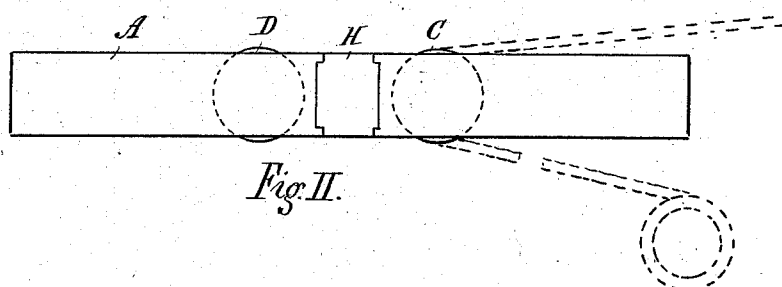
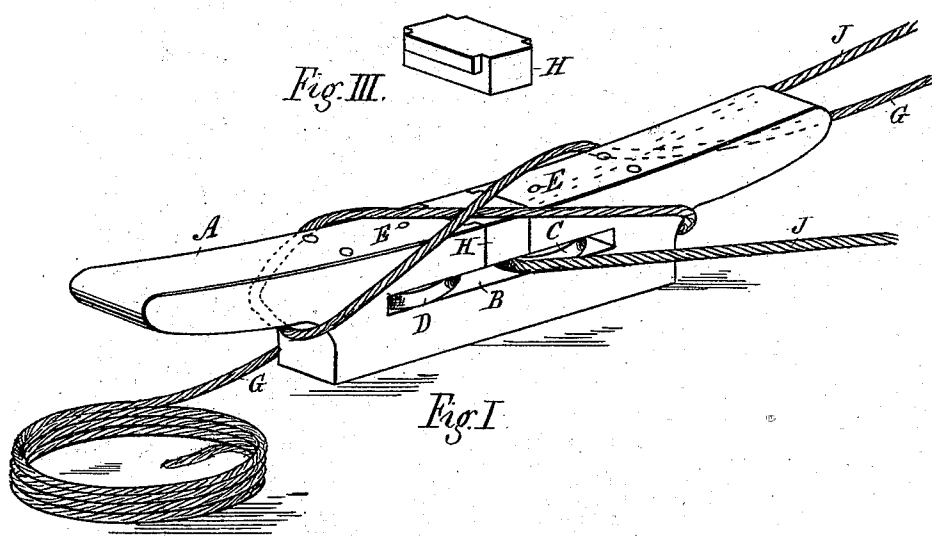


(No Model.)

M. J. FORAN.  
CLEAT.

No. 557,984.

Patented Apr. 7, 1896.



Witnesses  
R. S. Millar,  
Albert Beck

Inventor  
M. J. Foran  
By C. Bailey Atty.

# UNITED STATES PATENT OFFICE.

MICHAEL J. FORAN, OF CINCINNATI, OHIO.

## CLEAT.

SPECIFICATION forming part of Letters Patent No. 557,984, dated April 7, 1896.

Application filed July 23, 1895. Serial No. 556,942. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL J. FORAN, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Cleats, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of my improved cleat in engagement with a cable; Fig. 2, a plan view, and Fig. 3 a detail view.

The object of my invention is to provide an improved cleat for sail-vessels, steamers, and other water-craft.

The appliance in ordinary use consists of a strong piece of timber in the form of a cleat, which is permanently secured to the gunwale or deck of a vessel. When about to make a landing, a rope or cable is thrown ashore and made fast to a ring or post. The inner end is then passed around the horns of the cleat and the vessel or boat is drawn toward the desired position at a wharf or landing.

The cleat is also employed for easing off the tension upon a cable whenever the strain upon it seems too severe for its strength.

The purpose of my improvement is to modify the construction of the cleat in order to provide means whereby one or more additional cables may be applied with great advantage, as will be apparent by referring to the accompanying drawings, in which—

A represents the cleat, having an oblong horizontal cavity B extending through its center from side to side. Sheaves C D are suitably journaled near the ends of the cavity on spindles E.

The operation of the device will be readily understood. When a vessel is nearing a land-

ing or dock, the outer end of a cable G is fastened on shore in the usual manner, while the inner end is generally coiled around the cleat, as shown in Fig. 1. If by reason of a current or head wind the vessel should be driven below her landing-place, the block H, which is fitted into the top of the cleat, may be removed, so that the bight of the cable may be placed in the cavity and passed around the sheave C to a capstan, by which the vessel may be warped forward as far as required. If the cable G should have been coiled around the cleat in the first place, thereby closing the cavity, the end of an additional cable J may be run through the cavity, and being made fast on shore is operated by the capstan, as already described. If it be required to move the vessel in the opposite direction, the shore end of the cable is fastened to a point aft of the cleat and passed around the sheave D to the capstan.

The device will be found specially desirable and useful for towboats, enabling them to adjust their barges or flat-boats in any desired position.

What I claim as new is—

An improved cleat having an oblong slot B, in the body thereof, sheaves journaled at the ends of said slot, and a removable portion H, in the top of said cleat for the purpose of allowing a rope to be inserted, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 6th day of July, 1895, in the presence of witnesses.

MICHAEL J. FORAN.

Witnesses:

ALBERT BECK,  
ERNEST GREY.