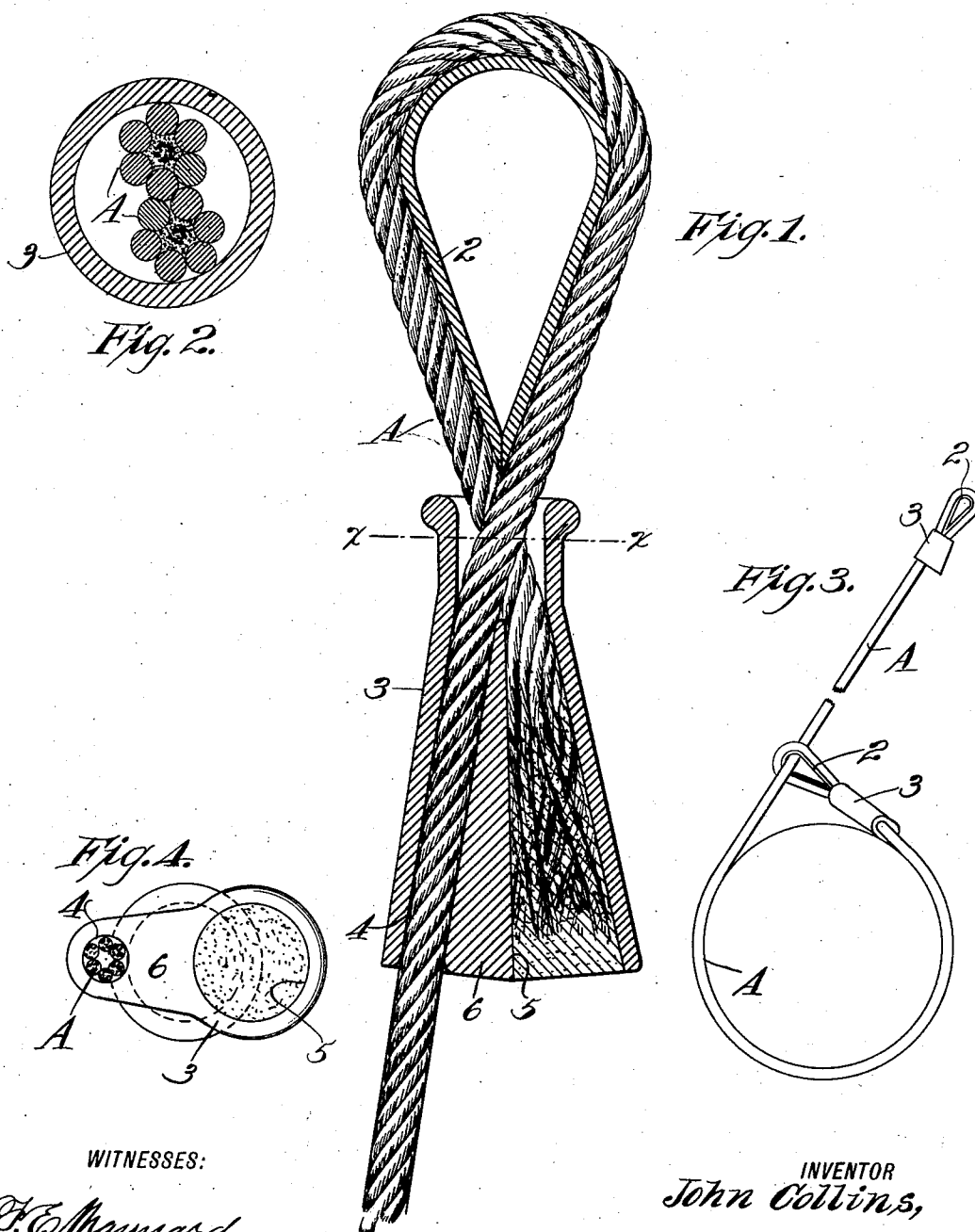


No. 849,832.

PATENTED APR. 9, 1907.

J. COLLINS.
SAFETY ROPE CLAMP.
APPLICATION FILED JUNE 13, 1906.



WITNESSES:

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JOHN COLLINS, OF SAN FRANCISCO, CALIFORNIA.

SAFETY ROPE-CLAMP.

No. 849,832.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed June 13, 1906. Serial No. 321,497.

To all whom it may concern:

Be it known that I, JOHN COLLINS, a citizen of the United States, residing at the city and county of San Francisco and State of California, have invented new and useful Improvements in Safety Rope-Clamps, of which the following is a specification.

My invention relates to a device for securing the ends of ropes, especially where the rope is turned about an open thimble which is designed to be retained securely in the bight thus formed.

It consists in the combination of parts and details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a sectional view showing my device as applied to a rope in conjunction with a thimble. Fig. 2 is transverse enlarged section through $x x$ of Fig. 1. Fig. 3 is a view showing the application to opposite ends of a rope to make a slip-noose. Fig. 4 is an end view of the device.

A represents a rope of any description.

2 is a thimble of the usual construction having a peripheral concaved groove or channel around which the bight of the rope is fitted, and 3 is the socket piece or device for interlocking the main portion of the rope and the end after the latter is passed around the thimble. This socket-piece 3 has made in it two channels or openings 4 5, whose walls taper in form from one end of the socket-piece to the other. These channels are separated by the convergent central diaphragm 6, this portion having walls converging toward the end where the two portions of the rope enter and to which the thimble is contiguous. The diaphragm 6 terminates a sufficient distance from the end of the socket-piece 3 so that the two parts of the rope A cross each other above the thin edge of the diaphragm and within the socket-piece 3. The advantages of crossing the rope in this manner are, first, that by crossing the rope the two parts of the rope are made to follow the diminishing end of the thimble and to fit snugly in its peripheral groove to its very point or termination without the need of any exterior means for producing such a result; secondly, the twist or lay of the rope is such that the strands of the two crossing parts of the rope follow each

other, and thus interlock, so as to hold these parts of the rope very firmly in position.

The opening 5, into which the terminal end of the rope passes, has its walls made divergent, and the strands of the rope being separated or broomed out will loosely fill this opening and may be very firmly locked in place by a plug which may be very suitably formed by pouring melted metal into the divergent opening to fill in a space around the strands. Wire ropes of this description are very generally used in logging, where it is desirable to form a running noose, so that the rope can be passed around a log or other part to be moved and power applied to the opposite end. For this purpose I apply a thimble and holding attachment to each end of the rope, the thimble at one end being sufficiently larger than that at the other end to allow the smaller one and its socket-piece 3 to easily pass through the larger one, as plainly shown in Fig. 3.

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

1. A rope-clamp having in combination a socket-piece whose inner wall diverges substantially from one end to the other, a diaphragm within said piece and dividing the interior of said piece into two channels, a thimble disposed near the smaller end of the socket-piece, said diaphragm extending from the larger inner end of the socket-piece to a point short of the smaller outer end, and a rope passing around said thimble and having its two parts entering the smaller outer end of the socket-piece, said parts of the rope crossing each other in the smaller end of said socket-piece above the outer end of the diaphragm whereby the strands of the rope interlock at their crossing-point.

2. The combination with a socket-piece having an internal diaphragm which divides its interior into two channels, the inner wall of the socket-piece diverging from substantially one end of the socket-piece to the other, said diaphragm having its outer end terminating within the socket-piece, a thimble disposed contiguous to the outer end of the socket-piece, and being made tapering in shape toward the smaller end of the socket-piece, and a rope passing around the thimble and having its two parts entering the smaller

or outer end of the socket-piece and crossing each other therein above the outer end of the diaphragm whereby the rope is fitted closely against the narrow end of the thimble and
5 the strands of the rope are interlocked within the socket-piece, one of said ends of the rope being expanded and wedged in its channel in the socket-piece substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN COLLINS.

Witnesses:

S. H. NOURSE,
C. H. HARVEY.