## C. C. EVERSON.

## Improvement in Paddles.

No. 129,012.

Patented July 16, 1872.

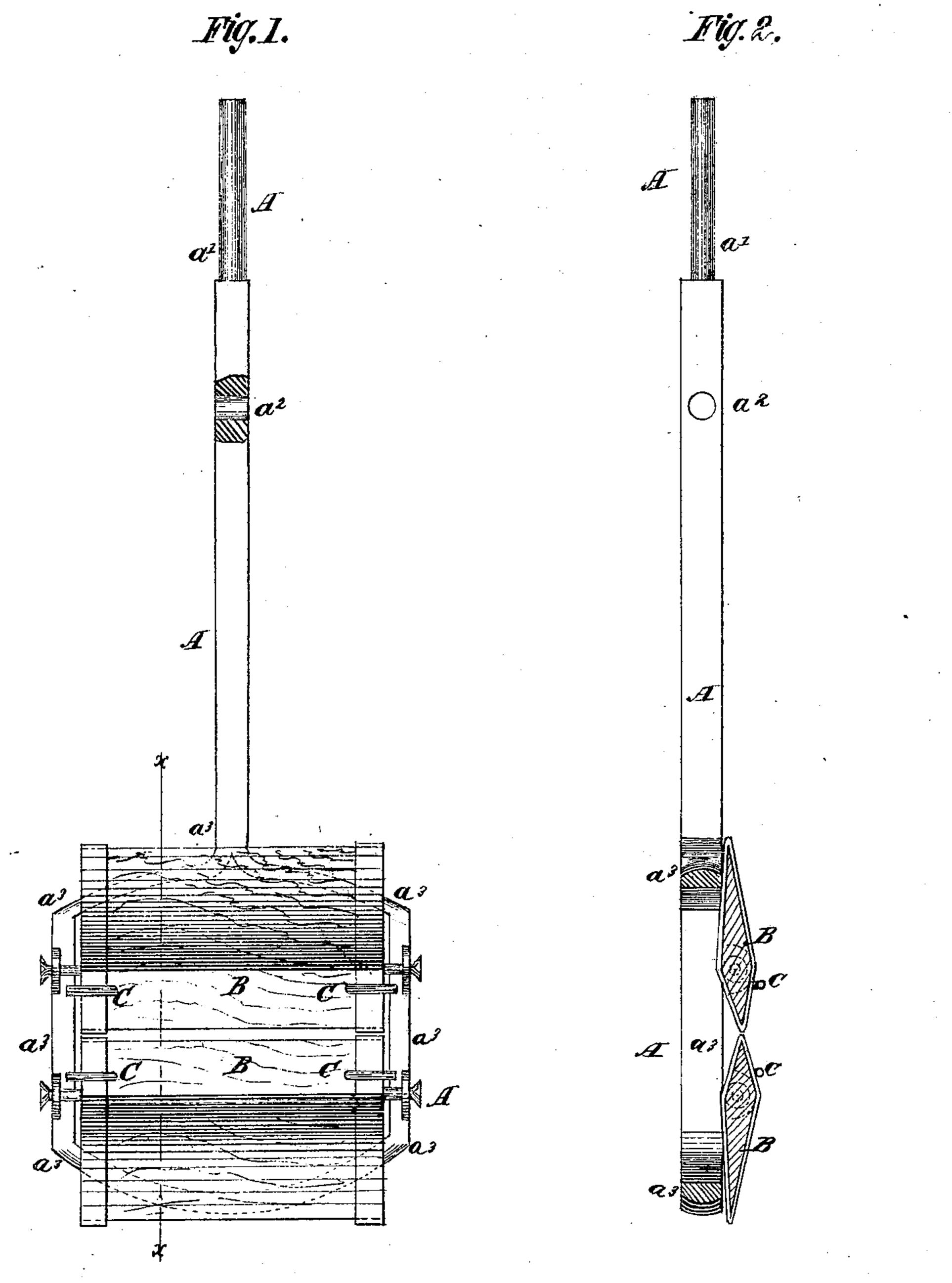


Fig. 3.

Witnesses:

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## UNITED STATES PATENT OFFICE.

CALVIN C. EVERSON, OF PALMYRA, NEW YORK.

## IMPROVEMENT IN PADDLES.

Specification forming part of Letters Patent No. 129,012, dated July 16, 1872.

· Specification describing certain Improve. ments in Paddles for Boats, invented by CAL-VIN C. EVERSON, of Palmyra, in the county of Wayne and State of New York.

Figure 1 is a side view of my improved paddle. Fig. 2 is a detail sectional view of the same taken through the line x x, Fig. 1. Fig. 3 is an end view of one of the paddles or wings, illustrating its construction.

Similar letters of reference indicate corre-

sponding parts.

My invention has for its object to furnish an improved paddle or oar for propelling boats, which shall be so constructed as to encounter great resistance from the water when moving in the direction to propel the boat and very little resistance when moving back for another stroke; and it consists in the construction and combination of the various parts of the paddle, as hereinafter more fully described.

A represents an oar, having the handle  $a^1$ , aperture  $a^2$ , and open end frame  $a^3$ . B are two lever-paddles, fulcrumed in bearings of frame a³ at a point on each side unequally distant from the two ends. C C are stops against which the paddles rest while being drawn back. In, or nearly in, a vertical plane passing through the fulcrum-pins are vertexes of two plane angles, from which the planes incline in reverse

directions. The two planes which extend toward the rear and beyond frame a<sup>3</sup> are much longer than those which extend in front and toward each other. The object of this is that the greatest area of surface-pressure from the water may always come upon the same sides of the fulcrum.

As the hand of the oarsman pulls handle  $a^1$ to the left and paddle end of the oar moves to the right, the pressure of the water upon the outer long sides keeps the oars aligned on the frame  $a^3$ ; but when the motion is reversed and the water presses through the frame outside thereof, and on the opposite long side of the paddles, the said paddles are thrown up against the stops C C in a perpendicular position. This allows the water to pass freely through them.

Having thus described all that is necessary to a full understanding of my invention, what I esteem to be new, and desire to protect by

Letters Patent, is—

The hand-oar A having frame a³, provided with a pair of paddles, B B, and stops C C, constructed and arranged as and for the purpose described.

CALVIN C. EVERSON.

Witnesses:

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H. P. Knowles, N. A. ROGERS.