

311

PACIFIC HEALTH JOURNAL

February, 1903

CONTENTS

Causes of Stomach
Disorders

Diet and Endurance
Expectoration

Simple Treatments

Healing Power of Nature

Zwieback

Question Box

50c per year
5c per copy

Volume XVII
No. 2



A TREASURE for CHRISTIAN MOTHERS

The Rev. Joseph F. Flint, a gentleman who has spent many years laboring among boys in industrial and other schools, and who has made the subject of their training and their mental, moral, and spiritual development a life study, has written an excellent work, entitled

The Boy Puzzle

This book has just been published by the Pacific Press Publishing Company, and is dedicated "To parents who prize Old-Fashioned Christian Family Life, while Believing in Progress."

"The Boy Puzzle" has the "true ring." Parents will at once realize that the author is master of his subject.

The book is illustrated by the use of reproductions of charts used by the author at his lectures. These sketches represent in an original and most interesting manner the various stages of mind development.

The Rev. James R. Kaye, Ph. D., author of "Christian Science Examined," has contributed a splendid chapter, entitled "The Crown of Child Culture."

Mrs. McVean Adams presents a beautiful address, headed, "The Mother and Her Bible."

As a fitting conclusion, the Rev. Clement E. Babb, D. D., the associate editor of the *Herald and Presbyterian* and the *Interior*, powerfully advocates "The Bible in the Home."

We earnestly recommend this book to all Christian parents

The author's concluding remarks in his earnestly-written preface are worthy of careful thought: "We hear much of the need of a deep and thorough revival of religion, but have we not in the work of Christian nurture the greatest of all revivals? The awakening is here and now at hand, only that it centers about the hearthstone instead of the mourner's bench. May the reader share in its blessings."

The book is printed on antique stock, has 217 pages and 22 illustrations; is bound in cloth, with three-color cover design

PRICE SEVENTY-FIVE CENTS

PACIFIC PRESS Publishing Co.

OAKLAND, CALIFORNIA



Would you lengthen out your years?
Eat mush!
Would you banish cares and tears?
Eat mush!
Would you chase the little wrinkles
From the corners of your eyes,
Till each laughing optic twinkles
Like a diamond in the skies?
Eat mush!



**CREAM FLAKE OATS, MORNING MEAL, NUTTY-
GRAINS, AND SEMOLA**

MAKE THE BEST MUSH

MANUFACTURED ONLY BY
DEL MONTE MILLING CO.
SAN FRANCISCO, CAL.



What Is a Nebulizer?



Price \$2.00

It is a simple, easily operated appliance for the treatment of diseases of the nose, throat, bronchial tubes, and lungs. It transforms the liquid medicine into a little cloud or vapor, and this drawn or forced into the nose, throat, or lungs brings the medicine immediately in contact with the affected parts, thus securing all the benefit possible to be derived.

*It has stood the test
for many years,
and thousands
have been bene-
fited by its use.*

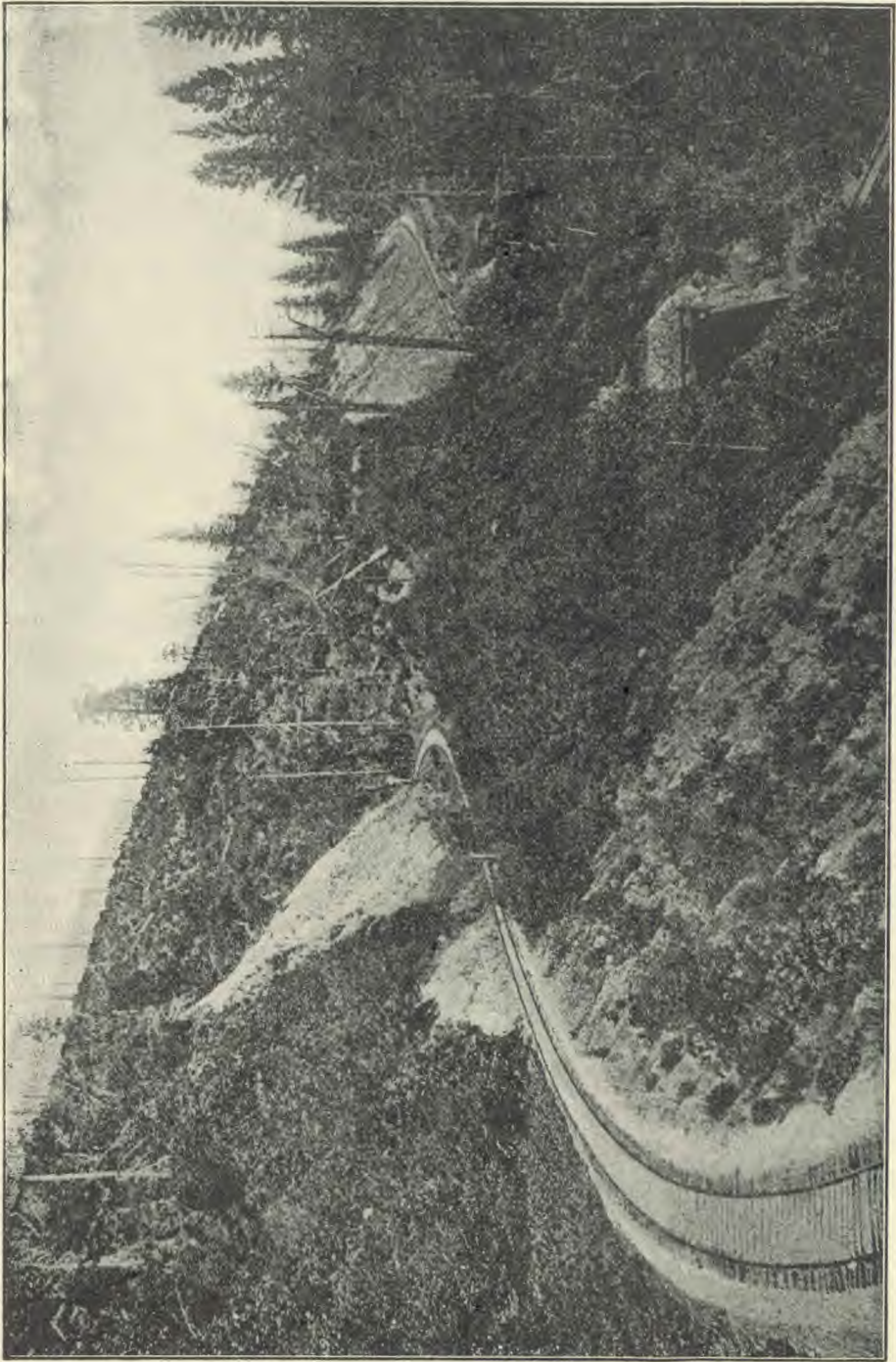
*Sent, post-paid, on receipt of price.
Send money by draft on San Francisco,
Chicago, or New York; or by postal or
express money-order, or by registered
letter. Address*

St. Helena Sanitarium
SANITARIUM, CAL.



Price \$6.00

When answering advertisements, please mention Pacific Health Journal



THE LOOP, SISKIYOU MOUNTAINS, CALIFORNIA

PACIFIC HEALTH JOURNAL

A Sound Mind in a Sound Body

Vol. XVIII.

Oakland, California, February, 1903.

No. 2.

Causes of Stomach Disorders*

By A. M. Winegar, M. D.

HASTY eating, one of the most common of dietary errors, is responsible for much of the trouble we have with the stomach, and I believe is the fore-runner of a large number of other troubles. There are many wrong things in the manner of our eating which cause us a great deal of trouble. In the first place, when we eat rapidly we do not masticate the food properly. Mastication being the only act in the digestive process over which we have control, we should masticate the food thoroughly, and so give the remainder of the digestive apparatus a chance to do its work properly.

When we fail to masticate the food thoroughly, we do not secrete enough saliva for good digestion. When we have not sufficient saliva mixed with the food, it necessitates drinking at meals. If we would eat more slowly, we would have no occasion to take liquid with our foods.

It may seem difficult for some to adopt a dry diet. When we recommend a dry diet, the answer is sometimes given: "I can not swallow it. I can not get it down. It chokes me." This is because they eat too fast. We

had a patient some years ago who was placed on a dry diet, and for the first three days it almost choked him, but after that time he had no more difficulty; in fact, he said he had more saliva than he needed, and had no desire to drink at meals.

When the salivary glands are stimulated with dry food they begin to act in a perfectly normal manner, but if we take liquid with meals this checks the flow of saliva and dilutes and weakens the digestive juices.

Milk should not be taken as a drink, but should be eaten with something hard that requires mastication. Fruit juice should be taken the same way, otherwise it acts much the same as water. It dilutes the digestive fluids and weakens them.

We should drink more than we do ordinarily; for every one requires one and one-half quarts of water during the twenty-four hours, but of course aside from meals. Liquid should not be taken for two hours after a meal. Those who have slow digestion would be better off if they waited three hours after meals. In drinking water take it far enough in advance of the meal so it will have time to absorb before the meal. Some people can take water half an hour before meals. It

*From a parlor lecture delivered at the St. Helena Sanitarium.

is well to take a glass of cold water before meals, provided it is taken a sufficient length of time before or after meals not to interfere with digestion.

Taking improper food is a very common error. In fact, I think we are all guilty on this point, because we do take things that are not the best for us, especially when the table is spread with so many articles of food. Many of them have little or no food value; and the presence of pepper, spice, mustard, and vinegar makes them objectionable. We can not call condiments foods. There is no necessity for our taking pepper on our foods. The real purpose of eating is to strengthen and nourish the body. And if we desire to nourish the body, we must take food containing nourishing properties. Pepper and mustard act on the mucous membrane of the stomach much the same way as on the delicate membrane of the eye, producing congestion and perhaps inflammation. They contain no nourishment and are really harmful. We can not allow a mustard plaster to remain on the surface of the body longer than twenty minutes or half an hour. We can judge from this what would result if we should put a mustard plaster inside the stomach, as the stomach walls are more sensitive than the skin.

The same thing may be said of vinegar. It acts as an irritant to the stomach. It is highly acid, and thus interferes with starch digestion.

Free fats, whether of animal or vegetable origin, are objectionable, particularly when cooked in foods. The cooking of the fat renders it indigestible and irritating to the stomach. Butter or foods of that sort taken in their natural state are not so harmful as when heated.

The drinks that are usually taken, such as tea, coffee, cocoa, and chocolate, are objectionable because of their liquid form, and also because they contain stimulants. The fact that it makes us feel good does not prove that such things are good for us. There are many drugs that would make us feel good if we took them, and yet they might be really harmful. The same can be said with regard to coffee and tea. Coffee contains a strong drug called caffeine. The thein in tea is much the same as the caffeine in coffee. Cocoa and chocolate contain the same drug. These drinks are probably more objectionable, from the fact that people use large quantities of sugar and cream or milk and sugar, which are not good combinations.

One of our greatest difficulties is that we do not masticate the food that we do take. We should chew the food until it is thoroughly dissolved. If the stomach should be emptied of its contents we would notice that the food was in chunks, the fruit and the different foods quite easily discerned; whereas, had the food been properly masticated, it would appear as one homogeneous mass.

However many meals per day we may take, there should be a regular time for taking them. It is true there are certain conditions to be considered. Those following certain professions often have to take their meals at irregular hours. There is perhaps no class of which this can be said more truly than that of physicians. If we form the habit of taking our meals regularly the stomach will accustom itself to this time, and when the meal hour draws near we will feel hungry. I think for most people two meals are better than three, for the simple reason

that people with slow digestion can not possibly manage more.

Overeating is another cause of stomach disorder. Hasty eating or failure to masticate the food properly is responsible for overeating. If we eat very slowly we will rarely overeat. When we bolt our food we do not feel satisfied, and in this way we are liable to overeat when we are living on the most wholesome diet. A good plan for those who have a tendency to overeat is to make a selection of the food that would be best and place it around the plate before beginning the meal. In this way they would know just how much they were eating.

The manner of serving foods in courses is not the best, as it has a tendency to establish the habit of overeating. We do not know just how much will be served in the courses, and we eat freely of that which is served, and the courses keep coming, and we keep eating, and do

not realize at the time that we are overeating. If we adopt the plan of selecting what we are going to eat and eat that, we will be much better off. Of course if we are invited out to a meal we can not regulate those things; but we can eat sparingly of the courses as they come. We can eat slowly, and thus avoid one of the errors first mentioned, and at the same time dispose of less food. We used to have a custom among our workers for the purpose of forming the habit of eating slowly, and that was to chew each mouthful of food thirty times. Of course it would seem irksome, but it is a good practise. If we endeavored to carry out this plan, we would find that after about a dozen movements of the jaw we would be ready to swallow the food. Those who try this plan will find that they will be forced to masticate their food quite thoroughly, and in this way the habit of overeating will be avoided.



Simple Treatments

By M. B. McDonald, M. D.

[Superintendent of Reno Sanitarium.]

USES OF THE WET-SHEET PACK.

GREAT caution is required in giving the wet-sheet pack. It must not be given to patients who are feeble and emaciated and who can not react without the aid of friction, nor in Bright's disease, diabetes, rheumatism, gout, nor in eruptive fevers after the eruption appears.

If a patient is not able to take a wet-sheet pack at once, he may be

prepared for it by first taking a short warm bath, fomentations to the spine, or a drink of hot water, or he may be gradually accustomed to the pack by having a portion of the body treated at a time, until he is able to take full treatment. Sometimes certain parts, as the chest in asthma and the spine in spinal irritation, need protection. In such cases a dry cloth, flannel preferably, placed over the part before applying the wet sheet will prevent any ill effects.

* This treatment is valuable as a cooling agent in fevers. To receive this effect the pack must be interrupted before the end of the first stage. It is excellent to reduce the temperature of typhoid fever when the skin is hot and dry. In congestion and inflammation of the brain it is valuable. In the insomnia and delirium of typhus fever, typhoid fever, pneumonia, and cerebro-spinal meningitis (brain fever), it is invaluable if continued to second or neutral stage. In the last-named disease it is necessary to keep an ice-bag to the spine and ice on the head (ice-cap) or around the neck (ice-collar).

The sleeplessness of nervous people is much relieved by the neutral pack, as is also melancholia, epilepsy, and St. Vitus' dance. Congestions of the spleen and liver from malarial poisoning or biliousness are relieved by the heating pack—the wet-sheet pack continued to the third stage—also constipation complicated by hemorrhoids, abdominal dropsy, and the eruptive fevers,—measles, scarlet fever, and smallpox,—when eruption is delayed.

The fourth or sweating stage is entirely eliminative and indicated in all cases where secretion, excretion, circulation, and assimilation need to be increased. It is, therefore, valuable in constipation, chronic catarrh in any locality, chronic bronchitis with a dry cough, chronic pleurisy, dyspepsia, jaundice, and convulsions in children.

THE HOT BLANKET PACK.

The hot blanket pack communicates heat to the body, diminishes heat elimination, and increases heat production. It excites the circulation, raises the temperature, and produces perspiration. It is an excitant, while the

wet-sheet pack is a sedative. And though primarily a stimulant and excitant, it becomes depressing and exhausting after continued use. It is given somewhat after the fashion of the wet-sheet pack, except that it requires five or six woolen blankets and a number of hot-water bottles. All the blankets should be spread smoothly and evenly on a couch or bed, except one, which is to be wrung out of boiling water. Two persons are required to wring the blanket thoroughly and quickly. Spread this blanket out rapidly over the dry blankets. The patient, having previously removed all clothing, lies down on the wet blanket, which is wrapped around him after the manner of the wet sheet. Place hot-water bottles to the feet, stomach, spine, and outer sides of the legs. If you have not hot-water bags, common bottles, or jugs filled with hot water, or hot bricks or stones, will answer the same purpose. Then wrap the dry blankets around one by one, as previously directed for the wet-sheet pack. Cloths wrung out of cold water and frequently changed must be kept on the head constantly. Duration of pack should vary from three minutes to one hour. The pack should be brief for very weak and very sick patients; for robust or comparatively strong patients a good rule is to leave them in until they perspire. In the latter case take patient out gradually, by removing or unwrapping one blanket, waiting a few minutes before throwing the next one back. Proceed in this way until you come to the wet blanket, then remove it sufficiently to expose one arm, which you sponge with tepid water, dry thoroughly, and cover with dry blanket. Proceed in

the same manner until the whole body has been sponged and dried. Then allow the patient to rest half an hour before he dresses. In the case of a feeble patient it is undesirable to wait so long in removing him from the pack. As he has been in only a few minutes, it will be safe to take him out immediately, by removing the blankets and sponging as above stated, leaving him covered in dry clothing to rest.

Three things always remember: Do not give any one a hot blanket pack unless the bowels have been evacuated some time shortly before. If the patient is constipated, give enema. Do not put him in with cold feet; always give a hot foot-bath before putting him in the pack. While the patient is sitting with his feet in the foot-bath, have him drink one or two glasses of hot water.

The hot blanket pack is a most excellent means of breaking up a cold, the beginning of an attack of neural-

gia, rheumatism, influenza, and biliousness. It is valuable in all fevers when temperature is elevated and the skin cold. It is useful as a preparation for cold treatments, also in kidney complications of typhoid and scarlet fever, in measles, malaria, rheumatism, peritonitis, and in convulsions of children when face is pale. It is especially useful in collapse, coma, and shock following surgical operations.

Great care must be exercised in giving these treatments, not to burn the patient and to provide that the heat shall be evenly distributed. Watch the head, always keeping it cool. If patient faints (unless he is very feeble or has serious heart disease), do not be alarmed. Bathe his face gently in cold water or quickly dash a little in his face. He will soon regain consciousness, and usually you can continue the treatment without further interruption.



Diet and Endurance

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

DURING a recent visit of the writer in London, considerable interest was manifested over an athletic contest which had just taken place in Germany to test the relative endurance of the vegetarian and the flesh-eater.

The contest under notice was a race promoted by the Kornet Sport Club, Berlin, walking or running, Dresden being the starting-point and Berlin the finish. The distance between these two cities is about one hundred and twenty-five English miles. Among the contest-

ants were eighteen vegetarians and fourteen non-vegetarians, or flesh-eaters.

The German government, with its usual progressive spirit, appointed scientific experts to watch events through every stage of the race for the gleanings of facts likely to be used to the physical welfare of the people. In this respect Germany has set an example that it is to be hoped other nations will not be slow to follow.

Scientific experts of the Royal Physiological Institute made careful tests and examinations of the favorites both

before and after the contest. At different points of the race the competitors had to sign their names at control stations, and as early as the first forty-seven miles there were five vegetarians in the lead, and all were doing excellently.

Only thirteen of the thirty-two contestants reached the goal, in the following order: (1) Karl Mann, 26 hours 58 minutes; (2) Herman Zendt, 28 hours 58 minutes; (3) Martin Rehann, 30 hours 29 minutes; (4) A. L. Dheur, 30 hours 57 minutes; (5) Thuk, 32 hours 46 minutes; (6) Pochfdi, 34 hours 9 minutes; (7) Runge, 34 hours 32 minutes; (8) Schmidt, 35 hours 5 minutes; (9) G. Gahde, 39 hours 58 minutes; (10) Biber, 41 hours 55 minutes; (11) Peterjohn, 44 hours 6 minutes; (12) Debes, 44 hours 53 minutes; (13) Max, 49 hours 58 minutes.

Of the thirteen who completed the full course only three were flesh-eaters. These came in Nos. 7, 8, and 13. No. 9 was a man sixty years old, while No. 3 was but twenty, both vegetarians.

The weather could hardly have been more unfavorable, the most of the distance being covered during a blinding wind and rain-storm, but in spite of this the winner, Karl Mann, lowered the world's amateur record of sixty-two miles by twenty-three minutes. Mr. Mann is not a professional, but an amateur, engaged in business, and judging from the endurance displayed during and after this contest, one would say that a walk of one hundred and twenty-five miles was simply a holiday for him.

For the ninety-six hours including and following the race he obtained only twenty-one hours' sleep, during which time he gained four and a half

pounds. Professor Zundt, chief director of the Royal Physiological Institute, found, by physical and X-ray examinations, that his heart was even smaller after passing the goal than before the start. Every physiologist realizes that the great danger of violent athletic contests is dilation of the heart.

Careful examination of the mental faculties demonstrated that no change had taken place—that the memory was as retentive and the intellect as keen immediately after finishing as when examined in Dresden.

Mr. Mann is an enemy of tea and coffee, his diet consisting of fresh and dried fruits, bread, cooked cereals, prepared nuts of various kinds, forming the so-called nut butter, fresh green vegetables, and salads, and occasionally unfermented grape juice.

That this test of endurance of the vegetarian is not an exceptional one has been abundantly demonstrated by numerous carefully-watched experiments within the last decade. One which has been published quite extensively in the *Medical Press* is that of a traveler in Japan who drove 110 kilometers (68 miles) in fourteen hours, changing horses six times. A Japanese with a cart made the trip at the same time in fourteen and one-half hours. He had two rikisha men trot 40 kilometers (25 miles) with his weight of 80 kilograms (175 pounds) every day in the heat of the sun. At the end of fourteen days one of the men had gained one pound in weight. He then added a little meat to their food, but the men said it made them feel tired, so it was suspended after three days. At the end of the twenty-second day of the test the men were as full of energy as at first.

It is said that a century and a half ago Benjamin Franklin found the world believing that alcoholic drinks were a necessity to health. Franklin proved that a man could do more and better work on water than on alcohol.

Slowly, unwillingly, public opinion has come up to Franklin's position, and few now hold to the necessity of alcohol, even in disease. It seems quite probable that the same history will be repeated as to meat-eating.



The Health of the Little Ones

By H. E. Brighthouse, M. D.

[San Francisco Branch St. Helena Sanitarium.]

ALARGE proportion of all children born, fully four-fifths, die before they reach six years of age. It is estimated that as much as eighty per cent of these deaths are preventable. Think of the large number of deaths due to contagious disease which might be avoided by proper isolation and disinfection. Think of the accidents, and of the still larger number of deaths directly due to ignorance of the simple principles of hygiene, clothing, and diet for children.

During this season of the year many children succumb to pneumonia, bronchitis, and kindred affections, whooping-cough, diphtheria, etc., while during the summer season a large number perish from bowel disorders, cholera-morbus, and gastritis, brought on by ignorance regarding infant feeding, while the whole year through scarlet fever, measles, typhoid, and other contagious diseases carry off their victims.

A few facts in regard to the general hygiene of the child are essential. The child should have an abundance of fresh air in all kinds of weather. This should be secured without drafts. It is well to remember that the floor

is the coolest part of the room, and also that the foul air gradually sinks to the floor, so that the little ones, unless especial precaution is taken to secure good ventilation, have, in their play on the floor, both cold and foul air. The foul air must be guarded against by freely admitting fresh air.

Let the clothing of the child be suitable to the temperature, not the temperature of the room as high as your heads, but that of the lower strata of air in which the child is. Aim to have the clothing as light as possible to secure the desired warmth. Too heavy clothing is also bad. The aim should be to so clothe the little one that it will keep comfortably warm only in its active play. An even distribution of the clothing is of more importance than quantity. The arms and legs need more attention, if anything, than the rest of the body. The present custom of dressing the legs so lightly is altogether injurious, and the future of the child so dressed will reveal many conditions of deteriorated health. A positive cruelty which can not be too severely condemned is that fashion which leaves bare the little legs from the shoe tops to the knees or above.

And yet it is not coddling and over-dressing that is needed. A certain amount of hardening, judiciously and intelligently carried out, is the best thing for the vigor of the child. The child, as well as those of full growth, is benefited by the stimulus of cold. But children bear cold badly, and the process of training them to endure it must be wisely and carefully managed.

This question is one that includes not merely the clothing of the child, but all its environments and life, especially its diet, the amount it eats, and the regularity of its meals. A sufficient amount of pure food, suitable to the needs of the growing child, will furnish pure blood. Overabundance, especially of improper food, unsuitable to the needs of the child's growth, clogs the machinery of the system, and, as a result, circulation is

impeded, and colds and other diseases are easily contracted. To avoid colds under these conditions it becomes necessary to bundle up and continually watch every little avenue by which a cold might be contracted.

The natural impulse is to cover the child very warmly the cold winter nights; but children usually keep warm with light covers. They sleep better and more restfully. It is a mistake to cover them too warmly. It is the cause of their taking cold, because becoming warm they kick off all the covers. It is much better to cover them only sufficiently to prevent their becoming cold. Intelligence must be brought to the care of the child in this as in other things. Study each child and its particular physical makeup, and suit its clothing to its needs.

1436 Market Street, San Francisco.



Light as a Healing Agent

By David Paulson, M. D.

[Superintendent Chicago Branch of the Battle Creek Sanitarium.]

INVENTIVE genius and scientific investigations are beginning to reveal to us some of the healing possibilities that have been hidden in natural remedies. It is only a few years ago that a noted nerve specialist stated that there was no value in hydriatic applications beyond their cleansing properties. Now in the great hospitals in Europe cold baths have reduced the death-rate in typhoid fever from about twenty per cent to two or three, while in this country the use of hydrotherapy has lowered the death-rate in pneumonia from twenty-five to

about four per cent. Think of the vast number of funerals that the wise applications of nature's own remedies have thus prevented; and that which has already been attained is only a suggestion of what may be accomplished in the future. Although the ancients had some conception of the healing properties of light, it is only in the last few years that its magical effects in the treatment of disease have come to be clearly recognized.

From the results already obtained, we have every reason to hope that in the X-ray we have an efficient agency with which to cure internal cancers.

Professor Finsen, of Copenhagen, has during the past few years developed an instrument by which the electric arc rays can be concentrated upon such diseased conditions of the skin as tuberculosis, eczema, psoriasis, and many other of the most obstinate skin disorders, and the results that have been obtained are simply marvelous.

Patients suffering with skin disorders that have defied all form of medication have flocked to his laboratory, and in a few months' time have returned home perfectly cured.

An improved method of utilizing this light has recently been invented in London, where the same effects can be secured in three minutes by what is known as the Dermo lamp as was produced by the Finsen lamp in an hour. One of these lamps has been

imported for the use of the Battle Creek Sanitarium and another for the Chicago Branch of the Battle Creek Sanitarium. Almost without exception the results from their use have been very encouraging. The most unsightly acne on the face has been entirely cured by a few exposures to this light. Such results only give us a hint of the possibilities that Providence has locked up in the rays of light when man shall have discovered other means of using it. How thankful we should be at this time, when sin is so universal and consequently disease has become so widespread, that God is at the same time allowing to be discovered the healing resources that have been hidden away for ages in these natural remedies!

28 Thirty-third Place, Chicago, Ill.



Question Box

Answers by F. Zalinsky, M. D., of the St. Helena Sanitarium

BLACKHEADS is a disorder of the sebaceous glands, characterized by retention in the excretory ducts of a thickened secretion, which is visible as yellowish or whitish elevations, containing in the center black points. Their cause is unknown. Dyspepsia, constipation, and anemia are often, and with good reason, regarded as the prime cause. In chronic affections they are observed mostly on the forehead, neck, chest, and back. There is no evidence of inflammation, but the skin presents a dirty, greasy, and unwashed appearance. Treatment is not always satisfactory and is often tedious. If the bodily functions are im-

paired, they must be corrected, and strict attention must be given to diet, as well as to eliminative and stimulating water treatments. Cold sprays or sponges before breakfast, with two or three shampoos a week, would help to stimulate and promote active sebaceous secretion.

TORPID LIVER.—The most frequent causes of torpidity of the liver are sedentary habits, irregularity, over-eating, excessive use of fats, sugars, pastry, tea and coffee. Alcoholic stimulants often play an important part. Narcotic drugs and the prolonged use of purgatives, especially of the mercurial type, are known to

affect the structure of the liver substance itself. Since nuts and their products have entered into the composition of the vegetarian's diet, the writer has observed in many cases the excessive and indiscriminate use of such products to be a disturbing element in the normal hepatic secretion.

In many chronic cases simply the avoidance of fats, sugars, alcoholic beverages and condiments of all sorts, with a well-regulated diet of grains and acid fruits, has given great relief. Where milk can not be used,

a little cream is often assimilated.

For simple home hydrotheraphy an ordinary hot waist pack, followed by a good vigorous shampoo of the entire body and an oil rub once or twice a week, varied with two or three salt glows, with an early morning cold spray or sponge, would, in the majority of cases afford entire relief. If, however, there is any heart or kidney complications, such individual should carefully seek the advice and counsel of his physician before attempting any home treatments.



The Healing Power of Nature

By T. S. Whitelock, M. D.

IN all the marvelous workings of nature nothing is more profound than the phenomena of regeneration. The privilege of watching this wonderful process, as it is carried on by the great Creator, can be had by all who are interested in knowing themselves. The work of rebuilding and repairing the broken-down tissues of the animal and vegetable organism never stops. A simple cut or wound furnishes a good illustration as to how the work is done. In this locality we see the rapidly-multiplying cells filling up the cut and restoring the damaged parts. Few stop to think what is going on, and often hinder the workings of nature by using strong medicines that poison and retard the work of the delicate cells. When a cut or wound of any kind is made upon the body, the repair station is immediately notified and a large number of white cells start for the afflicted parts. Here they

produce coagulating ferments, which stop the hemorrhage and also form a mucilaginous, soothing substance which protects the raw edges of the wound, and causes them to adhere until nature can take a few stitches.

The healing process seen in a wound is but a small example of the constant process of regeneration going on all over the body. The finger-nails are entirely renewed in from five to six months, while the toe-nails require a little longer time, or about eleven months. It is found, however, that when the feet are left exposed to the open air as the hands are, that the toe-nails grow at about the same ratio. Four weeks is sufficient time in which to renew our epidermis. The eye-lashes are replaced in from one hundred and twenty-five to one hundred and fifty days; in fact, but a short time is required to replace all the tissues of the body. The cornea of the eye, which is kept clean and smooth by

the soft action of the lids, is also constantly undergoing a change.

One of the principal agents concerned in the rebuilding process is the leucocytes, or white cells. Millions of these are constantly traversing the veins and arteries, and often are seen wandering through the tissues. These little bodies are called nature's protecting and building force. They hunt out the bacteria and destroy them, carrying off waste matter and foreign particles, and also carry repair material to remote tissues. They are constantly occupied in rebuilding broken-down and exhausted tissues of the body.

Yet in man the process of regeneration is very much limited compared with that of other animals. Man being the highest order, and the masterpiece of the great Creator, it would seem that he should possess above all others the greater power of regeneration, yet we see many animals of lower and inferior orders which have the power to reproduce parts of the body; for instance, the frog grows a tail, then discards it, and it has been found that

the fish can readily grow a new tail if by some accident this appendage is lost. The crab will readily develop a new pair of legs and shears, and the slimy snail can even grow new eyes and parts of the head. Lizards and salamanders have yet greater recuperative powers, and can grow parts of the bones and muscles, and even go so far as to develop a new spinal chord.

We might go on and enumerate other families whose regenerative powers are almost unlimited, such as the infusoria or medusa, but this is sufficient to give us a glimpse of the workings of our great Creator. All life and its regenerative forces come from One who proclaims Himself to be the source of life, and without Him there is no life at all.

It is a wise providence that has provided for all the different orders, and as we view His great work we are to learn lessons from the school of nature, and see how ready God is to cooperate with us when we conform to the great laws of the universe.

715 Tenth Street, San Diego, Cal.



The Meat Habit in Children

ACCORDING to the editor of the *New York Medical Journal*, it is but a few years since starchy food for young children was regarded with horror by most physicians, but that feeling is rapidly giving way, so far as concerns children whose salivary apparatus is sufficiently developed, before such considerations as have recently been set forth most ably by so wise a physician as Dr. Joseph E. Winters. Dr. Winters's pamphlet deals with the dietetics

of childhood in a comprehensive way, advancing from the requirements of the new-born infant to those of older children, but our limitations in the matter of space will not permit of our noticing more than one feature of the essay, namely, that which refers to the easy acquisition of what may be called the meat habit by young children.

One of the most unfortunate evil consequences of an early and liberal meat diet, says Dr. Winters, is the loss of

relish it creates for the physiological foods of childhood—milk, cereals, and vegetables. A child that is allowed a generous meat diet, he adds, is certain to refuse cereals and vegetables. Meat, by its stimulating effect, produces a habit as surely as does alcohol, tea, or coffee, and a distaste for less satisfying foods. The foods which the meat-eating child eschews contain in large proportions certain mineral constituents which are essential to bodily nutrition and health, and without which the processes of fresh growth and development are stunted. These mineral constituents, he goes on to say, can not be introduced into the system in an assimilable form except in organic combination with albuminous molecule, and in such combination they are found in sufficient proportions to meet the child's needs only in certain vegetables and cereals. Not only will a lack of

these mineral constituents cause all vigor and vitality to dwindle and die out, but indeterminate morbid processes supervene in consequence.

Moreover, to overstimulation of the child's delicate nervous system with meat, and to the defective oxidation of the elements of such food, Dr. Winters attributes abnormally high acidity of the urine, with consequent incontinence of urine, rheumatism, chorea, rheumatic inflammation of the tonsils and torticollis, night terrors, urticaria, angioneurotic edema, anemia, convulsions, and petit mal. There is more so-called nervousness, anemia, rheumatism, valvular disease of the heart, and chorea at the present time in children from an excess of meat and its preparations in the diet than from all other causes combined, he declares.—*Dietetic and Hygienic Gazette*.



Lemon Juice for Rheumatism

THE idea of treating rheumatism with lemon juice appears to have had its rise in Germany. The method consists in swallowing the juice of one lemon on the first day, of two on the second day, and so on progressive up to twenty-five lemons. When the limit is reached, the number of lemons is progressively diminished.

M. Desplats, of Lille, has recently adopted this treatment with some of his patients who suffer from articular rheumatism. In one case the patient was able to drop the treatment at three lemons. In another, he succeeded in effecting a cure at twenty-five lemons, so complete and so persistent that at the end of ten months

the patient had not once had an attack, whereas previously he had suffered periodically every month. The third case was one of ankylosis, so bad that the patient could not dress himself without help. To-day he has almost entirely recovered the use of his limbs, and is free from pain.

M. Desplats has also tried this mode of treatment on a patient suffering from attacks of rheumatism accompanied by disease of the heart, for which all means adopted had proved merely palliative. After a few days the patient experienced a manifest relief of the articular symptoms, but he also experienced pain in the upper right side of the thorax, the pain

being extremely great and tenacious. In another case there was the same improvement, though in a less marked degree, and the pain in the thorax made its appearance at the end of the treatment. A third case gave the

same results. Another patient suffering from rheumatism that had proved refractory to salicylate and to thyroid, when treated with citric acid in doses of from two to ten grams daily, improved considerably.



Nervous Children

INTELLIGENT people are beginning to understand the importance of protecting the nervous system in infancy, and the danger of a shock to childish nerves. As a rule, the more quiet a baby is kept during the first year of its life, the better chance it has of a life of health and happiness. The fact that so large a proportion of the human family die in infancy is due largely to the folly of nurses and the ignorance of mothers. Overbright babies do not commend themselves to physicians who know that the first year of the child's life should be spent largely in sleep. All efforts to arouse the dormant mind of a child at this period

are attended with danger. The foolish practise of tossing a helpless baby in the air, while it screams both with affright and delight, is a most dangerous one. A physician with a large practise tells the story of a precociously bright child which showed evident delight when tossed in this way by a doting grandfather who was accustomed to play with it in this way every evening. The child trembled with delight when the night's frolic was over, but one evening from this trembling it passed into a spasm, the first indication of one of those fatal brain diseases against which medical science is helpless.



Olives

THE following is taken from *Farmers' Bulletin*, No. 122, of the U. S. Department of Agriculture:—

"The California Station insists that the pickled ripe olives are more than a relish; that they possess a considerable food value, much more than the pickled green fruit. This statement is borne out by their composition, as determined by analyses. The green olives are simply a relish, and to be used in *very limited quantities* [Italics

ours] in the same way as pickled walnuts or cucumbers. A meal of bread and ripe olives is not only palatable, but nutritious and sustaining, and the amount eaten is to be limited only by the same considerations as that of any good, wholesome food. In Southern Europe and other regions the ripe olive is used as a staple article of diet."

The value of the olive lies in its richness in oil, which makes it rank high as a force producer.



Woman's Realm

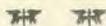
Conducted by MRS. M. C. WILCOX



Say It Now

BREAK now the alabaster box
Of sympathy and love
Amid the cherished friends of earth,
Ere they are called above.
How many burdened hearts are here
That long for present help and cheer!

The kindly words you mean to say
When they are dead and gone
Speak now, and fill their souls with joy
Before the morning's dawn.
'Tis better far when friends are near
Their saddened hearts to soothe and cheer.
—James J. Reeves.



Winter Evening Amusements

By Mrs. M. C. Wilcox

THERE is certainly a demand on the part of young people for society. God has placed this element within mankind, and while it should be kept under proper control, it should not be crushed.

It is only by coming in contact with others that we are able to work for them. It is only by meeting different and varied influences that we are able to discern, receive, or resist that which is good or evil.

Christ, our elder brother, certainly appreciated the importance of our coming in contact with the world, when in His prayer for His followers He prayed, "I pray not that Thou shouldest take them out of the world, but that Thou shouldest keep them from the evil that is in the world."

It is a mistake for parents to think that by excluding their children altogether from society they will grow up pure, good, and strong.

Many who have tried this method have found to their sorrow that they

were simply "strong for lack of test."

Do not misunderstand the writer. She does not think it wisdom to permit the children to mingle indiscriminately with all children.

During the formative period, when the mind is tender and plastic, their playmates and society should be guarded with the greatest care. But they need the strength that contact with others of their own age gives. It is wise, then, for parents to choose their children's companions, invite them to their own home, and enter with interest into that which interests them. Let them visit and chat around their own fireside, talk with them, play with them games that are good and instructive. Make them feel that the presence of father and mother adds greatly to the interest and inspiration of the evening's pleasure.

In this way we shall hold their confidence, remain young ourselves, and by their own choice be able to act

as their companions and counselors through life.

There is always one evening in the week when the children of those who observe the seventh-day Sabbath are somewhat at a loss to know what to do, how to put in the time, and that is the evening after the Sabbath, usually called Saturday night. They have been quiet all day as a usual thing, and they now have a desire for physical exercise, where they may "run off their animal life," and this is indeed quite a necessity from a physiological standpoint. Let the children then have a romp, let them exercise their lungs, let them convert the sitting-room into a play-room, by removing everything that will be disturbed by such a vigorous game as Blind Man's Buff, or a game with a toy balloon. These little balloons you know after about twenty-four hours are inclined to settle to the floor. Let one or two stand on each side of the room and keep it from touching the floor by knocking it back and forth from side to side. If it touches the floor on the opposite side it counts one for you.

This is also an excellent evening for practise in physical culture, especially when you can practise to music, which always adds greatly to the inspiration of the exercise.

At our own home we have given much thought as parents as to how we could arrange that which would be elevating and helpful, as well as entertaining, for our young people.

We finally decided to organize the members of our own household (all that were old enough) into a club. These consisted of five, from which were to be elected a president, vice-president, secretary, and critic. By consultation together we decided to call it a "Mutual Edification Club." All members were to be of good moral character and must agree to contribute something at each meeting that would edify the others,—some thought or sentiment which had been a help or inspiration to them during the week, or at any previous time.

Next month we want to tell you how this plan developed and succeeded. We feel sure it will be of interest and we hope profit to all.



Dress. No. 4

By A. M. Winegar, M. D.

[St. Helena Sanitarium.]

INFLUENCE UPON THE CIRCULATION.

THE health depends largely upon the quality of blood and the freedom with which it circulates.

The circulatory system is one of the most intricate and yet one of the most perfect arrangements of the entire body. The blood enters every organ,

and bathes every tissue, distributing in its course the life-giving principle which it constantly carries on its never-ceasing rounds. Having faithfully deposited in every part of the body that which vitalizes and builds up every organ and tissue, it performs another important function, that of gathering up that which is no longer

necessary in the body, and which if retained acts as a poison to the system, and carries it away, thus purifying the body constantly.

The heart, the great center of circulation, acts both as reservoir and pump, receiving and propelling the blood to the remotest parts of the body. In the normal condition the natural beat of the heart is sufficient to send the blood through the arteries into the capillaries, from whence it enters the veins and is returned to the heart. This process is repeated about seventy-two times per minute during the lifetime, giving warmth and vigor to the body.

The dress of the women of the present day often hinders the free flow of the blood, by various irregularities in the clothing, causing mechanical obstruction to the flow of the blood, or chilling of some parts of the body, while others are overheated. Tight clothing, particularly about the trunk, puts extra work upon the heart, as is proven by the fact that vigorous exercise with a corset increases the heart beat very much more than the same exercise in loose garments.

This being true, we can readily appreciate the evil which must come to our race from a constant strain of this sort upon the system. The extra work upon the heart in many cases overstrains the valves of the heart and results in organic heart disease.

While the arteries are deeply located, and are well protected from outside influences, at the same time the pressure from tight garments, particularly about the trunk of the body, impedes the circulation of the blood from its very source. The blood does not flow so freely to the extremities, and, having to pass so great a distance from

the heart and at a slower rate, on account of the obstruction, is chilled, and fails to keep the extremities warm, as it should.

The amount of clothing about the trunk is usually much greater than that of the extremities, notwithstanding the fact that the heart and large vessels are located in the central part of the body and serve to keep it warm, while in the extremities the vessels are much smaller, and a greater amount of clothing is required to keep up the warmth of these parts. Particularly should the lower extremities be well clad, to protect from cold and dampness. The thin-soled shoes, which have been so commonly worn, have, no doubt, been a great source of disease. The sole of the shoe should be thick and of a kind not easily water-soaked.

The garters which are worn by so many women and children, especially those worn below the knee, interfere with the circulation, particularly the venous circulation, causing, we believe, in many cases, varicose veins. The elastic garters obstruct the return flow of the blood, the veins become overdistended, the walls become stretched, and the blood fails to return to the heart as freely as it should. These veins become tortuous, and often swell out like tumors on the legs of persons accustomed to continued standing. Frequently they rupture, forming what are known as varicose ulcers, which are very difficult to heal, owing to the defective circulation. The interference is a little less if the elastic is above the knee, as the vessels are somewhat protected by two large tendons, known as the hamstrings. However, there is some interference, which should be avoided by supporting the hose from a waist

suspended from the shoulders. A garter which is tight enough to hold the stocking in place will necessarily obstruct the circulation to some extent.

Tight shoes impede the circulation of the feet, thus causing cold feet, which leads to diseased conditions of various kinds. The circulation of the arms is often hindered by tight sleeves.

A congested condition of the brain often results from tight collars. The blood is sent to the head through the arteries, which are more deeply located and not so much affected by the collar. The veins, being more superficial, are obstructed, and the blood is retarded in its return from the head; thus a large amount of blood is retained in the head, often causing a full feeling,

throbbing, and many times severe headache. The condition of the brain, as well as other organs of the body, depends upon its nutrition, which is supplied by the blood. The quality of the blood and the freedom with which it flows through the brain have much to do with the character of mental work accomplished.

Health has been defined as the "perfect circulation of pure blood in a sound organism." This being true, our clothing should be so adjusted that it will in no way interfere with the free and perfect circulation of the blood in every part of the body. It should also be so arranged that there will be an even distribution of the heat of the body.



Father's Time

"OH, no, I can not go with you after dinner to-night, because that is father's time, and we always have so much fun then."

That is what I heard a little maiden say to her school friend, who had invited her to go somewhere with her.

"Father's time." I wondered what that meant, and so I asked the little maiden, "What is 'father's time'?"

"Oh," said she, "'father's time' is right after dinner at night, an hour or so before we go to bed. Father makes lots of pleasure for us then, and it is the only time we can see him, except in the early morning, and that is for

such a short while. Father never goes away at that time, neither do we; we give that hour to him, and he gives it to us. It is our 'together hour.' Oh, he is such a good, dear father!"

What a testimonial to the high standard of fatherhood was the speech of this little girl! Away all day, immersed in business cares, the father could give no time to his children except the hour before their bedtime. With what happy, light hearts those little ones kissed him good-night when bedtime came, and with what smiling faces they went to sleep to dream beautiful dreams of father love!—
S. T. P., in Evangelist.

'Tis easy enough to be pleasant
When life flows by like a song;
But the man worth while
Is the man who will smile
When everything goes dead wrong.
—Ella Wheeler Wilcox.



Editorial Articles



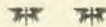
Cold Feet

WHERE there is a tendency to cold feet, it may be because the stockings are moist, favoring the loss of heat. It may be necessary to change the stockings daily, or to dry the stockings before putting them on. Two thin pairs of stockings will probably be as good a protection as one thick pair, or better, because of the layer of air contained between them. Air is a poor conductor.

Be sure there are no constrictions at the knees or ankles; wear good, sen-

sible shoes, for comfort rather than looks, large enough to permit the blood to circulate.

Shoes which permit evaporation are an advantage, as dampness does not collect to chill the feet. Those who are especially troubled in this respect will, if they fail to get relief by all other methods, have delightfully warm feet by wearing all-felt shoes. They permit evaporation, and thus keep the feet dry; at the same time they retain the heat.



Two Principles

IN every living being two principles are working, one tending to build up, to repair, to perpetuate, the other tending to disorganize, to break down, to destroy. One has the ascendancy in the young and robust, the other in the old and feeble. Sooner or later in each individual the second principle must become more prominent than the first, but it depends to quite a large extent on each individual how long that change shall be postponed in his case.

The natural tendency of the young is to feel that their superabundance of vitality will last indefinitely. "Oh, that never hurts me!" is the reply with which a timely caution is apt to be greeted. Possibly it does no

harm, so far as one can now see, but these little indiscretions, trifling though they seem to be, hasten the time when the summit will be reached and the path will start down-hill—when aches and pains, rheumatisms, stiff joints, and numerous other ills, warn, a little too late, that it is time to go slow.

Why can not the young learn by the experiences of others, and avoid those practises which have the reputation of being unhealthful, even though each transgression is not immediately followed by a visible penalty? How often we see people in the vigor of youth, conscious of possessing a superb vitality, with little or no thought of the future, abuse the powers be-

stowed on them by their Creator! How often the physician learns from their lips later in life the sad results of their thoughtlessness!

The healing powers of nature for a long time counteract the destructive influence of injurious practises, but thereby the day is hastened when the building-up processes will leave the field in possession of the tearing-down processes. Then doctors, resorts, climate, sea voyages, everything will be tried—as long as the purse holds out—in the vain attempt to regain the squandered resources.

Too late the victim comes to his

senses. Henceforth it is an ever-accelerating rush down the hill of destruction. The brakes are applied with all the energy of despair, but they are worn out, and scarcely influence the mad flight of the doomed machine.

The different stages of this sad picture can be seen about us any day. Who has eyes to see and take warning before it is too late? Stimulation of all kinds—alcohol, tobacco, even tea, coffee, and condiments, late suppers, late parties—are but a few of the many ways of hastening the destructive processes.



“The Curve of Health”

It was Oliver Wendell Holmes who called attention to the variation in health from day to day, even in the healthy person. “It is a mistake,” he says, “to suppose that the normal state of health is represented by a straight horizontal line. . . . The ‘dynamo’ which furnishes the working powers of consciousness and action, has its annual, its monthly, its diurnal waves, even its momentary ripples, in the current it furnishes. There are greater and lesser curves in the movement of every day’s life,—a series of ascending and descending movements, a periodicity depending upon the very nature of the force at work in the living organism. Thus we have our good seasons and our bad seasons, our good days and our bad days, life climbing and descending in long or short undulations, which I have called the ‘curve of health.’”

This same curve is seen in all con-

ditions, whether of health or disease. As the pendulum is drawn down by the force of gravity only to rise again, and again fall, so the forces controlling the body keep up a constant swaying. The heart contracts and relaxes, the temperature rises and falls, sleep follows waking. There is a constant change in the bodily functions, and these changes are more or less periodical. Among other changes are those in one’s general well-being. This is partly dependent on atmospheric changes, on surroundings, diet, nature of work, etc., but it is to some extent, at least, independent of all these, being simply one of the rhythmical changes of the body, or, rather, the result of the cooperation of all these changes.

In health this change is little noticed. In fact, many people are unaware of such a change until their attention is called to it. They are

"always well." The rugged teamster would not notice a slight roughness in a road, which might be very annoying to an invalid.

So when one is sick this rhythm becomes especially noticeable. The physician attempting to help a chronic invalid back to health will, some morning, after his patient has been progressing beautifully for several days, find him "all down in the mouth,"—completely discouraged, his

confidence in his treatment greatly shaken by his backset. For this reason the doctor does well always to forewarn his patient that the road from disease is not a straight line, but a wavy line—up and down. The patient must learn beforehand to expect these "backsets," and to regard them as a part of the normal process of cure. Otherwise the mental effect of the backset will do much to retard recovery.



Medical Inspection of Schools

IN progressive cities physicians are appointed by the board of health whose business it is to visit the schools daily, make all necessary examinations, and exclude all pupils showing evidence of contagious disease. This is as it should be, only the practise should be universal. If the work of caring for the health were more carefully attended to during childhood, there would be less need of the doctor's visits. It is far better for the doctor to be engaged in preventing than in curing disease.

The children should not only be examined with reference to the presence of contagious disease, but also with reference to diseases of the eye, ear, nose, and throat, which, sometimes overlooked, work such havoc in a child's life, destroying health and usefulness. Speaking of the frequency of cases of partial closure of the air passages by obstructions, Dr. John A. Huber says, "There can hardly be any greater handicap in the struggle for existence than such air-starvation at the childhood period."



Education vs. Commercialism

THE question comes to us, Why should we use the columns of the JOURNAL for giving publicity to the work of certain food companies and sanitariums? The reply is that all these are working for a common purpose, the education of the people on health lines. While the food com-

pany sells food, and sometimes sells at a profit, it would never have been started had it not been the desire of the founders to bring before the world the great principles of preserving health through a simplified and corrected dietary.

The founders of the sanitarium had

a similar purpose in view,—the healing of the sick and the spreading of health principles. The original sanitariums and food companies were so founded that those investing in them would not only receive no profit on their investment, but would give their investment permanently to the work. It was purely a work of love, started by men who had such confidence in certain principles that they willingly gave of their means to advance the work.

With these enterprises, founded for the advancement of truth, the JOUR-

NAL stands hand in hand, and desires that its pages shall ever be used for their furtherance. This is not to say that everything that goes by the name of "sanitarium" or "food company" is established on these principles. There are others, many of them, in the business for the shekels. Of them we have nothing to say. Wherein they accomplished good, we rejoice.

A directory of associated sanitariums, food stores, and restaurants, established for the good they can do, is given on one of the advertising pages of the JOURNAL.



The Forthcoming Cook-Book

THE writer has had the pleasure of examining the manuscript of Mr. E. G. Fulton's forthcoming book on cookery, and he feels confident that, notwithstanding the number of cook-books—large and small—already among us, this book will have a ready sale from the first. The author is being urged to get it into the press as soon as possible, for it will be a valuable addition to any kitchen, no matter what cook-books they already have. Mr. Fulton's extensive experience as a restaurant manager has given him an insight into how to prepare tasteful dishes at a minimum of cost. The book will be sold at a price within the reach of all.

We give herewith a few sample recipes:—

Nut French Soup.—To one pint of strained tomatoes add three quarts of water, three medium-sized baked onions, one-half pound of nut food finely minced, two bay leaves, one

tablespoonful of salt, one-half teaspoonful of sage, one-half teaspoonful of thyme, one teaspoonful of browned flour. Boil slowly for one hour, and serve very hot.

Frizzled Protose and Eggs.—Take one-half pound of protose, or any kind of nut food, and cut into small, thin, narrow strips. Put into a frying-pan with a little olive-oil, and when hot pour four well-beaten eggs over it, stirring constantly until the eggs are set; then serve on hot platters or on toast.

German Noodles Saute Vegetarian Style.—Whip six eggs smooth. Add a little salt, then work in as much flour as possible. Roll out very thin; cut in strips about four inches wide; sprinkle with flour; stack them one on the other, and cut in narrow strips with a sharp knife. Boil in plenty of water till done. Wash them and braze in a little olive-oil and bread crumbs.

Dampness

SOME years ago the writer read an article on "clean damp and dirty damp," showing how much less danger there is in a little dampness left in the bedding by the laundry than in that given off from the body during sleeping hours. At this season, when sunlight is not very strong at best, when the morning and evening sun has scarcely any force, when everything naturally gathers dampness,—this is the time when many will be inclined to partly or entirely close windows, in order to economize heat. It is the time of all times when rooms should have the advan-

tage, as many hours as possible every day, of sunlight and fresh air. The bedding should be aired and sunned *frequently*. Some persons air a bed by throwing back the bedding. This is good as far as it goes, but on cold, damp days the cold sheets will absorb more moisture from the air. This dampness, besides causing a clammy condition, which makes retiring an object of dread, makes the bedding a better conductor of heat. And hence the heat of the sleeper is more rapidly given off. Where practicable, the bedding should have a daily sun bath.



Offensive Breath

FETID or offensive breath, a condition the presence of which the unfortunate possessor may not be aware, is a splendid thing to part company with. The difficulty is it is not always easy to get rid of. Every one dreads the presence of a person with bad breath, and yet no one feels free to mention the matter to the unfortunate victim.

What can be done to remedy this difficulty? If there are unfilled cavities in the teeth, they should be attended to. Any catarrhal condition should receive attention, but probably the trouble will be found to originate in the intestinal tract. Poisonous gases, the products of decomposition, are absorbed from the intestines into the blood and thrown off through the lungs. For this reason a bad breath frequently accompanies constipation. The remedy, then, is to improve the condition of the digestive system.

Eat more simply, avoiding foods which tend to decompose. Keep the bowels free by means of a laxative diet. A dry diet combined with some fruit is excellent for a time, as granose biscuit with baked apples, fruit nuts with grape juice, zwieback and fruit toast. Either one of these combinations would be a sufficient meal for one suffering from decomposition of foods.

An excellent laxative mixture is bran and New Orleans molasses baked into a pudding. This is not at all unpleasant to take and can be eaten with the meal.

Regular daily massage to the bowels is excellent. In all cases of fetid breath from intestinal decomposition, the nitrogenous part of the food should be restricted.

Meat, eggs, milk, cheese, and especially beans should be used in small quantities if at all.

The Minimum Age for School Attendance

THIS topic is now attracting some attention, on account of the early age at which children are being sent to school. This abuse is more apt to be in vogue in cases where both parents must work out in order to earn the living for the family; and, no doubt, the child is better off in the kindergarten, or in a primary school, than he would be roaming the streets; but observation and experience teach that the child which begins school at eight, or even ten, is very apt in a short time to outstrip the child which began at six.

His mind, not being forced at an unnatural age, experiences a more healthy and normal growth. In fact, other things being equal, he is apt to develop, mentally and physically, more rapidly than his less fortunate classmate, who entered the "grind" at a more tender age. A close contact with nature, rather than with chance companions of unknown habits, will have developed in him, perhaps less of that cunning which is so common in the modern child, but more of real hard sense; less of the artificial, more of the real.



Expectoration

WHEN a man boards a New York street-car and reads a sign that he is liable to \$500 fine, or one year's imprisonment, or both, should he chance absent-mindedly to spit upon the floor, he laughs and feels a good-natured contempt for the lawmakers of Gotham, so absurdly disproportionate is the penalty to the offense.

Such judiciary ignorance upon the part of the health authorities simply makes the law abortive. If a reasonable fine, say \$5.00, were imposed, the law would stand some chance of being supported, but it is hard to find a magistrate who will fine a man \$500, or commit him to prison for a year, for spitting on the floor of a street-car, while a petty thief gets off with \$10 or ten days.

Spitting is an unclean and unsightly practise, and the health board is perfectly right in trying to regulate it—for sanitary and esthetic reasons. On the other hand, spitting is not simply a habit, as alleged by health boards; it is a necessity with many people.

Those who suffer with catarrhal affections of the naso-pharynx or lungs, as a goodly percentage of our population does, must spit. They can not swallow this waste matter, continually dropping into the throat or being coughed up. Some means of disposing of it in a cleanly manner should be provided.

Provision has been made to dispose of filth discharged by the kidneys and bowels; let refuse matter from the respiratory mucous membrane be likewise cared for. Then it will not need to lie around, an offense to the sense of decency or a menace to health.

If the health authorities wish to go about this matter in the right way, let them secure laws compelling street-car companies to furnish and keep clean receptacles to receive expectorated matter. At present health boards are in the absurd attitude towards spitters of trying to force them to adopt the disgusting, unhealthy, and unnatural practise of swallowing their sputum.

—*Medical Brief.*

PACIFIC HEALTH JOURNAL

MONTHLY—DEVOTED TO

Family Hygiene and Home Comfort

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, February, 1903.

No. 2.

Zwieback

BREAD may be said to be the staple article of diet in civilized nations, and, for that matter, in many uncivilized communities, its general excellence as a force and tissue producer having won for it a high place among the foods of mankind. Rich and poor, high and low, white and black, robust and weak, all make use of bread in some form as a part of the daily dietary. Almost anything else may be omitted from a meal, but if bread is left out, something is wanting. It has come to be a necessity.

But bread in its ordinary form, even when well baked, is marked by certain disadvantages or drawbacks, not noticeable, perhaps, to the fortunate possessor of superb digestive powers; but in cases of feeble digestion, ordinary raised bread often "disagrees" when other forms of bread cause no disturbance. Chief among these is zwieback, the food which has, perhaps, as much as the mineral waters, made Carlsbad famous.

The name "zwieback," and perhaps the food itself, originated in Germany. The word means "twice baked." Curiously enough, "biscuit" also means twice baked, though the

household product now known as biscuit is not twice baked, and much of it is not even once baked thoroughly. The interior of the ordinary raised biscuit is a doughy, half-cooked mass, unfit for human consumption. Zwieback, on the other hand, is, true to its name, baked twice.

It is made from good raised bread, sliced evenly (no other will make good zwieback), by toasting in a slow oven so that it is cooked through. It is in nowise comparable to ordinary toast, which is bread browned on the outside, and more gluey than ever on the inside. The ordinary toast is anything but a healthful food. Zwieback, on the other hand, is, by those having feeble starch digestion (the condition of most dyspeptics), far better handled. In fact, many who, while using ordinary bread, were subject to more or less digestive disturbance, have found complete relief on changing from ordinary bread to zwieback.

The following are some of the advantages possessed by zwieback over the ordinary raised bread: It is more thoroughly cooked, and is partly dextrinized or predigested. The yeast plant, which is not all killed in the



center of a loaf of bread, and which often sets up serious fermentation in susceptible stomachs, never survives the second baking to which zwieback is subjected. Zwieback can not form a pasty, indigestible mass in the stomach. Requiring longer mastication, it favors the more complete insalivation of the food, and the preservation of the teeth.

Zwieback has one great advantage: it can be made by any one who can make good bread. All that is required is good light bread, even slices—not too thick—and a moderate heat. In zwieback every family can have a supply of health food always at hand—a food crisp, appetizing, healthful.

Many people, however, do not care to take the time and trouble necessary to make good zwieback. Such will find the Sanitarium Food Company's zwieback just what they need. It is put up in neat cartons, which can be obtained at any of the food company's stores, as given in the directory in another column.

In each town the food company has a desire to have at least one grocery store handling a full line of the health foods. Any one desiring the foods and not knowing where to obtain them is requested to address the Sanitarium Food Company, Sanitarium, Cal., where satisfactory arrangements will be made.

WE have an excellent report of the work started in Salt Lake City by Drs. W. L. and Eva M. Gardner. With few facilities, but with the blessing of God, they have been enabled to pay their way in their new location and to present to many the pure principles of the gospel and of health reform. A detailed report of their first year's work appears in the *Pacific Union Recorder*, under date of Dec. 4, 1902.

DRS. THOMAS J. and MARGARET EVANS are opening up a work in Pasadena, which gives promise of developing into a successful sanitarium. In fact, the doctors are a success wherever they work.

THE consumption of meat in England has reached the total of 113 pounds a head a year, which is more than double what it was fifty years ago.

FREE

**Sample of our
WASHING TABLETS**

**Don't waste your strength
rubbing clothes, as the
Tablets clean them thoroughly
without the washboard**

*AGENTS, here is your chance
to make a steady income. Read
what others say:—*

"I have done well with them, and every-
body likes them. I call it a life preserver,
and my customers have fallen into the same
thought."

Another says: "Enclosed please find Money
Order for which send me one gross of the
Tablets. Send by express at your earliest
convenience. I find no trouble whatever in
selling the Tablets."

The originals of the above are in our letter
files, and we could print many more of the
same kind, but space will not admit.

We offer large commissions to people who
can put in full or part time. Don't waste
your time by working with an inferior
article. Secure the best. We have it. Every
tablet guaranteed. Sample free to those
desiring an agency, with full instructions
and terms. Address

BROWN-FOX CO.

Box 1084 ALAMEDA, CAL.

HEALTH AND STRENGTH

HOW TO GET IT AND HOW TO KEEP IT

The newest and most advanced idea. Just published.
No latent or secret system, but one that will give
perfect health and develop the body to the best at-
tainable state. Have strong, healthy lungs, vigorous,
muscular system, good digestion, and perfect form.

This valuable book sent upon receipt of 25 cents
Health and Strength Publisher, Williamsport, Pa.

A Letter from
Mexico

TO THE
Pacific Health Journal

*"Your January number comes to hand
to-day, and I can not refrain from con-
gratulating you on its appearance. It has
been made more artistic and attractive for
many months, and I think this number the
crowning one of all, and I can hardly see
how you are to improve upon its appear-
ance or contents. However, I may not fully
measure your resourcefulness, and, if so, I
bid you God speed in your efforts to make
the Pacific Health Journal the best of its
kind."*

**Send for sample copy
50 cents per year**

Pacific Health Journal
Oakland, California

**THE IMPROVED
PEDIGO**

*Washing
Machine*



Lately Improved & Up to Date

Diplomas won by its merits at every Exposition in the State

The Pedigo keeps everybody good-natured on wash days

Guaranteed to wash six shirts in five minutes

Do you want to try it? If you do, write or telephone

C. J. CLARK, Mfg. Agent
1188 East 14th Street, Oakland, Cal.
Telephone Vale 103

All kinds of Wringers Furnished, Exchanged or Repaired
Send Postal and I will call on you anywhere in the county

Reduced Price \$6.00, Formerly \$9.00

POLYTECHNIC BUSINESS COLLEGE

Twelfth and Clay Streets, Oakland, California



EMBRACES the following schools and colleges: The College of Business Training; School of Shorthand and Typewriting; College of Mathematics; School of Electricity; School of Telegraphy; School of Civil and Mechanical Engineering; School of Manual Training; School of Penmanship, and School of Mechanical and Architectural Drawing.

The Polytechnic Business College of Oakland stands at the head of the business colleges of the Pacific Coast by reason of its superiority in all that pertains to a modern business or practical education. Three entire floors of this magnificent building are occupied by the school. The location and equipment of the college are beyond question, features which are unequalled by any business college in California.

We can assure the young men and women of California that in the Polytechnic Business College of Oakland they will find all that is best, most modern, and up-to-date in the leading business colleges of America.

Our students are to be found in many of the leading commercial houses of the state and coast. They are sought by business and professional men who desire high-grade help. One company in San Francisco alone employs thirteen of our graduates. No other business college in California can point to such a record.

YOUNG MEN AND WOMEN going away from home to attend school should investigate the advantages offered not only by the high standard of excellence of the Polytechnic, but by the pleasant climate, the home-like influences, and the educational environment of Oakland, which is the educational center of the coast.

SEND FOR FREE ILLUSTRATED CATALOGUE

Address, **POLYTECHNIC BUSINESS COLLEGE, Oakland, California**

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

Publishers' Price, \$1.00 per volume

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

Address
PACIFIC HEALTH JOURNAL
Oakland, Cal.

When answering advertisements, please mention Pacific Health Journal

BATTLE CREEK SANITARIUM

ACKNOWLEDGED 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
steamers, 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 Creek, Michigan

JAMES S. WATSON, *President*
Chicago, Ill.

NATE R. SALSURY, *Vice-President*
New York

STEPHEN G. PALMER, *Secretary*
Minneapolis, Minn.

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

JOHN R. ADAMS, *Treasurer*
Chicago, Ill.

Porter Brothers Company

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

Corner Washington and Drumm Sts.

A. W. PORTER }
D. H. PORTER } *Managers*

SAN FRANCISCO, CAL.

Pillsbury's Best FLOUR

Leads the World



For Sale to the Trade Only by

PENNELL-SUYDAM CO., Wholesale Grocers
14-16 Spear St., San Francisco

**DIRECTORY OF PACIFIC COAST
SANITARIUMS**

- ST. HELENA SANITARIUM**
St. Helena, California
- PORTLAND SANITARIUM**
Portland, Oregon
W. R. SIMMONS M. D., Superintendent
- MOUNT VIEW SANITARIUM**
Spokane, Washington
SILAS YARNELL, M. D., Superintendent
- LOS ANGELES SANITARIUM**
315 West Third Street Los Angeles, California
F. B. MORAN, M. D., Superintendent
- GARDEN CITY SANITARIUM**
San Jose, California
I. LEWIS J. BELKNAP, M. D., Superintendent
- NEVADA SANITARIUM**
619 Ralston Street Reno, Nevada
DR. M. B. McDONALD
- 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
- SACRAMENTO BRANCH**
ST. HELENA SANITARIUM
719½ K Street Sacramento, California
G. A. DROLL, M. D., Superintendent
- EUREKA BRANCH**
ST. HELENA SANITARIUM
Eureka, California
C. F. DAIL, M. D., Superintendent
- TACOMA BRANCH**
BATTLE CREEK SANITARIUM
1016 Tacoma Avenue Tacoma, Washington
DR. T. J. ALLEN, Medical Superintendent
- NORTH YAKIMA TREATMENT ROOMS**
317 N. First Street North Yakima, Washington
Phone 1273
Conducted by
MR. AND MRS. A. R. STARR, MR. AND MRS. H. GILLIS
Trained Nurses from Battle Creek Sanitarium
- SAN DIEGO BRANCH SANITARIUM**
1117 C Street San Diego, California
T. S. WHITELOCK, M. D., Superintendent
- 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
- VEGETARIAN RESTAURANT**
315 W. Third Street Los Angeles, California
- GOOD HEALTH RESTAURANT**
616 Third Avenue Seattle, Washington
- VEGETARIAN CAFE**
Corner 4th and C Streets San Diego, Cal.
- DEPOSITORY**
516 S. Hill Street Los Angeles, California
- STORES**
- 1482 Market Street San Francisco, California
72-74 E. Santa Clara Street San Jose, California
46 San Pablo Avenue Oakland, California
63 E. First South Street Salt Lake City, Utah
124 W. Center Street Provo, Utah
1115 C Street San Diego, California
2113-2115 Fresno Street Fresno, California

**A New System
of HEALING**

*Read what is said about this NEW
SYSTEM in all cases of chronic
and acute diseases*

Rev. Dr. H. Wendel, Trenton, N. J., says:—
"I suffered eighteen years with Dyspepsia without finding a cure, but the Schaefer System cured me at last."

Rev. Wm. Dahlke, Reserve, N. Y., says:—
"My daughter was cured, by the Schaefer System, of Nervous Prostration, after everything else failed."

Rev. H. Henkel, Greenfield, Ind., says:—
"I have tried everything in the line of medicine for my Sciatica, but failed to find a cure. Schaefer's System cured me."

J. J. Mettler, Lodi, Cal., says:—
"I can faithfully recommend the Schaefer System to all my fellow-sufferers."

**For further testimonials and literature
of this New System of Healing
address**

G. H. A. SCHAEFER, M. E.
855 West 9th St. Los Angeles, Cal.

**THE CHAMPION
Washing Tablets**

**SAVE HEALTH, LABOR, MONEY
TIME AND CLOTHES**

Contain no acid. Will not injure the most delicate materials.


Every woman owes it to herself and family to lighten her household work. These Tablets make the family washing a mere incident of Monday's work, instead of a weekly bug-bear.

They do not cost much, and save the clothes.

**3 Sample Tablets by Mail, 10c
Agents Wanted Everywhere**

Manufactured by
W. L. SIMS, Redding, California

Zwieback





Bread scientifically toasted

Delicious served as dry or
cream toast

For cream toast, place in
saucer, pour hot cream or
milk in dish until Zwieback
floats, and serve at once. A
toothsome palatable dish is
the result

Nice fruit toasts can also be
made with it



For Sale by Grocers

Sanitarium Food Co. ♡ ♡ Sanitarium, Cal.
Portland Sanitarium Food Co., Portland, Ore.
Walla Walla Food Co., Walla Walla, Wash.

FOUR NEW TRACTS



The above is the first-page design of one of the four new tracts which are just being issued. The following are the titles of the series:—

We Would See Jesus

The Signs of the Times

Gospel Remedy for Present-Day Isms—

Spiritualism, Hypnotism, Christian Science, Higher Criticism

What Do These Things Mean

The prices of the above are 72 cents a hundred post-paid

Address Your State Tract Society, or

PACIFIC PRESS PUBLISHING COMPANY, Oakland, California

11 West 20th Street, New York City 18 West 5th St., Kansas City, Missouri

REVIEW AND HERALD PUBLISHING CO., Battle Creek, Mich.

SOUTHERN PUBLISHING ASSOCIATION, Nashville, Tennessee