

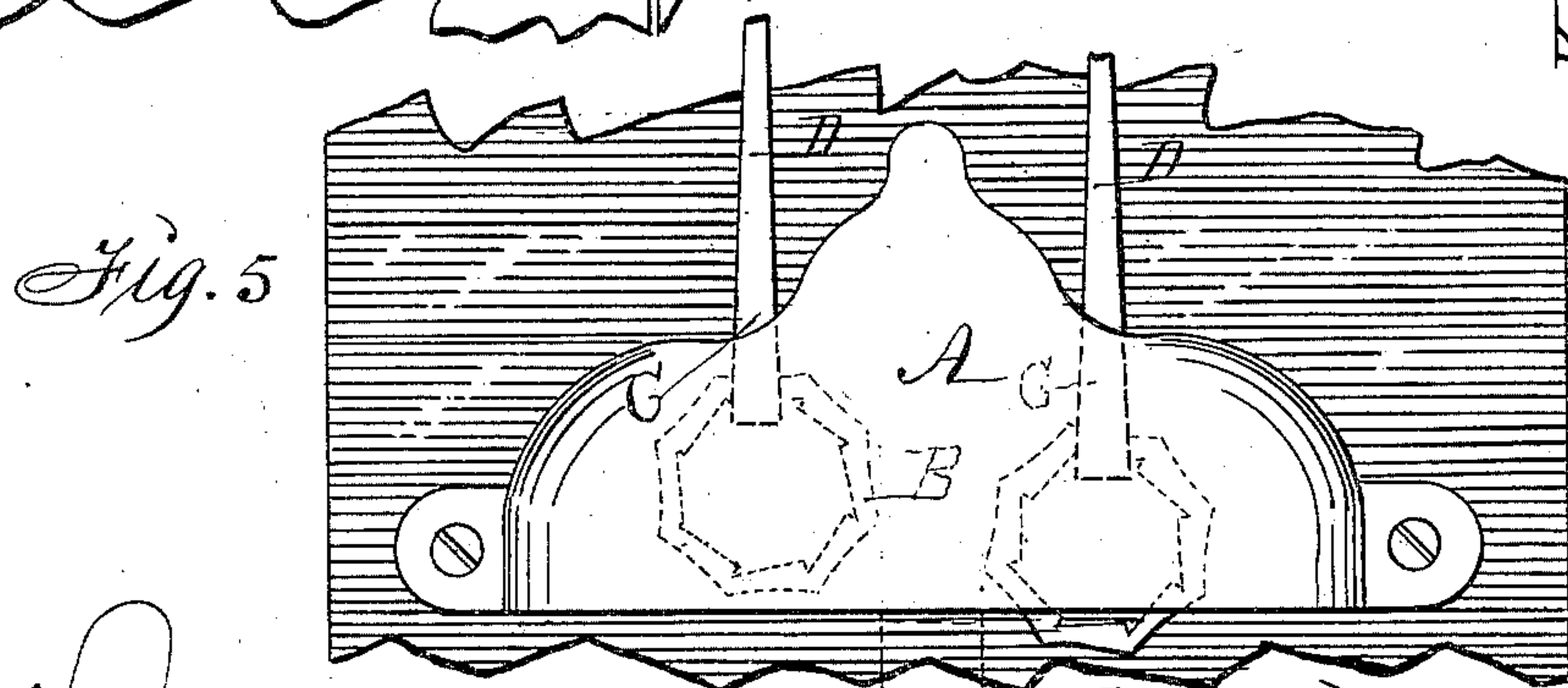
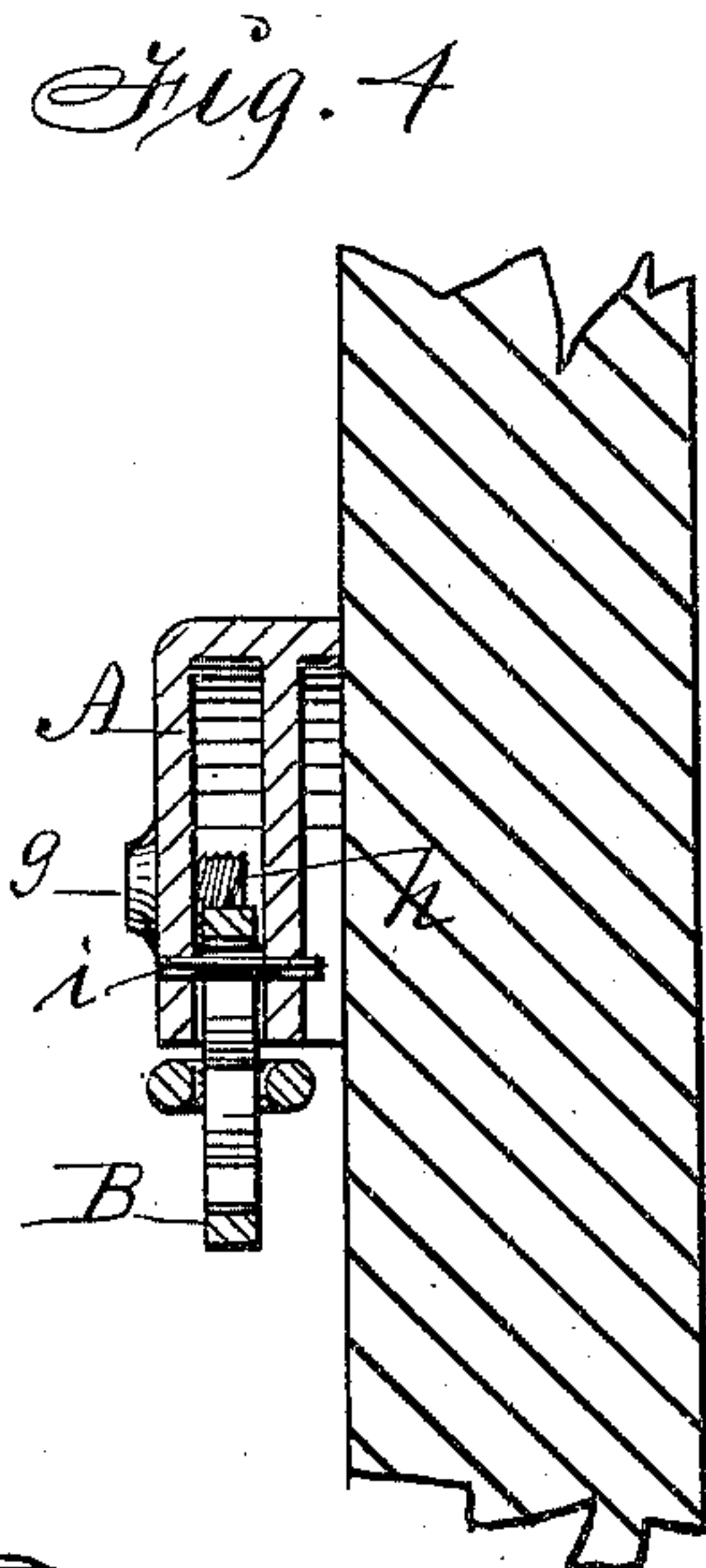
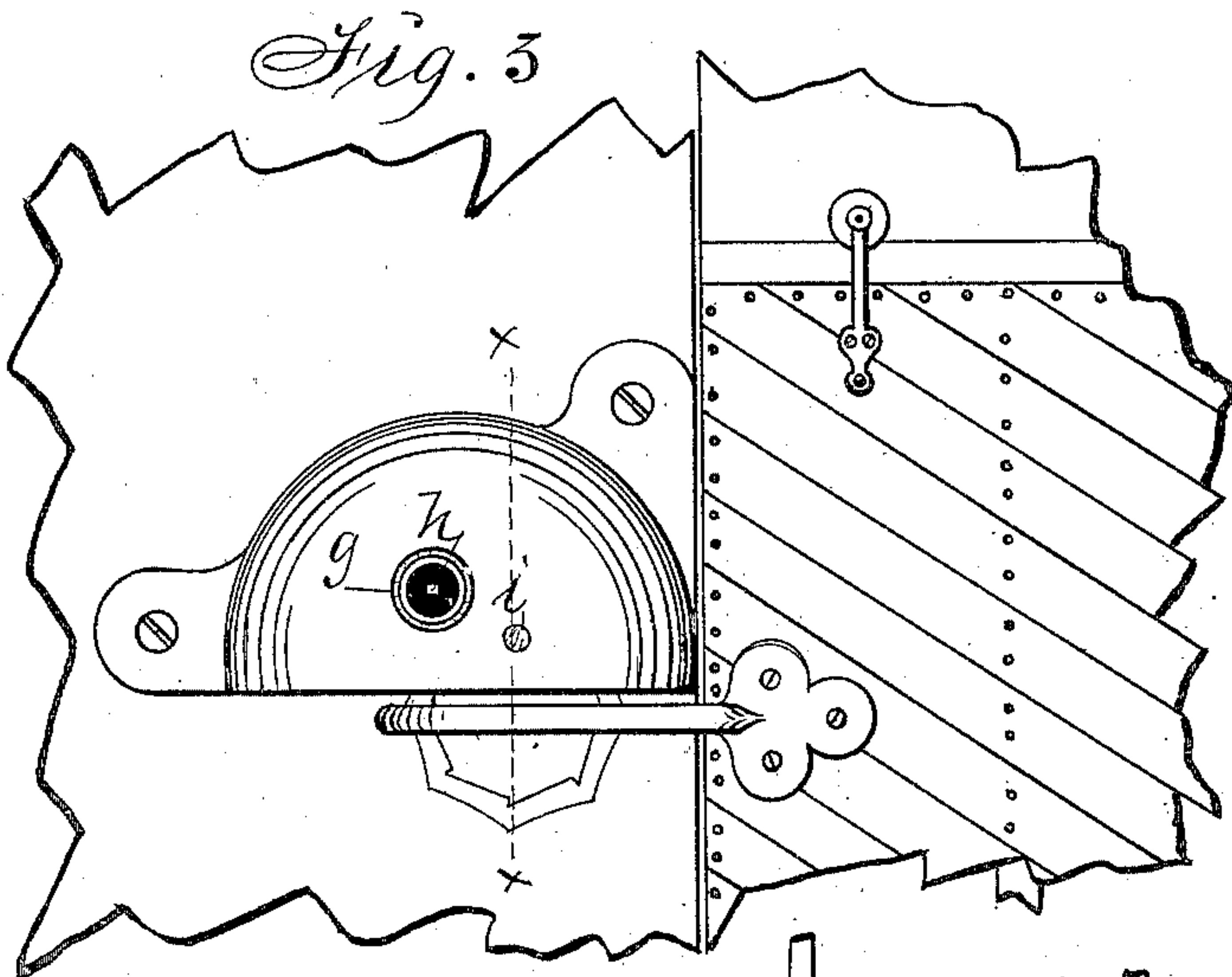
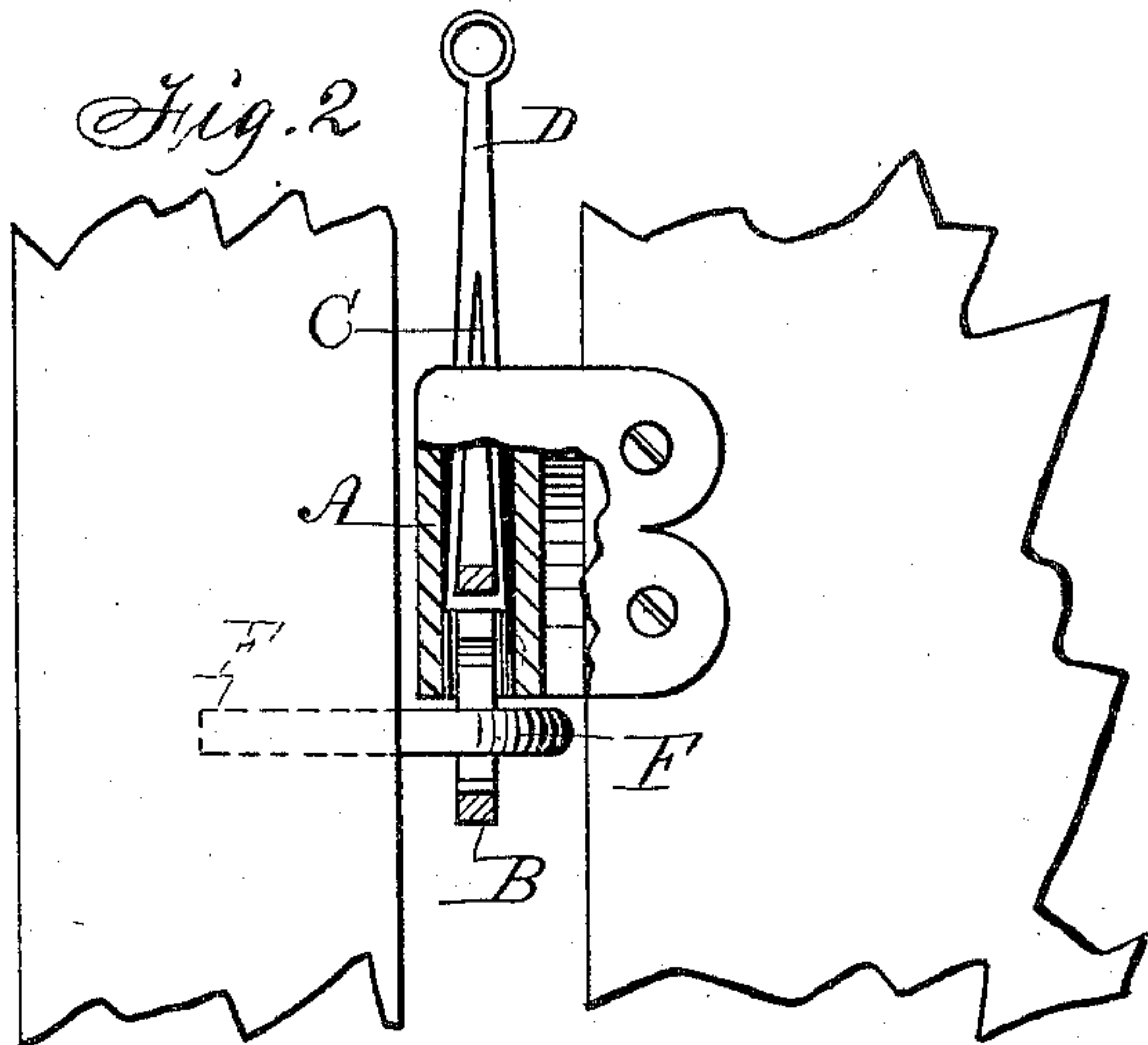
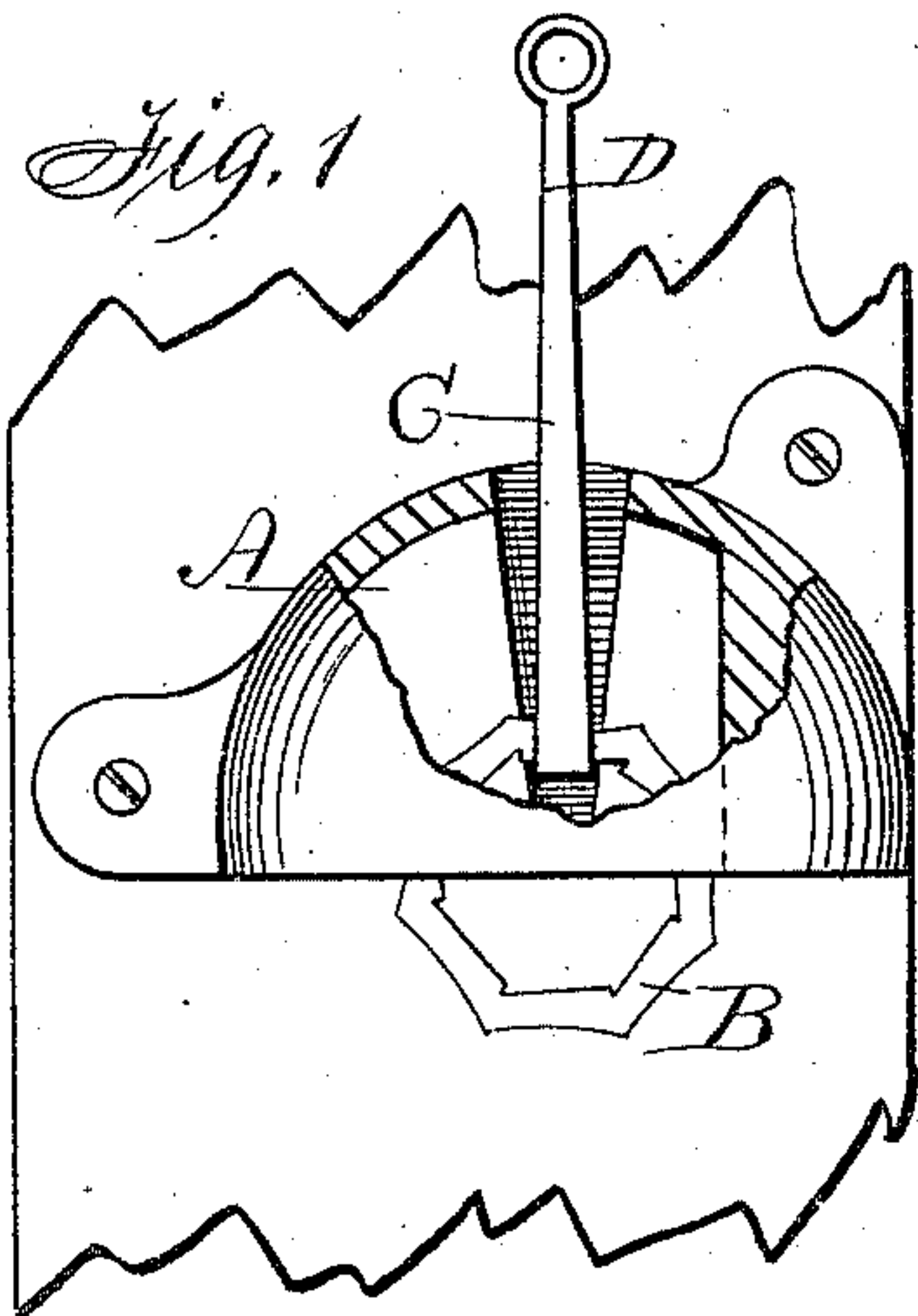
(No Model.)

A. SIME & W. M. MOORE.

GATE LATCH.

No. 398,351.

Patented Feb. 19, 1889.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALEXANDER SIME AND WILLIAM M. MOORE, OF EMMETSBURG, IOWA.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 398,351, dated February 19, 1889.

Application filed January 3, 1888. Serial No. 259,696. (No model.)

To all whom it may concern:

Be it known that we, ALEXANDER SIME and WILLIAM M. MOORE, citizens of the United States of America, and residents of Emmetsburg, in the county of Palo Alto and State of Iowa, have invented an Improved Automatic Gate-Latch, of which the following is a specification.

Our object is to furnish a gate-latching device that is adapted to be fixed to a hinged and swinging gate or door, to a rolling or sliding gate or door, or to a fixed gate-post or door-frame, in such a manner that the latching, as required to fasten a gate or door, will occur automatically whenever the gate or door is closed.

Our invention consists in the construction, application, and operation of a latching device, as hereinafter set forth, pointed out in our claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows our device fixed to the flat face of a section of a gate and part of the case that contains the operative parts broken away. Fig. 2 shows the device attached to a fixed gate-post, and represents a swinging gate latched thereby to the post, as required to keep the gate closed. Fig. 3 represents our device fixed to a post or door-frame and a sliding or roller gate or door latched and locked thereto. Fig. 4 is a view through the line $x x$ of Fig. 3. Fig. 5 represents our device in duplex form and fixed to the face of a fixed post, as required for a gate that swings in opposite directions from the fixed post.

A represents a flat metal case that has perforated ears or flanges adapting it to be fastened against the flat face of a gate or post by means of screws. It is hollow and open at its bottom and has an opening at its top to admit a yoke, and vertical grooves, preferably tapering, in its inside faces, that form a bearing for directing the up and down motions of a yoke extended through the top of the case. The size and configuration of the latch-case may vary as desired, to suit different kinds of doors or gates.

B is a solid metal ring, preferably provided with concaves on its periphery, suspended in the case A by means of a yoke, C, in such a manner that it will in its normal condition

hang out below the case, as shown, and as required to engage a fixed pin or link to fasten a gate or door.

D represents a handle extending upward from the top of the yoke in such a manner that the yoke and ring suspended thereby can be readily lifted to disengage the ring from a fixed pin or link, as required, to unlatch and open a gate or door.

In practical operation, when a swinging gate having our latching device attached is closed, the ring will strike a pin, F, fixed to the gate-post, and be thereby pressed up into the case A, and the moment it has passed over the pin it will by force of gravity drop behind the fixed pin, and thus automatically latch and lock the gate to the post having the fixed pin; and when the latching device is fixed to the post and the pin to the gate the same result is accomplished, and in addition to preventing the gate from lateral motion it will be prevented from vertical motion by the fixed case on the fixed post which overlaps the pin and prevents the gate from being raised by animals and opened and unhinged, as is frequently the case where no provision is made to prevent a gate from being lifted.

By fixing an open link to a post or frame or to a sliding gate or door, as indicated by Figs. 3 and 4, the link will perform the same function as the pin in elevating the ring in such a manner that the ring can drop through the link and latch and lock a sliding gate or door that is suspended upon rollers in a common way.

G represents a screw-threaded key-hole, and H a screw that can be readily moved in and out by means of a tubular key, as required to lock the ring B fast within the link. I is a pin upon which the ring is suspended.

We are aware a ring has been inclosed in a case and a lever connected therewith to extend horizontally in such a manner that the device could be used for a gate-latch and the ring lifted by pressing down upon the lever; but it is objectionable to extend levers horizontally to catch on the garments of persons, and our manner of constructing a case with vertical grooves inside and combining a yoke therewith for guiding and lifting a ring, and

also combining a locking device therewith, is novel and greatly advantageous.

We claim as our invention—

1. A hollow metal case adapted to be fixed
5 to a flat surface, having an open bottom, an opening in its top, and vertical grooves in the inside faces coinciding with the opening in the top, and a ring and a yoke combined there-
with, to operate in the manner set forth, for
10 the purposes stated.

2. A hollow metal case, A, having perforated ears or flanges, an open bottom, an opening in its top, a ring, B, a yoke, C, and a fixed

stop, F, arranged and combined with a gate or door in the manner set forth, for the pur- 15
poses stated.

3. In a gate-latch, the combination of an adjustable screw and a ring with a case having a screw-threaded key-hole, to operate in the manner set forth, for the purposes stated. 20

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