A. SCHREINER.

ROUND FOR LADDERS.

APPLICATION FILED OCT. 22, 1914.

1,162,950.

Patented Dec. 7, 1915.

Fig. 1.

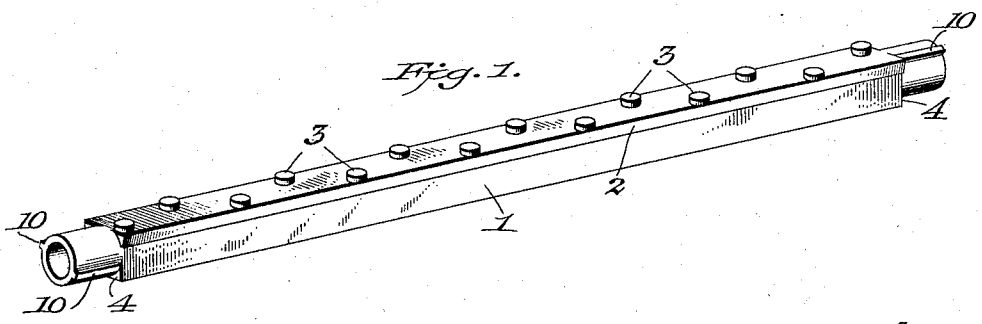


Fig. 2.

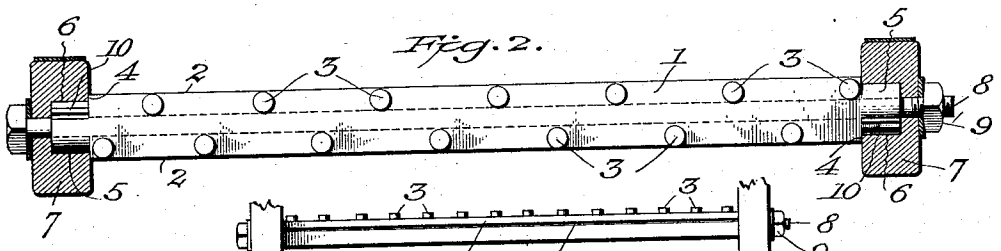


Fig. 3.

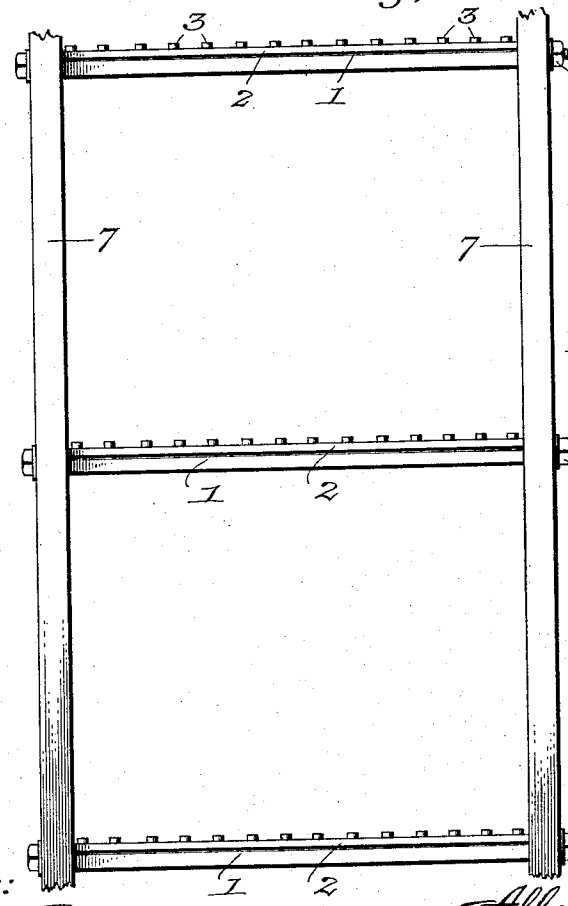


Fig. 4.

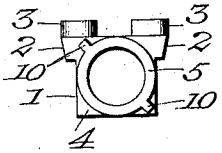
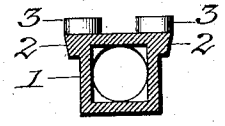


Fig. 5.



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UNITED STATES PATENT OFFICE.

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ROUND FOR LADDERS.

1,162,950. Specification of Letters Patent. Patented Dec. 7, 1915.

Application filed October 22, 1914. Serial No. 868,069.

To all whom it may concern:

Be it known that I, ALBERT SCHREINER, a citizen of the United States of America, residing in the city and county of Denver and State of Colorado, have invented new and useful Rounds for Ladders, of which the following is a specification.

This invention relates to improvements in rounds for ladders.

The objects of the invention are to provide a hollow round having a flat tread surface formed with projections which prevent slipping of the feet, the ends of said round being cylindrical, and adapted to extend partially through the side rails of the ladder, bolts being passed through the said rails and through the rounds to hold the rails in place, the ends of the rounds being provided with integral splines which prevent turning of the round in the rails. These objects are accomplished by the style of round illustrated in the accompanying drawing, in which:

Figure 1, is a perspective view of a ladder round constructed in accordance with my invention. Fig. 2, is a horizontal sectional view of a ladder equipped with the improved round and showing the manner of its attachment. Fig. 3 is a front view of a portion of a ladder equipped with the improved round. Fig. 4, is an end view of one of the rounds. And Fig. 5, is a transverse sectional view thereof.

Similar letters of reference refer to similar parts throughout the several views.

Referring to the accompanying drawings,—The numeral 1 indicates a hollow metal round which is preferably square in cross section. This round is provided along each of its upper edges with an integral laterally projecting longitudinal rib 2, which not only gives added width to the tread face of the round, but also increases the strength and rigidity of the round. The upper or tread face of the round is provided with spaced integral flat-faced projections 3, which may be of any shape, but are preferably round, and they extend in two rows along and flush with the longitudinal edges of the face, the projections in one row alternating with those in the other row. These projections are large enough and close enough together to afford ample support for the feet, and they also serve to prevent the feet from slipping.

The rectangular outline of the round terminates in abrupt shoulders 4, adjacent its ends, and the remaining short portions 5 are cylindrical. These short cylindrical portions are inserted in openings 6, in the sides or rails 7, of the ladder, the shoulders 4 bearing against the inner faces of the rails. The short portions 5 extend only partially through the side rails, and the rails are held in non-spreading relation against the shoulders 4, by bolts 8, which pass through the side rails and through the hollow rounds and receive clamping nuts 9.

The portions 5 of the rounds which enter the side rails are provided with integral splines 10, which are embedded in the rails in the act of inserting the rounds in the holes 6, and the splines prevent the rounds from turning.

The improved rounds are adapted to be used either with single or extension ladders. When used in connection with single ladders as illustrated in the drawings, the cylindrical or round portions of the rounds would be as shown; but when used in connection with extension ladders where the slidable member is provided with supporting hooks, the cylindrical portions of the rounds would be longer in order to receive the hooks of the slidable member.

In other respects, the rounds for both styles of ladders would be identical.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A round for ladders comprising a main portion which is rectangular in cross section, the end portions thereof being cylindrical and provided with integral splines.

2. The combination with metal ladder rounds the end portions of which are cylindrical and provided with integral splines, the remaining portions being rectangular in

cross section, of side rails in which said cylindrical ends are inserted, and bolts which pass through said rails and hollow rounds and receive clamping nuts.

3. A hollow metal round for ladders, the end portions of which are cylindrical, the remaining portion being rectangular in cross section, the tread face being slightly wider than the other faces, and provided with longitudinal rows of projections.

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

ALBERT SCHREINER.

Witnesses:
S. G. HAMLIN,
J. L. KILLIE.

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