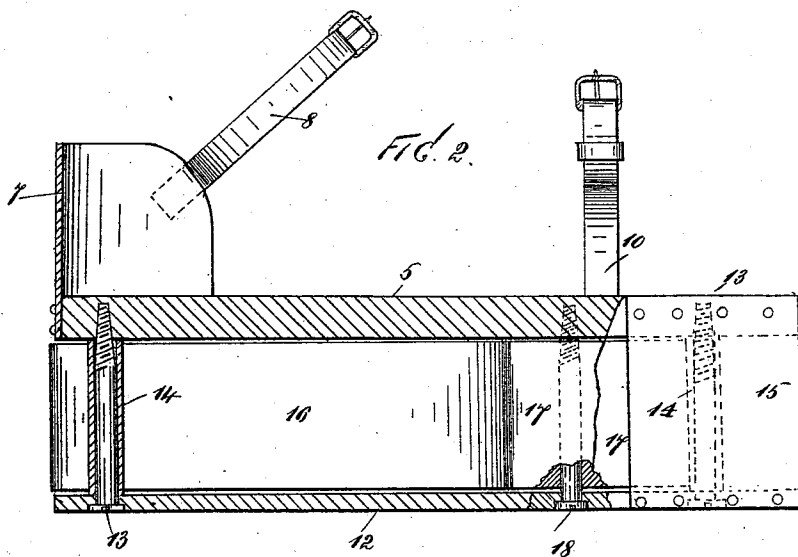
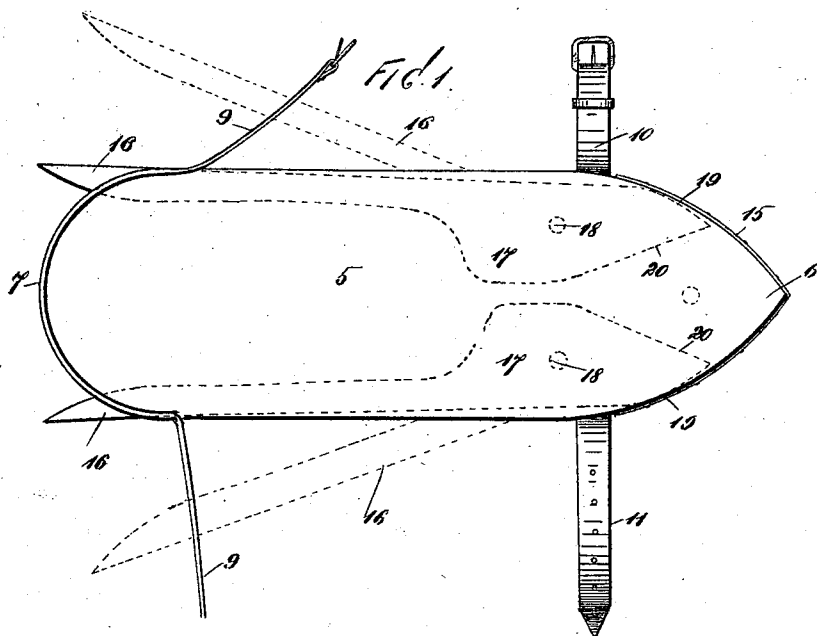


(No Model.)

B. CARMINA-MORREALE.
WATER SKATE OR SHOE.

No. 579,695.

Patented Mar. 30, 1897.



WITNESSES
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UNITED STATES PATENT OFFICE.

BENJAMIN CARMINA-MORREALE, OF NEW YORK, N. Y.

WATER SKATE OR SHOE.

SPECIFICATION forming part of Letters Patent No. 579,695, dated March 30, 1897.

Application filed October 16, 1896. Serial No. 609,141. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN CARMINA-MORREALE, a subject of the King of Italy, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Water Skates or Shoes, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to water-shoes; and the object thereof is to provide improved devices of this class which will enable the wearer to walk through water with greater ease and facility.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which like numerals of reference designate the same parts wherever found in both views, and in which—

Figure 1 is a plan view of my improved water-shoe, and Fig. 2 a sectional side view thereof.

In the practice of my invention I provide a foot-plate 5, which is preferably of the form shown in the drawings and the front end of which is pointed, as shown at 6, and said foot-plate is provided with a heel strap or plate 7, to which are secured straps 8 and 9, which are adapted to be buckled around the ankles, and the foot-plate 5 is also provided with toe-straps 10 and 11, this construction being similar to that of an ordinary roller-skate. I also provide a bottom plate 12, which is similar in form to the foot-plate 5 and which is connected therewith by screw-bolts 13, on which are mounted tubular bearings 14. The tubular bearings 14 serve to hold the foot-plate 5 and bottom plate 12 in proper relative position, while the screw-bolts 13 hold said plates together. The bottom plate 12 is also pointed at its forward end, and placed around the pointed end of each plate is a shield 15, which extends backwardly almost to the toe-straps 10 and 11, and this shield 15 is preferably composed of thin sheet metal.

Pivoted between the foot-plate 5 and bottom plate 12 are wing or fin plates 16, which are provided with enlarged heads 17, as shown in dotted lines in Fig. 1, through which pass pivot-pins 18, which consist of screw-threaded bolts which are passed upwardly through the

bottom plate 12 into the foot-plate 5, and the forward ends of the heads 17 of the fin or wing plates are beveled on their outer and inner surfaces, as shown at 19 and 20, respectively, and the outer beveled portion corresponds with the shape of the forward end of the shoe, and said outer beveled ends of the heads 17 are adapted to bear upon the shield 15 when the said wing or fin plates are in the position shown in full lines in Figs. 1 and 2, and as said wing or fin plates are turned outwardly, as shown in dotted lines in said Fig. 1, the inner beveled surface 20 thereof will strike the forward bolt 13, by which the foot and bottom plates are connected, or the tubular bearings 14, mounted thereon.

The heads 17 of the wing or fin plates 16 may, however, be beveled or formed in any desired manner, and the said heads may be directed forwardly and so formed as to strike each other instead of the bolts 13 or its tubular bearing.

My invention is not limited to the means herein described for connecting the foot-plate with the bottom plate 12, nor is it limited to the means herein described for connecting the shoe with the foot.

My improved water-shoe may be used upon the naked foot or it may be used in connection with an ordinary shoe, and in practice it is buckled to the foot in the manner of an ordinary roller-skate.

It is frequently necessary to walk in the shallow water of lakes, rivers, and along the sea-shore, and my improved water-shoe is intended to facilitate this operation.

It will also be understood that waterproof clothing may be used in connection therewith, and also life-preservers or similar devices, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

In the forward movement of the foot the fin or wing plates 16 fold backwardly into the position shown in full lines in Fig. 1, and in the backward movement of the foot these wing or fin plates are thrown outwardly and the angle of their projection will depend upon the form of the heads 17 thereof or the means employed for limiting the movement thereof. The fin or wing plates 16, when they are

thrown outwardly as described, offer great resistance to the water and thus facilitate the movement of the wearer therethrough, as will be readily understood, and the foot-plate 5 and bottom plate 12 are connected in such manner that the weight of the body may be borne on the bottom plate, even when the wearer is not in the water, without injury to the shoe.

One of the objects of the shield 15, which covers the pointed forward ends of the foot-plate 5 and the bottom plate 12, is to prevent the water from rushing in between the said plates at the forward ends thereof, thus interfering with the operation of the wing or fin plates 16, and in addition thereto, as hereinbefore described, said shield also serves to limit the movement of said wing or fin plates in the forward movement of the foot.

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

1. The herein-described water-shoe, consisting of a foot-plate, and a bottom plate which is connected therewith, said plates being pointed at their forward ends, and provided with a shield, and wing or fin plates pivotally mounted between said foot and bottom plates near the forward ends thereof, said wing or fin plates being adapted to fold between said plates when the foot is moved forwardly, and to swing outwardly when the foot is moved backwardly, substantially as shown and described.

2. The herein-described water-shoe, comprising a foot-plate, which is provided with means for securing it to the foot, a bottom plate which is secured to said foot-plate, the forward ends of said plates being pointed, and provided with a shield, and wing or fin plates, which are pivotally mounted between said foot and bottom plates, and which are adapted to fold between said plates when the foot is moved forwardly, and to swing outwardly when the foot is moved backwardly, substantially as shown and described.

3. The herein-described water-shoe, comprising a foot-plate, which is provided with means for securing it to the foot, a bottom plate which is secured to said foot-plate, the forward ends of said plates being pointed, and provided with a shield, and wing or fin plates which are pivotally mounted between said foot and bottom plates, and which are adapted to fold between said plates when the foot is moved backwardly, said wing or fin plates being provided at their pivoted ends, with beveled heads by which both their inner and outer movement are limited, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 15th day of October, 1896.

BENJAMIN CARMINA-MORREALE.

Witnesses:

JOHN BUCKLER,
THOS. A. AITON.