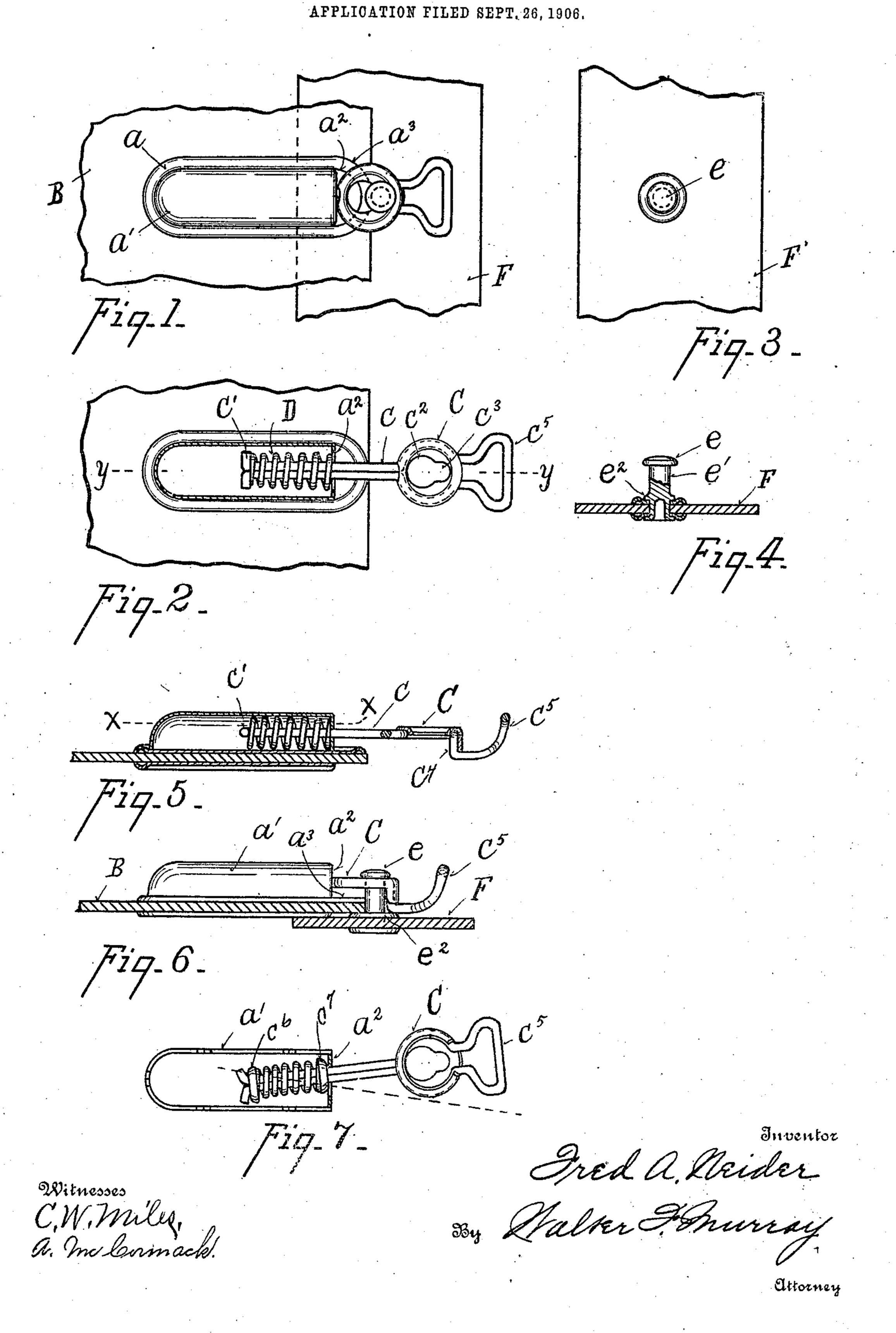
## F. A. NEIDER. CARRIAGE CURTAIN FASTENER.



## UNITED STATES PATENT OFFICE.

FRED A. NEIDER, OF AUGUSTA, KENTUCKY.

## CARRIAGE-CURTAIN FASTENER.

No. 847,430.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRED A. NEIDER, a citizen of the United States of America, and a resident of Augusta, county of Bracken, 5 State of Kentucky, have invented certain new and useful Improvements in Carriage-Curtain Fasteners, of which the following is a specification.

My invention relates to that class of carriage-curtain fasteners which have a casing
to be secured to the carriage-curtain or to the
backstay of the carriage-top and within
which is located a sliding spring pressed rod,
which carries an eyelet at its outer end to engage a stud to be secured either to the carriagecurtain or the backstay according to which
of these members the casing is secured to.

The object of my invention is to provide a carriage-curtain fastener of this kind which will hold the curtain from bulging beyond the carriage-stay and which when the eyelet and the stud are engaged will hold together firmly so as not to be disengaged should the curtain hang loosely.

The invention will be described first in connection with the accompanying drawings, in which like parts are indicated by similar reference letters, and will then be pointed out in the claims.

Referring to the drawings, Figure 1 is a view of a part of a carriage-curtain, backstay, and the fastener embodying my invention attached thereto in elevation. Fig. 2 is a sectional view of the casing and the parts 5 carried thereby taken upon line x x of Fig. 5. Fig. 3 is a plan view of the backstay with the stud attached thereto. Fig. 4 is a view partly in section and partly in elevation of the stud and backstay. Fig. 5 is a longituo dinal sectional view taken upon line y y of Fig. 2. Fig. 6 is an edge elevation of the carriage-curtain fastener embodying my invention with the carriage-curtain and the backstay shown in section. Fig. 7 is an inverted 5 plan view of the hood, sliding rod, and the spring, the end  $a^2$  of the hood being shown in section and the rod being shown in an angular position, the dotted line showing the opposite angle to which the rod may be drawn.

Referring to the parts, the casing consists of a base-plate a, having a semicylindrical hood a' mounted upon it and having tangs to pass down through the base-plate and the carriage-curtain B and to be bent down against the under side of the curtain to secure the casing thereto in the usual manner.

Hood a' is open at the end  $a^2$ , through which passes the rod c, to which the eyelet C is secured, the inner end of the rod c terminating in a piston c' against which a coiled spring D 60 normally bears to hold the eyelet C against the end  $a^2$  of the hood.

Rod c, being made of a double wire, will be of an elongated contour in cross-section. The hole in the end  $a^2$  is made of a height 65 equal to the diameter of the wire and of a width somewhat greater than twice the diameter of the wire, as shown in Fig. 2 and Fig. 7, to permit of a sidewise play in the rod so as to facilitate the engagement of the eyelet C 70 with the stud E. As shown in Fig. 7, the coiled spring D is held, preferably, between two piston-cups  $c^6$  and  $c^7$ .

Eyelet C has a pear-shaped opening in it, the enlarged part  $c^2$  of the opening being of a 75 diameter such as to pass over the head e of the stud and the small part  $c^3$  of the opening being of a diameter so as to fit the neck e' of the stud.

Base-plate a at the end  $a^3$  adjacent to 80 the edge of the curtain B projects beyond the end  $a^2$  of the hood a distance such that when the eyelet contacts the end  $a^2$  the enlarged part  $c^2$  of the perforation in the eyelet stands above the end  $a^3$  of the base-plate. 85 Thus when the eyelet has been engaged with a stud, the base-plate bearing against the stud and the shank of the stud being situated in the small part  $c^3$  of the eyelet, it is seen that no matter whether the curtain be 90 hanging loosely or not the eyelet will not become disengaged from the stud.

The rod c is bent in the following manner:
The straight portion consists of the ends of a piece of wire standing flat against each other, 95 the wire being then bent into a circular form at the eyelet and being bent inward at a right angle to the plane of the eyelet to form an elbow c<sup>4</sup>, the elbow c<sup>4</sup> being made of a length equal to the height of the neck e' of the 100 stud and the end c<sup>5</sup> of the wire being bent into a finger-piece, which is bent upward at its end to afford a ready grasp for the fingers, as shown in Fig. 5.

When the eyelet is engaged with the stud, 105 it is seen that the elbow  $c^4$  bears against the base  $e^2$  of the stud, and thus holds the eyelet firmly against the under side of the head e, so that the plane in which the eyelet lies is in a right angle to the stud secured to the 110 backstay. This prevents the curtain B from bulging—that is, maintains the curtain

B in a plane practically parallel to the plane of the backstay F.

What I claim is—

1. In a carriage-curtain fastener a casing 5 consisting of a hood having an opening at one end and a base-plate, the base-plate projecting beyond the hood at said end, a rod within the casing projecting through said end and having an eyelet at its end, a headed 10 stud to be engaged by the eyelet and a spring within the casing to hold the rod normally in a position such that the opening in the eyelet projects beyond the base-plate a distance less than the diameter of the head of 15 the stud.

2. A carriage-curtain fastener consisting of a casing having an opening at one end, a stud to be mounted adjacent to the casing, a rod within the casing projecting through 25 said end and terminating in an eyelet and an elbow projecting inward from the eyelet to

bear against the base of the stud.

3. In a carriage-curtain fastener the combination of a casing consisting of a hood hav-25 ing an opening at one end and a base-plate,

the base-plate projecting beyond the hood at said end, a headed stud to be mounted adjacent to the projecting end of the base-plate, a sliding rod within the casing and projecting through said end of the casing, an eyelet at 3 the end of the rod and an elbow projecting inward from the eyelet to bear against the base of the stud.

4. In a carriage-curtain fastener the combination of a casing consisting of a hood 3 closed at one end and having an elongated opening in the opposite end, a base-plate, a rod within the casing projecting through the opening, its height being substantially that of the height of the opening and its width 4 being less than the width of opening so as to permit a sidewise play of the rod, a piston upon the end of the rod, a coiled spring surrounding the rod, an eyelet at the outer end of the rod and a stud located adjacent to the

eyelet to be engaged thereby.

·FRED A. NEIDER.

Witnesses:

W. C. SADLER, WILL A. FIELD.