

No. 611,005.

Patented Sept. 20, 1898.

S. STONE.
SWIMMING APPLIANCE.

(Application filed Jan. 21, 1898.)

(No Model.)

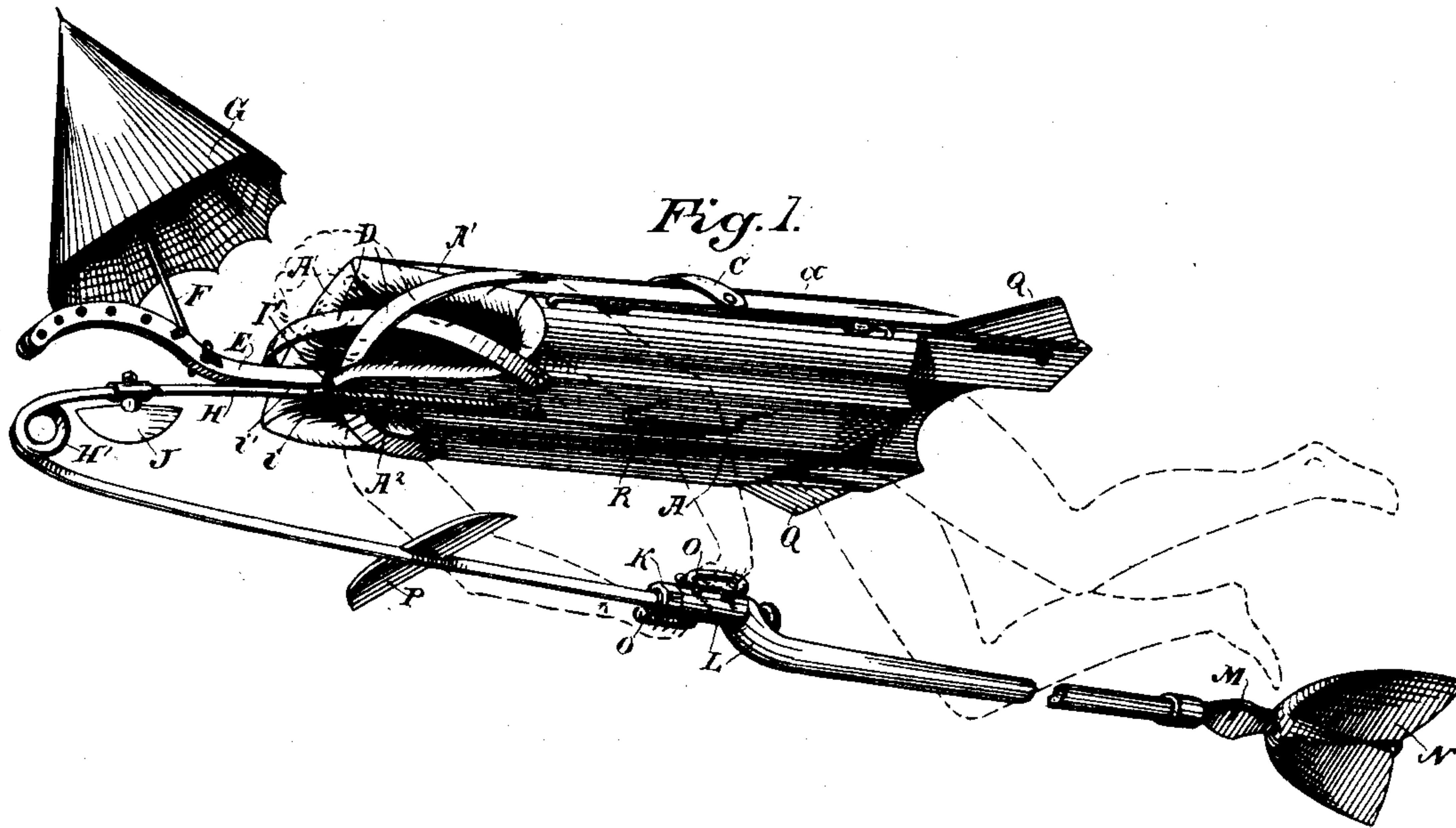


Fig. 2.

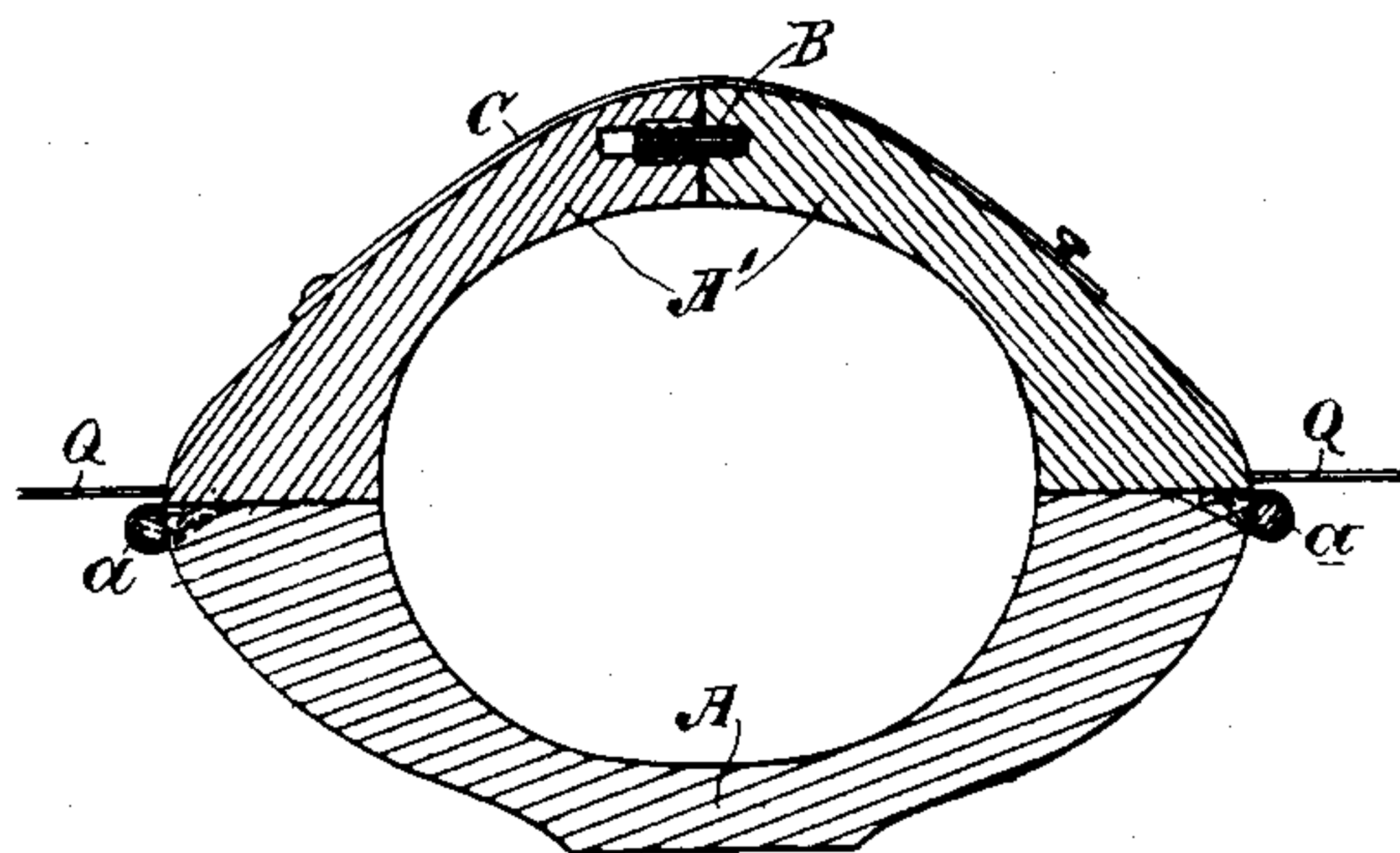
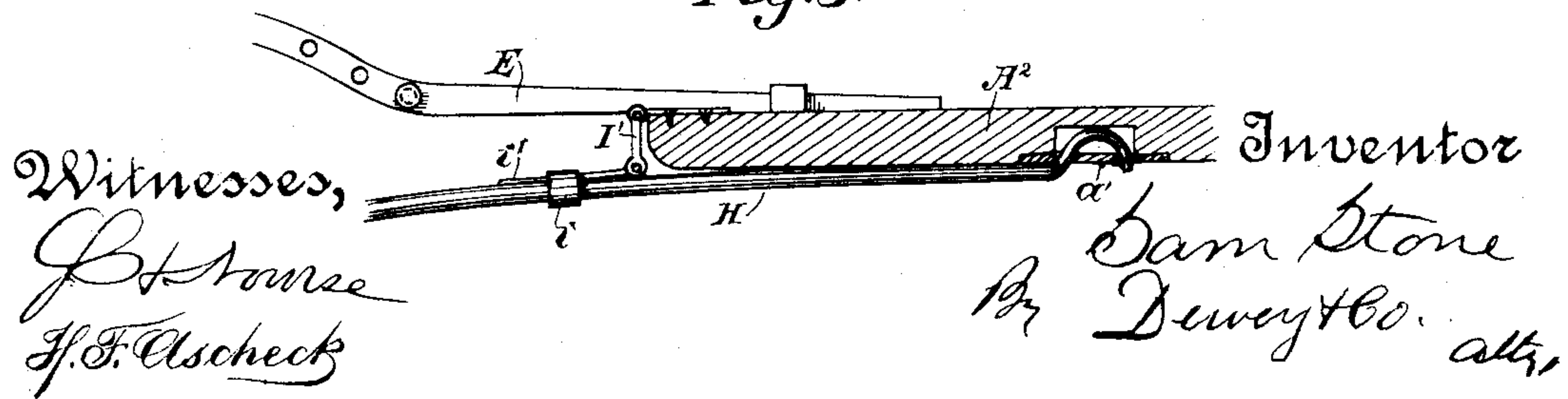


Fig. 3.



Witnesses,

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SAM STONE, OF QUILLAYUTE, WASHINGTON.

SWIMMING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 611,005, dated September 20, 1898.

Application filed January 21, 1898. Serial No. 667,388. (No model.)

To all whom it may concern:

Be it known that I, SAM STONE, a citizen of the United States, residing at Quillayute, county of Clallam, State of Washington, have
5 invented an Improvement in Life-Jackets and Propellers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an apparatus which
10 is especially designed as a life-jacket for persons who may be thrown into the sea, and in combination therewith of a means within the control of the persons by which they can propel themselves through the water.

15 It consists in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a general view of the apparatus.
Fig. 2 is a transverse section of the jacket.
20 Fig. 3 is a detail section of the front extension with its connections.

The jacket may be made of any suitable or desirable buoyant material, either solid or hollow and inflatable. It consists of a bottom section A and two top sections A', hinged
25 together, as shown at *a*, so that the top sections A' may be opened outwardly to allow the device to be placed upon the person. Then they are closed together over the back,
30 and have locking engaging bolts or pins B by which they are properly brought together, and may also be provided with straps C to further unite and secure them together.

The apparatus is provided with suitable
35 straps D, which may be crossed over the shoulders or otherwise secured to retain it properly in place upon the wearer. The lower section A of the device has an extension A² toward the front, and this carries an
40 adjustable bar E, slotted and having pinholes made through it, as shown. This bar is also curved and forms a support for the handle F of an umbrella or awning G, made of any suitable flexible material, and so constructed that it can be opened or closed at
45 will. When opened, it may be also adjusted upon the curved support E, so as to either form a protection for the head of the wearer or, if the wind is fair, it may be set at any desired angle, so that the wind will act upon it
50 as a sail to assist in propelling the apparatus through the water.

To the lower part of the extension A² is secured a rod H, which is here shown as being bent and hooked into a plate *a'*, which holds
55 the end. At the front of the extension A is a hinged plate I', the front part of which, *i'*, is clamped to the rod H by a sliding ring or collar *i*, through which the rod H passes, extending to a considerable distance to the
60 front, where it is coiled, as shown at H', and thence extends rearwardly beneath the wearer of the apparatus.

J is a weight slidable upon the front part of the rod H and adapted to be secured at
65 any desired point. This weight, by being moved outward or inward at the will of the wearer of the apparatus, serves as a ballast and as a keel for steadiness, and the angle at which the apparatus lies in the water can be
70 partially regulated by this device.

The rear end of the lower part of the rod H is secured by any suitable or desired clamp
75 K to an arm L, which extends rearwardly below the apparatus and to a sufficient distance behind it. At the point M is a flexible elastic section made of steel or other suitable flexible material which will allow it to easily bend up or down, its own elasticity bringing
80 it into its normal position straight in line with the arm L when at rest. To the rear end of this elastic portion is secured a flat tail N, which is of any suitable shape or description, preferably like the tail of a fish, so that by
85 moving the arm L up and down the resistance of the water and the elasticity of the part M will allow this tail to bend up and down with the movements, and thus act like the tail of a fish in propelling the apparatus forward.
90 This up-and-down movement is effected by the wearer of the apparatus by means of handhold-loops O, which are here shown as fixed at the point K within easy reach of the hands of the wearer, so that by grasping these holding devices he can oscillate the propeller, the
95 curve or coil at H' giving sufficient elasticity to the rod H for this purpose. By these handholds the rear part or tail can be turned so as to cut the water sidewise, port, or starboard, as desired, to steer and steady on course which
100 will enable anybody, whether they know how to swim or not, to successfully use the apparatus. I have also shown at P an arrangement of fins which assist in balancing the ap-

rear portion of the apparatus and all are adapted to be projected more or less, and these serve in the same manner to assist in
5 balancing the wearer in the water.

The whole device serves in a great degree to protect the body of the wearer, to give it a buoyancy which will retain him on the top of the water, while at the same time allowing
10 perfect freedom of the arms and legs for ordinary swimming purposes, while the propeller N, which may be of the described or any other suitable form and adapted to be operated by the hands of the wearer, will greatly assist in
15 propelling him and enabling him to reach some point of safety. When the propeller is not in use, the rod H and the extension L can be drawn up, and by means of a suitable loop or clasp it can be attached to the lower part
20 of the jacket, as shown at R, or by other suitable device. This enables the wearer to take a rest. He can then cross the feet on top of the rear part and the arms on the bow, and a mere motion of the body or the swell only
25 will also in that position produce headway, and when swimming up to a ship's side to be picked up a hook or line can by the wearer be fastened through or to the coiled section in the bow, and in that manner he can be lifted
30 on board without bending the curve out of shape.

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

35 1. A life-jacket consisting of a bottom section, two upper sections hinged thereto at the sides and closable over the back of the wearer, means for securing them in position and an extension of the lower portion toward the
40 front.

2. A life-jacket consisting of sections hinged and closable about the body of the wearer, an extension of the lower portion toward the front, an adjustable arm carried upon said
45 extension and means for the attachment of a protecting awning and sail.

3. The combination with a life-jacket con-

body with a forward extension, of an arm supported by and adjustable upon said extension
50 having a curved slotted front with pin-holes therethrough, a handle adapted to fit the slotted portion and an awning or sail carried by said handle and adapted to open or close there-
upon.

4. A life-jacket consisting of sections united and adjustable as shown, a flexible rod secured to the lower section extending forward, coiled and returning upon itself beneath the appa-
ratus, and a propeller carried by said rod and
60 means for operating said propeller.

5. The combination with a life-jacket adapted to be secured to the person of the wearer, of a flexible rod secured to the lower section, extending forwardly and returning upon it-
self beneath the apparatus, a bar extending rearwardly from said rod and a clamp by which the two are adjustably secured together, a flexible section formed with or secured to the rear end of said bar and a propeller carried
70 by said flexible section, and means for vibrating the bar and propeller.

6. A life-jacket composed of jointed sections with means for attaching them to the body of the wearer, a flexible rod secured to
75 the lower section extending forwardly and returning upon itself beneath the apparatus, a flexible section at the rear end with a tail or propeller carried thereby, handles fixed to the rod and adapted to be grasped by the hands
80 of the wearer so that the rod may be oscillated and the propeller caused to act.

7. A life-jacket consisting of hinged sections and means for securing them to the body of the wearer, a propelling device connected
85 with said jacket and means for actuating said device and adjustable balancing-fins connecting with the jacket substantially as described.

In witness whereof I have hereunto set my hand.

SAM STONE.

Witnesses:

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ALBERT HANSEN.