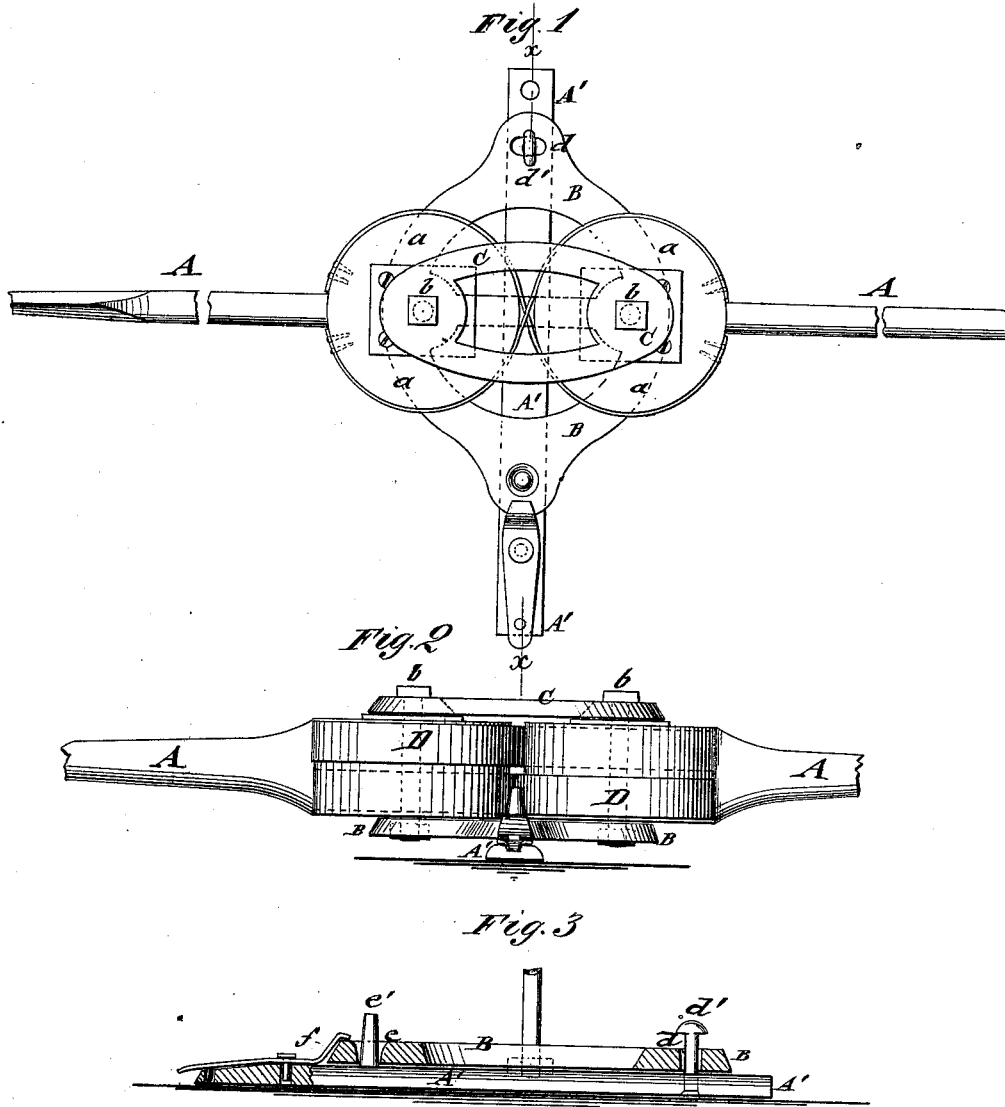


J. W. WALL.
OARS.

No. 195,778.

Patented Oct. 2, 1877.



WITNESSES:
A. W. Almqvist
J. H. Scarborough.

INVENTOR:
J. W. Wall.
BY *Mumford*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES W. WALL, OF CLEVELAND, OHIO.

IMPROVEMENT IN OARS.

Specification forming part of Letters Patent No. **195,778**, dated October 2, 1877; application filed July 23, 1877.

To all whom it may concern:

Be it known that I, JAMES WILLIAM WALL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Oar, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a top view, Fig. 2 a side view, of my improved oar, and Fig. 3 a detail vertical longitudinal section on line *x x*, Fig. 1, of the base-plate of the oar, showing mode of attachment to gunwale.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved oar for boats, by which a person can sit in a boat face forward and row ahead, the oar working in perfectly smooth and noiseless manner, and being readily shipped or unshipped from the gunwale of the boat.

The invention consists of an oar in which the handle and blade are made of separate pieces, and connected by metallic bands being fastened to and running in opposite direction around the circular pivoted ends of the handle and blade, in combination with base-plate having end slot and hole with a cross-pin and binding-spring of a stationary strip of the gunwale, as will be hereinafter explained.

By reference to the drawing, A represents an oar, in which the handle is separated from the blade, and each section applied by its circular ends *a* to center pivots *b* passing through the round ends of the handle and blade, and being rigidly attached to a base frame or plate, B, and a top brace-piece, C. The round ends *a* of handle and blades are connected with each other by means of brass or other bands D, which are attached at their ends to the round portions *a* of handle and blade, and arranged to run in opposite direction, first around one-half of the handle end,

and then in **S** shape over to the round portion of the blade. One band is attached to the lower half, the other to the upper half, of the round portions, and one passed across the other, so as to produce by one band the forward direction of the blade when the handle is moved forward, and by the other band the backward motion of the plate simultaneously with the return motion of the handle, without the least noise or jar, being thus superior to oars working by intermeshing cogs on the same principle.

The base-plate B is secured to the gunwale of the boat in such a manner as to admit the oscillation of the oar by being attached by a slot, *a*, at one end to a cross-catch, *d'*, of a fixed strip, A', of the gunwale, and by a hole, *e*, at the opposite end, to a pin, *e'*, of the strip, and retained by clasp-spring *f* of the strip A', as shown in Figs. 1 and 3.

The noiselessness and ease by which the oar is worked, and the simple mode of shipping and unshipping the same from the strip of the gunwale, furnish advantages which are readily perceptible to every oarsman, and which produce the quick and convenient working of the oar.

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

The combination of the jointed and pivoted oar-sections and base-plate, having end slot and hole, with a cross catch-pin and binding-spring of a stationary strip of the gunwale, to admit oscillating motion of oar, and ready shipping and unshipping of the same, substantially as specified.

JAMES WILLIAM WALL.

Witnesses:

JOHN B. COLEMAN,
J. H. SCHNEIDER.