

(No Model.)

A. J. LYTLE.
CARRIAGE CURTAIN FASTENER.

No. 359,979.

Patented Mar. 22, 1887.

Fig. 1.

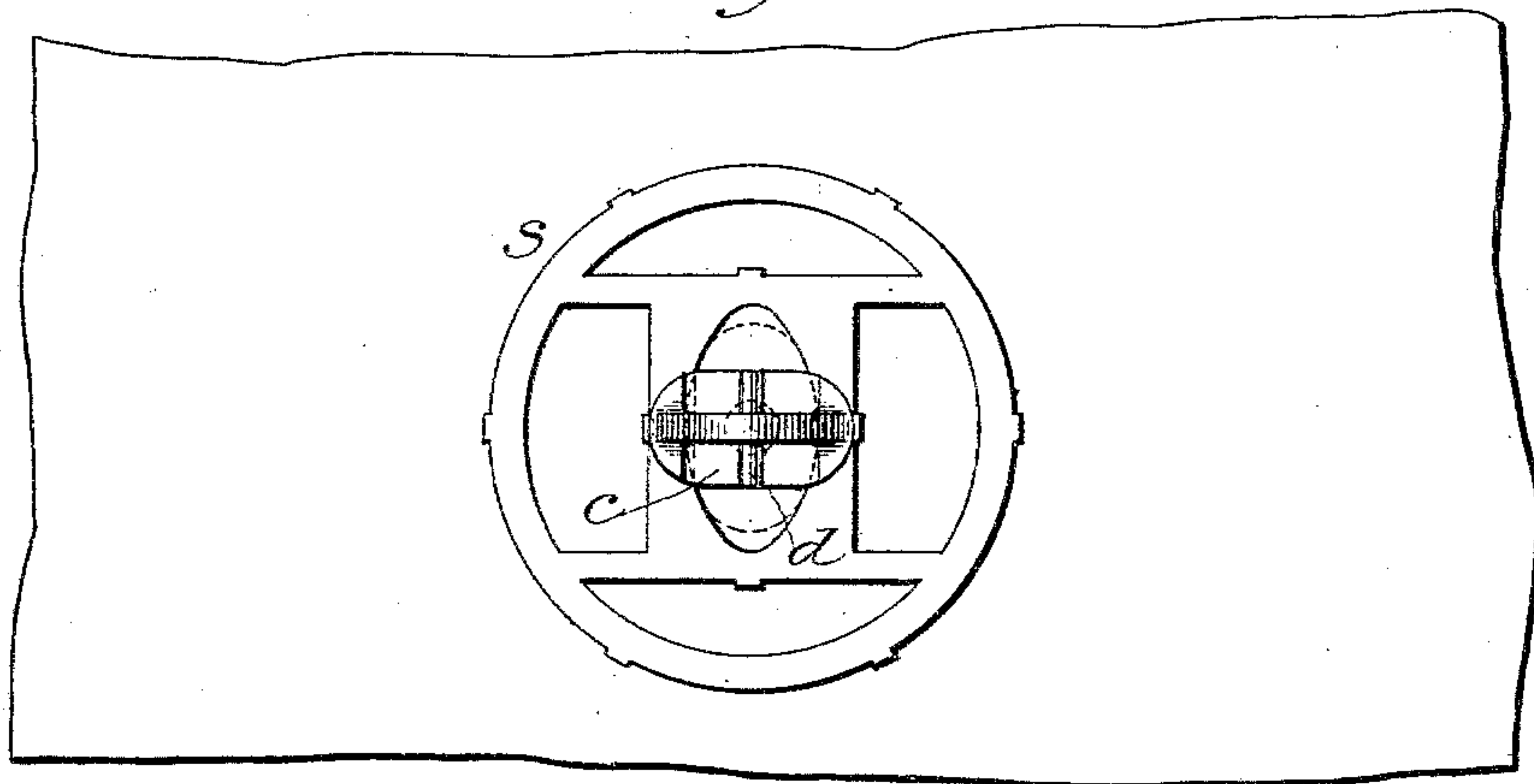


Fig. 2.

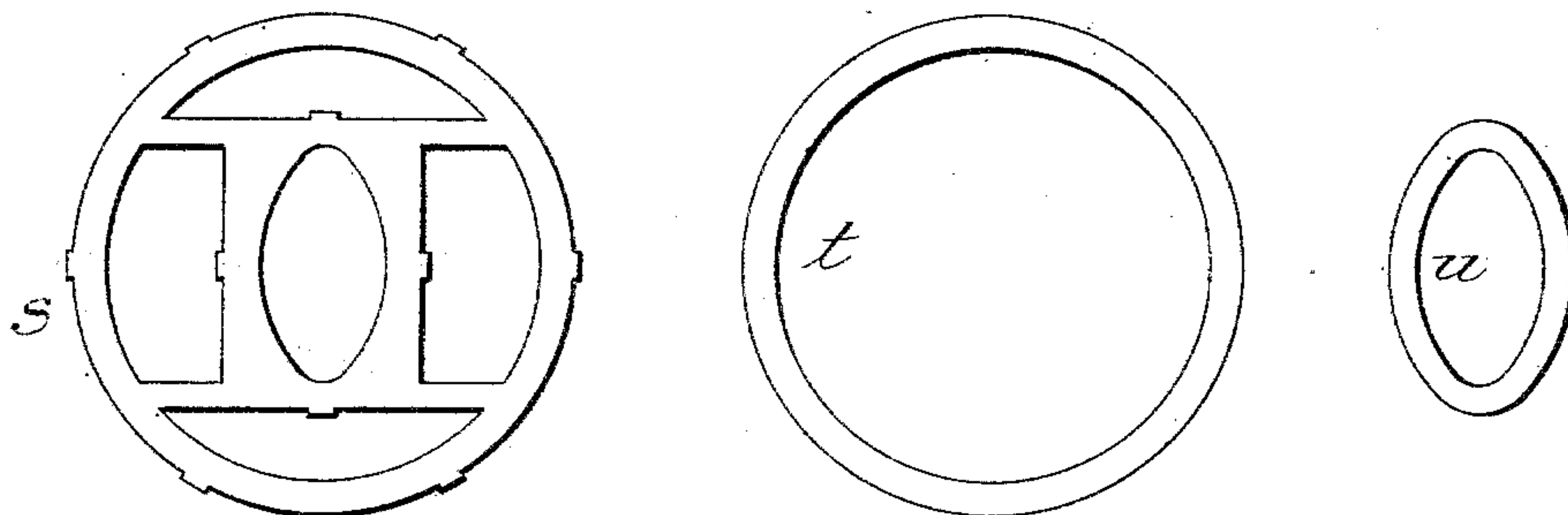


Fig. 3.

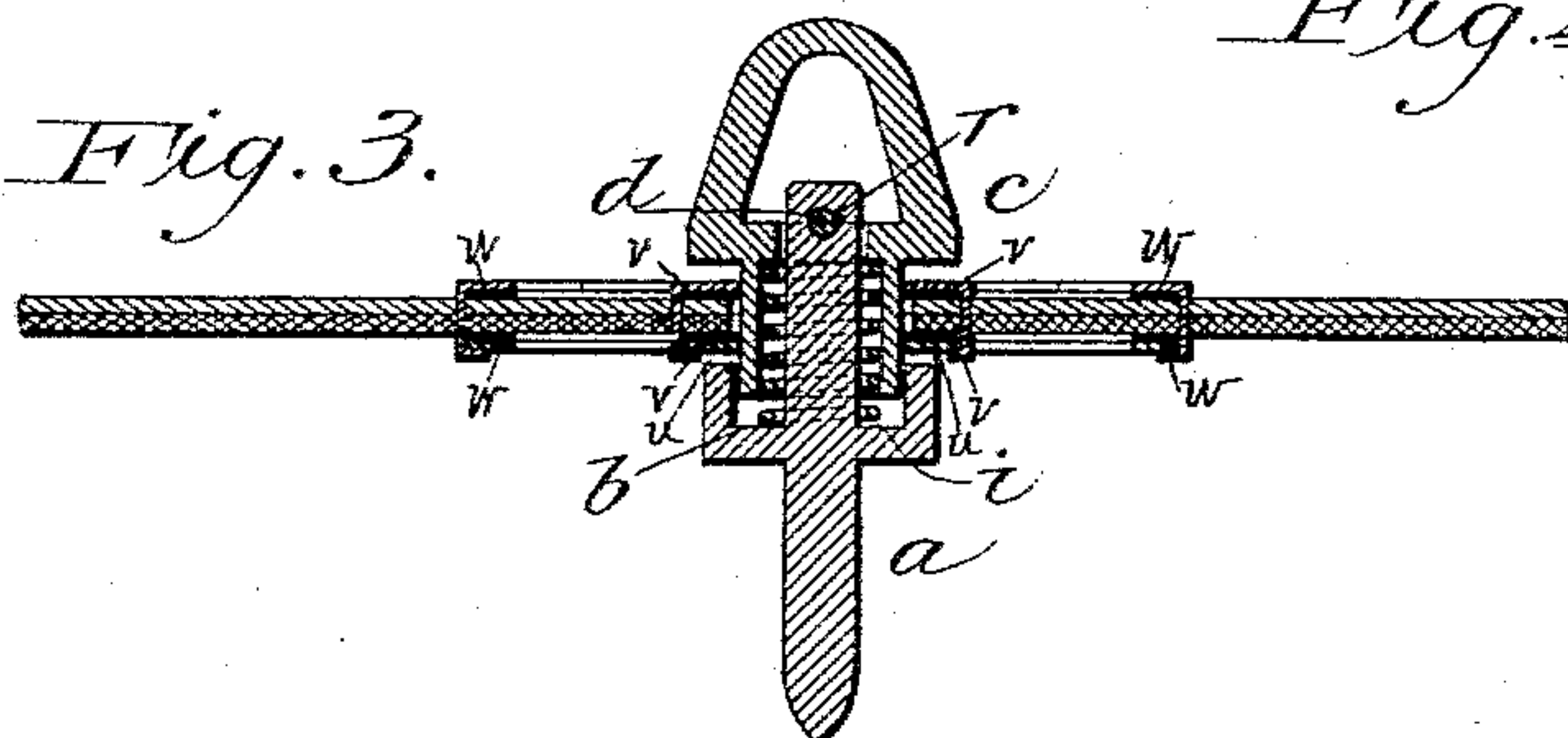
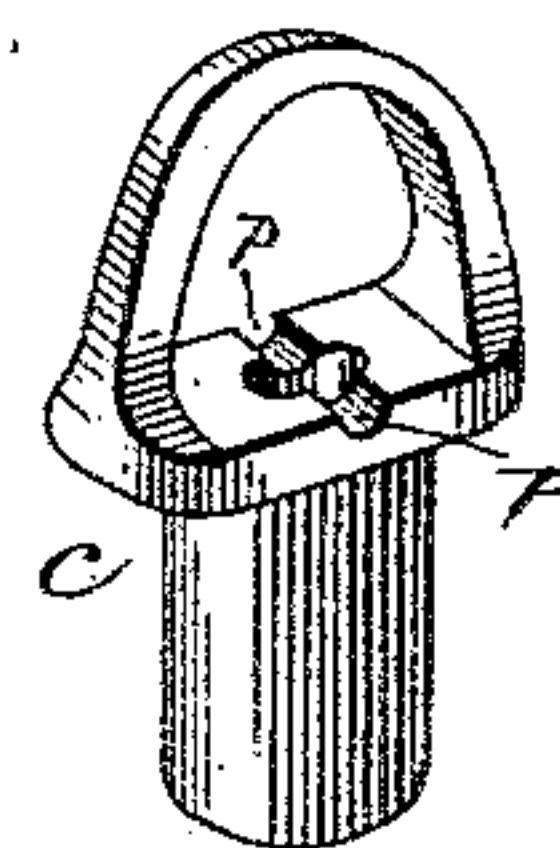


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

ANDREW JACKSON LYTLE, OF HILLSBOROUGH, OHIO.

CARRIAGE-CURTAIN FASTENER.

SPECIFICATION forming part of Letters Patent No. 359,979, dated March 22, 1887.

Application filed June 5, 1886. Serial No. 204,258. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JACKSON LYTLE, a citizen of the United States, residing at Hillsborough, in the county of Highland and State of Ohio, have invented a new and useful Combined Curtain-Fastener, of which the following is a specification.

My invention relates to improvements in the mode of fastening vehicle curtains or flaps; and the objects of my improvements are, first, to produce such a cheap and durable fastener as will afford facilities for properly and substantially securing said vehicle curtains or flaps in their required places; second, to provide such a fastener as will allow of the easy and rapid removal of the vehicle curtains or flaps from said fasteners at any time desired, even though said curtains may have become perceptibly drawn up or shrunken from any cause; third, to afford by means of this fastener a preventive of the usual ripping and tearing that vehicle curtains or flaps undergo when other fasteners or curtain-buttons are used. This tearing is usually confined to the point of contact of the curtain with the fastener or button, and is caused by the omission of the necessary protection for the button-hole of the curtain; and it is one of the objects of this invention to supply the necessary protection for said button-hole. I attain these objects by the combined mechanism herein described, and illustrated in the accompanying drawings, in which—

Figure 1 is a front view of the combined mechanism when the curtain is fastened. Fig. 2 is a view of the ribbed and slotted exterior plate, *s*, circular inner plate, *t*, and oval inner plate, *v*, the same being used, in conjunction with the mechanism shown in Figs. 3 and 4, to attain the third object of these improvements. Fig. 3 is a view of the shaft of the button and of the countersunk spring-seat attached thereto, also showing the lock-pin in its proper place through the top of the shaft. Fig. 4 is a view of the cap or crown of the button used with these improvements.

Similar letters refer to similar parts throughout the drawings.

The button consists of the shaft *a*, countersunk spring-seat *b*, cap or crown *c*, lock-pin

d, and spiral spring *i*, and is preferably constructed in the manner herein described.

The shaft *a* and spring-seat *b* should be cast of malleable iron in one piece, the said shaft *a* having a transverse hole, *r*, cast or drilled through its upper end, said hole being of sufficient size to receive the lock-pin *d*. The spring-seat *b* should have a countersink cast in it, around the shaft *a*, of sufficient size and depth to receive and give a secure rest to the spiral spring *i*. The cap or crown *c* should also be cast in one piece of malleable iron, said cap or crown having a longitudinal countersink cast through its length for about one-fourth of an inch, or the full length of the shank of the cap or crown, said countersink to be of sufficient size to receive the spiral spring *i* and to converge in a hole of sufficient size to receive the shaft *a*.

This cap or crown should be cast with a shank about one-fourth of an inch in length and of suitable size, terminating in a flattened arc of a circle, said arc to serve as a finger-clasp by which said crown *c* may be moved round and round on said shaft *a*. This said arc should also have cast transversely through its center a hole of sufficient circumferential size to allow the lock-pin *d* to describe a circle therein. This said cap or crown *c* should also have slots *p p* cast across the upper end of the shank thereof and within the arc of the circle above described, these slots *p p* to be of sufficient size and depth to receive the ends of the lock-pin *d* and, acting in conjunction therewith, to retain the cap or crown of the button in its required place.

The spiral spring *i* is a common spiral spring of the desired length and size, and is placed over and around the shaft *a*, fastened permanently in the countersink of the spring-seat *b*, (or may be just set into the same,) and the upper end of said spring passes up into the countersink of the cap or crown of the button, and by maintaining a continual upward pressure on the crown of the button keeps the lock-pin *d* in its proper place in the slots *p p*, unless the proper manual force is applied to move it to another place.

The lock-pin *d* should be a straight section of suitable wire of sufficient size, and of a length

to correspond with the length of the slots *p p* of the crown *c*. This pin should be securely fastened in the hole *r* of the shaft *a*.

One of the shoulders of the cap or crown *c* should be perceptibly shorter than the other, as this will allow the button-hole of the curtain to slip off of the button with greater ease whenever the shorter shoulder is turned toward that part of the button-hole which presses most against the shank of the crown of the button.

The plates *s t u* of Fig. 2 should be stamped from plate-brass or other suitable metal of the desired thickness, the exterior plate, *s*, being stamped, as shown in the drawings, with cross-stays to act as supports, and with a slot of the desired shape and size to admit the cap or crown *c* of the button, said plate also having tongues stamped thereon, the same to be pressed through the curtain and clinched around the inner plates, *t* and *u*. The larger inner plate, *t*, should correspond in size and breadth to the outer circumference of the exterior plate, *s*, as shown in drawings, the smaller one likewise to correspond to the oval hole of the outer plate, as shown in the drawings.

It is necessary, and as a part of this invention, I place slips of rubber *w* and *v* between the exterior and inner plates used, said rubber to act as an anti-rattler for this combined fastener. The mode of fastening and operat-

ing this fastener is as follows: First, attach the button by means of its shaft to the desired part of the vehicle. Clinch the exterior and inner plates together on each side of the curtain, placing the rubber slip between them. When it is necessary to fasten the curtain, pass the button-hole or slot of the plates down, over, and around the crown of the button, and applying pressure, turn the same around until the lock-pin *d* comes up with and falls into the crown-slots *p p*, thereby locking said crown and securely fastening said curtain.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A button for a curtain-fastener, consisting of the shaft *a*, provided with spring-seat *b* and hole *r*, the pin *d*, secured in said hole, the spring *i*, and the cap *c*, provided with the countersunk shank, the notches *p*, and the flattened arc.

2. In a curtain-fastener, the combination of a plate on one side of the curtain, provided with two rows of tongues stamped thereon, two plates upon the other side, to be held in place by said tongues, and two angular rubber rings upon each side of the curtain, adapted to fit between said plates and the curtain.

ANDREW JACKSON LYTLE.

Attest:

JOHN T. HIRE,
JOHN C. PARKS.