

J. A. & C. P. FISHER.
CURTAIN FASTENER.
APPLICATION FILED MAR. 23, 1910.

1,008,633.

Patented Nov. 14, 1911.

Fig. 1.

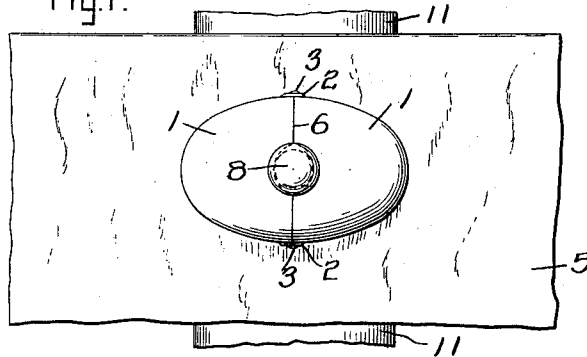


Fig. 2.

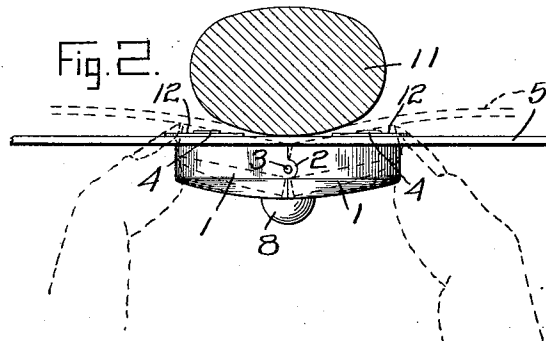


Fig. 3.

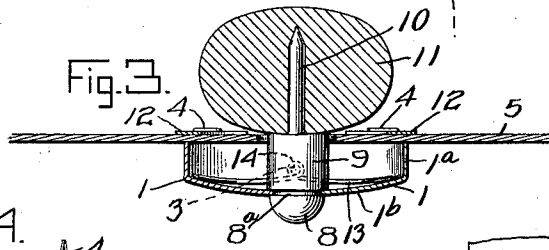


Fig. 4.

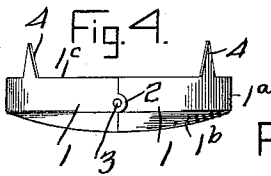


Fig. 5.

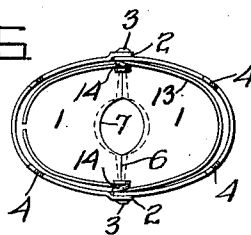
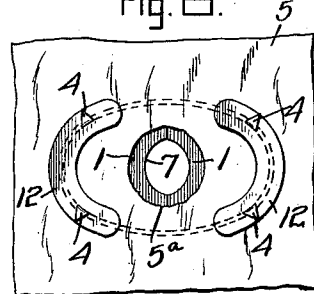


Fig. 6.



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CURTAIN-FASTENER.

1,008,633.

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To all whom it may concern:

Be it known that we, JAMES A. FISHER and CHARLES PAGE FISHER, citizens of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Curtain-Fasteners, of which the following is a specification.

Our invention relates to separable fasteners and more particularly to that type comprising a rigid stud and a resilient socket member.

More particularly, and, as shown in the accompanying drawing, our invention relates to devices for fastening what are commonly known as "storm curtains" or the like, on carriages, automobiles and other vehicles. The usual method of fastening such curtains is by means of a stud or button secured to the frame of the carriage and a button hole formed in the curtain. Such an arrangement is, however, very unsatisfactory for the reason that the button holes soon become worn or torn, and it is then impossible to make them hold the button.

The primary object of our invention, therefore, is to provide a device which will positively and efficiently secure the curtain in place and which will not be subject to rapid deterioration.

A further object is to provide a device of this character which shall be extremely simple and cheap to manufacture, and easy to manipulate.

With the above and other objects in view, our invention consists in the construction and arrangement of parts hereinafter described, and shown in the accompanying drawing, in which,

Figure 1 is a front elevation of our improved curtain fastener complete, showing it attached to a curtain; Fig. 2 is an edge view thereof, the vehicle frame being shown in section; Fig. 3 is a longitudinal section through our improved device, the stud being shown in elevation; Fig. 4 is a side elevation of the socket member hereinafter described; Fig. 5 is a rear elevation thereof; and, Fig. 6 is a rear elevation of the socket member as it appears attached to a curtain.

Referring to the drawings in detail, it will be seen that our improved socket member comprises a metallic shell preferably of elliptical contour, and bowl-shaped or dish-shaped in cross section. It comprises a pair

together as by means of pivot pins 3, passing through overlapping lugs 2 formed at each side of each section, and at opposite sides of the bowl-shaped socket member. As shown in the drawings, the socket member has a curved or convex bottom 1^b, and substantially perpendicular sides 1^a, but the exact shape of these parts is immaterial, since the halves can be made with a flat bottom if desired. It will be noted by reference to Fig. 2 that the pivot pin 3 is located about midway between the bottom 1^b and the upper or top edge 1^c (see Fig. 4) of the socket member. Along the edge 1^c are provided a plurality of tongues 4, preferably formed integral with the socket member, and adapted for securing the same to a curtain 5. As shown in Figs. 3 and 6, this is accomplished by forcing the prongs 4 through the material of the curtain and then clenching them over, a divided washer 12 being interposed between the inside of the curtain and the bent over ends of the tongues 4, in order to prevent wear.

The reference numeral 6 designates the meeting edge of the halves or sections of the socket member and, as shown in Fig. 5, these edges are cut away in the middle so as to provide an opening 7, which is thus formed partly in both sections.

8 designates the head of our improved stud, which is preferably round or conical. The stud also comprises a shoulder 9, and a shank 10 which is adapted to be driven into the frame 11 of the vehicle. Between the head 8 and shoulder 9 is formed an annular notch or groove 8^a, as clearly shown in Fig. 3. This groove is preferably of just sufficient thickness to accommodate the edge of the material of which the socket member is formed.

In order to hold the device in the position shown in the drawings, a spring is provided which preferably consists of a loop 13 of resilient wire, which rests in the bottom of the bowl, and is coiled one or more times, as indicated at 14, around each pivot pin 3 on the inside of the socket member, as clearly shown in Fig. 5.

It will be noted that the opening 7 is not circular, and also that it is smaller than the head 8 of the stud. When, therefore, the parts are in the position shown in Figs. 1 or 3, the edges of the opening 7 bite into or engage the groove 8^a in the stud, and thus hold the device in place. When it is de-

sired to disengage the socket member from the stud, pressure is applied to the opposite sides of the socket member by grasping the same between the thumb and finger as indicated in Fig. 2. This pressure causes the sections 1 to turn on the pivots 3 and to swing to the position indicated in dotted lines, the curtain flexing in order to permit such movement. When the sections swing to the position shown in dotted lines in Fig. 2 the edges of the opening 7 are drawn apart, and assume some such outline as that indicated in dotted lines in Fig. 5, which it will be noted is approximately circular. When the sections are thus moved by compressing the device between the thumb and finger as described, the edges of the opening 7 are withdrawn from the notch or groove 8^a in the stud, and the opening itself is enlarged to such an extent as to permit of its being slipped over the head 8 and disengaged from the stud.

When it is desired to cause the parts to engage, it is simply necessary to push the socket member over the head of the stud, the spring 13 permitting the sections to turn on their pivots sufficiently to allow the head of the stud to pass through the opening, and causing the edges 7 of the opening to snap into the groove 8^a and securely lock the device in position.

The opening 5^a (see Fig. 6) is, of course, formed in the curtain in alinement with the opening 7, to permit the passage of the stud. It will be particularly noted that when the device is compressed as indicated in Fig. 2, the sections are caused to rotate in a plane at right angles to the curtain. This is permitted either by the oval shape of the frame 11, or else by having the stud project a sufficient distance from the frame to allow proper operation of the device.

While we have shown and described the fastener as applied to a carriage curtain, it will, of course, be understood that the invention is not limited to such use, but that it may be employed in a number of ways which will readily suggest themselves to those skilled in the art. To suit slightly changed conditions it may be necessary to vary somewhat the details of construction, but such changes can be made without in any way departing from the spirit of the invention as defined by the scope of the accompanying claims.

What we claim is:—

1. In a separable fastener, a rigid stud, and a resilient socket member comprising a pair of hollow sections hinged to each other by means of a pair of alined pivots, such pivots being disposed one at each side of said member, so as to provide an open space for said stud, the front edges of said sec-

tions being adapted to engage the stud, and the rear portions of said sections being extended back behind the axis of said pivots, whereby, when such rearwardly extended portions are pressed together, the said sections are rotated on their pivots and the front edges thereof disengaged from said stud.

2. A curtain fastener comprising a fixed, rigid stud, having a notch adjacent its end, and a hollow, bowl shaped socket member attached to the curtain, such member comprising a pair of sections pivoted directly to each other so as to swing in a plane at right angles to the edge of the bowl shaped member, said member being arranged to inclose said stud, and the edges of said sections at the bottom of the bowl being adapted to engage said notch, the pivots being located between the edge and bottom of the bowl at each side of said stud, and in a line intersecting the axis thereof.

3. In a separable fastener, a bowl-shaped socket member having a bottom and sides, said member comprising two sections, pins on which said sections are hinged together at points on opposite sides of the bowl, said socket member being provided with an opening formed partly in both sections, a stud having a notch adapted to be engaged by the edges of said opening, and a spring for maintaining such engagement, such spring comprising a loop of resilient wire resting against the bottom of said bowl shaped member and having one or more coils encircling each of said pivot pins, substantially as described.

4. In a separable fastener, a rigid stud, and a bowl shaped socket member comprising a pair of hollow sections hinged to each other by means of a pair of alined pivots, such pivots being disposed one at each side of said member, so as to provide an open space for said stud, the front edges of said sections being adapted to engage the stud, a spring lying within such bowl-shaped socket member and serving to normally maintain the said edges of the sections in engagement with the stud, and the rear portions of said sections being extended back behind the axis of said pivots, whereby, when such rearwardly extended portions are pressed together against the tension of said spring, the said sections are rotated on their pivots and the front edges thereof disengaged from said stud.

In testimony whereof we affix our signatures, in presence of two witnesses.

JAMES A. FISHER.
CHAS. PAGE FISHER.

Witnesses:

JNO. B. LIGHTFOOT, Jr.,
R. C. CULLEN.