

J. Conway
Sails & Rigging
Nº 89,631. Patented May 4, 1869.

Fig. 1.

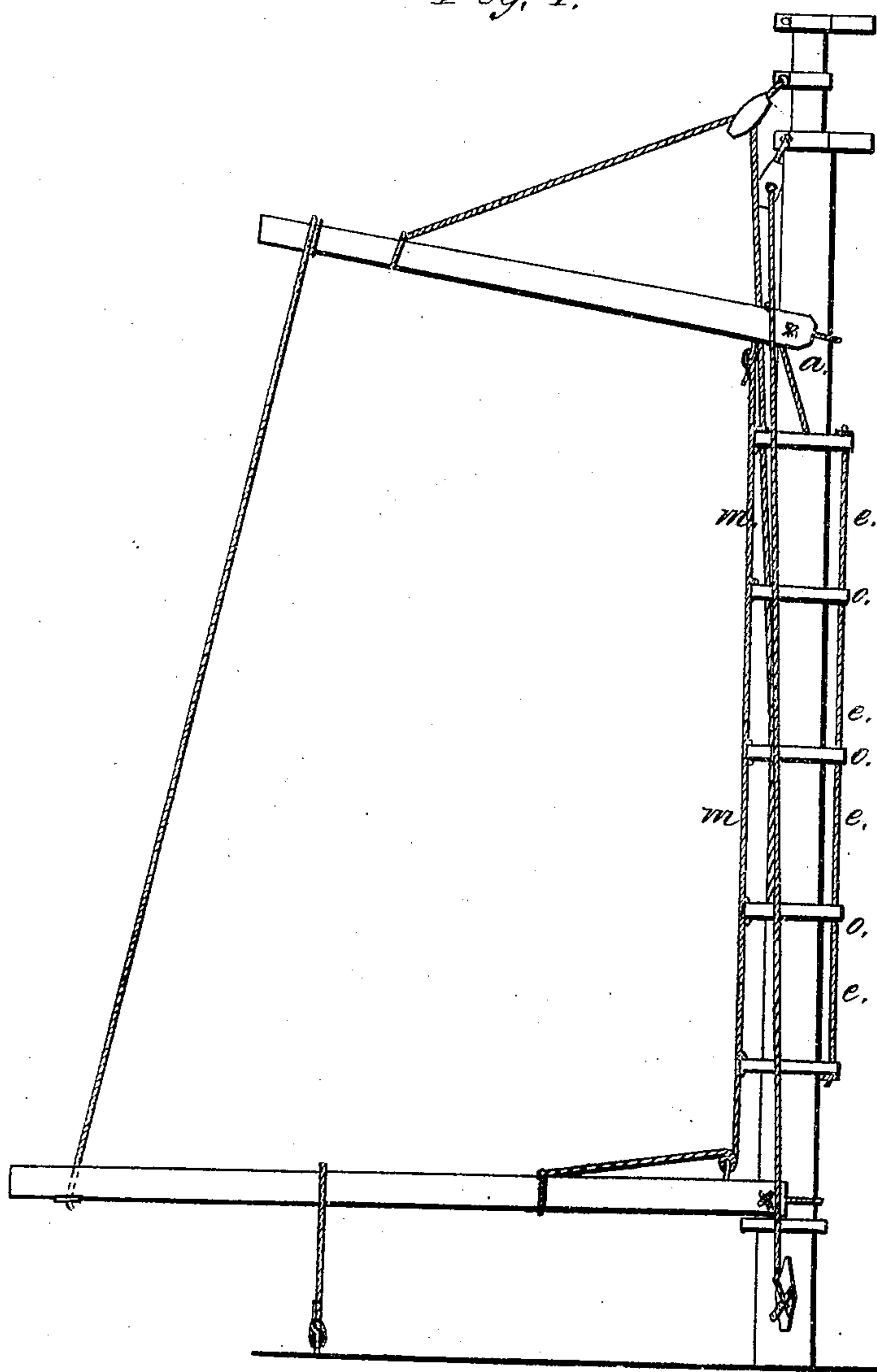
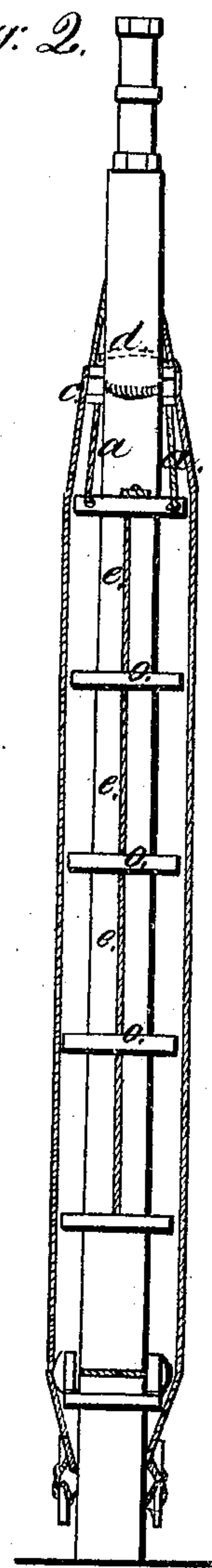


Fig. 2.



Witnesses:

C. A. Pettit.
F. C. Beach.

Inventor.

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United States Patent Office.

JOSEPH CONWAY, OF HARRISON, MARYLAND.

Letters Patent No. 89,632, dated May 4, 1869.

IMPROVEMENT IN BALANCE-LINES FOR MAST-HOOPS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JOSEPH CONWAY, of Harrison, in the county of Dorchester, and State of Maryland, have invented a new and useful Improvement in Regulating Mast-Hoops on Vessels; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view, and

Figure 2 a front view.

The object of this invention is to provide a cheap and simple device, which will prevent mast-hoops from catching on the mast, and which will, by causing the hoops to slide smoothly up and down, greatly diminish the labor required to hoist and take in sail on "fore-and-aft" rigged vessels.

The device which I employ to accomplish this object is very simple, inexpensive, and not liable to get out of order, and can be applied to any vessel whether already fully rigged, and in use, or entirely new. It consists simply in supporting the upper hoop from the gaff, by means of two lifts *a a*, attached at their lower end to the hoop at each side of the mast, and slightly in front of its centre, so as to hold the hoop perfectly horizontal at all times, and attached at their upper end to the side of the gaff near its "throat;" or instead of two ropes to form the lifts, a single one may be used, its bight running through the gaff or over it, or through a block or eye under it, as seen at *a'*, fig. 2.

By this means the upper hoop is kept horizontal. All those beneath it are held in the same position by being connected to it by means of cords or lifts, *e e*, running from the upper to the lower hoop, and fastened to each of the intermediate ones, as seen at *o o*.

Only one set of hoop-lifts *e e*, is needed, and this may be used on the front side of the mast, the bolt-rope *m* answering to connect the hoops on the rear side.

By means of the ropes *m e*, all the hoops will be held perfectly horizontal in hoisting and lowering the sail,

and will slide smoothly and easily up and down on the mast.

I am aware that it is not new to connect the several mast-hoops by means of lines *e e*, and I do not claim such device alone as my invention. As heretofore employed, the device has been of no practical utility, and has not come into general use, from the fact that the lifts *a a* were made to run directly from the forward extremity of the upper hoop to the forward end of the jaws of the gaff. Of course the gaff being pivoted upon the throat-halyard as a fulcrum, must be free to raise its jaws when the peak is dropped; but in practice this was prevented by the lifts running from the hoop to the end of the jaws, so that the peak could not be lowered without breaking the lift *a*, or the cords *e e*, and the device had to be abandoned.

In my invention, however, the lifts *a a* run from the hoop obliquely back to a point immediately under the throat-halyard, so that whether the peak be raised or lowered no increased strain will be brought upon the lifts or the cords *e e*, but the whole apparatus will work perfectly.

I do not claim any combination or arrangement of the cords *e e*, the hoops, and the gaff, except as I have above particularly set forth; but

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

In connection with the cords *e e*, extending between the several mast-hoops, arranging the lifts *a a* in such a manner that they run from the side or forward part of the upper hoop obliquely back to a point upon the gaff under the throat-halyard, substantially as and for the purposes set forth.

To the above specification of my improvement, I have set my hand, this 15th day of October, 1868.

JOSEPH CONWAY.

Witnesses:

W. H. CONWAY,

WALTER S. SMITH.