A. I. LENHART.

CARRIAGE-BUTTONS.

No. 188,157. Patented March 6, 1877.

Fig. 1.

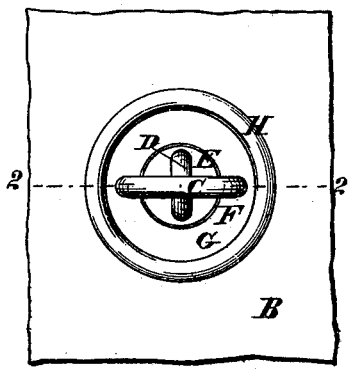


Fig. 4.

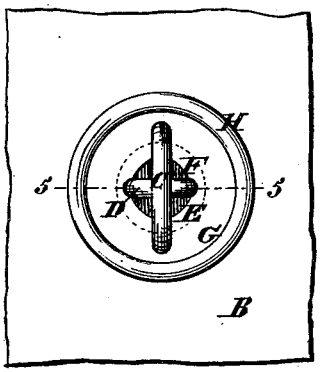


Fig. 6.

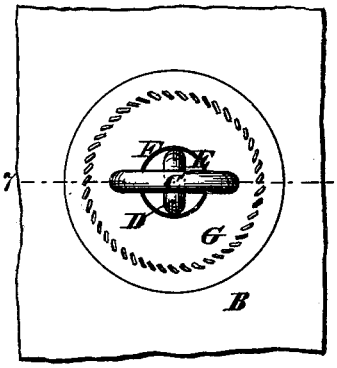


Fig. 2.

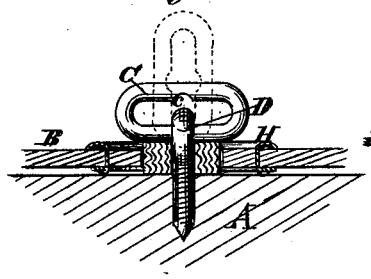


Fig. 5.

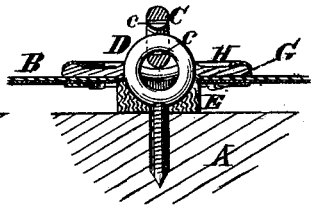


Fig. 7.

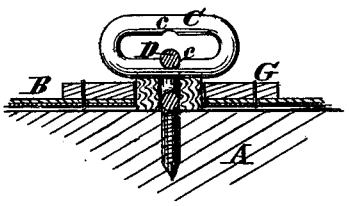


Fig. 11.

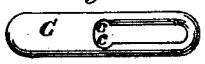


Fig. 3.

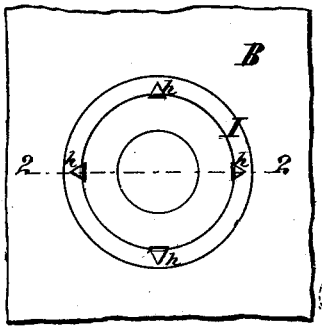


Fig. 8.

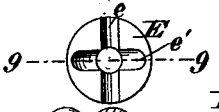
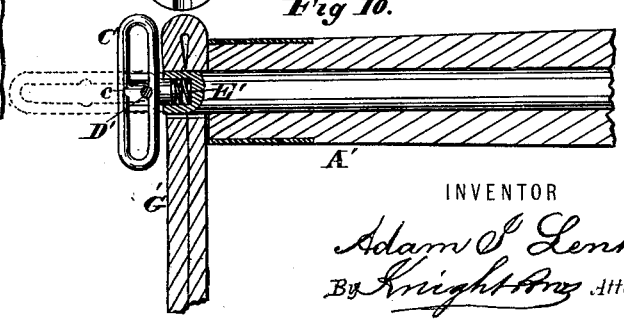


Fig. 9.

Fig 10.



WITNESSES

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UNITED STATES PATENT OFFICE.

ADAM I. LENHART, OF NEW BRUNSWICK, NEW JERSEY, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM H. RUST, OF SAME PLACE.

IMPROVEMENT IN CARRIAGE-BUTTONS.

Specification forming part of Letters Patent No. **188,157**, dated March 6, 1877; application filed January 17, 1877.

To all whom it may concern:

Be it known that I, ADAM I. LENHART, of New Brunswick, in the county of Middlesex and State of New Jersey, have invented an Improved Fastening for Carriage-Curtains and for other purposes, of which the following is a specification:

My improvement consists, in part, in a notched link, adapted to form a sliding button or fastening. The link, of round wire or metal, is secured to an eye or ring of any suitable form, and is acted on by a spring or cushion to retain it in position. The spring or cushion may be provided with a groove to form a seat for the lower portion of the link, and also hollowed out to form another seat for the eye or ring. The spring is designed to force or press the link outwardly, so as to hold it against the interior of the eye or ring, and thus retain the link or button in position.

In the accompanying drawings, Figure 1 is a top view of my improved fastening. Fig. 2 is a longitudinal section on the line 2 2, Figs. 1 and 3, the position of the link, when applying the button-hole, being shown in dotted lines. Fig. 3 is an under-side view of the button-hole. Fig. 4 is a top view of the fastening, the cushion being beneath the button-hole, as indicated in dotted line. Fig. 5 is a longitudinal section of the same on the line 5 5, Fig. 4. Fig. 6 is a top view of the fastening with an ordinary re-enforced button-hole. Fig. 7 is a longitudinal section of the same on the line 7 7, Fig. 6. Fig. 8 is a top view of the cushion detached. Fig. 9 is a longitudinal section of the cushion on the line 9 9, Fig. 8. Fig. 10 is a sectional view, illustrating the use of a central spiral spring acting on a cushion, as a substitute for the annular spring shown in the other views. Fig. 11 is a view of a link of modified form.

In the illustration given in Figs. 1 to 7, inclusive, A represents a frame, and B a curtain, to which my improved fastening may be applied. C is a link of round wire or metal, forming a button, and having notches *c* on its inside. This link or button C is attached to an eye or ring, D, secured to the frame A. E is a rubber cushion or spring surrounding the eye or ring D, so as to form a spring-bed for the link C. This cushion may be grooved so as to form a seat for the link, and excavated so as to permit the eye or ring to fit snugly within the cushion. A cushion of this construction is shown in Figs. 8 and 9, *e* being the groove for the link, and *e'* the excavation for the eye or ring. F is a button-hole having a re-enforce disk or flexible diaphragm, G, which may be secured by stitching, as shown in Figs. 6 and 7, or by two rings, H I, as shown in Figs. 1 and 2, one ring having tongues *h*, which engage, through the disk G and curtain, with the ring on the opposite side. The cushion E may be of rubber, metal, or any other suitable material, and when grooved and excavated, as shown in Figs. 8 and 9, fits closely to the eye or ring, and is thus held in place and cannot slip off. At the same time the cushion retains its cylindrical form, and has its greatest thickness where the greatest elasticity is needed.

In Figs. 4 and 5 I show a flat cushion larger than the button-hole. This form of cushion is preferable for some purposes, as it is concealed by the flexible disk of the button-hole, and does not project through the button-hole.

Fig. 10 shows a spiral spring, E', pressing out a washer or plunger in contact with the link, as a substitute for the annular spring surrounding the eye. The spring may consist of a simple cylindrical piece of rubber or a tube of small bore.

To apply a button-hole the link C is turned end up, as shown in dotted lines in Fig. 2, so as to be in a position to permit the button-hole to pass over it. The button-hole surrounds or rests on the cushion, as preferred. The link is next turned down crosswise of the button-hole, which action presses down the cushion or spring, and the latter, forcing the link outwardly, causes one of the notches to engage with the upper side of the eye or ring, and securely holds the link or button.

To remove the button-hole a slight pressure is applied to the upper side of the link, which, forcing down the cushion, disengages the eye

from the notch, the link at the same time being slid endwise and turned up, thus allowing the button-hole to be taken off.

The cushion, when the button-hole is removed, prevents the link from rattling.

The button-hole may be of any ordinary construction, though suitable button-holes are represented in the drawing.

My fastening will be found useful for a variety of purposes.

The notch in the link prevents it from shifting or sliding out of place when shaken.

The links being of round wire or metal, they will not cut or wear the button-holes.

In Fig. 11 I have shown a link or button with one solid end, and the slot at one end only. Nor do I limit myself to the precise mode of attaching the eye or ring herein shown, as I may attach the eye in any suitable way, or use an eye formed by inserting a staple in a frame, or may employ any equivalent device which will permit the passage of the curtain or other object to be secured, and will afford a cross-bar for the link to bear against.

If the material to be secured is of such a character as to form a cushion for the link, a separate cushion or spring may be dispensed with.

The rubber cushion is less likely to get out of order, and is better suited to the purpose to which it is applied, than the springs heretofore used.

My device is simple in construction and very durable.

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

1. The notched link C *c*, of round wire or metal, operating as a sliding button or fastening, substantially as set forth.

2. The link C, in combination with the rubber cushion or spring E.

3. The combination of the link C, of round wire or metal, the cushion or spring E, and an eye, staple, or cross-piece to lock the link by the action of the spring, as explained.

4. The excavated cushion shown and described.

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Witnesses:

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