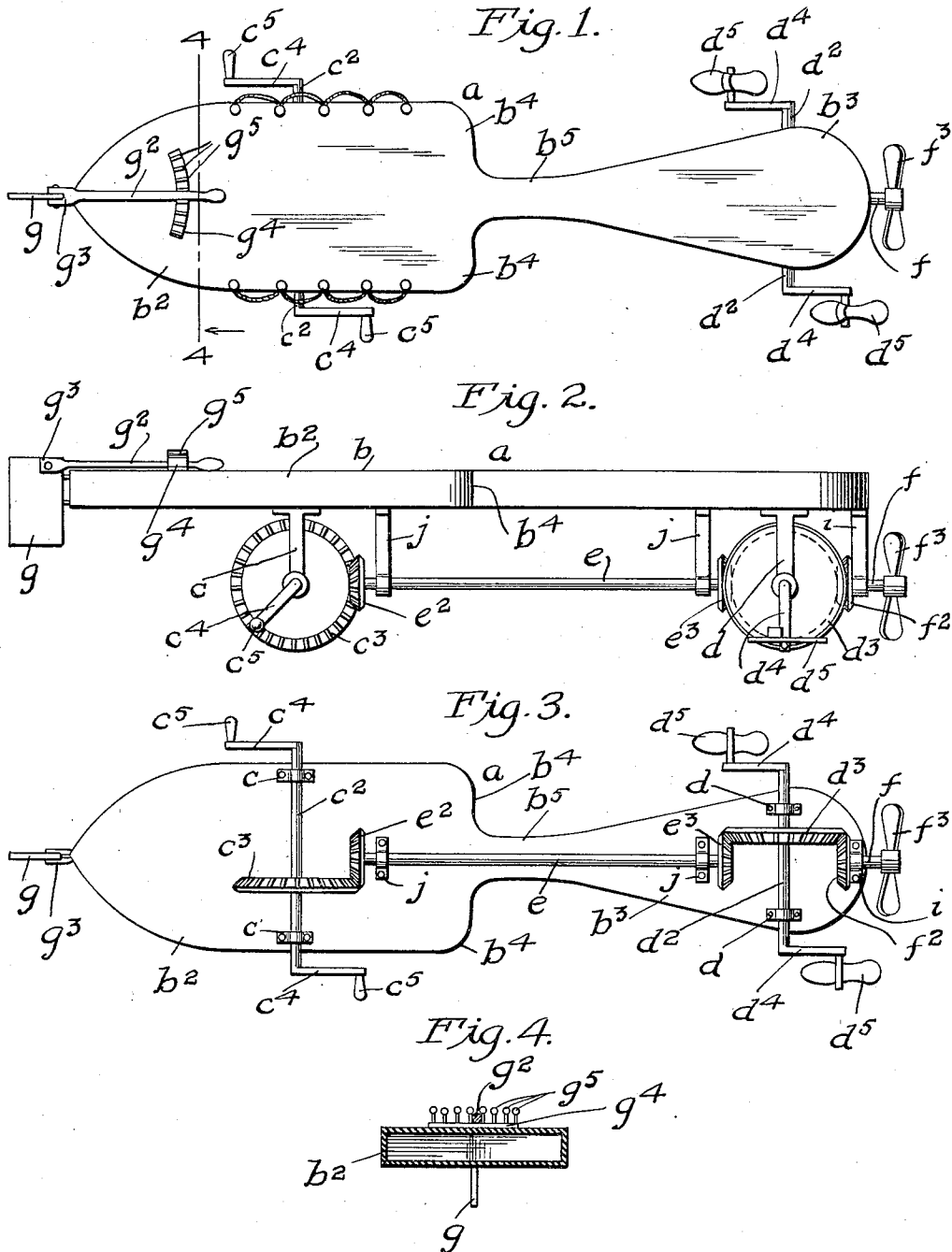


A. B. SANDBERG.
EXERCISING DEVICE.
APPLICATION FILED MAR. 31, 1911.

1,005,478.

Patented Oct. 10, 1911.



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EXERCISING DEVICE.

1,005,478.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, AUGUST B. SANDBERG, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Exercising Devices, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to devices particularly designed for exercising purposes, and the object thereof is to provide an improved device of this class which is made to represent a boat and which may be manually propelled by a person lying thereon.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a plan view of my improved exercising device; Fig. 2 a side view thereof; Fig. 3 a bottom plan view, and; Fig. 4 a transverse section on the line 4—4 of Fig. 1.

In the practice of my invention I provide an exercising device *a*, the main feature of which is a float member *b* comprising a casing or shell which is made watertight and comprising, in the form of construction shown, a front or bow portion *b*² and a rear or stern portion *b*³, and at all points the casing or shell, in the form of construction shown, is substantially rectangular in cross section, but this shape is not an essential element of my invention and the said casing or shell may be of any desired form in cross section.

The front or bow portion *b*² is tapered forwardly and the rear or stern portion *b*³ is much contracted, especially at the front end thereof or at the middle portion of said shell or casing to form lateral shoulders *b*⁴ at the rear end of the front or bow portion *b*² and a narrow neck *b*⁵ for the front end part of the rear or stern portion *b*³.

The front or bow portion *b*² is provided transversely of the bottom thereof with hangers *c* in which is mounted a transverse shaft *c*² provided with a beveled gear *c*³, and the shaft *c*² is provided at its opposite ends with cranks *c*⁴ having handles *c*⁵. The rear or stern portion *b*³ is provided on the bottom thereof with hangers *d* in which is

mounted a transverse shaft *d*² provided with a beveled gear *d*³, and the shaft *d*² is provided at its opposite ends with cranks *d*⁴ with which are connected feet plates or similar devices *d*⁵. The shaft *c*² being adapted to be operated by hand and the shaft *d*² by the feet.

Suspended centrally of and longitudinally of and beneath the casing or shell is a shaft *e* provided at its opposite ends with small beveled gears *e*² and *e*³ which mesh respectively, with the gears *c*³ and *d*³ and a short propeller shaft *f* is mounted rearwardly of the shell or casing and in line with the shaft *e* and provided at its inner end with a beveled gear *f*² which meshes with the gear *d*³ and at its outer end with a propeller *f*³.

At the front end or bow end of the front or bow portion *b*² of the shell or casing is mounted a rudder *g* provided with a tiller *g*² which is pivoted thereto at *g*³, and ranged transversely of the top or deck of the front or bow portion of the shell or casing is a rack bar *g*⁴ having upright teeth or pins *g*⁵ between which the tiller arm *g*² is adapted to be placed.

With this construction a party lying flat on the shell or casing may operate the shaft *d*² with his feet and the shaft *c*² with his hands, as will be readily understood, and this operation will drive the propeller *f*³, and the boat or exercising device will be driven through the water, as will also be readily understood. In this operation both the arms and legs and hands and feet will be in the water a part of the time at each revolution of the shafts *c*² and *d*², and the object of cutting out the sides of the shell or casing centrally thereof to form the shoulders *b*⁴ and the neck portion *b*⁵ is to provide room for the proper movement of the feet and legs in the above described operation.

It will be understood that the rudder *g* may be operated by hand and the tiller *g*² is manipulated for this purpose, and said rudder may be locked in any desired position.

The opposite sides of the front or bow portion *b*² are preferably provided with loops *h* formed from a rope or cord or other suitable flexible device secured thereto at intervals and which the operator may grasp with his hands at any time, if necessary to hold himself in position or for any other

purpose, and in practice, the shell or casing *b* is preferably made so that it will support all the parts connected therewith and the weight of an operator without entirely sinking beneath the surface of the water.

In the accompanying drawing the shaft *e* and propeller shaft *f* are mounted in hangers *i* and *j*, but my invention is not limited to any particular means for supporting the various parts of the propelling apparatus and these parts may be of any suitable construction.

My invention is also not limited to the idea of suspending the propelling apparatus below the hull, shell or casing *b* and said hull, shell or casing may be made deep enough to contain the propelling apparatus if desired, in which event, the walls thereof would be provided with stuffing-boxes through which the shafts *c*², *d*² and *f* would pass.

It will also be understood that my improved exercising device or apparatus may be made of any desired dimensions and of any preferred material, and changes in and modifications of the construction thereof as herein shown and described may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. An exercising device or apparatus of the class described made to represent a boat, said device comprising a float having a rudder at its front end and a propeller at its rear end, and means for operating said propeller comprising two transverse shafts one of which is adapted to be operated by the hands and the other by the feet of a person lying on said float.

2. An exercising device of the class described comprising a float, provided at its front end with a rudder and at its rear end

with a propeller, and devices for operating said propeller comprising two transverse shafts one of which is adapted to be operated by the hands and the other by the feet of an operator lying on said float.

3. An exercising device of the class described comprising a float, provided at its front end with a rudder and at its rear end with a propeller, and devices for operating said propeller comprising two transverse shafts one of which is adapted to be operated by the hands and the other by the feet of an operator lying on said float, the sides of the float being cut away inwardly and backwardly to form a narrow neck portion for the stern part of the float.

4. An exercising device of the class described made to represent a boat and comprising a float, said float being provided at its front end with a rudder adapted to be operated by hand and at its rear end with a propeller, and means for operating said propeller involving two transverse shafts one of which is adapted to be operated by the hands and the other by the feet of a person lying on said float, said float being flat on its top and bottom sides and the propeller being suspended therefrom.

5. A device of the class described, comprising a boat-shaped float the central part of which is contracted whereby the separate end portions are connected by a narrow neck portion, said device being also provided with a propeller at one end and a rudder at the other, means for operating said propeller by the feet and means for operating the rudder by the hands.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 29th day of March, 1911.

AUGUST B. SANDBERG.

Witnesses:

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G. A. MANDEVILLE.