(No Model.)

J. M. DUNN & A. A. PASCHAL.

WEATHER BOARDING MACHINE.

No. 423,419. Patented Mar. 18, 1890.

Fig 1.

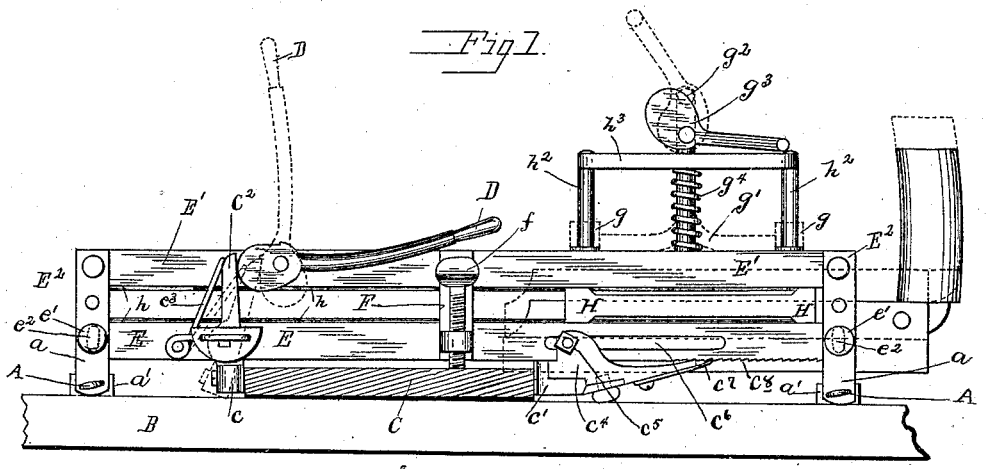


Fig 2.

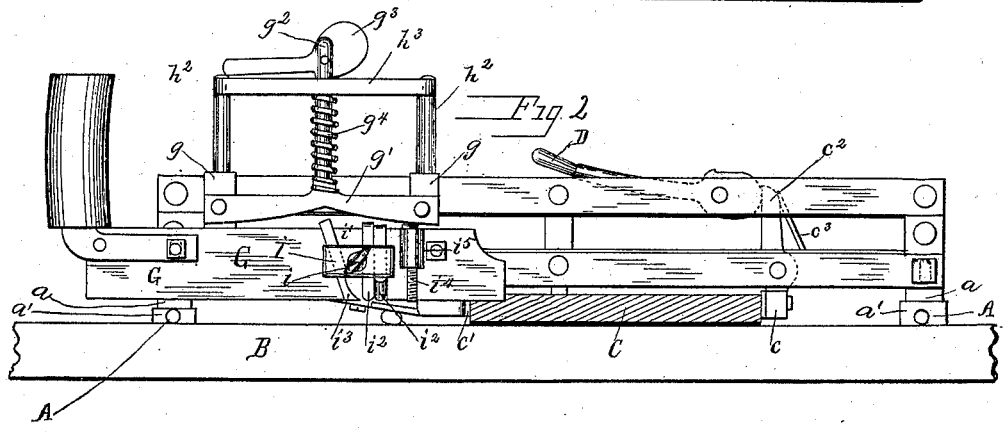
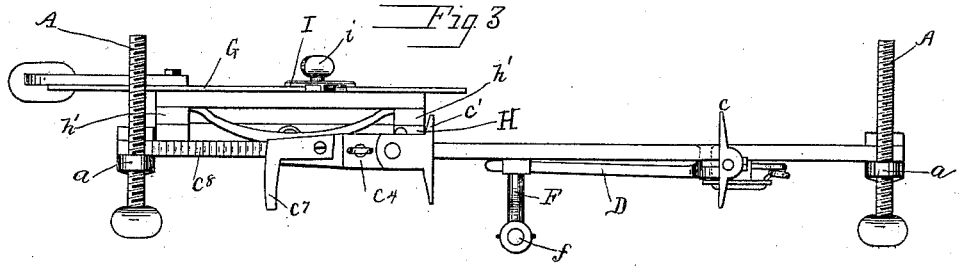


Fig 3.



Witnesses
R. A. Balderson.
Wm. P. Grove

Inventor
James M. Dunn.
Adam A. Paschal.
By J. S. Duffie
His Attorney

UNITED STATES PATENT OFFICE.

JAMES M. DUNN AND ADAM A. PASCHAL, OF HOLDEN, MISSOURI.

WEATHER-BOARDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 423,419, dated March 18, 1890.

Application filed March 24, 1888. Renewed August 24, 1889. Serial No. 321,854. (No model.)

To all whom it may concern:

Be it known that we, JAMES M. DUNN and ADAM A. PASCHAL, citizens of the United States, residing at Holden, in the county of Johnson and State of Missouri, have invented certain new and useful Improvements in Weather-Boarding Machines; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to weather-boarding machines; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a front side elevation of our invention. Fig. 2 is a rear side elevation of the same, and Fig. 3 is a bottom plan view of the same.

Our invention is described as follows:

A are gage-screws, which pass through arms a, attached to the machine, and through posts a', secured to a work-bench B or other proper stand, on which the said machine may be successfully operated. After placing the board C in position between the clutches c and c' we can set the machine on the exact line where we wish to cut the board off by turning the said gage-screws A. Then we turn down the lever D, and thereby clamp the board securely in place. The said clutch c is secured to the lower beam E of the frame, and is pivoted horizontally to the lower end of the lever c^2, which is perpendicularly pivoted to said beam E. The said lever c^2 is provided with a spring c^3, which throws its upper end backward, and thereby releases the clutch c from the board C, and its upper end is also operated by an eccentric lever D, which throws its front end forward and causes the clutch c to clutch the board C. Clutch c' is pivoted in a socket c^4, which is secured to the lower beam E by a bolt c^5, which passes through the arms of said socket and through a slot c^6 in said lower beam. The object of said slot is to allow the said clutch c' to be moved back and forth that it may clutch boards of different widths. Said socket c^4 is provided with a catch c^7, which catches in notches c^8 on the lower face of said beam E, the object of which is manifest. These clutches c and c', instead of being rigidly secured, are pivoted, so that the board may be set at any angle in the machine and cut off accordingly.

F is an arm extending horizontally from the machine, provided with a set-screw f, the lower end of which rests against the upper face of the board C. By the use of said set-screw we are enabled to cut the board perpendicularly or inclinedly cut to the right or left. By having the machine thus under our control we can make the cuts all conform to one another, and thus make perfect joints.

The frame of the machine consists of the lower-beam E, upper beam E′, and end pieces E^2. The upper beam E′ is rigidly bolted to said end pieces E^2, while the lower beam E is secured to the same by bolts and nuts e', which bolts pass through the slotted openings e^2 in said end pieces E^2. The office of said slotted openings e^2 is to allow the said beam E to be let down, so that the carriage G may be taken out from the said frame, the same being secured to a sliding bar H, which is grooved and runs back and forth between the said beams E and E′, which have tongues h, fitting into the grooves in said sliding bar H. Said sliding bar H has extending from its front face lugs h', and from these lugs arise two cylindrical arms h^2, their upper ends being held from separating by a perforated head-bar h^3. The arms g of the carriage G are perforated, and fit around and slide up and down on said cylindrical arms h^2. To the front face of said carriage-arms g is bolted a bar g', from the center of which extends upwardly a cylindrical rod g^2, which passes through a perforation in head-bar h^3. To the upper end of said cylindrical rod g^2 there is pivoted an eccentric lever g^3, used for the purpose of raising the carriage up, as shown by the dotted lines, Fig. 1, to enable us to pass the board C under the machine. A spiral spring g^4, coiled around the said cylindrical rod g^2, its lower end resting against cross-bar g' and its upper end against the head-bar h^3, serves to press the carriage down to its work when the eccentric lever is turned back, as shown in Fig. 2.

The front face of the carriage G is recessed, said recess being bridged by a plate I, se-

cured over said recess by means of a thumb-screw *i*. In the said recess are secured, by means of said bridge-plate I and thumb-screw *i*, wedge *i'*, right and left plow-knives i^2, and plow i^3. We can remove said plow-knives and plow at any time and put in their place any knives, plows, or similar tools to cut any sort of groove, tongue, or other shaped cutting. On the front face of said carriage G is a set-screw i^4, turning in the female screw i^5. This set-screw is for the purpose of regulating the depth of the said cut.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A machine for cutting boards, consisting of the frame composed of the tongued beams E and E' and cross-pieces E^2, arms *a* and F and set-screws A and *f*, lever c^2, pivoted to said frame, spring c^3 and eccentric lever D, pivoted to said frame and adapted to operate said lever, clutch *c*, pivoted on the lower end of said lever, clutch *c'*, pivoted in socket c^4, socket c^4, bolted in the slot c^6 of said frame, said socket being provided with a catch c^7, to catch in the notches c^8 on the lower face of the lower beam E of said frame, grooved sliding bar H, working between said tongued beams E and E', carriage G, secured to said sliding bar H, provided with a recess for carrying the plow-knives i^2 and plows i^3 or other similar tools, and with means of holding the same in place, said carriage riding up and down on the cylindrical arms h^2, being operated by eccentric-lever g^3 and spiral spring g^4, all substantially as shown and described, and for the purposes set forth.

2. In a machine for cutting boards, as above described, the combination, with the frame, of the clutch *c*, operated by the lever c^2, clutch *c'*, pivoted in the socket c^4, socket c^4, bolted in the slot c^6, and catch c^7, adapted to catch in the notches on the under edge of the beam E, substantially as shown and described, and for the purposes set forth.

3. In a machine for cutting boards, as above described, the combination, with the frame, of the carriage G, consisting of the grooved sliding bar H, lugs *h'*, secured to said bar H, cylindrical arms h^2, rising from said lugs *h'*, perforated head cross-bar h^3, perforated arms *g*, working up and down on said cylindrical arms h^2, cross-beams *g'*, cylindrical rod g^2, eccentric-lever g^3, and spiral spring g^4, adapted to operate the plow-plate of said carriage, the front face of said carriage being recessed to receive knives, plows, or other similar tools, bridge-plate I, thumb-screw *i*, wedge *i'*, for securing said tools in place, and set-screw i^4, substantially as shown and described, and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES M. DUNN.
ADAM A. PASCHAL.

Witnesses:
J. H. JANUARY,
D. A. JANUARY.