

NEXT MONTH—"HOPE FOR THE BROKEN DOWN DYSPEPTIC"

By DAVID PAULSON, M. D., Superintendent Chicago Branch Battle Creek Sanitarium

PACIFIC HEALTH JOURNAL

FEBRUARY, 1902

WARFARE AGAINST TUBERCULOSIS

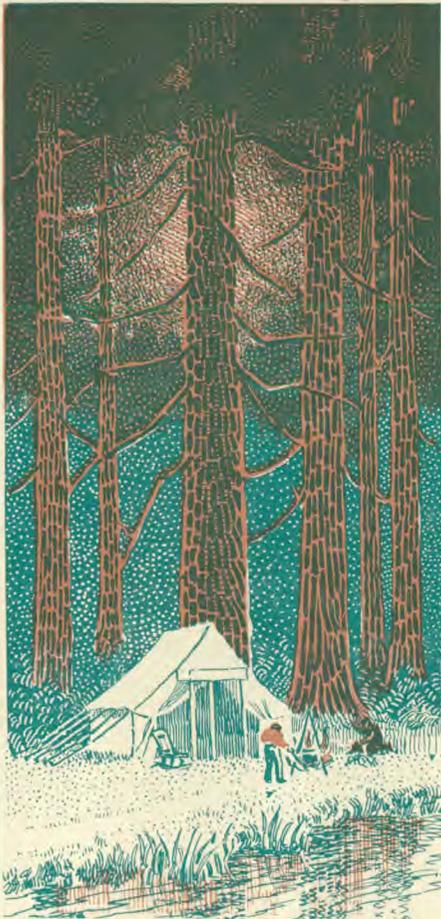
By G. H. HEALD, M. D.

HYGIENE OF DIGESTION

By W. R. SIMMONS, M. D.

THE INFLUENCE OF LIGHT UPON DISEASE

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



"WE LITTLE REALIZE WHAT IS
IN THE AIR, PURE AIR"
From "Warfare Against Tuberculosis"

PACIFIC HEALTH JOURNAL

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PACIFIC HEALTH JOURNAL

A SOUND MIND IN A SOUND BODY

VOL. XVII.

OAKLAND, CAL., FEBRUARY, 1902.

No. 2.

The Warfare Against Tuberculosis. No. 4

By G. H. Heald, M. D.



THERE are several arm exercises which can be taken to advantage in connection with the breathing exercise; in fact, they are modified breathing exercises, for the arm movements aid the muscles of respiration in their work.

Exercise 1.—Patient, standing erect on balls of feet, with chest raised as high as possible, and the hands at side, palms inward, takes in breath slowly, beginning with abdomen, and filling both abdomen and chest completely, at the same time raising the arms side-wise until they are level with the shoulders, holding for a moment the breath and the arms, then slowly exhaling and allowing the arms to fall to the side, or rather pressing them down slowly but forcibly to the side; for in



this exercise there should be no listless movements. As the arms reach the level of the shoulders, they should be stretched as far as possible, pushing the hands from the body, and should be carried slightly backward. This helps to expand the chest. Try it. Then, as the arms reach the sides, the elbows may be used to aid in compress-

ing the ribs. It is possible to perform this exercise with very vigorous movements, but it is necessary to begin somewhat cautiously, in order to avoid unpleasant results. This exercise may be modified by inhal-



ing in little puffs, as described in the last article, or by exhaling through tightly-closed lips, or by both; or patient may rise on toes at same time the arms are raised. This makes a variety of exercises.

(a) Arms side raising and breathing.

(b) Arms side raising and breathing, interrupted inspiration.

(c) Arms side raising and breathing, forced expiration.

(d) Arms side raising and breathing, interrupted inspiration, and forced expiration.

(e) Arms side raising, toes raising, and breathing, etc.

Exercise 2.—Position as before. Arms instead of raising to shoulders are carried up until the fingers touch over the head.

In making this movement the arms are carried well back, and when over head are stretched upward as far as



possible. Put energy into the movements. This may be modified by various breathing movements, and by the toe raising. Inspiration should always be through the nose; expiration also, unless through the closed lips. As the hands reach the level of the shoulder, the palms turn upward. Another modification of this movement is to have the hands, instead of touching each other, cross over to opposite side and down, each arm making a complete circle.



Exercise 3. — Arms forward stretch, on a level with the shoulder, palms inward. Inhale, carrying hands horizontally backward as far as possible. Exhale, carrying hands forward to original position. Then make a forced expiration, forcing the shoulders and elbows inward or toward each other, at same time turning the palms upward. This exercise may be varied by beginning as in swimming, backs of hands together and making the first movement with palms directed backward; also by combining the toe raising and various modifications of breathing. There is work in these three exercises for several weeks' or months' practise, and, if conscientiously performed, will cause a surprising and very gratifying development of the chest and breathing capacity.



Never lounge in a chair in such a way that the hips are several inches from the

back of the chair, while the shoulders touch the back of the chair higher up. It is a position which cramps the chest, favors spinal curvature, and invites consumption.

Never, for the same reason, allow the back to arch backward, when engaged in writing or other sedentary work. It is impossible to get good results from a few minutes' breathing exercise each day when several hours are spent in faulty positions. More can be accomplished by the habitual taking of proper positions and execution of correct movements in the ordinary vocations, than any amount of special gymnastic work. One is forming habits for life; the other is simply posing. The lion does not go into the gymnasium to make preparation for the capture of his prey. His gymnastic exercises consist in making all his movements correctly and with energy. Special movements are of advantage to those whose habits are so far formed that it is difficult or impossible to conform the body to a correct poise, or make correct movements.



By increasing the chest capacity, hardening the skin, and strengthening the muscles, by developing the digestive power, and by the use of abundance of pure air, one may add years to his life through the increased resistance to invasion of tubercle bacilli.

We little realize what is in the air, pure air. If more people discarded houses and slept right out, even in inclement weather, there would be fewer attacks of consumption. Even

advanced cases receive marked benefit from out-of-door treatment. And an ounce of fresh air as a preventive is worth a pound as a cure. But fresh air is cheap. We can thank God that no trust can get a corner on it. Let us make the most of it. True, the inhabitants of crowded quarters and operatives in large factories are shut off quite largely from a pure air supply, but somewhere, some way, every one should continue to get an abundance of this blessing which has been freely given as a part of man's inheritance. Man must earn his bread by the sweat of his brow. He often has to pay for the water he drinks; he may even have to pay the trolley company to transport him to the region of fresh air, but he had better get there and stay there. It is a question whether Providence ever intended such a congestion of humanity as we see in our large cities.

Did you ever think how necessary the air is to our well-being? One may live for six weeks without food, and for one or two weeks without water, but without air, a few minutes at most will cause death. The reason is that the lungs need fresh air in order to carry on the exchange of gases with the blood. After the breath has been held for half a minute, one begins to feel exceedingly uncomfortable on account of the retained car-

bonic acid and organic poisons. The lungs have been poorly ventilated for just a few seconds. The same thing is being accomplished, only more imperceptibly, when one is breathing air contaminated by the breath of others, by the product of combustion, and especially by the effluvia arising from decomposing organic matter, cesspools, etc., and also when one is not breathing deep enough. All these things have a marked influence on the general health, and especially on the resisting power of the air passages. Where the weather permits, it is an excellent plan to sleep outside, and when this is impossible, there should be provision made for ample ventilation. Better put on a few more bedclothes, if necessary, and have an *abundance of fresh air*.

Savages begin to die off rapidly with tuberculosis when they are housed in civilized dwellings. "God hath made man upright; but they have sought out many inventions." Among these inventions are whisky, the smoking habit, the corset, gunpowder, houses which exclude the air, clothing which lessens the resistance of the skin.

The next article will tell how to recognize tuberculosis in the first stages, when treatment will do the most good, and will discuss the question of climate.

Germans Taught Hygiene

THE German Government has instructed the Berlin Hygienic Association to open offices in which instructions on hygiene and sanitary matters shall be imparted *gratis*. Doctors will be present at certain hours every day to answer questions as to the best food to eat, the best clothing to wear in the different seasons, and questions on

housing, cooking, heating, sleeping accommodations; whether children should be washed with hot or cold water; what outdoor exercises are best at various seasons; how long children should remain out-of-doors; how to protect one's self against colds, influenza, etc.—*Philadelphia Medical Journal*.

Health Principles

By Mrs. E. G. White

MAN came from the hand of God perfect in organization and beautiful in form. All his faculties of mind and body were fully developed and harmoniously balanced. His nature was in harmony with the will of God. His affections were pure; his appetites and passions were under the control of reason. His mind was capable of comprehending divine things. He stood before his Maker in the strength of manhood, the crowning glory of the creative work.

In infinite wisdom, the world which God had newly formed was placed under fixed laws. Laws were ordained, not only for the government of living beings, but for the operations of nature. Man was created subject to law. He was to glorify God by a life of obedience to the divine laws, including those that relate to his physical organization. But God's laws are not merely an expression of His selfish or arbitrary authority. He is love, and in all that He did, He had the well-being of humanity in view. He would have been glorified in the work of His hands had man retained his first perfection, and had all his varied capabilities of mind and soul and body been developed so as to reach the highest possible degree of excellence.

The appetites of our physical nature were given us for important purposes. Kept, as they were at first created, in subjection to reason and to the laws that God made for their regulation, they would have worked only for good. Their legitimate action would

have prompted health and happiness; but the Creator's benevolent purpose has been interfered with. By the fall, man was brought into bondage to sin. He lost his moral uprightness and his physical perfection. The appetites and passions that were given to him as blessings were perverted, and became warring lusts, the ministers of death. And so man passed under the dominion of the grave. Sin is the cause of physical degeneration; sin has blighted the race, and introduced disease, misery, and death.

Since the fall the tendency of the race has been continually downward, the effects of sin becoming more marked with every successive generation. But so great was the vitality with which man was endowed that the patriarchs from Adam to Noah, with a few exceptions, lived nearly a thousand years. Moses, the first historian, gives an account of social and individual life in the early days of the world's history; but we find no record that an infant was born blind, deaf, crippled, or imbecile. Not an instance is recorded of a death in infancy, childhood, or early manhood. Obituary notices in the book of Genesis run thus: "And all the days that Adam lived were nine hundred and thirty years; and he died." "And all the days of Seth were nine hundred and twelve years; and he died." Concerning another, the record states, "He died in a good old age, an old man, and full of years." It was so rare for a son to die before his father that such an occurrence was thought

worthy of record: "Haram died before his father Terah."

Since the flood, the average length of life has been decreasing. Had Adam possessed no greater physical force than men now have, the race would before this have become extinct.

At the time of Christ's first advent, humanity had so degenerated that many endured a terrible weight of misery; and not only the old but the middle-aged and the young were brought to the Saviour from all the country around, to be healed of their diseases.

Still more deplorable is the condition of the human family at the present time. Diseases of every type have been developed. Thousands of poor mortals with deformed, sickly bodies and shattered nerves, are dragging out a miserable existence. The infirmities of the body affect the mind, and lead to gloom, doubt, and despair. Even infants in the cradle suffer from diseases resulting from the sins of their parents.

Disease and premature death have so long prevailed, with an ever-increasing weight of suffering, that they have come to be regarded as the appointed lot of humanity. But this is not the case. God is not the author of the many woes to which mortals are subject; it is not because He desires to see His creatures suffer that there is so much misery in this world. Neither is it all due to Adam's transgression. We may mourn over the fall in Eden, and think that our first parents showed great weakness in yielding to temptation, thus opening the door for sin to enter our world, with all its attendant evils. But the first transgression is not the only cause of our unhappy

lot. A succession of falls has occurred since Adam's day.

The same subtle enemy that beguiled Adam and Eve still attends our steps, and employs his strength and skill to urge us on in the way that leads to death. He was working to thwart the purpose of God when he presented the first temptation in Eden; and he has ever since been trying to deface the image by marring the body and depraving the soul. Wherever we look, we see evidences of his success in this work in the indulgence of depraved appetites and lustful passions, in defilement and corruption, deformity and sin. It is to these causes, and not to the providence of God, that the physical degeneration of the race is attributable. Men have listened to the suggestions of the arch-deceiver, and he delights in the ruin he has wrought.

There is a close relation between the moral law and the laws that God has established in the physical world. If men would be obedient to the law of God, carrying out in their lives the principles of its ten precepts, the principles of righteousness that it teaches would be a safeguard against wrong habits. But as, through the indulgence of perverted appetite, they have declined in virtue, they have become weakened through their own immoral practises and their violation of physical laws. The suffering and anguish that we see everywhere, the deformity, decrepitude, disease, and imbecility now flooding the world, make it a lazar-house in comparison to what it might be even now if God's moral law and the law which He has implanted in our being were obeyed. By his own persistent violation of these laws, man has greatly aggra-

vated the evils resulting from the transgression in Eden. How dishonoring to God is all this, how opposed to His design that men should glorify Him in their body and spirit, which are His! How destructive, too, to the health and happiness of mankind!

Against every transgression of the laws of life nature utters her protest. She bears abuse as long as she can; but finally retribution comes, and the mental as well as the physical powers suffer. Nor does the punishment fall on the transgressor alone; the effects of his indulgence are seen in his offspring, and thus the evil is passed on from generation to generation.

Many complain of providence when their friends suffer, or are removed by death; but it is not in the order of God that men and women should lead lives of suffering, and die prematurely, leaving their work unfinished. God would have us live out the full measure of our days, with every organ in health, doing its appointed work. It is unjust to charge Him with a result which, in many cases, is due to the individual's own transgression of natural law.

Because mankind have, by the transgression of these laws, departed so far from God's purpose in their creation, and have brought upon themselves such untold woe, a reform in habits relating to health has become an important branch of the great work of God in the earth. The soul temple

has been polluted, and men are called upon to awake, and win back their God-given manhood.

There is an intimate relation between the mind and the body; they react upon each other. In order, then, to reach a high standard of moral and intellectual attainment, and to secure a strong, well-balanced character, the laws that control our physical being must be heeded; both the mental and the physical powers must be developed. Such a training will produce men of strength and solidity of character, of keen perception and sound judgment,—men who will be an honor to God and a blessing to the world.

In the providence of God, the laws that govern our physical being, with the penalties for their violation, have been made so clear that intelligent beings can understand them, and all are under the most solemn obligation to study this subject, and to live in harmony with natural law. Health principles must be agitated, and the public mind deeply stirred to investigation.

As in everything else, the Bible is the standard on this subject. The teaching of the Bible has a vital bearing upon men's prosperity in all the relations of life. Compliance with its requirements will be a blessing to both soul and body. The fruit of the Spirit is not only love, joy, and peace, but temperance also,—health of body as well as health of mind.

THE mosquito's offendings seem to multiply. It is held responsible for the spread of malaria in Italy, and of yellow fever in Cuba, and a French medical scientist claims to have just

discovered that one species of the insect propagates leprosy. The mosquito must be without friends, for no one has yet put in a defense for it against any of these accusations.—*Ex.*

The Enema and Its Uses

By Henrietta E. Brighthouse, M. D.

[Of the St. Helena Sanitarium.]



THE enema is an injection of fluid into the rectum given for the purpose of cleansing the bowel, administering medicine or nourishment, or producing certain remedial effects.

Mothers with families, especially of young children, have in this treatment a remedy which may prevent severe illness and save the expense of doctors' bills and medicines; for stomach and bowel disturbance is the cause of most children's diseases, and is usually a prominent factor in the rest. Hence every home should be provided with some appliance for giving enemas.

Fountain syringes or enema bags are excellent on account of their small bulk, light weight, and portability. Many hot-water bags are fitted with enema attachments, so that they may be used as enema bags if desired.

The cleansing enema, usually of tepid water, is used in constipation. Just enough water should be used to secure the desired effect. For grown persons this should be from a pint to a quart, though more may be necessary in obstinate cases, or where the use of the enema has become habitual.

Serious disease is sometimes prevented by the use of a full enema at the onset of the disease; but in this case the amount of water should be large—from one to two quarts or more—and the cleansing should be thorough. Such a treatment should be given to every person who manifests such symptoms as fever, malaise, bad breath, a coated tongue, or who is

coming down with a heavy cold. In addition the patient should be given a hot bath, should remain in bed, and fast or eat simply gruel or fruit and drink copiously of water. In case the trouble has arisen from the stomach, this may be all that is necessary to break up the attack. If there be a deeper cause for the illness, the cleansing treatment will have put the system in its best condition to resist the disease.

The best position for the enema is the recumbent position. For the simple cleansing enema the left side will do, but for a large, thorough enema, the right side is best, as in this position the water can most readily reach the whole length of the colon. The clothes should be well loosened, or removed, the knees flexed and drawn up to the abdomen. The water should be allowed to pass into the bowel slowly. If too rapid or with too much force, it causes griping, and sufficient water for a good effect can not be given. The force is regulated by the height at which the enema bag is hung, three or four feet being usually the best, though a greater or less height may be used, as circumstances indicate. The rate of flow is regulated by pinching the tube to shut off the flow when griping begins, till the bowel becomes accustomed to the presence of the water; and though it may seem urgent that the bowel move, the sensation will pass off after several minutes, and more water can be introduced. Do not be in a hurry. Repeat the process, shutting off the water as many times as is needed till the required amount is introduced. It is

well to allow the first pint or quart to pass off to free the lower bowel before beginning the large enema.

Many people think they have taken all the water they can retain when they have taken but a cupful or less; and, getting no satisfactory result, they declare an enema does them no good, when in fact they have not really taken an enema at all.

One who suffers from habitual constipation should neither rely on the enema nor medicine, as a routine measure for moving the bowels. The constipation must be treated as a disease, and the cause searched for and removed. Frequently diet is an important part of the treatment.

The enema has its place in treating constipation, and is valuable in its place, rightly used, but wrongly used

it may only interfere with other measures.

The details of the treatment of constipation can not be taken up here. But the use of the enema as a routine measure should be avoided, yet use it rather than let the bowels go days without movement. It is not advisable ordinarily, except with children, to resort to the enema every time the bowels fail to act a day. Rather regulate the diet, drink abundantly, eat sparingly, and many times you will have done all that is necessary. But when symptoms showing disturbance of the general system, as headache, bad feelings generally, depression, symptoms of a cold, arise, then do not wait longer for tardy nature to act, but thoroughly empty the bowels.

(To be continued.)

Spices and Condiments

By E. R. Caro, M. D.

[Supt. Sydney, N. S. W., Australia Sanitarium.]

THERE is a long list of substances which may be classified under the heading of spices and condiments, so general in their use that it seems almost sacrilege to express utter condemnation of them. On almost every table are to be seen, at the midday meal, pepper, mustard, vinegar, and Worcester sauce, with occasionally a jar of pickles, to assist in making the meal appetizing.

Now good food should need no such additions to render it palatable. If properly prepared, there is in food a flavor that is satisfying to every natural appetite. When, however, the palate from early childhood has been trained to demand spices and condiments, then, as the child becomes a

youth, and the youth a man, he finds that he does not enjoy his food without them. Moreover, as the years roll by, it becomes necessary to make his supply of condiments larger and larger to satisfy his perverted taste.

What is the physical action of spices and condiments on the human body? In the mouth they first irritate the nerves of taste, and then deaden them, until the delicate flavors of the various food products are no longer discerned. Food all tastes alike, and this very loss of discernency calls for more and more spice and condiments to make it palatable. It is the stomach, however, that suffers the most deleterious effects. The pepper, mustard, or whatever else is used, irritates the

delicate lining membrane of that organ almost as much as it would do if placed in the sensitive eye. The glands of the stomach secrete a large amount of mucus, and, in a short time, a catarrh of the organ, with subsequent indigestion, may set in.

The condiment is absorbed from the digestive system, and passes into the blood. In this fluid it is carried around through the tissues, coming in contact with many of the body cells, and inflaming them in its course, until it reaches the kidney, or some other excretory organ. Then it is cast out of the body as a dangerous intruder, for which the human economy can have no possible use. And even as it is carried through the kidney, it succeeds in irritating that organ, finally,

if a sufficient quantity be taken, actually producing kidney disease.

There are many varieties of spice, and there are many different sources from which condiments are extracted, but we have not space to enter into their derivation on this occasion. It is sufficient for our readers to know that they can readily be discarded, with a gradual return on the part of the individual to an almost normal condition, and that they can not be indulged in without causing a disordered state of the system. Digestive derangements, constipation, biliousness, kidney disease, and a hasty, passionate disposition, may all be traced, more or less directly, to the action of spices and condiments.

The Value of Health

By H. W. Rose

THE value of health is usually not appreciated until one is sick. In the time of physical vigor, when the blood flows naturally through one's veins, and the flush of vitality appears upon the cheek, we do not pause to reflect on the immense degree of comfort we are enjoying, and which we would sorely miss should we lose it if even but for a short time. Hence, persons who are blessed with a good measure of health often abuse the goodness of their Maker in endowing them with a large degree of robustness.

Then, ignoring the warning of the Scripture, "Let him that thinketh he standeth take heed lest he fall," the thoughtless and perhaps thankless one rashly exposes his body to unfavorable surroundings, and runs unnecessary risks of endangering and perhaps ruining his health. Then, before he has realized the enormity of

his act, he finds himself within the clutches of fever, and nights and days of anxiety are brought upon loving friends and relatives. Yet, by a little foresight and thoughtfulness, this might have been wholly avoided.

Those who flatter themselves that they are not liable to take cold, because they have such a strong constitution, or think that because they have never yet fallen under the weather, therefore they are not likely to become ill, are tempted to unduly expose themselves, and take liberties which the more careful will scrupulously avoid. But we are told that as men sow, so inevitably will they reap; the hasty and reckless act is sure to bring with it the penalty; and often it is true that the person who, in some hasty moment, took chances of getting sick, has months in which to repent of his folly.

Hygiene of Digestion

By W. R. Simmons, M. D.

[Superintendent Portland Sanitarium.]



Portland Sanitarium

GREAT advances have been made in the last few years along different lines in the matter of hygiene. Much has been done to prevent disease by establishing a more thorough and complete system of health culture; but there is probably no part more important nor more neglected than the care of the digestive organs. The great majority of the people eat whatever is set before them or just what seems to suit their taste, without ever stopping to think what the consequences will be. Some may go on in this way for months or years without apparent injury, but the time will surely come when those who have transgressed the laws of nature in this way will pay the penalty.

There are those who treat their stomachs like a garbage barrel, never stopping to think how this delicate organ is to care for the mass of indigestible substances emptied into it. If it should fail to do its work properly and promptly, it is not given a rest, as other parts of the body, but is whipped into action by the use of stimulants, as pickles, pepper, mustard, spices, alcoholic drinks, or anything that will get more work out of the organ. Is it any wonder that the American people have been called a "nation of dyspeptics," when it is so hard to find a person who is not suffering with some form of indigestion? If we would have healthy bodies, it is necessary that we should treat our stomachs with the greatest care.

If we will stop and consider for a moment, we will find that many of the most common customs of eating and drinking directly oppose the laws relating to a healthy digestion. There are many ways in which these laws are disregarded. One of the great dietetic errors is the habit of eating too fast. When the busy cares of life demand our attention to such an extent that we think we have "hardly time to eat," we bolt the food down without a thought of the combination or digestibility, stopping only to reduce it to a size small enough to swallow it without choking, or rinsing it down with a large quantity of liquid. In doing this the food is not broken up so fine that the digestive fluids have a chance to do their proper work; the starch digestion, which should take place in the mouth by the action of the saliva, is hardly started, and the saliva, which acts as a stimulus to the digestive glands, is deficient, thus decreasing both the salivary and gastric digestion, and the food, entering the stomach in the unbroken, unmasticated condition, acts as an irritant to the mucous membrane lining the organ; this, with undigested food, is a very common cause of grave digestive disorders. The habit of drinking at meals not only lessens the salivary digestion by allowing the food to pass into the stomach before it is thoroughly masticated, but it dilutes the gastric juice, decreasing its strength, thus retarding gastric digestion. If the fluid be hot and in large quantities, it relaxes and weakens the walls of the stomach. If it be cold,

it lowers the temperature to such an extent that digestion is greatly retarded.

Irregularity in eating, as well as eating between meals or too frequently, is not at all conducive to good digestion. The body is so constructed as to have a thorough system in all its functions, and in its natural state works in perfect rhythm. With regular meals, the digestive apparatus is ready just at meal-time for the food, so that at this time it can be digested better than at any other. If food be eaten irregularly, the stomach is taken by surprise and is not ready for action. Again, if food be eaten too frequently, the stomach has no chance to rest and prepare itself for the process of digestion. Particles remaining in the stomach are much more liable to favor fermentation of the fresh foods, and thus render the whole mass less fit for nutrition, and injurious to the mucous membrane by the acid formed.

If we have formed habits of eating at certain hours, these hours should be strictly guarded, and the meals taken at the same time each day, provided the hours be the proper ones. The habit of eating late suppers is very injurious. Food taken into the stomach just before retiring does not digest properly, as the digestive power is greatly diminished, the secretions decreased, the whole body more or less exhausted; and the food, instead of being digested as it should, forms a load in the stomach, disturbing the nervous system, causing bad dreams, nightmare, and a disordered sleep, followed, in the morning, by bad taste in the mouth, headache, and a feeling of weariness.

Eating when tired has caused dyspepsia in many cases. When the

whole body is tired, the stomach is tired as well. And, as one author expresses it, "A tired stomach is a weak stomach." The idea that taking food into the stomach when tired gives strength, is a great mistake. What the stomach needs is not food but rest. Many people would be better off to-day if they would stop crowding their digestive apparatus when they are weak and tired, and give their stomachs rest. The stomach is composed largely of muscular fibers, and there is no reason why the organ should not become tired, as well as the arm or other parts of the body. Severe mental or physical labor draws the blood to other parts of the body, and thus robs the stomach of the necessary natural stimulus to complete proper digestion; hence vigorous exercise should never be taken just before or just after meals.

The habit of sleeping after meals is detrimental, as all vital processes are thus lessened, and the digestion retarded. Good digestion does not take place while one is sleeping. While one should not take heavy exercise after eating, light exercise, such as walking or carriage riding, will help to bring about the best conditions for proper digestion, as moderate exercise encourages the process, by increasing the muscular activity of the digestive organs, and encourages both secretion and absorption. The problem of how much or how little to eat at a time is an important one, and one we believe which will have to be determined by each individual, for there can be no set rule laid down for any class of people. It is true that the quantity and quality should be governed by the occupation and amount of work done, but there is as much difference

in stomachs as there is in faces; and what will suit one person will not be sufficient to sustain another under similar circumstances.

There is much more that might be

said regarding the quantity and quality of foods, the use of condiments, alcoholic drinks, etc., but space will not permit at this time.

Portland, Oregon.

The Influence of Light upon Disease. No. 1

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

[Superintendent Mount View Sanitarium.]

SOME years ago the writer was taking a special course in bacteriology at the private laboratory of one of the leading professors of germ life in a leading western city. One day during the early part of the course, after spending some time in laboratory technique, the professor was called away, leaving us for a time to pursue our investigations alone.

Here we were in the presence of the minute yet virulent staphylococcus and streptococcus, whose proclivities for producing pus cost the surgeon anxious days and restless nights after his most skilful operation. Here were myriads of the bacillus tuberculosis, which, in spite of the fact that all the sanitary science of the past focuses upon our day, causes almost one-fifth of all deaths. Tubes containing the Klebs-Loeffler bacillus were at hand—the ever-present microbe in that epidemic disease, diphtheria—a disease which has left desolate so many homes by slowly strangling the little ones therein.

Cultures also were found of the cholera germ, prized almost above rubies by our learned instructor as being the first successfully imported to this country from India. The bacillus typhosus, with others innumerable,

basked here and there in their favorite culture media. Everything about this laboratory seemed ideal except one thing, which we immediately proceeded to remedy. It being a warm, sunshiny day, it was noticed that the shades covering the many windows were closely drawn. This was easily rectified, and soon old Sol's rays were beating into this modern brooder at almost every angle.

After an hour's absence, our instructor returned, and imagine our surprise at his rushing from window to window, until every blind was closely drawn. He then turned to us and proceeded to deliver a very impressive extemporaneous lecture—one not paid for in the course.

Said he as a prelude: "Do you not know that the sun's rays are as destructive to germ life as is a cyclone to the Kansas farmer? I dare say by the hour's exposure you have destroyed germs which will take me months to replace. Only for the fact that my absence was not prolonged for the afternoon, I should not have a live germ left to tell the story."

This set us to thinking: Is it possible that these microbes, so small that the most powerful microscope only can reveal their presence, yet so destruc-

tive that the pathetic wail of Uncle Wiggins in the following verse, voices the sentiments of multitudes:—

"I want a chance to eat a meal without a
'microbe' yell,
To breathe a little atmosphere without a
microbe cell;
I long for that bright country of the peace-
ful and the blest,
Where bacteria cease from troubling, and
the weary are at rest"—

is it possible, we say, that these deadly germs are so soon annihilated by exposure to the sun, that to cultivate them in the laboratory where conditions can be made so nearly perfect, light must be excluded? Surely, if such a potent germicide is so readily obtained "without money and without price," no one ought to be stricken down by the so-called germ diseases.

Some years ago a patient was advised to undergo an operation for an obscure condition of the bowels, which had resisted all other forms of treatment. Upon opening the abdomen, the lining membrane of the bowels, as well as adjacent tissues, was found covered with tubercular nodules. In alarm the wound was quickly closed. To remove the diseased area would mean

the removal of almost the entire abdominal viscera. Anxious relatives were notified that the case was beyond all help. But imagine the surprise of surgeon and all when from the time of the operation the patient gradually grew better, until complete recovery took place.

This same mistake was made by several surgeons, and nearly always with the same most surprising results. Later investigation demonstrated that the benefit derived in these cases was almost wholly due to the remedial effects of light, which was permitted to reflect upon the diseased mass. This it could do undimmed by a muddy skin, through the opening made, and, although the exposure was only for a short interval, it was sufficient to check the disease process and start the patient upon a road to recovery.

To-day hardly a surgeon of note but could multiply instances where similar cases have come under his own observation,—where patients, apparently hopeless, were given a new life lease by the above-mentioned operative procedure.

Spokane, Wash.

Items of Interest

By B. B. Bolton, M. D.

[Director Los Angeles Sanitarium Laboratory.]

THE claims made for crude petroleum as a "hair restorer" led a prominent specialist in skin diseases to test it in about thirty cases, and he reports in the *Journal of Cutaneous Diseases*, that petroleum has no hair-growing properties whatever.

THE French Minister of War has issued an order prohibiting the use, in his department, of paint containing lead, owing to its poisonous nature, and in consideration of the fact that zinc oxide is not poisonous and is fully as useful.

ONE thousand horses were slaughtered last year, in a special slaughterhouse, for consumption in Frankfort, and the eating of horse meat in that city is said to be slowly increasing.



IN surgical operations where thread is used, the *Centralblatt für Chirurgie* reports the use of a wire composed of copper eighty-five per cent, aluminum five per cent, and tin ten per cent. It has been found that pus germs will not grow upon or near the surface of this wire, and it is, therefore, more desirable than the silver wire commonly used.



DEALERS in creamery supplies are advertising and selling a "cream thickener," the maker of which claims that it "pays for itself, and makes a handsome profit besides. By its use a gain is made in quality, in nutritive value, and in the satisfaction which a customer derives from a rich, pure cream that is thick, heavy, and smooth. One pound will make thirty-six gallons of rich cream out of twenty-seven gallons of thin cream." It would seem that state laws which permit wholesale houses to advertise and sell such preparations need revising.



ACCORDING to the *Los Angeles Journal*, the Berlin Institute of Physical Diagnosis has made a number of interesting experiments with morphin, strychnin, and arsenic, and finds that where oxygen is given, the poisonous effect of these drugs is completely removed.

It is said that ninety per cent of the suicides by poison result from the taking of morphin. Respiration is interfered with in these cases, and the administration of oxygen is followed by recovery, where it would otherwise be impossible to save the patient.

The details of the method and of the experiments made were reserved to be reported at the German Medical Congress.



IN 1890 the average age at death was 31.1 years; in 1900 it was 35.2 years. During the ten years the deaths due to consumption decreased 54.9 per thousand. This lengthening of life and checking of the spread of tuberculosis is the combined result of popular education on the lines of hygiene and sanitation, and also the preventative and restrictive measures enforced by the health authorities.

The death rate is nearly always proportionately greater in the large cities than in the small towns or rural districts, and it is in the large cities that this improvement has been most marked. On this point Dr. W. A. King, chief of the Vital Statistics Division, says: "The entire significance of these figures can be properly weighed only when the rates for the individual cities are considered in connection with known conditions of local improvements in sanitation and health regulations—factors which are not of a statistical nature, and which were not developed by the schedules."

Cleanliness in large cities is absolutely necessary. The death rate in Mexico City, where there is no outlet for sewerage, is 53.52, and that of New Orleans, where a similar difficulty exists, has risen in ten years from 26.3 to 28.9.

EDITORIAL

The Tetanus Scare

No one would think of advocating the discontinuance of railroad travel because of an occasional disaster involving the loss of a number of lives, yet there are those who condemn vaccination and serum treatment of diphtheria, because of some accidents which have recently occurred in connection with the administration of these remedies. Such accidents probably bear about the same proportion to the total number of vaccinations and serum treatments as railroad accidents bear to the total amount of railroad travel. Though countless thousands of persons travel every day, we rarely meet a person who has been an eye-witness of a serious accident; and we enter a train with about as little fear of danger as though an accident were impossible. The morning paper appears with a heart-rending story of a frightful wreck. For a few hours it is all the talk, and then is forgotten, and we travel with the same indifference as though it had never occurred.

Tetanus, or lock-jaw, in connection with vaccination or serum treatment, is the result of uncleanness in the preparation of the remedies or in their administration. Some deaths have occurred in this way which would not have occurred had proper precautions been taken. There can be little question that the ravages of diphtheria and smallpox have been so markedly decreased by the use of serum and vaccine that the accidents which have resulted from their use sink into insignificance.

There is one question regarding the use of antitoxin or vaccine which may

not have been sufficiently investigated, namely, the general after-effects on the patient. Do these agents leave one with damaged kidneys, weaker heart, increased susceptibility to other diseases? If they are the only agencies which will save life, this question can well be waived; but other and even more effective remedies may yet be discovered.

According to the *American Medical Journal*, "the vinegar treatment as a preventative against contagion of smallpox, discovered and introduced by Dr. C. F. Howe, county health officer, Atchison, Kansas, has passed the point of mere theory, and is now an established fact, having been efficient in several hundred cases of exposure. Many of these cases have been the nurses, as well as many others that it was impossible to isolate from the original case of smallpox, for want of room. In other words, any one vaccinated or not, can nurse a case of smallpox without fear of contracting the disease if at the same time he uses the vinegar in tablespoonful doses four times daily in half a cup of water."

If these claims prove to be true it will do away with the necessity for vaccination, as one can begin the use of the vinegar even after exposure and still abort the disease. And if the medical fraternity do not get so completely committed to sero-therapy that they will have no time for investigation in other lines, other remedies may be found for diphtheria which will supersede the antitoxin treatment.

The Transmission of Tuberculosis through Meat and Milk

IN a recent number of *American Medicine* appears a paper by Repp, in which he summarizes the work which has been done, demonstrating the communicability of tuberculosis from animals to man. This work he has given under a number of heads, namely: First, that tuberculosis may be transmitted to animals by feeding them the meat or milk of tubercular cows; second, that the meat and milk of certain tubercular animals contain virulent tuberculæ bacilli; third, that the tubercle bacilli of cattle are pathogenic (disease-producing) to man; that, therefore, the meat and milk of tubercular animals are capable of producing tuberculosis in human beings who use these products as food.

Some of the experiments recorded are as follows:—

One experimenter fed thirty-five animals with raw flesh of animals attacked with tuberculosis, and eight became tuberculous. In another case of forty-six treated in this manner, six contracted the disease. Tuberculosis was produced in all of four rabbits inoculated with the milk of a cow with tuberculous udder. Of eighty-eight guinea-pigs inoculated from tuberculous cows, twelve became tuberculous. Three calves of healthy parentage, fed on the milk of three tuberculous cows with apparently sound udders, all developed tuberculosis. Of twenty-one healthy calves fed on the milk of tuberculous cows with healthy udders, eight became tuberculous. Of twenty-eight samples of mixed milk, four proved to be infectious when inoculated into guinea-pigs.

In the work of transmission to man, there seems to be no direct evidence, as it is difficult in case of a disease so slowly developing as tuberculosis, to point directly to its cause, and of course there has been no experimental work in the line of inoculation, which has been recorded.

In regard to milk, the evidence seems a little more conclusive. Two daughters of a Scotch family of good health, who were brought up on the milk of tuberculous cows, died of tuberculosis. Two sons of the same family, who did not use milk, remained healthy. At a young ladies' boarding-school, five girls, the children of healthy parents, died of tuberculosis of the intestines. The cow which had for three years supplied the school with milk, was found to have generalized tuberculosis, including the udders. A child of six months, of healthy parents, died of tuberculosis, having been fed on milk of tuberculous cows. A child dead of intestinal tuberculosis had been fed on milk of a tuberculous cow.

These are samples, which were selected with the greatest care, any reports of a doubtful nature having been excluded.

Another strong presumptive proof in favor of the communicability of tuberculosis from cattle is given in an article by Fishberg, in the *American Medicine*, in which he calls attention to the fact that the Jews would naturally be taken to be subject to tuberculosis; their inferior stature, their narrow girth, their habit of dwelling in towns and dealing very largely in second-hand clothing, and their mar-

riage of close relatives, their poverty, anxiety, mental exertion, and the constant persecution to which they are subjected, would naturally make them victims of tuberculosis to a greater extent than other people. But the fact is, the Jewish nation is unusually exempt from inroads of this disease. It seems that the most plausible explanation for this immunity is the fact that their meat is carefully inspected, all diseased meat being discarded.

A number of experiments recently performed to determine the thermal death-point of tubercle bacilli have shown it to be considerably lower than has heretofore been supposed. At a temperature a little less than boiling tubercle bacilli are destroyed in less than a minute. On the other hand, it is well to remember that milk may be scalded or even boiled quite vigorously without the upper portion of the

milk being heated to a temperature destructive to the bacilli of tuberculosis. The skin, or pellicle, which forms on top of the milk when boiling, has been found to contain living virulent germs even after the boiling has been continued for some time, so that the process of boiling the milk is absolutely no protection against the germ of tuberculosis, when it is done in an open vessel. In order to make the sterilization effective, it should be done in a closed vessel (a bottle, for instance), to prevent the formation of a scum. Milk may be prepared this way and heated to one hundred sixty degrees Fahrenheit for two hours, with the result that the tubercle bacilli will be all killed and the milk will not suffer deterioration in quality or become less digestible, as is the case when the milk is brought to a boiling point in an open vessel. H.

AN investigator in Europe has found, as a result of several experiments performed on dogs, that the presence of fat in the duodenum causes the pyloric opening of the stomach to close for a period varying from one to one and one-half hours, preventing the food from leaving the stomach. The cause evidently is that the duodenum recognizes (if we may use this expression) that it has all the work it can attend to for the time being, and so prevents the entrance of more food. This will explain why the presence of a considerable amount of fat always retards stomach digestion, for the fat, rising to the top of the food in the stomach, is passed over into the duodenum during the early part of digestion, and by its presence causes a reflex contraction of the pyloric orifice. From this it will be readily understood why fats should not be used in any-

thing but minute quantities by those who have a tendency to retarded emptying of the stomach.

That fat leaves the stomach before other foods has been incidentally demonstrated by another investigator who was endeavoring to determine the rate of absorption of sugar from the stomach walls. As the stomach walls do not absorb fat, he gave a meal of fat and sugar, a definite proportion of each, which, after it had remained in the stomach for a certain time, he removed by siphonage, with the expectation that the sugar would bear a smaller proportion to the fats than when the food entered the stomach, the difference being the amount absorbed by the stomach walls; but, to his surprise, he found that the returned fat bore a smaller proportion to the sugar than at the beginning of the experiment, the inference being that part of

the fat had gone into the duodenum. It is possible that some of the sugar solution may have also, but much more of the fat passed over than the sugar.

H.

wholesale adulteration. Keep in mind the divine motto, "Eat ye that which is good," steadily adhering to it, and the result will be continued health and happiness.

C.

Diet Dangers

NEW dangers in diet are being almost constantly discovered. Not only is it found unsafe to indulge freely in flesh meats because of known disease in all animal bodies, but danger seems to lurk in many vegetable products as well. The latter is not because of inherent disorder, but by reason of treatment provided to protect plants from the attack of external enemies. For instance, a warning was lately issued by the Los Angeles Horticultural Commissioners against the habit of sucking juice from oranges through the perforated rind.

This warning is based on the discovery that certain washes and spraying preparations used to destroy infecting scale, are very poisonous, and so render the fruit unwholesome. Fruit thus treated may be known by brown spots on the surface, which often penetrate well into the pulp. Swollen lips generally result to children from sucking this class of oranges.

In their report the commissioners "recommend that this method of disinfecting orange orchards be discontinued until the manufacturers of these compounds can guarantee them to be entirely free from damaging elements."

It is well to add in this connection, Let all see that the sort of fruit here spoken of is not palmed off on them, because of its monetary cheapness. Such fruit is dear at any price. It will pay to be careful in the selection of all kinds of food in these days of

Novel Treatment for Consumptives

DR. SHOEMAKER, president of the Board of Charities of Philadelphia, is reported as planning to build eight glass houses in which to treat the hundreds of tubercular victims of that city. An appropriation of \$80,000 has been made by the city for their construction, and Dr. Shoemaker has received \$4,000 more with which to equip the buildings with necessary electrical appliances.

The plan seems to be to provide a system of treatment by pure air and strong sunlight, assisted by various electrical appliances. In order to provide the most complete ventilation, the walls and roofs of the buildings are to be in sections, hung on pivots, so that they may be opened or closed at will.

It would seem from the many methods of treatment now being brought forth with which to combat tuberculosis, that it is becoming a subject of the deepest study by scientists. This is well, but it would be better by far to study the causes which are mainly responsible for the rapidly-spreading malady, and, having found these, to avoid the excesses which lead to them. We believe that the most prolific source of this dreaded disease is a gross diet. Let nature's pure products satisfy the desire for food, and one may bid defiance to the dire scourges that now cause so much apprehension in the minds of those inheriting weak constitutions.

C.

WOMAN'S REALM

Conducted by Mrs. M. C. Wilcox

The Divine Masterpiece vs. the Reign of Fashion

By Mrs. E. E. Kellogg

BEAUTY and symmetry characterize all the works of the Creator, but the human body in its perfection is the most infinitely beautiful of all divine creations. A study of its structure reveals exquisite form even in its minutest fiber and cells. Its strong framework of two hundred pieces of differing sizes and shapes is so carefully joined as to form a complete whole. Overlaid and rounded out with elastic muscles, then covered with the fair satiny skin, it is indeed a piece of workmanship to excite our admiration. But even more wondrous are the various organs and intricate processes within this exterior which heat, replenish, purify, and regulate the movements of the marvelous whole, concerning which the psalmist truly says, "I am fearfully and wonderfully made." And, indeed, we should scarce expect it to be otherwise, for was it not fashioned by the Divine Artist in His own image?

That we are made "in His likeness" is the greatest of reasons why it is every woman's duty to care for her body in the very best manner, that she may the better fulfil the purpose of her Maker and the more fittingly represent Him before the world. She is under obligation to the Creator to preserve her body as nearly as possible in conformity with the original pattern, and has no right to in any way distort or deform it. If, as is the

case with most of us, she has the inheritance of physical weakness and imperfections, it is her privilege to cultivate the body, to improve it, to seek to secure for it sound health, correct poise, and such other modifications as will enable it to approach more nearly the beauty of that One in whose similitude it is made. It is her right to promote her bodily faculties by every proper means, to develop them in harmony with God's wise and beneficent laws. To seek to change it in ways that will injure its physical integrity, or pervert the original ideal, or hamper its usefulness, is surely nothing short of sacrilege.

Does it seem beyond reason that any could be found who would seek thus to impair this "living temple"? Yet is this not just what hundreds of women are doing (though perhaps unwittingly) in their endeavor to follow the mandates of fashion? So wedded are we to this sovereign of dress that her requirements receive first consideration when clothing is needed. The prevailing mode is studied as critically and carefully as if it were some needful art or science, and the particular design or style which pleases the eye being chosen, the effort is put forth to fit the body into the garment rather than to shape the dress to the body.

It is the consensus of medical opinion that the larger percentage of the

diseases peculiar to her sex which make the lives of so many women miserable, is mainly attributable to conventional dress. Verily the body *is* more than raiment. A study of its requirement as regards clothing makes plain that the essentials of rational dress are protection, warmth, equally distributed, perfect freedom of movement, minimum of weight, becomingness, and suitability. The woman who must lace her shoes before she puts on her dress, must duck her head to put on her hat or adjust her bonnet in place before she fastens her waist, who can not stoop to put on her rubbers, who must push eight or more pounds of skirts with her knees at each step or drag behind her even greater weight, quite as often as otherwise supported from her hips, is certainly out of tune with nature in her manner of clothing her body. Properly equipped to make the most of life, a woman ought to be able to bend and turn her body, take any position with it or make any movement with any portion of it when dressed that she is capable of doing when undressed. Indeed, the ideal dress is one so comfortably adjusted, so well suited to the season, so perfectly adapted to every need of the weather, that she is wholly oblivious of it.

Distorted ideals have been for so long before the eye that the human form as God fashioned it appears wholly out of fashion to the minds of a great majority; and, as if assuming that the Creator had made a mistake, some plan is undertaken to correct nature, and give a "form" to the human figure. In truth, however, it is a "deform" of the figure which is the usual ultimate result. In this country the waist is the portion of the

body which it is deemed needs changing. In other lands and by other people the feet and the head are considered "out of style" when shaped according to nature's plan, and efforts are put forth to modify these valuable members to suit their perverted ideas. We are shocked when we read of these distortions of the body, but in reality they do it less harm than is occasioned by any means which compresses or restricts its important central portion, wherein are all the vital organs. Nature has packed the cavities of the body full, and there is no way of changing the shape of the figure to make the waist tapering and smaller than it naturally is without displacing some vital organs. There are no vacant spaces inside the body; when the walls of this middle portion are compressed, the organs which naturally occupy the space are pushed below or above, pressed and crowded one upon another, so that the entire viscera is put out of harmony, and when disorder thus obtains, pain and disease naturally follow.

The corset is the article of apparel most commonly under condemnation as the means of injury to the body, and it is fully deserving of all that is said against it, but it is in nowise the only offender. As much harm comes from tight belts and tight waist and skirt bands, particularly if the bands be attached to the heavy skirts at present so universally worn, as from the corset. Many who imagine they have made a praiseworthy reform because they have discarded the corset, are damaging their bodies by the constriction of the waist by bands of some sort. Nothing tight, stiff, firm, unyielding, whether wide enough to confine the whole middle part of the

body or so narrow as to cover but an inch of its circumference, can be worn with impunity about that yielding portion of the trunk which should expand its entire length with every breath. It is difficult for women to convince themselves that their clothing is tight. Is one expostulated with, she at once draws in her figure, gathers a fold of her garments in her hand, and says in a much injured tone, "My clothing tight? Just see how loose it is!" There is one test: Remove the clothing and measure the body in its fullest possible expansion, then measure the bands, the waists, or other garments commonly worn, and compare. If the clothing is of the proper looseness, there will be no difference in the measurements. Such a test will generally make it evident that bands and belts of sufficient looseness to rightly serve the body, that is, to permit full play of the breathing muscles, will be of little service in keeping the clothing in place. Made loose enough for proper breathing, the band will slip down upon or over the hips. A band must of necessity be tight if it is to be depended upon to keep the skirts in place, that is, tighter than it ought to be, for, like most other things, there are degrees of tightness. Even a slight pressure about the body, long continued, does harm in the weakening and wasting of the muscles and tissue. Rational clothing dispenses entirely with corsets and bands and provides single garments for the entire body, suspended from the shoulders, or separate garments buttoned together closely.

That woman can persuade herself that the conventional dress is desirable and comfortable, as often asserted, is due to the force of habit. Were she

to study the body and to know it well, she must see that her powers are lessened, her privileges diminished, her health undermined, and even life shortened when the body is so clothed as to restrict any function. To commit suicide is generally looked upon as an unlawful proceeding. Pray, what is the moral difference, whether one's natural term of life be shortened with a tight rope around the neck or a constriction around the waist? The one may occupy less time in execution, but is not the principle the same?

Neither is beauty of form enhanced by the customary mode of dress. Nature's lines of beauty are always curves; those natural to the body are all outward curves, one gently rising out of the other, but when a corset is donned the whole outward contour of the body is distorted. The lines produced are inward curves, and when the shoulders spread out above and the hips bulge below an artificial smallness of the waist, the figure is entirely out of harmony with the principles of beauty. A small waist is only pronounced pretty because of the perversion of our ideals. The perfect figure admits of but from two and one-half to four inches difference between the waist measure and the measure of the chest, while a corset-fashioned waist frequently shows eight or even ten inches difference. Why should not women take a normal and a perfect ideal for their standard, and aim to reach it as nearly as possible?

We have somewhere seen it asserted that the women who have done the most to move the world for good were women with natural-sized waists. We do not doubt the truth of this. Deep breathing has much to do with deep thinking; a constricted waist means

small vital capacity; a natural waist means large vital capacity, and consequent ability for healthful, vigorous life and action. Said Miss Frances Willard in one of her last addresses:—

“But be it remembered that until woman comes to her kingdom physically she will never really come at all. Created to be well and strong and beautiful, she long ago sacrificed her constitution, and has ever since been living on her by-laws. She has made of herself an hour-glass, whose sands of life passed quickly by. She has walked when she should have run, sat when she should have walked, reclined when she should have sat. She has allowed herself to become a mere lay figure upon which could be fastened any hump or hoop or farthingale that fashion-mongers show; and oftentimes her head is a mere rotary ball upon which milliners may perch whatever they please—be it a bird of paradise, or beast, or creeping thing. She has bedraggled her senseless long skirts in whatever combination of filth the street presented, submitting to a motion the most awkward and degrading known to the entire animal kingdom; for nature has endowed all others that carry trains and trails with the power of lifting them without turning in their tracks, but a fashionable woman pays lowliest obeisance to what follows in her own wake; and, as she does so, cuts the most grotesque figure outside a jumping-jack. She is a creature born to the beauty and freedom of Diana, but she is swathed by her skirts, splintered by her stays, bandaged by her tight waist, and pinioned by her sleeves until—alas, that I should live to say it!—a trussed turkey or a spitted goose are her most appropriate emblems.”

The covering of the foot is also a matter of import in relation to bodily welfare. Mrs. Morris L. King, who has given much study to physical culture, says:—

“One of America’s greatest surgeons was recently heard to say that modern women are never allowed to be anatomically normal after they are two years old. This statement seems more extreme than it really is. So soon as a child begins to walk about, its shoes are made stiffer and higher around the ankles; thus its weight is thrown back, and the habits of walking on the heels, and of throwing forward of the hips, are begun. From this time on, shoes are never wide enough and flexible enough across the ball of the foot, nor full enough over the instep and ankle. The feet are being grown to suit the fashion of the day. The wrong carrying of the weight of the body makes ills that are patched up by palliative measures of various kinds, but are almost never radically attacked by righting the body’s most important relation to its base of support; popular fallacy is so much easier to follow than radical remedy, at least for the tradesman. And by the time the average child is five years old, the perversion of its physiological and personal harmony is well underway.”

The body, or any portion of it, once injured by careless usage can never be restored to its pristine soundness. Some day we may learn that the cultivation of health, wholeness of body, is an imperative duty, both out of regard to personal welfare and that we may “glorify God in our bodies, which are God’s.” Then we shall realize that the human form as God shaped it is lovelier than any device of fashion.

HEALTHFUL DISHES

Tasteful Preparation of Dried Fruits

By Mrs. Flora Leadsworth

FRUIT, being one of the most palatable and easily-digested foods, is frequently found on our tables.

Since we have learned its true value, and being forcibly reminded of the fact that summer has gone, and with it the fresh fruits, that really required little skill to make them appetizing, we are forced to look to the dried fruits.

All the art and science at our command will be required to serve these in such a way that they will so nearly resemble the fresh fruit that the eater will be at a loss to know which he is eating. Because of the unpalatable way in which dried fruits are usually prepared and served, it is not so popular as it would otherwise be.

All dried fruits should be thoroughly cleansed before cooking. The best way to do this is to cover the fruit well with water and allow it to stand a few minutes until the little particles of dirt on the outside have softened so that they can be readily removed by a vigorous rubbing of the fruit between the hands. Then drain the water off, and carefully look the fruit over, rejecting all that is not good. Rinse well in one or two other waters. Now that you have your fruit clean, put it to soak in twice the amount of water that there is fruit, and allow it to stand until it has absorbed as much moisture as was evaporated during the drying process. The length of time required for this will depend upon the

fruit, but most fruit can stand overnight without becoming too soft.

Peaches and apricots will require but little more time for cooking when prepared in this way than when fresh. The water that they are soaked in should be poured off into another kettle, sweetened, and placed over the fire until it begins to boil, then pour over the fruit and place over the back of the stove, where it will not cook too rapidly, and when done, each piece of fruit should be perfect in shape, and the fruit should have plenty of juice in it. If prepared in this way, the fruit will not have that strong flavor so noticeable in dried fruits. One of the secrets in cooking dried fruits is, *do not be afraid of plenty of water.*

Pears should be prepared and cooked the same as peaches, or they can be baked after having been thoroughly soaked.

Prunes require more soaking than any other fruit, and more water, and a prolonged cooking; or they may be steamed and served in the same way that dates are.

Figs may be prepared in the same way as the above fruits, or, after washing, they can be steamed. The black or blue figs are the best varieties.

Mount View Sanitarium, Spokane, Wash.

"THE proper cooking of food is a most essential requirement."

PACIFIC HEALTH JOURNAL

MONTHLY—DEVOTED TO

FAMILY HYGIENE AND HOME COMFORT

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Exchanges—Please Notice

WITH the opening of the new year the PACIFIC HEALTH JOURNAL removed its headquarters from 1436 Market Street, San Francisco, to Pacific Press, Oakland. The reason for this change is better facilities and more satisfactory quarters. It is now expected that from this point the JOURNAL will go forth regularly for the entire term of its natural life. It is also expected that each issue of the JOURNAL will be better than its predecessor. All business communications should now be addressed, PACIFIC HEALTH JOURNAL, Pacific Press, Oakland, Cal.

An Interesting Movement

IN the latter part of the last year a council of leading health-reform advocates decided to put forth a special educational effort in behalf of the gospel of health, to continue through the first half of the year 1902. This is designed to be a real "forward movement" in Christian experience, based on the study of the complete gospel for spirit, soul, and body. In

order that the movement may become general, local committees will be formed in various localities. Several health publications will contain articles to this end. The studies will be from a book lately written by J. H. Kellogg, M. D., and covering twenty-six chapters, which will afford weekly lessons for just six months. Let those who wish to cooperate in this movement open correspondence at once with "The Forward Movement," 267 West Main Street, Battle Creek, Michigan.



OUR frontispiece this month is a charming view of the valley overlooked by the St. Helena Sanitarium. The picture was taken from in front of the main building of the sanitarium, and gives a most excellent idea of the magnificent surroundings of that best of Pacific Coast retreats. It is not too much to say that no part of California is better adapted to meet the needs of the overworked brain or enfeebled constitution. One never tires of viewing such scenes as is shown in our picture, as may be demonstrated by a visit to the sanitarium, and beholding these sights from the broad porch of the main structure.

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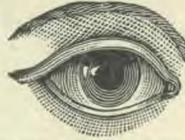
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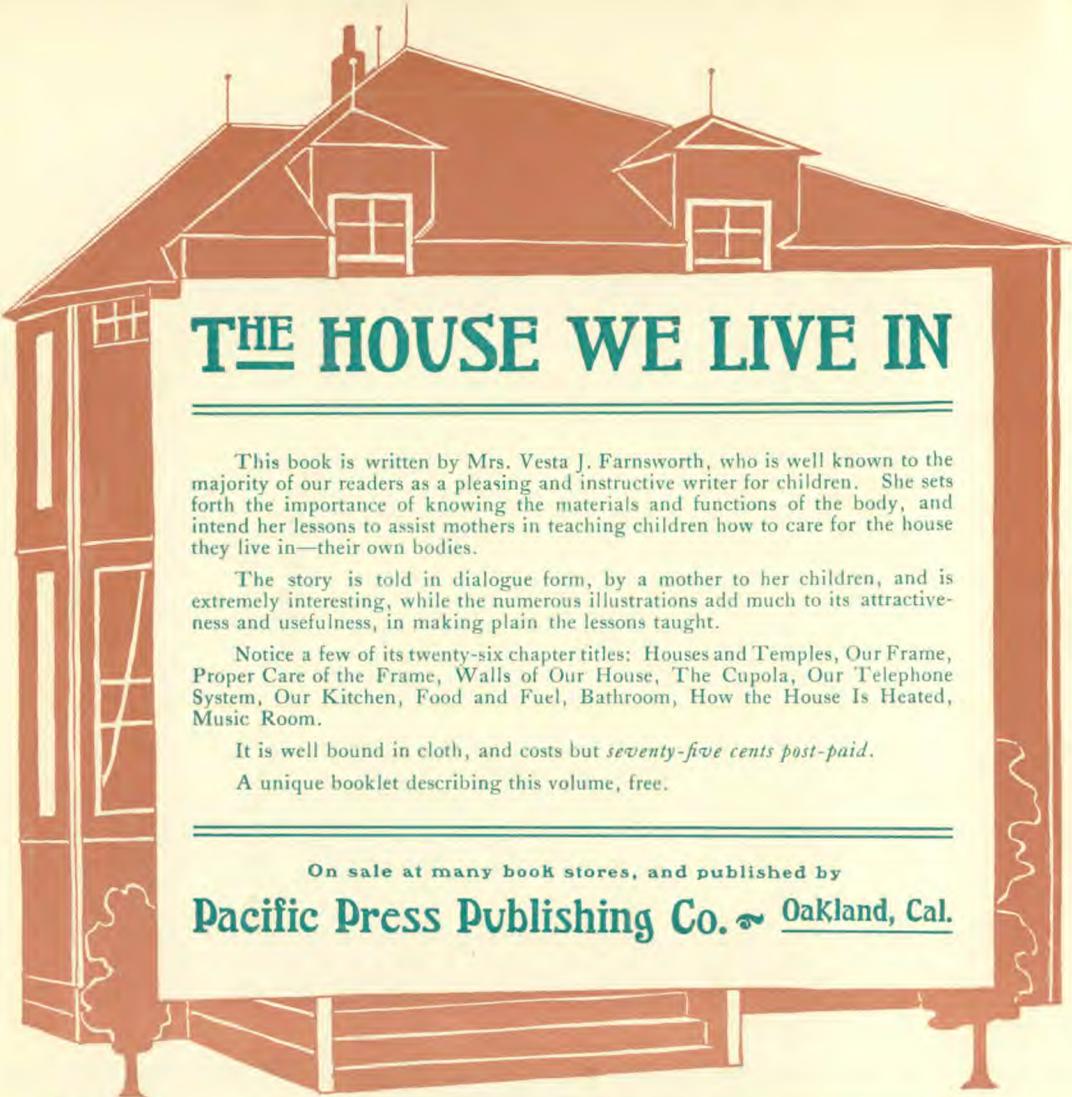
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