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What Circular Saws can do.

In a letter received from H. A. Hoyt, of Buffalo, N. Y., it is stated, that in a mill owned in that place, by J. A. Perry, our correspondent and another young man, sawed out 14,730 feet of boards in nine hours and a quarter, on the 15th of last November, and on the next day, the 16th, they sawed out in the same period of time, 14,950 feet.

Wadley & Reppard, of 77 Mile Post, Central Railroad, Ga., state that the Athens (Geo.) Steam Co., built for them a circular saw mill, with which they sawed 4,877,000 feet of lumber, from 17th July, 1854, to 17th Jan. 1855—about 11,000 feet per day, during the time of working. The stuff was about one half railroad stringers, 6 by 9 inches, and the balance weather-boards, floorings, and two inch plank.

More on the Same Subject.

This will certify that we cut on November 6th, 1855, two poplar logs, that made 1287 ft. of boards, in one hour, including the time of putting on the last log, and twice stopping to oil machinery, on one of Sharps, Davis, & Bonsall's circular saw mills, made for us. Boiler 40 inches diameter, two 15 inch. flues, 14 feet long; engine 7 inch. bore, 17 inch. stroke, saw 54 inch.

JAMES F. PATTERSON,
WILLIAM YAW,
JAMES M. NOBLE.

New Concord, Ohio.

What One Saw Did.

MESSRS. EDITORS—I noticed in a late number of the SCIENTIFIC AMERICAN "what one saw did" in California. Well, I will admit California is a fast place, but I think we can go ahead of it in sawing. In February, 1855, we were sawing lumber for a railroad bridge on the Central Railroad near Lewistown, and we sawed 140,000 feet in ten days, sawing from ten to twelve hours each day, and on one day sawed 20,000 feet in twelve hours. This was sawed on one of George Pages' mills by William L. Bush, sawyer.

Hollidaysburgh, Pa. R. LYTLE.

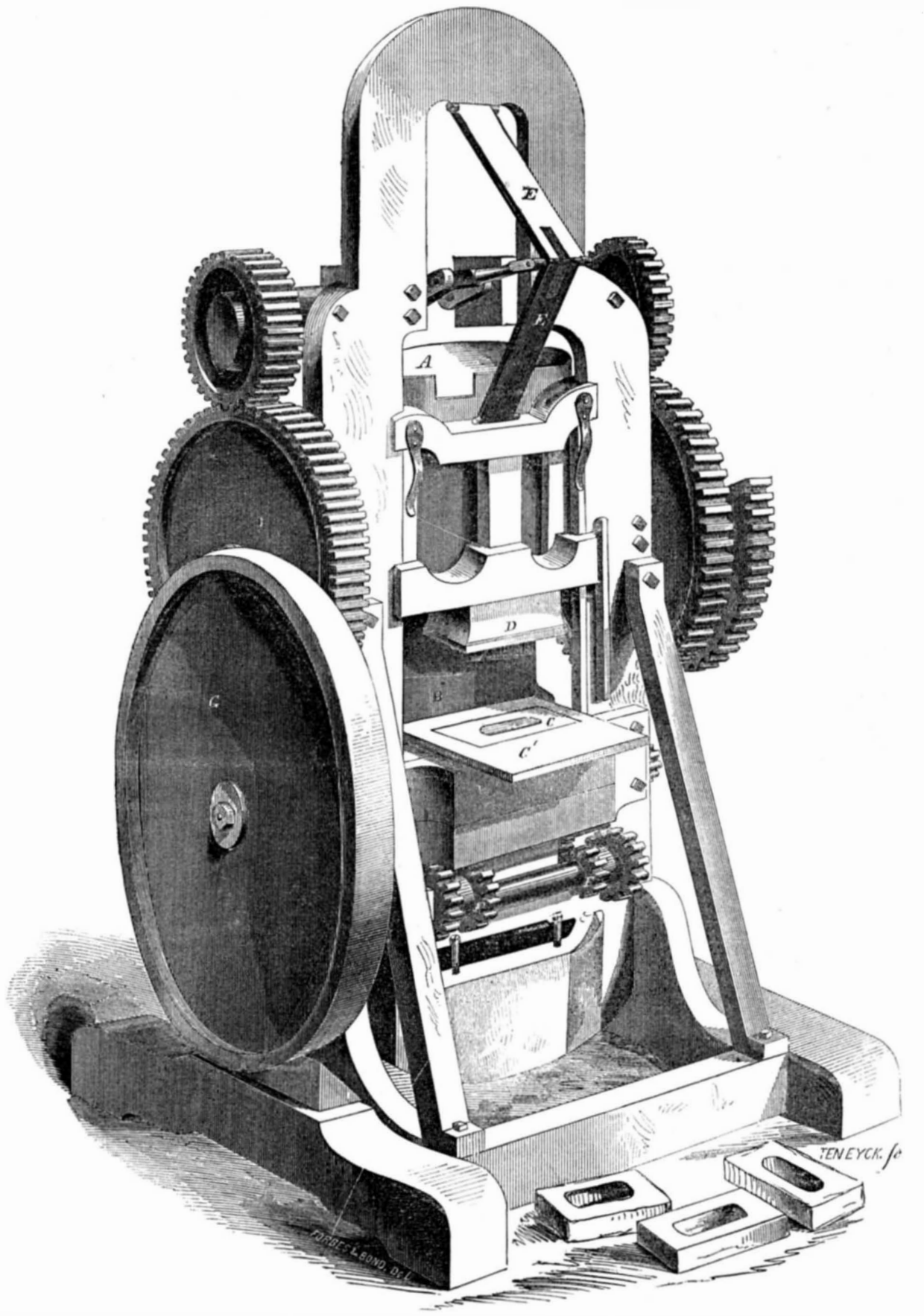
New Brick Machine.

The improvement illustrated by the accompanying engraving is a machine for forming and pressing what are known as "Hollow Bricks." These consist of bricks made of the usual materials and in the common form, but with an oblong aperture pressed through their centers. Specimens are shown in the engraving at the foot of the machine.

One of the chief objections to the erection of brick dwelling houses, especially in the country, is their tendency to absorb and retain moisture. This evil is so great, in some cases as to render it impossible to paper the walls, of apartments; the water strikes through, mildews and stains the paper, destroys pictures, clothing, or other articles that happen to be in contact; the atmosphere within the house is sometimes rendered unhealthy, and sickness is produced, while the stability of the wall itself is impaired. It is said that a single dry brick will absorb, in its pores, a pint of water.

Experience has proved that when walls are built double with an air space between, the evil results of moisture absorption are avoided.

MACHINE FOR MAKING HOLLOW BRICKS.



This has led to the introduction of hollow bricks, and it is found that single walls of this material are just as dry and durable as double walls of solid bricks, arranged as we have mentioned. Hollow bricks are rapidly coming into use in various parts of the country. Any improvement which cheapens their cost or facilitates their manufacture is important, and deserves careful attention.

In the present machine the clay out of which the bricks are formed is placed in the hopper, A, whence it falls into the movable box, B; the latter has a reciprocating movement, and alternately comes forward over the mold, C, and then returns back to the position seen in the cut. Box B has an open bottom, and slides on the table, C', when, therefore, box B comes forward, some of the clay contained within falls into and fills mold, C; the box then returns beneath hopper, A, and receives a new load of clay, while the plunger, D, comes down and presses the clay into the mold, C, with tremendous force. Plunger D is attached to a frame, which moves up and down in the frame of the machine; the plunger frame is operated, as will be seen, by the toggle joint levers, E, which, in their turn, are connected by pitman and crank to the driving part of the machine. The brick is thus pressed with great power.

Within the mold, C, there is another plunger, (not shown) which, at the proper moment rises, and throws up the pressed brick level with table, C', so that it can be removed. This secondary plunger is operated by pinions, F F, which move suitable racks. Motion is communicated to the machine through band wheel G, the various parts being connected and made to operate at the proper instant by means of gearing and other devices.

This machine is simple, strong, operates with great rapidity, is very convenient, presses the brick in a very direct and sure manner, leaves all the edges sharp, &c. It is the invention of Messrs. M. & J. H. Buck & Co., of Lebanon, N. H., from whom further information can be obtained. Measures have been taken to secure a patent.