Oct. 13, 1925. 1,557,373

A. D. SINDT

BURGLAR ALARM

Filed March 30, 1922

Fig. 2.

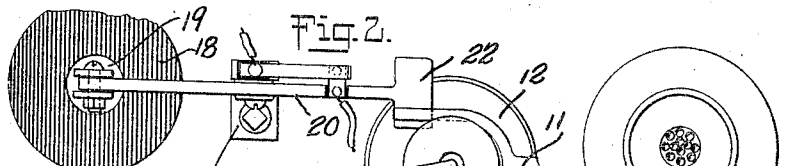


Fig. 1.

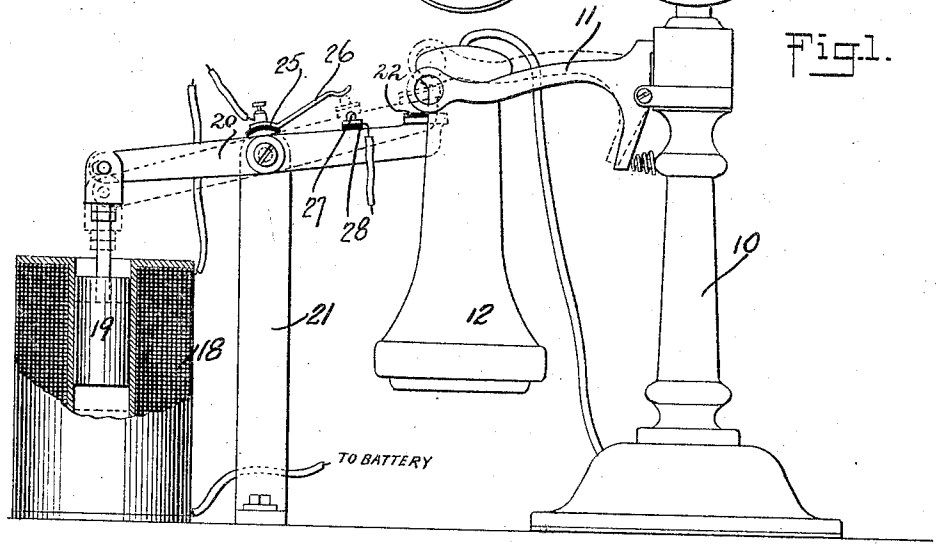
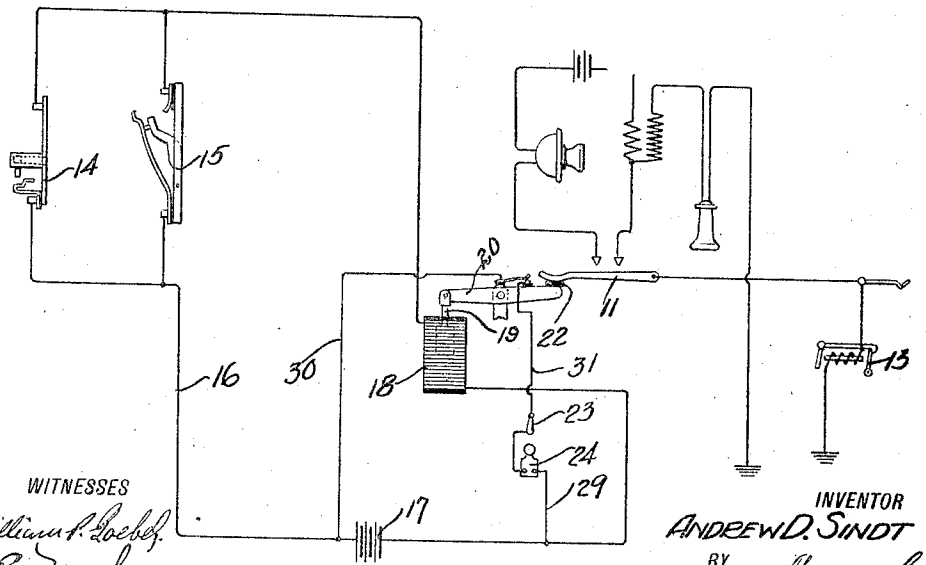


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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BURGLAR ALARM.

Application filed March 30, 1922. Serial No. 548,066.

To all whom it may concern:

Be it known that I, ANDREW D. SINDT, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented new and useful Improvements in Burglar Alarms, of which the following is a full, clear, and exact description.

This invention relates to improvements in burglar alarms.

The general object of this invention is the provision of simple and efficient means operated by the opening of an entrance closing means that may be operated with a telephone set without attaching anything thereto to operate it to signal the opening of the entrance closing means.

This object is accomplished by providing means associated with a telephone set and operated by the opening of an entrance closing means to close the telephone circuit to signal such opening.

This and other objects of the invention will be more clearly understood from the following detailed description and accompanying drawings.

Figure 1 is a side elevation of the device associated with the telephone set;

Figure 2 is a top plan view of the device for operating the telephone set; and

Figure 3 is a diagram of the electric connections.

Referring to the above-mentioned drawings, a telephone set 10 provided with a hook 11 and receiver 12 is shown. This telephone set is connected in any telephone system and the operation of it actuates an annunciator 13. The telephone circuit is closed by the raising of the hook 11 which is usually accomplished by a spring upon the removal of the lever 12 from the hook.

The alarm device consists of switches 14 and 15 of standard type adapted to be associated with a door or window, respectively. These switches are connected in parallel across a circuit 16 in which a battery 17 and a solenoid 18 are connected in series. The solenoid 18 has an armature 19 associated with it. This armature 19 is connected to one end of an arm 20 pivotally mounted on a frame 21. The other end of the arm 20 is provided with a flattened projection 22 extending upward. Either the arm 20 or the projection 22 or both may be made from some insulating material. The flattened projection on the arm 20 is located underneath the hook 11 of the telephone set, and the frame 21 is of such a height that the flattened projection just touches the hook when the armature 19 is released upon the de-energization of the solenoid.

A switching means comprising two contact members 26 and 27 are provided. The contact member 26 is mounted on the frame 21 and insulated therefrom by the insulating plate 25, while the contact member 27 is mounted on the arm 20 and insulated therefrom by the insulating plate 28. The contact members 26 and 27 are so positioned that upon the operation of the arm 20 they are brought into contact with one another so as to complete a circuit. This circuit includes a conductor which extends from the positive side of the battery 17 to the contact member 26, and a conductor 31 which extends from the contact member 27 to a switch 23 and from thence to one terminal of a bell 24 and from the other terminal of the bell 24 to battery 17 by conductor 29.

The telephone set is connected, as shown in Figure 3, and is operated upon raising of the hook which completes the circuit. The annunciator 13, which is usually in a local switchboard such as is often installed in an apartment house or office building, is operated upon the completion of the telephone circuit.

The operation of the device is as follows:

The telephone set is moved into a position where the hook 11 is directly above the flattened projection 22 on the arm 20. If it is desired to use the bell 24 the switch 23 is closed, connecting the bell in series with the switches and battery. Upon the opening of either a window or door or any other means closing an entrance with which the switches are associated, a circuit is established. If the switch 14 is thus operated, the circuit is completed and current flows from the positive pole of battery 17, through conductor 16, switch 14, the windings of the solenoid 18 and back to the negative pole of the battery. This energized the solenoid 18 which draws down the armature 19, rotating the arm 20 about its pivot point and raising the hook 11. This completes the telephone circuit and actuates the annunci-

ator 13 of the local switchboard located in the building, and the operator is warned of the entrance that has been made and also informed as to what apartment or room has been entered.

In case it is desired to use the bell 24, the switch 23 is closed and upon the operation of the arm 20 the contact member 27 is moved into contact with the contact member 26 thus completing the bell circuit, and current flows from the positive pole of battery 17, through conductor 30, contact members 26 and 27, conductor 31, switch 23, bell 24 to battery by conductor 29. This operates the bell and warns the occupants of the apartment or room of the opening of the window or door.

The above constitutes a burglar alarm that may be associated with any telephone set without attaching any parts of the alarm device to the telephone set or connecting any of the circuits to the telephone circuits. The alarm may be given at the local switchboard located in the apartment house or building or to the occupants of the same.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated since manifestly the same can be considerably varied without departing from the spirit of the invention as defined in the appended claims.

Claims.

1. In combination with a telephone system including a telephone set and an annunciator, of an alarm comprising a switch in conjunction with the means for closing an entrance, an electric circuit including a battery controlled by said switch, a solenoid energized by the closing of the circuit, and a pivoted arm one end of which carries the armature of the solenoid, the other end of the arm having a projection extending under the receiver hook of the telephone, said projection having insulating material thereon and normally just engaging said hook, whereby the arm will be operated by the solenoid to raise the receiver hook.

2. In combination with a telephone system including a telephone set and annunciator, an alarm of the class described comprising a switch in conjunction with the means for closing an entrance, an electric circuit including a battery and solenoid controlled by the switch, a pivotally mounted arm operated by the solenoid and associated with the telephone set for closing the telephone circuit upon its operation, switching means associated with the pivotally mounted arm, and a bell actuated by the closing of the switch associated with said pivotally mounted arm.

3. In combination with a telephone system including a telephone set and annunciator, a burglar alarm of the class described, comprising an electric circuit in which a battery, a solenoid and switching means associated with a door or window are connected in series, a pivoted arm associated with the telephone set to operate the latter upon the operation of the arm, an armature carried by one end of said pivotally mounted arm, whereby upon the energization of said solenoid the arm will be operated thereby, a bell and bell circuit having switching means connected in series therewith and operated by the pivotally mounted arm to close the circuit to ring the bell.

4. In combination with a telephone system including a telephone set and an annunciator, of a burglar alarm, comprising an electric circuit in which a battery, a solenoid and a switch associated with a door or window are connected in series, an upright, an arm pivoted at about its center of length on the upright and with one of which the armature of the solenoid is connected, the other end of the arm extending under the receiver hook of the telephone, a bell, a bell circuit, and contacts for closing the bell circuit, one of the contacts being on the upright and the other on the said arm.

ANDREW D. SINDT.