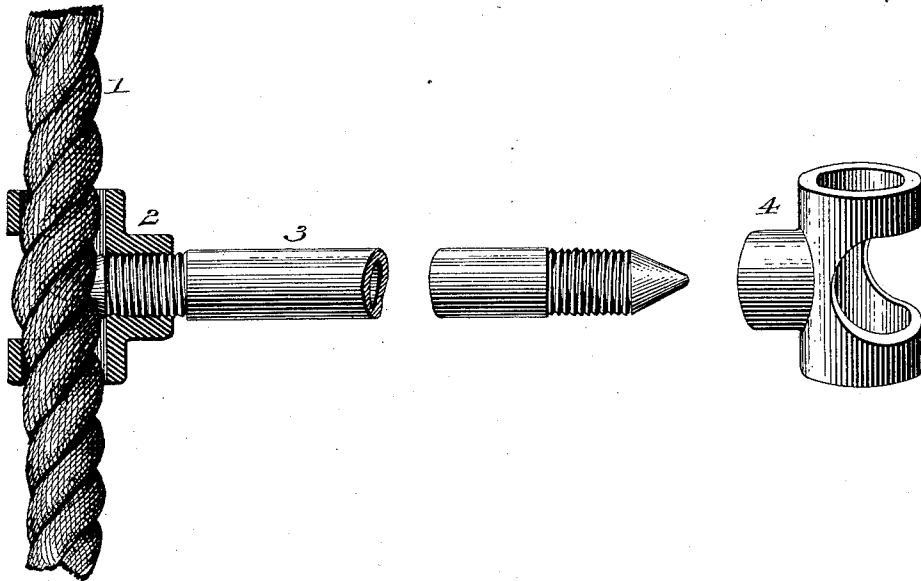


(No Model.)

C. J. HEIDMEYER.
ROPE OR WIRE CABLE LADDER.

No. 342,204.

Patented May 18, 1886.



Witnesses:

John Lehman
Henry Cooner

Inventor.

Conrad Joseph Heidmeyer

UNITED STATES PATENT OFFICE.

CONRAD JOSEPH HEIDMEYER, OF ALLEGHENY, PENNSYLVANIA.

ROPE OR WIRE CABLE LADDER.

SPECIFICATION forming part of Letters Patent No. 342,204, dated May 18, 1886.

Application filed July 20, 1885. Serial No. 172,167. (No model.)

To all whom it may concern:

Be it known that I, CONRAD JOSEPH HEIDMEYER, of the city of Allegheny, county of Allegheny, State of Pennsylvania, have invented new and useful Improvements in Flexible Ladders; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figures 1, 2, 3, and 4 are sectional views of the detached rope ladder.

This invention consists in the novel way to securely fasten a rundle or step to the upright ropes or wire cables that form the sides of a ladder.

The process of manufacture is as follows: 1 is an ordinary rope or wire cable of any desired thickness, depending on the strength of the ladder to be manufactured.

2 is a malleable iron casting, commonly called a "T," the opening for the rope in the same cast to fit any desired size of rope or wire cable, the connecting opening or outlet having a right-hand thread tapped therein to correspond with the thread cut on the end of the rundle or step of the ladder, the cylindrical part of this casting directly back of the outlet being cut away, leaving a ring extending around the top and bottom to clasp the rope or wire cable, the part cut away being for the purpose of giving the rope or wire cable room to expand on being forced apart by the tapered pointed rundle, also to give free access of air to the same in case the rope should get wet, also to keep the rope exposed to view, thereby preventing any accident which might result from the rope becoming worn out inside of a T having no part of it cut away, where a rope, should it become worn out, would be unseen and unknown to the person operating or using the ladder.

4 is a casting similar to 2, having a left-hand thread tapped in the outlet to correspond with a left-hand thread cut on one end of the rundle or step of the ladder.

3 is the rundle or step of the ladder, and is an ordinary piece of iron pipe, usually about one-half inch in diameter and about fourteen inches long, having the ends plugged and welded with a short piece of iron to fill the openings. The ends are then tapered down, each end having a smooth tapered point with the extreme end slightly rounded, so it may not cut the fibers of a rope when it enters the same. In addition to having each end tapered to a point each end has a thread cut thereon to correspond with the threads tapped in the outlets of 2 and 4, pipe being used instead of solid round bar-iron on account of it being much lighter and making the ladder when finished more portable.

To form the ladder have two ropes of any desired length, pass the T having a right-hand thread tapped in the outlet over one rope, pass the T having a left-hand thread tapped in the outlet over the other rope, screw in the rundle or step, starting both threads on or about the same time, and so continue on until any desired length of ladder is finished.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. A ladder rundle or step made of solid iron or a hollow piece of iron pipe having a right and left thread cut on opposite ends, each end being provided with a smooth tapered point, said ends being tapered for the purpose of entering between the strands of a rope or a wire cable, substantially as specified.

2. A malleable T-shaped iron with the cylindrical part back of the outlet cut away, leaving a ring or band extending around the top and bottom, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CONRAD JOSEPH HEIDMEYER.

Witnesses:

D. McKELVEY,
WM. H. STERRETT.