

M. A. PAHLER.
SIGNAL CORD BUSHING.
APPLICATION FILED JULY 7, 1913.

1,106,964.

Patented Aug. 11, 1914.

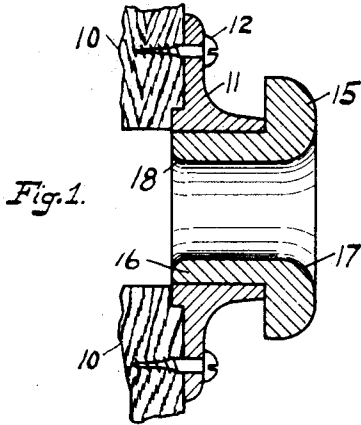


Fig. 1.

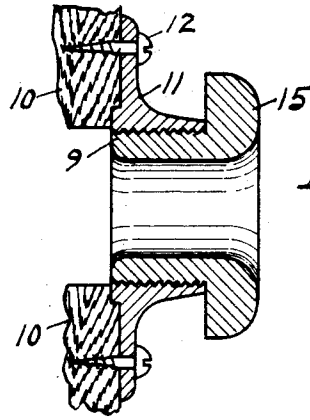


Fig. 2.

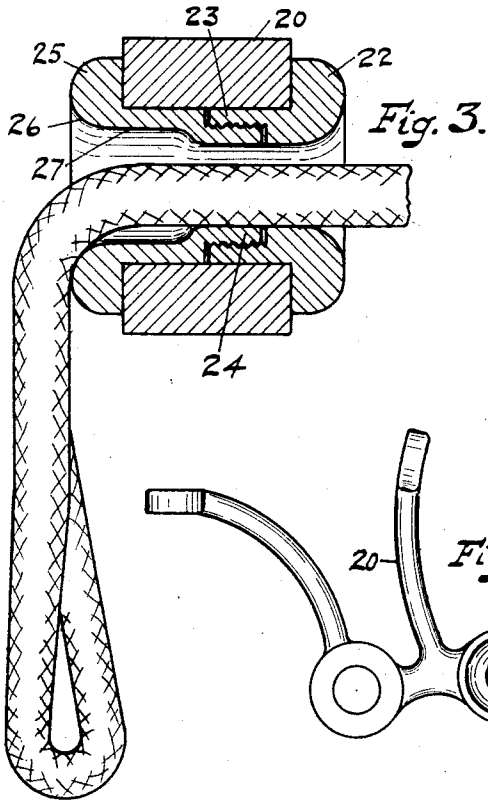


Fig. 3.

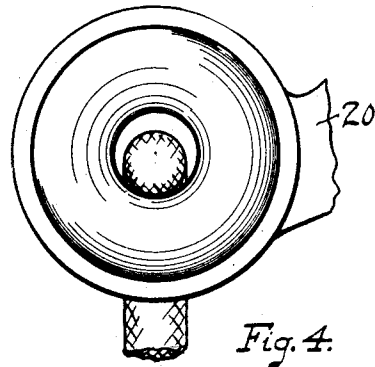


Fig. 4.

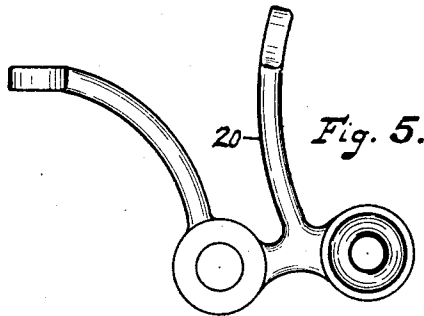


Fig. 5.

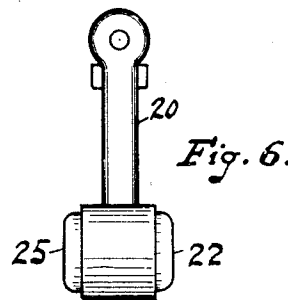


Fig. 6.

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SIGNAL-CORD BUSHING.

1,106,964.

Specification of Letters Patent.

Patented Aug. 11, 1914.

Application filed July 7, 1913. Serial No. 777,756.

To all whom it may concern:

Be it known that I, MARTIN A. PAHLER, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Signal-Cord Bushings, of which the following is a specification.

This invention relates to improvements in means for sustaining and guiding cords, such as are used for manually transmitting signals as to bells, whistles, etc., from points at a distance therefrom, and its objects are, to provide such devices in forms applicable alike to existing structures, or to new installations, that are adapted to operate with the least possible friction between their contacting surfaces and the cord, and which are readily renewable when desired.

These objects are attained by the novel construction and combination of parts hereinafter described and shown in the accompanying drawings, forming part of this specification, and in which:—

Figure 1 is a sectional view of the invention in its simplest form. Fig. 2 is a similar view showing a modification in construction. Fig. 3 is another like sectional view showing a further modification and illustrating the application of the invention. Fig. 4 is a front view of the same. Fig. 5 is a side elevation of a bracket having the device applied, and Fig. 6 is a front elevation of the same.

This invention was primarily designed for use in passenger cars where a signal cord is employed to obviate the untimely wear of the metal bushings and bracket openings in common service and at the same time prevent the rapid destruction of the cord in its passage through the mentioned openings. Figs. 1 and 2 indicate the application of the invention to the panels or end walls in such cars, the woodwork being represented by the numeral 10, to which the customary metal annulus 11 is secured as indicated by screws 12.

In the application of the invention, the common cord openings may be suitably enlarged and fitted to receive the removable bushing 15, having a reduced portion 16, suited to the mentioned opening so that the same may be pressed firmly into place and be

retained by frictional contact of the surface engaged. The interior of this bushing is preferably made somewhat larger than the size of the cord employed and has its outer edge surfaces well rounded as at 17, a smaller curve 18 being employed on the inner side where the rope extends only a short distance before entering the bushing placed on the opposite side of the car wall or partition. In Fig. 2 is shown the same general arrangement, the modification consisting only in the use of screw-threads at the engaging portions 19.

The view shown in Fig. 3 illustrates the preferred embodiment of the invention as applied to brackets or other sustaining fixtures, the same being indicated by the numeral 20. In this arrangement, the bushing 22 having an extending portion 23, suited to fit the opening in the bracket, is recessed at its inner end and provided with screw-threads adapted to engage with corresponding threads formed on the extension 24 of the reversed adjoining bushing 25. Thus it will be seen that the two bushings are entered from opposite sides in the annular opening formed in the bracket 20, one being screwed upon the other until the enlarged or flanged ends of the bushing contact against the side bracket thereby holding both bushings in alinement and affording a firm support for the same.

It will be noticed that the bushing 25 is not only rounded at 26 but formed with an enlarged annular chamber 27 contracted at its extreme inner end so as to register with the opening in the bushing 22.

While it is preferred to construct these bushings of an extremely hard fiber, obviously they may be manufactured from any suitable material whatever and it will be seen that the same are easily applied or removed when worn or if otherwise desired and replaced by others, thereby assuring continuous service of the brackets or containers without wear.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

In an article of the class described, in combination, two tubular bushings each adapted to be inserted in a common rigid annulus from opposite sides thereof and

having a flanged member integrally united therewith adapted to engage with one side of said annulus, said bushings being also rabbeted at their inner ends and having interlocking means on the overlapping faces
5 of the rabbet joint.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

MARTIN A. PAHLER.

Witnesses:

BENJ. BROOKS,

WARREN E. WILLIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."