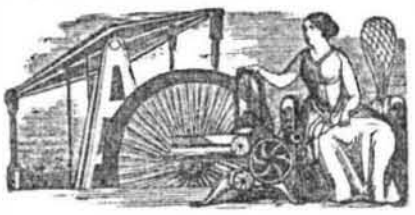


# New Inventions.

### Improvement in Wool Carding Machines.

Messrs. Jackson & Moir, of Cazenovia, N. Y., have made some new and excellent improvements on Carding machines, which they have introduced into the Cedar Grove Mills Factory, and have tested the same for a number of months with the most gratifying results. Attached to the condensing carding machine they have combined machinery for reducing the roping, drawing it with twist, but finishing it free from twist prepared for Jacks or other spinning machinery. The motion of the condensing cylinder is different from any other in use, but the benefits of drawing the roping on the frame by using the only way to do so, viz. while in the twist, and then untwisting and leaving it in a beautiful roll, will be apparent to all who are acquainted with the business. They have taken measures to secure a patent.

### Railroad Smoke Gun.

Mr. Josiah Magoon, of Hookset, N. H., has invented a new mode for expelling the smoke from locomotives, so as to prevent it annoying the passengers, a thing of too common occurrence. We alluded to the invention of this gentleman and pointed to a similar one of Dr. Townsend—the difference between the two being this, that the joints of Mr. Magoon's were made, one a bell mouthed tube and the other made to slide into it—self-coupling joints. We must say that the same ideas were presented to the mind of Dr. Townsend—but the new mode of Mr. Magoon is quite different from either. The principle of this invention is to blow the smoke into the air by atmospheric pressure, sending the smoke far above the cars and thus removing any annoyance to the passengers. The apparatus consists of galvanized sheet iron with a bell muzzle at the outer end, just so small as to let the smoke pass which will be forced out by the pressure of the atmosphere at its narrow end when the cars are in motion. The Smoke Gun is therefore a simple apparatus connected with the smoke pipe of the locomotive by screw bolts and the outer end tapering upwards to raise the smoke high into the atmosphere. Mr. Magoon believes that his smoke gun will at a very trifling expence be a complete curative of the evil alluded to. A fair trial would be the best way to test its merits.

### New Stave Jointing Machine.

Mr. D. Vaughan of Remsen, in Oneida County, N. Y., has made a valuable improvement in a shaving jointer for staves of every description, such as for hogsheads, barrels, tubs, &c. He uses only one plane or shaver which can operate either as a stationary or moveable cutter, and in combination with this he employs a guide fence on each side, which can be set for the diameter of the hogshead or barrel, so that by having a clamp in which the stave is set and held to the shaving iron, the guide fence will direct the shaver to joint the stave with the exact bevel required according to the size of the barrel, be it either one, two, or three feet in diameter. This quick plan of setting the machine to cut the bevel according to the diameter of the vessel which the staves are designed to make, is a most excellent improvement. The guide fence can be set to shave or plane the straight edges of boards as well as the tapering edges of staves. Measures have been taken to secure a patent.

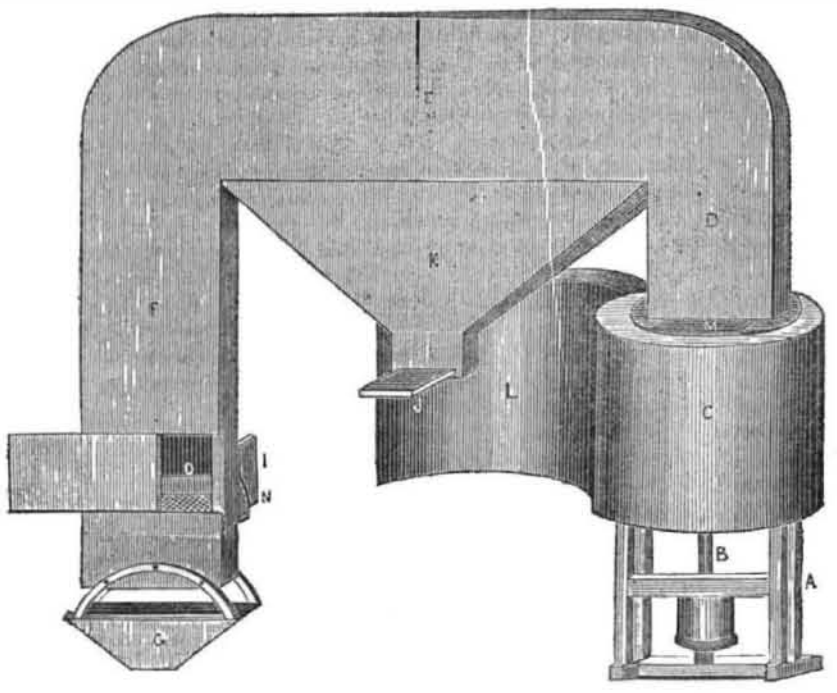
### Machine for Turning Umbrella Sticks.

Messrs. Solomon West & Hiram Plumbe, of Honesdale, Pa., have invented some useful improvements in turning umbrella sticks, which will lead to cheapness in those articles. Every improvement which leads to the production of such articles for a less price, be it ever so small, is a general benefit.

### Steel Tubes.

A French engineer, named J. O. York, has recently taken out patents in France and England, for making tubes of steel for the flues of steam boilers, as being less expensive than brass used for that purpose. He first casts the steel in the form of a thick short length with a diameter of the same size as the tube is wanted to be when finished. This tube is afterwards drawn between a series of grooved pairs of rollers placed opposite one another like rolling iron, but one pair receives the tubes at once from the preceding pair, and each pair from the first set have grooves of a slightly decreasing diameter to form a perfect tube. The short thick cast tube, before it is drawn, is heated to the required degree and placed on a steel mandril, which is the more easily effected, if the bore is a little larger than the finishing tube. The short tube is then placed between the first pair of rollers and is somewhat reduced in diameter, but drawn out in length. When the tube has passed the first set of rollers, it receives a quarter turn by the attendant before it enters the next pair and then the rolls act on it in an opposite direction to draw it out more effectually The distance between each set of rolls should be somewhat greater than the length of the tube, and the number in the series of rollers must be limited with the heat retained in the tube. It is our opinion that steel tubes are inferior to iron ones, and both of them inferior to those made of brass. It is wonderful to see so many patents taken out in London, where every one costs the inventor a sum not less than $600 and frequently far more than this.—They must surely be well protected. Six hundred dollars will cover the expense of 12 American patents, allowing $20 for expences besides the patent fee.

## IMPROVEMENT IN GRAIN SEPARATORS.




This Machine is an improvement on Grain Separators, invented by Benjamin D. Sanders of Hollyday's Cove, Va., and it is designed to separate the impurities in threshed grain upon the reverse principle from the action of the common Grain Separators. Instead of blowing or forcing by the blower, the chaff, &c. from the good grain, he forms a vacuum the power of which can be regulated at will, to raise the chaff and every thing specifically lighter than the good grain up into a receiver or light grain hopper, while the good grain is never raised off the screens but passes over them and falls into a grainary below. A, is a frame to sustain the blower, which is confined in the cylinder C. B, is the shaft to drive the blower by the drum below. D, is an air tight trunk connected with the blower, and E, a horizontal trunk, and F, a perpendicular trunk, which is placed above the receiving hopper of the uncleaned grain. G, is the receptacle for the good clean grain. J N, is the place where the uncleaned grain is introduced, the opening of which is regulated by a slide. This uncleaned grain falls on to an inclined screen O. The whole is air tight above to the blower, which is placed on the opposite end of the airtight trunk, or it may be termed "trunks." There is no way for the air to get in but under the screen O, passing through it, when the blower is in motion. K, is the hopper into which falls the very light grain or those impurities not lighter than the chaff. J, is a slide to let them out. L, is a case through which the chaff is blown after being drawn down the trunk D, and through the blower. M, is a slide to regulate the power of the blower. The trunk F, is wider at the top than bottom so as to have a stronger current exerted upon the screw.

The blower being set in motion a vacuum will be formed in the trunk above, therefore a current of air will rush from below through the screen carrying up the stuff specifically lighter than the good grain, the power of the blower being regulated for this purpose. According as the impurities are forced to a distance above the centre of gravity, so is the power to elevate them required to be greater. By this machine, the different qualities of grain and the impurities are separated, more distinctly upon the principle mentioned than by any other. The good grain is deposited in a grainary by itself, the very light in the hopper K, and the chaff completely driven out of the machine.

The Patent for this machine has been issued and is on our list of this week.

### Improvement on Railroad Trucks.

Mr. Robert S. Lytle, of Fulton, Hamilton Co. Ohio, we have been informed, has taken measures to secure a patent for some valuable improvements in the construction of Railroad Trucks, whereby the price of construction with the same strength of truck, will be considerably reduced, while the body of the car, with the same diameter of wheels as are now used, will be brought about six inches nearer to the track. This is a great deal in cars heavily or lightly loaded, to make them run steady.

### Zincographic Printing and Engraving in Colors.

We noticed, a few days ago, the transfer of copper and steel engraving to zinc plates, by Mr. Bourquin. A German artist, Mr. Louis Rosenthal, has taken a step far in advance of this, and has presented for our inspection some beautiful specimens of Zincographic painting and engraving in colors. The engravings are prepared upon zinc plates by Rosenthal from designs by artists. The printing in black from zinc plates have been practised in Europe, but the mode of coloring is an invention of Mr. Rosenthal. One of the specimens is a hawthorn flower and fruit from nature, arranged for an ornamental border, which has received ten different impressions and is beautifully painted. Another is an original design of grass and flowers, arranged for cotton printing; another is a design in chalk of a frieze from an ancient painting at Pompeii. This is an important improvement in the arts.

[The above is from the Philadelphia Ledger. We were shown some splendid specimens of Zincography about four years ago, since which time we heard no more on the subject until now. We hope to see the art prosper and flourish, and by the above paragraph there is every prospect of our hopes being realized.

### New Electro Magnetic Clock.

Messrs. W. T. Henly and D. G. Foster, philosophical instrument makers in Clerkenwell, England, have lately secured a patent which they call a mode of imparting motion to a train of wheel-work, with or without an auxillary power, for the purpose of giving correct time, by means of magneto-electric machines, or voltaic batteries, near or from a standard time-keeper at a distant station.—In this case, a very neat arrangement of wheel-work is used for regulating the clock by the induced electric currents, in connection with a spring and fusee, only one hand being made use of, instead of two, to show the time upon the dial, the face of such dial being marked out as usual with the hours; between the figures, representing the hours, are also marked every five minutes, that the time may be read off with the same facility as with two hands. This arrangement the patentees also propose to apply to all ordinary clocks. The spring and fusee may be dispensed with, if desired, and motion given to the clock by currents derived from a voltaic battery. Two circuit reverses of a peculiar construction, for this purpose, are described; the first is attached to the escape wheel arbor, and consists of two brass segments, fixed round the arbor with ebony, or some other non-conductor, and connected with the arbor by means of small metal screws. Two brass flanges, fitted with platinum points, dipping in a cup of mercury, are also fixed to the arbor. The segmental pieces have also platinum points which dip into other cups of mercury, all of which are properly connected by wires with the battery. By this means, it will be seen that at each revolution of the arbor, the circuit will be completed twice and broken.—In the second arrangement, the reverser is placed upon the pallet-arbor; it consists of two isolated arms, placed across the arbor, one of which is in metallic connection with the arbor, and the other with a cup of mercury connected with the battery. The ends of these arms carry platinum points, which, as the pallet vibrates, alternately dip into the right and left hand cups of mercury, the cups being connected with each other by transverse wires.

### Triumph of American Industry.

During the past week we have had our attention called to another triumph of American manufacture, that of producing French bareges. For the entire season our auction rooms have been crowded with these goods. All thought that the Frenchman had catered wonderfully in designs, peculiarly suited to the American taste, as well as to the prevailing whims, until one of our jobbers called upon an importer of whom he had purchased a case of bareges, "to arrive;" his design was to inform him if not delivered soon he would withdraw from the purchase. The importer was out, and the salesman, who was not so well posted as to the importation informed the jobber that they would soon be forthcoming, as his employer was then absent at the print-works urging up the work. Here then was the secret of the whole besiness exposed; the tissues were imported in the grey, and with the tissues came a workingman accustomed to the preparation of colors for this kind of work. A bargain was immediately struck with the celebrated printers, Messrs. Dunnell & Co. and all the bareges which have paid a profit to the producer are Yankee printing on imported cloths.

[The above is from the New York Dry Goods Reporter. We are glad to see our printers and manufacturers paying more attention to the producing goods of a superior quality and design. Messrs. Dunnell have exhibited the right spirit, by expressly, as we have been informed, employing French color makers to carry out the system.