(No Model.)

W. CIENCOSKI.

ROWING APPARATUS.

No. 320,458. Patented June 23, 1885.

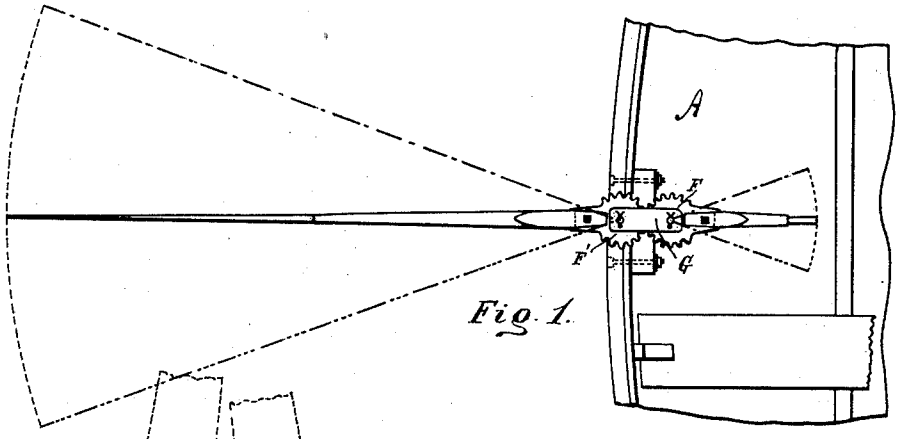


Fig. 1.

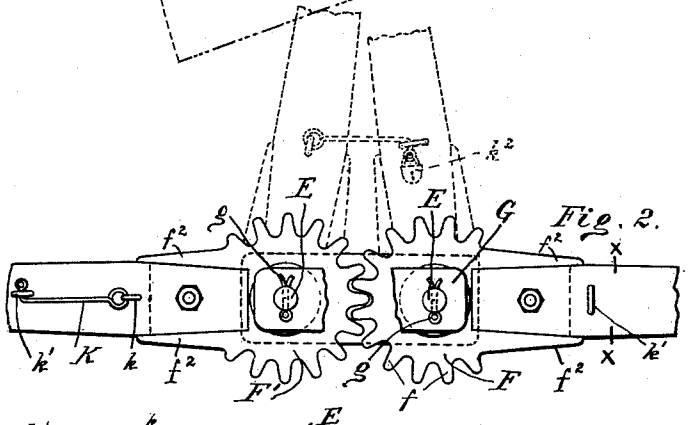


Fig. 2.

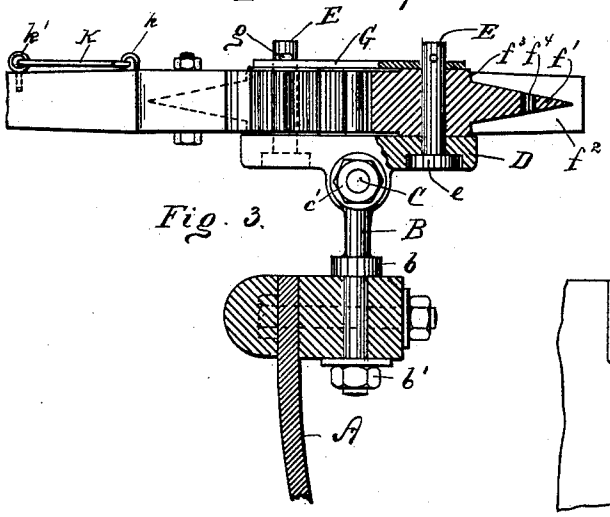


Fig. 3.

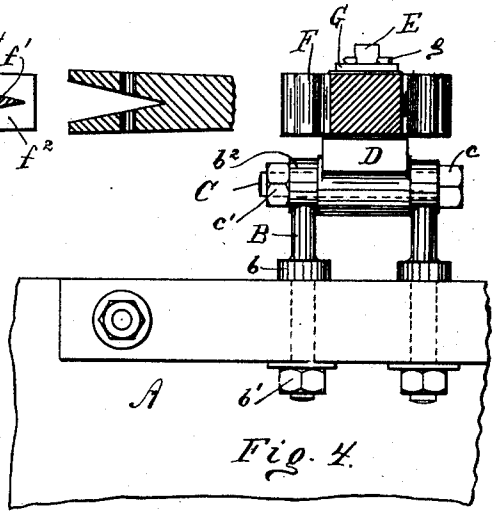


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM CIENCOSKI, OF KOUTS, INDIANA.

ROWING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 320,458, dated June 23, 1885.

Application filed October 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CIENCOSKI, a citizen of the United States, residing at Kouts, in the State of Indiana, have invented certain new and useful Improvements in Rowing Apparatus, of which I do declare the following to be a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

My present invention has relation to the improvement of that class of rowing apparatus by which the oarsman, by pulling in the usual manner, is enabled to propel the boat forward while sitting with his face toward the bow. In this class of apparatus it is customary to divide the oar and connect the divided portions together by suitable gearing attached to the side of the boat.

The object of my invention is to provide a simple, cheap, durable, and effective means of gearing together the handle and blade portions of the oar; and this object I have accomplished by the improved construction of mechanism hereinafter described, illustrated in the accompanying drawings, and particularly defined as to its novel features in the claims at the end of this specification.

Figure 1 is a plan view of a portion of a boat having my improved rowing apparatus applied thereto. Fig. 2 is a detail plan view, on a larger scale, showing the manner of gearing the divided portions of the oar. Fig. 3 is a view partly in side elevation and partly in vertical section. Fig. 4 is a view in cross-section on line $x\ x$ of Fig. 2.

Like letters of reference denote like parts in the several views of the drawings.

A designates the side rail of the boat, through which pass the standards B, having flanges b, and securely held in place by means of the nuts b'. The eyes b^2 of these standards serve to receive the ends of the journal-bolt C, which passes through a suitable journal-hole in the enlarged portion d of the bottom plate, D, and is retained in place upon the standards by means of the headed end c and nut c'. In the under side of the bottom plate, D, are formed seats for the enlarged heads e of the journal-pins E, which pass through the main castings F F′ and top plate, G, and are secured by the locking-pins g. The main castings F and F′, which receive, respectively, the handle and blade portion of the oar, are of like construction, and are geared together by means of the teeth f upon their peripheries. Each casting has formed integral therewith a recessed stem or shank, consisting of the central reduced portion, f', and side flanges, f^2, and shoulders f^3. The inner ends of the oar handle and blade are formed each with an inclined groove to receive the reduced portion f' of the stem and of such size as to fit snugly between the side flanges, f^2, and against the shoulders f^3. A perforation, f^4, in the stem, and corresponding perforations in the portions of the oar, serve to hold the parts firmly together.

From the foregoing construction it will be evident that when the parts are in position for use, the oarsman, with his face toward the bow of the boat, can use the handles of the oars in the ordinary manner, a forward movement of the handles causing a corresponding movement of the blades, and vice versa. The hinge-joint between the bottom plate, D, and the standards B allows the blades of the oars to be dipped into and raised from the water and yet guard against any unsteadiness of movement. The reduced portion f' and side flanges, f^2, of the stems afford a most secure means for attaching the blade and handle of the oar to the castings, as the flanges offer great resistance against displacement or breakage in the direction of the severest strain, and the reduced portions f', shoulders f^3, and connecting-bolt guard against any slipping or loosening in the direction of the length of the oars.

It will readily be seen that the parts are few and simple and can be cheaply made and easily put together.

A further advantage of my improved rowing apparatus is that when not in use the oars can be quickly moved into the position shown by broken lines in Fig. 2, and can be securely retained in such position by means of the link K and staples k and k' and lock k^2, thus holding them out of the way and preventing their surreptitious use.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In rowing apparatus, the combination of the uprights B, attached to the boat, the bottom plate, D, the pivot bolt C, the castings F and F′, having teeth upon their peripheries, and having the recessed shanks, provided with the side flanges, f^2, to resist lateral strain, the top plate, G, and the oar handle and blade having each a cutaway portion to fit the recessed shanks of the castings, substantially as described.

2. In a rowing apparatus, the combination, with the divided portions of the oar, of a suitable link and catches for fastening said portions down together when not in use, substantially as described.

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