New Inventions.

Barlow's Planing Machine.

There has been running for some time, at No. 27, Bethune street, this city, a machine for planing and matching boards, invented by N. Barlow, of St. Louis, Mo. We visited it on last Thursday to see it operate, and before it commenced working, we must say that we had a very unfavorable impression respecting its qualities. It has some peculiarities about it, which are decidedly good. It is not a rotary cutting machine, as neither the cylinder, nor disc cutter wheels are employed. Neither does it employ stationary cutters. The boards are fed in upon edge, between feeding rollers, and they run between the planing knives, which are a series of planes, set on both sides, the boards running in between them. They act upon the board or plank on both sides to take it down to a proper thinness. One set of planes has a fixed face plate, the other on the opposite side has a yielding face plate to accommodate itself to inequalities of the board. So far, it may be said, there is not much about it different from some stationary planing cutters; but the planes have a reciprocating motion, up and down worked by connecting rods, having eccentrics, and this gives a slanting cut transversely to the motion of the board. This is a most valuable principle of operation; the action is easy, and the difference between it and a stationary cutter can be easily explained by trying to cut a slice of bread from a loaf by giving the knife a slanting sawing motion, and not moving it all. It sends the boards through it faster, and with greater ease than any machine we ever saw in operation. The tongueing and grooving is done by stationary cutters of a peculiar form. We intend to present an engraving of the machine in a short time. Its principle of action is new and it has been admired by all who have seen it operate.

Improvements in Cotton Spinning Machinery.

Mr. W. Rouse, of Taunton, Mass., for whom we recently had the pleasure of securing a patent in spinning machinery, has made two other valuable improvements, for which he has taken measures to secure a patent. The improvements consist in regulating the draught of the thread between the ring guide and the traveller of the bobbin; and an improved method of letting the ring rail descend suddenly to lay the binding thread on the cope. This last is an improvement in the mechanism for which he previously secured a patent. The regulation of the draught on the thread is done by a movable guide ring which maintains an equal distance from the ring rail as it moves up and down, and thus it keeps the thread at the same angle always with the traveller, laying the threads in a most equal and beautiful manner, forming a cope of the first quality, and preventing much breakage of yarn.

Rope-Spinners' Improved Bobbin.

Mr. R. S. Tucker, of Brooklyn, N. Y., has invented a valuable improvement in Rope-spinners' Bobbins, for which he has taken measures to secure a patent. The improvement consists in constructing the bobbin with a moveable head, which can be screwed and unscrewed on the bobbin shank, to allow the coiled twine to be shipped off the shank and the thread unwound from the centre instead of the outside. No duplicate bobbins, in this case, are required. A vast expenditure for bobbins is hereby saved, and in unwinding the twine from the hollow coil, by commencing at the first end of twine laid, the twine is not roughened, as it now is, by the uncoiling process. It is a most valuable improvement, and will prove of great benefit in the manufacture to which it is destined to be applied.

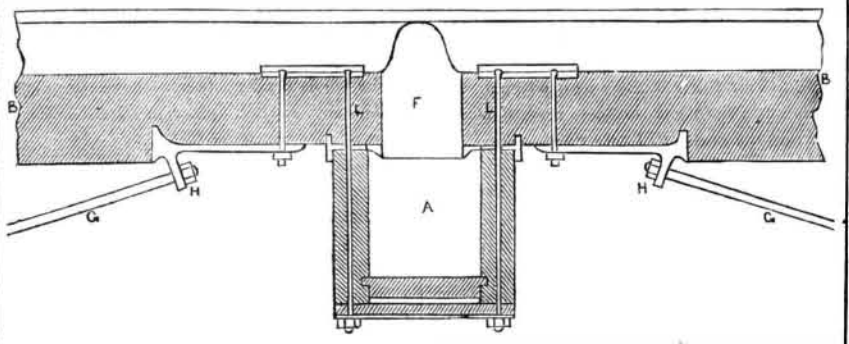
Improved Plow Cultivator.

Mr. L. M. Whitman, of Weedsport, Cayuga Co., N. Y., has made a good improvement on a Cultivator Plow, whereby it can be used either for hilling up the earth upon either side or simply running along and pulverizing the earth without throwing it from the centre. A movable wing or mould board is set upon each side, which can be taken off when not required; one may be used or both as may be found most suitable. Measures have been taken to secure a patent.

A New Patent for Something Old.

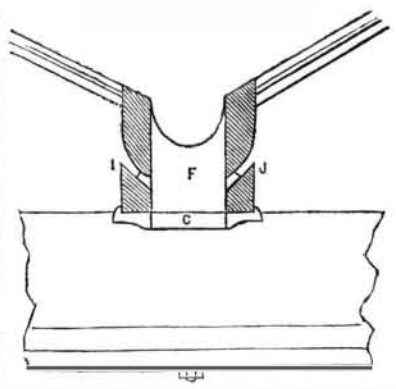
We have received a communication from Mr. Jeremiah Peck, of New Haven, Conn., informing us that the claims for a patent, granted to Charles Atwood & George Kellogg, of Birmingham, Conn., and published in our list for Nov. 13, 1850, was for something not new, but which he believes the patentees were no doubt honest about being the original inventors; but that he made a machine ten years ago embracing the same principle and nearly the same combination of parts. It was put into operation, he says, in Hopkin's & Pritchard's suspender factory, (in New Haven, we suppose), and sometime after 1841, it was sold and carried to Providence, R. I. He says that perhaps he was not the first inventor himself. We do not know, personally, anything about the invention and of course can express no opinion. The best judges of what is practically new, are those who have been and are now engaged in the same business; but people are not always able to judge correctly either about the parts or operation of a machine by the patent claim.

PAXTON'S IMPROVEMENTS IN THE CONSTRUCTION OF ROOFS OF BUILDINGS.---Figure 1.



The accompanying engravings are illustrations of an improvement by Mr. Joseph Paxton, of Chatsworth, England, the architect of the Crystal Palace. A patent was enrolled on the 23rd of last month, and published in the London Patent Journal, from which we select the same, for the purpose of bringing the matter before our people who are much interested in these things, more especially at the present moment. The improvement is on the ridge and furrow roof. Fig. 1 is a longitudinal section, and figs. 2 and 3 exhibit detached parts to which reference is made by letter, the same letters referring to like parts. A is a transverse trough, to represent the method of joining two or more of the gutters, known as the Paxton gutters, together. To the troughs, A, the gutters are affixed by the sole plate, C, and the screw bolts, L L. Notches are cut in the gutters at proper distances apart to receive the

Fig. 2.

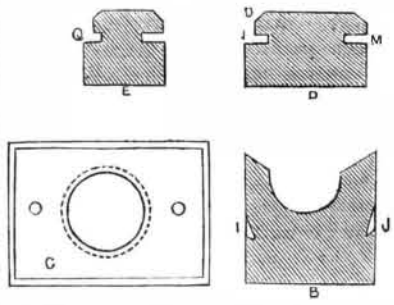


ends of the wide and narrow sash bars, D E, respectively. At the top of these bars is a ridge piece (not shown) running longitudinally with the gutters, and having grooves on each side to receive the edges of the glass. It is also notched to receive the upper end of the sash bars. A round hole, F is cut in the ends of the gutters, and passes through the sole plate C, thus allow the water to run from the gutters into the trough. Cast iron carriages are fixed to the underside of the troughs. G G are rods screwed at both ends by nuts, H H, for the purpose of cambering the gutter. The grooves I and J are cut to receive the water that may be condensed, and run down on the glass inside. This water passes finally through the hole, F, where it enters the trough A.

On the top of the columns or walls, the sole plate, C, is laid, and the gutters then laid on the face of the same, the bolts, L L, screwing all up firmly together. The wide sash bars are then placed in the notches cut for them, and in the ridge piece spoken of, where they are nailed. The groove, M, in the wide sash bar is then thinly coated with putty, and one pane of glass pressed into it. A narrow sash bar previouly prepared with putty is then taken, and the groove marked, Q, pressed on the other edge of the glass, until both ends of the sash bars fall into their notches and are then nailed. The same order is then followed with the other panes of glass up to the next wide sash bar, where the corner would prevent the sash from falling into the groove; this is then partially cut away, as shown by the section at O. When any of the intermediate panes of glass are broken, they are replaced in the same way.

The gutters are made of rectanglar beams of timber, B, the deep top groove being cut out by means of revolving cutters on a shaft. These cutters are intended especially for glass roofs. A severe hail storm visited the Crystal Palace on the 30th of last month, but not a pane of Paxtons glass was broken. We know but very little about glass roofs in our country yet, excepting for green houses. In some of the European cities, there are streets covered with glass roofs, but we suppose that there are more severe hail storms in our country than

Fig. 3.



in Europe; of this, however, we are not certain.

New Railway Signal.

A trial was recently made in England, on the Caledonian Railway, of a new signal enabling passengers and guides in a train to communicate with the engine-driver. The mechanism of the signal and modes of operating are thus described:—Over a series of pulleys, centered in pillars to the engine steam whistle, and extended to the guard's seat at the end of the train, while branch wires communicated with each of the passengers' compartments. The inventor took his position at the guard's seat, and several scientific gentlemen occupied the compartments. The re-result was most satisfactory—the connections most complete. Every pull of the wire brought forth an answering whistle from the engine. The inventor is Mr. Copling, one of the directors of the Caledonian Railway Company.

Improvement in the Manufacture of Composition Metallic Spoons.

Mr. Luther Boardman, of East Haddam, Middlesex Co., Conn., has made a very valuable improvement in the manufacture of spoons, for which he has taken measures to secure a patent. The improvement relates to the method of wiring, for stiffening the shanks. The wire in this improvement is not taken out of the side nor the end of the spoon shank as is no practiced, but placed and maintained in the interior of the shank, by an ingenous contrivance of the mould, which saves the trouble of filling up the wire passage after the spoon is cast.

A Great Discovery in Engine Power.

We saw some weeks ago, in a Pennsylvania paper, an announcement that a motive power had been discovered which would supersede the use of steam. Some facts have recently come to light which entitle the statement to credit. Prof. Saloman, of Harrodsburgh, Ky., has successfully applied the entire power of carbonic acid gas as a substitute for steam, in propelling machinery for every purpose. The power of this gas has long been known to chemists, but their inability to regulate and govern it, has prevented its use as a propelling agent. Prof. Saloman claims to be able to control it with perfect safety; and that it will afford a power equal to steam in one fiftieth of the space, and one hundredth part of the expense, dispensing with both furnaces and boilers. Experiments have recently been made in Cincinnati which are said to be entirely satisfactory. We are on the eve of a wonderful revolution in science and art. What will be thought of a ship of the line driven around the world by a single ton of coal; the process will not be divulged until patent rights are secured in the different European countries.

[The above is from an exchange. It is well known to those who are acquainted with the history of the steam engine, that Brunnel tried carbonic acid gas in a fluid state, as a substitute for steam, and failed, owing to the inherent nature of the gas, as it respects the difficulty of condensation. The difficulty cannot be overcome we are certain by any means to produce as economical a power as steam.

Genius.

They say of poets, that they must be born such; so must mathematicians, so must great generals, and so must lawyers, and they should excel; but with whatever faculties we are born, and to whatever studies our genius may direct us, studies they still must be. Nature gives a bias to respective pursuits; and this strong propensity is what we mean by genius. Milton did not write his "Paradise Lost," nor Homer his "Iliad," nor Newton his "Principia," without immense labor.

Monument to Christopher Columbus.

A subscription has been started in Spain for the purpose of erecting a monument to the great Columbus. It is indeed time that the nation whom Columbus benefitted by the discovery of a New World, should at this late day erect a monument to his name to wipe out the guilt of incarcerating him in a dungeon.

New Suspender.

A Yankee has just invented a suspender that so contracts on your approach to water, that the moment you come to a puddle it lifts you up and drops you on the opposite side.

[The above is from an exchange. Invention and Yankee appear to be synonomous terms yet the greatest number of patents taken out annually, are by natives of New York. This is no doubt owing to the greater amount of population.

English Patents for American Inventions.

On the 11th of last month a patent for a new paddle-wheel, invented by Mr. Abner Chapman, of Fairfax, Vt., was sealed. On the 14th of the same month a patent was sealed for an invention of a machine for manufacturing railway chairs, invented by Mr. Wm. Van Anden, of Poughkeepsie, N. Y. These inventions have been held to be of great value.

These patents were secured through this office, and those who desire to obtain foreign patents can obtain them through this office—promptly and at reasonable rates.

A child about three years of age is astonishing our citizens by playing on the drum. It would be more wise like if his parents would exhibit him less.