

THE YOUTH'S INSTRUCTOR

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THE STRENGTH OF THE HILLS.

MY thoughts go home to that old brown house,
With its low roof sloping down to the east,
And its garden fragrant with roses and thyme,
That blossom no longer except in rhyme,
Where the honey-bees used to feast.

Afar in the west the great hills rose,
Silent and steadfast, and gloomy and gray;
I thought they were giants, and doomed to keep
Their watch while the world should wake or sleep,
Till the trumpet should sound on the Judgment day.

I used to wonder of what they dreamed
As they brooded there in their silent might,
While March winds smote them, or June rains fell,
Or the snows of winter their ghostly spell
Wrought in the long and lonesome night.

They remembered a younger world than ours,
Before the trees on their top were born,
When the old brown house was itself a tree,
And waste were the fields where now you see
The winds astir in the tasseled corn.

And I was as young as the hills were old,
And the world was warm with the breath of spring,
And the roses red and the lilies white
Budded and bloomed for my heart's delight,
And the birds in my heart began to sing.

But calm in the distance the great hills rose,
Deaf unto raptures, and dumb unto pain,
Since they knew that Joy is the mother of Grief,
And remembered a butterfly's life is brief,
And the sun sets only to rise again.

They will brood, and dream, and be silent, as now,
When the youngest children alive to-day
Have grown to be women and men, grown old,
And gone from the world like a tale that is told,
And even the echo forgets to stay.

—Louise C. Moulton.

Written for the INSTRUCTOR.

THE CASTLE OF KENILWORTH.

ABOUT five miles from the town and castle of Warwick, of which you have had a description in a former number of the INSTRUCTOR, lie the ruins of the famous castle of Kenilworth. From our picture you can get but a faint notion of how the castle looked two hundred years ago, in the days of England's Maiden Queen.

This lordly castle, which had been the bone of contention among many high nobles and valiant warriors, and the cause of many sharp contests, Queen Elizabeth bestowed on her favorite, Robert Dudley, Earl of Leicester. Dudley spared no pains to improve and beautify his castle, and made many fine additions, which were called Leicester's buildings.

Apart from the sieges to which the old fortress was subjected, and the revels and games of chivalry that at other times took place within its walls, perhaps the most memorable event in the history of Kenilworth is the royal entertainment given by Leicester to his Queen. Dudley spared no means to make the entertainment one of princely magnificence. On one side of the castle spread an artificial lake; and over this the Earl built a fine bridge, that the Queen might enter by a path hitherto untrodden.

The journey from London to Kenilworth was made on horseback, the Queen herself being an expert horsewoman. Hither she came with thirty-one barons, and four hundred servants, besides the ladies of the court, all of whom were lodged in the castle. She arrived at the gate toward the close of the day (July 9, 1575), where she was met, says an eye-witness of the magnificent spectacle, "by a person representing one of the ten Sibylls, comely clad in a pall of white sylk, who pronounced a proper poezie in English rime and meter," telling, in flattering terms, how happy they were to entertain her gracious Majesty.

"On her entering the tilt yard, a porter, tall of person, and stern of countenance, wrapt also in sylk, with a club and keiz in quantity according, in a rough speech, full of passions, in meter aptly made to the purpose," demanded the cause of all this "din and noise, and riding about, within the charge of his office!" but when he saw the Queen, he fell down on his knees, and delivering up his club and keys, declared the castle free to all.

Then six trumpeters, "clad in long garments of sylk, who stood upon the wall of the gate, with their silvery trumpets of five feet long, sounded a tune of welcome."

"Harmonious blasters, walking upon the walls, maintained their delectable music, while her Highness all along the tilt yard rode, into the inner gate." At every step her thoughtful courtier and host had planned some new surprise. Slowly the Queen and her train made their way to the great hall of the castle, "gorgeously hung for her reception with the richest silken tapestry, misty with perfumes, and sounding to strains of delicious music."

For days the entertainment was kept up, and every pastime that could be devised was carried out to white away the gay hours; yet I fancy that underneath the white velvet and satin and cloth of silver of the proud Earl, and the gay apparel of many of his fellows, beat hearts ill at ease with themselves and the world, and hiding dark secrets that gnawed like a canker. But the demon of unrest and mad ambition urged them on to trample down the manhood that was their birthright, and stoop to any means to attain the highest place in the favor of the court.

"BUT THEN."

It was a queer name for a little girl, and it was not her real name, that was Lizzie, but everybody called her "But Then."

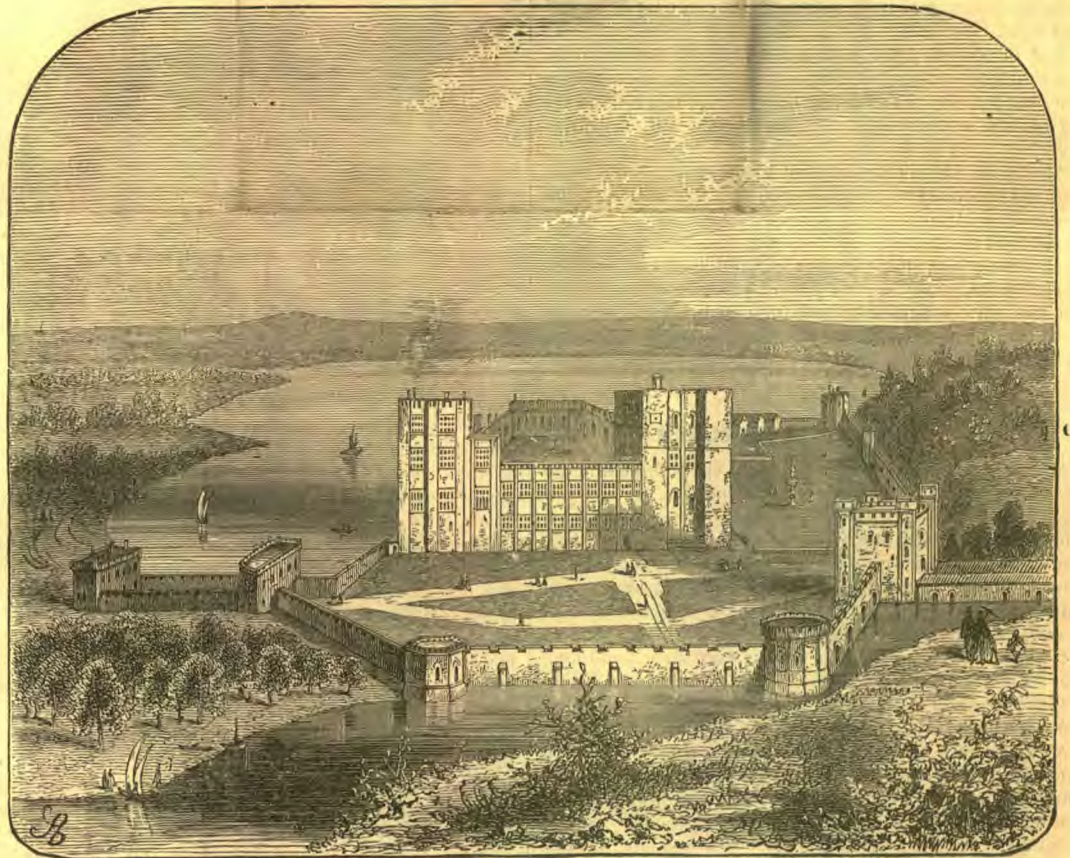
"My real name is prettier, but then, I like the other pretty well," she said, nodding her soft brown curls. And that sentence shows just how she came by her name.

If Willie complained that it was a miserable, rainy day, and they couldn't play out-of-doors, Lizzie assented brightly,—

"Yes; but then, it is a real nice day to fix our scrap-books."

When Rob fretted because they had so far to walk to school since they had "moved to this horrid out West," his little sister reminded him,—

"But then, it's all the way through the woods, you know; and that's ever so much nicer than walking on pavements."



And the great queen, though the attentions and fine speeches of her courtiers flattered her vanity, no doubt grew very weary of the pomp and cares of state, and the pretended solicitude of her followers. She whose lightest wish was law to a million people, yet found herself the greatest slave of them all. And I fancy that in very weariness and disgust at the hollowness of the court and the treachery of false friends, she would oftentimes long to exchange places with the humblest in the realm.

"Of this lordly palace," says a noted writer, "where princess feasted, and heroes fought, now in the bloody earnest of storm and seige, and now in the games of chivalry, where beauty dealt the prize which valor won, all is now desolate. The bed of the lake is but a rushy swamp; and the massive ruins of the castle only show what their splendor once was, and impress on the musing visitor the transitory value of human possessions, and the happiness of those who possess a humble lot in virtuous contentment."

W. E. L.

WHOEVER looks for a friend without imperfections will never find what he seeks. We love ourselves with all our faults, and we ought to love our friends in like manner.

When even patient Aunt Barbara pined a little because the rooms in the new house were so few and small compared with the comfortable Eastern home, a rosy face was quickly lifted to hers with the suggestion:—

"But then, little rooms are the best to cuddle all up together in, do n't you think so, auntie?"

"Better call her 'But Then,' and have done with it!" declared Rob. "No matter how bad anything is, she is always ready with her 'but then,' and some kind of consolation hitched on to the end of it."

And so, though no one really intended it, the new name began. There were a good many things that the children missed in their new and ruder home in the West. Money could have bought them even there; but if the money had not gone first, their father would scarcely have thought it necessary to leave his eastern home. They had done what was best under the circumstances, still the boys felt rather inclined to grumble about it one winter morning, when they were starting off to the village on an errand.

"Just look at all the snow going to waste, without our having a chance to enjoy it!" said Will; "and the ice, too,—all because we couldn't bring our sleds with us when we moved."

"But then, you might make one yourself, you know. It

would n't be quite so pretty, but it would be just as good," suggested little But Then.

"Exactly what I mean to do as soon as I can get money enough to buy two or three boards; but I haven't even that yet, and the winter is nearly half gone."

"If we only had a sled to-day, Sis could ride, and we could go on the river," said Rob. "It's just as near that way, and we could go faster."

"It is a pity," admitted the little girl, with a momentary clouding of her bright face. "But I've thought of something—that old chair in the shed! If we turned it down, its back would be 'most like runners, and so—"

"That's the very thing!" interrupted the boys, and the old chair was dragged out in a twinkling, and carried down to the river. Then away went the merry party, laughing and shouting, on the smooth road between the snowy hills, while Gyp followed, frisking and barking, and seeming to enjoy the fun as much as any of them.

"Now we'll draw our 'rig' up here close under the bank, where nobody will see it, and leave it while we go up to the store," said Rob, when they had reached the village.

Their errand was soon accomplished, and the children were ready to return; but as they set forth, Will pointed to a dark spot a little way out on the ice.

"What's that? It looks like a great bundle of clothes." It was a bundle that moved and moaned as they drew near, and proved to be a girl a little larger than Lizzie. She looked up when they questioned her, though her face was white with pain.

"I slipped and fell on the ice," she explained, "and I'm afraid I've broke my leg, for it is all twisted under me, and I can't move it or get up. I live in the village. That's my father's carpenter shop where you see the sign. I could see it all the time, and yet I was afraid I'd freeze here before any one saw me. Oh, dear! it doesn't seem as if I could lie here while you go for my father."

"Why, you need n't," began Rob; but the girl shook her head.

"I can't walk a step, and you two are not strong enough to carry me all the way. You'd let me fall, or you'd have to keep stopping to rest; and putting me down, and taking me up again would almost kill me."

"Oh, but we'll only lift you into this chair, just as carefully as we can, and then we can carry you easy enough," said Will.

And in that way the poor girl was borne safely home, and the children lingered long enough to bring the surgeon and hear him say that "young bones do n't much mind being broken, and she will soon be about again as well as ever."

"But then, was n't it good that it was only the old chair that we had to-day?" asked little But Then, as she told the story to Aunt Barbara at home. "O Aunty, I had the nicest kind of a time!"

"I believe you did," answered Aunt Barbara, smiling, "for a brave, sunny spirit that never frets over what it has not, but always makes the best of what it has, where it is, is sure to have good times. It does not need to wait for them to come; it has a factory for making them."—*S. S. Gem.*

PUT THINGS IN THEIR PLACES.

MUCH of the time of busy people is spent in picking up and clearing up after persons who are careless, thoughtless, lazy, and disorderly. They derange, but never arrange. They meddle with other people's affairs, misplace their tools, throw things into disorder, upset and disarrange work that has cost others time and labor to arrange, and then away they go, leaving everything in chaos. If all persons would learn to pick up their own litter, clear up after themselves, put things back where they find them, and let alone what belongs to others; if they would see to it that no action of theirs increases the labor of oppressed and overburdened people, they would be much more useful than they now are, and would have the satisfaction of knowing that if they could not be helpers, they were not hinderers in the world. But, unfortunately, those who are the least useful, and have the most time to pick up after others, are sometimes the very persons who make the most litter and confusion, and so hinder far more than they are likely to help, unless they mend their ways. Such ways are not easy to mend. Only those who have self-control enough to halt in the midst of the greatest hurry, and restore order, can hope to succeed.

The whole universe is a wonderful example of this orderly arrangement. In creation, God put things in their places.—*Little Christian.*

BELIEVING AND UNDERSTANDING.

"I WILL not believe anything but what I understand," said a self-confident young man in a hotel one day.

"Nor will I," said another.

"Neither will I," chimed in a third.

"Gentlemen," said one who sat close by, "do I understand you correctly, that you will not believe anything that you don't understand?"

"I will not," said one, and so said each one of the trio.

"Well," said the stranger, "in my ride this morning I saw some geese in a field eating grass; do you believe that?"

"Certainly," said the three unbelievers.

"I also saw the pigs eating grass; do you believe that?"

"Of course," said the three.

"And I also saw sheep and cows eating grass; do you believe that?"

"Of course," was again replied.

"Well, but the grass which they had formerly eaten had by digestion turned to feathers on the backs of the geese, to bristles on the backs of the swine, to wool on the sheep, and on the cows it had turned to hair; do you believe that, gentlemen?"

"Certainly," they replied.

"Yes, you believe it," he rejoined, "but do you understand it?"

They were confounded, silent, ashamed.—*Sel.*

MOTHER'S OLD HYMN.

THROUGH the trembling folds of the twilight dim,
I can hear the strains of that grand old hymn
Which mother, whose heart is now still and cold,
Sang midst her cares in the days of old.

There was something about it, undefined,
That charmed into quiet the troubled mind;
O'er the bleak hearts breathed with a spirit bland,
Like a warm south wind o'er a frozen land;

And crowning it all with a strange, deep chord,
Like the throb of the heart of the blessed Lord,
That shed through the fainting soul abroad
A sense of the pitying love of God.

The songs of the singers that fame has crowned
In the flood of the years are lost and drowned;
But mother's old hymn, every pause and tone,
With the growth of time has the sweeter grown.

—*Selected.*

Written for the INSTRUCTOR.

NEW ZEALAND.

NEW ZEALAND was discovered by Tasman, a Dutch navigator, in the middle of the seventeenth century, and received from him its present name. It lies about as far south of the equator as Spain does to the north of it, and its shape is very much like that of Italy reversed. It is situated something more than a thousand miles east of Australia, and in extent is nearly equal to that of Great Britain and Ireland. It consists of two large islands, and several smaller ones. The two principal islands are separated from each other by Cook's Straits, eighteen miles in width.

It is a country of varied scenery. The Southern Alps run through the entire length of the two larger islands, with only one interruption,—that of Cook's Straits. On the South Island, especially, some of the peaks of this range attain to great heights, Mount Cook having an elevation of 13,200 feet above the level of the sea. A large number of boiling mud-pools, hissing cisterns, and intermittent geysers throw up their columns of spray to a great height, with an explosive report. Water of almost every degree of temperature, from boiling heat to extreme coldness, may be found in its lakes. These are of great advantage to the few natives living in their vicinity, who, it is said, cook their food by immersing it in the already heated waters.

The natives are of Malay origin. They call themselves *Maori* (pronounced in two syllables), which means indigenous, or native; but their own traditions state that their ancestors came, more than five hundred years ago, from an island called Hawaiki, somewhere in the North Pacific. Their laws, language, and legends are very nearly like those of the Hawaiian islanders, from which it is inferred that the two races had a common origin. When the country was first discovered, the natives were estimated to number about 100,000. There are now probably not more than 40,000 left. They formerly lived to a great age, if not killed in battle; but since white men settled on the islands, diseases of which they once knew nothing have become quite common, and many die at an early age.

The Maories are a well-formed race, and the shape of their heads indicates considerable mental power. Their features are regular, and they have an olive complexion. When first known to Europeans, they were savages and cannibals, and extremely fierce. Among other barbarous customs, the men tattooed their faces, and the women their chins and lips. This was a very tedious and painful process. The skin was punctured with a piece of sharp, pointed bone, and a vegetable paint or die was then mingled with the blood. Only a little of this could be done at a time.

When the inflammation of the first wounds had passed away, another piece was added. In this way, several months were required to complete the design; but when once done, the lines are indelible. This custom, with others of like nature, is now nearly abandoned, and many of the natives are rising to fill positions of honor and trust in the Government. Already quite a number of them have been elected to seats in both houses of Parliament.

One custom prevailed among these natives that will no doubt appear singular to the reader. Instead of shaking hands when they met, as people do in our country, they would rub their noses together, and then express their feelings by laying their heads on each others' shoulders, and uttering a mournful wail. The men cultivated the soil in a rude way, while the women cooked the food, and wove rough garments from the fiber of the flax. Their cooking process was very simple. A hole eight or ten inches in depth was made in the ground, in which large stones were heated very hot. These were covered with layers of flax and fern, and the article to be cooked was laid on them, and covered with more flax. Water was

then poured over the heap, producing a steam, and thus cooking the food.

The Maories once lived in fortified villages, which were frequently built on high, open hills. The several tribes were at war so much with each other, that they were always prepared for an attack. It is altogether different now; the most of them are peaceable and quiet citizens, pursuing their avocations the same as the Europeans. Very few of them live in towns with the white people; but they have settlements of their own, and possess much land. The most of the natives are found on the North Island, they having sold nearly all the land owned by them in the South Island.

There are now only a few of them who cannot read and write their own language. While the advent of the white man among them has introduced some vices, which are to be much regretted, Christianity has done a great work for them; and many large and handsome churches stand as witnesses of their earnestness and devotion to the cause of Christ.

It was by much stratagem that Christianity was introduced into New Zealand seventy years ago. The natives allowed no one to land on their islands, and killed all who attempted to do so. An English missionary on his way to Australia, a few days after leaving England, saw, lying on the deck of the ship, a dark-skinned man who had a very sad look. Upon inquiry, he was found to be a young New Zealand chief, who had worked his way to England as a common sailor, in order to see the king. Disappointed, defrauded, and sick, he was returning to his native land after an absence of four years. Arriving at Sydney, New South Wales, the missionary took him to his own house, where he remained for some months. After recovering his health and spirits, the young chief returned to New Zealand, and was soon followed by the missionaries. But with all the influence wielded by the chief, who had been so well treated by the missionaries, their reception was anything but cordial; though they were permitted to remain, out of regard to the chief's wishes.

For quite a number of years the missionaries were continually harassed by the treachery of the natives, who watched for opportunities to commit depredations, and even to take their lives. After a long time, however, they succeeded in learning the language of the people, and then opened schools for the children, and preached the gospel.

Eleven years after landing, the first convert was baptized. But dark times were seen after that; for even after fourteen years of hard labor, one of the mission stations was burned, and the family fled to the coast, and sailed for Sydney. The work was, however, soon afterward recommenced there, and a large harvest of souls was gathered. But their faith was destined to be more severely tried; as late as 1800, a violent tribal war broke out, in which two missionaries were murdered, and many of the natives renounced their Christianity. But this proved to be the turning point in the work; for since then, Christianity has taken deep root in the hearts of many, and a large number of the natives have themselves become preachers of the gospel. Truly the Word is like "a hammer that breaketh the rock in pieces." J. O. CORLISS.

"PAYING OFF MOTHER."

"MOTHER," said a little black-eyed boy of six years, "when you get old, and want some one to read to you, I will pay you off."

Little Alexander's mother had been in the habit of reading to him a good deal, and on this Sabbath day she read to him a long time out of the Bible and a Sabbath-school book. The child was just able to read, himself, and the progress he was making doubtless suggested to him how he might at some future time return all his mother's care.

"I will pay you off, mother," said he, looking up into her face with childish satisfaction, as if a new thought from heaven had been sent down to light up the little world of soul. His mother pressed him to her heart with a delight that seemed to say, "My son, I am more than paid off already."

But, children, you can never pay off your mother. Her thoughts of love and acts of affection are more in number than the days of life. How often has she nourished you, dressed you, kissed you, rocked you on her knee and in the cradle, carried you in her tender arms, watched over you in sleep, guided your infant steps, corrected at times your misdemeanors, thought of you in absence, and guarded your life in the unvarying remembrance of a mother's solicitude, and the free-will offerings of a mother's devotion! Ah, dear children, you can never "pay off your mothers."

Mother has taught you to read and pray. She has patiently sat by you and taught you the letters of the alphabet, and then she helped you to put them together and spell words of thought. She taught you to know God. Before you could read, she taught you to say, "Our Father which art in heaven." Mother has trained you with lessons and hymns and prayers to come to Christ. She has prayed for you when none but God knew it, and has prayed with you when your wandering eyes understood not the meaning of her grave and imploring looks. She pointed you to heaven, and "led the way." Dear children, you can never "pay off your mothers."—*Sel.*

It is a bad fireplace where all the heat goes up the chimney; true religion spreads joy over all around. Yet the fire warms first the chimney in which it burns, and grace comforts the heart in which it dwells. Nobody will be warmed by a cold hearth.

The Sabbath - School.

SECOND SABBATH IN NOVEMBER.

IMPORTANT BIBLE SUBJECTS.

LESSON 9.—THE FOURTH KINGDOM.

[NOTE TO THE STUDENT.—Do not consider the lesson learned until you can give at least the substance of every text, with the correct reference for each. The references in black letters indicate those texts that should be committed to memory. A little diligent application each day will enable you to learn them, although this need not be considered a test of scholarship.]

1. By what metal was the fourth kingdom represented? Dan. 2:33.
2. How is the iron rule of this kingdom described by the prophet? Verse 40.
3. Describe the fourth beast of chapter seven. Verse 7.
4. What did the angel tell Daniel this beast represented? First part of verse 23.
5. What work of destruction was this beast to perform? Verse 23, last part.
6. How much territory was to be devastated by this beast?
7. By what is the fourth universal empire represented in Dan. 8? Verse 9.
8. What did the angel say of the destructive power of this little horn? Verse 24.
9. How is the greatness of the three kingdoms of Dan. 8 compared? Verse 4, last clause; verse 8, first clause; verse 9, first part.
10. Then which of these kingdoms was the strongest?
11. In comparing the metals of Dan. 2, how is this superior strength of the fourth kingdom represented? Dan. 2:40.
12. Is the name of this fourth universal empire mentioned in any of the chapters of prophecy we have been considering?
13. Against whom did this power array itself? Dan. 8:11, first part.
14. Who is the Prince of princes? Rev. 1:5; Acts 3:15.
15. Before whom was our Saviour tried and condemned to death? Mark 15:15.
16. Who was this Pilate? (See note.)
17. What edict was issued by the head ruler of this Roman government more than thirty years before the crucifixion? Luke 2:1.
18. What can you say of the extent of a government that can command all the world to be taxed?

NOTE.

PONTIUS PILATE was the sixth Roman procurator of Judea. He was appointed A. D. 25 or 26, in the twelfth year of Tiberius. Judea was one of the Roman provinces, and Pilate was its governor.

EVERY encouragement should be offered to the children to put questions to their teacher, and to give free expression to whatever doubts and difficulties may be in their minds. A good teacher will never think such questions irksome or out of place, but will welcome them, as so many proofs that the minds of his pupils are at work, and so many hopeful guarantees of future success.

For, indeed, the whole sum of what may be said about questioning is comprised in this: It ought to set the learners to thinking, to promote activity and energy on their part, and to arouse the whole mental faculty into action, instead of blindly cultivating the memory at the expense of the higher intellectual powers. That is the best questioning which best stimulates action on the part of the learner; which gives him a habit of thinking and inquiring for himself; which tends in a great measure to render him independent of his teacher; which makes him, in fact, rather a skillful finder than a patient receiver of the truth. All our questioning should aim at this; and the success of our teaching must ever be measured, not by the amount of information we have imparted, but by the degree in which we have strengthened the judgment and enlarged the capacity of our pupils, and imparted to them that searching and inquiring spirit which is a far surer basis for all future acquisitions than any amount of mere information whatever.—J. G. Fitch.

Our Scrap-Book.

HOW OIL-CLOTH IS MADE.

OF the manufacture of oil-cloth, an exchange says:—

"This article is the product of many years of inventive toil and experiment; and the processes and machinery by which it is turned out are of the most elaborate character. The body of all floor oil cloth is burlap, which is first sized by treating it to a saturation of dissolved glue. It then passes through fifteen heated wire rollers, which dries it, and presses the glue water into the porous material, and removes all inequalities of surface. It then passes to the paint rooms to receive its first and many subsequent coats of paint, the principal ingredient of which is ocher. The paint is liberally put on, and the cloth, after passing under a roller to press out the superfluous paint, is run on long racks through a room in which are heated steam pipes. After remaining on the racks a prescribed number of hours,

the cloth is run through a machine, where it is pumice-stoned down to a perfect smoothness. It then receives a second coat of paint, and is again pumice-stoned, and so on until the requisite number of coats are put on both sides.

"The well-prepared material now goes into the hands of the printer. This work is all done by hand, and it requires considerable experience on the part of the workmen to make a good job. Every color requires a separate impression, the blocks in the hands of the workmen being about eighteen inches square; and great care must be taken that the block is placed in the proper place, as a hair's breadth displacement would show; also that the proper blocks are taken up in their order. After being well dried in steam-heated chambers, the piece of goods goes to the varnish machine, where a number of arms, with brushes attached, and worked in almost exact imitation of a painter's, are passed over it, giving it a complete and evenly distributed coat. These processes having been completed, after drying and trimming, the article is ready for market."

THE GREAT SEAL.

You may have seen a seal for making an impression in wax or some soft substance, the stamped material to be attached to a document to confirm it or make it reliable. A proper writing which bears the imprint of an Association's seal, stands good in law. The following items of interest concerning the government of England's seal, were published in the *New York Observer*:—

"The mere holding of the Great Seal of England entitles its fortunate custodian to some \$60,000 a year, to immense patronage in Church and State, to be Speaker of the House of Lords, a Privy Councillor, and the head of all judicial authority in the kingdom, to be designated Lord High Chancellor of Great Britain, and Keeper of the Royal Conscience, and to rank (next to the royal family) as the second subject in the realm. It is very difficult, if not impossible, to say when England first had a Great Seal. Seals were not much used by our Anglo-Saxon ancestors, but came largely into fashion during the Norman reigns. The gilt crosses or marks of Edward the Confessor, and other Saxon kings, can scarcely be called seals, and partook more of the character of signatures of an illiterate age; but a grand and perfect seal of William the Conqueror exists, having the monarch crowned and throned on the one side, and mounted on horseback on the other, attitudes which have been invariably observed to the present day.

"One remarkable circumstance connected with the Great Seal, is its progressive growth in size as time advanced. Originally, eight hundred years since, not larger than the top of an ordinary modern tea-cup, it has been gradually enlarged from age to age, till it offers now the size and appearance of a muffin, and requires to be inclosed in a tin box for protection. Indeed, so cumbersome and unwieldy had the Great Seal become, that some three or four years since, an Act of Parliament passed—containing very extraordinary provisions, directing that all the minor, and many even of the more important documents passing under it, should for the future be authenticated by a *paper wafer* of moderate size, which should be gummed on the instrument, and be deemed and taken to be the Great Seal itself.

"The Great Seal has only three times been lost, twice temporarily, and once permanently. James II., on leaving the kingdom on his abdication, threw the seal into the Thames, whence, however, it was next morning fished up and brought to Whitehall. Lord Eldon buried it in his garden in Queen Square during one night when his house caught fire, and he thought in the confusion it might be stolen. 'And,' writes the Chancellor in his diary, 'when the fire was extinguished, I quite forgot in the morning where I had buried it, and while the carriage waited to take me to Court, my lady and I and all the household, were digging with pieces of stick, till we luckily found it.' Lord Thurlow, who always held it during the night in his bedroom, had it actually carried off by burglars, from whom it was never recovered. A Privy Council was called the next day, a new seal was rapidly made, and during the remaining of his continuance in office, Lord Thurlow invariably deposited it at night under his pillow.

"Down to 1818 the Great Seal itself was made of copper; since then, silver has been the metal employed. It is in two halves, somewhat like two very thick, bright, tin saucepan lids, fitting closely together, their inner surfaces deeply sculptured with the royal devices intended to be formed on the wax when squeezed between them.

"Instruments having a limited duration are sealed with yellow wax. Others supposed to exist in perpetuity, such as patents of peerage, etc., are exemplified under green wax; and in the case of some letters patent likely to be exposed to a good deal of knocking about, or journeying from place to place, such as were the Assize Commissions, the wax seal was stamped after being ingeniously enclosed in cream-colored leather."

CHARCOAL AND ITS KINSMEN.

How many of our readers have ever seen a coal-pit, where charcoal is made? Of the nature and use of charcoal, L. C. Cooley, Doctor of Philosophy, in Alden's Book of Knowledge, says:—

"The charcoal-burner piles his sticks of wood in the shape of a mound, and covers the whole with dirt and turf. He leaves several small holes at the bottom of the pile, for a little air to enter, and another at the top, for the smoke to escape. Then, lighting his fire, a half-smothered burning is kept up for a long time.

"Would you know what change takes place in the wood during this combustion? It is a very simple one. The particles of the wood are broken to atoms. Some of the minute pieces are like air in color and lightness, and are driven away by the heat; others are not, and stay behind, in the form of a solid, black substance, called carbon. This black solid is the charcoal. Not all of the carbon is left behind, to be sure; for some of it is seized by oxygen, and the two fly away together as carbonic gas. But the quantity lost in this way is very little, compared with the amount of charcoal left.

"Did you ever notice how much the charcoal looks like the wood from which it was made? It is very black, to be sure, no matter what may have been the color of the wood; but aside from this change in color, there is little more to be seen; there is the bark with all its knotty roughness; there are the annual rings of wood inside the bark, to be counted still; and, if we may look through a microscope, there are the delicate cells which the same microscope could have shown us in the wood before it was burned. Let us lift the charcoal, and it is easy to see that the wood lost much of its weight in the fiery trial; but, really, it is not easy to see that it lost much of its size; the stick of charcoal is nearly as large as the stick of wood from which it was obtained.

"But why should the carbon so obstinately maintain the form of the wood? All this resistance to any apparent change, but that of color and weight, is due to the single fact that *carbon cannot be melted*. The most powerful heat of a furnace cannot even soften this substance. There is no heat known that is strong enough to melt it. Whatever else is present in the wood can be driven away by heat, but the carbon cannot be moved. It stays just where it was, in every part; and so the delicate cell walls of the wood do not run together, as they would needs do if they were made of a substance which could be melted. In spite of the fire, every part of the wood retains its shape.

"Carbon is as careless about the action of liquids as it is about that of fire. Let us plunge a piece of charcoal into water. Years afterward, should it be left so long, the coal will be found to be as perfect as ever. Let us put it into more corrosive liquids. Will it waste away? Not in the least degree. Liquids cannot attack it.

"Charcoal is very porous, and it has a curious power to fill all its little cells with gases. Let us notice an instance of this action. A piece of freshly-burned charcoal was sunk in a vessel filled with oxygen gas. It began at once to suck this air-like substance into every pore, and refused to stop until it had taken a quantity *nine times as large as itself*. A cubic inch of charcoal is able to absorb nine cubic inches of oxygen. Is this at all surprising? What, then, shall we say to the more wonderful fact that a cubic inch of charcoal is able to take into its own pores as much as ninety cubic inches of ammonia gas, and hold it bound, a prisoner in its cells!

"This remarkable power of charcoal makes it very useful in hospitals, and other places where offensive odors are to be found. It will absorb the bad gases, and thus purify the air. Even animal substances, when decaying, lose their power to offend us by their odor when covered with a layer of good charcoal. The decay will go on, but the porous charcoal will seize and imprison the offensive gases set free by the decomposition.

"Charcoal is only one of the many forms of the element of carbon. No other element wears so many faces. There is the *hard coal*, which is taken from the mines for fuel. There is *coke*, the black and porous solid left in the retorts of the gas-works. There is *bone-black*, obtained by heating bones in close vessels. These are a few of the different and useful members of the carbon family, to which charcoal belongs."

AN ESKIMO ILLUMINATION.

ONE would hardly think of going to the Polar Regions to witness an illuminated city, but as described by Lieut. F. Schwatka, in *St. Nicholas*, such things are not rare at certain seasons of the year. He says:—

"The first snow of the winter does not make good strong snow-blocks for the igloos, however deep it may fall, and from the time there is enough of it, the Eskimos often have to wait three or four weeks before it is fit for building. As it gets too cold in their summer seal-skin tents before this time comes, the natives generally build preliminary houses of ice, which, singular as it may seem, are much warmer than the tents, but not so comfortable as the houses of snow. When the ice has formed to about six inches in thickness on some lake close by, they cut out their big slabs of ice for the sides of the house. Imagine an ordinary-sized house-door to be a slab of ice about six inches thick; then take a half-dozen to a dozen of these doors, and place them in a circle, joining them edge to edge, but leaning in slightly, and you will have formed your curious house of ice. Over this circular pen of ice—which you can imitate on a small scale with a circular row of upright dominoes on their ends and joined edge to edge—the summer seal-skin tent is lashed across poles for a roof, and the ice-house is complete. By and by, this roof, sagging with snow, may be taken off and a dome of snow put on, which gives more height and consequently more comfort.

"Before these houses get covered inside with the black soot from the burning lamps, and before the snow outside has drifted up level with the roof, a night scene in a village of ice, and especially if the village be a large one and all the lamps be burning brilliantly, is one of the prettiest views a stranger can find in that desolate land. If you could behold a village of cabins suddenly transformed into houses of glass, and filled with burning lamps, it might represent an Eskimo ice village at night."

WHO IS VICTORIA?

MOST all of you know that Victoria is the present queen of England; but can you trace her pedigree eight hundred or more years? We clip the following from a late exchange:—

"Victoria is the daughter of the Duke of Kent, who was the son of George III., and was the grandson of George II., who was the son of George I.; who was the son of Princess Sophia; who was the cousin of Anna, who was the sister of William and Mary; who were the daughter and son-in-law of James II.; who was the son of Mary (Queen of Scots); who was the granddaughter of Margaret; who was daughter of Henry VIII.; who was the son of Henry VII.; who was the son of the Earl of Richmond; who was the son of Catherine; who was the widow of Henry V.; who was the son of Henry IV.; who was the grandson of Henry III.; who was the son of John; who was the son of Henry II.; who was the son of Matilda; who was the daughter of Henry I.; who was the brother of William the Conqueror."

BORING ANIMALS.

INSECTS and other insignificant forms of life can do much mischief when they act in large numbers. The searchin, which you have often found on the shore, can bore through granite by means of its teeth. Sponges can pierce limestone. The gribble-crab seriously injured the beams that supported the temporary beacon erected on the Bell Rock by Robert Stephenson. It attacks all kinds of timber; and cases are known in which the piles of piers have had to be renewed every four years, owing to the havoc played in them by this crab, which assaults every submarine cables. The ship-worm is met with in every sea, and bears the palm for destructiveness. It bores long tunnels in the wood, which is soon reduced to a state of worthlessness. The only good that these borers can be said to do is when they destroy the wrecks of sunken ships and the stray wood that floats about on the ocean wave.

WE are credibly informed that there are 10,000 children in New York City who have no place to sleep nights, except in sheds and barrels.—*The Well-Spring*.

For Our Little Ones.

OUR HEROES.

HERE'S a hand to the boy who has courage
To do what he knows to be right.
When he falls in the way of temptation,
He has a hard battle to fight.
Who strives against self and his comrades
Will find a most powerful foe;
All honor to him if he conquers,
A cheer for the boy who says, "No!"

There's many a battle fought daily
The world knows nothing about;
There's many a brave little soldier
Whose strength puts a legion to rout.
And he who fights single-handed
Is more of a hero, I say,
Than he who leads soldiers to battle,
And conquers arms in the fray.

Be steadfast, my boy, when you're tempted
To do what you know is not right;
Stand firm by the colors of manhood,
And you will overcome in the fight.
"The right!" be your battle-cry ever
In waging the warfare of life;
And God, who knows who are the heroes,
Will give you the strength for the strife.
—Eben E. Rexford.

Written for the INSTRUCTOR.

LITTLE THINGS.—NO. 3.

GEORGE," said I to a little friend one day, "what does your mother teach you to do in the morning after you are up? Have you any regular chores, or not?"

"Oh," said he, dropping down on a footstool by my side, "mamma has me wash, the first thing; then fill the wood-box, and get the water for the table and set the chairs around. When breakfast is ready, if she is in a hurry, I help her put the things on the table. Mamma says boys ought to learn to do housework; and I like to do it."

"How old are you?" I asked.

"I am ten," he replied.

"You are in the right way," I said. "Is there anything else you learn to do about the house?"

"I go down cellar and get the potatoes, and I pick the beans over. I can sew carpet rags, and I can sew on a button. I dust the chairs and furniture for mother when she sweeps. I can set the dishes on the table, after they are washed, as good as mother can. She says I am 'most as good as a hired girl," and George's eyes danced with pleasure in telling what he could do.

There is a boy, I thought, whose mother has brought him up properly. That is the way every little boy ought to do. Sometime George may be where he will have to do his own work, and then he will be glad that he has learned how to do it. "Never be ashamed to work in the house, George," I said at length. "Some foolish boys think they are above that; but about the noblest thing that a little boy can do is to help his mother. Well, what is it?" I asked, seeing that he had something he wanted to say.

"I think," he replied, "that if we boys work in the house, it would be no more than fair for the girls to learn to work outdoors, too."

"Well, how is that, Vieve?" I asked, turning to a little girl who had entered the room in time to hear George's last remark. "What do you say to that?"

"I like it," said Vieve. "I would as soon work outdoors when mamma will let me. I tended a patch of strawberries last year, and had them all for myself. I take care of the chickens, too. Pa gave me one brood for it. I have learned to take care of the horses, so that when papa goes away, I can feed and water them, and harness them too. I can ride horseback. I wish mamma would let me work outdoors more."

"That is the way every girl ought to do," I replied. "It puts the roses on their cheeks so they do not care to paint them there. It gives them good health, so that they do not need the doctor. You need never be ashamed of working outdoors, Vieve; for some of the best and greatest women in the world have done it."

"I help papa plant his corn and potatoes," she continued. "He says I am real good to help pick up potatoes, and he gave me a cent a bushel for it, and ten cents a day when I helped him about the corn."

"Don't let any one shame you out of it," I replied. "When you are grown up, you may be placed where it will be very necessary to know how to do these things. Then the knowledge will be worth a great deal to you."

I have told you this story about two of my little friends, so that you may know some of the things that it is well for children to do.

But I do not want you to get the idea that it is all work and no play. I do not believe that. I think it is just as much a part of children's business to play as it is to work. The old saying is, that "All work and no play makes Jack a dull boy." It will make Jane a dull girl, too.

The Lord did not make little folks to do very much work. They will have to work hard enough when they get older. They can and should do many little things, but they should have some time every day for good, hearty, wide-awake play.

I think that if there is anything the Lord likes it is to see the little folks be merry and run and play. That is what makes you grow, makes your lungs grow, and gives you good health; that is the way children earn their living. The little boys or girls who always sit round the house and do not like to go out and have a good hearty play-spell

will not amount to much when they grow up. So at the proper time you should play, run, jump, slide down hill in the winter, and play ball in the summer, fly your kites, build play houses, dig in the sand, and hunt flowers; only you must not play all the time, and neglect your chores and little work. This world would be a very dreary place if we had no boys and girls to make it lively. Enjoy it now while you are young, for you will have plenty of burdens and sad things to bear when you are older.

D. M. CANRIGHT.

THE SPONGE.

FOR a long time people could not make up their minds whether the sponge was a plant or an animal. It has neither sense nor motion, so that there is not much about it to remind us of an animal. Still it has a kind of animal life, and naturalists have placed it in the lowest rank of the animal kingdom.

I will tell you what a sponge is like when it lives in the sea. It has a horny or stony net-work of a body, a skeleton, if you like to call it so. This net-work is full of passages, or holes, and is covered with a slimy matter, which is really the living sponge.

The way of life which the sponge practices is as simple as can be. It does not move. It remains, all its days, in the place to which it is attached under the water. All it does, is to draw water through its pores, or holes, and let it flow out again. This is the means of nourishing it, for the water is full of particles on which the sponge may be said to feed. You see what a feeble kind of life it has.

The passages, which branch about in the horny skeleton of the sponge, have often little points, or buds, sticking to the sides. These are the little sponges beginning to grow. As they get larger, they are clothed with hairs, or cilia, and at last break away from the parent sponge. They move about in the water a few days, their cilia helping them along.



At length the little sponge reaches a place where it can fix itself. Then it fastens one end of its body to the rock or stone where it means to live. Its cilia keep on moving very fast; but when the sponge has fairly settled itself, they become quiet. Indeed, they never move again.

The little sponge is a mere drop of jelly at present; but soon a change begins to take place. Little spots are seen on its body, which grow into fibers. These fibers are made of three materials—silice, or flint, lime, and horn. All these materials exist in the sea. The cilia have been sucking them up into the body of the sponge, to make the fibers of.

The fibers keep on growing, and become a kind of network, or skeleton. The jelly-like body keeps on growing too. It fills up all the holes and passages in the framework, and surrounds it as well. This animal part can never be taken hold of, though many people have tried to do so. It turns directly to a kind of oily substance, and dries up.

The sponge grows in all manner of different shapes and colors. It makes part of the beautiful gardens and shrubberies under the water. It will be like a vase, a trumpet, or a globe, or like the branch of a tree. There is one very curious sponge which is called "Neptune's Glove."

The sponge we use is not very handsome to look at when alive. It is dull black above, and a dirty white beneath. It grows to rocks deep in the sea, and has to be cut off with a knife. Men dive down to get it as they dive for coral.

There is a large, coarse sponge, which is much easier to obtain. It grows along the coast, and can be drawn out of the water by a kind of fork, or prong. The man who is fishing for it, sticks the fork into the sponge, and so carries it away. But this kind of sponge is not of much value.

The better and finer sponges would be spoiled by any such process. And these are by far the most valuable, and cost the most money.

When the sponge is brought out of the water, its living, jelly-like body drips away and is gone. The skeleton is dried, and becomes an article of commerce.

Sponges are found in the Red Sea, the Indian Ocean, the Mediterranean Sea, the Gulf of Mexico, and nearly all parts of the world. Fifty kinds of sponge grow on the British coast, but they are not used in commerce.—*The Sea and its Wonders.*

Letter Budget.

TESSA VAN BUREN, of Otsego Co., Mich., writes: "I have seen so many letters for the Budget that I am very much interested in them, and thought I would attempt to write one. I have taken the INSTRUCTOR two years, and love to read it. It is always a welcome visitor in our family circle. I live on a farm in the country, and attend day school every day that I can. The Sabbath-school is quite a distance from home, and it is impossible for me to attend every Sabbath, but I am trying to be a good girl, so that I may gather enough gems while on this earth to make me a crown when I reach my heavenly home. Pray for me, that I may be successful."

Like Tessa, we hope all the dear readers of the INSTRUCTOR are gathering gems for a heavenly crown. Do you know how it is done?

EVELINE GUNDY writes from Deer Lodge Co., Montana. She says: "I am a little girl nine years old. As I had never written for the INSTRUCTOR, I thought I would write. I have been taking music lessons through the vacation. Three days ago, I was playing with our dog and accidentally fell over my brother's wheelbarrow and dislocated my elbow. Papa and the doctor pulled it into place. To-day it is swollen, and is very painful. School will begin to-morrow, and I am very sorry that I cannot go. Neither can I go to Sabbath-school, because I cannot get on a dress. We attend Sabbath-school all the time. My sister Cornelia wrote last spring and told you all about our family. Our time for the INSTRUCTOR is out the 29th of this month. Mamma will send you the money in this letter to renew our subscription, as we children would not be without the YOUTH'S INSTRUCTOR for anything."

When one member of the INSTRUCTOR family is afflicted, all the other members should sympathize with that one, in order to fulfill the love of Christ. You cannot go to school, as you say, dear Eveline, and yet you may now be learning lessons that you can never learn save in the school of experience. May you be a daily learner in this new school,—gathering gems, shall we call it?

MILES A. CONNOR, of Langlade Co., Wis., writes: "You said you were getting near the bottom of the letter box, so I thought I would write again. I have not written since last spring. We are trying to get a knowledge of the truth. We started a tract and missionary society the 18th of last July. There are ten members. Six persons were baptized in July. I want to lead a Christian life, and I desire the prayers of all the INSTRUCTOR family, that I may prove faithful. A canvasser who has been canvassing this vicinity for "Sunshine" and *Stigma* since July has had good success, for which we are thankful."

Some others, like you, Miles, have thought to replenish the letter box, and we think they have all written with more than usual care. This is as it should be; and we hope the improved plan may be adopted by all.

LUCINDA RIDER, writing from Utica, N. Y., says: "I have been a reader of the INSTRUCTOR for the last nine months, and I think it is the best paper I ever read. I have a friend, Estella Rose, who canvassed in this city last fall for "Sunshine at Home;" she sent me the paper, and now I never want to do without it. People of your denomination held tent meetings in the city this summer. Eld. Swift preached. I should have liked to attend, as I never have been to one of their meetings; but we lived so far away I could not. I attend school, and study grammar, arithmetic, spelling, reading, geography, and take writing and drawing lessons. I like all my studies. I am eleven years of age. My father and mother are dead, and my two younger sisters and myself live with our grandparents. My friend said she wished she could send my sister Dolly, who is ten years old, and myself, to So. Lancaster, Mass., this winter. I have often heard her speak of the school, and I would like to go very much, but we can't both leave grandma. I had a pretty flower bed this summer. I used to love to make bouquets, but the frost has killed most of them now. I read the Letter Budget each week, and though I have never seen any of the INSTRUCTOR family, still it seems as if I love them dearly. I attend the Calvary Sunday-school, and have always had a perfect lesson. I want to 'shine for Jesus,' and so live that I may have a home in heaven."

Kind thanks, Lucinda, for your interesting letter. All will welcome you gladly to the INSTRUCTOR family, and share their love with you.

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