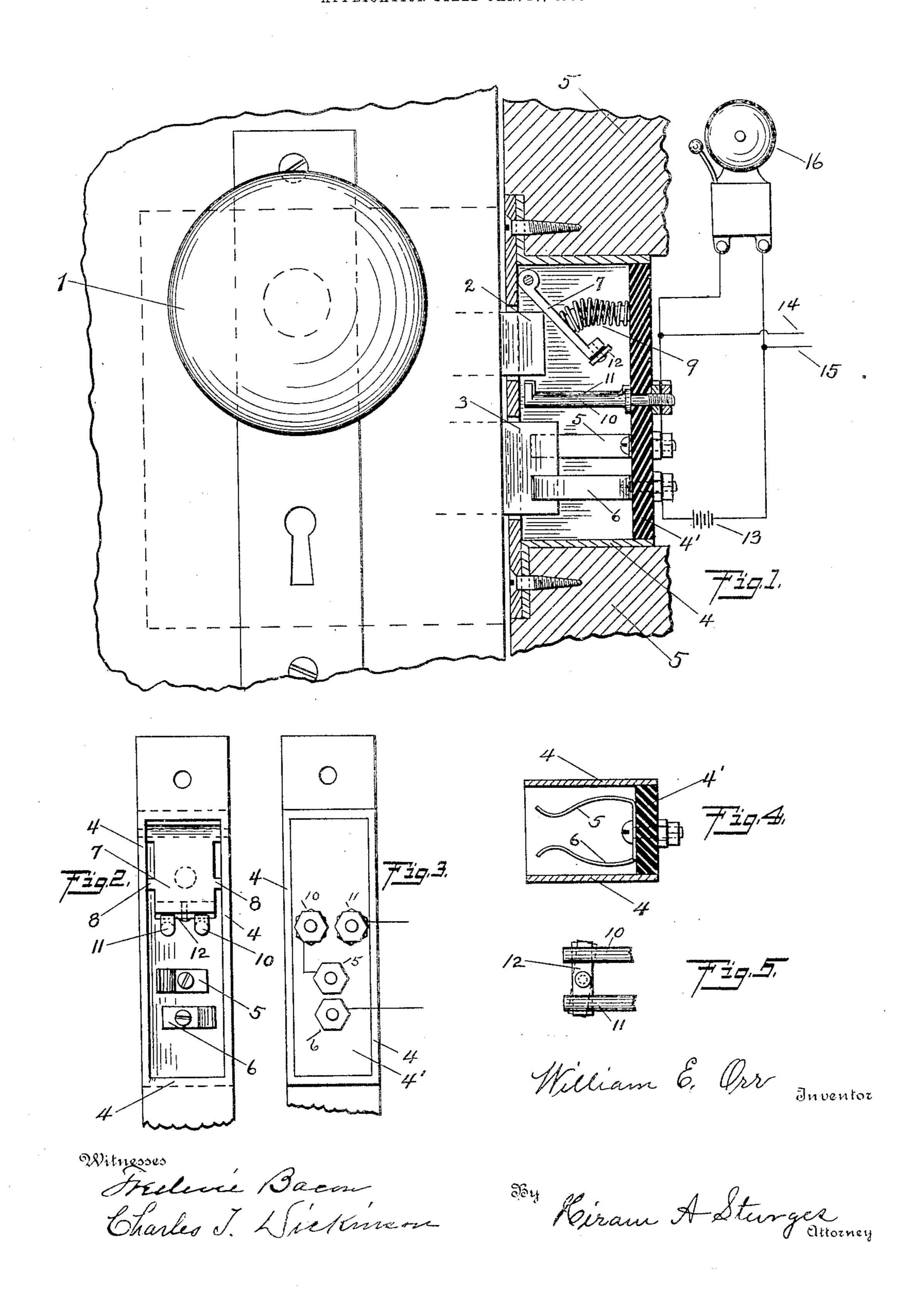
W. E. ORR.

ELECTRIC BURGLAR ALARM.

APPLICATION FILED JAN. 17, 1905.



UNITED STATES PATENT OFFICE.

WILLIAM E. ORR, OF COUNCIL BLUFFS, IOWA.

ELECTRIC BURGLAR-ALARM.

No. 804,760.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed January 17, 1905. Serial No. 241,411.

To all whom it may concern:

Be it known that I, WILLIAM E. ORR, a citizen of the United States, residing at 152 Vine street, Council Bluffs, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in Electric Burglar-Alarms, of which the following is a specification.

My invention relates to improvements in 10 electrical burglar-alarms for use in connection with a door or the several doors of a residence or other building, so that an alarm may be communicated to the occupant within after the door has been locked through the act of 15 turning the door-knob, performed by any per-

son upon the outside.

The object of my invention is to provide an alarm to the person within the building caused by the simple act of turning the door-knob of 20 the door in either direction by some person without the building by means of the electrical circuit, which will be operative only after the door has been locked and which may be used on any door employing the ordinary 25 door-lock with door-knob, to be operated electrically to give the alarm, the device being simple and inexpensive in construction and efficient, certain, and practical in every particular.

30 The invention consists in an electricallyoperated burglar-alarm embodying novel features of construction and combination of parts for service substantially as disclosed

herein.

Figure 1 represents an ordinary door-lock with door-knob, (numbered 1,) catch-bolt 2, and lock-bolt 3 with adjacent mechanism located within the cut-away portion, showing the housing or casing for this mechanism within 40 the door-jamb 5. Figs. 2, 3, 4, and 5 show the construction in detail of the mechanism within the housing, the several parts of this mechanism being constructed of any metal having good electrical conducting properties. 45 Fig. 2 is a front or face view, and Fig. 3 is a rear view of housing containing the mechan-ISM.

Referring to the drawings, in which similar numerals of reference denote correspond-50 ing parts of the several views, the housing 4 is preferably constructed of metal, except the portion 4', which is of wood or other nonconducting substance. Metal standards 5 and 6, having a bearing upon the portion 4', are 55 positioned so that when the lock-bolt is thrown forward these standards make actual contact | make constant contact with said catch-bolt; a

with either side of the lock-bolt and act as electrical conductors. An apron or lever 7, pivotally hung from the housing, provided with guide portions 8, is positioned to swing 60 laterally toward or away from the catch-bolt actuated by the spiral spring 9 in one direction and by the movement of the catch-bolt itself in the opposite direction. This apron or lever makes physical contact with the free 65 ends of the metal standards 10 and 11 when the door-knob is turned in either direction. A bar 12, pivoted at its center upon the bottom of the apron, operates as an evener or equalizer of movement to insure a complete 7° contact and makes contact with the free ends of the standards 10 and 11.

The standards 10 and 11, as well as standards 5 and 6, have a bearing upon the nonconducting portion 4' and are firmly bolted 75 thereto, as shown, and the pair of standards 6 and 11 form a connection with the battery 13; but the standards 5 and 10, while connected with each other, are disconnected from the battery.

An electrical alarm-bell is shown at 16 and placed at any desired part of the building and is provided with suitable electrical connections with the battery and standards 6 and 11. Also an additional alarm may be em- 85 ployed from the connecting-wires 14 and 15, as is evident.

From the foregoing description, taken in connection with the drawings, the operation of my electrical burglar-alarm will be readily 90 understood, and it will be noted that when the parts are in normal or initial position there is no electrical connection; but upon locking the door by moving forward the lockbolt the latter is then in the position shown 95 by the numeral 3 in the drawings and is in contact with the conductors 5 and 6. The electrical connection is thereupon complete from the battery to the conductor 10. The lever 7 is always away from and out of con- 100 tact with the conductors 10 and 11, except when the door-knob is turned; but upon rotating the door-knob in either direction the cross-bar of the lever 7 is immediately forced down upon both free ends of conductors 10 105 and 11, which closes the circuit, thereby electrically operating the alarm.

I claim—

1. An electric burglar-alarm comprising a catch-bolt to be moved by rotation of a knob, 110 a dependably-hung apron or lever adapted to

battery and an alarm with conducting-wires; a lock-bolt, and standards adapted to make contact therewith and with said conducting-wires, and standards adapted to connect the conducting-wires with said apron upon with-drawal of said catch-bolt.

2. An electric burglar-alarm comprising a catch-bolt to be moved by rotation of a knob, a dependably-hung apron or lever adapted to make constant contact with said catch-bolt; a battery and an alarm with conducting-wires; a lock-bolt, and standards adapted to make contact therewith and with said conducting-wires, standards adapted to connect the conducting-wires, standards adapted to connect the conducting-wires, standards adapted to connect the conducting-wires with said apron upon with-drawal of said catch-bolt, and the pivotally-

hung cross-bar upon said apron adapted to make a contact with one of said standards.

3. In combination with a door-lock with a catch-bolt and lock-bolt, the standards 5, 6, 20 10 and 11, the conducting-wires, electrical battery and alarm, the swinging apron 7 adapted to make constant contact with the catch-bolt and to make contact with one of said standards upon withdrawal of the catch-25 bolt.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM E. ORR.

Witnesses:

FREDERIC BACON, B. R. BALL.