R. DUNN.

LANDAU QUARTER LIGHT.

No. 188,785. Patented March 27, 1877.

Fig. I.

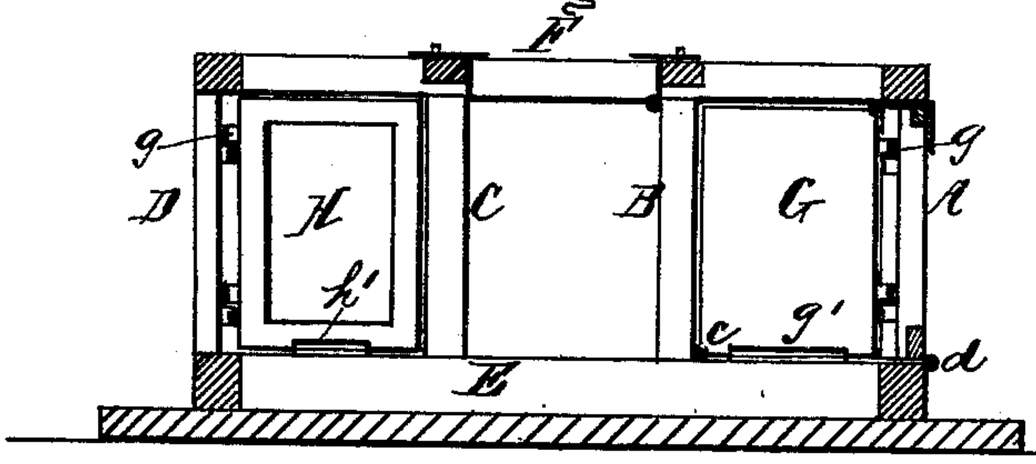


Fig. III.

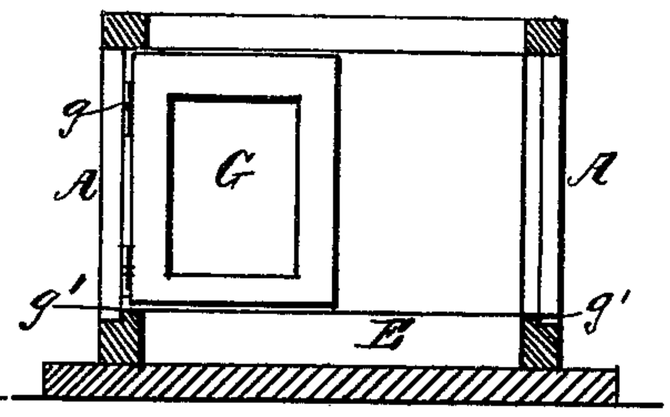


Fig. II.

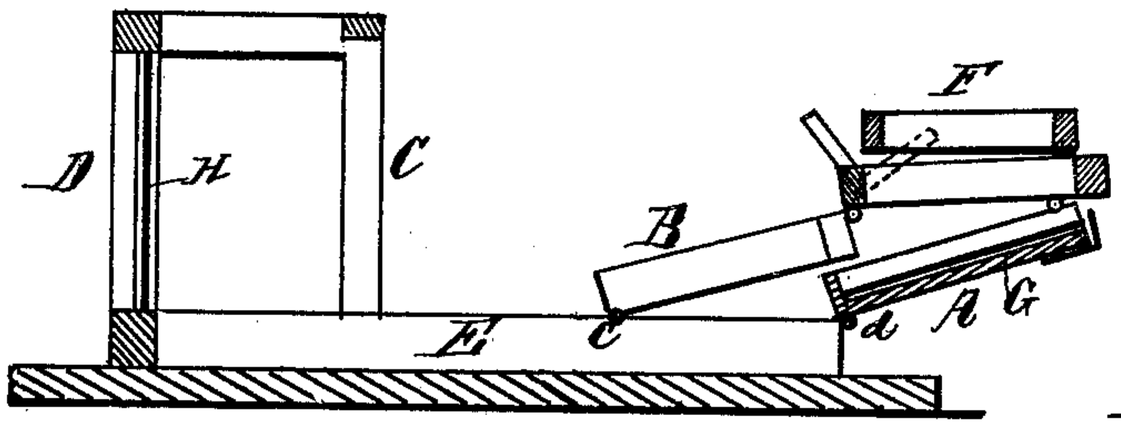


Fig. IV.

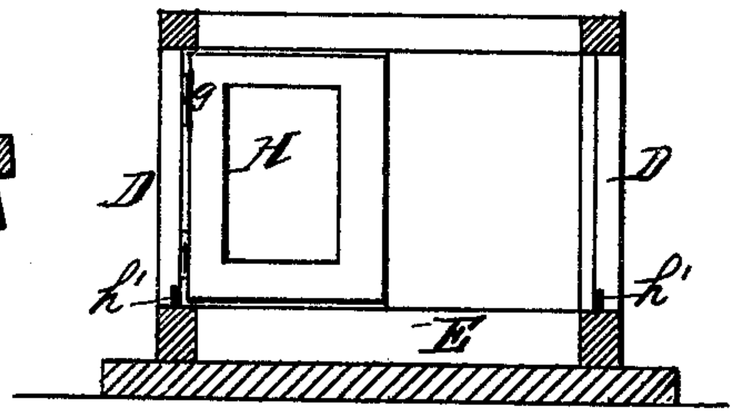


Fig. V.

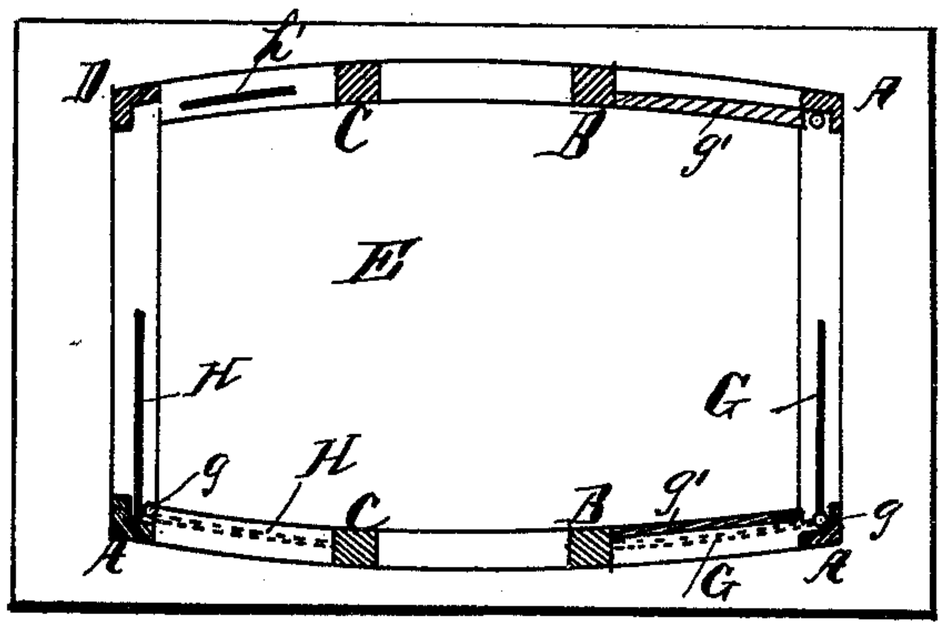
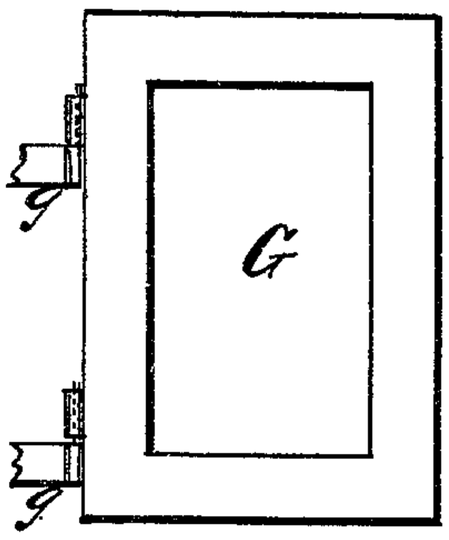


Fig. VI.



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Richard Gerner

Inventor:
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Atty.

UNITED STATES PATENT OFFICE.

ROBERT DUNN, OF SOUTH BEND, INDIANA.

IMPROVEMENT IN LANDAU QUARTER-LIGHTS.

Specification forming part of Letters Patent No. **188,785**, dated March 27, 1877; application filed September 13, 1876.

To all whom it may concern:

Be it known that I, ROBERT DUNN, of South Bend, in the county of St. Joseph and State of Indiana, have invented a new and useful Improvement in Carriage-Tops, of which the following is the specification:

This improvement relates to the construction of the pillars and other portions of the top of a landau-carriage so that the sashes of the quarter-lights may be folded up by the front and back lights, in order to turn down the top.

The invention will be readily understood by reference to the accompanying drawings, of which—

Figure I is a longitudinal sectional elevation of the improved top, showing the sashes of the quarter-lights folded into their proper positions in the side of the carriage. Fig. II is a longitudinal sectional elevation of the carriage-top, showing the quarter-lights folded up against the front and back lights and the front part of the top turned down. Fig. III is a transverse section, showing the bottom sash-rail of the front quarter-light and the water guard or rail below it. Fig. IV is a transverse section, showing the bottom sash-rail of the rear quarter-light and the water guard or rail below it. Fig. V is a sectional plan view of the carriage-body, showing, in dotted lines, the sashes of the quarter-lights in their places in the sides of the carriage, and, also, showing in full lines the position of the said sashes in their places in the front or back of the carriage. Fig. VI is a detail elevation of the sash-hinge.

The pillars A B C D, that support the top, are hinged to the top rail of the carriage-body E, respectively, by the hinges *a b c d*. The top central section F is hinged to the front section A B so as to be thrown over on top of the said front part when it is to be folded down, as shown in Fig. II. The front quarter-light sash G and the rear quarter-light sash H are secured, respectively, to the front corner pillar A and the back corner pillar D by the hinges *g*, so that the said sashes may be folded up, respectively, against the front and back lights when the top is to be turned down. Either or both of the sashes G and H may be, if desired, made in two or more folds.

To hold the sashes firmly in their places, and at the same time to make the joints around the same water-tight, grooves or rabbets (not shown in the drawing) may be used, which can be cut into the pillars B and C.

The hinges *g g*, as is clearly shown in the detail view, Fig. VI, are constructed so as to permit the sashes G H to be easily moved up or down over the weather-stops *g' h'*, which are formed on, or attached to, the top rail of the carriage-body. These stops may be formed as in Fig. III, where the guard *g* is simply a wooden lip, formed on the top of the carriage-body, or as in Fig. IV, where the lip *h'* is a metallic lip, secured to the top rail of the carriage-body. In either case the sash will be lifted over to the outside of the said weather-stop when the sash is closed, and the rain will thereby be effectually excluded from the body of the carriage.

Having thus described my invention, I desire to claim—

1. The sashes G and H of the quarter-lights of a landau-carriage, secured, respectively, to the corner pillars A and D by means of the vertically-adjustable hinges *g g*, substantially as and for the purpose set forth.

2. The carriage-body E, with weather-stops *g' h'* and hinged quarter-lights G H, arranged as and for the purpose set forth.

This specification signed this 14th day of July, 1876.

ROBERT DUNN.

Witnesses:

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