

No. 670,995.

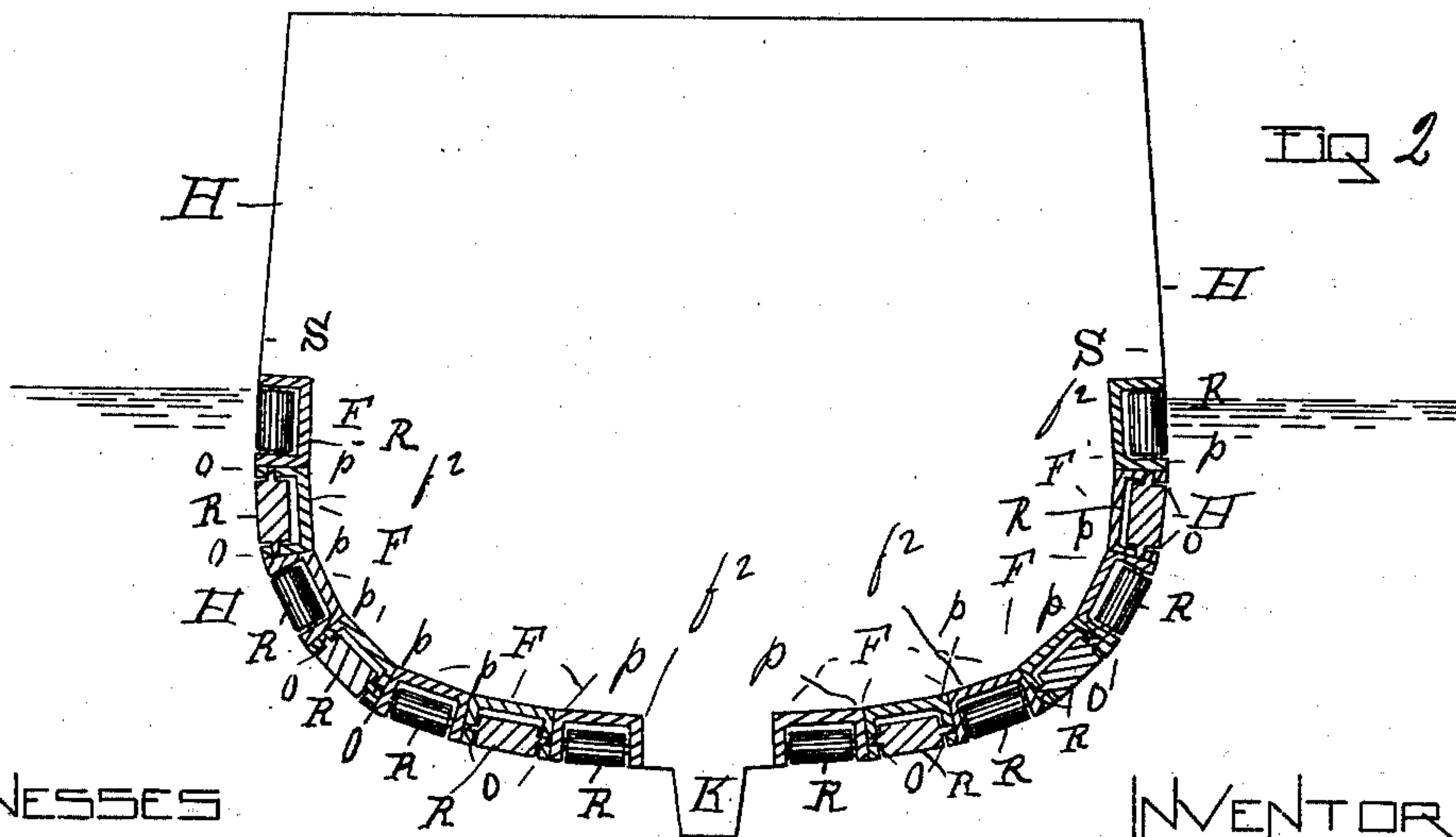
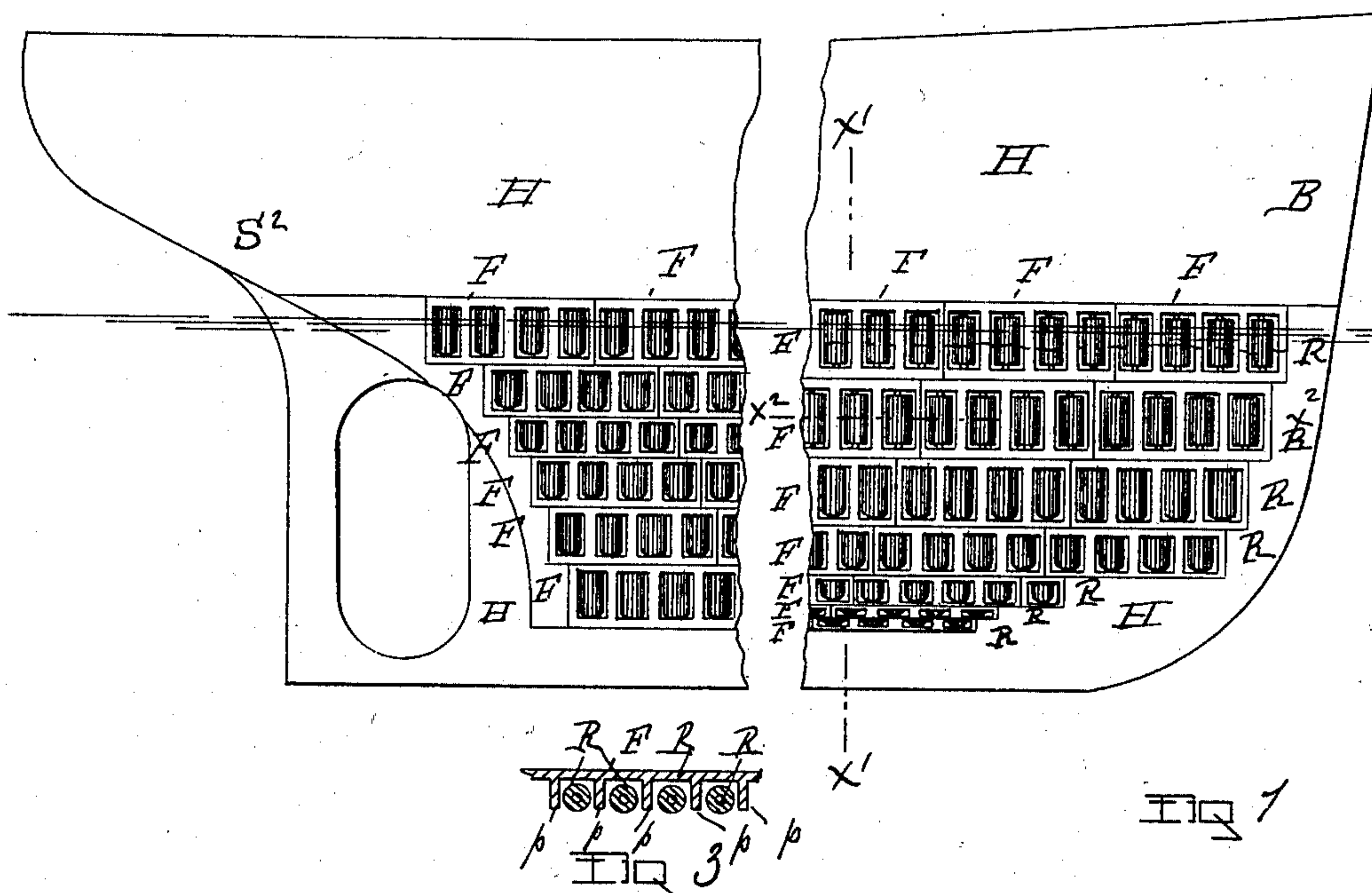
Patented Apr. 2, 1901.

J. W. MOORE.

CONSTRUCTION OF BOAT HULLS.

(Application filed July 17, 1899.)

(No Model.)



WITNESSES

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JOHN W. MOORE, OF LANSINGBURG, NEW YORK.

CONSTRUCTION OF BOAT-HULLS.

SPECIFICATION forming part of Letters Patent No. 670,995, dated April 2, 1901.

Application filed July 17, 1899. Serial No. 724,045. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. MOORE, of the village of Lansingburg, county of Rensselaer, and State of New York, have invented new
5 and useful Improvements in the Construction of Boat-Hulls, of which the following is a specification.

My invention relates to an improved construction of boat-hulls by which the friction
10 consequent upon their movement through the water may be reduced; and these better results I accomplish by the arrangement of friction-rollers in rows upon the exterior of the boat below the water-line.

15 Accompanying this specification to form a part of it there is a plate of drawings containing three figures illustrating the application of my invention, with the same designation of parts by letter reference used in all of them.

20 Of the illustrations, Figure 1 shows the side of a boat and illustrated as broken apart at the center with my invention applied thereto. Fig. 2 is a section taken on the line X' X' of Fig. 1, with alternating friction-rollers shown
25 in elevation and section. Fig. 3 is a section taken on the line X² X² of Fig. 2.

The several parts of the boat-hull and the mechanism containing my invention are designated by letter reference and the function
30 is described as follows:

The letters H designate the hull, and S its sides; K, the keel; B, the bow, and S² the stern.

35 The letters F designate frames, of which series are used, each frame having cross-partitions *p*, between each two of which latter there is arranged a friction-roller R, arranged to journal at O in each end of the inclosure, with the outer face of each of the rollers projecting slightly beyond the partitions *p* and
40 with the inner face *f*² of the frames made to

conform to the contour of the boat-hull below the water-line and the outer face of the frames at the top course of their arrangement made to aline with the hull sides where above the
45 water-line. As thus made, when the boat is being driven at high speed the resistance caused by the friction of the water where in contact with the hull will be reduced by the action of the rollers. 50

I am aware that an endless belt mounted upon rollers arranged to journal in the side of the hull has been used and in which the water through which the boat was passing caused the belt to run on the rollers with the outer
55 stretch of the belt acted upon by the water through which the boat was passing. This older construction differs from mine in the fact that the water through which the hull is passing operates directly upon the rollers to
60 reduce the friction, and no belt is used.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination with the hull of a boat, of
65 frames inserted therein below the water-line, said frames being provided with partitions; and on their inner faces made to coincide with the contour of the hull; a roller arranged in
70 each of said frames between each two of the partitions and provided with journals in the frame sides substantially as and for the purposes set forth.

Signed at the city of Troy, New York, this
21st day of April, 1899, and in the presence
75 of the two witnesses whose names are hereto written.

JOHN W. MOORE.

Witnesses:

CHARLES S. BRINTNALL,
W. E. HAGAN.