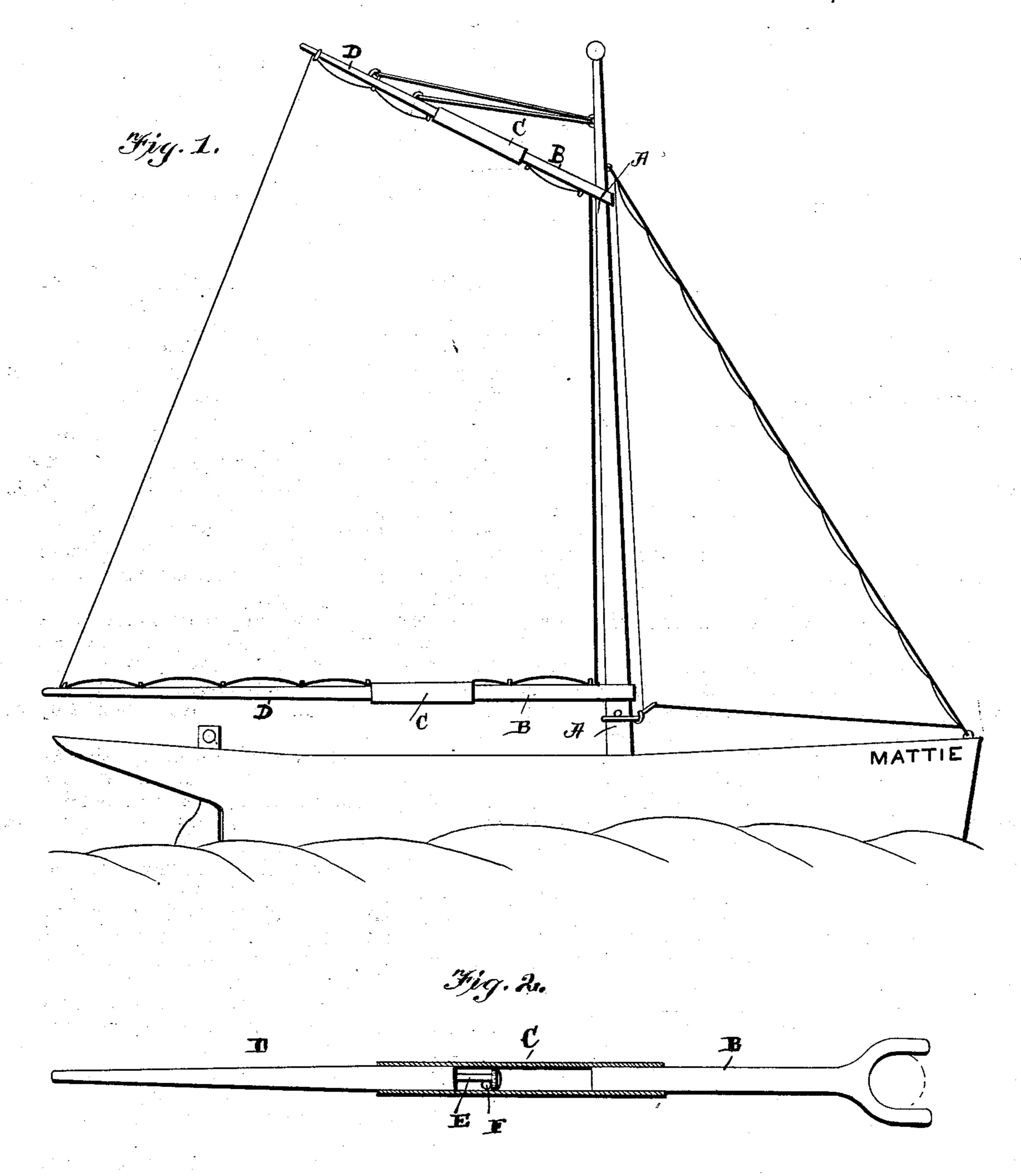
(No Model.)

A. VOSS.
GAFF OR BOOM.

No. 507,052.

Patented Oct. 17, 1893.



Seo. Freeh.

Johand a. Fritzgerald,

Adolph Vosa Lehmann Pattism Weshift

## United States Patent Office.

ADOLPH VOSS, OF GLOUCESTER, MASSACHUSETTS.

## GAFF OR BOOM.

SPECIFICATION forming part of Letters Patent No. 507,052, dated October 17, 1893.

Application filed March 2, 1893. Serial No. 464,431. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH Voss, of Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Gaffs or Booms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in gaffs and booms, and it consists in providing the same with swivels for the purpose hereinafter fully described, and especially pointed out in the claims.

Masts of sailing vessels often become badly worn by the continual wrenching of the gaffs and booms thereon, at points where the forks of the latter bear against the mast, and to obviate this wearing away of the same, I provide the gaff and boom with swivels intermediate their ends whereby the fork portions of the same may be relieved of this wrenching movement and thus the constant wearing upon the mast is prevented.

Referring to the accompanying drawings,—Figure 1, is a side elevation of a sailing vessel having thereon my improved gaff and boom. Fig. 2, is a detached view of my improved gaff, shown partly in section.

A designates the mast of the vessel and B the forked inner end of the gaff which bears upon the mast in the usual manner. Extending from this forked inner portion is the sleeve C, and extending thereinto is the revoluble main portion of the gaff D. A headed bolt or projection E extends from the inner end of this main portion within the sleeve and extending transversely through the sleeve is a pin F, which engages this head and by this means the said main portion of the gaff is held within the sleeve although revoluble in its said position. The boom is

constructed in exactly the same way and for the same purpose, as will be readily understood. Thus it will be seen that the continual vibration of the main sail has little effect on the forked end of the gaff and boom, as 50 this motion is accommodated by the partial rotation of the said parts within their respective sleeves. A mast rigged with the ordinary gaff and boom soon becomes very much worn and it is only a question of time before it 55 must be replaced by a new one at great expense. It is also apparent that my improved sleeve is well adapted for use in splicing booms or gaffs when broken at sea where they cannot be readily replaced.

My herein described improvement obviates the wear which causes great expense and is a most important adjunct to sailing vessels.

Having thus fully described my invention, what I claim as new, and desire to secure by 65 Letters Patent, is—

1. An improved gaff or boom comprising an inner portion, a sleeve secured thereto and projecting therefrom, a main gaff or boom portion revoluble within the sleeve, and a means 70 for holding the said main portion from longitudinal movement, as herein shown and described.

2. An improved gaff or boom comprising an inner portion, a sleeve secured thereto and 75 extending therefrom, a main gaff or boom portion projecting into the sleeve and revoluble therein, a headed projection extending from the inner end of the main portion within the sleeve, and a transverse pin extending 80 through the said sleeve which engages the said head whereby the said main portion is held from longitudinal movement, substantially as shown and described.

In testimony whereof I affix my signature in 85 presence of two witnesses.

ADOLPH VOSS.

Witnesses:

CYRUS STORY, FRANK E. SMOTHERS.