(Model.)

R. G. VASSAR.

BURGLAR ALARM.

No. 298,137. Patented May 6, 1884.

Fig. 1.

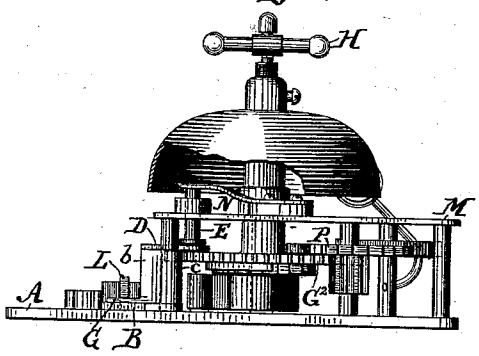


Fig. 2.

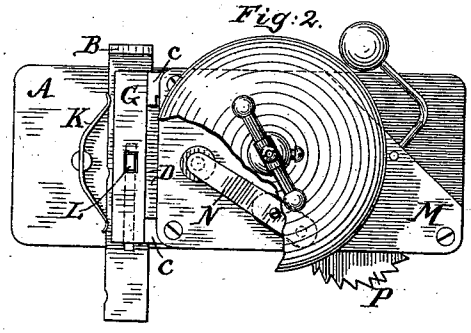


Fig. 3.

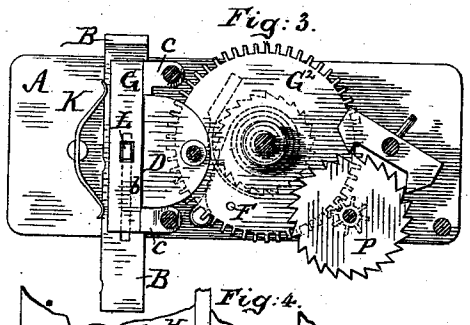
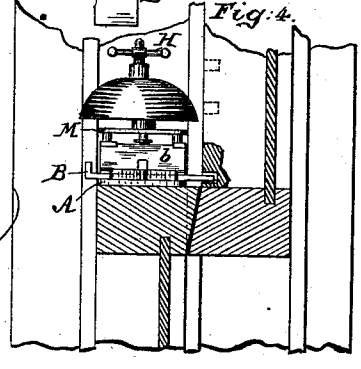


Fig. 4.



Witnesses:

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by his Atty:

H. G. Townsend

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

ROBERT G. VASSAR, OF NEW YORK, N. Y.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 298,137, dated May 6, 1884.

Application filed August 23, 1883. (Model.)

To all whom it may concern:

Be it known that I, ROBT. G. VASSAR, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Burglar-Alarm Catches, of which the following is a specification.

My invention relates to burglar-alarms designed for application to doors, window-sashes, or other objects, and constructed to automatically release or operate an alarm upon movement of the door or other object upon an attempt to open the same.

The object of my invention is to provide a simple, cheap, and effective device for this purpose, and among other things to furnish a device applicable to a window in such a way that both sashes may be left open, but that an attempt to move either sash after the alarm is set will result in the release of the alarm mechanism.

To these ends my invention consists in the combination, with a freely-movable catch or catch-bar adapted to rock on two points or fulcrums removed from one another, of an alarm mechanism whose detent is connected with the bar, so that by the rocking of the bar on either fulcrum the detent will be operated and the alarm caused to sound.

My invention consists, also, of certain details of construction and combination of parts, that will be specified in the claims.

In the accompanying drawings, Figure 1 is an elevation of a burglar-alarm mechanism embodying my invention. Fig. 2 is a plan of the same, a portion of the bell being broken away in order to better show the parts. Fig. 3 is a plan with the top plate of the alarm mechanism removed. Fig. 4 shows in vertical cross-section a portion of a window with the alarm applied.

A indicates the base-plate upon which the parts are mounted, and which plate is adapted for attachment to a door, window, or similar object to be protected.

B indicates a sliding catch-bar, sliding on the plate and guided by a pin, L, rising from the plate through an elongated slot in the bar. A spring, K, fixed on the plate and bearing at its ends against the edge of the bar, serves, by entering notches on the edge thereof, to hold said bar with end projected, as shown, to enter a suitable socket or retracted out of engagement with said socket. Resting on the bar is a movable plate, G, supported or engaging with the bar at the intermediate portion thereof in such way that if the bar be made to rock at one end or the other upon the edge of plate A said plate G will be raised, and thus caused to release the detent of an alarm mechanism of any suitable kind.

As will be observed, the catch-bar B, when engaging with a socket, will be caused to rock and raise the plate G by a movement in either direction of the support for said bar or of the socket with which its projecting end engages.

The plate G is provided, as shown, with an upwardly-extending portion, *b*, from which extends laterally a plate or arm, D, that engages with a detent, E, for an alarm mechanism. The plate G is guided by sleeves *c*, connected to the portion *b* thereof, and encompassing posts connecting plate A and a plate, M, in which two latter the arbors of the alarm are mounted. The pin E is guided in plate M, and is held down by a spring, N, so that its lower end tends to enter an opening, F, in a wheel, G^2, for the alarm-movement, thus locking the latter from movement. The arm D engages with an enlargement on the pin E, and when the bar B is tilted lifts the pin out of the opening F, thus allowing the alarm to be sounded. The spring N causes the pin to re-engage with the wheel if the pressure tending to tilt the bar has been removed.

The alarm-movement is of any ordinary or proper construction. That which I prefer to employ for the sake of simplicity consists of the mainspring-wheel G^2, the mainspring for which is wound up by the handle H upon the mainspring-arbor, and an escapement-wheel, P, whose escapement operates the bell-hammer in the usual way. I do not, however, limit myself to the form or kind of alarm-movement, nor to the particular kind of detent released by the tilting of the bar B, as these may be varied in many ways.

Fig. 4 shows the application of the alarm to a window. The plate A is fastened to the meeting-rail of the lower sash, while the end of the catch-bar may engage at its projecting

end with a socket in the upper sash, one or more of such sockets being provided, so that the upper and lower sashes may be left open to any desired extent, and the alarm will be released upon the application of an upward or a downward pressure to either sash.

What I claim as my invention is—

1. The combination of the sliding bar B, the transversely-movable plate G, the detent-pin E, and the perforated wheel G^2 of an alarm-movement.

2. The combination of the catch-bar B, having two fulcrums upon the plate A, pin L, plate or support G, for the alarm-detent, and wheel G^2, controlled by said detent, as set forth.

3. The combination of the plate A, spring K, notched sliding bar B, adapted to work freely in a transverse direction on a pin, L, and an alarm controlled by a connection with the bar B at a portion thereof which moves upon pin L when the projecting end of the bar rises or falls above or below its normal plane.

4. The combination of the sliding bar working freely in a plane at right angles to its sliding movement, so that it may rock on either of two pivotal points on the same side of the bar, and an alarm controlled by connection with the bar at a portion thereof which moves in the same direction irrespective of the direction in which its projecting end moves when the bar rocks.

Signed at New York, in the county of New York and State of New York, this 15th day of August, A. D. 1883.

ROBERT G. VASSAR.

Witnesses:

THOS. TOOMEY,

GEO. C. COFFIN.