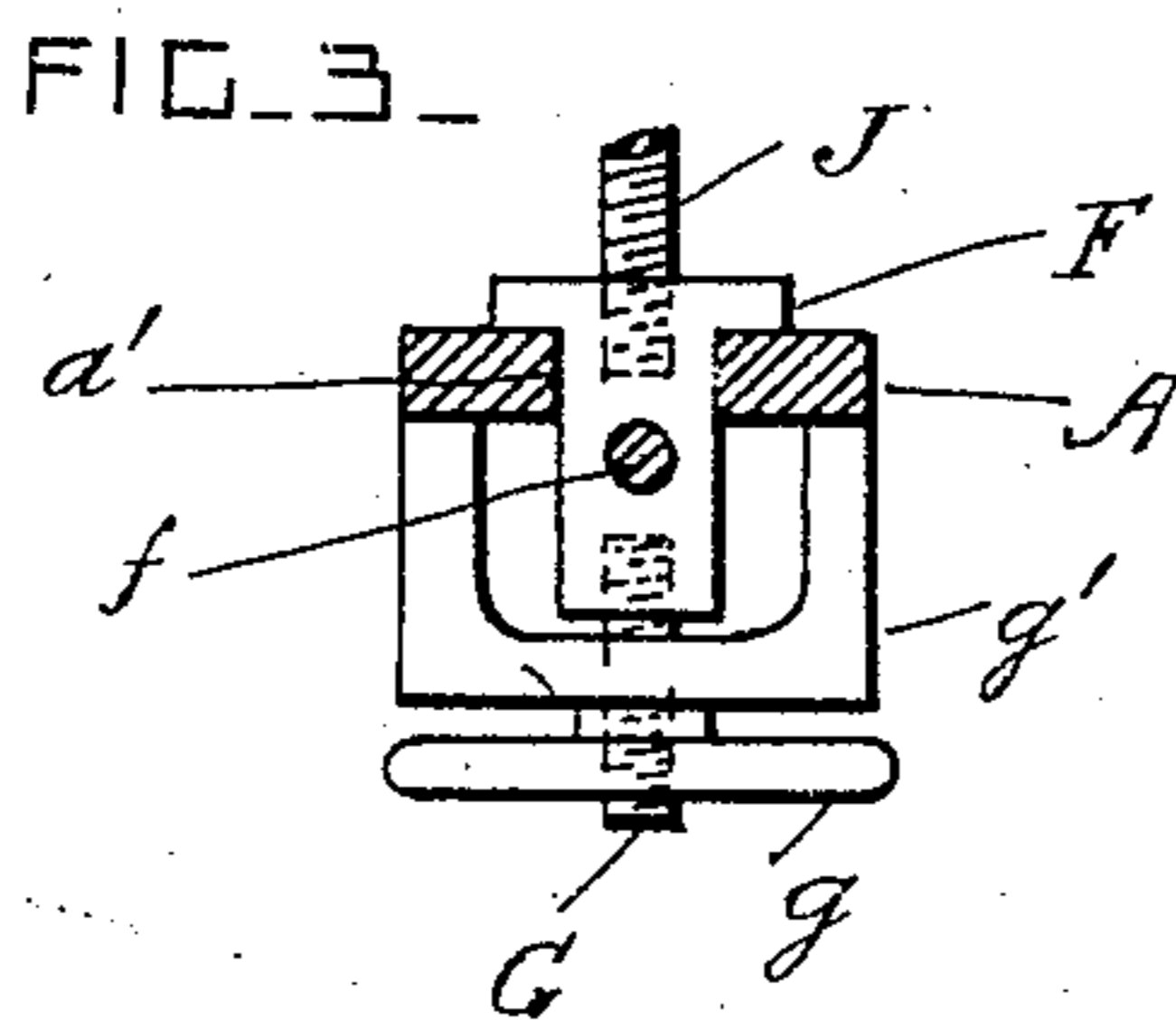
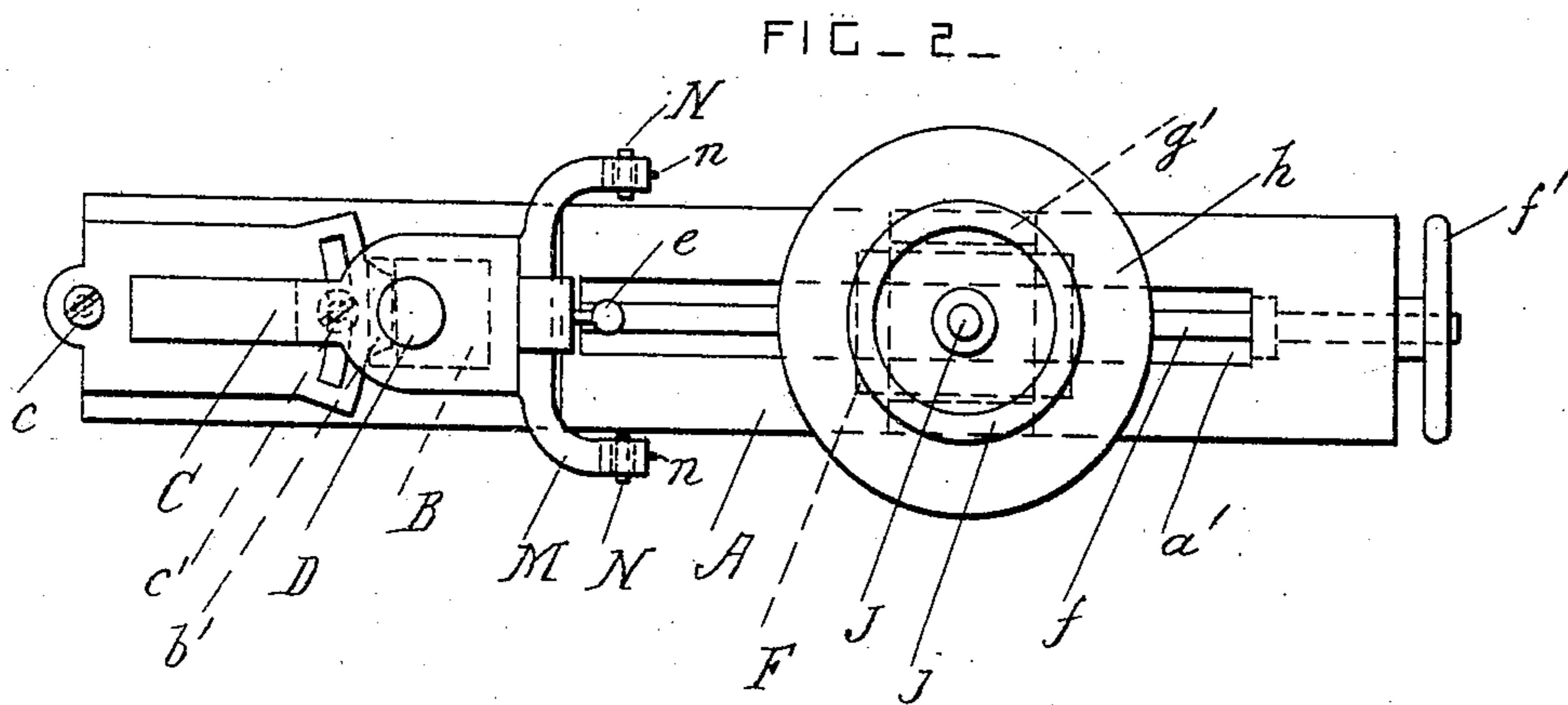
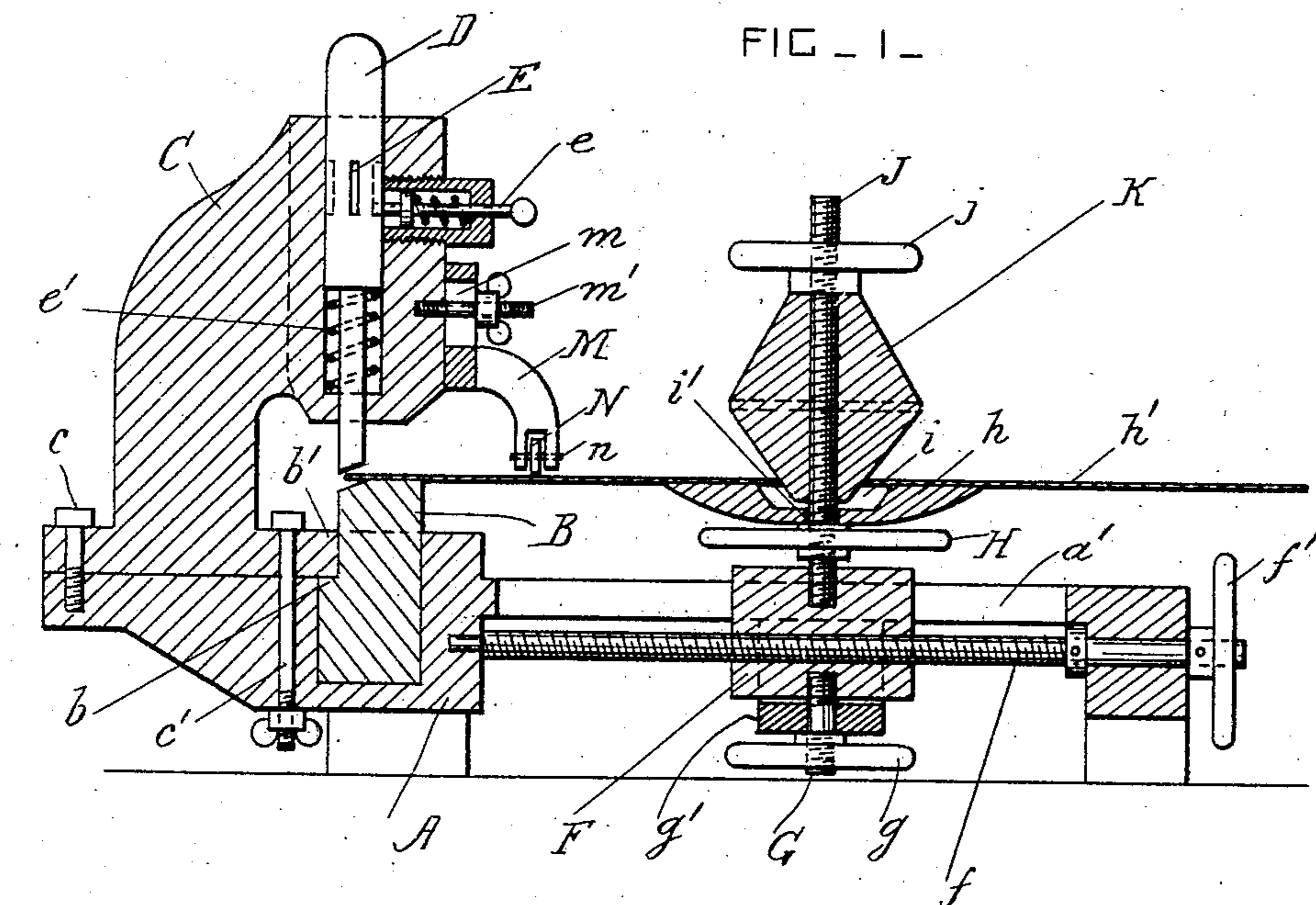


No. 775,035.

PATENTED NOV. 15, 1904.

T. M. HAKES.
SAW SETTING MACHINE.
APPLICATION FILED FEB. 25, 1904.

NO MODEL.



WITNESSES:

Walter Allen

L.B. Middleton

INVENTOR
Theodore M. Hakes.

BY
Herbert W. Jenner.
Attorney

UNITED STATES PATENT OFFICE.

THEODORE M. HAKES, OF BOSTON, MASSACHUSETTS.

SAW-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 775,035, dated November 15, 1904.

Application filed February 25, 1904. Serial No. 195,245. (No model.)

To all whom it may concern:

Be it known that I, THEODORE M. HAKES, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Saw-Setting Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to saw-setting machines; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a longitudinal section through the machine. Fig. 2 is a plan view of the machine. Fig. 3 is a cross-section through the base.

A is the base, which is provided with a longitudinal slot a' .

B is the anvil, which is secured in a recess at one end of the base and provided with a shoulder b .

C is a bracket which forms a guide for the plunger D, which is arranged to slide vertically in its guide over the said anvil. The bracket C is pivoted to the base by a screw or pin c , and c' is a bolt, which engages with a slot in the said bracket and clamps it to the base in different positions. The slot permits the bracket to be set in different positions, and a lug b' on the said bracket is arranged to come over the shoulder b of the anvil, so that the said anvil is secured in position by the said bracket. The lower end of the plunger and the top of the anvil are suitably beveled, so as to give the saw-teeth the required set. The plunger is provided with a plurality of slots E, and e is a spring-pressed catch carried by the said bracket and engaging with whichever of the said slots is placed opposite to it. The catch is retractable, and the plunger may be revolved to different positions in its guide. The catch permits the plunger to slide vertically and prevents it from revolving after being set to one preferred position. A spring e' is arranged in the guide under the plunger for holding it in its raised position.

F is a block which is supported by the base and which is slidable in the slot a' . A screw f is journaled in the base and engages with the said block. A small hand-wheel f' is secured on the said screw, and the block is moved back and forth when the screw is revolved by means of the said hand-wheel.

G is a screw-threaded stud which projects from the block F under the base, and g is a small hand-wheel, which is screwed on the said stud. A forked block g' is mounted on the said stud above the hand-wheel and its side portions bear against the under side of the base, so that when the hand-wheel is screwed up the block g' clamps the block F to the base.

J is a screw-threaded standard which projects from the upper side of the block F, and H is a hand-wheel which is screwed on the lower part of the said standard. A support h for the saw h' is arranged over the hand-wheel H and is provided with a central recess i in its upper side and a hole i' , which slides over the standard. The height of the support h is adjusted by turning the hand-wheel H.

K is the saw-centering cone, which is screwed on the upper part of the standard J. This cone projects into the saw-center hole and into the recess beneath the saw. The saw is free to be revolved upon the cone while resting on the said support. A clamping-wheel j is provided at the top of the standard for securing the cone in position after it has been adjusted to the saw.

M is a forked bracket provided with a slot m and secured to the bracket C by a screw or bolt m' . The slot m permits the forked bracket to be adjusted vertically. N represents rollers journaled on pins n at the ends of the said forked bracket. These rollers bear on the saw in front of the anvil and hold it in contact with the said anvil.

The saw is turned around to bring its teeth under the plunger, and the saw-teeth are set by striking the head of the plunger with a hammer. The spring e' raises the plunger between the strokes of the hammer, and the saw is revolved step by step until the teeth have been set all around its periphery.

What I claim is—

1. In a saw-setting machine, the combination, with a base provided with a socket, and an anvil inserted in the said socket and provided with a projecting shoulder; of a guide-bracket pivoted to the said base and engaging with the said shoulder and provided with a curved slot, a clamping-bolt passing through the said slot and securing the said bracket and anvil with the bracket in various positions, and a tooth-setting plunger slidable in the said bracket over the anvil.

2. In a saw-setting machine, the combination, with a guide-bracket, and a tooth-setting plunger slidable therein; of a clamping-bolt projecting laterally from the said bracket, a bracket having a base-flange provided with a vertical slot which is adjustable on the said bolt and having also two diverging arms each having a forked end portion, and two rollers for bearing on the upper side of the saw jour-

naled in the forked end portions of the said arms.

3. In a saw-setting machine, the combination, with a base provided with a slot, and a slidable block for supporting the saw depending through the said slot; of a screw for sliding the said block journaled in the said base and engaging with the middle part of the said block, a clamping-stud projecting from the bottom of the said block, a forked clamping-block which engages with the said stud and which straddles the lower part of the said block and bears against the said base, and a clamping-wheel screwed on the said stud.

In testimony whereof I have affixed my signature in the presence of two witnesses.

THEODORE M. HAKES.

Witnesses:

ALICE J. MURRAY,
FREDERICK K. DAGGETT.