

J. H. HATTON.

SLIDING KEELS FOR BOATS.

No. 185,320.

Patented Dec. 12, 1876.

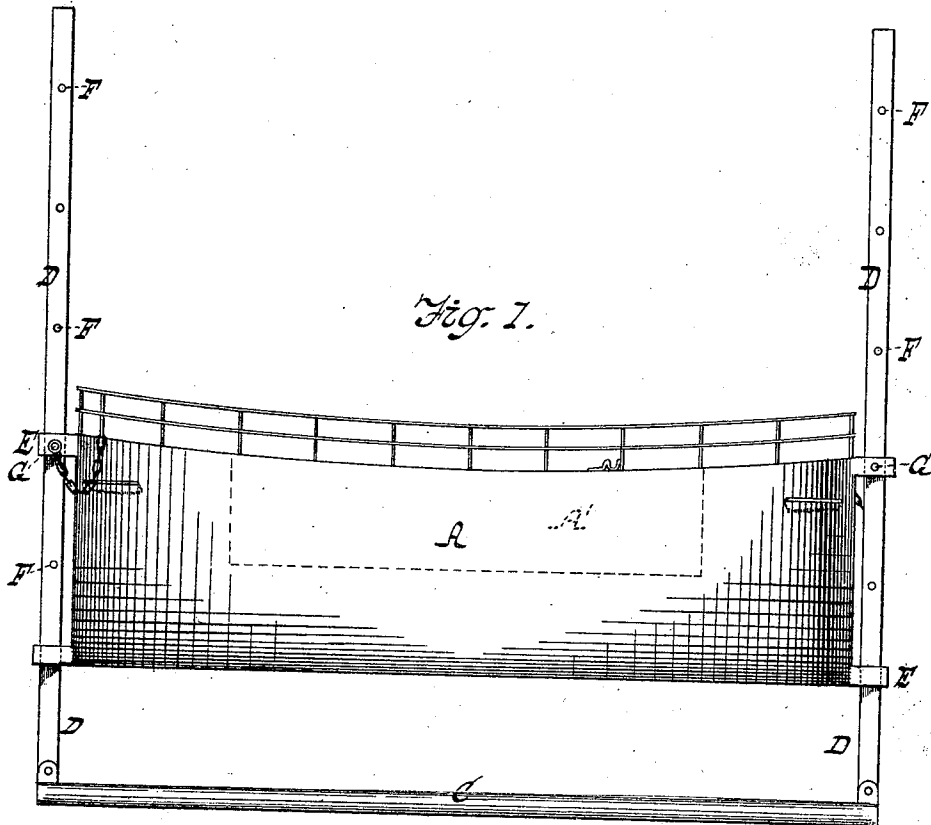
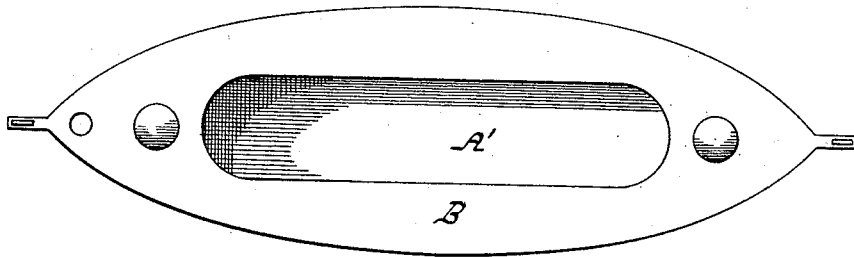


Fig. 2.



Witnesses.

J. M. Wagner.
J. L. Cooney

Inventor:

John H. Hatton.

By *James L. Norris,*
Attorney.

UNITED STATES PATENT OFFICE.

JOHN H. HATTON, OF FORT COVINGTON, NEW YORK.

IMPROVEMENT IN SLIDING KEELS FOR BOATS.

Specification forming part of Letters Patent No. **185,320**, dated December 12, 1876; application filed November 6, 1876.

To all whom it may concern:

Be it known that I, JOHN H. HATTON, of Fort Covington, in the county of Franklin and State of New York, have invented certain new and useful Improvements in Life-Boats, &c., of which the following is a specification:

My invention relates to certain improvements in supplemental keels for boats or vessels; and it consists in providing the boat with a false keel, secured longitudinally under the bottom of the boat, or below the true keel, by means of upright standards, preferably hinged to said false keel at each end, and secured in guides at the upper and lower ends of the prow and stern of the boat in such manner that they may be shifted vertically, so as to vary the distance between the false and the true keel or bottom of the boat to any desired extent, in order to ballast the same, as more fully hereinafter set forth.

Figure 1 represents a side elevation of a boat or vessel with my improvements applied thereto, and Fig. 2 is a plan view of the boat.

The letter A represents the hull of the boat, constructed of one plate of sheet metal or other suitable material, stamped into proper shape; and B, the deck of the same, constructed of one sheet of metal of similar material, if desired.

The deck portion may be provided with a central aperture, A', whereby, with the inner walls and hull, air-chambers are formed to give the proper buoyancy to the boat; or the aperture may be omitted, and the hull form one entire air-chamber.

The sheets forming the hull and deck of the vessel are united at the prow, stern, and gunwales. The prow and stern may be made either perpendicular, as shown, or shaped off at any desired angle.

The letter B, as above stated, represents the deck of the boat, which is formed of sheet metal or other suitable material, with a longitudinal aperture at the center, and is secured at its edges to the hull in any convenient manner.

The letter C represents a false or independent keel, located longitudinally under the true keel or bottom of the boat for a part or

the whole distance of its length, and secured at each end to the upright or inclined extensions D, which fit and are adapted to slide in the guides E, formed on or attached to the prow and stern of the hull, as shown. This false or supplementary keel is preferably hinged to the supporting rods or slides, in order that the whole may be folded and stowed away when desired, and can be made of any weight, but is usually made sufficiently heavy to ballast the hull when lying closely contiguous to said hull, and by means of the adjustable supports, by which it is secured to the hull, can be shifted so as to serve as an extra ballast for the boat when extended by means of the movable supports, by which it is secured to the hull.

The uprights or supporting-rods for the false or supplementary keel are provided at suitable intervals with apertures F, into which may be inserted pins or spikes G, to support the false or supplementary keel in any desired position, the upper guides E being perforated or provided with apertures for the pins, in order to secure the supports of the false or supplementary keel. As thus constructed, it is evident that the hull of the boat can be constructed without any openings for the supports, which weaken the boat and admit water to the same.

It will, of course, be evident that my improved supplemental keel can be employed in connection with boats or vessels of almost any construction.

What I claim, and desire to secure by Letters Patent, is—

In combination with the hull of a boat, the false or supplementary keel, supported longitudinally under the bottom or true keel by means of adjustable rods or slides secured at either end to the supplementary keel, and adapted to slide in guides attached to or formed on the prow and stern of the boat, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

JOHN H. HATTON.

Witnesses:

JAMES L. NORRIS,
JOS. L. COOMBS.