

Feb. 23, 1960

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2,925,877

LADDER TOP BUMPER

Filed April 22, 1958

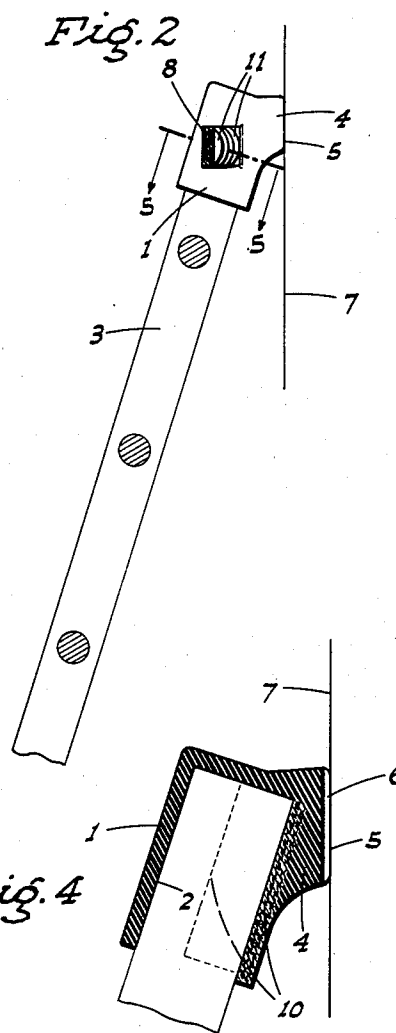
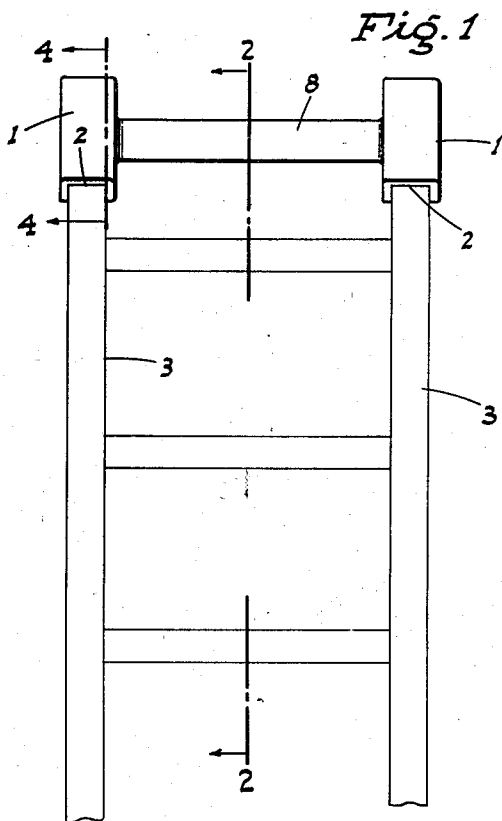


Fig. 3

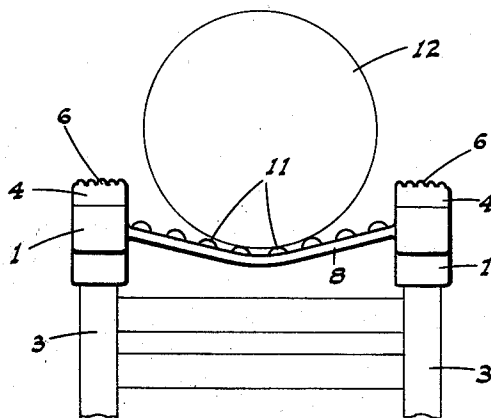


Fig. 4

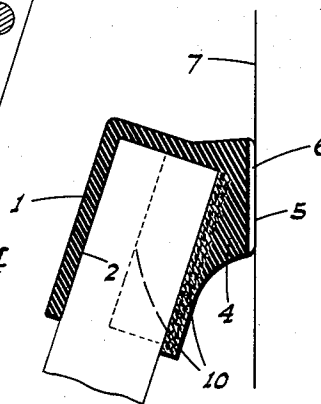
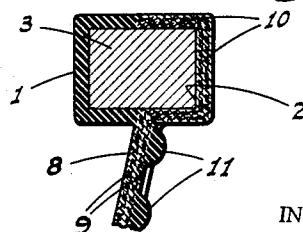


Fig. 5



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LADDER TOP BUMPER

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Application April 22, 1958, Serial No. 730,142

2 Claims. (Cl. 182—108)

This invention relates in general to an attachment for a ladder.

The major object of the invention is to provide a combination non-slip and mar-preventing attachment for the upper ends of the rails of a ladder; the attachment not only preventing slippage of the ladder from any flat vertical surface with which the rails of the ladder may be engaged, but also from corners and circular objects, such as utility or line poles. At the same time, surfaces of any shape or contour with which the ladder may be engaged, will not be marred or damaged in any way by contact with the ladder.

A further object of the invention is to construct the attachment so that it will remain in position on the ladder without the use of any exterior means—such as screws, clamps, cementitious material, or the like—being needed to maintain the attachment in place.

It is also an object of the invention to provide a ladder top bumper which is designed for ease and economy of manufacture, and convenience of installation.

Another object of the invention is to provide a practical and reliable ladder top bumper, and one which will be exceedingly effective for the purpose for which it is designed.

These objects are accomplished by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings:

Fig. 1 is a front view of the attachment as mounted on a ladder and engaged with a flat vertical surface.

Fig. 2 is a transverse section on line 2—2 of Fig. 1.

Fig. 3 is a top plan view of the ladder-mounted attachment as engaged with a pole.

Fig. 4 is a fragmentary enlarged transverse section on line 4—4 of Fig. 1.

Fig. 5 is a fragmentary enlarged sectional elevation on line 5—5 of Fig. 2.

Referring now more particularly to the drawings, and to the characters of reference marked thereon, the attachment comprises a pair of elongated bumper caps 1, each having a deep bore or socket 2 shaped to correspond to the cross section of the side rails 3 of the ladder to which the attachment is to be applied. Also, the sockets are of a size such that they will engage the rails with a snug frictional fit, being made of resilient rubber or corresponding material.

The caps, on their forward side—which is that side nearest the surface to be contacted—are each formed with a vertical boss or pad 4; the forward face 5 of which is preferably vertically corrugated or toothed, as shown at 6, to minimize or prevent lateral slippage with a wall 7 with which the bosses may be contacted.

Said forward face 5 is disposed at an acute angle, in a vertical plane, to the longitudinal plane of the rails 3; this angle being such that said face 5 will flatly engage

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wall 7 when the ladder is disposed at what may be considered to be a normal angle of slope to the wall, as shown in Fig. 2.

The bosses, being somewhat thick and of resilient or yieldable material, this face-to-face flat contact will be substantially maintained—when pressure is exerted against the bosses, as by the weight of a person on the ladder—even though the angle at which the ladder is set relative to the wall 7 may vary one way or the other somewhat.

Extending between and connecting the caps 1 on their laterally inner sides intermediate the front and back thereof is a slack or non-taut strap 8. This is made of the same flexible material as the caps, and may in fact be integral therewith. This strap is reinforced and prevented from extension, without being unduly stiffened, by longitudinal cords of the type which are used in tires, and as indicated at 9.

These cords, which may be of fabric form, extend from the strap into and about the forward half of the caps, as shown at 10. This cord attachment, which may extend the full height of the caps, as shown in Fig. 4, not only definitely ties the strap thereto, but reinforces the caps while allowing the rear portion of the same to expand so as to enable them to be snugly fitted over the ladder rails.

Rounded nubs 11, or other non-slip elements, are provided on the forward face of the strap 8 so that the ladder will not tend to slip sideways when the strap is engaged with a pole 12, as shown in Fig. 3.

The slackness and flexibility of the strap enables it to wrap somewhat about the pole, as shown, thereby giving the strap a better non-slip cling to the pole than would otherwise be the case. This of course is also true if the ladder is engaged with a projecting wall corner, whether angular or rounded.

The strap is preferably disposed in a plane substantially parallel to the faces 5 of the cap-bosses, so that the strap will properly engage a vertical pole when the ladder is set at a normal angle thereto.

The cap reinforcing cords or fabric extending from the front ends of the strap 8 about the front portion of the caps, pressure on the ladder forcing the strap against the pole will not tend to stretch the caps and possibly pull them off the rails of the ladder.

While the attachment is here shown as having the caps 1 parallel to each other for use on a ladder having parallel side rails, said attachment may of course be made with the caps at an angle, and with their sockets of different shapes and sizes to suit different ladder structures.

From the foregoing description it will be readily seen that there has been produced such a device as will substantially fulfill the objects of the invention, as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described the invention, the following is claimed as new and useful, and upon which Letters Patent are desired:

1. A top bumper attachment for a ladder having side rails, said attachment comprising bumper caps having sockets to fit onto the rails at the top, and a flexible but non-extensible strap extending between the facing sides of the caps and connecting the same as a unit; the width of the strap being vertically disposed, with non-slip nubs projecting from the front face of the strap.

2. A top bumper attachment for a ladder having side rails, said attachment comprising bumper caps having sockets to fit onto the rails at the top, a flexible but non-extensible strap extending between the facing sides of the caps and connecting the same as a unit, and non-extensible 5 but flexible cords in and extending unbrokenly along the strap, the front of the caps, and a portion of the sides of the caps opposite said facing sides thereof.

References Cited in the file of this patent

UNITED STATES PATENTS

1,994,369	Risser	Mar. 12, 1935
2,138,171	Johnson	Nov. 29, 1938

FOREIGN PATENTS

197,221	Great Britain	May 10, 1923
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