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GENERAL ARTICLES.

VARIETIES OF DIGESTIVE DISORDERS, AND HOW TO DETERMINE THEM.

We do not attempt to set before our readers any easy way of determining the causes of the many ills which come through the various disorders of digestion, nor do we give the idea that there are any specifics for these troubles. Yet modern methods of determining the chemistry of the stomach fluids, and the improved ways of ascertaining the physical conditions of the stomach, throw great light upon a subject that has heretofore been dealt with largely in an experimental way. Still, even with our advanced knowledge, it is, as Ewald says, "only by the most careful and thorough consideration and weighing of all the symptoms which can be obtained with all the diagnostic resources, that we are able to recognize the existing disease." These articles being written for home treatment, we must necessarily deal largely with the subject of dyspepsia from a systematic standpoint. This, however, will not be found to be the most satisfactory, because, as we have noticed, more distressing symptoms often come in simple cases, while the graver conditions may exist for a long time without serious local symptoms. By these facts, we will endeavor to make plain, as far as our experience has taught us, the varieties which may come with similar symptoms.

In our classification we will follow, with some variations, that of Dr. Kellogg, as given in his "Home Handbook," and as recently appears in his new work on "The Stomach."

We will speak first of the organic forms, or those which depend upon local conditions of the stomach, or associated organs, and, second, of the neurosthenic forms, or what has formerly been called nervous dyspepsia. The latter class is very large, and the varieties are not so well defined; but what we speak of as the organic cases, we will divide into the acute, simple, acid, bilious, and painful dyspepsias. These names are suggestive of what we will take up in each subdivision. But that all may better understand what we have spoken of already as hyperpepsia and hypopepsia, and which we will have occasion to mention frequently, we will briefly review the physical and chemistry work of the stomach, with methods of analyzing them. The physical agencies of the digestive work are those of secretion, absorption, and the motor power of the various parts of the alimentary canal. The chemical processes are those which belong to the activities of the various juices along the same tract. We speak only of saliva and gastric fluids, as they are the only ones to which we ordinarily have access by analysis.

The secretion is a physical process, due to the activities of the various glands. It must be normal, both in quantity and quality, in order that good work may be done. The process of absorption must balance that of secretion, with also the power to take up or absorb the quantity of fluid that is taken as drink, or used in food. The motor activities of the mouth give power to properly masticate the food, and are entirely voluntary in action. With proper care of the teeth they need

never be affected, even by disease of the body. The motor power of the stomach is that which keeps its contents in motion to facilitate the chemical work, and empties the organ when it has completed its task, which is that of digesting the nitrogenous portions of the food.

The saliva is made up of water and a ferment, ptyaline. The water is the agent that acts with the process of mastication, in reducing the food to a fine emulsion. The ferment acts chemically, in changing the starch and sugar to dextrin, then into maltose, or grape sugar.

The water of the gastric juice also acts physically in emulsifying the food for the latter activities. The chemistry is performed by the ferments, the pepsin and renin, and a free acid, which is identical with the ordinary hydrochloric or muriatic acid. Though it is an organic acid, it is different in action on the food from the acid of the chemist. A very small amount of pepsin, only, is needed to perform the work, provided that the acid is present. This fact was determined by the experiments of Morso and others. It is doubtful if there is often a natural deficiency of ferments. This explains the unsatisfactory results which have usually followed the administration of pepsin in cases of digestive disorders. A proper chemical analysis of the stomach fluids must determine the presence of the above elements, together with their quantity and quality and power to act upon the food. In addition to this, it is essential to go farther and ascertain the abnormal processes which go on as the result of the fermentation, and other septic conditions which come from the activity of disease germs which are present in the various disorders of the stomach. It is also necessary to determine the absorptive and motor power of the stomach.

Work along these lines has been developing for the past fifty years. It was begun, practically, by Dr. Bird, of London, who discovered that the acid of the gastric juice was hydrochloric acid. Since that time investigations have been carried on by many careful scientific workers, prominent among whom are Ewalt and Boas, of Berlin, and Hayem and Winter, of Paris. The chemical analysis which is the most complete, and which we use in our laboratory, is that which was originated by Hayem and Winter, and has been developed by Dr. Kellogg in his laboratory work. It is based upon determining the amount of chlorine in the various stages of digestion, as it is found that chlorine exists in the stomach as a fixed chlorine,

in combination with the various salts, also as a free chlorine, or merely united with hydrogen, forming hydrochloric acid, and then as a loosely combined chlorine, which is the product of a combination of free hydrochloric acid with the food which has been taken into the stomach, and is the first formed product of the digestive work of the stomach. s.

(To be continued.)

NERVOUSNESS.

THE nervous system of man is a very complicated arrangement. It not only has to preside over the vital processes of the body the same as in the lower animals, but is that by which thought is originated and carried on and impressions are received from without. It is largely by the higher organization of the nervous system that man is made so superior to the brute creation. While this is so, it is also true that it suffers more keenly than any other tissue in the body, from careless inattention.

The poisons which accumulate in the system during the day overcharge the nerves more than any of the other tissues, and we become so exhausted that we are glad to retire and allow the body to throw off this accumulated load, and let the nervous system store up fresh energy. This is nervous exhaustion in the primary sense of the word, and is a very harmless affair, and this is as far as it ever would go if its requirements were properly met; but many persons, instead of allowing the nerves to rest when they demand it, seek by some unnatural stimulus, as, perhaps, liquor, tea and coffee, tobacco, or highly spiced food, to extract from them the little remaining reserve energy which may be left, and when they succeed, they imagine they have accomplished something very desirable. It is exactly the same philosophy as if when one should find a person famishing for food, he should give him some stimulant to take away his appetite. The individual might, for the time being, think his condition very much bettered, but how inferior such treatment would be to the supplying of food the very thing nature demanded.

At the same time that the majority of people are using up their reserve energy, they are living upon such an inferior quality of food that they do not receive sufficient nourishment, and so when the half-starved and misused nerves finally break down—not once in twenty-four hours, but permanently

—the individual does not know what is the matter with him, until finally, perhaps, his case is diagnosed as neurasthenia. He is at last alarmed, and begins to cast about for some patent medicine which is warranted to cure this condition. How?—By simply drawing still stronger upon the weary and worn nerves.

When such persons are warned of the results of their course, and are advised to at once begin to live upon simple, unstimulating, and nutritious food, to give up late hours, and, in other words, to obey all the physical laws of their system, they are very impatient, and imagine that this has nothing to do with neurasthenia. Nervous exhaustion is simply an index of these other abuses, and as long as they are not removed, no amount of vile tonics will do the individual one iota of good. He will merely drag out a weary existence, and wonder why Providence has decreed that he should live a life so miserable.

D. P.

WALKING AS AN EXERCISE.

BY IDA M. POCH.

THE question, "Is walking a healthful exercise?" is frequently asked, and on general principles might be answered in the affirmative. It is perfectly natural to walk, if the body is in a normal condition; therefore it could not be injurious, but must be beneficial, all other things being equal. If, then, an ordinarily strong and healthy person fails to derive benefit from it, it will hardly do to say that walking is not good for that individual; the wrong must be somewhere else than in the primary mode of locomotion.

Walking, as an exercise, does not mean loitering along without aim or object; neither does it mean that preoccupied rushing after something which leaves no opportunity for so much as even a deep breath. In that loitering gait the true benefit of the exercise is lost, for one misses all the exhilaration which indicates a stimulation of the nerve centers. The quickened flow of blood, and the consequent rapid heart action that spurs the lungs to greater exertion in supplying the increased demand for the purifying and life-giving oxygen, causes the nerves to tingle with new energy, and leaves behind that delicious glow that shows the renewing of life. Medical men try to produce a like result by the means of drugs and treatment

when the body has been so enfeebled by disease that the natural means is out of the question.

Reaching after something without any thought of how one is getting over the ground, overshoots the mark as far as loitering falls short of it. We see men rushing to their daily work in this way. The head is thrown forward, and the feet are thrown forward in the mad effort to cover as much as possible of the distance at each step. That continual headlong rush produces a state of nervous tension which sooner or later must result in injury to the health. Further notice the position. See how the spine is bent, and listen to the sickening thud, thud of the heels upon the walk. Imagine how that continual unbroken jar must irritate the spinal cord and brain. In this mode of walking the whole weight of the body comes upon the heels, and this poise results in a depressed chest and protruding abdomen. These external abnormalities indicate a disarrangement of internal organs, and consequent faulty action. In any exercise increased activity is required of the lungs and heart, which is to some extent hindered by the cramped position of the chest.

We must conclude, then, that between this loitering and rushing lies the happy medium, where it is to be found the true delight in walking. A firm, elastic step adds not only to the individual enjoyment, but so far adds to the grace of the movement that it is a real pleasure to see.

In all the systems of physical training, much attention has been given to the use of the foot. This certainly has grown out of the perfect adaptability, by construction of the foot, to give an easy, light, elastic tread, together with the fact that only occasionally is this perfect construction realized and utilized to its fullest extent. While it may be absurd, and in practical life impossible, to place the foot according to directions at each step, still it is well to become so well acquainted with correct stepping that we may avoid dragging one foot after the other as if we were shod with lead, or that shambling, rolling gait suggestive of a sailor who recently came on shore with that equally awkward thrusting forward of the foot. One sometimes sees this movement so pronounced that the whole sole of the shoe is exposed to view as the foot comes forward.

The pleasure of walking for the sake of walking, not the using it as a means to an end, is dependent to a great extent upon the poise of the body, and the elasticity of the step, and the general ease and

freedom of movement. Upon the first the healthfulness of the exercise depends, perhaps, more than upon the other two, if it is possible to separate healthful action from grace and beauty.

To take a really delightful walking exercise, see that the weight of the body is well over the toes. Keep the chest up and active. Do not allow the feet to get ahead of the chest. Raise the foot back, or keep the knees as straight as possible. Step out an easy stride, toes turned out and heels in line. Let the arms hang loosely from the shoulder, so they may easily follow the natural motion of the body.

In the correct walk the toe falls upon the ground at nearly the same time as the heel. The chest must be so prominent that a line dropped from chest to floor will touch the toe, not the instep.

In walking thus, no part of the body is in any way hampered; the chest, heart, and blood-vessels are perfectly free. Every organ answers to the general exhilaration, and life takes on new possibilities with the renewing of vigor and strength.

To cultivate a graceful walk, poising exercises are very helpful; for walking consists of a succession of poises. The weight of the body is supported by one foot until the center of gravity is lost; then the other foot comes into action to keep the body from falling forward.

From the nature of the exercise, and also from observation, it is safe to say that daily walking, with a weight balanced upon the head, will most readily produce the desired correct poise. An iron crown devised for that purpose, or any other weight that does not press directly upon the crown of the head, will answer. The effort required to balance the weight directly over the spine so strengthens the necessary muscles that a correct carriage, without the weight, is gained. Those persons who are in the habit of carrying burdens upon the head, although they usually belong to the lowest class, have an upright, noble bearing.

There is still one thing which is intimately concerned in modifying the gait, and must answer for a large share of the poor walking and the injuries done by it. The one thing is dress. How can one expect a woman laden with pounds upon pounds of dry goods to walk easily and lightly? It is quite impossible to receive anything but injury from the exercise of walking when heart and lungs are battling for sufficient room to carry on the every-day business of life. The extra work put upon each organ of the body by exercise is accom-

plished only by straining and overdoing, under these conditions. The misplaced, weighed-down organs and jaded nerves protest against the imposition in their only language—pain. Instead of being invigorated and strengthened, the body is exhausted and enfeebled.

Then those high heels—if we will wear those, we must expect to hobble through life instead of walking.

A light, short dress, so supported that there is no weight upon the hips, and with ample room for expanding the lungs, upper and lower chest, adds infinitely to the health and comfort of the walk. Of course the undergarments must be constructed upon the same principles as the dress. If one would spend a short time daily, first in acquiring a correct walk, and then in the exercise of walking, the results would more than pay for the time and trouble.

IN BONDAGE TO FEAR.

BY HELEN MANNING.

WITH the best intentions, doubtless, a good many scientific men have, in the last few years, been letting loose dogs of fear upon the public, which have committed dreadful ravages. It is time that some of the worst of these were caught and muzzled, or, better still, time people knew that it was only a bugaboo of the dark, an empty shadow, which had frightened them. One of the worst of these bugaboos figures collectively as "microbes," or "germs." Air, water, and food were found to be teeming with them, and, though so infinitesimal in size as to be discerned only by means of a powerful microscope, yet so powerful were they that a strong man might tremble before them lest they snuff out his earthly candle without let or hindrance. Nothing but a high degree of heat was found sufficient to prevail against these pigmy-giants, and so everything must be sterilized.

Anent of this, a fashionable doctor is said to have cautioned one of his patients as follows: "My dear lady, you are drinking unfiltered water which swarms with animal and vegetable organisms. You should have it boiled—that would kill them." To this she replied, "Well, doctor, I think I'd sooner be an aquarium than a cemetery!"

Patent medicine men seized upon the new terror as a means of increasing their business, and "microbe killers" of various kinds are advertised.

far and wide. Probably these advertisements did as much or more to bring the masses into bondage to fear of germs than was done through regular practice; for the printed testimonial is of more authority than the law and the gospel in many communities, where nostrum after nostrum is swallowed "at their unchartered will," as Dr. James, of Harvard, puts it.

But the tide is turning, and the welcome intelligence is heralded that the microbes ordinarily present in food and water are friendly little creatures, and are an aid to digestion rather than a menace to health. The following, from a writer in the Chicago *Times-Herald*, concerns Dr. Kijanzin's experiments in this line:—

"The ubiquitous microbe is known to present two sides of phases to its character,—one is that of a disease-producing organism, the other, that of the beneficent remover of decaying matter, and of actually assisting the animal body to perform certain of its ordinary vital functions—digestion, to wit. To what extent the animal may be dependent upon microbes for its actual welfare, is an open question, but if certain researches undertaken by Dr. Kijanzin, of the University of Kieff, are to be credited, there may indeed exist a closer alliance between germs and their hosts than has hitherto been deemed possible. This investigator experimented upon animals, feeding them on food which had been practically sterilized, and giving them air which had been rendered wholly germless. One result of this regimen was to limit the assimilation of nitrogenous matter, the idea here being that the presence of the microbes in the digestive tract is necessary to effect this desirable end of nutrition.

"The microbes left in the intestine, or originally present there, no doubt accomplished some portion of the work, but the conclusion is that *the microbes received with the food constitute an essential feature of healthy assimilation*. Death was not the uncommon fate of many of the animals supplied with sterilized food and air. This result may, perchance, arise from the processes of self-poisoning, such as the microbes, naturally present in the air, food, and water, obviate and prevent. What strikes me as specially interesting, however, is the new analogy which Dr. Kijanzin's experiments reveal between the animal and the plant worlds. Certain plants can only assimilate nitrogen through the action and aid of the microbes which live in nodules on their roots. In the absence of these friendly germs, no assimilation of nitrogen is possible.

Therefore the case of the plant would seem to be closely related to that of the animal, if it be proved that the nutrition of the latter can not proceed naturally without the aid of the helpful microbes."

Perhaps a personal experience corroborative of the above may be pardoned: I was for five years an earnest disciple of a physician of some prominence, who spelled "*Germ*s" with a big "*G*," found them in everything, and ascribed to them unlimited power. I grew suspicious of food, water, and air, fearing that in them might lurk the infinitesimal enemies so much to be dreaded. The water I drank must be sterilized, and so must the milk and other foods of which I partook, so far as possible. Delicious fresh fruits must be put aside, or eaten at some peril. Washing it did not satisfy my germ-quicken sensitivities; for might there not be germs in the water? An invalid when all this nonsense was sprung upon me, it is needless to say that I grew worse, becoming very weak and much emaciated from lack of proper nutriment.

When at last the truth which set me free appealed to my consciousness, I received it gladly, though so ingrained had these notions about food and water become, that it was no light matter to rid myself of them. As my mind became cleansed from fear, I began to partake of a liberal diet, "asking no question for conscience' sake," except that the food be clean. I eat anything and everything now, that reason dictates, and the response is in renewed physical vigor. I believe that "Poor Richard" was right when he said that "whatever relishes nourishes." My experience is not exceptional. I can refer you or your readers to a dozen people around me who have been released from the same terrible bondage, and who now know such vigorous health as they never knew before.

The influence of sudden and terrible fright has long been generally recognized, such as the sudden turning of the hair, insanity, idiocy, etc., but very few have seemed to take into account the effects of minor fears, and of living constantly in a state of dread, anxiety, and the apprehension that "something is going to happen," and that "something" always being what people do not want, rather than what they desire. And so they keep brooding on the undesirable, until the time comes when they can say with Job, "The thing which I greatly feared has come upon me."

Take any ordinary day, and note in the conversations you hear how many times the expression, "I am afraid," is used. True, it sometimes means

very little, but, as a rule, it shows the great undercurrent of anxiety, doubt, and apprehension which characterizes the lives of most of us. We are born under its shadow; we breathe its baleful atmosphere so continually that it is hard to convince us that there are planes of mental and spiritual attainment where this miasma is unknown. We are afraid it will rain, or afraid there will be a drought; afraid of failure in school life first and business afterward; afraid of public opinion and criticism; afraid accident or calamity will overtake us; afraid we will grow old and helpless; afraid of unhappiness, misery, and poverty.

Here is what a physician, Dr. William Holcomb, says of the physiological effects of fear:—

“How does fear operate upon the body to produce sickness?—By paralyzing the nerve centers, especially those of the vasomotor nerves, thus producing not only muscular relaxation, but capillary congestion of all kinds. This condition of the system invites attack, and there is no resilience, or power of resistance. The gates of the citadel have been opened from within, and the enemy may enter at any point. . . . Fear not only affects the mind and the nervous and muscular tissues, but the molecular chemical transformation of the organic network, even to the skin, the hair, and the teeth. This might be expected of a passion which disturbs the whole mind, which is represented or externalized in the whole body.”

The recognition of an error or evil is the first step toward its eradication. We ourselves have raised this umbrella of unfaith and fear betwixt us and the clear shining of the Sun of Righteousness, and it is for us to put it down and throw it aside. Much that we have allowed ourselves to be afraid of is so senseless and unsubstantial that a little cold, hard common sense and experience will exercise these ghosts of nothingness. There is, however, but one unfailing remedy which will fully release us from its bondage, and that is for us to open our hearts and minds so that the radiance of the divine indwelling Presence shall clear away these shadows, and then we may rest in full security, ensphered in the “perfect love which casteth out fear.”—*Journal of Hygiene.*

EMOTIONAL WEAR AND TEAR.

MR. W. R. ALGER has well said that “when the body is perfectly adjusted, perfectly supplied with force, perfectly free, and works with the greatest economy of expenditure, it is fitted to be a perfect instrument alike of impression, experience, and expression.” The force of the above thought lies in the idea of adaptation of nerve force to the body; and as a consequence there will be free, easy, spontaneous action in every part of the body. To the casual observer, even, how different is the condition in most people, when the inadaptations are expressed so forcibly by the irregularities of action in the various parts of the body, both mental and physical,—in body, the sympathetic reflexes, the exhausted feelings, the congestions in various parts, the cold feet, the hot head, the neuralgias; in mind, the pathological emotions, that are largely mental, but, nevertheless, wearing.

It is very easy to interpret these feelings to mean more or less trouble, but it is indeed difficult to understand the profligate use of the vital force in these various manifestations. There is a great expenditure of vital force in intense suffering—even so great that the individual may for a long time after the suffering is past, feel a great depression from the shock. This may be looked upon as legitimate expenditure, inasmuch as the individual can not will it otherwise. But there is much expenditure of nerve force that is purely emotional, and uncalled for, hence prodigal.

To some extent, of course, an emotional expenditure of vital force is proper, and may be used to emphasize the life, the thought, or the act, if it does not interfere with the wholesome, free use of the body; but too often one's emotional nature is so developed that the individual lives largely in it, and consequently grows proportionately weaker in the more solid, common-sense, and matter-of-fact workings of the body. An unduly developed emotional nature serves as a sort of individual microscope, the lens of which seems to increase in proportion to the supersensitiveness of the nervous system. If one is a little tired, which in itself may be scarcely noticed, so slight is its cause and so small the result, it will nevertheless be magnified many times; and if very tired, the magnifying process may go on until it superinduces sickness. Thus the various expressions of the body are magnified through the emotional nature. So with pain. An inordinate emotional nature will always multi-

“THE COST OF A LONDON FOG.—It is estimated that a November fog in London cost, in gas and electric light, accidents, delays, and damage, about \$500,000.”

ply and intensity pain. It, like the lens, creates a sort of optical illusion, so that pleasures are unduly magnified, as well as pains, and thus is created the amplitude for great ups and downs in one's life, which means great expenditure of vital force.

From a physiological standpoint, this undue expenditure of vital force can not be otherwise regarded than as sham emotion, which may go so far as to be classed under the head of a condition known in some of our large colleges as "dry drunk," or an unbalanced mental development, the natural trend of which, if expressed more by the body, leads to abnormal physical action, as hysteria, which may indeed be considered delirium tremens of the "dry drunk" stage; for it always comes from a highly emotional tension of nerves more or less out from under control. This, of course, is an exaggerated manifestation of a plane of action that is very common in every-day life.

The abnormal emotional state referred to is as common among men as women. The suffering to them is even very real, in feeling, if not in fact. However, the true emotions, whether painful or delightful, should leave one eventually with a greater supply of strength; while the sham emotion, without exception, leaves the individual weaker; and, unless it is recognized as sham, and voluntarily dismissed by the owner of the nerves, the hope for future usefulness lessens with every experience. It is a sad sight to see a man or woman broken down, and perhaps an invalid for life, for no reason whatever but the unnecessary nervous excitement of weeks and months of sham emotion.

Not the least of the suffering caused by emotional excitement comes from mistaken sympathy with others. Many people seem to live on the principle that if a friend is in a swamp, it is necessary to plunge in with him, and that if the other man is up to his waist, the sympathizer should show his friendliness by allowing the mud to come up to his neck; whereas, it would seem evident that the deeper my friend is immersed in the mud, the more surely I should keep on firm ground, so that I may be able to help him, and if I can not give him my hand, I must use a long pole, the more surely to relieve him from danger. It is the same with the mental, moral, or nervous swamp, in which so many people are engulfed; and yet so many people thus in the swamp so little appreciate the use of the long pole that if the one who helps them does not cry when the friend cries, or moan

when the friend moans, or persistently refuses to plunge into the grief, that he may offer the more real help in helping the individual out, he may be accused of coldness and want of sympathy. Some people have been known to refuse the other end of the pole, because the other person will not leave it and come into the swamp with them. It is easy to see how this mistaken sympathy is the cause of unnecessary nerve strain.

The same thought was expressed at one time by the head nurse in one of our large nursing schools. Being interrupted at dinner by an emergency case being brought in, which so excited the sympathies of the under nurses around the table that they lost their appetite from sympathy, the head nurse told them that if they had any real sympathy for the man, they would eat, to gain strength to serve him, instead of spending a useless amount of energy in sympathy, in a way that would result in their loss of appetite, hence weakness and incapacity to serve the man in a true sense. It is possible for the nurse to eat his dinner without feeling sympathy, and to be concerned only with himself; but it is an easy matter to make a distinction between a strong, wholesome sympathy, and a selfish want of feeling, and as easy to mark the distinction between sham sympathy and real sympathy. The first causes a loss of nervous strength; the second gains new power for wholesome use to others. Sham emotions are always misdirected force. A woman may sacrifice her health in overexertion for a friend, and if she does not distress the object of her devotion entirely out of proportion to the amount of use she performs, she at least unfits herself by overworking, and may cause more suffering than she saves; and if so, the great ends are sacrificed to the smaller.

"If you only knew how hard I am trying to do right," comes with a strained face and a nervous voice from many and many a woman, who, if she could only learn something of that vaulting ambition that overleaps itself and falls on the other side of the goal, she could then realize that the very strained effort with which she tries, makes it impossible to gain the goal. In the light of physiology all she would have to do would be to relax to whatever work she wants to do, and then try. The gain for her would be incomparable. Some of the most intense sufferers from nervous excitement are those who are trying, with strained systems, to suppress their nervousness. This effort to hold in increases the nervous strain immensely, as may

be seen in the case of one etherized, who has suppressed fright which he may feel very keenly; but when he is under the anæsthetic enough to relax the voluntary muscles, the impression on the brain shows itself with all the vehemence of feeling. So when the muscles are unconsciously relaxed, the nervous excitement bursts forth like the eruption of a small volcano, and for a time is a surprise to the man or woman who has made a constant effort in this suppression.

There is a great difference between suppressing a feeling, and controlling it without suppressing it. If, when we are tempted to fly into a rage, or snap irritably at others, we would go through a short process of relaxing the emotions, the effect would be delightful. But some might consider that it would be ridiculous to thus relax before an enemy, and so they must do the relaxing in private, and recall it, if they can, on the outside. People generally know that anything that will avert the mind will cure a high temper, or irritability. Personal sensitiveness, to a great degree, is a form of nervous tension. Self-consciousness, with all the personal annoyances that come with or follow it, is also to a great extent nervous tension. All of these breed the worries of life, from the big worries, with the real foundations, to the miserable, petty, nagging worries, that wear on the system more than steady work. These petty worries are the most wearing, and, fortunately, they are the most easily cured. If the individual can practise that relaxation of muscular contractions, so often accompanying expression of high nervous tension, then the petty cares will roll off.

A recital of all the emotional disturbances which have such a strong hold upon us, and which are merely misdirected force, might, in the experience of every individual, easily fill a volume. But the body should be trained to obey the mind, and the mind should be trained to give the body wholesome commands worth obeying. The real, true feelings of life are too strengthening in their power to be brought out by those gross forms of nervous excitement for which we can find no better name than sham emotions. Most physicians, I think, agree that it is not overwork, but mental strain, that causes the great number of breakdowns all through life; for the deepest grief, as well as the greatest joy, can be made, in a way, to give new strength and new power for use, if we exercise a strong philosophy and a well-guided, wholesome body to meet it. But this is an education, and the work of years.

W. H. M.

BATHS AND BATHING.

BY J. H. EGBERT, M. D.

(Continued.)

FOR purposes of cleanliness the *tepid bath*,—with water neither hot nor cold,—is doubtless the best. Unlike hot and cold baths, this one does not seem to have any marked modifying influence upon the heat of the body, and hence its chief uses are to cleanse and soften the skin, and to promote insensible perspiration. The general action of the *vapor bath* is to accelerate the circulation, and to produce profuse sweating. It softens and relaxes the skin, quickens the pulse rate, and may render respiration quite difficult. The vapor bath diminishes the internal secretions, particularly the urine, while perspiration becomes sufficiently copious to reduce the bodily weight. It is beneficial in the treatment of acute and chronic rheumatism, in dropsy, in eruptive fevers, when the eruption is tardy and imperfect, and all chronic diseases of the skin in which the integument is torpid, dry, and hard. For domestic and medical purposes, a vapor bath may be constructed by merely surrounding the patient, seated in a chair, with a tent of blankets, or other impermeable stuff, and introducing steam within the inclosure. The head need not be included within the covering. The vapor of warm water may also be diffused throughout an apartment by boiling water in a kettle or other convenient vessel, or by slaking lime in the neighborhood of the patient. Precaution should be observed to prevent taking cold after a vapor bath. The surface should be thoroughly dried with a rough towel, after which it is well to rub for a few minutes with the bare hands, or, better, with whisky or diluted alcohol.

The *hot bath*, like the vapor bath, is decidedly stimulating, causing the pulse to become full and requent, the veins turgid, the face flushed, and the respiration quickened. If the temperature of the water is high, and the constitution weakened, its use is not without danger. When acting properly upon the system, it produces profuse perspiration. The hot bath is particularly applicable to excite motor derangements, and especially in convulsion and muscular spasm. Every mother should know the efficacy of immersion of the child in a hot bath to "break" infantile spasms. This bath should not be employed more than once or at most twice a week, and it is likely to enervate,

and to produce a tendency to congestion of the head and brain, and should always be followed by the precautions already given to guard against taking cold. Local hot baths are applied to various parts of the body. Hot foot-baths (98° to 105° Fahr.) draw the blood from the brain and spinal cord, thereby promoting sleep, and relieving pain and congestion of the head and trunk. They are of value in aborting colds in the head, congestive headache, sore throat, and in relieving amenorrhœa. The warm hip-bath is particularly useful in allaying painful abdominal and pelvic disorders, particularly colic, strangury, retention of urine, and lumbar pains from retarded menstruation.

The general *warm bath* diminishes the frequency of the pulse, renders respiration less frequent, lessens the heat of the body, and relaxes the skin and underlying tissue. It is not, therefore, a stimulant. By relieving certain diseased actions and conditions accompanied by morbid irritability, this bath acts, in certain nervous conditions, as a soothing remedy, overcoming excitement, and inducing a disposition to sleep. In many febrile conditions, with hot, dry skin, frequent pulse, and considerable restlessness, a warm or tepid sponge bath will frequently give rest and comfort to the disturbed sufferer.

The *cold bath*, when properly employed, is one of the most valuable of all the methods in which water is externally applied to the physical economy. The cold bath acts differently according to its temperature, the manner of application, and the condition of the system to which it is applied. When water of a very low temperature is suddenly applied to the surface of a healthy body, it acts primarily as a stimulant—in virtue of the sudden and rapid manner in which heat is abstracted; next as a tonic, by contracting and condensing vital tissues; and finally, as a sedative. For healthy individuals, systematic cold bathing is of the highest benefit, hardening the tissues, augmenting the strength, and protecting the entire body against the invasion of disease. A cold sponge bath every morning before breakfast, winter and summer, is not only a delight, but a safeguard against colds, sore throats, ennui, and melancholia. The occasional addition of salt to this morning bath increases its value, while subsequent thorough drying of the skin and friction with coarse towels, flesh gloves, or the naked hands, are indispensable. Cold baths by effusion or plunging are useful in

diseases with muscular relaxation and debility, but it is essential to the efficacy and safety of all cold baths that the stock of vitality shall be sufficient to create, immediately after their use, those feelings of warmth and invigoration included under the term "reaction." In fevers with extremely high temperature and those of the typhoid type, cold water in the form of baths, sponging, and wet wrappings, is usually productive of excellent results. In the words of another, "After the use of cold spongings to patients restless and even delirious with fever, they usually become calm, and delirium is often succeeded by quiet, refreshing sleep." Cold water is frequently applied as a sedative and antiphlogistic to local inflammations, and when thus applied will often abort abscess, tonsillitis, etc., and relieve the pain of burns, scalds, and stings of insects. Nervous exhaustion, hysteria, and chorea are all benefited by cold bathing—particularly sea bathing—while even insomnia can not resist its benign effects.

Infants should always be bathed in warm water, and children and elderly persons should eschew the cold baths. As regards the time which should be spent in bathing, much depends upon the kind of bath, and the physical condition of the bather. As a rule, from two to five minutes will be abundant time for the cold sponge bath, or the cold plunge; but with the tepid or warm bath, a limit of ten or fifteen minutes may be imposed. The cold bath acts as a tonic, and should be taken in the morning; the warm bath acts as a sedative, and hence is preferable when bathing in the evening, or after excessive fatigue, or prolonged exercise.

While it is to be deplored that we have not in this country more and better public swimming baths, still, the open fresh water in ponds, lakes, rivers, the sea, with its surf and tide, and even the equipments in our own homes, offer facilities for bathing and refreshment which are but poorly appreciated by many.—*Dietetic and Hygienic Gazette*.

TOO MUCH POISON.

Too much can not be said, or too strongly said, against the free use of alcohol and brandy in the treatment of diseases, on the supposition that real life and animation can be increased thereby, and that the system may be prepared to stand above

the influences of disease by its use. It will take many centuries to outgrow the effects of unwise teaching in reference to the influence of some of these most common poisons, that really stands in the way of the advance of true medical science.

A considerable per cent of the laity of this and oriental countries have gradually grown into the idea that opium is rather a help than otherwise to the system; and, indeed, this is not surprising, when a committee of physicians appointed by the British Government so gave to the people their verdict, after deliberation, perhaps more upon the advantages of the habit from a commercial standpoint than of its effects upon the body from a scientific point of view.

This is no more surprising than a similar verdict from many prominent physicians, on the subject of another equally if not more distressing evil, namely, the practice of using tobacco. And the same might be said, too, in reference to the use of alcoholic beverages, whether taken by prescription or otherwise. There have been strenuous efforts made at various times to uphold the practice of taking opium, tobacco, or alcoholic stimulants, even by physicians, for many years; but what is the result of this long experience in the use of them? Has their use furnished clear proof that they are beneficial, or are capable of increasing man's power to endure cold or fatigue, or to resist disease and pestilence? I think we can safely answer, No, not even the shadow of a proof.

Dr. N. S. Davis, professor of pathology and practical medicine in one of the leading schools of Chicago, has very clearly pointed out some of the great dangers that lie in the use of intoxicating beverages in disease. From his experiments and observations, it is evident that alcohol taken into the system not merely exerts a temporary exhilarating effect only on the functions of the brain and nervous system, but induces special morbid changes in the blood, thus influencing the vital properties of the tissues. These changes lead to a diminished exhalation of carbonic acid gas from the lungs, diminished arterialization of the blood, and diminished sensibility, both organic and voluntary. It is the exhilarating influence of alcohol on the brain and nerves that gives it its fascinating power, and has produced in the popular mind the idea that it is truly a tonic, or in some way a support to the functions of life. But the fact is, as shown by the experiments of many, that alcohol directly diminishes the amount of carbonic acid gas thrown

out by the lungs in expired air, and that the temperature of the system will slowly diminish under its influence. And while even a small portion of alcohol in the blood excites and exhilarates the function of the brain, it, on the other hand, diminishes that of the respiration and the heat-making properties of the body.

We are aware that some will be disposed to deny these assertions, and to allege that the experiment of taking alcoholic stimulants when exposed to extreme cold has been tried, with the effect to make the drinker feel warmer than before; and this furnishes positive proof of the power of the stimulant to increase animal heat. But we note that in this they make no distinction between the feelings, or mere nervous sensations, and the actual temperature of the individual; hence the popular belief in the power of the drink to increase animal heat and attach to it some value to those who are exposed to these vicissitudes of temperature, is quite natural. But Dr. Davis goes on to ask: Is this proof that the temperature of the tissues of the body is actually increased? Does not a patient with spasmodic cholera almost constantly complain of the heat, and plead for cold water and ice water even when the whole body, and the very breath from the lungs, is as cold as death itself? Then can one's feelings under such circumstances bear out the facts in the case?—Certainly not. Or, if a patient is under the influence of an anæsthetic, and revels in a world of dreams, and is unconscious of the fact that the operation is doing violence to his tissues, is that any proof that the body is not suffering, altho the patient does not feel the stroke of the surgeon's knife? So also when alcoholic drinks are taken into the stomach, a sensation or feeling of warmth is felt in the stomach and pharynx; and, as the alcohol enters the blood and through it comes in contact with the brain and nerve tissues, aside from its exciting effect, it is accompanied by a sensation of heat about the head and face, and a diminished consciousness of the presence of a material body. But this feeling of heat in the face and stomach under the influence of alcoholic drinks is no more evidence of an actual increase in temperature than is the absence of pain on the part of the individual under chloroform, evidence that the surgeon's knife has not done its work in the tissues. In both instances the brain and nerves are under the influence of an agent which alters their sensibilities, and renders the individual incapable of judging correctly the external agents

that have an influence upon him. Consequently, alcoholic drinks, instead of protecting the individual against the effects of cold, render him less conscious of the existence of such cold, and he often remains recklessly exposed until fatal effects are produced by it. Dr. Davis tells us that the majority of those who are frozen to death are so frozen while under the influence of alcoholic drinks, taken under the delusive idea that they keep them warm.

Dr. W. B. Carpenter, in his "Human Physiology," says that Mr. Bouchardt found in his experiments that alcohol introduced into the system in excess, caused the blood in the arteries to present the aspect of venous blood, showing that it had been prevented from undergoing the proper aeration from the oxygen in the lungs. This is also observed by Percy and many others. The evidences of this lack of change in the blood may be observed also in the leaden hue of the countenance, the blue color of the lips and nails, and the slow circulation of blood in the capillaries of the surface of the person in a state of profound intoxication. The dark color of the blood, together with the diminished elimination of carbonic acid gas from the lungs, while in this drunken condition, demonstrate beyond all doubt the depressing influence of these drinks upon the function of respiration, as well as the vital changes in the blood accompanying it.

Yet in the face of numerous scientific investigations, the idea to a considerable extent prevails that alcoholic beverages do furnish strength, do protect people against cold, epidemics, and diseases. On the contrary, Dr. Davis says he has found abundant evidence to corroborate the facts demonstrated by the scientific part of the inquiry. For instance, in the earlier expeditions in search of the north-west passage, amidst the icebergs of the North Seas, we are told that the use of intoxicating drinks actually diminished the power to sustain severe and protracted cold; and in many instances where ships have been foundered, and it has been necessary to keep the pumps working day and night, it was found necessary to compel abstinence on the part of those who manned the pumps. A few years since an examination of the reports of the British Army in the East Indies showed that there were in different regiments occupying that country, a certain number who did not use alcoholic beverages, and of their number an average of only three per cent had been on the sick list during the year,

while among those of the same regiments, who were subjected to the same duties, who took the regular ration of liquor, was found an average of more than ten per cent on the sick list. Observations in the West Indies have shown the same results.

Epidemics prove also that those who abstain from alcoholic drinks are more likely to withstand the ravages of the various scourges. Dr. Davis tells us that he passed through five seasons of epidemic cholera without being absent from his post of duty twenty-four hours, all the time passing from one sick-bed to another in the midst of cholera pestilence for ten or twelve successive days and nights, without resting two hours out of the twenty-four; and so thoroughly convinced is he as to the truth of the above fact that he says he would as soon attempt to extinguish a fire by pouring oil upon it, as to take a glass a day of alcoholic drinks while exposed to epidemic influences.

It is well known that life-insurance companies, to afford a safe principle of action, have taken great care to ascertain the average duration of human life, and the influences of certain agents thereon; and so fully has it been shown that the use of alcoholic beverages shortens the average duration of life, thereby adding to the risk of insurance, that companies have been established, both in this country and in England, for granting policies to those only who abstain wholly from these drinks, and at a much lower rate than that of companies doing a general business. Some of these temperance insurance companies have now been in active operation for several years, and so satisfactory have been the results that one of the best old-line life-insurance companies in New England has recently opened a special temperance department, with rates of life insurance twenty-five per cent below ordinary rates of other companies doing a promiscuous business, and below their own rates in the other departments.

Evidences of this nature are pouring in from almost all vocations of life, proving conclusively that not only health, but the social problem, and the question of crimes in the civilized world, will be very much influenced for the better by a dissemination of real scientific facts relative to the use of not only alcoholic drinks, but opium and tobacco as well.

W. H. M.

"COREA has a cold-wind cave, from which a wintry blast continually blows."



CONDUCTED BY HARRIET S. MAXSON, M. D.

SCOTTISH LULLABY.

SLEEP, baby, sleep;
The father watches his sheep,
The mother skaes the dreamland tree,
Down falls a little dream on thee;
Sleep, baby, sleep.

Sleep, baby, sleep;
The large stars are the sheep;
The little stars are the lambs, I guess,
The silvery moon is the shepherdess;
Sleep, baby, sleep.

Sleep, baby, sleep;
Down where the roses creep,
Be always like the lamb so mild,
A good, and kind, and gentle child.
Sleep, baby, sleep.

Sleep, baby, sleep;
I would not, would not weep;
The little lamb he never cries,
And bright and happy are his eyes;
Sleep, baby, sleep.

Sleep, baby, sleep;
The Saviour loveth his sheep;
He is the Lamb of God on high,
Who for our sakes came down to die;
Sleep, baby, sleep.

THE BABY'S CLOTHING.

IN arranging clothing for a young infant, the principal points to be taken into consideration are looseness, softness, warmth, and simplicity. The necessity of closely wrapping the body of the newborn in order to keep it from falling to pieces, or to encourage the development of a better form, or even to hold the cord firmly in place, has for some time been recognized by the best informed, even among the laity, as a mistake. Still some continue the custom of making all the baby's clothes on broad bands, to be pinned firmly about the

body; a custom which must result in great discomfort to the child, if not in actual harm, from interference with lung action and digestion.

In some countries the custom of swaddling young infants still prevails; and much might be said in favor of this practice, especially during the first week or two of life. It is no doubt true that many infants are robbed of the good start in life which is their due, by being unduly fatigued in the process of elaborate dressing to which they are subjected during the first days of their existence. The process of swaddling interferes greatly with freedom of motion. This is not objectionable during the first week or two, when in any case a well-regulated baby will put in most of its time in sleeping. But it should not be kept up longer than this. For three or four weeks, however, it is far better that the child should not be subject to the fatigue of putting on more than two garments, an extra wrap being thrown about it when exposed to changes of atmosphere. These two garments should consist of a flannel slip and a flannel nightdress. These, with the band, will be quite sufficient for its needs. The band should be of light-weight flannel, the edges being turned but once, and should be pinned loosely about the body. After two weeks this may be removed with safety, to be put on again when the baby is put into short clothes.

The flannel used for making the clothes should be of the softest quality, in order not to irritate the delicate skin of the child.

When the baby is completely dressed, its clothing may consist of a very soft light flannel shirt, a pinning blanket, which should be sewed to a flannel waist, preferably open in front, and fastened with tape or ribbons. To this may be buttoned, if it is cold weather, an outside flannel skirt. It is recommended by some that the combination waist

and pinning blanket take the place of the shirt, and that the outside flannel slip also be furnished with a waist without sleeves, if the weather is warm, or with sleeves in the winter season. Over this may or may not be worn a cotton skirt. If worn at all, we recommend that the waist of the same be made of a straight piece of single muslin, cut down slightly in front and behind, and provided with armholes. This should have tapes in the top and bottom, which will furnish the means of fastening. The dress may be of any pattern to suit the fancy of the mother, but simplicity is recommended, as scrupulous cleanliness is thereby more likely to be secured. Fine needlework is more admired than fine trimmings by those of refined taste.

While we should guard against dressing the baby so warmly as to induce constant perspiration, thus increasing the liability to colds, we must remember that young children do not bear well the depressing influence of cold. In the prematurely born, indeed, life depends upon the maintenance of bodily heat more than upon nourishment, even. All parts of the body should be equally protected, as the parts exposed are not so likely to suffer as some more remote part. Pneumonia and diarrhea often result from chilling of the extremities. Hence the custom of allowing the necks, arms, and knees of young children to remain unprotected, is very dangerous, and even cruel.

All the clothing should be very loose, in order to provide for the expansion and natural development of the body in every direction. Loose garments are warmer, as well as more comfortable. Loosely woven cloths are always warmer than those more tightly woven.

Special pains should be taken to keep the feet warm.

The diaper, or napkin, should be made of light, soft, absorbent material. A napkin made of not too heavy Turkish toweling is most excellent on account of its superior absorbent qualities. An inside napkin of cotton, covered with one of flannel, is to be recommended. Many children have received great injury from carelessness in removing the wet napkin, and, indeed, we doubt not that many severe and even fatal bowel troubles in young children are due to neglect in this respect.

Great care should be exercised in shortening the clothing. Extra pains should be taken to protect the limbs and abdomen. A great deal of care should be exercised during the first few days after the change is made, to keep the baby from expo-

sure. It is desirable to make the change in warm weather, or at least in pleasant weather. Many authorities on the subject of clothing for the young, recommend that children never be put into long clothing, at least that the skirt should never be below the bottoms of the feet. There are many things to be said in favor of this method. Certainly it is to be preferred above that of making the skirts very long and weighty, or continuing the use of the long skirt for a great length of time. The circulation in the lower limbs of very young children is comparatively feeble, and it is very important that they should be kept warm; but this is very soon established, so that in a healthy child there is no special tendency for the feet to become cold. We would recommend that the short clothes be adopted as early as the second or third month.

H. M.

THE RIGHTS OF THE CHILD.

BY KATE WIGGIN.

THE subject of Children's Rights does not provoke much sentimentalism in this country, where, as somebody says, the present problem of the children is the painless extinction of their elders. I interviewed the man who washes my windows the other morning, with the purpose of getting at the level of his mind in the matter.

"Dennis," I said, as he was polishing the glass, "I am writing an article on the 'Rights of Children.' What do you think about it?" Dennis carried his forefinger to his head in search of an idea, for he is not accustomed to having his intelligence so violently assaulted, and after a moment's puzzled thought he said: "What do I think about it, mum? Why, I think we'd ought to give 'em to 'em. But Lor, mum, if we don't they *take* 'em, so what's the odds?" And as he left the room, I thought he looked pained that I should spin words and squander ink on such a topic.

The French dressmaker was my next victim. As she fitted the collar of an effete civilization on my nineteenth century neck, I put the same question I had given to Dennis.

"The rights of the child, madam?" she asked, with her scissors poised in the air.

"Yes, the rights of the child."

"Is it of the American child, madam?"

"Yes," I said nervously, "of the American child."

"Mon Dieu! He has them!"

This may well lead us to consider rights as opposed to privileges. A multitude of privileges, or rather indulgences, can exist with a total disregard of the child's rights. You remember the man who said he could do without necessities if you would give him luxuries enough. The child might say, "I will forego all my privileges if you will only give me my rights; a little less sentiment, please—more justice!" There are women who live in perfect puddles of maternal love, who yet seem incapable of justice; generous to a fault, perhaps, but seldom just.

Who owns the child?—If the parent owns him—mind, body, and soul—we must adopt one line of argument; if, as a human being, he owns himself, we must adopt another. In my thought the parent is simply a divinely appointed guardian, who acts for his child until he attains what we call the age of discretion,—that highly uncertain period, which arrives very late in life with some persons, and not at all with others.

The rights of the parent being almost unlimited, it is a very delicate matter to decide just when and where they infringe upon the rights of the child. There is no standard; the child is the creature of circumstances.

The mother can clothe him in Jæger wool from head to foot, or keep him in low neck, short sleeves, and low stockings, because she thinks it pretty; she can feed him exclusively on raw beef, or on vegetables, or on cereals; she can give him milk to drink, or let him sip his father's beer and wine; put him to bed at sundown, or keep him up till midnight; teach him the catechism and the thirty-nine articles, or tell him there is no God; she can cram him with facts before he has any appetite or power of assimilation, or she can make a fool of him. She can dose him with old-school remedies, with new-school remedies, or she can let him die without remedies because she doesn't believe in the reality of disease. She is quite willing to legislate for his stomach, his mind, his soul, her teachableness, it goes without saying, being generally in inverse proportion to her knowledge; for the arrogance of science is humility compared with the pride of ignorance.

In these matters the child has no rights. The only safeguard is the fact that if parents are absolutely brutal, society steps in, removes the untrustworthy guardian, and appoints another. But society does nothing, can do nothing, with the

parent who injures the child's soul, breaks his will, makes him grow up a liar or a coward, or murders his faith.

The parent whose sole answer to criticism and remonstrance is, "I have a right to do what I like with my own child," is the only impossible parent. His moral integument is too thick to be pierced with any shaft, however keen. To him we can only say, as Jacques did to Orlando, "God be with you; let's meet as little as we can."

But most of us dare not take this ground. We may not philosophize or formulate, we may not live up to our theories, but we feel in greater or less degree the responsibility of calling a human being hither, and the necessity of guarding and guiding, in one way or another, that which owes its being to us.

We should all agree, if put to the vote, that a child has a right to be well born. That was a trenchant speech of Henry Ward Beecher's on the subject of being "Born Again," that if he could be born right the first time he would take his chance on the second. "Hereditary rank," says Washington Irving, "may be a snare and a delusion, but hereditary virtue is a patent of innate nobility which far outshines the blazonry of heraldry."

Mrs. Stoddard speaks of that sacred passion, maternal love, that, "like an orange blossom, buds and blossoms and bears at once." When a true woman puts her finger for the first time into the tiny hand of her baby, and feels that helpless clutch which tightens her very heart strings, she is born again with the new-born child.

Once the child is born, one of his inalienable rights, which we too often deny him, is the right to his childhood.

If we could only keep from twisting the morning glory, only be willing to let the sunshine do it? Dickens said real children went out with powder and top boots; and yet the children of Dickens' time were simple buds compared with the full-blown miracles of conventionality and erudition we raise nowadays.

There is no substitute for a genuine, free, serene, healthy, bread-and-butter childhood. A fine manhood or womanhood can be built upon no other foundation; and yet our American homes are so often filled with hurry and worry, our manner of living is so keyed to concert pitch, our plan of existence so complicated, that we drag the babies along in our wake, and force them to our

artificial standards, forgetting that "sweet flowers are slow, and weeds make haste."

In the matter of clothing we sacrifice children continually to the "Moloch of maternal vanity," as if the demon of dress did not demand our attention, sap our energy, and thwart our activities soon enough at best. And the right kind of children, before they are spoiled by fine feathers, do detest being "dressed up" beyond a certain point.

As to keeping children too clean for any mortal use, I suppose nothing is more disastrous. The divine right to be gloriously dirty a large portion of the time, when dirt is a necessary consequence of direct, useful, friendly contact with all sorts of interesting, helpful things, is too clear to be denied. The children who have to think of their clothes before playing with dogs, digging in the sand, helping the stableman, working in the shed, building a bridge, or weeding the garden, never get half their legitimate enjoyment out of life.

Thrice happy is the country child, or the one who can spend a part of his young life among living things, near to nature's heart. The child has a right to a place of his own, to things of his own, to surroundings which have some relation to his size, his desires, and his capabilities.

Things in general are so disproportionate to the child's stature, so far from his organs of prehension, so much above his horizontal line of vision, so much ampler than his immediate surroundings, that there is, between him and all these big things, a gap to be filled only by a microcosm of playthings which give him his first object lessons.

Again, the child has a right to more justice in his discipline than we are generally wise and patient enough to give him. He is by and by to come in contact with a world where cause and effect follow each other inexorably. He has a right to be taught, and to be governed by the laws under which he must afterwards live; but in too many cases parents interfere so mischievously and unnecessarily between causes and effects that the child's mind does not, can not, perceive the logic of things as it should.

The mother who is most apt to infringe upon the rights of her child (of course with the best intentions) is the "firm" person, afflicted with the "lust of dominion." There is no elasticity in her firmness, to prevent it from degenerating into obstinacy. It is not the firmness of the tree that bends without breaking, but the firmness of a certain long-eared animal, whose force of character

has impressed itself on the common mind and become proverbial.

But if the child is unhappy who has none of his rights respected, equally wretched is the little despot who has more than his own rights, who has never been taught to respect the rights of others, and whose only conception of the universe is that of an absolute monarchy, in which he is sole ruler.

The very best theoretical statement of a wise disciplinary method that I know, is Herbert Spencer's. "Let the history of your domestic rule typify, in little, the history of our political rule; at the outset, autocratic control, where control is really needful; by and by an incipient constitutionalism, in which the liberty of the subject gains some express recognition; successive extensions of this liberty of the subject, gradually ending in paternal abdication."

In these matters the child has a right to expect examples. He lives in the senses; he can only learn through object lessons, can only pass from the concrete example of goodness to a vision of abstract perfection.

"O'er wayward childhood would'st thou hold firm rule,
And sun thee in the light of happy faces?

Love, Hope, and Patience, these must be thy graces,
And in thine own heart let them first keep school."

—*Children's Rights.*

TRAINING OF THE AFFECTIONS.

THE first conscious expression in the infant face is that of love, and from this moment until the end love is the motive power, which enriches and ennobles life, or robs it of all that is grand and good. There is no attribute of human character more susceptible of training than this, so potent in its influence for good or ill. Loving, warm-hearted children grow into cold, selfish men and women; and when this happens, it is usually the result of bad training. The following, selected from the chapter devoted to this subject in a "Study of Child Nature," by Miss Harrison, contains so many excellent suggestions that we copy it for the benefit of our readers:—

"Selfishness is the most universal of all sins, and the most hateful. Why is this? To one who has thoughtfully and carefully studied the subject, the cause of the widespread prevalence of selfishness is not hidden. It lies largely in the mother's non-apprehension of the right treatment of her child's *earliest* manifestation of love.

"The love which instinctively comes from a child to its mother is usually shown in the caressing touch of the baby hands, the tremendous hug of the little arms, the coaxing kiss of the rosy lips, and is to the fond mother an inexpressible delight. Nor need she rob herself of one such moment; while her child is in the loving mood, let her ask of him some little service, very slight at first, but enough to make him put forth an effort to aid her.

"Thus can she transform the mere selfish love of the child into the beginning of that spiritual love which Christ commended when he said, 'If ye love me, keep my commandments.' Let her remember that against the mere protestations of attachment, he also uttered those stern words of warning: 'Not every one that saith unto me, Lord, Lord, shall enter the kingdom of heaven, but he that doeth the will of my Father which is in heaven.' The parent stands, for the time being, to the child as the one supreme source to whom he looks for all things, the center of all his tiny affections. The relationship established between parent and child is apt to become, in time, the relationship between the soul and its God. The thought is a solemn one but a true one.

"The earthly affections are the ladders by which the heart climbs to universal love. *'Love is to be tested always by its effect upon the will.'* The grace of God can turn the weak, selfish will from thoughts of self to thoughts of others, but it can not make a life all that the life would have been had that will from the beginning been made strong and unselfish by repeated acts of loving self-sacrifice even in human relationship.

"Froebel, believing so earnestly that it was only by repeated training in many small acts of self-sacrifice that the child attained unto the right kind of love, would have the mother begin with the babe in her arms, to play that its wee fingers were weaving themselves into a basket which was to be filled with imaginary flowers, to be presented to papa as a token of baby's love.

"The mother's effort is in nowise to stop with the playful service of her child, but by such plays she can incline him toward the desired line of conduct. She is to bear ever in mind the words of the beloved disciple, 'He that loveth not his brother whom he hath seen, how can he love God, whom he hath not seen?' That there might be no mistake as to the kind of brotherly love here referred to, the aged saint had already explained, 'Whoso hath this world's good, and seeth his brother have

need, and shutteth up his bowels of compassion from him, how dwelleth the love of God in him?'

"Never should the mother, through that foolish desire to keep her child as long as possible dependent upon her, or that worse pride which would show itself to be self-sufficient, refuse the proffered help of her child. If she is doing something in which, from the nature of the thing, he can not share, let her be careful to substitute some other loving service while declining the proffered one, remembering that love turned away, nourishes selfishness; and proffered help refused begets idleness. She may have to say, 'No, dear, you cannot help dress the baby;' she can add, 'You may hand mama the clothes.' I know of one household in which it is as much the self-imposed duty of the child of three to patiently hold the towel and soap until needed, as it is the mother's part to bathe the year-old brother. In another household, in which the six-year-old child had long been taught that true love showed itself in service rather than protestations, the mother was one day compelled by a severe headache to shut herself up in a darkened room. Her boy soon opened the door and asked her some question. 'Mama can not talk to you to-day, Philip, she has a headache. Go out and shut the door.' The door was quietly closed, and in a few moments a mysterious bumping and rolling about of furniture was heard in the next room. All was still for a short time. Then softly and gently the door was again opened, and little Philip stepped in on tiptoe to his mother's bedside. 'Mama,' said he, 'I've straightened the furniture in the sitting-room all up so nicely and fixed your work-basket! Isn't your headache better?' The loving little heart had prompted this difficult service in order that the love called forth by her suffering might find vent.

"All birthdays, Christmas celebrations, and other festivals, can be made occasions for the uniting of the whole family in a glad and loving service for the honored one, who, in his turn, may serve to an extra extent the others, *because* the honors of the day have been conferred upon him.

"The 'love-force,' as another has called it, is woman's greatest instrument of power. Unmarried children implicitly believe that their mother's love makes everything easy.

"Love engenders love. Can not this great God-gift of joyful self-sacrifice to the mother, devise a thousand ways by which to kindle the same fire in her child, until the Robert Falconers of fiction are

no longer beautiful dreams, but living realities? 'Ah,' says the doubter, 'what if I ask my child to do something for me, and he refuse, or begin to make excuses, or ask why his brother or sister can not do it as well?' You have simply mistaken the time for stretching the young soul's wings. Begin the training when the child is in the loving mood, and you will rarely fail to get the desired response. Yet, if need be, command the performance of the deed, that by repeated doing the selfish heart may learn the joy of unselfishness, and thus enter upon *true living*.

"Let us strive to follow the idea which our Lord himself has given to us, in all its fulness, in all its grand proportions. Let us aim at nothing short of a life which will embrace in it all the glory of the heavens, as well as the gladness of the earth; which will put Thou, Thine, Thee, in the first place, We, Ours, Us, in the second."

THE BABY.

BY MRS. A. P. JARVIS.

GRASPING at sunbeams and shadows,
Hands outstretched for the moon;
Heeding not snows of December,
Heeding not roses of June;
Clutching at all things illusive,
Sobbing when shadows they prove;
Hushed in the arms of its mother,
Soothed by caresses of love;

Laughing, and cooing, and crying,
Sweet as the heart of a rose;
Trembling all over with mischief,
From its head to its chubby wee toes;
Filling our hearts with new sunshine,
Cheering our wearisome way;
Teaching us that the dark shadows
Conceal the sun's beautiful ray.

Blessing of heaven the dearest,
Our hearts by thy smile are made glad;
The touch of thy soft, dimpled fingers
Has made us forget to be sad.
In thy smile we are basking in sunshine;
Thy prattle all gloom has beguiled;
There's nothing that's nearer to heaven
Than the innocent heart of a child.

—Selected.

THE SICK BABY.

SOME time since we called the attention of our readers to some of the signs of health in a child. In contrast with this, we will consider the features of disease. A careful comparison will enable any mother to recognize when her child is not well, and, recognizing this, she may save it great suffering, and even preserve its life.

A bluish appearance of the skin in the young child is caused by a lack of proper aeration of the blood, which is invariably the result of defective heart or lung action. Occurring in the new-born, most commonly it indicates some trouble with the heart, perhaps a failure of the heart to shut its temporary door between the auricles, a provision necessarily made by nature to secure circulation during foetal life, but which, being no longer needed, is dispensed with at the moment the first breath is drawn. Or it may indicate a failure on the part of the lungs to expand, a condition known as atelectasis. Occurring in the course of disease, it indicates heart failure or defective lung action.

The fontanel, or soft spots found on the head of the new-born, serve as danger signals in disease. Normally, even with the surrounding parts, any depression will indicate lowered vitality, or, in extreme cases, even collapse. Elevation above the surrounding surface, with strong pulsation, shows that there is congestion or inflammation of the brain or its membranes. The purpose of the non-union of the bones in these portions of the skull is evidently to provide for the normal rapid development of the brain during infancy. It is observed that premature closure of the fontanel is liable to be attended with lack of mental development in some particular. If the soft spots are unduly large, or show a tendency to remain open for some time after the normal time for their closing, the condition of the child should be carefully looked into, as this fact may indicate some fault of nutrition.

There is a wide diversity in the shape of perfectly normal infant heads, no two presenting exactly the same appearance. There are, however, certain departures from the normal which are characteristic, and should be easily recognized. A head distinctly globular in shape, showing a tendency to grow disproportionately to the face, should excite apprehension, and especially should this be the case if the fontanel grow decidedly large, and bulge. This may indicate the beginning of hydrocephalus, a condition in which there is an accumulation of water in the skull, the result of a slow chronic inflammation of the membrane of the brain. If not intercepted in its course, the head sometimes reaches an enormous size.

The head is enlarged also in the condition known as rickets, but in this case it presents a square appearance, with projecting forehead and flat sides and top. The fontanel show a tend-

ency to remain open in this disease also, often being larger at the end of a year than at birth.

All sorts of disfigurements of the head may follow birth, the deformity being due partly to the displacement of the bones, and partly to the swelling of the scalp, due to long pressure. Anxiety on account of these conditions is quite needless, as they will right themselves in due time. No attempt should be made at reducing any deformity, as such an effort might result in great harm to the child. In very rare instances there may be a protrusion of the brain through the bones of the skull, and when this does occur, of course it does not disappear; but this accident is of exceeding rare occurrence. A large, soft tumor is nearly always present, which will disappear in a few hours. This is due to swelling, the result of pressure.

The appearance of the tongue is not of such service as an indication of disease in childhood as in adult life. It is always covered with a whitish coating until after the flow of saliva is established. As a usual thing children having healthy digestive organs show a perfectly clean tongue, but a slight coating often has little or no significance. It is also true that the tongue is perfectly clean in severe disease of stomach and bowels. In scarlet fever the tongue is bright red after the first few days. In measles and whooping-cough the tongue often presents a bluish appearance. In case of debility and long-continued indigestion the tongue is often pale and flabby. In some diseases of the stomach and bowels it may look like raw beef.

H. M.

LESSONS IN NATURE FOR LITTLE ONES.

LAST month we learned how the fruit is made. If we will watch all the trees and plants during the next few weeks and months, I think we will be astonished to find how many different kinds of fruit there are; and no two kinds taste or look alike. Why do you suppose the dear heavenly Father made all so different? He who made the fruit gave us also the power to taste and enjoy what we eat, and I suppose he wanted to please us in this way, the same as he pleases the eye in making such a variety of flowers. Many fruits, too, are very beautiful to look upon. By and by, as the different fruits ripen, we will remember to notice this.

Let us remember to notice the cherries—some yellow, some red, and some purple—the large red

strawberries, with their pretty yellow seeds dotted all in the side; also the beautiful peaches.

What do you suppose makes the fruit grow? and where does it get the juice which makes it so delicious? We learned a long time ago that the sap that flowed up through the stem made the buds open, and gave color and fragrance to the flowers; and now the same sap flows into the fruit and makes it grow. Is it not wonderful that the same sap can do so many different things? If we should pick the green peaches now, we would not find much juice in them; the sap is all used up in making it grow; and it would not taste sweet either. But by and by, when the fruit is fully grown, and begins to get ripe, the sap will spend itself in filling the fruit with luscious sweet juice. In some plants and trees it is sweet, in others sour.

We can learn more about the fruits by and by, when they begin to get ripe, but now is the time to plant the seeds we have learned about, and we must say a few words about them this month; for I am sure many of my little readers will make gardens, and I want you to watch the wonderful work of nature in making plants out of seeds. The little seed, as we hold it in our hand, does not seem very wonderful to us. But truly, it contains life in itself, which, if it is put into the warm earth, and given water to drink, will cause to grow out of it a tiny plant, like the one which produced it. I think every one of my readers can get some beans. Suppose we all plant two or three. We will soon see that the smooth, hard skin will burst, and right at the point where we see a little dent, called the "eye," a little rootlet will come out, which will grow right down into the ground. On the top of this, and very near the eye of the bean, a little stem begins to grow upward. The two halves of the bean will form the first leaves. Notice how thick they are. This is because they contain nourishment to help support the tiny plant until it is strong enough to get all its nourishment from the earth beneath, and the air with which it is surrounded above.

Now there is one very strange thing about the growing seeds, more wonderful than all the rest, and that is, why the little rootlets always turn downward into the earth, and the little stems grow upward. No matter how you place the seed in the ground, the result is always the same. I want you to think about this, children, and if you can guess the reason, write a little note to the PACIFIC HEALTH JOURNAL, and we will tell it to other little children who are not able to guess.

H. M.

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THE INFLUENCE OF FEAR UPON THE SYSTEM.

It has been a well-established fact for a long time that in cholera and smallpox scares, and the like, fear increases the susceptibility of the individual to the disease; and so it might be said in reference to all diseases—that fear not only increases the liability to contract contagious diseases, but that it has an equally deleterious effect in promulgating the evil of all diseases, and weakening the system so that it is less capable of withstanding the ravages of disease, chronic as well as acute. It is fear that they are worse than they really are; fear that the doctor won't do all he can for them; fear that this or that remedy will not bring the desired result. So it is fear, morning, noon, and night, that increases the tension of the nervous system, and to no small extent blocks the wheels of nature's work for the individual.

On first thought most people would be inclined to doubt these statements, notwithstanding there are so many every-day common experiences to sustain it; and, indeed, we do not think it incredible when we realize the personality of the mind throughout the body. We were caused a few days since to think along these lines, when asked by a patient: "Why is it, doctor, that the harder I try to get well, the worse I get? I have been doing everything I can do, and the more I try, the more I feel that I am in a deplorably diseased condition." "Yes," we said; "we have noticed this in not a few cases." The more they try without any posi-

tive definite foundation upon which to work, and without real facts upon which to rest, and the more inclined they are to take the advice of everybody who professes to have been suffering in the same way, because they have no foundation for themselves upon which to base any courage, the greater the fear that they can not get well; and the consequent false symptoms that are sure to come are magnified and intensified until everything about the system seems to say to them, "I am getting worse instead of better."

But when we consider the personality of the individual as a complete organism, how the vital forces act and react upon the body—for this is the force that makes every part alive and active—flowing as it were from nerve centers to various other organs and tissues of the body, very much like the magnetic forces that sweep over the earth that help make the wonderful changes that are wrought in wind, wave, and elements—is it any wonder, then, that the influence of fear over the vital force flowing through the body will produce the halting of the function, the weakening of the function, until it is noticed by the excitable and suspicious nerve endings that were made to convey even the most delicate impressions to the nervous system? Has it not, then, been abundantly demonstrated that the sense of fear on any and all of the functions under the vital forces, is always a sense of weakness, a sense of imperfect action, a lack of confidence or faith, which brings about the halting, trembling function, while the element of confidence, on the other hand, is, indeed, strength, faith, and unity of action in every function of the system?

If we in imagination were to pay a visit to the various organs of the body, and there study their functions, we would see every organ in a sense independent of every other organ, so that, in fact, each has an individuality of its own. The liver cells carry on a work foreign in nature to the stomach cells, and the stomach cells a work foreign to lung cells, and so on through the body; yet all the organs are tied together under one common fountain of vital force, so that in health there is perfect harmony and sympathy. Being so, it will now be easy to see that the stomach, for ex-

ample, if it had an individuality of its own, would act very much like the worker, for instance, in a carpenter shop or shirt factory, if the president or superintendent should come in and watch every move that he made, with the attitude or feeling that it would not be done right. Invariably the operator would be embarrassed, and by the very nature of his environment could not do the work as well as he could if the superintendent did not stand over him, expressing his doubts and fears. Just so intimately connected is the work of the stomach or liver of the individual with his mind; and the sense of fear, the sense of grief, the sense of joy, are influences which act and react in varied degrees of intensity, but always surely, upon the various organs of the body.

If fear on the part of the individual depresses the vitality, depletes the fund of confidence, and renders the system halting, so that it is less toned, and consequently weakened in its power to resist contagious diseases, then why may we not reasonably conclude that fear of the stomach's not doing good work will have a depressing effect upon the stomach, or fear that the liver is not doing good work will have a depressing effect upon the liver? Each of these conditions carries with it a lack of confidence or faith in the function. May we not learn the lesson that when we have eaten what we think we ought to take, to fully believe that the alimentary canal will do its work properly? But the continual fear that exercises the minds of most individuals with chronic diseases, and for which many doctors are to a great extent to blame, always works against the getting well process, and lessens the chances of otherwise reasonable recovery. Thousands of unfortunate individuals are having or have had an experience very similar to that of Miss Manning, a lady whom we have not met, but there is so much good sense and gospel truth in her experience, as described under the title "In Bondage to Fear," that we are glad to reprint in another department her article from the *Journal of Hygiene*.

W. H. M.

AN OYSTER CONUNDRUM.

"WHY is an oyster like a diamond mine in South Africa?"

"Answer—Because it has millions in it.

"A bacteriological examination recently made showed a single ounce of oyster juice to contain

more than forty-five million microbes, all living and squirming. It is not surprising that the oyster has a dirty mouth, and that the saliva which drools from his beard should be so alive with wriggling germs of every description, when one considers the nature of his diet, and the fact that he never uses a napkin or a tooth-brush. The oyster dines upon the offal of the sea. Its chief food is the slime and ooze and the minute creatures which they contain, which are found adhering to the stone and sunken, decomposing wood along the sea bottom. The oyster is a scavenger of scavengers, a tidbit for a turkey buzzard, but never intended to be eaten by frugivorous man. A self-respecting orang-outang would die before he would eat an oyster, a clam, a frog, or a bloody beefsteak."

"Nothing succeeds like success." Equally true is it that there is nothing so ridiculous as ridicule.

The above conundrum from the editorial of one of our eastern exchanges last month, gives one the feeling that it was a great success in the light of ridicule. The conundrum, however, has a common-sense solution in facts; and we feel like taking the part of the weaker party in the above duel, and truly believe the said oyster to be a very respectable citizen, living at peace with all, and with malice toward none, serenely ensconced in a neighborhood and environment much more beautiful and lavish in floral decorations and created novelties of wonder than is his cotemporary, man, if we can believe the reports of all submarine explorers.

We are glad also that the friendly relations between the orang-outang and the oyster are not strained in the least by the food question. But, giving honor to whom honor is due, be it said that the self-respecting orang-outang does not feel above any other created object, nor would he think of singling out any fellow-being from the rest, and, with Pharisaical philosophy, cast reflections upon such a one from the point of his existence, for which he is least to blame. Ridicule is as foreign to his nature as a meat diet, and for the same reason he does not indulge in laughing, or saying pretty things; neither does he exhibit any of the refined social tactics so common to beings more highly endowed.

But beyond this conjecture lies the fact that the oyster does indeed live without any claim to fastidiousness, in a medium much nearer germless than does man. Thanks to the sea water, his air and

food are somewhat germ proof, with no credit to inventive genius. But, as everything can not be said in favor of the oyster, an observation that is more than hinted at by standard authorities among scientists is fitting, lest some one may be misled to wish that he were an oyster, viz., that that partially antiseptic environment of all sea life accounts for the diminished tone, quality, and strength of all flesh found in the sea; the same comparison holds good as to the intelligence of all sea animals. The fact that a fish can not be taught the tricks so common to land animals, evolves the evidence that life developed in an antiseptic medium is not as high grade of life and animation as life developed in the midst of more free germ action. And this leads to the question, Are germs necessary to life? The answer comes in the affirmative from all nature and science. The cycle of matter from the inorganic state to the highest grade of life is the result of a high order of germ action, under the impetus of vital force; and it is equally true that dissolution of organic to organic matter, thus completing the cycle, is almost altogether the result of a lower order of germ life. Hence, we can but conclude that germ action is indispensable to the maintenance of all life.

Germs, then, are our best friends, save a few pathogenic germs which have cannibalistic tendencies. Germs, many thousands of them in water by the drop, germs in the food in ever-varying quantities, germs in the air, fifteen thousand of them to one cubic centimeter in fresh milk, in skimmed milk many thousand times more, and in ordinary sour milk over forty millions have been counted, representing no less than sixty distinct varieties! I have been taking considerable of the "New Era" Kumyss of late, and like it very much, and consequently was interested to know how germ life thrived in that medium. We examined an ounce of it in our physiological laboratory recently, and found that it contained millions upon millions more germs than we found in sour milk, most of which were lively. Not a few, however, I am sorry to say (for I prefer live germs) were dead, no doubt due to being over-acclimated. What, then, are we to conclude?—First, that man himself, with his genteel dress, his damask napkin, and ivory-handled tooth-brush, is, after all, but a highly developed compound germ *in toto*. Second, that every avenue, canal, and pore of the body is but a gateless highway for a host of germs, passing in and out, bearing their legitimate and heaven-

ordained traffic. Third, that life and death are in close partnership in this frail body of ours; and, thanks to the germs, the cycle of matter is complete upon which depends the balance of life and the survival of the fittest.

Corollary conclusions: Fourth, that man has nothing of which to boast; his flesh has the same general construction of all flesh, low and high, and invariably the same end. Isa. 40:6: "All flesh is grass." Job 34:15: "All flesh shall perish together." Job 7:5: "My flesh is clothed with worms." Eccl. 3:18-20: "I said in mine heart concerning the estate of the sons of men, that God might manifest them, and that they might see that they themselves are beasts. For that which befalleth the sons of men befalleth beasts; even one thing befalleth them; as the one dieth, so dieth the other; yea, they have all one breath; so that a man hath no preëminence above a beast; for all is vanity. All go unto one place; all are of the dust, and all turn to dust again."

Fifth, the injunction in Isa. 58:7, "Hide not thyself from thine own flesh," is of more than honorary importance, and has a practical application in the righteous conception and relation of man to his own flesh, as well as the man to some other being's flesh.

Sixth, Eternal truth, in the interests of which man was created, is outraged when men with college erudition, microscope, crucible, and *et cetera*, all good in their place, spend most of their time and powers studying in the endeavor to corral the germ of death, instead of the germ of a higher life. The first is a sure failure in the work for souls and bodies; the second is a sure success, through the promise.

But, lest we weary the reader with innumerable drawn-out conclusions, we will close with a parody on Longfellow's noted verse, which, let us hope, every true lover of nature will set to music for every-day life:—

Life is real, life is earnest;
But it might be more sublime
If a man were not kept busy
Dodging microbes all the time.

THE drinker and his family in rags, while the drink-seller is clothed in jewels and velvets, affords a contrast that should keep any man from contributing to the seller's luxury at the expense of his own prosperity.—*Pacific Ensign*.

QUERIES.

14. WHAT is hyperpepsia of the stomach? I have been told that I have hyperpepsia; what can I do? H. A.

Hyperpepsia is simply overwork of the stomach, and may not be abnormal in any other sense than that a more than normal amount of work is done. This sometimes gives various symptoms. Usually there is a good appetite, sometimes tenderness over the stomach, and in some cases sour stomach, which does not come from acid fermentation of food, but simply an overproduction of the gastric juices. This condition often gives considerable trouble to the patient, although he is well nourished; it may, in fact, irritate the nervous system to that extent that it may approach what is termed nervous dyspepsia. This form of dyspepsia can be the more easily remedied from the fact that there is no lack of power in the work, and it is easier, as a rule, to check an exaggerated peptic action than to bring a case of low action up to the normal status. Taking less food is the first thing, and restricting the diet to grains, milk, and fruits, leaving off all flesh foods. This diet will materially diminish the gastric juices, which will be a benefit to this class of patients. An hour before meals a drink of cold water will be beneficial, which will not only dilute the gastric juice, and make it less irritating, but will also depress the production of gastric juice. Many cases often get a good deal of benefit from a drink of common cold water an hour before meals.

This class of dyspeptics is the most easily managed of all classes, and scarcely any other treatment is necessary than the above dietary regimen.

15. EDITOR PACIFIC HEALTH JOURNAL: Will you please tell me what biliousness is? G. S.

The literal meaning of the word is a condition of being full of bile. The bile secreted from the liver performs a very important function in the alimentary canal; but if for any reason, this bile is not allowed to pass into the alimentary canal, it is more or less disseminated throughout the system, giving the marked sallow color of acute biliousness, which is most pronounced in the obstructive form. The obstruction is usually from one of two causes—a catarrhal condition of the stomach and bile duct, which closes up the bile duct, and makes it difficult for the bile to enter the alimentary canal, and consequent absorption. A still more critical condition is the obstruction from gall-stone in the bile duct, or tumors. This many times proves to be fatal.

Some relief may be obtained, and often a cure accomplished, by surgical interference. Bilious dyspepsia is a term which has in the past been applied to that kind of dyspepsia which comes from slow digestion, with an overproduction of bile, and a specially torpid eliminative process. The various kinds should be treated from different standpoints. None of them are especially critical except the form in which there is obstruction.

16. DEAR EDITOR: I have been running down of late. Have had good health for years, until the last six months, when I have been very hoarse, and have coughed a great deal. I can scarcely talk above a whisper. Can you tell me what the trouble is, and what I may do? M. A.

In cases of loss of voice very much depends upon the condition of the lungs. There are many cases of lung trouble which have throat symptoms following, like your own. But if there is no lung trouble, a protracted throat trouble of that kind, with a great deal of irritation in the throat, and loss of voice, may be of tubercular origin. A critical examination by a specialist, followed by treatment which will improve the general health, and local treatment as the specialist may direct, is the thing that should be done in that case. Of course the case may be simple laryngitis, which would not need so much careful attention, and prognosis would be favorable. Our advice, inasmuch as the trouble is of such long standing, is that you should consult a specialist at your earliest convenience.

17. Will you kindly tell me through the columns of the JOURNAL what you recommend as the best treatment for deafness due to clogging of the Eustachian tubes? J. K.

There are many causes of deafness, among others that referred to by the inquirer, which is usually the result of catarrh in the throat. This, then, should receive first attention, and for it various remedies are recommended. Perhaps a careful regard for the general health, eating such food as is easily digested, avoiding exposure to rains and cold winds, sleeping and living in well-ventilated rooms, proper bathing and dressing—in short, proper care of the body in general—constitute the only successful treatment for catarrh. Various local treatments have been recommended, and some of them are beneficial. Bathing the mucous membrane of the nose and throat with boiled water, to which a little boracic acid has been added, or alternating this with a little salt water, often yields very satisfactory results. The Eustachian tubes having once been closed, however, need to be inflated. This is best done by a good aurist, who understands putting the air inside of the tubes.



THOUGHTS OF COMFORT.

BY ALICE DANNER JONES.

IF we're doing all we can, why despair?
 For the rest, whate'er it be, God will care.
 We may slowly plod and toil many a year,
 Losing hope of all reward, though so dear.
 But of deeds done heartily, victories won,
 Faithful is the record kept further on.
 Words of love, so longed for here, wait us there;
 And a beautiful fulfilling of each prayer.
 He who made us, understands us, never fear;
 And sometime will be the last time for each tear.
 Never sorrow's cup runs over ere that day;
 He who loves us, gently leads us far away.
 Earthly friends, perchance, misjudge us, not so He;
 All the hidden beauty in us He can see.
 Though for us no bright fruition of our dreams,
 And each hope, so fondly cherished, blighted seems,
 If His hand is left to guide us, not alone
 Do we walk the narrow pathway leading home.
 Earthly love can never equal the divine.
 Then, O Father, in our weakness, grant us thine!
 Still these feverish, fitful throbbings on thy breast;
 From the longing, without gaining, give us rest;
 Strength and courage, patience, wisdom, all of these
 Grant us, that our daily living thee may please.
 Tho', perchance, we've missed the sweetest things of life,
 Keep from us the coward's portion of its strife.
 O'er the graves of buried longings help us rear
 Temples fair and strong and stately, which shall cheer
 Other hearts, when ours are resting, and shall tell
 Unto all the simple story: "It is well;
 O'er the baser rose the higher power possessed;
 All strife ended, laurel crowned, she's at rest."

—Selected.

"THERE is only one sudden death among women
 to eight among men."

LEONE BARLOW'S CHOICE.

LEONE BARLOW stood at the window putting on her gloves.

"Mr. Morley," announced the maid at the door.

The young girl turned, a lovely rose tint staining her cheek.

"O Hiram, did you not get my note?" she cried, advancing to meet the tall, Saxon-faced man, whose eyes lighted up at the sight of her.

And she was a goodly sight. A little below medium height, slender and willowy, features cut with cameo-like precision, brown eyes, and hair in which the sunlight seemed entangled. Hiram Morley's keen glance took in every detail of her beauty as well as the perfectly fitting brown suit, with hat and gloves to match.

"Yes, dear"—there was a world of caressing tenderness in the low voice—"I read that you were going to accompany Mrs. Waters on what I verily believe is a slumming expedition in preference to driving with me."

"Now, Hiram, you know that I would prefer the drive. But the meeting is one from which the ladies of the W. C. T. U. hope great things. A gospel temperance meeting in a part of the city where the work is sorely needed. I am to sing. I really could not refuse."

"I understand, Leone. Don't look as if you thought I was displeased. As if any one could be displeased with you, dearest."

There was a moment's silence, one of the mo-

ments which the trusting girl counted as the happiest ever vouchsafed to mortals. Then Mr. Morley went on gaily:—

"But I ran in to tell you I knew no reason why you should not wear my roses, even to the slums," and he removed the wrappings from a package he carried.

"How lovely! Thank you a thousand times! Your taste is always perfect," Leone cried as she lifted from their bed of moss the odorous pale yellow roses, and, after pressing them to her lips, fastened them in her corsage.

"I wish you were going with me, Hiram," she said suddenly. "Can't you go? Why is it men so seldom do such work?"

He laughed lightly. "While slumming is not exactly in my line, I'd enjoy going anywhere with you. But even our drive was to have been business mixed with pleasure; I must see about a piece of property out on Elm Hill. As to your last question, well, dear, I think it is because of the difference in the ways men and women work."

"I don't understand you."

"We pay a missionary, an effective worker, and send him down there. You—no, Mrs. Waters—well, you see it is a fad. You must not let them make that awful thing, a fanatic of you, Leone."

Then, after a murmured word of tenderness, Hiram Morley went away. Leone stood and watched him drive down the street through the hazy splendor of the October afternoon.

"He is so different from other men," she thought proudly. "I could not have loved an idle or a heartless man."

That afternoon was a revelation to Leone Barlow. Very different from her own life seemed that of the wan-faced, hopeless wives and mothers who gathered in that little room. As for the few men present, ragged, dirty, unkempt, could they be men of the same minds and bodies as her father and lover? Then the world of misery, of which she had never before thought! Children dying for want of proper food and clothing, homes invaded by hunger, cold, blows, and curses. And all the work of drink. Why had she never thought of it before? Were people sleeping, that the hand of every Christian man and woman was not raised to crush the saloon? Leone that hour wakened to new desires and aspirations. She sang as never before, sang until those sin-stained and despairing souls felt stirring within them a longing for new lives.

The girl was very silent during the homeward drive. Mrs. Waters' years had brought her wisdom, so, after a keen scrutiny of the thoughtful face opposite her, she, too, was silent. Just as they reached the Barlow home, Leone laid her hand upon that of her friend.

"Mrs. Waters, I am thoroughly waked up. I will attend the next meeting of the union, become a member, and wherever my voice or presence can aid temperance work, I shall be ready."

"Now may our dear Father be praised." And into the sweet face framed in silvery hair came a joy unspeakable. "Leone, you can be a strong tower."

When Leone told her lover of her plans, she was unprepared for the gloom that settled over his expressive face. "You, Leone, my promised wife, to become one of those loud-voiced, woman's rights creatures! To soil your spotless womanhood by going down—"

She interrupted him, a light in her eyes he had never seen before. "You forget the class you are denouncing contains Mrs. Waters, the dearest friend of my dead mother. You also forget that I am henceforward one of the same class. I am sure if you dreamed of the misery caused by strong drink, you would cry out against it. Not only bodies but souls, for whom Christ died, are going down to ruin."

There was a short pause. Hiram Morley was struggling hard to regain control of himself.

Suddenly Leone laid a timid hand upon his arm. "We will not let it come between us, dear." Her voice was low but firm, "I can never go back to my olden state of indifference, and some day I am sure you will understand."

That day was apparently long in coming. It was hard for Leone to feel that her new work, work that she had been called to by the Lord, was by her lover considered a mere whim. They rarely discussed the matter. Once she urged him to sign the pledge, if only as a help to others.

"I sign the pledge!" and the proud lip of Hiram Morley curled. "I put myself upon a level with the drunkard! Leone, you surely can not wish it."

"I wish nothing derogatory to you, Hiram," was the reply. "I thought you might help others up to the heights where you stand. God has given you great opportunities for usefulness."

"Spare me," and he lifted a strong white hand upon which a diamond gleamed. "Spare me, I

pray, an infliction of the lecture platform phraseology."

Perhaps it was well for them both that an interruption in the form of a caller came just then. An hour later Leone went up to her room and thought it all over. What would the end be? she asked herself wearily. Could two who differed so widely on vital points ever be one? For when October again painted the leaves of the forest with crimson and gold, she was to be the wife of Hiram Morley. Trying to comfort herself with the remembrance of their mutual love, she dressed for the meeting at which she was to sing that evening. Leone had thrown herself into the work, and, with the strength of a well-poised but impulsive nature, was warring against what seemed to her the root of the whole evil,—the saloon.

"We work to save one drunkard," she had one day cried out to Mrs. Waters, "and while we are doing it, the rumseller makes three more."

The particular saloon then under discussion was located in one of a row of tenement houses, all owned by one man. The owner was personally unknown to the ladies, who had thus far negotiated with the agent. It was the only drinking place within several blocks. The keeper was a creature possessed of cunning enough to hide from the dull eyes of the officers his many transgressions of the law. Much work had been done in this vicinity by the union. Yet the work was steadily counteracted by the saloon. This had gone on for months, and now, in the early spring, the workers resolved to make one more effort. Another appeal to the agent met with no better success than had former ones. He assured them that the business of the tenant was entirely beyond the control of himself or his employer.

"I shall see your employer to-morrow," said Mrs. Waters, rising. Perhaps he is not entirely indifferent to the sufferings of his fellow-men. Please give me his address. His name is—" and she stopped abruptly, remembering she had never heard the name of the owner of the property.

A sinister smile passed over the agent's face. "Name? Well, Smith, for instance. Here is his address," handing her a bit of paper upon which he had scribbled a street and number.

When the indignant ladies had departed, the agent leaned back in his chair and laughed long and loudly. "'Don't let my name appear,' that was what he said. Well, I've obeyed his orders.

He never said a word about his address. Ha, ha! won't it be rich!"

The call upon the owner of the property was to be made the next day. It had been reported that the saloon-keeper's license expired within a few days, and the ladies hoped to so successfully plead their case that it should not be renewed. Mrs. Waters and Leone were selected to act in the matter. When Leone called for her friend the next afternoon, she found Mrs. Waters in bed with a sick headache.

"I am so sorry," the elder woman said. "Drive around and get Mrs. Peters to accompany you."

"Mrs. Peters is out of town," Leone announced in a hard voice. "I will go alone. I can not sleep until I have made one more effort to close that den of iniquity."

"Is there any new development?" Mrs. Waters asked. Notwithstanding the pain she was suffering, she could not but notice Leone's compressed lips and glittering eyes.

"Norah Maine came to me an hour ago. Her twelve-year-old boy was brought home at midnight dead drunk. At the saloon they have been for weeks giving him the sugar from the bottom of the glasses."

Mrs. Waters groaned. "How long, O God, how long must this go on?"

"This particular case must not, shall not, go on a day longer," Leone cried, as she rose to go.

A half hour later she was at the number indicated by the agent. On her requesting a few minutes' conversation with Mr. Smith, the clerk looked puzzled.

"There is no gentleman of that name here."

"I may be mistaken regarding the name," Leone said gravely. "It is the gentleman whose office this is that I desire to see."

"What name?" he asked deferentially.

"Say a lady on important business."

He entered an adjoining room. In a few moments he returned, and held the door open for Leone. A gentleman writing at a table rose. It was Hiram Morley.

"Leone!" he exclaimed, coming to meet her. "To what good fortune do I owe this happiness?"

"Hiram," and the brown eyes looked straight into his, "do you own a row of tenement houses on D Street?"

His face flushed. "You are not a census taker, are you?" he asked, trying to speak lightly, and at the same time placing a chair for her.

"Please answer me," she insisted, and then he noticed how pale she was.

"I fear you are not well. Yes," as she lifted her hand impatiently, "I am the owner of the houses."

"I am so glad."

"Why do you ask?"

His eyes met hers steadily. There was a steely light in their blue depths. Leone caught her breath. What would be the result of the interview? But was not that question disloyalty to her lover? Surely he would be glad to stay the sinful work.

"I will tell you, Hiram," she said gently. "It is a long story, but you will be patient with me."

It was a long story, for she went into details, surprising him by her knowledge of statistics and law. He sat, one hand shading his face, the other playing nervously with an ivory paper cutter. When she had finished, he asked coldly:—

"Do I understand that you, and through you the W. C. T. U., ask me to turn out the present occupant of the building, and to refuse to allow it to be used for a saloon?"

"That is just what we ask." She had risen and moved to his side. "And I—Hiram, I entreat you, by the love you bear me, to stop the work of this fearful evil."

He, too, had risen, and now took her hand. "Leone, dear one," in the old caressing tone that made her heart leap, "have you never suspected that you were the dupe of designing persons? You are misinformed. The poverty and suffering you attribute to drink can usually be traced to indolence. Besides, were I to close that saloon, another would soon be opened in the same vicinity. Your mistake is, you judge the inhabitants of D Street by yourself. They are of different clay, dear. Can you not trust this matter in my hands, Leone?"

She trembled. If she could not trust him here, could she—but she resolutely stopped. She must not think of that.

"O Hiram," she cried, "surely you do not think it right!"

"That is not for you or me to decide," he answered, gently but firmly. "The law settles that. It is purely a matter of business. The building brings me in the best rent of any in the block. You can not expect me to throw this away for a whim."

"A whim!" Her lips were white. "Hiram, if

you will close your eyes to right and wrong, will you not do this thing for my sake? I ask it in the name of the love we bear—"

Again he interrupted her. "I question the advisability of introducing that consideration. If you insist, why may I not use the same plea? Is not your love for me strong enough to induce you to give up this fanatical work? You know, Leone, how I have disapproved of it from the first. My refusal can not mean more to you than does yours to me. It grieves me, dear, to see how you have changed from the sweet, trusting woman whom I wooed."

"Hush," she said wearily, "enough has been said. I will go."

He accompanied her to her waiting carriage, assisted her to enter, lifted his hat, and went back to his private office. Alone here he cursed the fate that had come between him and the woman he loved.

As for Leone, when she was alone, she faced the question, Which should she give up, her work or her lover? To the first she felt sure God had called her. Hiram Morley—here she paused and hid her face in her hands. You may call her weak, yet Leone Barlow feared that had her promised husband proved all she had thought him to be, she would not have been strong enough to have renounced him. But had that been the case, there would never have come this crisis. As it was, dare she put her future in the hands of the cold, crafty man who had that day told her that a question of right and wrong could be decided for him by the law of the land? It was a severe struggle, for love dies hard, but it ended in Leone sending back her engagement ring.

This is the history of one W. C. T. U. worker. Thousands call her blessed. When they hear the earnest words of Leone Barlow, when they look into her sorrow-refined face, when they hear her melodious voice, when they know the mighty work she has done, even then they little dream that it was her heart's blood she offered up to stay the ravages of that monster, drink.—*Hope Darling, in Union Signal.*

Do the right thing, then stand by it though the heavens fall.

It is contrary to the eternal law of justice that vice should bring peace or prosperity.

VENTILATION OF SLEEPING ROOMS.

THE proper arrangement of draughts for the ventilation of sleeping rooms has perplexed all. One thing, however, is certain. It has been proved, by actual experiment, that a layer of air lies against the walls, which is subject to very little movement, even when there is a strong circulation in the middle of the room. It is, therefore, important that a bed should not be placed close to the wall. If kept there during the daytime, it should be moved at least several inches out into the room at night.

Alcoves and curtains should be avoided. In an alcove inclosed on three sides a lake of air forms, which may be compared to the stagnant pools often observed along the margins of rivers. A few yards away a rushing tide may be moving swiftly along, but these placid pools are unruffled by the current.

While placing the bed, especially the head of it, where it will be shielded from the strongest draught, there should still be enough motion to the air in that vicinity to insure fresh supplies constantly throughout the night.

The prevailing lack of appetite for breakfast, as well as many cases of anæmia and worse diseases are due to the breathing over and over again of the same air in restricted bedrooms, where beds are too often placed in alcoves or are shielded by curtains, which are far too seldom shaken out in the fresh air.—*N. Y. Times.*

THE POISON OF FATIGUE.

"As to the nature of the poison engendered by fatigue, some recent experiments have been made that are replete with interest. Maggiori and Mosso, as well as Wedensky, and others, find that if the blood of a fatigued animal be injected into another animal that is fresh and unfatigued, all the phenomena of fatigue will be produced. Wedensky has made a chemical analysis, and finds the poison to be similar to the ancient vegetable poison, curare, into which the Indians used to dip their arrows; and a most deadly poison it proved to be. The poison engendered by fatigue is of the same chemical nature, and is as truly a deadly poison. In case it is created more rapidly than can be carried off by the blood, the organism suffers seriously."

ABOUT THE HOUSE.

DON'T have "dark holes" about the house. Clean them out and let the sunshine in.

Plunge your bread knife into hot water before attempting to cut warm bread or cake.

No one should even attempt to wash dishes without two pans—one for the washing proper, and one for rinsing.

Sprinkle salt over the coal in your bin in liberal quantities; it will make it burn more evenly and prevent "clinkers."

If you can not procure dampened sawdust for use in sweeping, use bits of dampened paper sprinkled over the floor. Tea leaves stain and salt makes the carpet sticky.

A liniment that is very highly recommended is made from one quart of cider vinegar, half pint turpentine, four beaten eggs, and two tablespoonfuls of salt, well mixed together.

Mrs. Rorer is an earnest advocate of whole wheat flour. She says bread made from this flour not only contains seventy-three per cent more nourishment than white bread, but it is nature's own remedy for dyspepsia and kindred ailments, brought on by excess of starch in white flour bread. Apoplexy and Bright's disease can be traced in many cases to an excessive use of starchy food.—*Selected.*

MICROBES OF THE AIR.

"At the last annual gathering of the British Medical Association, Drs. Thomson and Hewlett made the startling announcement that each dweller in all large cities inhales, on an average, about fourteen thousand microbes per hour. These microbes are all retained within the body, for expired air contains no germs. Fortunately, the healthy body is itself capable of destroying these invaders. The great danger lies in a lowered tissue resistance produced by colds, alcoholism, and, indeed, any excess which lowers the vitality and so opens a gateway to our small but powerful enemies."

THREE MISTAKES.—Mothers adhere rather persistently to three mistakes in feeding babies: (1) They give the food too concentrated. (2) They give it too frequently. (3) They give it in too great quantities. These are mistakes of the head, certainly not of the heart, for their great fear is that the baby will starve.—*San Inspec.*

A BRIEF TEMPERANCE LECTURE.

MAYOR McCLAUGHRV tells this story: "A Confederate general, after the war, went back to his plantation in the south; but he was homeless. He had lost everything. Desolation and ruin surrounded him. He took to drinking heavily. He lived in a little cabin which survived the wreck of the war. An old negro, a slave in the family, was his faithful companion, who never deserted him. Whenever he had slept off the effect of his debauch, the general found the negro near him, with a cup of coffee ready made. In his fits of intoxication he treated old Joe dreadfully, but his faithful servant bore it all with unflinching patience. At last, one day, when half drunk and half sober, his master, in an extreme fit of ugliness, told Joe to pack up his things and leave, saying, 'I never want to see your face again.' Poor Joe, always obedient, rolled up his bundle, and started off. Then his master, feeling more desperate than ever, took to his bottle, and became ingloriously drunk. It took him a long time to come out of it, but when he did, there stood old Joe by his side, with a cup of coffee.

"'Well,' said the officer, 'didn't I tell you, Joe, to leave me, and never show your face again?' 'Yes,' said Joe; 'but I knew you was an old fool, and didn't know your own mind.'

"'You are right, Joe,' said the officer. 'And now, if you give me your hand, I will promise not to drink any more.' The white hand and the black were clasped together, and this oath served better than gold or amethyst. The officer kept his word, and by his energy and skill became prosperous again."

CREMATION SANCTIONED.

"THE advocates of the substitution of cremation for earth burial, on the score of the sanitary advantages of the former, will be gratified at the recent decision of Mr. Asquith, the Home Secretary for England, on an application for a faculty authorizing the interment of an urn, containing cremated remains, beneath the floor of a church. The faculty was granted, and a precedent is thereby established, which, at least in a country so largely influenced by precedent, can not fail to give a fresh impetus to the practice of cremation."

VEGETARIAN BOOTS.

THIS novelty is now advertised in London; the uppers are made of "pannus corium," the soles of closely waterproofed flax belting. To show that the skins of slaughtered animals are not necessary, the vegetarians say that "India rubber, gutta percha, steel and iron and brass nails, and brass caps, cashmere and cotton, elastic and webbing, wool and list, cork and straw, silk and jute, and even brown paper and wax, go to form the modern mystery which still carries the old name of boot or shoe."

"CONTAGION IN THE HANDKERCHIEF.—Even in such a disease as influenza, the handkerchief should be thoroughly boiled before being washed. The disease is not ordinarily fatal, but means of preventing it by contagion in dried handkerchiefs are so simple and easy that they should not be neglected."

RETREAT NOTES

—Mrs. Dr. Walter, of San Francisco, is at present a patient at the sanitarium.

—Mr. J. F. Parsons, of the Del Monte Milling Company, has been a guest at the sanitarium for a few weeks.

—The friends of Professor Sanderson will be pleased to know that he has entirely recovered from his recent severe illness, and seems to be progressing favorably.

—Mrs. Wirt and her little son, who have been with us for the past six weeks, have just returned to their home in Oakland. Mrs. Wirt has been greatly improved.

—A letter recently received from Mrs. Frear assures us of her continued improvement, and says that she expects to sail for her home in Honolulu on the 31st of May.

—Miss Emily May, who has been mentioned before in our home news, is now enjoying the company of her mother and sister, which fact will certainly add greatly to her pleasure, hence to the profit of her stay.

—Miss Holmes, of Oakland, who has spent some months with us, has recently returned to her home. She is almost if not entirely recovered, and will plan to spend the summer months on the hillside, thus to insure a permanent cure.

—Among recent arrivals we mention Mr. and Mrs. Heald, of Cloverdale; Miss Carrie Pratt, of St. Helena; Mrs. Craig, of San Francisco; Mrs. Landis and son, of Marysville; Miss Maxwell, of Santa Cruz; Mrs. Lane and family, of San Francisco.

—Napa Valley, in common with many other parts of the coast, has suffered materially from the recent frosts. The ranchers tell us that nearly all the fruit has been ruined by these visitations. The sanitarium gardens, however, were too high to be injured.

—We are glad to report that Dr. Lathrop has been able to resume his Sunday services in the chapel, and recently favored the guests of the home with a sermon. The doctor seemed to suffer no ill effects from this effort, and we trust we shall again be favored.

—Mrs. J. C. Kendall, who was a guest at the sanitarium during the summer of 1894, is again a member of the family. During the past two years Mrs. Kendall has enjoyed unusually good health, and we trust that another brief stay at the sanitarium will again make her over new.

—Judge Talcott and family have recently paid us a visit. Mrs. Talcott was the afflicted one this time. We are glad to report that the judge is looking well and hearty. Mrs. Talcott was greatly improved by her short stay of two weeks, and writes from her home that she is still gaining.

—We are glad to report that Mrs. A. E. Whitney, who was for so long a time a member of our family, is with us again, for a somewhat extended visit. She has had a return of her former illness during her few months' absence, but as we look upon her to-day, we can scarcely realize that she is the invalid who for so many months and years was such a sufferer.

—We shall be glad to welcome to our family this summer many of the San Francisco and Oakland school-teachers who have been with us before, and are glad to know that a goodly number who have not visited the sanitarium before are coming with them. We shall hope to make their stay both pleasant and profitable.

—Mrs. Carl, of Sacramento, who was several years ago a member of the Retreat family for nearly two years, has recently returned. During the past winter she has suffered a very severe attack of pneumonia, from which she has rallied very poorly. We hope to be able to help her back to her usual degree of health.

—Our swimming tank is early in demand this season. We are glad to note the enthusiasm on the part of many of our guests, particularly the ladies, in acquiring the very great accomplishment of swimming. We find this addition to our facilities a most useful adjunct in the treatment of many of our cases of invalidism.

—Captain Hanson, who has spent his vacation with his family on the hillside, and meantime has been connected with the family of workers, has been called upon to take

charge of the missionary ship, *Pitcairn*, on her next voyage, and has recently left here for that purpose. His family will again remain with us in his absence.

—A party of eight or ten recently visited the renowned petrified forest, and report a most delightful day. The distance of sixteen miles, through a most beautiful region, makes this trip a very pleasant one indeed for our semi-invalids. The forest of huge petrified trees presents a sight of very great interest, particularly to those who are interested in geology.

—Miss Parker, principal of the Broadway Grammar School, is at present a guest at the sanitarium. Miss Parker has been connected with the school in which she now holds the leading position for more than thirty years, and still ranks among the truest and best of San Francisco's most faithful teachers. We hope she will soon be able to return to her post, where her labors will be highly appreciated.

—We have recently heard from Mrs. Captain Ainsworth, who was for so long a time a patient at the sanitarium, and is known to many of our readers, that she has again been quite ill for a number of months. At the present time she is at the private hospital of Dr. Wier Mitchell, in Philadelphia. She has the sympathy of a very large circle of friends, and we shall wait anxiously to hear of her recovery.

—Spring has never painted the hills and valleys facing Howell Mountain more beautifully than at the present time. The meadows beneath, with their patchwork of red loam, green in ever-varying shades, and orchards, make a very pretty contrast to the hillocks, mountains, and cañons which rise abruptly from their borders. It is agreed by all visitors, from home and abroad, that this "Switzerland of America" is not surpassed in real beauty and loveliness by anything in the world.

—Doctor Lathrop, who has in many ways during the past year given tangible evidence of his interest in the welfare of the sanitarium, especially in the beautifying of the grounds, has recently added another most acceptable gift. The open space above the road leading to Rest Cottage, he has planted with a goodly number of shade trees, representing several varieties heretofore unknown on the hillside. Among them are the cut-leafed maple, the American linden, or basswood, the white birch, and the *Paulonia Imperialis*. In a few years they will add their contribution of foliage to the shade and beauty of that slope, and will contrast handsomely with the large madrones and pines just above them. Doctor Lathrop has also contributed to the beauty of the grounds in other respects, himself making and caring for several new flower beds about the White Cottage, where he has made his home for the past winter.

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David praiseth God.

PSALMS.

He prayeth for safety.

19 To deliver their soul from death, and ^b to keep them alive in famine.
20 ^aOur soul waiteth for the LORD: he ^{is} our help and our shield.
21 For our ^cheart shall rejoice in him, because we have trusted in his holy name.
22 Let thy mercy, O LORD, be upon us, according as we hope in thee.

PSALM 34.

^a Prov. 24. 16.
^b Ps. 37. 39.
^c ver. 8. 17.
^d Ps. 130. 6.
^e John 13. 36.
^f Zech. 10. 7.
^g John 16. 22
^h Ps. 94. 25.
ⁱ or, shall be guilty.
^k 1 Kin. 1. 29.
^l Ps. 71. 24.
^m or, Achish,
1 Sam. 21. 13.

19 ^a Many *are* the afflictions of the righteous: ^c but the LORD delivereth him out of them all.
20 He keepeth all his bones: ^e not one of them is broken.
21 ^f Evil shall slay the wicked: and they that hate the righteous ^g shall be desolate.
22 The LORD ^h redeemeth the soul of his servants: and none of them that trust in him shall be desolate.

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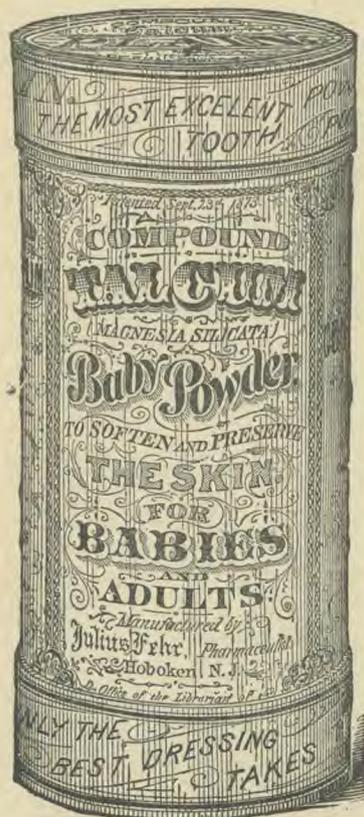
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