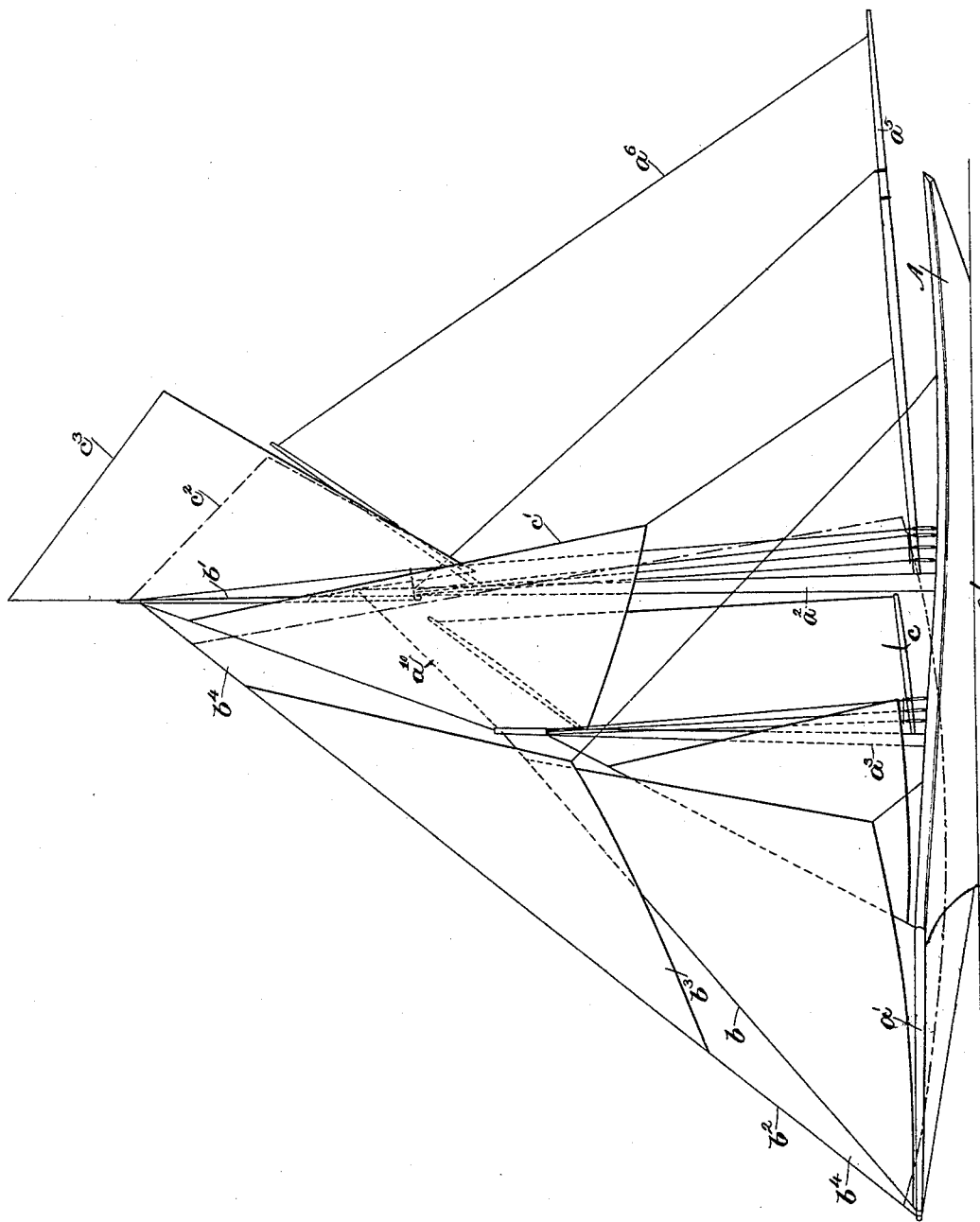


(No Model.)

E. F. SMALL.
SCHOONER.

No. 419,225.

Patented Jan. 14, 1890.



WITNESSES

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UNITED STATES PATENT OFFICE.

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SCHOONER.

SPECIFICATION forming part of Letters Patent No. 419,225, dated January 14, 1890.

Application filed November 15, 1889. Serial No. 330,445. (No model.)

To all whom it may concern:

Be it known that I, ELDRIDGE F. SMALL, of Swampscott, county of Essex, State of Massachusetts, have invented an Improvement in Schooners, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention relates to sailing-vessels of that class known as "schooners," and has for its object to improve the construction of the same, whereby the said schooner may be rigged in part after the manner of a sloop, and the advantages of such rigging obtained—as, for instance, the ability to point closer or sail more nearly in the eye of the wind.

My invention is more particularly designed to be employed on schooner-yachts and schooners employed in fishing, where speed combined with safety is the important factor.

In accordance with my invention the mainmast is stepped forward of amidships—that is, it is placed nearer the bow of the vessel than in schooners as now commonly constructed; and the foremast is made shorter than the mainmast, and preferably inclines upward toward the mainmast. The foretopmast is dispensed with, and the mainmast alone is provided with a top-mast, to which is connected the jib top-sail stay, the other side of the said stay being connected to the bowsprit. The jib-stay has its ends connected to the bowsprit and the top of the foremast, and the spring-stay connecting the top of the foremast to the top of the mainmast is made as an independent stay.

My invention therefore consists, essentially, in a schooner provided with a foremast, and a mainmast stepped forward of amidships, and provided with a top-mast, and a stay extended from the bowsprit to the maintopmast, substantially as will be described.

Other features of my invention will be pointed out in the claims at the end of this specification.

The drawing shows in elevation a schooner embodying my invention.

A represents a schooner constructed in accordance with my invention, it being provided with the usual bowsprit a' , and having the mainmast a^2 and foremast a^3 . The mainmast a^2 is stepped or placed forward of amidships—that is, forward of the longitudinal

center of the vessel—so that the main-boom a^5 may be made longer and the mainsail a^6 made larger and more nearly the size of a sloop's mainsail, the said mainsail being thus readily handled. The foremast a^3 is made shorter than the mainmast, and preferably is inclined upward toward the said mainmast, and is connected at its top to the top of the mainmast by a stay a^{10} , technically known as the "spring-stay," which is made independent of the jib-stay b , extended from the top of the foremast to the bowsprit. The usual foretop-mast is, in accordance with my invention, omitted, and the mainmast a^2 alone provided with a top-mast b' , which is connected to the bowsprit by a stay b^2 , known as the "jib top-sail stay." By connecting the jib top-sail stay b^2 with the maintop-mast, a top-sail b^4 , of substantially large size and technically known as the "balloon-jib top-sail," may be set upon the said stay.

The schooner may be provided with the other sails now commonly employed on schooners—such as the foresail c , maintop-mast sail c' , maintop-sail c^2 , and clubtop-sail c^3 .

The schooner, by reason of the increased size of mainsail and jib top-sail, has in part a sloop's rigging, and obtains the advantage of this construction or rigging—such as the ability to point closer by reason of the increased mainsail, and in running before the wind by reason of the increased mainsail and balloon-jib top-sail.

I claim—

1. A schooner constructed as herein described, it being provided with a foremast and a mainmast stepped forward of amidships, and provided with a top-mast, and a stay b^2 , extended from the bowsprit to the maintop-mast, substantially as described.

2. A schooner constructed as herein described, it being provided with a mainmast and maintop-mast, a foremast shorter than the mainmast and inclined upwardly toward the said mainmast, and a stay b^2 , extended from the bowsprit to the maintop-mast, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELDRIDGE F. SMALL.

Witnesses:

JAS. H. CHURCHILL,
E. J. BENNETT.