

(No Model.)

A. F. SPEAR.

DRUM ATTACHMENT FOR PIN RAILS.

No. 337,029.

Patented Mar. 2, 1886.

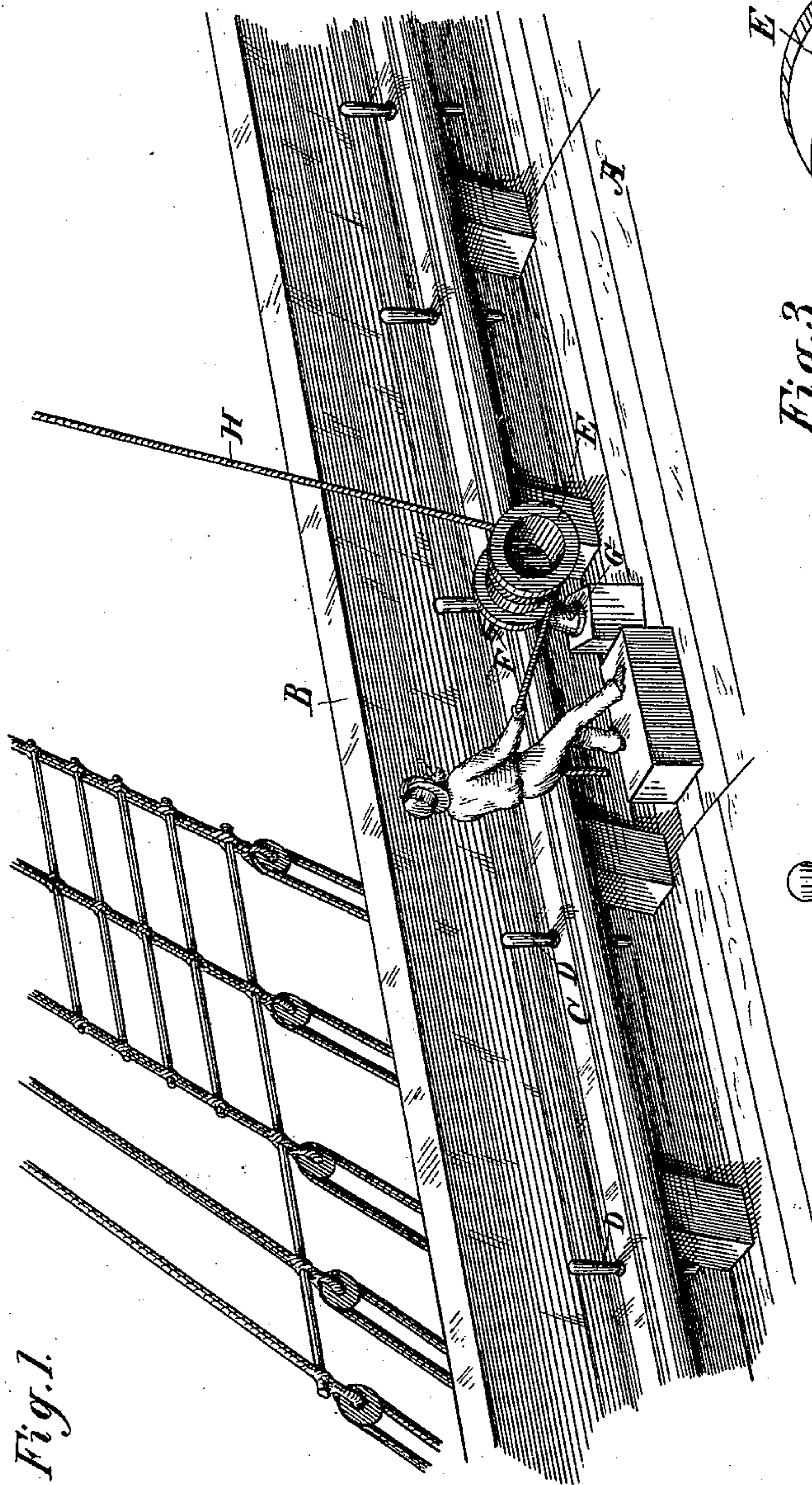


Fig. 1.

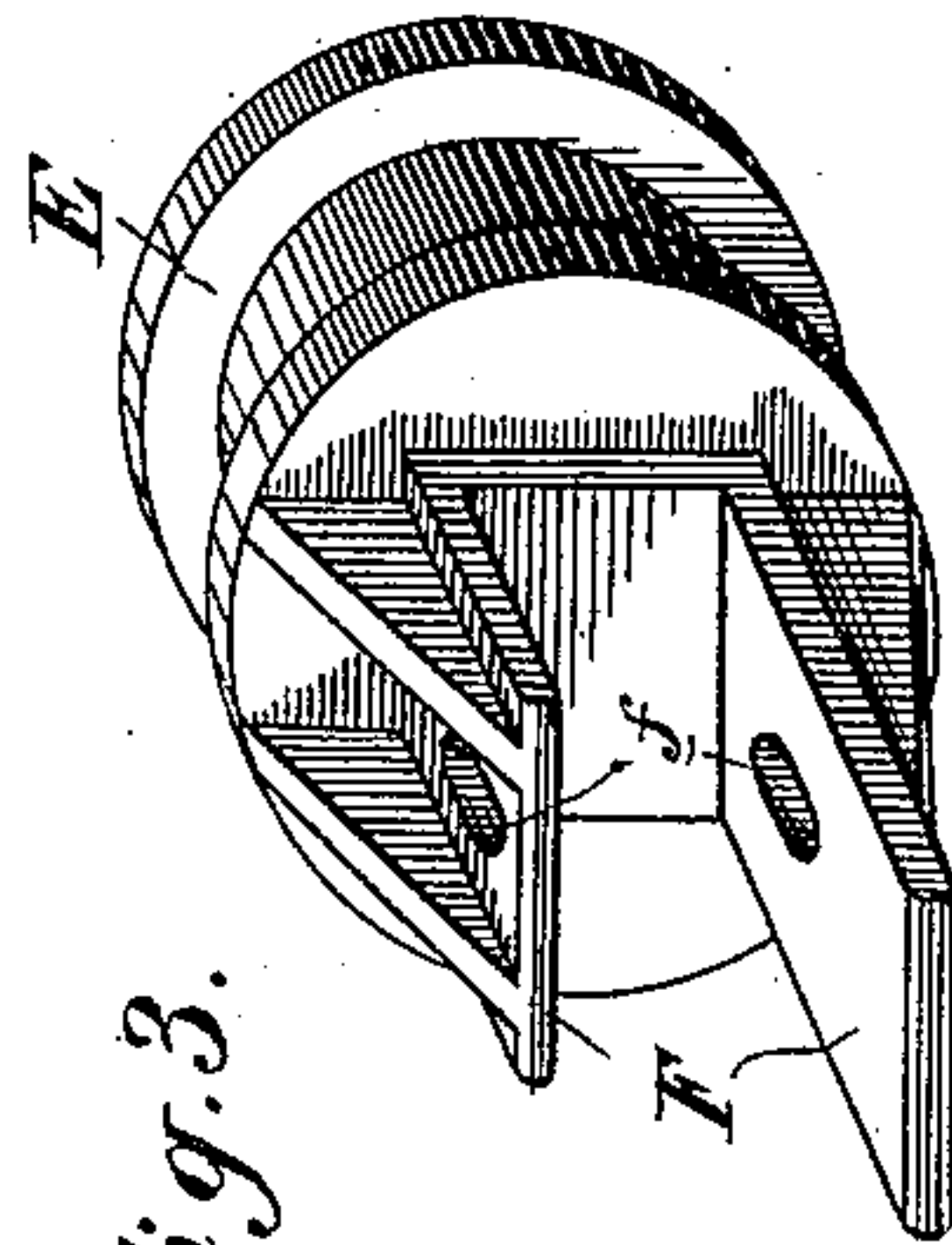


Fig. 3.

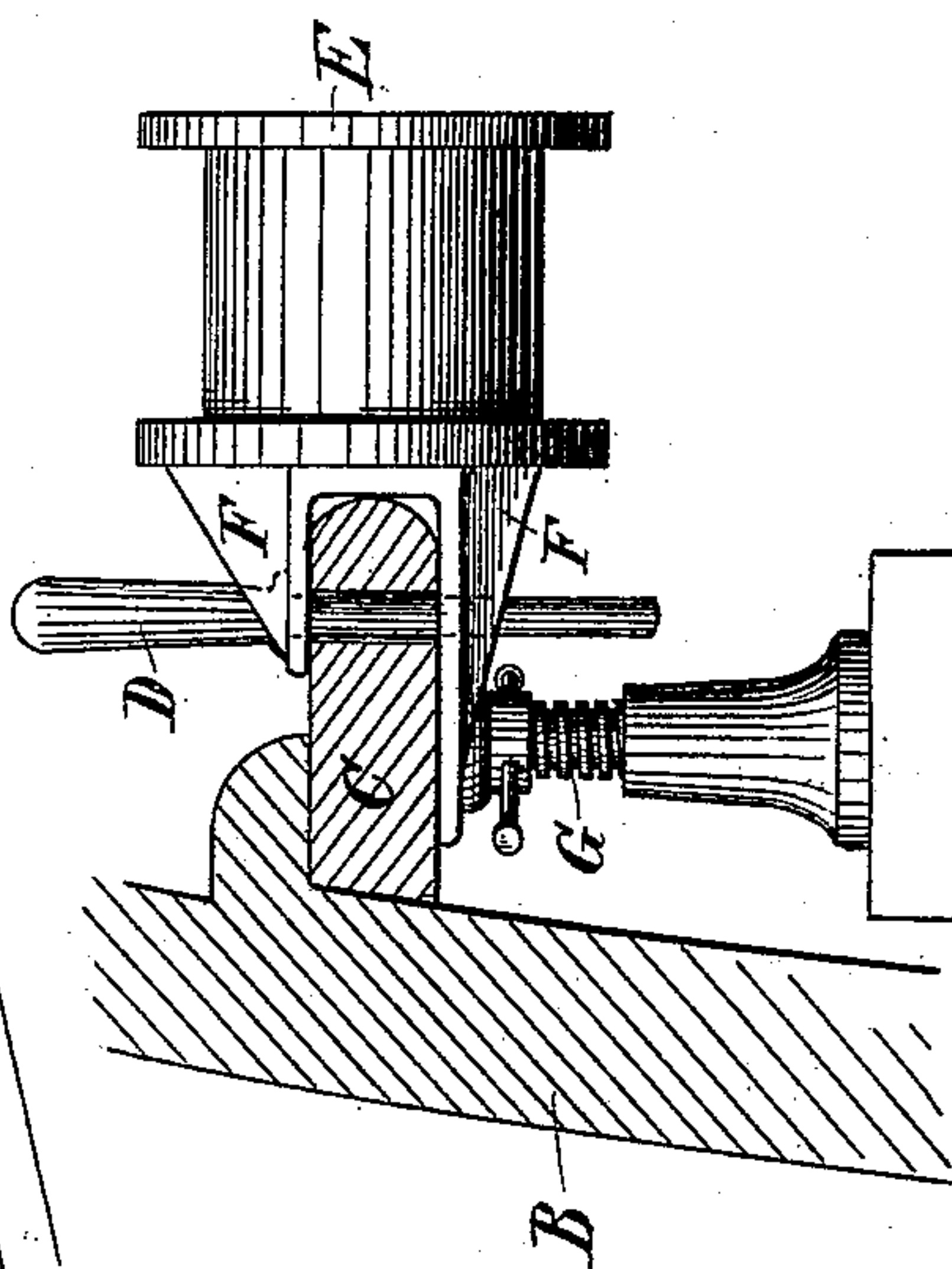


Fig. 2.

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UNITED STATES PATENT OFFICE.

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DRUM ATTACHMENT FOR PIN-RAILS.

SPECIFICATION forming part of Letters Patent No. 337,029, dated March 2, 1886.

Application filed November 17, 1885. Serial No. 183,143. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER F. SPEAR, of the city and county of San Francisco, and State of California, have invented an Improvement in Drum Attachments for Pin-Rails; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a new and useful drum attachment for the pin-rails of vessels; and my invention consists in a cylindrical piece or drum and means for attaching it readily to the pin-rail.

It consists, further, in novel means for attaching and holding it, comprising a clamp on one end, secured by a pin passing through it and the pin-rail, and a jack-screw bearing under the lower arm of said clamp, all of which I shall hereinafter fully describe.

In unloading a vessel there is rigged up to the end of the yard which extends over the side, a tackle known as a "burton," one end of which is attached to the fall of the engine or lifting-rope, and the other end is usually passed back and forth over several belaying-pins in the pin-rail, which is protected by a bent plate, called a "rail-box." The function of the burton, as is well known, is to guide the load over to the side and slack it away, and this is done by the operator hauling in the slack of the burton as the load is hoisted, and slacking away again when in proper position to be lowered. So much friction is caused by the burton slipping on the belaying-pins that it wears out in a short time, and is rendered useless. A new rope, or as is generally the case, a fresh portion of a whole coil of rope, has to be then rigged up. There is, therefore, considerable expense resulting from this frequent wear of the burton.

It is the object of my invention to obviate this expense by providing a drum for the guiding-rope or burton, which takes the place of the ordinary rail-box, and is adapted to be readily and quickly placed in the most convenient position—namely, on the pin-rail.

Referring to the accompanying drawings, Figure 1 is a perspective view showing a portion of the bulwark and deck of a ship, with the drum secured to the pin-rail and a portion of the guide-rope or burton. Fig. 2 is a cross-section through the pin-rail, showing the attachment of the drum thereto and the

jack-screw for holding it. Fig. 3 is a perspective view of the drum, showing the clamp upon its inner end.

A is the deck, and B the bulwark of a vessel.

C is the pin-rail, and D the belaying-pins therein.

E is a smooth-surfaced drum, on one end of which is formed or secured the clamp F, consisting of two separated arms having elongated holes or slots *f* made therein. The clamp embraces the pin-rail, as shown clearly in Fig. 2, while one of the belaying-pins D is passed through the holes of the clamp. The holes are made elongated, for the purpose of adjusting the clamp to various pin-rails, as the pins in some of the rails are farther in than those in other rails, and therefore by having the elongated holes in the clamp the pin may pass through them without any trouble.

G is a jack-screw, the upper end of which bears under the clamp, the under surface of which should be slightly roughened, and is tightened up so as to bind said clamp firmly to the pin-rail, and thus to hold the drum solidly.

H is the guide-rope or burton, which is passed one or more times, as may be required, around the drum. 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-rope. It will be seen that the rope in slipping back and forth on the drum is not subjected to much friction, and will therefore last a long time. By loosening the jack-screw and removing the belaying-pin, the drum may be taken from the pin-rail and as easily replaced when necessary. I am aware that a drum has been used for this purpose, but it is not attached in the same manner nor in the same place as mine, both points of difference resulting in a disadvantage in the use of the former. It is located on the monkey-rail, and has an arm projecting from it, which is chained at the outer end to the channels of the vessel and at its inner end to the pin-rail. This location and manner of attachment renders it very hard to adjust, and much time is lost in fixing it.

Having thus described my invention, what

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

1. An improved drum attachment for pin-rails, consisting of a cylinder or drum to receive the guide-rope, and provided at one end with a pair of jaws extending parallel with each other and adapted to embrace the pin-rail, said jaws having each a perforation to receive the belaying-pin when in the pin-rail, substantially as described.

2. The drum E, having upon one end the clamp F, adapted to embrace the pin-rail of a vessel, and the pin D, passing through holes in the arms of said clamp and through holes in the rail, substantially as herein described.

3. The drum E, having upon one end the clamp F, provided with elongated holes f, said clamp being adapted to embrace the pin-rail and to receive the belaying-pin of said

rail through its holes, substantially as herein described.

4. In combination with the pin-rail of a vessel, the drum E, having upon one end the clamp F, embracing the pin-rail, and the jack-screw G, binding the clamp against said rail, substantially as herein described.

5. The combination of a pin-rail, C, of a vessel, having a belaying-pin, D, the drum E, having a clamp, F, upon one end, embracing the pin-rail and receiving the belaying-pin, and the jack-screw G, binding the clamp to the pin-rail, substantially as herein described.

In witness whereof I have hereunto set my hand.

ALEXANDER F. SPEAR.

Witnesses:

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H. C. LEE.