

(No Model.)

C. A. SMITH.

BURGLAR ALARM FOR DOORS.

No. 268,300.

Patented Nov. 28, 1882.

Fig. 1.

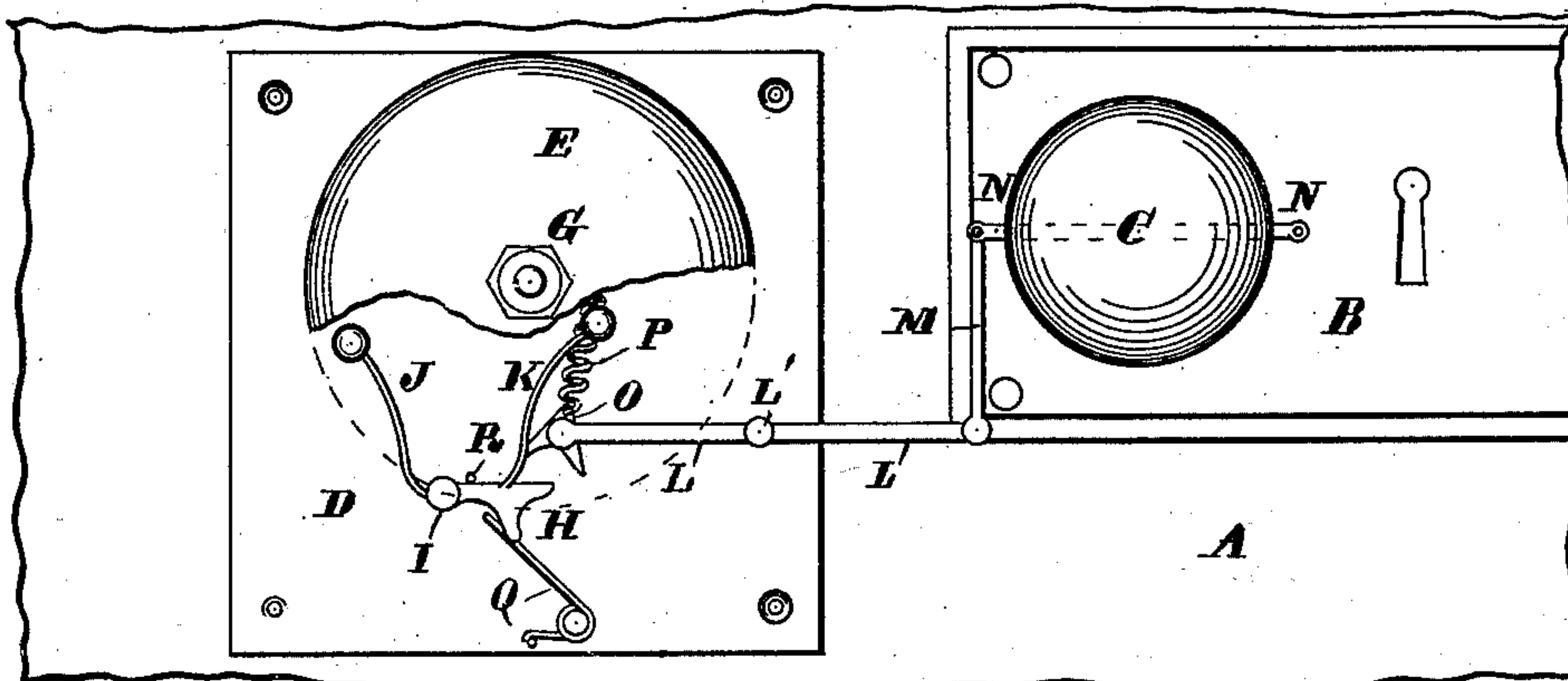


Fig. 2.

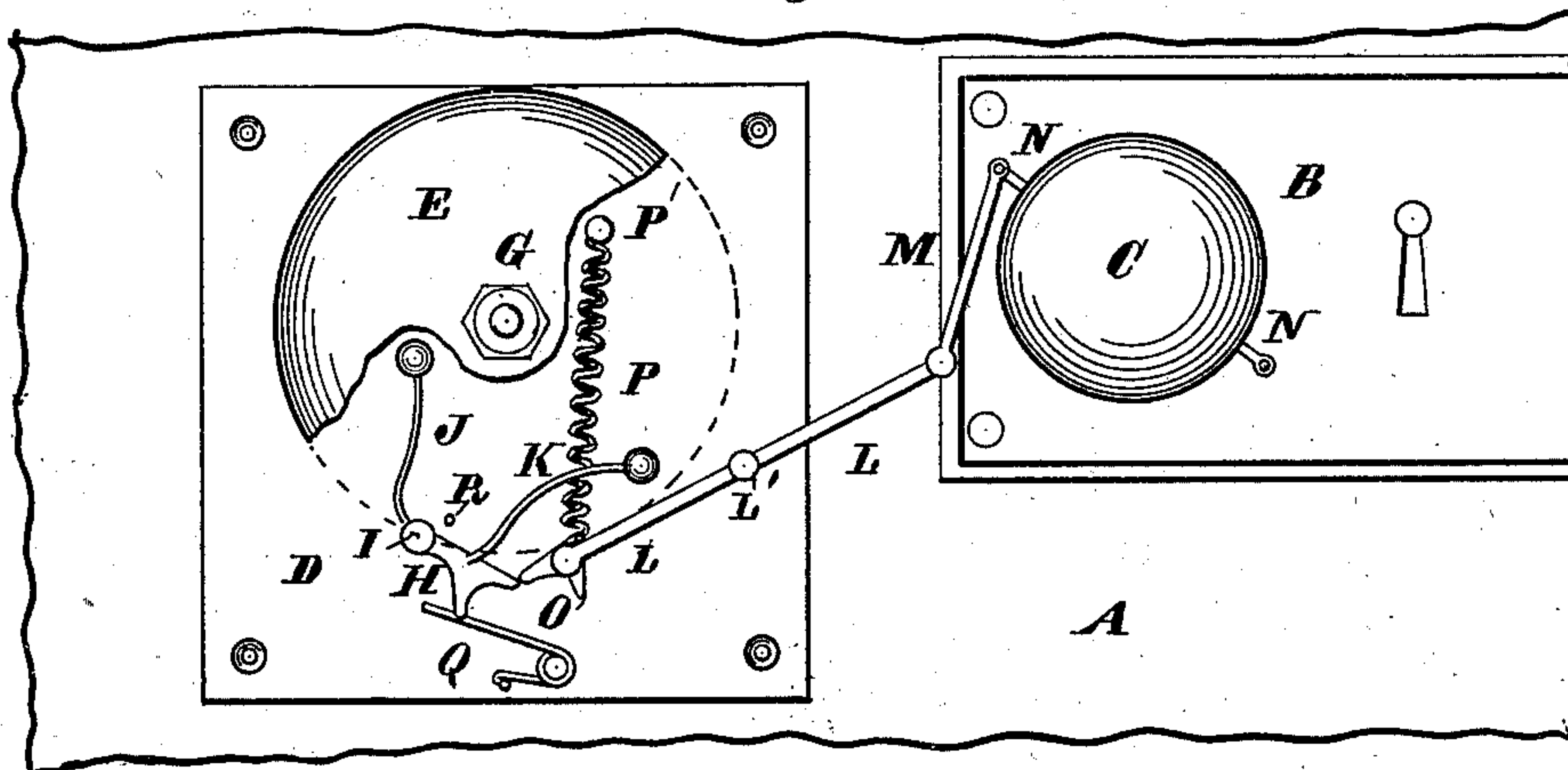
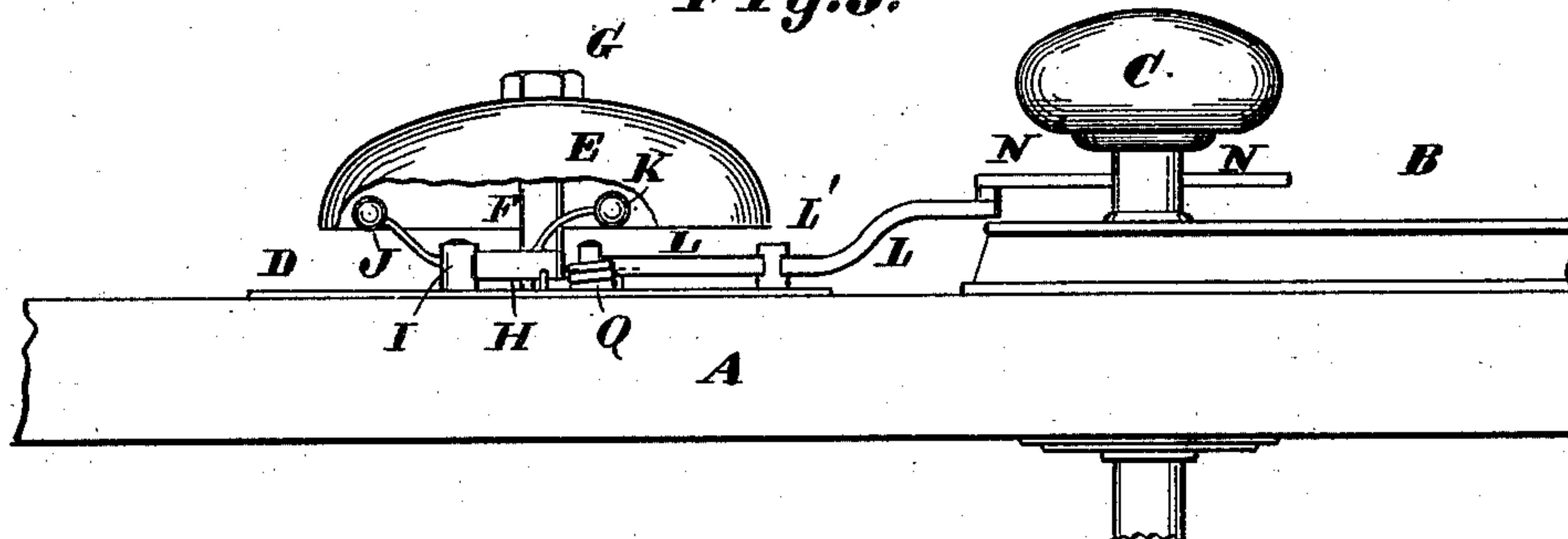


Fig. 3.



Attest;

Charles Pickles
per J. Jagers.

Inventor,

Charles A. Smith
By Knight Bros
Attys.

UNITED STATES PATENT OFFICE.

CHARLES A. SMITH, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO
WILLIAM ALLEN, JR., OF SAME PLACE.

BURGLAR-ALARM FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 268,300, dated November 28, 1882.

Application filed August 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. SMITH, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Door-Alarms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a front view with part of the bell broken away, showing the parts at rest. Fig. 2 is a similar view showing the parts operating. Fig. 3 is an edge view.

My invention relates to an alarm to be applied to a door and operated by the common knob each time the door is opened.

My invention consists in points of novelty hereinafter fully described and claimed.

A represents part of a door; B, the lock, with the ordinary knob, C, and D is a plate secured to the door near the lock.

E is a bell or gong, secured to the plate D by a post, F, and nut G.

H represents a block, pivoted by one end to the plate D by means of a rivet, I. To the end of this block is secured a hammer, J, and near its center is secured a second hammer, K, the two operating alternately on opposite sides of the bell each time the block is operated by turning the knob, as hereinafter described.

L is a lever, pivoted at L' to the plate D, its outer end being connected by a hinged arm, M, to a cross-bar, N, which passes through the shank of the knob C, securing it to the spindle of the lock. The ends of the bar N extend on each side of the knob, as shown, so that the arm M may be connected to either end, so that the alarm can be used with a right or left hand lock or whether placed above or below the lock.

On the inner end of the lever L is pivoted a V-shaped cam, O, one projection of which operates on the block H as the knob is turned, and to another projection of which is secured one end of a spring, P, which is secured by its

other end to a post, P', in the plate D. When the knob is turned the cam O comes against the block H, moving it on its hinge and striking the hammer K against the bell, and as the knob continues to turn the cam slips off the end of the block, as the radius of the circle on which it moves retreats from the radius of the circle on which the cam moves, and the block is then forced back to its normal position under the influence of a spring, Q, pivoted to the plate and bearing against the block, which causes the hammer J to strike the bell and give a second alarm. Then when the knob is released the spring P will draw the cam and lever into the position shown in Fig. 1, the cam turning on its pivot, allowing the projection, which operates the block H when the lever is moved in the other direction, to pass the block.

R is a stop, against which the block H rests when in its normal position to keep the hammer J out of contact with the bell.

I do not claim broadly a burglar-alarm connected with a door-knob so as to be operated each time the knob is turned; but

What I do claim as new and of my invention, and desire to secure by Letters Patent, is—

The combination of bell E, secured to the plate D by a post, G, the plate being secured to the door A, block H, pivoted to the plate at one end and carrying two hammers, J and K, stop R at the rear of block H, lever L, pivoted at L' to the plate, V-shaped cam O, pivoted to the inner end of the lever, spring P, secured by one end to the cam and by the other to a post, P', on the plate D, and arm M, secured by one end to the lever L and by the other to the bar N, which passes through the shank of the knob, securing it to its spindle, all arranged substantially as shown and described, for the purpose set forth.

CHARLES A. SMITH.

Witnesses:

GEO. H. KNIGHT,
ALBERT G. FISH.