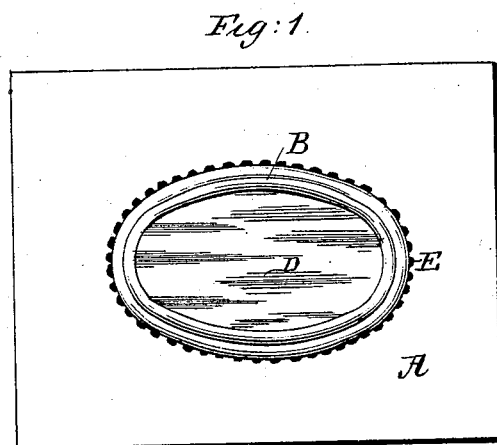
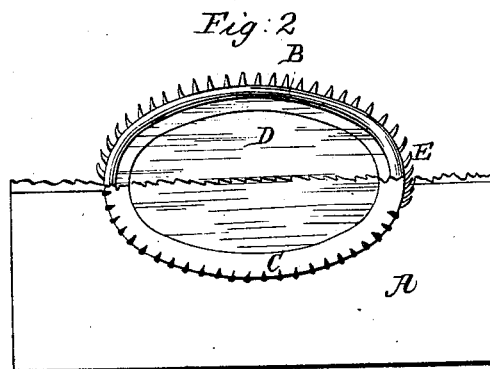


J. F. DOHAN.
Carriage Window.

No. 110,444.

Patented Dec. 27, 1870.



Witnesses.
B. C. Davis,
Donald Grant

Inventor
James F. Dohan

United States Patent Office.

JAMES F. DOHAN, OF BINGHAMTON, NEW YORK.

Letters Patent No. 110,444, dated December 27, 1870; antedated December 15, 1870.

IMPROVEMENT IN CARRIAGE-WINDOWS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JAMES F. DOHAN, of Binghamton, in the county of Broome and State of New York, have invented certain Improvements in Window-Frames for Carriages, Buggies, and Umbrellas, of which the following is a specification.

My invention relates to a "window" designed for "carriages' and buggies' curtain," and may also be applied to "umbrellas," which consists of so constructing the outside section of said window with sharp teeth or points uniformly produced on its outer edge, so the points or teeth shall be capable of penetrating through the cloth or other material and at the same time be easily and firmly clinched thereto, forming a "metallic stitch," and holding the window more firmly to the cloth or other material than heretofore accomplished.

Description of the Accompanying Drawing.

Figure 1 is a view of the window as it appears in use.

Figure 2 is a part of the same with a portion of the inside section broken away, showing the manner that the window is secured to cloth or other materials.

General Description.

A is the material that the window is attached to.

B is the outside section of said window, which should be stamped or struck out of sheet metal, brass, tin, zinc, or iron, with sharp teeth on its outer edge.

C, the inside section of the window that holds the glass D, and the uniform teeth or points E are

clinched down on the outside edge of its surface, as shown in fig. 2.

D is the glass that is placed in the window B in the usual manner.

E is the teeth or points that are forced through the cloth or other material A, and clinched down on the inside section C, thus forming a firm metallic stitch, as shown.

Mode of Application.

I take the outside section B and force all the teeth or points E through the material A; then I place the glass D inside section B. The teeth or points E are readily and easily clinched down on the outer edge of the inside section C; thus this metallic stitch secures the same firmly to the material A, as shown by the drawing. The material over the glass is removed in the usual manner, which gives light through the carriage or umbrella-window.

Thus it is a decided and practical improvement as applied, from the fact that this mode of "attaching windows" to the cloth or other material with a metallic stitch prevents "all moisture" from penetrating inside and around said windows.

I claim—

The outside section B, having the sharp teeth or points "uniformly" produced on its outer edge, in combination with the inside section C and glass D, substantially as and for the purpose herein described.

Witnesses:

JAMES F. DOHAN.

B. C. DAVIS,
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