W. J. LA FLEUR.

LADDER ROUND SUPPORT.

APPLICATION FILED SEPT. 5, 1907.

954,813. Patented Apr. 12, 1910.

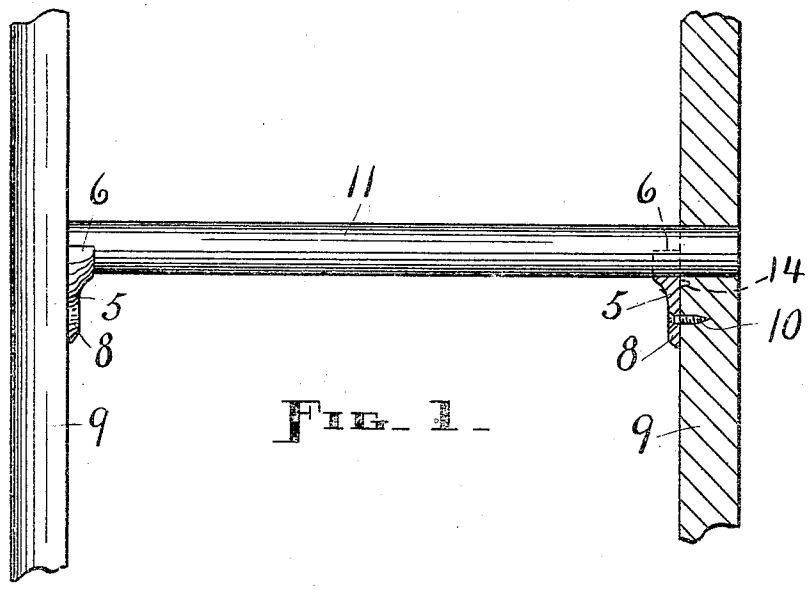

FIG. 1.

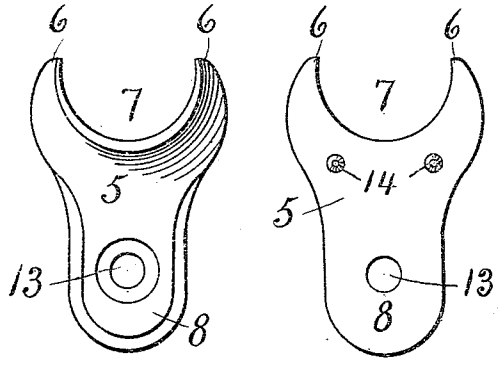

FIG. 2.

FIG. 3.

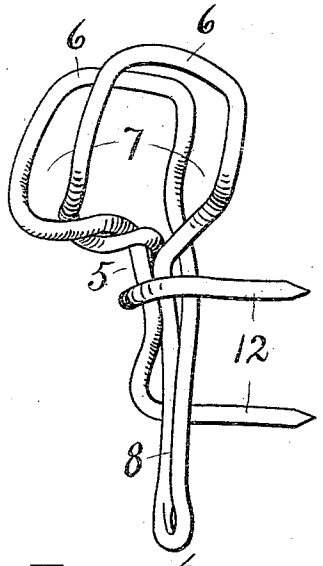

FIG. 4.

WITNESSES

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LADDER-ROUND SUPPORT.

954,813. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed September 5, 1907. Serial No. 391,418.

To all whom it may concern:

Be it known that I, WILLIAM J. LA FLEUR, a citizen of the United States of America, residing at Northampton, in the county of Hampshire and State of Massachusetts, have invented a new and useful Ladder-Round Support, of which the following is a specification.

My invention relates to improvements in devices designed to be attached to ladders for the purpose of supporting the rounds of the same at their points of junction with the side pieces or rails, and consists of a body part provided with upwardly-extending side pieces to form a stirrup for the round, and with a downwardly-extending shank adapted to be fastened to the rail, all as hereinafter set forth.

Although ladder rounds very seldom break in or near the center, they are quite liable to break adjacent to the rails of the ladder, such points being the weakest, and the object of my invention is to provide a strong, durable, simple, and inexpensive device which is adapted to be easily, quickly, and securely fastened to a ladder rail beneath that portion of a round which is contiguous to said rail and to thus support said round at one of its weakest points. Usually one of these supports is employed at each end of each round, but they may, of course, be used only where there are signs of weakness in the rounds. I attain this object by the means illustrated in the accompanying drawings, in which—

Figure 1 is a view showing portions of both rails and one round of a ladder with two of my supports in position, one of the rails and one of the supports being in section; Fig. 2, an enlarged front elevation of the support shown in the preceding view; Fig. 3, an enlarged rear elevation of said support, and, Fig. 4, a perspective view of a skeleton support constructed out of wire. Similar figures refer to similar parts throughout the several views.

The device shown in Figs. 1, 2 and 3 consists of a body 5 from the upper part of which extend two ears or side pieces 6 to form a stirrup 7, and from the lower part of which extends a shank 8 having a hole 13 therein. The stirrup 7 is substantially semi-circular to accommodate the round against the lower side of which said stirrup is to be placed. The back of the support, which bears against the inside face of the ladder rail to which said support is attached when in place, is flat except for two spurs 14. In practice, this device is placed against the inside face of a ladder rail below the round to be supported and brought up snugly against said round, and then it is secured by means of a nail or screw inserted in the hole 13, after first driving the spurs 14 into said rail. The end of the round so supported is practically insured against breaking, and with supports at both ends will last under ordinary conditions until literally worn out.

Although the presence of the spurs 14 is not imperative, when employed they are serviceable in holding the support in place while the screw 10 is being inserted, and they take some of the strain which otherwise would fall on said screw, thus enabling a shorter or lighter screw to be used. More or less than two spurs 14 may be provided, and the same is true concerning the prongs described below.

In the first view 9—9 represent the rails of a ladder to which two of my supports are fastened by screws assisted by the spurs 14, one of the screws appearing at 10, and 11 represents the round which said supports are intended to strengthen.

The support illustrated in the last view is made of a single piece of wire bent to bring into existence substantially the same elements as before, there being, however, two prongs 12 in place of the spurs 14. The prongs 12 extend to the rear and are to be driven into the ladder rail, for the purpose of holding the support in place beneath a round, in lieu of a screw and the spurs 14. This skeleton support is cheaper perhaps than the solid support, and can be attached to the ladder with somewhat less trouble possibly, although care must be exercised while driving the prongs 12 into the rail, by striking the bases of said prongs with a hammer, that the stirrup 7 does not bear away from the round against which it has been placed, but is left in contact therewith when the back of the support is tight against said rail.

Either style of the support is equal to the other so far as general efficiency and utility are concerned.

What I claim as my invention, and desire to secure by Letters Patent, is—

As a new article of manufacture, a ladder round support consisting of a wire bent to form a body part with stirrup-forming ears rising from such part and a shank extending below such part, the terminals of such wire being bent rearwardly and projecting back of said shank in the shape of prongs for fastening the support in position.

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