(No Model.)

S. H. & C. E. MANNERS.

ROPE HOLDER.

No. 334,878. Patented Jan. 26, 1886.

Fig. 1.

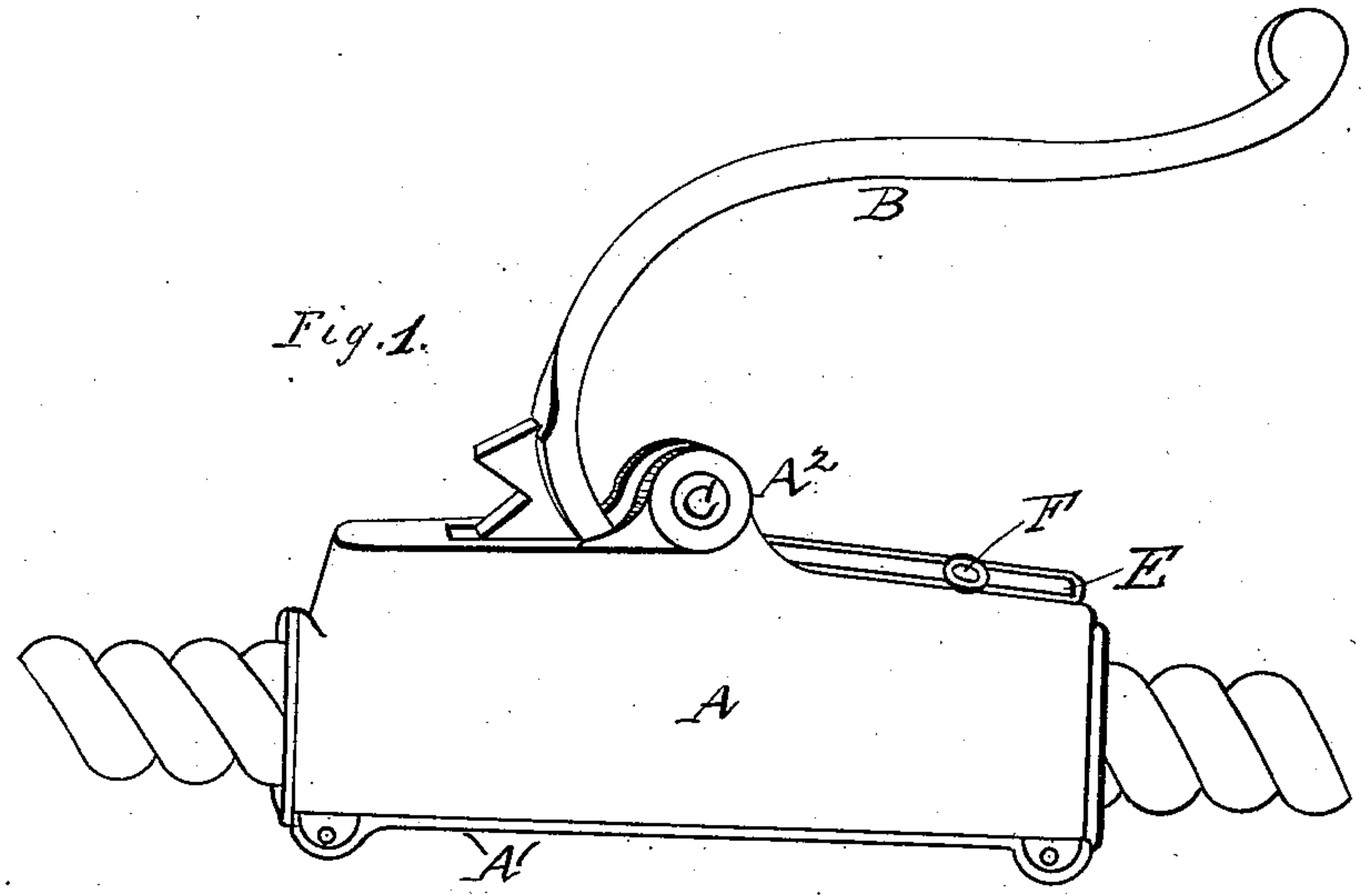
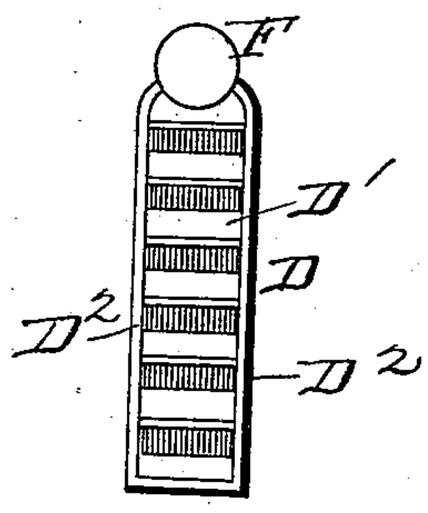


Fig. 3.

Fig. 5.



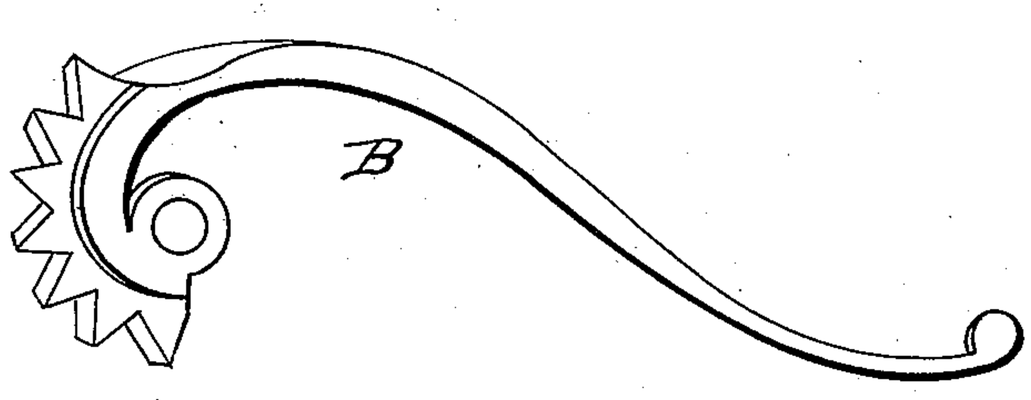


Fig. 4.

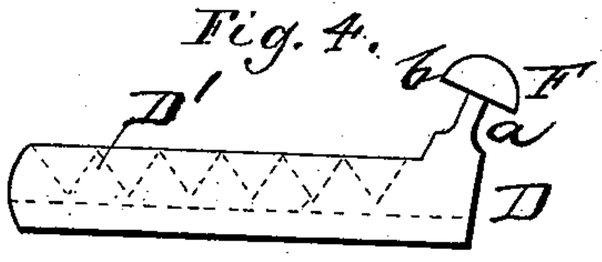
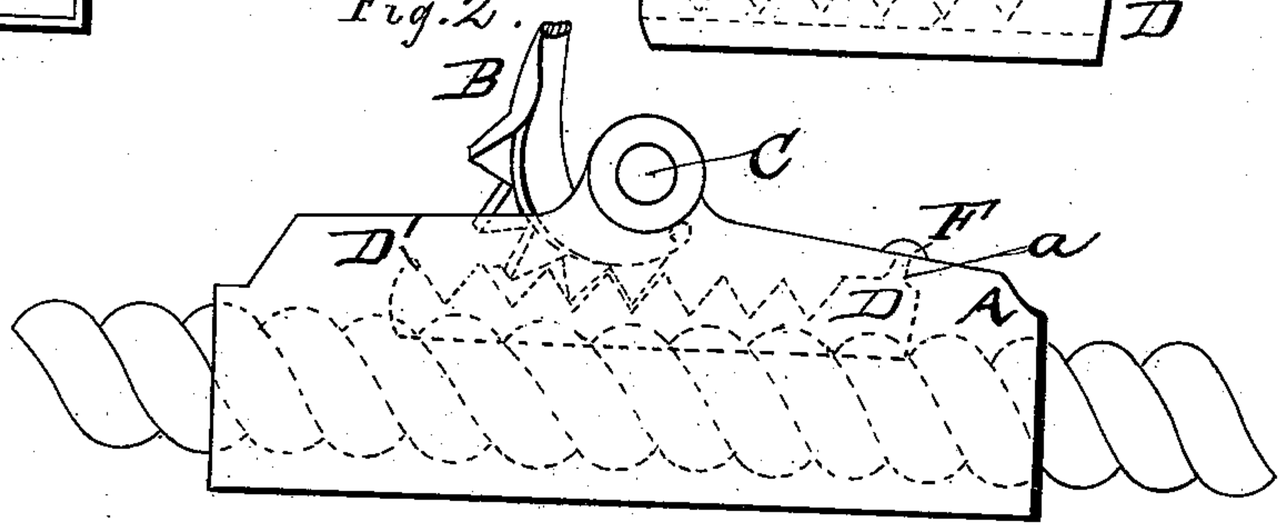


Fig. 2.



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UNITED STATES PATENT OFFICE.

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ROPE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 334,878, dated January 26, 1886.

Application filed July 23, 1885. Serial No. 172,428. (No model.)

To all whom it may concern:

Be it known that we, STEPHEN HENRY MANNERS and CHARLES EDGAR MANNERS, subjects of the Queen of Great Britain and Ireland, and residents of Adelaide, in the Province of South Australia, machinists, have invented an Improved Rope-Holder, of which the following is a specification.

The object of our invention is to provide a contrivance for holding ropes, lines, or cords, specially for use on shipboard, but capable of considerable variation and easily applicable to many other similar purposes.

Some of the advantages obtained by our invention are that the rope, line, or cord will run freely either way until the check is applied, when the greater the strain the more tightly it will be held, while even when held at the utmost tension the rope can be instantaneously released, and will then run freely, as before.

Our improved rope-holder allows of easy application to all positions and purposes on shipboard or elsewhere for which such a contrivance is requisite, and will be found as useful for the heaviest hawser as for the thinnest line or cord. By the use of a protecting-plate the pressure on the rope is more evenly distributed, the wear and tear being thus largely avoided.

Our invention consists of a short cylinder or tube or its equivalent open in the center and having bell-mouthed ends. Forming part of this is a bed of such shape as may be suitable to the special purpose or place for which it is intended. This bed may be provided with holes, through which it is bolted or otherwise secured, as may be deemed expedient. From the sides of this cylinder project upward two cheeks, through which a bolt or pin is passed and secured by means of a nut at the outer end. On this bolt works an eccentric lever provided with teeth for the purpose of actuating the protector-plate when it is desired to release the grip. The sides of the teeth are removed, so as to afford a bearing which acts on the sides of the protector-plate. This plate consists of a solid piece having ridged sides, between which are teeth or cogs. The under surface is hollowed to the shape of the rope. At one end is a set-screw or button-head. The body of this works freely through a slot cut for the purpose in the upper surface of the cylinder and prevents the plate dropping when no rope is in the holder.

In order that our invention may be the more clearly understood, we now proceed to again describe the same by reference to the accompanying drawings, in which—

Figure 1 represents a perspective view of our improved rope-holder in the position it assumes when gripping a rope. Fig. 2 represents a side elevation thereof, showing a part of the gripping mechanism in operation in dotted lines. Fig. 3 represents a detail view of the operative grip-lever; Fig. 4, a side, and Fig. 5, a top plan, view of the rope-clamping plate.

A is a short cylinder having bell-shaped ends and provided with a suitable bed, A′, for attachment to the deck, bulwarks, standing rigging, or other place for which it is required, and side ears, A^2, extending from its upper face.

B is an eccentric grip-lever secured to the ears A^2 on the cylinder A by means of the bolt C, on which it works freely. The grip-lever has on its lower portion a suitable number of teeth, and is provided with such bearings on each side as shall be sufficiently wide and proportionate to the strain which it will have to bear.

D is a protector or rope-clamping plate provided with flanges D^2 of a similar width to the bearings of the cylinder B, and having teeth or cogs D′ between them, in which the teeth of the grip-lever B work freely.

E is a slot in A, extending from near the center to its outer extremity.

F is a set-screw, lug, or, knob, forming part of D, the body *a* of which is of such size as to permit it to move freely in the slot E, while the head *b* rests on the upper surface of the cylinder A, for the purpose of retaining said plate in position within the cylinder. It will be noticed that the end of the cylinder A, in which the slot E is cut, slopes toward its outer extremity. This may be an incline of one in eight for ordinary purposes, or as may be required.

The method of action is as follows: The

plate D is placed through the open top in the cylinder with the body of the knob F in the slot E. The eccentric grip-lever B is then secured in its place by the bolt C. The office of the knob F is to hold up the plate D, so as to allow the rope to pass freely to and fro when the grip is not applied. When it is desired to grip the rope, the eccentric grip-lever B is raised and will immediately obtain a purchase on the flanges D′, pressing the plate down tightly on the rope and causing from its slope a greater pressure in proportion as the strain is increased. When it is desired to release the rope, the eccentric is pressed downward, and will easily and instantaneously release the rope. It can then be allowed to run freely, or checked where desired, and on the strain being felt will be gripped as securely as before.

It will be seen that many variations are possible in the construction of our invention. Thus, instead of a cylinder, A may consist of a bed with flanged sides sloping at one end, so as to allow F to rest on them; or one side may be removed and the rope placed in from the side, as in the case of heavy hawsers. In this case the opposite side will arch over and be proportionably strengthened.

In heavy ropes where a great strain is required the cylinder A and the plate D may be lengthened, and two or more eccentric levers, B, supplied, so as to increase the grip and distribute the pressure; or the cylinder may be made so as to be wholly removable from the bed to allow the rope to pass inside. In this case the bed and cylinder are dovetailed longitudinally and secured in position by a stop or bolt.

When saving of cost is desired and the wear of the rope of no consequence, the protector-plate may be omitted and the eccentric lever hollowed to fit the rope. Many other modifications to special purposes will suggest themselves to a practical man.

Having now fully described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is—

1. A rope-holder consisting of a cylinder having an attaching-bed and a longitudinal slot in its upper face, an eccentric grip-lever pivoted within said cylinder and having a toothed under face, a plate adapted to rest within said cylinder and on its under portion to grip a rope, and having a toothed upper face and a support for retaining said plate within the cylinder, substantially as set forth.

2. A rope-holder consisting of a cylinder provided with a suitable attaching-bed and having a slotted and sloping or inclined end, a plate adapted on its under face to embrace and grip the rope to be held and having on its upper face a series of cogs or teeth, and a lug, knob, or its equivalent adapted to rest and slide within the slotted portion of the cylinder and support the rope-gripping plate in position within said cylinder, and a grip-lever having pivotal bearing within the cylinder, and having on its under face suitable teeth or cogs to engage with the teeth on the rope-gripping plate, substantially as set forth.

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