(No Model.)

# P. BROWN.

## PIN RAIL ATTACHMENT FOR SHIPS.

No. 392,099. Patented Oct. 30, 1888.

Fig. 1.

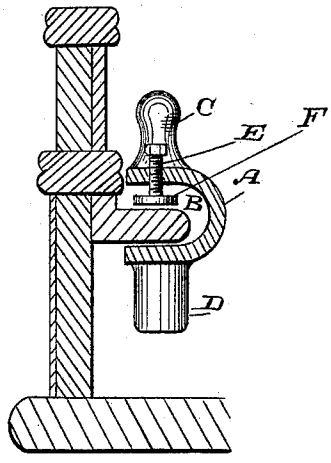



Fig. 3.

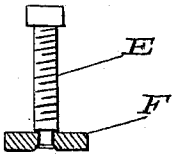
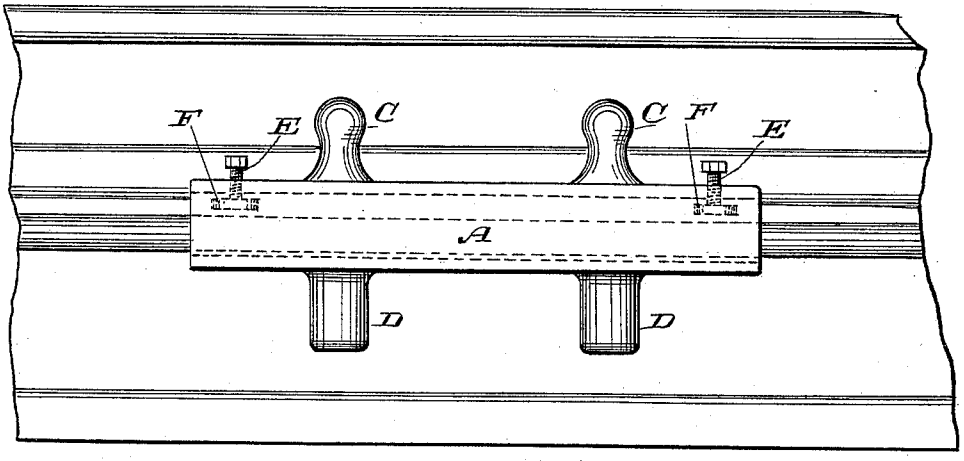



Fig. 2.




Witnesses,
Geo. H. Strong.
J. A. Sours Jr.

Inventor
Philip Brown.
By Dewey & Co.
Attys

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

# UNITED STATES PATENT OFFICE.

PHILIP BROWN, OF SAN FRANCISCO, CALIFORNIA.

## PIN-RAIL ATTACHMENT FOR SHIPS.

SPECIFICATION forming part of Letters Patent No. 392,099, dated October 30, 1888.

Application filed August 8, 1888. Serial No. 282,259. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP BROWN, of the city and county of San Francisco, State of California, have invented an Improvement in Pin-Rail Attachments; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an adjustable belaying-pin attachment for the pin-rails of vessels.

It consists of a casting having a channel made in one side to fit upon the pin-rail and vertical projections extending above and below the casting for the purpose of belaying or fastening a rope, and in combination with this of set-screws by which the device is locked upon the rail at any desired point without reference to any holes or perforations therein.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a vertical section of the bulwark of a vessel, showing also the pin-rail and my attachment. Fig. 2 is a front view of my attachment. Fig. 3 is a section of the washer, showing the countersunk bottom.

Hitherto various devices have been employed especially for the purpose of controlling the tackle which is used in unloading vessels, one of these consisting of a belaying device or drum secured to a spar which is lashed to the rail of a vessel; another of a device secured to the monkey-rail, and another of a horizontally-journaled drum having a clamp which is secured to the pin-rail by the pin passing through it and the rail. My device consists of a solid casting having vertical cylindrical pins or projections formed integral with it, and extending both above and below, so that the rope may be belayed upon these pins in the usual manner, and by reason of the friction it can be held with very little power, and is especially useful in wet weather, when the parts are all slippery from moisture. This device has a horizontal channel on the inner face, which enables me to secure it by means of set-screws and washers at any desired point upon the rail without reference to pin-holes or specially-formed attachments.

A is the casting, which is formed with the channel B to fit over the inner edge of the pin-rail. This casting is of such length as to have two upwardly-projecting posts or pins, C, of suitable diameter, having round heads, and below are two similar posts or pins, D, the lower ends of which are nearly or quite flat, so that the meeting of the perpendicular sides with the lower ends forms a right angle, as shown. By this construction when the rope is rapidly thrown upon the pins in the usual method of belaying there is no danger of its slipping off, and, having been turned about the pins, it forms a frictional hold, which enables the operator to easily hold it in any one position, or to allow it to slip as much as may be desired without losing control of it.

In order to secure this device at any point upon the pin-rail without perforations or prearranged fastenings on the rail, I employ set-screws E, which pass through the upper flange of the casting A and have their lower ends enlarged to fit into the countersunk holes in the plates or washers F. These plates rest upon the top of the pin-rail, and when the screws are turned the plates or washers remain stationary, the screws turning loosely within them, so that while they bind with any degree of force upon the pin-rail they do not indent or mar the surface.

The belaying pins or posts C and D lie within the vertical plane of the inner edge of the pin-rail, which relieves the casting A of the twisting strain which would be brought upon it to wrench it from the pin-rail if the belaying device projected at right angles from its inner edge.

Having thus described my invention, I do not claim, broadly, a movable attachment to pin-rails; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. A casting, A, having a channel, B, in one side to fit over the edge of the pin-rail, the vertical posts C and D, forming part of and extending above and below the casting, and set-screws for holding the casting at any point upon the pin-rail, substantially as and for the purpose herein described.

2. The channeled casting A, having the vertical posts C and D cast integral with it and

extending above and below it within the plane of the edge of the rail, as shown, in combination with the set-screws E, passing through the upper flange of the casting, and the washers F, in the lower ends of which the set-screws turn, substantially as herein described.

In witness whereof I have hereunto set my hand.

PHILIP BROWN.

Witnesses:
W. F. MURRAY,
S. H. NOURSE.