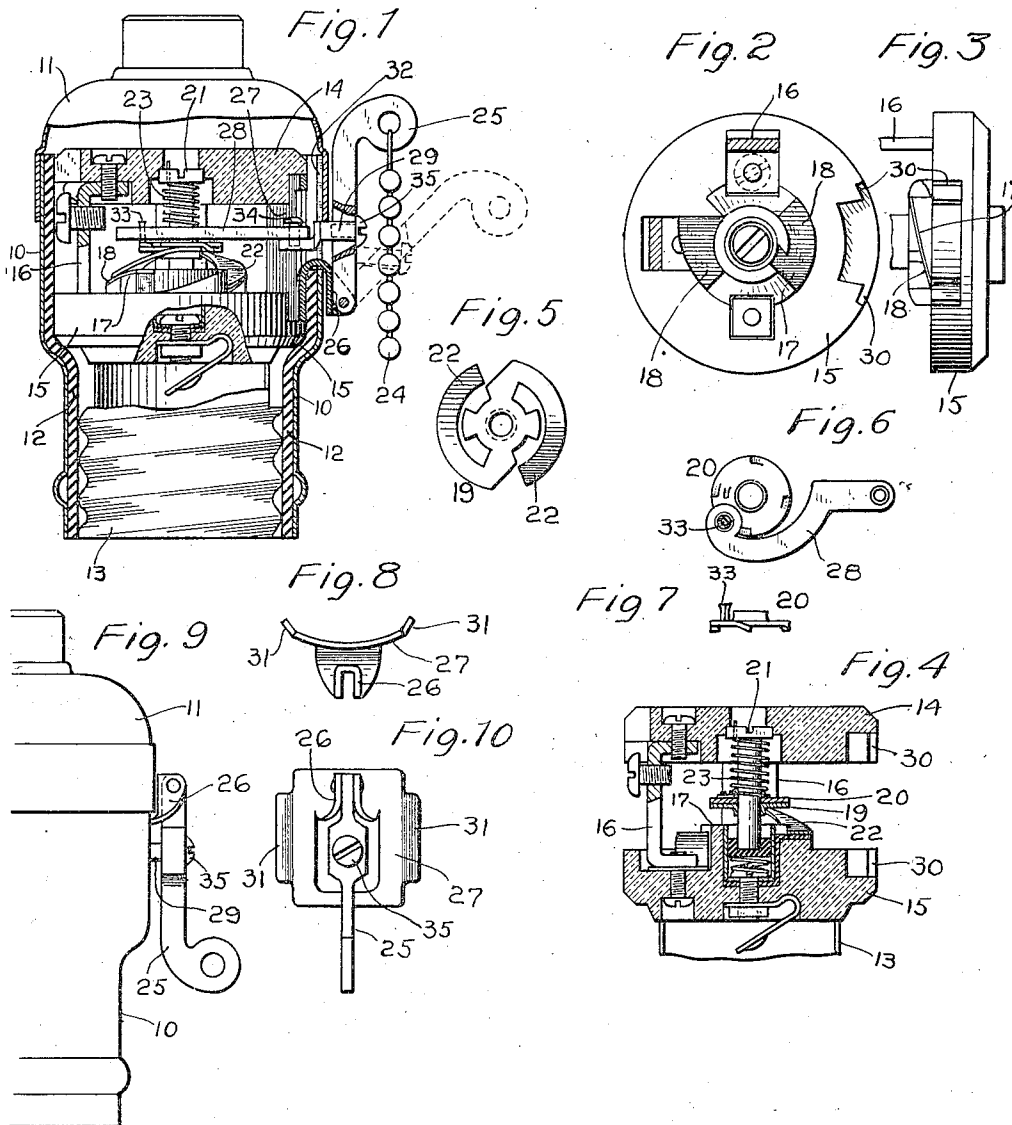


H. HUBBELL.
PULL SOCKET.
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1,064,831.

Patented June 17, 1913.



WITNESSES:

H. W. Meade
J. V. Weldon

INVENTOR

Harvey Hubbell
BY
A. M. Wooster
ATTORNEY

UNITED STATES PATENT OFFICE.

HARVEY HUBBELL, OF BRIDGEPORT, CONNECTICUT.

PULL-SOCKET.

1,064,831.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HARVEY HUBBELL, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Pull-Sockets, of which the following is a specification.

This invention has for its object to provide a pull socket in which the construction shall be simplified, the number of parts and the cost of production reduced to the minimum and in which the operating chain shall not pass within the shell, my present construction enabling me to dispense with the usual guide for the chain, to make the socket reversible and furthermore to practically eliminate danger of the mechanism getting out of order in use.

With these and other objects in view I have devised the novel pull socket of which the following description in connection with the accompanying drawing is a specification, reference characters being used to indicate the several parts.

Figure 1 is a view partly in elevation and partly in longitudinal section, illustrating the construction and operation of my novel switch; Fig. 2 a plan view of the lower insulating block, the brackets being in section; Fig. 3 an edge view of the lower insulating block detached; Fig. 4 a vertical section of the switch mechanism with the operating mechanism removed, the position of the parts corresponding with Fig. 1; Fig. 5 a plan view of the contact plate detached; Fig. 6 a plan view of the operating plate and insulating link detached; Fig. 7 an edge view of the operating plate with the insulating link removed; Fig. 8 an end view of the reversible bracket plate and bracket detached; Fig. 9 an elevation of a pull socket corresponding with Fig. 1 but showing the operating lever reversed; and Fig. 10 is an elevation of the reversible bracket plate and the operating lever detached.

10 denotes the socket shell, 11 the cap, 12 the insulating lining, 13 the screw shell, 14 and 15 insulating blocks which I term for convenience upper and lower insulating blocks respectively, and 16 the brackets by which the insulating blocks are connected. The lower insulating block is provided with inclines 17 which terminate in abrupt shoulders, alternate inclines carrying plates 18 which are in the circuit. The contact plate 19 and the operating plate 20 are adapted to

turn freely on a central pin 21. The contact plate is provided with spring arms 22 which engage the inclines and is engaged and operated by the operating plate, oscillation of the operating plate producing intermittent rotary movement of the contact plate.

23 denotes a spring which returns the operating plate to its normal position after each actuation, one end of said spring being connected to the pin and the other to the operating plate. The tension of the operating spring may be adjusted by rotating the pin, the spring additionally acting to hold the angular head of the pin in a socket in the upper insulating block, which retains it against rotation.

Further description of the switch mechanism is not thought to be required as it has been illustrated, described and claimed in various patents heretofore granted to me.

The operating chain or cord 24 is connected to an operating lever 25, one end of which is pivoted to a bracket 26 which is formed integral with or rigidly secured to a reversible plate 27.

28 denotes an insulating link one end of which is pivoted to operating plate 20 and the other to a connecting rod 29 on which the operating lever is mounted to turn. The special construction of these parts is immaterial so long as the operating lever, carrying with it the bracket plate, is free to rotate on the connecting rod. The bracket is shown as formed from metal struck out from the plate but left attached, the connecting rod passing through the opening in the plate and being provided with an offset portion to which the end of the insulating link is connected. Rod 29 is shown as detachably connected to the operating lever by means of a screw 35, the head of which lies on the outer side of the lever, the inner end of the opening in said lever through which the rod passes being greatly enlarged to permit the rod to swing with the movements of the lever. In the assembled position, the lever and the bracket lie outside the socket shell, as clearly shown in Figs. 1 and 9. The ends of the reversible bracket plate engage recesses 30 in the edges of the upper and lower insulating blocks and are provided on their sides with tongues 31 which are turned inward as shown in Fig. 8 so as to just pass between the insulating blocks and act as supports therefor in con-

nection with brackets 16. In assembling, bracket 26 to which the operating lever is pivoted is received in a slot 32 in the socket shell. I have shown the insulating link as provided near its ends with eyeleted holes which engage respectively pin 33 on operating plate 20 and pin 34 on the offset portion of connecting rod 29.

It is of course necessary that under all circumstances the free end of the operating lever project upward so that a downward pull upon an operating chain or cord connected thereto will swing the operating plate backward and the return movement of said plate caused by spring 23 will carry the contact plate forward, which will open or close the circuit. As it is quite common for lamp bulbs to project upward leaving the cap end of the socket shell downward, it is necessary to provide for reversing the operating lever. In my present structure, the socket shell being removed, in order to reverse the lever from the position shown in Fig. 1 to the position shown in Fig. 9, or vice versa, it is simply necessary to draw the operating lever and reversible plate outward against the power of spring 23 far enough to disengage said plate from the insulating blocks and then give the plate and operating lever a half turn on the connect-

ing rod and permit the spring to draw the plate (carrying with it the connecting rod and operating lever) into engagement with the recesses in the insulating blocks.

Having thus described my invention I claim:

1. The combination with the operating plate of a switch mechanism, a socket shell and an operating lever lying wholly outside the socket shell and having an opening through it enlarged at its inner end of a connecting rod loosely engaging the lever and extending through said opening and an insulating link pivoted to the operating plate and to the connecting rod.

2. The combination with a socket shell, insulating blocks and a switch mechanism, of a reversible plate having tongues adapted to pass between the insulating blocks, for the purpose set forth, a bracket carried by said plate, an operating lever pivoted to said bracket outside the shell and an insulating connection intermediate said lever and the switch.

In testimony whereof I affix my signature in presence of two witnesses.

HARVEY HUBBELL.

Witnesses:

A. M. WOOSTER,

S. W. ATHERTON.