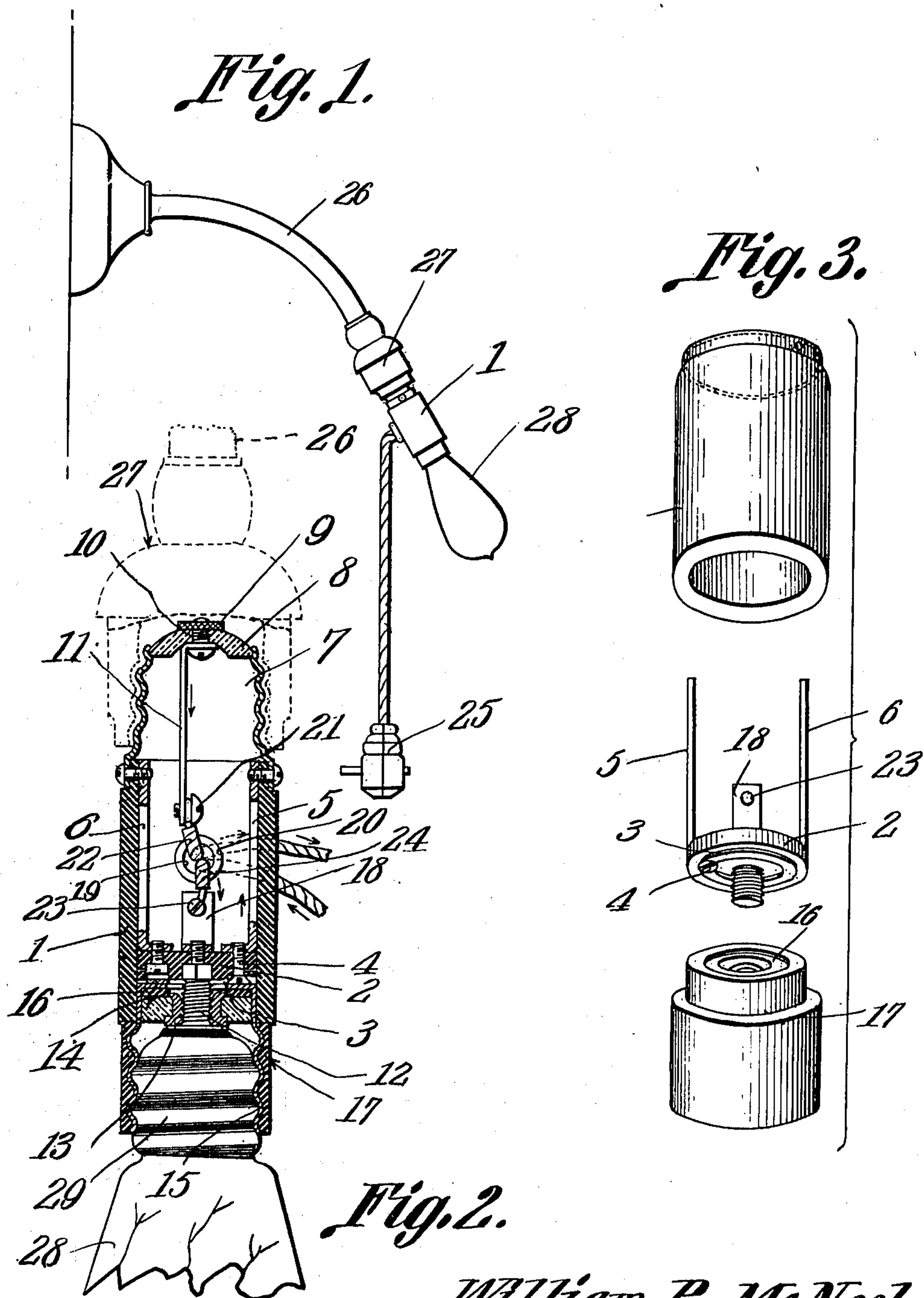


W. P. McNEEL.
COMBINED SWITCH SOCKET AND PLUG.
APPLICATION FILED AUG. 9, 1910.

978,322.

Patented Dec. 13, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM PINKNEY McNEEL, OF SAN ANTONIO, TEXAS.

COMBINED SWITCH SOCKET AND PLUG.

978,322.

Specification of Letters Patent. Patented Dec. 13, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM P. McNEEL, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Combined Switch Socket and Plug, of which the following is a specification.

This invention has reference to improvements in combined switch sockets and plugs for incandescent electric lights, and its object is to provide an extension socket adapted to fit an ordinary lamp socket and to receive an ordinary incandescent light, the socket including means exterior thereto whereby the circuit to the lamp may be made or broken at will, the device being adapted to be interposed between any ordinary socket and lamp especially where the sockets and lamps are ordinarily out of reach but it is desirable that the lamps should be individually readily accessible so that each lamp may be made to glow or the current may be cut off therefrom at will without disturbing any other lamp.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings forming a part of this specification, with the understanding however that the invention is not confined to the exact showing of the drawings since the invention is susceptible of various modifications so long as the salient features of the invention are retained.

In the drawings:—Figure 1 is a side elevation of a lamp bracket with a terminal socket, showing the intermediate socket applied thereto and an incandescent electric lamp carried by the latter. Fig. 2 is a longitudinal section of the combined switch socket and plug forming the subject matter of the present invention, showing an ordinary incandescent lamp inserted in the socket end of the attachment and illustrating in dotted lines an ordinary socket at the plug end of the attachment. Fig. 3 is a displayed perspective view of parts of the combined socket and plug forming the subject matter of the present invention.

Referring to the drawings and first more especially to Figs. 2 and 3 there is shown a cylinder 1 constituting the body portion of the combined switch socket and plug, this body portion being long enough to accommodate certain parts to be described.

Within the cylinder 1 is housed a disk 2 of insulating material, this disk being located preferably near one end of the cylinder. On one face the disk 2 carries a ring 3 of conducting material, usually brass, this ring being secured to the disk in any appropriate manner and at a suitable point in the circumference of the ring there is passed a screw 4 extending to the other face of the disk and there made fast to a strip 5 of brass or other suitable conducting material.

The strip 5 is secured to the disk 2 at one side of the center thereof and diametrically opposite this strip 5 there is secured to the disk another strip 6, which may or may not be in electrical contact with the ring 3. The strips 5 and 6 extend to the end of the sleeve 1 remote from that occupied by the disk 2 and there these strips are connected by screws or otherwise to plug sleeve 7, which may be molded into shape with embossed screw threads after the usual practice in the formation of lamp bases. The outer end of the sleeve 7 carries an insulating end piece 8 to which is centrally secured the usual terminal plate 9 below the center terminal of the base. In the particular structure shown the plate 9 is secured to the end piece 8 by a screw 10 which also serves as a means for securing a metal strip 11 to the end piece 8 and electrically to the terminal plate 9.

The disk 2 carries a central threaded pin 12 screwed into a bushing 13 in turn seated in an insulating disk 14 carrying a sleeve or shell 15 molded with screw threads after the usual practice in forming the receiving terminal of a lamp socket, this shell being adapted to the usual lamp socket. The material of the shell 15 is carried around the disk 13 and inturned over the inner face thereof, being separated therefrom by a ring 16 of insulating material so that the inner edge of the inturned portion of the shell 15 will be thoroughly electrically separated from the bushing 13 or pin 12. For strengthening and protective purposes the exterior of the shell 15 is surrounded by a sleeve 17 of insulating material. The arrangement of the parts is such that the disk 13 is inserted in the corresponding end of the sleeve 1 until the inturned end of the shell 15 is in engagement with the conducting ring 3 so that there is electric contact between this ring and the sleeve 15. The pin 12 is continued through the disk 2 and is there threaded to

engage a small metal bracket 18 between and preferably to one side of the strips 5 and 6.

Through one side of the sleeve 1 preferably at a point intermediate of the strips 5 and 6 and between the free ends of the strip 11 and brackets 18 which latter are of such length as to be separated a distance one from the other, there is formed a passage 19 in which there is set a ring 20 which may be so formed as to eliminate all sharp or abrupt edges at the passage 19.

Secured to the free end of the strip 11 by a binding screw 21 is a conductor 22 and secured to the free end of the bracket 18 by a binding screw 23 is a conductor 24. These two conductors 22 and 24 are properly insulated and are carried from the interior of the casing 1 to the passage 19 to the exterior of such casing and may form the two members of an ordinary two conductor flexible cord. This cord is made of appropriate length and carries at its free end a switch 25 shown in Fig. 1, the showing being that of a familiar type of pendent switch, and as the structure of this switch forms no part of the present invention, the exterior thereof only is shown.

In Fig. 1 there is shown an ordinary electric lamp bracket 26 carrying an ordinary socket 27 which may or may not be provided with the usual switch mechanism. The plug end of the attachment is adapted to the socket 27 and is shown inserted therein in Fig. 1, the socket on the bracket 26 being indicated in dotted lines in Fig. 2. There is also shown an ordinary incandescent electric light 28 having its base 29 inserted in the socket shell 15.

It often transpires that electric lamp brackets such as shown at 26 in Fig. 1 are placed so high as to be inaccessible to the user, and at times such brackets are provided with switchless sockets 27. In either case it is often desirable to be able to switch on or off a lamp and in the case of the switchless brackets this can only be done either in groups or from a distant switch.

With the present invention the lamp may be removed from the ordinary socket and the combined switch and socket may be inserted in the ordinary socket and the lamp then replaced in the exposed socket end of the attachment of the present invention. The circuit to the lamp may then be established by a proper manipulation of the switch 25 whereby an electric circuit may be established from, say, the center terminal of the socket 27, thence by way of the plate 9 and screw 10 to the switch 11, thence by way of the conductor 22 and to the terminals of the switch 25, considering the circuit to be closed at these terminals, and returning by way of the conductor 24 to the

bracket 18, thence by way of the pin 12 to the center terminal of the lamp 28, thence through the filament of the lamp, and back by way of the base of the lamp to the shell 15, thence to the ring, and thence by the strip 5 to the shell 7, and to the corresponding portion of the socket 27. When it is desired to put out the lamp the switch 25 is appropriately manipulated and the circuit is broken at the switch 25 the same as it would be broken at the socket 27 when the latter is provided with a switch and the latter is turned to the off position.

The attachment provides an insertible and removable switch interposable between an ordinary lamp socket and an electric lamp so that the latter may be included in the circuit or cut out therefrom at will, and the attachment may be carried from one point to another and applied or removed with the greatest facility, no change whatever in either the lamp or the ordinary socket being required.

By forming the body portion 1 and the socket covering 17 of insulating material, the attachment to all intents and purposes has no exposed metal parts with which a person is liable to contact.

What is claimed is:—

1. A combined switch socket and plug for incandescent lamps comprising a body member having a plug at one end and a socket at the other end, with interior terminal extensions of the like members of the plug and socket ends, and an exterior switch coupled to the said terminal extensions.
2. A combined switch socket and plug for incandescent lamps comprising a body member in the form of a sleeve of insulating material, a plug member at one end thereof, a socket member at the other end thereof, an insulating disk to which the terminals of the socket member are connected, a conducting strip extending from the plug member to the like terminal of the socket member and lying along the inner wall of the body sleeve, the latter being provided with a side passage therethrough, a conducting strip extending into the body member from the center terminal of the plug member, a conducting member extending from the center terminal of the socket toward the strip leading from the center member of the plug, an exterior switch, and conductors leading therefrom to the conducting members connected respectively to the center terminal members of the plug and socket.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM PINKNEY McNEEL.

Witnesses:

FRANK H. WASH,
STELLA D. CAMP.