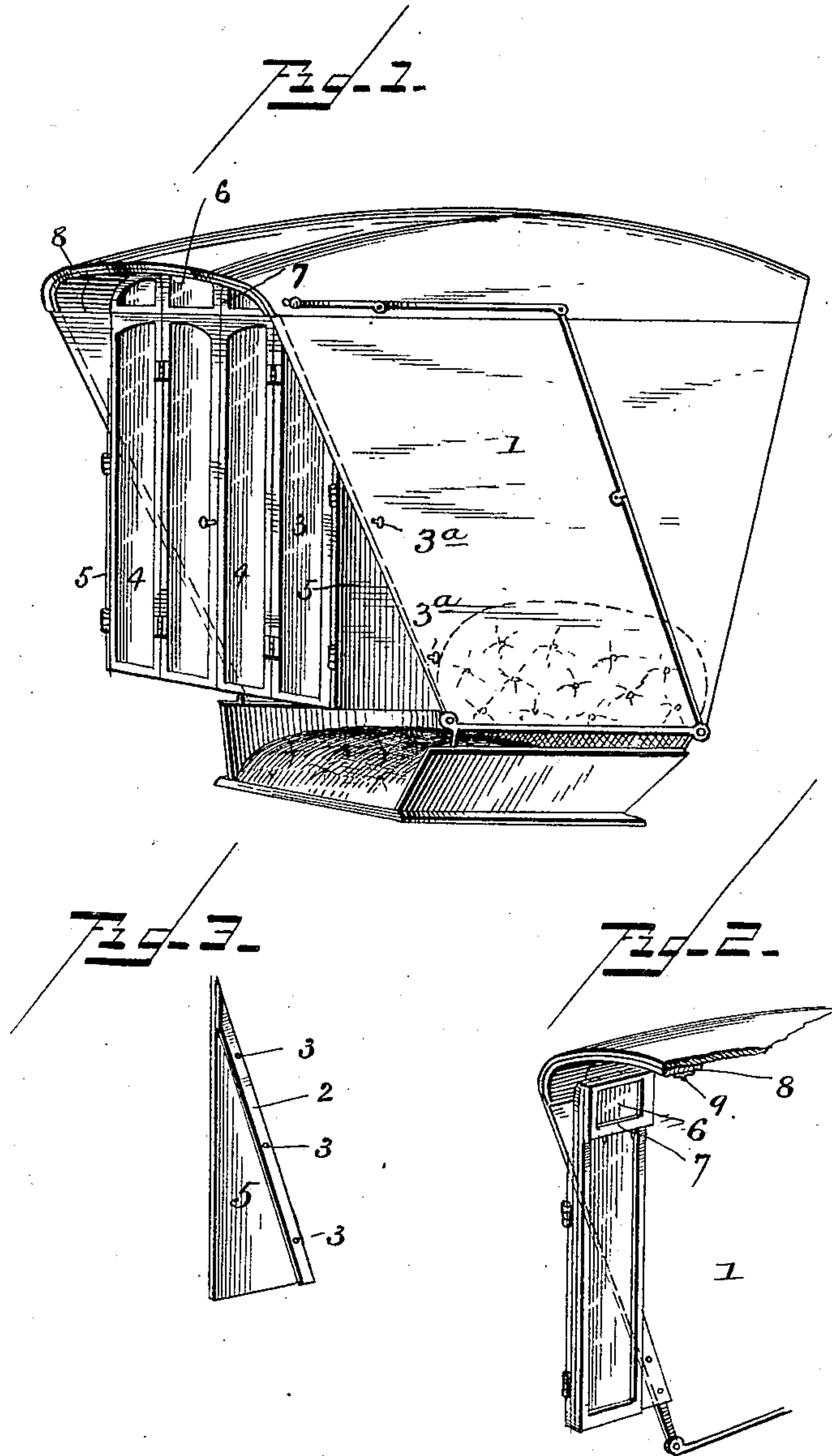


(No Model.)

J. E. SCHORAH.  
GLASS FRONT FOR VEHICLES.

No. 453,432.

Patented June 2, 1891.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JOSEPH ELLIS SCHORAH, OF WILMINGTON, DELAWARE.

## GLASS FRONT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 453,432, dated June 2, 1891.

Application filed February 11, 1891. Serial No. 381,055. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH ELLIS SCHORAH, a citizen of the United States, and a resident of Wilmington, in the county of New Castle and State of Delaware, have invented certain new and useful Improvements in Removable Glass Fronts for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in buggies and other similar vehicles.

The object of the invention is to provide a removable glass front for vehicles to be used in stormy weather, which can be readily opened to permit access to the vehicle and closed when the occupant is seated, and which may also be readily removed in fair weather.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a front view of a buggy-top with my invention applied thereto. Figs. 2 and 3 are detail views of the same.

In the said drawings, the reference-numeral 1 designates an ordinary buggy-top.

The numeral 3 designates the removable front consisting of a number of panels hinged together and provided with glass panes 4. These panels may be of any number desired and are of a size to entirely close the front of the buggy when in position. The two side panels are each provided with a triangular wooden strip 5, which is secured to a metal band 2 by means of ordinary screws 3, the

band 2 being secured to the front irons of the bow by means of thumb-screws 3<sup>a</sup>, so that it can be readily detached when it is desired to remove the front from the vehicle. To the tip of each panel is hinged an extension 6, which may be provided with stained-glass panels 7 or pieces of wood veneer, as desired. The upper portions of these panels are curved or rounded, so as to conform to the contour of the bow or frame, and their object is to close the upper part of the buggy, the hinges allowing them to be folded when the top is two-thirds down or thrown back. To one bow is also secured a wooden or rubber strip 8, provided with catches 9, by which the extensions can be held in place.

The operation will be readily understood. In wet or stormy weather the front can be secured to the side bands 2 by means of thumb-screws, so that the occupant of the vehicle will be thoroughly protected. In fair weather the device can be readily detached and stored away.

Having thus described my invention, what I claim is—

The combination, with a vehicle-top, of the hinged panels with transparent panes and the hinged extensions with rounded upper ends, the triangular wooden strips, to which the side panels are hinged, the metal bands secured to the wooden strips, and the thumb-screws for securing said strips to the vehicle-top, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOSEPH ELLIS SCHORAH.

Witnesses:

JAMES B. FOGARTY,  
EUGENE COLEMAN.