

THE YOUTH'S INSTRUCTOR

REMEMBER NOW THY CREATOR IN THE DAYS OF THY YOUTH

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NATURE'S WONDERS

Volcanoes

THE wonderful, oftentimes terrible and destructive, eruptions of smoke, fire, and lava from the bowels of the earth, which we call "volcanoes," are still a mystery as to their immediate causes. It is generally conceded that the greater portion of the earth is a molten mass, surrounded with a hardened crust from ten to forty miles in thickness. In this respect we might compare the earth to an apple, the crust corresponding to the skin of the apple.

The theory that the earth is a molten mass

other well, according to his theory, and could be utilized for industrial purposes.

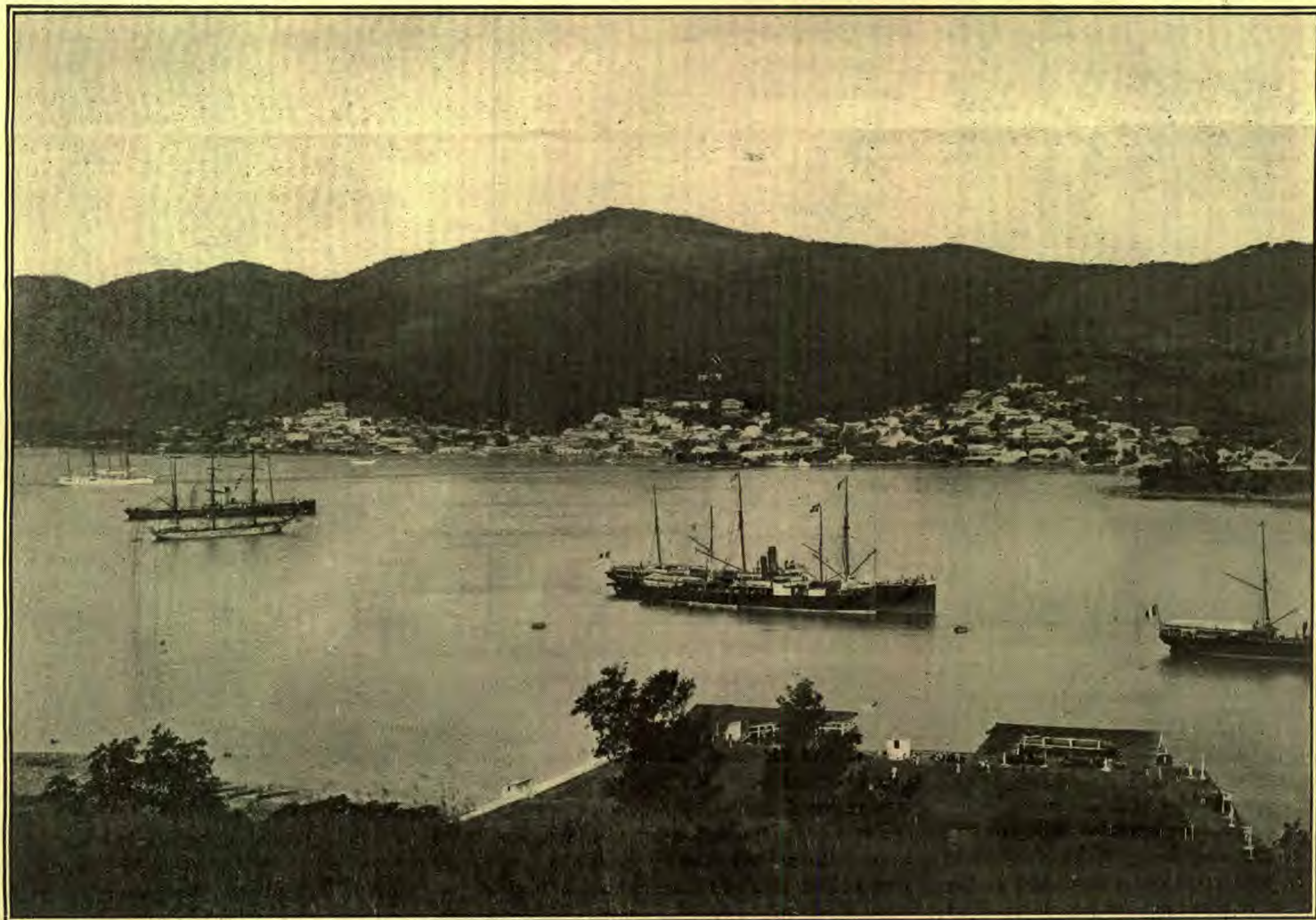
Some scientists suppose the internal heat is caused by chemical action on a vast scale, due to the action of water on certain elements in the earth's interior. Others suppose the heat is generated by friction and grinding, as the earth is gradually cooling, and that this grinding motion is severe enough in some places to generate a sufficient amount of heat to cause volcanoes.

Volcanic eruptions generally follow earthquakes, and this has given rise to another theory concerning the cause of volcanoes, which seems more probable. We know that earthquakes often cause fissures in the crust of the earth; and when these happen to be in the bottom of the ocean, large volumes of water rush down with tremendous force into the molten mass in the interior of the earth, and when they come in contact with this, the intense heat instantly converts the water into steam, causing, as we may well imagine, an

on the first-mentioned island been, that they exceed anything of the kind before described in this world's history, with perhaps one exception,—that of Krakatoa, on a small uninhabited island near Java in the East Indies. In almost an instant the town of St. Pierre, on Martinique, was overwhelmed on the morning of May 8 by a dense volume of suffocating gas, immediately followed by a cyclone of fire, ashes, and stones from Mt. Pelée. Spectators say that the destruction was complete in from three to ten minutes' time,—a city had been laid in charred ruins, and thirty thousand men, women, and children asphyxiated and burned to death.

An eye-witness gives the following graphic description of this terrible catastrophe:—

"I was in one of the fields of my estate when the ground trembled under my feet, not as it does when the earth quakes, but as if a terrible struggle was going on within the mountain. A terror came upon me, but I could not explain my fear.



THE THREE HILLS OF CHARLOTTE AMALIE, ST. THOMAS

inside is proved by the fact that in digging deep mines, the heat increases as the mine becomes deeper. One man has proposed to utilize this heat by boring two wells near each other to a depth of several thousand feet, and then uniting them at the bottom by an explosion of dynamite. By letting water run down one of these wells, it would be converted to steam by the heat at the bottom, and this steam would rush out of the

explosion on a scale utterly beyond the comprehension of man. The tremendous force thus so suddenly developed finds a vent-hole through some already existing volcano, or breaks through the weaker places in the crust of the earth.

We have already heard of or read about the late eruptions of the volcanoes on the islands of Martinique and St. Vincent. So terrible and destructive have the eruptions from Mt. Pelée

"As I stood still, Mt. Pelée seemed to shudder, and a moaning sound issued from its crater. It was quite dark, the sun being obscured by ashes and fine volcanic dust. The air was dead about me,—so dead that the floating dust seemingly was not disturbed.

"Then there was a rending, crashing, grinding noise, which I can only describe as sounding as if every bit of machinery in the world had sud-

it is fresh as the morning, and going forth in the strength of omnipotence to subdue the earth.

O, this mighty truth of God! Drop it into all soil; it will not be in vain. "By manifestation of the truth commending ourselves to every man's conscience in the sight of God." 2 Cor. 4:2. Thank God, too, all true-hearted service in the cause of Christ is closely linked with this divine truth. Like a sweet tone of music, it vibrates in harmony with divine purposes, and its melody will be prolonged forever.

This truth of God has elements fitted to vitalize heathen hearts, and animate them with spiritual life. Not only is it pure and elevating, just and holy, in all its requirements, but its effects on the human soul attest its divine origin. Shall we give our sympathies and prayers and means to carry this truth to every nation, and kindred, and tongue, and people?

O, if Christians but realized their privilege, if they considered what it is to give brightness to their crowns of rejoicing in the day of the Lord Jesus, who would not count it all joy to bear a part in efforts to win the perishing to Christ? Who would not pour out his money like water, and lay his choicest treasures, nay, even life itself, at the foot of the cross?

What a glorious work is ours!—to give effect to the yearnings of divine love; to be the organs and instruments of the redemptive purpose of God; to be associated with Christ in the salvation of the lost; to pluck men as brands from the burning, and to hold them aloft as torches for the progress of the King; to hasten the glad day of his second coming; to be his heralds and ambassadors! O, who would not, like the disciples of old, gladly "forsake all" to do this work which he has committed to our charge, and for which he holds us responsible?

JOSEPH S. JOHNSON.

I Don't Pinch the Baby

A FEW months ago I heard a simple story that revealed to me some of the things we mean when we say, "Christianity is a life, not a profession."

One of the international secretaries of the King's Daughters was walking along one of the streets of New York when she saw a little girl coming toward her wearing upon her breast one of the society's little silver crosses. The girl was poorly dressed, and it was evident that she belonged to the "slums."

The kind-hearted woman stopped the girl, and said, "My child, what is that you have on your dress?"

"The silver cross, ma'am," she answered; "I am a King's Daughter."

"You a King's Daughter! What do you know about being a daughter of the King?"

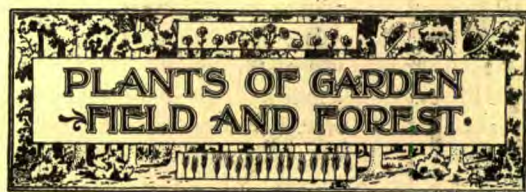
"Well," she replied, "I don't pinch the baby any more, anyway."

"You don't pinch the baby?" said my friend, getting a little closer. "What do you mean by that?"

"Why, up to the mission our teacher wanted us to be King's Daughters, and do good like the King wanted us to; and I joined the society. I mind the baby at home, and I don't pinch him any more, now. I play with him good."

This interesting testimony led my friend to get at the exact facts. It seems that this little girl used to "mind the baby" while her mother did washings. The baby was fretful; and in order to control it, this cruel-hearted sister had been in the habit of "pinching the baby." But at the mission she had learned about the love of Jesus, and had become a "King's Daughter." The only way she knew of to demonstrate her sincerity was by refraining from pinching the baby. Certainly the Christ-Spirit had changed her, and she was doing what she could.

Here is something of value for us all to imitate in daily life.—*Christian Endeavor World*.



The Quest

THERE once was a restless boy
Who dwelt in a home by the sea,
Where the water danced for joy,
And the wind was glad and free;
But he said, "Good mother, O! let me go;
For the dullest place in the world, I know,
Is this little brown house,
This old brown house,
Under the apple-tree.

"I will travel east and west;
The loveliest homes I'll see;
And when I have found the best,
Dear mother, I'll come for thee.
I'll come for thee in a year and a day,
And joyfully then we'll haste away
From this little brown house,
This old brown house,
Under the apple-tree."

So he traveled here and there,
But never content was he,
Though he saw in lands most fair
The costliest homes there be.
He something missed from the sea or sky,
Till he turned again, with a wistful sigh,
To the little brown house,
The old brown house,
Under the apple-tree.

Then the mother saw and smiled,
While her heart grew glad and free.
"Hast thou chosen a home, my child?
Ah, where shall we dwell?" quoth she.
And he said, "Sweet mother, from east to west,
The loveliest home, and the dearest and best,
Is a little brown house,
An old brown house,
Under an apple-tree."

—Eudora S. Bumstead.

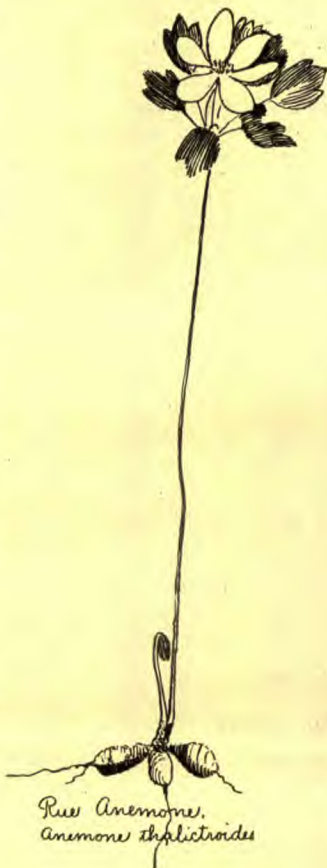
Anemonella Thalictroides

Rue Anemone

Description.—Corolla absent; sepals five to ten, white or pale-purple; flowers several, forming an umbel, surrounded by an involucre of two ternate leaves; stem six to eight inches high. All the leaves are radical except those forming the involucre, and biternate or triternate, with the leaflets roundish, and three-lobed at the end. Roots clustered and very fleshy.

The umbel is quite a common form of flower cluster. The flowers are all borne on separate pedicels, which spring apparently from the same point at the tip of the peduncle, and diverge more or less so as to resemble the rays of an inverted umbrella. It is this resemblance that has given the name "umbel" to this form of inflorescence.

The involucre of the Rue Anemone is apparently formed of simple leaves, usually six in number; but if carefully examined, it will be found that they are united near the stem into two sets of three



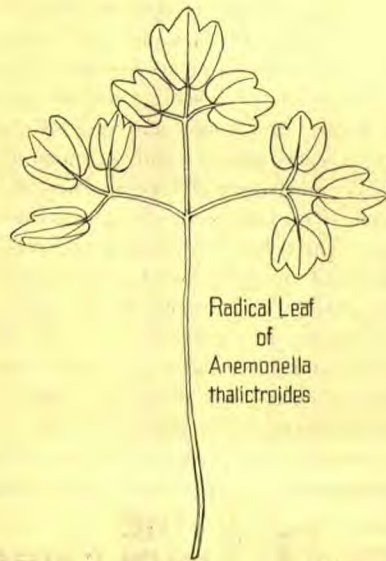
Rue Anemone.
Anemonella thalictroides

each, or a third set may be found present in some cases.

As stated in one of our previous studies, a ternate leaf is a compound leaf consisting of three leaflets. If each of these three leaflets is divided into three other leaflets, the leaf is biternate, or twice ternately compound. If the same division again takes place, the leaf is triternate, or thrice ternately compound.

It should be noted that the expression "ternately divided" is used with reference to divided simple leaves, as explained under the heading "Anemone Patens," while the expressions "biternate," "triternate," or "ternately compound," are used with reference to compound leaves.

The Rue Anemone is a delicate plant of early spring, blossoming in April and May. It grows in the woods, and seems to prefer the neighbor-



Radical Leaf
of
*Anemonella
thalictroides*

hood of the spreading roots of old trees. In appearance it quite closely resembles *anemone nemorosa*, or wood-anemone, but is easily distinguished by the fact that the flowers are borne in clusters instead of singly.

Anemonella is the diminutive form of *anemone*, and *thalictroides* means resembling *thalictrum*, or meadow-rue. Of the latter there are several species. Some are large plants ten or eleven feet high, while others are only a foot or two in height. They have small, greenish-white flowers, and leaves which are three or four times ternately compound. The leaflets bear a striking resemblance to those of the rue anemone.

It will thus be seen that *anemonella thalictroides* has been well named, meaning, literally, a little *anemone* resembling *thalictrum*, or meadow-rue.

B. E. CRAWFORD.

The Difficulty of a Front Lawn

DURING most of my life I have lived in the beautiful blue-grass region that stretches from the Blue Grass State of Kentucky up into Ohio. Until I moved to Massachusetts, I never knew how to appreciate grass. But now—O, the lovely blue-grass country! O, the long, delicate blades, so thickly set together, so fresh, so luxuriant, so dependable!

For now I live on a gravel bank in rock-ribbed New England. The lady from whose husband I bought the house told me before I bought it, that it would be much easier and cheaper to carpet the front yard with Turkish rugs than try to grow grass there.

Year after year the grass has degenerated. My front lawn is now a botanical museum, with samples of almost every plant except the proper grass, though there is wire-grass in vicious abundance. But daisies and dandelions, buttercups and wild strawberries, and especially moss, have made it their own. I asked a professional the other day to look over those few square feet, and estimate the cost of transforming them into smooth green turf, and he figured it at two hundred dollars. I must dig up the gravel to the

hard-pan, I must cart in some hundred loads of good loam. I must sow clean grass seed of a good variety. I must weed. I must cut. I must water. I must roll. I must enrich the soil to replace what the millions of little roots take from it. And if I do all this, and keep doing all this, I shall get and keep a good lawn. Not otherwise.

It is a parable, is it not? of what is happening all around us in numberless lives. What is the age at which the boys and girls drop out of our Sabbath-schools, and fall away from the influences of Christian homes? Whatever the age, it is when they are left alone, just as for the past few years I have been leaving my front yard alone, expecting it to run itself, like a blue-grass lawn in Ohio. The church has lost its grip on them. So has their Sabbath-school teacher. So has their pastor. So have their father and mother. The good soil is washed away by the cold rains. Good grass changes to wire-grass. The seeds of a thousand weeds find lodgment. Before long there is nothing but an unsightly expanse of dirt and stones and ragged plants—wild oats in very sooth. And we must tear up the soil. We must entirely reconstruct the lawn. At the cost of no one knows how many revivals, how many heartaches, how much pleading, how many agonized prayers, how many failures and tears, we must try to make these poor barren lives over again into gardens of the Lord.

And it would have been so much better to have kept on caring for them all along.—*Caleb Cobweb, in Christian Endeavor World.*



I Will Trust in Thee

MAN is born to trouble as the sparks fly up,
And in all earthly comfort it were vain to hope;
Yet there's one sure Helper in adversity,
"What time I am afraid, I will trust in thee."

Though all comforts shall flee, and afflictions
come,
Though my loved ones are laid in their long,
long home,—
If the everlasting arms be under me,
"What time I am afraid, I will trust in thee."

When my life is spent, and my strength doth fail,
And I walk through the shadows of death's dark
vale,
Thy rod and thy staff, they shall comfort me:
"What time I am afraid, I will trust in thee."

And when by Jordan's brink at last I stand,
If thou abide with me, and hold my hand,
I'll say, though all thy billows go over me,
"What time I am afraid, I will trust in thee."

ELIZABETH ROSSER.

A Chapter from the Life of a Wood-Duck

As the sun began to warm everything into new life after the winter's sleep, before the snow was gone, or even all the ice had broken up in the river, a steady procession of wild fowl began to move northward. The timber along the Skunk River had not then been cut down to any extent; therefore the ponds were full of water, and rushes and sedges grew in abundance. Snails and water-bugs abounded among the watercress, and even wild rice could be found in some places. There were shocks of corn still in the field, and acorns were abundant. Flock after flock of ducks passed over day and night, while every few moments could be heard the hoarse honk! honk! honk! of the wild geese as they steered their course to the nesting-grounds of northern Iowa and Minnesota. Now they must travel another thousand miles.

Of this never-ending procession it was no wonder that thousands stopped to feed and rest a while in the bottoms of the Skunk.

The Black Hawk mill had stood for years on the banks of this river, and ground feed for the neighborhood. Below its dam, where the water eddied, was a great deal of wheat and corn, washed there from the mill sweepings. Here came a flock of wood-ducks for their daily meal; and as other and larger varieties were in abundance, they were not disturbed.

On the bank opposite the mill stood a tree whose top had been broken by the wind. In this snag two of these ducks decided to rear their brood, instead of going farther northward. So they brought a little dried grass, plucked a few feathers from their own breasts, and made a nest. Here the mother laid a whole nestful of eggs.

By this time the other ducks had either gone on to the north, or chosen homes of their own, so this pair was left alone. From the house on the hill above the mill it was interesting to watch them. Every morning the mother duck would leave her nest, and fly quacking to the mill-pond, there to join her mate, and eat her breakfast. Then he was on the alert for anything to disturb the nest. If a hawk dared to come near, he would meet it in the air, and drive it far away. Things were progressing nicely, and the mother duck felt herself secure in leaving her nest at will, sure that it would be protected; but one day her mate disappeared. Whether he was shot, or caught by a hawk, or eaten by some wild beast, I never knew; but he was gone.

Now she was more cautious; and as the time for her eggs to hatch approached, she hardly left the nest. Finally twelve little ducklings climbed out of twelve eggshells, and in baby-duck language called her "mother," and began clamoring for a good swim and something to eat. How to manage this was a problem. The water had fallen until it was a considerable distance to a desirable swimming place, and her babies could never walk there, even if she had them on the ground. If only her mate were there!

But something must be done at once. Her children had already been in the nest a day and a half; they must have a good feed before night, and it was now noon. So she flew out over the water, and selected a place that was comparatively still, yet deep enough to be out of danger of turtles,—the most dreaded foe of the mother duck; for they come unseen, and darting up from beneath, pull the helpless duckling under the water before he is aware of his danger. After taking a cautious survey of the situation, to be sure no hawk was in sight, she went to her nest; and grasping a duckling in her bill, by the back of the neck, flew out over the river, and dropped it into the water. She returned to her nest again and again until the twelve were in the place selected. As the ducklings splashed into the water, they huddled up into a little bunch, and swam round and round.

A hawk drew near, and his presence gave the mother considerable alarm, but just then her worst enemy, a man, stepped out on the mill porch, and the hawk withdrew. For once the duck was thankful to see a man. Nevertheless she feared that same man more than any other danger, so she hastened as fast as possible to get her last baby on the water. Then she alighted also, and together the little family paddled away down the river, and into the rushes around the bend. Here, where food was plenty, they joined the family of a widowed neighbor, and were safe.

FLOYD BRALLIAR.

Our Share

SOME one has recently written a paper on "What Our Homes Do for Us." It might be well for many of us to turn the subject about, and inquire what we do for our homes. Have

you ever thought to ask that question, you younger members of the household?

Home is a place to go when school is over; a place in which to study, eat, and sleep; a place to run into for repairs of torn garments and wounded feelings, where one can be sure of sympathy, appreciation, and comfort generally; a place to invite friends to talk over one's plans or spend the night. It is the most desirable place on earth when one is sick, tired, or discouraged. Somebody's love and work bring in money to provide all its comforts and conveniences. Somebody's work and loving thought expend, arrange, foresee, and keep all the countless wheels moving.

All this, and a hundred times more, your home is to you, and has been for years. What are you doing in return? You turn to it for rest and cheer, but are you doing your part toward making it restful and cheerful for others? Do you bring your portion of brightness to the table and the hearth? Have you learned to leave your moods and your selfishness with your umbrella and your overshoes in the hall? Are you ready to give others the quick sympathy and encouraging word that mean so much to you? Think about it.—*Well Spring.*

Wonderful Lenses

ONE day, a group of college students, visiting the unassuming shops in which lenses are made, stood, half carelessly, before a huge lens, forty inches in diameter and nearly an inch thick. The maker pointed to it with pride, but cautioned his visitors not to touch it.

"How long did it take the glass works to make this disc ready for polishing? Six months?" A student asked the question as if he himself was giving the information.

"It took four years," said the telescope-maker, quietly. "The workmen failed many times before they succeeded."

The boys uttered an exclamation of surprise and incredulity.

"And how long will it take to polish it?" asked another.

"Two years. This forty-inch lens has a fifty-foot focus; that is, it must catch the rays of a star upon every point of its surface, and refract them to a common point exactly fifty feet away. If one ray falls but the breadth of a hair from that focal point, the glass is defective."

"But how can you do it?" asked one of the group, sobered by the thought of such a problem.

"With patience and without machinery," replied the lens-maker. "It is all done with the trained eye and a deft hand. A dab of beeswax here, a bit of rouge there, or the pressure of the thumb on the defective spot—that is all."

"Thumb!" exclaimed the thoughtful student. "Can you wear that flinty glass down with the bare thumb?"

The maker of the lenses, seeing that this student was the one in twelve,—the earnest boy, the real seeker after truth,—took him into another room, and, walking up to a table, showed him a lens that had been laid aside because it was imperfect. Then the master gave the tempered glass a few sharp rubs with the thick of his thumb.

"If that had been a perfect lens," he said, with an authoritative smile, "those rubs would have changed its shape enough to ruin it, perhaps beyond remedy."

A recent writer, telling this incident, says: "We find the heart of the telescope and the heart of man have many ways in common. It takes years of toil and patience to perfect either. Which needs the finer polishing—the lens or the soul? The one is made to reflect the stars; the other, God himself."—*Young People's Weekly.*

CHILDREN'S PAGE

A Gentlemanly Boy

A GENTLE boy, a manly boy,
Is the boy I love to see;
An honest boy, an upright boy,
Is the boy of boys for me.

The gentle boy guards well his lips,
Lest words that fall may grieve;
The manly boy will never stoop
To meanness, nor deceive.

An honest boy clings to the right
Through seasons foul and fair;
An upright boy will faithful be
When trusted anywhere.

The gentle boy, the manly boy,
Upright and honest, too,
Will always find a host of friends
Among the good and true.

He reaps reward in doing good,
Finds joy in giving joy,
And earns the right to bear the name —
"A gentlemanly boy."

— H. L. Charles.

A Sad Sight

Not long ago, while passing a farmhouse on a cross-road running in the rear of the buildings, I saw a sad sight. A mother and twelve-year-old boy were carrying something in a large basket to the farther end of the orchard. It was very still, and I could hear all the boy said, and see his actions. The mother was talking in a low tone, but the rude lad's replies were plainly heard: "I shan't;" "You bring it in yourself;" "I won't;" were some of the shameful words that fell from his lips. When the two had reached the place for emptying the basket, he jerked it from his mother's hand, and threw it upon the ground, at the time uttering the expressions mentioned and others of like nature.

I passed on, yet the picture of that scene lingered. What a pity that a home should thus be despoiled, and its comfort and peace destroyed.

Young reader, may there never be recorded by your angel such unkind words spoken to your mother as this boy uttered to his. When you think no one hears, do not forget that God hears. The mother who watches over you, and lovingly spends her life in caring for you, should never hear from your lips an unkind word. It may not be too late to repair her broken spirit if it has thus been grieved. Christ has power for you to overcome this great evil if it has taken root in your nature.

As you are in your home, so are you regarded in heaven. If your presence in the home brings comfort and peace, you may safely be introduced into the heavenly home on high. Never think it "smart" to injure the feelings of your mother. Truly honor her. You can never pay the debt of kindness due her. Though you may have the advantage of a better education, it is very likely she will always know many things in advance of you. God marks well how children treat their parents. The command to honor father and mother is the only commandment containing a promise for eternal life.

T. E. BOWEN.

The Missionary Potato

It wasn't a very large church, and it wasn't nicely furnished. No carpet on the floor, no frescoing on the walls; just a plain, square, bare, frame building, in southern Illinois. To this church came James and Stephen Holt every Sunday of their lives.

On this particular Sunday they stood together

over by the square box-stove, waiting for Sunday-school to begin, and talking about the missionary collection that was to be taken up. It was something new for the poor church; they were used to having collections taken up for them. However, they were coming up in the world, and wanted to begin to give. Not a cent had the Holt boys to give.

"Pennies are as scarce at our house as hens' teeth," said Stephen, showing a row of white, even teeth as he spoke. James looked doleful. It was hard on them, he thought, to be the only ones in the class who had nothing to give. He looked grimly around on the old church. What should he spy, lying in one corner of a seat, but a potato.

"How in the world did that potato get to

"That's an idea!" he said, eagerly. "Let's do it!"

James expected to see a roguish look on his face, but his eyes and mouth said: "I'm in earnest!"

"Really?" asked James.

"Yes, really."

"How? Split it in two, and each put half on the plate?"

"No," said Stephen, laughing; "we can't get it ready to give to-day, I guess; but suppose we carry it home, and plant it in the nicest spot we can find, and take extra care of it, and give every potato it raises to the missionary cause? There'll be another chance; this isn't the only collection the church will ever take up, and we can sell the potatoes to somebody. Shall we?"



JUNE DAYS

church?" he said, nodding his head toward it. "Somebody must have dropped it that day we brought things here for the poor folks. I say, Steenie, we might give that potato. I suppose it belongs to us as much as to anybody." Stephen turned and looked thoughtfully at the potato.

Full of this new plan, the boys went into the class looking less sober than before; and though their faces were rather red when the box was passed to them, and they had to shake their heads, they thought of the potato, looked at each other, and laughed.

Somebody must have whispered to the earth and the dew and the sunshine about that potato. You never saw anything grow like it! "Beats all," said Farmer Holt, who was let into the secret. "If I had a twenty-acre lot that would grow potatoes in that fashion, I should make my fortune."

When harvesting came, would you believe that there were forty-one good, sound, splendid potatoes in that hill? Another thing: while the boys were picking them up, they talked over the grand mass meeting for missions that was to be held in the church next Thursday,—an all-day meeting. The little church had had a taste of the joy of giving, and was prospering as she had not before. Now there was a big meeting, to which speakers from Chicago were coming. James and Stephen had their plans made. They washed the forty-one potatoes carefully; then they wrote out, in their best hand, these sentences forty-one times:—

"This is a missionary potato; its price is ten cents; it is from the best stock known. It will be sold only to one who is willing to take a pledge that he will plant it in the spring, and give every one of its children to the missions. Signed, James and Stephen Holt." Each shining potato had one of these slips smoothly pasted to its plump side.

Didn't those potatoes sell, though! By three o'clock on Thursday afternoon not one was left, though a gentleman from Chicago offered to give a gold dollar for one of them. Just imagine, if you can, the pleasure with which James and Stephen Holt each put two dollars and five cents into the collection that afternoon. I'm sure I can't describe it to you. But I can assure you of one thing: They each have a missionary garden, and it thrives.—*The Pansy.*

"Thank You"

EVERYBODY likes little Carl Rosenbloom, he is so cunning and small and fat. He has lived in America just a little while, and he can speak only two English words. It sounds so funny to hear him say, "Thank you," to whatever is said to him that no one can help smiling.

One day Carl was trudging along with a basket of clothes. He was a droll little figure, with his chubby legs and round, fat arms.

Some boys playing marbles on the pavement were quite amused at this comical sight, and they began to laugh and shout, "Sausage bags!"

Now, Carl did not understand a word, but he saw they were speaking to him, so he turned his dear little face to them with the sweetest of smiles, and said, "Thank you."

You should have seen how ashamed the naughty boys looked then! One of them smiled and nodded at little Carl, another gave him a nice red apple, while another took his big basket, and carried it for him.

So the good-natured little fellow trotted off, thinking what kind boys they were, and what a pleasant world this is to live in. And perhaps we should all think so, too, if our tempers were as sweet as his.—*Sunday Afternoon.*

Two Workers

CARE-NOT saw the days go by,
Watched the little minutes fly,
Heard the message of the clock
With its hurrying tick-tock;
And when others' work was done,
All at once the set of sun
Found him only half-way through
With the work he had to do.

Busy, bright No-time-to-waste
Did not see the moments haste;
Gave himself so much to do,
Keeping useful all day through,
That before he knew it quite,
Day had hastened out of sight.
But *we* knew at set of sun
All his work was nicely done.

—*Frank Walcott Hutt, in S. S. Advocate.*

Braiding and Weaving Horse Hair

The Link Chain

THE link chain, though very simple, is neat and serviceable; and if any of the boys of the INSTRUCTOR family wish to make a watch-chain for their own use, I would advise them to try this one.

Make the braids of alternate black and white strands. Each strand should contain about eight hairs. That is rather indefinite so far as it affects the size of the braid; for horsehair varies not a little in size. But eight hairs of the average size will make the strands about right. The finished links, one of which is shown in Fig. 10, should measure about an inch and three fourths in length. To make them, a braid four inches long will be required, as the ends must be slightly overlapped in the middle of the link. A long braid



Fig 10.

may be cut into the required lengths, but you must remember to tie the braid on each side of the place where it is to be cut, to prevent the strands from unbraid-ing. No special directions for making this chain will be needed, as each link is made like the illustration, and they are linked together like any other chain. An extra link may be added for a charm, and it may be attached to the watch by springing the ring of the latter, or by putting a loop like that shown in Fig. 9 a few weeks ago on one end of the chain. The other end may be slipped over the vest button.

The Heart-Shaped Fob

This attractive little ornament is simple in appearance, but somewhat complicated when you come to put it together. Fig. 11 shows the fob completed, but if no charm is to be worn on it, another heart might be added without making it too long, and the link at the end could be replaced with such a loop as that shown in Fig. 9.

To make the heart itself, a braid five inches in length is used. This is doubled, and the ends are sewed together. Now take another



Fig 11.

piece of braid of the same size, but only an inch long, to make the loop upon which the second heart is hung. Pass this short piece through the loop made with the long braid, and sew the ends even with the ends of the latter, as shown in Fig. 12. Next cover the ends, where they have been sewed together, with needlework. Now take the braid that makes the long loop, and twist it half-way around, so as



Fig 12.

to bring the side that was on the inside of the loop to the outside. This will bring the small loop to the outside, as shown in Fig. 13. All that is now necessary to finish the heart is to bring the braid together at the point marked *a* in Fig. 11, and fasten it there with a narrow ring of needlework. The other heart, or hearts, as the case may be, are made in a similar manner; but before sewing the ends of the long braid together, it is passed through the small loop below the first heart. A charm may be attached to the small loop below the last heart.

In braiding hair for this purpose you must be careful not to let the braid become twisted, or the hearts will not "shape;" and if they are not true when they are first made, no amount of coaxing and twisting will make them so.

J. EDGAR ROSS.



Fig 13.



THE INTERMEDIATE LESSON

XIII—Review

(June 28)

READ carefully the first three chapters of the book of Genesis.

Jesus Christ is the Beginning of the creation of God, the Word that in the beginning created the heavens and the earth and all things therein.

He worked by the Holy Spirit, which moved upon the empty, shapeless world, and brought forth everything perfect and beautiful, according to his word.

The first day Jesus commanded the light to shine out of the darkness, and made the day and night. So he is the Light of the world.

The second day he breathed between the waters, and divided them, and spread out the firmament as a tent for his creatures to dwell in. "In him we live, and move, and have our being."

The third day he gathered the waters together, making the seas and the dry land. His word is still holding the seas in the place he founded for them, and gathering the waters of the earth into them. On their way they refresh the dry land, and give drink to all creatures. Jesus is the Fountain of living waters.

On the third day also he sent his word into the earth, and from this living Seed the grass, plants, and trees sprang up all over the earth. These he made not only to beautify the earth, but also to be the storehouses through which he could give food to man and bird and beast. Jesus is the Bread of life, and all things live by the word that proceeds out of his mouth.

The fourth day God made the sun, moon, and stars, to be the bearers of his light to this world—to rule the day and night, the months and seasons. These are still preaching the gospel to the ends of the earth, declaring the good tidings that Jesus upholds and guides all things by his power and wisdom.

The fifth day God caused the waters to swarm with life. He made the fish and all that is in the seas, and also the birds that fly in the air. Jesus is the everlasting Father of everything that has life.

The sixth day he made the beasts, the cattle, and every creeping thing; and, as his noblest, crowning work, he made man in his own image, to be the king of the earth, and to rule everything in it. He put him in the beautiful garden of Eden,—the "garden of delight,"—to dress it and to keep it. The only thing man was forbidden to touch was the tree of knowledge of good and evil. His life depended on his obedience to God's word.

The seventh day is the Sabbath of the Lord; for in it God rested from all his work. He blessed the seventh day, and hallowed it. It was

the seal of creation, showing that everything was perfect, and that it would remain so as long as man obeyed the law of God. Since sin came into the world, the Sabbath, "a delight," still brings to those who keep it holy the joy of Eden. It is the seal of God upon them, his pledge that he will bring back to that lost paradise, to live there forever, all those who obey him by faith in Jesus.

The devil, who is the enemy of God and the father of lies, took the form of a serpent, and tempted man to disobey God. Adam and Eve ate the fruit of the forbidden tree, and brought death into the world. The earth became the kingdom of Satan, by whom they were overcome.

But God promised that his own Son, Jesus, who made all things, should come as the Seed of the woman, and destroy the serpent, that man and his kingdom might be delivered and made new again. It is through the cross of Jesus, because he who is stronger than death and Satan has taken the curse upon himself, that the earth still remains, and we have life to-day.

"In the cross of Christ I glory,
Towering o'er the wrecks of time;
All the light of sacred story
Gathers round its head sublime."

Questions

1. Who is the Beginning of the creation of God? What did he create in the beginning? By what means did he do all his work? Where did the Spirit move?
2. What was the work of the first day? Who is the true Light of the world?
3. What did God do on the second day? What is the firmament that he spread out? Where do we live?
4. What two things were made on the third day? Where do all the waters come from? How did God beautify the dry land? Were the plants made only for beauty? For what other purpose were they created? What is the seed of every living thing? Then by what are we all fed?
5. Tell of the work of the fourth day. What do these light-bearers rule? What do they all declare?
6. What was made on the fifth day?
7. What did God bring from the earth on the sixth day?
8. What keeps the flowers, the trees, the birds, fish, and animals from dying out?
9. What was the crowning work of God? Where did God place man? What was he forbidden to do? What depended on his obedience?
10. What did God do on the seventh day? What did this make the seventh day? What did the Sabbath show? Of what is it the pledge?
11. Did Adam and Eve obey God? Why did they disobey? Who was it that tempted them in the form of a serpent? What did the earth become when they sinned?
12. How did Adam and Eve know that the serpent would be destroyed?
13. Who is the promised Seed of the woman? How did he overcome Satan?
14. What has he thus done for us?

troubles so pressed upon him that he forgot them for a moment, and probably he was tempted to think that his death would end the merciful covenant of the Lord. But in his heart he knew that his "flesh would rest in hope" (Ps. 16:10), — in the hope of the One who was not to be left in hell, and whose flesh was not to see corruption. This One is Christ, the seed of David (Acts 2:30); and according to the "sure mercies of David" was he raised from the dead now no more to see corruption. Acts 13:34.

Christ was also raised from the dead according to the gospel (2 Tim. 2:8); therefore these "mercies" and the gospel must be one and the same thing. When David saw that they were "sure," he sang over and over again, "For his mercy endureth forever, for his mercy endureth forever." Psalm 136.

The "sure mercies of David" are God's everlasting covenant. Isa. 55:3. This covenant is not made for David alone; it is for every one that thirsteth. Verse 1. "Incline your ear, and come unto me: hear, and your soul shall live; and I will make an everlasting covenant with you, even the sure mercies of David." What this covenant is can be seen from Jeremiah 31 and Hebrews 8. It involves the writing of the law upon the heart and the corresponding forgiveness of sin.

When David prayed that his house might continue forever (2 Sam. 7:29), he recognized that only the Lord's blessing could bring this about. He describes this blessing in Psalm 32:1, 2, — "the blessedness of a man unto whom God imputeth righteousness." Rom. 4:6. From Prov. 12:7 we find out that "the house of the righteous shall stand." So when David asked the Lord for the blessing of righteousness, he asked for the very thing that would make his house endure forever.

David saw that the scepter of God's throne is a righteous scepter (Ps. 45:6), and therefore if David's throne was to be the Lord's, it must be established in righteousness. Ps. 97:2. It was this for which he prayed.

Of Christ it was said, "And the Lord God shall give unto him the throne of his father David." Luke 1:32. The Son of God became the Son of man to occupy David's throne as David's son. Thus David's house became the Lord's house, and divinity became united with humanity. We may all share in these sure mercies by becoming a spiritual house, too, as well as David. 1 Peter 2:4, 5.

Questions

1. In what psalm has David written for us his experience concerning the Lord's covenant with him?
2. How many times does he repeat the covenant in this psalm?
3. What trials was David having when he wrote this psalm?
4. In despair what cry does David send up to the Lord?
5. What had made David forget these "mercies"?
6. Even though he *should* die, yet what hope could make his heart glad?
7. When was that hope fulfilled? and who was the fulfillment of it?
8. Upon what basis does Paul show that Christ is risen from the dead in Acts 13?
9. What shows that these "mercies" are the same as the gospel?
10. When David saw this truth, what did he do?
11. What does Isaiah say that the "sure mercies of David" are?
12. With whom will God make this covenant?
13. What does this covenant involve?
14. When David prayed that his house continue forever, for what blessing did he ask?
15. What did he recognize that this blessing would do for him?
16. What kind of scepter did he know God's scepter to be?
17. What, therefore, prompted him to pray for the blessing of righteousness?
18. How did David's house become the Lord's house?
19. How may we also share the "sure mercies" of God's covenant with David? Read Acts 15:16, 17, in connection with 1 Peter 2:4, 5. Note that the house of David is to be built up again, and that the Gentiles are to share in this work. Will you share it also?

If good people would but make their goodness agreeable, and smile instead of frowning in their virtue, how many would they win to the good cause! — *James Ussher.*

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THE YOUTH'S LESSON

XIII—The Sure Mercies of David

(June 28)

MEMORY VERSE: "After this I will return, and will build again the tabernacle of David, which is fallen down; and I will build again the ruins thereof, and I will set it up: that the residue of men might seek after the Lord." Acts 15:16, 17.

Synopsis

In the eighty-ninth psalm David has written for us (verse 1) just what he understood by the covenant which the Lord made with him. Three times he repeats it that the Lord had taken his oath that his seed should be established forever, and his throne to all generations. Verses 4, 29, 36. This psalm was written during one of David's bitter experiences, when it seemed as if the covenant which God had made with him was not going to hold. Verse 39. His crown had been cast to the ground, he was a reproach to his neighbors (verse 41), he had been defeated in battle (verse 41), yea, even his throne had been cast to the ground (verse 44), and evidently his time was very short. Verse 47.

Then with earnestness David cries to the Lord, saying, "Where are thy former mercies, which thou swearest unto David in thy faithfulness?" Verse 49, R. V. David began singing of these mercies at the opening of the psalm; but his



The Kangaroo

This strange animal is so different from the animals of the northern world, and, indeed, any part of the world, with the exception of New Guinea, Tasmania, and a few other islands of Australasia, that it is an interesting subject for study. It is given the name "marsupial," meaning "pouched," from the pouch, or bag, in which the mother kangaroo carries her young, after they are born, until they are able to care for themselves.

Nearly all animals are born in a high state of development, compared with the marsupial division of natural history. Many a farmer's boy has seen young lambs three or four days old trying to play. Colts and calves run about when very young, but kangaroos and other marsupials are born at an early stage of development, and in an imperfect and helpless condition. When born, the young are only about an inch long, are blind, naked, and unable even to help themselves to the food which nature supplies for them. The mother immediately puts the little kangaroo into the pouch, or cradle, which she carries in front of her, and this is his home for many months. The young one grows fast, and after a time he looks out into the world; when he becomes accustomed to things, he jumps out to investigate for himself, but immediately returns to his safe hiding-place if danger threatens.

With the exception of the opossum, found in the southern part of the United States, marsupials are confined to the countries named. Another curious fact in this connection is that all the animals of these countries, with the exception of the dingo, or wild dog, and a few rats and bats, are marsupials. Even these exceptions are by some thought to have been imported before the colonization of these countries by Europeans. Of course the domestic animals of civilization are all found in them now. Originally, however, kangaroos and wallabies (a smaller species) took the place of the ruminants of other regions. All members of these families are purely vegetable feeders.

In the summer of 1770, when Captain Cook was refitting his vessel at the mouth of a river in New South Wales, a company of his men was sent ashore to procure supplies. On their return they described a strange animal of great size, which stood upright on its hind legs and tail, and progressed by enormous leaps. Great excitement was aroused, and soon a specimen was killed, and taken on board. Sir Joseph Banks, a naturalist, was a member of the expedition, and he wrote a description of the animal, which was the first specimen brought to European notice. It was what is known as the great gray kangaroo (*Macropus giganteus*). A specimen of this kind is the subject of the illustration.

The name "kangaroo" is said to be of Australian origin, although it is unknown by the natives of the present day except as learned from white men. True kangaroos and wallabies comprise twenty-three living species, as well as several that are extinct. They vary in size from the height of a man to the size of a rabbit, or even smaller. The one in our picture is the best known of all the species. He is called the "boomer," "old man," or "forester" of the early colonists. A full-grown one will measure sixty-three inches from nose to root of tail, and weigh two hundred pounds.

The tail is very large and strong; and when surveying the country on the approach of danger or for other reasons, the kangaroo can raise himself on the tips of his toes and his tail to quite a height. The front legs are very short, and the animal seldom touches them to the ground, except when grazing; then he sometimes awkwardly goes on all fours. It is stated, by those who have seen kangaroos, that these large ones jump ten yards at a single leap. The tail helps them much in running. When running in the bush, its measured thump, as it strikes the ground with each jump, is heard long before the animal can be seen.

The young are born in March and April. About Christmas they leave their mothers, and shift for themselves. Young kangaroos are called "joeys," and it is said that a mother kangaroo will pick up her joey, and throw him into her pouch on the run, when danger is near, and he always lands with his face out, as in the picture. When on the move, these animals invariably follow a leader; and when started, it is impossible to divert a drove.

In the tropical forests of Queensland are found what are called "tree-kangaroos." Their life being spent in the trees, their front legs are but little shorter than their hind ones. This variety is little known, and has been nearly exterminated by the natives, who regard their flesh as a great delicacy.

There are nine species of what are known as "rat-kangaroos," none of them being larger than



THE GRAY KANGAROO

rabbits. These, too, have largely disappeared. Besides the natives, the dingo, or native dog, used to be a great foe of the kangaroo. These dogs were also a great pest to the early settlers, killing their sheep and lambs, and making havoc with the poultry. A vigorous warfare was instituted by the colonists, however, and as a result, the dingos were killed off. As these and the natives disappeared, the kangaroos increased till they, too, became a burden to the farmers. They ate the grass the men wanted for their sheep, and did not hesitate to help themselves to the produce of the gardens. In self-defense the colonists were obliged to invent means for their extermination. Fences were built converging into corrals, into which thousands of the pretty kangaroos were driven, and killed. On one ranch ten thousand were killed every year for six years. Sometimes after a great "drive," two thousand were killed in a single day.

In a history of what is called the "squatter era" of Australia is a picture of the early colonists leaving their homes to escape a rapidly approaching "bush fire," the terror of Australian frontier life. In the hurry and confusion, men, women, and children, cattle, sheep, fowls, horses, wild birds, and kangaroos are shown together,

all joining in a mad rush to escape the approaching terror.

The kangaroo, like the deer, is an inoffensive animal. He never attacks man, unprovoked; but if brought to bay by either man or dogs, he will fight to the death. He will back up against a tree or rock, and woe be to the first dog or man that approaches him. Rising on his tail, with one kick of his tremendous hind leg, with its long, sharp toe, he will kill instantly any dog that happens to receive the stroke. Kangaroos have been known to pick up dogs, carry them to a pool, and hold them under water till drowned.

Like the black man of Australia, kangaroos are fast disappearing. They have been driven back into the interior, though they are still found in remote places throughout Victoria. Some are occasionally seen within thirty miles of Melbourne. There is a large collection of these animals in the zoological gardens in Royal Park in the northern part of Melbourne. Their odd way of hopping about, their short front legs hanging apparently so uselessly in front of them, always attracts general attention.

H. E. SIMKIN.

Read It!

Do not fail to read the little story called "The Missionary Potato," on the Children's Page. It contains a suggestion that the children big and little can act on, and so have an offering to bring to the Harvest Ingathering Service this fall. Have you given any thought to your offering for this service? It is none too early to begin to prepare for it now, in order to have it growing all through these "growing days."

There are many ways to earn this offering; and don't you think that money that is *earned* by hard work happily done, and *saved* by real self-denial, must be like some of the offerings we read about in olden times, a "sweet savor" to the Lord of the harvest?

Teachers, talk with your classes about this offering; children, ask your parents and teachers to help you plan to make it a generous one, if you can not think of a way yourselves; and then, whether a special service is held in your school or not, you will have a little sheaf for the Master.

There will be a Harvest Ingathering number of the INSTRUCTOR, with appropriate matter for this service. The date will be announced in due time.

Meanwhile, let the work of preparing for the offering be begun and carried faithfully forward.

"The Holy Spirit is given to men to qualify them for service. When Jesus was 'anointed with the Holy Ghost and with power,' he 'went about doing good.'"

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