

G. B. THOMAS.  
 PUSH BUTTON SWITCH.  
 APPLICATION FILED JUNE 5, 1908.

907,098.

Patented Dec. 15, 1908.

Fig. 1

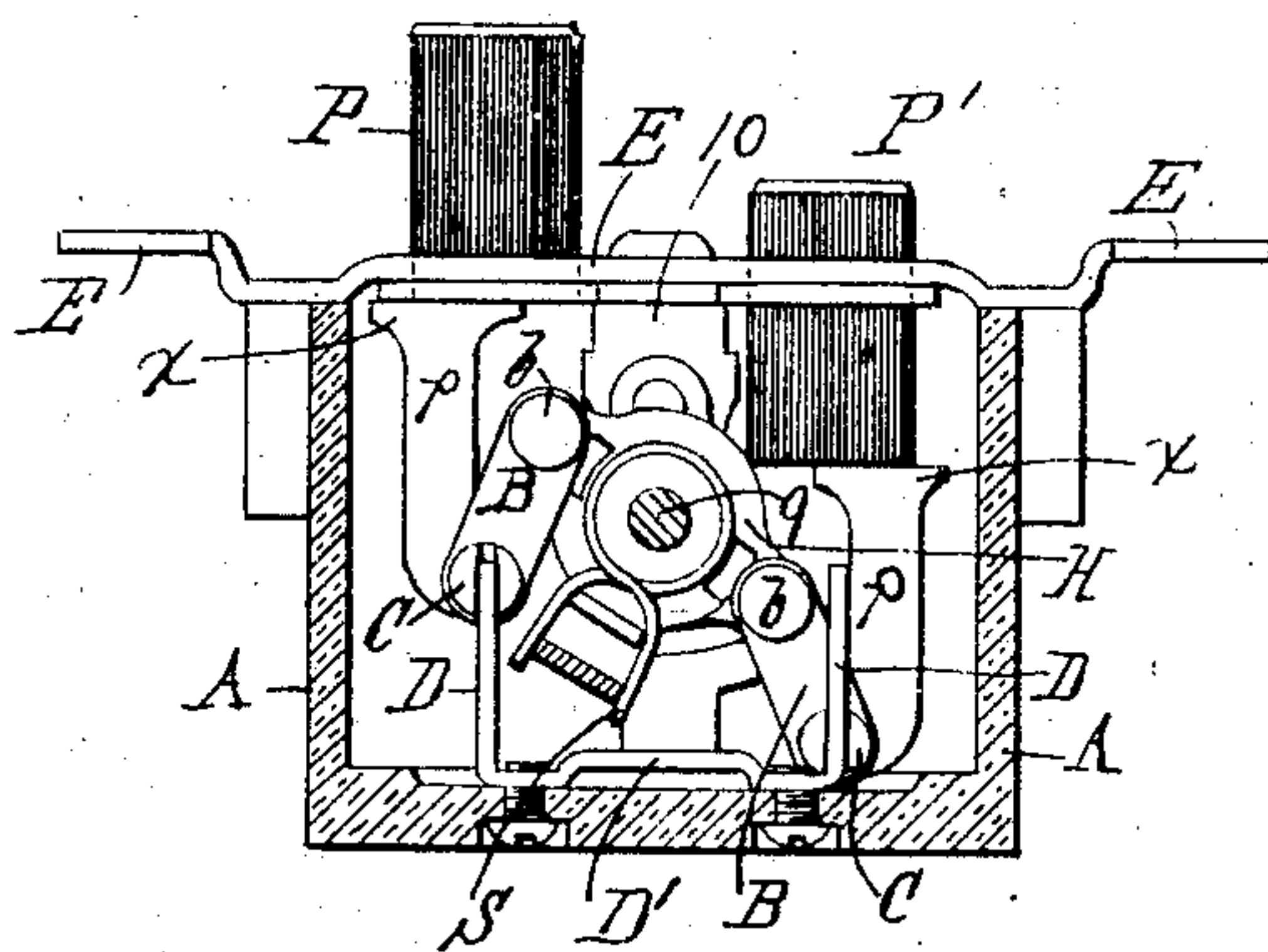
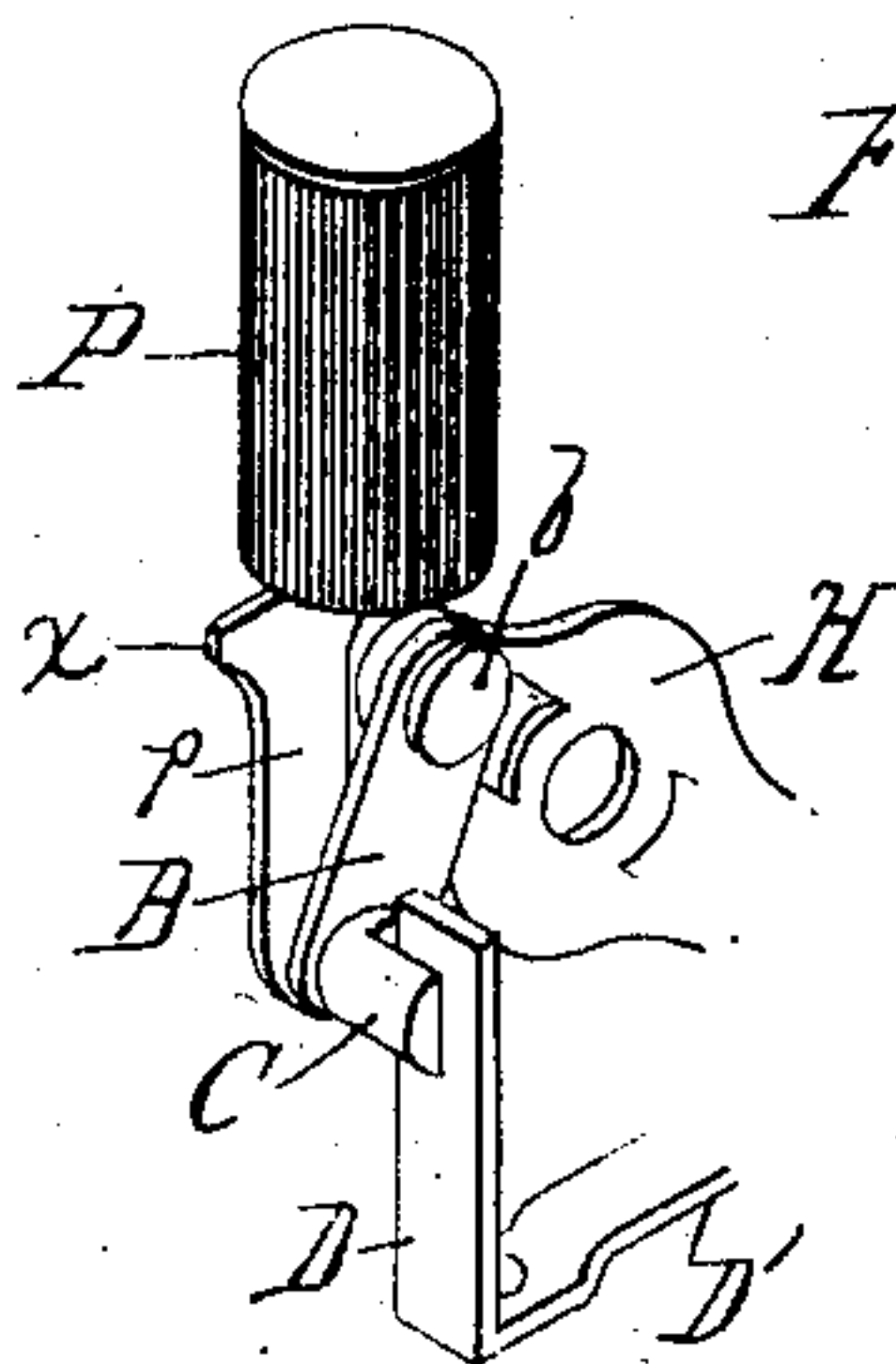


Fig. 2.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

GEORGE B. THOMAS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MFG. COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

## PUSH-BUTTON SWITCH.

No. 907,098.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed June 5, 1908. Serial No. 436,826.

To all whom it may concern:

Be it known that I, GEORGE B. THOMAS, a citizen of the United States of America, residing in the city of Bridgeport, in the county of Fairfield, in the State of Connecticut, have invented certain new and useful Improvements in Push-Button Switches, of which the following is a specification.

The object of my invention is to so construct an electric switch of the two push button snap type as to permit of a shallower box than usual, and to shorten the extent of movement of the buttons and make their movements straight. This object I attain by the construction hereinafter described.

In the accompanying drawings Figure 1 is a vertical section of a two push button switch embodying my invention; Fig. 2 is a perspective view of a portion of the device embodying my invention.

In these drawings, by way of example, I have shown my invention as applied to a push button snap switch mechanism of the construction forming the subject of my Patent 743,348, dated November 3rd, 1903, but it will be understood that my invention may be applied in connection with other suitable constructions of switch mechanism of the two push button type.

A is the insulating box, and across the open top of this is secured in any suitable way the yoke E, to which is secured the upper end of the upright supporting post 10, the lower end being supported in any usual way in the bottom of the insulating box. At 9 is the axis of the working switch mechanism supported by the post 10. On this axis is the oscillating operating lever H to be operated by the push buttons and provided with tension spring S. The rest of the snap switch devices and contacts are not shown and need not be described as they are fully disclosed in my former patent and form no essential part of my present invention.

P and P<sup>1</sup> are the two push buttons, guided as usual in the yoke E, but instead of connecting the stems *p, p*, of these push buttons directly to the ends of the lever H, I make the latter considerably shorter than hereto-

fore, and I connect the stems to the lever ends through the medium of links B, B. The distance apart of the pivoting centers *b, b*, at the ends of the lever H, for connection with the push buttons through the links B, B, is less than the distance apart of the center lines of the push buttons. The axis 9 is placed much higher in the box than formerly so that I may have these links B, B pendent from the ends of the levers to the ends of the stems of the push buttons. By this construction I am enabled to use a shallower box, provide a shorter push or stroke of the buttons, and a straight push of the buttons themselves and get an efficient action on the lever H.

To further insure a straight push on the buttons and prevent that binding action on the buttons in the holes in the face plate, so characteristic of the push buttons in most switches of the two button type, I provide in the lower part of the box means for guiding the stems of the push buttons. In the drawings I have shown for this purpose uprights D, D formed out of one strip of metal D<sup>1</sup> secured in the bottom of the box A; and on these guides slide slotted hubs C carried by the lower ends of the stems *p, p* of the push buttons. I prefer to provide these stems *p*, with shoulders, *x, x*, to contact with the underside of the yoke E and to act as stops.

I claim as my invention—

1. An electric push switch having two push buttons and an oscillating operating lever with connecting links pendent from the ends of said oscillating lever.

2. An electric push switch having two push buttons and an oscillating operating lever with connecting links pendent from the ends of the lever to the ends of the push button stems and means for guiding the latter in straight lines.

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

GEORGE B. THOMAS.

Witnesses:

F. E. SEELEY,  
A. H. JONES.