

(No Model.)

E. E. SPENCER.  
RIVET SETTING MACHINE.

No. 277,369.

Patented May 8, 1883.

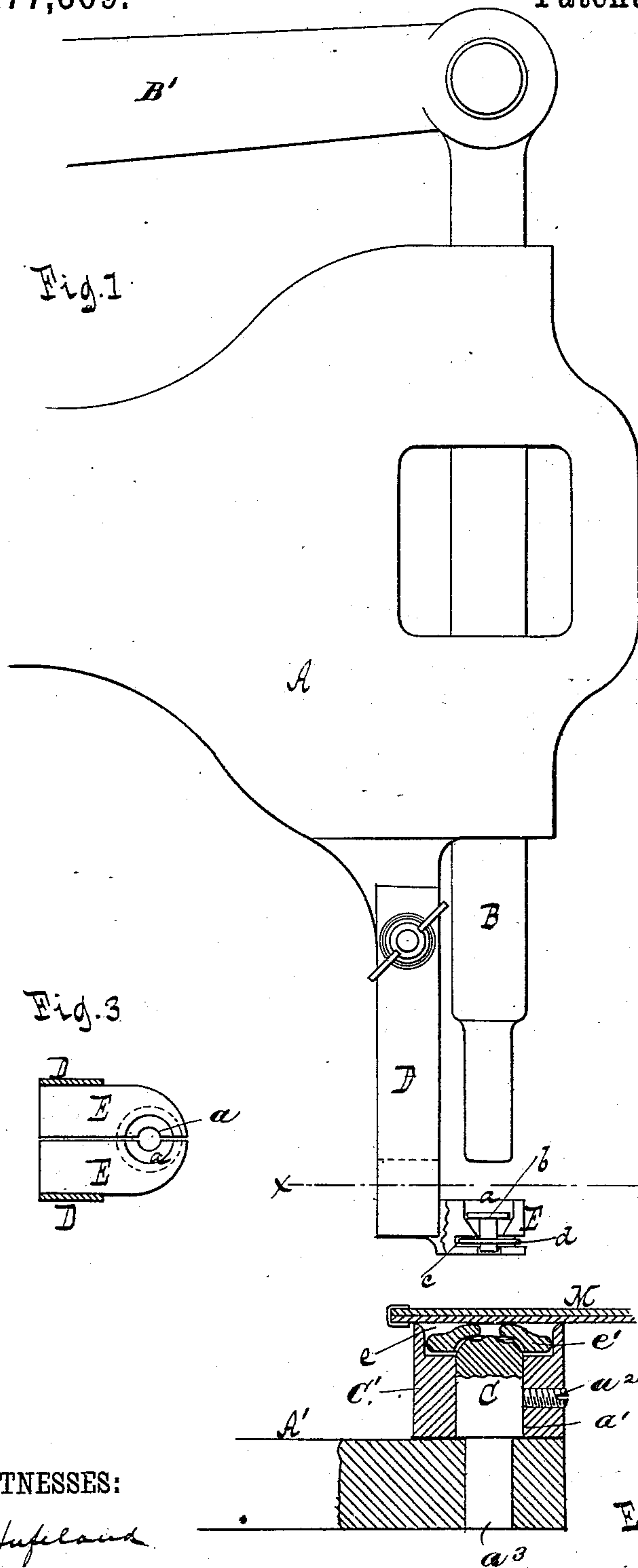


Fig. 3

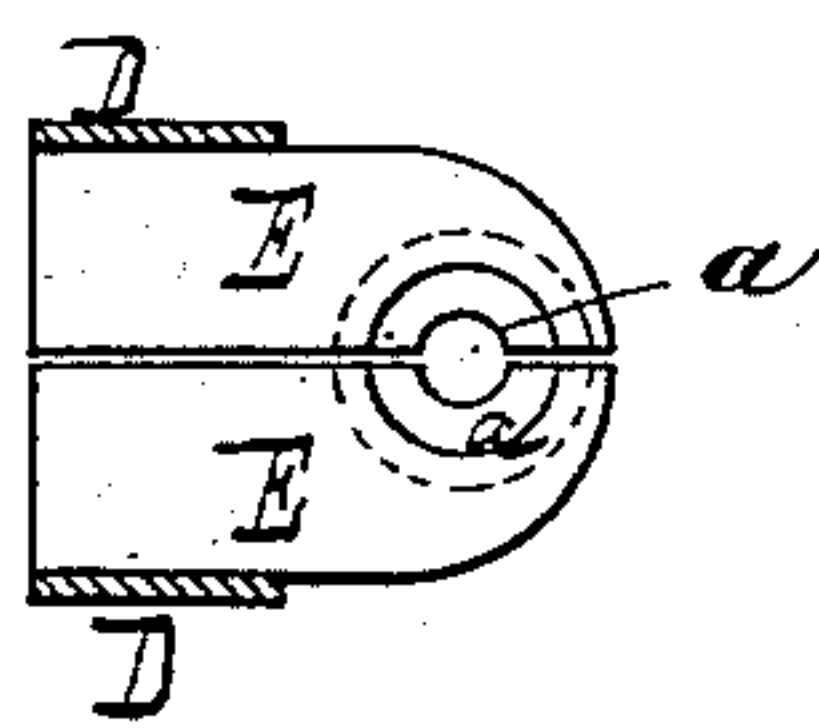
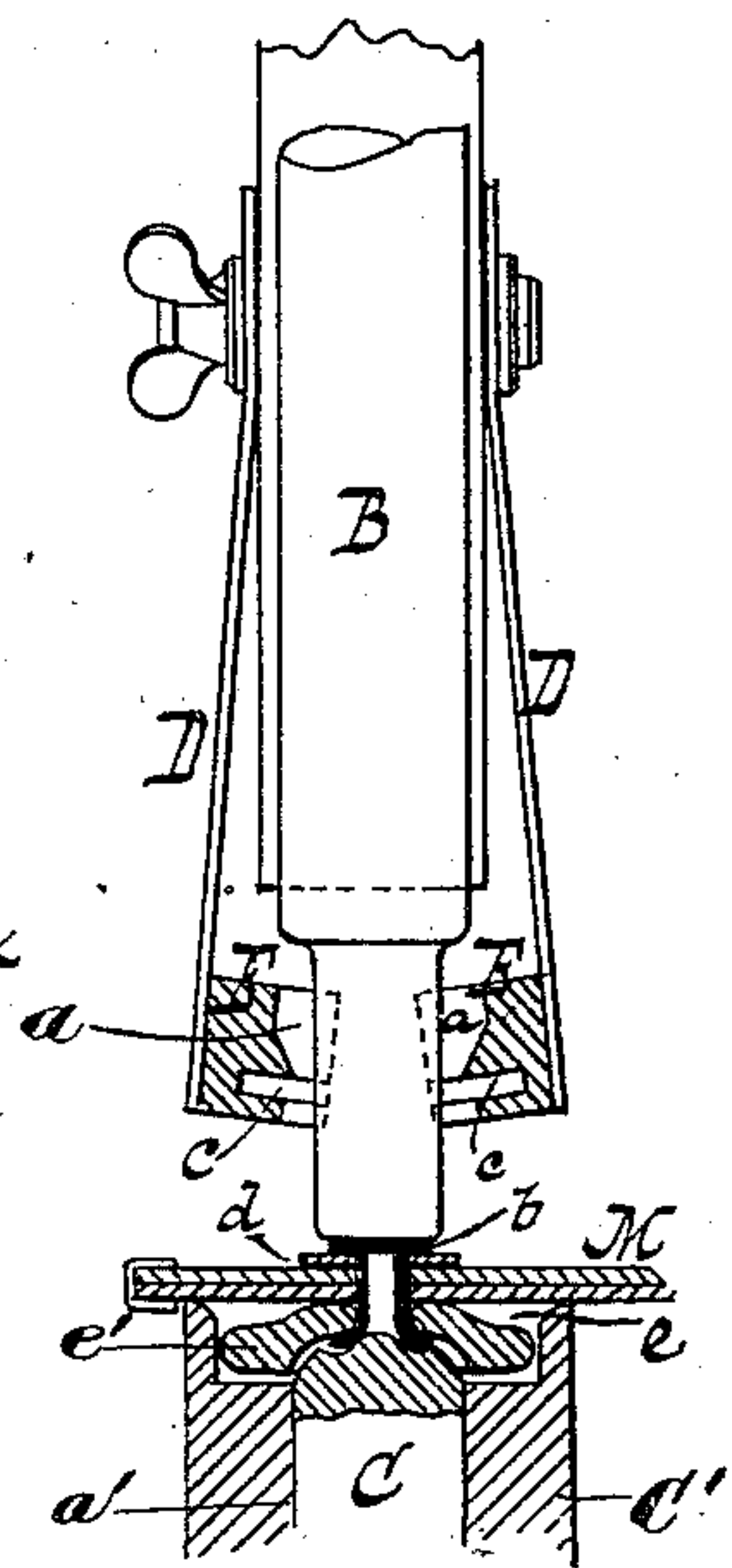


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWARD E. SPENCER, OF NEW YORK, N. Y.

## RIVET-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 277,369, dated May 8, 1883.

Application filed January 16, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD E. SPENCER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Rivet-Setting Machines, of which the following is a specification.

This invention relates to an improvement in machines for setting hollow rivets, the object of my invention being to adapt a machine of that class for the purpose of fastening buttons, buckles, or other articles of a similar nature to a support of leather or other material.

The nature of my invention is pointed out in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 represents a sectional side view when the plunger is up. Fig. 2 is a similar view when the plunger is down. Fig. 3 is a transverse section in the plane  $x x$ , Fig. 1.

Similar letters indicate corresponding parts.

Referring to the drawings, the letter A indicates the head of the frame, which forms a support and guide for a vertically-reciprocating plunger, B; and A' indicates an arm or table joined to the frame which carries the head A, and serving to support the anvil C directly under the plunger. The frame to which the head and arm or table are joined I do not consider it essential to represent, as it is the usual upright or standard common in presses or punches. The plunger B in practice may be connected by an arm, B', with the usual treadle mechanism supported in the standard, as usual, for reciprocating the plunger B; but, if desired, the latter can be forced down by a hammer and retracted by a spring, such features, however, constituting no part of my invention.

To the head A are firmly secured two depending spring-arms, D D, to the lower ends of which are attached the jaws E E, each of which is provided with a cavity,  $a$ , for receiving the tubular rivet  $b$ , and with a recess,  $c$ , for receiving the washer  $d$ , as shown in Fig. 1.

The anvil C is of cylindrical or other form, and is secured within a correspondingly-shaped socket,  $a'$ , in the lower portion of a ring, C', by means of a set-screw,  $a^2$ , or otherwise, said ring being secured to the arm or table A', so as to bring the anvil directly into line with the plunger, and the anvil having a shank,  $a^3$ , which sets within a socket in the arm or ta-

ble. The ring C', at its upper portion, is provided with a circular or other suitably-shaped cavity,  $e$ , for receiving the button or other article,  $e'$ , to be attached to the work M. The form of the cavity  $e$  will of course be varied to suit the shape of the article—such as a buckle—to be attached to the work M; but in any event the anvil will be arranged in the ring C', so that its center will be brought into line with the hole through the article which is to be attached by the rivet.

After the button (or other device) has been dropped into the cavity  $e$ , the leather or other material, M, (to which said button is to be fastened, and which may be provided with a hole to admit the rivet,) is placed upon the anvil and adjusted in the required position, and then the plunger B is depressed. (See Fig. 2.) As the plunger descends the jaws E E are gradually opened, so as to release the rivet and the washer, the shank of the rivet is driven through the holes in the material M and in the button, and as the tip of said shank strikes the anvil it is spread open and clinched on the face of the button, while the washer  $d$  remains between the head of the rivet and the material M, as shown in Fig. 2.

I do not claim as my invention the plunger, the anvil, and the spring-jaws for retaining the rivets, such being in common use.

My spring-jaws also contain a recess for the reception of the washer.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, substantially as hereinbefore described, of the plunger, the anvil, and the spring-jaws, provided with a cavity for retaining the rivet and with a recess for retaining the washer.

2. The combination, substantially as hereinbefore described, of the plunger, the anvil, the spring-jaws for retaining the rivet, and the cavity containing the anvil and forming a guide for the button or other article to be fastened.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

EDWARD E. SPENCER. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.