H. HUBBELL.

OPERATING ATTACHMENT FOR PULL SOCKETS.

APPLICATION FILED SEPT. 21, 1912.

1,048,169.

Patented Dec. 24, 1912.

Fig. 1

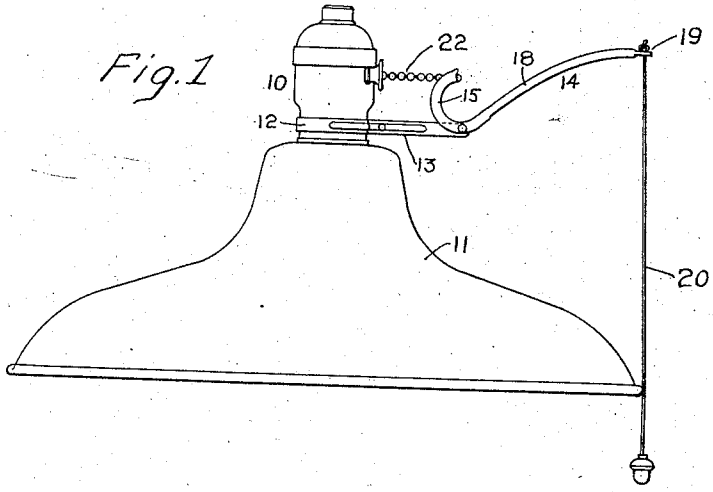


Fig. 2

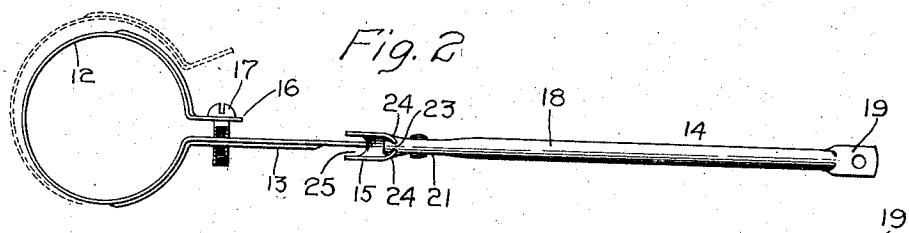


Fig. 3

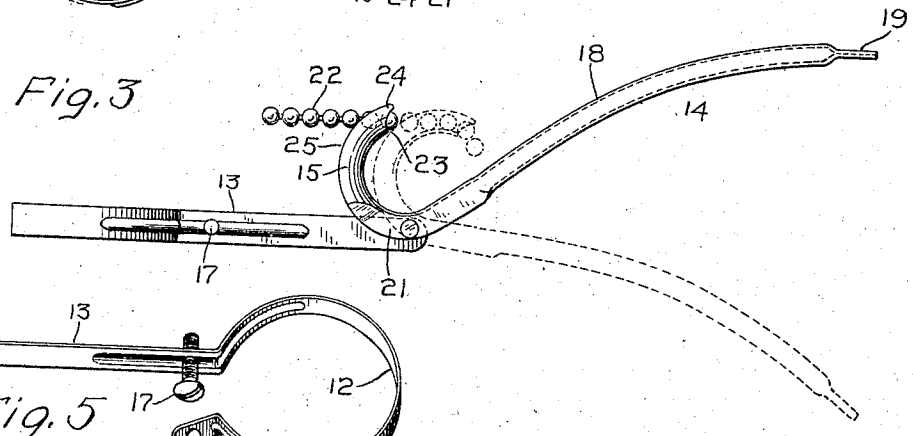
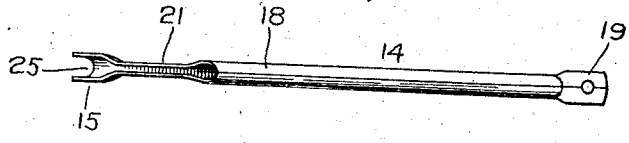


Fig. 5

Fig. 4



WITNESSES:

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OPERATING ATTACHMENT FOR PULL-SOCKETS.

1,048,169. Specification of Letters Patent. Patented Dec. 24, 1912.

Application filed September 21, 1912. Serial No. 721,705.

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 Operating Attachments for Pull-Sockets, of which the following is a specification.

This invention relates to the class of operating attachments for pull sockets, which is illustrated by patent to Kline, Number 1,015,897, dated January 30, 1912, and assigned to Harvey Hubbell, Incorporated, and has for its object to greatly improve the operation of the attachment by changes in the details of construction.

With this end in view I have devised the novel operating attachment which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is an elevation showing my novel operating attachment attached to an incandescent lamp socket as in use. Fig. 2 is a plan view of the attachment removed. Fig. 3 is a side elevation corresponding therewith. Fig. 4 is an inverted plan view of the lever detached; and Fig. 5 is a perspective view of the spring band and arm detached.

10 denotes a pull socket and 11 a shade attached thereto. My novel operating attachment is attached directly to the socket wholly independently of the shade and the shade holder, any form of which may be used. The attachment is furthermore applicable to any standard make of pull sockets, although I have illustrated it in connection with the well known Hubbell pull socket.

My novel attachment comprises a spring band 12, an arm 13 extending outward from one end thereof and a lever 14 pivoted to the outer end of the arm and provided with an arc-shaped short arm 15 extending toward the band. The end of the band opposite to the arm is provided with a hook 16, and a screw 17, whose head engages the outer face of the hook, has threaded engagement with the arm to clamp the band about a socket. This hook is a valuable feature of construction as it renders it unnecessary to turn the screw out in detaching the band from a socket, it being simply necessary to loosen the screw and then detach the hook therefrom, which leaves the band free to be sprung outward, as in Fig. 2, while the screw is still in engagement with the arm.

The lever, including the arc-shaped short arm, is formed from a strip of sheet metal and shaped in dies. The long arm, indicated specifically by 18, is formed by curving the strip transversely and closing the edges together, thereby forming a tube which is preferably curved in the direction of its length to give it a graceful contour. The outer end of the tube is flattened, as at 19, and is shown as provided with a hole for the attachment of a cord or chain, indicated by 20. At the pivotal portion of the lever the strip is formed to an inverted U-shape, as at 21, the sides receiving arm 13 between them.

22 denotes the operating member of the socket. I have illustrated a ball chain, so called, as they are in common use, and will describe its connection. The operation would be the same, however, with any other style of chain or a cord. The outer end of the arc-shaped arm is provided with a notch 23 with which the chain is engaged between two balls, the edges being closed inward making the notch smaller than the diameter of the balls but receiving the connection between the balls freely. The ends of the sides of the arm, indicated by 24, extend outward partly over a ball and are closed toward each other (see Figs. 2 and 3) so as to form a socket in which the engaging ball is retained under the ordinary conditions of use, but the chain may be readily detached if required by drawing it outward slightly and passing the connection between the engaging ball and the next ball outward between ends 24. Between notch 23 and U-shaped portion 21, the strip is made trough-shaped in cross section, as indicated by 25, to form a retaining guide in which the chain lies in use, as clearly shown in Fig. 3.

The advantages of this construction are its relatively great strength and its cheapness and most important of all that it insures a direct pull upon the operating member, which is drawn straight outward without drag upon the chain guide of the socket. This will be obvious from Fig. 3 (see dotted lines) which shows that as the end of the arc-shaped arm is swung outward and downward, the chain will rest upon the bottom of the trough and either upward or downward pull upon the chain or bending

of the chain, will be prevented as the bearing portion of the trough will swing in an arc and always be at a uniform distance above the pivotal point.

Having thus described my invention I claim:

1. An attachment of the character described comprising an attaching band having an arm extending therefrom and a lever having a U-shaped pivotal portion which receives the end of the arm and an arc-shaped arm made trough-shaped in cross section to receive a switch operating member, the curvature of the arc-shaped arm causing a straight pull upon said operating member.

2. An attachment of the character described comprising an attaching band having an arm extending therefrom and a lever formed from a strip of sheet metal and comprising a long arm curved transversely to tubular form, an arc-shaped short arm curved transversely to form a trough, for the purpose set forth, and a pivotal portion formed by curving the strip to an inverted U-shape to receive the arm.

3. An attachment of the character described comprising an attaching band having at one end an arm and at the other end a hook, a headed screw having engagement with the outer face of the hook and threaded engagement with the arm, and a lever formed from sheet metal and comprising a U-shaped pivotal portion which receives the arm between the sides, an arc-shaped short arm trough-shaped in cross section, for the purpose set forth, and a long arm formed by curving the strip into a tube.

4. An arm for a pull socket operating attachment formed from a strip of sheet metal curved to inverted U-shape at the pivotal portion and having an arc-shaped short arm trough-shaped in cross section and a long arm formed by curving the strip transversely into a tube.

5. An attachment of the character described comprising an attaching band having an arm and a lever formed from sheet metal and having a U-shaped portion pivoted to the arm and an arc-shaped arm curved transversely to trough-shape, for the purpose set forth.

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

HARVEY HUBBELL.

Witnesses:
A. M. WOOSTER,
S. W. ATHERTON.