

## New Inventions.

### New Power Loom.

Mr. P. Collins, of Cabotville, Mass., has invented an improved power loom, which a correspondent informs us, "is the most perfect and simple loom that he ever saw."—When he saw it in operation, it was weaving cloth one yard wide driven by a belt only one inch wide, and very loose. "No cams nor treadles," and makes the same quality of cloth at any degree of speed. It runs at one hundred and forty picks per minute and the cloth woven looks to be about five numbers finer than the same cloth produced by the same quality of web in other looms. "The shuttle," our correspondent adds, "will not throw out under any circumstances, and there are no pickers to wear out." We hope to be able to present an engraving of this remarkable and valuable invention in some future number.

### Improvement in Pressing Paper.

Mr. Betts, the foreman of the Pressing department of the American Bible Society in this city, has invented a machine for filling the hydraulic presses and removing the paper to and from them. Instead of removing the paper in small parcels from tables by boys at a considerable loss of time as well as great damage to the press-papers and sheets, especially where the press-papers are large and heavy. The paper to be printed is loaded on a bottom moving on rollers, and is shoved in by a boy at once without altering or disturbing the arrangement of the sheets in the least, and requiring less than half the room needed by the old plan. The process is very simple, and the inventor thinks that in our largest establishments it would save \$1000 a year over the old plan.

### Improvements on the Steam Engine.

We have been informed that Mr. A. D. Childs, of Lowell, Mass., has made some valuable improvements in the construction of the cylinder and the manner of operating the valves, for which he is about to take out letters patent in this country and in Europe.—From the consideration that it is about to be patented in Europe, we refrain from any further description at present.

### Improved Grain Separator.

Mr. Daniel Woodbury, of Perkinsville, Vermont, has invented a new and improved Separator, for which he has taken measures to secure a patent. Mr. Woodbury is the well known inventor of an excellent Horse Power, and his Separator will be a most valuable accompaniment to it. It prevents entirely the carrying of any of the wheat over with the straw, and it will separate three times the amount of grain of other machines in one day with the same attendance as other Separators, and only two more horses. Actual experiments have already proven its value.

### Artificial Arm.

Dr. Samuel H. Beam, of Philadelphia, has invented an artificial arm, which according to the accounts we have received, the French artificial arm will not hold a candle to it. It is constructed in such a manner that the motion of the elbow closes the fingers and hand into a fixed grasp, and a similar motion of the shoulder unfixes it. It is made of cork and leather, said to be superior to anything of the kind ever before invented, as it is light and obedient to the motions of the unfortunate (and we may also say fortunate) wearer.

### Stoneware for Sewers.

A patent has been taken out in England, by Messrs. Dalton & Watts, potters, Lambeth, for an improvement in material for drains, which consists in making them of stoneware, an article certainly far superior to bricks. On this side of the Atlantic this article for the same purpose is not new.

### New Steam Carriage.

A correspondent writes from London, that a Mr. Adams has invented a new Steam Carriage, which will carry thirty passengers with luggage, as well as fuel and water, at the rate of 40 miles an hour on roads with very light rails, and that it is excellently adapted to new countries, and would be excellent for a railroad to the Pacific, or from the City of Mexico to Vera Cruz. It is about five tons weight, and one weighing only twenty-two hundred weight made an experimental trip on one of the English railways at the rate of forty-seven miles per hour. The carriage does not draw a train but is a carriage, engine and all complete—a steam engine travelling *caravansera*.

### Important Telegraph Improvement.

To the Editor of the Sci. American.

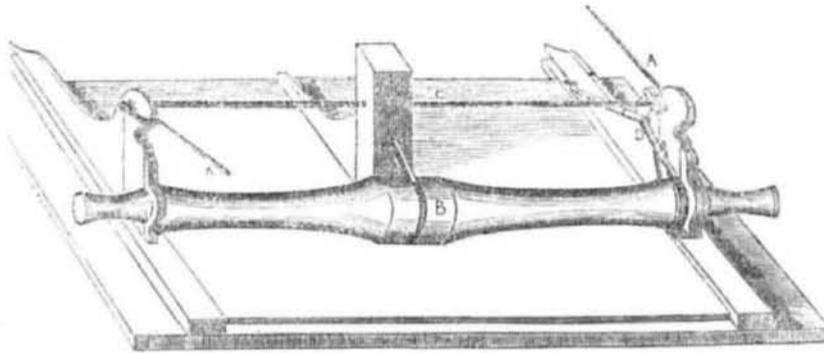
OFFICE OF THE A. & O. TELEGRAPH CO.  
Philadelphia, Feb. 27, 1848.

I have succeeded in working our whole line from this place to Pittsburg, a distance of 310 miles with pure water, in place of diluted sulphuric as heretofore. Sixteen cups on the "hydropathic" system, as I call it, will work the line. I find that I do not have to amalgamate but seldom. I know not that it has ever been found successful before, in the working of a Telegraph line.

For some time past I have been using salts, but have abandoned that for water.

Yours, &c. J. MONROE LINDSEY.

### IMPROVED WINDLASS.



This is an engraving of an improved windlass, invented by C. Leavitt, Esq. of Rockville, Connecticut. This view exhibits a side angle elevation so as to represent in perspective as full a display of the different parts as possible. The nature of the invention consists in applying the toggle joint in combination with the lever to work the windlass. It is well known that the toggle joint is a mechanical arrangement whereby great power is applied in a very simple manner, and Mr. Leavitt has taken advantage of this to combine it with a ship's windlass.

DESCRIPTION.—A A, are the levers connected with a metal rod C, passing horizontally through the standards on bearings. This rod is attached to the toggle joint by a reciprocating arrangement as displayed at D. On the middle of the windlass is a rack, and there is also one on the windlass in the inside of each outer standard. The catches or palls that catch and let go the windlass by working in the two outer racks, are fixed on the toggle

joint. One of these is hid from view in the above engraving, but the one that is represented is guided in a groove and as the levers work the toggle joints by being placed at different angles, the windlass is operated in a most simple and effectual manner. There are palls or clamps also fixed on the middle standard E, so as to strengthen the hold back of the catches worked by the toggle joint. This is a good invention and Mr. Leavitt has taken measures to secure a patent.

It sometimes happens that two different persons, living widely apart, are engaged in studying upon the same subject and the results of their study will be nearly the same. It has occurred, however, that in one instance at present, relating to the windlass, two different persons have invented valuable improvements and widely different. The other improvement will appear in the Scientific American next week. What is very singular, both models came to us a few days after one another.

### Designs for Improved Blow Pipes.



The above are two very neat and beautiful designs of blow pipes, invented by Mr. H. A. Haughton, Eaton Village, Madison Co., N. Y. The cylinder of the upper one is a perfect barrel shape and the lower one is a sphere or globe shape. The ejection tube is short on the outside and extends through the inside a short distance for the purpose of throwing a stream of oxyhydrogen on any thing underneath. Its benefits are that the cylinder or globe being kept over a candle, the alcohol can be heated far more than by any other common blow pipe, and thereby a more powerful and subtle stream of heat can be applied for any of those purposes for which a blow pipe is used. The common blow pipes now in use, have their ejection tubes too long from the cylinder or gas vessel, and thus the gas is somewhat cooled or condensed before it reaches the flame, and this is the reason why some use oil, instead of alcohol, for blowing, which is very unclean to use with a brass pipe.—Three thousand of these pipes have already been ordered and thousands more will be sold.—A teaspoonful of alcohol is sufficient to braze for about an hour with it. The inventor has taken measures to secure a patent. A model may be seen at this office.

### Model of a Railroad Bridge.

The Wilmington, (Delaware,) Republican, states that a model of a bridge has been constructed in that city intended to cross the Sus-

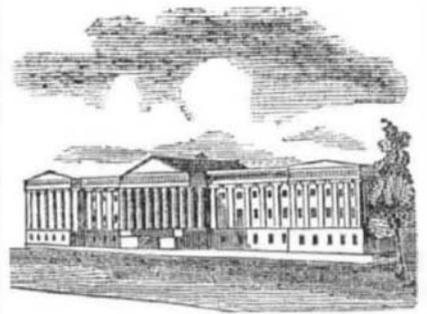
quehanna River on the line of the railroad.—It has been sent to Annapolis for the inspection of the legislature. It is the work of Col. Stone, of Wilmington. The plan is entirely new. It is designed that a large pier be erected in the middle of the channel so that vessels may pass on either side; and that portion of the bridge across the channel, instead of being drawn back, is to swing round and occupy the pier, leaving a passage on either side unobstructed. One man can easily perform this duty in an almost incredible short space of time, as with three turns of a crank, if the plan of the model is carried out, the bridge may be brought round to the desired position on the pier.

[If the swinging Draw of this Bridge is all that is considered new, we must say that we have seen the same in operation ten years ago. And a few years ago one of that construction was exhibited at the Capitol of this State by Mr. William Ellis, but he did not claim to be the inventor, he only exhibited it as being the most suitable for the draw bridge proposed to be built at Albany. Probably Col. Stone's plan for swinging the draw may be new.

### New Pavement.

A new pavement is being laid down in Exchange Street, Liverpool, in place of the old wood pavement. The usual stone sets are used, but they are so wrought as to be broad at the base and gradually taper at the top. The interstices are filled with small stones; and the road, when finished, will, perhaps be the best in that City, giving a firm footing to horses even in frosty weather.

The Cincinnati (Ohio) Commercial notices a "Pedometer," a new style of watch, which besides giving the time, indicates on the dial the distance the wearer walks. It operates by an attachment to the leg.



### LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE.

For the week ending Feb 22, 1848.

To E. L. Norfolk and S. S. Standley, of Salem, and J. A. Marden, of Newburyport, Mass. for improvement in Looms. Patented Feb. 22, 1848.

To Robert Dillon, of New York City, for improvement in machines for Roping Bales of Goods. Patented Feb. 22, 1848.

To Joseph Harris, jr., of Boston, Mass., for improvement in anti-friction Boxes and Axles. Patented Feb. 22, 1848.

To Perry G. Gardiner, of New York City, for improvement in Presses. Patented Feb. 22, 1848.

To Charles de Manoel and E. Brafin, of St. Pierre, Martinique, for improvement in making Sugar, (the aforesaid Brafin having assigned to Charles de Manoel.) Patented Feb. 22, 1848.

To Joseph Turner, of Kensington, Pa., for improvement in Spinning Machinery.—Patented Feb. 22, 1848.

To Jonas P. Fairbank, of Wilmington, Del. for improvement in machinery for Splitting Leather. Patented Feb. 22, 1848.

To Horace Wood, of Troy, N. Y., for improvement in the Bench Vice. Patented Feb. 22, 1848.

To Josiah Cowles, of Belchertown, Mass., for improvement in the Bench Vice. Patented Feb. 22, 1848.

### DESIGNS.

To Peter Lawson, of Lowell, Mass., for two separate Designs for Carpets. Patented Feb. 22, 1848.

### RE-ISSUE.

To Thomas J. Sloan, of New York City, for improvement in Wood Screws. Patented Aug. 20, 1848. Re-issued Feb. 22, 1848.

### INVENTOR'S CLAIMS.

#### Fire Places.

By Evans Backus, of Brooklyn, N. Y. Improvement in Parlor Fireplaces. Patented 25th September, 1847.—What I claim as my invention and desire to secure by Letters Patent is, the combination of the immediate radiators with a common open free grate, provided with doors, substantially in the manner and for the purpose set forth.

#### Turning Bowls.

By Parley Hutchings Jr., of Worthington, Mass.—For improvement in Machinery for Turning Bowls. Patented 25th September, 1847. Claim.—What I claim as my invention and desire to secure by Letters Patent is, the combination of the semi-circular arm with the knife frame, (holding one or more knives,) and adjustable piece, holding the gouge, for the purpose of turning wood bowls or dishes; and in combination therewith, I claim the manner of regulating the thickness and size of the bowls or dishes to be turned off, by means of the sliding or moveable bottom and the adjustable mandril and centre pin, for the purpose of turning wood bowls or dishes, in the manner as herein set forth and described.

#### Propelling Cars.

By Ira Avery of Tunkhannock, Pa. Improvement in propelling cars. Patented, 25th September, 1847. Claim.—What I claim as my invention and desire to secure by Letters Patent is, the application to railroads and railroad cars, &c., the air pipe, and driving wheel so adjusting them that when the air is forced into the pipe it will impart to the wheel bearing upon it a rolling motion, producing a forward movement of the body to which the driving wheel is attached.