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LOCOMOTIVE PORTABLE STORM WINDOW BOX

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Fig. 3

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This invention relates to attachments for locomotives and more particularly to a portable locomotive mounted storm window box.

An object of the present invention is to provide an attachment for a locomotive cab window which makes possible a more comfortable job of observing the exterior of the cab in any type of weather.

A further object of the present invention is to provide a lightweight portable window box attachment which is applied to the window opening of the locomotive and held in place without the use of any adjustable type fasteners, whereby the box is applied by simply setting it in place. One of the features of the invention is the interchangeability of the box from the window on the left side of the cab to the window on the right side of the cab or vice versa.

A further object of the invention is to provide a locomotive window box in the form of a separable attachment, the window box being weather-proof and having copious transparent area so that the engineer may lean out the window but remain in a protective enclosure while so doing. Another feature of the invention in this connection is the arrangement of doors in the attachment, at least one of the doors being capable of opening.

These objects will become apparent to those skilled in the art upon reading the following description in conjunction with the drawings.

Figure 1 is a perspective view of a locomotive illustrating one window in whose opening an attachment made in accordance with the invention is applied.

Figure 2 is a perspective view of the attachment of Figure 1.

Figure 3 is a back elevation view of the attachment in Figure 2.

Figure 4 is a sectional view taken approximately on the line 4—4 of Figure 3, but showing in phantom line a part of the locomotive window opening with which the attachment is engaged; and

Figure 5 is a sectional view taken on a line 5—5 of Figure 3 and further illustrating in phantom line the window opening of the locomotive with which the attachment is connected.

In the accompanying drawings there is an attachment constructed in accordance with the principles of the invention. This attachment is shown in the operative position in Figure 1, that is, applied to a locomotive in juxtaposition to window opening 12 thereof. The same attachment is adapted to be fitted in and secured to the edges of the window opening on the other side of locomotive 14, the attachment being freely and completely interchangeably without any adjustment whatsoever.

Attachment 16 is made of lightweight material so that it is easy to install and remove. It consists of a bottom 16 of approximately rectangular plan form, the inner edge of the bottom having a recess 20 shaped to accommodate arm rest 22 that is normally found on the bottom edge of the window opening 12 in a locomotive. Front 30 is secured along it lower edge to the outer edge of bottom 16 by standard fastening techniques, as by being glued and dowelled or screwed when the materials of construction that are used admit of such type of fastening. Such materials would be wood, whereas, if a metal is selected as the materials from which the attachment is constructed, other techniques will be used in making the junctions. The side or side wall 24 is made of frame construction, having two transparent panels 26 and 28 rabated therein or otherwise fastened in place. The transparent panels may be made of a safety type material, as safety glass or plastic, or may be ordinary window glass. The front and rear 30 and 32 are constructed of panels 34 and 36 suitably secured to the side wall 24 and to vertical posts 37 and 38 which are firmly attached to the bottom 16. The front 30 has a door 40 made of a frame 42 in which there is a transparent panel 44. Vertical hinge 46 is secured along the one edge of the door for the purpose of having an effective weather seal when the door is in the closed position and held by means of swinging latch 50 in that position. Rear wall 32 has door 52 connected by hinge 54 to the front wall 24, this door having a transparent panel 56 and otherwise constructed identical to door 42. Pivot door latch 60 holds door 52 in the closed position.

A sloping top 62 is attached to panels 34 and 36, whose upper edges are sloped to accommodate top 62, and it is secured to the posts 37 and 38 and the upper edge of the front wall 24. To assure a weather-proof attachment, covering 64 is applied on the top 62 and is held in place by tacks, either with or without a molding. The means for attaching the box to the locomotive are extremely simple and provide for excellent weather sealing. The upper part of the top 62 and, specifically, on strip 70, which is at the inner extremity of top 62, there is an upstanding strip 72. This strip is one side of an angle bracket 74 which extends the full length of the box. The strip 72 is adapted to be fitted under and behind the upper part 76 of the locomotive window opening and, specifically, behind the side wall of the cab which frames the window opening 12. The bottom 16 has, on its rear edge, two hooks 80 and 82 which open downwardly in order to fit over the edge 84 of the window opening 12. Accordingly, these means are interchangeably usable with either window on the sides of the cab of the locomotive 14.

The attachment is sealed to the side of the locomotive cab by means of weather seals 86 and 88 which may assume the form of rubber strips attached one to the posts 37 and 38 of the front and rear 30 and 32 respectively by means of cleats 90 and 92. A small part of the seal projects rearwardly beyond the rear edges of the cleats and the posts 37 and 38 so as to make firm, yielding contact with the side of the locomotive cab around the window opening 12.

In use, the window attachment is fitted through the window opening from the inside of the cab with the upper strip 73 located behind the upper edge of the window opening and the hooks 80 and 82 attached over the lower edge of the window opening on opposite sides of arm rest 22. The engineer or other occupants of the cab in the locomotive may then have entry into the box for a better view without being exposed to the weather, wind, etc. When it is desired, for one reason or another, to open the attachment, the latches 50 or 60 are opened and by means of the handles 96 and 97 the front or rear walls have their doors openable. Otherwise, a very effective
3 weather-proof attachment for the locomotive is present to make more comfortable the duties of the engineer or other occupants of the cab of a locomotive.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes are possible without departing from the spirit and scope of the invention, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed is as follows:

1. A locomotive portable storm window construction comprising an outwardly extending top with two end panels and a side panel connected thereto forming a rigid construction, each of said panels having transparent areas therein, said panels being further rigidly connected to a bottom of rectangular shape, said bottom on the inside thereof having downwardly opening hook means for embracingly engaging the lower edge of a window opening of a locomotive cab, said top having rigidly secured thereto on its inner edge an upper strip extending lengthwise thereof whose outer edge is engageable with the inside face of the upper edge of said locomotive cab window, said top being downwardly and outwardly sloped from said strip enabling said window construction to be inserted in a locomotive cab window from the inside of the cab by first engaging said hook with the lower edge of the locomotive cab window and then pivoting the upper portion of the window construction outwardly of the locomotive until said strip engages the inside face of the upper edge of the locomotive cab window whereby the storm window construction and its center of gravity will be positioned substantially entirely outside of the locomotive cab window and gravity will retain the window construction in position in the window opening of the locomotive cab.

2. The combination of claim 1, said bottom being cut away on the inside edge thereof a sufficient amount to receive an arm rest formed on the lower window member of the locomotive cab, said hook means including at least one hook adjacent each end of said bottom depending therefrom and engageable with the lower edge of said locomotive cab window and being disposed on either side of said arm rest.

3. The combination of claim 1, said bottom being cut away on the inside edge thereof a sufficient amount to receive an arm rest formed on the lower window member of the locomotive cab, said hook means including at least one hook adjacent each end of said bottom depending therefrom and engageable with the lower edge of said locomotive cab window and being disposed on either side of said arm rest, said end panels having at least a portion of each hinged at the outside edge of said portions for swinging movement inwardly of said construction for facilitating the circulation of air.

4. The combination of claim 1, said bottom being cut away on the inside edge thereof a sufficient amount to receive an arm rest formed on the lower window member of the locomotive cab, said hook means including at least one hook adjacent each end of said bottom depending therefrom and engageable with the lower edge of said locomotive cab window and being disposed on either side of said arm rest, said end panels having at least a portion of each hinged at the outside edge of said portions for swinging movement inwardly of said construction to facilitate the circulation of air, said hinged portions having a means comprising a latch for the sequestration of said hinged portions in the closed position.

5. The combination of claim 1, said bottom being cut away on the inside edge thereof a sufficient amount to receive an arm rest formed on the lower window member of the locomotive cab, said hook means including at least one hook adjacent each end of said bottom depending therefrom and engageable with the lower edge of said locomotive cab window and being disposed on either side of said arm rest, said end panels having at least a portion of each hinged at the outside edge of said portions for swinging movement inwardly of said construction to facilitate the circulation of air, said window construction having on its surfaces engaging the locomotive cab sealing means retarding the passage of air, water and smoke or the like therebetween.

6. The combination of claim 1, said window construction having on its surfaces engaging the locomotive cab sealing means retarding the passage of air, water and smoke or the like therebetween.

7. An insertable and replaceable storm window construction for locomotive cabs of the type having window openings in a side wall thereof, said window construction comprising; top and bottom panels having outwardly converging surfaces, two end panels and a side panel rigidly connected to said top and bottom panels forming a rigid construction, one of said top and bottom panels being relatively sloped to enable the insertion of said window construction in said window opening from the interior of the cab, at least one of said side and end panels having transparent areas therein, upstanding retaining means fixedly secured to the inner edge of said sloped panel and extending its entire length adapted to engage the inner face of the corresponding edge of the locomotive cab window, and means on the inner edge of the panel opposite said sloped panel adapted to embracedly engage the corresponding edge of the locomotive cab window wherein said window construction may be inserted in the position within said cab window by first engaging said embracing means with the corresponding edge of the cab window and then pivotal said sloped panel outwardly of said cab window to engage said embracing means with the inner face of the corresponding edge of the cab window whereby the window construction and its center of gravity will be positioned outside the locomotive cab and gravity will retain the window construction in position in the window opening of the locomotive cab.

8. The combination of claim 7, wherein said end panels have at least a portion of each hinged at the outside edge of said portions for swinging movement inwardly of said construction to facilitate the circulation of air.

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