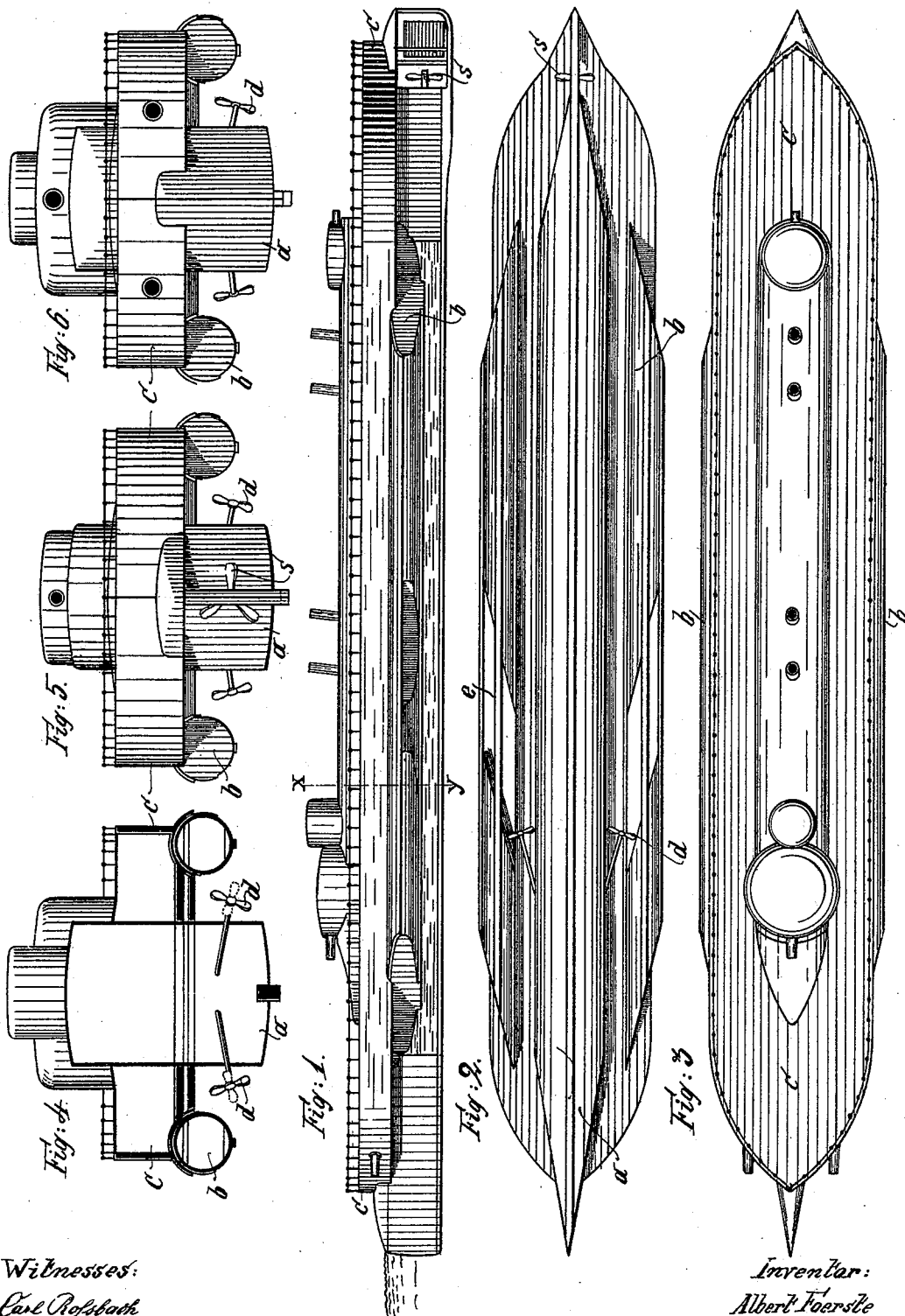


(No Model.)

A. FOERSTE.
FORM OF SHIPS.

No. 519,628.

Patented May 8, 1894.



Witnesses:
Carl Rofsbach
E. Kreyser.

Inventor:
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UNITED STATES PATENT OFFICE.

ALBERT FOERSTE, OF BERLIN, GERMANY.

FORM OF SHIPS.

SPECIFICATION forming part of Letters Patent No. 519,628, dated May 8, 1894.

Application filed July 6, 1893. Serial No. 479,770. (No model.)

To all whom it may concern:

Be it known that I, ALBERT FOERSTE, a subject of the King of Prussia, German Emperor, and a resident of Berlin, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Ships' Bodies, of which the following is an exact specification.

My invention relates to a ship and has for its object to heighten the speed of the ship in a manner not attained hitherto without increasing the motive force, and further to advance the stability of the vessel simultaneously.

In order to make my meaning more clear, I refer to the accompanying drawings, in which similar letters denote similar parts, and in which—

Figure 1 is a side-view. Fig. 2 is an under view. Fig. 3 shows an upper view of my improved ship. Fig. 4 is a transverse section on line $x-y$ of Fig. 1. Fig. 5 shows a back view, and Fig. 6 a front view of the ship.

In carrying my invention into effect, I construct my ship in the following manner:— a is the hull of the ship which I prefer to form oblong and keen. The hull a bears above it an enlarged portion c forming the deck of the ship and provided with two lateral closed chambers b which are likewise tapering and wedge-shaped at their ends. Besides the screw-propeller s which is arranged in the usual manner at the hind-part of the vessel, there are provided two screws d at the hull a of the ship. e are lateral cuttings provided in the closed chambers b of the hull a and arranged before the screws d in about a third of the length of the ship. The other parts of the ship are constructed in the usual manner and need no further description.

The advantages which I attain by building the ship in the described manner, are as follows: The ship even at full load, dips into the water only unto the under surface of the broader part c , because the buoyancy of the ship is increased by the tightly closed chambers b . The ship slides like a sledge on two tracks formed by the intervals between the hull a and the chambers b . In these intervals the water is strongly pressed together by the friction at the side walls, so that the lateral screws d find a higher resistance than

usually, thus causing a quicker movement of the ship and effecting a better utilization of the water. In order to prevent a diminution of the effect of the screws d , the chambers b are cut in the above described manner, so that the screws d press the water contained in the said intervals partly below, partly to the outside, thus diminishing the resistance of the water existing from the lateral friction at the walls of the ship.

A further advantage of the described construction consists in the greater mobility, which is effected by the arrangement of the screws d . In the same manner, as at swimming, the hands are used for turning the body, the screws d may serve for steering by being alternately operated. Thereby any danger produced by the loss or damage of the helm is effectually avoided and the ship may be turned without moving from its place by turning one of the screws d and the screw s . About the third part of the ship, this having reached its full speed, raises from out the water, whereby the friction between the water and the walls of the ship is considerably diminished and the speed naturally increased. The lateral screws d are perfectly sheltered from any damage by their position in the interval between the lateral chambers b and the hull a . The water being in this interval is perfectly calm, so that the shock of the waves cannot be noxious to the screws d . The fore part of the ship is tapering, which form is very favorable for cutting the water before the vessel. The lateral chambers b impart further an increased stability to the ship, which is of high importance especially for sailing-vessels and the latter, when constructed according to my invention, may be exposed to a greater inclination before the wind than this was possible hitherto, without being overset. For this reason my invention may be also preferably applied to all sorts of boats, especially life-boats, which are used at the high rut of the sea and therefore exposed to great undulations.

Having thus fully described the nature of my invention, what I desire to secure by Letters Patent of the United States is—

In a ship with a central sub-hull extending throughout the length of the ship, and with two lateral sub-hulls connected by the main-

hull and forming inverted channels with the
latter, the combination with propellers ar-
ranged within said channels and having an
oblique position with regard to the direction
5 of the central sub-hull, of oblique cuts pro-
vided within the lateral sub-hulls, said cuts
extending in the direction of the propeller-
shafts, for the purpose as described.

In testimony whereof I have signed this
specification in the presence of two subscrib- 10
ing witnesses.

ALBERT FOERSTE.

Witnesses:

R. HERPICH,
H. GENEHR.