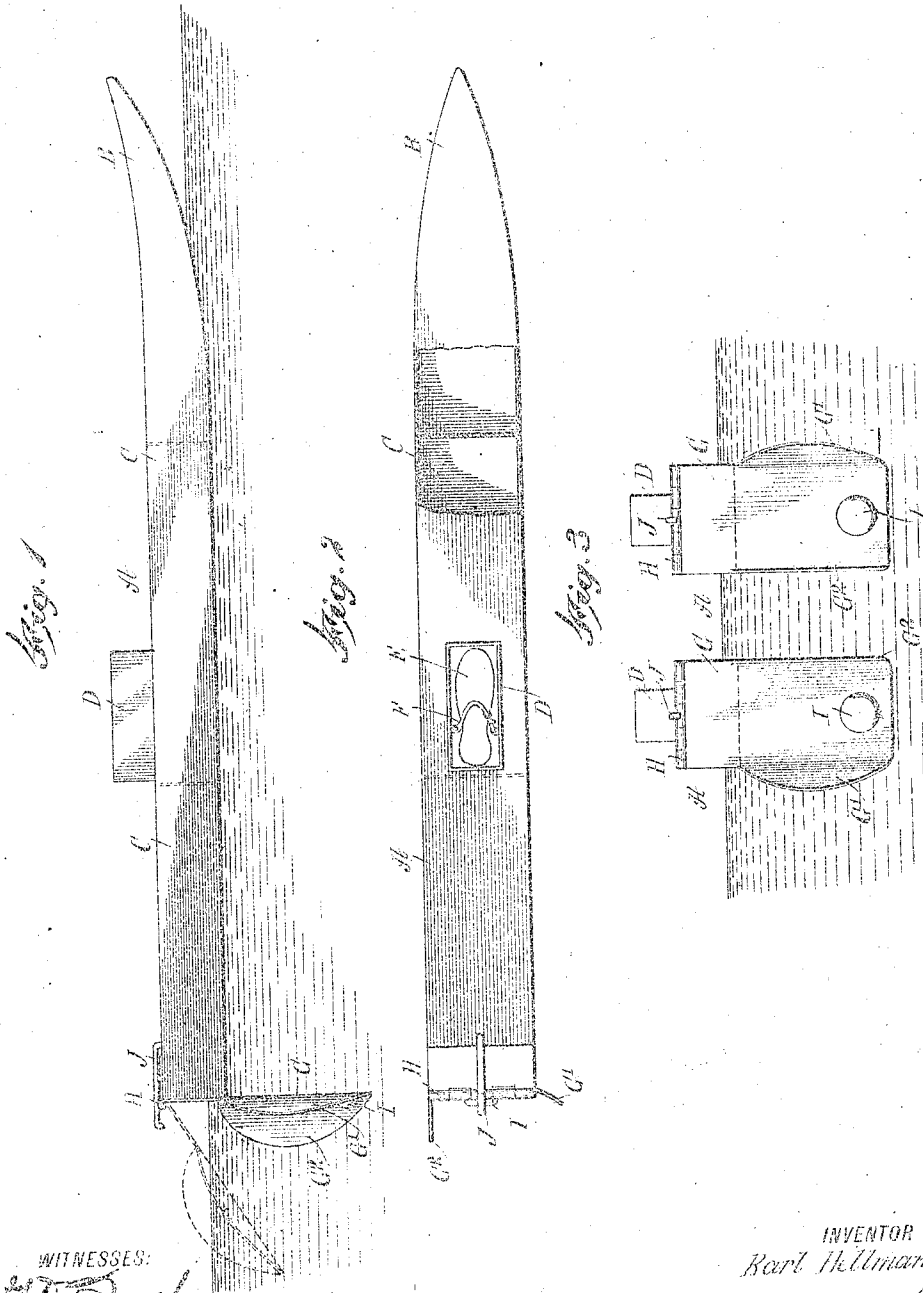


K. HELLMANN.
WATER SHOE.
APPLICATION FILED JULY 26, 1910.

Patented Mar. 14, 1911.

986,979.



WITNESSES:
[Signature]
[Signature]

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UNITED STATES PATENT OFFICE

KARL HELLMANN, OF NEW YORK, N. Y.

WATER-SHOE.

986,979.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed July 25, 1910. Serial No. 573,759.

To all whom it may concern:

Be it known that I, KARL HELLMANN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Water-Shoe, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved water shoe for enabling a person to move forward on a river, lake or other body of water, and arranged for convenient attachment to the foot, and having sufficient buoyancy to properly support the user on the water and to enable the user to rapidly glide over the surface of the water without danger of sliding backward.

For the purpose mentioned the shoe is provided with air-tight compartments, a foot attachment, and a back resistance wing capable of swinging into horizontal position on the forward stroke of the shoe, and dropping down into resisting position at the end of the forward stroke, thus preventing backward gliding and at the same time increasing the stability of the shoe on the party using it.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the water shoe; Fig. 2 is a plan view of the same, parts being broken out; and Fig. 3 is a rear end view of a pair of shoes.

The body A of the shoe is made hollow, and is provided at the forward end with a bow B, and is divided into water-tight compartments C so as to increase the buoyancy of the shoe for properly supporting a person, it being understood that a shoe is used on each foot. A pit D is arranged in the top of the body A for the reception of a foot resting on a foot plate E arranged in the bottom of the pit D, and straps F or other suitable fastening devices are arranged in the pit D to strap the foot of the user in position on the foot plate E (see Fig. 2). The body A is preferably made rectangular in cross section, and comparatively narrow but long, so that the two shoes used by a person properly sustain the user and enable him to glide over the water.

In order to prevent backward sliding, use is made of a resistance wing G, hinged at

H to the upper rear edge of a body A, so that the wing G hangs normally downward at the rear end of the body A, and projects a distance below the said body, as indicated in Figs. 1 and 3. The wing G is provided at the sides with flanges G', G², of which the outer flange G' is bent rearwardly and outwardly, while the inner flange G² is bent rearwardly and approximately at a right angle to the face of the wing G. The flanges G', G² are designed to give more stability to the shoe, and by bending the inner flange G² in the manner described the inner flanges G² readily pass each other on alternately moving the shoes forward when gliding over the water. The wing G is provided with a weight I so as to cause the wing to normally hang downward, as plainly indicated in Fig. 1, it being understood that when the shoe is moved forward the water causes an upward swinging movement of the wing G, so as to lessen the resistance of the latter to the forward movement of the shoe, but as soon as the shoe reaches the end of its forward stroke, the wing G drops downward into vertical position so that the wing offers resistance to the rear movement of the shoe, thereby preventing the person from gliding rearward. The upward swinging movement of the wing G is limited by a stop J attached to the top of the body A and projecting beyond the rear end thereof, as plainly indicated in the drawings.

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

1. A water shoe, comprising a hollow body provided with attaching means for attaching the shoe to the foot of the user, and a flanged resistance wing pivoted on the back of the said hollow body and adapted to swing upward on the forward motion of the shoe and to drop down into resisting position at the end of the forward stroke, the flanges of the wing standing at different angles to the wing.

2. A water shoe, comprising a hollow body provided with attaching means for attaching the shoe to the foot of the user, and a resistance wing pivoted on the back of the said hollow body and adapted to swing upward on the forward motion of the shoe and to drop down into resisting position at the end of the forward stroke, the wing having side flanges extending rearwardly.

3. A water shoe, comprising a hollow

body provided with attaching means for
attaching the shoe to the foot of the user,
and a resistance wing pivoted on the back
of the said hollow body and adapted to
5 swing upward on the forward motion of the
shoe and to drop down into resisting posi-
tion at the end of the forward stroke, the
wing having side flanges extending rear-
wardly, the outer flange being inclined out-
wardly and the inner flange being approxi-
10 mately at a right angle to the wing.

4. A water shoe, comprising a hollow
body provided with attaching means for
attaching the shoe to the foot of the user,
15 a resistance wing pivoted to the rear end
of the said hollow body and adapted to
swing upward on the forward motion of the
shoe and to drop down into resisting posi-
tion at the end of the forward stroke, a
20 weight for the wing, and a stop on the said
hollow body and projecting beyond the rear

end thereof for engagement by the wing at
the time the latter reaches an approximately
horizontal position.

5. A water shoe, comprising a hollow 25
body having a pointed bow and divided into
water-tight compartments, an attaching de-
vice for attaching the said body to the foot
of the user, and a weighted resistance wing
pivoted to the upper edge of the back of the 30
body to swing up and down, the said wing
having a flange at the inner side extending
rearwardly approximately at a right angle
to the wing.

In testimony whereof I have signed my 35
name to this specification in the presence of
two subscribing witnesses.

KARL HELLMANN.

Witnesses:

HEDWIG FÜHRLINGER,
OTTO ONKEN.