

New Inventions.

New Counting Machine and Indicator.

Mr. James Stone, of Broadway, this city, has invented a very beautiful and neat Indicator or counting machine, to be applied to a carriage, steam engine or printing press, to tell the number of revolutions of a shaft or wheel, or the number of copies of a newspaper printed. The instrument is not above three inches long and two inches broad. It has no dials but has six separate circular couplings fixed on a spur spindle, and these couplings are figured around their peripheries—the first coupling having a rocking shaft attached and connected with a shaft or wheel, &c. of whatever is wanted to be registered, which moves one figure for every revolution and for a whole revolution of the first coupling or ten revolutions of the shaft, one figure of the second coupling or small revolving circle is moved—in other words, one whole revolution of the second coupling indicates 100 revolutions of the shaft or wheel, and the third coupling indicates only 1, and thus in geometrical progression the 6 small cylinder couplings will record 1,000,000 revolutions. The whole of the figures on the couplings are seen in a row through a slot in the face of the indicator. Thus the small instrument attached to the wheel of a carriage three feet in circumference will register 1,000,000 yards,

$$\frac{1,000,000}{1760} = 567 \text{ 11-13 miles.}$$

It is the best and neatest Indicator of the kind, we believe, that has yet been brought forward, and is far superior to the Viometers sold in London, and described in our last number.

Separating the Hull of Wheat.

A patent was lately taken out for a new mode of hulling wheat. It simply consists in passing the wheat or grain through a jet of steam in any convenient manner, so that each grain shall be thoroughly acted upon by the steam which gives to the hull such toughness that it is not pulverized by the action of the stones in the grinding, but it peels off in large flakes. J. W. Howlet and F. M. Walker, are the patentees.

It is well known that when grain is ground in too dry a state, the hull is so brittle that a portion of it is pulverized and passes through the bolter with the flour, thus reducing its mercantile value. This invention then removes this difficulty, for the steam toughens the hull so that it peels off most beautifully and allows all that can be converted into fine flour to pass through the bolter, while the hull like a thin membrane is completely separated.

New Carding Machine.

The Newark Herald states, that Mr. John Daggett of that place, has invented an improved carding machine, which is to perform four times the work done by any other double carding machine in use. The machinery is so arranged that it will card the wool and produce four rolls as easily and as quickly as a common machine produces one. It requires one more power for its motion than that used to impel an ordinary machine but does not take up as much room upon the floor.

Carving by Machinery.

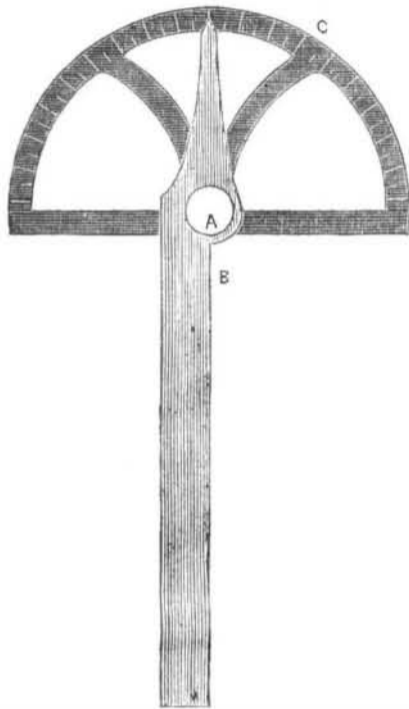
A valuable patent has been secured in England for a new improvement in carving by machinery, invented by a William Jordan, a Scotch artist, of which the following is a brief description:

The machine consists of two parts, each having its own peculiar movement quite independent of each other, but each capable of acting simultaneously and in unison with the other. The first or horizontal part is the bed plate and floating table, on which the work and the pattern is fixed, and all the motions of which except the revolution of the cutters,

is vertical. Let us now suppose that we have an horizontal table capable of moving about in every possible direction in its own plane, and that we have a point over that table capable of moving in a vertical line only. If the point remains fixed and in contact with the table while moving over the curves and right lines, lines corresponding with these movements will be described on the table, in the same manner they would have been had the table been fixed and the point moved; but if, while these horizontal movements are going on, we add the vertical movement of the point, we then trace a solid figure, which has for its plane the outline described by the vertical motion of the point. This may be better illustrated by taking any simple solid form and moving it horizontally, while it is traced by a point moving vertically.

We believe that the inventor is now in this country endeavoring to sell his invention. It is our opinion, however, that there are some points about it similar to some machines patented in this country.

Trigonometrical Bevel and Rule.



This is a very neat instrument for many useful purposes invented by Messrs. Hooper and Billings, of Worcester, Mass. Every mechanic will by the above engraving know and appreciate its worth, and no artist or mechanic should be without one. A, is a screw pivot by which the rule B, is attached and connected with the bevel C. It is a most excellent instrument to mitre degrees upon all circular work, and answers the purpose of a T square. The flutings of columns, the sides of iron nuts, &c. can all be found out by this instrument in the most easy manner. The index pointer indicates the line of the Rule and as the whole instrument is made of metal, there is no fear of warping and getting out of line. The Rule moves on the pivot and the pointer is shifted to any degree on the bevel, so that as a mitre it is very useful in laying out either iron or wood work.

Measures have been taken to secure a patent. At present they are manufactured by J. N. Billings, Worcester, Mass., and sold by W. N. Seymour & Co., No. 4 Chatham Square, in this city.

New Surveying Instrument.

Mr. Alexander Walker, a gardener at Mayor, in the north of Scotland, has invented a machine for measuring heights and distances, land surveying, levelling, &c. It solves the various problems in trigonometrical and triangular measurement, in such a short space of time, and with so little calculation to the operator, as entirely to supersede the use of the theodolite, circumferenter, plane table and various other instruments hitherto in use—the grand principle being, that it is a "self calculator," requiring scarcely the aid of a pen or pencil from the operator. By this machine a field, it is said, may be measured, and the plan of the same laid down from the centre or any convenient place, either within the boundaries of the field, or from a distance without the limits of the ground, provided a

view of the margin of the same, or even the angles or corners be within sight of the surveyor. Another purpose to which it can be readily applied, is laying the line of roads or railways, canals, water courses, &c. It can also show the depth of cut required on any eminence or hill that may be in the route. In the topographical department this instrument may be of the greatest value to an army, in finding the distance to the walls of any fort that may be unapproachable, and the height of the same may be taken instantly without quitting the camp.

Universal Orrery Globe.

Mr. J. D. Hales, of Linton, England, has secured a patent for a new kind of Orrery Globe, which is to eclipse all the works ever produced by ancient or modern astronomers. For three years Mr. Hales challenged the astronomical world to meet him in London under the forfeiture of one thousand pounds, to discuss and prove the precise period of Joshua's miracle of the sun standing still; also the true principle of the magnet and what its variations would be for the next thousand years, &c. No one took up his challenge, so he has now registered his astronomical apparatus in the London Patent Office, by which he can tell accurately all the past and future eclipses of sun and moon—"every eclipse that will happen to the end of time,"—the increase and decrease of latitude, with change of variation of the magnet, and a great number of other important astronomical particulars, mooted and unmooted. If the instrument, which is two curiously constructed and arranged globes, be all that the inventor and patentee represents them to be, his invention certainly must be esteemed the most wonderful invention of the day.

New Electric Patent.

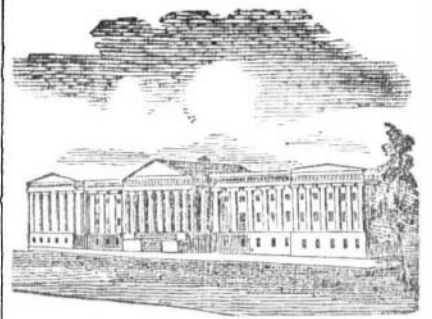
John Cross Roberts of Flintshire, England, has patented a simplified and improved mode of communicating intelligence by means of electricity and magnetism, combined or not with steam, on railways between the carriages on the line, and the engine or tender, so that the guards and passengers may give notice to the engineer or engine driver, for the prevention of accidents or casualties, or the mitigation of the evils thereof, and the protection of human life and property from loss or injury, and also of communicating signals by the same agency, describing the cause or causes of alarm; and a new mode of securing the passage of electricity for the above purposes to be submitted or not for the side chains and of communicating intelligence between distant places on the line.

New Process for Preserving Wood.

Liebig allows that it is the constant action of the oxygen of the atmosphere which penetrating into the heart of wood by absorption and infiltration that produce on the elementary fibres a slow combustion which destroys the wood. By some this is called dry rot.—It is said that these elements of wood destruction enter only by the ends of the wood, hence some suppose that if these elements were prevented from entering the ends of wood it would be preserved for an almost indefinite period. To prevent then the entrance of this slow combustion agent, two ingenious Frenchmen, Messrs. Hutin and Boutigny, dry the ends of the wood they wish to preserve and dip them into naphtha or oil. The ends are then set on fire and when burned for some time are dipped into boiling pitch which hermetically seals up the the pores of the ends of the wood and prevents decomposition. It has frequently been observed that the small worm-eaten holes in decayed wood run as it were in longitudinal streaks or upwards from the ends of the timber. Charring itself has long been known to be a good preservative of piles, but in this process both charring and hermetically sealing is practised, and for piles, sleepers, posts, &c. the result may be predicted to be perfectly successful.

Glass Water Pipes.

We perceive by a late English paper that at a recent meeting of the Plymouth Town Council, it was determined to lay down glass water pipes in that town. In some important respects glass must have great advantages over lead, iron, or gutta percha.



LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending July 5, 1848.

To Jacob Pierson, of Wilmington, Del., for improvement in Seed Planters. Patented July 5, 1848.

To Benjamin Hinkley, of Utica, N. Y., for improvement in Bedsteads. Patented July 5, 1848.

To Luther Tracey, of Concord, N. H., for improvement in Seraphines. Patented July 5, 1848.

To David Alter and Edward Gillespie, of Freeport, Penn., for improvements in the manufacture of Bromine. Patented July 5, 1848.

To Bradford G. N. Hathaway, of Rock Stream, N. Y. for improvement in Machines for threshing and cleaning Grain. Patented July 5, 1848.

To John F. Winslow and John Snider, of Troy, N. Y., Snider assignor to Winslow, for improvement in rolling Puddler's Balls. Patented in England October 14, 1847. In the United States July 5, 1848.

INVENTOR'S CLAIMS.

Grain Separators.

To Asa Smith, of Birmingham, Michigan, for improvement in Grain Separators. Patented 11th April, 1848. Claim.—Having described my invention, what I claim therein as new and desire to secure by Letters Patent, are, first: I claim the revolving rake, constructed and operating as described, for shaking up and separating the straw and grain and carrying the straw through the machine. Secondly, I claim the motion of the screen in combination with that of the rake, its motion being pendulous and in reverse direction to that of the rake, as described.

Grain Driers.

To Elias Knauer, of Valley Forge, and Samuel Beaver, jr. of Great Valley, Penn., for improvement in Grain Driers. Patented 11th April, 1848. Claim.—What we claim as our invention, and desire to secure by Letters Patent, is a series of hollow frustrums of cones, having a common axis, and placed relatively, as herein described, for drying grain, so that the grain shall enter the centre and pass down through each one of the series, in the manner and for the purpose above set forth.

Rivet Machines.

To William Van Anden, of Trenton, N. J., for improvement in Rivet Machines. Patented May 2d, 1848. Claim.—What I claim as my invention and desire to secure by Letters Patent, is the adjustable eccentric or cam, for the purpose of increasing or decreasing the throw of the same, by means of a centre, that may be varied, and this in combination with the header, so as to make rivets with large or small heads, by such variations of throw of the eccentric. 2d, I claim the method of assorting the headed rivets from the unheaded pieces of metal, by means of an inclined trough and vibrating apron, constructed and operated in manner herein described and set forth.

Trimming Books.

To Leonard F. Markham, of Cambridgeport, Mass., for improvement in machinery for Trimming Books. Patented April 18th, 1848. Claim.—What I claim as my invention, is the turning and adjustable book-holder, in its combination with the reciprocating sliding cutter, and as arranged, constructed and made to operate therewith, substantially as above specified. And I also claim the adjustable frame in its combination with the turning book-holder, for the purpose and to operate therewith substantially as above set forth.