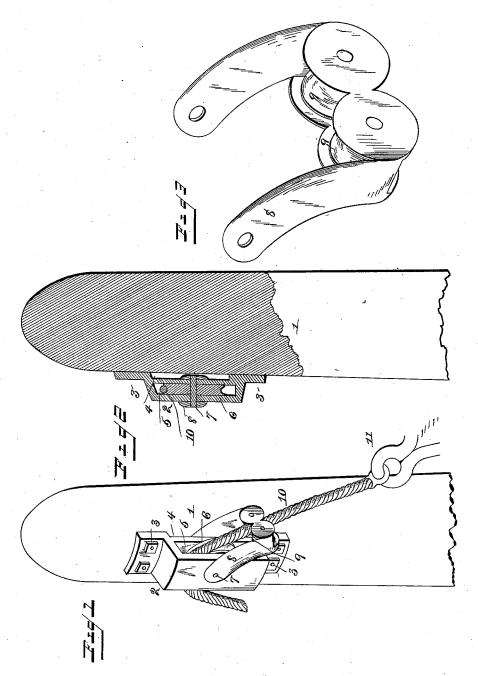
(No Model.)

## L. DYER.

ANTI FRICTIONAL CHOCK OR LEADER.

No. 381,831.

Patented Apr. 24, 1888.



WITNESSES. F. L. Ourand. Benj. Y. Cowl.

Sucius Dyer Lauis Dagger Kos Attorneys,

## United States Patent Office.

LUCIUS DYER, OF MILLBRIDGE, MAINE.

## ANTI-FRICTIONAL CHOCK OR LEADER.

SPECIFICATION forming part of Letters Patent No. 381,831, dated April 24, 1888,

Application filed January 30, 1888. Serial No. 262,381. (No model.)

To all whom it may concern:

Be it known that I, Lucius Dyer, a citizen of the United States, and a resident of Millbridge, in the county of Washington and State 5 of Maine, have invented certain new and useful Improvements in Anti-Frictional Chocks or Leaders; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others to skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of one end of 15 a spar provided with my improved leader. Fig. 2 is a vertical transverse sectional view of the same, and Fig. 3 is a detail view of frame and guide-pulleys.

The same numerals of reference indicate cor-

20 responding parts in all the figures.

My invention has relation to anti-friction leaders or chocks for booms, gaffs, or other spars of a vessel, having a pivoted frame provided with guide pulleys for the rope to be carried around the leader; and it consists in the improved construction and combination of parts of such a leader, in which the sheave is journaled in a cleat or bracket upon the side of the spar, as hereinafter more fully described 30 and claimed.

In the accompanying drawings, the numeral 1 indicates the spar, to one side of which the cleat 2 is secured by means of nutted bolts 3 passing through the ends of the cleat and the 35 spar, and the inner side of this cleat is formed with a recess, 4, extending from the upper to the lower edge of the cleat, leaving the ends of the cleat in contact with the spar and a space between the cleat and the spar at the 40 middle of the same.

The cleat is formed with the usual slot, 5, in which the sheave 6 is journaled upon the pin 7, and the ends of this pin project through the sides of the cleat, and have the inner ends of 45 the bent arms of the frame 8 for the guide-pulleys 9 pivoted upon them, the said frame having one arm upon the outer side of the cleat, and the other in the space formed by the re-

cess of the cleat, the arms straddling the recessed middle of the cleat. The rope 10, which 50 is fastened to the sail 11, passes between the guide-pulleys and around the sheave in the cleat, from which it is carried to its further destination wherever the character of the rope

and its office requires it.

It will be seen that this leader will perform the same function as the leader or chock for which Letters Patent were issued to me on the 11th day of May, 1886, No. 341,838, and the leader or chock for which I have made appli- 60 cation for Letters Patent on the 5th day of August, 1887, Serial No. 246,195; but in both of these cases the spar was slotted for the reception of the sheave and for the passage of the rope, while in this leader the sheave is 65 journaled in the cleat, which is secured to the side of the spar, so that there will be no weakening of the spar by slotting it.

The frame for the guide-pulleys will swing freely upon the pin of the sheave, and the en- 70 tire cleat and sheave and frame may be secured upon the spar by simply passing the nutted bolts through the spar and securing them in the perforations in the ends of the

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States-

In an anti-friction leader for the rigging of vessels, the combination, with a cleat, the in- 80 ner side of which is provided with a recess extending from its outer to its inner edge, and having a slot, a sheave in the slot, a pin through the leader and through the sheave, and a frame secured upon the pin, with one of its arms 85 within the recess and the other arm upon the outside of the cleat, and having guide pulleys journaled in the other end of the frame.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in 90

presence of two witnesses.

LUCIUS DYER.

Witnesses:

F. E. WALLACE,

J. B. SWANTON.