

# THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

### VOLUME VII.]

NEW-YORK, FEBRUARY 21, 1852.

## **(NUMBER 23.**

Scientific American, CIRCULATION 16,000. FUBLISHED WEEKLY At 128 Fulton street, N. Y., (Sua Buildings) BY MUNN & COMPANY. DI MUNN & COMPA Hotchkiss & Co., Boston. Dexter & Bro., New York City. Stokes & Bro., Philadelphia. Jno. Thomson, Cincinnati, O. Cooke & LeCount, San Francisco, Cal. Oourtenay & Wienges, Charleston, S. O John Carruthers, Savannah, Ga. M. Boullemet, Mobile, Ala. Sidney Smith, St. Louis, Mo. Barlow & Co., London. M. M. Gardissal & Co., Paris. Responsible Agents may also be foun Responsible Agents may also be found in all the principal cities and towns in the United States. Terms-\$2 a-year-\$1 in advance and the remainder in 6 months.

#### The Hudson River Railroad.

A controversy has taken place between Mr. Poor, the Editor of the "American Railroad Journal," and a person signing himself " Countryman," respecting the payability of the Hudson River Railroad. Mr. Poor speaks against its payability, the Countryman for it. The greatest expenses of this road are set down for horses, &c., in New York city, for drawing the cars from 31st street to the centre of the city. We thought that condensing locomotives (the "Dummies") were to be used for this purpose. Why are they not? Are they more expensive than horses? It is our opinion that we cannot form a very sound opinion about the payability of this road for a year or two to come. It pays better than ever we expected it would; but it will require time to decide fairly on the subject.

## The Compound Rail.

J. F. Winslow, Esq., of Troy, N. Y., has gone to Europe to introduce his compound rail on the English and other European railroads. This rail has received very high commendations from those railroads where it has been laid down and received a trial. Erastus Corning, Esq., of Albany, N. Y., President of the Utica and Schenectady Railroad, a gentleman of great probity, says that ten years' experience of ten continuous miles on the railroad, convinces him that "it is one of the greatest improvements yet made in railroad construction." The Superintendent (C. Vi bard, Esq.) of the same road, expresses the same opinions.

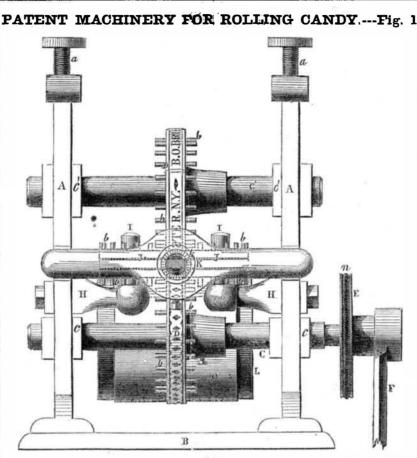
Hobbs before the London Society of Arts. Mr. Hobbs, in a lecture before the Society of Arts, in London, gave the following statement of the manner in which he picked the Bramah lock :-

"He said that his first step had been to take an impression of the hole in wax. He had originally supposed that each slide had its spring, but he found himself mistaken in that surmise. Having contrived the necessary implements, he pressed down the disc, which left him at liberty to work on the slides; introduced a lever to the key-hole, and applied pressure to the cylinder; felt the slides successively, pressed them in the false notches. and succeeded in loosening the cylinder, and the lock was picked. He had never seen the inside of a Bramah lock before his experiments-had never tried to pick one; and he entertains no doubt that, with his present experience, he could repeat the process in an hour's time.

In conclusion Mr. Hobbs said he had never great deal: and he astonished his English av\_ ditors by saying that he knew more expert lock-pickers than himself.

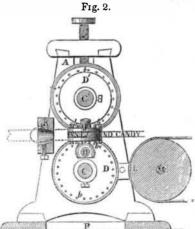
### Clinton State Prison Iron Ore.

The Northern Gazette, Keesville, N. Y., contains a stinging article in reference to the message of Gov. Hunt, recommending more prisoners to be sent there. The article states that there is no ore on the State property (so does Gov. Hunt's Message) and wonders how iron can be made without ore.



invented by Mr. Bartholomew O'Brien, of the city of Rochester, N. Y., the patent for which was granted on the 13th of last month (Jan.) Figure 1 is a front elevation ; figure 2 is a vertical section, taken at right angles to the axis of the rollers. The same letters refer to like parts.

A A are two standards, and B is a bedplate, forming the frame of the machine. C is a shaft or axle hung horizontally in boxes, c c, on the standards ; this shaft carries a roller, D; a pulley, E, and a winch handle, F, by which it is turned. C' is a shaft hung parallel to C in the boxes, c' c', which are adjustable at various heights on the standards by the screws, a a; it carries a roller, D', of similar



size, and in other respects like D. H H are a pair of arms or brackets secured within the made a lock, and never practiced picking a standards each carrying a stud, I; upon each of these studs is hung a roller, J, whose diameter is such as will allow of its periphery nearly touching the sides of the rollers, D D'. The two rollers, J J, and the ones, D D', have all a series of teeth, b b, on each side at a distance within their peripheries, by which they are geared together, so that when one receives motion it gives motion to all the others, in such a direction that the sides of their peripheries which are nearest together, more to-

The accompanying engravings represent the | the periphery of D' has the words B. O'Brien, improvements in machinery for rolling candy, Rochester, N. Y., cut upon each half of it, being divided into two parts by cutters, d d, secured to it diametrically opposite each other. The rollers, J J, have each the words "Jenny Lind Candy" cut upon their peripheries. K is a bar which is secured across the front of the standards; it has a base on the middle, which is bored out to receive a conical collar, k, which is secured by a set screw ; this collar forms the gauge for reducing the stick or piece of candy to be operated on to the required size before it reaches the rollers; the machine must be provided with several of these collars to suit various sized sticks. L is a drum secured upon a shaft, M, which is hung in bearings in brackets attached to the standards -it is driven by a band, n, which runs from the pulley, E, to a pulley, N, on its shaft; upon this drum, and upon another hung on a confectioner's table, at a convenient distance from the machine, the endless apron, O, runs.

> The operation of the machine is as follows: Rotary motion being given to the shaft, C, by means of the handle, F, it will give motion to the other rollers in the required direction. The candy being introduced through the gauge, k, to the rollers, is drawn through or between them, and reduced to the proper size and shape, receiving the impression of the maker's name on the top face; the ornamental devices on the lower roller, D, on the under face, and the words "Jenny Lind Candy " on each edge, and being cut off or indented, reathey are carried by the apron, O, to the confectioner's table and disposed of as may be thought fit. The thickness of the sticks may be altered by raising or lowering the top roller, D'. The form of the impressions produced upon each side of the stick may be varied indefinitely by differently cut or engraved roll- chest they found it to contain gold coin, performed candies may be produced.

This machine gives the impression on four sides to any candies that may pass between dred and eighty-three dollars. wards the same direction horizontally. The the rollers, and it makes all the candies of a

time, it cuts them off at required lengths. Its utility, beauty, and good qualities, for those engaged in this kind of manufacture-one of nosmall importance in our country-is ob-

vious. More information may be obtained by letter

addressed to Mr. O'Brien. The Montgomery Mechanics' Association.

The mechanics' of Montgomery, Ala., have formed an association and have become a corporate body by an Act of the Alabama Legislature. The objects of the association is the promotion of the mechanic arts, the sciences, and the diffusion of useful information among the members. They are to have a library, reading room, courses of lectures on various subjects pertaining to the objects in view; also a system of debate among the members, for the excelling in which, cards of merit. diplomas, &c., will be awarded. The terms of admision are \$10, and 50 cents as monthly dues. We understand the citizens of Montgomery are highly pleased with this effort of the mechanics, and that the impression is general that it will prove a benefit to the community. We have received a list of the names of the officers, they are gentlemen of respectability and worth, and we are confident that the association must do good. We hope that all the intelligent men in Montgomery will give it their support, and we hope that all the mechanics in the place will join it. We have just one word ot advice to give to them, it is this, "endeavor to cultivate a real good, sociable, and kindly feeling towards one another and endeavor to make the evening meetings pleasant to one another." We do not like debating clubs; this opinion is formed after much experience; they bring into play the feeling to exceed rather than excel. The reading of short papers, we have noticed, does more good; these papers should be on various subjects, and each should not be longer than to take up about 15 minutes to read.

#### Hurl Gate.

The whirlpool at Hurlgate, on the Long Island Sound, has ceased to be a whirl pool. The rock which caused the whirl of boiling waters has been blasted, and the debris of it has filled up the yawning gulfs around it. Monsieur Maillefert has done this by inserting a shaft in some crevice, attaching a canister of powder to it to rest on the rock, and then discharging the powder by the electric spark. The water answers for a lever to make the powder act upon the rock. The discovery of this principle of blasting is a valuable one. We do not know who claims to have discovered it, the invention, we know, is five years old at least, and was used to tear up the concrete shoal in the Thames in 1847 or '48.

## Remarkable Discovery in Virginia.

A letter in the Richmond Times states that a few days ago, while severel men were engaged in blasting limestone near Buchanan, Bottetourt County, they discovered a cave, with an entrance some six or eight feet in dy for breaking off into sticks of equal length height, and one hundred long, with two apartby knives, on one or both of the rollers, D D'; ments. In the first they found some earthenthe sticks being of equal thickness through- ware and a large stone cross; on the cross out, and consequently all of uniform weight, there was some carving, but it was so much defaced by the hand of time that it was scarcely discernible. A number of citizens with lanterns, consequently, entered the second apartment, where they found a skeleton seated on a huge iron chest, with its back resting against the wall. On opening this ers. By a modification of the rollers various fectly smooth on one side and a cross with some characters on it on the other. The gold in the chest by weight, is worth seven hun-

This really looks to be something more roller, D, is ornamented on its periphery, while certain shape and thickness, and at the same than a fact, we do not give it any credence.