## F. A. LANE. BURGLAR-ALARM.

No. 177,727.

Patented May 23, 1876.

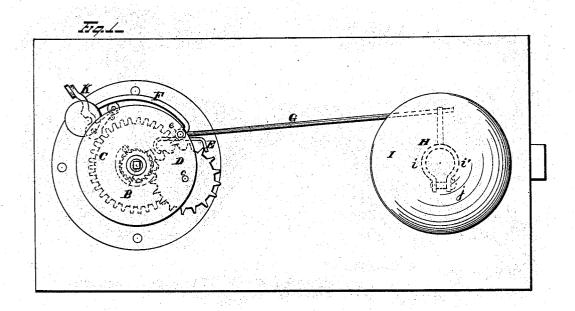
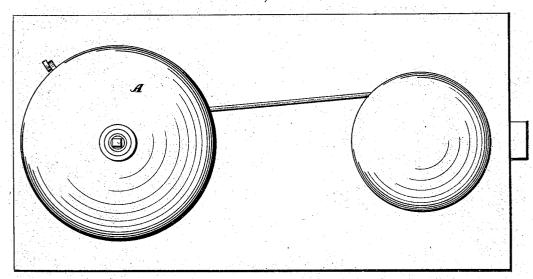


Fig. 2 \_



WITNESSES ÖdskStöttingham! Albert H. Bright. INVENTOR Frederick a Save, By Haffaymon, Attorney

## UNITED STATES PATENT OFFICE

FREDERICK A. LANE, OF NEW HAVEN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO HENRY A. SEYMOUR, OF BRISTOL, CONNECTICUT.

## IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 177,727, dated May 23, 1876; application filed December 21, 1875.

To all whom it may concern:

Be it known that I, FREDERICK A. LANE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Burglar-Alarms; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, front view of the apparatus; Fig.

2, side view.

My invention relates to an improvement in burglar alarms; and it consists in the combination, with a verge to which the hammer of the alarm is secured, of a rod, and a detachable cam or stop piece, the latter attached to the shank of a door-knob, whereby the rotation of the door-knob causes the hammer of the alarm to be successively thrown in contact with the alarm-bell.

In the accompanying drawings, wherein like letters designate like parts, Figure 1 represents a front view of the alarm movement and door knob, the bell being removed to show the movement. Fig. 2 shows the doorknob and the alarm, with bell in position.

A represents an alarm - bell, which is secured in any suitable manner to a sleeve or post, attached to the upper or face plate of the alarm movement. B is the winding arbor, having a ratchet, main wheel, and clock spring attached thereto. The main wheel U meshes with the crown-pinion c, and thereby imparts rotary movement to the crown-wheel D. A verge, E, is secured to a shaft, e, pivoted in the upper and lower plates of the movement. and said verge is arranged to mesh with the teeth of the crown-wheel D, as in ordinary clock-movements. To shaft e the hammer-rod F, and the rod or lever G, are rigidly secured. The free end of rod G engages with the end of a cam or stop-piece, H, which is constructed with two spring-arms, i i', and a fasteningscrew, j, whereby it may be attached to a door-knob, I, without removing the same from the door.

When the door is locked, the cam H will assume a vertical position, and support the end of the lever G, which, in turn, will lock the pallet of the verge E to the teeth of the crown-wheel, and thereby prevent any revolution of the crown wheel D. By turning the knob I, the end of the lever G is released from the cam H, and sets free the verge, and thus allows the crown-wheel to revolve and rapidly actuate the verge and bell-hammer connected therewith, thus sounding the alarm continuously until the knob is returned to its original position, when the cam H will automatically lock the verge to the crown-wheel, and stop the action of the bell-hammer.

A lever, K, is pivoted to the lower plate, one end of said lever projecting from beneath the bell, that it may be easily moved by hand, while the opposite end of the lever is located

adjacent to the rod of the hammer.

By moving the lever in one direction, the inner end of same is thrown completely out of engagement with the hammer-rod, and the alarm is actuated by the movement of the door-knob; but when it is desired to lock the alarm movement so that it shall not be affected by the rotation of the door-knob, the lever is moved in the opposite direction, and its inner end presses on the hammer-rod, and securely locks the verge to the crown-wheel, thus preventing the operation of the alarm.

Having fully described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is-

The combination, with the verge of an alarm movement, said verge having the alarmhammer connected therewith, of a rod and a detachable cam secured to the shank of a door-knob, whereby the rotation of the door-knob causes the alarm to be sounded, substantially as and for the purpose set forth.

FREDERICK A. LANE.

Witnesses: John E. Earle, Clara Broughton.