

## New Inventions.

### West and Thompson's Clasp Coupling Joint.

This is the name given to a new joint for uniting pipes together, invented by Messrs. West and Thompson of this city. We have examined it both without being tested and have seen it tested thoroughly, and we have been so favorably impressed with its evident merits and utility, as to have no hesitation in saying that it is one of the most valuable and important improvements of the day. We will in all likelihood be able to give our readers an engraving of it in a few weeks, and in the meantime the following description will at least convey to the minds of practical men, some idea of its construction. A flange is attached to the end of a pipe in the common way, having a face exactly like those in common use, either plain or grooved, but the outside, or exterior part of the flange is altogether different from any in common use or heretofore known. It is rounded or bevelled with no holes through it for bolting, but by putting the faces of the two flanges together each on a separate piece of pipe, there is a gradual swelling of the bevel from the outer edges of the flanges to the root of them, or close to the pipes. Over this comes the clasp, which is concave inside, and wraps over the outside, or convex of the flanges. This clasp is divided into two parts (but can be made of as many as will be most convenient.) Each part has two rounded knobs or projections with a hole in each for a screw bolt to pass through, and the clasp fits to the bevel of the flanges in its curve. There is a small space left between the meeting of the knobs or projections, for the purpose of screwing up the bolts, so that an immense power is exerted in squeezing the flanges together and thus it forms the most perfect joint for a steam pipe yet invented, as the lever power exerted in screwing up by the bolts and acting thereby on the incline of the flanges conduce to make it just as tight as any person chooses. One of these joints can now be seen under a fair test at the Methodist Book Concern in Mulberry street, this city, and it far surpasses all the old joints in tightness, while it is not above one half of the weight, and four of them can be put up in the connection of pipes in the same time that it will take to put up one of the old kind. It is very neat and simple—one of Nature's joints—and in a short time it will no doubt be the only joint used for connecting steam pipes. Robert L. Stevens, Esq. has seen it and spoken highly of it and John Clark, Esq., the well known Steamboat Inspector, considers it one of the most valuable mechanical improvements. Engineers have spoken highly of it to us, and our opinion is the same as that of all others who have seen it in operation. The inventors have applied for a patent, which will be granted in due time, and in the meantime, from its simplicity and cheapness, it will be fast winning its way into general use.

### Another Improved Printing Press.

We have seen it stated in more than one of our city papers, that Mr. William Heaton of New York, has invented a printing press, which it is said is calculated to print off eight sheets in a single revolution of the cylinders, taking an impression on both sides of each sheet. The number of sheets which it is estimated that it will print in an hour, is not less than twenty thousand. The wear of the types is also said to be diminished by the invention.

We cannot say anything to throw light upon the above notice of such a wonderful press, more than that it appears to claim too much superiority. We are doubtful of the ability of any press to print three hundred and thirty-three sheets in one minute, which this press must do to print twenty thousand sheets in one hour.

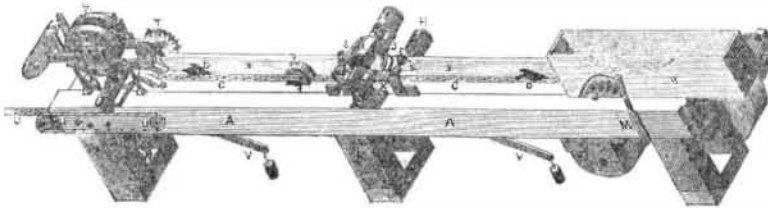
### Electrical Precipitation.

Mr. A. Crosse of Broomfield, (Eng.) has recently enrolled a patent for improvements in heating fermentable and other liquids, so as to cause impurities or matters to be extracted or precipitated. The means proposed are electric currents generated from zinc and iron in water, in porous cylinders, passing through wine, cider, beer, &c.; through the first two during, but through the latter after fermentation. Also through sea-water, after having been once distilled, to purify it. From the use of electric currents in fermentable liquids the patentee says, much benefit may be derived, and it is the application of electricity to fermentable, fermented, and other liquids, for the purpose of extracting and precipitating other impurities and other matters, Mr. Crosse claims.

### New Railroad Brake.

Mr. G. Stevenson of England, has invented a Brake which is a self-acting apparatus connected with the buffers by means of a rod or bar, around which a spiral spring is wound. Both rod and spring are attached to a perpendicular lever or beam, affixed to the customary brake. The effect is instantaneous. The stoppage of the locomotive, as it is known to every body, causes the buffer to press inwards the beam or lever connected thereto, pressing up the the break, and claspings both wheels at one end and the same time, upon every carriage throughout the train simultaneously. The stoppage of the entire train is effected in a very much shorter space. The invention is simple and effective; and Mr. Stephenson with great liberality has thrown it open for the benefit of the public.

### LAW'S PATENT STAVE DRESSER.



This is an engraving of a Stave Dressing Machine invented by Mr. H. Law, of Wilmington, N. C., and which has been highly spoken of, but as the following description will explain its different parts, it will speak better for itself than all we can say respecting it, making an apology for a mistake of the engraver in making some of the letters to read backwards.

A A is the frame. B, is the hopper or box to receive the stave. C C, the endless chain. D D D, the dogs or hooks to carry forward the stave. E E, are guide boards. F F, are adjustable levers to support the stave. O, weight. H H, roller above second set of cutters. I, pulley. H, guide pulley to drive cutter heads. J J, pedestal and journal boxes for first cutter head shaft. K K K, frame that supports short chain and roller H H. L, wheel to feed gear. M, lever to throw out of gear. N, feed shaft pulley. O, pulley to carry cutter heads. P, driving pulley to the machine. Q Q, levers pressing stave away from cutters. R R, (only one seen) levers, also pressing stave away the cutters. S, wheel to carry short chain. T, long toothed wheel, meshing into another larger long toothed wheel, on the chain shaft below, said larger wheel is hid from view by the guide board. U U U, endless chain, carried by the long chain shaft to connect with the Jointer, as seen at the ends of the two machines, say at U and J. V V, weighted levers. W, spiral springs to R; one only is seen. X, raised roller under first set of cutters. Figures—1, first cutter head. 2, second cutter head. 3, 3, first pair of weighted rollers. 4, 4, second pair of rollers.

**OPERATION.**—The staves are placed or piled flatways in the hopper B, and are taken out one by one by a dog, on a short chain in the bottom of the hopper, which does not appear in the engraving. This dog is so formed that it reaches up and takes hold of a stave of any shape and can in no case take but one at a time. It carries the stave out of the hopper under a pair of springs (not seen in the engraving,) which springs keep back the remainder of the staves, allowing but one to pass, and leave the stave on the floor of the machine; a dog on the main chain takes it

and carries it under the first set of cutters and under the two pair of weighted rollers 3 3, and 4 4, but over the raised roller X, that is to say, the stave passes between the revolving cutters and the roller X; the weighted rollers press the stave away from the cutters on to the roller X, which being raised about 3 inches above the floor of the machine affords to the stave the only support against the action of the weighted rollers, and consequently must come to a solid bearing on that roller no matter how twisted or crooked the stave, and the cutters revolving above reduces the stave to a uniform thickness. The levers F F, are thrown up by a light weight and readily adjust themselves to the passage of any shaped stave, working loose until the stave is about to leave the weighted rollers 3 3, when they are thrown into gear by one of the dogs passing through a throat under the floor of the machine and forcing out a lever, when F F become stationary and afford a sure support to the stave until it gets clear of the cutters, when F F become loose again and allow the stave to pass freely and continuously on, over the second set of revolving cutters and over the levers Q Q, and R R; the first dog carries the stave nearly up to the cutters where the dog on the short chain travelling faster than the first dog comes round in the proper time, and takes away the stave from the first dog and carries it out of the machine. The levers Q Q and R R, press the stave away from the cutters against rollers H, upon the same principle as the first operation. A simple weight G, bears upon the end of the stave to keep it from tilting into the cutters, as the other end leaves Q Q. The circumference of roller H, describes the length of the stave; it is eccentric and runs freely with the leverside weighted down; therefore the stave always enters with the lean part down—as it progresses to the middle, the full part of the roller is down—as the stave leaves the roller the lean part is again down, dressing the stave with thick ends and thinner in the middle, after the manner of coopers.

An application has been made to secure a patent.

### Improved Candlewicks.

An improved candle may be made by the steeping cotton wicks in lime water, in which a considerable quantity of saltpetre (nitre) has been dissolved. By this means is obtained a pure flame and a superior light; a more perfect combustion is ensured, snuffing is rendered nearly as superfluous as in wax lights; and the candles thus made do not run nor waste. The wicks should be thoroughly dry before they are covered with tallow, otherwise they will not burn with a uniform and clear light.—*American Agriculturist.*

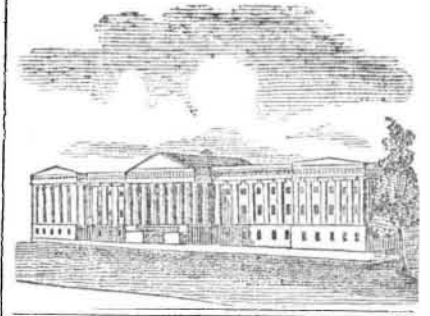
Candlewicks should always be smooth in fibre and bleached and by a fair experiment they are better without the saltpetre than with it. The lime however, is an improvement.

### Strange Patent.

A patent has been taken out in England for making paper for the building of houses, bridges, ships, boats, and all sorts of wheel carriages, chairs, tables, bookcases, either entirely of paper, or to cover wood and iron with sail paper.

### A Furnace Chilled.

We learn from the Boonsboro' Odd Fellow, that the stack in the furnace at Antietam Iron works, in that county, is now in a bad fix, in consequence of which the furnace is entirely stopped. By some misfortune, a very heavy blast became chilled and there it now remains a tremendous mass of cold iron. Efforts have been made to chisel it out, but it is feared the stack will have to come down before it can be removed.



### LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE.

For the week ending Dec 25, 1847.

To Jean Le Doyen, of Paris, France, for improvement in Disinfecting Compounds.—Patented Dec. 24, 1847. Date of Foreign Patent Oct. 8, 1844.

To John Watson, of Kingston, Jamaica, for improvement in Cleaning Filters. Patented Dec. 24, 1847. Date of Foreign Patent April 27, 1847.

To E. J. McCarthy, of Saugerties, N. Y., for improvement in Paddle Wheels. Patented Dec. 24, 1847.

To William J. Brainard, of Hamilton, N. Y., for improvement in Fences. Patented Dec. 24, 1847.

To Thomas J. Hubbard, of Hamilton, N. Y. for improvement in Fences. Patented Dec. 24, 1847.

To Andrew D. Brown, of New York City, for improvement in Harness Saddles. Patented Dec. 24, 1847.

### INVENTOR'S CLAIMS.

#### Carriage Brakes.

By Christian Stoner, of Gettysburg Pa., Improvement in Apparatus for operating Carriage brakes. Patented 28th August, 1847. Claim.—What I claim as my invention and desire to secure by letters patent is: 1st, The manner of retarding carriages in descending hills by the combination of the crossed levers, cranks, parallel connecting rods, springs, arranged and operated in the manner and for the purpose above set forth. 2d, I likewise claim making the rod to retain its central position beneath the pole or perch and tongue, whilst turning the carriage in the manner described, by having an oblong link formed in it at the coupling bolt in the manner above set forth by the combination of the triangular plates I, and short rods.

#### Preparing Wool and Cotton.

By George L. Mason, of Willston. Improvement in preparing wool and cotton for carding. Patented 4th September, 1847. Claim—what I claim as my invention and desire to secure by Letters Patent, is the application of heat and moisture by means of steam, to cotton, wool, and other material, preparatory to carding and manufacturing.

#### Mattresses and Cushions.

By Charles Lewis Fleischmann, of Washington, D.C. Improvement in making mattresses, cushions, &c. Patented 4th September 1847. Claim.—What I claim as my invention and desire to secure by Letters Patent is, First, placing between layers of horse hair, moss, or any of the specified materials, layers of cotton batting either confined between cloth, paper or any suitable fabric, or cotton batting, glazed on both sides, or simply calendered, as above described. Second, the mode of making mattresses suitable for winter and summer use, substantially as herein described.

#### Making Sugar.

By Antome Maria Felix Chevt, of the Parish of St. James, La. Improvement in making sugar. Patented 4th September, 1847. Claim. What I claim as my invention is the employment of soluble saccharate of lime, instead of the lime in its native state, and the employment of an agent which may take off the lime after its action, without having any thing soluble in the saccharine liquor,

Seven thousand three hundred and seventeen Mexican bounty land warrants, for 150 acres each, have been issued, and 1120 for 40 acres,—in all, 1,139,800 acres of which only 3,520 have been located. A land warrant is worth \$125 at Washington, and as good as \$200 in specie to the Western buyer.