

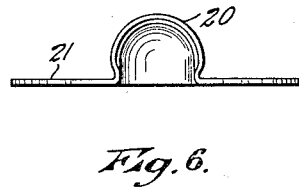
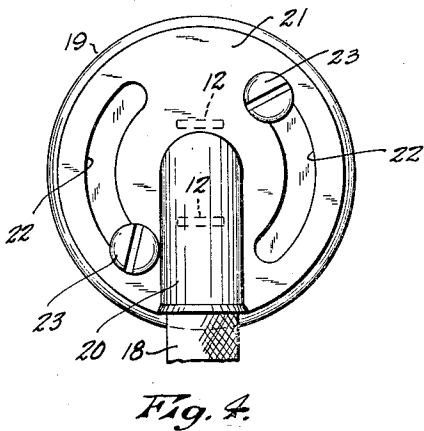
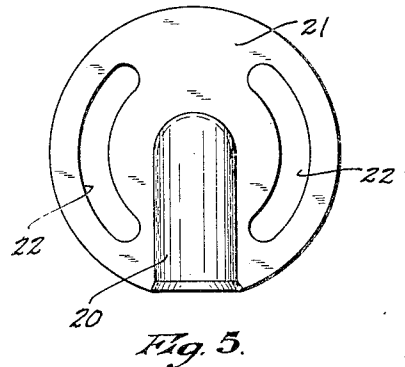
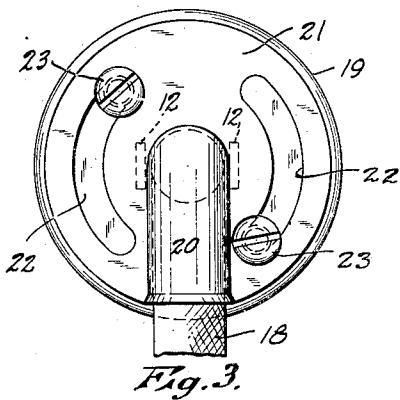
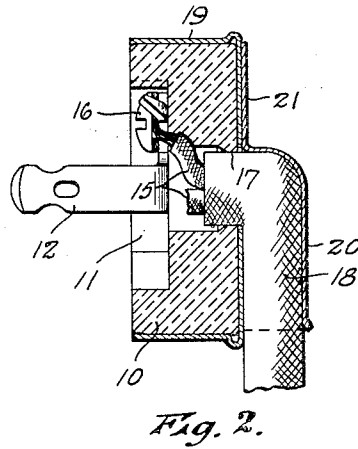
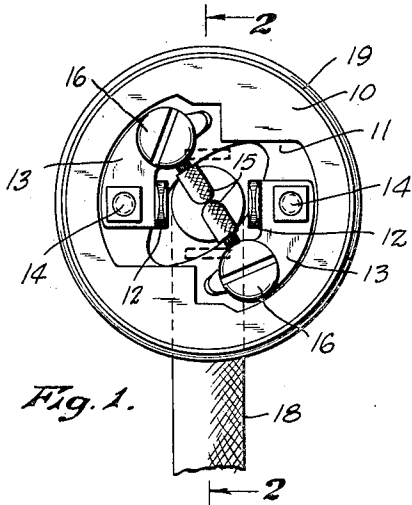
Aug. 4, 1931.

H. HUBBELL, JR

1,817,004

ANGLE CORD GRIP CAP

Filed Oct. 27, 1927



Inventor

Harvey Hubbell Jr.

By

Hooster & Davis
Attorneys

UNITED STATES PATENT OFFICE

HARVEY HUBBELL, JR., OF BRIDGEPORT, CONNECTICUT

ANGLE CORD GRIP CAP

Application filed October 27, 1927. Serial No. 229,036.

This invention relates to attachment plug caps, and particularly to a cap for heavy work, such as around garages, factories and the like, and has for an object to provide a cap of this character which has clamping means for the cord carrying the lead wires which will remove the strain placed on the cord from the connections of the lead wires to the binding screws, and will also so hold the cord that it may hang down straight so that the cord pull is close to the wall and there is, therefore, a short leverage of the cord on the blades greatly reducing the tendency of the blades to rock in the receptacle and work loose.

It is also an object of the invention to provide a structure in which the angular position of the cord clamp with respect to the axis of the cap may be adjusted so that no matter whether the contact blades are parallel or in alignment, are vertical or horizontal, the cord clamp may be adjusted to that the cord may hang downwardly from the cap.

With the foregoing and other objects in view, I have devised the construction illustrated in the accompanying drawings forming a part of this specification. In the drawings,

Fig. 1 is a rear elevation of a cap embodying my invention.

Fig. 2 is a vertical section thereof substantially on line 2—2 of Fig. 1.

Fig. 3 is a front elevation of the cap showing one position of the guard and clamp.

Fig. 4 is a similar view showing another position of the guard and clamp.

Fig. 5 is a front elevation of the guard and clamp removed from the cap, and

Fig. 6 is a side elevation thereof looking from the bottom of Fig. 5.

The cap structure includes an insulating body member 10 preferably having a recess 11 on its inner side in which are mounted

the contact blades 12. It will be noted that the blades shown are arranged in parallel relation, although they may be equally as well in alignment if desired. These blades include base portions 13 seated on the bottom of the recess and through which the blades are secured to the body through the screws or rivets 14 molded in the body and extending through the base portions. These base portions also carry the usual securing means for attaching the lead wires 15 to the blades such for instance as the binding screws 16. The body also has longitudinal openings 17 through which the cord 18 and the leads may pass. This cord for this special type of work is usually a heavy rubber covered cord.

For this type of work the insulating body 10 is usually enclosed in a metal protective casing 19 which also has an opening in alignment with the opening 17 for the cord. Secured to the outer wall of this casing is a guard and clamp for the cord comprising a channel portion 20 to embrace the cord and a flange or base portion 21 by means of which it is secured to the top or face of the enclosing casing. The channel portion 20 embraces the cord and is curved to substantially fit it, but in height it is somewhat less than the thickness of the cord so that when it is clamped to the face of the casing and cap the cord will be clamped against the face of this casing. It will also be noted that this channel portion extends in substantially the plane of the base and transversely thereof so that this channel portion lies substantially parallel to the outer end or face of the cap and thus extends substantially radially of the axis of the cap. The flange or base portion 21 is provided with a pair of curved slots 22 through which pass securing screws 23 threaded or otherwise secured to the body of the cap through the casing 19. It will be obvious that by loosening these screws

the cord clamp and guard may be turned about the axis of the cap so as to bring the channel portion 20 and the cord in this portion to different angular positions with respect to the axis of the cap, and then by tightening the screws 23 this clamp and the cord are securely clamped in the adjusted position, it being understood that tightening of the screws 23 also firmly clamps the cord against the end of the cap or the protective casing 19 so as to remove any strains or pull on the cord from the binding screw connections 16. It is preferred that the slots 22 be of such a length that the channel portion 20 and the cord may be adjusted through an angle of about ninety degrees.

In the installation of the receptacle outlets the receptacle may be so placed that the slots for the contact blades may be either vertical or horizontal. If the slots are vertical then when the blades of the cap are inserted in the receptacle the blades must be vertical as shown in Figs. 1, 2 and 3. In loosening the screws 23 the clamp may be adjusted to bring the channel portion 20 in the upright position as shown in this figure, so that the cord 18 will depend downwardly from the cap and will be clamped in this position when the screws are again tightened. Thus with vertical slots in the receptacle the cap may be inserted therein with the cord hanging downwardly from the cap and extending substantially parallel with the wall so that the pull of the cord is close to the wall and has a short leverage on these blades, thus greatly reducing the tendency of the blades to rock in the receptacle and work loose. On the other hand if the slots are arranged horizontal then the contact blades must be horizontal when the cap is in position as shown in Fig. 4. The blades in this position are substantially at right angles to the position of Fig. 3 but with this construction the cord may still be positioned to hang downwardly by first loosening the screws 23 and then turning the clamp on the cap through an angle of about ninety degrees to the position of Fig. 4, after which the cord and clamp may be again clamped to the cap by tightening the screws 23. It will thus be seen that with this construction it makes no difference whether the receptacle slots are vertical or horizontal, as the cord and clamp may be adjusted to hang downwardly with either type of receptacle, and in either type the leverage of the pull of the cord is short and the tendency of the blades to rock in the receptacle and work loose is greatly reduced.

Having thus set forth the nature of my invention, what I claim is:

1. In an attachment plug cap, a body member, spaced knife blade contacts projecting from one side of said member adapted

ed for insertion into the spaced blade slots of an outlet receptacle, binding posts connected to said blade contacts, said body having an axial opening for a cord carrying leads for connection to said binding posts, a guard for said cord extending transverse the axis of said body and shiftable relative to the body and to the blade contacts about the axis of the body, and means for securing said guard to the body in different angular positions with respect to said axis.

2. In an attachment plug cap, an insulating body member having an axial opening for lead wires, spaced knife blade contacts projecting from one side of said member adapted for insertion into the spaced blade slots of an outlet receptacle, means for securing lead wires to said blade contacts, a metal protective casing enclosing the body, a guard for the cord which carries the leads, said guard extending radially along the outer wall of the casing and shiftable relatively to the body and to the blade contacts about the axis of the body to locate said guard in different angular positions with respect to the blade contacts, and means for securing the guard to the casing in said different angular positions.

3. In an attachment plug cap, an insulating body member, contact blades carried by said member and having means for securing lead wires thereto, a guard and clamp at the outer end of said body for the cord which carries the leads to said blades, said guard comprising a portion for enclosing the cord and extending transversely of the axis of the body, a base for said enclosing portion having curved slots, and securing means in said slots and adapted to secure the guard in different angular positions with respect to the axis of the cap.

4. In an attachment plug cap, a body member, spaced knife blade contacts projecting from one side of said member adapted for insertion into the spaced blade slots of an outlet receptacle, means for securing lead wires to said blade contacts, said member having an axial opening for the lead wires to enter therethrough, a metal guard and clamp on the outer end of the body having a clamping portion to embrace the cord which carries the leads, said guard extending transversely of the body and shiftable relative to the body and to the blade contacts about the axis of the body, and means for clamping said guard to the body to clamp the cord in position against the end of the cap and extending along the outer wall thereof.

5. In an attachment plug cap, an insulating body member, contact blades mounted thereon and having means for securing lead wires thereto, a metal casing enclosing the body, said body and casing having aligned

openings through the end thereof for the leads, a metal clamp and guard having a portion to embrace the cord which carries the leads, said guard extending laterally from
5 said openings and having a flange provided with curved slots, and screws secured to the casing and passing through said slots to clamp the guard in different angular positions with respect to the axis of the cap.

10 In testimony whereof I affix my signature.

HARVEY HUBBELL, JR.

15

20

25

30

35

40

45

50

55

60