June 20, 1933. W. J. GAGNON 1,915,185

CAPPED ELECTRICAL CONTACT PIN

Filed March 21, 1931

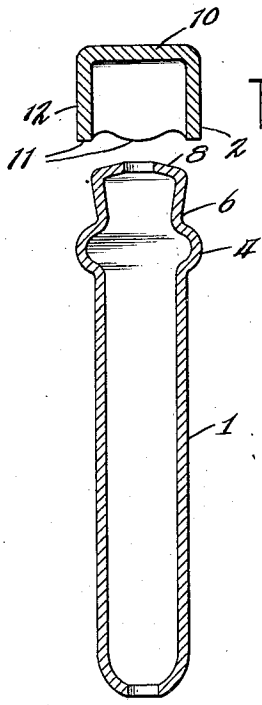


Fig. 1.

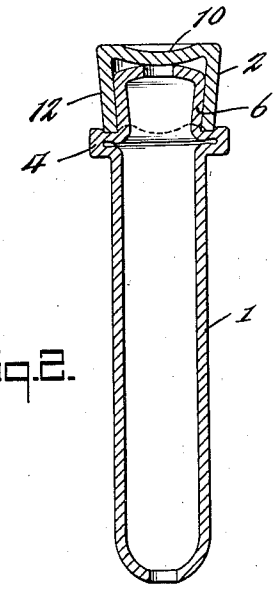


Fig. 2.

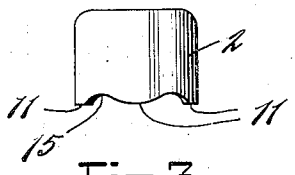


Fig. 3.

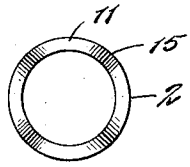


Fig. 4.

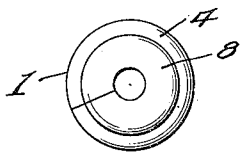


Fig. 5.

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by his attorneys
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Patented June 20, 1933 1,915,185

UNITED STATES PATENT OFFICE

WILLIAM J. GAGNON, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE BEAD CHAIN MANUFACTURING COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT

CAPPED ELECTRICAL CONTACT PIN

Application filed March 21, 1931. Serial No. 524,392.

This invention relates to capped tubular electrical contact pins and particularly pins of the type described which are molded in position as in the formation of tube bases and it is an object of this invention to provide a pin of the type described of improved construction and having the cap non-rotatably secured on the pin body or insert.

In the drawing—

Figure 1 is a view in vertical section showing the cap and insert before the parts are assembled;

Figure 2 is a similar view showing the parts assembled to form the complete pin;

Figure 3 is a view in elevation of the cap;

Figure 4 is a bottom plan view of the cap shown in Figure 3; and

Figure 5 is a top plan view of the insert shown in Figure 1.

A pin constructed in accordance with this invention, comprises, as shown in the drawing, a seamed tubular body or insert 1 formed from sheet metal and a seamless cap 2. The insert 1 is provided with a bead or shoulder 4 adjacent one end and extending around the pin which is, before the application of the cap 2, substantially semi-circular in form.

The end or head portion 6 of the insert tapers inwardly forming a substantially truncated conical head having its least diameter adjacent the bead or shoulder 4. The end surface 8 of the head 6 is shown as bulging outwardly slightly and both ends of the insert 1 are formed with openings therein.

The cap 2, before application, comprises a flat circular wall 10 and a cylindrical wall 12 projecting therefrom, the free edge of the wall 12 being provided with uniformly spaced lobes 11.

To complete the pin, the cap 2 is pressed on the insert 1, as shown in my Patent No. 1,812,743, issued June 30, 1931 and as in that patent as the cap 2 is pressed on the insert 1 the cap 2 is given a conical shape by the dies to fit the conical head 6 of the insert 1. The cap is, in this case, however, of such length that the lobes 11 of the cap are embedded in the flexible upper surface of the bead or shoulder 4 collapsing the bead or shoulder 4 and, with the dies, bringing it to the shape shown in Fig. 2—with the metal of the shoulder 4 fitting the recesses 15 between the lobes 11 of the cap and interlocking the cap 2 with the shoulder so as to prevent relative rotation thereof.

When the pin is completed the cap 2 and head 6 are conical and the bead 4 is substantially rectangular in section and fitted to or interlocked with the free edge of the cap wall 12. The conical shape of the cap 2 and the head 6 prevent the cap 2 from being withdrawn from the head 6 and the interlocking of the free edge of the cap wall 12 with the shoulder 4 prevents rotation of the cap 2 on the head 6.

While the contour of the free edge of the wall 12 of the cap 2 shown and described is that which is believed permits the bead 4 to be most readily shaped thereto, it is to be understood that other contours may be used so long as they provide means for interlocking the cap 2 with the bead 4.

It will also be understood that the usual opening in the cap 2 for inserting the wire which is connected to the pin can be formed in the cap 2 as the pin is molded in the tube base as set forth in my application Serial No. 519,616 filed Mar. 2, 1931.

What is claimed is:—

1. An electrical contact pin having a tapered head, a bead adjacent said head and a cap fitting said head and interlocking with said bead.

2. A tubular electrical contact pin having a tapered head, a bead adjacent said head and a seamless cap fitting said head and interlocking with said bead.

3. A tubular electrical contact pin having an inwardly tapering head, a bead adjacent

said head and a cap tapered to fit said head and interlocking with said bead.

4. An electrical contact pin having a tapered head, a bead adjacent said head and a cap tapered to fit said head and engaging with said bead to prevent relative rotation of said cap and head.

5. An electrical contact pin having a tapered head and a cap fitting said head and having its free edge engaging said pin to prevent relative rotation of said cap and head.

In testimony whereof I have signed my name to this specification.

WILLIAM J. GAGNON.