(No Model.)

F. M. MUNROE.

CLEAT.

No. 304,349. Patented Sept. 2, 1884.

FIG. 1.

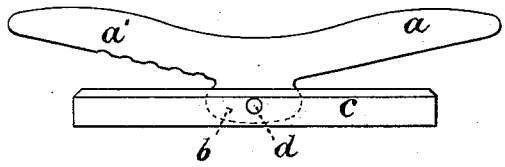


FIG. 2.

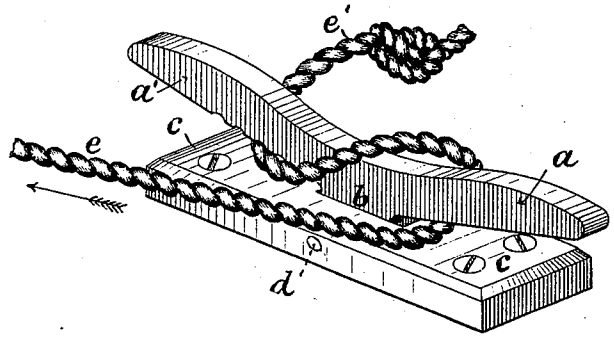


FIG. 3.

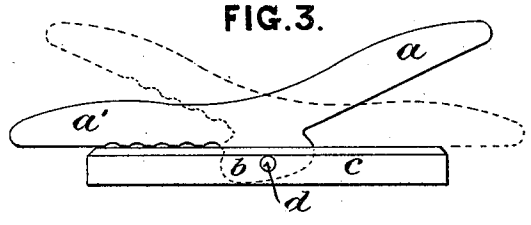
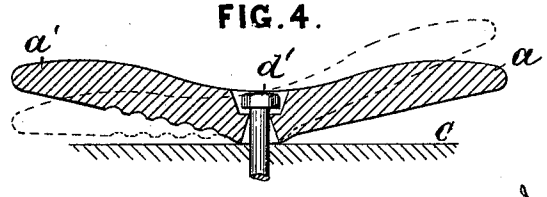


FIG. 4.



Witnesses.
E. Slauta.
Joseph A. Souby

Inventor.
Fredk M. Munroe
by J. H. Adams
Atty.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

FREDERICK M. MUNROE, OF CAMBRIDGE, MASSACHUSETTS.

CLEAT.

SPECIFICATION forming part of Letters Patent No. 304,349, dated September 2, 1884.

Application filed November 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK M. MUNROE, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Cleats, of which the following is a specification.

My invention consists in attaching the cleat at its center to its supporting post or piece, by means of a pivot or otherwise, in such a manner as to allow either arm to be moved toward or from the supporting-piece, so that when a rope is passed under one arm and crossed over the cleat, and then under the other arm, the force exerted upon the former will cause the last-named arm to bear upon and clamp the rope, and thus hold it securely, and the greater the tension upon the rope the more firmly will it be held.

Referring to the accompanying drawings, Figure 1 represents a side view of a cleat embodying my invention. Fig. 2 shows the invention as applied to a rope in use. Fig. 3 indicates the different positions the arms may assume, and Fig. 4 is a modification of the mode of pivoting the cleat.

a a' represent the two arms of a cleat, of which a projection, *b*, forms a part. This projection is fitted in a slot in a plate, *c*, and secured therein by means of a pin, *d*, so as to allow the cleat to rock freely. The plate *c* is to be firmly secured by screws or otherwise to a post, stanchion, or other object of support. The under side of one of the arms of the cleat may be roughened or corrugated, as shown at *a'*, in order to hold the rope more securely, if required, while the under part of the other arm, *a*, is smooth, so as to allow the rope *e* to slip toward the center.

In operation, the rope *e* being attached to any object causing tension, the end portion, *e'*, is passed under the arm *a;* then crossed over the center and passed under the opposite arm, *a'*, as shown in Fig. 2, and drawn taut. It will thus be seen that the tension upon the rope *e* will tend to raise the arm *a*, and consequently force the arm *a'* down upon that portion of the rope under it and hold it firmly; and the greater the tension of the rope *e* the more firmly will it cause the arm *a* to press upon the rope and prevent it from slipping. It will further be seen that the rope can be very easily hitched to and unhitched from the cleat, thus rendering it very desirable for use in yachts and other vessels.

In Fig. 4 the cleat is shown as attached to the plate *c* by a pin, *d'*, passing down through the center.

My invention may be applied to vessels of all descriptions having running rigging, and also to use in connection with awnings, heavy window-shades, flagstaffs, &c.

I am aware that cleats have been made that are pivoted near one end, and having one arm of the lever longer than the other, as shown in Patents Nos. 74,789 and 122,021. These I do not claim; but

What I claim as my invention is—

A double-acting cleat composed of arms *a a'*, each of equal length, and having at the center a projection, *b*, pivoted to a supporting-plate, *c*, as shown and described, in combination with the rope *e*.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK M. MUNROE.

Witnesses:

JOS. H. ADAMS,

ROBT. I. MELLEDGE.