

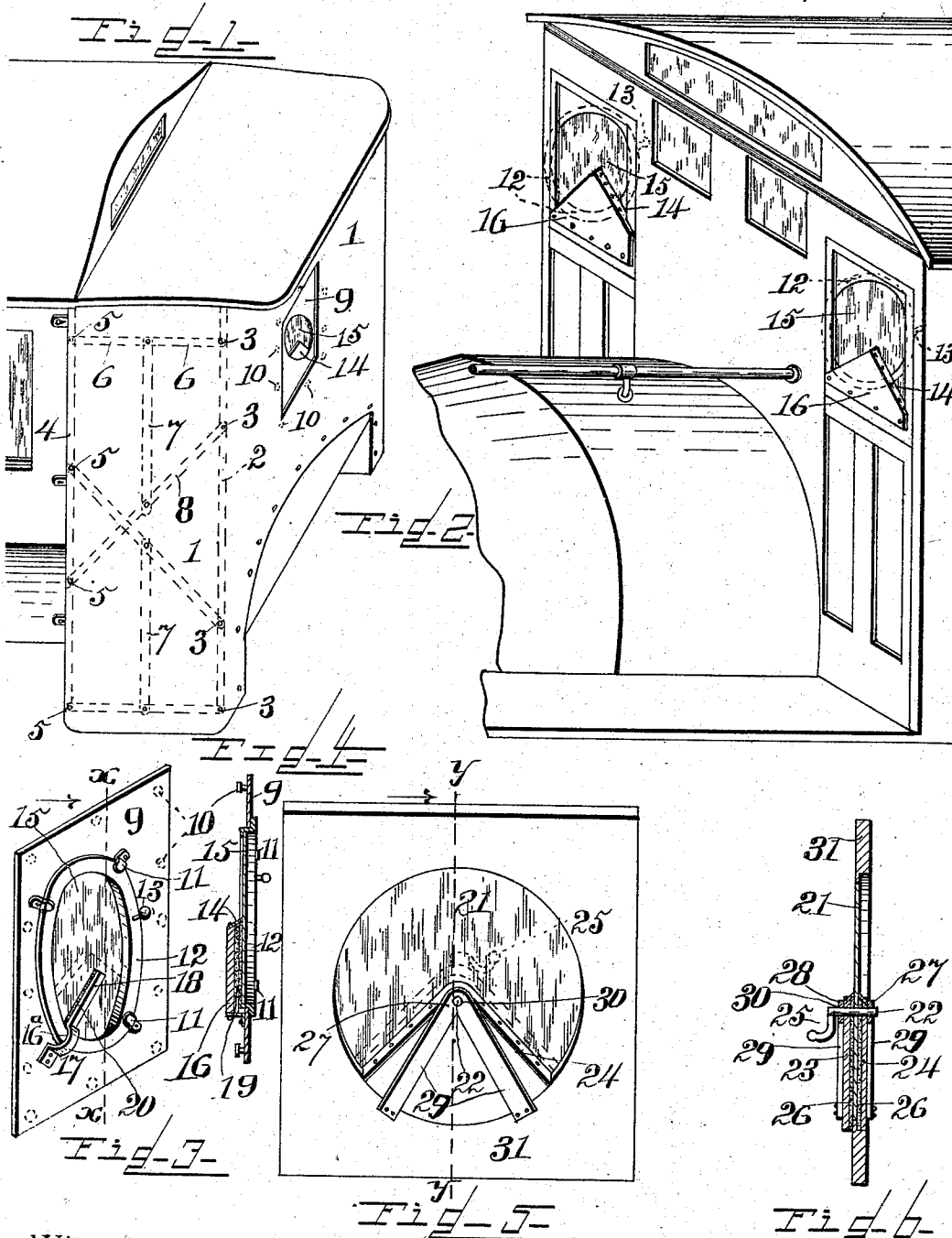
(No Model.)

J. HARTMAN

STORM FRONT AND LOOKOUT WINDOW FOR CARS.

No. 552,662.

Patented Jan. 7, 1896.



Witnesses.

Claude Lumsford.
 H. B. Smith.

Filed
Inventor.

John Hartman

By C. J. Rupp
Attorney.

UNITED STATES PATENT OFFICE.

JOHN HARTMAN, OF PHILADELPHIA, PENNSYLVANIA.

STORM-FRONT AND LOOKOUT WINDOW FOR CARS.

SPECIFICATION forming part of Letters Patent No. 552,662, dated January 7, 1896.

Application filed March 5, 1895. Serial No. 540,616. (No model.)

To all whom it may concern:

Be it known that I, JOHN HARTMAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in a Storm-Front and Lookout Window for Cars, of which the following is a specification.

My invention relates to lookout-windows for locomotive-cars, street-cars, and other analogous structures, and its novelty will be fully understood from the following description and claims, when taken in connection with the annexed drawings.

The object of the invention is to provide a lookout-window for locomotive-cabs, &c., of new and novel construction.

A further object of the invention is to provide a novel and peculiar means for keeping the glass of the lookout-window clean and free from dust, snow, ice or sleet at all times.

A still further object of the invention is to provide a simple and inexpensive means for keeping the lookout-glass from frosting.

Other objects and advantages accruing from the special construction and arrangement of my invention will hereinafter appear.

The invention consists in the novel construction and arrangement of parts, and essentially in a revolvable means for keeping the lookout-window pane clean and clear.

In the accompanying drawings, forming part of this application, Figure 1 is a perspective view of the front of a motor-car, partly broken away, provided with my improved awning or storm-front, having a lookout-window embodying my improvements. Fig. 2 is a perspective view of a locomotive-cab, partly broken away, provided with my lookout-window. Fig. 3 is a perspective view of a window-frame having buttons and carrying my lookout-window. Fig. 4 is a sectional view of Fig. 3, taken on the plane indicated by the dotted line *x x*. Fig. 5 is a perspective view of my lookout-window employing a modified form of cleaner. Fig. 6 is a sectional view of Fig. 5, taken on the line *y y*.

The same reference-numerals denote the same parts throughout the several figures of the drawings.

The storm-front or awning 1 is hooked or buttoned onto a car in the usual manner, its

sides being provided with a bar 2, having pivots 3, and near its side edge with a similar bar 4, having like pivots 5. At the top these bars are connected by short arms 6, pivoted to the two top pivots 3 and 5 and to the center bar 7, the latter being pivoted to the diagonal bar 8 at its center. The bar 8 has one end pivoted to one of the middle pivots 3 and 5. This said set of bars connecting the bars 2 and 4 are duplicated at the bottom of the side and form a simple and convenient means of opening the said sides of the awning by pressing the bar 4 forward, which operates the bars 7 and 8 to raise the top arms and lower the bottom arms. The said bars and arms are folded together with the side of the awning.

The window-frame 9, carrying the cleaning device, has buttons 10, where used in connection with an awning or storm-front, for securing the lookout in position. Revolvably secured to this frame 9, by means of the holders 11, is the ring 12 carrying the glass 15, having a hand-knob 13, by means of which the ring is revolved or oscillated.

The outside cleaner 14 for the glass 15 is supported upon a casing 16, secured to the frame 9. Said cleaner is angular or V-shaped, and its edge bears against the glass, removing all sight-obstructions, and because of its peculiar shape carries off all such obstructions as soon as the same are made.

The inside-cleaner 17 has one end secured to the frame 9, and its free end 18 engages the opposite side of the glass to that engaged by the outside cleaner. Between the said secured end and free end of the inside cleaner a channel or passage 16^a is provided for the glass-carrying ring 12.

The casing 16 is provided with a pad 19, saturated with some suitable substance, as glycerine, while the inner face of the cleaner 17 has a pad 20, also saturated in the same manner. It will therefore be seen that by simply moving the glass-carrying ring the glass is not only perfectly cleaned upon both sides, but having come in contact with the pads is left in a condition not to be readily frosted.

Referring to the modified form of window, the glass 21 is secured to the shaft or arbor 22, which passes through the inside and out-

side cleaners 23 and 24, respectively, and is provided on the inner end with a crank-handle 25. These cleaners are provided with pads 26, saturated with glycerine for the purpose hereinbefore described. The said shaft or arbor is journaled at one end in the outside hanger or bracket 27 and at the other end in a like inside hanger or bracket 28. These hangers or brackets consist of two arms 10 29, which diverge from the journal-bearing 30 beyond the periphery of the glass, where they are secured to the frame 31, in which the glass 21 is fitted to be revolved or oscillated by the crank-handle against the said 15 pads.

The utility of my invention also lies in its application to pilot-houses, as in time of storm or heavy mist the glass can be kept perfectly clear, leaving a clear view.

20 I do not wish to be understood as limiting myself to any particular material or shape of cleaners or pads, nor to any particular arrangement of means for revolving or oscillating the glass, as the same may be varied 25 without departing from the spirit of my invention.

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

1. The combination with the window having a revoluble glass, and means for revolving the glass, of the outside cleaner secured to the window frame and covering a portion of the glass, and the inside cleaner also secured to the window frame and projecting 35 over the glass, substantially as set forth.

2. The combination with a revoluble window and means for revolving the same, of the V shaped outside cleaner fixed to the window frame and provided with a pad, and the 40 inside cleaner having one end secured to the window frame and the other end projecting over the window glass and provided with a pad, substantially as and for the purpose set forth. 45

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOHN HARTMAN.

Witnesses:

CYMS R. MORGAN,
J. DANIEL EBY.