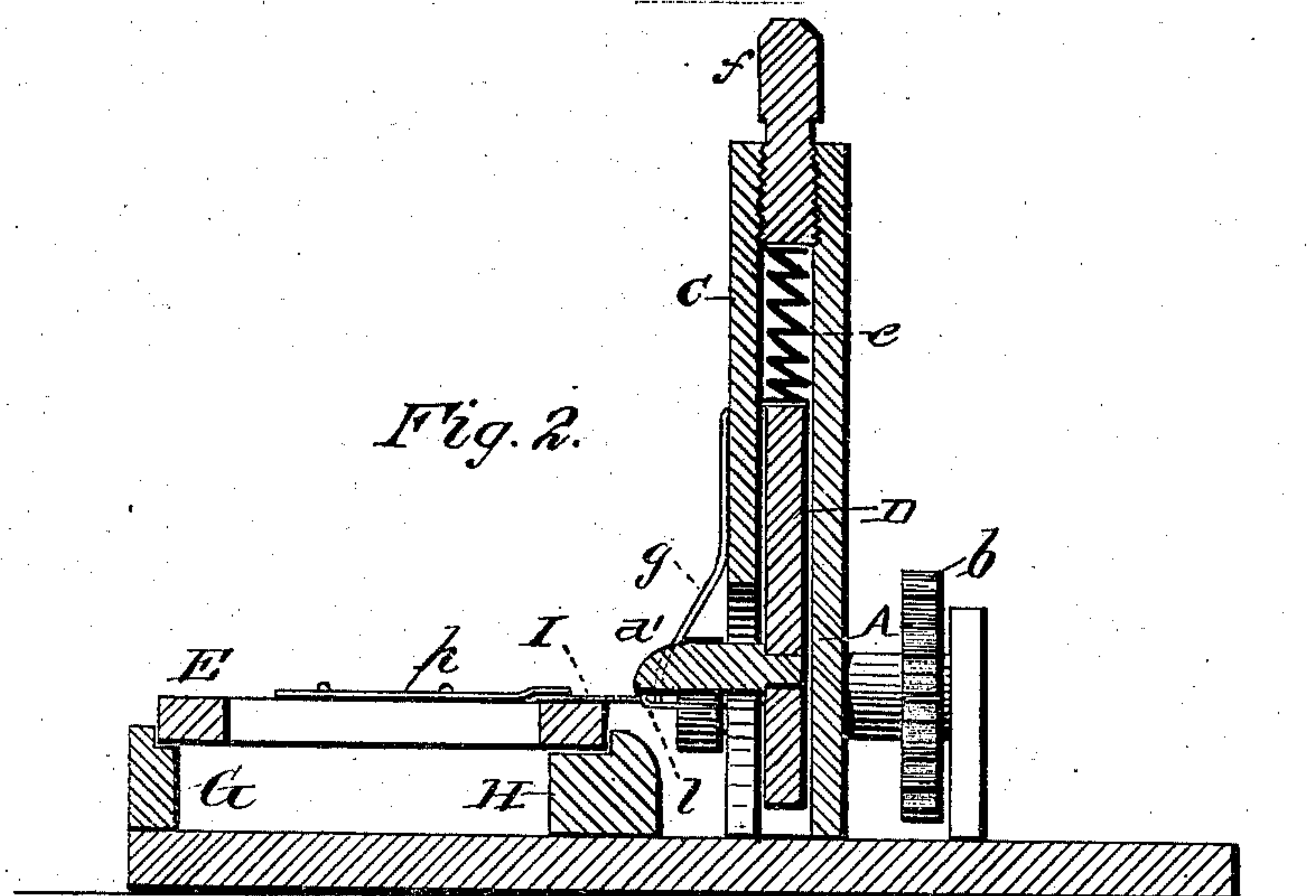
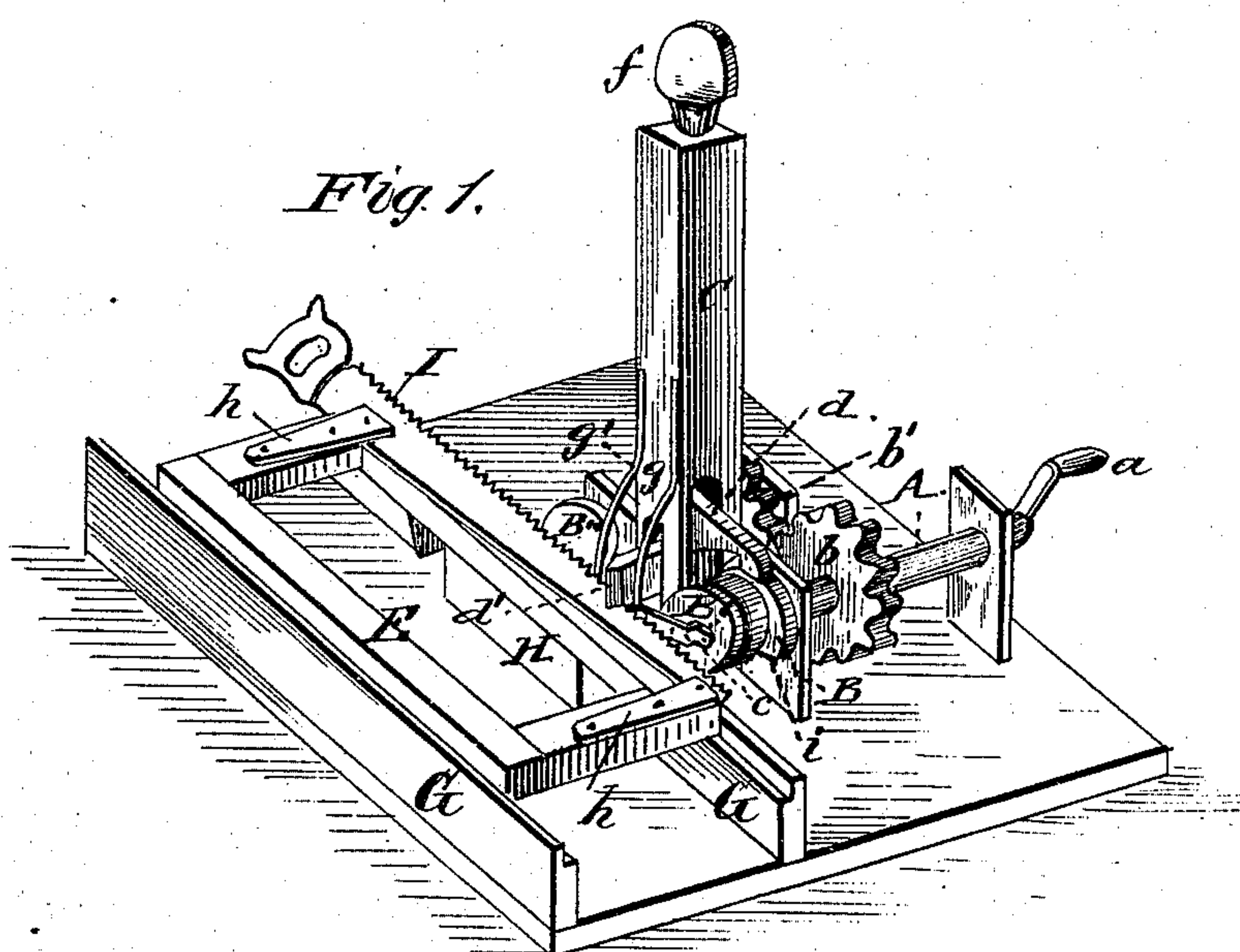


(Model.)

J. W. WILT.
Machine for Setting Saw Teeth.

No. 241,467.

Patented May 10, 1881.



Witnesses
Fred. G. Dietrich
A. H. Krause.

Inventor:
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UNITED STATES PATENT OFFICE.

JOSEPH W. WILT, OF WARRIOR'S MARK, ASSIGNOR OF ONE-HALF TO
SAMUEL HOOVER, OF HANNAH FURNACE, PENNSYLVANIA.

MACHINE FOR SETTING SAW-TEETH.

SPECIFICATION forming part of Letters Patent No. 241,467, dated May 10, 1881.

Application filed November 27, 1880. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH W. WILT, of Warrior's Mark, in the county of Huntingdon and State of Pennsylvania, have invented certain new and useful Improvements in Saw-Setting Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view, and Fig. 2 is a vertical transverse section laid through the post or upright C.

Similar letters of reference indicate corresponding parts in both the figures.

My invention has relation to machines for setting saws; and it consists in the detailed construction and combination of parts of a machine of that class, as hereinafter more fully set forth, and particularly pointed out in the claim.

In the annexed drawings, E is a movable carriage, which slides upon the bed or support G, and is provided with clamps *h h*, or equivalent fastening devices, for holding the saw (denoted by the letter I) during the operation of setting.

C is a hollow post or upright, in the upper end of which is a screw, *f*, which bears against a spring, *e*, inserted between the lower end of said screw and the upper end of a plunger, D. Into the lower end of the plunger D is inserted a projecting arm, *d*, and a hammer or striker, *d'*, which project out through longitudinal slots in the lower end of post C, at right angles to one another.

A is a shaft journaled in suitably-arranged bearings, and provided with a crank, *a*, for turning it. Shaft A has a gear-wheel, *b*, an eccentric cam, B, and a circular disk, B'. The wheel *b* meshes with another gear-wheel, *b'*, the shaft of which (not shown in the drawings) is parallel to A and is provided with a disk, B'', at its inner end, in a line with and corresponding to the disk B' at the inner end of shaft A. The eccentric cam B is cut off to form a shoulder, *i*, at the point of its greatest swell or rise, and it follows that when this point is reached by the projecting arm *d*, the arm, impelled by its plunger D and spring *e*, will slip down, and with it the hammer or striker *d'*, to be again gradually raised by the next revolution of shaft A.

The force or impetus of the downward stroke of the plunger, with its appurtenances, may be regulated by adjusting the tension of spring *e* by means of the screw *f*. At each down-stroke of the striker *d'* one tooth of the saw I is set, an anvil, H, being placed beneath the striker and saw-blade to take up the blow.

The saw is fed forward intermittently under the striker by the following mechanism: Upon a wrist-pin, secured in the face of the disk B', is pivoted one end of an arm, *c*, the free end of which is bent to form a catch adapted to engage with the saw-teeth, against which it is forced by a spring, *g*, the upper end of which is secured in post C. This arm or catch-pawl *c* is prevented from dropping at its free end by a keeper, *l*, which serves to hold it in an approximately horizontal position, opposite to the edge of the saw. As shaft A is rotated arm *c*, slipping with its bent end over one of the teeth, is forced by spring *g* into the notch or throat back of the tooth, and on its forward stroke pushes the saw and carriage E with it for the space of one tooth, thus bringing the saw under the striker *d'*, in position for setting the next tooth. If desired, in handling large saws, this feeding mechanism may be duplicated by arranging another feed-arm upon disk B'', and forcing it against the saw by a spring, *g'*, arranged and operating in like manner as *g*.

It is obvious that where two feed-arms are used one of them is arranged to push and the other to pull the saw and carriage, both arms operating simultaneously.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a machine for setting saws, the slotted tubular post C, provided with the set-screw *f* and spring *e*, plunger D, having the striker *d'* and arm *d* projecting through the slotted post at right angles to one another, shaft A, having eccentric cam B and disk B', feed-pawl *c*, and spring *g*, all constructed and combined to operate in conjunction with the sliding carriage E and anvil H, as specified, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH W. WILT.

Witnesses:

G. G. HUTCHINSON,
Z. LOWER.