# Scientific American.

# Miscellaneous.

## American Cast Steel.

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We would call the attention of those interested in cast steel, to the advertisement of Daniel Adee, of this city. We have examined his steel, and do not hesitate in pronouncing it fully equal to the best English manufacture. We have also the assurance of this fact from parties in this city who have used it. We are glad of this, and hope our manufacturers will not overlook the importance of patronizing the American article. Mr. Adee is an enterprising man and deserves a liberal encouragement.

## Cannalton.

In the State of Indiana, on the Ohio River, is built a vast city (yet in embryo); it has in its vicinity 5000 acres of coal land-the coal of superior quality. Last year 400,000 bushels were mined and sold. A cliff, 300 have high, near the town, is composed thus :--1st. Limestone, 20 feet; 2d. Congiomerate suitable for furnace hearths, fire beds, mill stones, &c., 36 feet; 3d. Fine sand stone, abundant; 4th. Fire clay, 10 feet. In front of the coal seams are four miles of wharfage and 16 feet water at lowest stage. The site of the town is on a bend of the Ohio, embracing an area of 1000 acres, lying between the river and the coal hills. Lots are offered at very low rates to individuals or companies, on condition of improving. The rent of soal 1 cent per bushel, mining 2 cents. Free stone manufactories can be built at \$2,75 per perch. Clay, sand, timber and stone, given free to all who build in this town.

At the last session of the Legislature, twelve charters, of the most liberal character, were obtained for manufacturing establishments on this plan. One cotton mill is building, to contain 10,000 spindles, of stone, 4 stories high, 272 feet by 65. Another, of 2000 spindles. Both mills are erected under the direction of Gen. T. C. James, of Providence.

#### Wealth of Russia.

Five millions of rubbles were lately transported from the fortress of St. Petersburgh to the depot of the bank, to replenish its resources .-The sum was taken from the vaults of the fortress in the presence of the assistants, of the comptroller of the empire, the members of the Committee of Revision, the delegates from the Bourse, and the foreign commercial charges d'affaires, and escorted to the bank by infantry and cavalry. The council of the Bank, in full sitting, and in the presence of the above gentleman, assured themselves that the sum was the same as that taken from the fortress. The act relative to the removal was then signed by all present, and among other things, establishes the fact that there remained in the vaults of the fortress of Peter and Paul, after the removal of the five million roubles, 101, 528, 595 roubles.

[The above from foreign papers, either makes the Russian, or R. Cobden void of truth.

#### Chicago Mechanics' Fair.

The third Annual Fair of the Mechanics Institute of the city of Chicago, Ill., will be held on the second Monday of October next The following list constitutes some of the premiums to be awarded :-10 gold medals, 25 silver medals, 4 gold pencils, 4 gold pens, 1 silver cup, 1 plated cup 5 silver pencils, 2 silver butter knives, 4 silver fruit knives, 2 silver table spoons, 4 silver desert spoons, 2 sett of

#### Gratifying Result of an Interesting Operation.

Rev. N. Hoskins, of Crawford County, Ind., able, with the exception of the supernumery who had been blind from birth. The Bulletin foot. This was upon the left hind leg, having says :

Mr. Hoskins was taken home to Crawford county before the bandages were removed, and when this was done, we are informed by a gentleman residing in that neighborhood, the operation was found to have been eminently successful. He describes the emotions of the patient when suddenly possessed of a scene so and hoof were well shaped but were not more novel to him, to be of the most enthuastic description. Things which he had long been acquainted with, through the medium of the oth- in walking, and the shoe, which was well worn er senses, became possessed of a new and sur- showed that the foot did its duty in suporting. passing beauty, and roads which he had been and moving the animal. used to travel fearlessly when blind, had to be again learned. His wife and children, whom he had never seen, his friends, his parishioners, his home, everything endeared, to him, became an unending source of delight and new-born gratification. He had the same confused notions of distance which we see the smallest children manifest, and took the liveliest pleasure in beholding the great variety of colors.-In short he was compelled to learn to see in precisely the same manner that the smallest child does, and to him it was an occupation of the most gratifying nature.

## Heat Expands Bodies.

This is a universal law, and there are but one or two apparent exceptions. Were there no such thing as heat, liquids and gases could not exist : all matter would be solid. Heat is the cause of bodies becoming fluid; it insinuates itself between the particles of which they are composed, and forces them further apart: if a great degree of heat is applied, the particles are separated so far that they then assume the form of gas. Steam is a familiar example : and the thermometer acts solely on this principle. There are only two or three exceptions to this law, and they are only so in appearance. The principal one is water, which, instead of contracting when cooled down below 32 degrees, expands, when it assumes the form of ice. This is a beautiful provision, since the ice, floating on the water, prevents it parting readily with its heat and thus does not allow our rivers, &c, to become a solid mass of ice, as they otherwise would. The cause of the water expanding, and becoming lighter, when it freezes, is because the crystals of ice have interstices between them, which are filled with air.

## Raising Fruit in Russia.

In the intensely cold climate of St. Peters burg, where nearly all our common fruit trees perish under ordinary circumstances, fine crops of apples, plums, and cherries have been obtained, by training the branches on a trellis only about a foot from the ground.-The heavy snows entirely cover them and completely protect them. Large crops of apples have thus been obtained for successive years, even after winters which have destroyed other trees when double-matted. The Green Gage and Orleans plum have ripened before mid-autumn. Mo-When rello cherries have borne good crops.

the fruit ripens, it does not bruise in falling. [Here is certainly a hint to all our fruit growers. Would it not apply to the peach, so that it might be raised in the northern parts of our country, where this delicious fruit, is unknown?

#### Natural Curiosity.

A short time ago, a horse was brought into a lock joint, or to speak more exactly, between foot, and these motions were effected independently of the natural foot, showing an independently set of muscular fibres also. The foot than one-half or two-thirds of the size of the other. It was placed firmly upon the ground

## Gov. Marcy's Cane.

headed, and gold ferruled, with a socket of employs a strong leather loop or noose attachbrass at the foot. The timber of the cane is | ed to the end of a pole eight or ten feet in length. from the flag-state of the National Palace of Mexico, occupied by the Americans Sept. 14, den, in front of which the snakes bask in the 1847. The socket is from a Mexican howitzer, sun, placing the noose over the head and neck and the iron rannod of a Mexican escopeta, run through the heart of the stick, gives it the solidity of lighum vite. The ferrule dering escape is upossible. When the old fellow which binds the ivory head of the cane `is of California gold, and the Governor says he has he extracts their frangs in the following manner : no doubt that the ivory is from the tusk of He lays the head across a log of wood, then "the elephant" which so many of the volunteers discovered in the deserts and terres cali- his snakeship trows back his upper jaw-the entes of Mexico.

#### Mineral Resources of Western Virginia.

The Kanawha Republican says that on the tops of the hills near the Falls of Kanawha. is a stratum of black flint rock which is found to be the very article with which to grind the Hydraulic Cement; beneath this is a stratum of Coal, and again under this is the Hydraulic Cement rocklin inexhaustible quantities, and of a quality equal to any in the world; and all this upon a stream that is generally navigable.

## Ship Building in this City.

From the 1st of January to the present time there have been built and launched at New York twenty-eight vessels, whose aggregate tonnage is 20,251 tons; and there are now on the stocks twenty-two vessels whose tonnage amounts to 28,960 tons, making a total of fifty vessels and 49,211 tons. The value of the whole is not far from three millions three hundred thousand dollars.

#### Good Post-Office Regulation.

By a recent regulation of the British Post-Office Department, any letter having the writer's name and residence engraved on the seal, or writen on the outside, and not finding the party to whom the same is addresed, will be returned to the writer immediately through the Post Office, and not through the Dead Letter Office; by which regulation considerable anxie ty and loss of time will be prevented.

Improvement of the Mississippi Rapids. Some time ago a Convention of deligates representing towns, cities, and States interested in the improvement of the Rapids in the Mississippi, River, was called at Davenport, Iowa. The day fixed was the 4th of July, but owing to the prevalence of the Cholera, the time October next, at which it will be held.

At the late session of the New York and Penn-The New Albany (Ind.) Bulletin has an in- blacksmith shop in Cambridge Mass., to get 5 sylvania Yearly Meeting of the Free Will teresting account of an operation performed by feet shod. The horse was larger size than Baptists, a set of resolutions against all secret Dr. Sloan, of New Albany, upon the eyes of usual, but in other respects in no ways remark- orders was passed, which are quite stringent in their character. They declare that the tendency of such orders " is to destroy the peace its origin upon the inside, just above the fet- of Zion;" forbid the licensing of any minister who is known to be a member of any of them ; the larger postern and cannon bones. It had recommended the churches under their author. its own tendons for bending and extending the  $\dot{|}$  ity to expel members who adhere to secret orders, and interdict fellowship with any church, quarterly or yealry meeting which refuses to comply with the resolutions.

The Quakers and Secret Societies.

#### Rattle Snake Hunter.

Among the wilds of Lake George, in the northern parts of this State, there is an old man who makes his living by catching rattlesnakes, pulling the teeth of those he wants to sell to showmen, and making oil out of others -an oil which ignorant people have been At the recent Syracuse Convention, Gov. | quackized to believe in its superior virtues for MARCY sported a heavy walking stick, ivory, rheumatisms and sprains. To catch them he With this p le he cautiously approaches the -the noose being so constructed that when the snake struggles, the tighter he is held, renwishes to tame them and render them harmless places his foot on the neck, pressing it until mode in which they bite; he then applies a pair of pincers, and with the coolness of an experienced dentist pulls out the frange one by one!

#### The Fair of the American Institute.

This Fair, the 22nd of the Institute, opens on next Tuesday at Castle Garden. The anni-Bituminous Coal, with which to burn the rock versary address will be delivered on the 11th cement; and under this is a stratum of Cannel by the Hon. Levi Woodbury. It will no doubt be an able one.

## A Present of Mexican Armor.

Mr. Buchanan has presented to the National Institute at Washington, a coat of mail, consisting of breast, back and helmet. They were captured in one of the battles of the Mexican war. The helmet bears evidence of several severe sabre cuts, and a blow as from a musket. The weight of the three articles is 26 pounds ; also, the coat of a Mexican lancer taken at the storming of Monterey.

## Soap Stone Quarry.

The Manchester Democrat says the best soap stone quarry in New England is that at Francistown, N. H., discovered in 1794, but not much worked till eight years later. It has since yielded to its owner, Mr. Fuller, \$2,500 per annum.

#### A Dog Disgusted.

Sir Walter Scott being asked to sit for his portrait for Terry the actor, saidthat both he and his dog Maida were tired of that sort of thing-Maida particularly ; where she had been so often sketched that, whenever she saw an artist unfold his paper and arranged his brushes, she got up and walked off, with a dignity and expression of loathing almost human.

## Heavy Verdict.

At Berkshire, Mass., last week, a verdict of \$7,000 was rendered against the Berkshire of meeting was postponed until the 10th of Railroad Company, and in favor of D. B. Campbell and wife, for injuries sustained by them

silver teaspoons, several volumes of useful books, diplomas, &c., &c. This Institution, we believe, is a very excellent one and does credit to the city of Chicago.

### Adulterated Milk.

A Mr. Rugg, in London, has published a pamphlet on the subject of milk that is used in cities, the product of city fed cows. He says, "the results to those who use such milk, are injurious in the extreme,

#### Cement for Mastic Work.

Mix 50 parts of silicious sand, 50 parts of to his head as to cut his upper lip and break lime marl, or pulverised brown sand stone and two of his teeth. On yesterday morning the 8 parts of litharge. When the cement is used it is to be ground up with linseed oil. was brought the night before.

#### Railway Accident.

A young man named John Herring, of Pier mont, a breakman on the New York and Erie Railway Line met with a dreadful accident on Saturday night last, at Sloatsburgh. He was engaged at his duty when he was knocked down by the engine and the entire train of cars passed over his left arm, shattering the bonesand mangling the flesh in a most frightrit of his copies. ful manner. It was a miracle he was not killed for the guard of the engine passed so close

A Fine Work.

A reduced copy of Huntingdons picture Mercy's Dream, by Mc. Mutric, for the PhiladelphiaArt Union, is in the possession of Mr.Ritchie the eminent engraver in chamber St. this city. who is engraving the Distribution Plate. The work will be executed with skill as the engraver knows well, how to preserve the life and spi-

## A Fossil Ape is said to have been found lately in the upper tertiary stratum at Montpelier, Vt. This is an interesting fact, taken in conarm was amputated in this City to which he nection with the fossil elephant discovered by Professor Agassiz in New England.

while crossing the railroad track.

Counterfeit \$5 on the City Bank; Providence, R. I., have just made their appearance in Boston. Vignette, a female and eagle : female on each end; unlike the genuine, yet executed s as to be likely to deceive.

The consumption in Ireland, last year, of wine, was 549,755 gallons ; of brandy, 259,-655 do.; whiskey, 7,072,993 do.; tobacco, 5,138,314lbs; tea, 6,713,272 do.; coffee, 1,313,-971 do; sugar, 510,867 do. What has temperance done for Ireland?

A greatriot has taken place in Arkansas, in which eight persons have been killed.