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GENERAL ARTICLES.

BILIOUS AND NON-ACID DYSPEPSIAS.

BY A. J. SANDERSON, M. D.

It has been our experience that those cases of digestsional disorders that are accompanied with bilious symptoms, as a rule belong to the class of hypopepsias, and should be treated somewhat after the same methods, with the exception of those cases of hypopepsia which come from a purely nervous origin, concerning which we will speak later.

In these cases we usually find either a partial or complete absence of hydrochloric acid, together with a very slow action of the digestive ferments on the albuminous substances. In consequence of this the digestsional work of the stomach is very slow and incomplete, and as a result there are usually various forms of fermentation or decomposition taking place, which greatly interfere with nutrition. The individual either suffers greatly from a lack of nourishment, or the quality of the nutrition is so poor that abnormal conditions arise, such as an accumulation of a poor grade of fat tissue. The individual becomes sallow, and suffers much from general depression, and often becomes a hypochondriac, in which condition his disease seems unnecessarily serious to him. These cases, above all others, are apt to suffer from what has been termed by some authors gastric crises, which in some persons come on periodically, and in others irregularly, when there seems to be an exacerbation of all the symptoms, which makes the

patient very miserable. During the interval he may be so comparatively easy that he does not think his trouble exists, except at the time of the crises. During the attacks the patient becomes decidedly sallow, if not slightly jaundiced, which condition usually relieves itself by vomiting, which comes on in the early morning upon rising, and may be repeated several mornings, or instead it may be relieved by an acute attack of diarrhea. Thus rapidly throwing off the poison from the system, the patient recuperates and feels well until another accumulation of the same material takes place, when the same symptoms will be repeated.

The local symptoms, as a rule, are not so pronounced as in other cases of dyspepsia. The stomach is in more or less of an atonic condition, and simply refuses to work, and the symptoms are usually referable to the intestines and liver, which suffer from the foul contents of the stomach being thrown upon them, to be taken care of and eliminated.

Where the motor power of the stomach is quite good, so that the contents do not remain in the stomach too long, the gastric crises do not occur, and the symptoms are mostly intestinal, together with those of the torpid liver. If the intestinal digestion is in a perfect condition, the trouble may exist a long time without the patient apparently suffering; but as a rule the different parts of the alimentary canal hold such a sympathetic relation with each other that the intestines suffer more or less with the other, and so the symptoms

of intestinal indigestion arise. In some cases there may be severe cramping in the bowels from five to six hours after the food has been taken. Constipation is usually an accompaniment of these cases of dyspepsia, though it is sometimes relieved by an acute attack of diarrhea, as above described. Flatulence is usually present, and sometimes becomes very troublesome. There may also be a slight feeling of heaviness about the stomach, or even some burning after meals. There is usually a dull feeling about the head, if not an actual headache, and sometimes the latter becomes very severe.

The bad feelings are more often manifest in the morning, when there is a very bad taste in the mouth, together with coated tongue. Vomiting, which has been mentioned, usually comes in the early morning, when there will be expelled a small quantity of greenish-colored liquid from the stomach, which has remained there during the night. This is usually pronounced bilious vomiting, being supposed to contain bile, but in our experience it has usually failed to give the reaction to the ordinary bile tests, and it is more probable that it is the various secretions of the stomach which have decomposed. Dr. Mathieu suggests that the bitterness of the fluid is due to peptone instead of bile.

Patients suffering from these forms of dyspepsia usually retain a good appetite, except in those cases where the crises occur, when the appetite will be lost for a few days, and there will be a disgust for all kinds of food. We usually find this class of dyspepsias in individuals of sedentary life, who have lived rather high, so that the digestive organs have become very much depressed. Especially is this apt to be the case if the individual has lived upon food that is highly seasoned, or has been addicted to the use of alcohol, and other excesses.

In the treatment of these, special measures should be taken to tone up the motor power and the secretory power of the stomach as much as possible, and at the same time to remove the poor products from the system, as well as to guard against taking anything into the system that will ferment or decompose easily. To tone up the motor power it is essential to avoid excessive quantities of food or drink, and also to avoid taking cold food. Heat is the best tonic for this trouble. Fomentations applied over the stomach after meals will be of great advantage. The food should be taken warm or hot, and until the condition is somewhat

benefited, fluids should be taken hot. A small quantity of hot water sipped with the meals would be advantageous, and hot water taken between meals would be of service, not only to tone up the motor power of the alimentary canal, but to remove the waste products from the system by elimination. This, however, should not be continued too long or carried to excess. A large quantity should not be taken with the meals, and the entire quantity for the twenty-four hours should not be more than three or four pints. If it is found that the liquid has a tendency to remain in the stomach for a long time, the quantity should be much less than this. These same measures will also have a tendency to excite the secretions of the stomach.

As to the diet that is best adapted to these cases, we can not make a general diet do for each one; in fact, the stomach, as we have often stated, is peculiar in its action. Some of the causes of dyspepsia, with one individual will create an excessive case of hypopepsia, while in another individual seemingly under the same circumstances, and the same causes acting the same length of time, marked cases of hyperpepsia will result. This fact has been pointed out by Hayem, Mathieu, and others. So, with this variation in the action of the stomach, we must allow quite a margin for any prescribed dietary. Milk, as a rule, will be found to disagree, but where it is adapted to the peculiar condition of the individual, it may be of advantage to make it the principal article of diet for a time. Buttermilk will often be taken to advantage when milk will disagree. The starchy foods are so fermentable that they will not be tolerated in these cases, especially the starch which comes from vegetables.

A nitrogenous diet is indicated, and the selection must be made from various foods of this class. In some cases, eggs cooked in the most digestible way will be found useful. Grains which contain a large per cent of gluten, or specially prepared gluten, where a large portion of the starch has been taken out, can usually be taken with impunity. The fruits that can be cooked and taken without sugar are usually well borne, and also the dried vegetables, taken in the form of purees.

These cases are benefited more by lavage of the stomach than any other class of dyspepsias. If the stomach is foul, cleansing daily for a short time will be of great advantage. In other cases,

where it is used two or three times a week for a while, it will often do more toward effecting a cure than any other means, not only by cleansing the stomach, but the mechanical action of using the siphon will greatly aid in stimulating the motor and secretory powers of the organ. It may be necessary to use some antiseptic, and for this purpose charcoal, prepared in the way we have previously indicated, will be as good as any. Out-of-door life and moderate exercise after meals are means that will greatly hasten recovery. The regulations should be persisted in until the stomach has had time to recover its normal condition.

DRINKING AT MEALS.

BY DAVID PAULSON, M. D.

THE almost universal custom of drinking a considerable quantity of fluid at meals, would naturally suggest that there must be a sound physiological basis for the custom; but the more study we give to this question, the more apparent it becomes that it sets up a train of various evils in the digestive system, which demand more than a passing consideration. Nature in her normal condition is never wasteful. The saliva is poured into the mouth for two purposes, one to moisten the food, and the other, which is more important, to digest the starch elements. When the salivary glands find that the mouth is already filled with fluid, they pour out little or no saliva; thus the food is swallowed sufficiently moistened, it is true, but in such a condition that there will be no digestion of starch until after it has left the stomach. It is an interesting scientific fact that the largest portion of the food must be absorbed from the stomach, before any real digestion can be begun there. An important part of digestion consists in the contraction of the muscular walls of the stomach, the food being churned, and bringing every portion of it in contact with the digestive juice which is poured out from the glands of the stomach. The presence of a large quantity of water mingled with the food in the stomach interferes with the various processes of digestion by diluting the digestive fluids, and thus delaying the food in reaching a condition in which it is prepared to nourish the body.

If the fluid drunk with the meals is very cold, the evil is increased tenfold, because digestion is carried on very slowly when the food is below the

normal temperature of the body, which in the region of the stomach is about 100 degrees Fahr. At low temperature there is almost no action at all of the digestive fluids on the food. It will be readily seen that if a glass or two of some iced liquid or food be swallowed, the temperature of the stomach is greatly lowered. Dr. Beaumont, in his experiments upon Alexis St. Martin, observed that more than half an hour was required to enable the stomach to recover its natural temperature after half a glass of ice-water had been swallowed. Cold liquids also prevent the formation of gastric juice in the stomach. One important office of this juice is to destroy the germs which are swallowed with the food; and when there is delay in its secretion, and also in the digestion of the food, these germs rapidly develop, and not only destroy the nutrient qualities of the food, but produce poisonous substances, which, when absorbed into the blood, give rise to various unpleasant symptoms, such as drowsiness, headache, nervousness, etc. Hot drinks are less injurious than cold, but too much fluid of any kind taken into the stomach with the meals is injurious, for the reason that it delays digestion, and affords an opportunity for germs to act upon the food. When liquid food of any kind is taken, hard, dry substances should also be eaten, to stimulate the salivary glands, so that the proper amount of saliva may be mixed with the food, and its ready digestion thus insured.

LUNG GYMNASTICS.

BREATHING.

BY IDA M. POCH.

I WONDER how many of us really comprehend all that is included in this exercise? Certainly we have breathed all our lives, but in how indifferent and impassive a manner. Persons suffering from various respiratory and resultant diseases have gone from place to place to find a life-giving, healing air, and have returned without benefit, because they expected the air to do the work without any effort on their part. And having based all hope upon a certain climate, and being disappointed in their experience, they are discouraged, and conclude there is nothing to do but to drag out a weary, painful existence, and then die.

Now let us think a little. Breathing, we have been taught, is an involuntary function, which is true in a sense. That is, we need not keep the mind upon the process of breathing to sustain life ordinarily. But we have a lung capacity of tiny air-cells, which, if spread out, would cover a surface of 14,000 square feet; and, let me assure you, nature did not give us these for an ornament. There is no particle of matter, and no space in the human organism, that does not have a use in promoting the good and health of our being. Further, it is not merely capable of that use, but only by complete use of every portion do we realize the full possibilities of our being. This is preëminently true of the lungs.

Now why has nature given us such an immense lung surface?—Surely, because *there* is our life. When the blood has bathed and fed every portion of nerve, muscle, etc., every bit of richness and life has been taken from it, and it is charged with impurities of various sorts, which are disposed of in various ways. The most potent of these poisons is carbonic acid gas, which is accumulated in great quantity in the blood corpuscles. The lung cells are the medium through which the blood exchanges its load of injurious poison for the revivifying oxygen and healing ozone, which are brought to them by the air we inhale.

But the lungs do not involuntarily expand so that the whole lung surface is bathed in pure air. We were taught at school about the reserve space in the lungs, which, in case of emergency, might be called into use. While it is not necessary at every breath to expand the lungs to the fullest capacity, yet sometime during the day, for an hour or two at least, every portion of lung tissue should come into contact with pure air. Why?—Because nature does not keep in working condition an organ or part of an organ that is not used. Another reason—the ordinary respiration does not supply the blood with the necessary quantity of the important elements we have before mentioned, to produce the effects desired, in fact, necessary to keep the body from partial starvation for its most necessary food. Yet another reason—the muscular action required by full breathing is an exercise upon which other functions are in a measure depended. For instance, the gentle churning motion of the stomach and bowels induced by the action of the diaphragm in breathing, is one of the prime factors in securing good work from these organs.

These things being true, it is certainly safe to say that the individual whose lungs are cramped in any portion, from any cause whatever, does not *live* to the extent that he might.

Now the question comes, How shall we do it? Strange, isn't it, that the very first thing we do, and *must* do, to lay hold upon an independent existence, and which we cease to do only when we quit this existence, must be taught us in order that we may derive the intended benefit from it? Yet so it is.

But to our subject. The respiratory act consists of three distinct parts,—expiration, emptying the lungs; inspiration, filling the lungs; and holding. Something depends upon the first, a great deal upon the second, but perhaps most upon the third. And we have not learned our full possibilities until we can fill every lung cell, and expel the air by a well-controlled effort. Having seen something of the importance and meaning of a full breath, and of what it consists, we will proceed with the "how" of the matter. In order to do this, we must call to mind some anatomical and physiological facts. The lungs are situated in the chest, which is a bony box formed of the spinal column behind, the sternum in front, and the ribs at the sides. We find the upper ribs firmly attached, both in front and behind, but the lower ribs are loosely held in place by cartilages, which would seem to indicate that the greatest motion should be at the lower chest. We find that the floor of this chest is a strong muscle, dome-shaped when at rest and flat when active. Now let us think of the lungs as bellows. The diaphragm corresponds to the wider end, between the handles. Then think of the abdominal muscles as the power to work this bellows. If we can keep in mind the illustration, it will help us in working our lungs. To make the bellows do good work, we must apply the power at the handles. So with our lungs. Notice a horse, and see how it works its lungs with the abdominal muscles. Every animal does it in the same way, and so the human animal is supposed to do it.

According to the directions, let us take a breath. With the abdominal muscles expand the lungs, and draw the air in to fill the space. Now hold it for a moment. Then exhale, sounding s—. See how long it will take to expel every particle of air, work it all out, reserve and all. Now get a new supply. "Oh," I hear some one say, "but that is hard work!" True; that is why we called

it lung gymnastics. But we can not do this with any restriction about the middle portion of the body. Loose clothing, with no weight upon the hips, is absolutely necessary. An hour or two a day, spent in working the air in and out of the lungs, will give a power that can not be obtained in any other way. Why?—Because in this way we gain control of the most vital portion of the body, and upon this control depends the integrity of the brace for every muscular effort.

Filling our lungs in this way, we find the real power in the abdominal muscles. The greatest expansion is at the lower chest. We breathe from *below up*, or we fill the lower portion of the lungs first and exhale in the opposite way, that is, empty the upper chest first, as if we drew the breath through the legs into the lungs, and expelled it through the arms.

We notice a distinct *in* and *out* motion of the abdomen, and a sideways and upward enlarging of the chest cavity, thus allowing, or, perhaps better, causing, the lungs to expand in every direction.

The careful reader will notice that control and flexibility of the muscles are more important than strength. Many an athlete has died of consumption because the hard, knotty, inflexible muscle upon which he prided himself bound his lungs as effectually as a corset would have done.

We would repeat, then—by the size of the lungs and the power to use them we may measure the life of an individual. Hence the importance of deep breathing.

A POISONOUS FISH IN FOREIGN WATERS.

BY F. B. H.

THE diet of a people is usually governed more by the purse than by intelligent convictions on the subject; so that not even the most ardent vegetarian could see in the "daikon"* and grain food of large numbers among the Japanese people, any particularly hygienic motive. They would eat fish if they could, and do so when their financial condition permits it. A little dried fish as a relish is better than nothing, and fresh fish is a feast. A fish dinner in a well-to-do family is something to be remembered; and we may well speak of it, in Japanese parlance, as a *go chisô*, or "honorable

* The "daikon" is a very common vegetable, a sort of exaggerated radish.

feast." It must be understood that the finny tribe in Japanese waters abounds in palatable creatures, with whom the average hungry mortal delights to make acquaintance. One has to pay due regard to exceptions, however; and the seas are so rich in good, healthful food that one wonders why any one should risk his life in tampering with a fish of bad reputation. A recent copy of the *Japan Mail* contains a marked instance of the dangers attending the eating of fugu, a fish said to belong to the "tetrodon" species. A jinrikisha man—one who draws a small carriage in use in Japan—thought to regale himself and three friends with a fine stew of fugu. After a hearty meal, the quartet went out in search of customers, and while waiting for an expected train, were seized with severe cramps and nausea.

Thanks to the excellent Japanese police service, the best aid possible was obtained, if we may judge from the report; but, in spite of all that could be done, the sufferers died "within an hour." "The symptoms of this poison," according to a physician competent to judge, "are headache and nausea, paleness, profuse perspiration, and heart failure."

BANDAGING.

BY E. G. WOOD.

(Continued.)

THE bandages used for various common injuries are the oblique, the simple spiral, reversed spiral, spica, figure of eight, and recurrent bandages. These may be applied to various parts of the body.

The oblique bandage is applied to retain temporary dressings. The initial end is secured by two circular turns, then the bandage is carried obliquely over the part, leaving small spaces between each turn. The terminal end is secured by circular turns and fastened.

The simple spiral bandage is mostly used in bandaging those parts of the body where there is no sudden increase in the diameter of the part, as the abdomen, chest, or arm. In this bandage the initial end is secured by two circular turns, then carried around the part spirally, each turn overlapping the preceding one about one-third. This bandage may be applied ascending or descending.

The reverse spiral; this is a spiral bandage,

but differs from the ordinary spiral bandage in having its turns folded back, or reversed, as it ascends a part the diameter of which gradually increases. By this means equal pressure can be made upon all parts of the surface. The reverses are made as follows: After fixing the initial end of the roller by two circular turns, going from left to right, as the part increases in diameter, the bandage is carried off a little obliquely. The index finger of the left hand is placed upon the body of the bandage, to keep it secure to the limb. Then slacking the unwound portion of the bandage, the bandage is given one-half turn loosely, and drawn half around before being tightened. This makes the reverse square and even, whereas, if you tried to make them while the bandage is tight, you would have your reverse cord-like, unsightly, and uncomfortable to the patient. The reverses should be made in line to have the bandage present a good appearance, and should not be made over bony prominences, as they may cause creases in the skin, and become uncomfortable to the patient. The principal use of this bandage is for the upper and lower extremities.

When the turns of a roller cross each other, leaving about one-third of the previous turn exposed, this is called a spica bandage.

The figure of eight receives its name from the turns being applied so as to form a figure of eight. This is applied to the knee, the elbow, and in connection with many other bandages.

The recurrent bandage derives its name from the fact that the roller, after covering a certain part, is reflected, and brought back to the point of starting. This bandage is generally used in bandaging the head and stumps of limbs.

After giving directions in general bandaging, we will now give directions for the applying of some regional bandages.

The reversed spiral of the upper extremity; this bandage should be two and one-half inches in width, and seven yards in length. The bandage is secured around the wrist by two circular turns, then carried across the back of the hand to the second joint of the fingers, where another circular turn is made. The hand is then covered by three reverse turns. When the thumb is reached, its base and the wrist are covered by two figure of eight turns. The bandage is then carried up the forearm by spirals, and reversed spiral turns, to the elbow, where three more figure of eight turns are made. When this is done, the arm may be

covered in by spiral and reversed spiral turns to the shoulder. This bandage may be used for securing dressings to the arm in case of any common injury.

The reversed spiral of the lower extremities are applied in very much the same way. The bandage should be the same width and length as for the upper extremity, and should be secured at the ankle and carried obliquely across the top of the foot to the toe, where a circular turn is made, then three reverse turns to the ankle, where two figure of eight turns are made, over the ankle and instep. Then the bandage is extended up the limb, making reverses as directed. When the knee is reached, make three figure of eight turns, as at the elbow, then extend up the thigh to the groin and secure by circular turns and fasten. This also is used in securing dressings to the limb.

To bandage an injured finger would require a bandage one inch wide and one and one-half yards long. The initial end is secured around the wrist, and the bandage carried obliquely across the back of the hand to the base of the injured finger. Then go to the tip with two oblique turns, make one circular turn around the point of finger, and bandage to the base with simple spiral turns. Carry the bandage obliquely to the wrist, and secure with two circular turns. Split the end of bandage, tear down, and tie with the two resulting ends.

In case of an injury to the hand, the gauntlet bandage is used. A roll one inch in width and three yards in length is needed. Secure the initial end around the wrist, as in the finger bandage. It is then carried to the end of the thumb with an oblique turn of the roller. Make one circular turn around the point of thumb, and apply the bandage spirally to the base. Then carry the bandage to the wrist, where one circular turn is made; then carry to the next finger, which is treated in the same manner as the thumb, again to the wrist with one circular turn, and to each remaining finger in the same way. When all the fingers have been covered in, the bandage is finished by circular turn around the wrist, and secured as in the finger bandage.

(To be continued.)

OATMEAL should be soaked overnight and then cooked for two hours; when prepared in this way it is highly nutritious, containing eighty-five parts nutritive elements.

SOMETHING TO TAKE.

BY RACHEL E. GLEASON, M. D.

HAVING occasion to call on a poor woman who had had a surgical operation the day before, the anxious mother met me at the door, and, in a tone of tenderness for the daughter, mingled with mild reproach for myself, said, "Surely, it seems cruel that Phoebe should be there without something to take."

On stealing softly into the patient's room, I found her sleeping, not with suppressed suffering written on her countenance, but rather like one who was taking a comfortable nap. When she awoke, I found no febrile excitement, no local inflammation. The symptoms were every way encouraging. On explaining this to the mother, she replied: "Well, yes, it did seem as if Phoebe was doing well, but then she kinder thought she *ought* to have something to take."

On our return home, the medical student who was with me told the story, for the amusement of our patients. As a result of this, for a week after, every chronic invalid who could find a fresh twinge, came to the office, and said to me, "Phoebe wants something to take."

And so it came to pass that "something to take" sounded in my ears as if uttered all along the valley of the Chemung, and echoed by the adjacent hills. And thus it is the world over; this "something to take" is the main thought of many a head, the great disturber of many a stomach, the irritant of millions of nerves.

The young miss of genteel form and fashionable dress, who dines on dainties, reclines on sofas, and reads light literature by day, and dreams of her admirers by night, has loss of appetite, want of strength, a pain in the side, and must have "something to take." Well, what shall she take? Why, take off her tight dress, and take to some active, useful employment.

The man of business whose brain is oppressed, whose stomach is disturbed, whose nerves are irritable, must have "something to take." What shall it be? Let him take more time to talk with his wife, and play with his children, and his dinner will digest better, his head be clearer, and his sleep sweeter.

To be sure, in years to come, he may have a few hundreds less in purse; but in health, yea, in

heart, too, he will have gained a treasure of infinitely more worth than golden wealth. More than this, he will have imparted to the "loved ones at home" that which is *too choice* for money to buy,—a father's care, a husband's company. The masculine as well as the maternal element is required to perfect "home influence."

Here we find a fair young mother lying on a feather bed, with a flushed cheek and fluttering pulse, every door and window guarded as if a pestilential vapor instead of an invigorating breath would steal in if they were left ajar. Though the dreaded peril was safely passed, and she hoped soon to be strong again, yet she finds that day by day she grows more feeble and nervous. The vigilant nurse and devoted husband decide "she must have something to take." Let us select anodynes, tonics, and restoratives for her. First, give her plenty of fresh air in her chamber; draw aside the curtains, open the blinds; for human as well as vegetable organizations need sunlight to thrive well. Let her have one general ablution and two hip baths of mild temperature each day. Do not burden her with body braces or abdominal supporters, but rather adjust a wet linen girdle, covered with dry cotton, about the body, and it will be a soothing support. Let her take short walks and frequent rides, and so use what strength she has—sure way to find more.

Next our eye rests on the little nestling in blankets. It worries; a friend suggests that it has the colic, and must have "something to take." Shall we give it catnip, anise seed, or some other more potent baby cordial?—No, none of these. Perhaps its dress is too snug; perhaps its sensitive stomach is suffering from the sickly condition of the mother. So we will not add irritant to irritant, but we will unfasten its dress, rub its little body; wait a little, it will soon be better.

At the house of a friend we find a little girl with curly hair and fair features, but frail constitution. It is midwinter, and she is kept closely within doors. She is thinly clad, and those little arms have a purple, mottled look, for chill of the surface has rendered the capillary circulation imperfect. The mother assures us they are not cold, but, nevertheless, we see the unmistakable signs of that condition. The little miss has frequent colds, and a croupy cough, and must have "something to take." First take off that thin dress, those low slippers, and give her instead a flannel suit, with substantial shoes, and then let her run hither and thither,

in-doors and out, without fear of soiling her clothing or catching cold.

On every hand we find some one complaining of the "compliments of the season," in the shape of coughs, colds, influenzas, and catarrh—all in want of "something to take." What shall we select from the host of pectorals and pulmonics?—Nothing to put inside save frequent draughts of pure, cold water; and for the outside such treatment as will increase the activity of the skin, equalize the circulation, etc.

If the attack be severe, just before retiring take a bath at 105 degrees for 10 minutes, with a shower or cold pour afterwards at 65 degrees. A Turkish or Russian bath is good, provided warmth and quiet can be had afterward till the next morning. The inhalation of pure cold air is the best thing "to take" for many hours a day when there is a tendency to pulmonary trouble, provided the body be kept warm when walking, riding, or sitting out-of-doors.

The shutting up of those having sensitive lungs in close rooms, is a practice most deleterious to both health and longevity. The safety of such depends not on the warmth of the air breathed, but on the warmth of surface maintained, especially that of the extremities.

Some persons have a kind of cold-catching mania, and every time the wind whistles through a crevice, they fancy they have a severe cold. Such, despite all their precautions, or, rather, *by* them, are suffering from colds almost constantly, because their over-careful habits beget such a morbid sensitiveness that they become unfit for the climate of this globe. If there be any more favored planet, where changes never come, where breezes never blow, it would be best to transport them thither.

Then, too, there are electrical changes in the atmosphere, which induce more or less oppression of head and chest in those who are supersensitive. These symptoms are often mistaken for the effects of undue exposure to cold; and so the unfortunate fidgets about, bundles up, and shuts up more closely than ever, and thus perpetuates and increases the trouble.

Wherever we turn, somebody is ailing and in want of "something to take." So now for some all-healing balm. Well, let us take more simplicity in diet and dress, less fashionable restraint, and more freedom of thought and life. Let us all *worry* less, and *work* more quietly, patiently, and hope-

fully, remembering that it requires both resolution and resignation, not only to do duty, but to maintain health. Thus may we all be in less need of "something to take."—*Journal of Hygiene.*

NATURE'S TEACHING.

BY ANNIE PAYSON CALL.

NATURE is not only our guide in the matter of physical training, she is the chief engineer, who will keep us in order and control the machine, if we study to fulfil her conditions and shun every personal interference with the wholesome working of her laws.

Here is where the exquisite sense of growing power comes. In studying nature, we not only realize the strength that comes from following her lead, but we discover her in ourselves, gently moving us onward.

We all believe we look to nature, if we think at all; and it is a surprise to find how mistaken we are. The time would not be wasted if we whose duties do not lead us to any direct study of natural life for personal reasons, would take fifteen minutes every day to simply think of nature and her methods of working, and to see at the same time where we constantly interfere with the best use of her powers so far as we individually are concerned. With all reverence I say it, this should be the first form of prayer, and one's ability to pray sincerely to God, and live in accordance with his laws, would grow in proportion to the power of a sincere sympathy with the workings of those laws in nature.

Try to realize the quiet of all natural growth and movement, from a blade of grass, through a tree, a forest of trees, the entire vegetable growth on the earth, the movement of the planets, to the growth and involuntary vital operations of our own bodies.

No words can bring so full a realization of the quiet power in the progress of nature as will the simple process of following the growth of a tree in imagination from the working of its sap in the root up to the tips of the leaves, the blossoms, and the fruit. Or, beginning lower, follow the growth of a blade of grass or a flower, then a tree, and so on to the movement of the earth, and then of all the planets in the universe. Let your imagination picture so vividly all natural movements, little by little, that you seem to be really at one with each and all. Study the orderly working of your own bodily functions; and having this clearly in mind, notice where you, in all movements that are or

might be under the control of your will, are disobeying nature's laws.

Nature shows us constantly that at the back of every action there should be a great repose. This holds good from the minutest growth to the most powerful tornado. It should be so with us, not only in the simple daily duties, but in all things up to the most intense activity possible to man. And this study and realization of nature's method which I am pleading for, brings a vivid sense of our own want of repose. The compensation is fortunately great, or the discouragement might be more than could be borne. We must appreciate a need to have it supplied; we must see a mistake in order to shun it.

How can we expect repose of mind when we have not even repose of muscle? When the most external of the machine is not at our command, surely the spirit that animates the whole can not find its highest plane of action. Or how can we possibly expect to know the repose that should be at our command for every emergency, or hope to realize the great repose behind every action, when we have not even learned the repose in rest?

Think of nature's resting times, and see how painful would be the result of a digression.

Our side of the earth never turns suddenly toward the sun at night, giving us flashes of day in the darkness. When it is night, it is night steadily, quietly, until the time comes for day. A tree in winter, its time for rest, never starts out with a little bud here and there, only to be frost-bitten, and so when spring time comes, to result in an uneven-looking, imperfectly developed tree. It rests entirely in its time for rest, and when its time for blooming comes, its action is full and true and perfect. The grass never pushes itself up in little untimely blades through the winter, thus leaving our lawns and fields full of bare patches in the warmer season. The flowers that close at night do not half close, folding some petals, and letting others stay wide open. Indeed, so perfectly does nature rest when it is her time for resting, that even the suggestion of these abnormal actions seems absurdly ridiculous. The less we allow ourselves to be controlled by nature's laws, the more we ignore their wonderful beauty; and yet there is that in us which must constantly respond to nature unconsciously, else how could we at once feel the absurdity of any disobedience to her laws, everywhere except with man? And man, who is not only free to obey, but has exquisite and increasing power to realize and enjoy them in their

fulness, lives so far out of harmony with these laws as ever to be blind to his own steady disobedience.

Think of the perfect power for rest in all animals. Lift a cat when she is quiet, and see how perfectly relaxed she is in every muscle. This is not only the way she sleeps, but the way she rests; and no matter how great or how rapid the activity, she drops all tension at once when she stops. So it is with all animals, except in rare cases, where man has tampered with them in a way to interfere with the true order of their lives.

Watch a healthy baby sleeping; lift its arm, its leg, or its head carefully, and you will find each perfectly relaxed and free. You can even hold it in your outspread hands, and the whole little weight, full of life and gaining new power through perfect rest, will give itself entirely to your hands, without one particle of tension. The sleep that we get in babyhood is the saving health of many. But, alas! at a very early age useless tension begins, and goes on increasing; and if it does not steadily lead to acute "Americanitis," it prevents the perfect use of all our powers. Mothers, watch your children with great care, of which they must be unconscious; for a child's attention should seldom be drawn to its own body. Lead them into nature's laws, that they may grow up with her, and so be saved the useless suffering, strain, and trouble that comes to us Americans. And, besides that, if we do not take care, the children will more and more inherit this fearful misuse of the nervous force, and the inheritance will be so strong that at best we can have only little invalids. How great the necessity seems for the effort to get back into nature's ways, when we reflect upon the possibilities of a continued disobedience!

To be sure, nature has repose in itself, and does not have to work for it. Man is left free to take it or not, as he chooses. But before he is able to receive it, he has personal tendencies to restlessness to overcome. And, more than that, there are the inherited nervous habits of generations of ancestors to be recognized and shunned. But repose is an inmost law of our being, and the quiet of nature is at our command much sooner than we realize, if we want it enough to work steadily for it day by day. Nothing will increase our realization of the need more than a little daily thought of the quiet workings of nature, and the consequent appreciation of our own lack. Ruskin tells the story, with his own expressive power, when he says: "Are not the elements of ease on the face of all the greatest works of creation? Do they not say, not there has been a great effort here, but there has been a great power here?"

(To be continued.)

Mother's Helper

REGRET.

BY MRS. CRIST.

ALL ev'nin' I've been sittin' here,
A-cryin' to myself,
Over this ragged little book
Frum off the garret shelf;
It's twenty years an' over
Sence I hev seed the book,
But to-night I felt so lonely like
I thought I'd go an' look

Fer it; fer somehow all these years
I've hankered fer that book,
A-layin' there deserted an'
Dust-covered in its nook;
But I couldn't trust my feelin's,
An' so I let it lay
All dusty on the garret shelf
Until this very day.

You see it b'long to little Tom,
Who died long years ago;
It seems to me but yisterday,
Though time does drag so slow;
I almost see his little head
A-bendin' o'er the book,
A-lookin' at the picters there,
Like children like to look.

I almost hear his little voice
Ring out in merry glee,
When he'd find a purty picter there,
An' tell uv it to me,
With his sunny curls a-tumblin' down
Jes' techin' uv the book,
While he looked at the picters
Like children like to look.

I could stan' the losin' uv him,
Though time does drag so slow,
Ef it was not fer what I done,
Mor'n twenty years ago.
'Twas one brilin' day in summer,
An' I'd been workin' hard,
A-bakin' an' a-washin' an'
A-weedin' in the yard,

When little Tom come runnin'
A-holdin' up the book,
An' sayin', "See this picter dear,
O mother, please do look!"
But I wus warm an' awful tired,
An' didn't want to see,
An' so I turned and slapped the child,
An' cried, "Quit botherin' me!"

I still kin see the big tear-drops
Come to his little eyes;
But how should I know baby Tom
Wus ripenin' fer the skies?
But that day was the very last
He ever teched the book;
He went an' put it on the shelf
With such a sorry look.

An' that night he was taken sick,
An' all the time he'd say,
"O mother, I won't bother you,
I'll take my book away."
I hear it durin' all the day,
I hear it all the night,
It comes to me with every sound,
It comes with every sight;

An' when I'm settin' here alone,
An' mem'ries round me crowd,
An' the clock ticks—oh! so lonesome like,
An' sounds all seem so loud,
It's then I see the little face,
So dimpled an' so fair,
The big blue eyes brimful o' tears,
The curly yallar hair,
An' the little voice draws nearer,
So plain it seems to say,
"O mother, I won't bother you,
I'll take my book away."

—Womankind.

"Many a man, for love of self,
To stuff his coffers, starves himself;
Labors, accumulates, and spares,
To lay up ruin for his heirs;
Grudges the poor their scanty dole;
Saves everything—except his soul."

THE SICK BABY.

GENERAL MANAGEMENT.

(Continued.)

As a means of applying local heat in the treatment of children, the poultice is often more satisfactory than fomentations, for obvious reasons. In the first place, the heat is retained longer, without the frequent changes and the shock which accompanies the application of the freshly heated cloth. Then, again, it is much less likely to wet the garments.

In order that a poultice shall be effectual, it must be properly prepared, and properly applied, conditions which, we are sorry to say, few understand.

There are various kinds of poultices. That kind best adapted to general use is made from flaxseed meal, and serves nearly all purposes obtained by other poultices. To mix the flaxseed poultice, water should be heated to the boiling point, when the ground meal should be stirred slowly in, the water boiling the while, until the mixture is the consistency of thick mush. Some authorities recommend that it should be thick enough to cut; we are a little doubtful about this; however, it should be sufficiently stiff so that moisture will not seep from it and wet the garments. It will hold its heat better if quite stiff.

A sack to fit the surface to which it is desired to apply the poultice should be prepared before the poultice is made. This is best made of cheese cloth, or very old, thin muslin. In our estimation cheese cloth is preferable to anything else. The edges should be turned twice and run so that the mixture will not squeeze out through the stitches of the sack. One end can be left unsewed until the sack is filled. If the poultice is made in haste, it can be applied on a straight piece of cloth, two or three times larger than the desired application, and the edges folded over and basted. While sewing the sack which holds the poultice, it is well to cover it up, as it will part with its heat quite rapidly, and if there should be any other delay in making the application, the poultice may become too cold. It is better to have it too hot than too cold when it is taken to the bedside.

In applying, a thin flannel should first be laid upon the surface; then the poultice is applied, having been first held to the cheek of the nurse, to guard against burning. If the child resists, it is

well to lift it frequently, so that the child may become gradually used to the heat. We have found it quite an effectual measure to blow underneath the poultice on the surface, dropping and lifting the poultice quickly for a time, thus giving a cooling feeling until the skin becomes used to the increased degree of heat, and it will be surprising what a degree of heat the little sufferer can bear if it is gradually applied in this way.

When it is desired to poultice the lungs, the sack should be made in the shape of the chest, being cut out for the neck and arms. If a poultice jacket is ordered, two sacks should be made, to fit the back and front, and supplied with tapes, to be tied under the arms and over the shoulders. It is of the utmost importance that the poultice shall be covered properly. We believe it is best to cover first with oiled muslin, as this retains the heat better than any porous substance. Over this may be applied cotton batting or flannel, making sure that the covering reaches beyond the edges of the poultice an inch or two inches at least. If the poultice is left in such a way that the edges become exposed and get cold, much more harm than good may result. Properly applied, it is one of the most effectual means of treating inflammation and various other conditions, which we will consider later.

In applying a poultice to the lungs it is often a valuable addition to sprinkle the poultice well with oil, or a little turpentine, or a mixture of camphor and oil, or turpentine and oil.

If it is desired that more irritation be induced than will result from the heat alone, a little mustard may be added, mixed with the poultice, a tablespoonful to a poultice sufficient to cover the chest. Care should be taken that the mixture is spread evenly, as it is very heavy, and should not be too thick.

The slippery elm poultice is prepared from the ground slippery elm bark, the same as the flaxseed poultice. Sometimes it is more convenient to use bran than the flaxseed meal. This can be arranged in the following manner: The dry bran can be placed in a sack cut to fit the surface to be poulticed, and then quilted, so as to insure even distribution of the bran. Boiling water can be poured over it. This can be taken off and reheated and reapplied frequently.

A poultice arranged in a similar way, made of hops, is very soothing in its influence when the pain is great, and has the advantage of being much

lighter than either the flaxseed or bran. If the sack is made of flannel, the heat is better retained.

A starch poultice is sometimes used to advantage in cases where there is great irritation of the skin. A starch poultice is made in the following manner: The starch is made in the ordinary manner, except that it is made very thick, and spread warm on a cloth, and applied directly to the surface, without any covering between.

When it is desired to produce irritation, mustard alone should be used. The pain from the application of mustard can be greatly relieved by mixing with the white of an egg, which also obviates the danger of blistering. If not convenient to mix with the white of an egg, it may be mixed with flour, in proportion of one part of mustard to four of flour. Wet up with cold water. Vinegar or hot water detracts from the virtue of the mustard. Spices are used for the same purpose. A mixture of cloves, cinnamon, and allspice, with or without pepper, is placed in a cloth sack and quilted so as to secure even distribution. This is then dipped in hot water or hot alcohol or whisky, and applied to the part. This can be used several times, till the spices lose their strength.

A cotton jacket is sometimes ordered in cases of pneumonia. This is constructed by making a jacket that will fit the child loosely, of some thin material, and then tacking it over with a thick layer of cotton batting. It is better to tie it on one shoulder and under one arm with tapes, so that it can be renewed readily without moving the sufferer.

Cold applications are very valuable in cases of inflammation. They are made either by means of cold compresses or by ice inclosed in a thin rubber bag made for the purpose. If the rubber bag is used, care should be taken to secure one that is very thin, as some of those which are offered for sale in the stores are of little use, on account of the great thickness of the rubber of which they are made. These should be filled about half full of cracked ice, and the mouth securely tied, to avoid all possibility of leaking. The ice should be broken in pieces about half an inch or one inch square. The bag should not be filled full, as in this case it is impossible to apply it to the part satisfactorily. As the outside of the bag will gather moisture, on account of the lower degree of temperature of its contents, it is well to surround it with dry towels so as to avoid wetting the patient.

A cold compress may be applied of simply cold water or hamamelis or alcohol or other mixtures,

as directed by the physician. They are often very effectual in controlling a beginning bowel or throat trouble. To apply the compress, a piece of linen or cotton should be used, usually of two thicknesses, of the size of the part to be covered, and this should be wrung quite dry from the cold solution, and covered securely with cotton or flannel, preferably flannel. Various devices have been made for the treatment of the throat, the most common of which is the atomizer, used for applying liquid sprays to the throat. When it is desired to make an application directly to the throat, a little brush should be used. In case it is necessary to resort to the use of the cotton swab, great care should be taken that the end be securely protected. It is difficult to make the child open its mouth in such a way that the application can be made without some little struggle. If, however, one has an assistant, it can easily be done. The head should be held firmly by the assistant, with the face turned to a bright light. A spoon handle is then introduced into the mouth, and far enough back on the tongue to produce gagging, which act opens the throat effectually, and then, with a quick, gentle movement, the application can be made. H. S. M.

LESSONS IN NATURE FOR LITTLE ONES.

IN our last lesson we learned all about the stamens, which were the last of the essential organs, that is, those that are absolutely necessary to the development of the seed which shall produce a plant like itself. There are other parts of the flower, which certainly are most convenient if they are not absolutely necessary, and one of these parts is what is known as the *receptacle*. This is a little body, varying in shape in different plants, which is situated at the very end of the stem which bears the flower. It is called the receptacle because it receives the other parts of the flower—that is, it is that to which the other parts of the flower are attached.

Usually the receptacle is a small, round, or flat body, but in some plants it has a peculiar shape; for instance, in the wild geranium it is long and pointed, and the different parts of the pistil and ovary are divided up and situated on its sides. In the strawberry the receptacle becomes very large and juicy, indeed, is that which we call the fruit; while the little seeds are scattered all over the surface in the form of little yellow points that we have all noticed.

In the rose the receptacle is quite the opposite in shape. Instead of being a round, fleshy ball as in the strawberry, it is a deep, hollow, urn-shaped body, with the ovaries and pistil growing on the inside.

If the only object of flowers was to make the earth beautiful, and reproduce themselves, in order that the earth might be made beautiful again, we should see great kindness in the plan of our dear Father, who has made this home for us; but this is not sufficient to satisfy his very generous desire for his children on the earth, and so he has planned that from the flowers shall be produced not only that which shall gratify the eyes, but will satisfy the appetite as well; and so from a certain part of the flower that we have been studying, we obtain the fruit. I wonder how many of you can guess which part of the flower it is that produces the fruit. If you should think but for a little while, I am sure you would be able to tell me. It is the ovary, of course, because in it are contained the seeds that we often find in the fruit we eat. When the tube of the calyx or corolla is adherent to the ovary, as we have learned that in some flowers they are, these enter into the formation of the fruit as well, and sometimes become the best part of it. Thus, in the apple and the pear, the wall of the ovary, which also includes the adherent tube of the calyx, forms the large, fleshy part that is so delicious.

Indeed, the fruit always comes from the ovary or seed, or both. I told you a few moments ago that the strawberry was made from the large, pulpy receptacle. This is true; but, in the true sense of the term, the strawberry, that we love so well, is not the fruit at all, but the real fruit, consisting of the ripened pistils, is scattered over its surface, and is the least desirable part of this delicious food.

Will you be surprised if I tell you that a single fig is made up of a great mass of fruits? The little flowers that produce the fruit grow all inside the fig, and when it is ripe, form the delicious, sweet, juicy mass which is called the fruit.

There are three kinds of fruits,—fleshy fruits, stony fruits, and dry fruits. In the fleshy fruits the whole wall of the ovary becomes very thick and soft and juicy, and often very sweet and delicious in flavor. Of these we have the gooseberry, the cranberry, the tomato, and the grape. The orange also is of this kind, but has a very leathery rind. Some of these soft fruits have a very hard exterior. Of this sort are pumpkins, squashes,

and melons. Many of us have been taught to regard pumpkins, squashes, melons, cucumbers, and tomatoes as vegetables, but really they are not vegetables at all, but belong to this class of fleshy fruits that I have been describing.

Then there are the stony fruits, to which belong the peach, the plum, and the cherry. Here the wall of the ovary is divided into two portions; the outside portion becomes very much thickened and enlarged, and forms the pulp of the cherry or the peach, while the inner lining undergoes a change, becoming very hard indeed, and the hard stone covering of the single seed on the outside.

Of the dry fruits there is quite a large variety. Some of them we do not recognize as fruits at all, but only dry seeds; but to these also belong the grains—wheat, barley, and Indian corn. Nuts also—the coconut, hazelnut, and chestnut—belong to this class. In the last named the hard portion of the ovary forms a bur, which incloses the nuts within. Peas also belong to this class, being formed in a pod. The fruit of the pine tree is very peculiarly located. The little ovules in this case are not protected in the ovary, as in other plants, but are located just at the base of the little scale, which protects them. When the cone is ripe, and it is time for the seed to be scattered, the cone opens, and the scale, with the seeds attached, falls out. Then these scales act as wings, which, borne by the wind, are more easily distributed far and near, and in this way the little pine trees are planted in places often very far from the parent tree.

H. S. M.

FROWNS OR SMILES?

WHERE do they go, I wonder,
The clouds of a cloudy day,
When the shining sun comes peeping out
And scatters them all away?

I know! They keep them and cut them down
For the cross little girls who want to frown.
Frowns and wrinkles and pouts—oh, my!
How many 'twould make—one cloudy sky!

I think I should like it better
A sunshiny day to take,
And cut it down for dimples and smiles.
What beautiful ones 'twould make!

Enough for all the dear little girls,
With pretty bright eyes and waving curls,
To drive the scowls and frowns away,
Just like the sun on a cloudy day.

—*Child's Hour.*

THE CHILD BELONGS TO THE RACE.

BY MARY WOOD ALLEN, M. D.

THE natural order of human development is from the individual to the general. The baby is an unconscious egotist. He considers nothing but his own wishes, his fears, his joys, or his griefs. After a time he becomes conscious that there are other people in the world whose rights and whose authority he must recognize, but as yet his world is the small one of home. His experiences gradually lead him into a knowledge of an outside world which also has claims upon him, his affections broaden to take in friends, then native town, state, and country, and even as a child he acquires the feeling of loyalty as friend, citizen, and patriot.

But even here his boundaries can not remain stationary, for the wider view dawns upon his vision, and he begins to know himself to be a "citizen of the world." Very small indeed is the man whose world is himself.

I have often been amazed at the amount of time and drill spent in acquiring unimportant geographical facts, while the broad world, with its wonders, its peoples, and their customs, is an unknown land. And yet children could be most readily interested in the inhabitants of far-off lands and their condition and needs. The girl of fourteen cares very little about how many tons of seals are killed every year off the coast of Alaska, or how long the rivers, or what the climate of that country; but tell her of the Alaskan girl, who at her own age is thought unfit to live with the tribe, and is put away in a little hut by herself for a year, seeing no face, hearing no voice but that of her mother, who once a day brings her food, and here, in loneliness and isolation, she lives until time shall have passed and cleansed her so that she may come back to her friends, and you have awakened in her a vital interest in that strange land which belongs to us and of which we know so little.

But to awaken interest is not enough. To arouse the emotions and allow no practical outlet is detrimental. The child should in some way be enabled to contribute to aid those less fortunate than himself. Instead of giving him pennies with the command to buy himself candy, thus engendering self-indulgence, the wiser friend or parent will contribute to his little missionary fund.

But money-giving is easiest of all, and the child

should be taught to give himself. Charity can be first taught at home in doing to help father and mother, or waiting on the aged grandparents. Gradually the helpfulness can be extended to take in the sick or the poor, until to do for others becomes a second nature. I saw a pretty sight the other day on the train. A baby, fretting and crying, had called out many exclamations of annoyance from both men and women. A young man not more than twenty years of age—a time of life when most boys are afraid of ridicule—seemed much interested in the little one, and at length, evidently no longer able to keep still, went to the mother, and after talking sympathetically with her, held out his arms to take the babe, to quiet and amuse it. This young man no doubt had been trained to think of others with an unselfish desire to aid them, and I think his little deed was a rebuke to many who had frowned and made audible criticism.

But there is even a more important lesson to be taught concerning the belonging of each individual to the race, and that is the influence each one may have upon the characteristics of those who are to receive their traits from him through inheritance. Some may urge that this motive is not one to be brought to bear with any force upon the minds of children; but my observation leads me to believe this opinion to be a mistaken one. Our little people, with their dolls and with each other, are constantly playing at child training, and often artlessly announcing how they are going to bring up their children, and they very readily accept the idea that their own lives may be made to tell upon the characters of their possible children.

One boy of ten who listened to a lecture on heredity, supposed to be quite beyond his comprehension, surprised his mother by saying, "Mama, it seems to me this lecture was more for us young folks than for you old folks, but," he added reflectively, "that was a hard saying that your boy will tell on you, wasn't it?" He referred to a remark by the lecturer that the son in dissolute habits might betray the dissolute life of the father in his own youth. Who can measure the influence of such a thought put into the mind of a child? A little girl made a very practical application of the same lecture, saying to her younger sister, "I'll tell you what it is, Minnie, if you want your children to mind you, you've got to mind mother."

The child who is taught that he is but a link in a living chain of transmissions, and who is im-

pressed with his accountability in maintaining the integrity of that chain, will have had put into his mind a powerful impetus toward right living. The truths of heredity must not be impressed upon him as a fatality, but he must be made to comprehend that in his own conduct of life, in the tendencies which he controls or regulates, in his education of his highest nature, he is helping to elevate the moral standard of humanity.

Thus taught, the apparently insignificant acts of his childhood and youth become endowed with a new meaning, and he himself acquires a new value in his own eyes. I once asked a lad of seventeen which would be the stronger motive for right living, the thought that evil deeds would injure himself or that they would injure his children. "I would not do them if I thought they would injure my children," was his prompt reply.

The children of to-day will be the parents of the future, and they understand this. Why, then, should we hesitate to bring to their minds this vital fact, that they thus belong to the race, and by their own volition may help to make or mar the future?

The incentive to a moral life is a grand one, and the child, instead of feeling that he is of no value until he reaches maturity, becomes conscious that even upon the acts of his childhood depends to a great extent the integrity of the future.—*Sel.*

AN APPEAL TO MOTHERS.

NEVER be too busy, too tired, or too impatient to enter into the confidences of your smallest child. When your little five-year-old girl runs to you, her winsome face all aglow with excitement, and says rapturously: "O mama, I do so like Bobbie Smith! I think he's so nice—and he likes me, too!" do not ridicule the child, and do not turn to your friend with the remark that "it is beauteous already," but take your darling on your knee, let her pour out all her sweet thoughts, show her your undisguised interest in her little companions and friendships. Find out why this particular Bobbie is "so nice," why she likes him, and if the affection is reciprocated; and, later, should you consider it best that the friendship be discontinued, take a tender way of doing it; but, above all, do not put your child away with a laugh. She is only a child, but her heart will be deeply hurt, and she will think, with the tears swimming in the

bonnie eyes, "Mama doesn't want to hear about my Bobbie," and the next time she will not run so eagerly to your side with her childish confidences.

Some mothers will rise *en masse* and say, "Such ideas should not be encouraged in children." We do not say they should; we simply ask that you do not sacrifice the most beautiful blessing of motherhood,—the confidence of your child. Is it not better to listen to their little secrets, their joys and their sorrows? Is it not better to encourage this confidence than to turn them aside with such remarks as, "I am too busy now," or, "I am too tired to-night, dear," and suffer the result in years to come?

Have your arms and heart always ready; what may seem trivial to you is very important to them in their fresh, glowing, active lives. Meet your dear ones fairly; encourage them to open their hearts to you; let this be your duty from their earliest childhood, and in the trying years of young manhood and young womanhood, you will know the souls of your children, and be the one to keep them pure and unsullied from contact with the darker life of this world.

We have often seen children of tender age repulsed—not unkindly always—but repulsed in the midst of a burst of childish confidence; and we have seen the little face grow grave; we have seen tears spring to those sunny eyes; and we have heard the faltering step grow fainter as it lost itself in the distance. You can not afford to do this, mothers; more can be lost in one such unkindness than can be regained by weeks of kindness in other directions. If this point has been neglected, begin immediately to remedy the fault. Teach your boys and girls the value of a mother's confidence; give them to understand no one in all this earth can understand them as well as you, and that everything which interests them interests you, and that you will feel pained if they should keep anything from you; and, above all, never repulse them in any confidences; and you will realize in the long years to come no bitter regrets for duty undone or love ungiven.

A YOUTH who starts out in life determined to be honest, upright, faithful to all trusts, punctual, attentive and God-fearing, will have abundant success. Though he be without money, or wealthy friends, he will be sure to gain all that he most desires.

THE PROBLEM OF DISCIPLINE.

BY PROF. EARL BARNES.

It is generally believed that in the historical development of the race we have passed through three stages in our attitude toward punishment. With the people whom we meet in early records, punishment means getting even with the culprit. It rests upon the idea that the offender should suffer as much as his victim does. Crime or wrong-doing is something to be offset or paid for by a certain amount of suffering or money. This is well illustrated by the old Hebrew body of penal law, expressed in the phrase, "An eye for an eye, and a tooth for a tooth." Nearly all feudal law rests upon this conception, and the feud system in certain parts of our own country is a survival of the same idea. In this state of development, laws, judges, and executioners exist to see that in the barter the criminal pays his full bill. Such punishment depends for its realization on the feeling of revenge, a feeling which, at least in its crude form, is rapidly disappearing with advancing civilization.

In the second stage of development, punishment is looked upon as a deterrent. The culprit is punished, not necessarily to offset his crime, but to frighten him and others so that they will not repeat the act. Most early theologies rest upon this conception of punishment. Eternal punishment may follow a very slight fault, if the rest of the world can thereby be frightened away from wrong-doing. Most of our present penal code rests upon this view of punishment. English law down to the present century inflicted the death penalty for a great variety of petty offenses, and the laws in this second period are often more severe than those springing from revenge. In this phase of development the laws and the judges exist as scarecrows to frighten evil-doers, and the whole idea rests for its realization upon the feeling of fear, a base and weakening feeling, which is undoubtedly, at least in this crude form, disappearing with increasing intelligence.

In the third case, the cause for wrong-doing is sought in disease or ignorance, and the aim of punishment is to educate or cure the culprit. This conception has already begun to modify our penal regulations. Reform schools for juvenile delinquents, the work of the Elmira Reformatory, the sentencing of criminals for not less than a certain period or more than a maximum term,

dependent upon behavior, and the general abolition of severe punishments in dealing with young children,—all these movements depend on this new conception of wrong-doing and crime. Under this idea, judges and executioners are transformed into criminal experts, and education becomes the principal instrument of the law. This last conception rests upon the feeling that justice should be done to the offender as well as to society.

The first question that an inductive study on this subject should help to answer is, Does a child, in the process of his development from infancy to manhood, pass through clearly marked stages in his attitude toward punishment? If so, what are these stages? and are these stages the same as those passed over by the race?

Such a study should also throw some light on the development of children's sense of justice. The idea that what a man sows that shall he also reap, dominates all three of the periods outlined. In the first, however, the feeling of justice centers about the individual wronged; the criminal's interests are ignored, and the public simply attends to seeing that the wronged one is satisfied; in the second stage, justice centers in the needs of society, and the public ignores the criminal and the wronged one in its eager desire to protect itself; in the last stage, justice concerns itself primarily with the criminal, as an integral part of the social organism, and is inclined to ignore, in a measure, the wronged one, and to trust that society will find its greatest security in the cure of the criminal. Do children pass through similar stages in their own sense of justice? Do they feel at first that they are to be recompensed; then that justice is satisfied if they are protected; and, finally, that the criminal should be cured? Do our schools help to develop this advancing sense of justice?

Whether there is a parallelism between the development of the child and the race or not, there can be little doubt that this present generation is committed to the experiment of trying to cure wrong-doing by removing ignorance and disease. If this is so, then the question of first importance for us to meet is how properly to diagnose the culprit's own attitude toward his misdemeanor. Where punishment rests on the idea of getting even, it does not matter much what the culprit thinks or feels; if it rests on fear, we have only to make the punishment severe enough to produce fright; but if we are to cure or educate the mind away from crime, then the first and prime question

is, How does the guilty one think and feel about what he has done, and about the punishment we propose to administer? Such a study as this must help to answer this question, if it is to justify itself.—*Studies in Education.*

"STRAIGHTENING OUT THE FURROWS."

CAPTAIN SAM'S LITTLE SERMON TO THE BOYS.

"Boys," he said, "I've been trying every day of my life for the last two years to straighten out the furrows—and I can't do it."

One boy turned his head in surprise toward the captain's neatly-kept place.

"Oh, I don't mean that kind, lad! I don't mean land furrows," continued the captain, so soberly that the attention of the boys became breathless as he went on:—

"When I was a lad about the age of you boys I was what they called a 'hard case,' not exactly bad or vicious, but wayward and wild. Well, my dear old mother used to coax, pray, and punish—my father was dead, making it all the harder for her, but she never got impatient. How in the world she bore with all my stubborn, vexing ways so patiently will always be to me one of the mysteries of life. I knew it was troubling her, knew it was changing her pretty face, making it look anxious and old. After a while, tiring of all restraint, I ran away, went off to sea—and a rough time I had of it at first. Still I liked the water, and liked journeying around from place to place. Then I settled down to business in a foreign land, and soon became prosperous, and now began sending her something besides empty letters. And such beautiful letters as she always wrote me during those years of my cruel absence! At length I noticed how longing they grew—longing for the presence of the son who used to try her so—and it awoke a corresponding longing in my own heart to go back to the dear waiting soul.

"So, when I could stand it no longer, I came back, and such a welcome, and such a surprise! My mother is not a very old lady, boys, but the first thing I noticed was the whiteness of her hair and the deep furrows on her brow, and I knew I had helped blanch that hair to its snowy whiteness, and had drawn those lines in that smooth forehead. And those are the furrows I've been trying to straighten out.

"But last night, while mother was sleeping in her chair, I sat thinking it all over, and looked to see what progress I had made.

"Her face was very peaceful, and the expression contented as possible, but the furrows were still there. I hadn't succeeded in straightening them out—and—I—never—shall!—never!

"When they lay my mother—my fair old sweet-heart—in her casket, there will be furrows in her brow; and I think it a wholesome lesson to teach you that the neglect you offer your parents' counsel now, and the trouble you cause them, will abide, my lads, it will abide."

"But," broke in Freddie Hollis, with great, troubled eyes, "I should think if you're so kind and good now, it needn't matter so much."

"Ah, Freddie, my boy," said the quavery voice of the strong man, "you can not undo the past! You may do much to atone for it, do much to make the rough path smooth, but you can't straighten out the old furrows, my laddies, remember that."

"Guess I'll go and chop some wood mother spoke of; I'd most forgotten," said lively Jim Hollis in a strangely quiet tone for him.

"Yes, and I've got some errands to do," suddenly remembered Billy Bowles.

"Touched and taken," said the kindly captain to himself, as the boys tramped off, keeping step in a thoughtful, soldier-like way.

And Mrs. Bowles declared a fortnight afterward that Billy was "really getting to be a comfort instead of a pest; guess he was copying the captain, trying to be good to his ma—Lord bless the dear, good man!"

Then Mrs. Hollis, meeting the captain about that time, remarked that Jimmy always meant to be a good boy, but he was actually being one.

"Guess your stories they like so much have morals to them now and then," added the gratified mother, with a smile.

As Mrs. Hollis passed, Captain Sam, with arms and head bent down, said softly to himself:

"Well, I shall be thankful if words of mine will help the dear boys to keep the furrows away from their mothers' brow; for, once there, it is a difficult task straightening out the furrows."—*The Lifeboat.*

If you put a piece of bread on the top of your knife when peeling onions they will not affect your eyes at all.

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RELAX THE NERVES.

To a thinking individual, his creation, by which comes the right to life and the pursuit of happiness is indeed the great primary cause for thankfulness, secondary to which is the capability, by the same creative hand imparted to the individual, to reconstruct wornout tissues. And so the individual finds at his hand, right and left, the necessary food, water, and air by which the wastes of the system can be supplied, if he rightly relates himself, so that he may live on indefinitely. Action and reaction, which are but the ebb and flow of vitality, for the most part being equal, the individual does not grow old in feeling or capacity, even though his children and grandchildren rise up and call him blessed. Although this might be the experience of every one, and is a foregone conclusion theoretically, nevertheless there is a practical side to the question which materially falsifies all physiological and theoretical standards.

Even a casual observer will note that few indeed are the persons who exhibit more than a minimum amount of vital resources with which they were so richly endowed in the beginning, and as a consequence we see a majority of human forms below, and often far below, the medium physiological standard, with dwarfed action of every function of the body. Every appearance of these individuals shows that the various organs, so to speak, run with considerable friction, and with more or less irregularity, until the nerve force is unable to con-

trol, regulate, or harmonize the vital functions, and present the individual to the world as even a fair specimen of humanity.

The influences that thus work to captivate and enthrall the individual, are of two kinds,—those without and those within. It is true that many a person is so bound by circumstances that it takes almost the very life-blood to gain a livelihood, in which circumstances they are obliged to meet with the severest trials, and are, perhaps, not morally responsible for a breaking down of an organism that they may never be able to recuperate to the extent that will bring a physiological balance in after life.

While a few are thus unduly wrought upon by external causes, the majority of people, more kindly situated, reach the same point by internal dissensions. Improper eating and drinking have their bearing, and may be the essential influences that wreck the life with a minority. However, these are of minor importance in comparison with the expenditure of vital force in perverted habits of thinking and acting. Idleness restricts the tide of vital action necessary for a clearing, and, hence, a cleansing, of the system. Idleness and luxury are, perhaps, two of the greatest bodily vices which restrict elimination, and consequently pave the way to retaining deleterious material in the system, which restricts and deteriorates every function of the body. The individual who can have whatsoever he wishes by the mere expression of that wish, and without the necessary physiological effort by which the system is cleansed, and strengthened, and purified, will indeed deteriorate with every wish thus gratified.

Among the internal dissensions referred to, none is more prominent than a misuse of the sleeping function. If you ask the farmer, the mechanic, the professional or the literary man the question, "Do you sleep as well, and are you as much refreshed thereby, as in childhood, when nature was putting in her storehouse the rich vital resources, a prophecy of a useful and successful life?" the answer will invariably be, "No;" for since the burdens and cares of life, the struggles for home, money, and farms have absorbed the attention, they have, in a measure, lost the art of sleeping.

There is no function that can be so fully termed nature's sweet restorer as the function of sleep. More people grow old, nervous, wrinkled, cross, and disagreeable in their ways, by letting worry take the place of natural sleep, than by any other sinful habit. How we do misuse our nerve force! When the body should be perfectly at rest, is it not usually the case that the mind is so loaded with cares of unfinished work, or thrilled with expectations of the successful enterprise, or weighed down with the bridges to cross in the future, that it is impossible to relax and take the much needed rest? In consequence of which, if not a headache the following day, there will be many premonitions of nervousness, that are but fixing the habits for the individual.

Only a day or two since a lady came to us, a nervous wreck, who, being naturally precocious in her early life, was pushed in her school work, and became so animated over school studies that there was scarcely a night in the early part of her life that she did not dream of her books, and on many occasions would get up in her sleep to hunt for them, and worry because she could not find them. Legion are the cases who, in early life, in one way or another, form habits which prevent the natural sleep that they so much require in later life. Quick, nervous actions of the mind all through early life, and misdirected nerve force later, are always a strong preventive of free nerves, relaxed muscles, and natural sleep.

We can not overestimate the importance of regularity in sleep, and undisturbed mental conditions upon retiring, and plenty of fresh air, which will be unconsciously absorbed for the relief of the poor, tired nerves. The individual pays dearly for his mansion, farm, or home, his professional or literary career, if he does not cultivate the habit of good sleep. We say *cultivate*, because most people who are matured will be obliged to cultivate the art, having unconsciously drifted from natural and healthful repose since childhood days, by the daily unrest and worry of living.

To take the regular process of sleeping, we should first let go of the muscles. That will enable us the more easily to drop distracting thoughts; and as we refuse admittance to the thoughts, freedom from care for the time will follow, and the rest gained will enable us to awaken with new life. This, however, is a habit that must be established, and it will require thoughtful study; for it can not always be acquired at once.

FOLLICULAR TONSILLITIS.

FOLLICULAR tonsillitis is a common disease, and especially at this season of the year do we find many who are thus affected. It is an infectious disease, which will sometimes run through a whole family. As a rule there is more or less sore throat, if not a swollen and painful throat. There will usually be a marked degree of dryness in the throat. The bones will ache, and general bad feelings will prevail, usually with headache and fever. Sometimes the onset of follicular tonsillitis is very marked, with the temperature at 104 or 105 degrees for a day or two. When these fevers come on, the throat should be looked after carefully, to determine whether it is simply follicular tonsillitis, or whether it is an attack of real diphtheria. In follicular tonsillitis, where there is considerable sore throat, the tonsils will usually be red and enlarged, and there will be numerous points of white mucus dotted over the tonsils, which have the appearance of exuding from the little follicles situated so numerous on the surface of the tonsils.

If there is considerable sore throat, there will usually be two days when the individual will feel quite badly, with high temperature.

When one of the family is thus attacked, it will be well to keep other members, especially the children, away as much as possible, in order that they may not become infected, as light attacks of diphtheria have often been known to come from follicular tonsillitis; in fact, it is quite generally known that this disease is somewhat related to diphtheria.

The individual should be kept quiet, in a well-ventilated room, and the diet should consist of bland foods. A gargle of chlorate of potash should be used for cleansing purposes. If there is considerable pain about the throat, fomentations and compresses should be used. When there is considerable fever, tepid sponging may be of great advantage. Some simple treatment like the above is usually all that is necessary to meet the exigencies of this disease, and others of its kind.

Salt is a powerful *irritant*, and its power is not expended while in the system, for the reason that it undergoes no change in the system. They who use salt in large quantities should certainly make an effort to become more intelligent on the subject and see if they are not making a mistake.

QUERIES.

29. DEAR EDITOR: Will you give me some information in your HEALTH JOURNAL? I take it, and like it very much. I am trying to be a vegetarian, and have made several trials, but seem to get so weak, and my stomach gives out. It does not feel right. Can you give me something that will make my food digest? I am able to do about half work when I have not a sour stomach.

E. M. W.

We should recommend you to take meat once a day until your stomach does better work than it is doing now, and when it has recovered its tone, drop off the use of the meat gradually, to see whether or not you can maintain strength without it. If not, do not hesitate to take it occasionally, until you are able to leave it off and maintain digestive powers capable of giving you excellent health without the use of meat.

Above all things, do not let your vitality run down, if there is any food that can possibly sustain it. Vitality is a precious commodity intrusted to the individual, and the Creator and angelic hosts are looking down to see if you maintain it, improve it, and make it capable to operate healthy muscles, sinews, and bones for some divinely appointed service.

What would you think of a farmer who would let his farm run down, not only in appearance, but allow the soil to grow weak for lack of anything, no matter what, in the fertilizing line, that would keep up its virtue and strength? We would all say that such a farmer is unworthy of his calling. It is indeed a much more serious matter in the physical domain to allow the vital forces to run down, the blood-making qualities to recede, until the individual is often unable to do either mental or physical labor.

Many people have the mistaken idea that everyone can utilize the muscle, blood, and force-producing elements of a vegetarian diet as readily as they can the animal albuminoids of a mixed diet. Many who are strong and well may, and if they can it is always to their advantage to do so.

Prof. R. H. Chittenden, professor of physiological chemistry in Yale University, who perhaps has no peer in the United States on the subject of digestive proteolysis, by many experiments, has shown conclusively that healthy stomachs lose seventeen per cent of the proteid matter in a vegetarian diet, while the same stomachs lose only three per cent of proteids while using a mixed diet. If there is that difference in a healthy stomach, there is a correspondingly greater differ-

ence in a weak stomach, in the digestibility of the two different classes of foods. Dr. Wilson, who has made some very extensive experiments in the army, navy and states' prisons of Europe, elucidates the same fact substantially in which all physiologists agree. It will consequently always remain a physiological fact that animal proteids are more easily digested and assimilated than vegetable proteids.

Our bodies are complicated pieces of machinery, with engines, heating apparatus, etc., run, as it were, by vital force, following the same general laws as are illustrated by the steam from the furnaces that run the engines and heating apparatus of a large establishment. Normal work in the body depends upon the vital force, as the machinery depends for its action upon the steam pressure. If in either case the operation of the machinery is enfeebled, provided the machinery itself is in good running condition, the conclusion is that the steam force in the one case, and the vital force in the other, has run down. Consequently, with enfeebled people, the question of paramount importance is, How shall we get up steam? The steam in the one case comes from the wood and water appropriated, and in the other, from the food and water appropriated. If the engineer of the establishment should come to the superintendent and say that it was impossible for him to keep up steam on a certain amount or variety of fuel, the superintendent would immediately reply that if the quality of the fuel was not adequate to the purpose, he had better change his fuel, and at all hazards keep up the necessary steam for the establishment. If the engineer should say that the wood was too coarse to burn well, he would no doubt get his walking papers if he did not use a sufficient amount of kindling wood to accomplish the end desired. Likewise, good common sense would teach the individual who lacks nerve force, and is not able to develop it with a certain kind of food, that he would be under moral obligations to change his food, and, if necessary, take some animal food as kindling wood, to start up the vital processes. So, to all people who are suffering with slow digestion, and seem to lose their vital force on making several trials to live upon a vegetarian diet, only to find the vital force running down, we are free to say, Use enough animal food to maintain the vital force.

All true reformers in the dietary realm will bear positive testimony against the too common prac-

tice of making flesh foods the main or only article of diet where grains, fruits, and vegetables are so common and wholesome. It would be deleterious to a steam plant, as well as false economy, to burn kindling wood altogether, and yet the practical engineer would not discard the kindling material, or hesitate to use enough of it to insure the requisite steam capacity for easy work. Likewise, meat is a high potential food, more easily digested and assimilated than vegetable proteid. It has been raised from the vegetable to the animal kingdom by the vital force of the animal, which has a better digestive apparatus, and under more natural surroundings, and hence is a better product than man can usually produce; for his heart is the most deceitful of all the animal kingdom, and his flesh the most diseased of all flesh. The vital force expended in raising the vegetable kingdom to the animal kingdom can be approximately measured in foot pounds or volts of vital force, thus proving beyond individual experience that it is a high potential food. It is the kindling wood to the weakened and run-down body, and should be used only as such.

30. DEAR EDITOR: Will you please tell me what is food for my knee? I can walk well, without any pain or inconvenience, enjoy good health, am thirty-five years old. When bending the knee, as in sitting down and rising, I have a pain, and it feels somewhat like a grinding sensation. It came on first about three years ago when I took a long walk after recovering from a sickness. I used cold foot-baths, and it left me for about a year, but came back some months ago. Can you suggest any treatment?

We would suggest that if there is no swelling in the joint your trouble is likely one of three things—first, it may be rheumatic; second, it may be the result of a strain; third, there may be an obstruction in the joint, consisting of a sesamoid bone, or a piece of cartilage, which is torn from the cartilaginous surrounding about the joint. If there is an obstruction like the above, in some position of the knee it can very likely be felt, and if detected can be very readily removed by a slight operation, which is by far the best measure for relief. We would suggest that the knee be carefully examined, and if there is nothing of this nature in the joint, that hinders its free action, it is more than likely there is a strain, in which case cold compresses, rest and massage to the knee are all that would be necessary. If it is a strain, great relief may often be obtained by bandaging the knee. While walking, we would recommend a shoe with a broad, firm heel, in order to avoid any undue strain upon the joint.

NO MEDICINE.

WE are now in the season of the year when fresh fruit of every variety is abundant, and the general inclination of those who have no special stomach trouble is to regale themselves *ad lib.*, and often to take unreasonable quantities and mixtures of fruits, some of which may not be as ripe as they should be; consequently digestional disturbances, as diarrhea, dysentery, and occasionally inflammation of the bowels, is the result. The distressing symptoms arising from this too free use of fruit, may be relieved, and it is for this reason that we write a few lines on the subject. A little simple treatment in the beginning is almost always sure to give relief.

The first thing usually suggested to the mind is medicine, but it is not medicine that is needed, if we will but avail ourselves of some of the simplest kind of treatment, that can be given in any home. This treatment consists of fomentations to the bowels, which will relieve them of their overcharge of blood, and allay the pain. In addition to the fomentations to the bowels, a good hot enema of two or three quarts or more, if it is borne well, should be used. Hot enemata will usually relieve the situation immediately, and if a patient who is suffering thus will take the hot enema, following it with fomentations to the bowels, and quiet rest, he will be surprised to see how easily he will overcome what might otherwise have been a serious attack of bowel trouble.

WHICH ARE YOU?

THERE are two kinds of people on earth to-day.
Just two kinds of people, no more, I say—
Not the sinner and saint, for 'tis well understood
The good are half bad and the bad are half good.

Not the rich and the poor, for to count a man's wealth
You must first know the state of his conscience and health.
Not the humble and proud, for in life's little span
Who puts on vain airs is not counted a man.

Not the happy and sad, for the swift-flying years
Bring each man his laughter and each man his tears.
No; the two kinds of people on earth that I mean
Are the people who lift and the people who lean.

Wherever you go you will find the world's masses
Are always divided in just these two classes;
And, oddly enough, you will find, too, I wean,
There is only one lifter to twenty who lean.

In which class are you? Are you easing the load
Of overtaxed lifters who toil down the road?
Or are you a leaner, who lets others bear
Your portion of labor and worry and care?

—Ella Wheeler Wilcox.



THE BLIND WEAVER.

A BLIND boy stood beside the loom,
 And wove a fabric. To and fro,
 Beneath his firm and steady touch,
 He made the busy shuttle go.

And oft the teacher passed that way
 And gave the colors, thread by thread;
 But by the boy the pattern fair
 Was all unseen. Its hues were dead.

"How can you weave?" we pitying cried;
 The blind boy smiled. "I do my best;
 I make the fabric firm and strong,
 And one who sees does all the rest."

O happy thought! Beside life's loom
 We blindly strive our best to do,
 And He who marked the pattern out,
 And holds the threads, will make it true.
 — *Youth's Companion.*

JOHN ADAMS' SILVER WEDDING.

BY EDITH S. DAVIS.

GREAT piles of snow covered the fences and loaded down the trees and stood knee-deep on the level ground. The mercury had reached ten degrees below zero. Long icicles hung down from the scalloped edges of the old-fashioned porch, the sleigh-bells tinkled frostily, and everything outside suggested winter. But inside the farmhouse of old John Adams there was mirth and song and laughter. The big, comfortable dining-room had been packed to its utmost three times, and now the merry party had assembled in the great, handsome,

old-fashioned parlors. Old and young were there, sons and grandsons, and neighbors for miles around.

They had come in response to an invitation sent them to attend the silver wedding of old John Adams. They didn't one of them understand what it meant, for they well remembered the grand good time they had had at his silver wedding some ten years before. Over and over again had he been asked why he kept the anniversary a second time, but to each and all was the same reply, "After supper you shall know all about it." And now they were wild with excitement to hear the story; for they knew that John Adams always had a reason for everything.

He sat now in his big armchair, and in a low-rocking-chair by his side was Sarah Adams, his faithful, loving wife. Her slender hand was clasped in both of his, and occasionally one of his hands would slip away and smooth her white hair, that lay in coils on her neck. Everybody knew how these old people loved each other, and many a young man and woman had gone home from the old farmhouse feeling a more earnest desire in their hearts to be true to each other even as were John and Sarah Adams.

Curled upon a sofa near him was his little grandson John, and clustered all around were sons and grandsons and neighbors and friends. The room was perfectly quiet, however, when the old man began his story.

"Yes, boys and girls, it was just twenty-five years ago; it don't seem possible, but it was, and

twenty-five years ago yesterday was just such a day as this is. You wonder why I remember it, don't you? But I can see in memory the piles of snow and the great big icicles, and can almost breathe the frosty air. Little John and I were going to town that day. Not you, Johnny," said the old man, patting his grandson on the head, "no, not you, but our boy John. He was just nine years old. Ah, me! I can see him now, with his warm overcoat and his big cap and his scarf, that mother tied so tightly over his ears. And then he drew on his big fur mittens that she had made out of a bear skin, mittens that were just like mine, and the pride of his heart. And then he threw his arms around his mother's neck and gave her a big hug and kiss." The old man's hand trembled now as it rested on his wife's bowed head. "Then he said, 'Come on, papa; I'm all ready.'

"But mother had a few words yet to say to him, I didn't hear all she said, but I caught the words, 'Be sure you take good care of him.' Angrily I turned around and said, 'Sarah, aren't you ashamed of yourself, asking that boy to take care of me?' A flush of pain and sorrow overspread her face, but she never said a word, and, without even bidding her good-by, we got into the sleigh and away we went.

"I was taking a big load of grain to market, and I knew well what Sarah feared; for in Knowlton was the same old saloon that is there to-day, only twenty-five years ago it was kept by Sam Price. I knew even then what a curse the old thing was, but get by it I could not, and many a time the old horses had to find their way home because they knew more than their driver. Well, that day I just made up my mind that I'd never drink a drop, and show Sarah that she needn't ask a little nine-year-old chap to take care of a strong man like me, his own father, too.

"Well, I'd sold my grain and pocketed the money, and Johnny and I were going for the horses, when we met Jim Brown, who used to live on the Hill place.

"'Hello, John!' said he. 'Come on and take a drink.'

"'Thank you, Jim,' said I, 'but I'm in a hurry; we'll have to get home.'

"'Pshaw!' said he, 'you'll have to go right by Sam's, and it won't take more'n a minute.'

"I hesitated. John pulled my sleeve. 'Come, papa,' he said, 'let's hurry home; it's getting late.'

There was a little anxious quiver in his voice, and it made me mad. Sure enough, he was trying to take care of me, and wasn't I old enough to take a drink and be none the worse for it, and stop, too, when I'd had enough? My pride got the better of my reason, and I said, 'All right, Jim, I'll stop for a glass.'

"'O papa, don't, please don't', said Johnny. Angrily I struck him on the head. 'Stop your noise. I'll do as I please, I guess.'

"Into the saloon we went, my conscience making me mighty uncomfortable. Johnny never said another word, but stood by the stove looking at me with his big, pleading eyes. I set the glass down twice before I tasted it. I really felt as if I couldn't swallow a drop.

"'Why, John, what's the matter with you?' said Sam Price; 'never knew you to grow sick over a glass of brandy before. Growin' faint-hearted? Take a little to warm and liven ye up.' I raised the glass and drank the contents; the blood went like fire through my veins. 'Here, give me another, Bill; it'll keep me warm on the road.' I drank another glassful. My boy's face began to swim, but I could still feel the two big, pleading eyes fixed upon my face. Glass after glass followed, and I knew no more."

John Adams stopped. Great drops of perspiration stood on his forehead. Every one there knew they were caused by an agony too deep for words.

"O friends, how can I tell you the rest! When I came to myself, I was at home, and a bright fire was burning on the hearth. The kettle was singing in the kitchen, but it seemed so still. I listened, and could hear a low sobbing from the next room. I arose and crept to the door. There on the big lounge was my boy, and kneeling by him was his mother, and bending over him was old Dr. Moore. I was too frightened to speak, but I heard distinctly every word that was said.

"'Is there no hope, doctor?' It was my wife's voice; oh, how I listened to catch the answer! It came at last: 'I can do nothing more. He is in God's hands.' Just then Johnny opened his eyes. 'Mama, O mama', he cried, 'I did try to take care of him, but it was so cold, so awful cold, and the sleet blinded me. I just knew he'd freeze, lying there so white and still, and so I took off my overcoat and spread that over him with the blankets, but, O, it was so cold, and the wind blew right through me, and it seemed as if we'd

never get home, but I held onto the horses, and, O mama, I'm so glad we're here at last!

"The voice stopped. I never stirred. The doctor put his hands on my boy's heart; it was still beating. His mother cried out in a perfect agony of grief, 'O Johnny, darling, speak to mama!' A great wave of joy came over the little face, that had been so full of pain. 'O mama, it's all so light, so warm, so beautiful, and Jesus is here! O mama, tell papa I'll always take care of him now; God will let me. Papa, papa, papa',—not another word—he was dead."

The old man's voice broke down, and sobs were heard all over the room. Little Johnny crept into his lap, and put his arms around his neck, and kissed him, saying softly, "Poor grandpa! poor grandpa!"

John Adams at last began again: "I can't tell you all about it, just how my boy gave his fresh young life, every bit of it, to save his miserable, drunken father; but this I must tell you: Twenty-five years ago to-day I knelt by my boy's dead body and signed the pledge. A silver wedding to-day? Yes, friends, twenty-five years ago to-day I gave my heart and my hand to the temperance cause, and I've been kept safe ever since.

"But, children and friends and neighbors, I asked you to come to-day because I saw there were some of you standing just where I stood twenty-five years ago, drinking an occasional glass, thinking you're strong enough to do it without any harm—too proud, some of you, to be persuaded to stop altogether, too proud to sign the pledge. But I want to ask you all, in my boy's name, to sign the pledge to-night. My boy's life isn't the only life that has been sacrificed. The world is filled with sorrows even greater than mine. Strong drink is an accursed traffic, and its shadow is over all of our lives. The shadows deepen as the years go by, and it will be utter darkness unless we emerge from the shadow into the light of God. O friends, let this anniversary be the beginning of a stronger, truer life to every one of you, and then unitedly we may work for the redemption of the world."—*Union Signal*.

It is said that glycerine in its pure state should not be used for chapped hands, as it absorbs moisture from the skin, thus leaving it dry and liable to crack. When moderately diluted with water, however, glycerine is an excellent application.

SEEING MORE AND MORE.

BY H. CLAY TRUMBULL.

No one can see at the first glimpse all that is to be seen in anything that is worth seeing. In many an object of sight, hardly an appreciable portion of its distinctively noteworthy points of interest can be perceived at the first looking; and, in every case, there is more to be seen than shows itself to a casual observer. Only he who sees more and more in his seeing and observing, really sees that which is best worth seeing in this world; and how to see more and more in one's seeing and observing, is one of the things in this world that is well worth knowing.

If you would train a child to enjoy looking at pictures, you must train him to see more and more in each picture at which he looks. A child's first impulse in looking at a book of colored pictures is to glance at one picture, and then turn over the pages until he finds another; and so on through the book, over and over again. In this way he would soon know each picture as a whole, or by one of its central features, but not in its minor details. If, however, you ask a child to point to a man in a picture at which he is looking, and then to point out the man's face, and the man's eye, and then to point out a dog, or a tree, or a bird, in the same picture, you give to that child an added interest in his picture-looking, and you enable him to see more and more in that at which he looks. It is much the same in training a child to look at a flower, or a bird, or a tree, or a house, or at a landscape, or a sunset. You must help him to see more and more in everything at which he looks, by looking for more and more; and in doing this, you are adding to his powers of observation, and increasing his possibilities of enjoyment by means of his eyes.

Most persons have not been so trained while children, to look for more and more in their seeing, as to be able to see more and more in their looking; hence most persons go through the world as an untrained child goes through his colored picture-book, glancing at one picture after another as it passes before his eyes, without seeing more of it than stands out on the surface. He who sees more and more in his looking is an exception among his fellows, and he has exceptional power and exceptional enjoyment in consequence.

One man often sees more than another in one

line of looking, because his eye has been trained in that particular line; but rarely does a man continue to see more and more in the line of his most careful seeing, because, in most cases, a man does not expect to see more in that direction, after he has attained to a certain measure of perception. Yet he who sees most in any one line of seeing might see more and more in that very line, if only he realized his possibilities for such seeing; for in this sphere, as in every other, it is true that "who-soever hath to him shall be given," and that added progress is a privilege that accompanies possession.

It is much the same in observing beauties of natural scenery. One man expects to see Niagara, or the Yosemite, or the Yellowstone Park, or the Alps, or the Nile, as pointed out to him by the personal conductor of a tourists' agency, in the schedule time of the conventional tour, without missing anything that other tourists have seen at the same point of observation; while another is sure, from his first glimpse of what is before him, that he should be seeing more and more that is worth his seeing, for days and weeks to come, if only he could continue looking from that point, and from other points available to him.

The soul power which enables the eyes to see more and more continually is a matter of growth and cultivation, rather than of inborn possession. He who understands that his eyes are given him, not only to see with, but to search with, has already learned the alphabet of observation by which all the discoveries of taste and knowledge in the realm of nature are disclosed and described to the world. Only he can see more and more with his eyes who has more and more in his mind that he is looking to find outside.

As it is in seeing with the natural eye, so it is in the realm of mental and of spiritual vision. One man sees all that he cares to see, because he sees all that he supposes there is to be seen, in the direction of knowledge or of faith, at his first looking in that direction. Another man is sure that, because he has seen something as he looked thither, there must be a great deal more there for him to see, if only he will continue to look expectantly; for there is always more to be seen, in any and every direction, by him who expects to see more and more. Just here, indeed, is the line of marked distinction between the true scholar and the vain pedant. The one sees; the other supposes he has seen. The one sees more and more; the other saw it all the first time he looked. The one

will make progress in knowledge and faith as long as he lives; the other reached the limit of his progress when he opened his eyes to the light of day. The one has no conception of any light or sight beyond that which was his at the earliest hour of his life's morning; the other is always in that pathway of "the light of dawn that shineth more and more unto the perfect day."—*Seeing and Being.*

AFRICAN BOYS IN ZULULAND.

BY MRS. F. W. BATES.

HARK! do you hear that distant rumbling? That is an ox wagon coming over the hill, and soon you will see a big, heavy wagon, and two—four—six—twelve pairs of oxen drawing it. A man with a long-lashed whip is driving the oxen, and in front of the long line is the "leader boy," who leads the first pair. "Leader boys" are the general utility boys on a journey, and their position would not be coveted by an American youth. They are coming to a deep river. In splashes the boy, though the driver may climb into the wagon and ride over. Now they will "out-span," to let the oxen eat and rest, meantime cooking their own meal of porridge. Off goes the leader boy for wood to kindle the fire, then away for water to a neighboring stream, and any other business that may come up. When they are ready to start, the leader boy must go and hunt the oxen up and drive them to the wagon, and help the driver to "in-span," and off they start on a run, the small boy keeping ahead to guide the oxen. Transport wagons carrying goods far up into the interior are very numerous, and of all bad places for a Zulu boy, the position of leader is one of the worst; for the class of men with whom he comes in contact is very low.

Another occupation which belongs especially to the small boy is herding the cattle. The cattle, you know, are kept at night in a round cattle pen, made by driving supple sticks into the ground, and weaving into these smaller sticks; and it is surprising what strong fences they make. It is the duty of the "herder boy" to drive the cattle out to pasture, and keep them in view all day, keeping them out of the gardens, etc., and driving them up at night. Another of these duties is to pick off the "ticks," which are a great pest here. The ticks attach themselves to the skin, and suck

the blood till they are of great size, and drop off of their own accord unless they are picked off. They are very troublesome, and make an animal grow poor if they are not removed. The herder boy has plenty of time to meditate, as he has nothing to do for hours in the day but to lie in the grass and keep his eyes on the herd. His wages are not high; \$1.00 to \$1.25 a month is his usual pay.

Another occupation which keeps both boys and girls busy in the summer, when the crops are growing, is "watching the monkeys," or, as we would say, watching the gardens to keep the monkeys away. A whole drove of these chattering little pests can do a great deal of damage in the growing gardens. The children share the work of bringing water, weeding the gardens, etc., though the latter belongs more especially to the women and girls. The children also act as nurses to their younger brothers and sisters. Often and often you will see, on visiting a kraal, several children of six years or so, each running about with another child nearly as big as himself strapped to his back. A boy of three or four will sometimes be found clad only in the garb in which nature dressed him, but as he grows older, he is not respectable unless he has a string of beads around his waist.—*Sel.*

THE USES OF ICE.

IN health no one ought to drink ice-water, for it has occasioned fatal inflammation of the stomach and bowels, and sometimes sudden death. The temptation to drink it is very great in the summer. To use it at all with any safety the person should take but a single swallow at the time, take the glass from the lips for half a minute, and then another swallow, and so on. It will be found that in this way it becomes disagreeable after a few mouthfuls.

On the other hand, ice itself may be taken as freely as possible, not only without injury, but with the most striking advantage, in dangerous forms of disease. If broken in sizes of a pea or bean, and swallowed as freely as practicable, without much chewing or crushing between the teeth, it will often be efficient in checking various kinds of diarrhea, and has cured violent cases of Asiatic cholera. A kind of cushion of powdered ice, kept to the entire scalp, has allayed violent inflammation of the brain, and arrested fearful convulsions induced by too much blood there. In

croup, water as cold as ice can make it, applied freely to the throat, neck, and chest, with a sponge or cloth, very often affords an almost miraculous relief; and if this be followed by drinking copiously of the same ice-cold element, the wetted parts wiped dry, and the child be wrapped up well in the bedclothes, it falls into a delightful and life-giving slumber. All inflammations, internal or external, are promptly subdued by the application of ice or ice-water, because it is converted into steam, and rapidly conveys away the extra heat, and also diminishes the quantity of blood in the vessels of the part. A piece of ice laid on the wrist will often arrest violent bleeding of the nose.

To drink any ice-cold liquid at meals retards digestion, chills the body, and has been known to induce the most dangerous internal congestions. Refrigerators are as philosophical as they are healthful; for the ice does not come in contact with the water or other contents, yet keeps them all nearly ice-cold. If ice is put in milk or on butter, and these are not used at the time, they lose their freshness, and become sour and stale; for the essential nature of both is changed when once frozen and then warmed.—*Sel.*

FOOD AND STIMULUS.

DR. SAMUEL WOLFE, physician to Philadelphia Hospital, neurologist to Samaritan Hospital, says: "It was late on Sunday night; I was sitting in my office alone. I became aware of a stillness unusual for even that quiet hour. I turned to the old grandfather's clock in the corner of the room, an heirloom and highly prized, by the way. On opening the panel door in the case, I found the pendulum still swaying regularly from side to side, but not with its full range. The second hand on the face rocked to and fro with perfect regularity, but did not advance over its usual circular course.

"The great weights had sunken as far as the fully unwound cord would admit. I had neglected to wind the clock the night before, the accustomed time for performing that weekly duty, and the faithful old servant had exhausted—almost exhausted—the last vestige of force stored there more than a week before. The food material had been all used up. I thought, Will the winding restore the swing of the pendulum to its full degree? Will it bring back the tick and movement of the works and hands? I tried it and waited.

The pendulum and second hand continued their weak, purposeless movements, but they gained no power. They became even fainter. There was the force, ready to act, in the suspended weights—enough of it to run the machinery for eight days. The weak, dying patient had been fed to repletion, but nothing had been gained. I gave the pendulum a slight push; the familiar tick was heard, the oscillating hand advanced; the clock was off for a week's run. I had given a stimulus."—*National Board of Health Magazine*.

THE TALE OF A SERPENT; OR A WOMAN'S LOGIC.

BY REV. WARD B. PICKARD.

LOOKING from the door of a humble western cabin, a mother was startled by the discovering of a rattlesnake sunning himself on the rocks. She quickly closed the door, and with bounding heart pressed to her bosom the bright boy who played upon the floor. When her husband returned from the fields, he was met by his wife, who in great excitement said: "John, there's a rattlesnake in our garden. You must kill it at once."

But John did not become excited. He was too familiar with serpents to be startled by a woman's snake story.

"Is dinner ready?" he asked.

"No, John; how could I get dinner with that snake so near our boy?"

"Don't be foolish, Mary," said John; "it's just like a woman to forget everything else at the sight of a snake."

With quivering lips she replied, "I didn't forget our boy."

That evening John took up the *Weekly Sophisticator*, and the first item that attracted his attention was an editorial entitled "Snakes and the Common Law."

"Mary, hear this," he said. "The *Sophisticator* says that under the common law snakes have a right to live, that all this talk about extermination is the fancy of fanatics. Serpents always have existed, and always will exist; therefore regulation is the only way to deal with them. This can best be accomplished by tying a strong cord to each snake's tail and fastening the cord to a post."

Mary was a woman, and did not always accept her husband's newspaper as authority, so she asked, "Can a tethered snake bite?"

"Yes," said he.

"Do dead snakes ever bite?" she persisted.

"Of course not," said her husband impatiently.

"Then would it not save time and rope and prevent danger to kill the serpent when you first catch him?"

"There's no use arguing with a woman," said John, and he turned again to the *Sophisticator*, where he found consolation in an article on "The Failure of Snake Killing as a Method of Reform."

Next morning John determined to try the experiment. By tearing an American flag into strips he was provided with a suitable cord. Cautiously proceeding to the rocks, he found the snake, and just as its sinuous form was gliding out of sight, John planted his "No. 10" upon the reptile, so securely fastening him that he could neither go in or come out. He quickly tied one end of his red, white, and blue cord to the writhing tail of the "rattler." The other end he secured to a stake. Releasing the serpent, he called, "Mary, bring the boy here," which she did. "Now," said the proud protector of the defenseless, "I have settled the snake question. The boy must be kept outside this circle of danger." Turning to the lad, he said firmly: "My son, if you go beyond this line, the snake may bite you. And if he does, I will shut you up in the dark closet."

"Papa," said the boy, who was not old enough to read the *Sophisticator*, "wouldn't you just as soon shut the rattlesnake up before he bites me?"

"Children should be seen but not heard," was the stern reply.

Some days later the mother was startled by a cry from her boy. Rushing out, she saw him lying on the ground. In running toward home he had tripped over the rattler's tether. The snake, hissing with rage, was just ready to dart its envenomed fangs into the face of the prostrate child, when the mother caught the cord, and, with a quick pull, prevented the fatal stroke.

That night the husband heard the story of the rescue. The *Weekly Sophisticator* lay unopened. With trembling lips he said: "You saved our boy. Now what can we do with the snake?"

Mary's prompt answer was, "A cord strong enough to tie him with is strong enough to choke him with."

"True," said John, "but I never saw that in my paper."

"Try it," said Mary.

"I will," said John; and, seizing the rope, he

dragged the reptile from the den, till his head was nearly in sight. Loosing the noose, he slipped it up to his neck. John then placed his great boot on the infuriated creature, and handed the end of the cord to Mary, saying, "Pull." Mary pulled. John stood fast. The snake hissed and rattled, but the cord was strong, Mary was in earnest, John had been converted; and the snake died, and was afterward eagerly devoured by some hungry pigs.

Hear ye the interpretation thereof:—

The saloon serpent, decorated with the American flag, is still a serpent. Its fangs are filled with deadly poison. The licensed saloon "biteth like a serpent and stingeth like an adder."

The tri-colored cord that legalizes the saloon serpent would, if applied in the right place, choke to death the hideous reptile. The fact is, it takes far more red tape to tether a snake than to strangle one. Prohibition is the essence of political wisdom.

We degrade "Old Glory" when we use its sacred colors as a tie for slimy serpents. We honor the flag when we use it as a noose about the throat of any serpentine evil. The only harmless rattlesnake is a dead rattlesnake. To save the boys we must choke the saloon.

A bad rattlesnake may be converted—yes, converted into good pork by feeding him to growing pigs. The men, money, and grain now employed to curse our country through drink, could, under prohibition, be used to bless mankind.

No one is in doubt as to what woman would do to the snake if man would permit her to pull on the rope. John, give Mary a chance. Stop the *Weekly Sophisticator*, and take your wife's advice. Together stand, together pray, and together act, till the sibilant echoes of the serpent's hiss shall be heard no more, but in its place

"Let music swell the breeze
And ring from all the trees
Sweet freedom's song;
Let mortal tongues awake;
Let all that breathe partake;
Let rocks their silence break,
The sound prolong."

—*Union Signal.*

WHAT THE MULE SAID.

A CIVIL engineer tells this story:—

While overseeing a gang of men who, with mule teams, were hauling loads of dirt, a friend of mine

—a ventriloquist—came up and stood by my side, watching the men at work.

Presently a mule, driven by a large, red-headed, and fiery-tempered Irishman, balked when right in front of where my friend and I were standing. The Irishman soon lost his temper, and began to belabor the animal with his whip. Every now and then the mule would turn his head and look reproachfully at the angry Irishman, but still refused to budge.

"Now just watch the Irishman," the ventriloquist whispered in my ear.

At that moment Pat, losing all patience, gave the animal a tremendous kick in the ribs with his heavy boot.

The mule turned his head, and, looking the Irishman in the face, opened his mouth:—

"Don't you do that again!" The voice sounded as though it came direct from between the mule's parted lips.

The whip dropped from the Irishman's hand. For a moment he stared at the mule, and then, without uttering a word, he whirled about and bolted down the street as fast as his two legs could take him.—*New York Herald.*

AUNTIE SEPTIC.

ONCE upon a midnight cheery, at his work and never weary,
Sang that happy little microbe who torments the editor.
Suddenly there came a tapping, as of someone softly rap-
ping,
Seeking for admittance gently, softly tapping o'er and o'er,
And the microbe smiled complacent, "'Tis my friend and
fellow bore,
Tapping at the chamber door."

But there stood within the portal such a form as any mortal
Would have gazed on with delight, and hugged unto his
bosom's core;
Then the naughty microbe started, and his valor quick
departed.
"Who are you?" he cried in terror. "Tell me, tell me, I
implore!"
"Oh, I am your Auntie Septic, whom you never met before—
Merely this and nothing more."

Then this little microbe faltered, and his joyous mien it
altered,
As he felt determination in his auntie's grasp full sore;
And he said with agitation, "Can't I seek another station
Where I may pursue my studies, and all the mysteries
explore?"

But his auntie, as she clasped him even closer than before,
Gently murmured, "Nevermore!"

—*Living Church.*

RETREAT NOTES

—Miss C. Porter, of San Jose, is spending some time at the Retreat.

—J. A. Barr, superintendent of schools at Stockton, has recently visited the Retreat.

—J. D. Ruggles and wife, of San Francisco, are stopping at the sanitarium at the present time.

—Mrs. Wellingdorf has returned to us for a time, and we are glad to report that she is making satisfactory progress.

—Among the recent visitors at the Retreat may be mentioned John J. Valentine, of Oakland; Mrs. H. R. Miller, Oakland; Mrs. F. H. Goddard, Sacramento; Miss Mary Whalin, Oakland.

—In spite of the heavy frost in the early spring, and the fear that we should go hungry for fruit this year, we find that our fruit rather surpasses in quality that of last year, if possible.

—Mrs. Kendall, who has at various times been a member of our family, has again returned for a short stay. We are glad to report that Mrs. Kendall is much better than when with us on previous occasions, and we trust that this brief visit will complete her recovery.

—A larger amount of surgical work has been done at the sanitarium the last three weeks than during any preceding three weeks. We are happy to state that there have been no accidents whatever, and, though some of the cases have been most serious in their nature, all have been attended with the usual success.

—We are glad to welcome as members of our family more friends from Eureka. Eureka has at various times patronized us largely, and we have always enjoyed our acquaintance with the people of that isolated city. Among those who recently came to the sanitarium from Eureka are E. J. Whipple, Mrs. Crane, and Mrs. Berry.

—Miss Eveline Merrit, instructor in the Normal School of Bridgewater, Mass., has recently spent some weeks at the sanitarium. Although surrounded all her life by the grand old hills of New England, than which Bostonians are wont to think nothing is more picturesque, she declares she has never been in such a delightful spot as that in which the sanitarium is located.

—Among those who are at the Retreat at the present time, who have acquaintances among our readers, may be mentioned Mrs. Manifold, Mrs. Goetz, and Mrs. L. P. Cutting. Mrs. Cutting has recently suffered from a severe attack of fever, due to forced residence in a malarial district. She is already, however, on the mend, and we hope will soon recover strength. Mrs. Goetz finds the atmosphere of the sanitarium more conducive to her progress healthwise than that of San Francisco, and we are glad to welcome her to our household.

—Since our last number the guests and family at the Retreat have listened with great pleasure to a musical entertainment of more than ordinary merit, appreciation of which was shown by the crowding of the gymnasium with attentive listeners. Many of the guests coöperated with our family in their efforts to make the occasion a successful one, and their endeavors met with gratifying success. Mrs. C. S. Neill, of Sacramento; Mr. Whipple, of Eureka, and Miss Nellie McCune, who has been for some time a resident in this vicinity, rendered excellent piano music; also Mrs. W. E. Sanderson. "Very good," and "Try it again," was the verdict of all who heard.

—The weather at the home on the hillside has been unsurpassed for comfort and its invigorating quality during the last month. We have not suffered from the depressing heat experienced in other parts of the state, and in nearly all parts of the United States. Our guests consider themselves fortunate in being at the Retreat during this unusually hot wave. The fleecy condition of the sky has rendered the sunsets unusually beautiful. Even old residents on the hillside declare that the sunsets this summer have been unsurpassed in grandeur. The Alpine tints of the mountains have been almost, if not quite, equal to those of the Alps themselves. We have only needed the snow-capped points beyond to perfect the scene.

—We are grieved to be obliged to announce to our family of readers that our faithful night-watchman, John Vye, has fallen asleep. His faithful services during the many years of his connection with the institution have been most highly appreciated by the family and our guests, upon whom he has waited most patiently night after night. His death was occasioned by an internal abscess very serious in its nature. Mr. Vye has spent his time and means in patiently administering to the wants of the sick and needy, devoting all his surplus means to the care of the sick poor, most of the time enabling at least one poor patient to obtain the advantages of the treatment at the sanitarium. His loss will be keenly felt by the family, and many who have known him will, we are sure, sympathize with us in our loss. We are comforted with the thought that he sleeps only until those who sleep in Jesus shall be called forth at the first resurrection.

—Many of the family are availing themselves of the newly-arranged plan for exercise in climbing Howell Mountain and various other elevations surrounding the Retreat. While our gymnasium exercises have been greatly appreciated, and are still, yet we feel that this more natural method of exercise is productive of even greater benefit. The gymnasium training is necessary in connection with it, however, in order that the right position may be taken in climbing, and that the lungs be exercised in the right way, so that neither they nor the heart shall be overtaxed. Miss Poch, who for some time has been in charge of the physical culture department, is adding new interest to this line of work. A strength test is made of every one who comes to the sanitarium, and it is very interesting to note the points

of weakness in individual cases. It is also most interesting to know how these points can be strengthened and the weaknesses overcome by systematic training in the gymnasium, and by outdoor climbing.

—The sanitarium family have again been favored by a talk upon the progress of civilization and the Christian religion in China, this time by Miss Robinson, who has for twelve years been connected with a school at the Methodist missionary station of Tchikiyan. Miss Robinson has had most wonderful success. As those who have become acquainted with her will quickly appreciate, her success has been due, not alone to her great diligence in application and devotion, but to her peculiar tact in entering into the lives of those for whom she works. Her description of the work in connection with the family where she is located, has given us a clearer view of the lives of missionaries and their work, and the inspiration which causes them to desire to remain steadfast to their tasks year after year, than any talk upon this subject that we have ever listened to. The missionaries in connection with this station have the great satisfaction of knowing that almost if not quite every one of their family of about sixty, are converts to the religion of Jesus Christ. Miss Robinson, we are happy to state, has improved quite remarkably during her brief stay at the sanitarium, and will doubtless be able to return to China this fall. This is a privilege that we feared she would not be able to enjoy for some months, and perhaps years, to come.

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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 ^a Our soul waiteth for the LORD:
he is our help and our shield.
21 For our ^c heart 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. 19.
^c ver. 6. 17.
^d Ps. 130. 6.
^e John 13. 36.
^f Zach. 10. 7.
^g John 16. 22.
^h Ps. 94. 23.
ⁱ or, shall
be guilty.
^j 1 Kin. 1. 29.
^k Ps. 71. 23.
^l or, Achish,
1 Sam. 21.
13.

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

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