Aug. 27, 1929. W. RUFF 1,726,239

BOAT PADDLE

Filed Sept. 24, 1928

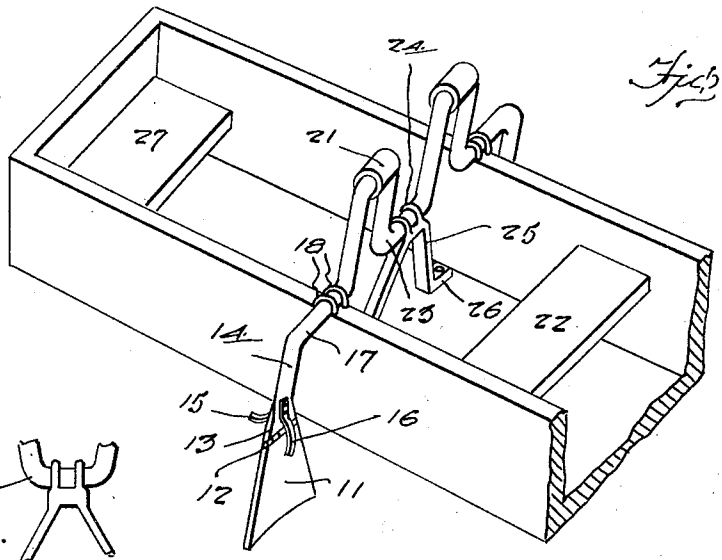


Fig. 1.

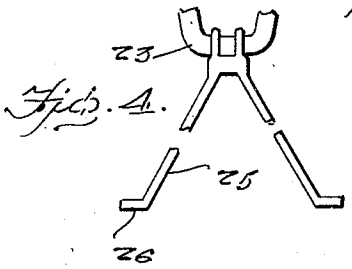


Fig. 4.

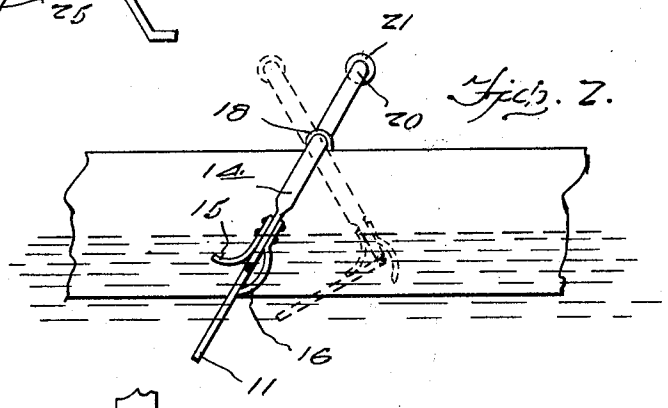


Fig. 2.

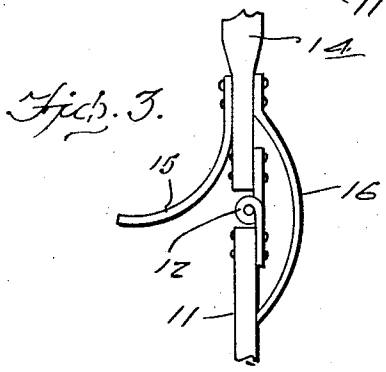


Fig. 3.

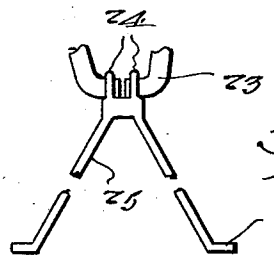


Fig. 5.

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Patented Aug. 27, 1929.

1,726,239

UNITED STATES PATENT OFFICE.

WILFRED RUFF, OF CRANE VALLEY, CANADA.

BOAT PADDLE.

Application filed September 24, 1928. Serial No. 308,057.

The present invention relates to boat paddles and has for its prime objects the provision of a simple and improved form of paddle which may be readily and firmly mounted on a row boat, canoe or the like to provide for an easy operation thereof.

Another very important object of the invention resides in the provision of boat paddles of the character stated which are simple and of an improved construction, its substantial imitation of the feet and legs of a duck and thus designed to operate in a similar manner for propelling the boat.

A further object of the invention resides in the provision of boat paddles of the character stated, in which the wide flat paddles or blades are hingedly connected with the depending legs or shanks and limited in the swinging movement in either direction by resilient stop members carried on said legs and shanks.

A still further very important object of the invention resides in the provision of boat paddles of the character stated which may be readily operated by crank portions within ready reach of the occupant of the boat to either force the boat along or permit it to drift by letting the paddles run idle.

A further and important object of the invention resides in the provision of boat paddles of this character which are mounted so that the paddles may be operated in unison or separately as desired, and the blades of the paddles limited in the swinging movement on the legs or shanks therefor, in either direction.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing:

Figure 1 is a perspective of the paddles mounted in a conventional boat, a portion of the boat being broken away,

Figure 2 is a side elevation illustrating the manner of operating the paddles,

Figure 3 is an enlarged fragmentary detail elevation, showing clearly the hinging of the paddle blade and the resilient stop member for limiting the swinging movement thereof, in either direction,

Figure 4 is a fragmentary detail view, showing the manner of mounting a pair of paddles on the bottom of the boat, and

Figure 5 is a slightly modified form of central mounting for the pair of paddles.

Referring to the drawing in detail it will be noted that the paddles each include a flared flat blade 11 corresponding in general outline to the foot of a duck.

The blade 11 is hingedly connected at its narrow upper edge by means of a conventional hinge 12 to the flattened lower end 13 of the depending leg or shank 14. The blade 11 is limited in its swinging movement in either direction by means of a pair of resilient stop members 15 and 16 which are carried on the lower flat portion 13 of the leg or shank 14.

The stop members 15 and 16 are preferably in the form of arcuate leaf springs and the member 15 is curved outwardly and downwardly, away from the hinge 12, while the member 16 is curved in a vertical plane past the springs 12 so that the lower free end of the member 16 is substantially below the upper ridge end thereof and is thus engaged against one face of the blade 11 when the latter is in its depending vertical position.

When the blade 11 and the leg or shank 12 occupy positions in planes at right angles to one another, as by forcing forwardly the upper portion of the handle of the leg or shank, as will be later more clearly understood, the curved free portion of the stop member 15 engages the lower face of the blade 11.

The leg or shank 14 for each paddle has an inwardly directed horizontal portion 17 which is rotatable in a pair of rings 18 secured in the upper end of the boat side 19. The portion 17 of the leg or shank 14 then connects with an upstanding crank portion 20 having a loose collar 21 thereon which may be firmly gripped by the occupant of the boat for operating the paddle while the occupants remain comfortably on the boat seat 22.

In the preferred form of the invention, the legs or shanks of the paddles are connected at the center of the boat by the central connecting section 23 which is rotatably mounted in a pair of rings 24 carried on the substantially inverted V-bracket 25 which

has the outturned extremities of its legs secured on the bottom of the boat in any suitable or well known manner.

In the modified form of the invention disclosed in Figure 5, the central section 23 of the paddle legs or shanks 24 are separated between the rings 24, thus permitting operation of either paddle blade 11 independently of the other, as well as simultaneously therewith, as desired.

As the construction of the device has thus been described in detail, brief reference is now had to its use and mode of operation. To operate the paddles, it is simply necessary to grip the collars 21 and force the upstanding crank portion 20 forward and backward, thus rocking the horizontal portion 17 of the paddle legs or shanks 14 in their respective rings 18 and thereby compelling the paddle blades 11 to function.

In this movement of the paddle legs or shanks 14, the blades 11 are raised and moved rearwardly as the upper crank portions 20 of the legs or shanks 14 move forward and downwardly. Then, on the return of the upper crank portions 20, the paddle blades 11 are forced downwardly and forwardly, thus forcing the boat rearwardly.

Naturally when the same operation is given to the paddles by an occupant of the boat seated on the end seat 27 of the boat, the forced movement of the boat will be forward movement with respect to such occupant. The strokes may be increased or decreased in length, according to the arc through which the upper crank portions 20 are moved.

When mounting of the blades in the boat will permit, the paddles may be operated independently of one another or in unison, as desired to turn the boat or move the same in a straight rearward or forward direction, according to the operation of the paddles.

It is thought that the construction, operation, utility and advantages of this invention will now be quite apparent to those skilled in this art without a more detailed description thereof.

The present embodiments of the invention have been disclosed in detail merely for the purposes of exemplification since in actual practice they attain the features of advantage enumerated as desirable in the statement of the invention and the above description.

It will be apparent that changes in the details of construction, and in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described my invention, what I claim as new is:

In combination, a boat, diverging shanks rotatably mounted across the edges of the sides of the boat, means for mounting the innermost portions of said shanks on the bottom of the boat, said shanks having upstanding crank portions, the outer ends of the shanks being directed downwardly and flattened, flat blades hinged to the lower flattened ends of said shanks, inwardly bowed arcuate resilient stop members carried by one face of said shanks to limit the swinging movement of said blades in one direction, and upwardly curved resilient stop members carried by the opposite faces of the shank and extending in the same direction as the first stop members, and extending substantially to the pivot points of the blade for limiting the swinging movement of said blades in the opposite direction.

In testimony whereof I affix my signature.

WILFRED RUFF.