

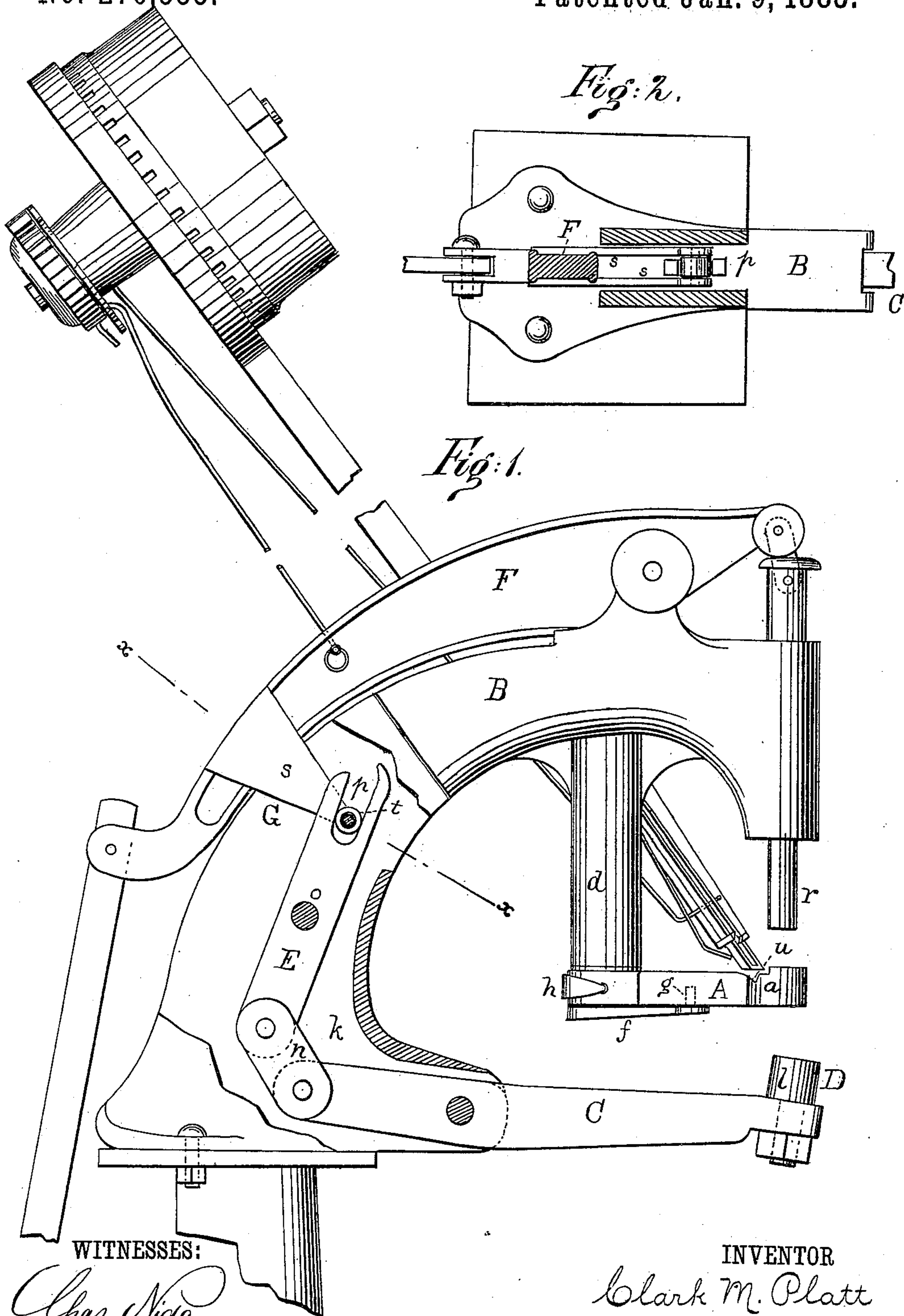
(No Model.)

2 Sheets—Sheet 1.

C. M. PLATT.
RIVET SETTING MACHINE.

No. 270,555.

Patented Jan. 9, 1883.



WITNESSES:

Chas. Nida.
Charles E. Simms, Jr.

INVENTOR

Clark M. Platt

BY

Simms & Co.
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(No Model.)

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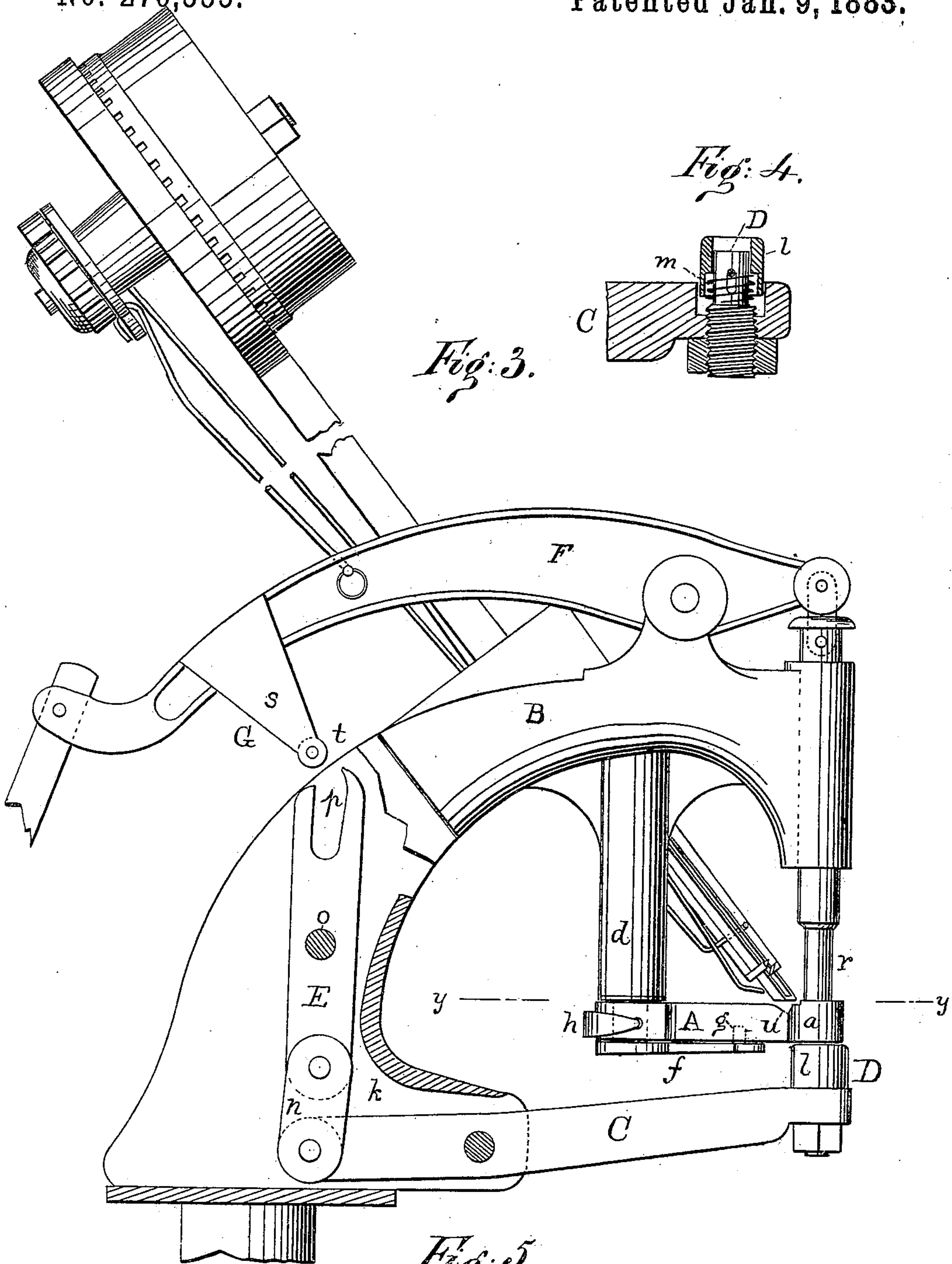


Fig. 4.

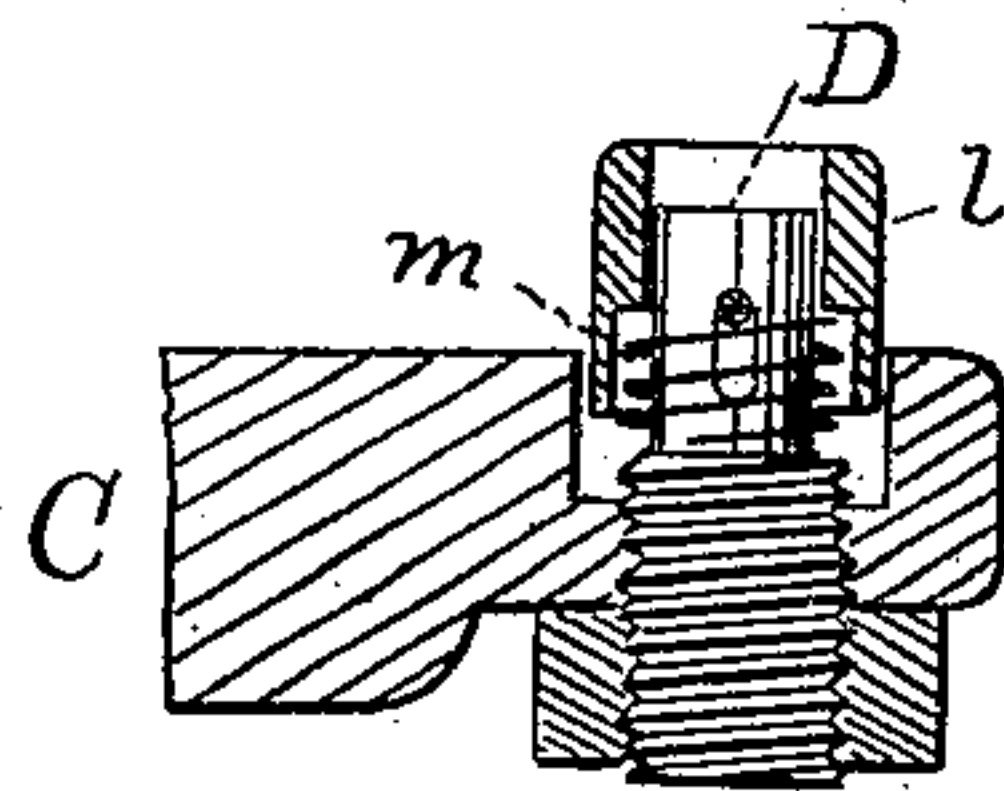
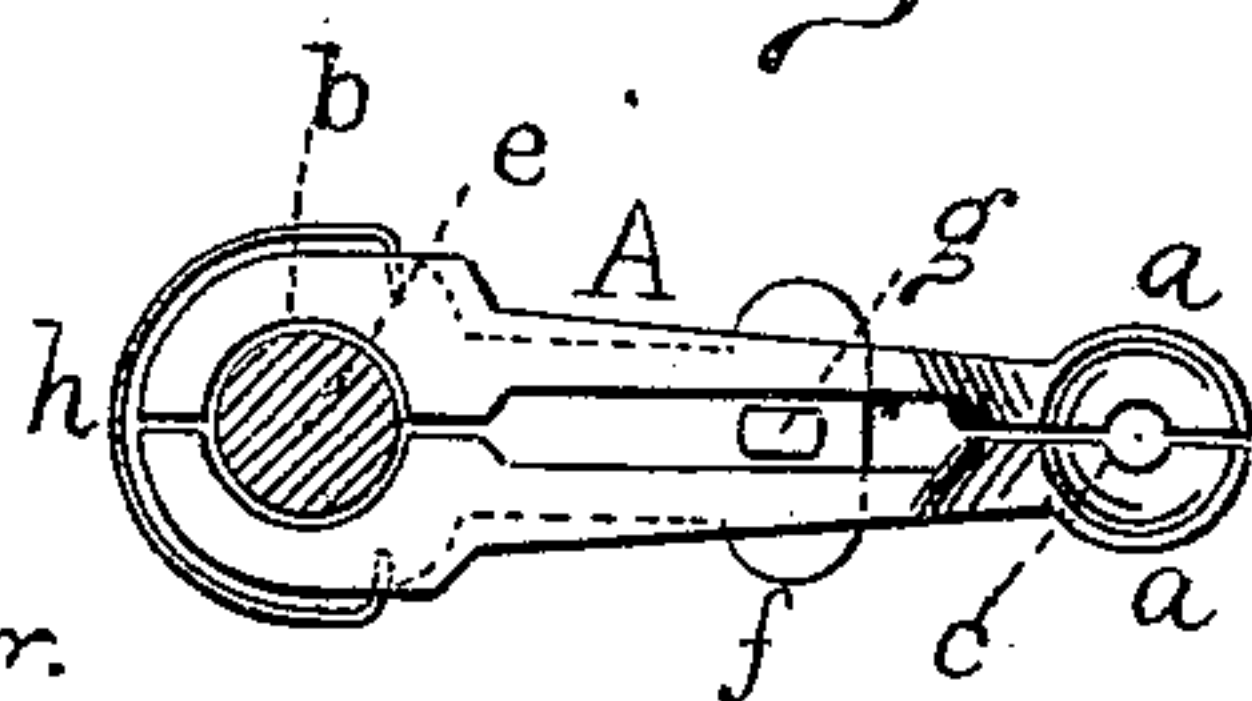


Fig. 3.

Fig. 5.



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UNITED STATES PATENT OFFICE.

CLARK M. PLATT, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
PATENT BUTTON COMPANY, OF SAME PLACE.

RIVET-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 270,555, dated January 9, 1883.

Application filed August 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, CLARK M. PLATT, of Waterbury, New Haven county, State of Connecticut, have invented a new and useful Improvement in Rivet-Setting 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 sheet of drawings, making part of this specification.

10 This invention is in the nature of an improvement in rivet-setting machines; and the invention consists in a rivet-setting machine provided with an immovable receiver, having spring-jaws, a pivoted anvil-bearing arm, unit-
15 ed to a forked vertical lever by a link, and an operating-lever provided with a tripping device, all constructed, arranged, and combined in the manner more particularly hereinafter described and claimed.

20 In the accompanying sheet of drawings, Figure 1 is a side elevation of my rivet-setting machine, partly in section, showing anvil dropped from the receiver; Fig. 2, a cross-section taken in the line *x x*, Fig. 1; Fig. 3, a side elevation,
25 partly in section, showing the anvil up to the receiver; Fig. 4, a longitudinal section of anvil, sleeve, and spring; Fig. 5, a section through *y y*, Fig. 3, showing the receiver and its jaws in plan.

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

This invention is in the nature of an improvement in the riveting or eyeleting machine patented to me on the 8th day of November, 1881. The details of the construction and operation of the feed-box, guide-channel, and their accessories being the same in every particular, they therefore need no further description now.

40 In the rivet-setting machine so patented by me, however, the receiver or the device that catches the rivets as they emerge from the end of the channel-way was pivoted so that it could be carried down to the anvil, and, by
45 means of a spring, recover its normal position. In that machine, also, the anvil was rigidly fixed.

In my present and improved machine, A represents the receiver, which consists substantially of two jaws, *a*, constructed so as to form, when placed together, a cylindrical opening, *b*,

at their rear ends and a cup-shaped or conical opening, *c*, at their front ends. This receiver is mounted upon a projection, *d*, depending at right angles to and below the frame B
55 of the machine. The lower end of this projection has fitted to it a journal or bearing-surface, *e*, and a supporting-bracket, *f*, the bracket extending toward the front of the machine and at right angles to the journal *e*, with a pin, *g*,
60 projecting upward. When in position the cylindrical opening *b* of the jaws *a* incloses the journal or bearing *e*, and the under surface of the jaws are supported by the bracket *f*, the pin *g* passing upward between the jaws. 65

Uniting the jaws together and holding them in place by its elastic force is a spring, *h*, which encircles the rear ends of the jaws.

Pivoted to the lower part, *k*, of the frame B of the machine is an arm or lever, C, which projects in front of the frame and extends through
70 and to the rear of the frame B. The front end of this arm or lever has fixed to it an anvil, D, which anvil is surrounded by a sleeve, *l*, and a spiral spring, *m*, so that the sleeve can be
75 pressed downward around the anvil, and afterward be restored by the resilient action of the spring *m*. The rear end of the arm or lever C has one end of a link, *n*, pivoted to it, the other end of the link being pivoted to a lever, 80
E, which lever is pivoted at *o* to the frame B of the machine, and at its upper end is formed with a fork, *p*.

The machine is provided with the ordinary operating-lever, F, with a setting-plunger, *r*,
85 secured to its front end, and a treadle attachment at its rear end. To this operating-lever, however, and near its rear end, is fixed a tripping device, G, consisting of projections *s*,
90 fixed nearly at right angles to the operating-lever F, and with a roller, *t*, secured between them.

Now, when my riveting-machine is constructed substantially in the manner herein-
before described, and the rivets have passed
95 into the receiver from the channel-way, it is operated by throwing upward, by treadle or otherwise, the rear end of the lever F, which depresses its front end, thereby forcing downward the plunger *r*, and at the same time caus-
100 ing the roller *t*, of the tripping device G to bear against the inner surface of the rear leg

of the fork *p* of the lever *E*, bringing that lever into a vertical position, and in so doing depressing the rear end of the arm or lever *C*, thereby throwing upward its front end until
 5 the anvil *D* is brought immediately below the under side of the receiver *A*, in which position it is rigidly kept, for its rear end, the link *n*, and the lever *E* and its pivot, are brought in the same vertical line. (See Fig. 3.) This
 10 rigid position of the anvil enables it to receive the rivet as it is forced through the receiver and to resist the downward thrust of the plunger *r*, so that the end of the rivet may be properly upset on the anvil. When the rear end
 15 of the operating-lever *F* is forced downward the roller *t* of the tripping device *G* enters into the fork *p* of the vertical lever *E*, thereby throwing this vertical lever and the link *n* somewhat out of the same vertical line. (see
 20 Fig. 1,) and by so doing drawing upward the rear end of the arm or lever *C*, causing its front end and the anvil secured thereto to descend or drop away from the receiver *A*, permitting thereby the removal or shifting of the
 25 goods that are being riveted. As the plunger *r* descends and forces the rivet through the cup-shaped opening *c* of the receiver *A* the jaws *a* spread apart laterally, and as the plunger is withdrawn by its upward stroke
 30 from the receiver the spring *h* restores the jaws to their former closed position. The pin *g*, acting as a stop, keeps the jaws from being thrown out of their proper position, and maintains the receiver in its true place in line with
 35 and below the plunger.

The anvil *D* is surrounded by a sleeve, *l*. The upper end of this sleeve projects somewhat above the end of the anvil, affording a better resting-surface for the goods that are being
 40 riveted, and when the plunger descends to force the rivet through the goods and upset it on the anvil, the sleeve descends, leaving the end of the anvil *D* exposed to receive the rivet. When the riveting is completed the sleeve is
 45 restored to its former position by the spring *m*.

In my riveting-machine heretofore referred to as patented to me, an upset plate was secured to the lower end of the channel, which reversed the position of the rivets, compelling
 50 them to enter into the receiver point downward; but in my present machine a notch, *u*, is formed in the jaws *a* of the receiver, which accomplishes the same purpose—that is to say, as the rivet descends from the end of the
 55 chute it strikes within the notch *u* or against its side, thereby checking the descent of such rivet, and causing it to tumble over into the receiver *a*.

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

1. In a rivet-setting machine, the fixed post *d* and the arms *a a*, connected by a spring and secured to said post, the rivet-opening *c* in the ends of said arms, and a pin, *g*, and bracket *f*,
 65 constituting a fixed receiver, combined with the anvil *D*, its moving-lever, a rivet-feeder, a plunger, and operating mechanism, substantially as shown and described.

2. In a rivet-setting machine, a fixed receiver
 70 for the rivets to be inserted, combined with a movable anvil, the lever *C* therefor, forked lever *E*, link *n*, for connecting said levers, and operating-lever *F*, provided with the tripping device *G* to engage the forked lever, substantially
 75 as and for the purpose described.

3. In a rivet-setting machine, the pivoted anvil-bearing arm or lever *C*, a link, *n*, and lever *E*, forked at *p*, combined with the operating-lever *F*, provided with the tripping device
 80 *G*, to engage the forked end of the lever *E*, substantially as and for the purpose described.

4. In a rivet-setting machine, an arm, *B*, provided with a stationary projection to which is fixed a receiver to take the rivets from the
 85 feeder, a plunger, *r*, an anvil, *D*, and the lever *C*, supporting such anvil and movable from the plunger-operating lever through tripping device *G*, lever *E*, and link *n*, substantially as and for the purpose described.
 90

5. In a rivet-setting machine, the jaws of the receiver thereof provided with a spring at their rear ends, and in combination with a bracket, *f*, and pin *g*, substantially as shown and described.
 95

6. The arm or lever *F*, provided with the tripping device *G*, the lever *E*, provided with the forked end *p*, the lever *C*, carrying the anvil *D*, and the link *n*, connecting the said levers *C* and *E*, as shown, so that the lever *E* and
 100 link *n* move into a right line upon the elevation of the anvil and hold said anvil positively and fixedly, combined with a stationary rivet-receiver, a plunger, and a feeder, substantially as shown and described.
 105

7. In a rivet-setting machine, the combination of a feeding-channel, a fixed receiver provided with a notch, *u*, an anvil, and operating mechanism, substantially as shown and described.

CLARK M. PLATT.

Witnesses:

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