The Youth's Instructor

"Remember now thy Creator in the days of thy youth"

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Our Contributors

Bloom

Blossoms, in the joyous spring,
Breathe their fragrance to their King.
His are all the forest bowers,
But the joy of them is ours.

B. F. M. Sours.

Feeding upon the Light

THROUGH the long days of winter the trees look dead. Their naked branches stand out dark and bare against the winter sky. But in the early days of spring all the trees and shrubs, the plants and vines, suddenly awake from sleep. The leaves burst from their buds. Green growth springs up on all sides. The flowers blossom. What has wrought the change?

Ah, the sunlight has been pouring forth its increased energy upon the earth, and all living things respond to its kindly impulse. Life responds to the light.

The leaves will wake from sleep only when light calls. The flowers will burst their bonds only when light energizes them.

Life responds to light. At the call of light, life answers.

Hugh MacMillan has said something beautiful upon this subject: —

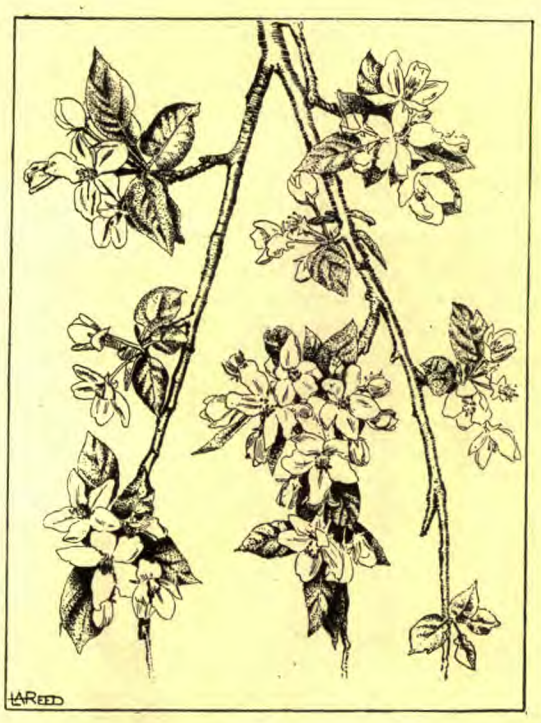
"A beautiful little daisy grows by the side of a path in the outskirts of a large city. It follows with its golden eye all day the march of the sun through the heavens. Like a miniature sun, it expands its white, luminous petals, and revolves in its little orbit on earth as its great prototype revolves in its magnificent orbit on high. When the sun sets, the daisy closes its little eye, and sinks into sleep.

"I have seen the lamplighter come and light the gas lamp beside it, and its broad yellow gleam has fallen across the folded head of the little flower buried among its leaves; but it awoke no response. I have seen, later in the evening, the moon rising over it, and sending down a flood of brilliant silvery rays upon the spot where it grew; but it still remained shut up in its emerald hood. Later in the night, the whole face of the sky sparkled with stars; but to the music of the spheres and the witching spell of the starbeams the little daisy remained insensible. The lights of the earth and the glories of heaven — lamplight, moonlight, starlight — allured it to open its bosom and bask in their smiles, but all in vain.

"And so it remained all night, until the sun rose above the horizon in the early morning; and when the first warm sunbeams fell upon its head, it unfolded at once its pearly rays, and opened its golden heart; and as long as the sun shone, without a cloud to obscure its rays, it confessed the sweetness and potency of the solar presence, and continued open until the sun set.

"And why was this? — Because it found the sunshine alone the stimulus of its vital action,— the food which it assimilated, and by means of which it was able to grow the bright colors which enliven it, and all that made it what it was. The light of the sun was its life. Neither lamplight, nor moonlight, nor starlight contained the principles essential to its existence; and therefore it acknowledged them not.

"That daisy read me a lesson which it would be my highest happiness to learn and practise. What it does will-lessly and unconsciously, I should do willingly and consciously. 'Whom have I in heaven but Thee? and there is none upon earth that I desire beside thee.' God alone is conatural with my spirit; all influences that own him not are foreign and uncongenial; they have no true relation to my higher being. The



True Light, that lighteth every man that cometh into the world, is alone the element of life.

"Let looking to Jesus, then, be the business of my life, while I run with patience the race set before me, that my face may be always lightened. Let me with open eyes and open heart, behold his glory, that I may be changed into the same image, and be, like the daisy, a miniature of the Sun of Righteousness."

And "we all, with open face beholding as in a glass the glory of the Lord, are changed into the same image from glory to glory, even as by the Spirit of the Lord."

But the great characteristic of life is growth; and growth is the building, or storing-up, process. The plant, living in the sunlight, grows; that is, stores up light and heat. And the longer it continues to grow, the more it stores. The mushroom grows in a single night; it has but paltry store of light and heat, and is almost worthless as fuel. The oak grows for a hundred years; through a hundred years it stores within itself light and heat: it is excellent fuel. And coal, the vegetable growth of ages past, is still better fuel; for it is concentrated, crystallized sunlight.

It is therefore plain that the more light appropriated, the more complete and full is the life. A little light drunk in means but a little of life; but much light appropriated means much life. And fulness of light everlastingly and fully appropriated is a full life and everlasting life. The mushroom appropriates but little light; it grows in a single night: it appropriates some light, not much. Its life is measured by the amount of light which it has appropriated, and that light was the few rays that reached it through a single night. The tree, however, which for years appropriates light, has a life that is measured by scores of years.

Suppose your life to be measured by a few rays of light that have sifted down through the shadows of night; would your life thus be a full life? Would it be an unending life? Thus living, would you know anything of the wondrous glory of God's undimmed light, or the overflowing fulness of his life?

O the little of his fulness that satisfies the souls of men! Only a few rays sifting down through the blackness of the night! Only a few trembling beams of star or moon or lingerings of the day! True, the soul must take a few rays, for no light at all means no life at all; but as to appropriating the fulness of the light fully and forever, that some think unnecessary. Therefore, like the mushroom, this starved soul grows through one night, and, like the mushroom, it shrivels up in the glory of the day, and is no more. The place that knew it once, knows it no more forever! Fit ending for a mushroom, but what sort of ending for a human soul?

Give us rather to live in God's unending light, and thus to know the fulness of his unending life; to grow like a cedar in Lebanon, to be of God's own planting, "trees of righteousness," trees "planted by the rivers of waters," whose fruit never fails, and whose leaf never fades; to bathe in the effulgent shining of his glory, where there is no darkness, no chill, no death!

There, kissed by the balmy breezes from the land of the blessed; there amid the radiant beauty of the flowers, and the enrapturing melody of the birds, drinking in his everlasting goodness and his soul-enriching glory — this, O brother, is our everlasting portion.

Shall we be satisfied with less?

L. A. Reed.

Power of a New Sun Motor

A Portuguese inventor and scientist has constructed a sun motor, by which he has found that there is no substance, not even asbestos, that will not fuse in his wonderful furnace, into which the concentrated rays are thrown by the aid of over six thousand mirrors. Manganese, also, which is the hardest known substance to melt, runs almost like water, when this heat is

applied to it. Iron, instead of melting and running in a liquid state, as it does in a blast furnace, shrivels and becomes like pasteboard burned in the fire.

The inventor believes he has established that the rays from the sun are electrical, and that the new motor has opened a window in nature's workhouse which has been closed up to this time. In chemistry especially the machine has possibilities calculated to lead to important results, while in the field of astronomy much will be attained. By means of special appliances the power from the sun may be applied to the soil in such a way as to increase the fertility.

The inventor is confident that he will be able to displace steam with his motor in countries like those of South America, the Sahara Desert, California, and certain parts of Texas, where the sun shines nearly all the time.

The rays are caught in a great, shield-shaped contrivance of mirrors. This is so regulated by a delicate clock-work mechanism that it always faces the sun. Directly in front of the reflector is the sun furnace, or retort, lined with fire-brick, which gathers the concentrated rays with intense heat. Even the fire-bricks are unable to withstand the terrific power for any great length of time. The temperature of the furnace is higher than any ever recorded by man.— *Young People's Weekly.*

The Song-Sparrow

Dear little song-sparrow! Who does not love him? — modest, unassuming, ever happy and musical, even in the cold, blustering days of March; and trustful and thankful when the early snows of winter have driven southward most of the feathered songsters, and covered the little brown seeds with a white mantle.

A few of this species remain in the North during the coldest months, but most of them seek a warmer and more friendly climate. In early March, however, some sunny morning, we are awakened to the fact that Winter's icy grasp is being broken, and Spring, with her attendant train of birds, sunshine, and flowers, comes on apace. From orchard and roadside we hear the melodious notes of the song-sparrows, who have arrived with the bluebirds, and who confirm, by a sweet, continuous chorus, the solo performances of their brilliant blue neighbors, who assure us, over and over again, that "tru-a-ly, tru-a-ly," spring is coming.

The song-sparrow is a plain bird, with a grayish-brown back, marked with reddish streaks, and plain brown wings and tail. His head is brown, streaked with gray; and he has a brown stripe on each side of his throat. Underneath, he is grayish white, spotted with brown. These spots come together, and form a dark patch, or breast-pin on the center of his breast. By this breast mark he may always be recognized from other sparrows. What this bird lacks in brilliancy of plumage, it abundantly makes up by the sweet persistency of his song. It has been suggested that his song resembles the words, "Maids, maids, maids, hang on the teakettle, teakettle, ettle, ettle." This is the common song of these birds, which we hear coming from every meadow, brook, and roadside bush. Individuals vary this song. The song-sparrow also has a more complicated and brilliant performance, which he gives on the wing.

Some of the best gifts of nature are the most abundant. So it is with our little song-sparrow. During the warm months, one can not go far in the country without meeting this friendly bird, and being greeted by his cheery song.

The nest is rather thick, largely built of fine dry grass, and mostly lined with horse-hair. The parent birds hide it carefully near the base of an old stump, surrounded with grasses, or among protecting bushes. Sometimes, when snakes or mice abound, it is elevated a little way above the ground, in the crotch of a low-spreading shrub.

Three broods are usually raised in a season; and as the birds are scrupulously neat, they occasionally raise two broods in the same nest.

The birds take turns in occupying the nest; and after the young are hatched, each parent takes part in providing food for the growing family.

Late in November most of them leave our northern climate.

Many useful lessons may be learned as we study the life of our unassuming friend, but one of the most important is a lesson of faith. Whether flying among the glad spring flowers or gleaning a scanty pittance among the frosts and falling leaves of autumn, his song is full of trust and good-will. Eva Jenks.

The Versatility of the Banana

Much has been told about the versatility of the bamboo, that grass of the tropics which rivals the oak in height and surpasses the pine in utility. As much may be told in the future about the banana, that great tropical lily which circles the world in the torrid zone, and feeds lazy millions of mankind who have nothing to do but pluck and eat. The potato is not bad as a producer, but the banana outvies it in the ratio of forty-four to one, and wheat in that of one hundred thirty-three to one, one acre of ground yielding banana food enough for fifty men. A piece of land of one hundred twenty square yards will produce four thousand pounds of fruit, while the same area rarely produces more than thirty pounds of wheat or eighty of potatoes.

No books are written in the tropics on "Five Acres Enough," for two acres there will feed a company of soldiers, and with only a fraction of the labor, and the value of the banana is not alone in bulk; for its nutritive value is very high, being twenty-five times greater than our ordinary white bread and forty-four times greater than the potato. There are various other uses to which the banana plant is put,— the invaluable Manila hemp comes from one species of it,— but we shall confine ourselves here to its food uses. From every part of the neighboring tropics the great green bundles, weighing at times more than a hundred pounds, pour into the United States, till we receive annually about ten million dollars' worth. But these are eaten merely as dessert.

Only recently have steps been taken to adapt the banana to more varied uses. The dried banana is one of the latest innovations. By getting rid of its abundant water, a great saving in transportation is affected, and vast quantities of overripe fruit can be utilized, in addition to the small bunches not deemed worth shipping. Mr. A. F. Spawn, a distinguished adapter of vegetable food to human uses, tells us that fifteen different dishes can be made from the banana, first dried and ground into flour. These include breakfast food, crackers, biscuits, cup cake, fruit cake with banana raisins in it, etc. Indeed, a ten-course dinner, from soup to coffee, has been served, made wholly of variations of the banana.

Banana bread has been voted excellent. Then we have "banana figs" and "banana raisins," not unlike the real article, and "banana coffee," which tastes a great deal like real coffee, and has none of the nerve-wracking effects claimed for coffee by those who are opposed to it.

Banana coffee is one of the many discoveries of Mr. Spawn, who is an enthusiast on the utilization of the banana, and is turning out a ton a day of this product from his plant at Woodbury, N. J. He has evaporating machines in Mexico, in which the fruit is thoroughly dried and prepared for roasting into artificial coffee. These new uses of the banana point to a greatly widened employment of this prolific and nutritious fruit.— *Search-Light.*

How Gold-leaf Is Made

The art of the gold-beater is one of the oldest handicrafts in the world, and among those which have changed least. Much of the decoration of Solomon's temple is believed to have been covered with gold-leaf, hammered to the requisite thinness by hand, as it is to-day.

The gold-beater receives his material not in the form of the sixty-pennyweight ingot in which it is cast, but in the form of a ribbon about an inch wide and twenty-four feet long.

This ribbon is first cut into two hundred squares, and placed in the "cutch," which is a pile of square pieces of a peculiar paper, part animal and part vegetable in composition, the preparation of which is a secret. The best cutches are made in London. A square of gold is placed between each two leaves, and the whole mass is ready for the first beating.

This is done with an iron hammer, weighing from twelve to seventeen pounds, while the cutch rests upon a granite block, which is supported by a heavy wooden post.

Under the heavy, measured blows of the hammer the sheets of gold begin to stretch or expand until in half or three quarters of an hour, they have reached the edges of the cutch. They are then removed, and with a thin strip of bamboo are cut into quarters, so that the two hundred pieces become eight hundred. Next comes the "shoder," a collection of eight hundred pieces of skin, four inches square, made from the intestines of cattle. As in the cutch, each piece of gold is placed between two leaves of skin, and bands of parchment or vellum are slipped over the whole pile, to keep it together.

Another beating, this time with a hammer weighing from eight to ten pounds, now follows. This takes about an hour, during which the sheets of gold are all the time perceptibly growing thinner and thinner.

The last stage is the "mold," which, like the cutch and the shoder, is composed of alternate leaves of gold and skin; but the mold is about five inches square and made up of gold-beater's skin. The preparation of this is a jealously guarded trade secret.

The skin, like that in the shoder, is made from the intestines of the ox. It is translucent, and not unlike rawhide in color. Although it will stand continuous beating without breaking, it will tear like a sheet of thin paper. The making of a single mold requires the intestines of five

hundred bullocks. Between each two beatings the skin is rubbed with baked and pulverized gypsum.

A mold contains one thousand sheets. After the second beating the workman takes from the shoder a single leaf of gold at a time, handling it with bamboo pinchers, and, when necessary, smoothing it with a rabbit's foot. With the strip of bamboo he cuts each sheet into quarters again, so that the original two hundred have now become three thousand two hundred. One shoder, therefore, contains more than enough gold to fill three molds.

The final beating, in the mold, is done with a seven-pound hammer, and requires from three to four hours. By this time the gold-leaf should have expanded again to the edge of the skins, and should be of the requisite thinness, which is determined by holding it up to the light. If it transmits green rays, it is done, and will measure about one two-hundred-and-eighty-thousandth of an inch in thickness.

The hammers used in beating gold are slightly convex on the face. The art of the workman consists in so striking that the gold will always be thinnest in the center. He must pound with evenness all over the square, in order that the sheets of gold may expand without losing their form; but at the same time he must keep the thickest part near the edges, so that when the sheets are finally trimmed to size, the thicker portions may fall in the waste, to be recast. No machinery has ever been devised which will do this successfully.

The tools of the craft are interesting and peculiar. The rabbit's foot is exceedingly soft, and just oily enough to prevent the gold from sticking, and the bamboo pliers and cutting-slips are the only things with which it is possible to do this delicate work. The gold does not adhere to the fibers of the reed as it does to steel.

The gold-beater performs all his work standing. The use of the heavy hammers in such continuous pounding would, one would think, impose an almost intolerable strain upon the hands and arms. The men say, however, that their arms never ache. The only place where "it catches them" is in the bend of the knee.

The lack of strain upon the arms is accounted for by the fact that the hammer rebounds. It is astonishing, but by no means a rare thing to see a gold-beater change hands while the hammer is in the air, and without losing a stroke.—*Edward W. Frentz, in Youth's Companion.*

Preserving Foods

(Concluded)

Because germs are everywhere, ready to spoil anything within their reach, it becomes necessary to take various measures to preserve foods. Many methods are adopted for preventing the action of germs on food. Some of these have already been mentioned. The germs may be destroyed by heat as in the ordinary processes of cooking. By heating over from time to time, food can be kept fresh for a long time, which, if not heated, would spoil in a few hours. Instead of heating the food over every little while to kill any more germs that may have fallen in, one may heat the food, and then exclude the germs by keeping it in an air-tight package. This is called canning. Such food is said to be *sterile;* that is, without any living germs.

Foods may be preserved by drying, as dried fruits, dried vegetables, and grains, or they may be preserved by the use of antiseptics, as is done in salting meat or butter or in smoking meat, or in the preparation of preserves and jellies by the use of large quantities of sugar; or foods may be put in an ice-chest, and thus kept from spoiling. This does not stop the action of the germs, but retards it. The germs continue to multiply, though slowly; and food, if left long enough, would be found to be spoiled, even in an ice-chest.

Foods are often kept in cold storage for weeks, in large cities. Meat, butter, eggs, and other foods are stored when they are cheap, and kept there until prices rise. Refrigerator cars or refrigerator steamers are used to transport perishable goods long distances. While ordinary decay does not take place in cold storage, there seems to be a deterioration, and the food is not so good as when fresh.

Natural Preservatives

Nearly all the processes of preserving food were employed by nature long before man ever used them. A grape is a little can of fruit. The skin, as long as it is whole, prevents the germs from getting inside. Decay does not usually begin until the skin is broken or punctured by some little animal.

Winter apples resist decay for a long time because of a tough skin. Cocoanuts, bananas, oranges, and, in fact, nearly all fruits are examples of nature's method of keeping out the germs. Such fruits spoil much more rapidly when the outer covering is injured.

But while disease germs can not grow through the skins of fruits, there are molds that find lodgment on the skin, grow through, and thus cause decay. By wiping or polishing apples occasionally, and keeping them perfectly dry, the molds do not get a foothold, and the apples last much longer.

Another of nature's methods of preserving against germ action is the use of antiseptics.

Plants and animals protect themselves to some extent against the inroads of germs by producing substances that are germicidal, or at least antiseptic. In the air and on the skin, there are always germs, known as "pus germs," which are capable of producing boils. They are on the hands, under the nails, and all over the body, even after a most thorough bath, and you may wonder why they do not cause more trouble than they do. They can not, ordinarily, get through the skin, which serves as a protection, the same as the skin of a grape or the peel of a banana; but when the skin is bruised or broken, they may get an entrance. Sometimes a child falls down and gets a bad bruise. Perhaps the "skin is barked" or torn off the hand. The little fellow says nothing about it, though it hurts pretty badly. Thousands of germs may have gotten into the wound, yet in nine cases out of ten the wound will heal without any difficulty. Why? — Because the serum, or fluid, poured out has the power to destroy the germs or prevent their growth.

There is an acid in the stomach of healthy people and healthy animals which is capable of destroying nearly all the germs that are eaten with the food.

You may have wondered why growing grass and other plants do not decay; for when it is cut down or broken off, decay soon sets in. During life the fluids of the plant are resistant to germ life. So, then, nature has the power to exclude germs from her products, and to make antiseptics. Many of the fruit acids are more or less antiseptic, and this is a reason why lemon-juice and other fruit juices are often so excellent for certain disturbances of the system.

Another method nature uses (and when we say "nature" we do not mean a blind force, because we see in all this the well-laid plan of an all-wise and loving Creator) to preserve against germ action is drying. As they mature, wheat, corn, beans, peas, and other vegetables and cereals dry, and are then unassailable by the germs. In countries where figs grow, these often fall off the tree, and dry on the ground. They are such soft, juicy things that if this did not occur, they would soon sour through germ action.

Out in the desert where animals die, they often, instead of decaying, dry up. The air is so dry that it absorbs the moisture from the body of the dead animal so rapidly that it does not have time to decay. So, over the great Western deserts may be seen the dried-up mummies of many animals. It was the dryness of the Egyptian air that enabled the ancient Egyptians to embalm their dead so successfully that now, after thousands of years, some of these bodies are still in a fair state of preservation.

Sunlight is another of nature's means of destroying germs. Where the sun strikes directly, the germs do not live long, that is, on the surface. When sunlight is allowed to enter a parlor, it may fade carpets a little, but it plays havoc with the germs. You know the difference in the odor of a room which is always dark and one which has an abundance of sunlight. One smells musty, and you are glad to get away from it. Your sense of smell warns you that it is not a healthful place to live in.

Spores

Germs, as a rule, succumb readily to the action of heat, chemicals, drying, and sunlight, but they produce *spores,* or what resembles seed, which can survive much more severe treatment. Germs do not all form spores. The varieties that do not are much more easily destroyed. Ordinarily, exposure to water at a temperature much below boiling — one hundred forty degrees Fahrenheit for ten to fifteen minutes is sufficient to destroy all germs, if there are no spores present. Exposure to direct sunlight for about an hour, will have the same effect. But spores may still live after having been boiled for several hours. One kind is said to require fifteen hours of steady boiling in order to kill it. Fortunately, the ordinary disease germs do not form spores.

You may have heard the words "disinfect" and "sterilize" used, and may have wondered if they mean the same. They do not, exactly. To disinfect anything is to destroy all infectious material, all disease germs in or on it. To sterilize it is to destroy all the germ life. It is much more difficult to sterilize anything than it is to disinfect it, because there are usually some spores present (of harmless germs as a rule) which are extremely difficult to destroy. Very rarely is milk actually sterilized. It is usually put through a process to kill the disease germs. But if such milk were sealed in air-tight, sterilized bottles, it would sour in a few days, showing that some germs were still present in the milk.

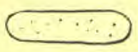
Sterilizing milk renders it much more difficult to digest. *Pasteurizing* it, that is, cooking it at a temperature of one hundred forty degrees, kills most of the dangerous germs.

Milk could be sterilized by heat in three different ways: first, by heating it to a point above the temperature of boiling water. This is accomplished by having the milk in a close vessel, boiling it in brine, which, you know, can be heated much hotter before it boils than plain water.

Another method of killing the spores is to keep the milk boiling for eight or ten hours, or even fifteen hours. Both of these methods are objectionable, as they cause undesirable changes in the milk. Sterilized milk is especially bad for babies; and yet it would not be so bad as some of the milk which is fed to them swarming with germs.

Another method of sterilizing milk is known as *fractional sterilization.* By this method the milk, which is sealed, or so closed as to keep the germs out, is heated to near the boiling-point for a few minutes for three successive days. Such milk will keep indefinitely, the same as canned fruit, and is not open to the objection that it has been

overcooked. But even this amount of heating probably makes the milk inferior to raw clean milk.



You will wonder how three successive heatings at less than boiling temperature is more effective than one continuous boiling of several hours; and before I explain this it will be better to say a little more about the formation of spores.

Under certain circumstances not yet well understood, little granules from all parts of a germ will collect at one point. In some species of germs this is at one end, in others, it is at or near the center. Sometimes this is accompanied by swelling of the germ at the point of collection.

Around this collection of granules forms a very tough resistant shell, and finally nothing remains but the spore.

Under favorable circumstances a new germ hatches out from this spore, much as a chick develops from an egg.

When milk is heated to one hundred forty degrees, for a time all the germs are killed. The heating favors the development of some of the spores, and within twenty-four hours a crop will have hatched out. Heating this will kill the newly hatched crop. The second day the rest of the spores will all hatch out, so that, with rare exceptions, three successive heatings will sterilize the substance, not by destroying spores, but by destroying the newly formed germs.

Mike Robe.

Paul Again Visits Corinth

Opening Exercises.

Text for Personal Study: 2 Cor. 13:5.

Scripture for Study: Acts 20:1-3; 2 Cor. 2:12, 13; 8:1-5; 11:9.

Reference Study: "Sketches from the Life of Paul," pages 183-194.

Outline of Topics:—

Leaves Ephesus.
Stops at Troas.
Waits for Titus.
Enters Macedonia.
Liberality of Macedonian brethren.
Goes over "those parts."
Enters Greece.
Visits Corinth.

Notes

The only information Luke gives us of this visit to Corinth is the brief mention in Acts 20:1-3. Other information must be gleaned from the writings of Paul.

Paul did not go to Corinth direct, but by way of Macedonia. He visited Troas, where he seemed to have had an anxious wait for Titus (2 Cor. 2:12, 13), who had been sent from Ephesus to visit the Corinthian church. We are not informed with certainty as to who were his companions on this journey, but Tychicus and Trophimus, both of whom were Ephesians, are mentioned as being with him at Corinth. Acts 20:4. For the biography of these two laborers look up the following texts: Acts 20:4; Eph. 6:21; Col. 4:7; 2 Tim. 4:12, 20; Titus 3:12; Acts 21:29.

Doubtless his sojourn in Macedonia was with the church at Philippi, where he and Silas were imprisoned, and the jailor and his household were converted. Without doubt his reception here was an affectionate one. He was joined here by Titus, and comforted with the favorable tidings which he brought concerning the condition of the church at Corinth. 2 Cor. 7:5-7.

From 2 Cor. 8:1-5; 11:9, we catch a glimpse of the liberality of the church at Philippi. This church was also a united church, as every liberal church is. Note the expression, "but first gave their own selves to the Lord." The gift of ourselves takes precedence of all else.

The expression in Acts 20:2, "when he had gone over those parts," indicated that the apostle went into some of the regions at least of northern Greece before entering Corinth. The details of this are not given, but it is evident that this great apostle embraced every opportunity to extend the gospel into new regions.

"It was autumn when Paul again visited Corinth. As he beheld the Corinthian towers and lofty citadel in the distance, the clouds that enshrouded the mountains and cast a shadow upon the city beneath, seemed a fitting emblem of the error and immorality which threatened the prosperity of the Christian church in that place."

"As Paul thus approaches Corinth, how striking the contrast to the close of a former journey, when Saul, 'breathing out threatenings and slaughter against the disciples of the Lord,' drew near to Damascus. . . . Then he was entrusted with the sword of secular power, he was the agent of the Sanhedrin, the Jewish inquisitor, the exterminator of heretics, seeking victims to imprison, to scourge, or to stone. Filled with pride, he rode toward Damascus, with servants at his command to convey his prisoners to Jerusalem. Now he journeys on foot, with no outward tokens of rank or power, and no officers of justice to do his bidding."

"There has been as great a change in the spirit of the apostle as in his outward appearance. . . . Now the proud, passionate nature of Saul has been transformed by the grace of Christ. His heart yearns for his most bitter opponents. The thought of causing them pain, fills him with sorrow."

"Paul was accompanied to Corinth by a little band of fellow laborers, some of whom had been his companions during the months spent in Macedonia, and his assistants in gathering funds for the church at Jerusalem."

"For three months, Paul stayed at Corinth. During this period he not only labored unweariedly for the church in that city, but he found time to look forward to wider missions, and to prepare for new conquests. His thoughts were still occupied with his contemplated journey from Jerusalem to Rome. To see the Christian faith firmly established at the great center of the known world, was one of his dearest hopes and most cherished plans." G. B. T.

Young People's Society of Raiatea

We have been very much encouraged by reading the reports from many of our Young People's Societies, and thought you, in turn, might enjoy a report from our small band in the South Pacific.

At our conference meeting here on Raiatea last June, Elder Gates laid before us the importance of beginning the work here; but on account of rainy weather no organization was formed until a few weeks ago. We now have twelve members. Four of them are children under fourteen years of age, but they are willing to take part in our meetings. We meet every two weeks only, as our young people are scattered, and roads are very bad.

We have been studying the chapter in "Great Controversy" on "The Time of Trouble," and I believe every one realizes as never before the importance of being ready for that time. We spend about fifteen minutes at the beginning of our meetings in learning new songs; and in connection with our other lesson we have some one read a good article that our leader has selected from the *Review* or Instructor.

There is not much we can do here in the way of canvassing or giving out reading-matter, as there are but few who can speak English, but some of our young people can work among the natives, as they speak the language well.

All have said they were willing to do whatever their hands find to do, so we know much good will be done in some way, for the Lord wants willing servants who are not afraid to do anything they may find to do.

We want to be among the faithful who will be counted worthy of a place in God's kingdom.

Mary Brown Beckner,
Leader.

Not Content With a Tithe

The following deeply interesting particulars are recorded in the memoir of Mr. Cobb, a Boston merchant. At the age of twenty-three, Mr. Cobb drew up and subscribed the following remarkable document:—

"By the grace of God I will never be worth more than fifty thousand dollars.

"By the grace of God I will give one fourth of the net profits of my business to charitable and religious uses.

"If I am ever worth twenty thousand dollars, I will give one half of my net profits; and if I am ever worth thirty thousand dollars, I will give three fourths; and the whole after fifty thousand dollars. So help me, God, or give to a more faithful steward, and set me aside."

To this covenant he adhered with conscientious fidelity. At one time, finding that his property had increased beyond fifty thousand dollars, he at once devoted the surplus seven thousand five hundred dollars.

On his death-bed, he said, "By the grace of God — *nothing else* — by the grace of God I have been enabled under the influence of these resolutions to give away more than forty thousand dollars. How good the Lord has been to me!" — *George Muller.*

Changed

Through the winter they stood,
Shaken by many a storm,
Lacking beauty and grace
In both color and form.

A cluster of brown sticks,
All crooked, bare, and dry;
No loveliness have they
To please the passer-by.

But one joyous spring day
Wonderful changes are seen;
Behold the ragged bush,
Glowing in living green.

Marvel how it was done.
God's transforming power
Wrought through sunshine and shade,
Gentle dew and shower.

Impossible, one might say,
To whom the sight was new,
Out of such ugliness,
To spring beauty so true.

Wonder oft repeated,
Teach thy lesson again,
To cheer, comfort, strengthen,
The sinful hearts of men.

From the distorted soul,
God can surely erase
All disfiguring marks;
Make it blossom in grace.

Cornelia Snow.

April Rain

It isn't raining rain to me,
  It's raining daffodils;
In every dimpled drop I see
  Wild flowers on the hills.
The clouds of gray engulf the bay,
  And overwhelm the town —
It isn't raining rain to me,
  It's raining roses down.

It isn't raining rain to me,
  But fields of clover bloom,
Where any buccaneering bee
  May find a bed and room.
A health unto the happy,
  A fig for him who frets —
It isn't raining rain to me,
  It's raining violets.

— *Robert Loveman, in Harper's Magazine.*

What One Boy Did

"Don't tell me that boys have no influence," said the dark-eyed lady, with emphasis. "Why, I myself know a boy of twelve whose influence changed the manners of an entire hotel. Tell you about it? — Certainly. It was a family hotel on the seacoast in southern California, and almost all the guests in the house were there for the winter. We had become well acquainted, and — well, lazy, I guess is the best word for it. So we decided that it was too much trouble to dress for meals, and dropped into the habit of coming in just as we chanced to be, from lounging in the hammock, or fishing off the pier, or bicycle riding down the beach. Our manners, too, had become about as careless as our dress; we were there for a rest, a good time, and these little things didn't matter, we said.

"But one day there was a new arrival. Mrs. Blinn, a young widow, and her little son, Robert, as sturdy, bright-faced lad of twelve as one often sees. The first time he came into the dining-room, erect, manly, with his tie and collar and dress in perfect order, escorting his mother as if she had been a princess, and standing till not only she, but every lady at the table was seated, we all felt that a breath of new air had come among us, and every one there, I think, straightened up a little. However, we looked at one another and nodded our heads as much as to say, 'He won't keep this up long.' We were strangers, and in the familiarity of every-day life we did not doubt that it would soon wear away.

"But it did not. Rob was full of life, and active and busy as a boy could well be. At the same time, when, twenty minutes before meals, his mother blew a little silver whistle, no matter where he was or what he was doing, everything was dropped, and he ran in to make himself ready. And every time he came to the table, with his clean face and smooth hair and clothes carefully arranged or changed, he was in himself a sermon on neatness and self-respect, which, though none of us said much about it, we felt all the same. Then by and by one and another began to respond to the little silver whistle, as well as Rob; and one laid aside a bicycle dress, another a half-invalid neglige, till you could hardly have believed it was the same company of a few weeks before.

"It was the same with manners. Rob's politeness, simple, unaffected, and unfailing, at the table, on the veranda, upon the beach, wherever you met him; his readiness to be helpful, his deference to those older, his thoughtfulness for all, was the best lesson,— that of example. As a consequence, the thoughtless began to remember, and the selfish to feel ashamed, and those who had been simply careless to keep themselves more in hand.

"And so, as I said in the beginning, in less than a month the whole atmosphere of that hotel had been changed by the influence of one boy, and the only one there who was utterly unconscious of this was Rob himself."

This is truly a pleasant incident. We like to think of this boy who, because he was at heart a true little gentleman, drew what was kindly and courteous and gracious in those about him to the surface as by a magnet. In like manner it is possible for every boy to be so true and kindly and tender, so unselfish of action, so obedient to duty, so responsive to conscience, that, wherever he goes, he shall carry an inspiring atmosphere and influence with him; and whoever he meets shall, because of him, unconsciously be drawn to better thoughts and nobler living.— *Adele E. Thompson.*

A Sketch from Life

"Ellen, give me some soap-suds, quick. Bessie and I are going to blow bubbles. Hurry up, now."

Ellen only looked at the impatient little girl, and went on about her work.

"Quick, Ellen, I can't wait."

Ellen, who had lived long in the family, and knew that the mother desired her children to be civil to everybody, still paid no heed.

"I wouldn't have such an ugly old hired girl," said Bessie; "I'd tell my mama on her."

Carrie looked surprised at these words from her little playmate, and then, turning to Ellen, said, quietly, "Ellen, will you please make us some soap-suds? We want to blow bubbles."

"Sure," answered Ellen, heartily, and soon with their foaming basin the little girls left the kitchen.

"What made you say 'please' to the hired girl?" asked Bessie. "My mama says it is a hired girl's business to wait on us children."

"My mama doesn't think so," replied Carrie. "And anyway, she always wants me to say 'please' to Ellen, just the same as to any one else."

"Well, I wouldn't," asserted Bessie. "Think of saying 'please' to a servant!"

"Oh!" exclaimed Carrie, "I must tell Ellen that Jamie is wading in the gutter. Mama doesn't want him to."

"Jamie," called Ellen, a minute later, "you must come in. Your feet are wet now, and your mother wouldn't like you to get more cold."

Jamie was too intent on his own pleasure to obey at once, and he continued his splashing.

Ellen, finding that he did not intend to mind, acted promptly, and bore him, struggling, into the house. As she set him down, he raised his hand and slapped her.

"Jamie," exclaimed Carrie, who witnessed the deed, "I shall tell mama that you slapped Ellen."

"Well, what if he did," said Bessie, who had looked on approvingly, "she's only a hired girl."

This did not seem a valid excuse to Carrie, who reported Jamie's misdemeanor to her mother.

Mrs. Weston called Jamie before her, and made inquiry as to his conduct.

"Well, she's only a hired girl," quoted Jamie in self-defense.

This was a new plea to be set up in Mrs. Weston's household, and after a moment's pondering, the mother asked, "What is a hired girl, Jamie?"

"Why, a cook."

"Do you know that Cousin Louise is a hired girl?"

"Why, no, she isn't. She's a stenographer."

"Doesn't she get pay for her work?"

"Of course."

"Then she is a hired girl. Any one who works for pay is hired. You wouldn't want to work without pay, would you?"

"'Course not."

"Then you hope some day to be a hired man, don't you?"

"Papa isn't a hired man;" this with positiveness.

"Yes, papa is a hired man."

"But he's a doctor."

"So he is, but doctors are paid for their work, so they are 'hired.' The minister, the lawyer, the school-teacher, the engineer — all are hired to do their work. So you see there is no disgrace in being either a hired girl or a hired man."

"But Ellen's just a cook, Bessie says," interpolated Carrie, who was a listener to the conversation. "She says a cook isn't a lady."

"Last summer I was our only cook for several weeks," said Mrs. Weston, smiling; "was I any the less a lady?"

"'Course not," asserted Jamie, positively.

"So you see the occupation, merely, does not make one a lady or the reverse. Now when one has treated a lady with impoliteness, what is the only thing to be done?" asked Mrs. Weston.

Jamie hung his head, and after a moment's silence, said, hesitatingly, "'Polergize."

"Yes, that is the only thing left for a *gentleman* to do. I will ask Ellen to come in, and you can apologize to her."

"You do it for me," pleaded Jamie.

"That would do you no good. You know that in slapping Ellen you did yourself more harm than you did her. It is for your sake, as well as hers, that the apology must be made."

Jamie had been well-drilled in the idea of being a gentleman, and, after a little hesitation, rose to the ideal held up to him.

"All right," he said, "I'll 'polergize."

The apology was made in all sincerity, and Ellen received it almost in tears.

"He didn't hurt me," she said to Mrs. Weston. "Sure, he didn't need to make any apology."

"Yes, he did," replied Mrs. Weston. "He needed to for his own sake if for no other reason.

My boy must never feel that he can treat any woman unkindly. To treat all women with respect must be a part of his character."—*Mary Wood-Allen, in American Motherhood.*

To Fathers and Mothers

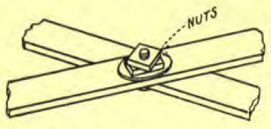
Some months ago we decided to write to you as soon as spring-time came. We are sure you all will be ready to help us in our plan to revive the missionary garden idea. Will you not help us by interesting your children in this work? Give them a little garden spot, and plan with them how they may make the most of it. Give them seeds, and show them how to begin their work, and then keep an oversight of it while they are tending, harvesting, and getting it ready for the ingathering service in the fall. Encourage them to spend some of their time and strength in doing this special work for the Lord. It will not only be a help in creating a missionary spirit in their hearts, but will also be an educational factor in cultivating a spirit of industry and perseverance. If you can spare only one little strip of ground, let them have a row of something that they can take care of for the Lord.

Please do not fail to try this. We shall hope to see quite a sum for missions raised in this way. Watch and see if it is not a success in other respects as well.—*Mrs. F. V. Dorcas, in Iowa Bulletin.*

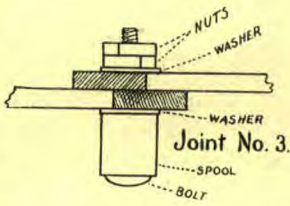
AROUND THE WORK-TABLE

How to Make a Blackboard Drawing Instrument

So many of the young people of the Instructor have made and are using the simple little enlarging instrument I described in the Instructor of Dec. 13, 1904, that I will describe for them still another useful contrivance. This is also a drawing-machine, but it is larger, and is designed for use on the blackboard. How often we have seen some busy day-school or Sabbath-school teacher spend half an hour or more drawing a simple little picture on the board. It should have taken five minutes, perhaps; but this line went wrong, and had to be redrawn, and then another line was wrong, and so on till the hour was gone, and the picture not a very great success even then. Now, let us all see how helpful we can be in overcoming this difficulty by constructing the simple drawing-machine which we will now describe. If careful attention be given to a few points, the home-made pantograph, as it is called, will do as good work as one costing five or even ten dollars.

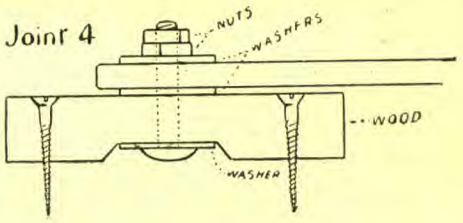


Joints 1 and 2

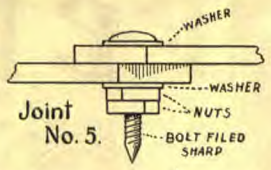


Joint No. 3.

Four bars of wood are needed for the frame. If you can get hard wood for the bars, that is the thing to do. You may make them large or small, but 36 x ½ x ⅜ inches is the commonly approved size where soft wood is used. Plane them smooth and square.

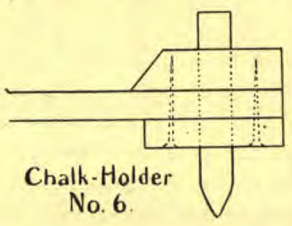


Bore holes in the bars an equal distance apart, two or three inches, and take special care to have them all in exactly their correct measured distance; don't guess at it; for as I told you in describing the small pantograph, the opposite bars must work parallel to each other, or the copy or enlargement will be a distortion. The bars will work parallel if the holes are made right.

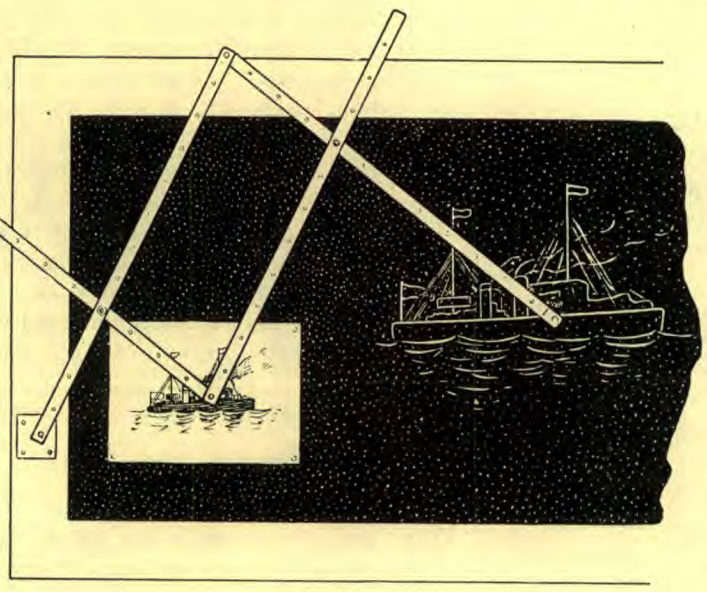


Joint No. 5.

I have illustrated the joints that you will need. They are so designed as to be easily made, and yet they work smooth and true, and wear well. Notice that the principal feature is a short bolt, and that two washers and two nuts are used on each bolt. One nut acts as a lock-nut, to keep the joint from loosening or tightening while in use. Simply screw the first nut down on the washer till the joint is tight enough, then screw the second nut down on the first tightly, to lock it, and keep it from turning.


Chalk-Holder No. 6.

Be sure to make the holes in the bars so that they *just fit* the bolts; for they must not be loose and wabbly.


How it is used

Joint 3 is so arranged that the smooth head of the bolt glides over the blackboard without catching and jerking. If it should leave a mark on the board, a small piece of cloth may be tied over the bolt head so that the cloth instead of the metal will rub.

Joint 4 is the support of the pantograph. We have made it stronger than we did in the little instrument, because here it has a greater strain upon it. The block of wood to which it fastens is screwed to the wall on one side of the blackboard; thus it folds to one side when not in use, and is in no wise in the way.

Joint 5 has a longer, sharpened bolt, called a tracer, because it traces the outline of the original picture. In drawing, the operator does not watch his chalk crayon at all, but leaves it to take care of itself while he gives the closest attention possible to the tracing point. The tracer can easily be made sharp with a file, but it should have a smooth point that will not tear.

The chalk holder is fully described by the diagram. Keep the chalk well sharpened with a knife. If it fits too loosely in the holder, wrap it with a strip of paper.

The cost of making the pantograph should not exceed ten or twenty cents, especially if the wood bars can be made from something you find at home. Four good, straight-grained laths have been successfully used as bars.


Not in use

How to Use a Pantograph

It is somewhat puzzling to a person unacquainted with the instrument to know how to use the pantograph, such as we have just described, for the purpose of copying or enlarging. I will therefore try to explain the difficult point.

Under the tracing point is tacked a picture to be copied. Your hand grasps the crayon or pencil, 6, and marks with it, while the eye watches carefully the motion of the tracing point. Don't watch the pencil, but keep the tracing point on the lines that are to be copied.

Suppose you wish to make a large picture from a small one; all that you need to do is to change joints 1 and 2. For instance, you use the four holes marked 7 on the diagram. Don't you see that will bring the point 5 nearer to 4, and at the same time put the pencil, 6, farther away, thus increasing the leverage, so that while the tracing point moves just a short distance, the pencil will move a long way, and of course make a long mark. Now, if you used the holes marked 8 for the joints, that would bring the tracing point and pencil quite close together, and the pencil would not move very much more than the point; and so there could not be much enlargement. Thus by using different sets of holes, different degrees of enlargement may be produced. Remember one thing always, and that is to *keep the opposite bars of the pantograph parallel.* I hope that many will find both pleasure and profit in the making and the using of the pantograph, for it certainly is a time- and labor-saving devise.

Edison Driver.

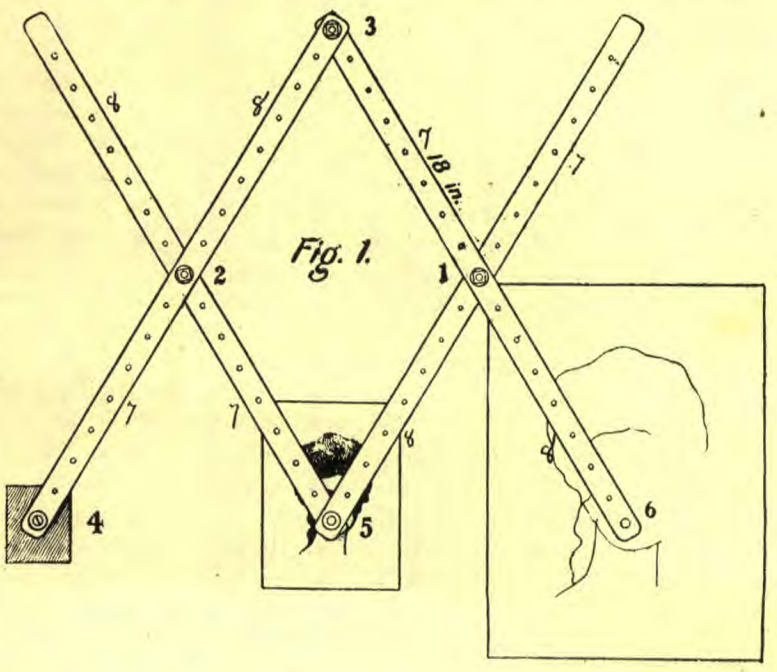


Fig. 1.

Good Rules for All

A CAP worn at rakish angle is no sure sign of a riotous disposition, but some persons think it is. The better way is to take no chances, and if one is willing to regulate his cap — and other things — by good authority, he may profitably heed these rules which the president of a New England railroad company has issued to his trainmen: —

Don't wear your cap on the back of your head.

Don't wear your cap askew.

Wear it firm and square on the top of your head.

Keep your shoes well polished.

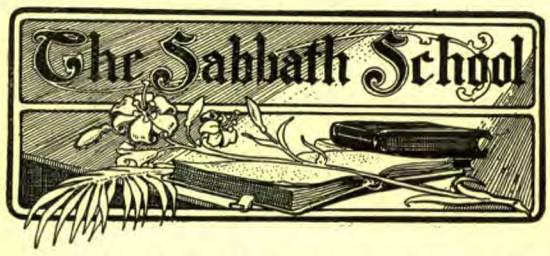
Wear a linen collar, and keep it clean.

Wear a dark necktie.

Crease your trousers.

Brush your clothes.

Wear a glad smile, and live up to it.— *Selected.*



INTERMEDIATE LESSON

V—The Baptism of Jesus

(April 29)

LESSON SCRIPTURES: Matthew 3; John 1: 19-34.

MEMORY VERSE: "Behold the Lamb of God, which taketh away the sin of the world!" John 1: 29.

"In those days came John the Baptist, preaching in the wilderness of Judea, and saying, Repent ye: for the kingdom of heaven is at hand. For this is he that was spoken of by the prophet Esaias, saying, The voice of one crying in the wilderness, Prepare ye the way of the Lord, make his paths straight. And the same John had his raiment of camel's hair, and a leathern girdle about his loins; and his meat was locusts and wild honey.

"Then went out to him Jerusalem, and all Judea, and all the region round about Jordan, and were baptized of him in Jordan confessing their sins. But when he saw many of the Pharisees and Sadducees come to his baptism, he said unto them, O generation of vipers, who hath warned you to flee from the wrath to come? Bring forth therefore fruits meet for repentance: and think not to say within yourselves, We have Abraham to our father: for I say unto you, that God is able of these stones to raise up children unto Abraham. And now also the ax is laid unto the root of the trees: therefore every tree which bringeth not forth good fruit is hewn down, and cast into the fire. I indeed baptize you with water unto repentance: but he that cometh after me is mightier than I, whose shoes I am not worthy to bear: he shall baptize you with the Holy Ghost, and with fire: whose fan is in his hand, and he will thoroughly purge his floor, and gather his wheat into the garner; but he will burn up the chaff with unquenchable fire.

"Then cometh Jesus from Galilee to Jordan unto John, to be baptized of him. But John forbade him, saying, I have need to be baptized of thee, and comest thou to me? And Jesus answering said unto him, Suffer it to be so now: for thus it becometh us to fulfil all righteousness. Then he suffered him.

"And Jesus, when he was baptized, went up straightway out of the water: and, lo, the heavens were opened unto him, and he saw the Spirit of God descending like a dove, and lighting upon him: and lo a voice from heaven, saying, This is my beloved Son, in whom I am well pleased."

"And this is the record of John, when the Jews sent priests and Levites from Jerusalem to ask him, Who art thou? And he confessed, and denied not; but confessed I am not the Christ. And they asked him, What then? Art thou Elias? And he saith, I am not. Art thou that prophet? And he answered, No. Then said they unto him, Who art thou? that we may give an answer to them that sent us. What sayest thou of thyself? He said, I am the voice of one crying in the wilderness, Make straight the way of the Lord, as said the Prophet Esaias. And they which were sent were of the Pharisees. . . .

"These things were done in Bethabara beyond Jordan, where John was baptizing.

"The next day John seeth Jesus coming unto him, and saith, Behold the Lamb of God, which taketh away the sin of the world. This is he of whom I said, After me cometh a man which is preferred before me: for he was before me. And I knew him not: but that he should be made manifest to Israel, therefore am I come baptizing with water. And John bare record, saying, I saw the Spirit descending from heaven like a dove, and it abode upon him. And I knew him not: but he that sent me to baptize with water, the same said unto me, Upon whom thou shalt see the Spirit descending, and remaining on him, the same is he which baptizeth with the Holy Ghost. And I saw, and bare record that this is the Son of God."

Questions

1. What was John's direct message to the people? What was he to do? What prophet had written of John? Repeat his words.

2. Where did John live? With what was he clothed? What was his food? Whom does God choose to do his greatest work? See James 2: 5; 1 Cor. 1: 26-28.

3. What did John ask the Pharisees and Sadducees? What did he urge them to do? What would it not be enough for them to say? What will be done to every tree that does not bring forth good fruit? What is meant by "fruits meet for repentance"?

4. How did John say he baptized the people? How did he speak of the one who would come after him? What great work would he do?

5. Who came to John to be baptized? What did John say to him? Tell how Jesus answered John.

6. When he had baptized Jesus, what did John see? What did he hear a voice from heaven saying?

7. After this who came to John? By whom were they sent? What questions did these men ask him? What did John tell them plainly that he was?

8. The next day whom did John see? What did he exclaim? Is He able to take away *your* sin? But what must all do who wish to have their sins taken away? 1 John 1: 9.

9. What did John now say to the people who were gathered about him? Had he known Jesus when he first saw him? What had he since seen? Why did this convince him that Jesus was the Christ? What positive testimony did John bear for Jesus? Verse 34.

V—Some Questions Considered

(April 29)

MEMORY VERSE: "Thy word is a lamp unto my feet, and a light unto my path." Ps. 119: 105.

NOTE.— From the scriptures studied in previous lessons, it is very clear that man is mortal. Being shut away from the tree of life, and alienated from the life of God, his only hope rests in the resurrection of the dead, and the gift of immortality when the Life-giver comes. This is the united testimony of the Bible. There are a few texts, however, which, to the casual student, may seem to conflict with the general tenor of inspiration. One lesson is devoted to a study of a few of these texts, that the complete harmony of the Word may be clearly seen.

Questions

1. Who appeared on the mount of transfiguration? Matt. 17: 1-9.

2. How had Elijah been taken into heaven? 2 Kings 2: 11.

3. What record do we have of the death of Moses? Who buried him? Deut. 34: 5, 6.

4. What had taken place in his case? — He had been resurrected. See Jude 9.

5. Instead of proving a conscious existence in death, what did the transfiguration represent? Note 1.

6. What request did the thief make of Jesus on the cross? When did he ask to be remembered? Luke 23: 42.

7. How did Jesus answer him? Verse 43.

8. Did Jesus ascend to paradise that day? John 20: 17.

9. When will he come in his kingdom? Matt. 25: 31.

10. When will his saints be gathered with him in his kingdom? Matt. 25: 31-34. Then when will the request of the thief be granted? Note 2.

11. What is said of the fire that will consume the wicked? Matt. 3: 12.

12. Must an unquenchable fire necessarily burn forever? Jer. 17: 27; note 3.

13. How did Jesus describe the punishment of the wicked? Matt. 25: 46; note 4.

14. What is the wages of sin? Rom. 6: 23.

15. For whom was the lake of fire originally prepared? Matt. 25: 41.

16. How will it be kindled? What effect will it have upon the wicked? Rev. 20: 9, 10.

Notes

1. Christ here appeared in his glory as King. Elijah, who was translated, appeared as a representative of those who will be translated into the kingdom at the coming of the Lord. Moses was resurrected, and appeared as a representative of all who will be raised from the dead at the appearing of Christ. The Saviour here gave in epitome a representation of his future eternal kingdom. 2 Peter 1: 16-18.

2. Jesus did not ascend to paradise on the day of his crucifixion. John 20: 17. There is no probability that the thief died that day, for Pilate marveled that Jesus was so soon dead, and the legs of the thieves were broken, for the purpose, evidently, that they might not escape when taken from the cross, which would have been unnecessary if they had been already dead. An error of the printers in punctuation which appears in the text, placing the comma before, instead of after, the word "to-day," is responsible for any apparent contradiction of other scriptures. Properly punctuated, the text would read as follows: "Verily I say unto thee to-day, Thou shalt be with me in paradise." See note 1 in *Lesson Pamphlet.*

3. It is not stated that the fire will burn to all eternity, but simply that it is "unquenchable," a term used to signify only destructive fire. Being kindled by Jehovah, no power can extinguish it. It will burn until that upon which it preys has been consumed.

4. The wicked truly will receive everlasting punishment. It will continue as long as the reward of the righteous. But the punishment is *death,* not eternal *torture.* We frequently speak of "capital punishment," meaning death. Their punishment will be the second death, a death from which there is no resurrection.

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YOU will be interested, I am sure, in Mr. Reed's excellent article in this number entitled "Feeding upon the Light."

I HOPE many are making a study of the articles on Germs; for they are worth more than an ordinary reading.

A MECHANICAL cotton-picker has been invented by Mr. George Lowry, of Albany, Georgia. Five men or boys are required for its operation; but it is claimed that it can do the work of twenty pickers.

THE five highest buildings in the world are the Eiffel Tower, Paris, 984 feet high; the Washington Monument, 555 feet; City Building, Philadelphia, 535 feet; Cathedral of Cologne, 511 feet; Cathedral at Strasburg, 466 feet.

THE Roosevelt Irrigation Dam to be constructed in Salt River Valley, Arizona, is to be one of the largest dams in the world. It will cost $1,100,000. In addition to overflowing about 350,000 acres of land, it will supply water-power for hundreds of places throughout the Territory.

THE war between Russia and Japan has already cost Russia, it is estimated, nearly a billion dollars, and five hundred thousand men. It has cost Japan also its millions of dollars and thousands of men. A stroke of a pen in St. Petersburg a year ago last January, and of another in Tokyo would have saved all these lives and treasures.

SAGHALIEN is an island off the eastern coast of Siberia, in the Sea of Okhotsk. Russia has used it since 1869 as a place for banished criminals. Among the people of Russia, it is called the Isle of the Lost, since no person sent to this island ever returns. As capital punishment is not a part of Russia's criminal code, many of the prisoners are murderers who have been sent there for life. All the servants of the officers are criminals.

THE desire to retain the good that is read, makes all who can not confidently rely upon memory, look about for some means of storing away knowledge that it may be available at some future time. Notes and cuttings therefore must be indexed and preserved. The methods resorted to for doing this are as various as are the individuals. One man conceived and utilized the idea of placing in the ceiling of his room a number of hooks, each of which supported, by a system of pulleys, a market basket. Whenever a clipping was secured or a note taken, the proper basket was lowered to receive the paper. It is to be hoped that the thoughts preserved were not as cumbersome as the method of preservation.

Listen to the Macedonian Calls

ELDER W. H. ANDERSON spoke recently at the Memorial church in Washington. Many hearts responded in a very practical way to his appeal for Africa, as the collection basket showed. Did not our missionary impressions evaporate so soon, more could be accomplished for the Lord. Brother Anderson's appeal was merely a statement of the *needs* of the people of that Dark Continent — the strongest kind of appeal to the Christian.

He spoke of the king of one country, who came out to them and pleaded for help. For *eleven years* this tribe has been holding out its hands to our denomination, begging for missionaries. Not one has yet been sent to them.

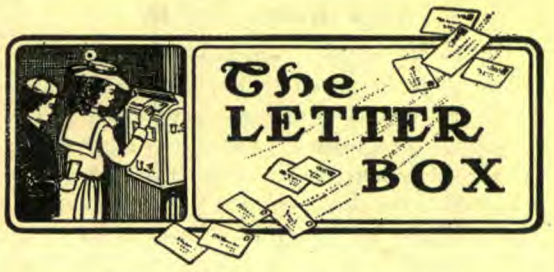
The king of another tribe went to England at the time of the coronation of King Edward. He was shown the magnificient navy of England, the armies in parade, the great manufacturing establishments, and the imposing government buildings — all with the idea of impressing him with the greatness of the British kingdom. On his return to Africa he was asked what in England impressed him the most, and what he then considered the greatest need of his own people? He replied to the first question that he was most impressed by the education of the English people. The pomp and show of armies and navies were unheeded; but the *education* given the children and youth had wonderfully appealed to him. He said, in answer to the second question, that his people were in most need of *missionaries*. There are none even yet to respond to this need.

At another place in South Africa about two years ago, the people urged Elder Anderson to stay with them; but he could not do so. Then they cried to him for other help, but there was none to send. Then came the pleading for leaflets or something whereby they could learn more of the truth. But at that time there was not a page of printed matter in their language. Now we have "Steps to Christ," "Christ Our Saviour," and some Bible readings to give to the people; but where are the teachers and preachers?

From still another place where Mrs. Rogers taught a school, there came a very urgent call for a teacher. They had the building, and were willing to pay a tuition, but Brother Anderson said that no one had yet been found with a burden for the salvation of these souls. Will not these calls be answered before the door of mercy has closed?

Brother Anderson has left the Matabela Mission, and is on his way to establish another about five hundred miles north of Buluwayo. The English government gave our people a grant of land consisting of three thousand acres. And recently another grant of five thousand acres has been received. This is good land, can be well watered, and so made very productive. Brother Anderson is taking with him to this mission one or two native workers from Buluwayo. One young man who is expected to go, was taken from that country near the Zambesi when he was a child. He was made a slave by a southern tribe. His mother told him, when dying, that he must remember his native land; and that when he grew up he must return there. Now he is exceedingly anxious to return and give the gospel to his own people. He understands and appreciates the truth, and can speak it with great power. He is a natural orator, has an excellent memory, and takes great interest in committing parts of the Bible.

Natal also is regarded as a very fruitful field of labor. The people are intelligent, and have been taught by missionaries of other denominations to have implicit confidence in God's Word. Men of discretion and consecration are needed to learn the language, and give this people the truth for this hour. Are there none to answer, "Here am I; send me"?



CUMBERLAND, BRITISH COLUMBIA,
Feb. 13, 1905.

DEAR EDITOR: The YOUTH'S INSTRUCTOR is given to me, and I like to read it very much. I live three miles from Cumberland. I go to public school. I am in the fourth reader. I will be thirteen years old in May. LIZZIE MILLER.

BARNESVILLE, MINN., Feb. 1, 1905.

DEAR EDITOR: I have just been reading the article entitled "Read, Young Men and Women." I will join in reading the five books during the year 1905. I am already reading the book entitled, "Explorations of Henry M. Stanley and David Livingstone in the Wilds of the Dark Continent." The others that I have chosen are "Christ's Object Lessons," "Heralds of the Morning," "Patriarchs and Prophets," and "Life of Joseph Bates." I think you have left one of the best books out; that is "Jack the Conqueror, or Overcoming Difficulties." I am nearly fourteen years of age. ANNE GRUNDSET.

ARIEL, PA., Feb. 1, 1905.

DEAR EDITOR: I thought I would write a letter for the INSTRUCTOR. I am a boy twelve years old. I go to church-school and to Sabbath-school. Mr. John K. Jones is my teacher in both schools; I like him very much. I like the INSTRUCTOR, and I like to read the Children's Page. I like to read the letters, also the missionary pieces.

Ariel is a summer resort, and in the summer a picnic excursion goes there nearly every day. There is a small lake with cottages nearly around it, and a nice drive part way around. I will close for this time. MORGAN R. FIELD.

BURDETT, KAN., Feb. 11, 1905.

DEAR EDITOR: I have been a reader of the INSTRUCTOR for a long time; I like to read the Children's Page. I am a Prairie State girl, and live on a farm with my father, mother, and four sisters, and one brother.

I go to public school, and am trying to get an education. We have Sabbath-school at our house, as we have no church. There are only five families represented in our Sabbath-school.

We have Young People's meeting every Sunday night five miles from here. My brother is the leader. I was fourteen years old the third of February.

I will close with best wishes to the YOUTH'S INSTRUCTOR and its readers. I hope to meet them all some day in the new earth.

I am your friend,
MARY A. SHAFER.

HOUSTON, TEX., Feb. 7, 1905.

DEAR EDITOR: I get the YOUTH'S INSTRUCTOR every week. I like to read it. I would like to see more letters in the Letter Box. I am eleven years old. I have a little brother six years old; his name is Coy. He has a little white dog with brown spots on it. Its name is Rover. I have a big black cat.

We have Sabbath-school in a hall. I go to church every Sabbath. My teacher's name is Mrs. Feeks. I like her very much. There are twelve in our class. We study our lessons out of the *Quarterly*.

I canvassed some in the summer; I sold four copies of "Best Stories from the Best Book," and two of "Gospel Primer," and twenty-nine of the special number of *The Signs of the Times*. I like to canvass for our papers and books. I joined the church two years ago. I went to a church-school three months. I was in the fourth grade. I wish I could go all the time. I study my lessons at home now.

I hope my letter is not too long to be published; for it is my first one. I hope to meet all the INSTRUCTOR readers in the new earth.

FAY FELTER.

"WHERE faith begins, anxiety ends;
Where anxiety begins, faith ends."