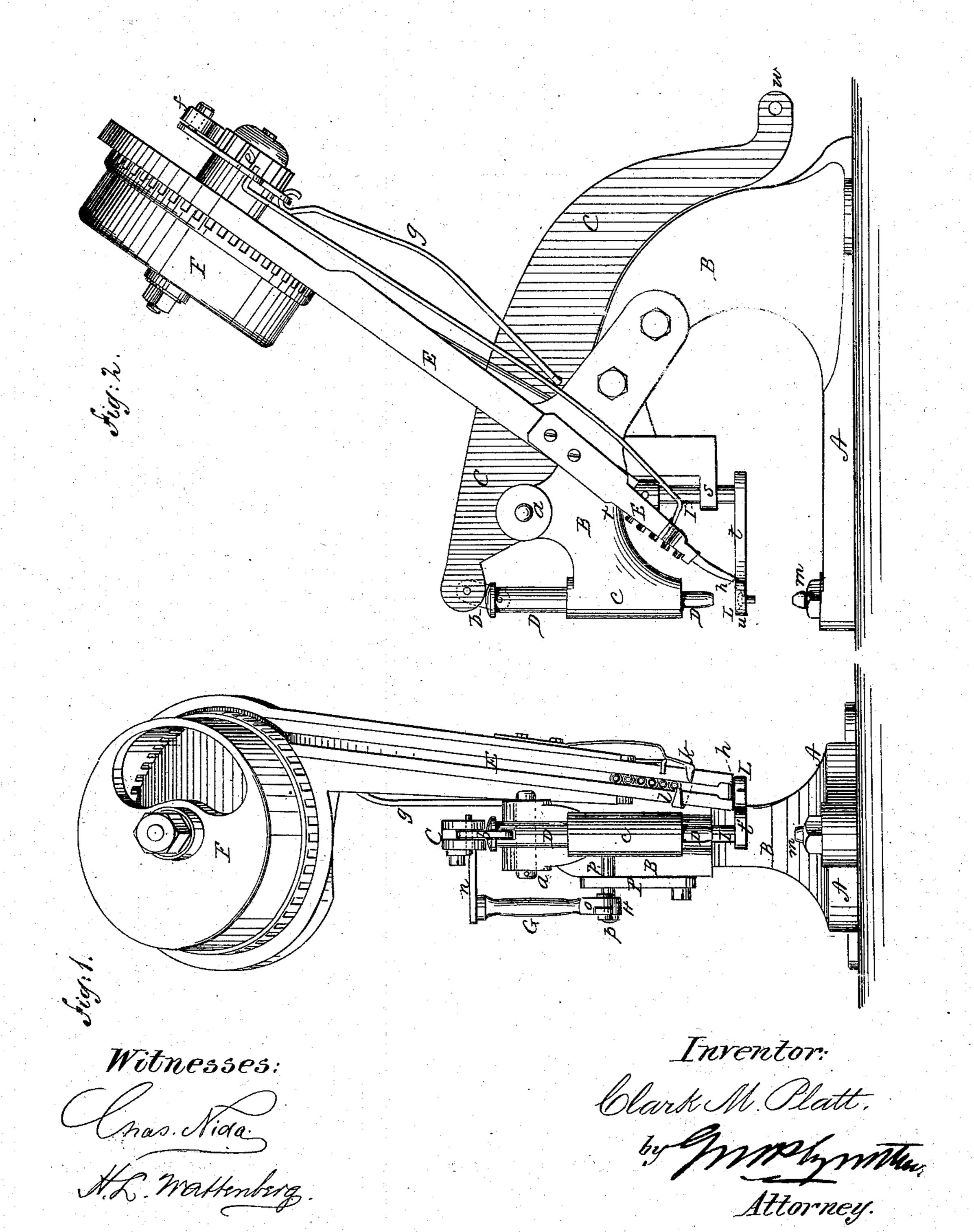
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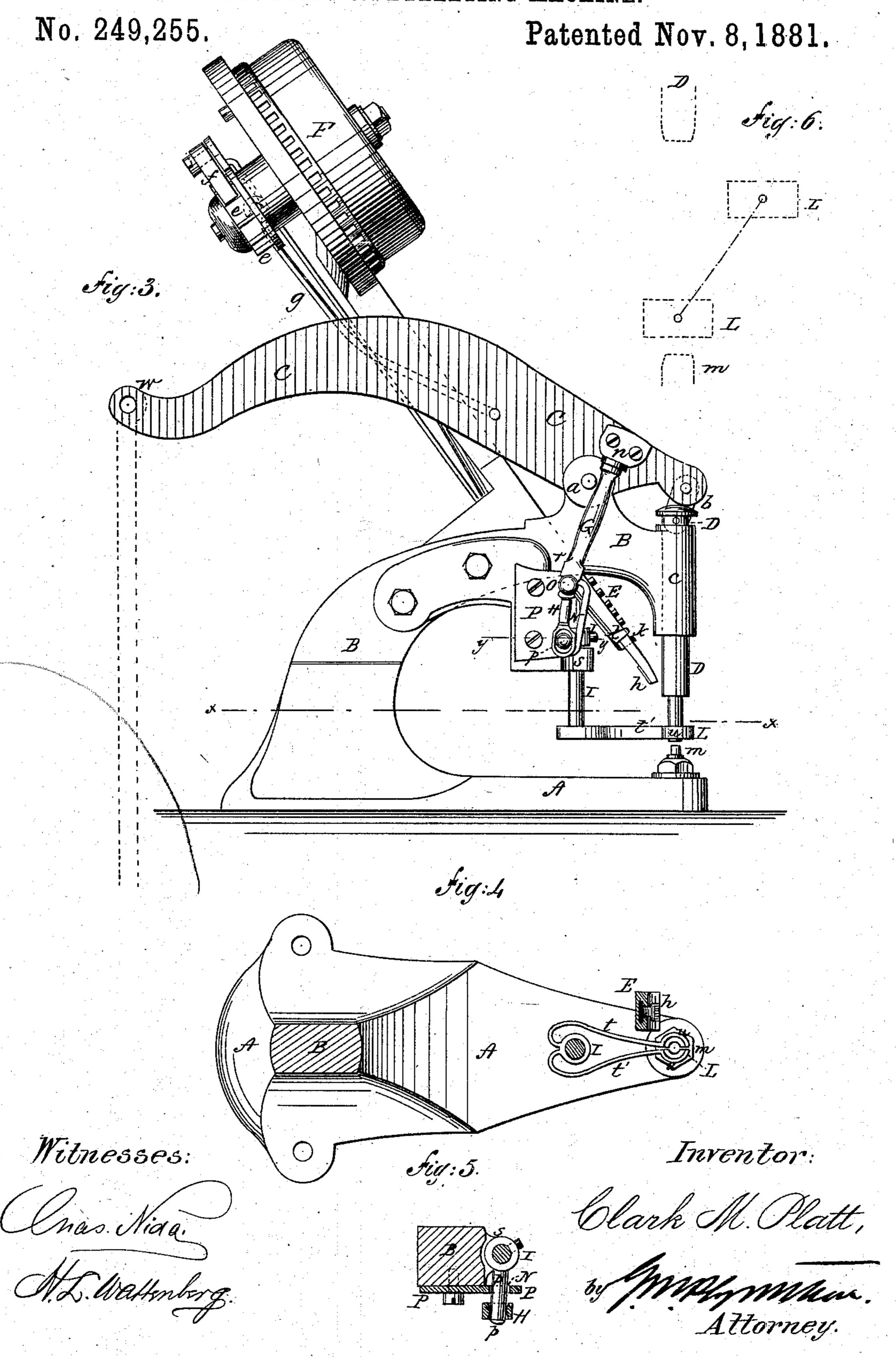
No. 249,255.

Patented Nov. 8, 1881.



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RIVETING OR EYELETING MACHINE.



United States Patent Office.

CLARK M. PLATT, OF WATERBURY, CONNECTICUT.

RIVETING OR EYELETING MACHINE.

SPECIFICATION forming part of Letters Patent No. 249,255, dated November 8, 1881.

Application filed June 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, CLARK M. PLATT, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Riveting or Eyeleting Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

This invention is in the nature of an improvement in riveting or eyeleting machines; and the invention consists in a riveting or eyeleting machine constructed with an adjustable holder or receiver for the rivet fixed to a turning and vertically-reciprocating shaft, and combined with a cam and levers, whereby said receiver may swing beneath in line with and from the end of the setting-plunger of the machine, in the manner and for the purpose more particularly hereinafter described.

In the accompanying sheets of drawings, Figure 1 represents a front view of my improved machine; Fig. 2, a side view of same before the receiver has begun to move; Fig. 3, an opposite side view after the receiver has been turned into position over the anvil; Fig. 4, a horizontal section in the line x x, Fig. 3; Fig. 5, a detail section of turning shaft, cam, plate, 30 &c., taken in line y y, Fig. 3; Fig. 6, a diagram showing track of receiver in moving to and from the anvil.

Similar letters of reference indicate like parts in the several figures.

This invention relates particularly to that class of machines employed to insert rivets or eyelets into Arctic overshoes, corsets, and similar articles of apparel; but it may be also used for other purposes when the insertion of rivets or eyelets becomes necessary.

The machine is provided with a base, A, to which is cast or otherwise fixed a curved arm, B. On the top of this arm, and near its front end, at a, is pivoted a lever, C. To the front end of this lever is secured, by a yielding joint, b, a setting-plunger, D, which passes through a box or guide, c, formed in the front end of the arm B, so that it shall work vertically therein; also, to the arm B is rigidly fixed at a suitable angle (see Figs. 1, 2, and 3) a channel-way, E, the upper end of which is provided

with a rotating feed-box, F, which is actuated by a ratchet, e, and a pawl, f, operated by a rod, g, connected therewith and to the lever C, as is shown in Figs. 2 and 3. The lower end 55 of this channel-way is supplied with an upset plate, h, and near its lower end are fitted fingers k and l.

To the base A, immediately below and in line with the lower end of the plunger D, is secured 60 an anvil, m.

The several parts, their construction and operation, as is hereinbefore described, being substantially the same as are similar parts which are described and shown in Letters Patent 65 heretofore granted to me on the 29th day of June, 1880, No. 229,459, no further description need be given them in this specification.

The improvements, however, which it is desired to patent in this application consist in 70 an arm, G, which is rigidly fixed to the lever C near its front end, as at n, Figs. 1 and 3. This arm projects downward, and to its lower end is secured by a rule or other joint, o, one end of a lever, H, or connecting-link, the other 75 end of which is loosely fitted to the outer end of a pin, p, which protrudes through an angular slot or cam, N, formed in a plate, P, fixed to the arm B, the inner end of this pin being secured to a shaft, I, which works in boxes or 80 bearings r and s in the arm B. At the lower end of this shaft I are rigidly fixed at right angles to it in any desired manner the springsides t t', which terminate in front in half-cupshaped ends u, so that when these two ends 85are brought together a cup-shaped receiver, L, is formed. The spring-sides tt of the receiver extend somewhat to the rear of the vertical shaft I, as shown in Fig. 4.

Now, my rivet or eyelet setting machine being constructed substantially as above described, its operation is as follows: The lever C, when raised by the operation of a treadle and connecting-rod secured to its rear end, w, causes the lower end of the arm G to describe of a curve, and in so doing it forces the lever or connecting-link. H rearward and downward; and as this link moves down it carries with it the pin p, which pin, by reason of its attachment to the shaft I, forces down this shaft; but as 100 this pin p is in this way forced down it is compelled to travel or follow in, or follow the direc-

tion or angle of, the slot or cam N in the plate P, thereby causing the shaft I to turn as it descends in its bearings r and s, so that by reason of the downward thrust of this shaft, together with its turning motion as it descends, the receiver L, fixed to the end thereof, describes a curve which is slightly elliptical, which brings it immediately beneath and in line with the lower end of the setting-plunger D by the time this receiver has taken a rivet from the channel-way E in readiness to be forced by the plunger D through the yielding jaws of the receiver L into the material which has been placed on the anvil m for that

15 purpose.

The receiver, it will be observed, has no vertical movement in line with the plunger. To the contrary, the receiver L is never in line with the plunger during the vertical motion of 20 the plunger up or down, but is brought in line with the setting-plunger only after its downward motion has ceased; then at that instant only is it brought in line with or beneath the plunger by its horizontal motion imparted by 25 the turning of the shaft I in the manner before described. Upon the upward stroke of the setting-plunger D, produced by the downward motion of the lever C, the receiver L at once moves to the right and out of line from 30 the setting-plunger. The spring-sides t t' of the receiver L extend to the rear of the verti-

cal shaft I, for the purpose of increasing the elasticity of the receiver and its sides.

Having thus described my invention, what I claim as new, and desire to secure by Letters 35

Patent, is—

1. A rivet-setting machine provided with a revolving feed-box, angular channel-way, and setting-plunger, in combination with an operating-lever and a receiver constructed to be 40 turned horizontally beneath and in line with and from the setting-plunger, substantially in the manner and for the purpose described.

2. In a rivet-setting machine, the receiver thereof fixed to a shaft constructed to move 45 vertically, and also to turn in its bearings, substantially as and for the purpose described.

3. In a rivet-setting machine, the receiver thereof combined with a revolving and reciprocating shaft, a cam-plate, P, slot N, pin p, 50 link H, arm G, and operating-lever C, substantially as and for the purpose described.

4. In a rivet-setting machine, the receiver thereof constructed with spring-sides fixed to the end of a reciprocating and turning shaft, 55 the sides of the receiver extending to the rear of the shaft, whereby its elasticity is increased, substantially as described.

CLARK M. PLATT.

Witnesses:

CHAS. W. GILLETTE, D. F. WEBSTER.