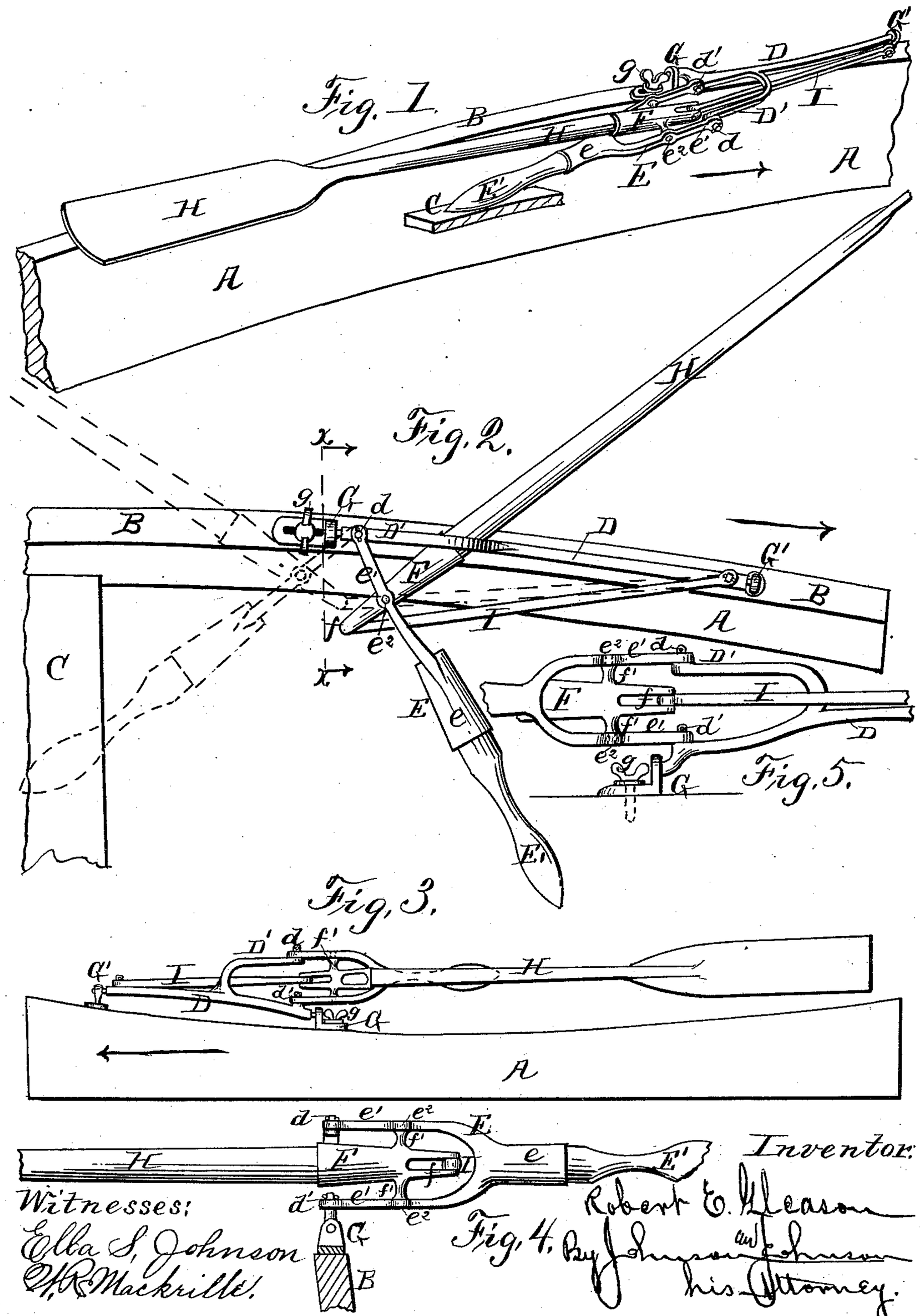
(Model.)

R. E. GLEASON.

ROWING GEAR.

No. 358,259. Patented Feb. 22, 1887.

Fig. 1.



Witnesses:
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UNITED STATES PATENT OFFICE.

ROBERT E. GLEASON, OF STILLWATER, MINNESOTA, ASSIGNOR OF ONE-HALF TO AARON A. HARPER, OF SAME PLACE.

ROWING-GEAR.

SPECIFICATION forming part of Letters Patent No. 358,259, dated February 22, 1887.

Application filed November 3, 1886. Serial No. 217,888. (Model.)

To all whom it may concern:

Be it known that I, ROBERT E. GLEASON, a citizen of the United States, residing at Stillwater, in the county of Washington and State of Minnesota, have invented new and useful Improvements in Rowing-Gear, of which the following is a specification.

This invention relates to rowing-gear of that class by which the oarsman faces in the direction of movement and propulsion of the boat.

The object of the improvement is the construction of a gear which can easily be applied to any boat and form a stable support for the oar, and permit the same to be folded within the boat and upon the top or gunwale and allow the oar to track or trail in the water, when released, without impeding the momentum of the boat.

The improvement consists in the peculiar construction of the rocking oar-support, the hand-lever support, the oar, oar-socket, and in the peculiar combination of these several parts, whereby the various objects before mentioned are accomplished in a substantial manner, all as more fully hereinafter set forth and claimed, and shown in the annexed drawings, in which—

Figure 1 is a perspective view of a portion of the side of a boat and my improvement applied thereto and shown folded; Fig. 2, a top view of the same, showing the position of the oar previous to the stroke by full lines, and the position at the end of the stroke by dotted lines. Fig. 3 is an outside view, showing the oar above the edge of the boat; Fig. 4, a transverse section on the line *x x* of Fig. 2. Fig. 5 shows in elevation, enlarged, the gear-connections.

A portion of a row-boat is shown in the drawings to illustrate the application of my rowing-gear simply. It consists of the side A, the gunwale B, and the thwart C.

The rowing-gear comprises the rocking oar-support D, the hand-lever socket E, and the oar-socket F. The rocking oar-support is journaled at its ends in brackets G G′, and has an arm, D′, branching laterally therefrom, near one end, the outer portion of which is bent and extends substantially parallel with said rocking oar-support D. The bracket G is slotted and the set-screw *g*, passing through said slot and into the gunwale, holds it in an adjusted position. By this means the wear between said brackets and oar-supports can be readily taken up and the rowing-gear removed. The hand-lever socket E is bifurcated at one end, and the opposite end is formed into a socket, *e*, which is adapted to receive the handle E′. The arms *e′* of the bifurcated end are pivotally connected at their ends with the rocking oar-support arms, preferably by the studs *d d′*, which pass through eyes formed in the ends of said arms *e′*, as shown.

The oar-socket is bifurcated at its inner end, *f*, and its outer end is adapted to receive the inner end of the oar H, and has gudgeons *f′* projecting from its diametrically-opposite sides, which gudgeons are located between the end of said socket and its bifurcated end *f*, and enter coincident openings e^2 in the arms *e′* of the bifurcated end of the hand-lever socket E, as shown. The inner end, *f*, of the oar-socket is connected with the rocking oar-support D, near its front end, by the connecting-rod I, which is pivotally held at its rear end between the bifurcated ends *f* of said oar-socket, and is pivotally connected at its opposite end with the front end of said oar-support.

In practice the forward movement of the oar is limited by impinging against the arm D′, as shown in Fig. 2, and its backward movement is limited by the connecting-rod I striking against said arm D′, as shown by dotted lines in Fig. 2. The inner portion of the oar and its socket have a movement in the space between the rocking oar-support and its arm, and between the bifurcated ends of the hand-lever socket, as will be readily comprehended by reference to the several figures of the accompanying drawings.

It will be noticed that the oar has an equal bearing on each side, by reason of the gudgeons *f′* of the oar-socket being journaled in the arms *e′* of the bifurcated end of the hand-lever socket.

When it is desired to store the oars and yet have them in readiness for use at a moment's notice, the hand-lever and oar are folded close to each other and turned into the position shown in Fig. 1.

The end of the hand-lever resting upon the thwart forms a support for the inner end of the oar, while the outer end rests flatwise upon the gunwale or edge of the side. In this position the oar occupies the least space, as it is substantially parallel with and is folded close to the side of the boat. This construction brings the hangings of the oar within the side of the boat, and, while giving a full and easy stroke, does not run out in the water so far, which is an important advantage in narrow streams, or in grass or weeds which sportsmen have to contend with.

Another advantage is, when the oar passes the center going on its forward stroke, it throws outward and draws to the center on its backward stroke, which gives it a smoother and better movement than any rowing-gear hitherto in use, so far as I know and can find.

I claim—

1. The combination, with the hand-lever pivotally supported at its outer end, and the oar pivoted a short distance from its end to said hand-lever, of the connecting-rod I, interposed between the end of the oar and the side of the boat, and the pivoted oar-support D D′, substantially as described.

2. The combination, with the hand-lever having a bifurcated end, which end is pivotally supported, of the oar pivoted a short distance from its end, between the arms of the bifurcated ends of said lever, and the connecting-rod I, interposed between the end of the oar and the side of the boat, substantially as set forth.

3. The combination, with the rocking oar-support having an arm connected therewith, and a portion extending substantially parallel with said support, and the bifurcated hand-lever pivotally connected at its outer end to said support and arm, of the oar pivotally supported, at a short distance from its end, between the bifurcated ends of said hand-lever, and the connecting-rod interposed between the end of the oar and said oar-support, substantially as and for the purposes set forth.

4. The herein shown and described rowing-gear, consisting of the following elements in combination: the rocking oar-support provided with an arm having a portion extending substantially parallel therewith, the bifurcated hand-lever socket, the oar-socket pivotally supported midway its ends between the arms of the bifurcated ends of said hand-lever socket, and the connecting-rod interposed between the ends of said oar-socket and the oar-support, as described.

5. The rowing-gear consisting of the bifurcated pivoted support D D′, the bifurcated oar-socket F *f*, the bifurcated handle-socket E *e*′, and the rod I, the latter pivoted to the support D, the oar pivoted between the handle-arms, and the latter pivoted to the arms of the support D in the manner shown and described, whereby the oar is limited in its forward and backward movements, is permitted to trail in the water, and is supported within the boat by its handle.

6. In a rowing-gear, the oar-socket F, having the bifurcated end *f* and the side gudgeons, *f*′, and the handle having the arms *e*′ *e*′, pivoted to said gudgeons, combined with the bifurcated support D D′, pivoted to the boat, the ends of its arms being pivotally connected to the ends of the handle-arms, and the rod I, pivoted to the end of the oar-socket and to the front end of the oar-support, whereby the inner end of the oar operates between the arms of the handle and the arms of the oar-support, substantially as described, for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of subscribing witnesses.

ROBERT E. GLEASON.

Witnesses:
FAYETTE MARSH,
H. H. HARPER,
F. H. WHITNEY.