F. A. NEIDER.

FRAMES FOR CARRIAGE-LIGHTS.

No. 186,946. Patented Feb. 6, 1877.

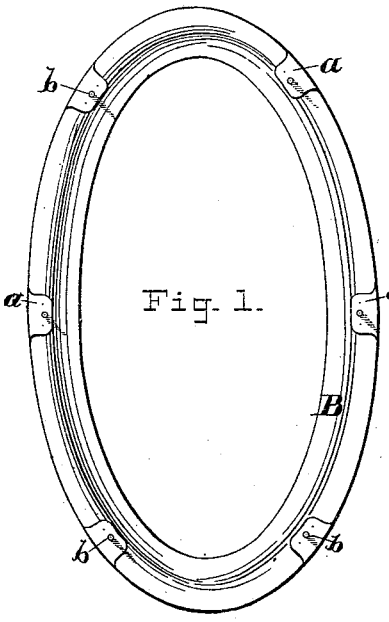


Fig. 1.

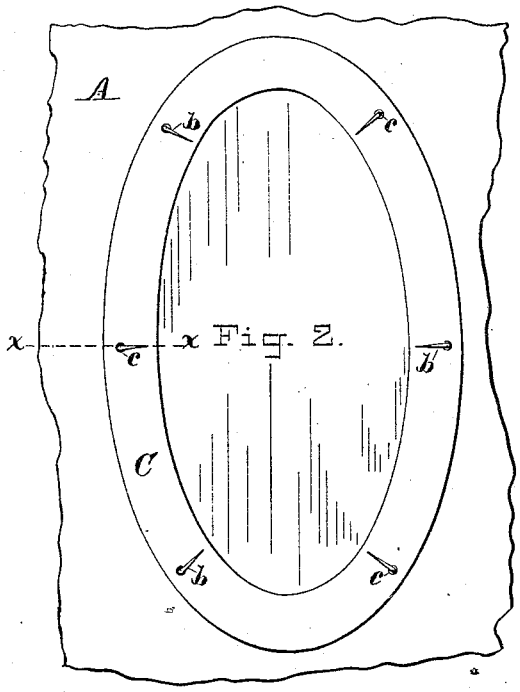


Fig. 2.

Fig. 3.

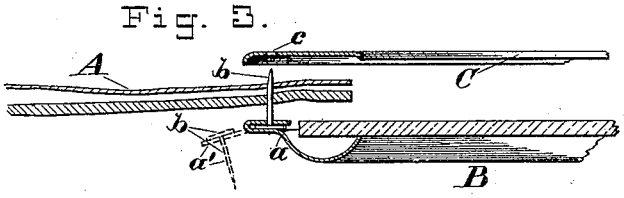


Fig. 4.

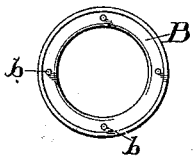


Fig. 5.

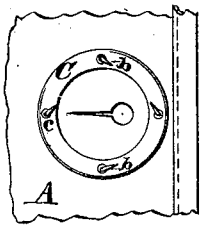
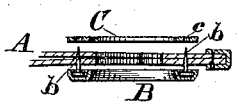


Fig. 6.



ATTEST:

Arthur C. Fraser.
Thomas J. Keighan

INVENTOR:

Fred. A. Neider
Per Burke & Fraser
Attys

UNITED STATES PATENT OFFICE.

FRED. A. NEIDER, OF MADISON, INDIANA.

IMPROVEMENT IN FRAMES FOR CARRIAGE-LIGHTS.

Specification forming part of Letters Patent No. **186,946**, dated February 6, 1877; application filed July 14, 1876.

To all whom it may concern:

Be it known that I, FRED. A. NEIDER, of Madison, in the county of Jefferson and State of Indiana, have invented certain Improvements in Fastenings for the Frames of Carriage-Lights, for Metallic Button-Hole Guards, and for frames of an analogous character, of which the following is a specification:

My invention relates to fastenings for that class of frames for carriage-lights, and constructions of an analogous character, in which the material of the curtain, or other fabric to which the device is applied, is clamped between sheet-metal frames or bindings; and it consists essentially in forming perforated ears, or their substantial equivalents, on one of the frames, through which malleable broad-headed tacks or pointed nails are passed, and the ears then bent back or folded over on the frame, so as to clasp or confine the tack-head, and hold the tack in an erect position ready to engage corresponding holes in the other frame, upon which they are to be clinched; all of which will be more fully described hereinafter.

In the drawings, Figure 1 represents the inner face of the outer frame of a carriage-light, showing the ears and tacks in position ready for use. Fig. 2 is an inside view of a curtain, or carriage-light provided with my improved fastening. Fig. 3 is an enlarged sectional view, taken in the plane of the line *x x*, Fig. 2, illustrating the manner of attaching the frames to the curtain. Figs. 4, 5, and 6 are views similar to Figs. 1, 2, and 3, illustrating the application of my invention to metallic bindings for button-holes.

Let A represent a carriage-curtain, or other analogous fabric, to which my invention is to be applied; B, an outer frame, and C an inner frame.

On one of the frames, usually the outer, are ears *a a*, stamped out with, or formed of, the same piece with the frame, and perforated, as shown. When first formed, these are left projecting, as shown in dotted lines *a'*, in Fig. 3.

A flat-headed tack, *b*, made of some malleable metal, is passed through the perforations in each of the ears *a' a'*, as shown in the dotted lines in Fig. 3, and the ears are then bent over upon the inner face of the frame, thus confining the head of the tack firmly between the ear and the frame, and rigidly maintaining its point in an upright position, as clearly shown in Fig. 3. The other frame, C, is provided with holes *c c*, which coincide with the tacks secured to the other frame, so that when the two frames are placed together the points of the tacks will enter the holes.

In Figs. 1, 2, and 3, I have shown the application of my mode of fastening to the attachment of a carriage-curtain light. The mode of fixing such a light is as follows: A hole of the proper size and shape being first cut in the curtain, the glass D is placed in the hollow of the outer frame B, and the latter fixed in place by pressing the points of the tacks through the material of the curtain. The inner frame C is then so placed that the points of the tacks will engage the holes *c c*, and the two frames pressed together, thus tightly clamping the curtain between them. The tack-points are now clinched or riveted down upon the inner frame, as shown in Fig. 2. In Figs. 4, 5, and 6, I have shown my invention as applied, securing metallic bindings or rings around button-holes.

In these the principle is the same, but, instead of employing ears, I pass the tacks through holes in a thin metal ring, and lay this upon another ring, which is a little wider, confining the former by bending the edge of the latter over on it, as shown in Fig. 4. This method is equivalent to that shown in Fig. 1, and more suitable for small rings. At *e* the fabric is cut to form a button-hole, the object of the frame in this case being to prevent the fraying or enlargement of the hole.

I am aware that curtain-frames for carriage-lights, and bindings for button-holes, have been provided with "clips" formed on the edges of the same, and from the same piece, to be bent up at right angles and passed through slits in the curtain, and then clinched upon the inside frame. These clips, however, are necessarily broad, and the fabric is liable to be mangled and drawn into wrinkles by their use.

In my fastening, on the contrary, the points

are slender and sharp, penetrate readily the material of the curtain, make their own holes, and do not draw or wrinkle the material.

I claim—

A fastening for carriage-lights, composed of two frames, one provided with recurved ears to hold and conceal the headed ends of the riveting-tacks, and the other provided with holes to receive the tacks and clinch them upon, substantially as herein specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

FRED. A. NEIDER.

Witnesses:
J. H. SULLIVAN,
S. H. THOMSON.