J. Tuers.

Building Form.

No. 5,388. Patented Dec. 4, 1847.

Fig: 1.

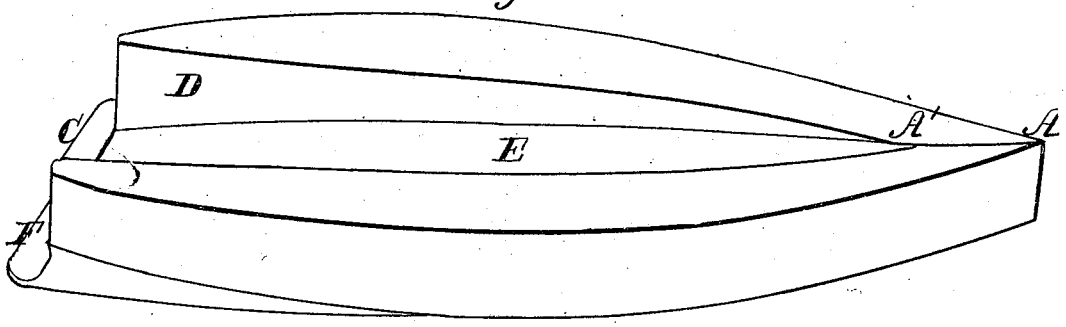
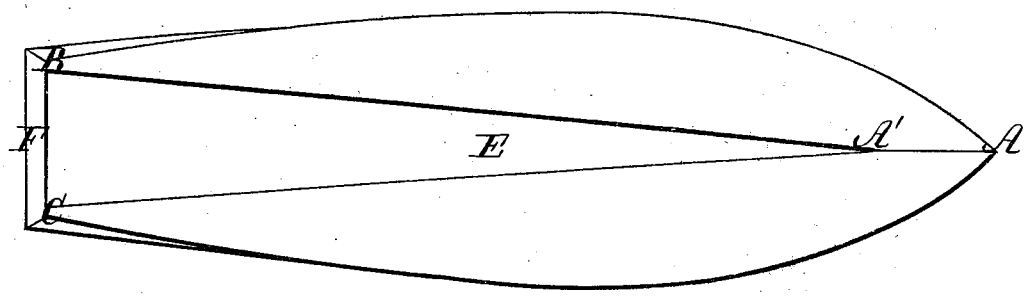


Fig: 2.



UNITED STATES PATENT OFFICE.

JOSEPH TUERS, OF JERSEY CITY, NEW JERSEY.

BOAT FOR SAILING.

Specification of Letters Patent No. 5,388, dated December 4, 1847.

To all whom it may concern:

Be it known that I, JOSEPH TUERS, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Mode of Constructing Boats and other Vessels, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an isometrical projection of one form of boat; and Fig. 2, a plan.

The same letters indicate like parts in all the figures.

The nature of my improvement consists in forming a boat with a single bow, from which diverge two keels, the triangular space between said keels being occupied by an inclined plane that extends from a point just in the rear of the bow, backward, and upward to the transom, where it terminates, and at which point it is as broad as the space between the keels; by which means I obtain a boat possessing in all essential particulars the advantages of a double or twin boat and obviate many of its most prominent defects.

The prominent advantages of my boat are as follows: First, the bow is like that of any ordinary sailing craft with a single stem from which the sides curve outward in the most approved, with perhaps a little more than usual beam, although that is not essential. The stern lines do not close inward as far as usual, and each side of the middle plane the keels are formed in a virtual line down from said plane. By this arrangement there is but one bow to open which causes the craft to steer as easily as an ordinary boat; the two keels give it greater stability, especially when running before a wind, while the inclined center plane causes a clean run and prevents the water from following in the wake of the boat. Thus the water is easily displaced by the single bow and freely and gradually returns to its place. In consequence of her stiffness she needs little or no ballast, which in ordinary sail boats is enough to sink them if they fill with water, an accident of frequent occurrence.

When the boat is listed over in sailing on a wind the windward keel rises and acts as ballast, its leverage being sufficient for that purpose; while the keel on the leeward side becomes the directing keel of the boat, and this it will be perceived stands at an angle, consequently it will incline her to the windward and make her sail much closer to the wind and go square through the sea.

In construction the outline of this boat is like ordinary ones, but from a point A′, just abaft the cant timber at the bow (A) the two sides are divided and separated, forming two keels or lines (A′ B), (C, A′) by the junction of their bottom on their inner sides with the planes D. These are vertical and intersect an inclined plane (E) that extends from one side to the other commencing at the point of separation A′ and extending backward and upward to the transom (F) where it terminates; this plane gradually increases in width as the keels separate, which serves to strengthen the whole structure.

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

The combination of a single bow with two diverging keels, as above set forth, and in combination therewith the inclined center plane, as hereinbefore specified.

JOSEPH TUERS.

Witnesses:

DANIEL B. WELSH,

JOHN TONNELI.