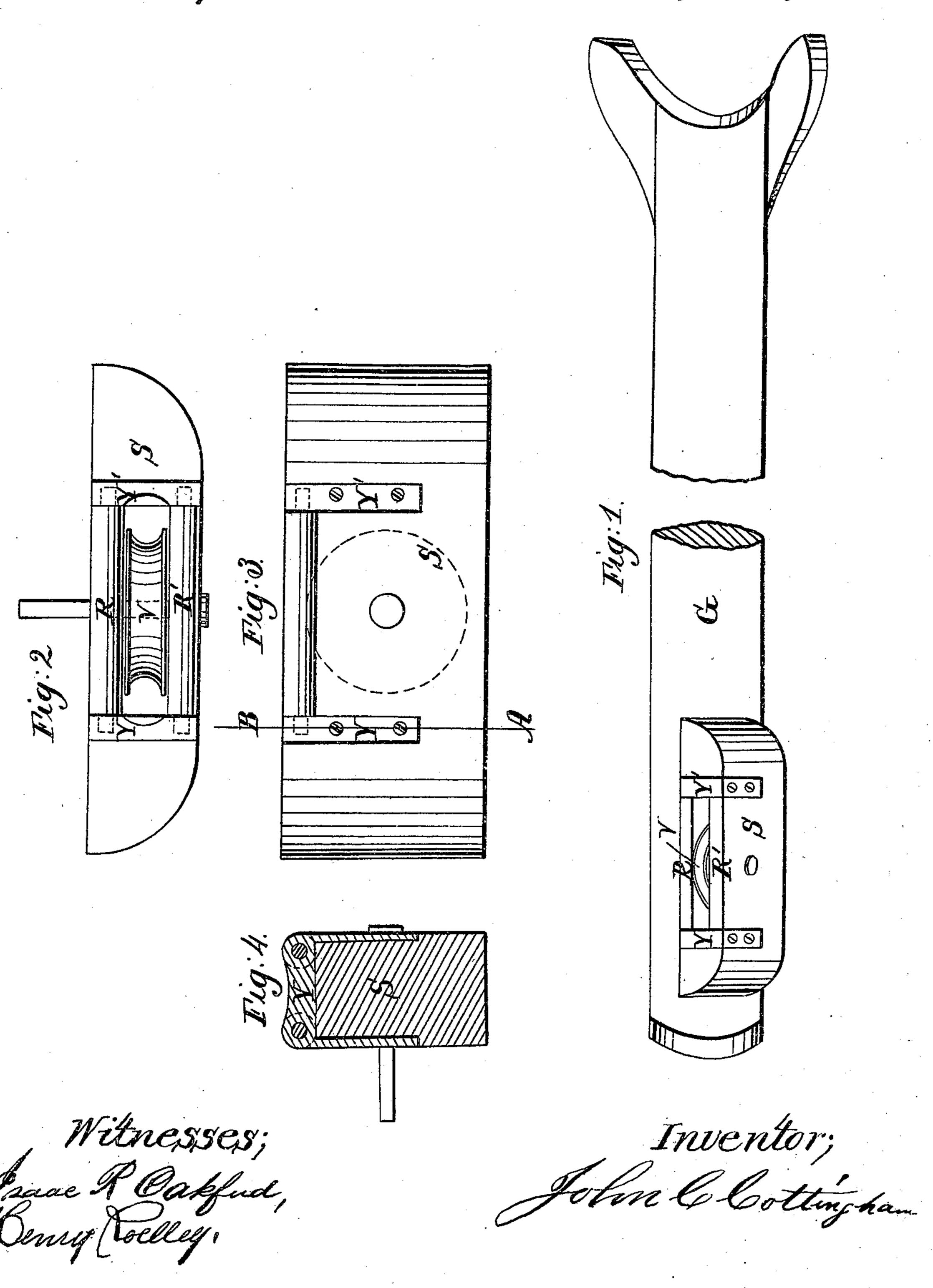
J. C. Cotting/nain. Masts and Snars. No. 202.271. Patented Jul. 6, 1869.





JOHN C. COTTINGHAM, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 92,271, dated July 6, 1869; antedated June 24, 1869.

IMPROVEMENT IN GAFF-CHOCKS FOR VESSELS.

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, John C. Cottingham, of the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in "Gaffs;" 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, and to the letters of reference marked thereon.

Figure 1 is a perspective view, showing my improve-

ment in gaffs.

Figure 2 is an enlarged view of same, detached.

Figure 3 is a side view of same.

Figure 4 is a sectional view through the line A B. The nature of my invention consists in arranging yokes, provided with sockets, for the purpose of holding friction-rollers in the chock of gaffs, so that the topsail-sheet rope, which passes through the chock, will be prevented from chafing, and it (the rope) can be easily drawn through.

The gaff G, fig. 1, is constructed in the usual form, near the end or peak of which is secured a chock, the stock S being made with a mortise, m, in the centre, in which is pivoted a sheave, V. On the upper edge of the stock S, on each side, and on a line with the mortise m, are placed two friction-rollers, R and R', with journals turned on their ends. The said rollers are held in place by means of the yokes Y and Y', pro-

vided with sockets, in which the journals of the rollers fit and work.

The yokes Y and Y' clasp the stock S, and are secured to the sides of it by means of screws or bolts. In order to give additional security and better finish, the yokes are sunk into the stock, so that they and the rollers will be flush with the upper edge of the stock.

The inside edges of the yokes, between the rollers, are hollowed out, to prevent the chafing of the rope when inclined lengthwise with the chock. The stock S is secured, at the proper point on the gaff G, by means of bolts or screws.

I do not wish to claim broadly the chock, neither do I claim the friction-rollers, as I am aware that they

have been long in use on ordinary blocks.

Having thus described my invention, its construction and operation,

What I claim, and desire to secure by Letters Pat-

ent of the United States, is-

Arranging the yokes Y and Y' in the stock S of the gaff G, the said yokes being constructed as shown, and provided with sockets, for the purpose of holding the friction-rollers, substantially as specified.

JOHN C. COTTINGHAM.

Witnesses:

ISAAC R. OAKFORD, HENRY ROELLIG.