

P. BYS.
LIFE SAVING DEVICE.
APPLICATION FILED NOV. 26, 1912.

1,061,264.

Patented May 13, 1913.

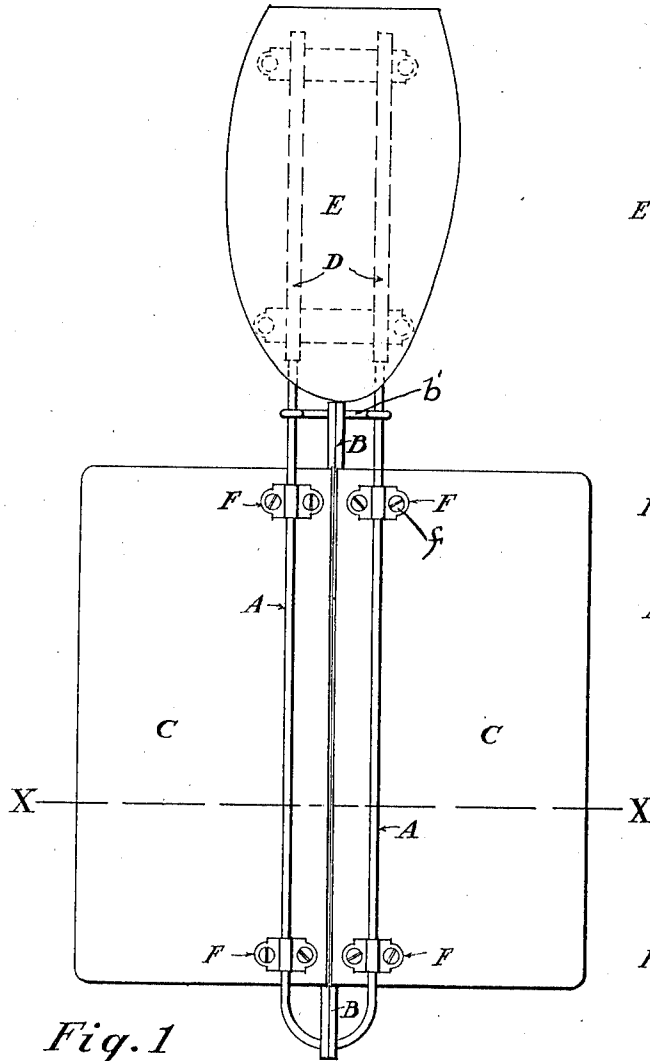


Fig. 1

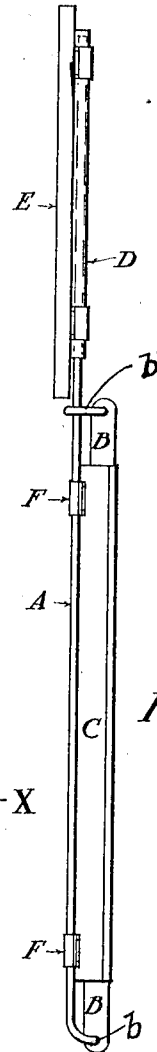


Fig. 2

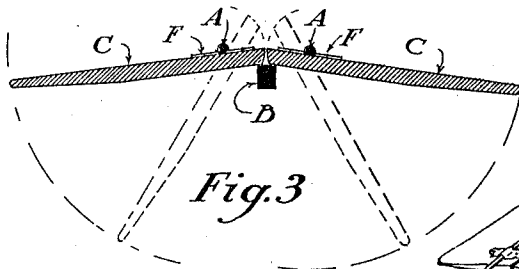


Fig. 3

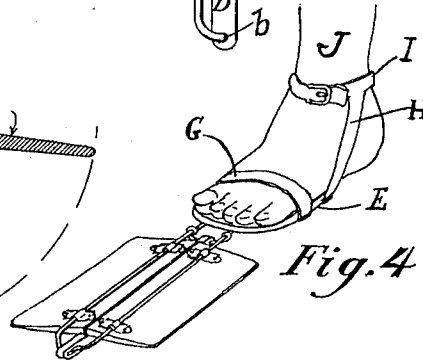


Fig. 4

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LIFE-SAVING DEVICE.

1,061,264.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, PETER BYS, a subject of the Emperor of Austria-Hungary, and resident of Great Falls, in the county of Cascade and State of Montana, have invented certain new and useful Improvements in Life-Saving Devices, of which the following is a specification.

This invention relates to life saving devices and particularly to a device adapted to be attached to a foot of a person, operative to offer resistance when pressed against the water, the same being provided with novel means for yielding and reducing the resistance on movement of the device in a direction opposite to that in which it is moved when resistance is encountered.

A still further object of this invention is to provide novel means for attaching the same to the person whereby the manipulation will result in automatically positioning the parts to effect such resistance or to move without resistance according to the direction of movement.

With the foregoing and other objects in view, the invention consists in the details of construction, and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 illustrates a plan view of the apparatus; Fig. 2 illustrates a side elevation; Fig. 3 illustrates a sectional view on the line $x-x$ of Fig. 1; and Fig. 4 illustrates a perspective view illustrating the foot of a person with the invention applied thereto.

In these drawings A denotes a frame-like structure comprising arms which project outwardly from a plate and B denotes a parallel rod which is placed intermediate the sides of the frame and connected thereto at one end by having the frame A pass through an aperture b in the end of the rod B, it being observed from an inspection of Fig. 2 that the outer end of the frame A is offset with relation to the plane of the said frame so that the rod B while being parallel to the sides of the frame is offset with relation thereto. The purpose of the rod B is to act

as an abutment or stop for the wings C which may be termed hydroplanes in that they are adapted to engage water for the purpose of sustaining or partially sustaining the weight of the user of the device, the said wings C being pivotally connected to the sides of the frame A in a manner to be presently explained.

The rear ends of the frame A are secured in sockets or tubes D which are connected to the pedal or plate E, by means of clips of any appropriate type so that the frame A which is an approximately U-shaped member having its free ends secured in the sockets D may be applied to and removed from the pedal or plate E at the will of the operator.

The wings C are hinged or pivotally mounted on the sides of the frame A by the clips or plates F which members F are provided with channels forming clearances for the reception of the sides of the frame as fully shown in Fig. 3, so that when the clips F are secured to the wings C by the fastenings such as the screws F, the said wings may be free to oscillate with respect to the frame. The relation of the wings to the frame and to the rod B is such that the inner side edges of the wings extend beyond or over the rod B which rod B acts as an abutment to limit the movement of the wings in one direction, in order that the said wings may offer resistance when forced against the water in which a person is moving when wearing the apparatus.

From an inspection of Fig. 3, the full line position of the wings is the one which they assume when being thrust against the water whereas the dotted line position thereof is the position they assume when being retracted or drawn backward for the succeeding thrust which is to propel the swimmer or support the user when treading water or the like.

The plate E is provided with means of attachment to the foot of the user and in Fig. 4 the said plate E is shown as provided with a strap or other flexible device G extending over the foot just in front of the instep whereas the extension H of said strap or flexible connection is shown as passing upwardly and terminating in a belt or encircling member I provided with fastenings such as a buckle J by which the apparatus is secured to the ankle of the user.

The inner end of the rod B is connected to the frame by a yoke *b'* which extends from one side of the frame to the other.

I claim—

5 1. In a life saving device, a frame having two sides, a rod in a position intermediate the said sides, wings hinged to the frame and projecting partially across the rod and adapted to engage said rod, whereby the
10 movement of the wings in one direction is limited, and a plate to which the frame is connected.

2. In a life saving device, a frame having two sides, a rod in position intermediate the
15 said sides, wings hinged to the frame and projecting partially across the rod and adapted to engage said rod, whereby the movement of the wings in one direction is limited, a plate, and members carried by the
20 plate to which the frame is connected.

3. In a life saving device, a frame having two sides, a rod in position intermediate the said sides, wings hinged to the frame and projecting partially across the rod and
25 adapted to engage said rod, whereby the movement of the wings in one direction is

limited, a plate, and tubular members secured to the plate for receiving the ends of the frame.

4. In a life saving device, a frame having 30 two sides and an offset end, a rod connected to said offset end, wings, clips secured to the wings and engaged by the frame whereby the wings are pivotally connected to the frame, a plate to which the frame is se- 35 cured, and means for securing the plate to a wearer.

5. In a life saving device, a frame having two sides and an offset end, a rod connected to said offset end, wings, clips secured to the 40 wings and engaged by the frame whereby the wings are pivotally connected to the frame, a plate, and members carried by the plate to which the frame is secured, and means for securing the plate to a wearer. 45

In testimony whereof, I have hereunto affixed my signature in the presence of two witnesses.

PETER BYS.

Witnesses:

E. F. SUTTON,
JOHN G. HOREN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."