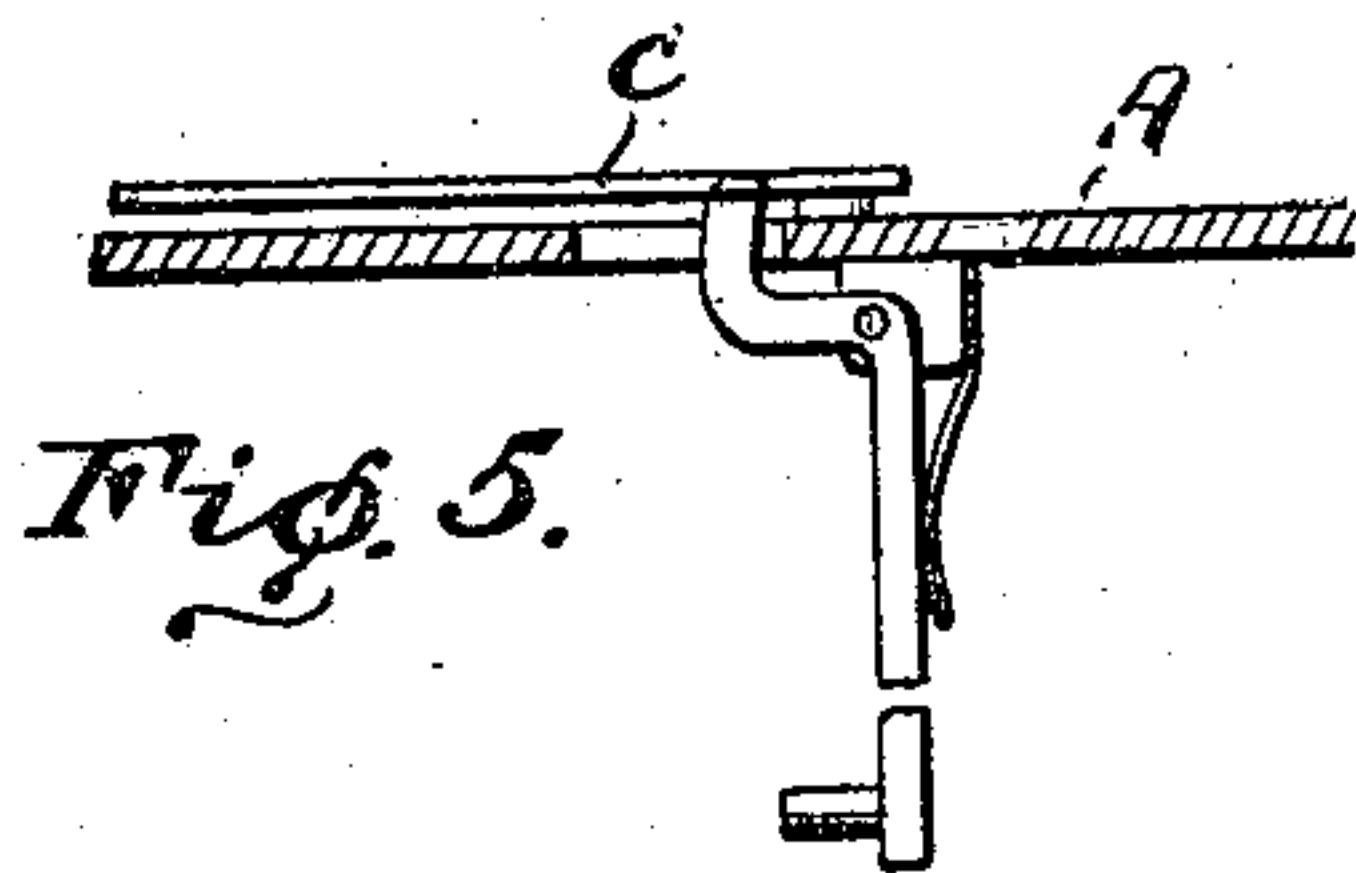
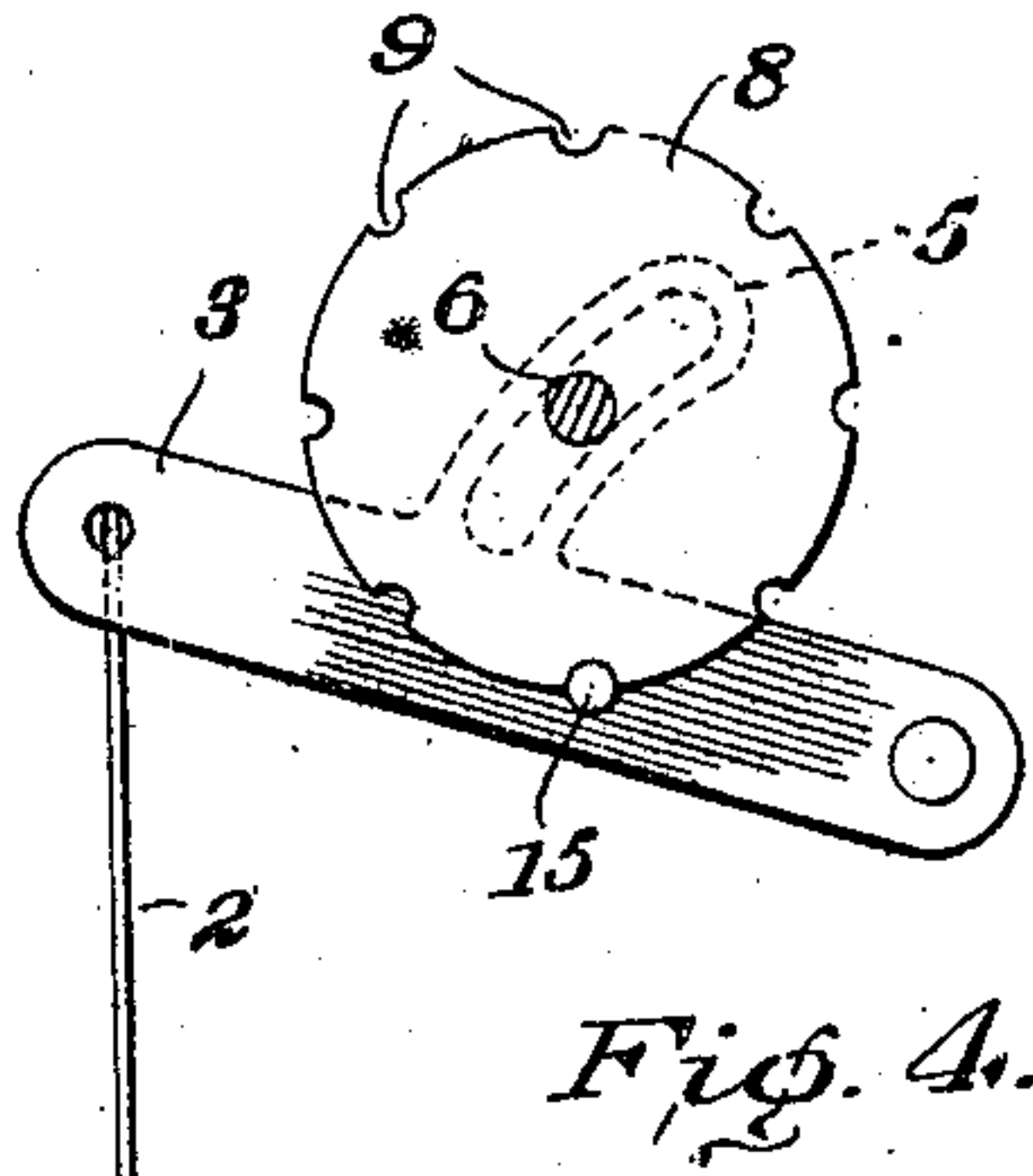
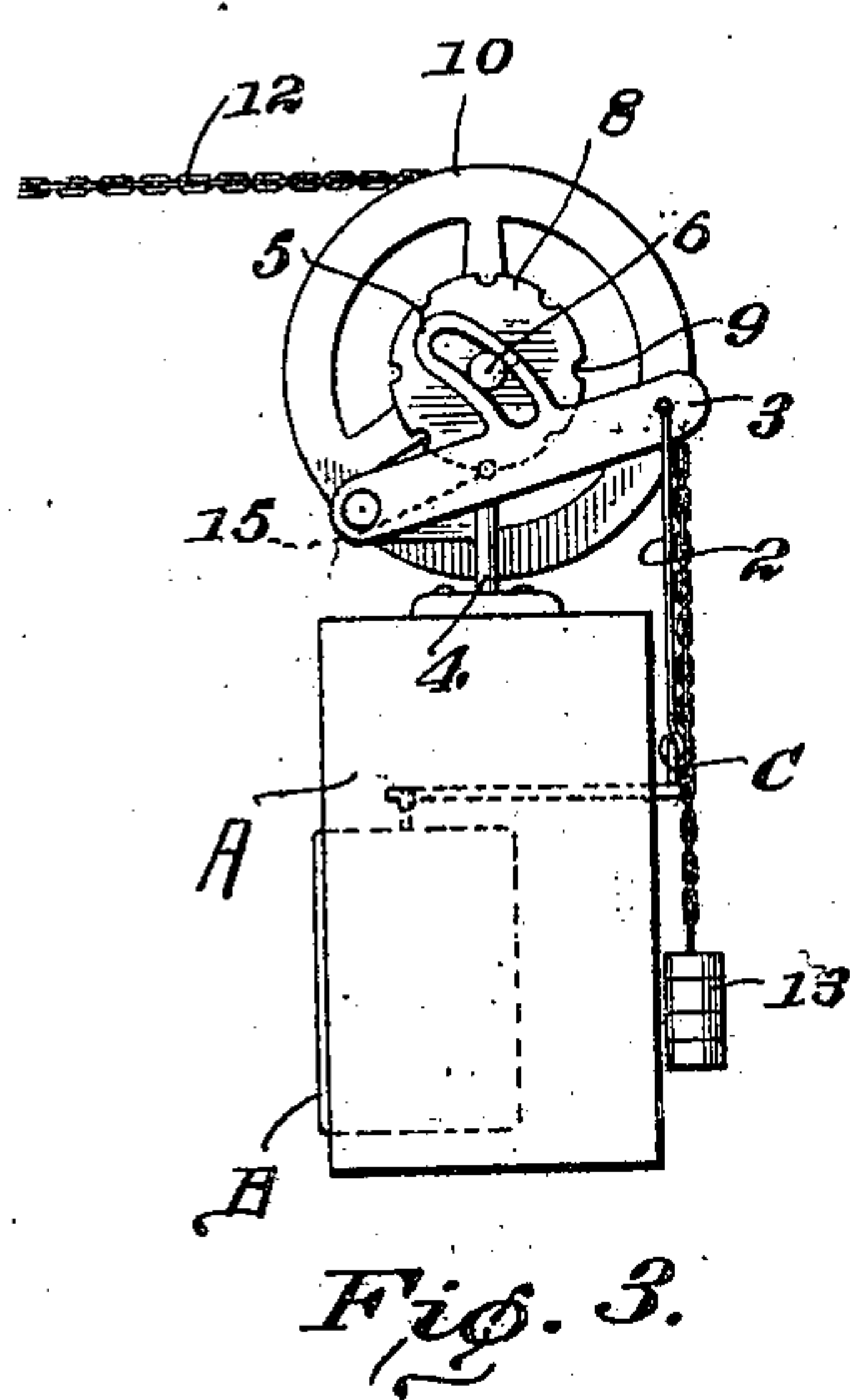
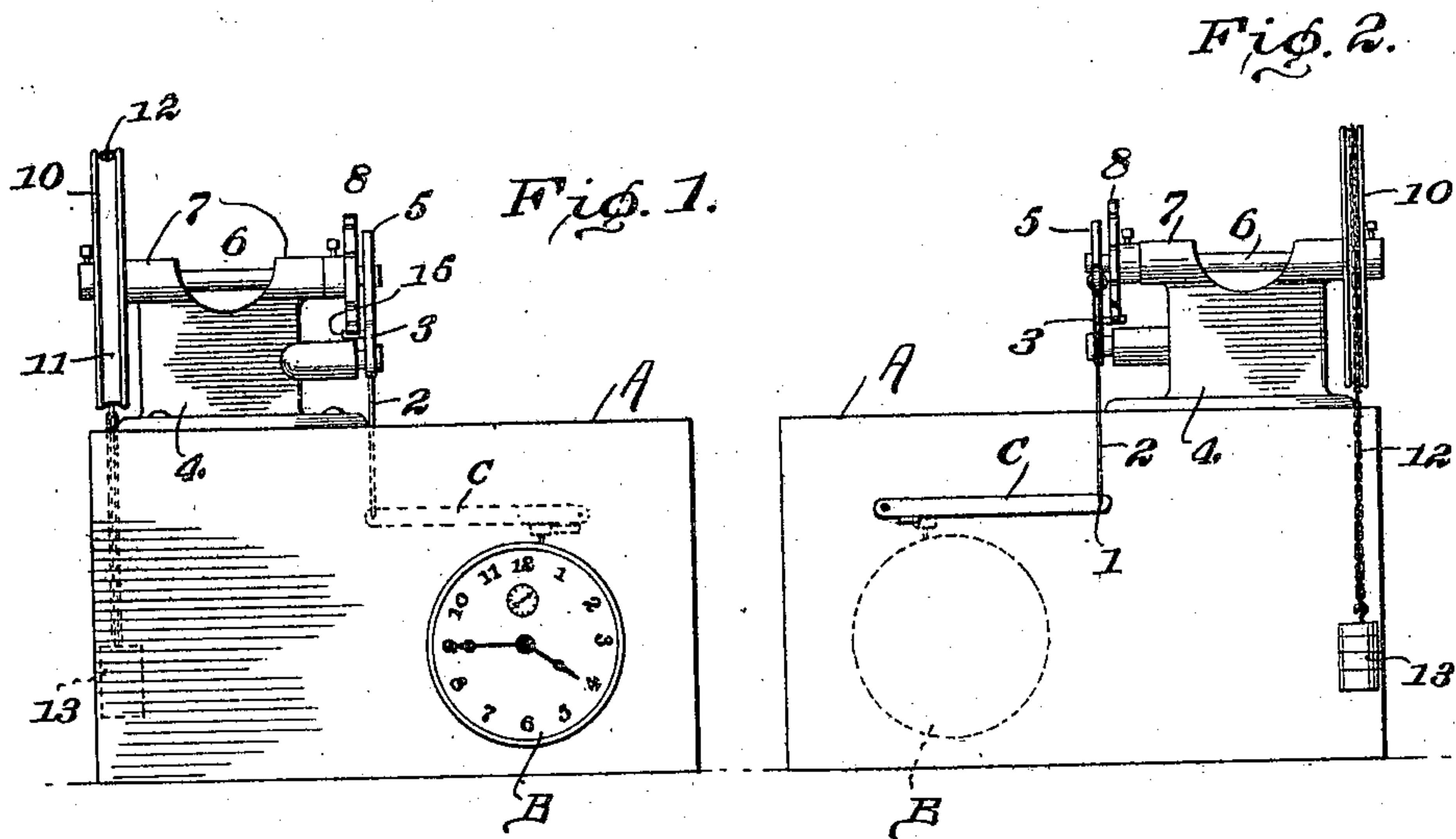


H. L. WEIGEL.
ALARM REGULATOR.
APPLICATION FILED JUNE 20, 1910.

983,661.

Patented Feb. 7, 1911.



Witnesses
J. A. Bishop
C. H. Griesbauer

Inventor
H. L. Weigel,
by A. B. Wilson & Co.
Attorneys

UNITED STATES PATENT OFFICE.

HARRY L. WEIGEL, OF HAZLETON, PENNSYLVANIA.

ALARM-REGULATOR.

983,661.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed June 20, 1910. Serial No. 567,899.

To all whom it may concern:

Be it known that I, HARRY L. WEIGEL, a citizen of the United States, residing at Hazleton, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Alarm-Regulators; and I do 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 regulating means for dampers or like mechanisms.

One object of my invention is to provide a simple, inexpensive, and efficient means for automatically releasing or setting a stove damper or the like, or for automatically operating any suitable mechanism at any predetermined time.

A further object of my invention is to provide a simple and compact operating or regulating means that may be automatically set in motion at any predetermined time by an alarm clock of the usual or ordinary type.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings:—Figure 1 is a front elevation of my improved operating and regulating means; Fig. 2 is a rear elevation thereof; Fig. 3 is a side elevation of the same; and Figs. 4 and 5 are detail views of parts to be hereinafter described.

The same reference characters designate corresponding parts throughout the several views.

Referring particularly to the drawings, A designates a casing within which is positioned a clock B having an alarm lever C extending therefrom and adapted to be actuated at any predetermined time by the usual or any desired operating mechanism arranged within or adjacent to the clock B. The alarm lever C is herein shown as extending through a suitable opening in the rear of the casing, and it is provided adjacent one end with an aperture 1 for the reception of the end of a chain or link 2, the opposite end of which is suitably secured to one end of the trip-lever 3, which is pivotally mounted at its opposite end to a frame 4 secured upon the top of the casing A. The trip-lever 2 is constructed with an offset

slotted arm 5 adapted to fit over the end of a shaft 6 rotatably mounted in suitable bearings 7, at the upper extremity of the frame 4. Secured upon the shaft 6 adjacent one end, is a trip-wheel 8 having a series of radial notches or recesses 9 in its periphery, while secured upon the opposite end of said shaft 6 is an operating-pulley 10 which is preferably provided with a peripheral groove 11 for the reception of the operating-chains or like flexible elements 12. A suitable weight, as 13, is adjustably secured at one end of the operating-chain 12, while the opposite end of this chain or like flexible element is designed to be connected with a stove damper or any suitable movable part of a similar operating mechanism. Intermediate its ends the trip-lever 3 is provided with a laterally extending pin 15 which is arranged to enter one of the peripheral notches or recesses 9 in the trip wheel 8 when the trip lever is in its normal position.

In practice the operating chain 12 is suitably connected at one end to the stove damper or similar operating means and said chain is passed around the operating-pulley 10 and adjusted so that the weight 13 at its opposite end will be in an elevated position. The laterally projecting pin 15 on the trip lever 3 is then inserted into one of the peripheral notches 9 in the trip wheel 8 and the trip-lever and alarm lever connected to each other by the chain 2. At the predetermined time for which the alarm clock has been set in the usual or any preferred manner, the alarm lever will be vibrated or rocked by the alarm mechanism of the clock B, and the motion of said alarm lever will release the pin 15 upon the trip-lever 3 from the peripheral notch 9 of the trip wheel 8, the weight 13 thereupon dropping from its elevated position as soon as the operating-wheel 10 is free to move. The stove damper or like operating means attached to the chain 12 will be regulated or set in motion by this movement of the operating chain. The slotted arm 5 of the trip-lever will limit the vibrating movement of the trip-lever 3 when it is set in motion by the alarm lever C, to prevent the trip lever from contacting with the top of the casing A.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the

invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may
5 be resorted to without departing from the principle or sacrificing any of the advantages of the invention claimed.

Having described my invention, I claim:—

10 1. The combination of a shaft, a pulley thereon, means connected with the pulley for rotating the shaft, a trip wheel on the shaft, a trip lever arranged adjacent said wheel and engaging the same to hold the
15 shaft normally against rotation, an arm extending from the trip lever and engaging the shaft to limit the movement of the lever, and clock controlled means for releasing the lever.

20 2. The combination of a casing, a frame

thereon, a shaft journaled in said frame, a pulley on said shaft, means for rotating said pulley, an alarm lever within the casing, a trip lever pivoted on the frame, a flexible connection between said trip lever 25 and the alarm lever, clock controlled means for releasing the alarm lever, a trip wheel on the shaft having notches in its edge, a pin on the trip lever normally engaging one of said notches, and an arm projecting 30 from the trip lever and having a slot through which the shaft passes.

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

HARRY L. WEIGEL.

Witnesses:

JOHN KEMP,

R. W. MONTGOMERY.