(No Model.)

W. STANLEY, Jr.

ELECTRIC CIRCUIT CONTROLLER.

No. 353,603. Patented Nov. 30, 1886.

Fig. 3,

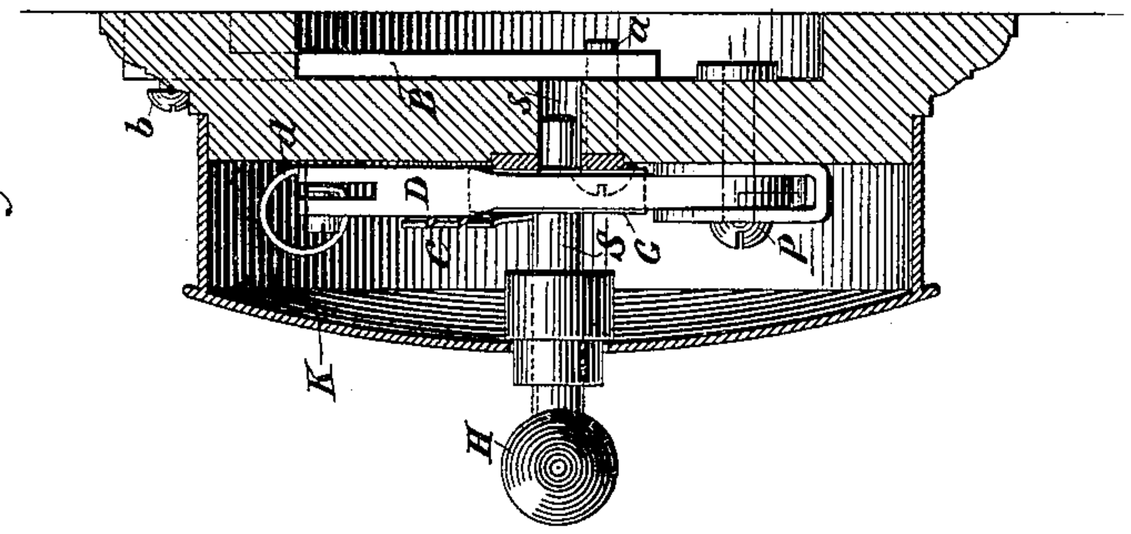


Fig. 2,

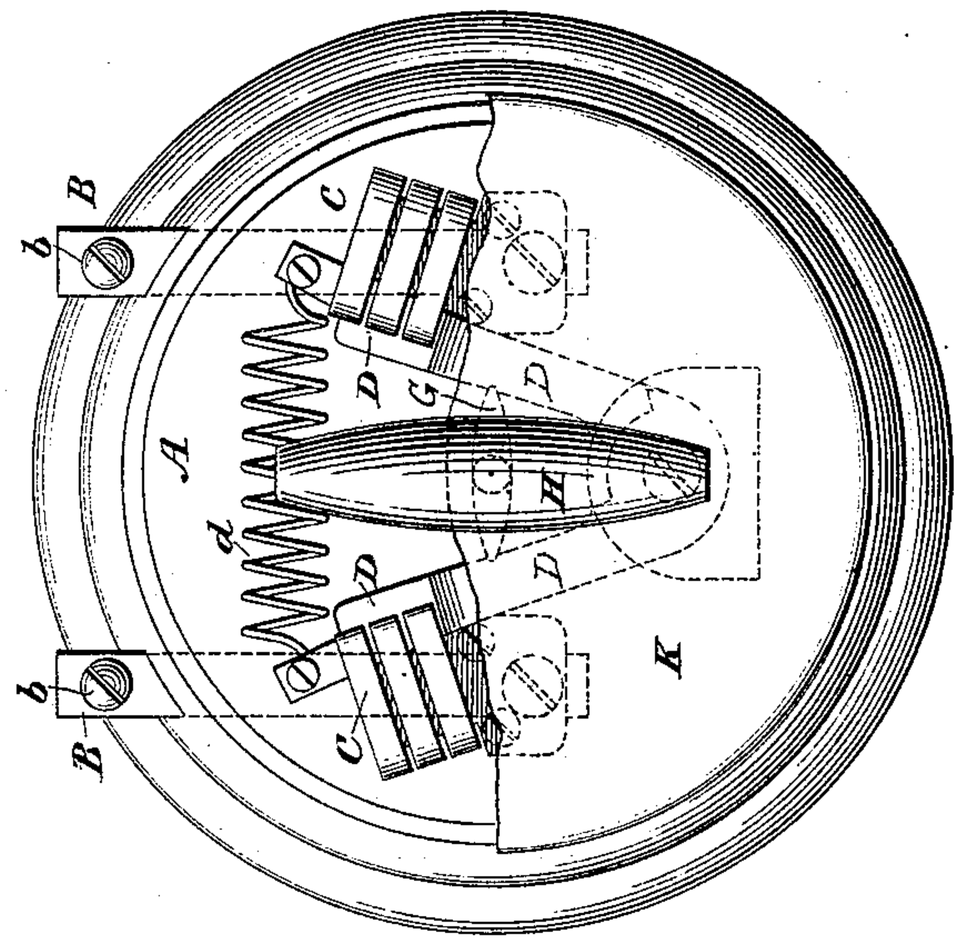
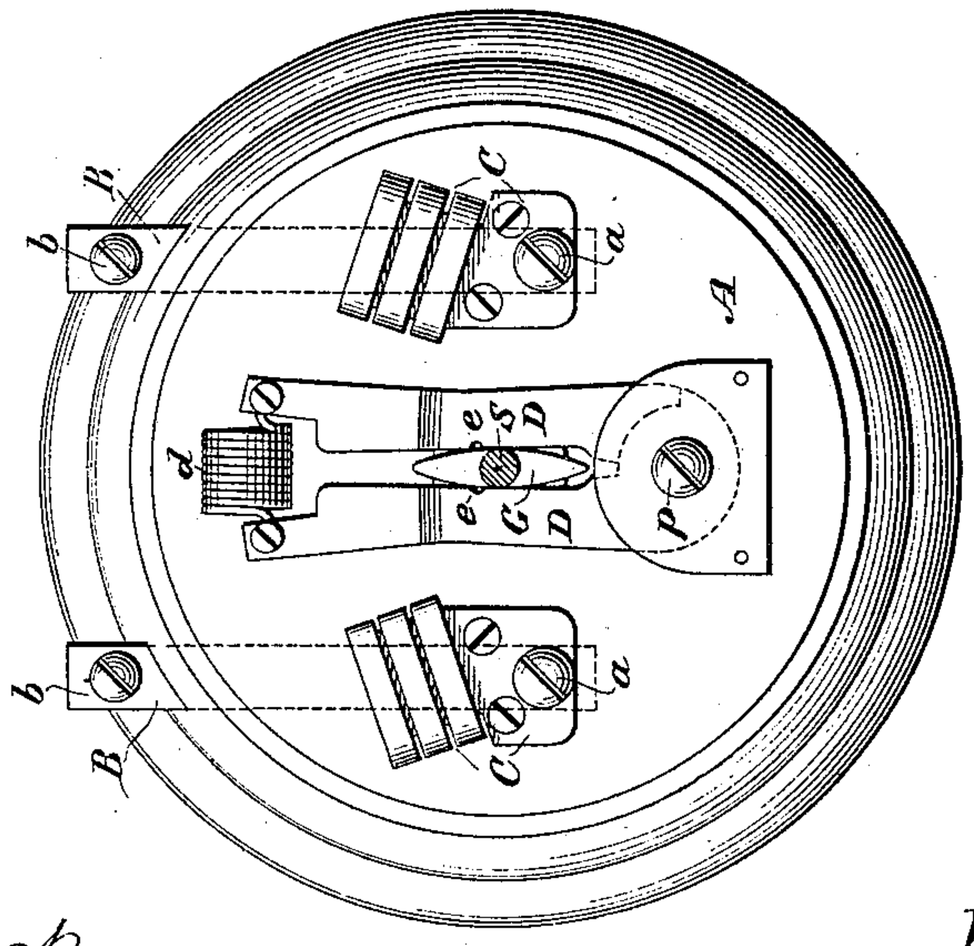


Fig. 1,



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM STANLEY, JR., OF GREAT BARRINGTON, MASSACHUSETTS.

ELECTRIC-CIRCUIT CONTROLLER.

SPECIFICATION forming part of Letters Patent No. 353,603, dated November 30, 1886.

Application filed December 11, 1885. Serial No. 15,343. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STANLEY, Jr., a citizen of the United States, residing at Great Barrington, in the county of Berkshire and State of Massachusetts, have invented certain new and useful Improvements in Electric Switches or Circuit-Controllers, of which the following is a full and exact specification.

My invention relates to that class of devices which are employed to open and close an electric circuit containing lamps or other translating devices; and the object of my improvements is to effect the breaking of the circuit by a quick movement independent of the speed with which the manual part of the switch is operated.

My invention is illustrated in the drawings, in which Figure 1 shows an elevation with the parts occupying the position they are in when the circuit is broken. Fig. 2 is a similar view showing the circuit closed, and Fig. 3 shows a transverse section.

The different parts are indicated by letters as follows: A is a base, of wood or other suitable non-conducting material, to which the other parts of the switch are attached. To the lower side of the base A are fastened two pieces of brass, B B, having at their outer extremities sockets and set-screws *b b*, by means of which the conducting-wires are attached. At their inner ends the pieces B B are respectively connected, by means of brass screws *a a*, which pass through the base A, with contact-pieces C C, secured to the upper side of the base A. Between the contacts C C are arms D D, of brass or other suitable conducting material. The arms D D are connected at one end by a spiral spring, *d*, and at the other end move freely on a pivot, *p*, by means of which they are fastened to the base A. Between the arms D D lies a cam-shaped piece of metal, G, which I call the "spreader," firmly fastened to a spindle, S, which passes through a cover, K, and terminates in a handle, H, and at its lower end turns in a socket, *s*, in the base A, midway between the contacts C C.

When the spindle S is turned so that the greater dimension of the spreader G is at right angles, or nearly so, with the arms D D, the arms are brought against the contacts C C. The ends of the spreader G rest in two shallow notches, *e e*, cut in the arms D D, and the spreader is held in position by the tension of the spring *d*. The circuit is now closed, and current entering by one of the pieces B passes to the corresponding contact C, thence to the arm D, in contact with it, and by the arms D D and spreader G to the other contact C, and so on. When it is desired to open the circuit, a slight turn of the handle H dislodges the ends of the spreader G from the notches *e e*, and the spring *d* instantly draws the arms D D together and away from the contacts C C. Such a switch is economical in construction and not liable to get out of order, and is at the same time effective in its operation, breaking the circuit without destructive sparking.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, substantially as hereinbefore set forth, of two circuit-closing arms supported from a pivot common to both, a spring tending to draw said arms toward each other, means for separating said arms, and two contact-points against which the respective arms are pressed when they are separated from each other.

2. The combination, substantially as hereinbefore set forth, of two contact-arms pivoted at one end, a single spring tending to draw said arms toward each other, two contact-points with which the respective arms make contact when separated, a shaft extending between said arms, and a cam carried thereby, serving, when said shaft is turned, to separate said arms.

3. The combination, with the pivoted arms D D, of the spreader G, operating to separate the arms, and notches *e e* in the arms, adapted to receive the ends of the spreader when the arms are extended so as to complete the circuit, substantially as set forth.

4. The combination of the contacts C C, the pivoted arms D D, completing the circuit when in contact therewith, and the single spring *d*, attached to the arms D D and operating to break the circuit by withdrawing the arms from the contacts, substantially as set forth.

WILLIAM STANLEY, JR.

Witnesses:

BENJAMIN BARKER, Jr.,

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