Feb. 20, 1923.

1,445,974.

E. L. RYCRAFT.

BURGLAR ALARM.

FILED SEPT. 15, 1922.

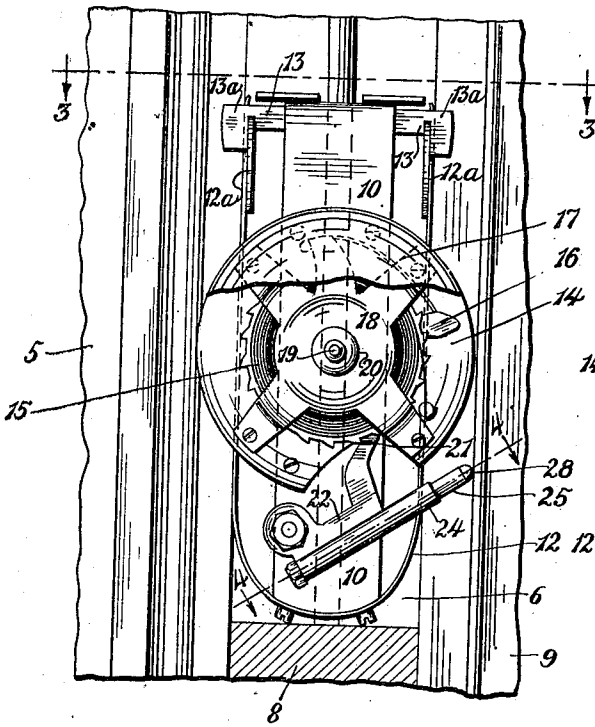


Fig. 1.

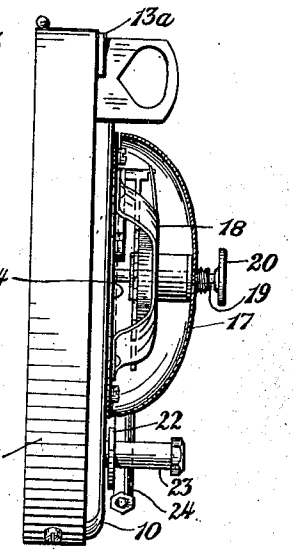


Fig. 2.

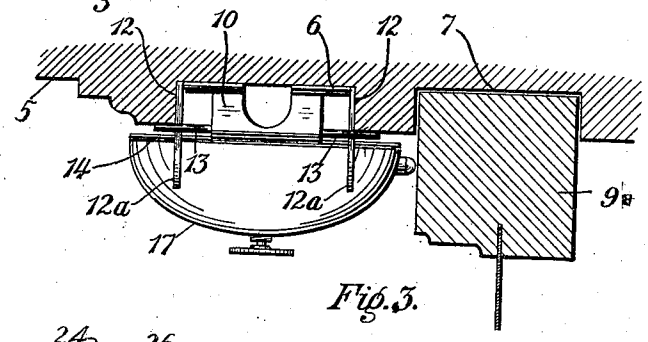


Fig. 3.

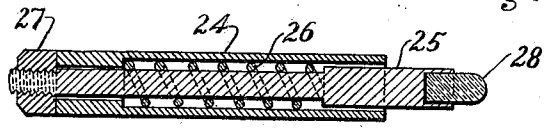


Fig. 4.

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Patented Feb. 20, 1923. 1,445,974

UNITED STATES PATENT OFFICE.

EVA L. RYCRAFT, OF DENVER, COLORADO.

BURGLAR ALARM.

Application filed September 15, 1922. Serial No. 588,436.

To all whom it may concern:

Be it known that I, EVA L. RYCRAFT, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Burglar Alarms, of which the following is a specification.

My invention relates to burglar alarms and more particularly to improvements in alarms of the character shown and described in my United States Letters Patent #903,888 of November 17, 1908.

The device consists of a spring actuated clock-movement which through the medium of a spring clamp is attached to a window casing in the channel of the lower sash.

The clock movement operates a gong mounted in juxtaposition thereto and it is controlled by a pivoted member which frictionally engages with the upper sash.

The improvements above referred to reside mainly in changes in the form and arrangement of the controlling member, which simplify the construction and increase the efficiency of the device, and they furthermore reside in details of construction as will fully appear in the course of the following description.

An embodiment of my invention has been illustrated in the accompanying drawings in the various views of which like parts are similarly designated and in which—

Figure 1 represents a partially broken front elevation of my improved burglar alarm in its operative position relative to the upper and lower sashes of a window casing;

Figure 2, a sectional side elevation of the device;

Figure 3, a section taken on the line 3—3, Figure 1; and

Figure 4, a section along the line 4—4, Figure 1, drawn to an exaggerated scale.

Referring more specifically to the drawings, the reference character 5 designates a window casing having spaced channels 6 and 7 for the up and downward movement of upper and lower sashes 8 and 9 of a window of conventional construction.

The improved burglar alarm consists of a base plate 10 which at its lower end is connected to a U-shaped spring clamp 12 by means of which the device is held in the channel of the lower window sash as shown in Figures 1 and 3 of the drawings.

The plate has at its upper end a pair of alined arms 13 which guide and steady the correspondingly grooved upper ends of the U-clamp, and which are provided with heads 13^a to limit the outward movement of the same.

The clamp has at its ends forwardly projecting thumb pieces 12^a by means of which its normally converging members are brought together to place the device in its operative position in the channel of the window sash.

The clock movement above referred to is in its entirety mounted upon a circular plate 14 which is rigidly attached to the base plate. It consists of an escapement which controls the operative action of a coiled spring 15 upon the hammer 16 of a gong 17 which is mounted upon a spider 18 attached to the plate 14.

The spindle 19 of the clock movement projects through a central aperture of the gong and is provided exteriorly of the same, with a knurled head 20 by means of which the spring is wound.

The controlling member of the clock movement consists of a pawl or dog 21 on the arm of a bell crank 22 which is pivotally mounted in an outwardly projecting tubular bearing 23 on the base plate.

The crank carries a tubular housing 24 in which a contact-piece 25 is mounted to move longitudinally against the resistance of a spring.

The contact piece consists of a plunger which is fitted for reciprocation in a bore of the housing and which has a head for the engagement of a coiled spring in an enlarged chamber of the same.

A nut 27 at an end of the plunger limits its outward motion by expansion of the spring, and a tip 28 of resilient material in a recess at the end of its head, engages in practice with the upper window sash as shown in the drawing.

The alarm in its operative position is held in the channel of the lower sash by expansion of the U-shaped clamp which in order to place the device, was momentarily compressed by means of its forwardly projecting thumb-pieces.

The lower end of the clamp engages with or extends slightly above the lower window sash, and the tip of the contact piece is in frictional engagement with the upper sash and thereby holds the pawl on the bell crank in mesh with the wheel of the escapement.

After the spring of the movement has been wound by means of the head 20 of its spindle, the device positioned as hereinabove described, will be actuated to sound the gong by either an upward movement of the lower sash or a downward motion of the upper one, it being evident that in either case the bell crank will be turned about its pivot so as to release its pawl from the teeth of the escape wheel.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A burglar alarm comprising a base, a clamp on the base for securing it in a sash channel of a window frame, a gong on the base, spring-actuated mechanism adapted to sound the gong, a pivoted member on the base adapted to restrain the mechanism, and a resilient contact piece on the member adapted to frictionally engage with a sash in another channel of the frame.

2. A burglar alarm comprising a base, a clamp on the base for securing it in a sash channel of a window frame, a gong on the base, spring-actuated mechanism adapted to sound the gong, a pivoted member on the base adapted to restrain the mechanism, a housing on the member, a spring-urged plunger movable in the housing and adapted to engage with a sash in another channel of the frame.

3. A burglar alarm comprising a base, a clamp on the base for securing it in a sash channel of a window frame, a gong on the base, spring-actuated mechanism adapted to sound the gong, and including an escape wheel, a pivoted pawl on the base, engaging with the wheel, and a spring-urged contact piece mounted in connection with the pawl adapted to engage with a sash in another channel of the frame.

4. A burglar alarm comprising a base, a clamp on the base for securing it in a sash-channel of a window frame, a gong on the base, spring-actuated mechanism adapted to sound the gong, and including an escape wheel, a bell crank pivoted on the base and having a pawl engaging with the wheel, and a spring-urged contact piece on the bell crank, adapted to engage with a sash in another channel of the frame.

In testimony whereof I have affixed my signature.

EVA L. RYCRAFT.