

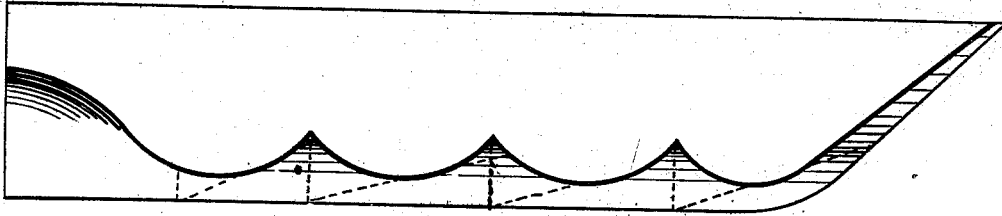
W. B. WHITING.

CONSTRUCTION OF HULLS OF VESSELS.

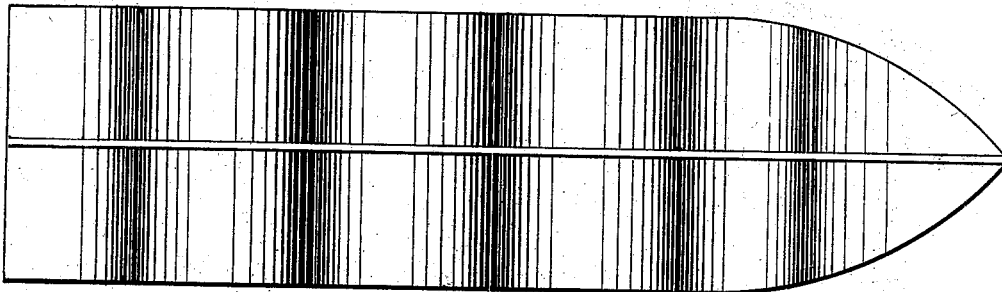
No. 187,742.

Patented Feb. 27, 1877.

*Fig. 1*



*Fig. 2.*



WITNESSES

*Helena Kruffmann*  
*J. R. Perkins*

INVENTOR

*William Bradford Whiting*

# UNITED STATES PATENT OFFICE.

WILLIAM B. WHITING, OF WAUKESHA COUNTY, WISCONSIN.

## IMPROVEMENT IN CONSTRUCTION OF HULLS OF VESSELS.

Specification forming part of Letters Patent No. 187,742, dated February 27, 1877; application filed November 29, 1875.

*To all whom it may concern :*

Be it known that I, WM. B. WHITING, of Waukesha county, Wisconsin, have invented certain Improvements in the Hulls of Vessels, of which the following is a specification:

The improvement in the shape of the hull of vessels for which I solicit a patent is a series of curved surfaces, forming the bottom of the vessel, extending from the bow to the stern.

Experiments have been made in Europe with what are termed "serrated" bottoms, consisting of a series of inclined planes, the first terminated at its lower extremity by an upright wall, from the top of which another inclined plane extends, terminated in like manner by another inclined plane, and so on, until the stern is reached. The purpose of these inclined planes is to increase the buoyancy of the vessel, enabling it to glide over the surface of the water, rather than force its way through it, (as boys make flat stones to skip on the water by their shape, combined with velocity of motion,) with this peculiarity, that the draft is decreased as the speed is increased. These experiments have developed

the astonishing speed of sixty-two knots, and it is believed that a similar result will be obtained by the more perfect shape of a series of curves, which I propose to combine with the shape of bottom now in use.

My design is more clearly shown by the annexed drawing, which is herewith made part of this specification.

The continuous line shows the actual shape in the proposed improvement, and the dotted line the shape now in use, which shape I propose to combine with the curved surfaces described. The exact proportions are the radius of the curves to be two-thirds of their distance apart from each other, from one center to another, that distance being equal to the depth of the vessel, exclusive of the keel, which should extend a short distance below.

What I claim as original is—

The series of curved surfaces constituting the bottom of the boat.

WILLIAM B. WHITING.

Witnesses:

M. J. MILLER,  
EUGENE S. ELLIOTT.