(No Model.)

C. D. MARSH.

MOLDING OR STICKING MACHINE.

No. 556,015. Patented Mar. 10, 1896.

Fig. 1.

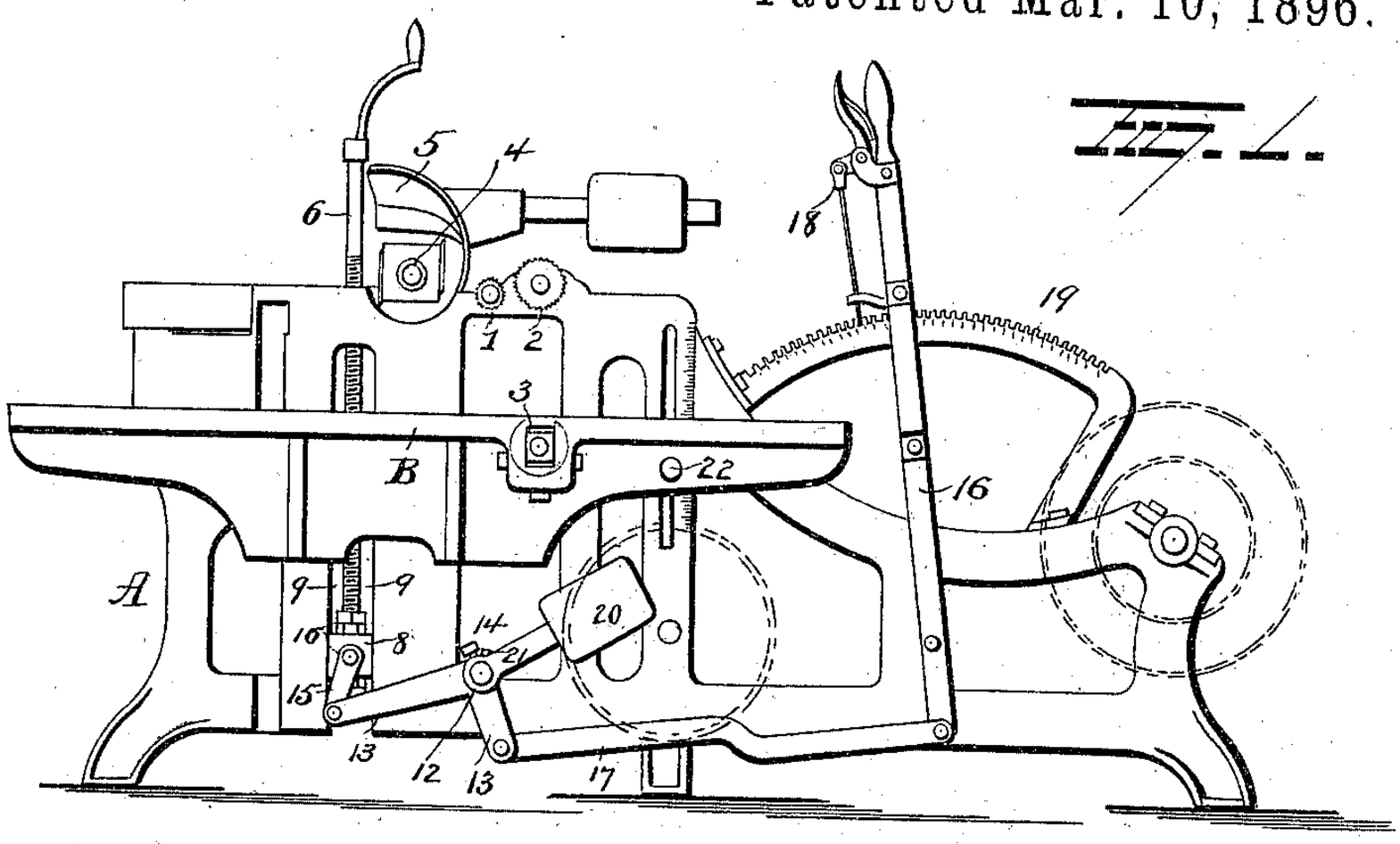
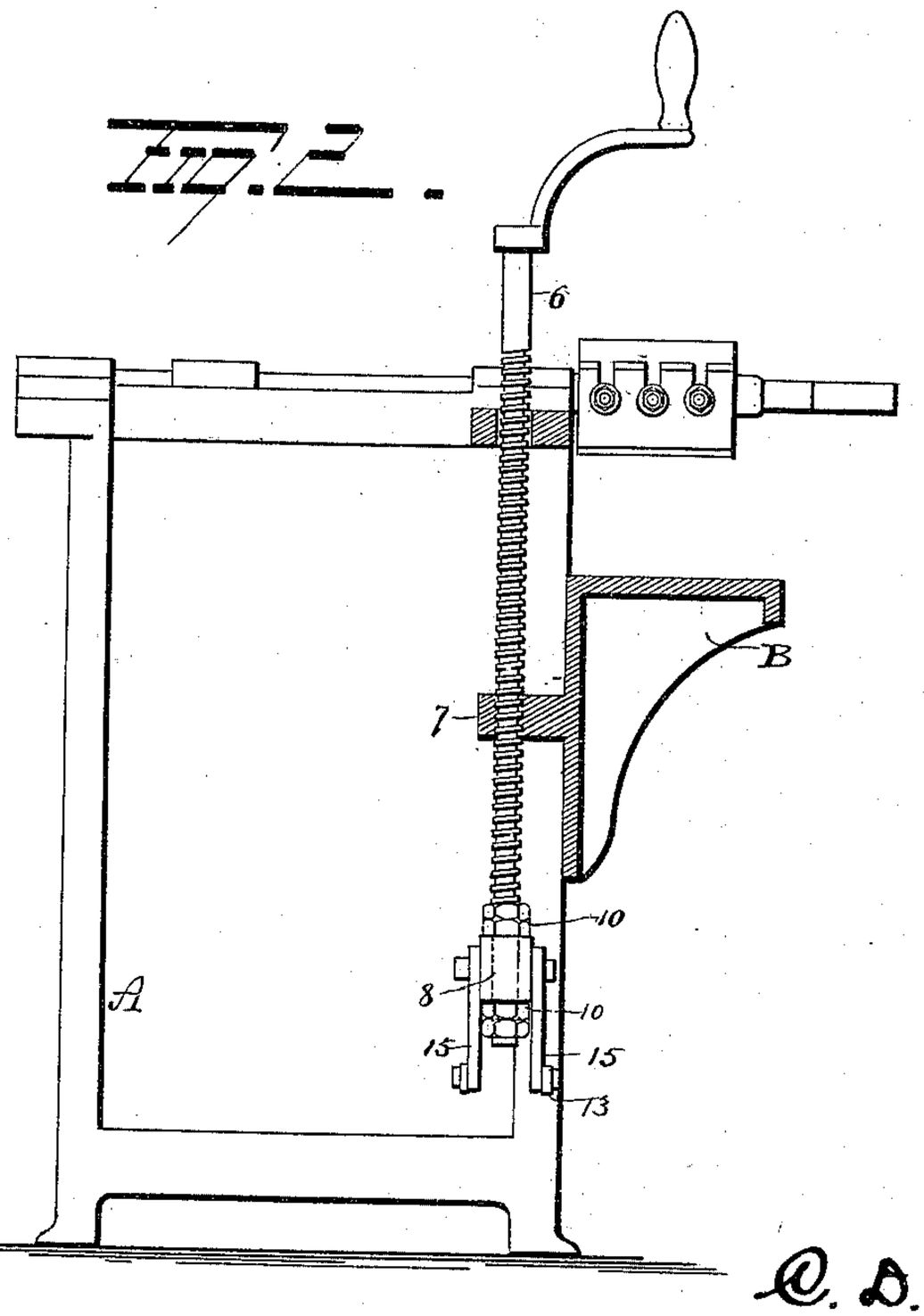


Fig. 2.



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UNITED STATES PATENT OFFICE.

CALVIN D. MARSH, OF WILLIAMSPORT, PENNSYLVANIA, ASSIGNOR TO THE ROWLEY & HERMANCE COMPANY, OF SAME PLACE.

MOLDING OR STICKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 556,015, dated March 10, 1896.

Application filed November 16, 1894. Serial No. 529,059. (No model.)

To all whom it may concern:

Be it known that I, CALVIN D. MARSH, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Molding or Sticking Machines; and I do hereby 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.

My invention relates to an improvement in molding or sticking machines.

In machines of this character frequent adjustment is necessary for different widths of material under treatment. Heretofore the method of adjustment has been slow and laborious, and the aggregate of time consumed has been considerable when it not infrequently happens that these changes have to be made many times a day.

The object of my invention is to greatly lessen the time consumed in making these changes and to provide means for making close and accurate as well as quick adjustments.

With these ends in view my invention consists in the vertically-adjustable table or bed and lever mechanism for raising and lowering it.

It also consists in the usual screw, with means for turning it for making the close adjustments, in connection with a vertically-adjustable slide or bearing block, in which the lower end of the screw is stepped or swiveled, and means for raising and lowering the step or bearing together with the screw and table or bed for making the more extended adjustments before the close ones are made.

It further consists in certain details of invention and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective, and Fig. 2 is a transverse vertical section.

A represents the frame of the machine; 1, 2 and 3, feed-rollers; 4, the cutter-head, and 5 a chip-breaker.

B is the table or bed over which the material to be worked is fed. This table or bed is vertically adjustable with relation to the cutter-head by the following means, which constitute the novel features of my present invention:

A screw 6 of the usual construction passes through a threaded box 7 on the side of the table or bed in the customary manner, and the screw itself is independent of the machine and hence may be moved up and down with the table. A swivel box or bearing 8 is carefully fitted between the openings 9 9 of the frame, and these openings act as guides. In this box or bearing 8 the lower end of the screw is swiveled and jam-nuts 10 10 are provided above and below the box for taking up the vertical wear and lost motion. This swivel box or bearing 8 could be raised and lowered by any suitable mechanism. The construction illustrated, however, has been devised as most expedient, and is as follows: A rock-shaft 12 is supported in suitable bearings in the frame. A bell-crank lever 13 is secured on one end of this rock-shaft by a set-screw or other means 14. One end of this bell-crank lever is connected to the swivel box or bearing by link 15 and the other end is connected to a hand-lever 16 by means of rod 17. The hand-lever is fulcrumed at some convenient point on the frame of the machine and is provided with suitable latch mechanism 18, adapted to operate in connection with the toothed segment 19, whereby to lock the hand-lever in position.

As a counterbalance for the table and table-operating mechanism a weighted arm 20 is secured to the rock-shaft by a set-screw or other means 21. The tendency of this counterbalance is to help sustain the table and assist in balancing it and the lever mechanism, so that the table may be easily moved up and down.

On the segment 19 a scale is formed in inches and fractions of inches, and on the side of the frame against which the table bears a scale of small fractions of inches, such as sixteenths, is formed.

From the foregoing it will be seen that the more extensive adjustments are made by means of the hand-lever. Then the close adjustments of sixteenths and thirty-seconds, &c., of inches are made by means of the screw. Heretofore this has all been done by

the screw; but as there are usually about six threads to the inch on these adjusting-screws and the material varies in width all the way from about a half-inch wide to twelve inches it is necessarily very slow and tedious work adjusting the table to accommodate different widths of material, and especially so as it has to be done repeatedly. This sacrifice of time and resultant tedium is effectually obviated in my present invention, and instead of the screw being used alike for the long and the close adjustments, as heretofore, it is only used for the very fine ones, and the operator has only to watch the scale on the segment when he is making the more extensive adjustments with the hand-lever and the scale on the side of the frame when he makes the close adjustments with the screw. When once adjusted the table is secured in place by a bolt and nut or similar means 22.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself to the exact construction herein set forth; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the frame of a molding and sticking machine, a movable table for the work, means for feeding the material to be treated longitudinally over the table, and a cutter-head located in the plane of this table, of hand-operated mechanism for quickly raising or lowering the table in relation to the cutter-head, and additional means for making the fine adjustments of the table relative to the cutter-head, substantially as set forth.

2. The combination with the frame of a molding and sticking machine, one side of which constitutes a guide for the table and the stock being operated upon, a table movable up and down upon the said side, means for feeding the stock along the table and holding it against the said side, and a cutter-head located in the plane of the table in position to operate upon the stock as it is fed thereto, of hand-operated mechanism for rapidly raising and lowering the table in relation to the cutter-head, and additional means for making the fine adjustments of the table relative to the cutter-head, substantially as set forth.

3. The combination with the frame of a molding and sticking machine, a table movable up and down upon the side of the frame, a cutter-head in the plane of movement of the table and feed mechanism for moving the stock to be operated upon longitudinally over the table, of a swivel box or bearing for raising and lowering the box or bearing for making rapid adjustments of the latter, and a screw swiveled in the box or bearing and passing through a nut on the table for making the finer adjustments of the table, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CALVIN D. MARSH.

Witnesses:
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