Nov. 25, 1930. J. L. MOHUN ET AL 1,782,905

BOTTOM BAR FOR CURTAINS

Filed Dec. 9, 1929

FIG. 1.

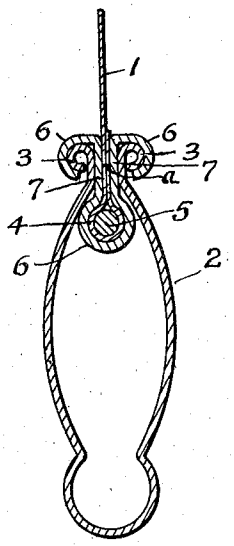


FIG. 4.

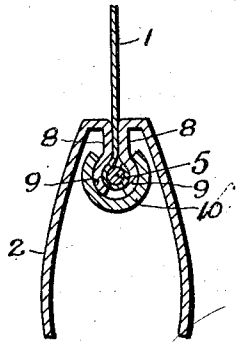


FIG. 2.

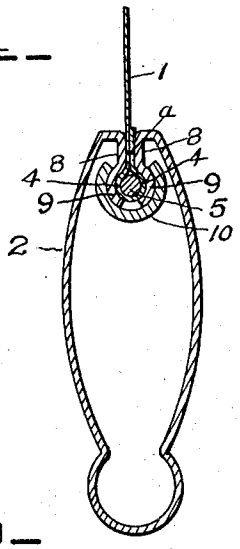


FIG. 3.

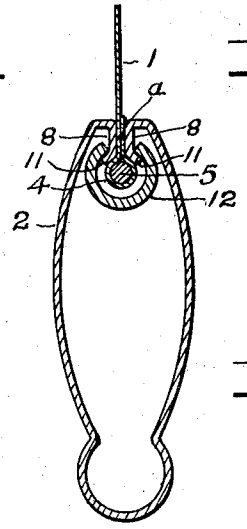


FIG. 5.

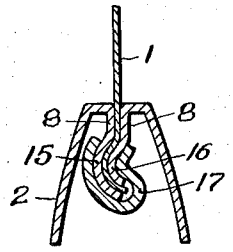


FIG. 6.

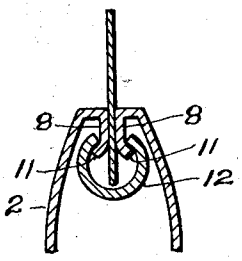


FIG. 7.

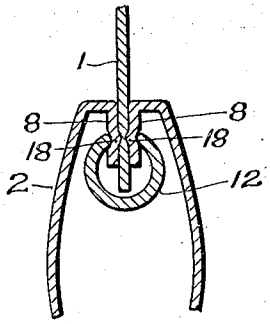
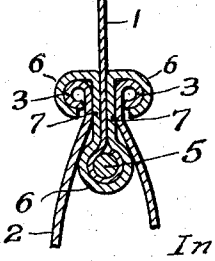


FIG. 8.



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UNITED STATES PATENT OFFICE

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BOTTOM BAR FOR CURTAINS

Application filed December 9, 1929. Serial No. 412,627.

This invention relates to bottom bars for curtains, particularly those that are used for the windows of railroad cars, and has for its object to provide a hollow bottom bar, made from a single piece of sheet metal, and furthermore, to secure the lower edge of the curtain within this bar without the employment of any such means as screws or rivets.

An additional object is to so equip the bottom of a curtain that it will harmonize with the general appearance of the interior of a railroad coach, particularly one made of steel.

In the accompanying drawings which form a part of this application

Figures 1, 2 and 3, are cross sectional views showing various ways of securing the bottom edge of the curtain within the curtain bar, in accordance with this invention, and

Figures 4, 5, 6, 7 and 8, are broken cross-sectional views showing modified ways of securing the curtain to a bottom bar.

Similar numerals of reference denote like parts in the several figures of the drawing.

We have illustrated several ways of securing the bottom edge of the curtain to the bottom bar, and they will be hereinafter described. All of these forms of the invention show a deformation of the upper edges of the bottom bar and the employment of separate means applied to the edges in such a manner as to prevent undue spreading of said edges. The curtain is therefore firmly held in position. While we have shown deformations on the edges of the bottom bar, we desire to have it understood that any arrangement whereby the curtain is frictionally held in place comes within the scope of the broadest claims.

1 is the curtain and 2 the hollow metal bottom bar which is of any suitable shape in cross section and whose edges terminate at the top of the bar.

In Figure 1 the edges of the bottom bar 2 are curved outwardly to form curled edges, as shown at 3, and the lower edge of the curtain is doubled so as to form a hem, this doubled edge being stitched together, as shown at *a*, and within this hem is inserted a keeper rod 5, and a metal member 6, closely conforming at its lower end around the curtain hem, is inserted within and preferably extends throughout the length of the bar 2. The upper side portions 7 of this member 6 embrace the doubled edge of the curtain, while the outer extremities thereof are bent outwardly, so as to conform closely to the curled edges 3 of the bottom bar. The chief function of this member is to hold the upper curled edges of the bar so that they cannot accidentally spread apart, when strain is put upon the curtain, so as to allow the latter to pull free of the bar. It assists in holding the curtain in position.

If this strip 6 were not employed the curtain might be pulled free of the bar, notwithstanding the obstruction offered by the retaining rod 5. It will be seen that the curtain is frictionally held between the upper edges of the bar 2, although the member 6 is interposed between the curtain and the bar 2.

In the construction shown at Figure 2, the edges of the bottom bar are bent downwardly at 8 and terminate in outwardly curved portions 9 which closely embrace the hem 4 of the curtain and cause it to closely hug the retaining rod 5. The clamping means, preferably a strip 10, is passed through the bar 2 so as to embrace these curved portions 9 on the bottom bar to hold said portions firmly. The upper edges of the bottom bar are thereby prevented from spreading when strain is put upon the curtain.

In Figure 3 is shown a construction in which the upper edges of the bottom bar are bent inwardly and terminate in short outwardly extending lips 11. The curtain is embraced between these edges of the bottom bar, the retaining rod being inserted within the hem of the curtain as in the constructions above described. Clamping means, preferably a circular strip 12, whose upper terminals extend inwardly, firmly clamps the lips 11. This means is inserted within the bar 2 and serves to prevent the upper edges of the bar 2 from spreading when strain is brought to bear on the curtain.

In the constructions above described, a stitched hem is formed at the bottom edge of the curtain for the insertion of the rod 5, but, while this is preferred, it is not necessary. The stitching, as in Figures 4 to 8 inclusive,

and the stitching as well as the rod, as in Figures 5 to 7 inclusive, may be omitted. The constructions shown in these figures will now be described.

The construction shown in Figure 4 is like that shown in Figure 2, with the exception that in the former there is no stitched hem, the curtain being merely wrapped around the rod 5.

In Figure 5 the downwardly bent edges 8 of the bottom bar terminate in parallel concavo-convex deformed portions 15, 16, between which the lower edge of the curtain is embraced. Clamping means, preferably a strip 17, closely conforms to said deformed portions and is placed on said portions so as to grip them and thereby bind the curtain securely between the edges of the bottom bar.

The construction shown in Figure 6 is like that shown in Figure 3, except that the former omits the hem along the bottom edge of the curtain and also the rod 5, and shows the curtain confined by the inwardly extending portions 8. The clamping means, preferably a strip 12, engages against the lips 11 and assists in firmly holding the curtain between the edges of the bottom bar.

Figure 7 shows the downwardly extending edges 8 with abrupt inwardly extending V-shaped deformations 18. The curtain is gripped between said edges and deformations, and the clamping means, preferably a circular strip 12, is placed in the bar 2 with the terminals of said strip firmly engaged with the outer surfaces of these deformations, to thereby secure the curtain.

Figure 8 shows a construction like that shown at Figure 1, except that in the former the stitched hem is omitted, the lower edge of the curtain being merely wrapped around the rod 5.

In all of the constructions shown in the eight figures of the drawing, the lower edge of the curtain is frictionally confined between the upper edge portions of the bottom bar, and clamping or retaining means is employed to make sure that the upper edges of said bar are prevented from spreading.

What is claimed is:—

1. A bottom bar structure for curtains consisting of a hollow bottom bar made of sheet metal having its edges at the top, intermediate of which edges the lower portion of the curtain is held by friction, and means for preventing the edges of the bottom bar from spreading.

2. A bottom bar structure for curtains consisting of a hollow bottom bar made of sheet metal having its edges at the top, between which edges the lower portion of the curtain is held, means to assist in frictionally holding said curtain in contact with the bottom bar, and means for holding the edges of the bottom bar from spreading.

3. A bottom bar structure for curtains consisting of a hollow bottom bar made of sheet metal having its edges at the top, between which edges the lower portion of the curtain is held, means to assist in frictionally holding said curtain in contact with the bottom bar, and a clamping strip for holding the edges of the bottom bar from spreading.

4. A bottom bar structure for curtains consisting of a hollow bottom bar made of sheet metal having its edges at the top, between which edges the lower portion of the curtain is held, said edges having deformations, and means for holding said deformed edges from spreading.

5. A bottom bar structure for curtains consisting of a hollow bottom bar made of sheet metal having its edges at the top, between which edges the lower portion of the curtain is held, said edges having deformations, and a keeper strip for holding said edges from spreading.

6. A bottom bar structure for curtains consisting of a hollow bottom bar made of sheet metal having its edges at the top, between which edges the lower portion of the curtain is held, said edges having deformations, and a retaining strip conforming to said deformations and holding said edges from spreading.

7. A bottom bar structure for curtains, consisting of a hollow bar made of resilient sheet metal having its edges at the top and terminating in deformations, a curtain having its lower edge stitched to form a hem and depending within said bar intermediate of said edges, a retaining rod within this hem, and resilient means for clamping said edges to prevent the spreading thereof.

In testimony whereof we affix our signatures hereto.

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HENRY PIESCH.