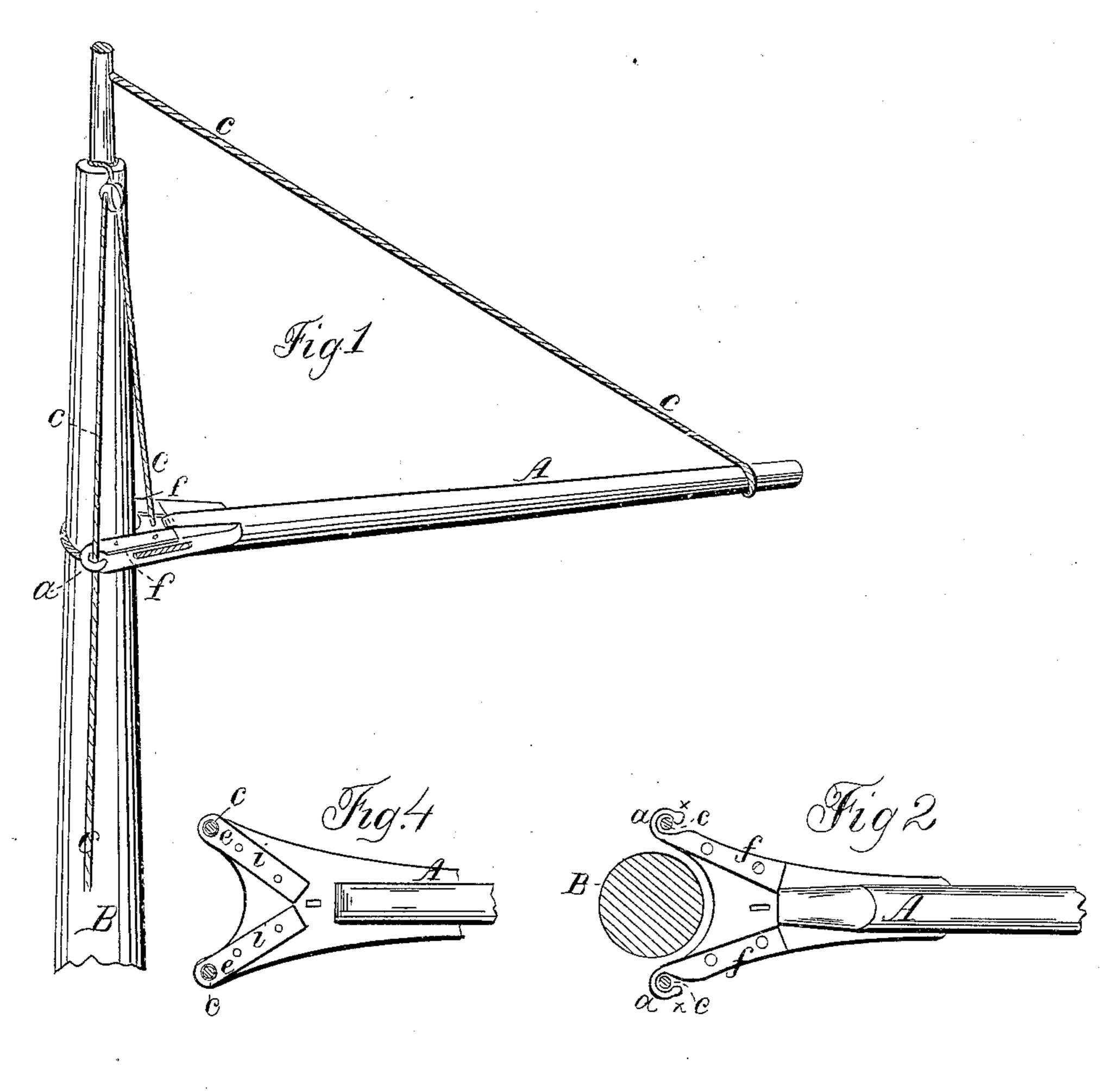
C. C. Milison

10.63555,

Patented Sp. 2.1867.



Witnesses Za. Za. Za. Lango Lauttwikell Fig 3

lz. lu. Ballison

By David a Nower

atten

## Anited States Patent Pffice.

## GOURNEY C. PATTISON, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIM-SELF AND BENJAMIN G. HARRIS, OF SAME PLACE.

Letters Patent No. 63,555, dated April 2, 1867.

## IMPROVED GAFF FOR SHIPS' SPARS.

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

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, Gourney C. Pattison, of Baltimore, in the county of Baltimore, and State of Maryland, have invented certain new and useful Improvements in Gaffs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, in which-

Figure 1 is a perspective view of a mast and gaff with my improved hooks attached.

Figure 2, a plan or top view of a portion of a gaff illustrating the manner of attaching the halyard hooks thereto, showing said hooks provided with knobs or balls on their ends; and

Figures 3 and 4, plan views, illustrating other modifications of my improved guard hooks and plates.

Similar letters of reference indicate like parts in all of the figures.

The nature of my invention consists in providing a gaff with guard hooks or halyard plates so secured on either side thereof at its inner end as to receive and retain the gaff halyards, and thus prevent them from being caught and held fast between the gaff and mast. It is often the case, when hoisting or lowering sail, a sudden change of wind or a change in the course of the vessel causes the gaff to swing round, carrying with it the halyards used for raising and lowering it, which in passing round become caught and bound fast between the mast and the inner face of the end of the gaff, thus preventing the sails being moved either up or down. To obviate this difficulty I provide the inner end of the gaff A with two guard hooks extending from either side thereof, and so curved or bent towards the outer end of the gaff as to receive and retain the halyards e c, which, although they swing round with the gaff, are prevented from being caught by it and carried round between it and the mast B, as seen in fig. 1 of the accompanying drawings. My invention is applicable to all forms of gaffs now in use, and may consist of two plates ff, with curved or hooked ends, as shown in fig. 2, or a semicircular plate, g, having its outer ends curved, as shown in fig. 3, or plates similar in form to those shown in fig. 4 may be used. Either of the above-described form of plates may be bolted or otherwise secured to the inner end of the gaff, and thus give additional strength thereto, and at the same time serve, by reason of the hooked ends thereof, to receive and prevent the halyards slipping round the but of the gaff and becoming held fast thereby. I contemplate using hooks provided with knobs or balls x x on their ends, (as shown in fig. 2 of the drawings,) to assist in keeping the halyards in place, and for bringing them the more readily within the eye of said guard hooks. I also contemplate using a plate or plates, i, provided with a small aperture, e, for the halyards to pass through, similar to that shown in fig. 4 of the drawings.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters

Patent, is—

Guard hooks or plates combined with the inner end of gaffs or other swinging spars, substantially in the manner and for the purpose herein set forth.

The foregoing specification of my improvements in gaffs for the masts of ships, &c., signed by me this 21st day of September, A. D. 1866.

G. C. PATTISON.

Witnesses:

DAVID A. BURR, H. H. Young.