

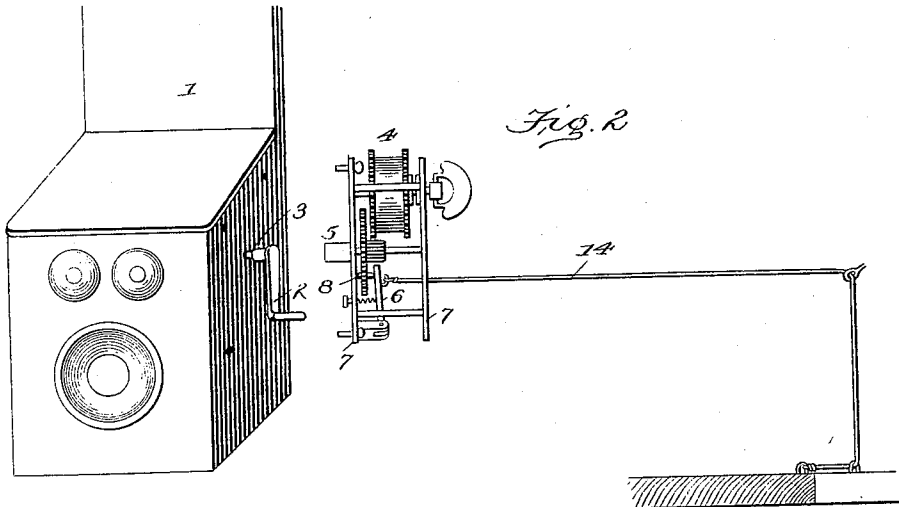
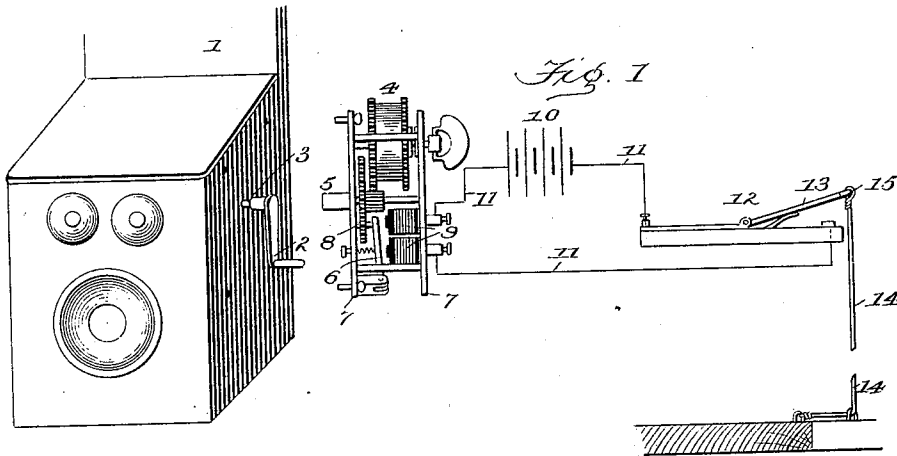
(No Model.)

2 Sheets—Sheet 1.

C. J. BUKOUTZ.
ELECTRIC BURGLAR AND FIRE ALARM.

No. 595,871

Patented Dec. 21, 1897.



WITNESSES

Edmund L. Bradford

R. M. Pherson, Jr.

INVENTOR

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ATTORNEYS.

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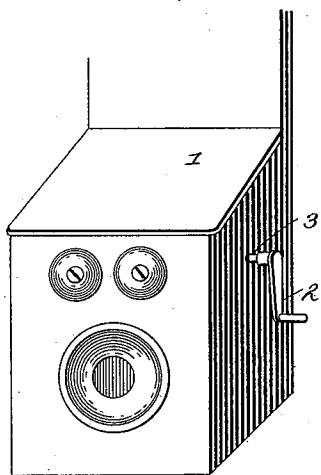


Fig. 3.

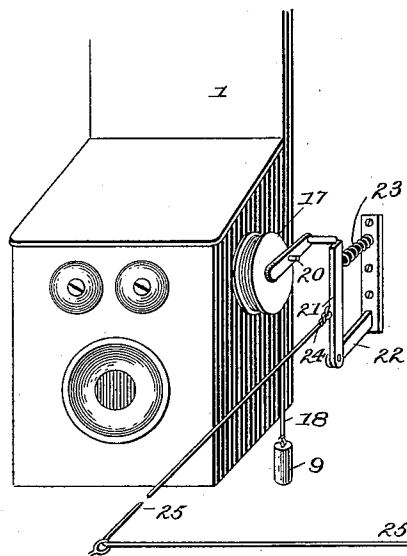
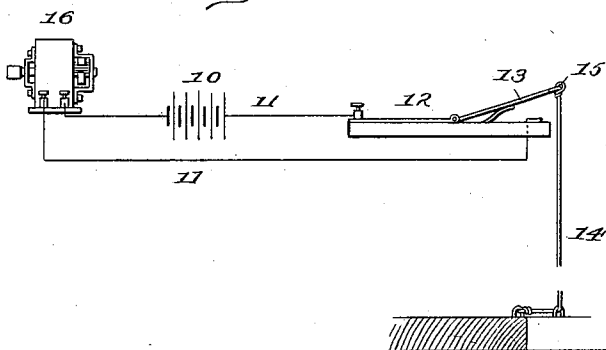


Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES J. BUKOUTZ, OF LAMOILLE, ILLINOIS.

ELECTRIC BURGLAR AND FIRE ALARM.

SPECIFICATION forming part of Letters Patent No. 595,871, dated December 21, 1897.

Application filed April 19, 1897. Serial No. 632,717. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. BUKOUTZ, a citizen of the United States, residing at Lamoille, in the county of Bureau and State of Illinois, have invented certain new and useful Improvements in a Combined Electric Burglar and Fire Alarm; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved automatic electric burglar-alarm system; and the object is to provide a simple, effective, and absolutely reliable system of this class.

To these ends the novelty consists in the construction, combination, and arrangement of the several elements of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a general perspective view of my improved electric burglar-alarm system as it appears in operation. Fig. 2 is a modification of the same. Fig. 3 is another modification of the manner of operating the alarm-circuit. Fig. 4 shows the same connected as a combined fire and burglar alarm system.

1 represents an ordinary telephone magneto call-box as is usually found in every subscriber's station, and it is operated to call the central office by the crank-handle 2, detachably secured on the main shaft 3.

4 represents an ordinary train of spring-actuated gearing having its main driven shaft provided with a sleeve 5, adapted to engage the shaft 3 on the call-box 1 when the crank-handle 2 is removed.

6 represents an armature pivoted in the frame 7 of the spring-motor, and its free end is provided with a stud or pin 8, which is adapted to be projected into the path of the gearing to arrest its motion when said armature is at rest.

9 represents an electromagnet fixed in the frame 7 contiguous to the armature and adapted to operate it when said magnet is energized and to withdraw its retaining stud or pin 8 and release the spring-actuated train of gearing, which in turn rotates the shaft 3

of the call-box, thereby sending an alarm-call to central office.

The local circuit comprises the magnet 9, the battery 10, the conductors 11 11, and the circuit-closer 12. The latter may be fixed contiguous to a door, window, or, in fact, any suitable place where its spring-arm 13 will be operated by an unlawful entry of the premises so protected to close the local circuit, energize the magnet, and sound an alarm, as above described.

In some instances the circuit-closer may be centrally located in an apartment and a series of cords 14 14, connected to the eye 15 on the outer end of the spring-arm 13 of the circuit-closer, and is thence led to the various doors and windows to be protected, the opening of any one of which will close the circuit and sound an alarm.

In the modification shown in Fig. 2 the local circuit may be dispensed with and the cord or cords 14 connected direct to the armature, as shown, in which instance it acts as a simple pawl, which when withdrawn by the cord releases the gearing with the same result as before.

In Fig. 3 I have dispensed with the spring-motor and substituted an electric motor 16, so that when the local circuit is closed the motor will operate the shaft 3 and sound the alarm in the central office, as in the first instance.

It is evident that with the motor 16 in circuit a magneto-generator (not shown) may be employed on such premises as are not provided with a telephone and the generated current transmitted to any suitable point or distance over the usual conductor.

In the modification shown in Fig. 4 a drum or spool 17 is loosely mounted on the shaft 3 and on it is wound a cord 18, provided with a suitable weight 19. A removable pin 20 is inserted through the crank-arm 2 and the contiguous flange of the spool, so that the two may travel together. 21 represents a pawl fulcrumed on a bracket 22, fixed to the wall or other convenient support, and its upper or free end is arranged to be projected into the path of the outer end of the crank-arm 2. 23 represents a spiral spring, one end of which is attached to said pawl and the other fixed to the bracket, and 24 represents an

eye or hook on said pawl, from which a combustible cord 25 extends in an opposite direction from the spiral spring to the points to be protected, and it may be run zigzag across
5 the room or around the wall, so as to be out of the way and yet exposed. If, now, the cord be drawn by the opening of the door or window, it will force the pawl 21 out of the path of the crank-arm, which being released
10 will rapidly rotate under the influence of the weight and send in an alarm to the central office. If, on the other hand, a fire should occur in the premises and be communicated to the cord at any point, the cord will instantly part, thereby allowing the spiral
15 spring 23 to retract the pawl and release the arm with the same result as before—a notification or alarm at the central office.

The extreme simplicity of the system as
20 well as its efficiency and reliability are great points in its favor, no skill being required to set it up and maintain it.

Although I have specifically described the construction and relative arrangement of the
25 several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as

clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, 30 what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

An automatic electric fire and burglar alarm system, comprising the telephone-call 1, provided with the shaft 3 and crank-arm 2, the
35 spool or drum 17 loosely mounted on said shaft and provided with the cord 18 and weight 19, the removable pin 20, the pivoted pawl 21 adapted to project into the path of
40 said arm 2, and the spring 23 connected to said pawl, in combination with the combustible cord 25, having one end fixed to said pawl and the other end connected to a door, window or other suitable point within the premises, substantially as and for the purpose set
45 forth.

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

CHAS. J. BUKOUTZ.

Witnesses:

E. H. MARRIOTT,
J. H. SHOWALTER.