

(No Model.)

G. PIRNIE.
ELECTRIC CIRCUIT CLOSER.

No. 304,557.

Patented Sept. 2, 1884.

fig. A.

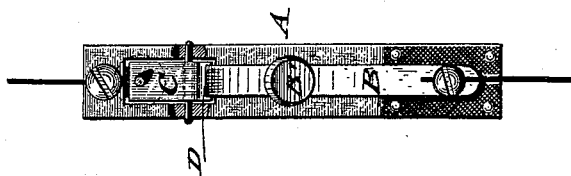


fig. B.

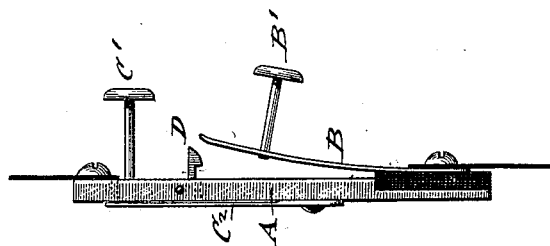


fig. C.

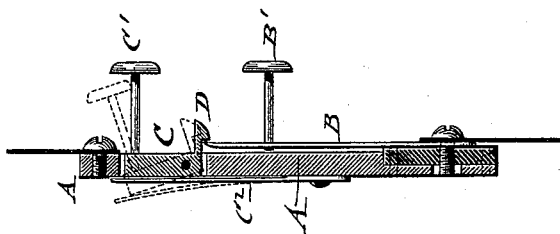
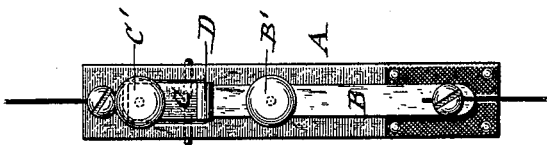


fig. D.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE PIRNIE, OF NYACK, NEW YORK.

ELECTRIC-CIRCUIT CLOSER.

SPECIFICATION forming part of Letters Patent No. 304,557, dated September 2, 1884.

Application filed December 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE PIRNIE, of Nyack, Rockland county, State of New York, have invented certain new and useful Improvements in Electric - Circuit Closers, of which the following is a specification.

This invention has reference to an improved circuit-closer for electric circuits, by which the circuit may be closed for any desired length of time, so that the ringing of the signal-bell is kept up without requiring the continuous holding of the button; and the invention consists of a slotted supporting-plate having a fulcrumed and spring-pressed lever, and of a circuit-closing spring, which is engaged by the catch of said lever. The locking-lever and circuit-closing spring are provided with push-buttons, so that when the button of the locking-lever is depressed the catch of the latter releases the contact-spring and breaks the circuit.

In the accompanying drawings, Figures 1 and 4 represent front elevations of my improved electric circuit-closer, showing it respectively in locked and released position; and Figs. 2 and 3 are a vertical transverse section of Fig. 1 and a side view of Fig. 4.

Similar letters of reference indicate corresponding parts.

A in the drawings represents the supporting-plate of my improved electric-circuit closer, to the lower part of which is applied a circuit-closing spring, B, that carries at its free end a push-button, B'. The spring B is insulated from the plate A and connected to the line-wire of the circuit, the upper part of the plate A being connected to the other wire of the circuit. The upper part of the plate A, above the circuit-closing spring B, is slotted and provided with a fulcrumed locking-lever, C, that is provided with a push-button, C'. The locking-lever C is provided with a projecting catch, D, the face of which is beveled or curved, so as to facilitate the passage of the circuit-closing spring along the face of the catch when the circuit-closing spring is depressed. A spring, C², is attached to the back of the plate A, and applied by its free end to the upper rear part of the lever C, the pressure of the spring retaining the lever flush with the plate A until the push-button C' of the lever C is depressed.

To close the circuit, the push-button B' of the circuit-closing spring B is depressed, and thereby said spring brought in contact

with the catch D of the lever C, and then placed below the catch, so that the spring B is locked by the same. The moment the contact takes place the circuit is closed and the signal-bell rung. As the catch D of the lever C holds the circuit-closing spring B in locked position, the circuit remains closed, so that the ringing of the bell continues until the push-button of the lever C and the latter thereby are pressed back against its spring C² into the position shown in dotted lines in Fig. 2. The catch D is thereby raised sufficiently, so as to release the circuit-closing spring B and break the circuit.

The advantages of my improved circuit-closer are that by the locking of the circuit-closing spring the ringing of the bell is continued without requiring the holding of the push-button B' by the thumb, the same being simply depressed, and then retained for any desired length of time by the catch D of the locking-lever C. When the latter is depressed, the spring B is released, and the circuit is instantly broken. The circuit-closer is thereby specially adapted for gas-lighting circuits, electric calls, alarm-circuits, &c. It can be applied with small changes to window-sashes, doors, and other points.

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

1. An electric-circuit closer composed of a supporting-plate, a circuit-closing spring, and a spring-pressed locking-lever, fulcrumed in a slot of the supporting-plate, said lever having a catch, by which the circuit-closing spring is locked or released, so as to close or open the circuit, substantially as set forth.

2. An electric-circuit closer consisting of a slotted supporting-plate, A, a circuit-closing spring, B, insulated therefrom, a locking-lever, C, fulcrumed into the slot of the plate A, said lever having a projecting catch, D, a spring, C², pressing on the back of the locking-lever, said catch engaging or releasing the circuit-closing spring when closing or opening the circuit, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GEORGE PIRNIE.

Witnesses:

PAUL GOEPFEL,
CARL KARP.