

## New Inventions.

### Improved Cheese Press.

Mr. Ira Carter, of Plattsburg, Clinton County, N. Y. has invented a beautiful and excellent Cheese Press, which is very different in its construction from any in common use. By pinions working in two rack levers, the table on which the cheese is placed, is raised and brought into contact with the head of the rack levers, and the whole weight of the cheese table and its appendages act upon the rack levers as a pressing power. Owing to this peculiarity of its construction, it occupies but a very small space, as the rack levers are upright, and joined by a cross head. It can do more work than presses which occupy three times the space which it does. They can be built very cheap as the whole of the works can be made of cast iron, and thus be made very durable. Measures have been taken to secure a patent.

### Improved Water Wheel.

Mr. Truman Hart, of Perrysville, St. Lawrence Co. N. Y., has made a new application of the tub wheel which is superior to any that we have ever seen, and in some situations it would be the best to use. The water is applied to the buckets by spouts from below the surface (there being a face plate on the wheel,) and therefore the friction upon the vertical shaft is but little, while the water is discharged very rapidly from the buckets, thus doing away what is technically termed, dead weight. The wheel can be built at little expense and made strong and durable.

### Improvement in Pianos.

Mr. J. Ruck, Piano Forte manufacturer, of this city, has made some valuable improvements in deepening and strengthening the tone of pianos. Some new instruments which have been fitted up by him, have a fullness and richness of tone unequalled. Measures have been taken to secure a patent, which relates to a new mode of constructing the sounding board and bridge.

### Reid's Lightning Exhauster.

It is well known that during thunderstorms the telegraph is frequently inoperative and often destroyed by the lightning. To remedy this great evil Mr. J. D. Reid, of Philadelphia, of the Western Telegraph office, has invented what is called a Lightning Exhauster, that carries off the lightning so that the magnets are never affected during a thunder storm. This is a truly valuable invention. Another remedy would be the laying the wires in Gutta Percha tubes under ground. Frost, water or lightning could not affect the wires then, and there would be no danger of the posts and wires being blown down, as frequently happens by the present mode of conducting the wires on elevated posts. The tubes would not need to be sunk very deep. They would not be very expensive and they are exceedingly strong.

### Galvanic Spectacles.

The Medical Journal says that Mr. J. S. Paine, optician, of Worcester, Mass., has invented something new in the way of spectacles. He has constructed that part of the bows holding the glasses, and the bridge, of two metals, viz. silver and zinc—and he is confident of having thus achieved an important improvement by an uninterrupted flow of electricity, which he believes invigorates the eyes, and actually relieves them from a world of small physical annoyances independently of wasting vision. By touching the tip of the tongue on the nose piece, an unmistakable sensation is produced, and a flash of light is instantly perceptible. Mr. Paine thinks that he feels a cool current constantly passing by the orbits, while the glasses are worn. He intends securing a patent.

A new field is here opened for exploration. On the subject of spectacles, we have a few words of practical comfort for those afflicted

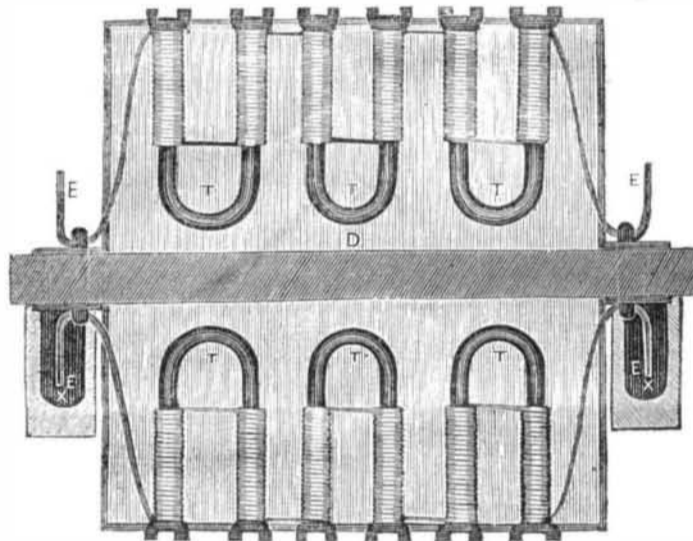
with weak eyes, and those who have tender eyes. The use of spectacles at an early age is more injurious than beneficial. From a fair test of the merits of glasses, we have laid them aside, to our benefit. We believe that glasses should never be used but in cases of extremity. Frequent bathing and the use of a soft pad to pummel the eyes gently will cure many defects in vision and strengthen tender eyes in a wonderful manner.

### Improvements in Lace Dressing.

John Keely, of Nottingham, England, dyer and lace dresser, has taken out an English patent, for an improved mode of dressing lace and other fabrics requiring like finish, so as to preserve them from absorbing dampness from the atmosphere and giving the articles so dressed a firmness that preserves them from creasing or wrinkling. The composition used is one pound of borax and five pounds of shellac dissolved in hot water. This is done by adding to three gallons of boiling water the pound of borax and when dissolved adding the shellac, keeping the water at the boiling point and stirring well until all is dissolved. The shellac, however, may be otherwise dissolved and in different proportions.—The only part of the discovery that is new, is the application of shellac to dressing and fin-

ishing lace, and other fabrics that require a like finish. But the solution described alone answers well and may be mixed with starch or glue as stiffening material. The glue must be mixed with the shellac at boiling heat, stirring all well together. When the fabric is wanted to feel thick, it is best to mix glue with the above solution of shellac and borax. One pound of white glue to the three gallons of the shellac solution makes an excellent composition. The lace is dipped into the solution and then spread out to dry on frames. For silks, it is put on with a sponge. To our dyers this is important information. Those who have much silk dressing, especially re-dyed and creased silks, the use of the shellac must be valuable, for it is well known that glue and gum dressed silks soon absorb moisture, and the old wrinkles that were in them before they were framed, or dressed on the cylinder, all come back again, hence the objection to re-dyed silks because so easily known by their creases. Here is a remedy for the evil, at once plausible and worthy of being adopted by all. Whether it may be a good solution for dressing crape or not, we cannot tell. It should at least be tried. If it will answer for crape, the discovery is a golden one to those who know the trouble of dressing that article.

## ELECTRO MAGNETIC ORE SEPARATOR.—Figure 3.



This is a section view and shows the manner in which the magnets are arranged on the cylinder. D, is the cylinder. T T, the magnets. E, the current wires; and X, the trough or vessel of quicksilver. The cylinder is about 30 inches in diameter, and the magnets are about five-eighths of an inch thick with four polar points, the negative and the positive on each magnet. There is a space of about three-fourths of an inch between each of the magnets and a large one has had ten magnets in a row with thirty rows on the cylinder. It will be observed that the wires are alternately wound in the direction of the polar currents. One wire is now represented as dipping in the mercury, but one fourth of all the magnets are charged at the same time as that number touch the mercury on the under side of the cylinder, but the mag-

nets are charged and discharge successively in rows. The ore is carried forward on the endless apron, and the magnet cylinder by revolving in the same direction as the apron, lifts the ore, while the cross is discharged from the apron while passing over the roller.

This machine is not an untried one. It has been fairly tested, having been in operation at Plattsburg for some time, and has exceeded the most sanguine expectations. When ore is associated with hornblende, no other process of separation can compare with this, and there can be no doubt but it will revolutionize the process of ore separation. Measures have been taken to secure a patent, and those who may desire more intimate information can attain the same by communicating, post paid, with the inventor at Plattsburg, N. Y.

### Track Sprinkling.

On the Providence, R. I. Railroad they have a contrivance for sprinkling the track which is excellent as the sand on that route is injurious to speed and disagreeable to passengers. A tank of 2000 gallons has been found sufficient to sprinkle the whole track from Providence to Stonington, the train going at the rate of twenty miles an hour. The dust has been laid so effectually as to give no annoyance to passengers; the friction of wheels on the rails has greatly diminished; the bearings of the wheels and journals have been much less worn, and such a thing as a "hot box," to a car has not been known, even at the greatest speed, since the sprinkler has been in use. The labor of cleaning the cars and the wear upon them have also been greatly diminished. The sprinkler is placed just behind the locomotive, so that while the locomotive is constantly traversing a dry and comparatively dusty track, the cars are going over a wet one.

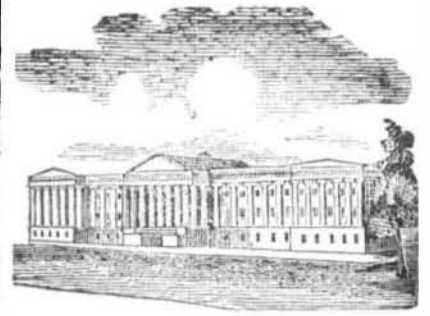
### Railway Switches.

Andrew Rallston, of West Middletown, Md., has made an improvement in Railroad switches, for which a patent has been obtained. His claim consists in the combination with the central cross-tie of the switch, the stud, the detaching plate, the lever, the spring, and the friction plate, with the apparatus in the same, in such manner, that the forward motion of the grinding-wedge to be secured to the front end of the locomotive, will unfasten and move the switch to the desired position, and switch refasten itself again.

### Improvement in Surveying.

Mr. M. Coate of Clark County, Ala., has invented new tables to probate with the square in surveying, which has answered a most important purpose, in his avocation of surveyor of the above county.

The machinery in England equals the labor of six hundred millions of men.



## LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending June 6, 1848.

To J. P. Gaume, of Cincinnati, Ohio, for improvement in machinery for cutting Bunges. Patented June 6, 1848.

To J. P. Gaume, of Cincinnati, Ohio, for improvement in the machine for dividing and cutting the teeth of Cog-wheels. Patented June 6, 1848.

To Jonathan W. Ward, of Cambridge, Mass. for improvement in tempering Clay. Patented June 6, 1848.

To Peter H. Watson, of Rockford, Illinois, assignor of William Watson, of the same place, for improvement in Wheat Fans. Patented June 6, 1848.

To C. B. Baker, of Troy, N. Y., for improvement in Brick Presses. Patented June 6, 1848.

To Isaac Gregg, of Pittsburg, Penn., for improvement in Brick Presses. Patented June 6, 1848.

To Proctor P. Cowles, of Cabotville, Mass. for improvement in Hooks for Joiner's Benches. Patented June 6, 1848.

To William A. Cole, of New York City, for improvement in Joiner's Planes. Patented June 6, 1848.

To Daniel Carpenter, of Cohoes, N. Y. for improvement in Furnaces for Steam Boilers. Patented June 6, 1848.

To Byron Densmore, of Kendall, N. Y., for improvement in Straw Cutters. Patented June 6, 1848.

To Huston, of Troy, N. Y. and Huston, of Wilmington, Del., for improvements in Propellers. Patented June 6, 1848.

## INVENTOR'S CLAIMS.

### Magneto Electric Machines.

To G. H. and B. H. Horn, of Boston, Mass. assignors to D. C. Moorhead, of New York City. For improvement in Magneto Electric Machines for giving shocks. Patented April 11, 1848. Claim.—We are aware that the contractile helical spring has been applied beneath a lever, to detach the armature used in the electro magnetic telegraph for registering or marking; but we do not know any instance in which an expansive helical spring has been employed, in direct contact with the armature itself for the same purpose in the magneto electric apparatus, for medical or other purposes; nor any in which the same effects are produced by a spring enclosed and protected in the manner we have described and shown. We therefore claim as new and of our own invention and desire to secure by letters patent of the United States, the application of the helical expansive spring, conjointly with the stud or pin acting within one part of the U-formed magnet or in any analogous or substantially similar manner, for the purposes above set forth and shown.

### Cleaning Wool and Cotton.

To Addison Arnold, of Walpole, Mass.—For improvement in Beater Cylinders for Cleaning Wool and Cotton. Patented May 9, 1848. Claim.—I claim the substitution of clothing made of wire, set in elastic substances in the place of permanent teeth, in combination with bars of iron or steel to protect the clothing.

### Smut Machines.

To Jesse Taylor, of Auburn, N. Y. Improvement in Smut Machines. Patented April 11, 1848. Claim.—What I claim as my invention and desire to secure by letters patent, is making the rubbers and concave with a notched and smooth portion, in the manner and for the purpose above set forth.