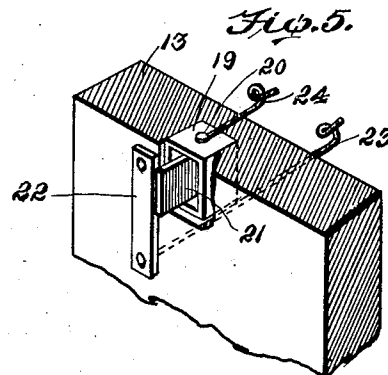
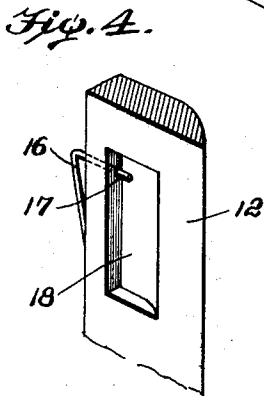
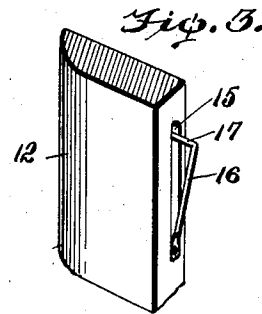
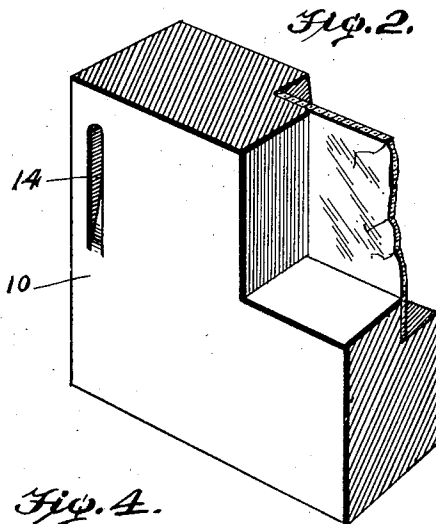
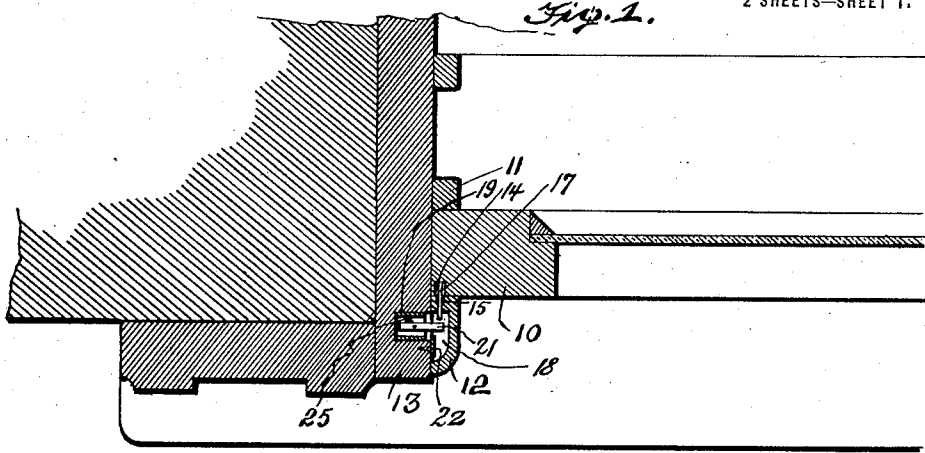


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CIRCUIT CLOSER FOR BURGLAR ALARMS.
APPLICATION FILED APR. 16, 1919.

1,330,473.

Patented Feb. 10, 1920.

2 SHEETS—SHEET 1.



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Fig. 6.

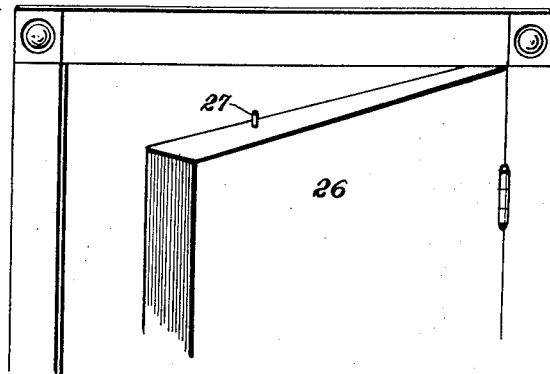


Fig. 7.

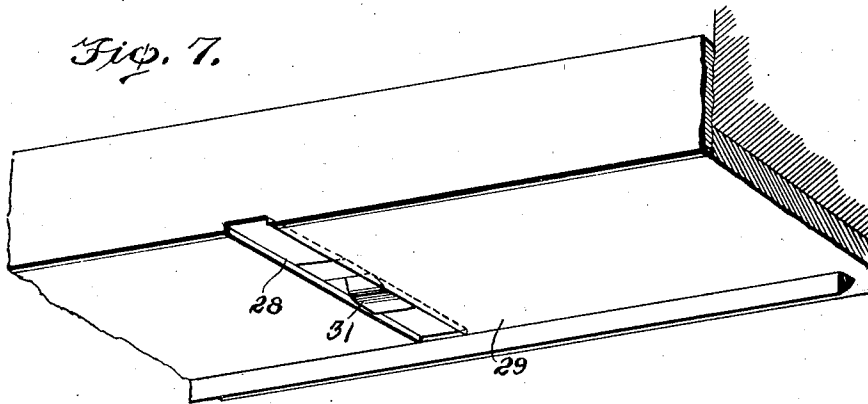
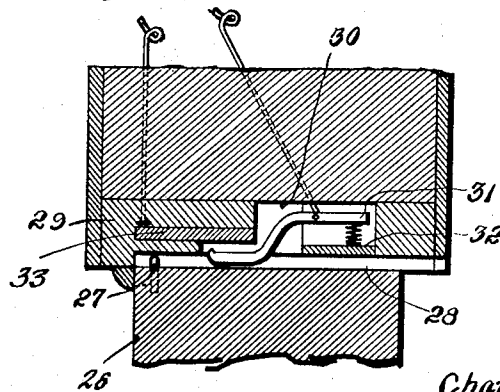


Fig. 8.



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UNITED STATES PATENT OFFICE.

CHARLES E. KIDDELSSEN, OF CHICAGO, ILLINOIS.

CIRCUIT-CLOSER FOR BURGLAR-ALARMS.

1,330,473.

Specification of Letters Patent.

Patented Feb. 10, 1920.

Application filed April 16, 1919. Serial No. 290,413.

To all whom it may concern:

Be it known that I, CHARLES E. KIDDELSSEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Circuit-Closers for Burglar-Alarms, of which the following is a specification.

This invention relates to electric burglar alarms, and more particularly to the circuit closing devices thereof, the object of the invention being to provide a circuit closer which is simple in construction, and efficient and reliable in operation, and which is so mounted as to be completely concealed so that it cannot be tampered with to render the alarm apparatus inoperative.

The object stated is attained by means of a novel combination and arrangement of parts to be hereinafter described and claimed, and in order that the same may be better understood, reference is had to the accompanying drawings forming a part of this specification.

In the drawings,

Figure 1 is a horizontal section of that portion of the window to which the invention is applied, showing the application of the latter;

Figs. 2 to 5 are details in perspective;

Fig. 6 is a perspective view showing the application of the invention to a door;

Fig. 7 is a perspective view of the top of the door frame, and

Fig. 8 is a section through the door and the top of the frame.

Referring specifically to the drawings, 10 denotes the side rail of the lower sliding sash of a window, the same working between the parting strip 11 and the inner stop 12 on the pulley stile 13 of the window frame. The drawing shows one side of the window only as this suffices for an understanding of the invention.

The side of the sash rail 10 which faces and abuts against the stop 12 has a vertical groove 14 the depth of which gradually decreases from its upper to its lower end, at which latter the groove merges with the face of the rail. In the edge of the stop 12 along which the sash rail slides is a groove 15 in which seats a spring switch actuator finger 16 having at its upper end a lateral bend 17 which passes slidably into an aperture in the stop, and has its extremity projecting into a recess 18 in that side

of the stop which seats against the pulley stile 13. The lower end of the finger 16 is fastened in the groove 15 in any suitable manner, and said finger is tensioned so that it has a normal tendency to project outward of the edge of the stop 12 containing the groove 15. When the sash 10 is down the finger 16 is opposite the groove 14 and is projected therinto, and upon raising the sash the inclined floor of the groove rides along the finger and forces it back into the groove 15, by which movement of the finger, its bend 17 is advanced farther into the recess 18.

In that face of the pulley stile 13 against which the stop 12 seats is a recess in which is housed a metal frame 19 in which is pivoted, as shown at 20, a switch lever 21, the pivotal axis being vertical, so that the lever swings in a horizontal plane. This lever projects from the stile a sufficient distance to locate its outer end in the recess 18 of the stop 12, and in the path of the bend 17 of the finger 16, so as to be actuated by said bend when the finger is forced back when the sash is raised as hereinbefore described.

In the face of the stile 13 from which the lever 21 projects, and located alongside the latter, is mounted a switch contact plate 22 which is struck by the lever when it is swung as hereinbefore described. To this contact plate is connected one side 23 of the alarm circuit, the other side 24 of the latter being connected to the frame 19. It will therefore be evident that the alarm circuit is closed when the lever 21 engages the plate 22, and this action takes place when the sash is raised, the lever being actuated by the bend 17 of the finger 16 when said finger is forced back by the inclined floor of the groove 14 as hereinbefore described.

The lever 21 is held normally retracted, and spaced from the contact plate 22, by an expanding coil spring 25 located in the frame 19 and pressing against the rear end of the lever.

The alarm device which is sounded or displayed when the circuit is closed, has not been illustrated, as it forms no part of the present invention and may be any suitable apparatus.

Figs. 6 to 8 show the invention applied to a door 26, from the top edge of which latter projects a pin 27 which enters a groove or slot 28 in the top 29 of the door frame

when the door closes and its top edge comes beneath the same. This groove opens into a recess 30 which houses a pivoted switch lever 31 similar to the lever 21 hereinbefore
5 described except that its outer end is offset downwardly to allow its supporting frame 32 to be set high enough to clear the switch actuator pin 27 as the door is opened. When this is done the pin 27 forces the lever
10 31 against a contact plate 33 similar to the plate 22 hereinbefore described, and the alarm circuit is then closed.

In both embodiments of the invention the switch is completely concealed when the
15 parts to which it is applied are in normal closed position, to forestall attempts of an intruder to render the alarm inoperative.

I claim:

The combination with the side rail of 20 a window sash, and the stop and the pulley stile along which the sash is slidable; of a pivoted switch lever and a contact opposite the same, said lever and contact being on the pulley stile beneath the stop and covered 25 thereby, and a resilient actuator finger carried by the stop and projecting from the edge thereof along which the side rail of the sash slides, said finger having a lateral bend into the path of which the switch lever 30 extends, and the sash rail having a groove in which the finger seats and out of which it is forced to operate the switch lever when the sash is slid.

In testimony whereof I affix my signature. 35
CHARLES E. KIDDELSSEN.