No. 692,845. Patented Feb. 11, 1902.

T. H. GARRETT, JR.

BALL BEARING ROWLOCK.

(Application filed Nov. 11, 1901.)

(No Model.)

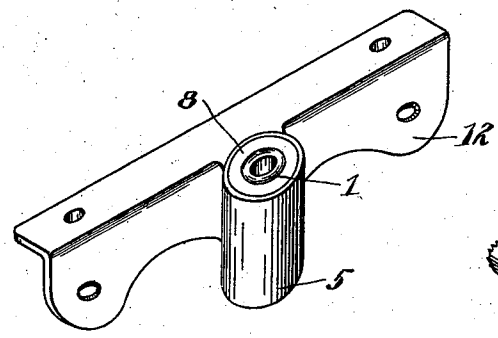


Fig. 1

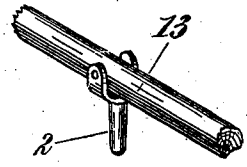


Fig. 3

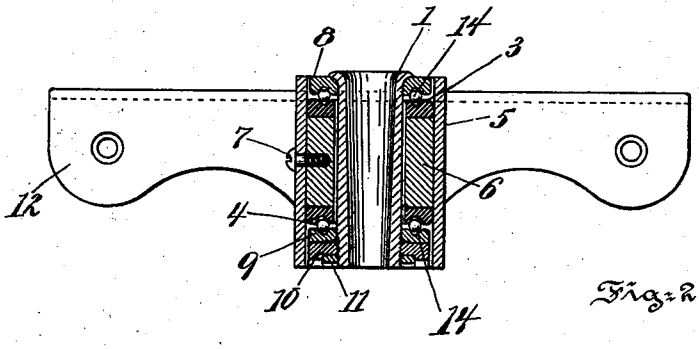


Fig. 2

WITNESSES:

W. F. Jackson

Frank T. Hales.

INVENTOR

Thomas H. Garrett, Jr.

BY

Augustus B. Strange & Son

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS H. GARRETT, JR., OF AUBURN, NEW YORK.

BALL-BEARING ROWLOCK.

SPECIFICATION forming part of Letters Patent No. 692,845, dated February 11, 1902.

Application filed November 11, 1901. Serial No. 81,840. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. GARRETT, Jr., a citizen of the United States, residing at Auburn, in the county of Cayuga and State of New York, have invented a certain new and useful Ball-Bearing Rowlock, of which the following is a specification.

The principal object of the present invention is to provide a silent, attractive, anti-friction, reliable, and efficient rowlock which shall be of simple construction.

To these and other ends hereinafter set forth the invention comprises the improvements to be presently described and finally claimed.

The nature, characteristic features, and scope of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a perspective view illustrating a rowlock embodying features of my invention with the fork removed. Fig. 2 is a view drawn to an enlarged scale and illustrating the same principally in central section; and Fig. 3 is a perspective view illustrating a portion of an oar, together with a fork which is applicable for use in connection with my invention.

In the drawings, 1 is a sleeve supported by ball-bearings and adapted to receive the fork 2. The fork 2 and the sleeve are arranged to fit together, so as to constitute when in use, in effect, one piece. Of course the fork can be removed from the sleeve, as is frequently desirable in use. To accomplish this result, the sleeve is made tapering, so that the fork fits it detachably, yet when inserted in place there is sufficient friction between the parts to cause the sleeve to turn with the fork 2. The sleeve 1 itself is supported upon ball-bearings. For this purpose use is made of suitable ball-races 3 and 4, which are shown as mounted in a socket 5 and secured to a suitable tubular piece or part 6, which is held by a set-screw 7 against rotation in the socket 5. Use is also made of a ball-race 8, fitted so as to turn with the sleeve 1, and of a ball-race 9, similarly fitted to the sleeve. The flaring upper end of the sleeve 1 serves to hold the ball-race 8, and the ball-race 9 is held by the pair of nuts 10 and 11, of which the nut 11 serves as a jam-nut. In the drawings the socket 5, as shown, is provided with a bracket 12, by means of which it can be secured to the gunwale, although it is obvious that the socket may be otherwise fitted for attachment or secured to the boat or to an outrigger, if desired. Similarly the fork 2 is shown as connected with the portion 13 of the oar, although it is obvious that the oar may simply rest in or be otherwise adapted to the fork.

The mode of operation of the described rowlock may be described as follows: In use the fork 2 is inserted in the sleeve 1, which it fits quite tightly, so that when the oar is moved backward and forward the fork and the sleeve turn as one piece. The parts 8 and 9 also turn with the sleeve and fork, and as they turn they ride on the balls 14, which in turn bear upon the ball-races 3 and 4, which are fixed in the socket, which in its turn is secured to the boat. The result of this is that the oar turns very lightly and easily and with practically no noise, which latter quality is very desirable in hunting and the like. Clearly the fork 2 may be easily removed from the sleeve when not in use by simply withdrawing it.

It will be obvious to those skilled in the art to which the invention relates that modifications may be made in details without departing from the spirit thereof. Hence I do not limit myself to the precise construction and arrangement of parts hereinabove set forth, and illustrated in the accompanying drawings; but,

Having thus described the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A rowlock comprising a movable sleeve, a fixed support, ball-races connected with the sleeve and with the support, balls interposed between said races, and a fork having a shank fitted to the sleeve so as to turn therewith, substantially as described.

2. In a rowlock, the combination of a tapered flaring sleeve, a socket, ball-races secured to the socket, a ball-race fitted to the flaring upper end of the sleeve, a ball-race fitted to the lower end of the sleeve, nuts for

securing the last-mentioned ball-race, and balls between said races, substantially as described.

3. In a rowlock, a socket, a support for the socket, a tubular piece mounted in the socket and provided with ball-races, a tapered flaring sleeve mounted through said tubular piece, a ball-race fitted to the flaring upper end of the sleeve, a ball-race fitted to the lower end of the sleeve, nuts for holding the last-mentioned ball-race, and balls interposed between said races, substantially as described.

4. A rowlock comprising a tubular member adapted for attachment to a boat and provided with upper and lower ball-races, a sleeve mounted through said tubular member and provided with ball-races above and below the last-mentioned ball-races, balls interposed between said races, and a fork having a shank fitted to said sleeve so as to turn therewith, substantially as described.

In testimony whereof I have hereunto signed my name.

THOMAS H. GARRETT, JR.

In presence of—
JAMES F. RICH,
GEO. B. GARRETT.