

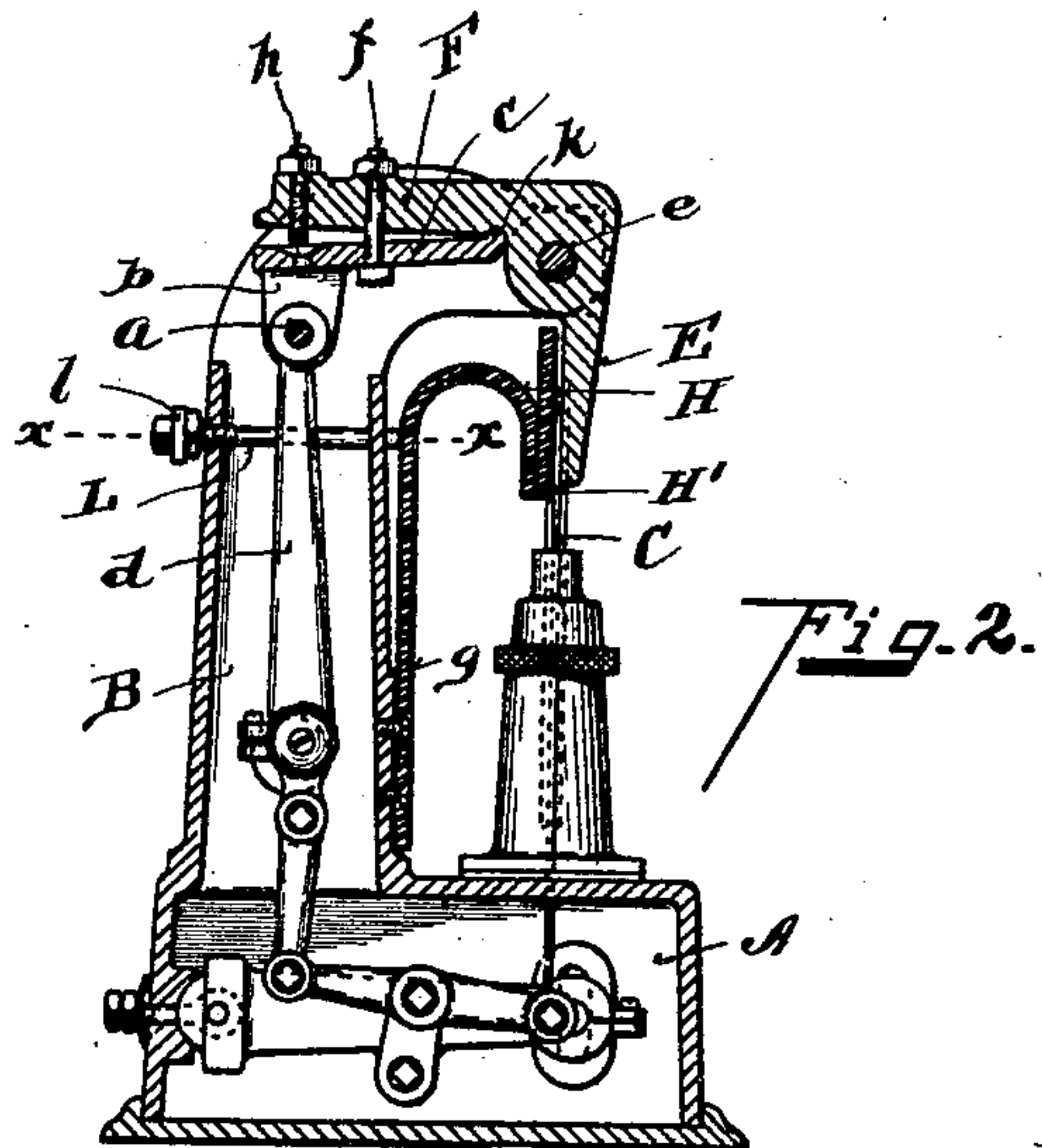
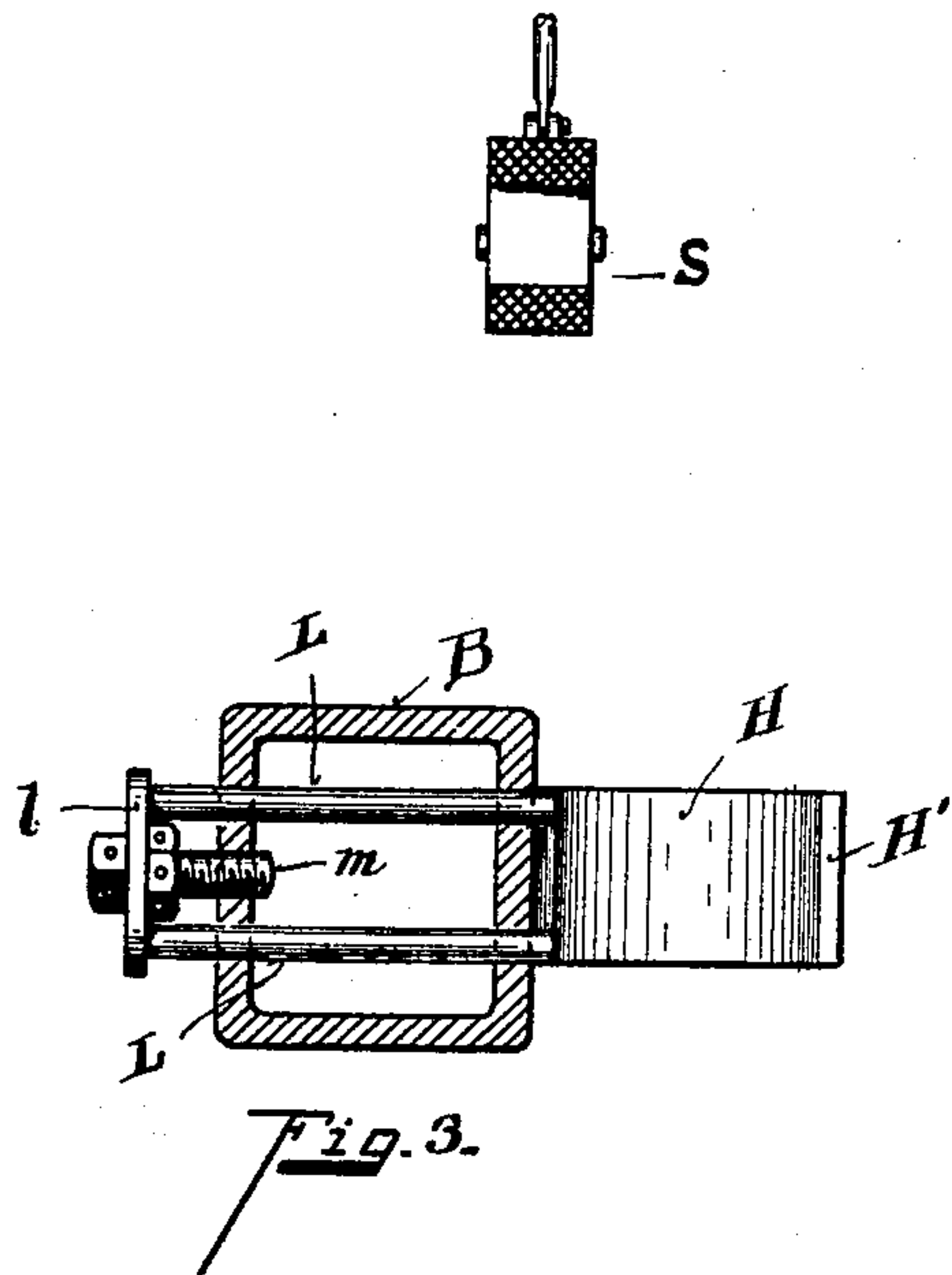
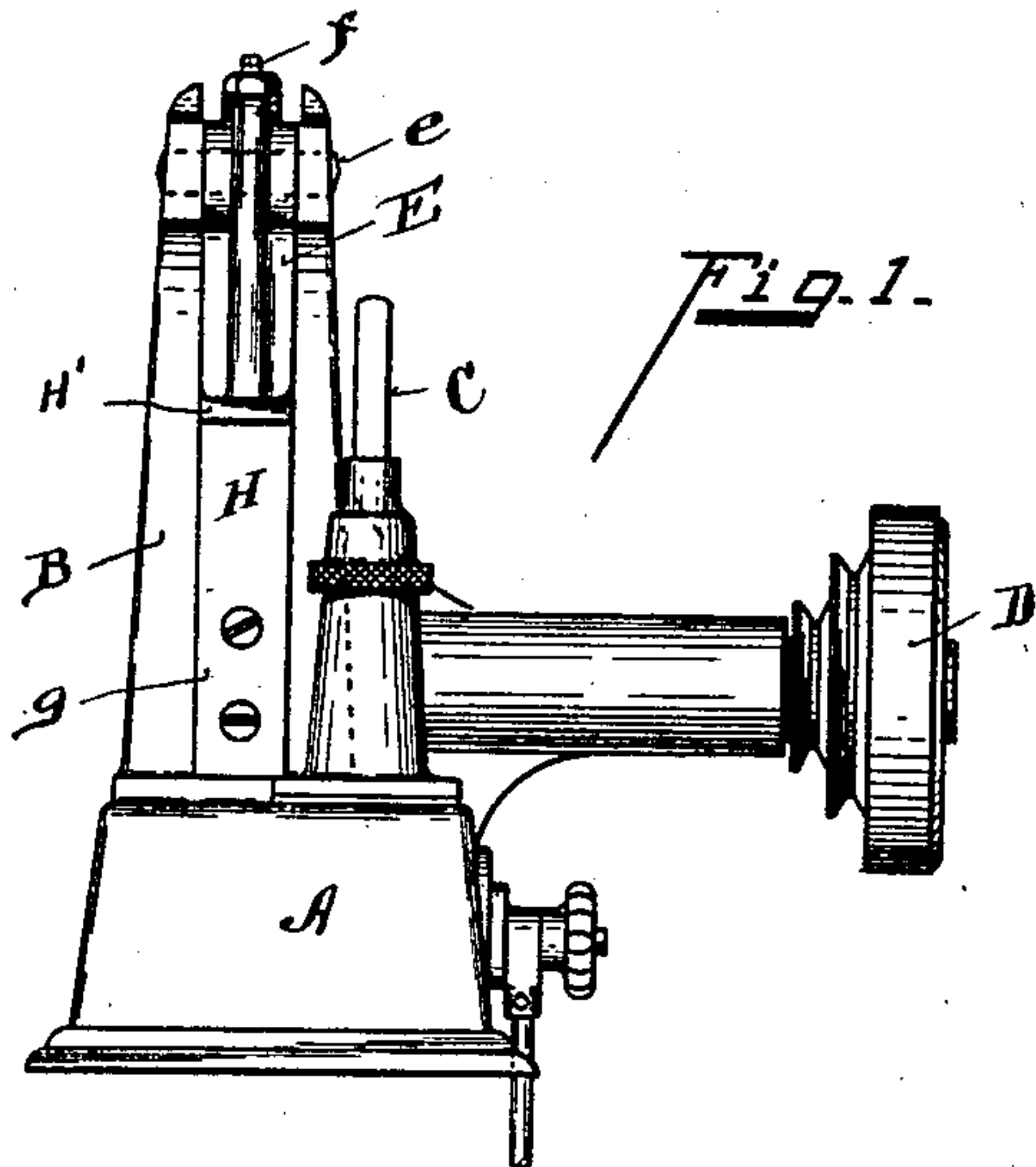
No. 680,624.

Patented Aug. 13, 1901.

S. ROSS.
BEADING MACHINE.

(Application filed Mar. 25, 1901.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

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MANUFACTURING COMPANY, OF SAME PLACE.

BEADING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 680,624, dated August 13, 1901.

Application filed March 25, 1901. Serial No. 52,719. (No model.)

To all whom it may concern:

Be it known that I, SIMON ROSS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Shoe-Upper-Beading Machines, of which the following is a specification.

My invention relates to an improvement in shoe-upper-beading machines. In the drawings it is shown as applied in combined form of shoe-upper turning and beading machine, in which form it is usually employed.

The object of the present invention is to provide an elastic or cushioning jaw, against which the beading is accomplished.

My invention also has for its object the simplifying of the parts and making them more durable.

Other features of my invention are more fully set forth in the description of the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front elevation of my improvement. Fig. 2 is a central vertical section of Fig. 1. Fig. 3 is a section on line *xx*, Fig. 2, showing the top section of the spring in elevation.

A represents the shell-base of the machine; B, the hollow column; D, the driving-pulley; C, the turning-iron; *d*, the connecting-rod for operating the heading-jaw. These parts and their connections are constructed in accordance with Letters Patent No. 606,301, granted me June 28, 1898, and need not be more fully described, as I employ the same driving apparatus as shown in my said former patent.

My present improvement relates to the manner of constructing and operating the beading-jaws. The connecting-rod *d* is journaled upon the center *a*, which is fixed to downwardly-projecting lug or lugs *b* of the vibrating arm *c*.

E represents one of the beading-jaws, which is journaled upon the center *e*.

F represents the horizontal arm of the knee-shaped jaw E.

f represents a bolt connecting the arm F to the arm *c*, which is oscillated by the action of the connecting-rod.

h represents an adjusting-screw for regu-

lating the throw of the beading-jaw E and to regulate its limit of movement. The jaw E rocks on the knife-edge center *k* in making said adjustment.

H represents the inner beading-jaw, which is formed of a U-shaped spring, the shank of the same being extended, as shown at *g*, and connected to the shell-column B. The spring-jaw standard H is supported at its rear end upon one or more tension-pins L. I prefer to employ two of these pins. They pass through the hollow column B, as shown in Fig. 3, and are connected to a yoke *l*.

m represents an adjusting-screw tapping into the hollow frame, and as said screw is turned in the ends of the pins are protruded, and thus push the jaw H farther forward. When the nuts are turned out, the pins are retracted and the spring-jaw and its standard moves back. The standard seats itself against the pins. The reciprocation of the jaw E causes it to impinge upon the work which is held between the jaws E H. As jaw H yields slightly to the impingement of the jaw E, the force of the blow is cushioned.

It will be seen that by means of the adjusting-screws *h m* the distance between the jaws H and E may be increased or diminished, and the range is sufficient to adapt the machine to all classes of work usual in beading shoes or boots.

By means of the cushioning-jaw herein provided several very important advantages are obtained—first, there is no danger when properly regulated of injuring the work by too heavy hammering; second, any desired amount of cushioning may be obtained by the adjustment, and, third, by having the jaw itself mounted upon and forming the terminal end of the spring there is little or no danger of the breaking of the jaw, which has been the trouble of older devices employing a rigid inner beading-jaw.

In order that the jaws H and E may be maintained in a parallel position, I prefer to employ a supplemental plate H', mounted upon the terminal jaw H and projecting a distance above the bend of the neck of said spring-jaw. The plate H' is so disposed upon the looped end of the spring-standard that it maintains a parallel position with the jaw E, so that the

compression upon the work passed between the jaws is uniform. This is an important feature of my invention.

5 I have found by experience that the construction herein shown and described is very durable and at the same time the quality of the work is improved and that the device is readily adapted to all classes of work.

10 The treadle S is employed to control the protuberance of the turning-iron, as shown and described in my said former patent, No. 606,301.

Having described my invention, I claim—

15 1. In a beading-machine, a frame, a vibratory jaw and an anvil-jaw, means for actuating the vibratory jaw, a spring-standard attached to said frame having a looped free end forming an elastic support for the anvil-jaw, substantially as specified.

20 2. In a beading-machine, a vibratory jaw and an anvil-jaw, means for actuating the vibratory jaw, a spring-standard attached to the machine-frame having a looped free end supporting the anvil-jaw, and an adjusting
25 device in the machine-frame for the spring-standard, substantially as specified.

3. In a beading-machine, a vibratory jaw

and an anvil-jaw, means for actuating the vibratory jaw, a spring-standard attached to the machine-frame having a looped free end 30 supporting the anvil-jaw, an adjusting device in the frame of the machine engaging the shank of the spring-standard at a point substantially opposite the position of the anvil-jaw on the free looped end of the standard, 35 substantially as specified.

4. In a beading-machine, the combination of a spring-jaw standard secured at one end to the frame of the machine, and having its free end of loop form, a jaw-plate attached 40 to the free end of said loop, an adjusting device in the frame engaging the shank of the spring-standard, a vibratory jaw journaled upon a center and mounted upon an adjusting-plate in rear of said center, and means 45 for adjusting the said vibratory jaw upon its supporting-plate, substantially as specified.

In testimony whereof I have hereunto set my hand.

SIMON ROSS.

Witnesses:

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