

Torpedo Warfare.

The weapons used for under-water warfare are called "torpedoes."

There are two kinds of torpedoes: those that are anchored in one place and those that swim about in the water. Of those that are anchored there are also two kinds. One kind consists of great iron boxes filled with dynamite and sunk in the water at particular places. They rest in the mud, or on the sand or stones, till they are ready to be fired, when they blow up or explode with terrible effect; and if a ship happens to be passing over one of them she is sure to be torn to pieces. The other kind have a float anchored just out of sight under water, while the torpedo rests on the bottom. These, too, when they explode, destroy anything that happens to be near.

There are two ways of firing these ground torpedoes: In one there is a wire carefully protected from the water, leading from the torpedo to the shore. The soldiers in charge of it can send electricity through this wire and set fire to the dynamite, and thus fire the torpedo. The torpedo is lost and destroyed, but the broken wire can be pulled ashore, and used again on another torpedo. The second method is to fasten to the torpedo a wooden float. If one of the enemy's ships passes over such a torpedo and happens to strike and push aside the float that is anchored just over it, this will also fire the torpedo, for the chain or rope that anchors the float is connected with the torpedo, and any strain or pull on the rope discharges it. In this way the ship itself may fire the torpedo, and thus become an agent of its own destruction.

The swimming torpedoes are of two kinds. One of these swims like a fish, and, if it strikes its nose against a ship, explodes, and sinks the vessel by tearing a terrible hole in the bottom. Another kind can also swim, but it carries fastened to its tail a long wire which it drags through the water wherever it goes. By means of this wire, the soldier who stands at the end, on the shore, or the sailor on board ship, can make the fish turn to the right or left, dive, turn around, go backward, or come home again when it is wanted. Besides this, the fish will blow up if it strikes against the enemy's ship, or whenever the man at the wire wishes to fire it. The government will not tell us how such a wonderful thing can be done, but you may be sure that these fish-torpedoes are strange fellows. They seem to be able to do everything that a fish can do, and more, for when they get angry they can burst out into a frightful passion and send the water flying into the air for hundreds of feet, and woe to the sailors who are near! Torpedo, ship and man go to the bottom in a volcano of fire and water. Besides these anchored and swimming torpedoes there is another kind called spar torpedoes, so named because they are placed on the ends of spars or booms that run out under water from the bows of small boats. The boats rush up to the side of the big ship, in the dark, and explode the torpedoes underneath, thus sinking the vessel.—*St. Nicholas.*

A Very Young Lieutenant.

The following anecdote of President Lincoln's youngest son is taken from "A Boy in the White House," by Noah Brooks, in *St. Nicholas*: One day Tad, in search of amusement, loitered into the office of the secretary of war, and Mr. Stanton, for the fun of the thing, commissioned him a lieutenant of United States volunteers. This elated the boy so much that he went off immediately and ordered a quantity of muskets sent to the White House, and then he organized and drilled the house-servants and gardeners, and, without attracting anybody's attention, he actually discharged the regular sentries about the premises and ordered his unwilling recruits on duty as guards.

Robert Lincoln soon discovered what had been done, and as he thought it a great hardship that men who had been at work all day should be obliged to keep watch during the night to gratify a boyish freak, he remonstrated. But Tad would listen to nothing from his elder brother, and Robert appealed to his father, who only laughed at the matter as a good joke. Tad soon tired, however, of his self-imposed duties and went to bed. The drafted men were quietly relieved from duty and there was no guard at the President's mansion that night, much to Mr. Lincoln's relief. He never approved of the precaution of mounting guard at the White House. While Tad sported his commission as lieutenant he cut quite a military figure. From some source he procured a uniform suitable to his supposed rank, and thus proudly attired he had himself photographed.

A striking subject—The hammer.

"Lady" Washington.

That celebrated woman, whom our Revolutionary sires, in spite of their republicanism, called "Lady Washington" was a homely. She used to speak of her public life in New York and Philadelphia as her "lost days." She preferred the comfort and seclusion of Mount Vernon to the gayety and publicity as the wife of the President. A lady who visited her there draws this pen and ink sketch of Martha Washington's room at her husband's farm: "On one side sits the chambermaid, with her knitting; on the other a little colored pet, learning to sew. A decent-looking old woman is there, with her table and shears, cutting out the negroes winter clothes; while the good old lady direct them all, incessantly knitting herself. She points out to me several pairs of nice stockings and gloves she has just finished, and presents me a pair half done, which she begs I will finish and wear for her sake."

Mrs. Washington's granddaughter, Miss Nellie Custis, who lived with her, was required to practice on the harpsichord four or five hours daily.

Miss Custis being young and romantic, was fond of wandering alone by moonlight in the woods of Mount Vernon. Her grandmother thought it unsafe, and scolded the young lady until she promised not to walk in the woods again unless accompanied. But one night, her habit being too strong to be curbed by a promise, she was again missed and a servant was sent to recall her from her favorite wanderings.

As soon as she entered the drawing-room, her grandmother, seated in her great armchair, reproved her severely. Nellie admitted that she was alone, but offered no excuse for her transgression. As she was leaving the room she overheard General Washington, who had been walking up and down the room with his hands behind him, say to his wife:

"My dear, I would say no more; perhaps she was not alone."

Instantly Miss Nellie returned, and walking straight up to the general, said:

"Sir, you brought me up to speak the truth; and when I told grandma I was alone I hope you believe I was alone."

The general, making one of his most courtly bows, replied: "My child, I beg your pardon."

To Think and Not to Think.

Improve your time, my boy. Put in every minute in honest hard work, or tranquil meditation, or healthful recreation. That is all I ask you to do. Oh, "you believe you'll select meditation as a profession," then, do you? It strikes you that it is easy work to sit and think, eh? Now, my boy, if you want something easy, you had much better stand and chop wood. It isn't easy to think. We don't think half so much as we want to make people believe we do. In fact, we don't think nearly so much as we think we do. Busy thought and aimless idleness are often very similar in external appearance. Edison sitting before his fireless forge, with his hands folded listlessly in his lap, looking at nothing, may be apparently as idle, even idler, than the man perched on the end of a cottonwood log, watching his cork bob lazily in the yellow water of a sluggish creek. But the results are in one instance the telephone and the electric light, and in the other, the ague and a soft-mouthed sucker and a cat-fish four inches long. The one dreams out marvelous inventions that thrill the world with wonder and multiply commercial activity, and gives them to the eager, waiting world; or at least he sells them to Jay Gould and Jay Gould sells them to the world, and the other contracts a malarial fever and gives it to his family. It is not easy to think we waste more time than we use, and the hours slip away so noiselessly and easily we don't know where they have gone.—*Burlington Hawkseye.*

Extraordinary Footprints.

The Virginia City *Chronicle* says that Professor Le Conte recently visited the State prison quarry at Carson, Nev., where fossil footprints were discovered not long ago. A stream of water was introduced on the quarry floor, at the western side, where the walls are about thirty feet high, and was rewarded by more than a dozen new footprints. Coming west are the prints of the feet of a man who was apparently dragging a heavy load after him through the mud. The traces are turned sideways, as if the man had sought the strongest purchase to pull along behind him his load. On the east side of the quarry a little tunnel was run in about six feet in the presence of Professor Le Conte, and three fresh human footprints were disclosed. Evidently the owner of the feet was plunging through deep and thick mud, for around each track was forced up a ridge several inches in height.

PEARLS OF THOUGHT.

If every person would be half as good as he expects his neighbor to be what a heaven this world would be.

Never be above your calling, or be afraid to appear dressed in accordance with the business you are performing.

Pack your cares in as small compass as you can, so that you can carry them yourself and not let them annoy others.

No man is more nobly born than another unless he is born with better abilities and a more amiable disposition.

The triumph of a woman lies not in the admiration of her lover, but in the respect of her husband, and that only can be gained by a constant cultivation of those qualities which she knows he most values.

It is much easier to reconcile an enemy than to conquer him. Victory deprives him of his power, but reconciliation of his will; and there is less danger in a will which will not hurt than in power which cannot. The power is not so apt as the will, as the will is studious to find out means.

Mediocrity raised to a position beyond its desert finds itself humiliated when placed beside those humbler in rank but equal to the duties of the office to which they were raised by merit alone. These waifs of favoritism dwindle by comparison and stoop to every suggestion of meanness and malice to sting their humbler but more deserving and more successful associates.

In the lives of the saddest of us there are bright days when we feel as if we could take the great world in our arms. Then come the gloomy days when the fire will neither burn on our hearths nor in our hearts, and all without and within is dismal, cold and dark. Every heart has its secret sorrows which the world knows not; and oftentimes we call a man cold when he is only sad.

SCIENTIFIC SCRAPS.

Of the 229 asteroids now known, forty-one were discovered by Dr. Peters and thirty-six by Dr. Palisa.

It is reported that the telephone is now in successful operation as an expedient for communicating with divers engaged in difficult and dangerous work.

It is observed that trees in the peach gardens of France, grafted on plum stock, ripen their fruit at least ten days earlier than the same variety grafted on a peach stock.

The assertion is made that from an annual cotton crop of 6,600,000 bales seed can be obtained to yield \$100,000,000 worth of oil. It is assumed that every 400-pound bale gives 1,200 pounds of seed.

Thermometers, like prophets, says the *American Register*, have no renown in their own countries. France has adopted the thermometer of the Swede Celsius; Germany, Austria and Russia that of the Frenchman Reaumur; England and America that of the German Fahrenheit, and Sweden, discarding that of her own son, is measuring heat with the thermometer of the Scotchman Leslie.

African exploration is to be taken up at the point where Livingston laid it down, by Lieutenant Giraud, who has sailed from Marseilles to Zanzibar as the leader of a French expedition. His probable route will be by the north shore of Lake Nyassa to the Chambeze river; thence to its outlet in Lake Bangweolo, which he proposes to circumnavigate. He proposes then to go in canoes down the Luababa-Congo, to its mouth in the Atlantic ocean—an ambitious programme, interesting to all geographers.

Snuff-Boxes.

Lord Petersham had the shelves of a favorite room completely fitted with tin snuff-boxes, snuff-boxes and snuff-jars. When a friend one day praised his light-blue Sevres snuff-box his lordship said, in his dainty tip-toe sort of way: "Yes, it's a nice summer box, but it really would not do for winter wear." Such was the extravagant foppery that distinguished the gentlemen of the regency. It has been recorded of Mr. Norris, a well-known snuff-box collector, that he had so many boxes that he never required to take a pinch twice from the same receptacle. A party of distinguished men were once comparing snuff-boxes, when it was found that one had been made from the deck of the Victory, another from the table on which Wellington wrote the Waterloo dispatch, a third from Canova's footstool, a fourth from the sign of the Bear at Devize's, beneath which Sir Thomas Lawrence began to paint, and so on. Crabbe's cudgel, the Siddon's desk, and, of course, the mulberry tree planted by Shakespeare, were all preserved in the form of snuff-boxes.—*Belgravia.*

TOPICS OF THE DAY.

The New York *Financial Chronicle* notes the fact that the United States government has paid of the national debt more than one thousand millions of dollars in seventeen years. The government debt was at its highest point August 31, 1865. It then amounted to \$2,756,000,000. On October 1, 1882, the debt of every description was only \$1,644,120,223.

General Terry is convinced from his success in working the Northern Cheyenne Indians on their farms until they are self-supporting, that this is the correct way of disposing of the Indian question. On these farms the men are manly, the women chaste, and all are anxious that the children shall be educated like the whites. He insists that cows will do more than soldiers in civilizing the red men.

Reports from South Africa tell of a financial collapse arising out of the mania for ostrich farms, which took possession some time ago of all sorts of members of the community. Those who could not pay cash gave bills, which were discounted by the banks, but the bills fell due before the feathers were grown, and birds bought for \$500 a pair were sold for \$150 and less. Besides this, heavy sums have been lost in diamond speculations.

The report of the United States commissioner of Indian affairs shows seventy-four boarding and one hundred and one day schools attended by Indians. The number of schools is substantially the same as a year ago, but the number of pupils shows considerable increase. Fair progress has also been made in agriculture. The report shows that the work of civilizing the aborigines is making encouraging progress, and is full of promise.

The treasury department has decided to act in accordance with the decision of the circuit court of San Francisco relative to the right of Chinese subjects to visit the United States under the recent act of Congress. This decision was substantially that the statute must be made to harmonize with the Chinese treaty, and that the law cannot be construed as forbidding the landing of merchants, travelers, students, etc., they not being laborers.

Geological examination of the delta of the Mississippi now shows that for a distance of about 300 miles there are buried forests of large trees, one over the other, with interspaces of sand. Ten distinct forest growths of this description have been observed, which it is believed must have succeeded each other. Of these trees, known as the bald cypress, some have been found over twenty-five feet in diameter, and one contained 5,700 rings; in some instances, too, huge trees have grown over the stumps of others equally large. From these facts, geologists have assumed the antiquity of each forest growth at 10,000 years, or 100,000 for all.

The Cincinnati *Price Current* has published a peanut number, and gives some interesting statistics as to the cultivation of this docile fruit. Few people, says the *Price Current*, have any idea of the extent of the peanut business or its increase in the United States. The consumption in 1877-8 was 1,066,000 bushels, in 1878-79 it was 1,380,000 bushels, in 1879-80 it was 1,927,000 bushels, and last year 2,108,000 bushels. The available supply for the winter, according to Mr. Murray, the editor of the *Price Current*, who is a good judge of peanuts, is 2,280,000, out of which there are 130,000 bushels from Virginia, 500,000 bushels from Tennessee, and 150,000 bushels from North Carolina.

The national government has won its suit against the city of Alexandria and the Alexandria Canal company, involving the ownership of the aqueduct bridge across the Potomac at Georgetown, D. C. In 1837 the government loaned Alexandria \$350,000 to aid in the construction of a canal. The defense was that while the money was technically a loan it was really a gift. Judge Hughes, in the circuit court at Alexandria, has decided otherwise, and directed the city of Alexandria to deposit with the secretary of the treasury three thousand five hundred shares of the canal company's stock. The decision amounts to a delivery of the canal and bridge to the government, and it is anticipated that the bridge on which tolls are collected will be made free.

Taking all the world, the United States in 1878 had the greatest mileage of railroad in proportion to the population, having a little over twenty-one miles for each 10,000 persons. In Europe, Sweden led with six and one-half miles to every 10,000 of her population.

PERILS OF STEEPLE-CLIMBING.

A Narrow Escape of a Professional Climber—Ascending Tall Chimneys.

"The longer you live the more you find out," remarked Mr. Joe Weston, the steeple climber, to a number of newspaper men lately. "I had an accident lately which taught me something. It was a curious one. You see I was on top of St. Paul's spire, in Spring street. We had rigged ropes to remove the planks of the scaffolding. The way we do that is to fasten a block to a post or tree on the other side of the street and another to the steeple, and splice the ends of the rope together to make an endless rope of it. I had tied the last plank to the rope, and it was going down. I wore a handkerchief tied loosely around my throat. The wind blew out an end of it and it caught on the removing rope and wrapped around it. It was immediately caught up, first the handkerchief and then my beard passing into the block. Now, if I had had an assistant in the street below he would have noticed the plank stop when I was caught that way, and, as he could not see anything wrong above, he would have pulled the rope. Then I should have been choked to death by my handkerchief, and my beard and part of my face would have been torn off. Persons in the street below would have noticed, perhaps, that I was very quiet, but they would not have suspected that I was hanging by the neck.

"That pull stretched me eighteen inches. As soon as I realized the trouble I reached below, and taking hold of a rope pulled back on it until my handkerchief came out of the sleeve, and I dropped onto the hooks of the scaffold below. I could barely touch them with my feet. I called to 'Frenchy,' who was on the other side of the steeple, and when he came around I told him how it occurred. Neither of us will wear handkerchiefs around our necks again when we are about such jobs. We were about 220 feet above the street."

"What is the highest you have ever climbed?" asked a bystander.

"Three hundred feet. During the Centennial I was engaged to place a streamer on the top of St. Paul's church, in Fourth street. I got a mast up there about fifteen feet long, fastened it to the big hand and a flag to it. I had a 'truck' on top of the pole, and I climbed up to that and stuck a fishing pole in the 'truck' and stood on the top of the mast. I was then 300 feet above the pavement in Fourth street. By means of the fishing pole you can steady yourself anywhere you can stand at all, if you can only put your hand on something tolerably steady. Even if you only touch your finger to a pole or something of that sort it will help you."

"Do you only work in Cincinnati?"

"No, I am sent for from different parts of the country around here. The way we have of ascending tall chimneys would interest you. We put up a ladder and I go up to the top, where I fasten it by a rope passed around the chimney. In tying the rope I leave a loop in it for the bottom of the next ladder. By this time my assistant has brought another ladder up, which I pass through the loop until the bottom rests firmly on the first ladder. Then I walk up that ladder with the help of another rope passed around the chimney. No matter if the ladder leans away over from the chimney, or to either side, you must not touch it. As I lift my right foot to the next rung I lift my right hand, working the rope up. Then the left hand and foot, depending for steadiness all the time on the rope. When I reach the foot of the ladder I draw it close to the wall by pulling on the rope, and tie it there. By working the rope up so that it is higher than the top of the ladder on the opposite side of the chimney you are enabled to throw the weight of each ladder on the chimney, and any weight on the ladder is a strain on the chimney, not on the ladder below.

"Our men, when they are new to the work, never fall. They hold on mighty tight. The only trouble we have with them is about the tools. They are apt to lay them on projecting cornices, or other such tempting places, where a rope sometimes catches a heavy bar and sends it down into the street. If one of those tools struck a man below it would go clean through him. Why, one man dropped a heavy chisel, with a blade two inches broad, from the cathedral spire one day. It struck two heavy joists which were lying below, and the blade passed through both timbers. Where would a man have been if he had stood below."—*Cincinnati Enquirer.*

Holyoke, Mass., is to employ 100 men and \$100,000 in the manufacture of a sealskin so nearly like the natural fur that a seal itself couldn't detect the difference.

Rest.

Out from the great world's crush and din;
Out from the pain, and wrong, and sin;
Out from ambition's cruel strife;
Out from the bitter race of life;
Out from its honors and affairs;
Out from its horrors and its cares,
Again, a child, he lay at rest,
In holy peace on his mother's breast.

Her gentle hand toyed in his hair;
Her sweet, dear voice dispelled his care;
Her loving eyes shed light divine;
Her very presence made a shrine;
His throbbing arteries ceased to teem;
The maddening world a sad, past dream;
Again, a child, he lay at rest,
In holy peace on his mother's breast.

PUNGENT PARAGRAPHS.

November 30—Autumn leaves.

It's easy finding reasons why other people should be patient.

Banged heads are fashionable among ladies and the prize ring only.

A statistician has estimated that courtships average three tons of coal each.

In trade what article is usually considered as occupying the foremost rank? Strong butter.

This season's vests will furnish patches for next year's trousers. Sweet are the uses of diversity.

And now has come the wintry breeze
And stopped as sure as fate,
This swapping taffy neath the trees,
And chinning o'er the gate.

This is a hurry-came in earnest,
Thought the boy as the old man rained
The blows upon his shoulders with
lightning rapidity.

A man with a plugged half-dollar in his pocket is troubled by the pangs of conscience until he drops it in the contribution box at church.

Lava from Vesuvius is said to make the best pavement in Europe. The paving appears to have been a trifle overdone in the case of Pompeii and Herculaneum.

A fashion exchange says: "There will be no change in skirts during the winter season." This will send the gaunt wolf howling to the door of the poor washerwoman.

"This decorative art business is being run into the ground," quietly observed a practical farmer as he drove down a hand-painted croquet stake for a tethering post.

Mrs. Howe says women do not fall in love any more. This may be true—women may not fall in love any more, but many of them do some awful tall stumbling in that direction.

Tommy don't like fat meat. One day the steak was very fat. "Tommy," asked the professor, "will you have some beefsteak?" "Yes, sir; but I don't want any that has pork all around it."

On the facade of one of the principal hotels in Vichy, France, is the announcement: "All languages spoken here." A tourist entering plies the host with English, Spanish, Russian, etc. Seeing that the good fellow understands never a word, he inquires who it is in the hotel who speaks every tongue. Then mine host with dignity responds: "The travelers, sir."

"I say, fellows," exclaimed Fogg. "Brown and his wife have separated." "No!" "Is that so?" "How did it come about?" "I always thought it would come to that." "Guess it'll be better for both of 'em." These were a few of the expressions that fell from the lips of the boys as they eagerly crowded around Fogg. "Yes," said Fogg, "the Browns have separated. I saw Brown kiss Mrs. B. good-bye at the depot just now. He said he would be back to-morrow."

A Sharp Question to the Bishop.

When Bishop Whitaker was in Candelaria, Nev., he took a stroll in the outskirts of the camp with a party of ladies and godly gentlemen. A man was seen laboriously turning a windlass which hoisted from a shaft a bucket filled with rock. The only thing remarkable about the man at the windlass was his hat, the crown of which was cut clean off, allowing the hot sun to pour down upon a perfectly bald head, some waggish friend recommended this arrangement as sure to produce a crop of hair. The bishop and his party stood watching the man toiling and grunting at his heavy labor for several minutes, and the kind-hearted clergyman spoke up with concern, and said:

"My friend, why don't you cover up your head? This hot sun will affect your brain."

"Brain, is it?" cried the man, as he gave the windlass another heavily-creaking revolution. "Begob, an' if I had any brains d'ye think I'd be here pullin' up this bucket?"

The bishop and his party hastily retired as the gentleman at the windlass proceeded to express, between tugs and in a very strong way, his opinion of men who had been born, like himself, without brains.