

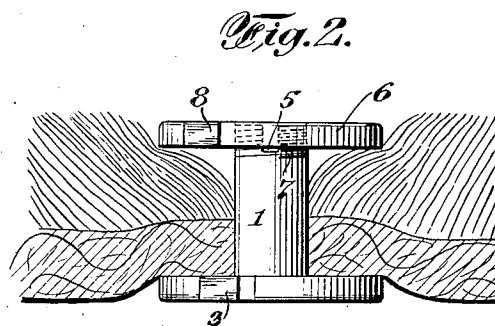
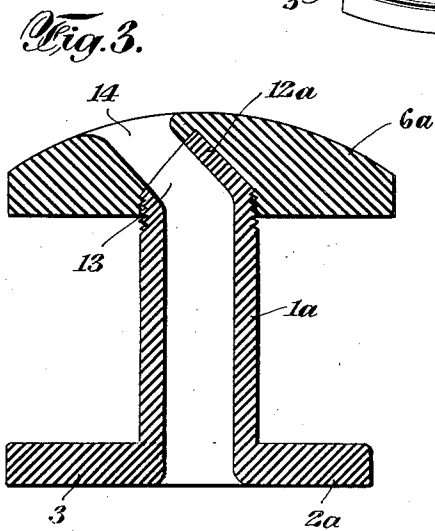
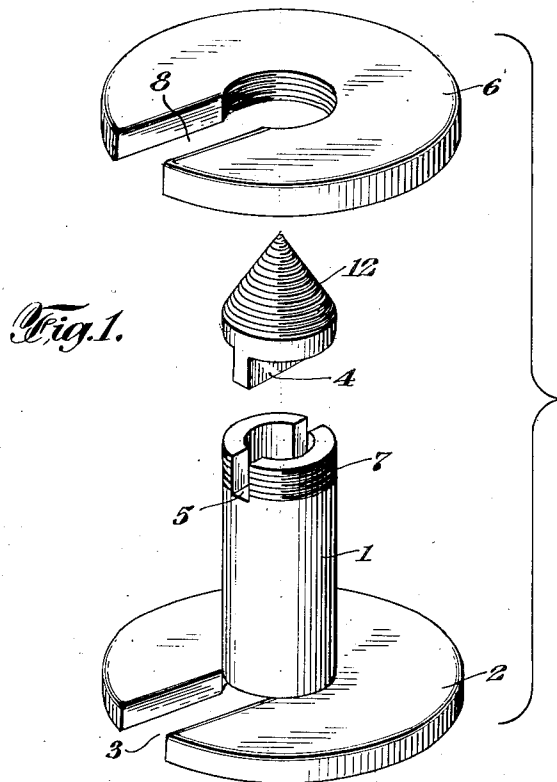
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INSULATING BUSHING

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INSULATING BUSHING

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2 Claims. (Cl. 174-153)

The primary object of the invention is to provide an insulating bushing by which electrical conductors may be safely led through a rug or carpet, the device being constructed to afford ready installation in the rug, and to avoid appreciable injury to the fabric. Further objects and advantages of the invention will be in part obvious and in part specifically referred to in the description hereinafter contained which, taken in conjunction with the accompanying drawing, discloses certain preferred embodiments of the invention which, however, should be considered as merely illustrative from the standpoint of the invention in its broader aspects. In the drawing—

Fig. 1 is a perspective view showing in disassembled relation the several parts of one form of insulating bushing constructed to operate in accordance with the invention.

Fig. 2 shows the bushing of Fig. 1 installed in a rug.

Fig. 3 is a central vertical section showing a somewhat modified form of bushing.

The insulating bushing as shown in Figs. 1 and 2 has a tubular body 1 constructed of suitable insulating material, and an enlarged base 2 which latter may be provided with a groove or slot 3 to receive the insulated electrical conductor which is to be passed through body portion 1. At the other end, the body portion 1 is provided with a pointed head 12 which may be threaded as shown in Fig. 1 to facilitate its penetration through the material of a rug, in such manner as to spread the strands of fabric and force its way between them, without tearing or otherwise substantially injuring the material. In the form shown in Fig. 1 the head 12 is detachably engaged with the body portion 1 of the bushing, being shown as provided with a lug 4 which fits in a slot 5 in body portion 1. With the above described parts thus assembled the user may grasp the bushing proper and force the body portion 1 through the material of the rug, the head 12 spreading the strands as above described, until the base 2 engages against one surface of the rug. The head 12 may then be removed and preferably a collar 6 is then detachably engaged with the end of the bushing which protrudes through the rug, collar 6 being shown as threaded and engageable with screw-threads 7 on the surface of body portion 1 for the above purpose. The collar 6 may also have one or more grooves or slots 8 to receive the electrical conductor. Fig. 2 shows the bushing in installed position, with the base 2 resting upon the floor and collar 6 screwed down to engage the upper surface of the rug.

In the form of the invention shown in Fig. 3, the body portion 1a of the bushing is provided with a base 2a of the character above described, but in this instance the pointed head 12a is formed integrally with the body portion 1a and

has a hole 13 through which the electrical conductor may be led. The collar 6a of Fig. 3 may be similar to the member 6 already described, except that as shown, the collar 6a preferably overlies the pointed head 12a to protect the latter, and is provided with a hole or slot 14 through which the electrical conductor may be passed.

Usually the bushing will only be made large enough to accommodate one electrical conductor, a separate similar bushing being used for the return conductor, and in such case the outside diameter of the bushing need not be larger than about an eighth of an inch, and the device about three-quarters of an inch high. The device may be easily and quickly installed and removed, and after removal the pile of the fabric will usually come back to its original position so as to leave no marred spot in the rug. If desired, insulating material of rubber-like type may be used, having a certain degree of flexibility, although when the device is set firmly in position, it is not likely to be injured in use.

While the invention has been disclosed as carried out by bushings of the above described specific constructions, it should be understood that changes may be made therein without departing from the invention in its broader aspects, within the scope of the appended claims.

I claim:

1. An insulating bushing constructed and arranged to lead an electric wire through rugs and like fabrics, said bushing having a hollow body portion constructed to receive an electric wire, and a tapering head, said body portion and head being constructed of such small cross sectional size as to enable the same to be inserted between adjacent strands of the fabrics within limits of spreading which do not substantially injure the latter, and a detachable collar constructed and arranged to enclose the head portion of the bushing, the head portion of the bushing being integral with the body portion thereof.

2. An insulating bushing constructed and arranged to lead an electric wire through rugs and like fabrics, said bushing having a hollow body portion constructed to receive an electric wire, and a pointed head integral with said body portion, said body portion and head being constructed of such cross sectional size as to enable the same to be inserted between adjacent strands of the fabric within limits of spreading which do not substantially injure the latter, said bushing having an enlarged base extending transversely outward from the bottom of said body portion, and a detachable collar fitting upon said pointed head and having a recess constructed to receive said head, said collar also having an electric wire receiving passageway constructed to communicate with the space within said hollow body portion.

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