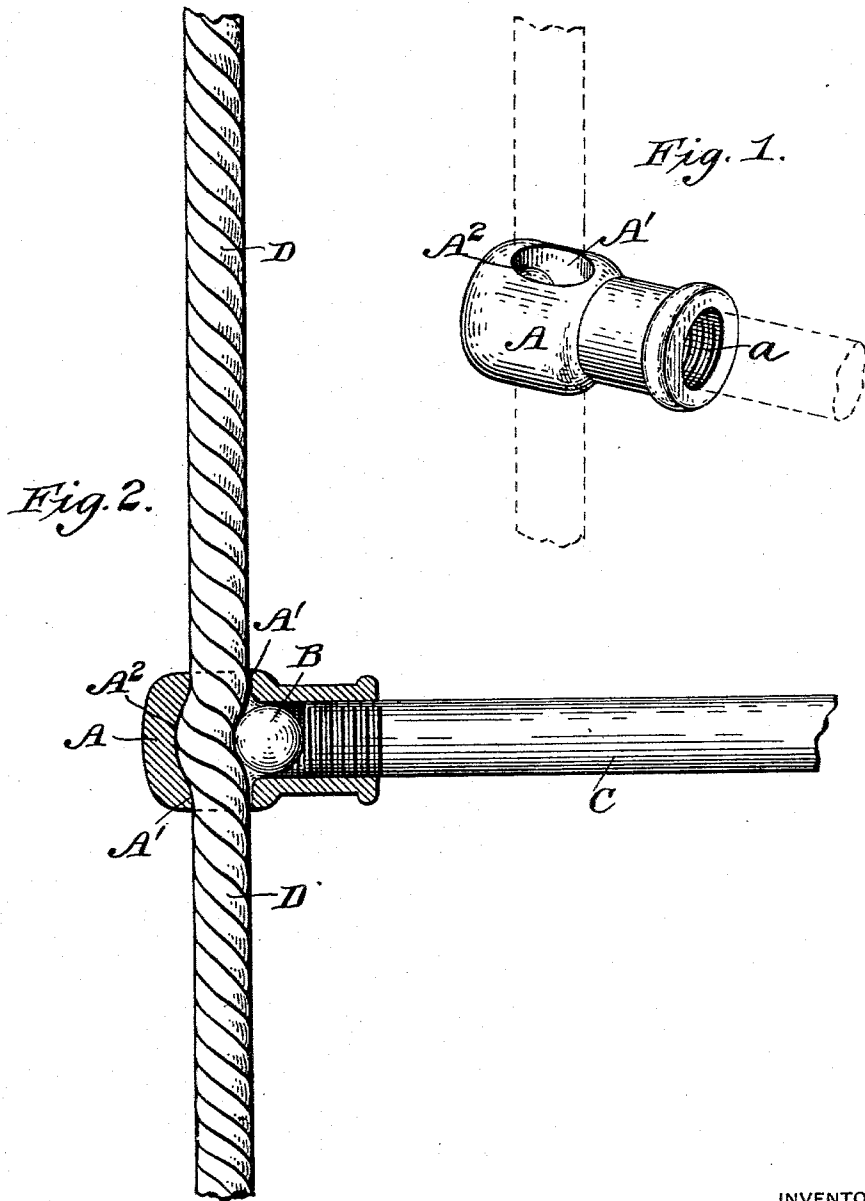


(No Model.)

A. CROSBY.
ROPE CABLE LADDER.

No. 531,784.

Patented Jan. 1, 1895.



WITNESSES

Everance
Charles R. McBride

INVENTOR

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by
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Attorney

UNITED STATES PATENT OFFICE.

AUGUSTINE CROSBY, OF WATERVILLE, MAINE.

ROPE-CABLE LADDER.

SPECIFICATION forming part of Letters Patent No. 531,784, dated January 1, 1895.

Application filed November 2, 1894. Serial No. 527,692. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTINE CROSBY, a citizen of the United States, residing at Waterville, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Rope-Cable 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 is closely allied to that which forms the subject matter of my application, Serial No. 513,891, filed June 7, 1894, and constitutes an improvement thereon for rope-ladder rung or round fastenings.

The said invention consists in the combination of a rung tip containing a movable ball and having a recess in the inner face of its opposite end opposite the said ball, the screwing of the rung into the said tip forcing the rope into the said recess and thereby bending and gripping the said rope so as to hold the rung in place.

In the accompanying drawings Figure 1 represents a perspective view of a rung tip or iron embodying my invention. Fig. 2 represents a longitudinal central section through the same the proximate parts of the rung and rope also being shown.

A designates a rung-tip or iron having a screw-threaded bore *a* to receive the end of the rung, a transverse passage *A'* for the rope and a recess *A²* of rounded form in the inner face of its outer end, opposite the said bore.

B designates a ball of metal or other hard material arranged within the said tip at the junction of the said bore and transverse passage. When the end of the rung C is screwed into the bore *a* it forces the ball B against the rope D, thereby pressing the said rope into the recess *A²* and bending it at this point so that it will be gripped firmly. As each end of each rung is provided with one of these tips or irons, the entire ladder is very securely held together.

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

1. In a rope ladder the combination with a rung and rope of a rung-tip or iron having a bore for the said rung a transverse passage for the said rope and a movable ball and rounded recess opposite the said ball, arranged and operating substantially as set forth.

2. As an article of manufacture a rung-tip having a movable ball arranged to receive the pressure of the end of the rung and a rounded recess opposite to the said ball in the inner face of the closed outer end of the tip substantially as set forth.

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

AUGUSTINE CROSBY.

Witnesses:

WALTER GETCHEL,
L. B. SPENCER.