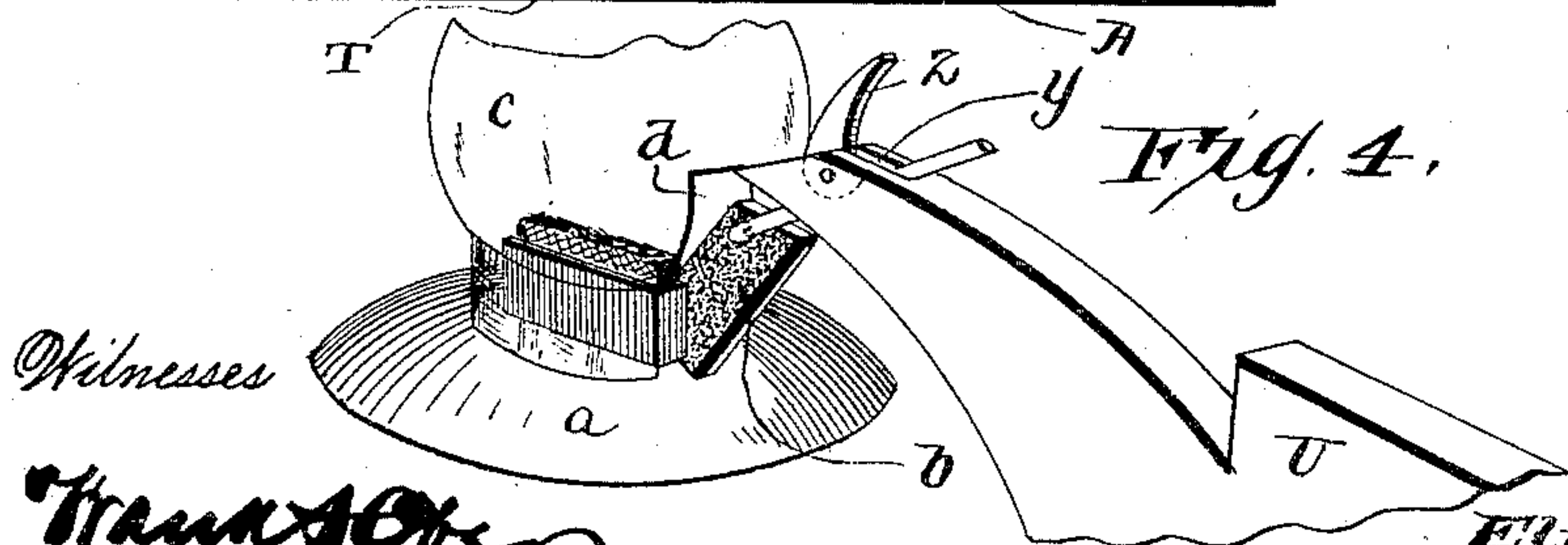
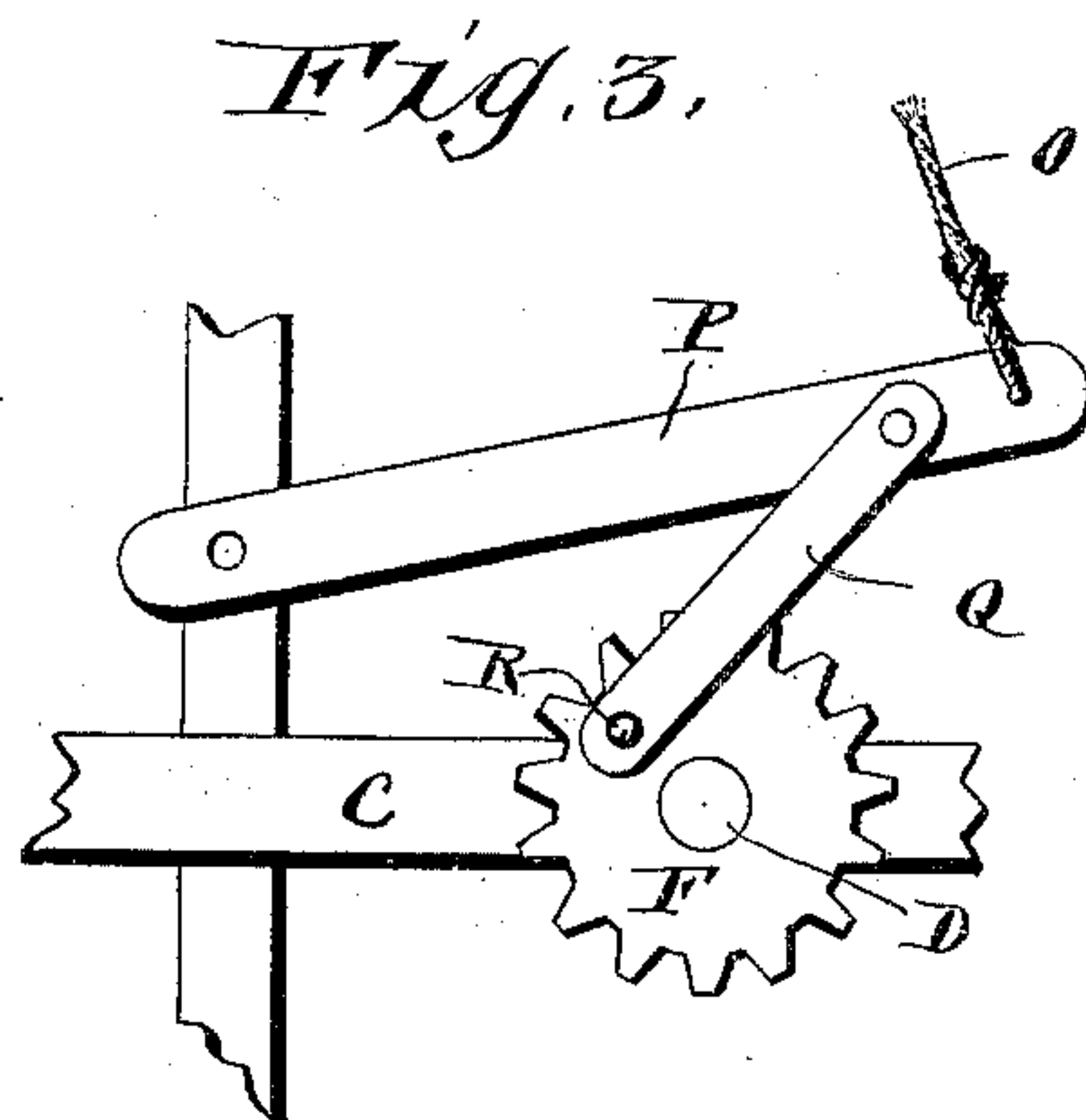
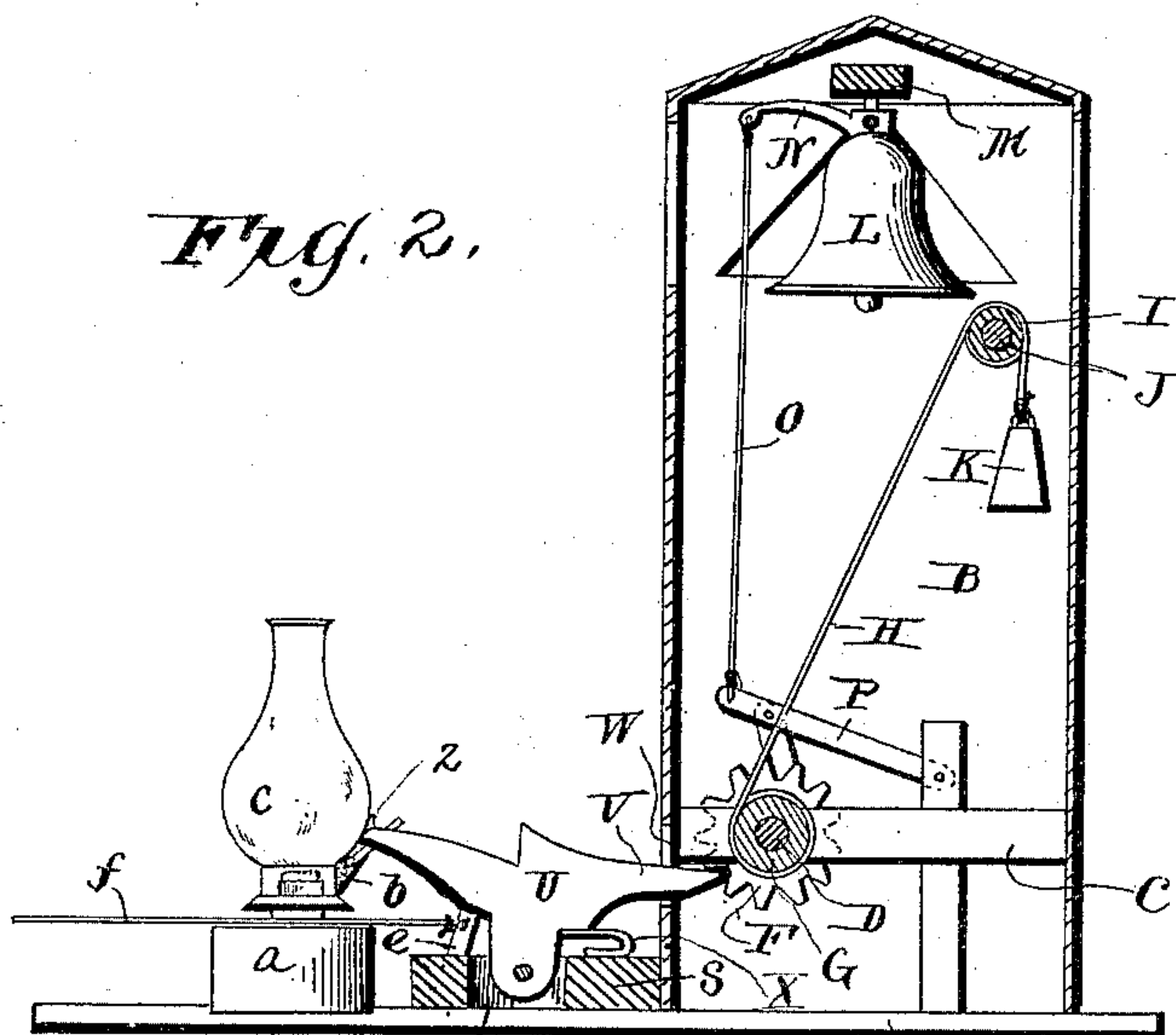
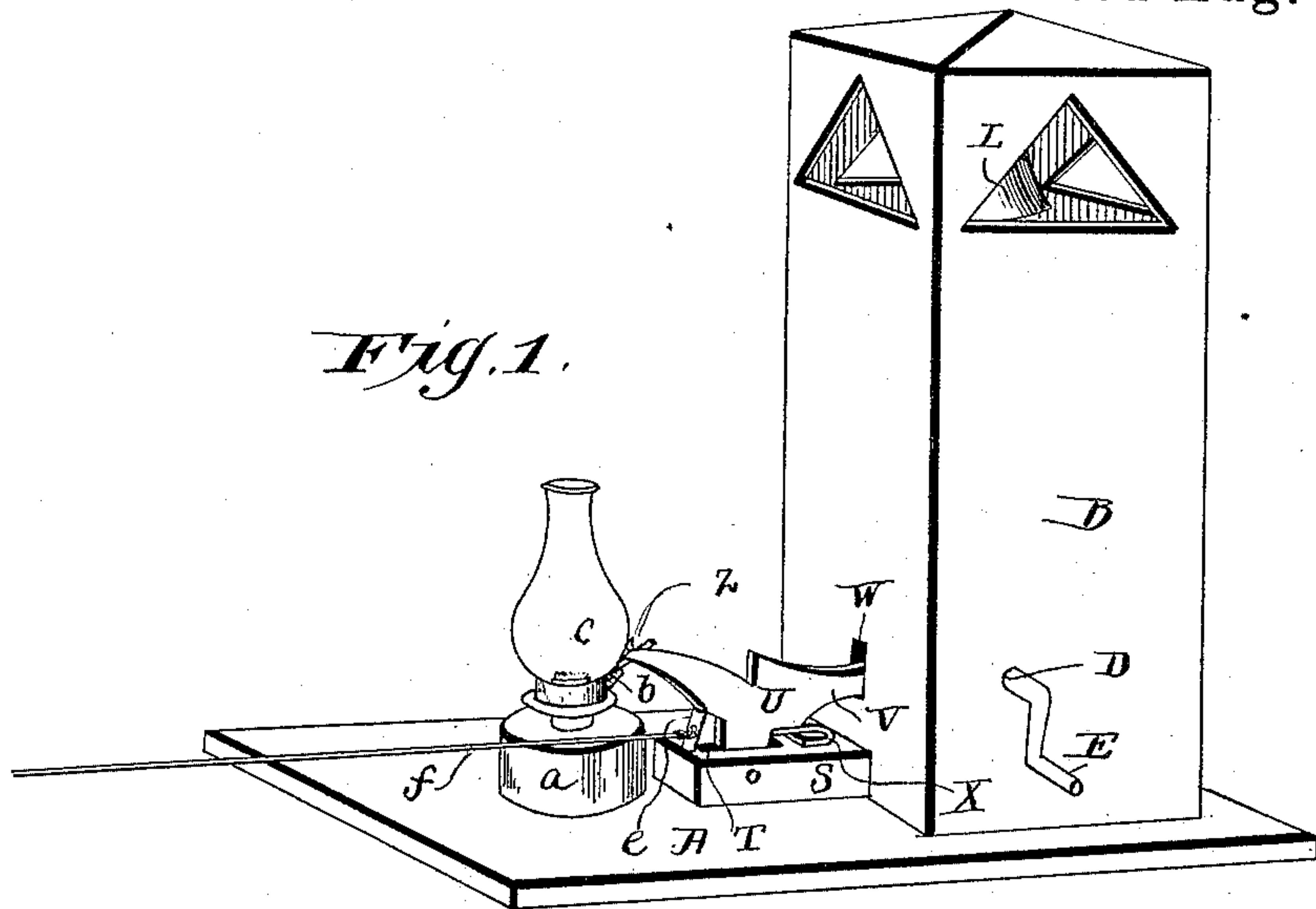


(No Model.)

E. CARTER.
BURGLAR ALARM.

No. 409,919.

Patented Aug. 27, 1889.



Witnesses

Wm. Bagger

Wm. Bagger

Inventor

Elmira Carter

By her Attorneys

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UNITED STATES PATENT OFFICE.

ELMIRA CARTER, OF CLIO, TEXAS.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 409,919, dated August 27, 1889.

Application filed March 27, 1889. Serial No. 304,970. (No model.)

To all whom it may concern:

Be it known that I, ELMIRA CARTER, a citizen of the United States, residing at Clio, in the county of Brown and State of Texas, have
5 invented a new and useful Improvement in Burglar-Alarms, of which the following is a specification.

This invention relates to burglar-alarms; and it has for its object to provide a device
10 which when thrown into operation shall sound an alarm and at the same time automatically light the lamp.

The invention consists in the improved construction and arrangement of parts, which will
15 be hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view showing my invention in position for operation. Fig. 2 is a longitudinal vertical
20 section. Fig. 3 is a detail view of a part of the operating mechanism. Fig. 4 is a detail view of the lamp-lighting mechanism.

The same letters refer to the same parts in all the figures.

25 A designates the base of the device, and B is the frame or casing, which is provided near its lower end with a longitudinal brace C, which, together with one of the sides of the casing, affords bearings for the ends of a
30 shaft D, the outer end of which has an operating crank or handle E, and the inner end of which carries a ratchet-wheel F. The shaft D is provided with a drum G, to which is attached one end of a rope H, the other end of
35 which passes over a pulley I, mounted upon a shaft J, which is secured transversely in the sides of the casing. To the end of the rope H is attached a weight K, which may be raised by rotating the shaft B, so as to wind
40 the rope or cord upon the drum of said shaft.

L designates a bell, which is hung to a cross-piece or brace M in the upper end of the casing, and which is provided with an operating-crank N, the outer end of which is
45 connected by a rope O with the outer end of the vibrating arm P, which is pivoted or hinged to the inner side of the casing, and the free end of which is connected by a pitman Q with the disk or ratchet-wheel F, to
50 the side or face of which it is connected by means of an eccentric-pin R. It will be seen

that when the said ratchet-wheel F is revolved it serves, through the intermediate mechanism, to operate the bell L, thus sounding an alarm.

55 S designates a block, which is arranged in front of the casing B and provided with a slot T, in which is pivoted a latch U, having an arm V, which extends rearwardly through a slot W in the front side of the casing, so as
60 to be capable of engaging the teeth at the periphery of the ratchet-wheel F. The latch U is automatically forced in a forward direction by the action of a spring X, arranged under its rear end. The front end of the
65 latch U has a notch Y, in which is pivoted a cam-lever Z, adapted to hold an ordinary friction-match in position in the said notch. In front of the latch U is arranged a lamp a, to the burner of which is attached a plate b, 70
having a roughened surface for the match to strike against for the purpose of igniting the latter. The lamp-chimney c has a slot d at its lower end to admit the front end of the
75 latch U, carrying the match, which latter is thereby made to come into contact with the plate b.

e designates a proper support adapted to be adjusted under the front end of the latch U to maintain the latter in a raised position. 80
To the said support is attached a cord f, which may be run through suitably-arranged staples or over guide-pulleys to the door or window which is to be guarded, and to which the
85 said cord is to be attached in such a manner that when the door or window is surreptitiously opened the prop shall be withdrawn from under the latch U and the mechanism thereby started into operation.

The operation of my invention is as follows: The rope H is wound upon the drum G of shaft D by operating the crank of the latter, thus raising the weight K to the highest point. The rear end of the arm V of latch U is then thrown into engagement with the
95 ratchet-wheel F and the prop e adjusted under the front end of the latch, which latter will serve to prevent the said ratchet-wheel from revolving. The end of the cord f is then made fast to the door or window, as
100 above described. When it shall be attempted to open the door or window to which the cord

is attached, the prop or support will be withdrawn from under the latch, and the latter will be thrown forward by the action of the spring X and disengaged from the ratchet-wheel F, which is then caused to revolve by the descending weight X, thus sounding the intermediate mechanism Q P O. At the same time the match attached to the front end of the latch will strike the plate *b*, against which it is ignited, when it will ignite the lamp in close proximity to the burner of which it is held, the room being thus automatically illuminated, the person who is entering the room being identified.

This device is, as will be seen, simple and inexpensive in construction, and it may be conveniently arranged for operation so as to guard the entrance to a room. It is obvious that in case more than one entrance is to be guarded separate cords may be run from the prop *e* to the said entrances; or a single cord may be run from one to another and attached to them all.

Having thus described my invention, I claim—

1. The combination, with a suitable casing, of a shaft having a winding-drum, a rope connected to said drum and passing over a pulley, a weight attached to said rope, a crank at the outer end of the main shaft, a ratchet-wheel at the inner end of said shaft, a pitman connected to said ratchet-wheel and pivoted at its free end to a vibrating arm pivotally attached to the casing, a rope connecting the outer end of said arm with a bell hung in the top of the casing, and a latch adapted to engage the ratchet-wheel, substantially as set forth.

2. The combination of the casing, the shaft having the winding-drum, a rope connected to the latter passing over a pulley and having a weight attached thereto, a ratchet-wheel at one end of the shaft, a pitman connecting said ratchet-wheel with the alarm-sounding mechanism, a spring-latch engaging the ratchet-wheel and having a cam-lever pivoted in a notch at its front end, the lamp having a scratch-plate attached to its burner, and the lamp-chimney having a vertical slot in its lower end, substantially as set forth.

3. The combination of the casing, the main shaft having a ratchet-wheel at its inner end, a pitman connecting said ratchet-wheel with a vibrating arm, a cord connecting the latter with a suitably-arranged bell, a weight adapted to be raised by means of the main shaft and to rotate the latter by its descent, a spring-latch arranged to engage the ratchet-wheel, a match-holding device at the front end of said latch, a lamp arranged in proximity thereto and having a scratch-plate attached to its burner, and a prop adapted to support the outer end of the latch and connected by means of a suitably-arranged cord with the entrance to be guarded, substantially as and for the purpose herein set forth.

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

ELMIRA CARTER.

Witnesses:

W. J. CARTER,
J. H. KENNEDY.