

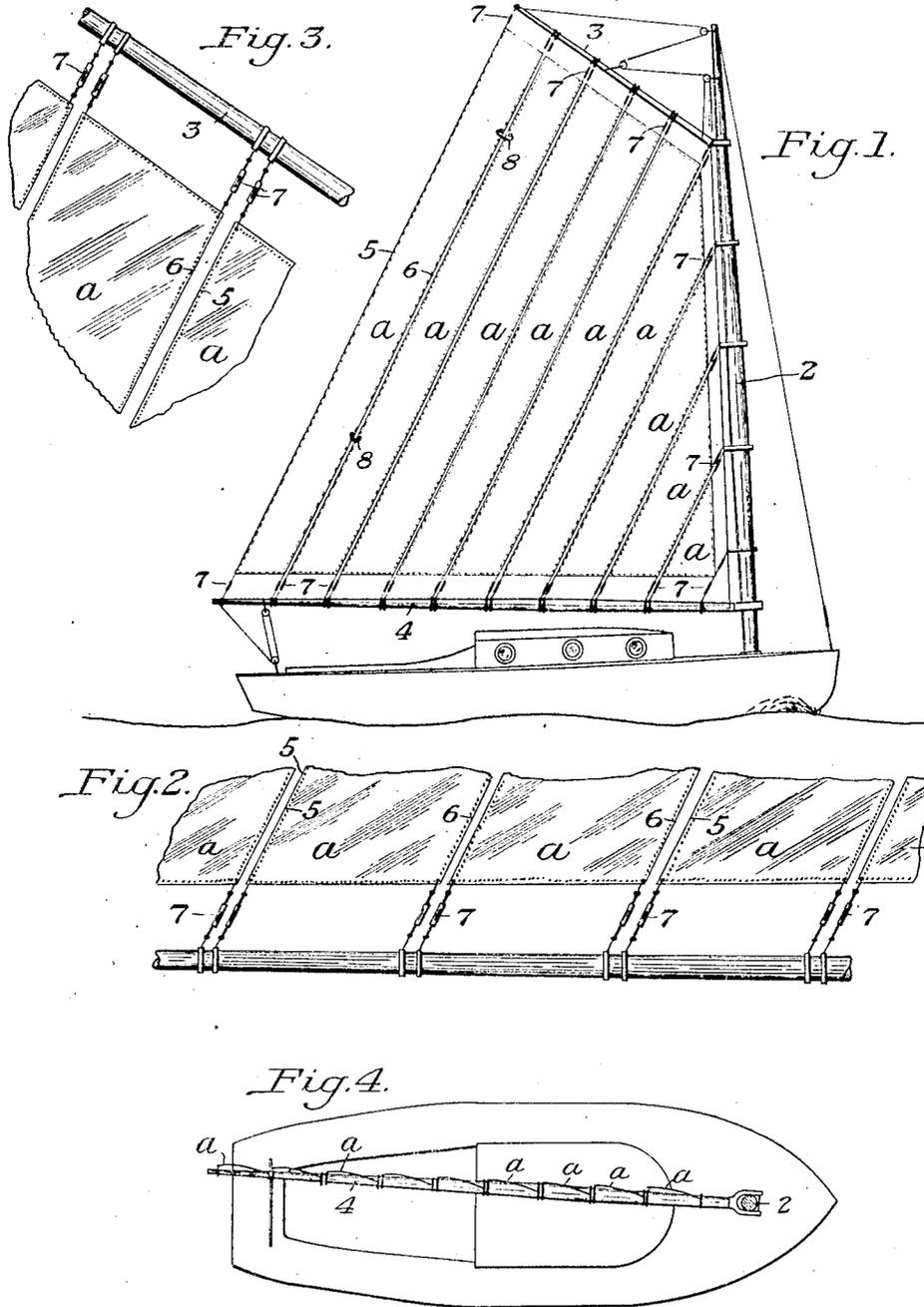
Nov. 18, 1924.

1,516.063

F. A. SCAMMELL

SAIL

Filed Dec. 14, 1923



INVENTOR

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Patented Nov. 18, 1924.

1,516,063

# UNITED STATES PATENT OFFICE.

FREDERICK A. SCAMMELL, OF JOHNSTOWN, PENNSYLVANIA.

## SAIL.

Application filed December 14, 1923. Serial No. 680,576.

*To all whom it may concern:*

Be it known that I, FREDERICK A. SCAMMELL, a citizen of the United States, residing at Johnstown, county of Cambria, State of Pennsylvania, have invented a new and useful Improvement in Sails, of which the following is a full, clear, and exact description.

The present invention relates to sails and an object thereof is to provide a construction of sail whereby the spilling of the dead wind may be readily accomplished.

A further object of the invention is to provide a construction of sail facilitating shortening thereof.

In the accompanying drawings, there is shown, for purposes of illustration only, one embodiment of my invention, it being understood that the drawings do not define the limits of the invention, as changes may be made in the construction and operation therein disclosed without departing from the spirit of the invention or scope of my broader claims.

In the drawings:

Figure 1 is a side elevation of a boat provided with a sail embodying my invention;

Figure 2 is a fragmentary detail view of the boom and lower end of the sail on an enlarged scale;

Figure 3 is a fragmentary detail view of the gaff and upper end of the sail; and

Figure 4 is a plan view of the boat and sail.

Referring to the drawings, numeral 2 designates a mast having a gaff 3 and a boom 4 connected thereto and supported therefrom in the usual manner.

In carrying out my invention, I provide a sail made up of a number of vertically extending strips *a* of canvas or other suitable material. The outer edge 5 of each strip is the leech and the inner edge 6 the luff. The strips are not quite as long as the corresponding distance between the boom and gaff, or between the boom and mast, and each strip is secured at its opposite ends to the boom and gaff, or to the boom and mast, by means capable of adjustment. As shown, each strip has each of its opposite ends secured to the boom or gaff, or to the boom or mast, by a pair of turnbuckle devices 7 located opposite the longitudinal edges of the strip. By adjusting these turnbuckle devices, it is possible to tighten one edge of each strip and loosen the other edge thereof, so as to tip out the wind between

the strips. The wind, therefore, after exerting its force upon a strip, passes from luff to leech and out behind the succeeding strip.

Each strip may, if desired, be fastened to the next succeeding strip by connecting the adjacent edges of the strips at various points by flexible means 8, or the like, and the strips may be fastened to each other in this manner in pairs, triplets, or otherwise. The strips may, of course, be fastened to the boom and gaff, or to the boom and mast, by other adjustable means than the turnbuckle devices shown and, obviously, only one end of each strip need be adjustably secured. By making the sail in sections, with provision for tightening one of the longitudinal edges of each strip and loosening the other edge thereof so as to tip out the dead wind, I am enabled to secure a more effective action of the wind on the sail than where the sail is made in one piece. Furthermore, making the sail in sections enables the sail to be readily shortened by dropping the gaff and removing the outer sections.

I claim:

1. A sail composed of a number of vertically extending strips placed side by side, and means for connecting the opposite ends of each strip to a boom or a gaff enabling one longitudinal edge thereof to be tightened and the other to be loosened, substantially as described.

2. A sail composed of a number of vertically extending strips placed side by side so as not to overlap, and means for connecting the opposite ends of each strip to a boom and a gaff enabling one longitudinal edge thereof to be tightened and the other to be loosened, substantially as described.

3. A sail composed of a number of vertically extending strips placed side by side, and a pair of turnbuckle devices for connecting at least one end of each strip to a boom or a gaff, said devices being located opposite the longitudinal edges of each strip, whereby to enable one longitudinal edge of each strip to be tightened and the other longitudinal edge thereof to be loosened, substantially as described.

4. A sail composed of a number of vertically extending strips placed side by side, means for connecting the opposite ends of each strip to a boom and a gaff enabling one longitudinal edge thereof to be tightened and the other to be loosened, and means

for connecting adjacent longitudinal edges of certain of the strips at certain points, substantially as described.

5 A sail composed of a number of vertically extending strips placed side by side, and means for connecting the opposite ends of certain of the strips to supports enabling

one longitudinal edge of each of such strips to be tightened and the other loosened, substantially as described.

In testimony whereof I have hereunto set my hand.

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FREDERICK A. SCAMMELL.