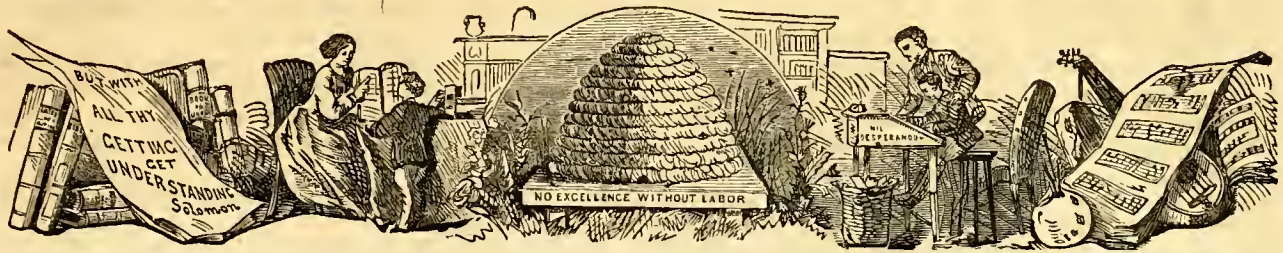


The Juvenile Instructor ¹¹³



VOL 3.

SALT LAKE CITY, AUGUST 1, 1868.

NO. 15.

THE THREE HEBREWS.

IN the engraving which we give below you see a large city with splendid buildings. You can also perceive a large image; it looks like a monument. The multitudes of people which you see seem to be bowing down to it as if they were worshipping it. To the left of the picture there is a large opening, that seems to be all ablaze, as though it were a furnace. In the foreground of the picture is a man with a crown upon his head. He is evidently a king.

By this time you all ought to be able to tell what this represents. There has been something already published about this in the INSTRUCTOR, and you ought to recollect it.

The account of this scene which you here behold, is found in the book of Daniel, which is one of the books of the Bible.

Nebuchadnezzar was king of Babylon. He had captured Jerusalem, and carried away the children of Judah into Babylon. Among the captives were Daniel, Hananiah, Mishael and Azariah. They are called children in the Bible, and they must have been very young at the time they were taken to Babylon. They were chosen to be taught in all the knowledge, learning and language of their conquerors. They had other names given to them also. Daniel was called Belteshazzar; Hananiah was called Shadrach; Mishael was called Meshach, and Azariah was called Abednego.

These young men, Daniel especially, became great men in Babylon. Daniel was made the ruler over the whole province of Babylon, and his companions, at his request, were placed to assist him.

But Nebuchadnezzar, though he had given Daniel, who was a prophet and servant of the true God, such honor, could not forget his idolatry. He made a large image of gold; and he set it up in a plain, so that the people could see it. After he had set it up, he wanted to dedicate it, and he sent out and gathered all the princes, governors and other officers of his kingdom together to the dedication. When they had come together a herald proclaimed to them what they had to do. It

is not likely that they printed newspapers in those days, or the king would not have had a herald crying out to them what to do; he would have published a programme in the papers, and then everybody could have seen it and read it for themselves. His programme was, that as soon as they all heard the sound of the music, which was to be played on the occasion, they were to fall down and worship the image he had set up. If they did not fall down and worship it, they were to be cast into the midst of a burning fiery furnace!

Some of his people were watching Shadrach, Meshach and Abednego, and went and told him that they did not worship the image he had set up. We are not told how Daniel escaped; no mention is made of him, yet he would not worship an idol.

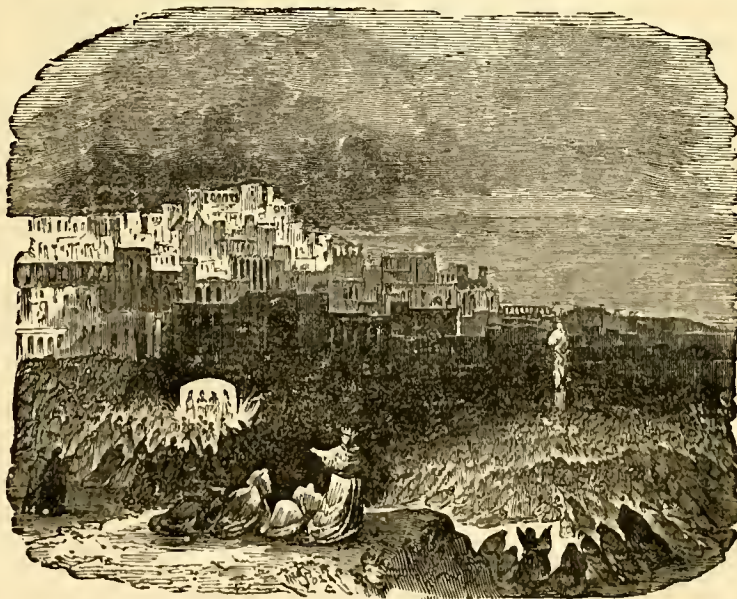
Nebuchadnezzar was very angry when he was told that these Jews would not worship his idol, and he sent for them. He told them they must worship the image he had made, or he would roast them in the big furnace, and said he, "who is that God that shall deliver you out of my hands?"

They told him the God they served was able to deliver them out of his hands; but whether He would do so or not made no difference, they would not worship his golden image.

This reply made the king furious. He ordered the furnace to be made

seven times hotter than it was before! and he commanded the most mighty men he had in his army to bind them and throw them into it. They tied them, and threw them, with their coats, hats and other clothes on, into the furnace. The king was in such a hurry to have this done, and the furnace was so hot, that the flames killed the men who threw them in.

Nebuchadnezzar soon rose up in a great hurry. He asked his counselors if they had not thrown three men bound into the midst of the fire. They told him they had. He answered that he saw four men walking around loose in the midst of the fire; they were not hurt, and, says he, "the form of the fourth is like the Son of God." It seems that he knew considerable



about the true God; at any rate he knew that He had a Son. Doubtless Daniel had told him. God gave him the power to see Him, and he appeared to know who He was.

He went to the mouth of the burning fiery furnace and called Shadrach, Meshach and Abednego, "ye servants of the most high God," to come forth. They stepped out of the fire in the presence of the king and all the great men of the kingdom, and their coats were not changed, their hair was not singed and there was not the least smell of fire about them! Then the king praised the God of Shadrach, Meshach and Abednego, who had sent His angel and delivered His servants who trusted in Him. He made a decree that all people who should speak anything amiss against the God of Shadrach, Meshach and Abednego, should be cut in pieces, and their houses be made into a dunghill! "because, said he, "there is no other God that can deliver after this sort." He then promoted these three servants of God in the province of Babylon.

Children, remember the lesson taught in this story all the days of your lives. Be true to your God; never forsake Him, and He will never forsake you. Though your lives may be at stake, do not flinch; but put your trust in God, and whether you live or die, He will overrule everything for your good.

THE STORY OF AMERICAN HISTORY.

Selected from Jacob Abbott's Writings.

PRESENTLY a gentle breeze began to blow again, and at length, a few days afterward, just at sunset, a sailor climbed up to a high place on the stern to look out, and immediately shouted, in a very loud and excited manner, "Land! Land!" They all hastened to the place, and there they saw, as they thought, a line of coast like that of an island, extending along the horizon in the southwestern part of the sky.

The land proved to be nothing but a cloud. This was a great disappointment. Still Columbus would not despair. He insisted on proceeding, and for a fortnight more the fleet went on. The patience of the sailors was then exhausted! They declared that they would go no farther, and as Columbus would not yield, they mutinied against him, and were about to throw him into the sea, when one evening they caught sight of a coast-fish swimming by, and very soon afterward they saw a small branch of a thorn-tree, with berries on it, floating in the water, and a sort of staff with figures carved upon it, which must have been cut by the hand of man. Columbus told the sailors that he was confident that they would all see land the next morning.

He himself sat up all night to watch. The vessels sailed on. Near midnight he thought he caught the sight of lights glimmering, as if on a shore. He went down, in his joy, into the cabin, to call one or two of his officers up to look. They came, and soon they saw a torch moving and waving. Columbus was overjoyed. He remained on the look-out all night, and in the morning, as soon as it was light, the land, in the shape of long and beautifully-wooded shores, came out fully to view.

Of course, the whole company of voyagers on board the several ships were greatly excited at the spectacle. The air was filled with birds of beautiful plumage, and perfumes of tropical plants and trees, wafted from the shores, awakened their senses to an intoxication of delight. The natives, too, were seen gathered in groups at all the prominent points along the shore, gazing with amazement at the ships, wondering apparently what they could be.

Columbus prepared to land. He dressed himself in a splendid military dress embroidered with gold. The chief

officers of the ships, bearing banners in their hands, and presents for the natives, accompanied him. He went to the shore in a small boat. He stepped out upon the sand elated with the most exalted feeling of pride and joy, and with a heart full of gratitude to God for having brought his hazardous enterprise thus to a successful termination.

As soon as all had landed from the boat, they kneeled down and chanted a hymn of thanksgiving and praise to God. Then rising, Columbus formally made proclamation that he took possession of the land in the name of the King and Queen of Spain.

And thus was the existence of America first discovered by the European nations.

The shore on which Columbus first landed proved to be one of the West India islands. He named the country West India because he then supposed that it was a part of the same India that had been known before to Europeans, and had been reached by travelers to the east. It was afterward found that there was a very wide ocean intervening between the land that Columbus discovered and the Indies of ancient times; but the new discoveries still retained the name of West Indies which Columbus had given them.

After Columbus had thus found the way to American shores, a great many other expeditions were fitted out by different adventurers, and so, at length, in the course of a hundred years, the whole eastern part of the continent was explored. The chief object of most of these expeditions was to procure gold and silver, and other such treasures, which were obtained in various ways from the natives in the West India islands and Mexico. It was not till a great many years had passed away that any permanent settlements were made on that part of the coast which now belongs to the United States.

The first of these permanent settlements was made in Virginia, in 1609, more than a hundred years after America was discovered. There were attempts made to establish colonies about twenty years before, but they had been defeated in consequence of a foolish and wicked quarrel which the settlers fell into with the Indians. They thought that it was their wisest policy to treat the Indians with great severity, in order to intimidate them; but they made a woeful mistake. The Indians were only exasperated. The consequence was, that the colonists were entirely destroyed, and the work of settling the country by Europeans was put off for twenty years.

The circumstances of the case were these: When the colonists first landed from their ships, they were received by the Indians very kindly. They were allowed to sail up the river without any molestation, and to land and explore the country in all directions. They had constant intercourse with the Indians by signs, and all things went on very harmoniously, until at length, one day, a silver cup was missed from the camp. They thought that some of the Indians must have stolen it. A difficulty arose on this account, and, in the end, the English, wishing to strike terror into the minds of the savages, attacked and destroyed one of their villages of wigwams, and burned their fields of corn, as a punishment for stealing the cup, and failing to discover and give up the thief. The poor Indians fled in dismay. They could not openly resist, for they had no weapons with which they could meet a foe provided with fire-arms. They, however, secretly resolved on revenge.

When the vessels which had brought the company of colonists over, had gone back to England, and the colonists themselves were left alone, one of the Indians came to the settlement, and told the white men wonderful stories of a place that he could show them, up one of the rivers, where they could find plenty of gold. The colonists sent a party of men, with the Indian for a guide, to see the place; but the Indian, instead of showing them a gold mine, led them into an ambush, where,

to their surprise and consternation, they were suddenly attacked by a shower of arrows issuing from a thicket.

The colonists foolishly resolved to punish this treachery by worse treachery of their own. They sent for one of the principal Indian chiefs to come and visit them at their camp. He came with a few followers. As soon as he was in their power, the whites fell upon and massacred the chief himself and all who were with him.

The Indians were now incensed beyond measure, and they took every means in their power to harass the colonists, and, if possible, destroy them. They finally succeeded, and, some time afterward, when more ships came from England to bring stores and supplies for the colonists, they found nothing on the spot where they had been left but bones bleaching in the sun.

These attempts to colonize Virginia were made through the influence and under the general direction of a distinguished Englishman of wealth and high rank, named Sir Walter Raleigh. He lived in the reign of Queen Elizabeth. Queen Elizabeth was an unmarried lady, and it was in honor of her that the part of America which Raleigh attempted to settle was called Virginia.

(To be Continued.)

Uncle Gregory's Visits.

For the Juvenile Instructor.

VISIT XXVI.

THE LORD WILL PROVIDE.

[CONTINUED.]

MARY and Ellen had obtained a very pleasant seat in the cars by the side of the window, and could look out at the fields, villages and farms that they rapidly passed; for this was a special train, one that was run between the other trains for the accommodation of the Saints, and it moved rapidly. No one seemed inclined to talk, the early morning was raw and cold, and the pain of parting with dear friends had chilled the heart and left an inclination to nurse grief in silence. The train dashed along, the sun arose in its beauty, they were out of the fogs and gloom into the open country. Some few began to sing a song of Zion, which chased the gloom away, and a feeling of peace and resignation succeeded the feeling of grief.

Mary and Ellen were delighted, and kept up an incessant small talk. As they passed the stations, it seemed as though the stations were running away from them in an opposite direction, and caused much fun for the light-hearted girls. As the day wore on, it became warmer, so that they could have the windows down and see out more clearly. Now they passed through the glorious country, where the farmers were busy plowing, sowing and harrowing; there through a manufacturing town, with its noise of factories and machinery, its smoke, dirt, and toil. Here was a beautiful mansion with its well laid out grounds and cultivated acres; then the cottages of the toiling millions huddled together, and their children half-naked playing in the dirt, holding up their hands, and dancing as the train rolled on regardless alike of wealth and poverty.

At last they stop at a station. "Stop here quarter of an hour!" shouts the guard as he opens the doors along the train. Off goes the engine to take more water. The passengers leave the cars and walk up and down the platform. Some hasten to the refreshment room. Fathers of families carry water to their

wives and children, to quench their thirst. Loungers inquire if this is an excursion train. They are told "These are the Mormons going to their Zion in America." "Poor dupes," says one. "They seem cleanly, intelligent people," remarks another. "The Government should put a stop to this delusion," says a third; but no one gives them credit for their faith and self-denial, none understand that these pilgrims are fleeing to the mountains according to the commandments of God.

The ringing of a large bell warns everybody to be seated as the quarter of an hour has expired. The engine comes puffing along and is attached to the train, the guard blows a shrill whistle to inform the engineer that all are in the cars and ready to start. The shrill scream of the engine sounds through the station, and onward they roll to Liverpool. When they reached there, awaiting them on the platform stood the president of the conference. He selected a few of the brethren to assist to load up the luggage into the wagons and carts that were awaiting their arrival. The luggage was speedily loaded, and away they went through the crowded streets of Liverpool, down to the docks, where lay the clipper ship *Goconda*. The luggage was unloaded, and all that was not needed stowed away in the hold. The president then gave them their tickets and the number of their berths, instructing them to make their beds and fix their boxes, carpet sacks, and tin ware, so that when they were out to sea they would not be flying all over the ship.

In a very short time all were busy fixing up their berths and preparing supper. Mary and Ellen had a very pleasant berth with their parents. The berths were arranged all around the ship, at one end the single men had berths, and at the other the single ladies; the married folks and families occupying the centre. There was a round window in the side of the ship that came in the berth of Mary and Ellen, through which they could see the shipping that filled the dock. Papa went to work, and being a mechanic, soon fixed all his sacks, tin ware, etc. Mamma and the girls made the beds and in a very short time they were comfortably settled in their berths. Then papa helped his neighbors, and assisted them to make fast their boxes, etc., that they would require on the sea voyage. A very pleasant spirit was the result, and every one seemed willing to accommodate his neighbor. Then the president appointed a temporary chaplain to call them to evening and morning prayer until they should be properly organized. Supper was soon dispatched, and they assembled for prayer; and soon silence reigned around; for all were weary with their day's journey and excitement; and thus was spent the first night on ship board.

(To be Continued.)

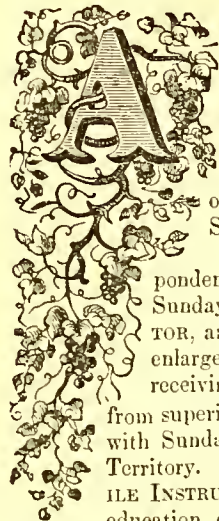
THE AMERICAN BEAVER.—They are social and live in the family relation. Their burrows, canals, dams, and winter supplies are held in common. They reach their full growth at two years and a half, and live from twelve to fifteen years. The cry resembles that of a child. The young are sent out to care for themselves when two years old. They migrate freely. Their lodges usually have two entrances, leading to the inner chamber, which is raised above the water. One of the entrances is for the supplies of wood. Their food is exclusively vegetable, and they chip up large trees for their use. Usually, but two individuals work on a single tree. The shallow ponds they construct do not freeze solid even around Hudson's Bay. Their canals are built to float wood to their lodges, and about three feet deep and equally wide. They are sometimes constructed to shorten the distance. The so called beaver meadows are caused by the destruction of vegetation, arising from overflows created by the dams. The "slides" are excavations at an angle of from 45 to 50 degrees, to facilitate the movements of the animals where the banks are high. Young beavers are easily domesticated.—*Selected.*

The Juvenile Instructor.

GEORGE Q. CANNON. : EDITOR.

AUGUST 1, 1868.

EDITORIAL THOUGHTS.



CORRESPONDENT, who takes great interest in Sunday schools, writes and says:

"I am pleased in perusing the pages of the JUVENILE INSTRUCTOR, and noticing its fitness for our youth, and would be glad to see it enlarged and made the organ of correspondence for our Sunday School Union."

It would suit us exactly to have correspondence on everything connected with the Sunday schools in the columns of the INSTRUCTOR, and this can be published without it being enlarged. We have been disappointed at not receiving more correspondence than we have from superintendents, teachers and others connected with Sunday schools in this city and throughout the Territory. The chief object in publishing the JUVENILE INSTRUCTOR has been to give an impulse to the education of the children of this Territory in the principles of our religion. Children cannot be educated as they should without Sunday schools. Hence, we have always urged their importance, and should have been pleased to have had brief correspondence from those connected with them, setting forth their progress and everything that would be interesting to all those engaged in Sunday schools throughout the Territory.

Our correspondent also alludes to the Sunday School Union, and asks whether the committee has taken any measures to give the various schools a plan upon which they can unite in teaching. If so, he says, he has never heard anything about it. In reply to this, we can say for ourself that we have met with a good many Sunday schools in the city—we have not let any opportunity escape us when we have had time—and have given the superintendents and teachers our ideas of the best method of conducting their schools. These visits have been most pleasant, and they have given us convincing proofs of the great good that is being accomplished, through the agency of Sunday schools, among the juveniles. We have been much surprised at the proficiency many of the schools have attained. We have questioned them upon Church history and doctrine, and have been answered with a correctness that was most gratifying, and that spoke highly for the diligence of the teachers and the aptitude of the scholars. We believe we can pick schools in this city that can answer more questions correctly upon points of Church history than the same number of Elders picked up promiscuously would be able to do. And very few children will ever forget what they are taught upon these subjects. They gain knowledge that will cling to them through life. We have not yet had time to visit the school with which our correspondent is connected; but hope soon to be able to give it a call. When we do, we shall, without doubt, find it conducted upon the proper plan.

There seems to be but little difficulty in getting at the right plan of managing these schools. The superintendents are generally men of experience, and they have taken hold of their duties understandingly. In some of the Wards the superintendents and teachers, however, have had many difficulties to contend with. These have had their origin in the indifference and carelessness of the Bishop and leading men of the Ward. There are many of the schools which are scarcely ever visited by the Bishops. They do not encourage the superintendents by their countenance or support. Where this is the case the labor of keeping up the school is very great. It is difficult to obtain teachers, and the children themselves become indifferent. This is a most unfortunate condition of things wherever it exists. It is unfortunate for the Bishop that he cannot see how he can best advance the people under his care and build up his Ward—it is unfortunate also for the people and their children that they have a Bishop who is so short-sighted. The children who receive a thorough Sunday school training, will make most useful and valuable members of society; they will have faith and will be intelligent and obedient. The Bishop who fosters Sunday schools, and encourages those engaged in conducting them, and urges upon parents the necessity of sending their children to them, is laying the foundation for the future greatness and excellence of his Ward.

dent

LIVE FOR SOMETHING.

HOW much better it is to be busily employed, to be industrious and improve our time, than to be idle and indifferent as to whether we accomplish anything in life or not. We should ever have for our aim the accomplishment of some good, some useful act, that we may have the esteem and regard of those with whom we associate and the approval of our Heavenly Father. He has placed us here upon earth to be useful, to make our lives noble by our own acts, if we will, and secure by our own exertions glory and honor and salvation. But, says some little Juvenile Reader, "What can I do to be useful? How can I do good? I cannot go on a mission. I cannot preach nor baptize, nor bring any into the kingdom of God. I cannot even earn the food I eat nor the clothes I wear, but have to be dependent on my parents for these things, and so I do not see how I can do any good."

Time enough, you cannot accomplish all this now while you are young; but there are many other ways in which you can be useful, there are many little acts that you are capable of performing, by which you may make those around you happy and please your Father in Heaven. By doing cheerfully and willingly all that is given you to do, without a murmuring and complaining spirit; by kindness to your younger brothers and sisters, and obedience to your parents and teachers, you will secure for yourself a good name and the respect of all by whom you are known, and at last be able to accomplish greater things; for "He who is faithful over a few things, shall be made ruler over many."

Do you ever think when you lie down at night that you are one day older than you were the night before, that you have one day less to live, and ask yourselves have you spent that day as you should. Can you go to sleep feeling happy and with a clear conscience? Did you pray for God to help you to do right, and to give you his Holy Spirit to enable you to overcome evil and folly? Did you commence the day by doing pleasantly and cheerfully all that was required of you and by casting away every evil thought that entered your mind? If you did not, that day will cause you unhappy reflections and you will feel a consciousness of not having accomplished any good; and if you allow many such days to pass away, your life, too, will soon pass away without being made noble.

Then strive to live for something; live to do good; live to secure an honorable position among the sons and daughters of earth and a name with the chosen of the Lord in His kingdom. Live righteously every day, for, "Every day is a little life, and our life is but a day repeated."

RAMTHA.

For the Juvenile Instructor.

THE CAMEL.

AMONG the most valuable gifts that our Father in Heaven has bestowed upon man, are the various animals which as beasts of burden, conduce to his happiness and lighten his toil. The Esquimaux, in his frozen home, relies on his teams of many dogs to convey him and his goods from place to place. The Laplander has his reindeer which swiftly draw their master's sleigh over the ice and snow of their native land. We, in these temperate climes, are greatly blessed in this respect; we have the stately horse, the sure footed mule, the patient ass, the plodding ox to do our bidding and carry our loads. The inhabitant of Peru and Bolivia owns his flocks of lamas to pack his burden over the almost inaccessible sides of the Andes. The East Indian boasts the huge elephant as his servant; while the Arab is blessed with an animal just suited to his wants to cross the burning sands of the great deserts amid which he dwells. We mean the Camel, a picture of several of which, with their masters, we present to-day.

The camel has been well named "the ship of the desert". Without it, it would be almost impossible to cross the terrible wastes of waterless deserts that cover a large portion of Arabia and Northern Africa. This beast carries his food and water with him. In the first place it has an extra cavity in its stomach, designed to receive water whenever it can be procured, and capable of retaining it unchanged for a long time. Thus it can go without water for seven or eight days together without injury. But, stranger still, it is provided with a storehouse of food, from which it can draw supplies when it can find no grass or herbs around. This storehouse consists of one or two large humps on its back. When the camel is in a fertile region these humps become large and plump; but, after a long journey in the wilderness, they become shrivelled and small; the camel has been drawing all the fat out of them. Is not this wonderful, children? Does it not manifest to us the kindness of God toward all his children in providing an animal so strangely adapted to these arid, barren deserts?

There are two kinds of camels. Those with two humps are generally called camels: those with one hump are styled dromedaries. The native land of these useful creatures extends from Morocco all along the northern parts of Africa and eastward through Arabia, Palestine, Persia, Mongolia, and Tartary as far as China.

These animals possess greater strength and activity than most beasts of burden. They are docile, patient in hunger or thirst, and contented with a very little of the coarsest food. But we cannot say it is very beautiful. The humps on its back do not look very graceful; but when we remember the good purpose for which God has placed them there we forget their ugliness. Its body is stout, its neck long and crooked, its limbs slender. To the Arab and other wanderers in the desert it is at once wealth, subsistence, and protection. Its milk

forms a large portion of their food, and the flesh of the young camel is a great treat. Of its skin they form tents, or manufacture it into saddles, harness, shields, pitchers and many other articles. The hair or wool from off its back is made into cloth. So, you see, in life or death it is very valuable to its masters.

The camel is taught when very young to carry small loads. This load is gradually increased as it grows stronger and bigger, until, when they are full grown, they will carry six hundred to one thousand pounds, thirty or thirty five miles a day according to their strength and size. Those trained for swiftness will travel seventy or eighty miles a day; but of course with only a light load. It is said the camels know quite well when enough is put on their backs, and that they will not move an inch when they think they have too great a load, until enough is taken off to satisfy them.

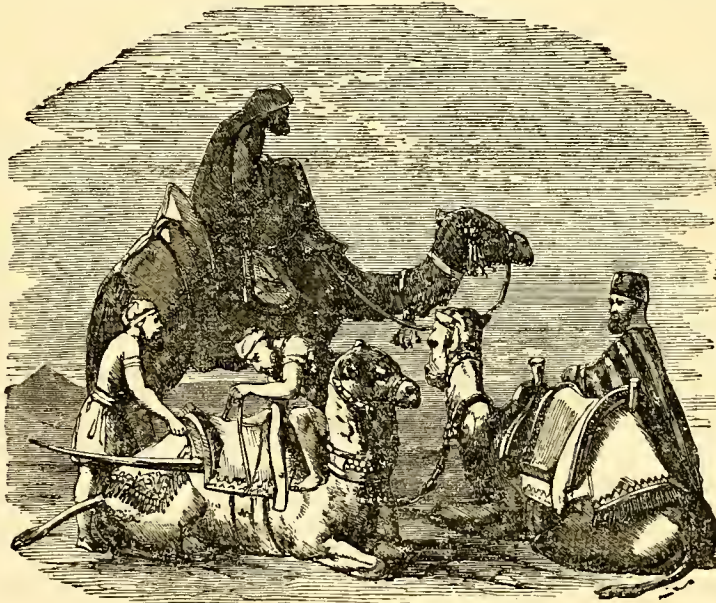
The Arabs ride on their backs on a saddle hollowed out in the middle. You see what they are like in the picture. Perhaps some of you would like to ride on the back of a camel. At first you would think that it was rather a dangerous mode of traveling, as the camel goes at a high and swinging trot which at first feels very unpleasant; but when one gets used to

it enough to feel safe he can enjoy it. When a caravan of camels arrives at a resting or baiting place they kneel, and the cords sustaining the load being untied, the bales slip down on each side. They generally sleep on their bellies, crouching between the bales they have carried; the load is, therefore, very easily replaced. The average length of a camel's life is forty to fifty years.

The camel appears to have been used as a beast of burden from the earliest times. They are very often mentioned in the Bible, from the age of the patriarchs to the days of Christ, and are referred to as

being used in war by the armies of the various nations who from time to time invaded Canaan and afflicted its people.

G. R.



REPLACE THE STONE.—One day General Washington and some of his officers while staying at Boston, went to visit Chelsea. On their way they stopped to rest and refresh themselves at the seat of Mr. Dexter, a beautiful spot, surrounded by stately elms and green fields. They alighted, and after securing their horses under the trees, went to partake of the good cheer within.

As they came out, one of the gentlemen accidentally knocked off a stone from the wall which ran before the house. Washington told him he had better replace the stone.

"No," answered the officer; "I will leave that for somebody else."

Washington then went quietly and put the stone up again, saying, as he did so:

"I always make it a rule in visiting a place, to leave things in as good order as I find them."

Chemistry of Common Things.

For the Juvenile Instructor.

FIRE.

TWO hundred years ago chemistry was very imperfectly understood; if that science had flourished in the remote ages of antiquity, which probably was the case, that knowledge had been lost. This may account for the ignorance manifested in those comparatively modern times when men believed in the existence of only four elements—earth, air, fire and water, from which all things were said to be compounded; when they believed in the possibility of discovering an earth which would transmute the baser metals, as lead and copper, into silver and gold, and in producing a cordial which would cure all diseases and prolong life indefinitely. These ideas of the “philosopher’s stone” and the “elixir of life” have not entirely died out even yet—bognus, or metal jewelry, “life pills” and “soothing syrups,” are their representatives.

It is now known that earth, air and water are compounds; that fire is not a simple element, as formerly taught, but a result of rapid decomposition, owing to intense chemical action. As to the caloric or matter of heat, evolved during combustion, or burning, there are different opinions. Some suppose that, in the same way that sound is produced by the vibration of particles of air, heat is produced by the vibration of particles of a more ethereal fluid which surrounds all things. Others believe that the principle of heat is a substance composed of minute particles which are transmitted from heated bodies. It matters little which is true, so far as chemical inquiry is concerned, if we consider that fire is that phenomenon which is accompanied by light and heat, and that the principle of heat, whatever it is, is called caloric.

As to the *sensation* of heat, that is felt when caloric passes from a heated body to the living system; cold is the transfer of the same principle from the living body.

When burning bodies attain to a very high temperature, they burst into flames. This temperature is found to be over 700°, (seven hundred degrees,) by an instrument called a thermometer, or “heat measurer.” Sometimes oxidation goes on at lower temperature, as in the human body; in the slow combustion which goes on when hay, etc., is put together before it is properly dried; in the occasional instances of so called “spontaneous combustion” when cotton in bales, and other substances, will gradually rise to so high a temperature that they take fire. Even the human body is not without a tendency to burn. There are well authenticated cases of human beings, who indulged to excess in drinking of spirits, being entirely consumed! These horrible cases of spontaneous combustion are frightful to read—the skull, the bones calcined to ashes—perhaps the extremities of the hands and feet only left to show that the remains are human! When once this terrible calamity begins it cannot be arrested;—water may be used, but in vain, the victim is sacrificed upon an altar from which no human hand can save!

To procure fire and light, coal, wood, oil, fat, etc., are used. Coal is only another form of wood. It has been submitted to distillation in the earth. It is charred. This has been done without access of oxygen, consequently the spirit which was distilled off, has passed away to colder parts where it has condensed. In this way our immense reservoirs, or natural cisterns of oil have been stored away for our use. The oil wells of this continent are famous all over the world. Man, upon a small scale, can produce artificially, the same results.

The hydro-carbons in solid, fluid and gaseous forms, as bitumen and pitch, petroleum or “rock oil,” paraffine, etc.

In some countries coal is burned extensively. Wherever iron is made, large quantities are used. In other countries, wood and peat are the only obtainable fuels. In some places the crude oil that comes out of the earth is mixed with clay, saw-dust, etc., to make fires. It was so in ancient times. The builders of Babel used fire; their bricks were burned by it and were cemented together with a kind of pitch. Even savages have obtained fire by rubbing together two pieces of dried wood. When some of us were boys, “flint and steel” were used, some charred rag, or “tinder,” was exposed, the sparks struck off by the attrition of the flint, which broke off minute pieces of iron that took fire in the air, set fire to the tinder. This was a clumsy way, for then we had to apply a match to the tinder to get a light. Matches were then made very long and pointed, the ends were dipped in melted sulphur or brimstone. This would ignite at a much lower temperature than wood. This was an improvement upon the method of the savages, who, by mere friction, kindled the wood; but, now, the more elegant mode of friction matches dipped in sulphur and coated with a preparation of phosphorous, thanks to Brother Findlay and others, enable us to dispense with those troublesome methods.

Fire has been considered a symbol of purification; there are allusions to this in the Bible and other books. The ladies of ancient Rome had dresses made of asbestos, or “mountain flax”—a kind of talc. We see talc used sometimes in stoves on account of its transparency and incombustibility. When these dresses were cleansed they were placed in the fire, instead of sending them to the wash, and the impurities were burned out. Fire was also used by the metalurgist, or “metal worker,” for refining. It was used in the sacrifices and in idolatrous worship, also. Volcanoes give us indications of a constant combustion going on in the bowels of the earth. Whether fire has its origin in the great natural source of heat—the sun, or not, is hard to say. It would appear that but for the existence of animal and vegetable life in the remote ages the vast deposits of carbonaceous matter would not have been formed. Without heat there would be no life, and the sun must be looked to as the source of life. If an infusion is made of any vegetable substance—any leaves can be steeped in water in a vial—and the sun’s rays are allowed to fall upon it, living organisms are soon developed by the heat. This has been considered by some as an evidence of spontaneous generation. It is more reasonable to believe that the germs of life are in the vegetable dissolved and that heat imparts vitality. Without heat we die—so do all animals. Even vegetables elaborate heat—a tree lives by its sap as much as we do by the blood, and the sap is seldom frozen except in severe winters—a slow oxidation goes on and caloric is evolved. The bark of trees, the skins of the lower animals are constructed in such a manner that heat is retained; man makes garments for the same purpose. It is not the clothing which is warm, *we* are warm, and heat passes away more slowly through porous substances, like cloth or flannel, than through close textures. To obtain the necessary heat we use food which contains the fuel needed; oil, butter and fat are heat-givers, sugar, molasses, rice, potatoes, sago, corn, flour, all contain fuel. Pure fat, as butter, lard and suet, are almost entirely carbon and hydrogen, with so small a quantity of oxygen that all is consumed. This is why we require so little fat in summer time and so large a quantity in winter. Sugar contains carbon, hydrogen and oxygen in such proportions as form water, so that the proportion of the combustible elements in fat, as compared with sugar, is nearly three to one. It will be well to remember this, for when we can obtain fruit in summer, or molasses, or sugar, the blood is supplied with fuel *in a better form* to produce and preserve health than in

fat. All that is required is to maintain the proper temperature of the blood, which is 98°. Flour bread contains much nutritious matter, and fuel as well—this is why it is of such great value to us as food. It is a mistaken idea that meat has to be taken as a constant article of diet. Unless it is very fat it has not so much fuel in its composition as potatoes; and has not so much nutritious, or flesh-forming matter as fish!

In the arctic regions, where the cold is very intense, large quantities of fatty matter are required to keep up the animal heat. It is said that those who sell meat pies, in the streets of large cities in Russia, usually keep a bottle of train oil as an incentive to buy. This luxury is poured into the pies, and, no doubt, is greatly relished, for it is needed by those who live poorly. It is not so here. We have good food. Fat in large quantities, especially in summer is very injurious. The skin is constantly removing the superfluous heat by evaporation and perspiration; but the elements of fat cannot be thus removed, because the proportions of hydrogen and oxygen are not such as to burn and form water. This is the reason fat frequently deranges the stomach and, probably, the reason we do not, as a general thing, desire it. There are other uses for fat which will be seen as we proceed—the making of soap, candles, and many other things connected with domestic economy.

Fire is of great use. The arts would scarcely exist without it. The locomotive, rail and telegraph, true types of the age we are favored to live in, when iron—like energy and swift intelligence, are executing the purposes of Jehovah, these, and all which make the world, by the handiwork of man, a "thing of beauty," are due to the operations of fire; well will it be when the earth is "cleansed by fire" and has become a "joy forever!"

BETH.

Biography.

JOSEPH SMITH, THE PROPHET.

ORRIN PORTER ROCKWELL, to be free from the anneyance to which he was subjected because of Boggs' affidavit, made a visit to the Eastern States. He remained there until the latter part of the winter 1842-3, when he started back to Nauvoo. On his way he touched at St. Louis, and on the 4th of March, 1843, was arrested by a man named Fox, on the oath of a man named Elias Parker. Parker swore that he was the O. P. Rockwell who was said to have tried to kill Lilburn W. Boggs. He was taken before a magistrate at St. Louis, and afterwards put in jail. He had a pair of iron hobbles fastened on his ankles, and was kept prisoner there two days. He was then carried to Independence, Jackson county. He was treated with great indignity after he reached there, and several plans were formed to kill him.

But he was delivered.

Soon after Joseph heard of Brother Rockwell's arrest he prophesied, in the name of the Lord Jesus Christ, that he would get away honorably from the Missourians. This prediction was fulfilled. God preserved Brother Rockwell; for His power alone could have preserved him. He was often threat-

ened with death, and on two occasions, while he was being carried to be tried at Liberty, Clay county, and on his return from there, men had planned to waylay him and kill him; but they failed. The grand jury could not find any evidence to prove that he had shot at Boggs, much as the mob would have liked them to do so.

Brother Rockwell was told by Joseph H. Reynolds, the sheriff of Jackson county, that he was going to arrest Joseph. He proposed to Brother Rockwell to go with him and betray Joseph into his hands. Reynolds said that he could have any sum of money he would name if he would do so. Brother Rockwell rejected his offer with indignation. Reynolds started to go to Nauvoo, and Brother Rockwell knew that he and his partners were after Joseph; yet he was a prisoner, and had no means of informing him of the danger he was in. He knew that they were determined to kill Joseph, and his anxiety was so intense upon the subject, that his flesh twitched on his bones. Twitch it would, and he could not help it. While he was in this condition he heard a dove alight on the window in the upper room of the jail where he was confined. The dove commenced cooing, and then went off. In a short time it came back to the window, where a pane was broken. It crept through between the bars of iron, which were about two and a half inches apart. It flew around the trap door several times; it did not alight, but continued cooing until it crept through the bars again, and flew out through the broken window. This proved a comfort to Brother Rockwell. He accepted it as a favorable sign. The twitching of his flesh ceased, and he was fully satisfied from that moment that they would not get Joseph in Missouri, and that he should regain his own freedom. As near as could be found out, this happened at the time that Joseph was in the custody of Reynolds, an account of which we will give you hereafter. It was the only time that he had a visit from the dove.

On the 13th of December, 1843, he was finally released from jail. He had been a prisoner upwards of nine months, and he had suffered everything almost but death. He had been imprisoned without any form of law, and chained hand and foot in a filthy dungeon, without fire or enough clothing to keep him warm, and without being allowed to change his clothes. Half-fed on miserable food, until he was reduced to a mere skeleton, and when the irons were taken off, so weak that he had to be led! And yet nothing could be proved against him!

After suffering many hardships, he reached Nauvoo on the evening of the 25th of December, 1843, and immediately went to Joseph's residence—the Mansion. Joseph had a company of his friends that evening at his house. In the midst of the festivities a man with his hair long and falling over his shoulders, and apparently drunk, came in and acted like a Missourian. Joseph requested the captain of police, who was present, to put him out of doors. A scuffle ensued, and Joseph had an opportunity of looking the man full in the face. It was no drunken man; it was no Missourian; but, as Joseph writes in his history, "to my great surprise and untold joy, I discovered it was my long-tried, warm, but cruelly persecuted friend Orrin Porter Rockwell, just arrived from nearly a year's imprisonment, without conviction, in Missouri.

Joseph gave utterance to a very remarkable prophecy on August 6, 1842, which should not be suffered to pass into forgetfulness. On that day he passed over the river from Nauvoo to Montrose, Iowa, in company with a number of persons, among the rest General James Adams, who was the Deputy Grand Master of the Free Masons in the state of Illinois. The organization of a Masonic Lodge was the occasion of their visiting Montrose. While the Deputy Grand Master was giving instructions to the Master elect of the Lodge, Joseph had a

conversation with a number of the brethren in the shade of the building. The subject was the persecution of the Saints in Missouri, and the constant annoyance which had followed them since they were driven from the State. In relation to this conversation Joseph says in his history:

"I prophesied that the saints would continue to suffer much affliction, and would be driven to the Rocky Mountains, many would apostatize, others would be put to death by our persecutors, or lose their lives in consequence of exposure or disease, and some of you will live to go and assist in making settlements and building cities, and see the Saints become a mighty people in the midst of the Rocky Mountains."

A SHORT RULE FOR FRETTERS.

A LITTLE girl has been visiting me who was a fretter. She fretted when it rained, and fretted when it shone. She fretted when little girls came to see her, and fretted when they did not. It is dreadful to be a fretter. A fretter is troublesome to herself and troublesome to her friends. We, to be sure, have our trials; but fretting does not help us bear or get rid of them.

I have lately come across a short rule for fretters, which they shall have. Here it is: Never fret about what you can't help, because it won't do any good. Never fret about what you can help; because, if you can help it, do so. Say this when you get up in the morning, say it at noon, and say it at night; and not only say, but do.

"But we have our trials," the children say. Yes, you have, and your little trials are as hard to bear as our big ones. But fretting don't help them, nor wishing we were somewhere else, dwelling upon them until they look a great deal bigger than they really are. Did you ever see that fable about the toad and the plantain leaf?

A toad used to live under a stone beside the brook. He was a pretty fat toad, and got along in the world as well as toads generally do. One day he went out to find something to eat, and hopping about among the leaves by the creek's side he heard a rustle among them, and said to himself:

"There's a beetle! I like beetles. I'll be quiet and catch it."

So he crept along till he got to it, and stuck out his tongue to get him; but it happened to be a bumble bee! He dropped it like a hot coal, and cried out in the way toads cry, and hopped back to his hole under the stone. He suffered with the pain and was obliged to lie by for two or three days. Hopping home to his home, he plucked a leaf of the plantain, and took it home for his medicine, and put it in his mouth to cure the sting of the bee. He stayed at home for two or three days, and began to get hungry, and poor, and lean. As he hopped along, he came under the leaf of a plantain, and being very tired, he stopped under the leaf, looking up, said:

"Oh, what a nice time you plantains have. I should like to change places. Toads have a hard life."

The plantain said:

"Friend Toad, I should like to change, too. I don't see what toads can complain of. I think they have a fine time of it."

"Let me tell you," said the toad. "In the first place, we have to work for our living, and find all we get to eat; and sometimes, when we think we are going to get a beetle, we get a bumble bee. Then again, in winter time we get frozen up, and when we come out, the boys come along and stone us, and the crows pick us up. Isn't that trouble? while you plantains just have to sit by the river and don't have to work. I should like to change places with you."

"Stop; let me tell you my side," said the plantain. "We plantains can't hop about as you can, but have to stay put. If we want a drink of water, we can't go to the creek and get it. We can't move an inch to see the world and visit our next neighbors. Then, the sun shines hot all day, and we have to bear it, and can't hop under a cool leaf as you do. Then, by and by, along comes a cow and nips off our head, or a little worm eats into our heart, and we haven't power to shake him off. I should like to change places with you. You take mine, and I will take yours, for I am so anxious to hop down to the creek and get a drink."

"Stay, stay," cried the toad; "I hear a cricket. Let me get it." And off he went after the cricket and never came back.

So it appears that all have their trials, and the only right way of getting along, is not to wish ourselves somebody else, and fret ourselves because we are not, but contentedly bear our lot, and be satisfied with what God has given us.—*Southern Churchman.*

Original Poetry.

For the Juvenile Instructor.

TO A STAR.

Little star, that shines so bright
In the darkness of the night;
Like a burning lamp on high—
Like a jewel in the sky.

When the sun has gone to rest
Down behind the distant West;
Then your kind and gentle light
Sheds a beauty on the night.

Though your light is but a spark
When it twinkles in the dark;
Oft the tiny spark will show
Little children where to go.

Now I wonder if you keep
Watching o'er me when I sleep;
When I lie upon my bed,
Are you shining over head?

E. R. S.

THE answer to the Charade in No. 13 is SWITZERLAND. Correct answers were received from J. M. Fisher, E. Healy, M. Weibye, E. D. Mousley, S. D. Mousley, C. Denney and Jos. Bull, Jun.

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