(No Model.)

J. R. MAHONEY.

PROPELLING MECHANISM FOR BOATS.

No. 509,133. Patented Nov. 21, 1893.

Fig. 1.

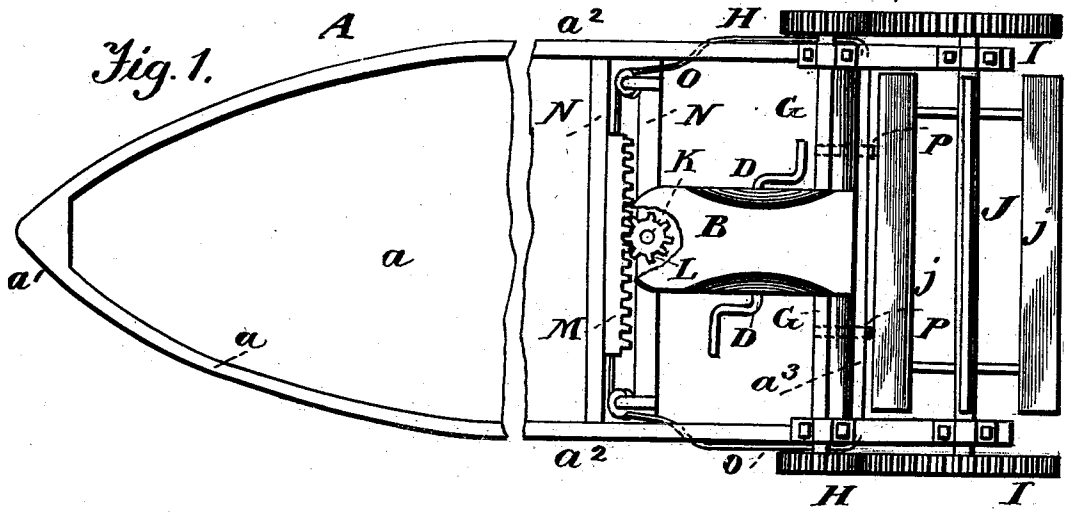


Fig. 2.

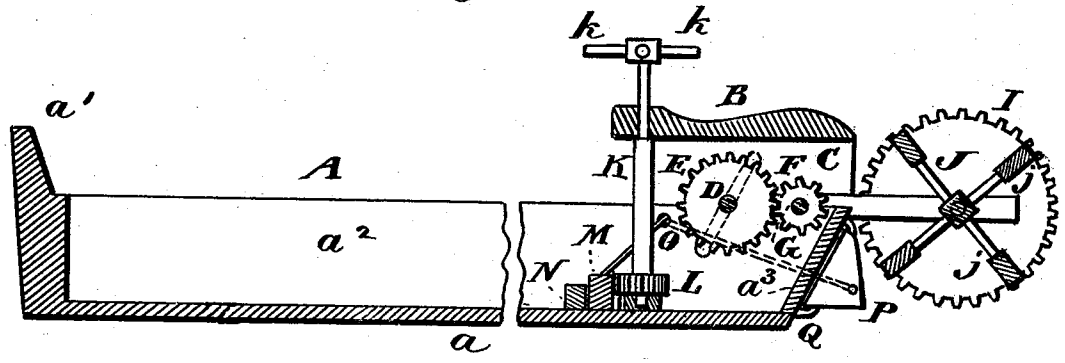
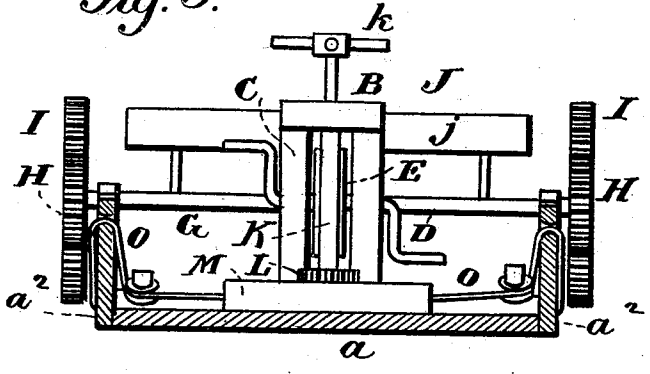


Fig. 3.



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PROPELLING MECHANISM FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 509,133, dated November 21, 1893.

Application filed April 28, 1893. Serial No. 472,191. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. MAHONEY, a citizen of the United States, residing at Sistersville, in the county of Tyler and State of West Virginia, have invented certain new and useful Improvements in Propelling Mechanism for Boats; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The special object of the invention is to make a propeller which may be operated and steered by one person, the boat being of shallow draft and requiring a small power to carry it along through the water.

Figure 1 of the drawings is a plan view; Fig. 2 a median longitudinal section, and Fig. 3 a transverse vertical section.

In the drawings, A represents the body of the boat having the flat bottom a, the sharp prow a', sides a^2 a^2 and stern a^3, the latter being preferably made to incline outwardly from the bottom upward.

B is the boatman's seat supported on two parallel walls or board uprights C C in which is journaled a crank or pedal shaft D made fast to the drive wheel E between said walls. Sitting on the seat B, the boatman rotates the crank shaft D with his feet and turns the spurwheel E which gears with a spurwheel F on the shaft G and fast to the middle thereof. The wheel F rotates shaft G and its fast end-wheel H which turn the end wheels I I on the propeller J. Of course, I may use sprocket chain and wheels or belts and pulleys instead of spurgears to connect the driveshaft with the propeller, as they are well known operative mechanisms.

The stern wheel propeller J may have two or more radial paddles j, but I prefer four as shown in the drawings. The shafts D are journaled in or on the sides a^2 a^2 while the propeller shaft is journaled in an extension thereof beyond the rear of the boat.

K is the steering post with the radial handles k at top and the pinion L at the bottom. This pinion reciprocates in either direction, the rackbar M between the two guides N N, the said rackbar being connected by the ropes O O with the rudder plates P, P, turning on the pintles Q Q affixed to the rear of the boat.

The spur or sprocket wheels of the driving shaft may be varied in their relative diameters so that the rotation of the drive shaft will rotate the propeller an equal, greater or less number of times. Of course, the speed of the boat will be decreased as the required power is lessened to give a revolution to the drive shaft.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to secure by Letters Patent, is—

The boat A having a box seat B at the rear end, a crank-pedal shaft journaled under said seat and carrying in the middle thereof a spurwheel E, a countershaft G with a middle pinion F gearing with wheel E and two end-pinions H H, and a paddle wheel on a shaft with end-wheels which gear with the pinions H H, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN R. MAHONEY.

Witnesses:
P. B. LOWRY,
J. C. WAY.