Three Burdens.

The burden of Life. Hours of pain,
Strong struggles for victories vain,
Dull doom of dust to dust again.
A ship of insecurity
On stormy sea.

The burden of Love. A bright morn,
That looks its loveliest at its dawn.
Ah, better had it ne'er been born!
For soon drive mists of misery
O'er darkened sea.

The burden of Christ. Blinding tears,
A longing and love through long years;
A firm, faithful front to all fears—
Then glorious eternity
Of golden sea.

—*Good Words.*

THE EKLHORN AFFAIR.

Our special correspondent forwards us an account of the strange affair at Elkhorn on the night of the 28th. Of course we do not vouch for the truth of the story. The affidavits of the parties concerned are appended, and our readers are at liberty to draw their own conclusions.

It will be remembered that the westbound express on the N. W. and A. road providentially escaped destruction at Elkhorn creek, the trestle bridge having been wrecked by the storm. The train was due at the bridge at twenty minutes past twelve. At ten minutes past twelve the eastern freight train passed over it in safety. Thus the bridge must have been wrecked during the interval of ten minutes, with so little warning that the track-walker had not yet discovered the catastrophe when the midnight express passed his caboose.

The track-man swears that when the train passed his house, which was a quarter of a mile down the road, the bridge light was burning white, which was the safety signal. The next instant, hearing the engineer blow "down brakes," he ran up the track and saw the red light showing.

The light is set upon an iron frame, and the mechanism which turns it is secured in a box at the foot, which is kept locked. There is no possible way by which the light can be turned except by the machinery, and the trackman states upon oath that the box was fastened and the key in his pocket at the time.

He further states that when he reached the signal, which he did in less than two minutes, the light was then showing white as before, the door still locked and exhibiting no trace of tampering. In these statements he is borne out by the affidavits of the conductor, the engineer and the fireman.

The story which the two last-named tell is so remarkable that it is appended below in full. The incident has occasioned much excitement, and our correspondent did his utmost to get at the truth of the matter. He was unable to interview the engineer, who was absent on his wedding trip, having, since his fortunate escape, resigned his position for a safer occupation, and married the woman of his choice. The fireman, however, was found, and was induced to make a statement, which we print in nearly his own words, as follows:

"If it wasn't that people have been doing Dave Garnet gross injustice in their reports of his action in this matter, I should refuse to utter a word. I am a plain man, and don't care to be thought a fool or a liar. But I am not the one to hear a friend slandered without saying a word in his defense.

"On the night of the 28th it was storming hard when we pulled out of the depot. The rain froze fast to everything it touched. Old heads like Dave and I know what that means. At every start and up every hard grade your wheels are going to slide around on the icy tracks, and the engine is going to rack herself all to pieces—that is, if you don't sand her well. Sand, you see, gives the drivers a grip on the rails, and after the old girl gets started she can generally take care of herself. I filled the sand-box before we started and put an extra bag in the cab in case of emergency.

"It was just after the holidays, and the sixteen cars behind us were packed full. The road was in a bad state; such a storm I hope never to see again. The wind roared around us so that we could scarcely hear our own whistle. The rain poured down in a flood and became a sheet of ice as it fell.

"We could not keep the front windows of the cab shut for a moment, for the ice made a dense curtain over them. We had to let it rain and blow in upon us as it would; for we had to keep a bright eye upon the signal lights, most of which looked like pale blots on the mist.

"We went the first twenty miles without speaking to each other. An engineer may run an engine his lifetime, and yet he never opens his valves without a feeling of anxiety. What with the storm and the heavy rain, neither of us cared to think of much besides our own duties.

"But Dave was unnaturally solemn, even for such a time. I could see his face in the light of the steam-gange lamp. It was pale and anxious as I never saw it before.

"'What's the matter, Dave?' I said.

"He turned and looked at me like a man in a dream.

"'It is a fearful night,' he answered, after a while. 'Hear the old machine groan and complain like a sick woman. She knows she's in danger, I verily believe. I wish the trip was over, Jim!'

"'Why, so do I,' I said, for to tell the truth I was unaccountably depressed myself. 'But, so far, everything is all right.'

"'Yes,' he answered, 'so far. But I have a kind of presentiment that we are going to have trouble before we are done with it. I have been thinking of Mary, too, for the past half-hour.'

"'A very good subject to think of,' I said, laughing.

"'Don't joke, Jim,' he replied, solemnly. 'It's a serious thing to think that with the fulfillment of a man's hopes of happiness only two days off, he is liable to be hurled into eternity any minute.'

"'It's a reaction,' I said. 'You have been too happy and too excited with thinking of your wedding and all that, and now, what with the cold and the rain, you are looking at the darker side of the matter.'

"'Maybe,' he said, then he uttered a loud cry: 'Great God! look! look!'

"He was pointing out of the window with a trembling finger, his face as white as death. I followed the direction in which he pointed, and—how shall I describe what he saw?

"I was well acquainted with Mary Warren, the girl Dave was going to marry in two days. She and I were old friends, and if it had not been for Dave's better education and fine figure, we might—but that is nothing to the point. As surely as I see you before me now, I saw Mary Warren then.

"The steam was pouring in a thick white cloud out of the stack, sometimes shutting out our view of the track ahead. The headlight made a sort of reflection upon it like the sun in a fog, and there, right in the center of the misty glow, I saw the figure of Mary Warren.

"We were going at top speed, but the shape glided along like a shadow, always hanging in the midst of the steam.

"The strangest part of it was that, while she looked like a real living woman, suspended in the steam, I could plainly see the glow of the headlight through her figure.

"She appeared to be looking fixedly at Dave, with a wild expression of terror, and kept wringing her hands and waving them toward us, as if she wanted us to stop.

"For the space of half a minute we both stared at the shape, dumb and breathless; then the steam dispersed and the figure was gone. The whole thing was like the stereopticon views of men and animals which they show you reflected on smoke, and it disappeared exactly the same.

"When it was gone Dave slowly turned and looked at me with a terrible expression in his face.

"'Mary is dead,' he muttered; 'that was her spirit come to bid me farewell.'

"'No,' cried I—'no, Dave. If it was Mary at all, she came to warn you of danger ahead. She loves you well enough to be able to come out of her body to save you. Cheer up, old boy, and keep a bright lookout.'

"Whether Dave took my view of the mystery or not, he kept very quiet, with his hand upon the bar and his eye on the track ahead.

"Nothing happened for the next hour to alarm us; nor did the spectral shape appear again. Just before reaching Elkhorn bridge there is a nasty curve in the road, and you are almost on the bridge before you can see it. It was here I expected trouble, if any were to come. Evidently Dave was of my mind, for, as we turned the curve and I leaned out to catch sight of the bridge light, he said, in a low tone:

"'What is it, Jim?'

"'White,' said I.

"Even as I said the words we both uttered a cry. Driving right before us, like a cloud of steam, we again saw the figure of Mary Warren. This time she seemed to move rapidly ahead of us, and disappear near the bridge light, which suddenly turned red.

"Engineers are like the engines they manage; pull certain bars and they start, shut certain valves and they stop. When we saw that danger signal, terrified and unnerved as we were, we did our duty as naturally as if wholly at our ease.

"When we first saw the red light we were within two hundred yards of the bridge. If the road had been dry we could have stopped in that distance. But though we blew brakes and reversed the drivers the train seemed to move on almost as rapidly as before. Dave and I exchanged looks.

"'It's all over,' said he. 'We'll stick by her, Jim!'

"'Of course,' said I.

"I take this much credit to myself. I could have jumped and felt pretty sure of saving myself, but I did not once think of it. Nor did Dave. He reached over with one hand on the bar and grasped mine with the other.

"'Good-bye, old man!'

"'Good-bye, Dave. God bless you!'

"The seconds that followed seemed like hours. We could feel the engine jump and shake as the reversed wheels revolved furiously under her. Still we slid on, though more slowly now. I could see where the bridge had been, the broken beams and the dark water rolling between.

"Nearer, nearer to that horrible gulf which seemed to yawn for us and our living freight. I could see the bright light glaring down at us with its bloody eye and not a soul near it.

"The wheels turned faster, the jar was heavier. We staggered like drunken men with the shock. Every now and then the drivers seemed to catch hold of the track and the engine would bound like a spurred horse. We were going so slowly now that we could almost have stepped off; yet we slid on, and now there was not fifty feet between us and death.

"Slower and slower we moved, and then, just as our forward trucks touched the broken beams of the bridge, we stopped. I looked up and saw that the signal light was white again, but I was so grateful, nervous and altogether so shaken, that I thought nothing of it.

"We could gather nothing from Mary Warren herself, except that she had an indistinct recollection of a dream, in which Dave seemed to be in great danger, which she was trying to avert. This is the story, sir. I offer no explanation of it. It may be that our souls can leave our bodies to watch over those we love. I believe it. And I believe, too, that I owe my life to Mary Warren's love for Dave Garnet."

Largest Arsenal in the World.

The greatest manufactory and storehouse of cannons and war materials is Woolwich arsenal, England. It has within its inclosure two hundred and eighty acres of land, of which some one hundred and sixty acres are covered with buildings. When in full operation it employs eighteen thousand persons. The amount of ammunition stored there is immense, and cannon can be counted by the hundred. In the storehouse a stock of twenty thousand cavalry saddles are kept constantly on hand, with a corresponding amount of horseshoes, nails, halters, traces, collars, harnesses for transportation trains, etc. One of the most interesting sights is the manufacture of rifled cannon, the very processes of which are going on in different shops all the time. These range in size from three-pounders to one hundred tonners, and the machinery required to make and handle them is very heavy, the largest forging hammers having six hundred tons force. The steel coils of the cannon are made from steel bars, the largest of which are three hundred feet long and one foot thick. These are coiled in a spiral by a heavy but nicely-working machine, and are welded together by the heavy hammers as perfectly as an ordinary piece of iron in a blacksmith's shop, and with comparatively few blows. The machinery used is some of the best in the country, and much of it was made in Manchester. One lathe-room has over an acre of space, closely filled in with two thousand lathes, and a busy sight it is to see them all in motion. One machine for the manufacture of fixed ammunition turns out two hundred cartridge molds every revolution, and has the capacity of two hundred and fifty thousand daily. The several shops and buildings are connected with railways for moving material. These aggregate a great many miles.

Fishing in a Corn-Field.

In Colorado is a ten-acre field, which is no more nor less than a subterannean lake covered with soil about eighteen inches deep. On the soil is cultivated a field of corn, which produces thirty bushels to the acre. If any one will take the trouble to dig a hole the depth of a spade-handle he will find it to fill with water, and by using a hook and line fish four or five inches long may be caught. The fish have neither scales nor eyes and are perch-like in shape. The ground is a black marl in nature, and in all probability was at one time an open body of water, on which accumulated vegetable matter, which has been increased from time to time until now it has a crust sufficiently strong and rich to produce fine corn, although it has to be cultivated by hand, as it is not strong enough to bear the weight of a horse.

While harvesting the hands catch strings of fish by making holes through the earth. A person rising on his heel and coming down suddenly can see the growing corn shake all around him. Any one having sufficient strength to drive a rail through the crust will find on releasing it that it will disappear altogether.

Strange, isn't it, that notwithstanding the immense crop made there, that ice is always high at the North pole?

CLIPPINGS FOR THE CURIOUS.

Elephants always disturb the water before they drink.

The albatross, the largest of sea birds, flies with the velocity of 100 miles an hour.

As late as the time of James I. the disposal of the hand of a young orphan heiress lay with the king.

It is estimated that there are at least ten brakemen killed throughout the United States in a single day.

An earthen projectile has been successfully used in pigeon shooting as a substitute for the living birds.

The blast furnace is supposed to have been first used in Belgium and been introduced into England in 1558.

In one hand of a corpse the Laplanders place some money to pay the fee of the porter at the gate of Paradise.

Buffon said that a pair of herrings, if undisturbed, would produce in twenty years a bulk of herrings the size of the globe.

By the law of King Ethelbert, for breaking a man's front tooth the fine was six shilling for a molar one and a canine, six.

Notwithstanding England's indebtedness to her mechanics, but one workingman has ever been buried in Westminster Abbey; this was Graham, the clockmaker.

In New Zealand are frequently found the bones of those large, wingless birds, called by the aborigines "moa." The largest representative known was ten and one-half feet high.

To make shoe-pegs enough for American use consumes annually 100,000 cords of timber; to make lucifer matches, 300,000 cubic feet of the best pine are required every year.

The total area of land available for wheat culture in the United States is not less than 470,000,000 acres. The entire wheat crop for one year would not suffice to sow so vast an area.

The Emperor Augustus was so pleased by a cure effected on himself by his doctor, Antonius Musa, that he raised him to the rank of knight and relieved the whole profession from taxation.

The ancient Hindoos, attaching no importance to events, had no reliable chronology. The only date of which there is any certainity is that of King Chandragupta, contemporary with Alexander, reigning 315 B. C.

Among the Araucanians in Chili, when a young man thinks of marriage, he goes to his friends, and if he is poor they make a contribution toward his expenses. One gives a fat ox, another a horse and another a pair of silver spurs.

The croton aqueduct of New York surpasses all modern constructions of this kind in extent and magnificence. It was constructed in 1842, having been five years in building, under the superintendence of Mr. John B. Jervis, chief engineer. The whole expense, including $1,800,000 for distributing pipes and amounts paid for rights-of-way and other incidental charges, was $10,275,000. Including interest and commission, whole cost was $12,500,000. The whole length, from its source at Croton river to the distributing reservoir at Fifth avenue and Fortieth street, is forty and a half miles.

The Newspaper Press.

The wealth of newspaper literature is purely the possession of civilization, but it is astonishing to contemplate the enormous number of people in the world to whom a newspaper must be as rare as an Arizona diamond.

Recently published statistics show that while the circulation of newspapers throughout the world aggregates the enormous number of over 10,000,000,000, it only averages six and a half copies per year to each inhabitant of the globe. This is assuming that only one paper goes to each purchaser, but since it is no uncommon thing for one man to buy several, the proportion of those who never buy one is greatly increased.

Europe publishes 19,537, while this wonderful section of the world classed as "North America" in the statistics follows with 12,400. The whole of Asia can only show 775, a contrast the more striking beside the benighted South America, which runs close upon that vast continent, with 699. Africa lags behind with only 182, the modern settlements of Australasia in its limited area owning 661.

Dividing them into languages there are 16,560 printed in the English language, 7,350 in German, 3,850 in French and 1,600 in Spanish. The annual aggregate circulation in the United States is 3,000,000,000, as compared with 2,260,000,000 in Great Britain and Ireland, giving us the position of being the most voracious devourers of newspaper literature in the world.—*New York Truth.*

Satin-wood is a species of the *Chloroxylon swietenia*, a native of the East Indies. The wood received its name from its silky aspect. It is very close-grained, heavy and durable.

SCIENTIFIC SCRAPS.

Professor Schlager, of Vienna, is responsible for the statement that blue light has a quieting and soothing influence on the insane.

The quantity of alcohol contained in rain, snow and sea water may be estimated from one to several millionths. Cold water and melted snow contain a greater proportion then tepid waters.

Water is not the only substance which expands in solidifying; tin, zinc, bismuth, antimony, iron and copper exhibit the same property. With lead and cadmium the results are indecisive.

Coal tar products have been utilized in the production of artificial indigo. This is a great chemical triumph, but it is impossible to say whether the new product will supplant the natural dye.

Celluloid is a combination formed by mixing gun-cotton and camphor, and may be made to imitate tortoise shell, coral, ebony and turquoise, although dangerous in domestic use from its combustible nature.

Ericson's torpedo boat destroyer will carry 350 pounds of dynamite—enough to destroy the largest iron-clad. The gun sending it, which is discharged by electricity, has a force sufficient to carry the projectile from 300 to 700 feet through the water.

Last summer, says the *Journal of Science*, some common hive bees built a comb against the flat wall of a house in Dorsetshire, England. A few pieces of the comb were exhibited at the November meeting of the Entomological society, London, and they had evidently contained bee grubs. This is an unexampled departure from the habits of the species.

The number of varieties of insects is vastly greater than that of all other living creatures. The oak supports 450 species of insects, and 200 are found in the pine. Humboldt, in 1849, calculated that between 150,000 and 170,000 specimens were preserved in collections, but recent estimates place the present number at about 750,000 distinct species.

Distances in Siberia.

A writer on Siberia in *Fraser's Magazine* says: Few have an idea of the dimensions of that enormous colony. I extract the following figures from Mr. Lansdell's book, giving the statistics of area and population:

	Square miles.	Population.
Tobolsk	800,000	1,102,302
Tomsk	500,000	838,000
Yeneseisk	1,000,000	372,000
Irkutsk	300,000	380,000
Yakutsk	1,500,000	235,000
Trans-Baikal	240,000	430,000
Amour	173,000	22,000
Primorsk	735,000	62,000
Saghalin	32,000	15,000

Are these totals not appalling? I confess they confuse me. But if you take a map of Siberia one could form some idea of its size by cutting out the size of Germany, France, Austria and Hungary; for there would be sufficient land still left over to create Great Britain and Ireland out of the single province of Yeneseisk. But all that enormous expanse is empty. The population of Yeneseisk is only 372,000, or about half the population of Moscow. The whole population of Siberia is less than the population of London.

Siberians do not seem distressed at these distances, and think nothing of riding 100 miles to attend a ball or a banquet, but entertainments of that sort are only held in towns, which are very few, only seventeen having more than 5,000 inhabitants. Of course, much of Siberia is not fit for colonization; the land is evidently greatly altered since the times of the mammoths and other antediluvian animals. But nevertheless there is evidently a great want of population.

To supply that want has been the constant thought of Russian statesmen. It is that which partly has led them to establish penal settlements in Siberia. There is a certain appropriateness about that which is quite undesigned. It is perhaps not altogether unfitting that Siberia, conquered by a half-brigand, should become the home of the convict. Yet it deserves a better fate, and it is sure to have it sooner or later—I hope sooner than later.

City Rain and Country Rain.

The St. Louis *Globe-Democrat* says considerable attention has been recently given to the differences between the rain of the city and the country. According to the statement advanced the country rain is neutral, and is considered the best adapted for human consumption of any found above the earth, on the earth and under the earth. The rain that falls in cities, on the other hand, is acid, corroding metals; stones and bricks and mortar crumble before it. Its evil effects are visible on every iside—in paint, in all decorations, and in fact, almost everything erected by man. The purest rain is that collected at the sea coast, more especially at considerable heights, while organic matter in the air usually corresponds with the density of population.

The first printing west of the Mississippi was done at St Louis in 1808.

CATTLE RESTAURANTS.

A New Invention for Getting Live Stock to Market in a Better Condition.

Mr. Alfred D. Tingley, of the Humane Live Stock Express company, New York, has invented a scheme which he thinks will put a stop to the present inhuman system of sending cattle long distances without food or water, and slaughtering them while in that unfit condition caused by this treatment. Formerly he invented a feed-car, which was tried, but was not a success. The grain and water were placed on the roof, and passed down pipes when required; but the troughs in the crowded cattle-cars got dirty, and the animals refused to eat out of them. An attempt was then made to substitute cars with compartments, so as to keep the cattle separate, but this rendered the cars unfit for any other purpose on the return trip and was abandoned.

Mr. Tingley's present scheme is a simple one. It is to establish a number of "cattle restaurants" along each line of railroad that transports live stock. They will be 200 miles apart, and the cattle can be fed and watered every twelve hours. When a train with a load of cattle on board gets within twenty miles of one of these restaurants a telegram will be sent to the officer in charge, and when the train arrives everything will be in readiness. Great iron cups, about as large as and something the shape of a good-sized kitchen pot will contain food and water, run into them through rubber pipes from tanks above. The train will stop between two rows of troughs, those on one side containing water and those on the other holding four quarts of a mixture of ground corn, oats and cut hay. Each car will have sixteen openings on each side, all of which can be easily closed when the car, which need be nothing more than an ordinary cattle car such is at present used, is required for other purposes on the return trip. Into each of these openings a trough of food or water will be pushed by means of a sliding bar upon which it rests. It will move forward to the car direct or sideways, as may be required to reach the opening, the side motion being accomplished by sliding it along another bar extending the whole length of the restaurant, the bar by which it is pushed forward accompanying. The flexible rubber tubes through which the food and water passes will, of course, offer no resistance.

How a Catamount was Killed.

"I don't mind telling how I did it," said John O. Smith, who recently shot a catamount near Frenchtown, N. J., weighing twenty-six pounds. "You see, my barn is only a short distance from a stretch of woods which lies between here and Stockton. The other morning I went into the barn to get a robe for the wagon. My shotgun rested against the wall in the harness-room. Just as I went in for the robe, I saw a head at the back window, which wasn't an ordinary head. Grabbing my gun, I started around the barn. The animal got to the corner before I did, and jumped out at me. I had no time to shoot, for the catamount—that's what it was—had its claws on me before I could do anything. I yelled like a trooper, and, reversing my gun, struck the critter on the head with the butt. The catamount was stunned for the moment, and sort of let go its hold, giving me a chance to move back a few yards and bring the gun to my shoulder. Just then my wife appeared on the scene, and I yelled to her to run and bring out a pail of hot water—the hottest she had. Then I fired, and hit the cuss square between the eyes. It ought to have settled him, but it didn't. It only him mad, and he crouched down to jump on me. I dodged, and got in another blow on the animal's head, laying him on his back, but not killing him. My wife had then returned with a pail of boiling hot water, and she threw it at the catamount. Part of it scalded the animal, but the most of it struck me, and took the skin clean off of one of my legs, from the knee down. I danced around with pain, and the catamount raised up as though he meant to show fight again. I gave him another blow on the head, which settled him. This is the first day I've been out since."

The White House Clock.

President Garfield had a great curiosity to know the history of things about the White House, and as there was no tradition about an alabaster clock surmounted by a statuette of the muse of history, a clock which has ticked in the White House time out of mind, he set Secretary Blaine to rummaging through the ancient documents of the White House. The search was amply rewarded, disclosing as it did that the timepiece, one of the most beautiful in Washington, was a present from Bonaparte to Lafayette, who gave it in turn to Washington, who determined that it should be handed down to his successors in the presidential office.