G. W. Brush,

Derrick.

No. 31,950. Patented Apr. 9, 1861.

Fig. 3.

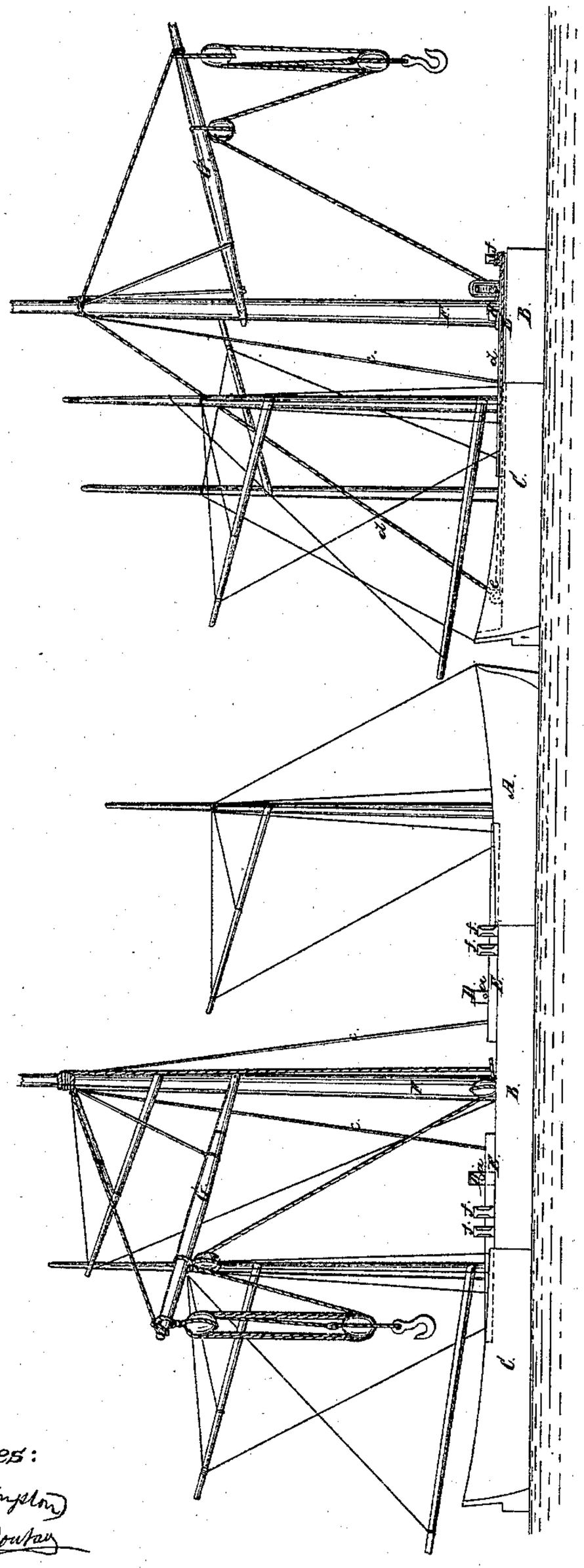


Fig. 4.

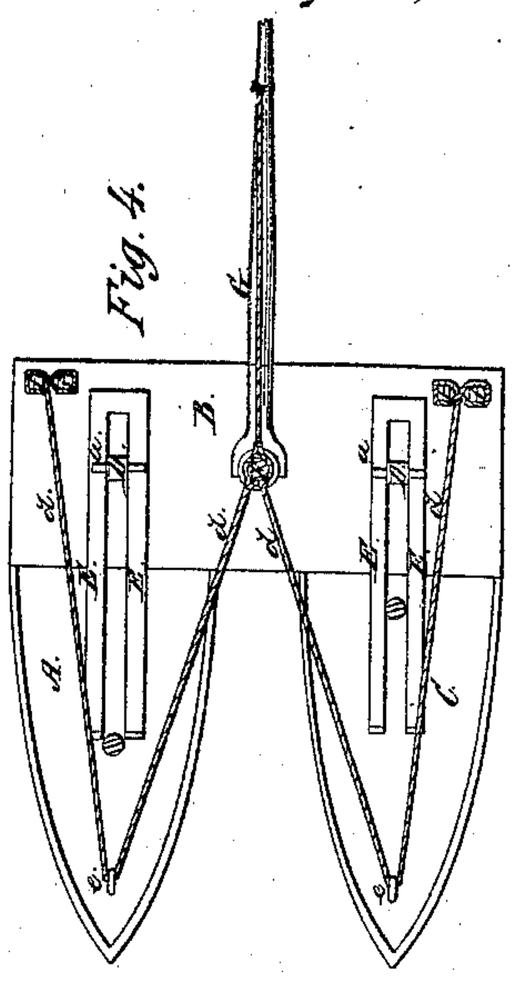
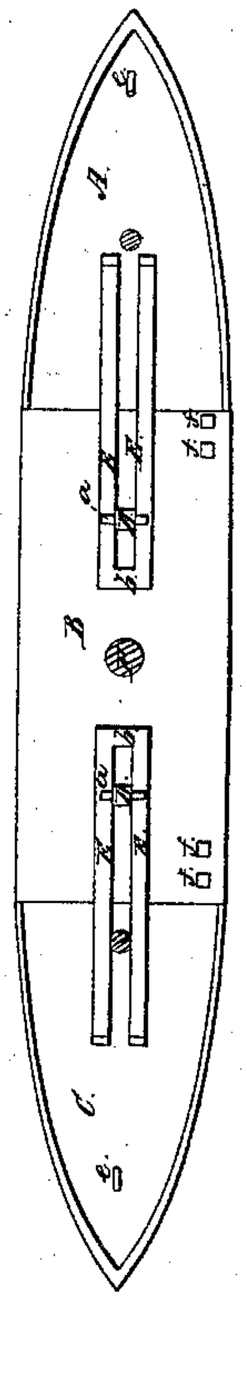


Fig. 1.

Fig. 2.



Witnesses:

C. W. Courtney

Inventor:

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UNITED STATES PATENT OFFICE.

GEORGE W. BRUSH, OF BROOKLYN, NEW YORK.

FLOATING DERRICK.

Specification of Letters Patent No. 31,950, dated April 9, 1861.

To all whom it may concern:

Be it known that I, GEORGE W. BRUSH, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Floats or Vessels for Carrying Boom-Derricks or other Hoisting or Lifting Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a side view of a float or vessel carrying a derrick representing it in condition for being navigated from place to place. Fig. 2, is a plan corresponding with Fig. 1. Fig. 3, is a side view of the float or vessel and derrick, in condition for hoisting or lifting. Fig. 4, is a plan corresponding with Fig. 3.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in so constructing, in two or more parts or sections, a float or vessel carrying a boom derrick or other hoisting or lifting apparatus, that the said sections may be brought in line with each other and in that condition present a suitable form for navigation from place to place like any ship or other vessel propelled by sail, steam power or other means, or may be brought to positions parallel or at any requisite angle to each other to produce the stiffness or steadiness in all directions necessary for the purpose of using the derrick or other lifting or hoisting apparatus.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

The example of my invention represented has the float or vessel in three sections A, B, and C, which might be built separately but as a more convenient mode I construct it in the first place as an ordinary ship or other vessel of suitable form, and then saw or otherwise cut it transversely into three parts or sections, and then make a strong tight bulk-head at each end formed by cutting apart, thus making each part tight of itself; and at a suitable distance from each end of the middle section B, I then insert in the keelson through the deck two upright posts D, D, of sufficient height to extend sufficiently high above the deck to pass between two fore and aft timbers E, E, which form the hinge-like connections between the middle section B, and the fore and after sections A, C, and to enable a toggle *a*, to be passed through each of said posts above the said timbers E, E, the said post being fitted to the keelson and deck to turn around therein in shifting the sections, and having its upper part squared to fit between the said timbers E, E, which are rigidly secured to the end sections and have blocks *b*, *b*, fitted and secured between the ends which extend over the middle section.

I use any known form of derrick, shears or purchase, which I erect upon or secure to the middle section B.

F, represents the mast of the derrick and G, the boom.

c, *c*, and *d*, *d*, are braces to brace the derrick, the braces *d*, *d*, when the float or vessel is brought to the condition for using the derrick, being led through ring or eye bolts or blocks *e*, *e*, near the bow and stern of the end sections A, and C, and secured to posts *f*, *f*, on the middle section by which arrangement the said braces are made to confine the end sections against the middle section by the strain brought upon them in hoisting or lifting.

The sections A, and C, may be shifted from one to the other of the positions represented in Figs. 2 and 4, by any suitable machinery or hauling tackle on board. Before swinging the said sections, they require to be moved longitudinally away from the middle section B. The sections are secured close together in either of the two positions by means of movable blocks inserted between the posts D, D, and the blocks *b*, *b*.

The float or vessel thus constructed may be rigged like a sailing vessel of any known kind or in any other suitable manner for sailing from place to place, or may be fitted with steam propelling machinery.

When the sections A, and C, are brought to the positions represented in Figs. 3 and 4, they constitute a powerful and effective counterbalance to the derrick or hoisting apparatus and any load or strain that may be brought to bear upon it.

When the float or vessel is constructed in two sections they may be connected by a system of connections substantially similar to the timbers E, E, which may form part of the foundation of the derrick or hoisting apparatus, or such apparatus may be erected upon one of said sections, which when such apparatus is to be used are swung to a posi-

tion parallel with or at such an angle with each other as will make their sharp or bow and stern ends constitute a counterbalance to the apparatus.

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

The float or vessel A, B, C, which carries the derrick or hoisting or lifting apparatus, constructed of two or more movable sections which can be brought into line with each other to form a navigable vessel, or to a position parallel with or at a suitable angle with each other to make their bow and stern ends counterbalance the derrick or hoisting apparatus substantially as herein specified.

GEORGE W. BRUSH.

Witnesses:
MONTG. M. LIVINGSTON,
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