H. ALPEN.

HOLDER ATTACHMENT FOR LADDERS.

APPLICATION FILED NOV. 23, 1918.

1,328,705. Patented Jan. 20, 1920.

FIG. 1.

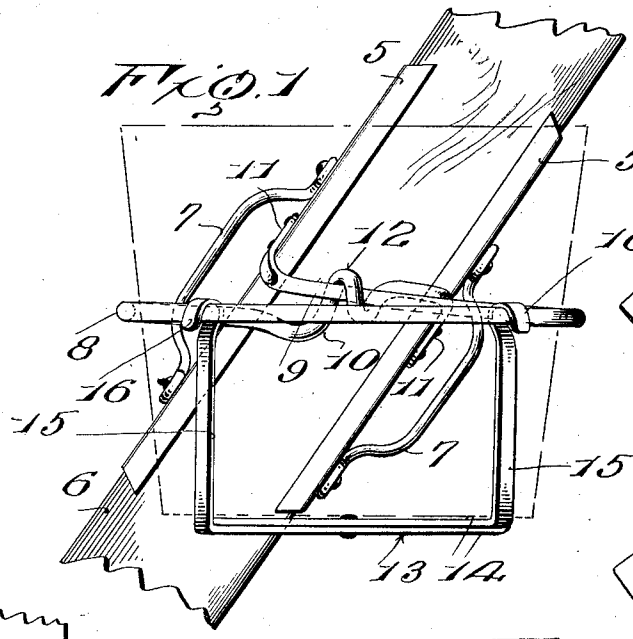


FIG. 4.

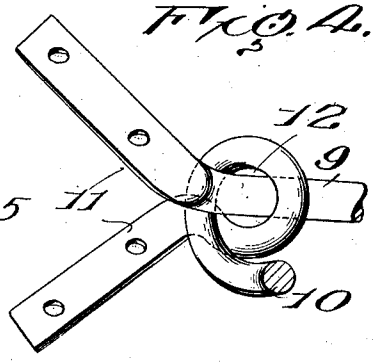


FIG. 2.

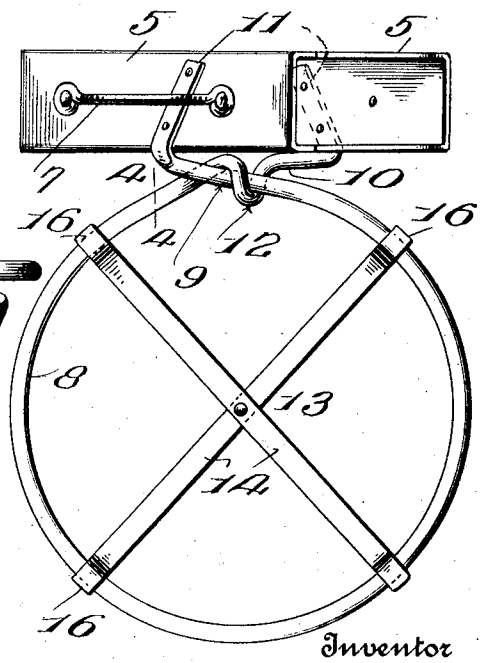
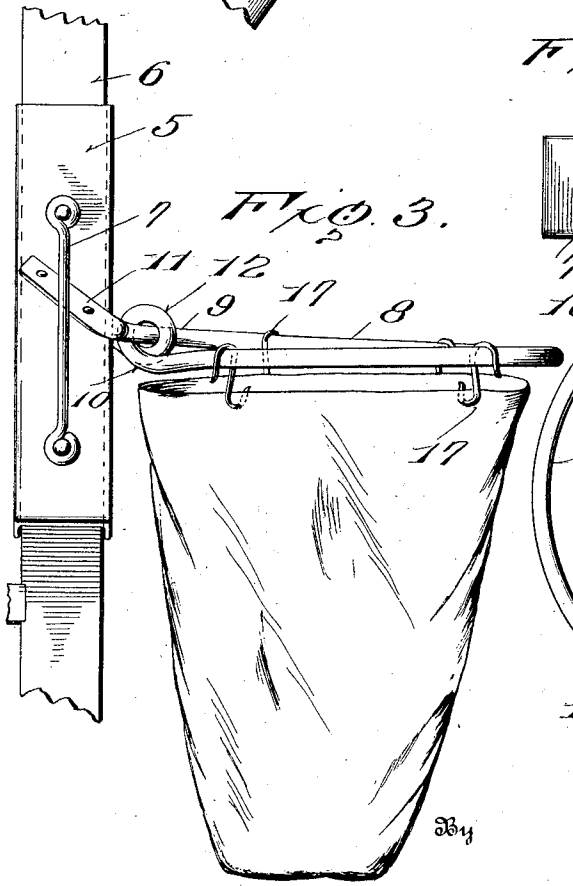


FIG. 3.



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HOLDER ATTACHMENT FOR LADDERS.

1,328,705. Specification of Letters Patent. Patented Jan. 20, 1920.

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To all whom it may concern:

Be it known that I, HENRY ALPEN, a citizen of the United States, residing at Hempstead, in the county of Nassau, State of New York, have invented certain new and useful Improvements in Holder Attachments for Ladders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to ladder attachments and more particularly to attachments designed to hold a receptacle in position to be reached by a person upon the ladder, and has for its object to provide an attachment of this kind which may be readily engaged with or detached from a ladder, and in which certain parts will coact to hold the device securely in place.

Another object is to provide a structure similar in some respects to that shown in Patent No. 1,193,964, issued to me but including a single means for holding the ladder engaging portions in engaging position and for retaining a bucket or other receptacle in desired position.

Another object is to provide a structure in which the single means above referred to will be adapted either to hold a bucket, or to suspend a sack, so that the device may be used in connection with fruit picking.

Another object is to provide a device of relatively simple construction so that the parts may be easily made and assembled.

In the drawings:

Figure 1 is a side elevation of the present device engaged with a ladder leg, a bucket being shown within the retaining ring.

Fig. 2 is a top plan with the bucket removed.

Fig. 3 is an elevation at right angles to Fig. 1, a sack being shown engaged with the ring.

Fig. 4 is a section on line 4—4 of Fig. 2, showing the eye in elevation.

Referring now to the drawings, the present invention comprises a pair of opposed jaws 5 adapted for engagement at opposite sides of a ladder leg indicated at 6. These jaws are provided upon their outer surfaces with handles 7 by means of which the jaws may be separated against the action of a combined retaining spring and bucket receiving ring 8.

This ring 8 consists of a resilient metallic bar bent into a circle and having its end portions overlapped as indicated at 9 and 10, and having its extremities beyond the overlapped portions directed outwardly and laterally and secured to the outer faces of the jaws 5. These lateral portions are indicated at 11. The tendency of the spring ring is thus to resist separation of the jaws 5, and its action is to move the jaws 5 toward each other when they are separated and afterward released. The ring 8 is yieldable to permit separation of the jaws, and thus the ring forms a yieldable jaw actuating element, in that it may be distorted by separating the jaws and will, by reason of its resilience, actuate the jaws by bringing them into position to grip the side of a ladder. When, in the appending claims, the expressions "yieldable jaw actuating means" is used, it is intended to define a means having the general qualities and functions of the ring 8 as just described.

Formed in the overlapped portion 10, there is a transversely arranged eye 12, through which the portion 9 is slidably engaged, this eye thus forming a guide for the portion 9 and serving to hold the overlapped portions and the jaws against displacement.

As shown in the drawings, the ring 8 extends laterally with respect to the jaws, and the latter are set at an angle with respect to the ring, so that when the jaws are engaged with a slanting leg of a ladder, the ring will be disposed horizontally and in position to receive a bucket therewithin.

To support a bucket disposed within the ring, there is provided a basket 13, which consists of a plurality of bars 14 having straight intermediate portions which are arranged in crossed relation, and having also angular end portions provided with hooks at their extremities. The end portions are indicated in the drawings at 15 and the hooks at 16.

The basket 13 is disposed with its hooks 16 engaged over the ring 8, with the end portions 15 extending downwardly and the straight portions 14 lying horizontally and below the ring. Thus a bucket engaged within the ring will rest with its bottom upon the bottom of the basket and will be supported thereby. The provision of the eye 12 with the portion 9 engaged therethrough prevents longitudinal movement of the jaws 5 with respect to each other, and

eliminates any possibility of distortion of the ring with resultant loosening of the jaws as a result of uneven weight within the receptacle supported by the ring or by the basket 13 suspended therefrom.

The basket is removable from the ring, its hooks 16 being open for their ready disengagement from the ring, and when the device is to be used to support a sack, the basket is disengaged from the ring and a sack is connected therewith by double ended hooks 17 as shown in Fig. 3, or in any other suitable way.

The basket is especially designed for use when the bucket to be supported is of a size to pass completely through the ring. When a larger bucket is employed, the basket may be dispensed with and the bucket placed within the ring with its slanting wall portions engaging the ring. In such use, the taper of the bucket serves to expand the ring and hold the jaws all the more firmly clamped against the ladder leg.

What is claimed is:

1. A device of the class described comprising separable jaws, an expansible resilient ring having overlapped portions and lateral ends, said ends being secured to the jaws, one of said overlapped portions having an eye formed therein through which the other of said portions is slidably engaged and a receptacle supporting basket removably engaged with the ring and disposed in position to support a receptacle disposed within the ring.

2. A device of the class described comprising separable jaws, a resilient expansible ring having an end attached to each jaw, said ring extending laterally with respect to the jaws and being of a size to receive a bucket therewithin, and a bucket supporting basket having hooks removably engaged with the ring and lying in position to receive and support a bucket disposed within the ring.

3. A bucket supporting attachment for ladders comprising separable ladder engaging jaws, a resilient expansible ring having ends attached to the jaws and arranged to resist separation of the jaws and a removable bucket support hung from the ring and disposed to receive thereupon a bucket disposed within the ring.

In testimony whereof, I affix my signature, in the presence of two witnesses.

HENRY ALPEN.

Witnesses:
EDWARD C. KELLY,
F. H. MALLINEAUX.