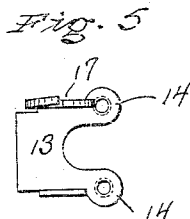
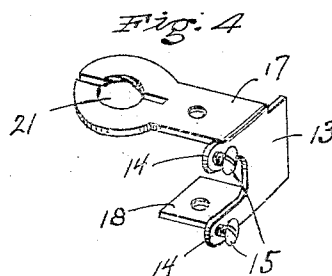
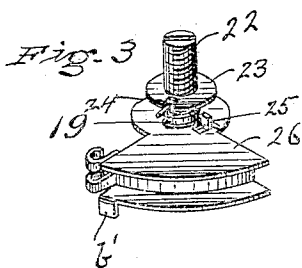
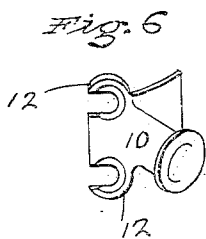
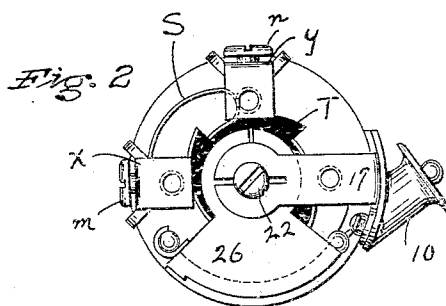
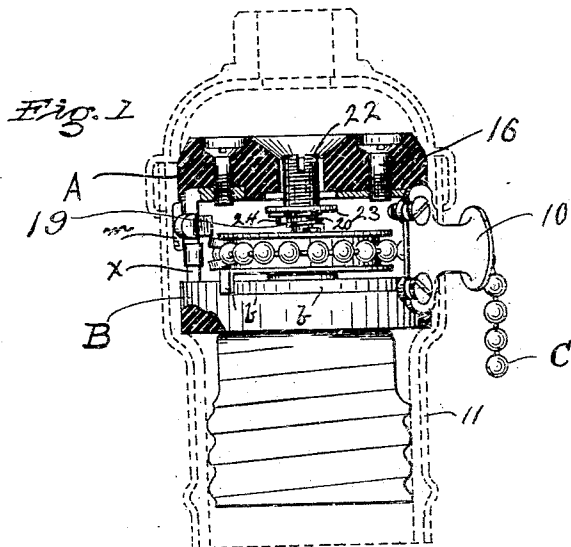


G. W. GOODRIDGE.
PULL SOCKET.
APPLICATION FILED DEC. 15, 1908.

Patented May 10, 1910.

957,768.



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UNITED STATES PATENT OFFICE.

GILBERT W. GOODRIDGE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE BRYANT ELECTRIC COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

PULL-SOCKET.

957,768.

Specification of Letters Patent.

Patented May 10, 1910.

Application filed December 15, 1908. Serial No. 467,619.

To all whom it may concern:

Be it known that I, GILBERT W. GOODRIDGE, a citizen of the United States of America, and residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in Pull-Sockets, of which the following is a specification.

My invention relates to pull sockets for incandescent lamps and more particularly to certain details of construction hereinafter referred to, the object of my invention being to provide an improved construction of such details.

In the accompanying drawings in which my invention is shown applied to a socket of common type, Figure 1 is a vertical elevation partly in section of said socket; Fig. 2 is a plan thereof with the upper porcelain button removed; Figs. 3, 4 and 6 are perspective views of details; and Fig. 5 is a vertical elevation of the part shown in Fig. 4.

The socket illustrated is of the type mentioned and comprises upper and lower insulating buttons A and B spaced apart by standards *x*, *y* and 13, the latter being of a peculiar form to be more particularly described hereinafter. The leading-in wires may be secured to the standards *x* and *y* by means of binding screws *m* and *n* and the lamp circuit completed through the spring contact S which bears upon the rotary switch piece T. The switch piece is actuated by means of a chain C which, passing through the chain guide 10 is secured to the upper ratchet member which serves also as the chain carrier 26. As a convenient means for limiting the travel of the latter, I form a slot *b* in the button B, in which a lug *b*¹ struck down from the chain carrier 26 travels, abutting at the end of the return stroke against the end of the slot and against lower screw 15 on the forward stroke. It not infrequently happens that the shell has to be refinished, and since the chain guide is exposed and forms a prominent feature of the socket, it becomes desirable to remove the same and subject it to the same refinishing operation. It would be impracticable to refinish the chain guide, if it were permanently secured to the constructional parts of the socket. In order therefore to render

the chain guide readily removable, I detachably mount the same upon the body of the socket within the shell 11, as for example by providing the guide 10 with lugs 12, preferably slotted as shown, and securing the same to a spacing bar 13, lugs 14 on which, corresponding to the lugs 12, carry securing screws 15. By unscrewing the screws 15 slightly, the guide 10 may be readily removed by sliding lugs 12 from beneath the screw heads. There would be no objection to using holes in the lugs 12 instead of slots, except that they would require withdrawal of the screws 15, and so make the removal of the guide a little more troublesome. The convenience of this arrangement will be the more apparent when it is recollected that the holes in the porcelain through which pass the screws 16, engaging the lugs 17 and 18 on the spacing bar 13 to hold the latter in position, are customarily filled with insulating wax after the screws have been inserted and are consequently inaccessible.

In connection with the lug 17, I provide improved means for tensioning the ratchet spring 19. As shown, the lug 17 is extended inwardly over the switch spindle 20 and provided with a threaded screw hole 21 in which works the adjusting screw 22. The lug is split on both sides of the screw hole 21 and the two parts offset from each other, as shown in Fig. 5. The screw 22 is threaded into the lug, while these two parts are held in the same plane, and then they are released, with the result that the screw 22 is held with great friction, and a binding action upon the threads of the screw is thus secured which is sufficient to hold the screw in whatever position it is adjusted to. Any suitable means for engaging the end of the spring 19 may be employed. For instance the lower end of the screw 22 may carry a disk 23 from which a lug 24 is struck down to serve as an abutment for one end of the spring 19. The other end of the latter abuts against a similar lug 25 struck up from the chain carrier 26. The advantage of the described adjusting means is that it permits of an immediate adjustment to any degree of tension desired, at which the spring will be held by the binding of the screw 22 in the threads of the split lug 17.

Various modifications of the device will readily suggest themselves and I do not limit myself to the precise structure shown.

I claim as my invention:

1. In a pull switch an inclosing shell, a switch body therein, and a chain guide independent of the shell, and readily accessible means for detachably securing said guide to the switch body within the shell.
2. In a pull switch, an inclosing shell, a switch body therein and a chain guide independent thereof provided with lugs and readily accessible means in connection therewith for detachably securing said guide to the switch body within the shell.
3. In a pull switch, an inclosing shell, a switch body therein, and a chain guide independent thereof, provided with lugs having openings therein, in combination with readily accessible screws adapted to engage said lugs through said openings therein and means in connection therewith for securing the guide to the switch body within the shell.
4. In a pull switch, an inclosing shell, a switch body therein, having insulating buttons between which the switch mechanism is located and a spacing bar between said buttons, in combination with a chain guide independent of said shell and provided with securing lugs and means in connection with the latter for engaging said guide with said spacing bar so that it may be readily detached therefrom, substantially as described.
5. In an electric switch mechanism, a ratchet member, a spring tending to turn the same in one direction and a tensioning device for said spring comprising a rotary abutment member engaged by one end of the spring and a friction bearing for said abutment member adapted to hold the latter in any position to which it may be adjusted.
6. A pull switch having upper and lower insulating buttons spaced apart, and switch mechanism located between said buttons, said switch mechanism comprising a rotary circuit maker, a spring returned ratchet for operating the same, provided with a lug, one of said insulating buttons having a groove formed therein in which said lug works, whereby the movement of said ratchet is limited, substantially as described.
7. In an electric switch mechanism, a ratchet member, a spring tending to turn the same in one direction and a tensioning device for said spring comprising a rotary abutment member engaged by one end of the spring and means for holding the latter in any position to which it may be adjusted, said abutment member being adapted to be adjusted by merely rotating the same.
8. In an electric switch having upper and lower insulating buttons, a spacing bar between said buttons, an actuating spring and a tensioning device for said spring, comprising an adjustable abutment member for one end of said spring and friction means carried by said spacing bar for holding said abutment member in any position to which it is adjusted.
9. In a pull switch, an inclosing shell, a switch body therein, a chain guide independent of the shell and provided with securing lugs and means in connection with the latter for engaging the switch body so that said guide may be readily detached therefrom.
10. In a pull socket, an inclosing shell, a socket body therein, a chain guide independent of the shell and provided with securing lugs, and means in connection with said lugs for engaging the socket body so that said guide may be readily detached therefrom.
11. In an electric switch having upper and lower insulating buttons, a spacing bar between said buttons, an actuating spring and a tensioning device therefor comprising a rotary adjustable member engaged by one end of said spring and a friction bearing on said spacing bar for said abutment member adapted to hold the latter in any position to which it is adjusted.
12. In an electric switch mechanism, a ratchet member, a spring tending to turn the same in one direction and a tensioning device for said spring comprising a threaded rotary abutment member engaged by one end of the spring and a threaded friction bearing into which said abutment member is adapted to be screwed, whereby the latter is held in any position to which it may be adjusted by merely rotating the same.
13. In an electric switch, switch operating mechanism, a spring connected thereto and means for tensioning said spring, said means comprising an abutment member against which one end of said spring bears, and a spring friction bearing in which said abutment member is adapted to be rotated, substantially as described.
14. In an electric switch mechanism, a ratchet member, a spring tending to turn the same in one direction, and a tensioning device for said spring, comprising an abutment member engaged by one end of said spring and a spring frictional bearing for said abutment piece in which the latter may be rotated.
15. In an electric switch mechanism, an oscillating ratchet, a spindle therefor, a coil spring surrounding said spindle and connected at one end to said ratchet, a rotary abutment for the other end of said spring, and a split bearing adapted to frictionally engage and hold said abutment member in the position to which it is adjusted.
16. In a pull socket, a pair of insulating

buttons, a switch operating ratchet arranged
between said buttons and provided with a
stop lug, one of said buttons being provided
with an offset runway in which said lug
5 works whereby the extent of oscillation of
said ratchet is limited.

In testimony whereof I have signed my

name to this specification, in the presence
of two subscribing witnesses.

GILBERT W. GOODRIDGE.

Witnesses:

A. J. WATERHOUSE,
H. W. GOLDSBOROUGH.