...w Invented the Steam-Engine?

To what man and to what Nation is the world indebted for the invention of the locomotive engine? The *Philadelphia North American* claims that honor for the little-known name of Oliver Evans, of that city, and courteously corrects the *Times* for a recent incidental allusion to the invention as having its origin in England, and being only afterward brought to higher perfection in the United States than it has elsewhere reached. We have not at hand that number of the *North American*, printed in 1878, in which Evans' claims are set out at length, but upon investigation of other authorities it appears clear that sufficient credit has not been given to the candidate for Stevenson's or Trevellick's and Vivian's honors. Thus it is beyond a question that so early as 1787 he obtained a patent from Maryland for steam carriages on common roads, and he thereafter developed his idea until his Oruktor Amphibolos was complete. Even now it is difficult to see what he could then have added to it. It would, and did, move itself on land and water, and when not engaged in propelling itself, the engine would saw wood or stone, grind plaster, etc. Another such engine-of-all-work has probably never been in existence before or since. Thus far it is agreeable to yield to a patriotic impulse, and follow the *North American* in claiming recognition for a neglected countryman. But it only needs a hasty comparison of the Amphibolos with the Rocket to demonstrate how untenable is the assertion that Evans invented the modern locomotive. His machine was a most cumbrous affair. It resembled nothing so much as a flat-bottomed scow, carrying an engine with a vertical cylinder, working-beam and fly-wheel (a locomotive with a working-beam and fly-wheel!) which could be mounted on wheels, and which would propel itself by an ingenious band connection to both pairs of wheels, or to a stern propeller. The sole and considerable novelty about it, even then, was that it was a high-pressure engine, and one of the first of the kind. On the other hand, it would be hard to name a single essential of the modern locomotive which was not embodied in the Rocket of 1829, and, though there have been numberless improvements in detail since then, there has not been—we believe the assertion needs no qualification—a single new principle applied to locomotion since Stephenson's day, excepting only an engine now building, and which has not yet had its trial trip. Nevertheless, it is only the rudest justice to call either Stephenson the inventor of the locomotive or Fulton the inventor of the marine engine. Nothing can excuse it except the popular demand, which concerns itself very little with niceties of detail, that the honor shall be settled somewhere. The truth is, and it is now very easy to see, that after the discovery of the power of steam its application to use on both land and water was only a question of time, and even Watt, though he never worked out his idea, added to his specification a caveat as to this idea. From that time down there were endless essays, each one an improvement on the other, so that land and marine engines are both a growth, and no one man can give to the world such an enormous gift. Thus, while it may be quite true, as it doubtless is, that Oliver Evans, three-quarters of a century ago, planned, in his mind's eye, a double-track railroad, sleeping-cars, and a speed equal to a pigeon's flight, the world will, nevertheless, probably continue to honor Fulton and Stephenson, next to Watt, as the human sources of one of the two great civilizing forces of this century.—*New York Times.*

Roller Skating.

THE fashionable dissipation at Nantucket is roller skating. There is a rink here that I am told is crowded every night with gentlemen and ladies, more or less, I mean, less and more. It is a beautiful sport, they tell me. And I have no doubt it is, an exercise at once healthful and graceful. I have not roller-skated any myself. I could, if I wished, but I do not wish to roller-skate any this summer. I prefer to enjoy my skating vicariously. I find it pleasanter, oh, much pleasanter, to look on and see the other people enjoy the poetry of motion. They tell me one sleeps so well after an hour's exercise on the skates. I should think after a man has swept up half a peck of pine slivers with his knees and that sort of thing, that he would be ready to go to sleep after he got them all pulled out. I have been a very careful observer of roller skating, and it always seemed to me that the principal part of the exercise consisted in getting up. One evening in Burlington I watched a young man fall down twenty-nine times while skating about three miles and a half. Now, he might have gone over to the *Hawkeye* office and fallen down the front stairs, and got just the same number of bumps in a much shorter period of time and distance. Why, I have seen men skating around a summer rink, so full of slivers that they looked like wooden porcupines with clothes on. And yet they said they liked it.

A man can fall down on roller skates in greater variety than he can on anything else. He can go down in two times and fifty motions, and when he gets down at last he is right where he started, and fully eighteen feet from where he expected to be. This element of uncertainty makes it very exciting and fascinating.

I have been proof against all manner of wiles and bribes in this matter of roller skates. I have amazed myself by my steadfastness: I, who am prone to do anything anybody asks me to do, to hold out against this thing all summer. I fear I am really becoming good. But while I am always glad and happy if I can afford people amusement, I don't like to amuse them by making a pine pin-cushion of myself. I once heard Mr. Beecher say that a man who had very little dignity had to be very careful of what little he had. I have no objection in the world to roller skating, but for my own part I can sit down almost as quickly and ten times as comfortably without the skates.—*Burdette's Letter to the Hawkeye.*

AT a recent meeting of the Dulwich (England) College Geological Club, Mr. B. G. Jenkins read a paper "On the Origin of Waves of Cold." The object of the paper was to show the very remarkable effect of the planet Venus upon the earth. Many years ago the present Astronomer Royal proved that the disturbing effect of this planet was so great that the earth was materially pulled out of its orbit. Mr. Jenkins shows that it is to this disturbing action we must look for an explanation of the cold waves which roll through the atmosphere on an average every eight years—as in 1829, 1837, 1845, 1855, 1860, 1871, 1879—and that for the next forty years the temperature will be below the average, as it has during the past forty years been above the average. With regard to high temperature, he stated that for the last fifty years a heat wave has been observed to pass over the earth every twelve years, nearly and contemporary with the arrival of the planet Jupiter about perihelion, and that we are on the eve of the next heat wave.

THE fur-seal of Alaska attains his full growth at the age of about seven years, and then weighs at least 400 pounds. His head resembles very much that of a full-blooded Newfoundland dog, except that his lips are not so flabby and hanging.

Dulcigno.

HISTORY tells us two things in particular of Dulcigno. At the beginning of the sixteenth century and for more than a century afterwards it was the most famous den of pirates in the Adriatic; and later on, when Charles II. was King of England, the place harbored a man on whom the eyes of all the Jewish and a great part of the Mohammedan world had once been turned. This was Sabbatai Zevi, a Smyrniote Jew, who gave himself out for the Messiah. In what proportions Sabbatai was an enthusiast, and in what an impostor, it would be hard to say. He was deeply read in Talmudic literature, and appeared to believe in his mission. At the same time he used the wealth which his father had left him to excellent purpose in securing adherents; and the care he took of such details as his dress, always austere but always becoming, and his beautiful face and beard, have a suspicious air. His name spread all over the world, and in Germany in particular his adherents were counted by thousands. By 1666 his fame had reached such a height that it was necessary for him to do something definite to prove his claims. He therefore set out for Constantinople to depose the Sultan through the power of his word. The Sultan temporized with him at first, but was eventually able to drive him into a corner; and under threat of execution Sabbatai went over to Islam. He was then banished to Dulcigno, as a remote corner of the Empire, where there were no Jews to be found; and there he died in 1676. Curiously enough, the renegade was far from losing all his followers. Rabbis learned in the Cabala soon found out that the Messiah had to adopt the faith of Mahommed, so as to draw the Moslems after him, and there were thousands of good Mohammedans who now believed in him as ardently as did the Jews. After his death his tomb at Dulcigno became a shrine sought by pilgrims from all parts of the world.

The harbor of Old Dulcigno is one of the oldest on the Adriatic and the best that exists on that harborless coast between the southern point of Dalmatia and the mouth of the Drin. The haven is a sure safeguard from the south wind—the fierce sirocco—but is exposed on its northern side. There are about a dozen huts now on the beach, making a little settlement, exclusively Albanian, and called Limani. In the beginning of the sixteenth century the appearance of the harbor was very different. The town fell into Turkish hands very late in 1571, and the Turkish Governor of Skutari, who was responsible for the district, proved incompetent or unwilling to check the piracy which gave Dulcigno an evil name in the sixteenth and seventeenth centuries. The light Dulcignote barques descended on the Italian, Albanian, even Greek coasts. The Porte undertook to put them down, but the Governor of Skutari, himself always chosen from a particular North Albanian family, was not inaccessible, and moreover the Porte had no particular objection to seeing Austrian and Italian commerce damaged. An unmanageable Pasha at last made his appearance in the person of Suleiman, and the whole Dulcignote fleet, numbering no fewer than 500 vessels, was burned to the water's edge in its own harbor. This blow ruined Old Dulcigno, and the present town was planted a little further inland to take its place. In 1722 the town was occupied by the Venetians, but only for a brief period. In 1878 the Montenegrins took it by storm, most of the Turkish garrison having previously got away by sea. Austria, however, at the Berlin Congress, objected to its retention by Montenegro and Gusinje and Plava were substituted—with what result all the world knows.—*Pall Mall Gazette.*

How to Fix the Attention.

A YOUNG correspondent in Macon, Georgia, asks: "How can I best cultivate the power of fixing the attention on a subject or a book? How can I learn to concentrate my mind on a question, so that it will not wander off to other things? I am very anxious to learn how to do it, and will be thankful for your advice."

It is easy to see how this power may be impaired. The desultory reading of nothing but "elegant extracts," anecdotes, newspaper items, and the like—dipping into books here and there, in order to pick out the most attractive passages—skimming over the surface and skipping the hard points of a subject—gliding through one sentence after another, without taking in the full meaning of anything—always leads to desultory thinking and weakens the fiber of the mind. Sir Isaac Newton attributed all his success to the habit of mental concentration. This is the most important part of our intellectual discipline. Steam has no motive power until it is concentrated. The chief value of such studies as mathematics lies in the fact that they cannot be mastered at all unless the student is able, for the time being, to abstract his thoughts from every thing else. It is the want of thoroughness in our early training that makes it so hard to think continuously in after life. Our boys and girls are called to study too many things, and are obliged to fly about like the bees, "who gather honey from every opening flower." They know a little of almost every thing, and not much of anything.

It is not so easy to furnish an exact recipe for acquiring the habit of fixing the attention on a subject or a book; but, in default of any thing better, I would say to my Georgia friend:

Take up some important matter that really interests you, and determine that you will get a clear and thorough knowledge of the same, in all its bearings, before you let it go. Allot a certain portion of the day to its study—not too long a time, especially at first—but resolutely resolve that, during the few hours devoted to it, nothing else shall be allowed to occupy your mind.

Go to work systematically—begin as the ship-builder does, with laying a good, strong keel—then, one by one, put in the ribs, bolting them well to their place, next adjust the sheathing and rivet every plank thoroughly.

Select the best books that you can find pertaining to the subject, and read them with deliberation. Do not turn over to the next page until you are sure that you understand what has already been read. If you come upon a very hard place, read it over and over; stop to think about it and question yourself about it. Do not allow your plane to slip carelessly over the knots in the wood. Untie every snarl as you go along. If you leave one point unsettled it may confuse you all the way through. It may be well sometimes to read aloud. Many years ago I tried this experiment with "Butler's Analogy," and found it useful.

At certain intervals stop and try to repeat the argument in your own language; this will show whether your conception of the subject is clear, and also help to fix it in your memory. We forget many things that we read, because at the time they made no definite impression. All men with great concentrative power have good memories.

It is an excellent plan to write out an analysis of what has been read, and then, if there is a full table of contents, compare the two, in order to see how thorough you have been.

Reading in this careful way, you may not be able to devour many books in a month, but what you do read will be digested. And when you have once formed this habit of intent study it will become spontaneous.

We are interested in any subject in proportion to the thoroughness of our knowledge. An accomplished naturalist, if he can get hold of a new leaf, or fly, or egg, will forget all about his dinner. It is no labor to concentrate the thoughts upon anything in which we are deeply interested. The trouble may be to turn the mind to any other subject.

I have just finished a book which, after toiling through the first chapter or two, I thought upon the whole, to be the dryest thing that I ever undertook. I determined, however, to read it through in spite of its dryness—or rather, *because* of its dryness—and not to skip a word. After 'awhile I began to see daylight, and to feel some little warmth penetrating the thick growth of briars and thorns, and at last found myself returning to the book with avidity. We often hear young people say: "I hate this or that study," when it may be just the kind of study that they most need, and if they would only take the trouble to master the beginning it may fascinate them at last.

Our young correspondent makes another request: "Will you please give me your opinion, also, as to whether or not the study of logic is of any advantage in learning a boy the art of thinking or reasoning on a subject?" A man may know all about logic and not be a great thinker; as one may reason correctly without knowing much about the science of reasoning. It is well to make one's self familiar with the laws of thought, just as it is for an artist to understand the laws of perspective, although this may not make him a great painter. And again, the study of logic, as it is presented by Whateley and Thompson and Mill, is a capital discipline for the mind.

I will only add that the writing of such a letter as that to which I have now replied, by one who is willing to speak of himself as a boy, indicates a turn of mind which is likely to result in something.—*Bishop Clark, in N. Y. Ledger.*

Men and Horses.

THE 156-hour race between men and horses, at Chicago, last week, ended in a victory for man. Byrne, a new pedestrian, who is scarcely twenty yet, scored 542 miles as his six-day record, and stopped Saturday with a score of 578 miles. The leading horse finished ten miles behind him. The Chicago papers call the contest a "great" one, of course, but without finding fault with that, it may be said that they are quite in error in describing it as "the first of the kind ever given." Last October there was a similar contest in San Francisco, but then a horse won, with a six-day record of 559 miles. However, the list of such contests—we believe there have been others—is happily, a brief one, and, stepping outside of it, there are authentic records of remarkable rides which are far more interesting than such objectless displays of grim endurance as the Chicago performance. In 1847 General J. C. Fremont and two companions covered 800 miles across a roadless and mountainous country in 158 hours, only 100 of which were spent in the saddle. Of course they had a frequent change of horses, those not under saddle being driven ahead and lassoed when wanted. This is perhaps the most remarkable horseback ride on authentic record. Two or three years ago nine Italian officers undertook a ride of 810 miles to see what was the extreme performance which might be expected of ordinary horses in war. Only three finished the distance, and they required 105 hours for the task. Some time before this another Italian officer rode 590 Italian miles in tenda's on a single horse. From Vienna to Paris is 500 miles as the crow flies. Prince de Linge once covered the road between the two cities in six days, but with relays of horses. Count de Maintenay is said to have done it in less time on a single roadster. He was then the bearer of of the consent of the Emperor of Austria to the marriage of Napoleon and Marie-Louise, and he was rewarded for his speed with a jeweled snuff-box, 6,000f., and the horse which carried him so well. It is said that he rode the whole way without dismounting, but that is scarcely credible. The conditions are so different that it is impossible to compare these feats with those of last week at Chicago, but it seems reasonably certain that neither on horseback nor on foot can the rate of 100 miles be kept up for more than five days, and that there are men who can do the distance at least as quickly without a horse as with one.—*N. Y. Times.*

Just Where He Had 'Em.

HALF an hour before the departure of a lake steamer from her wharf yesterdy the Captain was approached by a stranger who had been inspecting the boat from the dock for the last ten minutes. Introducing himself as a would-be passenger, he asked:

"Captain, is this boat provided with life-preservers?"

"She is."

"Are they all right?"

"They are."

"Can your crew launch a life-boat?"

"They can."

"Is your life-raft all right?"

"It is."

"Is the fire-hose all ready for instan service?"

"It is."

"Will your engineer stand to his post in case of disaster?"

"He will."

"Do you call yourself a cool and collected man in the presence of danger?"

"I do."

"Do you know exactly what you would do in case of a terrible gale or a fire?"

"I do."

"Can the mate be depended on to second all your efforts?"

"He can."

"And will your crew stand by you and obey you?"

"They will."

"Are your green and red lights all right?"

"They are."

"Machinery in perfect order?"

"It is."

"Going to overload the boat?"

"No, sir."

"Expect to do any racing?"

"No, sir."

"Is she fixed to blow off at forty-six pounds?"

"She is."

"Donkey-engine working all right?"

"It is."

The stranger heaved a deep sigh and was walking away when the Captain asked if his baggage was aboard.

"No, and I guess I'll go afoot," was the reply. "Every boat which has burned up or gone down for the last five years had everything in the nicest kind of order, and I'll either look for a craft making six feet of water an hour or run the risk of going through a railroad bridge. Good-by, Captain—I shall look in the dailies all this week to see who of your passengers were saved."—*Detroit Free Press.*

NATURE reports a very curious telephonic experiment made in Switzerland on the occasion of the Federal Fete of Singers. A telephone had been placed in the Zurich Festhalle, and two conductors connected with the Bale telegraphic office, where a large audience had congregated. The distance from Bale to Zurich is about eighty kilometers. The Bale audiences enjoyed the singing about as well as if they had been placed in the upper circle of an opera house. At the end of the performance they proved their satisfaction by clapping hands, which the telegraphic wires transmitted with perfect fidelity to the Zurich performers.

PERSONAL AND LITERARY.

MISS FLORENCE MARRYATT has entered on a reading tour which may extend to the United States.

VON BULOW, the pianist, has had a stroke of paralysis and lost the use of his right hand.

HERBERT SPENCER begins next year a tour of the world, going from England to the United States.

SEVERAL professors of the Kazan University, Russia, are preparing to translate Shakespeare into the Tartar language.

MISS FLETCHER, who has made special study of American antiquities, is to deliver a course of lectures next winter, on Ancient America.

THE Sultan of Zanzibar has sent an order to the Mission Press at Bedrom for a complete font of Arabic type, and for a native compositor to manage his Imperial Press.

JAMES PAYN, the most prolific of recent English novelists, is an incessant smoker. He rarely walks out, and does not consider physical exercise as a restorative of brain power.

SOMEBODY is making an index to the medical literature of the world. It will occupy 10,000 pages, and show what a tremendous amount of writing has been caused by the physical pains and miseries of the human race.

MISS EMMA BURT, well known as the author of several pleasing books of approved excellence for children, and a contributor to *Wide Awake, St. Nicholas, Work and Play* and other magazines, has been removed to the Insane Asylum at Utica, N. Y., for treatment.

SALA pictures Henry Labouchere of the London *Truth* as "a scholar of extensive and well-digested reading, a traveled linguist, a diplomatist of nearly twenty years' training, a shrewd financier, a brilliant conversationalist, a ready, incisive public speaker, a man of wit, a man of sense, and a man of business," and says he has made a palpable hit in the House of Commons.

EDWIN ARNOLD, the author of "The Light of Asia," is the second son of Robert Coles Arnold, a Magistrate for Sussex, Eng. He was born June 10, 1832, was educated at the King's School, Rochester, and King's College, London, and was elected to a scholarship at University College, Oxford, where, in 1852, he obtained the Newdegate prize for an English poem on the "Feast of Balshazzar."

MR. W. E. H. LECKY, the English philosopher and historian, is regarded as a sort of literary phenomenon. Though he has been before the public as an author since 1861, he is only forty-two years old. This is the more singular because his fame rests upon extensive scholarship and earnest investigation of topics that men seldom master until after middle life. He was born near Dublin, decided to be an author at twelve, and had read more books at fourteen than most young men at twenty. When he graduated at Trinity College, his professors said he had the best stored mind of the age who had matriculated within their memory.

MISS BETSY ROATH, of Greenville, Conn., has just celebrated the one hundredth anniversary of her birth. She does not appear to be more than seventy-five years of age and is in full possession of all her faculties. She has lived all her life near her present home, has always been temperate in her habits, and for fifty-five years has eaten but two meals a day. She had her photograph taken on her one hundredth birthday for the first time, sitting in an old-fashioned straight-backed chair which was bought by her ancestors two hundred years ago. Although she has lived opposite the track of the Norwich & Worcester Railroad for forty years, and has had six nephews, three of whom have been conductors and three engineers, in its employ, she has never stepped upon a steam car.

HUMOROUS.

WE suppose the man who was rocked in the cradle of the deep slept in the bed of the river when he grew up.—*Hawkeye.*

THE oyster would live for eight years if he had a chance, but he is kept in such a stew that he dies young of heart trouble.—*Graphic.*

OUR friend Jones frequently tells of ideas tiptoeing through his mind. Ideas find nothing in Jones' mind to obstruct their flits.—*Boston Trans ript.*

IN all the researches at Pompeii men have failed to come across one single sign of "No Trust." Those were the days for an honest man to live in.—*Detroit Free Press.*

THE elephant puts on a lot of style nowadays, but it takes a good deal of conceit out of him to be shown the jaw-bone of a mastodon.—*Chicago Times.*

IT is easy to stump Rhode Island. A grand stand is erected in the middle of the State and the thing is done with a single speech. Parties of the opposition go into Connecticut until the speaking is over.

A CERTAIN little damsel being aggravated past endurance by her big brother fell down upon her knees and cried: "O Lord, bless my brother Tom. He lies, he steals, he swears. All boys do; us girls don't. Amen."

A GREAT many look at life very much as one who rides backward looks out of a car window. Everything seems to be going ahead while he is falling behind, when in fact he is getting ahead all the time, and very rapidly.—*Boston Transcript.*

AN exchange prints a lengthy article on "Science at Breakfast." Valuable space wasted. Science at breakfast is getting away with four slices of ham and half a dozen eggs while your vis-a-vis is unfolding his napkin.—*Keokuk Gate City.*

THE Norristown *Herald* says that unless a man can thoroughly and intelligently describe the effect of chemico-physical influences in the evolution of branchinod crustaceans, or explain the subelytral air passages in Coleoptera, it is useless for him to apply for a position on the Boston police force.

FATHER—"Here, you have only been married four weeks, and almost every day you come to me with complaints about your husband. You ought to be ashamed of yourself." Daughter—"But he fights me all the time." "Foolish child! Haven't your mother and me been fighting every day for thirty years, and don't we get along peaceably and quietly with each other?"—*Galveston News.*

"IN bustin' up dis meetin' let me remark," said Brother Gardner to the Limekiln Club, "dat de pusson who sots out airly in life to mind his own bizness will take a heap o' comfort an' come purty nigh gettin' rich. De man who walks straight 'long, havin' his eyes open to his own faults, has plenty to see to an' take keer of, an' de less he squints at de axshuns of his feller travelers de easier it will be to borry $5 when he gits pinched. Let us now percolate down sta'rs."—*Detroit Free Press.*

THE editor laid his half-smoked cigar on the table, and the candidate, dropping in to talk matters over, perched himself on the table and sat down on the real Connecticut Havana. By and by he sadly slipped off his high seat. "You are not lukewarm in my cause, anyhow," he said, plaintively. "Ah, no," replied the editor, encouragingly, "the old fires are still burning." And then a great hush fell upon the busy sanctum, such a profound silence that for a minute you might have heard a gum drop.

Our Young Readers.

BABY TAKES ITS FIRST WALK.

"Come, my baby, all alone!"
Was so long a baby journey ever known?
All the way, so wide and bare,
From the table to the chair;
'Tis no wonder he should linger
Holding fights paper's fingers,
Though his mother looks and shows
From her throne,
With, "Come, baby, all alone!"

"Come, my baby, all alone!"
Were such tempted doubt and daring ever shown?
Now he drops his hold, and then
Closer clings to it again;
Now he steps out with a shiver,
As one tries a rapid river,
And shrinks back, and wonders when,
Taller grown,
Baby shall go all alone.

"Here comes baby, all alone!"
Was a more victorious brave by ever known?
Right across the trackless floor
The small foot have when their racer
And he leaves back thereafter
Such a peal of ringing laughter!
It laughs out from every face,
Proud to own
"Baby has gone all alone!"

Back goes baby all alone,
On white bodies, all at once, has baby grown!
Back and forth, with merry cries,
Like a little bird he flies;
First to father, then to mother,
Then to sister, then to brother,
Greeting each with laughing eyes,
Braving all
Shout for baby, every one!

—*George S. Burleigh, in Nursery.*

THE SETTLERS OF WALPOLE AND THE INDIANS.

BEAUTIFUL the green meadows, the surrounding hills and the distant mountains forming the landscape in Walpole, N. H., which Colonel Benjamin Bellows and John Kilburn gazed upon on the banks of the Connecticut River in 1749. They had built their log houses with loop-holes in the walls through which they could fire upon the Indians in case they were attacked. Though peace had been agreed upon between France and England, the people who lived along the frontier felt no security, for the French in Canada were continually urging the Indians to commit depredations on the English. It was a short and easy journey from Crown Point, on Lake Champlain, to the valley of the Connecticut, and the Indians who sold their furs to the French were frequent visitors to the settlements along the Connecticut.

One of the Indians who visited John Kilburn was called Captain Philip. He had been baptized and christened by the Jesuit priests at the Indian village of St. Francis, on the banks of the St. Lawrence, half-way from Montreal to Quebec. The St. Francis tribe were called Christian Indians. There were rumors that war would break out again between England and France. Before war was declared hostilities began.

It was in the spring of 1755 that Captain Philip made a visit to John Kilburn's house with some beaver skins for sale. He wanted powder, bullets and flints for pay. While he was trading, Captain Philip was running his eyes over the house, looking at the thick timbers, the loop-holes in the walls. When he had finished his trade he visited the other houses in the settlement. He was kindly treated. The settlers never mistrusted that he was taking observations for future use.

August came. The settlers heard that war had begun, and knew that the French and Indians might be upon them at any moment. They strengthened their block-houses. No one went into the field to work alone. They always carried their guns with them. They had some faithful watch-dogs which always growled when Indians were about. There were nearly forty men in the settlement. They were stout-hearted, and were determined not to be driven out by the French and Indians. They appointed Colonel Bellows to be their leader. He had a suspicion that Indians were about.

"We must have a supply of meal, so that in case we are attacked we shall have something to eat," he said.

The settlers filled each a bag with corn, shouldered them, and then, in single file, each man carrying his gun, they marched to the grist-mill which they had erected, ground the corn into meal, shouldered the sacks once more, and started homeward, their faithful watch-dogs trotting in advance, paying no attention to squirrels or partridges, or game of that sort.

Suddenly the dogs came back, growling, the hair on their backs in a ruff.

"There are Indians about. Throw down your sacks," said Colonel Bellows.

The men threw their sacks on the ground, dropped into the ferns, and looked to the priming of their guns. The ferns were tall, and completely concealed them. Colonel Bellows suspected that the Indians had laid an ambuscade at a narrow place in the path which they must pass. He crept slowly forward to see what he could discover, careful not to break a twig or make any noise. He crept to the top of a little hill, peeped through the ferns, and discovered a great number of Indians, nearly two hundred, crouching behind trees, or lying on the ground, waiting for the white men to enter the trap. He made his way back to his men, issued his orders in a whisper, and all crawled through the ferns toward the Indians till they were only a few rods from them.

All were ready. Every man sprang to his feet, and yelled as loud as he could, "Hi-ya hi-ya!" it was a terrific howl.

The next moment not a settler was to seen; all had dropped upon the ground, and were concealed by the ferns.

In an instant every Indian was on his feet, firing his gun, but hitting nobody.

There was an answering flash from the ferns, each settler taking aim, and the Indians sprang into the air, or fell headlong before the bullets.

The red men outnumbered the settlers five to one, but were so astounded by the surprise that, picking up the wounded, they made a hasty retreat into a swamp, and the settlers made all haste to their block-house, anticipating an attack. Not one of them had been injured.

This body of Indians was a part of a band of more than three hundred, led by Captain Philip, who had come from Canada with the expectation of wiping out the settlements along the Connecticut, and of returning to Canada with many prisoners and no end of scalps. It was at the pleasantest season of the year. The woods were full of game, and with the provisions they would get in the settlements which they intended to destroy they would have an abundance of food.

Captain Philip, with the rest of the Indians, was creeping stealthily through the woods toward John Kilburn's house. Mr. Kilburn and his son John, Mr. Pike and his son, were out in the field reaping wheat, their guns close at hand. Mr. Kilburn had trained his dog to scour the woods, and the faithful animal ever had his eyes and ears open, and was sniffing the wind if a wolf or bear was about. On this afternoon in August the dog came running in with his hair in a ruff, and growling.

"Indians," said Mr. Kilburn. The men and boys seized their guns, ran for the house, and had just time to get inside and bar the door when Captain Philip and nearly two hundred Indians made their appearance.

The Indians staid at a safe distance, and so did Captain Philip, though he came near enough to talk.

"Come out, old John! come out, young John! I give you good quarter," he shouted.

There were only the two men, the two boys, Mrs. Kilburn and her daughter and four children, in the house, with three hundred Indians attacking them, but John Kilburn was not in the least frightened—not he. Neither was Mrs. Kilburn, nor her son or daughter. They had several extra guns; Mrs. Kilburn and her daughter knew how to load them. They would rather die than be taken prisoners. The Indians had no cannon, and their bullets would not go through the stout timbers. Only by burning the house would they be able to get in.

"Get you gone, you rascal, or I'll quarter you!" was the defiant answer that John Kilburn shouted through one of the loop-holes to Captain Philip, as the latter went back to the dark crowd of savages, who set up the war whoop.

"They yell like as many devils," said John Kilburn; but he was not in the least disturbed by the howling.

Then the bullets began to come through the shingles on the roof, and strike against the timbers.

The Indians surrounded the house, but there were loop-holes on each side. Mr. Kilburn and Mr. Pike took two of the sides, and the two boys the others. Bang! bang! went the guns of Mr. Kilburn and Mr. Pike. Bang! bang! went the boys' guns. They could take a rest, and take deliberate aim. The Indians could not see the muzzles of the guns, and the moment one of the red men peeped from behind a tree his mind was in danger.

One by one they fell, which enraged them all the more, and they crept nearer, firing rapidly, yelling the shouts, hoping, quite likely, that a bullet might glance down from the roof and hit those inside.

"The roof looks like a sieve," said John Kilburn, as he looked up and saw the holes.

Mrs. Kilburn and her daughter were loading the extra guns the while, and handing them to the men and boys, who kept up such a rapid fire that the Indians came to the conclusion that there were a large number of men in the house.

"We shall soon be out of bullets," said Mrs. Kilburn.

A thought came. Why not catch the bullets that were coming through the roof? The balls had nearly spent their force when they came through, and they hung up a blanket with the folds, which stopped them entirely, and the girl, gathering them as they fell harmlessly upon the floor, put them into a ladle, melted them and ran new bullets, which soon were whizzing through the air, and doing damage to the enemy.

All through the afternoon the fight goes on, the Indians aiming at the loop-holes. Their bullets pepper the logs around them. One comes in and inflicts a ghastly wound in Mr. Pike's thigh, but the Indians do not know it, and the brave defense is kept up till the Indians, foiled in all their efforts, defeated, with several of their number dead and many wounded from the volleys fired by Colonel Bellows and his men, and by those in the house, set Mr. Kilburn's wheat on fire, kill his cattle, bury their dead and slink away, not having taken a scalp or a prisoner. They have only wounded one man.

When everything goes well with the Indian he can be very brave, but when the tide is against him he quickly loses courage and becomes disheartened, and so Captain Philip made his way back to Canada, very much crestfallen at the repulse he had received at the hands of two men, a woman, two boys and a brave-hearted girl.—*Charles C. Coffin, in Harper's Young People.*

Cold Feet.

WHAT a common complaint this is! and yet no one seems to know anything about it. You suffer from it for years, and yet you don't go to a doctor, or if you do you derive very little benefit from his advice. Some people suffer from it at night only, while others are troubled in the daytime as well. It occurs most frequently in women, but still you often hear men complain of it. We believe that the best remedy is hypophosphite of lime in one or two grain doses twice a day. This is soluble in water, and should be taken in the form of a mixture, nothing else being put with it, with the exception, if you like, of a teaspoonful of sirup, to make it more palatable, although it is really by no means disagreeable by itself. Another good remedy is nux vomica—five drops of the tincture in a little water three or four times a day. It is highly recommended, and you may hope for great things from it. Then you must do all you possibly can to improve the state of your general health. It is probable that you are below par somehow or other, although we must admit that it does not follow of necessity. If you feel generally out of sorts, and your appetite is poor, quinine will do you good. If you are pale and anæmic, you must put your faith in iron. Cod liver oil is an excellent remedy for improving the general nutrition; many people feel quite in a glow after each dose. You should live as well as possible. Cold bathing in the morning will quicken the circulation for you. A good brisk walk, if you are able to take it, soon warms the feet. It is a great thing to be properly shod; good stout, well-fitting boots, with thick, warm socks. If you for any reason are unable to get walking exercise, you will find that five or ten minutes' exercise with the dumb-bells in your room before breakfast is not a thing to be despised. The hot-water bottle in bed at night is a palliative, but does nothing to effect a cure. Many people who have suffered from cold feet have assured us that they have derived the greatest benefit from putting them into cold water at bedtime. It seems a disagreeable remedy, but they say that the reaction which almost immediately follows the primary chill is delightful, and that the plan succeeds admirably. The best way would be to rub the feet quite dry with a bath-towel after bathing them, and then to jump into a warm bed.—*Philadelphia Times.*

THE contrast between the British and American systems of railroad is very remarkable. The mileage of the former is only 17,696 miles, the latter 86,497. The cost of the former is $3,585,000,000, double our funded National debt and close upon the total of the English debt. The cost of our system in operation to December 31, 1879, is placed by Mr. Poor at $4,416,000,000 on 84,232 miles, or $4,919,000,000 on the whole system of 86,497 miles. The difference in the average cost per mile is very great—in Great Britain $202,000 per mile, in the United States, $50,000 average per mile. The gross earnings, on the other hand, are directly reversed. The British lines, on 17,696 miles, last year took in $[illegible],000,000. The lines of the United States, on 84,232 miles in full operation last year, took in $529,000,000. The proportion of passengers to freight on the former is greater than in this country, though only fifty-two per cent. of the whole earnings. The operating expenses in Great Britain average fifty-two per cent.; in the United States, fifty-eight forty-hundredths per cent.

THE greatest novelty of the coming season in this country will be Salvini playing in Italian with a company speaking English. The *Courier des Etats Unis* offers this as a sample of what may be expected in "Othello." Otello—*Ella si desta.* Desdemona—Who's there, *Othello?* Otello—*Desdemona, dicesto in questa sera los vostros peccati?* Desdemona—Ay, my lord. Otello—*Se alcun delitto per vi ricordi, che dal ciel non ebbe perdono, or l'incocate?* Desdemona—Alas, my lord, what may you mean by that? A polyglot performance of this same tragedy was attempted, some years ago, with Davidson, the German actor, in the titular role. An American actress played *Desdemona*, and the house laughed at *Otello's* scenes.