July 21, 1959 H. T. GOLDE 2,895,755

APPARATUS FOR SLIDABLE CLOSURES

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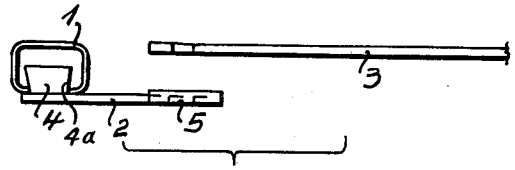


FIG. 1

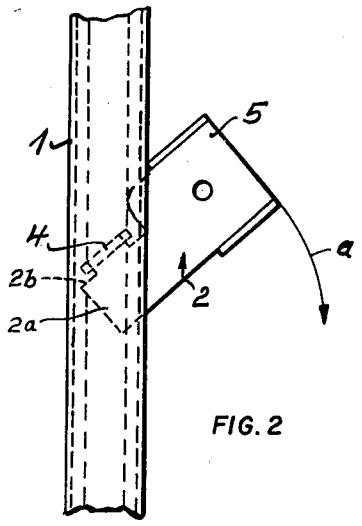


FIG. 2

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APPARATUS FOR SLIDABLE CLOSURES

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1 Claim. (Cl. 287—56)

This invention relates to slidable closures and, more particularly, to apparatus for the supporting and manipulation thereof.

These closures include, for example, the foldable or slidable roofs of convertible vehicles and for tops of this nature there is normally provided main and intermediate braces as well as an accessory arm for purposes of folding the top as it is being closed.

Heretofore, the means employed in connecting the folding accessory to the associated brace has consisted of a riveted joint. Unfortunately, the consequence of riveting is to interrupt the smoothness of the surface of the support and, consequently, the fabric constituting the top or roof cannot rest evenly due to the unevenness of the supporting structure.

It is an object of the invention to provide an improved structure for utilization with closures of the nature described above such as to provide a smooth surface of support for the associated roof material.

To achieve its objective the invention provides briefly for the utilization of a coupling means intermediate a roof brace and the folding accessory or the like which coupling member consists of a stamped piece or flattened metallic part having a dove-tailed shape. To accommodate this coupling member, the brace is provided with a substantially C-shaped cross-section or other such cross-section defining a recess having a narrowed opening.

By reference to the accompanying drawing it will be seen how the novel coupling member facilitates the operation of engaging an accessory with a roof brace and how the resulting coupling provides a smooth supporting surface which does not interfere with the fabric of a vehicle roof.

In the drawing:

Figure 1 is a sectional view of a roof brace with a support connected thereto in accordance with the invention and further illustrating in partially exploded view a folding accessory intended to be mounted on the support, and

Figure 2 is a top view of the roof brace illustrating the associated support during the operation of connecting this support with the brace.

In the drawing, the structure provided in accordance with the invention is illustrated as comprising a brace 1 in the form of a C-shaped beam, a support or connecting

piece 2, a roof folding accessory member 3, a dove-tailed stamped part 4, and a fastening member or clip 5.

The dove-tailed shaped part 4 is mounted with its broadest end spaced from the support 2 which is provided with a narrowed portion 2*a* having an edge 2*b* on which the part 4 is rigidly connected. The folding accessory 3 which may be any other type of accessory as desired is fastened to the support 2 by means of a clip 5 which may be of known construction.

To connect the support 2 to the brace 1 by means of the part 4 the support 2 is angularly disposed with respect to the brace 1 such that the wide edge of the part 4 may be inserted through the open mouth of the C-shaped cross-section of the brace 1 with the narrow throat 4*a* between the edges of the C-section. It follows as a natural consequence of the structure that when the support 2 is adjusted to assume a right angle with respect to the brace 1, the wedge like shape of the part 4 cooperative with the adjacent portions of the support 2 will sandwich the extremities of the brace 1 in such a manner that the support 2 assumes a rigid position with respect to the brace 1. As shown in the drawing, the wedge of part 4 has a width exceeding that of the opening of brace 1.

Within the scope of the invention the brace 1 may be constituted by a metal beam or by any other material having the requisite strength. Preferably, the dove-tailed part 4 is fabricated from a metal having the necessary strength but in accordance with the invention, this part may be made from any equivalent material such as plastic or the like which has the necessary structural strength.

To facilitate an understanding of how the support 2 is engaged with the brace 1 there is illustrated in Figure 2 an arrow *a* indicating the manner in which the support 2 need be pivoted to achieve the desired coupling.

There will now be obvious to those skilled in the art many modifications and variations of the structure set forth but which do not depart essentially from the scope of the invention as defined in the following claim.

What is claimed is:

A structure for a foldable, flexible closure of a vehicle comprising a cross brace of substantially C-shaped cross-section, a folding arm coupled at a right angle to said cross brace in a substantially horizontal plane, a flat coupling element mounted on said folding arm and including a narrowed portion, a dove tail extending perpendicularly from an edge of the narrowed portion, said dove tail including a narrow throat rigidly jammed between the edges of the C-section with said folding arm in its right angle position with regard to said cross beam.

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