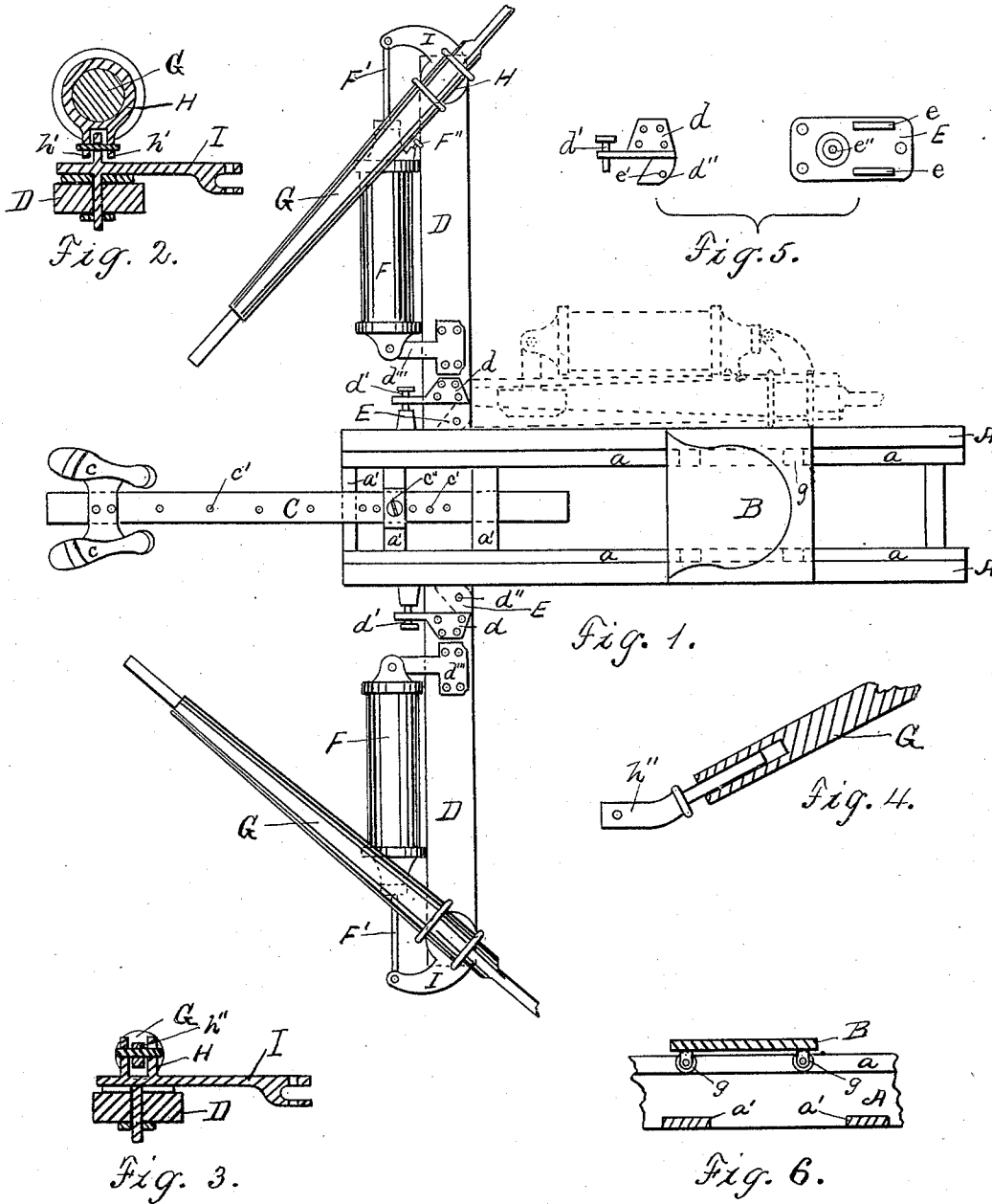


(No Model.)

W. J. O. BRYON, Jr.
EXERCISING MACHINE.

No. 432,598.

Patented July 22, 1890.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM J. O. BRYON, JR., OF NEW YORK, N. Y.

EXERCISING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 432,598, dated July 22, 1890.

Application filed December 5, 1888. Serial No. 292,767. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. O. BRYON, Jr., a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Exercising - Machines, of which the following, taken in connection with the drawings furnished, is a specification.

My invention relates to an apparatus designed for use as an exercising-machine, whereby exercise identical with that of rowing a boat is afforded; and it consists in the construction, arrangement, and combination of the several parts constituting my improved exercising-machine, as will be described in detail hereinafter, and pointed out in the claims.

Referring to the drawings, Figure 1 represents a top plan view of my improved exercising-machine. Fig. 2 represents a detail view of the oar or lever socket and piston-connecting arm. Figs. 3 and 4 represent detail views of a modification of device shown in Fig. 2. Fig. 5 represents detail views, to be referred to hereinafter. Fig. 6 represents a section of the supporting-frame, showing the sliding seat in section and the rollers.

In the drawings, A represents the bed or supporting-frame; B, a sliding seat provided, in this instance, with rollers adapted to operate in grooves *a a* in the supporting-frame.

C is an adjustable tongue supporting on its front end thereof foot-rests *c*, and the same is supported and adapted to operate in openings in rungs *a' a'*, which connect opposite sides of the supporting-frame, and is provided with openings *c'* therein, adapted to be engaged by a pin *c''*, which is supported in one of the said rungs *a'*, to hold said tongue stationary when adjusted to the desired position for use.

D D are two outriggers located upon opposite sides of the supporting-frame A, and are provided on their inner ends for connection with the supporting-frame or with plates secured thereto, with plates *d d* rigidly secured to the outriggers. Said plates *d d* are provided with a projection or arm at one side thereof, as shown in Fig. 5, projecting one side of the outrigger, adapted for the support of a screw *d'*, and on their inner edge or the edge adapted for connection with the plates

E E, located on the sides of the supporting-frame, as will hereinafter be described, is rounded off to one side, as clearly shown at *d''* in Fig. 5, to form a bearing-point, for the purpose to be hereinafter described.

E E are plates (a detached view of one being shown in Fig. 5) adapted to be secured to the sides of the supporting-frame, and are provided with two lips or projections *e e* thereon, as shown in Fig. 5, between which the end of the plate *d* extends, and which is pivotally secured thereto at *e'*, and said plates are also provided with a boss or projection *e''* formed thereon, adapted to receive the threaded end of the said screw *d'* to hold the outrigger rigidly when in its extended position, as shown in Fig. 1, as follows: the plate *d*, secured on the inner end of the outrigger, being pivotally secured at *e'* to the plate E or projections thereon, as before described, by tightening the screw *d'* in the said boss or projection *e''*, which causes the inner end of the said plate *d*, or that end or point from which the plate rounds off, to bind against the plate E, as shown in dotted lines in Fig. 1, serving to hold the outrigger rigid and also allow for an undue wear. It is obvious, however, that the said plates E E may be provided with two pairs of lips or projections, between which the inner ends of the outriggers may extend and be held by pins or screws passing through said lips or projections and the ends of the said outrigger, as will appear obvious.

F F are two cylinders, pivotally secured, in this instance, to an arm *d'''* of the outriggers at one side thereof, although it is obvious that the cylinders may be secured at any suitable point on the supporting-frame or on a separate post or frame.

G G are levers or oars, fulcrumed in this instance, at the ends of the outriggers in sockets H H, located at or near the ends of the outriggers. Said lever-sockets, as represented in Fig. 1 and in detail in Fig. 2, consists of a circular band or ring adapted to receive one end of the lever, and is provided with two lips or projections *h' h'*, adapted to span a projection or lug located on the oar-lock arm I, and be pivotally secured thereon to allow an up and down or a rocking movement to the lever and yet be stationary laterally in

relation to said oar-lock arm. Said oar-lock arm is arranged at right angles, or nearly so, to the line of the oar or lever, and is pivotally secured at one end to the end of the outrigger, as clearly shown in said Fig. 2, and at its opposite end adapted to be pivotally connected to the end of the piston-rod F', as shown in Fig. 1. By means of this described method of connection the oar or lever has a free up-and-down motion, and is allowed to be turned as in "feathering."

In lieu of the described mode of connection between the oar or lever and the oar-lock arm I, I sometimes provide said oar-lock arm with two projections or lugs, as clearly shown in Fig. 3, in lieu of the one as described in relation to Fig. 2, between which one end of an arm h'' rests and is pivotally secured, as shown in Fig. 3. The said arm is provided with an extension on which the end of the lever extends, and is loosely secured, as clearly shown in Fig. 4, to allow of the lever being turned for obvious reasons, and in this case the said oar-lock or piston-connecting arm may be provided with a pin projecting therefrom, by which it is pivotally secured to the outrigger or other frame, as shown, or the said outrigger or other frame, or the plate secured thereon, may be provided with a vertically-projecting pin, on which said piston-connecting arm may be pivoted without departing from the spirit of my invention.

The operation of my improved exercising apparatus is as follows: The outriggers D D are first swung out in position at or near right angles to the bed-frame, as shown in Fig. 1, and rigidly secured by the set-screws d', which enter the boss or projection e'' on the plate E, and the point on the said plate E, from which the edge is rounded off, as hereinbefore described, binds against the plate E when the set-screws are tightened, serving to hold said outriggers rigid. The tongue C is

then pushed forward horizontally from beneath the supporting-frame to bring the foot-rest supported thereon to the desired position, and is secured stationary in its adjusted position by the pin c''. The apparatus is then in proper position for operation, the cylinders forming the means of resistance to said levers. I do not, however, wish to confine myself to the outriggers as the only means for supporting the pistons and levers, as it is obvious that the same may be supported on a separate post or frame located at the proper distance from the supporting-frame proper.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In an exercising-machine, the combination, with a supporting-frame, of outriggers provided at their inner end with plates d d secured thereto, adapted to be pivotally secured or hinged to the sides of the supporting-frame, and set-screws whereby said outriggers may be rigidly secured in an extended position, substantially as described, and for the purpose set forth.

2. In an exercising-machine, the combination, with the supporting-frame, outriggers, cylinders pivotally supported on said outriggers, pistons, and connecting-arms, of lever-sockets pivotally connected with the said piston-connecting arms and levers, substantially as and for the purpose set forth.

3. The combination, in an exercising-machine, with the supporting-frame, of outriggers detachably connected thereto and cylinders pivotally supported on said outriggers, piston-rods, connecting-arms I, lever-sockets, and levers, arranged substantially as described, and for the purpose set forth.

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