

No. 881,985.

PATENTED MAR. 17, 1908.

B. O. WELLS.
PLUG SEAT SWITCH.
APPLICATION FILED DEC. 8, 1904.

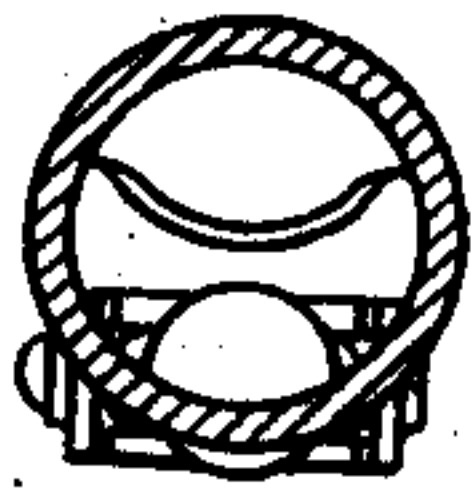


Fig. 3

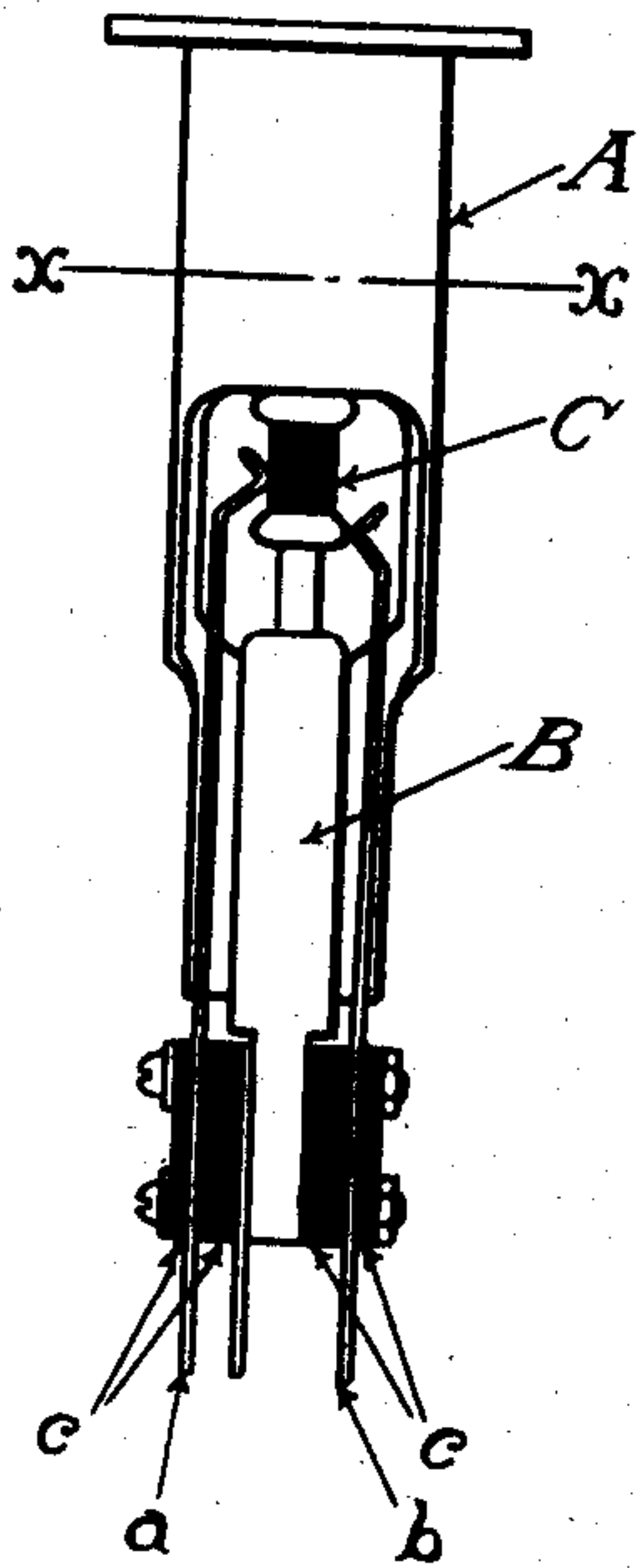


Fig. 1

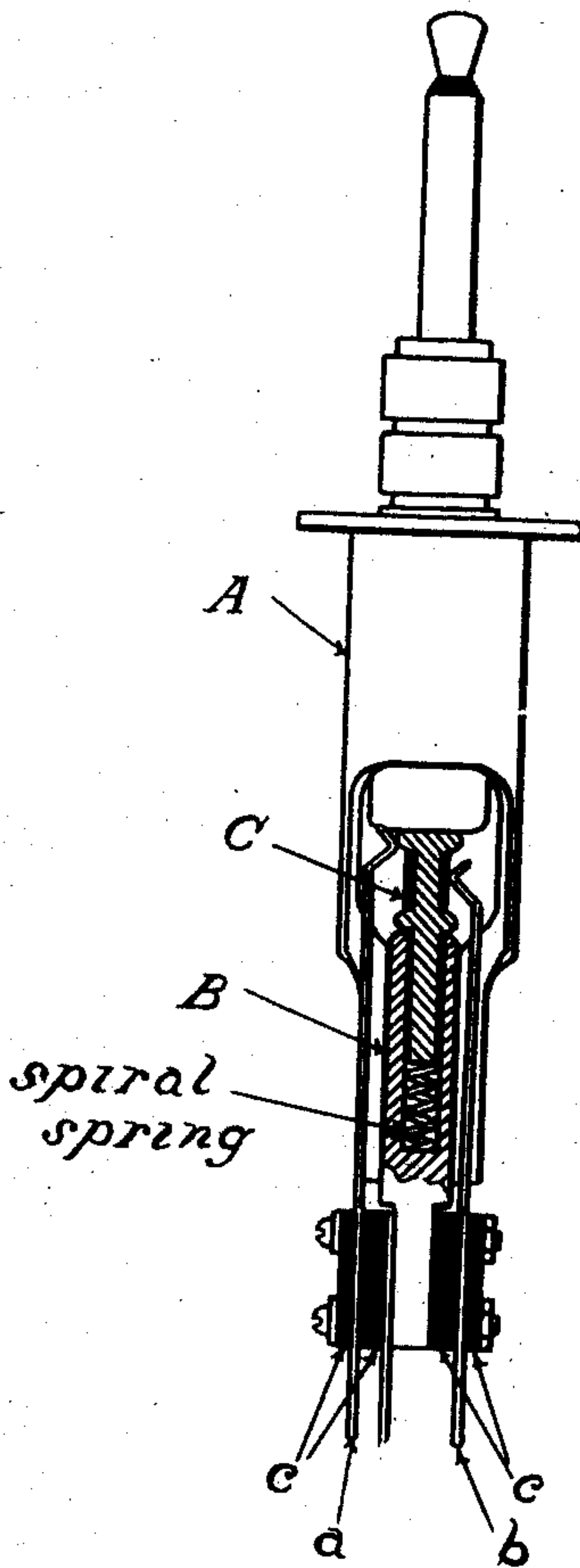


Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

BERNARD O. WELLS, OF CHARLESTON, ILLINOIS, ASSIGNOR TO STERLING ELECTRIC COMPANY, OF LA FAYETTE, INDIANA.

PLUG-SEAT SWITCH.

No. 881,985.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed December 8, 1904. Serial No. 236,075.

To all whom it may concern:

Be it known that I, BERNARD O. WELLS, a citizen of the United States, residing at Charleston, in the county of Coles and State of Illinois, have made a certain new and useful Improvement in Plug-Seat Switches, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to circuit switching devices known as plug seat switches, wherein the circuit connections made or broken are operated by the plug of a cord circuit.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 represents the plug seat switch with the plug withdrawn. Fig. 2 represents the same device with a plug seated therein. Fig. 3 represents a section of Fig. 1 through the line X—X.

The device consists of some suitable form of plug seat A, to which is attached a brass tube, B, in which is placed a plunger C. The plunger rests on a spiral spring contained in tube B, by which spring when the weight of the plug is not holding the plunger down, as shown in Fig. 2, the plunger is pushed up until held by a stop, which in these drawings is a portion of the plug seat, A.

In these drawings are shown two contact springs, *a* and *b*, which are attached to the tube, B, but insulated from it by the strips of insulating material *c*.

When the plug is withdrawn from its seat, as shown in Fig. 1, the head of plunger C is then in contact with spring *b*, and an electrical circuit is closed through the plunger and said spring, and whatever wires may be attached to their terminals.

When plug is seated in the device, as shown in Fig. 2, the plunger C, is forced down, its contact with spring *b* is broken and the plunger makes contact with spring *a*, thus closing another electrical circuit.

It is obvious that other contact springs, properly insulated can be assembled on this device, and that more than one contact can be made or circuits closed by the movement of the plunger as described, and further that by said additional springs, contacts can be made or broken for the purpose of closing

or opening electrical circuits in which the plunger itself, would not be included, without deviating from the invention described herein, and shown in the drawings attached.

I claim as new and desire to secure by Letters Patent:

1. In a device of the class described, the combination with a plug seat, of an extension secured to said plug seat, a reciprocating contact device secured to said extension, means for normally holding said contact device in engagement with the plug seat, and line terminals for said contact device.

2. In a device of the class described, the combination with a plug seat and a plug adapted to work therein, of an extension on said plug seat, contact springs mounted on said extension and a plug control circuit changing device carried by said extension and operating in substantial alinement with the plug.

3. In a device of the class described, the combination with a plug seat, line springs connected thereto, and a self operated vertically reciprocating plunger controlled in both directions by the plug for making and breaking the circuits of the said springs.

4. In a device of the class described, the combination with a plug seat, of line springs mounted thereon, a vertically reciprocating plunger adapted to make and break the contacts and controlled in both directions by the plug, means independent of the line springs for operating said plunger and means for limiting the movement thereof.

5. In a device of the class described, the combination with a plug seat, of contact springs, a vertically reciprocating plunger having a plurality of heads insulated in different positions from the contact springs, means for normally holding one of said heads in engagement with one set of springs, and a plug controlling the action of said plunger whereby either head may be brought into engagement with the contact springs to change the circuits.

6. In a device of the class described, the combination with a flanged tubular plug seat, and a plug adapted to work therein, of an extension secured to said plug seat, contact springs mounted upon said extension, and a plug control self-operated circuit changing de-

vice carried by said extension working in the
same general plane with the plug, said springs
and said self-operated circuit changing device
all encompassed within substantially the same
5 lateral dimensions as the tubular plug seat.

In testimony whereof, I have signed my
name to this specification in the presence of

two subscribing witnesses, this 10th day of
October, 1904.

BERNARD O. WELLS.

Witnesses:

W. E. TOWER,
F. A. BROOKS.