N. JENSEN.

Burglar Alarm.

No. 22,024. Patented Nov. 9, 1858.

Fig: 1.

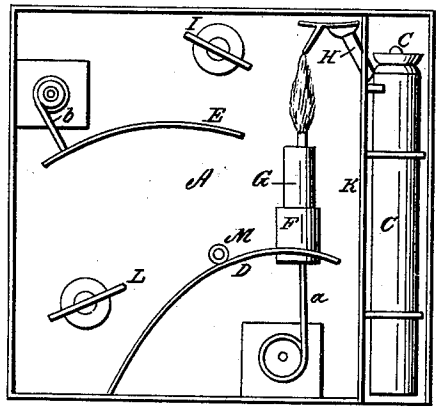


Fig: 4.

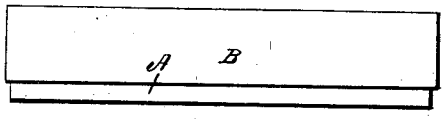


Fig: 3.

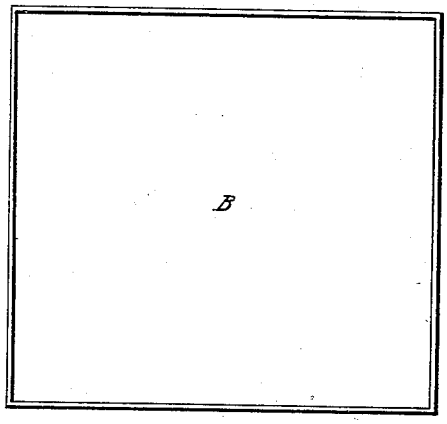
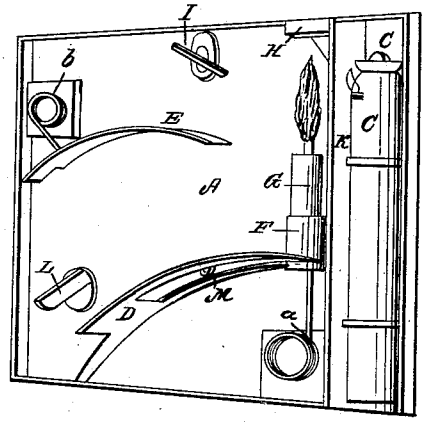


Fig: 5.

Fig: 2.



UNITED STATES PATENT OFFICE.

N. JENSEN, OF WASHINGTON, DISTRICT OF COLUMBIA.

BURGLAR-ALARM.

Specification of Letters Patent No. 22,024, dated November 9, 1858.

To all whom it may concern:

Be it known that I, N. JENSEN, of the city of Washington, District of Columbia, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1, represents a plan of the lighting in alarm mechanism contained in a box. Fig. 2, represents a perspective view of the same. Figs. 3 and 4, represent different views of the box containing the mechanism, and Fig. 5, represents an elevation of the draw pin to release the mechanism when set.

My improvements in burglar alarms relate to that class in which a taper or lamp is lighted at the same time that an alarm is sounded on the instrument being set in motion. In order to effect these two different results, these instruments as heretofore constructed were made exceedingly complicated, as two distinct sets of mechanism were generally used, one to put in motion the alarm mechanism, the other to light the taper or lamp. On account of the expense of these instruments as well as their liability to get out of order, they have been but little used.

The principal object of my improvements in this class of alarms is to simplify the instrument without diminishing its effectiveness—render it less liable to repairs, and diminish its cost to the consumer, and my invention for effecting these objects consists first, in supporting the taper or lamp by a movable spring socket so constructed and arranged that when released after being set the point of the prepared taper is brought in contact with, and passes over the surface of a rubber by which it is ignited and the taper lighted. Second, in lighting the taper by the motion of the socket and also bringing the socket to such position at the end of its motion as to cause the alarm to be sounded. Third, in preventing the explosion of the cannon giving the alarm from extinguishing the light, by arranging the light and the alarm in separate compartments in the box. Fourth, in forming the connection between the flame of the taper by which the cannon is fired and the vent by means of a tube for a fuse so arranged that gases escaping from the vent pass upward and over the flame of the taper without coming in contact with it.

In the accompanying drawing is represented a burglar alarm embracing my improvements and consists of a box (A) for holding the lighting mechanism and the alarm—which occupy different compartments.

The lighting mechanism consists of a taper (G) with a prepared friction igniting point similar to the ordinary friction matches, which is held in a movable socket (F) that is connected by a spring (*a*) with the back plate of the box. This socket moves in a guide (D) which limits its motion in either direction, and is set for the alarm by being drawn back to an inclined position, and held by a pin (P) in a spring catch entering a hole (M) in the back plate. Above the taper when drawn back is a curved rubber (E) which is also connected to the back plate by a spring (*b*) which allows the rubber to yield to the point of the taper and thus prevent its breaking as it passes over its surface when the socket is released by withdrawing the pin.

The alarm consists of a small cannon (C) arranged with muzzle pointing downward and separated from the taper and lighting mechanism by a partition (K) so that the gases generated in firing the cannon may not extinguish the taper. An inclined tube (H) passes from the vent of the cannon upward through the partition. The upper end is spread out forming a shield over the taper, and the lower end is disconnected from the vent. A fuse passes from this vent through this tube and then through an opening in the shield so that its end will be directly over the flame of the taper. The screws (L) pass through the back plate by which the alarm may be attached to the wall of the room when used. A cover (B) is provided for closing the box when not in use.

In using the alarm, the box is fixed in the proper position by the thumb screws, the taper socket drawn back and set, and the holding pin or trigger is connected by lines, or in any other convenient manner with the doors or windows of the house, the lines being so arranged that on the opening of either the doors or windows, the pin or trigger is withdrawn, releasing the socket, which springing back to a vertical position, carries

the prepared point of the taper over the roughened surface of the rubber, by which it is ignited. When the taper is in a vertical position the flame comes in contact with the fuse, which is ignited and the alarm given by its firing the cannon. Thus it will be seen that by the movement of the socket holding the taper, the light is produced and the alarm given. From the arrangement of the fuse tube most of the gases pass upward between the lower end of the tube and the vent; and the flame is protected from those passing through the tube by the shield formed by the extension of the tube over the flame.

I do not confine myself to the alarm cannon or the precise mode of firing it, as described; as other alarms as the bell may be used, and the mechanism by which they are sounded set in operation by the movement of the socket holding the taper, or instead of the flame of the taper lighting a fuse, a projecting point may extend from the socket, which when the socket springs back, explodes a cap and fires the cannon.

Having thus described my improvements in burglar alarms, what I claim therein as new and desire to secure by Letters Patent is:

1. Supporting the taper by a spring socket arranged substantially as described, so that by the movement of the socket when the holding catch is withdrawn the taper is lighted.

2. On releasing the spring socket holding the taper, I claim lighting the taper and causing the alarm to be sounded by the movement of the socket, substantially as described.

3. Arranging the alarm and the light in separate compartments in the box, for the purposes set forth.

4. The fuse tube constructed and arranged as described, so that the gases escaping from the vent will pass over the flame and not come in contact with and extinguish the light.

In testimony whereof I have subscribed my name.

N. JENSEN.

Witnesses:
F. S. SMITH,
M. V. B. RADCLIFF.