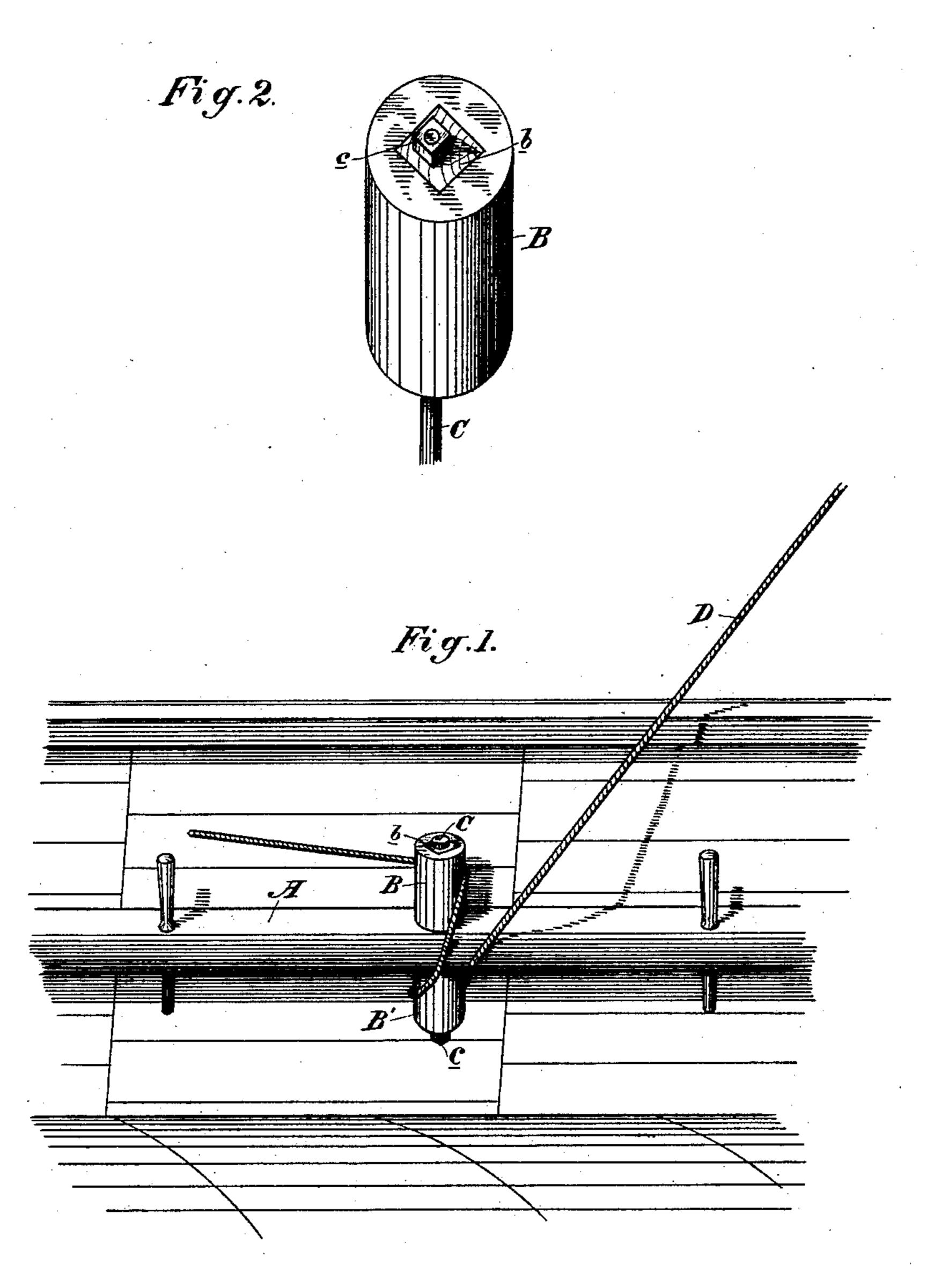
(No Model.)

## J. McKEON.

## PIN RAIL ATTACHMENT FOR VESSELS.

No. 360,535.

Patented Apr. 5, 1887.



Witnesses, Geo. H. Strong. G. H. Annse, John McKeon By Dewy 160.

## United States Patent Office.

JOHN MCKEON, OF SAN FRANCISCO, CALIFORNIA.

## PIN-RAIL ATTACHMENT FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 360,535, dated April 5, 1887.

Application filed June 25, 1886. Serial No. 206,274. (No model.)

To all whom it may concern:

city and county of San Francisco, State of California, have invented an Improvement in Pin-5 Rail Attachments; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of attachments to the pin-rails of vessels which are used 10 for guiding the lower end of the tackle known as the "burton," which is used in unloading; and my invention consists in cylinders or drums above and below the pin-rail, and secured thereto by means of a bolt passing through 15 them and through the intervening pin-rail.

My invention further consists in the peculiar construction of these drums or cylinders and the means for fastening them in place, all of which I shall hereinafter fully describe.

When a vessel is being unloaded, there is rigged up to the end of the yard, which extends over the side of the vessel, a tackle which is usually called a "burton." One end of this is attached to the fall of the engine or lifting 25 rope, and it is customary to pass the other end back and forth over one or more belaying-pins in the pin-rail. The object of the burton is to guide the load over the side and slack it away. This is done by the workmen hauling 30 in the slack of the burton as the load is hoisted and slacking away again when in the proper position to be lowered. When the end of the burton is passed back and forth over the belaying-pins, there is so much friction caused 35 by its constant and necessary slipping that the rope wears out in a very short time, and a fresh one or a fresh piece has then to be rigged up. This occasions considerable expense and loss of time.

It is the object of my invention to obviate this difficulty by providing a bearing-surface, upon which the end of the burton is guided and slips, of such a character as to reduce the friction, and thereby save the rope.

A further object is to provide a device which can be readily and quickly placed in position.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view showing my at-50 tachment in position. Fig. 2 is a view of one of the drums.

A is the pin-rail of a vessel, having the usual 1

| holes for the belaying-pins. B is a drum or Be it known that I, John McKeon, of the | cylinder standing in a vertical position on the upper surface of the pin-rail.

B' is a second drum or cylinder, in a verti-

cal position, just under the pin-rail.

C is a bolt which passes down through the centers of both cylinders or drums and through the belaying-pin hole in the intervening pin- 60 rail. A nut, c, on the end of the bolt, provides for the tightening up of both drums in such a way that they are bound firmly against the pin-rail and securely held in position.

D is the guide-rope or burton, which is 65 passed around the two cylinders or drums in the manner shown or in other ways. The remainder of the rope, though not here shown, is supposed to be rigged properly to the yard and to be attached to the fall of the engine- 70 rope.

It will be seen that there is but little friction in the slipping of the burton on the two drums, and their use is a great advantage over the belaying-pin, which is generally used, and which 75 is so small in diameter as to cause great friction. The drams or cylinders may be readily removed by taking out their securing-bolt. They do not mar the pin-rail of the vessel, nor are they in the way when in use. In Fig 2 I 8c show a peculiar construction of these drums or cylinders, which enables me to properly adjust the position of either or both with relation to the pin-rail. The bolt C, which holds them to the rail, may of course pass through 85 holes made in the center of the drums or cylinders themselves, or they may be secured in the position shown by other means. If the hole is just of a diameter sufficient to receive the bolt, then it is obvious that the drums will go have but one position—namely, in the vertical plane of the belaying-pin hole in the rail; but it is sometimes necessary to set one or both farther out or in, and for this purpose I make a large hole through the drums and fill in said 95 hole with a removable core, b, preferably of wood. If, when about to be adjusted, I find that the drums should occupy the regular position on the pin-rail, I bore the wooden core b through the center; but if I find that one or 100 both of the drums must be set out or otherwise varied in position with relation to the hole in the pin-rail, I bore the wooden core to one side of the center. In case but one drum

has to be varied in position, I may have a bent or crooked bolt for securing the drums.

Having thus described my invention, what I claim as new, and desire to secure by Letters

5 Patent, is—

1. An attachment for the pin-rails of vessels, consisting of independent cylinders or drums, and a bolt passing through them, whereby they are secured above and below the pin rail, sub-10 stantially as herein described.

2. In combination with the pin-rail of a vessel, the drums BB', above and below said rail, and the bolt C, passing through said drums or cylinders and the hole in the intervening rail, 15 and secured by a nut, whereby said drums or

cylinders are fastened to the rail, substantially as herein described.

3. The drums or cylinders B B', arranged above and below the pin-rail of a vessel, said drums or cylinders having a removable core, 20 b, and the bolt C and nut c, by which the drums or cylinders are secured to the pin-rail, substantially as herein described.

In witness whereof I have hereunto set my

hand.

JOHN McKEON.

Witnesses: WM. F. BOOTH, S. H. Nourse.