

A. C. Tibbetts.

Masts & Spars.

N^o 30,011.

Patented Sept. 11, 1860.

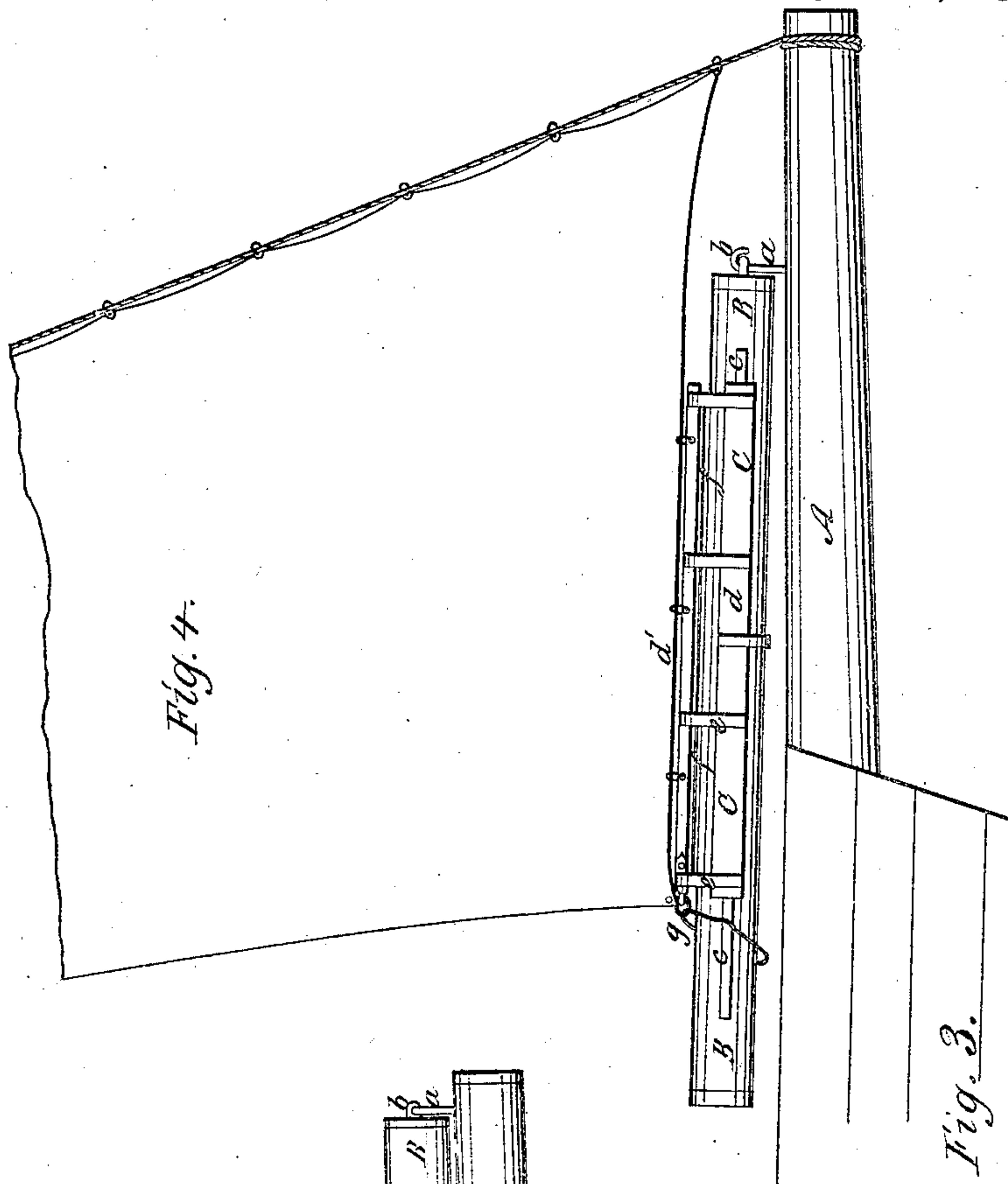


Fig. 4.

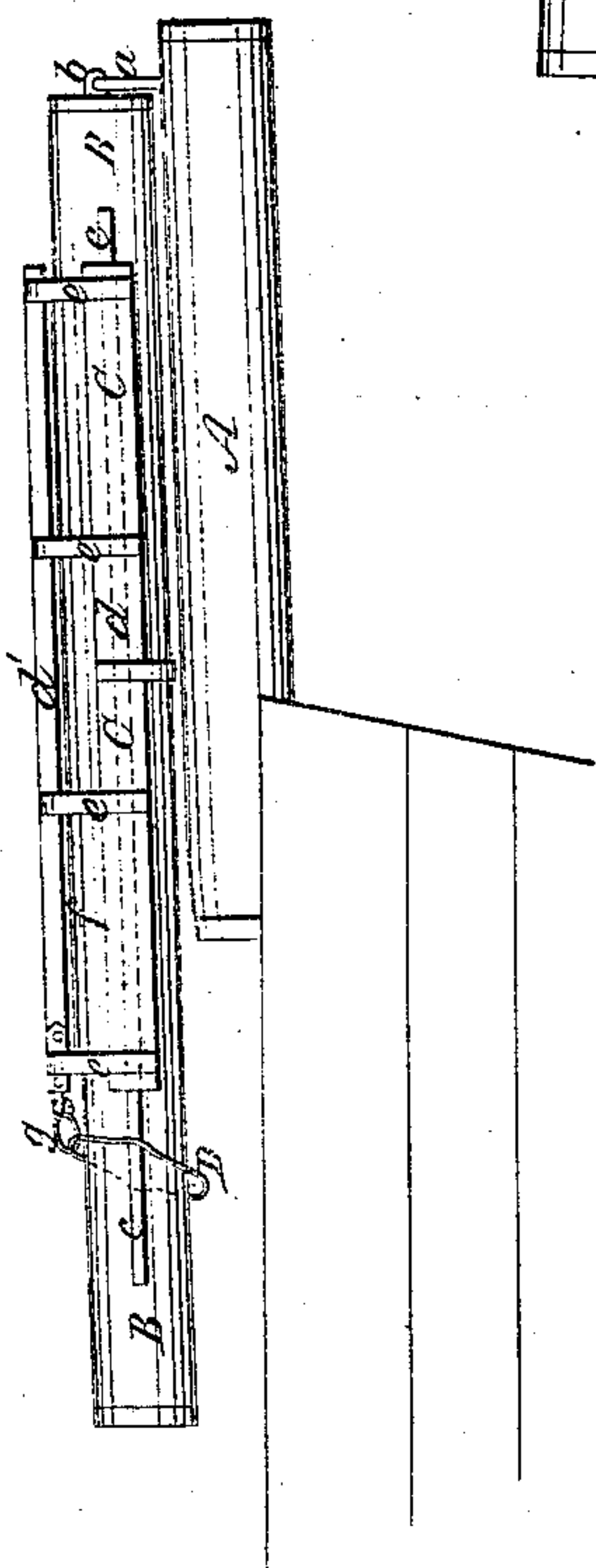


Fig. 1.

Fig. 3.

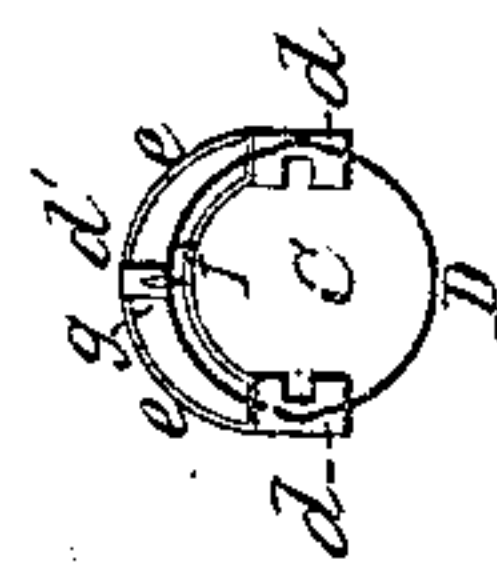
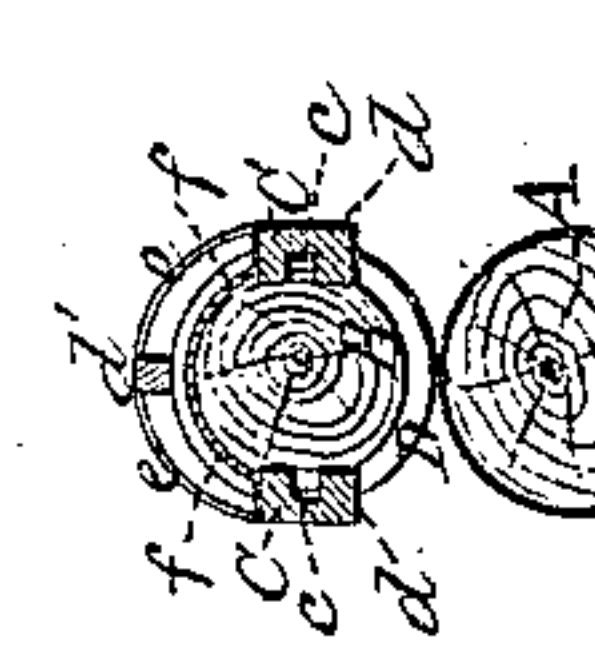


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ALPHEUS C. TIBBETTS, OF ROCKLAND, MAINE.

FORE-AND-AFT SAIL FOR VESSELS.

Specification of Letters Patent No. 30,011, dated September 11, 1860.

To all whom it may concern:

Be it known that I, ALPHEUS C. TIBBETTS, of Rockland, in the county of Lincoln and State of Maine, have invented a new and useful Improvement in the Application of a Fore-and-Aft Sail or Jib to a Vessel; and I do hereby declare the same to be fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, is a side elevation of a schooner's bowsprit provided with my invention. Fig. 2, a transverse section of the same. Fig. 3, is an elevation of the after end of the sail carriage or slider and its sheet ring to be hereinafter described.

In the drawings, A, denotes the bowsprit; B, a boom whose forward end should be so applied to the fore end of the bowsprit as to enable the boom to be swung to the leeward. For this purpose, a pin *a*, hung to a staple, *b*, (fixed in the end of the boom), passes downward into a hole made in the bowsprit, the said pin serving to maintain the nose of the boom in its proper position with respect to that of the bowsprit while the boom is being swung laterally. On opposite sides of the boom are two projecting rails *c, c*, which extend longitudinally along it and support a sail carriage or slider C, the latter being constructed partly of three bars *d, d, d*, connected together by arched bars *e, e, e, e*. Two of the bars *d, d* embrace and slide respectively on the rails *c, c*, and have a housing of tarred cloth or canvas *f*, extended from one to the other and over the upper half of the boom as shown in the drawings. The foot of the sail is to be secured to the middle bar, *d'*, and to the after end of such bar, a sheet ring D, is connected by a link *g*. The sheet ring goes around the boom and should have the sail sheet affixed to it. The forward edge of the sail is to be applied to the bowsprit and the fore stay in the usual manner.

Fig. 4, is an illustration or sketch of the arrangement of the slider relatively to a jib or sail. The object of the slider C, is to enable the front or head of the sail to be lowered toward or close down upon the boom. While the sail is being lowered for being either reefed or furled, the slider, C,

will be drawn forward on its rails, *c, c*. This not only causes the heel of the jib to be moved forward by the draft occasioned by the runners working on the forestay, but permit the head of the sail to come down on the stay and to the boom.

It is not new to use a boom in connection with the bowsprit and the jib, an example of such being shown in the United States Patent No. 23926, granted May 10th, 1859. In this case, however, the boom itself is so connected with the bowsprit as to slide longitudinally on a rail carried by the same, the movement of the boom taking place at the time of lowering the sail. The difficulty with this application of a boom is that when the boom is swung to leeward, it produces an awkward angle or bend in the sail where the boom is connected with the rail of the bowsprit. With my invention or improvement the boom has no forward and backward motion. It carries a slider or carriage to which the sail is attached and which slides on it (the boom) and moves to leeward with it as well as toward the nose of the boom. Consequently when the boom is moved to leeward, its nose being close to the fore corner of the sail, there can be no injurious bend of the sail such as results when the nose of the boom slides on a rail carried by the bowsprit. Furthermore, as my sail carriage, C, is so made as to cover its rails and the boom, it will operate to prevent, either, ice, snow, rain or extraneous matters from accumulating on the boom and rails so as to impede or interfere with the correct action of the slide or carriage on the boom or its rails.

I do not claim the application of an after jib boom to a bowsprit, by means not only of a slide rail and slider as exhibited in the United States Patent No. 23926.

I claim—

The above-described application or arrangement of the carriage, C, and swinging boom, B, together and with the bowsprit, A, the whole being to operate in manner and for the purpose substantially as specified.

ALPHEUS C. TIBBETTS.

Witnesses:

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