

## New Inventions.

### Improved Railroad Switch.

It is well known that the common *frog* or *branch plate* now in use on most Railroads is considered to be the cause of much damage to the wheels and machinery of the engine and cars. To remedy this evil some railroad companies between Albany and Buffalo have substituted what is called the *frog* latch for the *frog* plate. This does very well but it is attended with much delay to the trains as the latch is moved by the same process as the switch, hence there has to be two parts and levers varying from 36 to 50 feet apart, which have to be changed in order to pass a train by one branch.

We have been informed that Mr. Carlton Dutton, a most excellent mechanic at the Auburn and Rochester Railroad Machine Shop (an establishment by the way which is prolific in inventive genius and skill, from the Superintendent Isaac Van Kuren, Esq. to every mechanic about it,) has recently invented a plan to change both the switch and latch by a very simple arrangement of one lever—which beside being more effective than the old plan, is also provided at much less expense than by using the *plate* and guard rails.

One of them has been placed on the Auburn and Rochester Railroad and has been justly admired for its simplicity and durable qualities. It has been recommended to us by the Superintendent who considers it to be one of the best inventions which has been introduced for a long time on Railroads.

### Improved Washing Machine.

Messrs. Case and Graves of Granville, Ohio, have invented a very beautiful improvement on a Washing machine, something which everybody thinks is now obsolete, but nevertheless it is a good improvement and one which has been highly admired by all those who have seen and used it. The washing machine contains, it may be said, two boxes for the clothes completely separated from one another, yet the clothes rubbed in them both by a dasher, which has a reciprocating motion like the fulling stocks. One motion of the dasher operates the clothes in one box and the return motion operates the clothes in the other box or tub. The dasher is suspended above the middle of the machine and hangs down fitting accurately in the long wash tub or box. The bottom of the tub is concave and the bottom of the dasher convex, so as to move tight in the box according to the vibrating stroke of the dasher. A rotary motion drives the dasher, thereby rendering it very easily operated. One of Ira Avery's Wringing machines along with this should be found in every house, that has heavy washing.

### Improved Railroad Car Wheel.

Mr. Isaac Van Kuren, chief engineer of the Auburn and Rochester Railroad, N. Y. has made a very beautiful improvement in the construction of car wheels. It consists in casting the leaves of the wheels with an elliptical interior, which has been found to give far greater strength to the wheel according to the quantity of metal than is found to be embraced in the old cracker wheel. As it regards the different forms of wheels and other mechanical contrivances, such as tubes, &c. much has yet to be learned, because the subject has not yet been fully investigated. The experiments of Fairbairn with the tubular bridge resulted in favor of a square in preference to a circular tube, which before was considered to be the best form for strength. Mr. Van Kuren in his wheel, has, in our opinion, adopted the best form for a moving body, and practically considered, it has demonstrated this fact conclusively. They are now being extensively manufactured in Rochester, and measures have been taken to secure a patent.

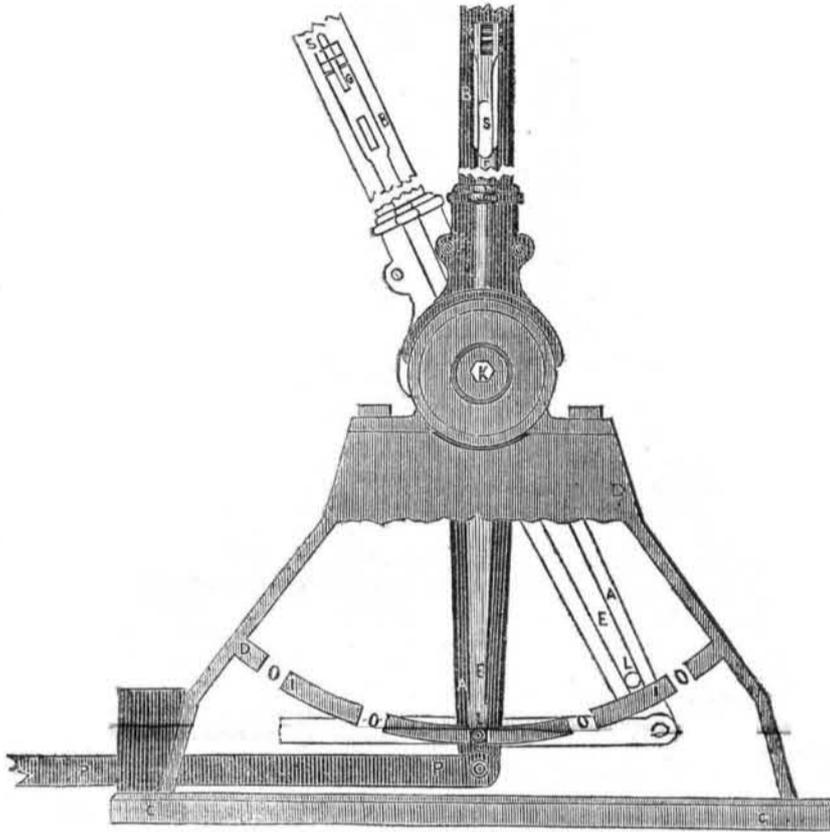
### Telegraphic Pen.

The Charleston Courier says that a gentleman in that city has invented an instrument which will "amazingly improve the facility of Telegraphic Communication. The important improvement is that the metallic pen which now records the message is so arranged as to operate directly on the key of the next office, and so on in connection from one end of the line to the other, where it operates on the pen which records the message. To illustrate—the operator at Washington desires to send a message to New Orleans. He proceeds to write, and the pen at Petersburg plays the part of the operator by striking the key, which sends on the letter or word written with a renewal of the magnetic fluid created by their

battery, to Charleston, where the same process is repeated to Columbus, and from thence to New Orleans, where it is recorded. By this means the communication is instantaneous, the first tick of the operator sending the mysterious agent directly to the desired point. In this case all re-writing, copying or delay, will be avoided—while at the same time any office can obtain a copy of the present message. If this instrument performs what it is expected to do, instant intercourse may be had to any distance that the wires may be extended."

All this is accomplished by House's Telegraph. The messages by it are printed as plain as A B C—no copying nor rewriting required.—Ed.

## WOODWARD'S PATENT SWITCH STAND FOR RAILROADS.



This is a Switch Stand invented by F. G. Woodward, and they are now manufactured by Mr. B. H. Goodale of Worcester, Mass.—They have been highly approved by eminent engineers. This is a side view and semi-section, and shows that it is of the vertical lever kind.

The engraving shows a stand for five tracks. A B, is a hand lever with fulcrum K. P P, is a rod connected with the switch rails. E F, is the latch rod, the office of which is to disengage the pin L, from the notches O, when

the switch is to be shifted. S, is a lever handle to facilitate the last mentioned operation. G, is a padlock hole. The elevation of the stand will convey a correct idea of the apparatus, and the dotted lines exhibit its operation, so that all those acquainted with the business will understand it at once.

These Switch Stands present an important improvement, and can be made for any number of tracks. More information may be obtained by communicating with the manufacturer, Mr. Goodale.

### Sleeping on the Railroads.

A mechanic in Philadelphia has invented a new kind of Napper, which is to be the accompaniment of every traveller. The object of it is to enable a traveller in a railway car or stage coach, or in any conveyance, to enjoy at will a comfortable sleep or nap, without requiring any more space, or incommoding a neighbor. He can carry his bed in his pocket till wanted, and all he requires is a hook above his seat, which can be easily furnished. This is a good invention, although it puts us in mind of the old yankee preacher, who in kindly admonishing his hearers respecting a snoozing propensity, told them in his quiet, sly way, that "all those who intended to sleep next Sunday should bring their night caps to keep their heads warm."

### Inlaid Marbles.

A beautiful mode of ornamenting marbles has recently been brought into use in Paris: It consists in etching by acids, deeply into the marble, various designs upon a properly prepared bituminous ground. When the corrosion has gone sufficiently deep, the cavities are filled up with hard, coloured wax, prepared so as to take a polish equal to that of the marble when cleared off. Drawings thus made on black marble and filled in with scarlet wax, after the manner of Etruscan, and certain Egyptian designs, are said to have a very noble effect, and are applied to tables, panelling, stoves, &c., &c.

### New Motive Power.

The Boston Post says that two young Pennsylvanians, now in Boston, have invented a locomotive by which a vehicle is propelled at the rate of 200 or 300 miles per hour. Ice and snow are no impediments to its operation. The Post says, it is precluded from revealing the method, and declares the inventors are not visionaries but the authors of at least one very useful invention.

It professes to travel two hundred miles too quick to be generally credited.

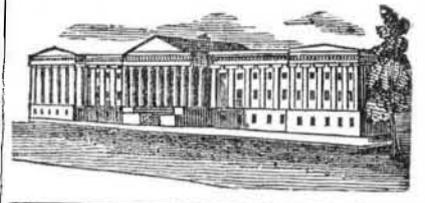
### Architectural Ornaments.

Messrs. Boyden and Joy, of Worcester, Mass., have employed for carved capitals, mouldings, and other ornamental work, beautiful castings of Potter's clay. These can be made of all colors and every pattern, and for outside work, are as durable as stone while in point of economy the saving must be 60 or 70 per cent.

### Drain Pipes.

Pipes for underdraining are made by Mr. Price of Middletown Point, Monmouth county, New Jersey. They are made of burnt clay and many of the farmers in the southern states are availing themselves of their benefits in draining.

A pulley of one serial groove upon a truncated cone, as the fusee of a watch, is calculated to maintain a constant equilibrium or relation between two powers, the relative forces of which are continually changing.



## LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending Dec. 19, 1848.

To J. G. Day, of Brooklyn, N. Y., for Bell Telegraph. Patented Dec. 19, 1848.

To John H. Hecker, of Hinkeltown, Pa., for improvement in apparatus for Drawing and Measuring Liquors. Patented Dec. 19, 1848.

To Reuben Smith, assignee of Samuel Maxam, of Westfield, Mass., for improvement in Furnaces for Heating Sad Irons. Patented Dec. 19, 1848.

To P. Pengeot and G. Pengeot, of Buffalo, N. Y. (name of machine not stated,) Patented Dec. 19, 1848.

To Neri Blatchly, of Windsor, N. Y., for improvement in Ploughs. Patented Dec. 19, 1848.

To S. Taylor and A. R. Davis, of East Cambridge, Mass. for improvement in machinery for Boring Brush Blocks. Patented Dec. 19, 1848.

To W. H. Bustin, of Watertown, Mass. for improvement in Horse Collars. Patented Dec. 19, 1848.

To Ira Glynn, of Syracuse, N. Y. for improved Sash Bearer and Fastener Patented Dec. 19, 1848.

To Joseph P. Pirsson, of New York City, for method of employing water used for condensing steam as a motive power. Patented Dec. 19, 1848.

To Ebenezer Rowe, of Rockport, Mass. for improvement in the manufacture of Ichthyocolla. Patented Dec. 19, 1848.

To D. M. Smith, of Springfield, Vt. for method of preserving the shape of steel springs in the process of tempering. Patented Dec. 19, 1848.

To Allen Goodman, of Dana, Mass. for improvement in machinery for turning irregular shapes. Patented Dec. 19, 1848.

### DESIGNS.

To Samuel D. Vose, of Albany, for Design for Parlor Stoves Patented Dec. 19, 1848.—Ante-dated June 19, 1848.

For the week ending Dec. 26, 1848.

To David B. Haight, of Perryville, N. Y., for improvement in Ploughs. Patented Dec. 26, 1848.

To Waldron Beach, of Baltimore, Md. for Improvement in Corn Shellers. Patented Dec. 26, 1848.

To H. D. Bartleit, of Harmony, Me. for improvement in Lathes for turning Hoe Handles, &c. Patented Dec. 26, 1848.

To Robert T. Fry, of Spring Garden, Pa. for an oblique Door Latch. Patented Dec. 19, 1848.

To Peter H. Low, of Boston, Mass. for improvement in Piano Forte Action. Patented Dec. 26, 1848.

To William Grant, of Boston, Mass. for improvement in Bolt-heading Machines. Patented Dec. 26, 1848.

To L. A. Orcut, of Albany, N. Y. for improvement in Cooking Stoves. Patented Dec. 26, 1848.

To T. J. Lovegroove, of Baltimore, Md. for method of employing centrifugal force in the casting of Iron Pipe. Patented Dec. 26, 1848.

To Thomas Green, of Dewitt, N. Y. for improvement in Sawing Spokes. Patented Dec. 25, 1848.

To John J. Wise of Baltimore, Md. for improvement in Piano Forte Action. Patented Dec. 26, 1848.

To H. Parker, of York, Pa. for improvement in Stoves. Patented Dec. 26, 1848.

To Otis D. Ballou, administrator of Albert G. Bartlett, of Oxford, Ohio, for improvement in Grain Drills. Patented Dec. 26, 1848.

### RE-ISSUE.

To T. D. Jackson and A. Judson, of New York City, for Bell Telegraph. Patented Oct. 17, 1846. Re-issued Dec. 26, 1848.