

B. FISCHER.
Burglar-Alarms.

No. 148,942.

Patented March 24, 1874.

Fig. 1.

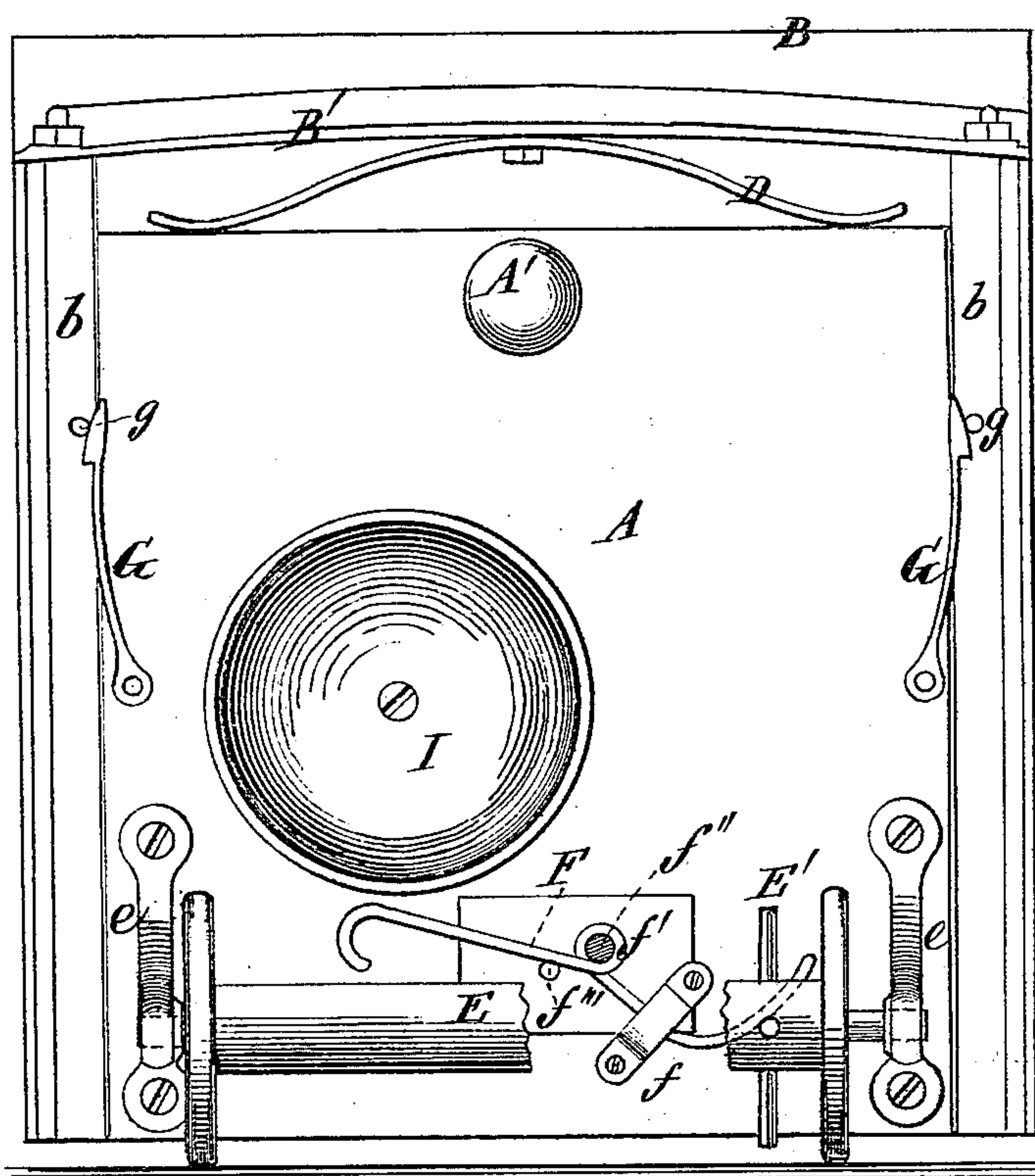


Fig. 2.

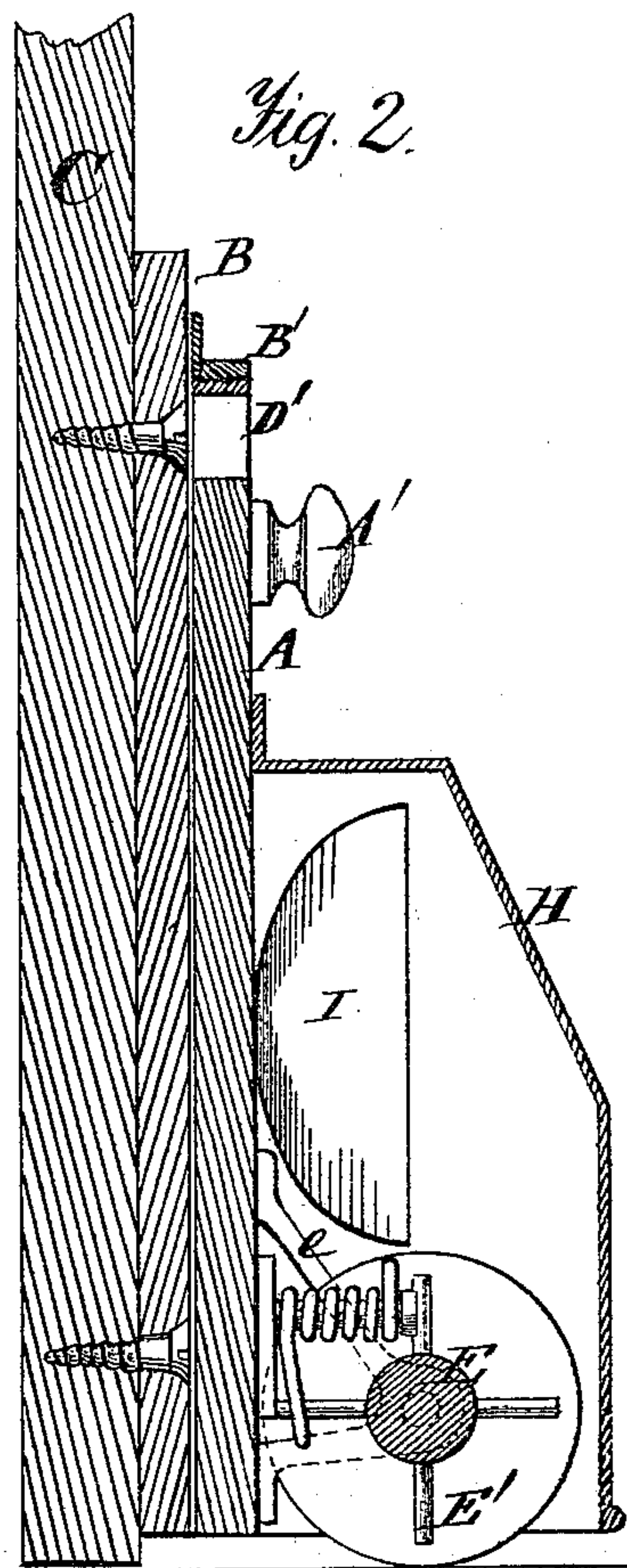
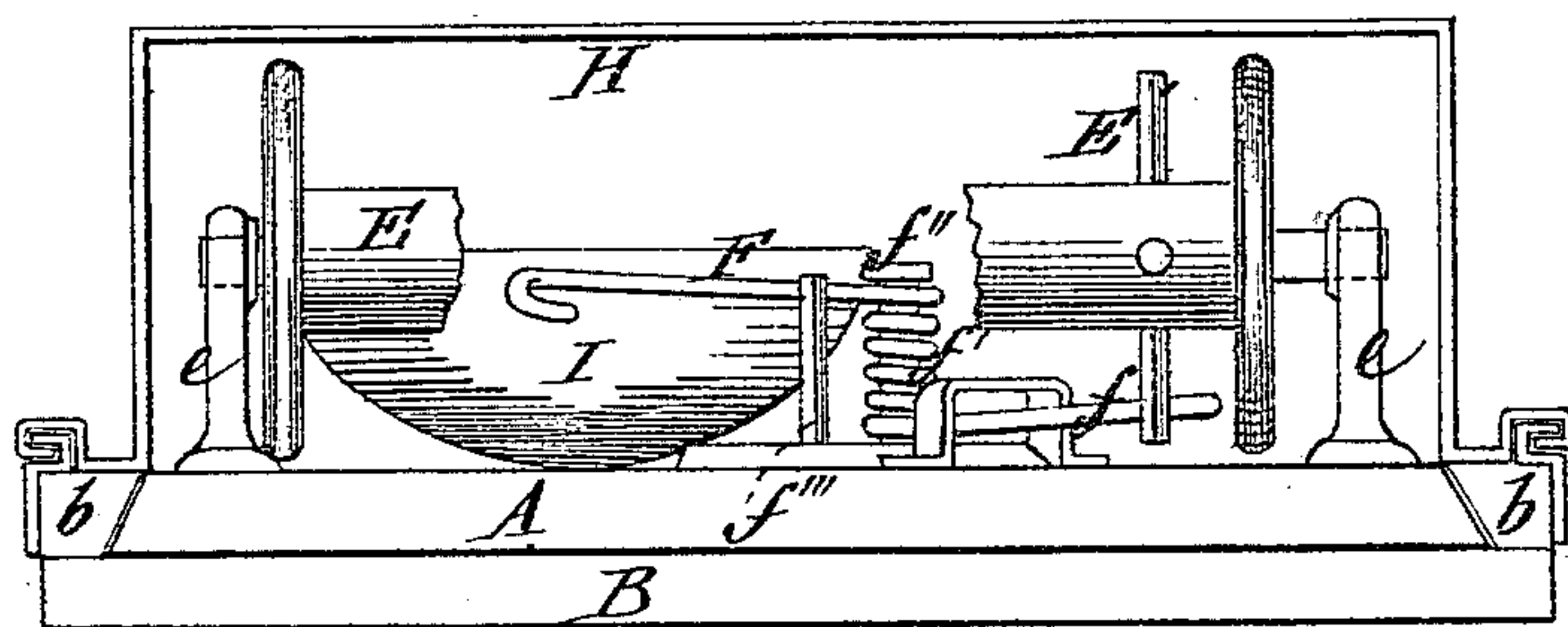


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

BERNARD FISCHER, OF COLUMBUS, OHIO.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 148,942, dated March 24, 1874; application filed March 2, 1874.

To all whom it may concern:

Be it known that I, BERNARD FISCHER, of Columbus, in the county of Franklin and State of Ohio, have invented a certain Improvement in Burglar-Alarm Bells, of which the following is a specification:

This invention relates to that class of burglar-alarms in which a suitable bell and striker are combined with a roller kept in forcible contact with a fixed surface, over which the door or other device carrying the alarm moves, and provided with a number of arms or their equivalents, for actuating the striker on moving the door.

My improvements consist in certain hereinafter fully-described details of construction.

In the annexed drawings, Figure 1 is a front elevation of my improved alarm-bell, the cap having been removed to expose the mechanism. Fig. 2 is a vertical transverse section. Fig. 3 is a bottom view of the same.

Corresponding letters are used in the several figures in the designation of identical parts.

The bell and its striking mechanism are suitably secured to a plate, A, fitted between vertical guides or ways *b* on the bed-plate B, which is suitably fastened to the lower end of the door C. A string-piece, B', connects the upper ends of the guides *b*, to which it should be detachably secured. A spring, D, bolted to the under side of the string-piece, bears against the upper end of the sliding plate A, pressing it downward to keep the heads of the roller E, which turns with its journals in fixed brackets or bearings *e e* on said plate A, in forcible contact with the floor. One end of the roller is provided with a number of radial arms, E', which, on opening the door, causing the rotation of the roller, come successively in contact with the outer arm *f* of the striker or hammer F, and, in bending it, wind up the spiral spring *f'*, forming part of the hammer or striker, at the same time that the striker is drawn away and held at a slight distance from the bell I. As each arm escapes by the arm *f* of the striker, it is sent by the recoil of the spring *f'* to deliver a blow on the bell. The distance between the supporting-brackets of the roller is sufficiently greater than the distance between the exterior faces of its heads

to permit the rollers to slide endwise until the radial arms can pass without striking the arm *f* of the striker or hammer.

The apparatus shown is designed for a left-hand door. For a right-hand door the position of the arms E' must be at the other end of the roller, and the arrangement of the striker reversed likewise. In other words, the arms E' must always be on that side of the apparatus which is nearest to the hinges of the door, and consequently moves the slowest. Thus disposed, the roller will be automatically drawn away from the hinges of the door in opening it, so that the arms E' will operate upon the striker, but will be pushed toward the hinges of the door in closing it, and the arms E' turn without coming in contact with the striker, so that the bell will not be sounded.

It is evident that, by a slight modification, a gravitating striker might be used instead of one operated by the recoil of a spring. Though I prefer to use such a one as shown, yet my invention is not limited to it exclusively. Cams may also be used in lieu of the radial arms E' on the roller.

The plate A may be provided with hooks G to catch over fixed studs *g* on the guides *b* when the apparatus is lifted to raise the roller out of contact with the floor. The device being thus suspended, the door can be opened without operating the bell. A knob, A', is put on the upper end of plate A for convenience in lifting it.

The bell and striking mechanism are covered by a cap, H, as shown in Figs. 2 and 3.

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

The combination of the bell and its striker with the friction-roller E, having arms E', and arranged to slide endwise in its bearings, substantially in the manner and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERNARD FISCHER.

Witnesses:

L. G. BYRNE,

G. M. ROBINSON.