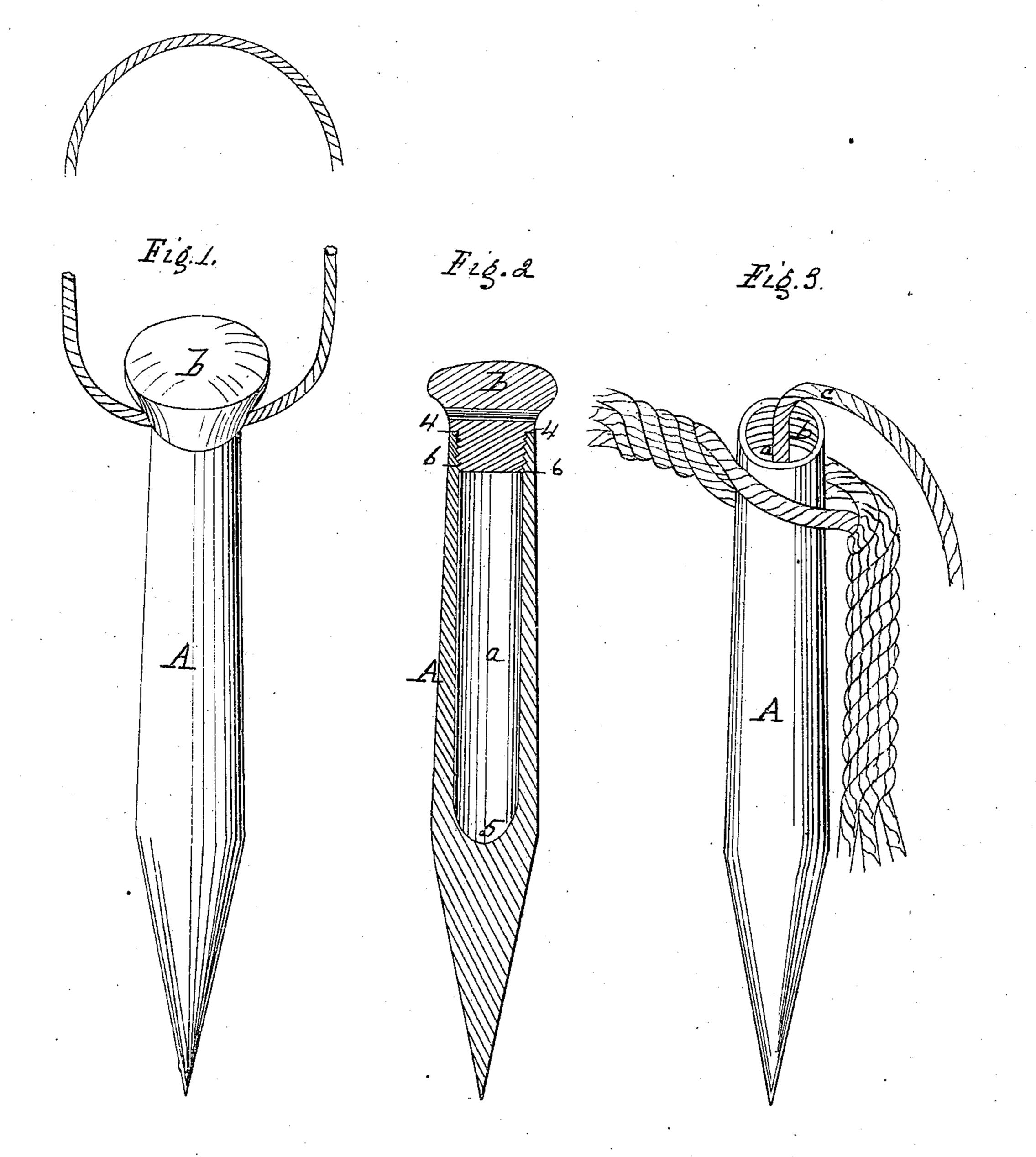
Frederick Fisher.
Marline Spike.

Nº92,296.

Patemed Inted 12/196. 1869.



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Fredrick Fisher Per his Attorneys Teschemacher & Staarns

## Anited States Patent Office.

## FREDRICK FISHER, OF ROCKLAND, MAINE.

Letters Patent No. 92,296, dated July 6, 1869.

## IMPROVEMENT IN MARLINE-SPIKES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, FREDRICK FISHER, of Rockland, in the county of Knox, and State of Maine, have invented certain Improvements in Marline-Spikes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a marline-spike,

of my improved construction.

Figure 2 is a longitudinal section, through the centre of the same.

Figure 3 illustrates the manner of using my im-

proved marline-spike.

Marline-spikes employed in splicing rope have heretofore been made solid (with or without an enlarged head) from a single piece of metal.

This construction, however, is objectionable for the

following reasons:

When the point of the marline-spike has been with-drawn from the opening which it has formed between the strands where the splice is to be made, the opening is apt to close before the end of the splicing-strand can be inserted, owing to the strong tendency exerted by the strands to recover their original twisted position, and it frequently happens that the opening has to be re-formed several times before the splicing-strand can be successfully interlaced and laid as desired.

Again, the end of the strand to be inserted within the opening, in the majority of cases, requires to be "whipped," in order to avoid the "fagging" or unravelling of the fibres; otherwise it would be extremely difficult to introduce it within the opening between

the strands of the rope.

To avoid the above-mentioned difficulties is the object of my invention, which consists in a marline-spike having the whole or a portion of its length made hollow for the reception of the end of the strand to be spliced between the strands of the main or standing portion of the rope, the marline-spike being provided, or not, with a separate head, which may be readily removed, so as to allow the remaining or chief portion of the marline-spike, with the end of the strand in its hollow portion, to be pushed entirely through the opening; the head, if one be employed, being provided with a hole for the passage of a lanyard, by which the marline-spike is suspended from the neck of the person using it.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the

manner in which I have carried it out.

In the said drawings-

A represents my improved marline-spike, the interior, a, of which, from 4 to 5, is made hollow, as seen in fig. 2, and is provided with a screw-thread, 6, near its top, for the reception of a corresponding thread on the lower portion of a removable head, b, having a hole for the passage of the ordinary lanyard, by which the marline-spike is suspended or carried.

These marline-spikes may be made of various sizes, to adapt them to ropes and lines of different

diameters.

When the operation of splicing is to be performed, the point of the marline-spike is inserted between the strands, and pressure is applied to the head b until the instrument is nearly forced through the opening, as seen in fig. 3, when the head may be removed, and the end of the strand c to be inserted, is laid into the hollow portion a, after which the instrument is drawn through, carrying the strand c with it into the desired position, and I am thus enabled to avoid the loss of time involved in "whipping" the strand and frequently making the opening in the rope through which it is to be passed.

By making my marline-spike hollow for a portion or the whole of its length, the quantity of metal therein is materially diminished, consequently rendering it lighter and more convenient to handle, and also

reducing its cost.

It is evident that any suitable catch or fastening may be employed, instead of a screw, for securing the head in place, and an opening for the lanyard may be made through the top of the head, instead of through its side, in which case, the end of the lanyard, after being passed through is knotted, or a swivelling eye may be attached to the top of the head, to prevent the lanyard from being twisted by the revolutions of the marline-spike.

## Claim.

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

A marline-spike, A, made hollow for a portion or the whole of its length, and provided or not with a removable head, substantially as and for the purpose described.

FREDRICK FISHER.

Witnesses:

N. W. STEARNS, W. J. CAMBRIDGE.