(Model.)

F. M. WOODS.

BURGLAR ALARM.

No. 307,076. Patented Oct. 21, 1884.

Fig. 1.

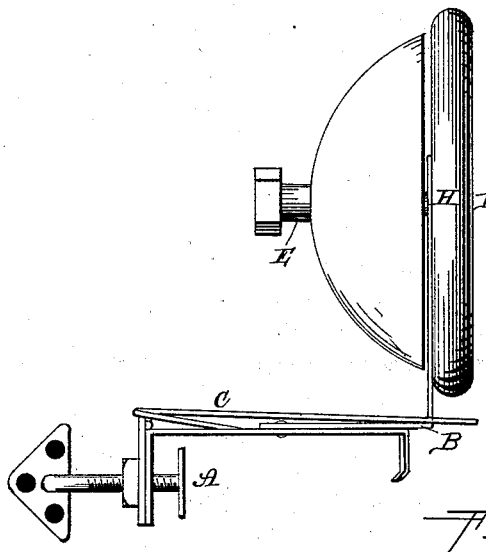


Fig. 2.

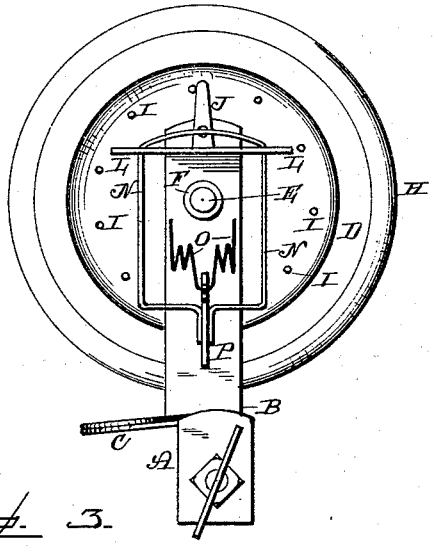
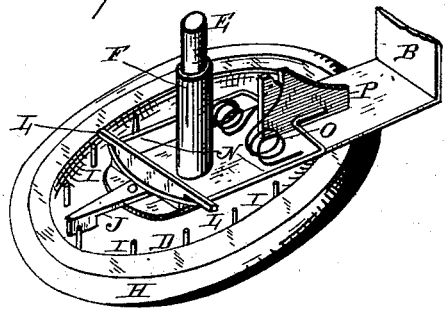


Fig. 3.



Witnesses.
Louis F. Gardner
J. W. Garner

Inventor.
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per
J. A. Lehmann,
Atty.

UNITED STATES PATENT OFFICE.

FRANK M. WOODS, OF MARSHALL, ILLINOIS, ASSIGNOR OF ONE-HALF TO JOHN MARVIN, OF SAME PLACE.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 307,076, dated October 21, 1884.

Application filed February 13, 1884. (Model.)

To all whom it may concern:

Be it known that I, FRANK M. WOODS, of Marshall, in the county of Clark and State of Illinois, have invented certain new and useful Improvements in Burglar-Alarms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in burglar-alarms; and it consists, first, in the combination of a suitable clamp for securing the alarm in position, a wheel provided with a rubber rim, a series of operating teeth or pins, and a pivoted arm which strikes against the teeth and operates a spring-actuated striking device; second, the combination of the clamp for securing the alarm in position, a spring which is attached to the clamp and bears against the plate upon which the wheel is pivoted for forcing the wheel against the sash, the wheel provided with a series of pins, a striking mechanism, and a gong or alarm, all of which will be more fully described hereinafter.

The object of my invention is to provide a burglar-alarm which can be attached to the lower sash and made to bear against the upper one, so that in case either sash is moved a continuous alarm will be struck.

Figure 1 is a side elevation of an alarm embodying my invention, shown in position upon the sash. Fig. 2 is a front view of the same, the gong being shown in dotted lines. Fig. 3 is a perspective of the striking mechanism.

A represents an ordinary clamp, which is to be applied to the left-hand corner of the top rail of the lower sash. To this clamp is pivoted the metallic bearing-plate B, upon which the parts which form the alarm are placed. Secured to the clamp is a suitable spring, C, which bears against one edge of this bearing-plate, and forces the plate carrying the alarm mechanism around to one side, so that the edge of the operating-wheel will bear against the edge of the upper sash. This spring causes the alarm to follow any inequality of the surface, and to keep the edge of the wheel in constant contact with the upper sash, so that in case either one of the sashes is moved an alarm will be sounded.

Pivoted upon the bearing-plate, near its upper end, is the operating-wheel D, which is placed upon the pivotal rod or bolt E. After this rod passes through the operating-wheel and the upper end of the bearing-plate, a sleeve or washer, F, is placed upon it for the purpose of preventing the gong or bell from passing down too far. The same effect can be produced, so far as keeping the gong or bell in position, by forming a shoulder directly upon the rod itself. The wheel D has a rubber rim, H, applied to it, and this rim is made to bear against the edge of the upper sash. Rubber or any other similar material is used for forming this rim, because it affords a greater frictional contact than could be made if the rim of the wheel itself were made to bear against the edge of the sash. The inner side of this wheel is recessed a suitable distance from its outer edge, and in the face of this recessed portion are inserted a number of pins or projections, I, against which the operating mechanism is made to strike when the wheel is turned in either direction. These pins are placed equal distances apart and project just far enough from the face of the wheel to operate the striking mechanism.

Pivoted upon the upper end of the pivoted bearing-plate is the pivoted lever J, which has its forward end to project into the circular recess formed in the wheel, and which strikes against the pins when the wheel is turned in either direction for the purpose of operating the alarm. This lever has an arm, L, projecting from each of its rear corners, and these arms, being placed inside of the upper end of the yoke N, serve to force the yoke outward every time the lever is turned to one side. When the operating-lever strikes one of the pins, its outer end is thrown to one side, and one of its arms is forced outward at the same time, and this upward movement of the arm draws the yoke upward against the pressure of the springs O. Secured to the lower end of the yoke is the striking device P, which, as the yoke slips back in position, strikes against the bell or gong and sounds an alarm. As soon as the operating-lever slips off of the pin by which it is moved, the spring connected to

the yoke instantly draws the lever back into position, ready to be operated by the next pin. This alarm having been attached to the upper rail of the lower sash and made to bear against the edge of the upper sash, when either sash is moved the frictional contact of the wheel against the upper sash will cause the wheel to revolve, and thus the pins are made to operate the striking mechanism no matter in which direction the wheel is turned. As the pins are placed close together, a continuous alarm will be struck as long as either one of the sashes is moved.

In case the alarm is to be attached to a door, the rubber band and the clamp or foot piece can be dispensed with, and then by adjusting the small cord and the wheel in place of the rubber band it can be applied to a door, so as to cause an alarm to be struck whenever the door is opened.

I am aware that a wheel having a soft rim or flange is not new, and this I disclaim.

Having thus described my invention, I claim—

1. In a burglar-alarm, the combination of the clamp, a pivoted plate applied thereto, a spring for bearing against the plate, a wheel, and an alarm mechanism which is applied to the wheel, whereby the movement of the wheel in either direction will cause an alarm to be struck, substantially as shown.

2. In a burglar-alarm, the combination of the bearing-plate, the wheel pivoted thereon and provided with a series of pins, a pivoted operating-lever, the spring-actuated striking device, and the bell, the parts being combined and arranged to operate substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK M. WOODS.

Witnesses:

SAMUEL B. LAKE,

JOHN L. MOUNT.