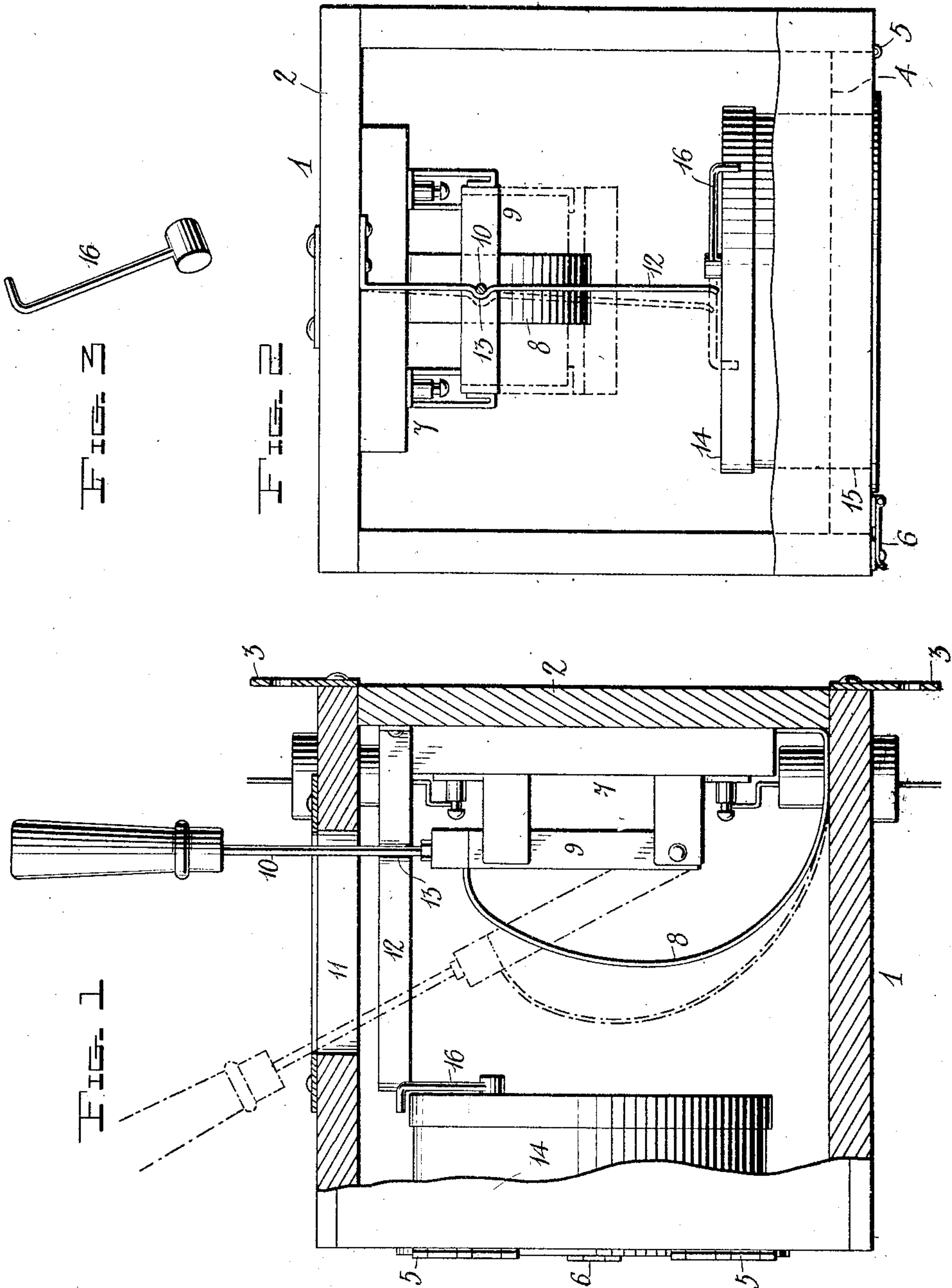


No. 843,005.

PATENTED FEB. 5, 1907.

L. C. DORLAND.
AUTOMATIC ELECTRIC TIME SWITCH.

APPLICATION FILED JUNE 8, 1906.



Witnesses
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by

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AUTOMATIC ELECTRIC TIME-SWITCH.

No. 843,005.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed June 8, 1906. Serial No. 320,859.

To all whom it may concern:

Be it known that I, LESLIE C. DORLAND, a citizen of the United States, residing at Poughkeepsie, in the county of Dutchess and State of New York, have invented new and useful Improvements in Automatic Electric Time-Switches, of which the following is a specification.

My invention is an improved automatic electric time-switch apparatus adapted at any predetermined time to release the spring-actuated lever of an electric switch to enable the said lever to move to the position required to break the circuit or circuits controlled by the said switch to put out the lights or discontinue the operation of other translating devices in such circuit or circuits; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an elevation of electric time-switch apparatus embodying my invention, the casing in which the same is inclosed being shown in section. Fig. 2 is a top plan view of the same, the lever of the switch and the casing being shown in section. Fig. 3 is a detail perspective view of the trip-arm of the alarm-mechanism-winding arbor of the clock.

The inclosing casing 1 (here shown) is provided at the back 2 with hangers 3, whereby it may be secured on a wall. It also has a door 4, hinged at 5 and provided with a fastening device 6.

In the casing and secured to the rear wall thereof is a switch 7, here shown as a knife-switch, provided with a spring 8 to throw the switch-lever 9 to open position. The arm 10 of the switch-lever operates in a slot 11 in the top of the casing. To the rear wall of the casing is secured the inner end of a detent, which is a spring-arm 12, that bears against the arm 10 and is bent at a suitable point to provide a shoulder 13, which engages the said arm when the switch-lever is closed to hold such switch-lever in closed position.

An alarm-clock 14 of usual construction is secured to and carried by the door of the casing, the face of the clock showing through an opening 15 in the door. The major portion of the clock-case projects from the inner side of the door and extends into the casing 1 when the door is closed. To the winding-

arbor of the alarm mechanism of the clock is attached a trip-arm 16. Such trip-arm is turned in one direction to wind the alarm mechanism and remains in the position indicated in full lines in Fig. 2 until the alarm mechanism is sprung by the clock at the predetermined time and when the said trip-arm moves to the position shown in dotted lines in such figure.

When the door of the casing is closed, the free end of the detent 12 is in the path of the said trip-arm, and hence the movement of such trip-arm when the alarm mechanism is sprung causes the detent to be disengaged from the lever-arm of the switch, whereupon the spring 8 moves the said lever to open position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined by the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The herein-described automatic time-switch apparatus comprising the casing having the movable door and provided with the slot in one side, an alarm-clock having a trip-arm attached to the winding-arbor of the alarm mechanism, a switch secured in the casing and having a switch-lever extending through and operating in the said slot, a spring to open the switch-lever, and the spring-detent arm to engage and normally hold the switch-lever in closed position, said spring-detent arm having one end secured to the casing and the other disposed in the path of the trip-arm, when the door of the casing is closed, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LESLIE CARY DORLAND.

Witnesses:

GEO. F. MOSHER,

FRANK C. HOWARD.