

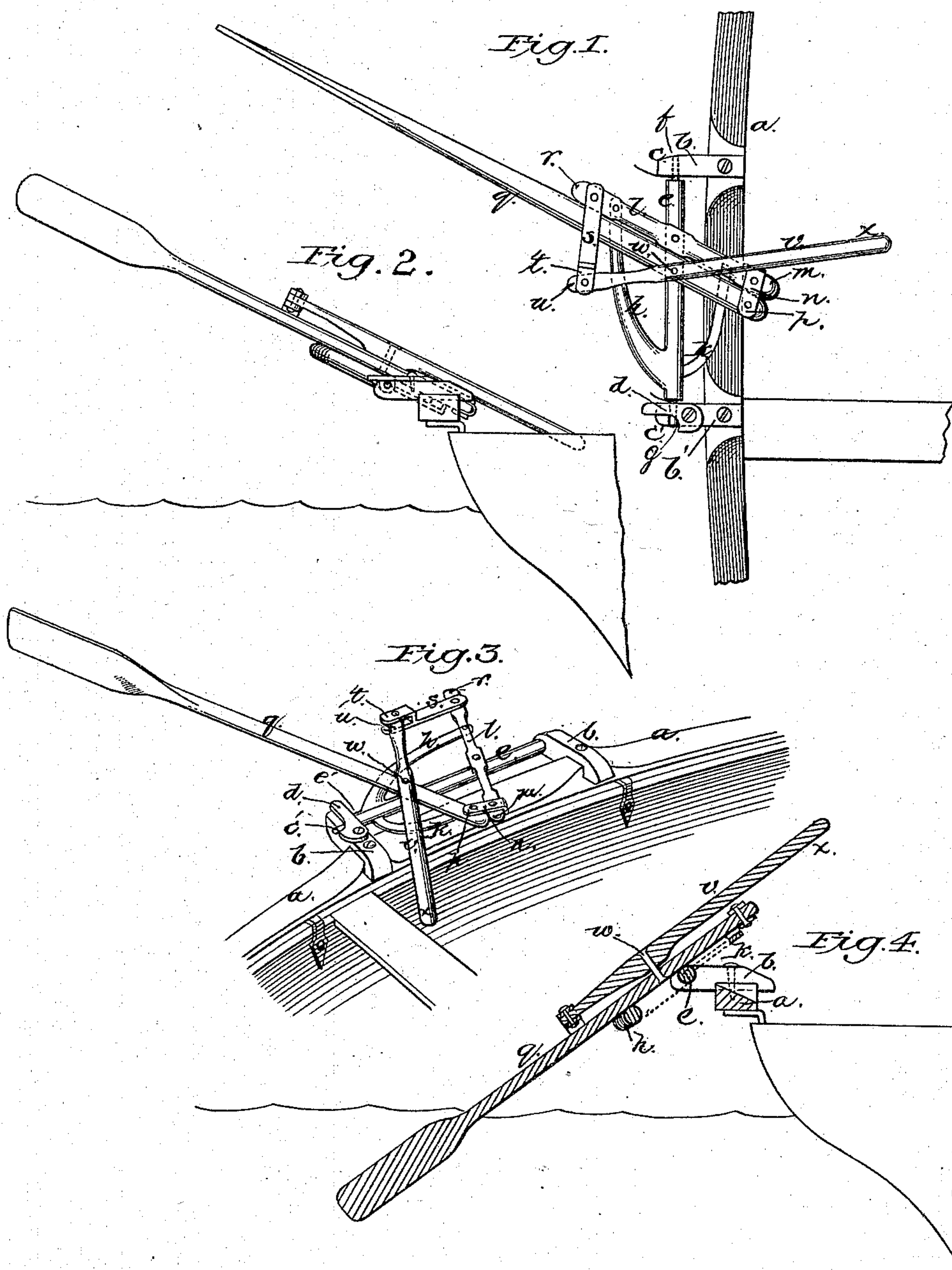
(No Model.)

L. A. COOK.

ROWING GEAR.

No. 252,432.

Patented Jan. 17, 1882.



WITNESSES

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UNITED STATES PATENT OFFICE.

LEEDS A. COOK, OF HANOVER, MICHIGAN.

ROWING-GEAR.

SPECIFICATION forming part of Letters Patent No. 252,432, dated January 17, 1882.

Application filed June 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, LEEDS A. COOK, a citizen of the United States, resident of Hanover, in the county of Jackson and State of Michigan, have invented a new and valuable Improvement in Rowing-Gears; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my device. Fig. 2 is a rear view, showing the oar raised out of the water. Fig. 3 is a perspective view; and Fig. 4 is a sectional view, showing the oar in the water.

This invention relates to improvements in devices for propelling row-boats; and it consists in a construction whereby the rower can face the bow of the boat, and at the same time lift the oar easily from the water at the "finish," as hereinafter set forth.

Heretofore in the class of devices of this kind where the rower faces the bow there has been no easy means for the equivalent of "feathering," so that the oar can be readily withdrawn for the "recover" without loss of speed by back-pressure on the blade. In such old devices sufficient support has not been given to the bearing of the oar at the gunwale, so as to relieve the rower of much of its weight. In the present device these objects are obtained. A broad full bearing is afforded the oar during its sweep, and an easy withdrawal of the blade at the end of the stroke.

In the annexed drawings, the letter *a* represents the gunwale streak or edge of the "cock-pit" of a shell or other row-boat, from which edge extend outwardly, at a proper interval, two posts, *b, b'*, the former having a closed bearing, *c*, the latter an open one, *c'*, over which is placed a pivoted latch-plate, *d*. Held by journals *f, g* in these bearings is a rock-shaft, *e*, arranged lengthwise the boat, from which shaft, at its end *e'*, diverges outwardly and forwardly the curved rest *h*, and inwardly and forwardly the curved brace *k*, the former longer than the latter. Secured near its ends

to those of the rest and brace is an obliquely-arranged cross-bar, *l*, which is fastened to rock-shaft *e* where it crosses the latter, and is on the angle the oar would have when at the beginning of the stroke, thereby forming an abutment. Attached firmly to the inner end, *m*, of this cross-bar *l* is a looped coupling-strap, *n*, between the open ends *p* of which is pivoted the inner end of the oar *q*. This latter extends out over the brace, rock-shaft, and rest, having its bearing on the latter two throughout its entire sweep.

Secured loosely to the outer end, *r*, of cross-bar *l* is a connecting-rod, *s*, which, extending rearward, carries between its forks *t* the pivoted outer end, *u*, of the hand-lever *v*. This lever *v* is swiveled by bolt *w* to the oar *q*, and extends inboard, so that the hand-grasp *x* is at the proper position for the rower.

From this description it will be readily seen that the oar moves with the hand-lever, and not in opposite directions, like the blade and hand-grasp of an ordinary oar. This enables the rower to face the bow and see where he is going. The oar has a good rest during the whole of the stroke, relieving the oarsman of the weight, and at the finish by pressing down on the hand-lever the rock-shaft turns, bringing the blade out of the water "clean" and without even the slight back-pressure of feathering. There are to be two of these devices on opposite sides of the boat for each rower, and as many pairs as the style of boat demands. This arrangement of oar and lever, with the other accompanying features, forms a jointed oar easily and quickly managed with slight fatigue.

I claim—

The combination of oar *q*, hand-lever *v*, swiveled together, rock-shaft *e*, rest *h*, and brace connected to the shaft and extending forwardly, connecting-rod *s*, and coupling-strap *n*, as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEEDS ALLEN COOK.

Witnesses:

JAMES D. KNIGHT,
O. B. JOHNSON.