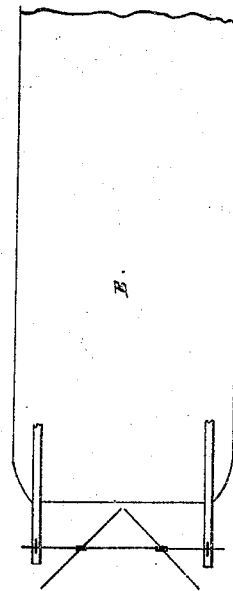
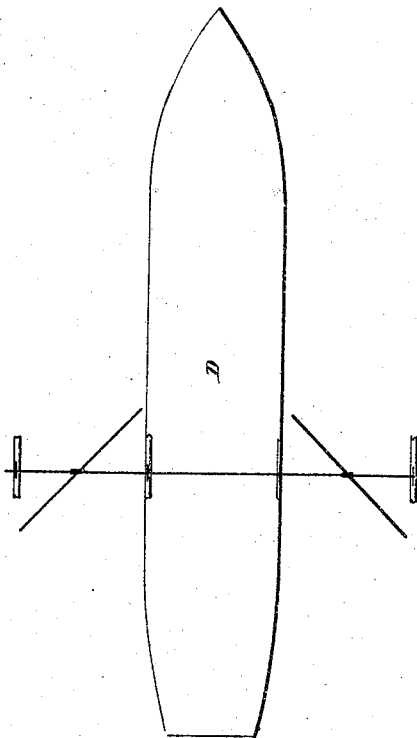
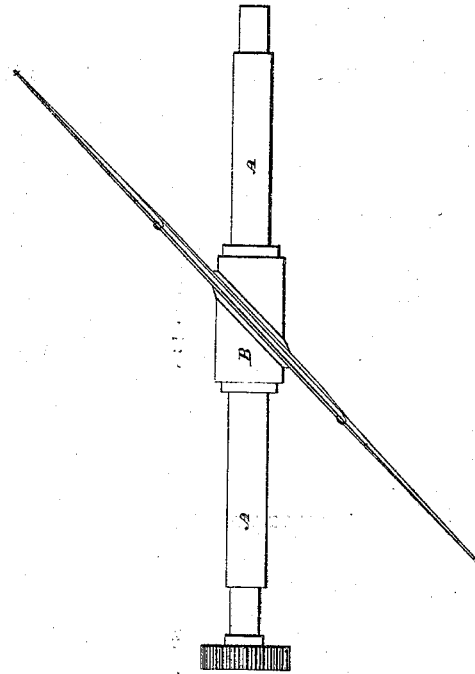
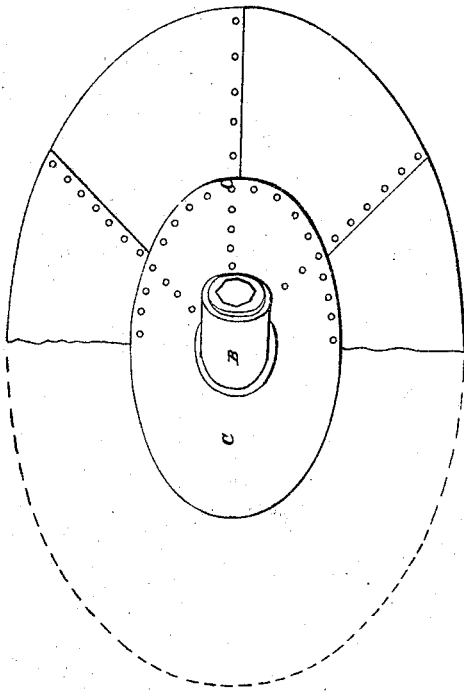


G. Erkson.
Paddle Wheel.

N^o 3,967.

Patented Mar. 26, 1845.



UNITED STATES PATENT OFFICE.

GERRETT ERKSON, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN PROPELLING BOATS AND OTHER VESSELS.

Specification forming part of Letters Patent No. 3,967, dated March 26, 1845.

To all whom it may concern.

Be it known that I, GERRETT ERKSON, of the city of Pittsburg, county of Allegheny, and State of Pennsylvania, have invented a new and Improved Wheel for the Propelling of Boats or Vessels on Seas, Lakes, Rivers, or Canals where Steam, Horse, or other Power is Applicable; and I do hereby declare that the following is a full and exact description of the same.

The nature of my invention consists in placing on and fastening to the common shaft now in use, or any other shaft that may hereafter be used, a convex or flat wheel of oval form, of wood or metal, by a cylinder that passes on and is fastened firm on said shaft or otherwise, at an angle of forty-five degrees, more or less.

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

Letter A represents a shaft made to revolve, as usual, horizontally. This shaft is to be placed on boats or vessels at right angles with the keel when the wheel is placed either on the stern or on the sides of boats or vessels, as represented in the drawings D and E.

Letter B represents a cylinder, cast or made in whole or in segments with the wheel, and is to be fastened firm on shaft A.

Letter C is a convex or flat wheel of oval form, made or cast in whole or in segments with the cylinder B. The wheel C is to be made or cast on the cylinder B at an angle of forty-five degrees, more or less, and the two wheels, when in motion, should stand at right angles to each other, as represented in drawing D, and when applied to the stern of boats

or vessels one wheel may be used to propel; but I should recommend two wheels, standing at a right angle to each other, as represented in the drawing E. The wheel may be cast of small size on the cylinder B and then enlarged to any size that may be desired by riveting or fastening on said wheel wood or metal, as represented in the drawing C, and if the wheel C and cylinder B is made or cast in segments these several segments, with their corresponding segments, should be attached to each other by rivets or otherwise, so as to form a convex or flat wheel of oval form, attached or in whole upon cylinder B at an angle of forty-five degrees, more or less.

The shaft A should be placed on boats or vessels so as the wheel C is immersed in water within twenty inches of cylinder B, more or less. This wheel may be propelled by a single or double gearing. I recommend double gearing.

Boats or vessels using my propeller may be built much narrower than they are usually built without danger of capsizing in a gale or otherwise.

I name and designate this invention of mine the "Erkson propeller."

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

The application of an oval wheel, flat or convex, to operate as described in the foregoing specification. I do not claim any part of the machinery used in the construction thereof.

GERRETT ERKSON.

Witnesses:

JAMES LEMEN,
JAMES BLACK.