(No Model.) 2 Sheets—Sheet 1.

E. C. AKERS.

LINE HOLDER FOR VESSELS.

No. 522,773. Patented July 10, 1894.

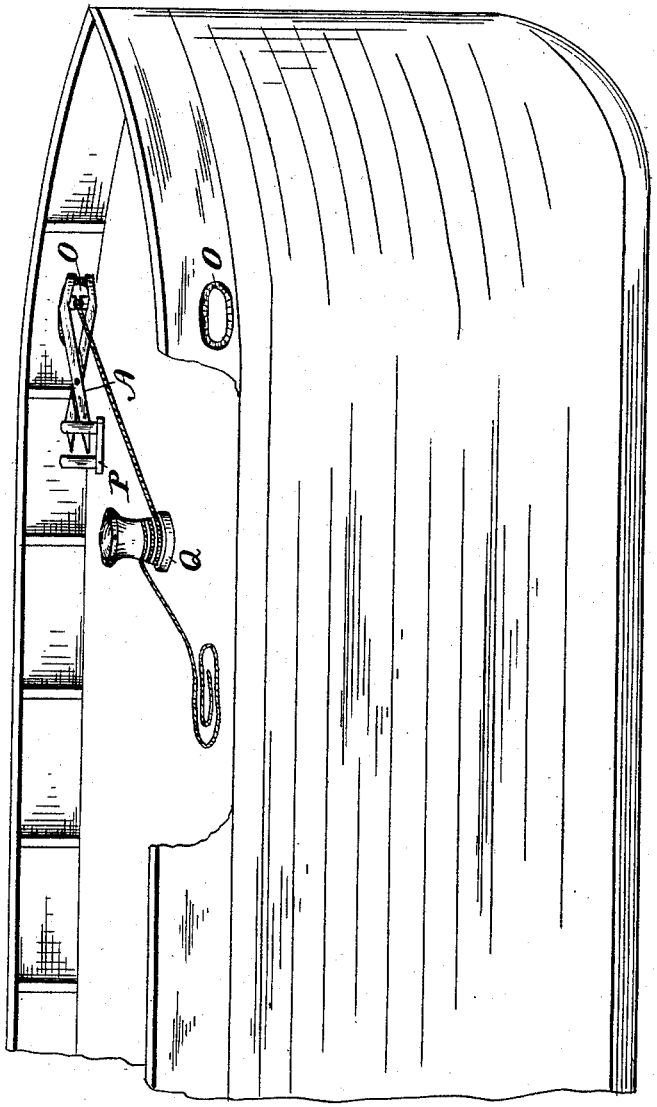

Fig. 1.

Witnesses:
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(No Model.) 2 Sheets—Sheet 2.

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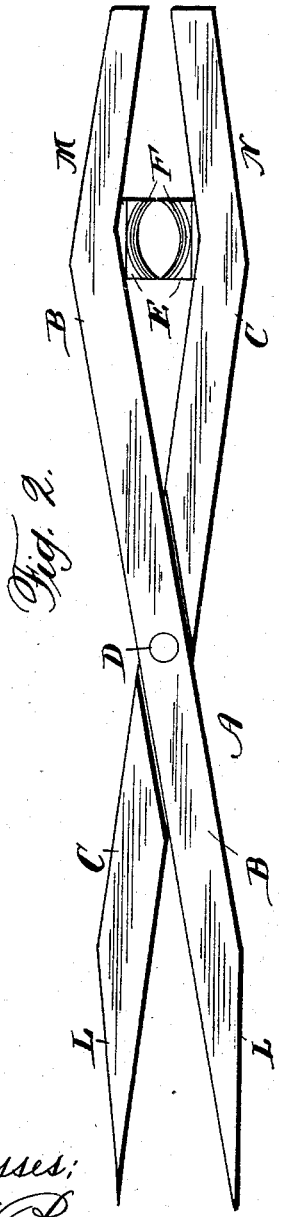

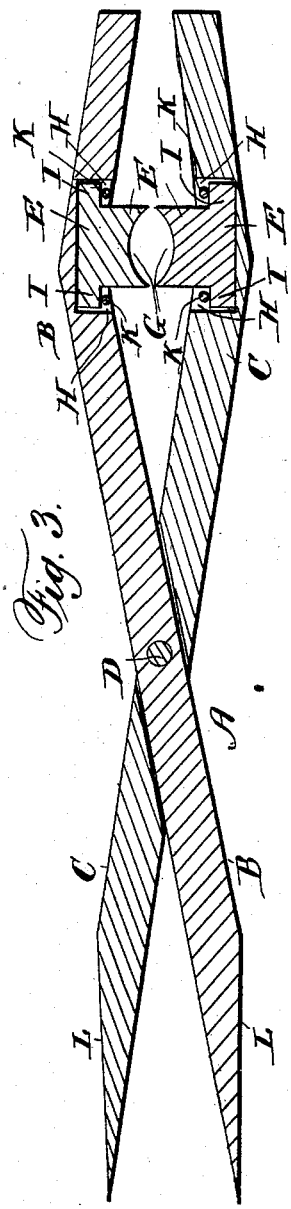

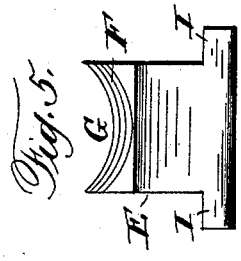

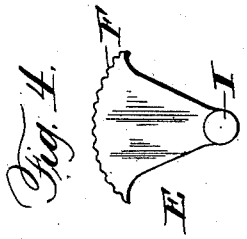

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UNITED STATES PATENT OFFICE.

EARL C. AKERS, OF PORT HURON, MICHIGAN.

LINE-HOLDER FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 522,773, dated July 10, 1894.

Application filed January 22, 1894. Serial No. 497,627. (No model.)

To all whom it may concern:

Be it known that I, EARL C. AKERS, a citizen of the United States, residing at Port Huron, in the county of St. Clair and State of Michigan, have invented certain new and useful Improvements in Line-Holders for Vessels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to a device for use on boats or vessels of various classes for the purpose of securely holding the line by which the craft is held to the dock while said line is being transferred from the capstan to the timber head without losing the strain on the line, and among the objects in view is to provide an extremely simple, inexpensive and efficient device of the character referred to which may be readily and conveniently manipulated for the accomplishment of the desired object, and my invention consists in the novel construction, arrangement and combination of parts constituting my improved device, all as hereinafter fully described, illustrated in the drawings and pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a portion of a vessel or boat showing the application of my improved line holder. Fig. 2 is a side elevation of the device detached. Fig. 3 is a vertical sectional view of the device. Fig. 4 is an end view of one of the gripping heads or jaws. Fig. 5 is an end view of one of the clamping jaws or blocks E.

My improved device consists essentially of a pair of levers fulcrumed together and provided with co-acting gripping heads or jaws adapted to grip tightly between them the line by which the boat or vessel is held to a dock without losing any of the strain upon the line while it is being transferred to the timber-head from the capstan. It is well known that it is extremely desirable that the line (or lines) by which a boat is held to a dock should be securely held while it is being transferred from the capstan to the timber-head so as to prevent any slack in the said line or lines which would permit the vessel to range back and forth. It is also well known that the devices at present in use for accomplishing this object are very unsatisfactory and fail to give the best results in use.

With a view to overcome all objections in devices of the described character and at the same time obtain excellent results, I have constructed the device which I will now describe in detail, having reference to the accompanying drawings.

A indicates my improved device, the same comprising the levers or sections B, C, fulcrumed together at D. Near the outer end of each of said levers I provide a block or head E the purpose of which is to grip the line, and in order to provide for a more secure hold upon the line I provide each of the blocks or heads E with a serrated or toothed gripping surface as shown at F.

I prefer to construct each of the blocks or heads E in the form shown in the drawings, that is to say somewhat in a segmental shape, the gripping surface of said blocks or heads being curved or rounded, and being slightly depressed as shown at G whereby when the blocks are brought in immediate proximity to each other, an approximately elliptical space will be formed between them to receive the line, so that the latter will be more tightly gripped between said blocks E, and cutting of the line prevented.

The blocks E may be secured to the levers in any desired manner and by any desired means. I prefer to attach the said blocks in such manner that they will have a loose connection with the levers and be enabled to have a slight rocking or pivotal movement with relation thereto. For this purpose I form within each of the levers near the outer end thereof and in their opposing surfaces, a cavity or recess H within which is adapted to loosely fit the tapering portion of the block, the latter being provided with the oppositely projecting journals or studs I, which also lie within the recess. For the purpose of confining the blocks within the recesses and at the same time permitting of a rocking or pivotal movement therein, I provide pins or bolts K which extend transversely across the recesses over the journals I, so that the blocks are securely yet loosely held in position and permitted to move therein. The object of this construction and arrangement of the parts is to permit the line to slacken a trifle after be-

ing gripped by the levers whereby I overcome any danger of breakage of the parts which might be occasioned were the blocks or heads E rigidly held in position. Said construction and arrangement also permit of the ready detachment of a block or jaw E should the same become broken and the substitution therefor of another.

The levers B, C, are beveled or inclined as shown at L whereby the device may be enabled to rest firmly upon the deck of the boat and the opposite end of each of said levers is bent—the lever B being bent downwardly as seen at M, and the lever C upwardly as seen at N—so that the extreme outer ends of the levers will extend beyond the end of the chalk or opening O in the side of the boat and conform somewhat to the shape of the said opening.

In using my device I arrange the same in immediate proximity to the opening O in such position as to enable the line to pass between the gripping jaws E, and when sufficient strain has been put upon the line the jaws E are caused to tightly grip or clamp the line by pressing downwardly upon the lever C with the foot, and while so clamped, the line may be removed from the capstan Q by another person and transferred to the timber-head P, and after being so transferred the line will be released from the device A, and another line then operated upon in the same manner until all the lines are secured to the timber-heads to thus hold the boat or vessel to the dock.

The advantages to be derived from the use of my invention will be readily apparent and appreciated.

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

1. In a device of the character described, the combination with a pair of levers fulcrumed together, and provided with recesses in their opposing surfaces, of co-acting gripping jaws arranged within said recesses and having projecting pins or journals, and pins or bolts loosely confining the jaws in position, as described.

2. In a device of the character described, the combination with a pair of levers fulcrumed together, and provided with recesses in their opposing surfaces, of co-acting segmental shaped gripping jaws arranged within said recesses and having oppositely-projecting journals or studs, and curved gripping faces, and pins or bolts extending transversely of the recesses in the levers and over the journals of the jaws, as described.

3. In a device of the character described, the combination with a pair of levers fulcrumed together, and beveled or inclined at one end, at L, as described, of co-acting gripping or clamping jaws carried by said levers near their opposite ends, for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

EARL C. AKERS.

Witnesses:
HARRY N. STODDARD,
WM. P. BOTTEMLY.