N. Robbins, Jr.

Masts & Spars.

Nº 66,633.   *Patented Jul. 9, 1867.*

Fig. 1.

Fig. 2.

Fig. 3.
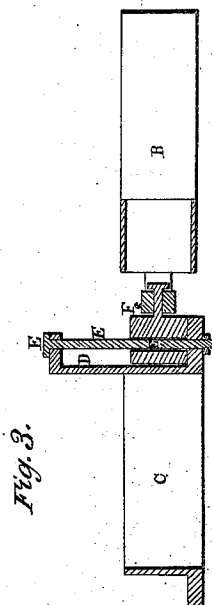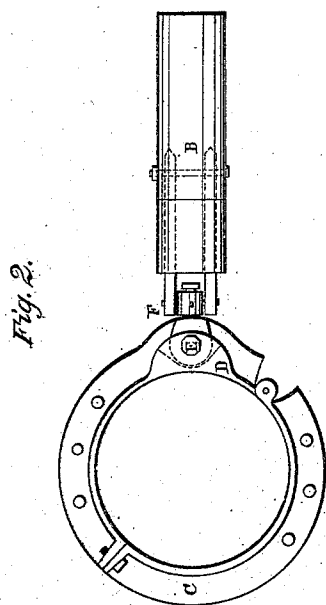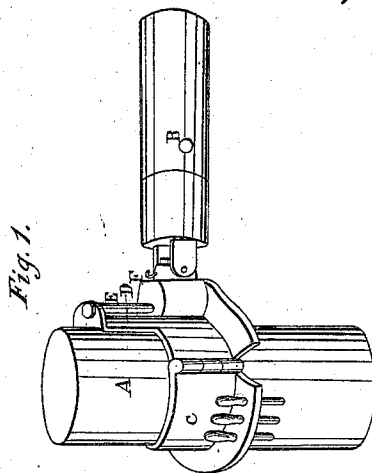
Witnesses.
J. Herbert Shedd
Wm. M. R. French —

Inventor.
Nathaniel Robbins Jr.

UNITED STATES PATENT OFFICE.

NATHANIEL ROBBINS, JR., OF ROCKPORT, MASSACHUSETTS.

IMPROVED GUDGEON FOR BOOMS.

To all whom it may concern:

Be it known that I, NATHANIEL ROBBINS, Jr., of Rockport, in the county of Essex, in the State of Massachusetts, have invented a new and Improved Connection or Gudgeon for Booms; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and showing one application of my improvement on board vessels, in which—

Figure 1 is a perspective view; Fig. 2, a horizontal view; and Fig. 3, a vertical section.

Similar letters refer to similar parts, as follows:

A, portion of mast, to which the boom is attached; B, lower end of boom; C, collar or span clasping the mast and forming a support for the socket D, pintle E, and universal joint F, which together form the gudgeon which I claim as my improvement. By this device, the friction usually attending the motion of a boom against a mast is very much lessened, and the strain brought upon the throat and jaws or pintle of a boom, as ordinarily arranged, by the tendency of a sail full in the wind to roll a boom over on its axis, is entirely avoided.

By making the socket D and pintle E longer than would be otherwise necessary, I am enabled to give a vertical motion to the boom, which may at times be valuable. In construction I bring the weight of the boom upon the socket D, and not upon the pintle E.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The use of the socket D and the pintle E, as a bearing for a boom and connection with a mast, substantially as described.

2. The construction and arrangement of the boom-joint or connection, substantially as described.

NATHL. ROBBINS, JR.

Witnesses:
HENRY F. FRENCH,
OTIS F. CLAPP.