J. N. FARNHAM.

LADDER ATTACHMENT.

APPLICATION FILED SEPT. 9, 1913.

1,115,420. Patented Oct. 27, 1914.

Fig. 1.

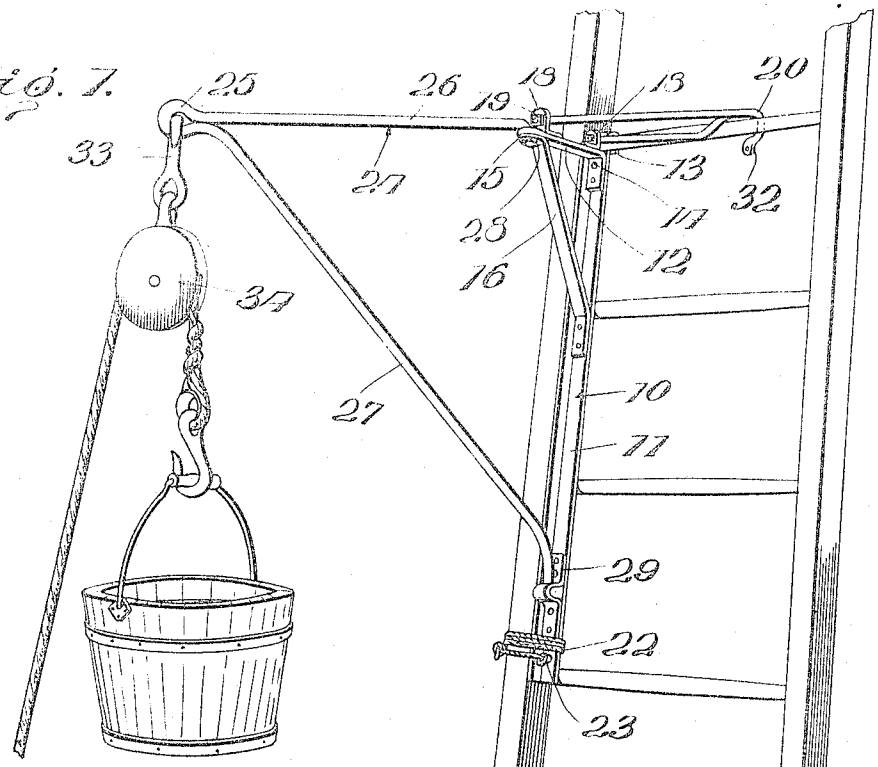


Fig. 3.

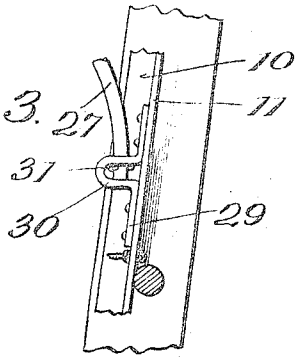


Fig. 2.

Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

JEREMIAH N. FARNHAM, OF ROCKLAND, MAINE.

LADDER ATTACHMENT.

1,115,420. Specification of Letters Patent. Patented Oct. 27, 1914.

Application filed September 9, 1913. Serial No. 788,916.

To all whom it may concern:

Be it known that I, JEREMIAH N. FARNHAM, citizen of the United States, residing at Rockland, in the county of Knox and State of Maine, have invented certain new and useful Improvements in Ladder Attachments, of which the following is a specification.

My present invention relates to new and useful improvements in attachments for ladders and more particularly to ladder brackets, being an improvement over the ladder bracket construction disclosed in Patent No. 1,066,892, granted to me July 8, 1913.

The primary object of my present invention is to provide a ladder bracket construction which may be more simply secured to the ladder, it being necessary to employ but one lashing instead of the three, previously employed. And a still further object of my invention is to simplify the construction of the swinging crane-arm and the manner of mounting the arm upon the body of the bracket.

With these and other objects in view, my invention will be more fully described, illustrated in the accompanying drawings, and then specifically pointed out in the claims which are attached to and form a part of this application.

In the drawing:—Figure 1 is a perspective view of my improved ladder bracket in use. Fig. 2 is a sectional view taken through the ladder showing the bracket in top plan. Fig. 3 is a fragmentary side elevation of the ladder bracket showing the lower bearing for the swinging crane-arm.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

My ladder bracket consists primarily of an L-shaped frame 10 adapted for attachment to a ladder, this frame being formed in two parts 11 and 12, the former part consisting of a strip of angle iron having one flange cut away at one end and the extending portion of the other flange rebent outwardly in spaced relation to provide a ladder rung engaging hook 13. The frame-member 12 is substantially L-shaped, being secured by its shorter arm to the cut-away flange of the member 11, adjacent the hook by rivets, bolts, or other fastening devices 14, and being formed at its free end with a perforation 15. A diagonally extending brace 16 strengthens the frame and prevents movement of the member 12 toward the member 11.

A V-shaped frame 17 has its ends laterally directed and passed through spaced apart upstanding ears 18 carried by the frame member 12 and secured in place by nuts 19 threaded upon the ends thereof, or by cotter pins in lieu of nuts. The frame 17 is preferably formed from two rods of metal welded together at one end and this juncture of the rods is extended and bent upwardly rearwardly and downwardly to provide a second ladder rung-engaging hook 20. That side member of the frame 17 extending adjacent the rung is off-set horizontally toward the rung, as shown at 21 in order that said side of the frame 17 may extend in parallel relation to the ladder rung upon which the bracket is supported.

It will be clear that when the above described frames comprising the main body of the ladder bracket are lowered into place they will bring the hooks 13 and 20 into engagement with the ladder rung and the frame will be held not only against downward movement but against all swinging movement as well. Furthermore, the frame cannot be freed from the ladder by any means except by bodily raising the frame to disengage the hooks. To prevent such possibility of disengagement the lower end of the frame member 11 is perforated to receive a lashing cord or cable 22 which may be lashed about the adjacent side of the ladder. This cord is preferably knotted as at 23 upon either side of the frame member 11 to prevent disengagement from said member, when not in use.

The swinging crane arm in my present ladder bracket construction is indicated as a whole, by the numeral 24, and is formed from a single rod bent intermediate its length to provide an eye 25 and having its ends extended at an angle to each other as shown at 26 and 27. The free end of the side member 26 is bent downwardly at right angles and passed through the eye 15, being secured against disengagement therefrom by a cotter-pin 28. A strip of metal 29 has its intermediate portion bowed to form a U-shaped bearing 30 and is secured by its end portions to the lower bar of the frame member 11 in such a man-

ner that the U-shaped member extends at an angle therefrom. The upper arm of the said U-shaped member is perforated to receive the lower end of the side 27 of the crane-arm 24 in such a way that said end will bear against the lower side of the U-shaped member. A cotter pin 31 is passed through the end portion of the side 27 between the sides of the U-shaped bearing member 30 to prevent disengagement of the lower part of the crane-arm 24. By this means the crane-arm is mounted for swinging movement between the free ends of the frame members 11 and 12.

The free end of the hook 20 is preferably provided with an eye 32 in order that the frame member 17 may be lashed to the ladder rung, if deemed necessary. The eye 25 of the crane arm is adapted to receive a hook 33 of any preferred form of block and tackle 34.

The operation of the above described ladder bracket is identical with that of the ladder bracket set forth in my earlier patent previously referred to, and will also be readily understood by reference to the drawing. For this reason no description of the same is deemed necessary.

The chief advantages of the above construction over that set forth in my previous patent, reside in the fact that the bracket may be secured to a ladder with one lashing, therefore accordingly shortening the length of time necessary to apply or remove the same and in the further fact that the frame member 17 and swinging crane arm 24 are simpler and more economical to manufacture than the corresponding parts of my old form of ladder bracket. I do not wish, however, to be limited to the specific details of construction shown and described, as various minor changes, within the scope of the appended claims may be made at any time without in the slightest degree departing from the spirit of my invention.

What I claim is:—

1. A ladder attachment including a body member provided at one end with a hook an arm extending laterally from the body member and braced thereto, a bearing bracket secured to the free end of the body member and including a horizontally disposed U-shaped intermediate portion, the upper part of which is provided with a perforation, a crane-arm mounted to swing in the free end of the laterally directed arm and having a diagonally extending brace member, the free end of which is passed through the perforation of the upper part of the U-shaped portion of the bearing bracket to engage against the lower part thereof, a pin passed through that part of said free end portion within the bearing bracket, and means for attaching the body member to a support.

2. A ladder attachment including an L-shaped body member, a ladder rung engaging hook carried by one arm of the body member adjacent its juncture with the other arm, a bearing bracket carried by the same arm carrying the hook, a crane arm swingingly mounted at one end in the free end of the other arm of the body member to swing in a plane parallel thereto, a diagonal brace extending from the free end of the crane arm and journaled in said bearing, the bearing taking up the thrust of the brace, and a second frame swingingly secured to that arm of the body member carrying the crane arm and terminating in a hook adapted to engage the same rung engaged by the first mentioned hook, the throat of said latter hook being directed at right angles to the throat of the former hook.

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

JEREMIAH N. FARNHAM. [L. S.]

Witnesses:

KELLEY B. CRIE,

IRA A. SIDLINGER.