

No. 757,364.

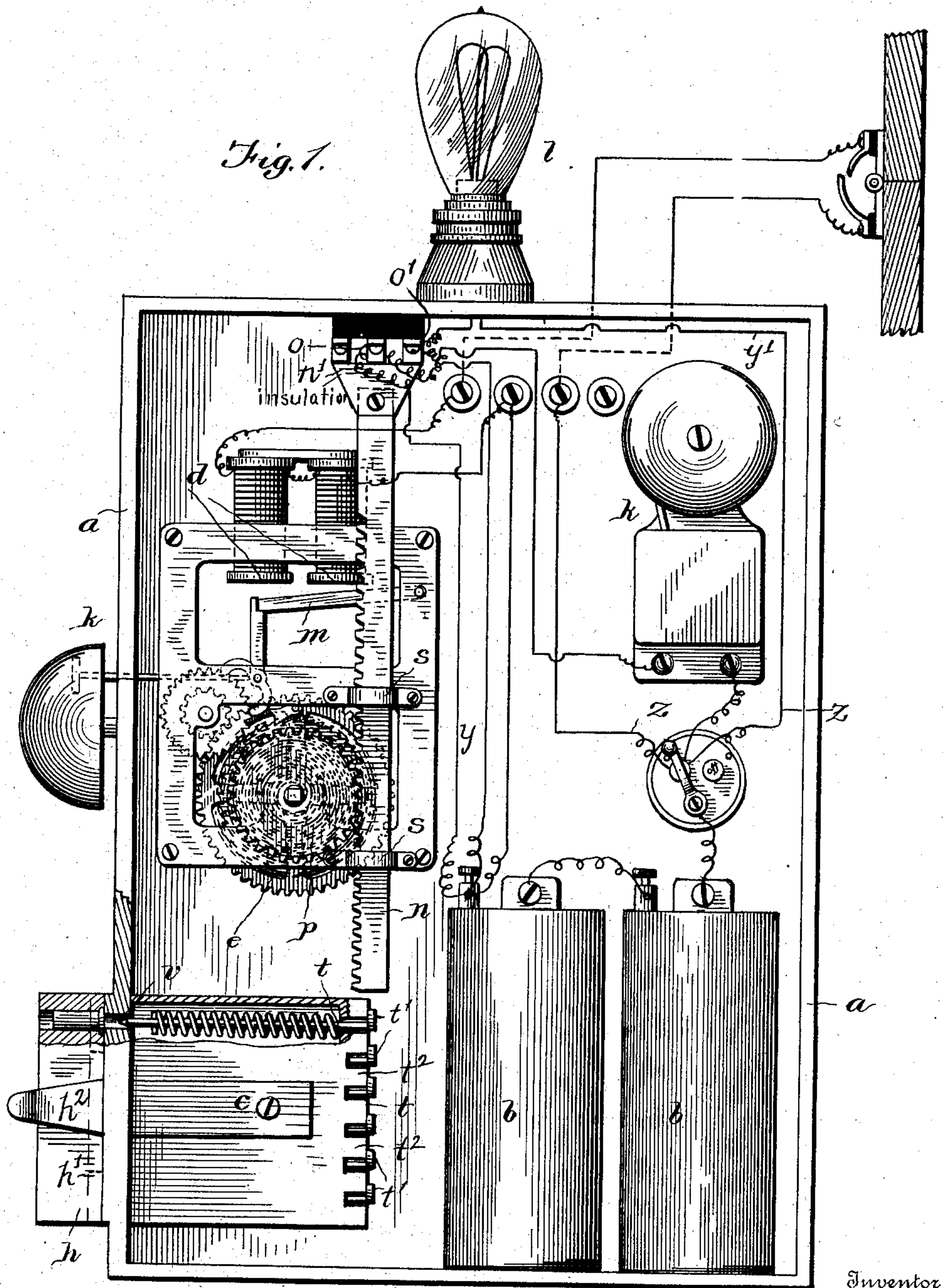
PATENTED APR. 12, 1904.

J. THORSEN.
COMBINED LIGHTING AND ALARM DEVICE.

APPLICATION FILED SEPT. 24, 1903.

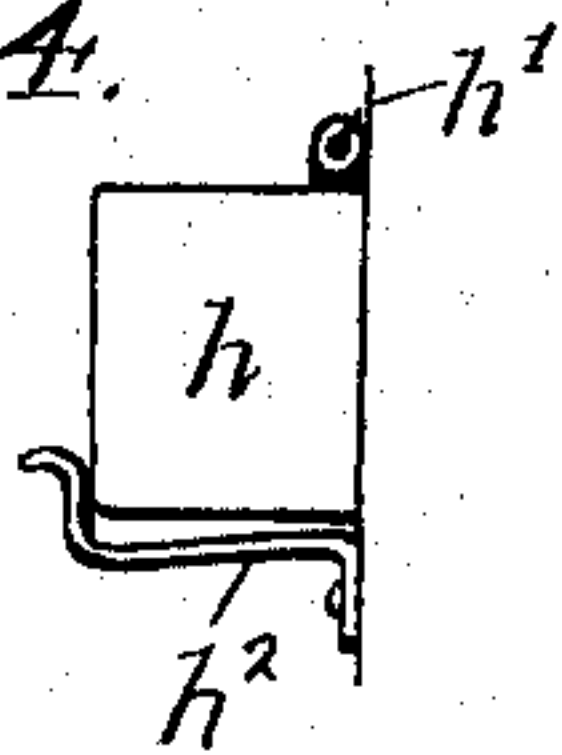
NO MODEL.

2 SHEETS—SHEET 1.



Inventor

Fig. 2.



Witnesses

R. A. Brewell.
George M. Anderson

By

John Thorsen
E. W. Anderson
his Attorney

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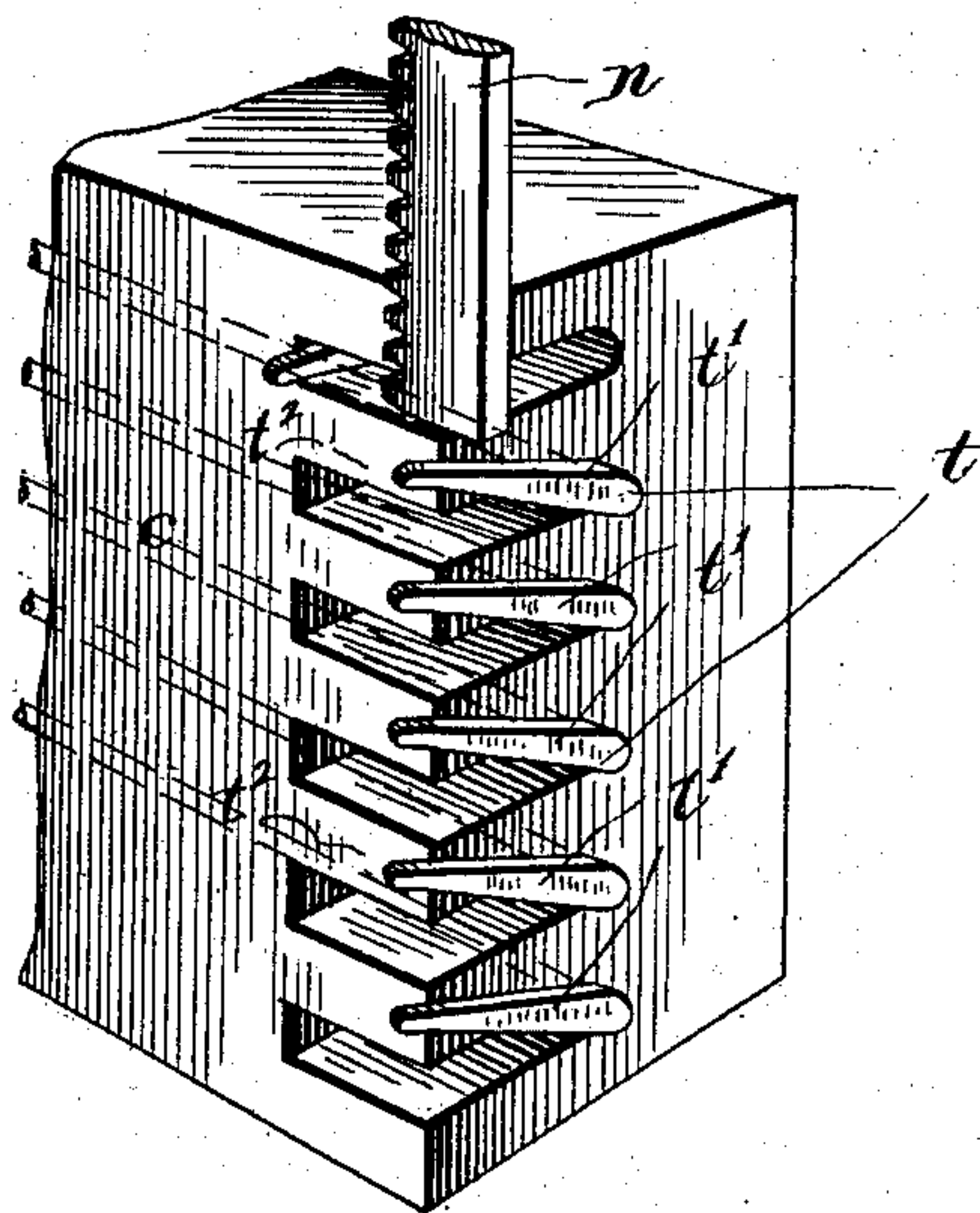
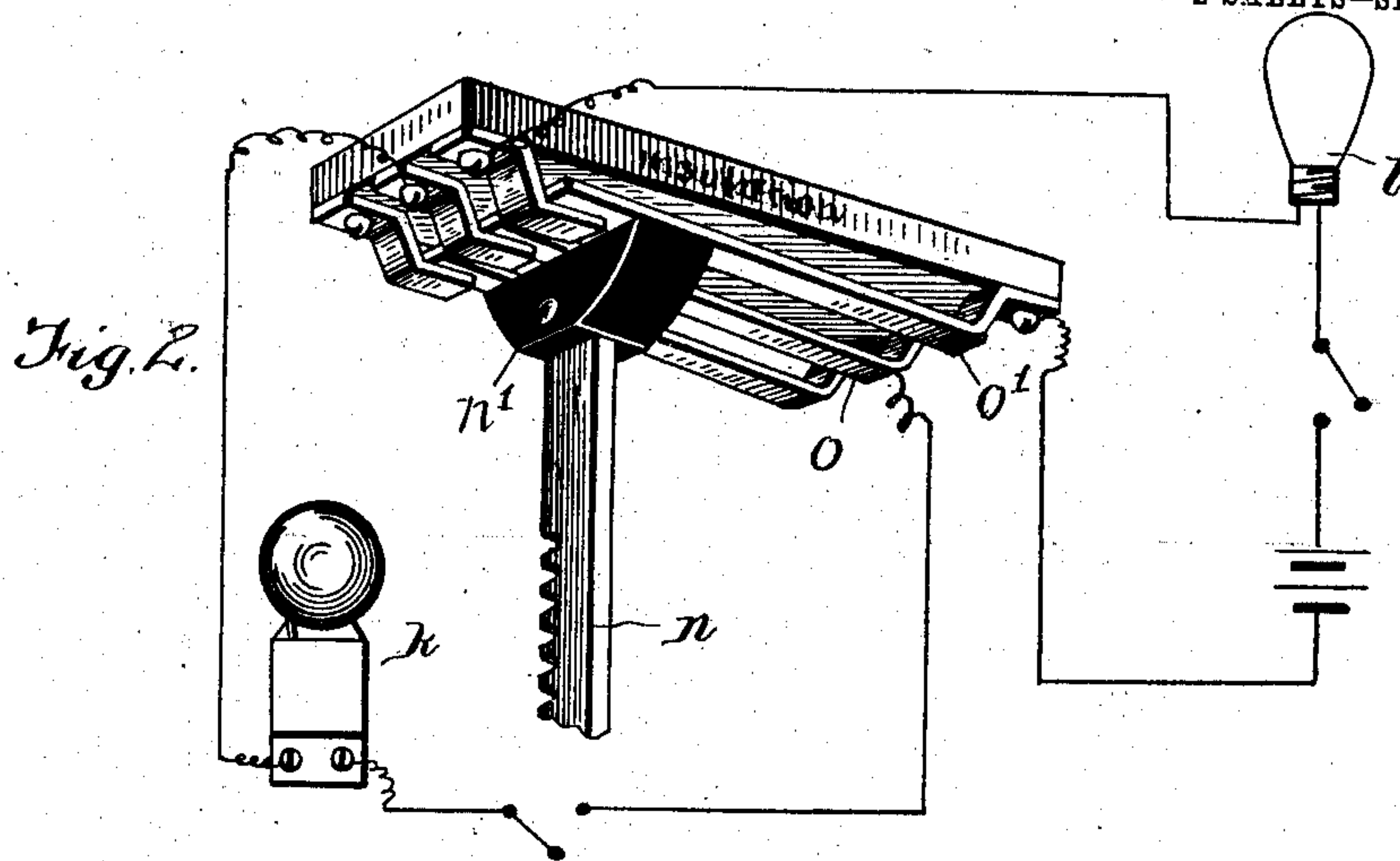
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NO MODEL.

2 SHEETS—SHEET 2.



Witnesses

R. A. Boswell.
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UNITED STATES PATENT OFFICE.

JOHN THORSEN, OF CHICAGO, ILLINOIS.

COMBINED LIGHTING AND ALARM DEVICE.

SPECIFICATION forming part of Letters Patent No. 757,364, dated April 12, 1904.

Application filed September 24, 1903. Serial No. 174,485. (No model.)

To all whom it may concern:

Be it known that I, JOHN THORSEN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have made a certain new and useful Invention in a Combined Lighting and Alarm Device; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a front elevation of my alarm and lighting device, partly broken away. Fig. 2 is a detail view showing the spring-contacts o and o' in perspective and the alarm-circuits in diagram. Fig. 3 is a detail perspective view showing the trigger devices t of the gun. Fig. 4 is a detail view of the cartridge-holder.

The invention has relation to alarm devices; and it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter a designates a case in which are located a battery b , a discharger c , an electromagnet d , and a spring-motor e . On the outside of the case and attached thereto is a gun h , and it is designed to provide also an alarm-bell k and an alarm-light l . The battery is wired in connection with the electromagnet, the alarm-bell mechanism, the electric lamp, and switches at various points of ready access about an apartment, whereby the battery may be set in action to energize the electromagnet and the alarm-gong and lamp. The electromagnet is designed to operate an armature m , which when moved by the attraction of the magnet sets free the previously-wound spring-motor e , the main shaft of which is provided with a discharging-trip, preferably a pinion p , in engagement with a rack-bar n , located in a suitable slideway s and designed to have longitudinal movement relative to a line of spring-operated firing-pins t in the discharger. These firing-pins are set by pulling them back until their triggers or lugs t' engage with catch-shoulders t'' of the

discharger. As the rack-bar moves endwise it pushes the triggers out of engagement with the catch-shoulders one after another, and the firing-pins are successively shot forward by their springs. These firing-pins are located in position on the discharger so as to respectively register with openings v in the case-wall, said openings communicating with the openings of the cartridge-chamber of the gun. The gun is designed to be of battery form, having several chambers, which may be of different size of bore to hold cartridges of different caliber. The gun or cartridge holder is designed to be adjustable in bearings attached to the case-wall in such wise that it can be turned back after discharge for the removal of the empty cartridge-shells and for loading with fresh cartridges. This is accomplished by means of a hinge h' and spring-catch h'' .

The rack-bar n carries at its upper end the insulation-block n' , which is arranged upon downward movement of such rack-bar to release the spring-contacts o and o' , and thereby make connection in the circuits $y y'$, having the alarm bell and light in connection therewith. An extra spring-contact is shown for an extra circuit and alarm device.

The wires $z z$, which extend to the operating-switch, may have branch extensions to other switches. In this way the alarm-bell, the light, and gun may be operated from various points—as, for instance, by arranging switches to be acted upon by the opening of a window or door, by the pressure of a hinged platform under a mat at the door, or by pressing a button which may be arranged near the bedside or in other position of convenient access. The entire device is designed to be put up and taken down in a house in a convenient and inexpensive manner, as its parts may be, as shown, carried by a casing or box which may be placed on a shelf. As a burglar-alarm it will serve an important purpose, and as it is not advisable for such use that it should be capable of action except during the night a special key may be used to operate a cut-off or disconnecting device, whereby the current can be turned off during the day and turned on at some proper hour in the evening.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In an alarm device, a motor having a pinion, a rack-bar engaging said pinion, alarm devices, means above and in the path of movement of said rack-bar for effecting the operation of one of said alarm devices, means below and in the path of movement of said rack-bar for setting the other of said alarm devices in operation, a stop for keeping said motor out of operation, and means for releasing said stop, substantially as specified.

2. In an alarm device, the combination with a motor having a pinion, of a cartridge-holder, a spring-pressed firing-pin for said cartridge-holder having a trigger attachment, a stop for holding said trigger attachment and firing-pin withdrawn, a rack-bar engaging said pinion and operating in the path of said trigger attachment, a stop for keeping said motor out of operation, and means for releasing said stop, substantially as specified.

3. In an alarm device, the combination with a motor having a pinion, of a cartridge-holder, a spring-pressed firing-pin for said cartridge-holder having a trigger attachment, a stop for

holding said trigger attachment and firing-pin withdrawn, a rack-bar engaging said pinion and operating said trigger attachment, a second alarm device, means located above and in the path of said rack-bar for setting the same in operation, a stop for keeping said motor out of operation, and means for releasing said stop, substantially as specified.

4. In an alarm device, the combination with a motor having a pinion, of a cartridge-holder, the spring-pressed firing-pin of said cartridge-holder having a trigger attachment, a stop for holding said trigger attachment and firing-pin withdrawn, a rack-bar engaging said pinion and operating said trigger attachment, a second alarm device, a spring-contact in circuit therewith and located above and in the path of said rack-bar, a stop for keeping said motor out of operation, and means for releasing said stop, substantially as specified.

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

JOHN THORSEN.

Witnesses:

WALDEMAR LIEBERT,
CHRIST JENSEN.