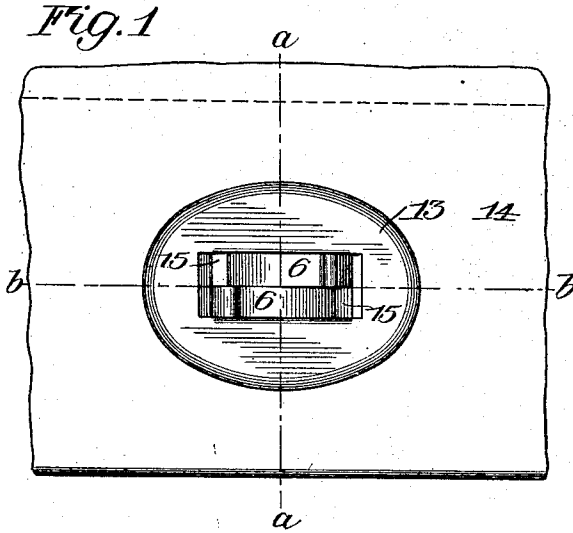
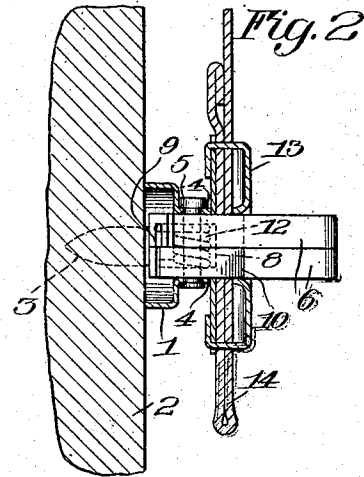
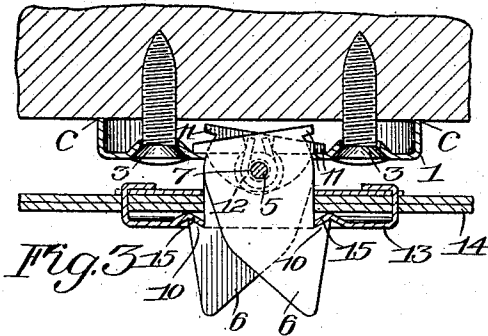
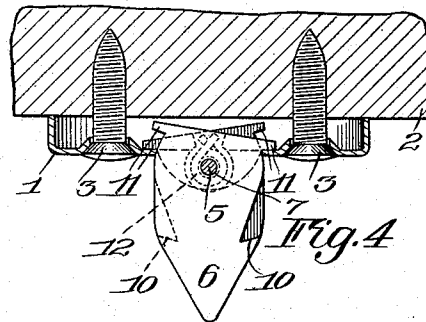
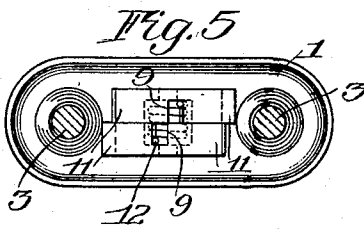
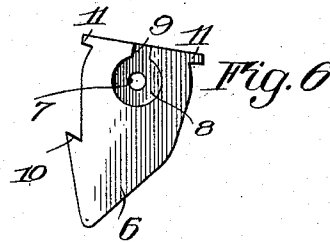


E. LUDEKE & S. B. LUEHM,
 SPRING FASTENING DEVICE.
 APPLICATION FILED JAN. 5, 1916.

1,199,014.

Patented Sept. 19, 1916.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EMIL LUDEKE AND SAMUEL B. LUEHM, OF ROCHESTER, NEW YORK.

SPRING FASTENING DEVICE.

1,199,014.

Specification of Letters Patent.

Patented Sept. 19, 1916.

Application filed January 5, 1916. Serial No. 70,342.

To all whom it may concern:

Be it known that we, EMIL LUDEKE and SAMUEL B. LUEHM, both of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Spring Fastening Devices; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

Our invention has for its object to provide an improved spring fastening or locking device for holding two parts in engagement with each other, and to permit of their being disengaged by a simple releasing operation of the fastening device.

A further object of the invention consists in affording a construction that requires only a few parts, and can be produced at a very low cost.

To these and other ends the invention consists in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a view in elevation, showing an application of one embodiment of the invention; Fig. 2 is a vertical sectional view partially in elevation on the line *a-a* of Fig. 1; Fig. 3 is a sectional view partially in elevation on the line *b-b* of Fig. 1; Fig. 4 is a view similar to Fig. 3, with one of the parts removed, and the latch members in disengaging position; Fig. 5 is a sectional view on the line *c-c* of Fig. 3, and Fig. 6 is a detail view in elevation of one of the latch members.

Similar reference numerals throughout the several figures indicate the same parts.

The invention is susceptible of a large variety of applications, and in the present embodiment, we have illustrated one arrangement which may be employed for retaining in position the removable curtains, such as are used on carriages and other vehicles, where fastening members are attached on the body and cooperate with the curtain to hold the latter in place, as an illustration of a preferred form of the invention, there is provided a support or plate 1 which is attached to the body portion 2 of the vehicle by suitable screws 3 or other convenient means. The support 1 is provided with ears

4 in which is secured the bearing or pin 5 upon which the latch members are pivotally mounted, as will now be described.

The device embodies a pair of latch members which are designated generally at 6 and are preferably constructed in the form shown, although the invention is not necessarily limited to the precise construction herein set forth as a modified arrangement may be employed while still retaining the essential features of the invention. Each latch member is provided with a transversely arranged opening 7 which receives the bearing 5, and is recessed around the opening, as indicated at 8, said recessed portion being connected with the base of the latch member by means of a cut away portion 9.

10 designate beveled shoulders provided on the latch members for engagement with the latch plate in a manner which will presently appear. The latch members are also undercut at points slightly above the base, as indicated at 11, in order to afford means for limiting their movement, as will appear hereinafter.

The latch members are designed to be spring actuated in opposite directions, and to this end there is provided a single spring cooperating with oppositely disposed surfaces on the respective latch members whereby to move the latter in opposite directions. More specifically in this respect, the structure comprises a coil spring 12 which is arranged upon the bearing 5 and is housed in the recess 8 between the latch members. The opposite ends of the spring extend into the cut away portions 9 of the latch members, as will be apparent from an inspection of Fig. 5, and the action of the spring is such as to cause the ends thereof to engage opposite surfaces of the latch members and thereby to effect their movement in opposite directions. The shoulders which are afforded by the undercut portions 11 engage the lower faces of the plate 1, as shown in Figs. 3 and 4, and serve to limit the movement of the latch members in either direction, Fig. 3 showing the position of the parts when the latch members are in engaging position, and Fig. 4 showing them with the latch members in disengaging position, the spring being compressed by pressing against the latch members until their outer ends are in alinement with each other.

The latch plate is designated at 13 and may be attached in any convenient manner

to the object to be fastened, the same in the present instance consisting of the curtain 14. The latch plate has an opening to receive the latch members and in order to afford proper locking engagement of the latch members with the latch plate, the latter is provided with angular flanges 15 at the ends of the opening to engage with the beveled shoulders 10 of the latch members. The flanges 15 are preferably formed as shown, by providing a substantially V-shaped depression or indentation in the plate near the edges of the opening. By this construction, when the parts are in the position shown in Fig. 3, the curtain is securely locked and cannot be accidentally or unintentionally removed from the vehicle. When, however, it is desired to remove the curtain, this can be readily accomplished by simply pressing together the ends of the latch members until they assume the position shown in Fig. 4. In a similar manner, the curtain can be locked in position with equal facility by simply positioning the latch plate over the ends of the latch members and forcing it on until the shoulders 10 engage the flanges 15.

We claim as our invention:

1. In a curtain fastener, the combination with a support embodying side walls and a top, of a bearing secured to the support, a pair of latch members mounted on the bearing having transverse openings to receive the latter, each of the latch members being provided with a recess surrounding said opening and a cutaway portion in the base communicating with the recess, and a coil spring surrounding the bearing and disposed in said recesses of the latch members, the ends of the spring being engaged in cut-

away portions at the base of the latch members, the latter being undercut at points adjacent to their base portions to afford lugs or extensions adapted to engage the lower side of the top of the support so as to limit the movement of the latch members.

2. In a curtain fastener, the combination with a support embodying side walls for engagement with the surface to which the support is attached, and a top connecting the side walls, of a pair of oppositely acting latch members pivotally mounted on the support, the latch members having lugs or extensions formed at points adjacent their base portions for engagement with the lower face of the top of the support to limit movement of the latch members.

3. In a curtain fastener, the combination with a support embodying side walls for engagement with the surface to which the support is attached, and a top connecting the side walls, a bearing secured to the support, a pair of oppositely acting latch members having transverse openings substantially intermediate their opposite edges to receive said bearing whereby the latch members are centrally pivoted with relation to their opposite edges, the latch members having lugs or extensions formed at points adjacent their base portions for engagement with the lower face of the top of the support, to limit movement of the latch members, and a spring housed by the latch members and cooperating therewith to move them in opposite directions.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."