



Safety Valve.

Mr. Moy, of Roll's Buildings, has constructed a double cylinder safety valve. It consists of a cylinder, the upper part of which is smaller than the lower, with two pistons fitting therein; the pistons are cast in one piece and have a free passage for the steam to pass to the upper part of the cylinder. He has given the following explanation of its construction:—Suppose the required pressure to be 5 lbs. per inch, and that the two pistons weigh together 60 lbs., the lower piston must be 12 inches greater in its superficial area than the upper. Again: suppose the required pressure to be 60 lbs. per inch, and the pistons weigh, as before 60 lbs., then the lower piston must be one inch greater in its superficial area than the upper—thus doing away with springs and levers, &c. In practice, the cylinders should be lined with brass, and the eduction passages made obliquely that the lower piston may wear equally.—*London Artizan.*

Just about ten minutes before the above paragraph met our eye, we had some conversation with Mr. Charles Clinton, of South Middletown, Orange Co., N. Y., during which he described to us a Safety Valve the identical counterpart of the one described above in the November number of the Artizan, received by the Hibernia. Mr. Clinton invented his valve nine years ago, and secured a patent, but although it cost him more than a thousand dollars of expense from first to last, it has failed to bring him any remuneration, it not having been adopted in our country, whether from prejudice or want of real utility we cannot tell. Real downright experiment is the only true test of efficiency, and if Mr. Clinton's valve has not been fully and fairly tested, it is something to be regretted, as the principle of the invention is apparently sound in theory.

Another Warlike Invention.

The Boston Post says, a very neat pattern of a new cannon was exhibited to us yesterday morning by Mr. E. B. White, of Nashua, N. H. the inventor, which is supposed to be a valuable improvement upon the old fashioned instrument. It is not exactly a revolver, but is on something of the plan of Colt's pattern, for pistols and rifles. It has six bores and six vent-holes, so that it can be fired that number of times with once stopping to load. The lock, which has but one hammer, revolves, while the barrel is stationary. The vents or touch-holes are to be made of steel inserted in the barrel, and are covered with a piece of steel or iron which moves on a hinge, so that it can be lifted for the purpose of picking and inserting the cap. This cover will serve to keep the cap in its place, and will also serve the purpose of the thumb-piece. The caps to be used are the flat or wafer-caps, and the hammer is to be carried round by means of a screw and crank, and, striking upon this iron thumb-piece, causes the explosion. The invention has been examined by several scientific and practical gentlemen, who have pronounced favorable opinions respecting its convenience and economy. The inventor states that the six charges can be loaded and fired in less time than two cannons of the same calibre of old fashioned cannon. He has made application for a patent.

A Newly Invented Rail.

The whole of the line between Darlington and York in England, is being relaid with new rails, chains and sleepers. The rail is of new invention, and of a very superior make and is considered as a great improvement upon the old description, as the surface of the rail being convex, it presents much less surface to the wheel and thereby the friction is much reduced—a great desideratum.

The mind is a most subtle electric apparatus. It can beat either Morse, House, Mac Bain or Brett, but it is an apparatus that needs to be frequently renewed.

Nautical Improvement.

A patent has been taken out in England by a Mr. Henwood for improvements in propelling vessels, and in steam vessels. The improvements have reference to the construction of the hulls of ships and vessels, particularly to screw propelled vessels, and are two-fold, first the construction and arrangement of the stern-post and rudder, also the mode of attaching the propeller itself, the principal feature of this improvement consisting in placing the rudder in the deadwood of the vessel before the propeller, and below the propeller shaft. The advantage the patentee says is ease and steadiness in working, by the entirely submerged position of the rudder, and of its not being affected therefore by any motion of the waves upon the surface, which renders the working of it by the helmsmen easy and steady; also less liable to derangement by being comparatively free from violent concussions.

Learning is better than Riches.

Every aspiring young mind seeks elevated society. But elevated society is, and must always be intellectual. Indeed it is moral and intellectual elevation that elevates society, and where these qualities are not found society cannot be elevated, though every member of it were as rich as Croesus. The youth, therefore, who cultivates his mental powers, and sustains a proper moral character, elevates himself to the level of elevated society, and will be admitted into it, whether he be rich or poor.

A New Island.

On the 21st of last March an island covered with luxuriant vegetation, is represented to have been discovered eighty miles north, and about one thousand miles east of the Bermudas. The skeleton of a man and a boat partly finished were found on the beach. So says Capt Paulson in the Charleston Courier.

The Consecrated Island.

The island of Pootoo near Chusan in China, is remarkable for the number of its Hindoo Temples, estimated at 208; thirty-six are very spacious, where the principle heathen deities are kept. There are only a few inhabitants; but the priests, sometimes to the number of 2,000, here celebrate their orgies. The island is but about twenty miles long, and has no females upon it.

Philanthropic.

The "General Society of Mechanics and Tradesmen" of this City has resolved to grant the use of its Library and Reading Rooms to educated deaf mutes on the same conditions as apprentices. The library is situated in Crosby st. between Broome and Grand sts.

Zinc.

A large deposit of carbonate of zinc has been discovered in Lancaster county, Pa. The specimens have been proved by analysis to contain upwards of 60 per cent of zinc. Almost every week some new and rich mineral deposit is developed in that great State.

Our Down East Girls Yet.

In Dedham the women attend court, for the purpose of hearing the pleadings, during which they employ themselves in knitting and sewing. The more voluble the lawyer the faster go the needles—and when the judge commences his charge they generally begin to toe off.

Fires in New York.

During the year 1847, there were 264 fires and 96 false alarms. Eight persons were burned to death, and five or six others were injured. The amount of property destroyed was not far from \$400,000. In December there was 17 fires and three alarms.

The Azores Rising

It has lately been discovered that a considerable elevation having taken place at the East end of the Island of St. Michaels. The old sea beach marked by unmistakable sea boulders is visible about three hundred yards within the present line of coast, and at the height of from three to four hundred feet above the sea level.

A steamboat race for \$10,000 is to occur on the Hudson next spring between the John Stevens and the Mountaineer without passengers.

Correspondence.

NEW ORLEANS, Dec. 24, 1847.

Messrs Munn & Co.

GENTLEMEN:—Enclosed you will find a draft of 25 dollars for another thousand of those excellent likenesses of Gen. Taylor.—The thousand which we ordered in October, came safe to hand per bark Daniel Webster, and have all been disposed of.

While the old General was here en route to his family, the portraits sold rapidly, and we had not half enough to supply the demand.

Your edition is pronounced to be the most accurate likeness of any that have been sold in this city, and we desire that you forward another thousand by the first vessel bound for this port.

H. DELROY & Co.

[The above letter was received a few days since and the order has been filled; but we would inform the trade that we have a few more thousand to dispose of, at the prices named in the advertisement. Send your orders early—only a limited number on hand.]

Gen. Talmadge's Address.

Mr. Editor:—

I read with no inconsiderable degree of pride the address of Gen. Talmadge before the Great Fair of the American Institute, and boasted in good nature to one of my shopmates (an ingenious English mechanic) of our great improvements in mechanism and advancement in the Arts and pointed him to the following flattering sentence in the General's speech:

"In Cutlery England has yielded the endeavor to supply us; and now comes here to obtain our patterns and learn from us the perfection of her work."

My companion no sooner read the sentence than he burst into a hearty laugh, and said, "Well, the General is a good un, saying all this after giving the gold medal for the best cutlery to an Englishman." And he referred me to the list of gold medals awarded, one of which was to Ibbotson & Horner for the best American cutlery. Ibbotson, he said, was a Sheffield English manufacturer, who in company with Mr. Horner, manufactured his American cutlery by contracting for labor at some of the New York State Prisons.

I was somewhat mortified by this intelligence and had my doubts that my companion was wrongly informed, as I do not believe that General Talmadge would make such a statement were it not an indisputable fact, and after long pondering over the subject, I write to you, Mr. Editor, for correct information on the subject. Yours, &c. J. L.

Boston, 6th Jan., 1848.

[We believe that J. L.'s shopmate is correct respecting Mr. Ibbotson, yet that does not invalidate the statement of General Talmadge.—ED.]

Curious Mode of Splitting Rock.

According to the calculations of philosophers, a spherule or little globe of water, only one inch in diameter, expands, in freezing with a force superior to the resistance of the weight of 13 1-2 tons. This power it is said has been applied with success in Sweden and France, to the splitting of rocks. Why cannot this mode be adopted in Canada, and the northern parts of the United States, in winter filling holes drilled in the rocks with water, and allowing it to freeze.

Rye Bread Bakers.

The Emperor of Russia recently sent over to England ten bakers to teach gratuitously her British Majesty's subjects. One of these Bakers says the North British Mail having been employed by the parochial board of Glasgow, a specimen of his manufacture was exhibited at a meeting of that body lately and contrasted with a loaf baked from the same grain by a Scotchman. Notwithstanding the experience of the Russians in the manufacture of this description of bread, we are of opinion from the specimens produced, that the Scotch style of baking is decidedly the best; the bread, besides being more pleasing to the eye, is much more agreeable to the taste.

New York Path-Finder.

A neat little sheet with the above title has just been started in this city by Howe, Holbrook & Co as publishers, which is well worth the attention of advertisers. Office 205 Broadway, up stairs.

White and Black Songstress.

La Mascherata, the famous songstress, whose voice compasses the lowest barytone and highest soprano, has arrived in Paris. Her body is of snow white, while her head and neck are those of the blackest negress. She covers her face and neck with a mask.

The Lowell Courier says a new canal recently completed for the use of the factories in Lowell, cost \$580,000. The canal commences at the Pawtucket Dam, and ends at the Western Canal, near the Tremont Mills. Its length is about 5,000 feet, or a little less than a mile. The water way is 100 feet wide, and 15 feet deep.

A correspondent of the N. O. Delta, writing from Parras, in Chihuahua, says:—"There is in this rancho the phenomenon of a large number of Mexicans, from 17 years old to 7 months, all with fair skins and red heads. A red-headed Scotch gardener has been settled here twenty years."

There has been found imbedded in the banks of the Ohio, a tusk measuring eight feet and a half in length, twenty two and a half inches in circumference, with a corresponding diameter, and weighing about 206 lbs.

The Governor's Message of this State was conveyed by express locomotive from Albany to Utica, in two hours and thirty minutes.—The distance is 99 miles. This is on account of the heavy rail.

"Come down this instant," said the boatswain to a mischievous son of Erin who had been idling in the round top, "come down I say and I'll give you a dozen, you rascal!" "Troth, and I wouldn't come down if you'd give me two dozen."

At Pittsburg, a short time since, a man offered a lighted segar to one of the elephants at a managerie. The elephant acknowledged his politeness, with a wipe over the ribs, which sent him half across the arena.

M. Arago states, that there is in Siberia an entire district where, during the Winter, the sky is constantly clear, and where a single particle of snow never falls.

A comfortable four-wheeled carriage with crown ornaments and iron wheels, has been recently discovered in a house dug out at Pompeii.

On New Year's day there was no ice in the North River at Poughkeepsie, a fact without a precedent in the memory of the oldest inhabitant. A few years since heavy laden teams were driven across on the ice about Christmas time.

At Baltimore, Christmas day, a drunken man entered one of the churches, and walking up to the altar, asked for a glass of egg-nogg. He thought he was in a tavern.

Liberia has been erected into a Republic. Gov. Roberts was elected President, and Nathaniel Brander Vice President. The affairs of this new republic are represented to be in a prosperous condition.

Near 7 lbs. of gold pieces, five of which weighed 5 lbs. 8 oz. 17 dwt, and the largest 1 lb. 11 oz., were found lately near Island Creek, in Montgomery county, North Carolina.

A fellow in Louisville has been fined ten dollars for unmercifully beating his horse, because the poor animal could not pull a load sufficient for six horses.

The Woolverhampton Chronicle, says that such is the celerity in manufacturing iron in this part of the country, that instances have occurred in which the calcined ore has been converted into rails and actually delivered in Liverpool within two days.

An Irishman went into a drug store in Boston lately, and called for a pint of gin. The druggist gave him nearly half a pint of camphene, which he drank and was not expected to recover.

On the railway near Newcastle England, where there is a strong current of air in consequence of a deep cutting, the wind produces beautiful tones from the wires of the Electric Telegraph.