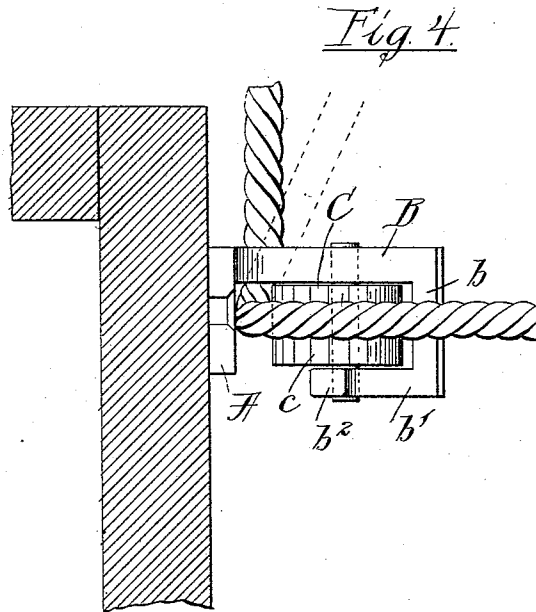
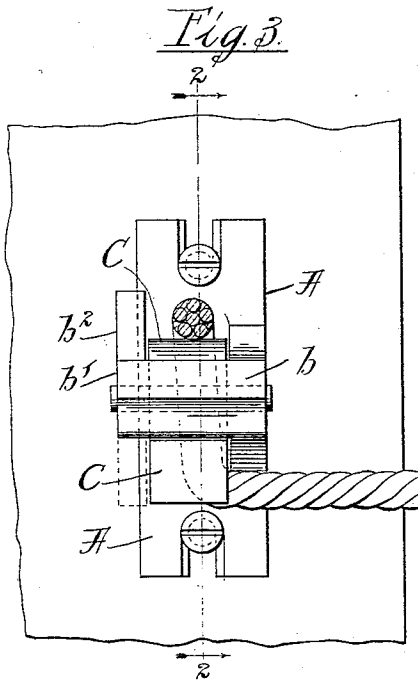
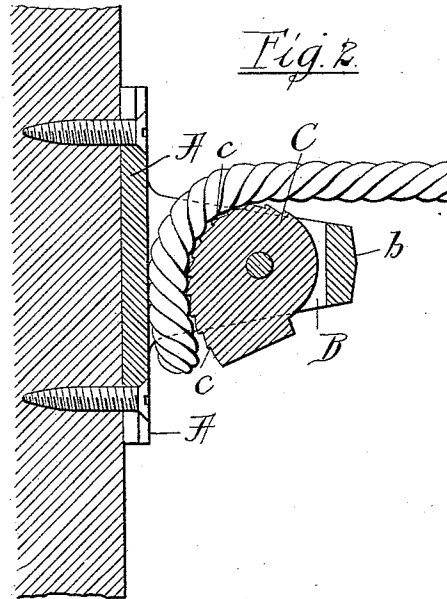
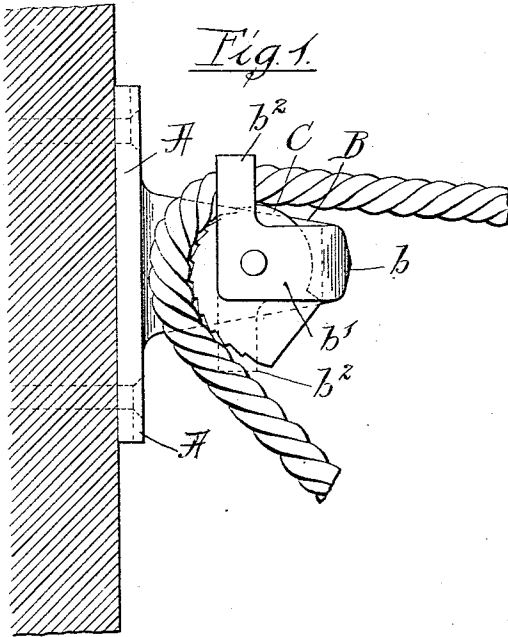


(No Model.)

J. W. GRAY.
LINE HOLDER.

No. 557,800.

Patented Apr. 7, 1896.



Witnesses:-
John W. Adams.
Am. L. Hall.

Inventor:-
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his Attorneys

UNITED STATES PATENT OFFICE.

JOSHUA W. GRAY, OF CHICAGO, ILLINOIS.

LINE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 557,800, dated April 7, 1896.

Application filed February 16, 1895. Serial No. 538,693. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA W. GRAY, a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Line-Holders; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to line-holders of the class in which the line, drawn from a fixed point, is held by means of an eccentric or rotary cam arranged to oppose a fixed plate; and it has for its primary object to provide a construction in which the cam is more certainly and positively made to seize and hold the line, when drawn taut, without manipulation.

The invention has other and minor objects, which will be pointed out in connection with the following description thereof.

In the accompanying drawings, which illustrate my invention, Figure 1 is a side elevation illustrating the position of the device when secured in place for use and the normally open and pendent position of the clamping cam-jaw when not in use, and also a line being drawn taut over the cam in the act of putting up or taking down the line. Fig. 2 is a corresponding side view illustrating the cam drawn to the line into holding position after relaxation of strain upon the portion of the line which is held in the hands. Fig. 3 is a front view of the device, illustrating the lateral direction of the portion of the line that leads from the holder to another. Fig. 4 is a top view showing the form of the part which supports the cam.

A represents a back plate adapted to be secured by screws or similar means in a vertical position to a flat surface of a post, building, or other object or structure.

B is a hook-formed bracket projecting forwardly from the back plate A at a right angle thereto, said bracket having an arm b projecting laterally at its outer end generally parallel with the back plate and a second arm b' directed inwardly from the end of the arm b toward the back plate. From the inner end of the short arm b' rises a projection b^2 .

C is a cam or eccentric pivoted upon a pin, which is supported at its ends in the parallel members of the arm B and occupies the recess in said bracket. The cam C has its eccentric surface c roughened and directed toward the back plate. It is free to turn upon its pivot and is arranged to hang in a position retracted from the back plate A when not engaged by the line, thus affording suitable space for the ready introduction of the line between it and the back plate by first throwing the slack line over the projection b^2 and then dropping or drawing the depending part of the line sidewise to that position. By thus pulling upon said depending part of the line it slides over the eccentric face of the cam until taut, and then, upon the relaxation of this pulling strain, the line, by contraction of its strained portion leading to the holder and by its engagement with the rough or serrated surface of the cam, rotates the latter upward in opposition to its own gravity and causes it to clamp the line securely against the back plate.

When the line is to be led from this holder to another, this is usually done as illustrated in Fig. 3—namely, by leading the portion carried by the hands laterally beneath the long arm of the bracket B to the next holder, with which it is similarly engaged. In this manner the line may be tightened in sections and secured at as many points as may be desired.

It is to be observed that the back plate A is secured in a vertical plane, which desirably should be as nearly as practicable at a right angle to the portion of the line leading to the holder. Albeit if this is not practicable the rising projection b^2 will serve to guide the line leading laterally to the holder from the side, while if the line leads to the holder from the other side it will slide over the top edge of the long arm of the bracket B.

In taking down the line a downward pull upon the descending part thereof in the fastening rotates the cam away from the back plate, and while the cam is held in this retracted position a sidewise pull upon the line withdraws it from between the cam and the back plate, leaving it hanging loosely hooked over the projection b^2 , and thus keeping it from falling to the ground and becoming soiled. No matter how elevated the holder,

a whip of the line will throw it over this projection, and being seized at the proper place for this purpose it is easily kept from falling into the dirt.

- 5 It will often be necessary to provide in a series of such holders or in different places some holders which are laterally open at the right side and others which are open at the left side—*i. e.*, “rights and lefts.” This will, 10 of course, be done by casting the frames from right and left patterns; but to enable a single frame to be used either as a right or left mounting for the always openly-depending cam I propose to provide two projections *b*² 15 upon such casting, so that one or the other may project upwardly, whichever way the cam may be mounted therein. Thus by driving out the pivot of a holder originally serviceable as a right one the cam may be reversed 20 to make it serve for a left.

I claim as my invention—

1. In a line-holder, the combination of a back plate provided with a bracket projecting outwardly therefrom, a stud projecting 25 upwardly from the end of the bracket at a distance from the said back plate, and an eccentric pivoted to said bracket in position for its periphery to coact with the back plate to grip an interposed line by upward movement of the eccentric, the throat-opening 30 formed between the periphery of the eccentric and the back plate being open at one side,

whereby a line thrown transversely across the upper surface of the bracket between said stud and back plate and drawn downward 35 will enter said throat laterally and will engage the eccentric, and upon release of drawing strain will rotate the eccentric upwardly, substantially as described.

2. In a line-holder, the combination with a 40 back plate provided with a bracket having its outer end bent upon itself, the returned end of which terminates at a distance from said back plate and is provided with an upturned portion forming a stud which projects 45 above the upper surface of the bracket, an eccentric pivoted between the returned end and the main body of the bracket and arranged to coact with the back plate to grip a line, and a stop adapted to arrest the rotation 50 of the eccentric in that position in which it is most remote from the back plate, whereby a line being drawn to tautness over the eccentric will be made to slip thereon and will rotate the eccentric backward to clamping 55 position upon relaxation of strain on said line, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

JOSHUA W. GRAY.

Witnesses:

WILLIS D. SHAFER,
ALBERT H. GRAVES.