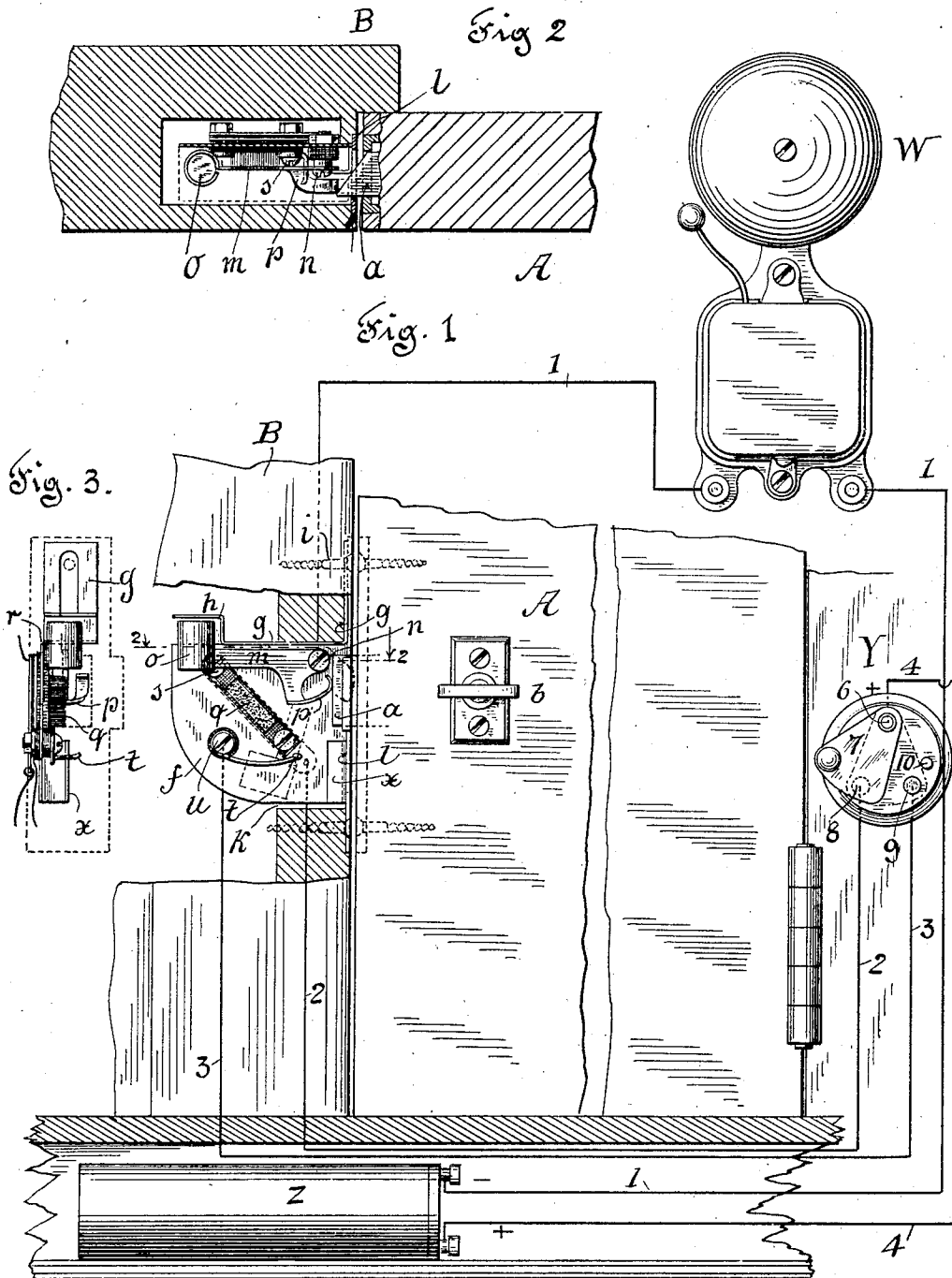


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DOOR BELL ATTACHMENT AND BURGLAR ALARM.

APPLICATION FILED MAR. 26, 1902.

NO MODEL.



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DOOR-BELL ATTACHMENT AND BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 726,366, dated April 28, 1903.

Application filed March 26, 1902. Serial No. 100,002. (No model.)

To all whom it may concern:

Be it known that I, ELBERT SNEDEKER, a citizen of the United States of America, and a resident of the borough of Brooklyn, in the city of New York and State of New York, have invented certain new and useful Improvements in Door-Bell Attachments and Burglar-Alarms, of which the following is a specification.

This invention relates to improvements in door-bell attachments and burglar-alarms, and particularly of that class wherein a bolt or latch normally holds a switch open, so as to then break an electric circuit through an alarm, but allows the switch to close the circuit, so that the alarm is rung when the bolt or latch is drawn back to open the door or other closure at which the switch is placed.

The invention especially relates to the combination, with the bolt or latch, of a switch (which I designate the "bolt-switch" to distinguish it from the hand-operated switch, termed hereinafter the "house-switch") inserted in a recess in the door-jamb behind the strike-plate, the screw or screws of which secure the frame of the bolt-switch in its recess. By thus placing the bolt-switch in the jamb and behind the strike-plate the wiring is simplified, the bolt-switch is made more accessible for renewal or repairs, and the parts of the bolt-switch may be simplified and cheapened.

Another important feature of this invention is the combination, in the bolt-switch, of two sets of terminal contacts with proper wiring, whereby the said switch can be used both for an ordinary door-bell ringer and a burglar-alarm. The house-switch is provided with a make-and-break device which is adapted to simultaneously open or to close both circuits to the bolt-switch or to open one while closing the other.

Referring to the drawings which accompany the specification to aid the description, Figure 1 is a broken elevation of a door equipped with the invention as seen from the inside of the door. The battery, house-switch, and alarm are of course indicated, for clearness, in different positions with respect to the door than they usually occupy. Fig. 2 is a section on the plane of the line 2 2

of Fig. 1. Fig. 3 is an elevation of the bolt-switch from the left of Fig. 1.

Referring to Figs. 1, 2, and 3, A is the door and B the jamb, *a* the bolt of a spring-latch, and *b* the knob of the latch. The bolt-switch mechanism is arranged on a frame *f*, which is a metal plate with a protecting top flange *g h*, which is preferably shaped as shown in Fig. 1. Said frame *f* is inserted in a recess *k* in the jamb B behind the strike-plate *l*, said frame *f* being held in the recess by the screw *i* of said strike-plate. Said flange *g h* prevents bits of mortar, &c., from falling into the bolt-switch mechanism, and I prefer to provide the frame *f* with a lateral flange *x* to turn over or into the jamb. Said mechanism, consisting of any suitable make-and-break device and terminal contacts, is carried on said frame *f*. In Fig. 1 the make-and-break device is a metal lever *m*, pivoted on a screw *n* in electrical contact with said frame *f* and is provided with a weight *o* to insure its dropping positively when not held up by the engagement of the bolt *a* with the bent arm *p* of said lever *m*. Said frame *f* and screw *n*, and therefore said lever *m*, are connected by wire 1 1 through the alarm W with one pole of battery Z.

The contact for momentarily ringing alarm W as the lever *m* drops is preferably a wire brush *q*, insulated from frame *f* by a layer of insulating material *r* and fixed to said frame by screws *s s*, which are insulated from said frame by insulating sleeves and washers in the usual manner. One of said screws *s* which is in contact with brush *q* is electrically connected with a wire 2 2, which leads to a contact-post 8 of the house-switch Y. As said lever *m* drops to its lowest limit it passes out of contact with brush *q* and into contact with the head of the contact *t* for continuously ringing said alarm W, said contact *t* being preferably a bent rod which is suitably insulated from, but is fixed on, said frame *f* by a screw *u*, with which said contact *t* is in electrical connection. Said screw *u* is connected by wire 3 3 with the post 9 of said house-switch Y. The make-and-break plate 7 of said switch Y is of such shape and dimensions that it can simultaneously contact, if desired, with both said posts 8 and 9,

and it is connected through the pivot 6 with wire 4 4, which leads to the other pole of battery Z. A stop 10 holds up said plate 7 when thrown over to open all the circuits.

5 Supposing plate 7 to be in contact with both posts 8 and 9, then when the door is closed and the latch locked the bolt *a* will hold up lever *m* and break both circuits through the lock-switch; but when the bolt *a* is drawn back the switch-lever *m* drops, momentarily making contact with brush *q* and closing the circuit by wires 1 1 and 2 2 and ringing the alarm. When the lever *m* drops to its lowest limit and into contact with rod *t*, it closes the circuit through wires 1 1 and 3 3 and rings said alarm continuously. For door-bell ringing said plate 7 is turned onto post 8 only, as in Fig 1, and then by turning a key or knob of the latch on the outside of the door A corresponding to knob *b* on the inside back and forth a caller can ring the alarm as a door-bell. I can also connect the brush *p* with a suitable wire from a push-button, so that a caller can ring the alarm as a door-bell by pushing the button.

25 Manifestly the bolt-switch is applicable to a door-bolt as well as to a spring-latch, and the make-and-break device in the bolt-switch may be a spring-actuated member in place of a gravity-lever without departing from my invention.

Now, having described my improvements, I claim as my invention—

1. The combination in a burglar-alarm of a spring-latch, an alarm, an electric circuit for operating said alarm, a make-and-break device on the door-jamb adapted to be operated by said spring-latch, and contacts for intermittent and for constant ringing, substantially as described.

2. The combination in a burglar-alarm, of a spring-latch, an alarm, a house-switch, wiring, and a bolt-switch on the door-jamb and characterized by a make-and-break device adapted to be actuated by said spring-latch and by two independent contacts both in circuit with the said alarm and house-switch one of said contacts being for intermittent the other for constant ringing, substantially as described.

3. The combination in a combined door-bell and burglar-alarm, of a spring-latch, an alarm, an electric circuit therefor, a make-and-break device on the door-jamb adapted to be operated by said spring-latch, and contacts one

for door-bell ringing and one for burglar-alarm, substantially as described.

4. The combination in a combined burglar-alarm and door-bell, of a spring-latch, an alarm, wiring, a house-switch adapted to simultaneously close two circuits or only one circuit, and a bolt-switch on the door-jamb provided with a make-and-break device adapted to be operated by said spring-latch, and two contacts one for door-bell ringing and one for burglar-alarm, substantially as described.

5. In a burglar-alarm, the combination of a frame adapted to be set in a door-jamb, a movable make-and-break device thereon in electric connection with a circuit-wire from one pole of a generator, and independent contacts in electric connection with wires to the other pole of the generator, substantially as described.

6. In a burglar-alarm, the combination with an alarm of a frame *f* adapted to be set in a door-jamb, a lever *m* on said frame and in electrical connection with a circuit-wire, contacts *q* and *t* one for intermittent the other for continuous ringing, and said contacts in connection with circuit-wires, substantially as described.

7. The combination in a combined burglar-alarm and door-bell, of a frame adapted to be set in a door-jamb behind a strike-plate, a make-and-break device on said frame in electrical connection with a wire from one pole of a generator, a contact for momentarily ringing an alarm as a door-bell and a contact for continuously ringing an alarm as a burglar-alarm and wiring for said contacts, substantially as described.

8. The combination in a burglar-alarm of a latch, an electric circuit, and terminals thereof on the door-jamb, and a pivoted lever on the door-jamb having one arm weighted and adapted to make and break said circuit, and the other arm substantially at right angles therewith and provided with a curved part *p* which is adapted to remain in contact with the latch-bolt during the entire movement of the said lever, substantially as described.

Signed at New York city this 25th day of March, 1902.

ELBERT SNEDEKER.

Witnesses:

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