C. H. MEADER

STORMPROOF ROLLER CURTAIN

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2 Sheets-Sheet 1
This invention relates to improvements in curtains especially adapted for use upon locomotives, automobiles, etc., and has for an object the provision of a storm proof curtain which may be readily adjusted for use, or positioned within a protective housing when not in use, the housing also protecting the curtain roller at all times.

Another object of the invention is the provision of a housing for this purpose which is of novel construction and within which the curtain may be mounted so that it may be readily withdrawn, yieldable means being provided to closely engage the curtain at all times to exclude rain and snow, and permit of the ready manipulation of the curtain.

Another object of the invention is the provision of a spring roller curtain and housing therefor having means upon the outer side of the housing for adjusting the tension of the roller spring.

In the drawings:

Figure 1 is an elevation illustrating the curtain arranged for use in the window of a locomotive cab.

Figure 2 is an enlarged sectional view on the line 2—2 of Figure 1.

Figures 3 and 4 are fragmentary sections taken respectively on the lines 3—3 and 4—4 of Figure 1, the views being on an enlarged scale.

Figure 5 is a section on the line 5—5 of Figure 3.

Figure 6 is an elevation showing a portion of the body of an automobile with the invention applied.

Figure 7 is a fragmentary sectional view on an enlarged scale, the section being taken on the line 7—7 of Figure 6.

Figure 8 is a detail perspective view of the curtain housing shown in Figure 7.

Referring to the drawings in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates a window frame which may represent the frame of a window of a locomotive cab. The invention which is designed to close the window opening includes housings 11, one of which is positioned at each side of the window. These housings are of like construction and each includes an attaching bracket 12 and a rib 13, the latter extending from one edge of the housing. The housing is elongated in shape and has one of its faces open and while the housing is shown as being cross sectionally rectangular, this particular shape is not essential.

The open face of the housing is closed by a closure member 14. This member is cross sectionally semi-circular or substantially so, and extends longitudinally of the housing 11 with its ends closed by disk-like heads 15. A flange 16 extends longitudinally along one edge of the closure member 14 adjacent the rib 13 of the housing.

Mounted for axial rotation within the housing between the heads 15 of the closure member is a spring influenced roller 17. The lower end of this roller carries a trunnion 18 which is rotatable in a bearing provided in the end of the housing 11 and in the adjacent disk 15. The opposite end of the roller has mounted therein a spring 19 which has one of its ends secured to the roller and its opposite end secured to a bar 20 projecting from the end of the roller 17. This bar is engaged by the bifurcated end of a screw 21 which is adjustable in the housing 11 and which is held in adjusted position by means of lock nuts 22. A curtain 23 is wound upon the roller 17. A spring 24 which has one of its ends secured to the housing and its opposite end to the closure member 14 as shown in Figure 5 of the drawings, acts to yieldingly hold the member 14 in position to close the housing and to yieldingly contact with the curtain as the latter is withdrawn from or wound within the housing, the curtain however having free movement.

The free end of the curtain is provided with a strip 25 of suitable material and these free curtain ends are adapted to overlap and be secured together as shown in Figures 1 and 2 of the drawings so as to close the window opening. By reason of the character and manner of controlling the closure member 14, this member will sufficiently close the housing as to protect the curtain and the curtain roller at all times.

In Figures 6, 7 and 8 of the drawings, the...
invention is shown as applied to an automobile. In this form of the invention, the curtain roller 26 is horizontally arranged and the curtain 27 may be provided with transparent panels and with a normally closed flap 28 so that when the free edge of the curtain is secured to the body of the vehicle as shown at 29, the flap 28 will permit of the hand being extended for signalling purposes.

The roller 26 is mounted for rotation within a housing 30 and this housing is provided with an attaching flange 31 which is secured along the top 32 of the automobile. The housing is provided along one edge with a flange 33 which extends oppositely from the flange 31. Mounted for axial rotation within the housing 30 is a transversely curved closure member 34 from which the curtain 27 extends, the closure member 34 being provided with a flange 35 over which the curtain passes.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is here reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention what is claimed is:

In a curtain mounting, an elongated housing, a hollow substantially cylindrical closure member having a disk at each end thereof and mounted for rotary movement within the housing, said member having an elongated opening therein, a flange extending along one edge of the opening, a spring influenced roller mounted for rotation within the hollow cylindrical member, a curtain wound upon the roller and extending through the housing, and spring means to yieldingly hold the flanged end of the closure member in contact with the curtain.

In testimony whereof I affix my signature.

CLARENCE H. MEADER.