

THE YOUTH'S INSTRUCTOR

REMEMBER NOW THY CREATOR IN THE DAYS OF THY YOUTH

VOL. XLVII.

BATTLE CREEK, MICH., MAY 4, 1899.

No. 18.

BURIAL-PLACES IN NEW ORLEANS.



THE cemeteries of New Orleans are among the most interesting features of this interesting old city. A half-dozen of these burial-places are to be found grouped together on Metairie Ridge, about half-

way out to West End and Lake Pontchartrain.

Because of the dampness of the soil, it has been thought impracticable and unsanitary to bury the dead beneath the earth. Therefore these cemeteries, the most unique burial-places in this country, abound with tombs of brick or marble. These tombs usually consist of two vaults, carefully cemented together, with a crypt below for the bones. Sometimes they are built in tiers, like a wall of more than ordinary thickness. After a year or two, if the tomb is needed for another body, the slab is removed, the wooden coffin destroyed, and the remains deposited in the crypt. Thus a long series of burials may take place in a single tomb.

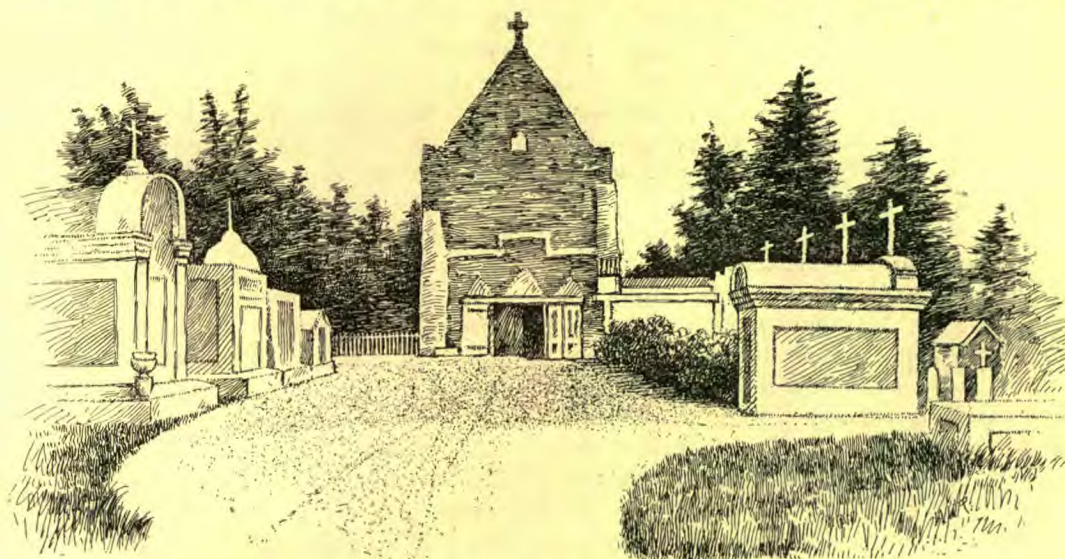
The decorating of tombs on All Saints' day is generally observed in New Orleans. Flowers, wreaths, lighted candles, and draperies are placed on the tombs; and in the Catholic cemeteries, services are held in the afternoon. The celebration of All Saints' has been traced back to the year 998, when Abbot Odilo, of Cluny, instituted it for the monasteries of his congregations. It is an ancient French and Spanish custom in New Orleans, and has been taken up by nearly all the Protestant denominations.

On visiting the cemeteries, the first, on approaching the Ridge, is the Jewish, called "Tememe Direch." Across from this is another Jewish cemetery, belonging to the "dis-

Grove cemetery. Just beyond the Charity Hospital cemetery is the Firemen's cemetery, conspicuous for the massive Egyptian columns at its entrance. Greenwood is just opposite. Metairie cemetery, which is large and well-kept, is probably the most interesting of the burial-places of New Orleans. It has been beautified by lawns and a system of lagoons, at a cost of thirty thousand dollars. There are many fine tombs in this cemetery. Near the entrance is the mound-shaped vault of the Confederate Benevolent Association of the Army of Tennessee, surmounted by Doyle's famous equestrian statue of General Albert Sidney Johnston. The burial-vault in the heart of the

The Campo Santo of St. Roch is one of the most notable burial-places of New Orleans. It is the burying ground of several of the religious orders of the Catholic Church, and its mortuary chapel is a shrine to which many a pilgrimage is made to implore divine blessing.

Of the many places of interest in and about New Orleans, none is more interesting, historically, than the battle-field of Chalmette. The battle took place, Jan. 8, 1815. The American troops were drawn up within five miles of the city, and numbered about thirty-two hundred men. It is said that these men made an esplanade of cotton bales to support their guns, which would otherwise have sunk



ST. ROCH'S SHRINE.

mound contains a tablet to the memory of General Johnston, on which is inscribed Dimitry's famous epitaph, said to be one of the finest mortuary inscriptions in the English language. At the entrance to the vault stands a marble statue of an orderly sergeant, "calling the roll." The tomb of the Association Army of Northern Virginia is surmounted by a shaft, crowned by a statue of General Stonewall Jackson. Near the entrance is the large receiving vault, built in the form of a chapel.

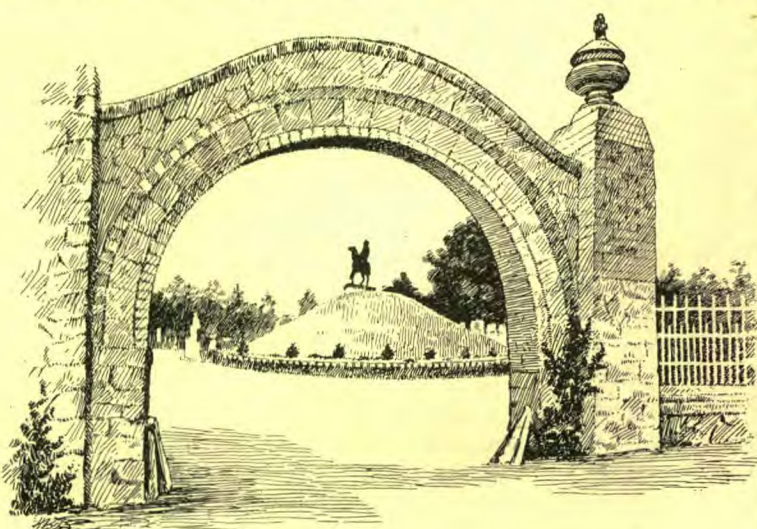
There are three St. Louis cemeteries. St. Louis, No. 1, is the oldest in the city. Many of the tombs belong to old creole families, and others are owned by various societies. On some of the tombs in this cemetery may be seen the phrase, "*Mort sur le champ d'honneur*," or "*Victime de l'honneur*," indicating that here lies one who fell in a duel. Some of the old graves date back to the beginning of the century, and are almost wholly in decay. One old stone bears the inscription, "Mammy, aged 84, a faithful servant, who lived and died a Christian."

hub-deep into the oozy earth. The British army, under General Packenham, numbered about twelve thousand men. The attack was made at dawn, and lasted till eight o'clock, when the enemy was finally repulsed, having lost nearly three thousand men. The American army was led by General Jackson, and its loss was six men killed and seven wounded. A large monument marks the battle-field.

Just beyond this monument is the Chalmette cemetery, the burial-place of over twelve thousand soldiers who fell during the Civil War.

How precious to the Christian visiting these silent cities is the assurance that very soon all those who have been in this world "faithful servants" indeed, no matter how humble their service, will arise, at the call of God, clothed with the garments of immortality, singing the song of victory over death: "O death, where is thy sting? O grave, where is thy victory?"

LESLIE J. WEESE.



VAULT OF THE CONFEDERATE BENEVOLENT ASSOCIATION.

persed of Judah." St. Patrick's cemetery is the next. The Charity Hospital burial-grounds are on the left-hand, and on the right is Cypress

Nay, not too low!
Pale, tender flower, half hidden in the grass;
The sun, and dew, and kindly winds that blow
Will find you as they pass.

Nay, not too low!
Pure, humble life, whose wayside graces meet
Few friendly eyes. God's watchful angels know
How fair you are, how sweet.

—Madeline S. Bridges.



LIFE'S HARMONY.

THEY tell me that in Pisa's old cathedral
All noises harsh and loud —
Grating of ponderous doors, shrill tones, the tramping
And murmur of the crowd —
Are caught up, softened, harmonized, and blended
Within the lofty dome,
Then echoed back in one great wave of music,
Sweet as a dream of home.

So all the harsh notes in life's mingled music, —
The burden and the woe,
The stroke that almost snaps the quivering heart-strings,
The loss that grieves us so, —
In heaven's o'er-arching dome of perfect wisdom,
Power, and love, shall be
Gathered, and blended in divinest marvel
Of matchless melody.

— M. L. Upton.

THE RESURRECTION OF LAZARUS.

VI.

WHEN the Lord is about to do a work, Satan moves upon some one to object. "Take ye away the stone," Christ said. As far as possible, prepare the way for my work. But Martha's positive and ambitious nature asserted itself. Thinking that he wished only to look upon the body of her brother, she said, Lord, the work of corruption has made this impossible. She thought that it would be terrible to reveal the decomposing body to the beholders. Thus she expressed her unbelief. She did not realize that Jesus had tarried for two days where he was when he received the message, permitting Lazarus to die, that he might manifest the greatness of his power by raising him, thus giving all who should witness the miracle an evidence that could not be excelled.

Christ reproved Martha for her unbelief, but his words were spoken with the utmost gentleness. "Said I not unto thee, that, if thou wouldst believe, thou shouldst see the glory of God?" Why should you doubt my power? You have my word. If you will believe, you shall see the glory of God. Skepticism and unbelief are not humility. Implicit belief in Christ's word is true humility, true self-render.

Christ's every word is full of meaning; his every lesson is important. Was not his word sufficient for Martha, even in her sorrow? Why did she reason in opposition to his requirements? Natural impossibilities can not prevent the work of the Omnipotent One. Christ would not be hindered in taking the prey from the enemy, and giving his disciples another trophy of victory. But the human heart is slow to understand Christ's words, and Martha's faith had not grasped the true meaning of his promise.

"Take ye away the stone." Christ could have commanded the stone to remove, and it would have obeyed his voice. He could have bidden the angels who were close at his side to do this. At his bidding, invisible hands would have removed the stone. But the stone was to be taken away by human hands. Thus Christ would show that humanity is to co-operate with divinity. What human power can do, divine power is not summoned to do. God does not dispense with man's aid. He strengthens him, co-operating with him as he uses the powers and capabilities given him.

The order was obeyed. The stone was rolled away. Everything was done openly and deliberately. All were given opportunity to see that no deception was being practised. There lay

the body of Lazarus in its rock grave, cold and silent in death. The cries of the mourners were hushed. Surprised and expectant, the company stood around the sepulcher, waiting to see what next would happen.

Calmly Christ stands before the grave. No hurried movements are made. A sacred solemnity exerts its influence upon all present. Christ steps closer to the sepulcher. Lifting his eyes to heaven, he says, "Father, I thank thee that thou hast heard me." Not long before this, Christ's enemies had taken up stones to cast at him because he claimed to be the Son of God. They had accused him of blasphemy, of performing his miracles by the power of Satan, thus blaspheming God themselves. But here Christ claims God as his Father, and with perfect confidence declares that he is the Son of God.

In all that he did, Christ was co-operating with his Father. Ever he had been careful to have it understood that he did not work independently, but that it was by faith and prayer that he wrought his miracles. Christ desired all to know his relationship with his Father. "Father," he said, "I thank thee that thou hast heard me. And I know that thou hearest me always: but because of the people which stand by I said it, that they may believe that thou hast sent me." Here the disciples and the people were to be given the most convincing evidence in regard to the relationship existing between Christ and God.

"And when he had thus spoken, he cried with a loud voice, Lazarus, come forth." His voice, clear and penetrating, falls with solemn power on the people, and pierces the ear of the dead. As he speaks, divinity flashes through humanity. The people see in his face, which is lighted up by the glory of God, the assurance of his power. Every eye is fastened on the entrance to the cave. Every ear is quickened to hear each word. With intense and painful interest, all wait for the test of Christ's claim, the evidence that is to substantiate the fact that he is the Son of God, or to extinguish the hope forever.

There is a stir in the silent tomb. He who was dead stands at the door of the sepulcher. His movements are impeded by the grave-clothes in which he was laid away, and Christ says to the astonished spectators, "Loose him, and let him go." Again they are shown that what human hands can do, divine power does not attempt to perform. The human worker is to co-operate with God. In God's order, humanity is to work for humanity. There is a work that God alone can do. He alone can heal the sick. But the physician can co-operate with him by supplying right conditions. God alone can restore the diseased frame, but if man fails to do his part, he has no right to expect God to do his part.

This miracle exerted a powerful influence. "Many of the Jews which came to Mary, and had seen the things which Jesus did, believed on him." They received Christ, and in them the words were fulfilled, "As many as received him, to them gave he power to become the sons of God." "But some of them went their ways to the Pharisees, and told them what things Jesus had done." They had just witnessed the most wonderful evidence ever given to men that Jesus was the Messiah; but in spite of this, they surrounded their souls with darkness so dense that the divine light could not reach their souls.

MRS. E. G. WHITE.

"THERE is nothing noble in being superior to some other man. The true nobility is in being superior to your previous self."



TWO LITTLE BOYS.

A BAD little boy with a cross little face
Came slowly down-stairs in the morning;
Of fun or good nature he showed not a trace;
He fretted and cried without warning.
He'd not touch his breakfast, he'd not go and play;
If you spoke, he just answered by snarling;
He teased the pet kitty; and all the long day
He really was "nobody's darling."

A good little boy with a bright little face
Came down in the morning-time, singing;
And indoors and out, and all over the place,
His laughter and music went ringing.
He ran grandpa's errands; his orange he shared
With Sue; and he found mama's thimble;
To do what was asked he seemed always prepared,
And in doing it equally nimble.

These two little boys, who are wholly unlike,
Though they live in one house, are not brothers;
That good little lad and that bad little tyke
Have not two kind fathers and mothers.
But there are *two tempers* to only *one boy*,
And one is indeed such a sad one
That when with the good one he brings us all joy,
We ask, "Has he *really* a bad one?"

— The Outlook.

MAKING HOME PEACEFUL.

XXII.

AH, James Beardsley is not alone in his sorrow. Thousands all over the land share his loneliness. Husbands and wives walk the path of life together many a year, and are yet only strangers to each other,—one acquainted with the peace of God; the other an alien to the Father's house: the one cruising about on an unknown sea, without chart or compass; the other led on by angel hands.

The evident lack of sympathy from his wife, and her complete blindness to the true state of affairs, together with his son's rebellious spirit, were a sore trial to James Beardsley. Then, too, it seemed that Grandmother Sharpe grew continually more querulous and jealous-hearted as the weeks went by. The contrast between her life and the beautiful and peaceful one which his godly father had lived, seemed even greater than when Deacon Beardsley was with them. But all these things only gave him a clearer sense of his dependence upon God. Especially had he felt blessed in taking up the one duty which, above all others, his beloved father had urged him not to neglect,—that of erecting the family altar, which so long had been broken down. These seasons of Bible reading and family prayer, though seemingly only a trouble to the older members of the family,—a meaningless ceremony, to be hurried over morning and evening,—were to little Flossie seasons of special delight; for then she could hear her father read the beautiful stories of Joseph and Benjamin and David and Samuel, with which Grandpa Beardsley used to beguile the tedious hours when she was so tired. Particularly did she enjoy the sweet story of Jacob's dream of the angels; and that of the mountains that were full of horses and chariots of fire round about Elisha; and she always listened to the story of the birth of the Christ Child, and of the angels' song, "On earth peace, good will to men," with ever-increasing interest. In fact, any story in which the angels bore a prominent part was sure to be regarded with favor by this "strange child," as every one called her. It seemed as if the little heart was growing daily more patient and tender, and that these lessons of divine truth were sinking deeper and deeper into it.

Fathers, are you neglecting this means of grace in your family? Are you more anxious to settle down with the evening paper in your hands than to read the message God has for you in his Book? Ah, why do we welcome with such gladness, letters from our absent loved ones, while the grand old Letter from

heaven is neglected day after day? Children, you have a message from the skies to-day,—a message from heaven directly to you. Have you read it, or have you neglected reading the message of your best Friend, which tells you he is coming again,—yes, and coming *soon*,—and teaches you what you may do to get ready to meet him?

Little Flossie surprised everybody with whom she came in contact—and none more than her wayward brother, Reginald—by her quaint, womanly conduct, and strange fancies. One day when her "big brother," as she called him, was wilful and unkind, Flossie looked at him pleadingly, and said, softly, "Please don't, Regie; you hurt Flossie. See! the angels are crying!" and the impulsive lad turned suddenly, and giving the pale little cheek a kiss, seized his hat, and dashed out of the house, saying, "O puss! you do make a fellow feel so mean!"

The death of little Tim, her never-to-be-forgotten playmate, made an impression on the sensitive mind of the child, which had never been effaced. Later, when her beloved grandfather died, was the first time she had looked upon death; and for months she was so lonely and heart-broken that nothing less than "angel stories," as she called them, would comfort her. But her playmates—little Tim Mallory and Grandpa Beardsley—were gone; and, as if their places could never be filled again, she seemed to care less and less for the companionship of other children, playing her quaint little games either entirely alone, as she sat in her wheel-chair, or with little Bessie. But Bessie generally soon wearied of Flossie's quiet plays, and trotted off to find some noisier sport. At such times, perhaps because she more keenly missed her grandpa than at others, she loved to close her eyes tight, and wheel softly across the floor, back and forth, "playing blind," like "poor grandpa."

It was the next week after the events recorded in the last chapter,—a dismal snowy afternoon. Great gusts of wind howled and moaned around the house, like the evil spirit in the parable, seeking rest and finding none.

Mrs. Beardsley and Janet were unusually busy, and Grandmother Sharpe had gone to make an afternoon call. Little Bessie had not been very well all day, and was asleep in her crib; and Flossie was quite lonely. She had played all her simple games, with an imaginary playfellow; had looked at the pictures, one by one, in her latest new book; and at last had taken her basket of calicoes, and spread the gaudily colored pieces down carefully, patting out every wrinkle with the delicate little hand again and again. At last a bright thought struck her,—she would ask mama to cut dolly a new frock from one of her largest pieces.

"Please, mama," she called, as she slowly wheeled her chair out into the kitchen, where Mrs. Beardsley was busy making cookies, "won't you cut dolly a nice new dress?"

At that moment Mrs. Beardsley was irritated; for she had burned a large tin of cookies. For that simple reason, and that alone, she answered the child harshly, and with an impatient frown: "Oh, go away, Flossie, do! here I've burned all these cookies,—just ruined them,—and I'm in such a hurry!"

Mrs. Beardsley did not often speak unkindly to this little daughter, whom she dearly loved; but we all understand well enough,—aye, too well,—by our own experience, how sometimes under slight provocation, we speak harsh words, the memory of which is afterward gall and bitterness, because of some trifling circumstance that has irritated us, and caused us to lose for the moment our self-control. Oh, those moments of thoughtlessness, those moments when we forget ourselves, and let go the hand of our good angel! how many days and years of regret and sorrow of heart they have cost!

Flossie was quite stunned for the moment; she could hardly believe that her mother had been speaking to *her*. But she turned away sadly, with a little ache in her heart, and, choking down a sob, wheeled slowly back through the hall, saying to herself: "Mama's busy; poor mama." Just then Mrs. Beardsley opened the heavy trap-door in the kitchen floor, and hastily went down cellar. She in-

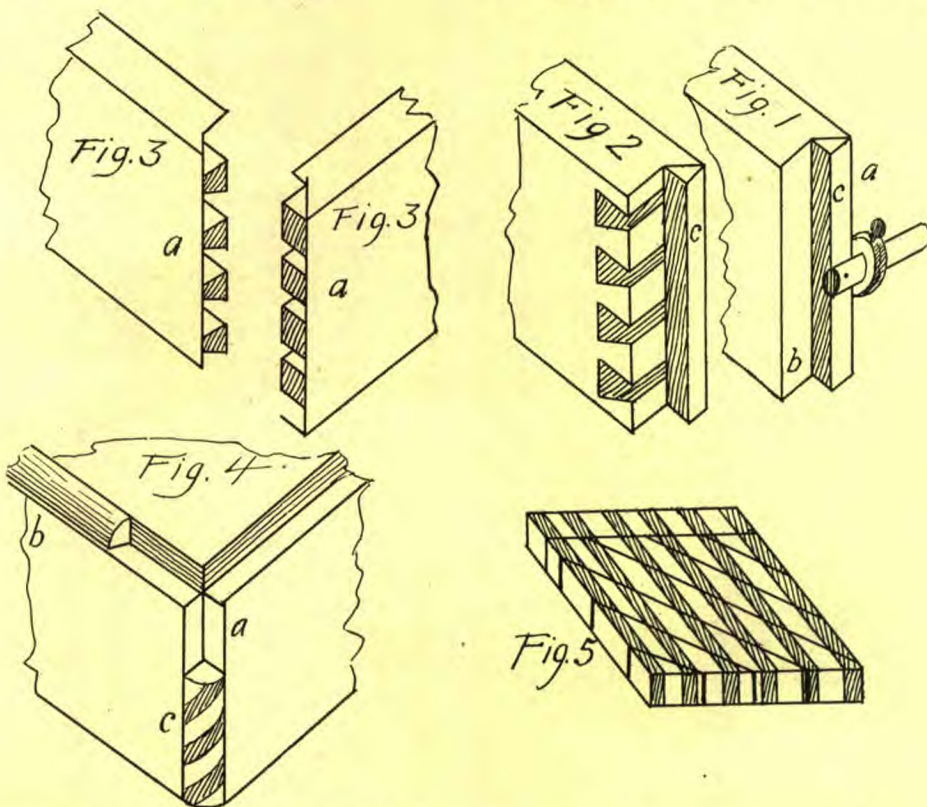
tended to be gone only a moment, and knowing that Bessie was asleep, and thinking Flossie had returned to the sitting-room, she had no thought of fear from the open door. But, failing to gain the attention of her mother, Flossie had determined to fall back upon her old source of amusement—"playing blind."

"I'll play I'm grandpa,—blind,—so—so; now I'll walk,"—she always called it "walking" when she turned the wheels of her little chair. Then she begins her journey back through the hall; with some difficulty she passes through the door of the kitchen. She has done the same thing—played the same way—many times before. The open trap-door is just in front, not a yard distant. Still Mrs. Beardsley tarries in the cellar, unmindful of the danger to her child. Slowly the small wheels revolve; the little chair pauses a second with its precious freight, as if dreading to make the fearful leap; and then it goes plunging downward.

MRS. L. D. AVERY-STUTTLE.
(To be continued.)

IT WILL HOLD MORE.

"THAT measure's full," said Rob, holding the wooden measure even, and noticing the rounded top as his father poured the stream of yellow grain from the meal-bag.



"Not quite," said the farmer. "It will hold a little more, if you shake it down well."

"Does, does n't it?" answered Rob, thoughtfully, as a gentle shaking left a half-inch of the sides of the measure visible. "Now, it's full, though."

"It will hold a little more," repeated his father, steadily. "Set it down hard, once—there! A pint more will go in easily. Things look full long before they really are, sometimes. Some folks round up their time that way. Day's packed full; can't possibly get in another chore; no time to do an errand; dreadfully busy. Worst of it is, they really think so. What they need is a good shaking up and setting down hard. Never was a day so full it couldn't hold a little more. Hold that a minute, will you, while I go and lead old Billy out?"

"I believe father heard me telling mother I was so busy I hadn't a minute to go to the store for her," mused Rob, standing stock-still, holding the measure. "And I thought I was. I'm pretty close on time, with that physics examination coming to-morrow; but I might have done the errand. I could have studied all the way over and back if I'd wanted to. I believe I'll shake up my days a little. They'll hold a little more, if they do look full."—*Forward.*

"PASS the countersign, Endure!
Not to him who rashly dares,
But to him who nobly bears,
Is the victor's garland sure."



BLIND DOVETAILING.

AS YOU have lately had one lesson in dovetailing (see INSTRUCTOR, No. 14), I will now give you a second lesson, in which I will finish the instruction on this subject. In Fig. 4 of that article is shown what I called "blind dovetailing." However, in the true sense of the word, this is not blind dovetailing, but drawer dovetailing. Regular blind dovetailing does not show the work anywhere, whereas drawer dovetailing shows it at the end of the drawer, but not in front.

In Fig. 1 you will see a piece of the side, or end, of a box. To make this of a board three eighths or one half an inch thick, set your gauge, after the board is squared up, one eighth of an inch, and gauge on from the side, *a*; then turn and gauge on the end one eighth of an inch, so that when the corner is sawed out, as you will see at *b*, it will leave the end at *c* projecting one eighth of an inch square.

Now proceed to lay out your dovetails, as directed in the first lesson, and as shown here in Fig. 2. Observe that you do not cut through, but only up to, the projection, *c*. When one piece is cut out, lay it on the other piece, which has the end projecting, as at *c*, Fig. 1, and mark with your knife. When you have your mortises and tenons all made, take a sharp chisel and cut off the corner of *c*, in order to miter them, as shown in Fig. 3, *a*.

Be careful not to take off too much, as that would leave an open joint. As you proceed, it would be well to try the pieces together once or twice. With care and patience, you can, after you have had a little practise, succeed in doing a good job.

When a box is put together in this way, and the joints are tight, the corners of the box can be rounded off without showing the dovetail, thus giving it a nice finish.

Sometimes it is desirable to put a round corner of some other kind of wood in the box. For instance, if you were making a box veneered with maple, and wanted a dark border, such as black walnut or rosewood, you would gauge on from the inside of your lumber, and up on the ends about one half the thickness of your lumber, and dovetail as in the box described above, except that you would not allow the end to project. On the contrary, there would be a corner without anything in it, as seen in Fig. 4, at *a*. To fill this corner, you could get out a piece of wood about

one fourth of an inch square, fit it in nicely, and glue it to the box. Wind a piece of cord or strong twine around the box, to hold the pieces in place until the glue is set, when the corners can be rounded up.

At *b*, Fig. 4, you will see a plain piece of wood inserted and rounded. At *c*, Fig. 4, a fancy corner is shown. In making a box of this description, the top and bottom should project the same as the corners. To make the fancy corners, use two or more kinds of wood, as you like. Dress them out one fourth of an inch wide, one eighth of an inch thick, and about a foot long, and glue them together in alternate layers, as shown in Fig. 5. When the glue is set, saw them into strips, either square or diagonal, as shown in Fig. 5, and glue them in, the same as you would the plain strip. Afterward round off, file, and sandpaper smooth. This makes a pretty finish. See *c*, Fig. 4.

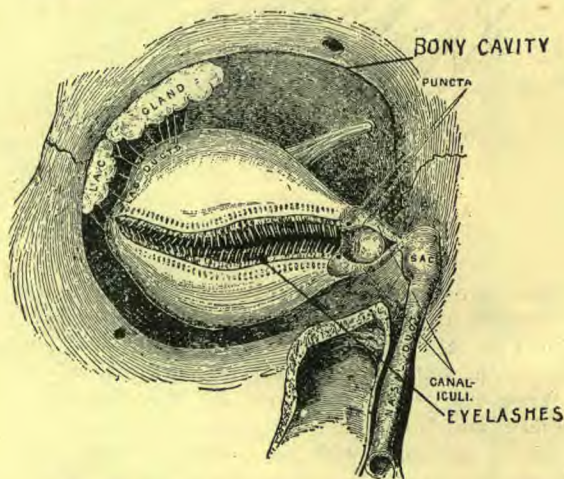
Next week I will give you some instruction in veneering.
W. K. LOUGHBOROUGH.

Nature Study

MAN'S PLACE IN NATURE.

Man's Relation to Light.

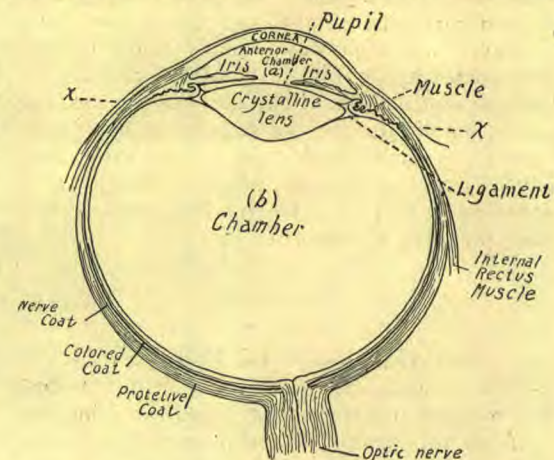
IN our study this week we will consider man in his relation to light. We have already seen that light bears important relations to the air, the water, the plants, and the lower animals; it also has its relation to man. When God made light, on the first day of the week, he had in mind the man Adam, whom he was to create on the sixth day. The light was to be a means by which man could recognize the wonderful creations that God had made on the six days; so God made the eye, the window which allows light to pass into the human soul. Not only can we see, by means of the sense of sight, the objects that are about us; but "truly the light is sweet, and a pleasant thing it is to behold the sun."



The eye is set into a socket, or bony cavity, thus being protected against accidents which might otherwise result from external objects striking it. The eye is surrounded with a dark coating, which absorbs the light; inside of this is a lighter coating; and inside of the second coating is a third, consisting of an expansion of the optic nerve. This third coating is called the retina. The part of the eye which first admits light is a transparent, horny layer; and just inside of this is a watery fluid. Back of this fluid is a crystalline lens. Back of the lens is another fluid, which is glassy in appearance. You will remember that in the study of light, we studied the lens,—the instrument used to magnify the fly and other objects. It is used in microscopes and telescopes for magnifying very small objects. The Creator has placed in the eye a lens made of living tissue, which focuses the light in the same way that the glass lens does in the microscope and telescope. You will remember that the object appears magnified when we look through the lens, because the rays of light are bent. As the rays of light pass into the eye, through the crystal-

lin lens, they are brought to a focus on the retina. The image thus produced is carried through the optic nerve to the brain; and thus it is that we behold the objects about us. By studying the eye, we see that the Lord constructed a lens before lenses were invented by man. I will now name the different parts of the eye, and you may see if you can find them in the illustrations given.

The rays of light enter the *cornea*, pass through the *aqueous humor*, *pupil*, *crystalline lens*,



vitreous humor, and finally reach the *retina*. The cornea is somewhat rounding, and bends the rays even before they pass through the crystalline lens. The *choroid* coating of the eye is black, and allows no light to pass through it into the interior of the eye. The *sclerotic* coating is light in color, and forms a background upon which the retina is spread out in a very thin layer.

We should be careful how we treat our eyes, which the Lord has given us to use in obtaining a knowledge of his ways and works. Many spoil their eyes by studying where the light shines directly into the eye. They should sit with the back to the light, and let the direct rays of light strike the page instead of the eye.

Human beings and many of the lower animals have two eyes; but there are many creatures, especially among the insects, which have anywhere from a hundred eyes to a thousand or more. This enables them to see all about them, without turning the head. A few animals have but one eye.

Next time we will take up the study of man as related to heat.
M. E. CADY.

THE CHLOROPHYL CELL.

IV.

THE chlorophyl cell, then, is the "food creator;" all other cells are food consumers. In one respect the office of all cells is alike,—their action is destructive. Because of this, it will be necessary to make the difference in the result of cell action clear to you.

The green cell abstracts gases from both air and water, and substances out of the earth, by destroying, or disarranging, the connection between the gases and substances and their natural surroundings. Out of all this separated material, the cell reconstructs a substance which it alone can create,—protein, the foundation of all living tissue. Bear in mind that the office of the chlorophyl cell is to produce food by destroying the natural condition, and surrounding associations, of certain elements.

The white cells, which include those whose office is in any way to *perpetuate life*, can only take that which has been produced by the chlorophyl cell, and out of it manufacture tissue, or the parts of its own organization. In other words, the white cells consume the protein created by the green cells, and out of it manufacture other cells, similar to themselves,—their children,—which, clustering around the parent cells, form little communities, called "tissue." For instance, the fibers of meat are tissue; and a number of these fibers, grouped together, make a larger tissue, called "muscle." Tissue, therefore, is simply a collection of cells of one kind.

White cells may be called "manufacturers." They destroy the natural condition of the elements they operate upon, but for the purpose

of sustaining life. While both green and white cells are destructive, *each destroys to perpetuate life*.

The other forms of cell life, such as bacteria, infusoria, microbes, germs, etc., all invisible micro-organisms, or cells too small to be seen without a microscope, are found in air, water, etc., and are all destructive, but with a far different purpose. They destroy to reduce living tissue, or that which has had life, back to the inorganic material from which the chlorophyl and white cells raised it, first to protein, and then to tissue. The office of these cells is destructive, never constructive.

This is the distinction in the three forms of cell life and cell action,—the first produces the material; the second manufactures the material into tissue; and the third disintegrates, or takes apart, the material, and reduces it again to its original elements. Now read Gen. 3:19; Job 34:15; Eccl. 3:20; 12:7. Is there not to you a greater depth of meaning in these verses than formerly?
W. S. CHAPMAN.

Physical Culture

BE NATURAL.

IN studying the natural way of breathing, as seen in animals and young children, we notice that absolute freedom is imperative. It seems almost too bad, in these days of general reform, to take time to dwell upon this matter; but it is necessary to impress on every mind the fact that ignorance regarding the laws of health is a crime, and disobedience to them is a sin; and "the wages of sin is death." The early mandate against transgression was, "Dying, thou shalt die;" and it is amazing how indifferent women have been to this truth, as applied to the care of their bodies. How sadly lacking in an appreciation of the beautiful are those who admire the deformities of Satan rather than the noble work of God! Our ideas of true beauty and symmetry need to be cultivated up to God's standard.

I have been greatly grieved to see promising young girls, just ripening into womanhood, doing, often in ignorance, a very terrible thing. Their bodies, which God had given that he might be glorified therein, were being slowly deprived of life. By tight clothing their waists were being compressed so the lungs could take in but little oxygen. How pale and weak is the girl who breathes in short, panting breaths, the lungs struggling for action, the body starving for the vitality in the air.

A large waist indicates large lungs and vital organs, and these, in turn, betoken the likelihood of long life; while a small waist bespeaks exactly the opposite. True, there are some who, because of an unusual constitution, survive in spite of abuse; but such are the exception to the rule. Who would not admire a full-blown rose, blooming in health and vigor, more than a sickly, half-developed, faded attempt at a rose? Who, likewise, would not rather see a natural waist, growing as God intended it to grow? A natural waist is really an ellipse, but fashion has decreed it to be a circle. Let students in geometry and anatomy find how the natural waist is an ellipse.

We do not wish to study the Greeks as our examples in all things, but they certainly did set a commendable example in their sensible ideas regarding the human form. But while they had no higher motive for caring for their bodies than present, selfish interests, surely we should have the highest motives for studying and obeying health principles; for our bodies are to be temples of the indwelling Christ. Then, too, a little in the future, in the time of trouble, disease will greatly increase, and in those days we shall need every bit of vitality God has given us.

In our next talk we will consider some facts concerning the relation of dressing to breathing and to exercise in general.

MRS. M. D. MCKEE.



THE GARDEN OF LIFE.

The garden of life—it beareth well,
It will repay our care;
But the blossoms must always and ever be
Like the seed we're planting there;
For beautiful thoughts make beautiful lives;
And every word and deed
Lies in the thought that prompted it,
As the flower lies in the seed.

THE PERMANENT ACRE-GARDEN.

LAST week we gave directions for making a small, temporary garden. Now let us who live on the farm see what we can do for the Lord with a permanent acre-garden.

Where should the garden be situated?—If possible, it should be near the house, as it can

be easily cultivated with horse and plow. If a horse is used, the tomatoes, currants, gooseberries, blackberries, raspberries, grapes, strawberries, asparagus, rhubarb, and sage may be planted in rows about four feet apart. Sweet corn, potatoes, cabbages, and beans may be planted in rows three and one-half feet apart. If you do not have a horse, and wish to cultivate your garden by hand, all these may be planted one foot nearer together, thus saving considerable land. Melons, squashes, and cucumbers require the same distance under any kind of culture. The narrow rows to the south will have to be tilled by hand. If farm animals are running loose, the Lima beans on the north and south should be changed to some other place; corn should not be planted close to the fence. Celery needs some shade, so it would be well to plant it near the south fence. This arrangement of the garden is not arbitrary, but may be varied to suit the taste.

Many small gardeners raise all their plants; and as it is not yet too late to plant tomatoes and cabbages, let us see what we can do. Fill an open box, about twelve by eighteen inches in size, three fourths full of mellow soil. With

the same as beets. Spinach may be planted according to the directions given last week for planting lettuce.

Almost every person has a way of his own for planting potatoes. Some cut the potato, leaving but one eye to the piece; others leave more; while some of the largest potato-growers claim an increase of thirty bushels an acre by planting the whole tuber. Drop the pieces, or whole tubers if you wish to experiment, in a trench previously prepared, sixteen inches apart, cover with the hoe two inches deep, and firm the soil with the feet. If you wish to fertilize the soil before planting, scatter well-decomposed stable manure in the trench; a wagon-load would not be too much for four rows of this length.

If you wish, you can have a succession of such vegetables as radishes, lettuce, beets, spinach, etc., by planting every two or three weeks until the middle of July. In like manner you can have a succession of sweet corn, beans, and peas.

The following amount of seed and plants will be required for this acre-garden, to keep it cropped as it should be:—

Tight board fence				North Gate	Acre plan				
One Row Lima Beans on Wire Fence				Toma	toes			One Row Lima Beans on Wire Fence	
				Currants	and Gooseberries				
				Rasp	berries				
				Black	berries				
				Grapes					
				Straw	berries				
				"	"				
				Asparagus	Sage and Rhubarb				
				Pota	toes				
				"	"				
				"	"				
				Sweet	Corn				
				"	"				
				"	"				
				Peas	peas				
				"	"				
				"	"				
				"	"				
				String	Beans				
				"	"				
				"	"				
			Cab	bage					
			"	"					
			"	"					
Hubbard Squash Cucumbers Musk				ROAD	Melons Summer Squash Water Melons				
Salsify Parsnips Carrots Beets					Onions Radishes and Parsley Lettuce Spinach				
Celery				Gate South	Celery				
Wire or Picket Fence					290 x 150 Feet				

then be given more attention. The way many gardens have been neglected is a good reason for hiding them in the corn-field. A well-cultivated garden is an ornament, and something that its possessor can justly take pride in. If it is neglected, and the weeds are allowed to grow, and hide the crooked rows, it is an eyesore to the owner and a byword among the neighbors.

Concerning the nature of the soil and the slope of the ground, but little need be said. The richer the soil, the better. A sandy loam and a southern slope are to be preferred. Have a tight board fence on the north side, if possible, to protect the garden from the cold winds. The other sides may be surrounded either with picket or close wire fence. The fence should be made tight enough to keep out chickens. This acre is to be for the Lord; therefore it should be a pleasure to keep it free from weeds, and in the best condition.

The methods of gardening have advanced during the last fifty years. Horse-power has taken the place of the spade, hand-rake, and hoe; and garden-drills are rapidly taking the place of hand-sowing.

For a modern garden of one acre, make the rows longer one way than the other, so it can

the finger or a small stick, make small trenches half an inch deep, and two inches apart. Into these trenches drop ten or more seeds to the inch. Cover and "firm" (press the soil over the seed) with the palm of the hand. The boxes may be carried out-doors during sunny days. Never plant seed of any kind without firming the soil. This is absolutely necessary. Many persons carelessly drop seeds into the ground; and when they do not come up, they begin to accuse the seedsman of selling worthless seed. Much poor seed is sold; but in many cases the real fault is with the careless planter, and not with the seed. If buying seed in small quantities of your grocer, ask him to supply you from some well-known firm, that takes back all unsold seed in the fall, and brings fresh seed every spring. Next week I will tell you how we can set out tomatoes and cabbage plants in the field. This week we will mention only those that ought to be planted early.

Beets may be planted in rows from twelve to eighteen inches apart. Into trenches about one inch deep drop the seed one fourth of an inch apart. Draw the soil over the seed, and firm with the feet. Carrots, parsnips, salsify (vegetable oyster), and turnips may be planted

Four qts. extra smooth peas; 4 qts. early dwarf wrinkled peas; 1 pkt. later wrinkled peas; ½ lb. spinach; 1 oz. celery; 4 qts. onion-sets; 1 oz. early cabbage; 1 oz. late cabbage; 4 ozs. early beets; 4 ozs. Blood Turnip Beet; 1 oz. carrot, Early Scarlet Horn; 1 oz. carrot, Chantenay or Danvers; 1 oz. tomatoes, early; 1 oz. tomatoes, late, Ponderosa; ¼ lb. radish, Early Turnip; ¼ lb. radish, Long-rooted; ¼ lb. lettuce; 4 qts. beans, Green String; 4 qts. beans, Wax String; 4 qts. beans, Bush Lima; 4 qts. sweet corn, Extra Early Cory; 4 qts. sweet corn, medium; 4 qts. sweet corn, late; 4 qts. cucumbers; 3 ozs. muskmelons; 3 ozs. watermelons; 3 ozs. squash, summer; 3 ozs. Hubbard squash; 1 pkt. sage; 1 bu. early potatoes; 800 strawberry plants; 100 asparagus roots; 20 rhubarb roots; 45 gooseberry bushes; 45 currant bushes; 90 raspberries; 35 grapevines.

Buy your seed in *bulk* for a garden of this size, or, in fact, for a smaller garden, if you are sure the seed is as good as that in sealed packages. There is usually about half an ounce in the small packets, and the seed so bought costs two or three times as much as if purchased by the ounce or pound.

I have avoided naming the varieties, except such as are known and planted almost the world over, as some varieties that do well in one section would not do well at all if grown in another.

ARTHUR F. HUGHES.

"Lost time is never found again."

BIBLE LESSONS AND NOTES

SABBATH-SCHOOL LESSON.—NO. 7.

(May 13, 1899.)

HEALING THE MAN WITH THE WITHERED HAND.

Lesson Scriptures.—Matt. 12:9-21; Mark 3:1-12; Luke 6:6-12.

Memory Verse.—Matt. 12:20.

TIME: A. D. 31. **PLACE:** Capernaum. **PERSONS:** Christ and his disciples, the man with the withered hand, Pharisees.

QUESTIONS.

Where did Jesus go upon another Sabbath? Matt. 12:9. Who is especially mentioned as being in the synagogue? V. 10. Who were on hand to watch Jesus? Luke 6:7. What did he say to the afflicted man?—"Arise, stand forth in the midst." Mark 3:3, margin, Greek. How did he address his would-be accusers? V. 4. Did they reply to his question? How did their hardness of heart affect the Saviour? V. 5. What did he say to the crippled man? With what result? Mention other cases of immediate healing that have been referred to in the lessons thus far. What did the Pharisees now do? V. 6. Knowing their designs, where did Jesus go? V. 7. Who followed him? Matt. 12:15. What did he do for them? What charge did he give these people? V. 16. What prophecy was thus fulfilled? Vs. 17-21. Where did Jesus go to pray? Luke 6:12. How long did he continue his devotions? Why did he choose this late hour for communion with the Father?—Because the people thronged him during the day.

NOTES.

1. Upon another Sabbath, as Jesus entered a synagogue, he saw there a man who had a withered hand. The Pharisees watched him, eager to see what he would do. The Saviour well knew that in healing on the Sabbath he would be regarded as a transgressor, but he did not hesitate to break down the wall of traditional requirements that barricaded the Sabbath. Jesus bade the afflicted man stand forth.—"*The Desire of Ages*," page 286.

2. While Jesus manifested great tact, and sought in every right way to win the favor of his enemies, yet when it was opportune to reveal a right principle, he never compromised to save himself. The Pharisees must have been impressed with the brave course of him whom they hated, as, in the face of their malignity, he bade the afflicted man "stand forth." The same unflinching courage has characterized reformers and martyrs for Christ. A conviction that a certain course is right, and a determination to stand by the right at any cost, bring into the soul the strength of the Master.

3. Thus greater care was shown for a dumb animal than for man, who is made in the image of God. This illustrates the working of all false religions. They originate in man's desire to exalt himself above God, but they result in degrading man below the brute. . . . Every false religion teaches its adherents to be careless of human needs, sufferings, and rights. The gospel places a high value upon humanity as the purchase of the blood of Christ.—*Id.*, pages 286, 287.

4. The Pharisees were continually charging Christ with Sabbath-breaking, because he healed on the Sabbath. With a great show of outward zeal for God's law, they continually violated its spirit, and, by so doing, misrepresented the author of the law. Christ healed, set men free, consoled and comforted, on the Sabbath, and by so doing, manifested the true significance of the Sabbath law. Instead of being a Sabbath-breaker, he was the true Sabbath-keeper. Filled with rest in the manifestation of God's love, he shed the rest of God upon all who would receive it, and convinced the unprejudiced that it is "lawful to do good on the Sabbath." Are we Sabbath-keepers of the same order? or are we heaping man-made exactions about God's law of love, obliterating its meaning and misrepresenting its author?

5. Jesus withdrew from those who had withdrawn from him. Those who had not withdrawn from him, he drew after him; for "a great multitude followed him." They came from all parts of Palestine, as well as from Idumea and Tyre and Sidon. Those who were responsive to the drawing of his love were richly rewarded; for he healed them all. The people pressed upon him, desiring deliverance from their plagues. Unclean spirits cried out, acknowledging him as the Son of God. The glorious work wrought by him was in fulfilment of the very scriptures that the Pharisees professed to believe. Isaiah had foreseen his gracious ministry, and God had spoken of him as "my

beloved Son, in whom my soul is well pleased." The God of love, who delights in mercy, rejoiced in the very work the Pharisees hated, and loved him whom they sought to destroy.

6. Of Christ this sublimely tender prophecy was written: "A bruised reed shall he not break, and smoking flax shall he not quench, till he send forth judgment unto victory. And in his name shall the Gentiles trust." The figure employed is that of a man walking through a garden. Some plant has been bruised and laid prostrate. He does not pass it by; he does not break its bleeding fibers; but he lifts it up, heals its wound, pours upon it his own life, waters it every moment, and fits it for the celestial garden. This tender love is for the bruised, helpless soul. The cruel, ruthless foot of the Pharisee, the professed follower of God, may have crushed it, and left it to die: Jesus will heal and restore, and make it flourish. Why should we not trust in his name?

INTERNATIONAL LESSON.—NO. 7.

(May 14, 1899.)

CHRIST BETRAYED AND ARRESTED.

Lesson Scriptures.—John 18:1-14.

Related Passages.—Matt. 26:47-56; Mark 14:43-52; Luke 22:47-53.

Memory Verses.—John 18:3-5.

TIME: Night before the crucifixion, April, A. D. 30. **PLACE:** Gethsemane. **PERSONS:** Jesus, his disciples, Judas, priests, soldiers.

QUESTIONS.

Where did Jesus go from the temple? Who went with him? By what name is the garden known? Matt. 26:36. Who also knew of this place of meeting? How? Whom did Judas lead to the garden? What did these men bring with them? What did Jesus ask the officers? Why did he ask this favor? Who came forward to defend Jesus, and what did he do? What did Jesus say and do? What did the officers do to Jesus? To whom did they take him? To whom did Annas send Jesus? V. 24. Why did the priests and Pharisees desire Christ's death?

NOTES.

1. "Over the brook Cedron." The name means "the black torrent." In the rainy season it rushed through a ravine east of Jerusalem, between the city and the Mount of Olives. Gethsemane means the "oil-press," because it contained a press for extracting the oil of the olive-trees. The spot now known as Gethsemane contains eight olive-trees, whose gnarled, knotted, and twisted trunks speak great antiquity.

2. It was not the intention to arrest Christ during the feast, lest there should be a popular tumult (Matt. 26:5); but now that an opportunity offered of seizing him secretly at the dead of night, . . . his enemies could not hesitate. . . . Judas knew the place. . . . No hallowed associations . . . deterred his treason for one moment.—"*New Testament Commentary*."

3. How vast is the contrast between the picture of Christ in Gethsemane and that of his enemies plotting his death! Behold him contemplating the price to be paid for the human soul. "The history of the human race comes up before the world's Redeemer. . . . He sees the helplessness of man. He sees the power of sin. The woes and lamentations of a doomed world rise before him. He beholds its impending fate, and his decision is made. He will save man at any cost to himself. He accepts his baptism of blood, that through him perishing millions may gain everlasting life.—"*The Desire of Ages*," pages 690, 693.

4. The multitude guided by Judas is described by Mark as "great." It consisted (1) of the band (John 18:3, 12), or Roman cohort, numbering three or four hundred men; (2) the captains of the temple (Luke 22:52), with their men, who guarded the temple and kept order; (3) some of the chief priests and elders (Luke 22:52); (4) and finally, their servants, such as Malchus. The lanterns and torches show that they expected escape, as the moon was at the full.

5. No traces of his recent agony were visible as Jesus stepped forth to meet his betrayer. Standing in advance of his disciples, he said, "Whom seek ye?" They answered, "Jesus of Nazareth." Jesus replied, "I am he." As these words were spoken, the angel who had lately ministered to Jesus, moved between him and the mob. A divine light illuminated the Saviour's face, and a dove-like form overshadowed him. In the presence of this divine glory, the murderous throng could not stand for a moment. They staggered back. Priests, elders, soldiers, and even Judas, fell as dead men to the ground.—*Id.*, page 694.

6. "Let these go their way." The divine courage with which Christ met, single-handed, the hosts of his enemies, is not more sublime than his tender, unflinching consideration for his faltering followers. Divine love,

while making the soul utterly self-forgetful, quickens into life intense, unflinching remembrance of others. "Abnegation of self and devotion to others" is the true test of Christlikeness.

7. "Put up thy sword into the sheath." Peter, in defending Christ, was defending truth; yet Christ forbade the use of the sword. . . . Truth sits, not on a throne that is bristling with bayonets, but on one established on the immovable basis of eternal right and love.—*Parker*.

8. The disciples were terrified as they saw Jesus permit himself to be taken and bound. They were offended that he should suffer this humiliation to himself and them. They could not understand his conduct, and they blamed him for submitting to the mob. In their indignation and fear, Peter proposed that they save themselves. Following this suggestion, "they all forsook him, and fled."—"*The Desire of Ages*," page 697.

NOTE AND COMMENT

More Money Wanted.—T. B. Reed, of Maine, ex-speaker of the Senate, has announced his intention to retire from political life, and engage in the practise of law in New York City. The natural desire to increase his income is the reason given for the change. As a senator he received \$5,000 a year; as a member of the law firm with which he is to connect, it is supposed he will receive \$50,000 a year,—a salary equal to that of the President of the United States.

Russia and Persia.—The imperialistic ambition of Russian statesmen, not satisfied with the appropriations made in Turkey, China, and Finland, is now seeking additional territory in northern Persia. No objection to this appropriation has as yet been made, but some are in favor of intervention on the part of the United States, on account of Russia's well-known opposition to missions, of which there are several supported by churches in this country in and near the section in question.

Too Late.—Some good people in Massachusetts are trying to prevail upon the State legislature to revoke the sentence of banishment passed on Roger Williams in 1635. This would accomplish no more than a supreme-court decision to reverse the sentences of the persons executed for witchcraft at Salem. The best thing the Bay State people can do now is to act upon the words of the historian: "The past has taught its lessons; the present has its duty, and the future its hope."

Liquor-Selling in the Army.—The construction now given to the attorney-general's interpretation of the new law prohibiting this traffic with the soldiers, is that only beer and light wines shall be sold in the canteens. *Harper's Weekly* says: "The canteen ought not to be abolished to please reformers, nor retained to gratify rum-sellers. It ought to get absolute justice on its merits." If "justice" in this connection means a proper reward for previous responsibilities, we can only conceive of total oblivion as the proper future of the canteen.

Wireless Telegraphy.—Experiments in this newly discovered process are continually being made. The sending of a message thirty-two miles across the English Channel to France has been successfully accomplished. At Notre Dame, Ind., scientific men have been making daily trials of the wonder, independent of others, and have now successfully telegraphed two and one-half miles without a connecting wire. At the Ann Arbor State University, attention is also being given to this invention; and additional apparatus, already ordered, is now awaited further to prosecute its study. The principles involved are now being applied to telephones, with promise of success.

"Uncle Sam's Philippine Puzzle."—What will happen next in these troublesome islands seems as far from settlement as at any time since the "Raleigh" fired her first gun in Manila harbor last May. The Spaniards are becoming importunate in asking for the return of their countrymen now held by the Filipinos,—a consideration named in the peace treaty between this country and Spain. So far the United States forces have been unable to fulfil this part of their contract, but they have offered to turn over to Spain sixteen hundred Filipino prisoners in exchange for her men. Later comes the news of the capture of Lieutenant Gilmore, with fifteen men, by the Filipinos, and the proposal to exchange these sixteen hundred prisoners for them. What next?

The Youth's Instructor

DURING THE NEXT 52 WEEKS WILL CONTAIN OVER

FOUR HUNDRED PAGES THIS SIZE,

Thus giving you, for only 75 cents, over 6,000 square inches more reading-matter than could be furnished in double the number of pages, small size, as heretofore, besides enabling us to illustrate the various themes better than is possible on a page only half the size of this. We propose to make the "Youth's Instructor"

SO MORAL———SO EDUCATIONAL———SO ARTISTIC

THAT NO OTHER YOUTH'S PAPER IN THE WORLD CAN BE COMPARED WITH IT.

The Following-named Features Indicate the Merit of the Whole:—

Character Building.

Under various topics, Mrs. E. G. White, author of numerous well-known religious books, will supply such counsel and encouragement as only her lifelong study of God's Word and a ripened Christian experience can impart. Practical Christianity, or every-day right-doing, is more important than correct theory with careless practise. We are building for eternity.

How Things Are Made.

By a carpenter and cabinet-maker of lifelong experience,—Mr. W. K. Loughborough, one of the most skilful wood-workers that ever handled a tool. Illustrated lessons for boys, big and little. Thousands of boys are idle, because parents do not take time, or do not know how, to instruct them.

Great Musicians.

From David to the religious harmonists of the Reformation era. God's purpose and Satan's perversion; showing that the tenderest influences are the most powerful either for good or for evil, and urging the importance of placing the youthful mind under the right musical training as well as discriminating in other educational lines. By Mary Alicia Steward, author of "Sketches of Bible Child Life."

Mission Fields.

The progress of "the everlasting gospel," in all parts of the world, on land or sea, will be joyfully heralded for the encouragement of those conducting "Missionary Gardens," or aiding Christian workers by other methods. You will be kept in touch with the East Indies, the West Indies, the South Sea Islands, the Philippines, our missionary ships, the Southern field, etc.

Nature Studies.

Prof. M. E. Cady will continue his excellent interpretation of Nature's myriad voices, so meaningless to plodding millions. Flower and forest, insect and reptile, monkey and man, cover a vast field of research.

Practical Hygiene

Will comprise numerous treatises on important health topics, by Drs. A. B. Olsen, F. M. Rossiter, and others skilful and in training.

Hints for the Home, by Mrs. S. V. Sutherland.

Phases of Life in the Orient, by R. W. Munson.

Bible Characters, by Elder U. Smith and others.

MRS. L. D. A. STUTTLE, author of "Making Home Happy," will complete her story, "Making Home Peaceful," and contribute other valuable articles during the year.

A Few of the Many Other Themes to be Presented.

Religious.—Christian Help Work, Prayer and Praise, Temperance, Precious Promises, The Three Graces, An Onward Glance, God's Handiwork, Other Worlds, Beacon Lights, The Word of Power, Whosoever Will, The Strait Gate, The Christian Pathway, The Eternal Inheritance, Prophetic Voices, Among the Stars, Missions and Missionaries, Christ Our Pattern.

Secular.—Good Manners, Books and Writers, Science of Common Things, Around the World, Other Lands, With Pen and Kodak, Humane Topics, In Mercy's Name, On the Frontier, Talks on Electricity, The Laboratory, American Pioneers, Wonders of the Deep, Bits of Biography, Chats with Children, Our Dumb Friends, Underground, Pointers to Success.

Only 75 cents a Year, or 1½ cents a Week, for Eight Large Pages.

Appreciation is the best collector that ever managed a subscription list. **Excellence** is the best premium ever offered to secure appreciation.

P. S. If you consider yourself in any degree responsible for the intellectual or spiritual condition of your children, neighbors, and friends, kindly see that they supply themselves with so excellent but cheap an Instructor during the next year. We are running this paper on a missionary basis, and the list must be increased to cover expenses. Will you assist for the good of humanity, without even a five-cent premium? Sample copies free. Address,—

YOUTH'S INSTRUCTOR, Battle Creek, Michigan.

Missionary Gardening

Describes and illustrates the best way to work the vacant spot in your back yard, or the vacant lot which your neighbor will allow you to use free of charge, for missionary purposes. Shows how to do everything, from planting a 20-day radish to harvesting a 20-pound squash. Conducted by Arthur F. Hughes, graduate Michigan Agricultural College, and Battle Creek College, scientific course.

From Sinai to Olivet.

This story, by Mrs. S. M. I. Henry, an author and lecturer too well-known to need introduction, will deal with practical every-day life, and will be of interest to parents and young people. It will forcibly point out some dangers into which both are liable to fall in their mutual relations, and the one sure remedy.

Modern Inventions.

Prof. Frank William Howe, editor of the "Christian Educator," and graduate of the University of Michigan, classical course, will describe and illustrate the most remarkable of evolutionary articles, from the primitive wheelbarrow to the smokeless locomotive; from the jack-lantern to the automatic electric search-light; and from David's 40 rod hand-sling to the modern armor-piercing shell, thrown fifteen miles by smokeless powder.

Our Sewing Circle

Will be conducted by a practical dressmaker, Miss Nellie Dice, now teaching in Battle Creek College. Almost any girl can gather a hole and tie thread around it, but few can mend a rent so neatly as to save the expense of buying a new garment. An excellent plan in the home would be for the boys to study our department on wood-work, learning to make household utensils on exchange for first-class patching.

Physical Culture,

Or the care of our bodily "temples of the Holy Spirit," will be presented from a practical standpoint by Mrs. M. D. McKee, formerly preceptress and teacher of physical culture in Battle Creek College.

Civil Government,

Or the analysis of human relations in a world of sin, always mindful of man's obligations to the Creator, will be treated by Prof. W. H. McKee.

Science Stories, by Ethel Terry Reeder.

Echoes of History, by H. E. Simkin.

Bible Lessons and Notes, Conducted by Fannie Bolton.