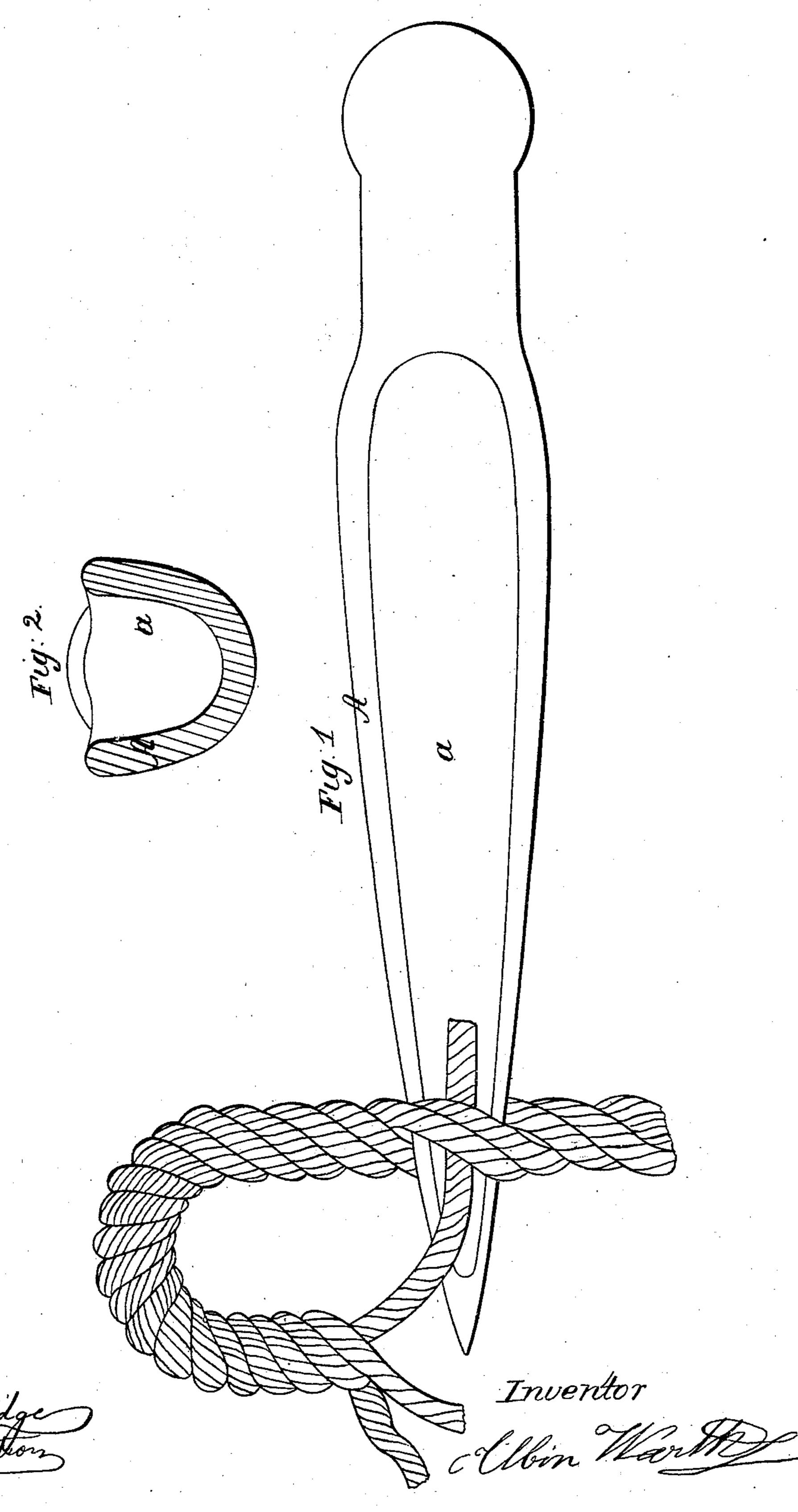
## Ship Implement.

JY938,034.

Pate nteat May 19, 1863.



Witnesses; Mr. S. Fartridge Daniel Robertson

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

## United States Patent Office.

ALBIN WARTH, OF STAPLETON, ASSIGNOR TO HIMSELF AND W. A. LILLIENDAHL, OF NEW YORK, N. Y.

## IMPROVED MARLINE-SPIKE.

Specification forming part of Letters Patent No. 38,634, dated May 19, 1863.

To all whom it may concern:

Be it known that I, ALBIN WARTH, of Stapleton, in the county of Richmond and State of New Yerk, have invented a new and Improved Marline-Spike; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a front elevation of my invention, showing its application to a rope. Fig. 2 is a transverse vertical section of the

same.

Similar letters of reference in both views

indicate corresponding parts.

This invention consists in the arrangement of one or more cavities in the surface of a marline-spike in such a manner that when the point of the spike is passed through a rope the end of the strand can be passed through the opening before the spike is withdrawn, and thereby the operation of splicing ropes is considerably facilitated.

Marline spikes of the ordinary construction consist of a solid round pointed tapering piece of iron or steel, and in using them for splicing ropes the point is passed through the rope, and thereby an opening is made through which a new cord or strand of the rope can be passed after the spike has been withdrawn. In drawing the spike out, however, the opening made by it closes up more or less, and it is always difficult to enter the end of the cord or strand, and it requires much practice and time to accomplish the operation. This difficulty is obviated by my invention.

My spike A is made with one or more cavities, a, on its surface, sufficiently wide and deep to allow of passing the strand through

the opening made by the spike before the latter is withdrawn, as clearly shown in Fig. 1 of the drawings. This spike can be made of malleable or wrought iron, or any other suitable material, and the cavity a must be made to extend as close to the point as possible. When two cavities are made in the surface, one opposite the other, the partition between the two cavities may be taken out entirely, leaving a slot through the center of the spike in a longitudinal direction, and for small ropes a spike of this description will answer. For large ropes, however, a spike with one cavitysuch as represented in the drawings—will answer best. It will retain sufficient strength to prevent its being broken by any accident, and when it is passed through a rope, and a cord or strand is laid into the cavity, as shown in Fig. 1, both the spike with the strand can conveniently be drawn through by pressing the thumb or finger on the end of the strand while the spike is withdrawn.

By the use of my improved marline-spike the time and labor required for splicing ropes are greatly reduced, and the operation can be carried out by a comparatively unpracticed person with greater facility than it can by an experienced person with the ordinary solid marline-spike.

What I claim as new, and desire to secure

The arrangement of one or more cavities, a, in the surface of a marline spike, constructed and operating substantially as and for the purpose herein shown and described.

ALBIN WARTH.

Witnesses:

M. S. PARTRIDGE, DANIEL ROBERTSON.