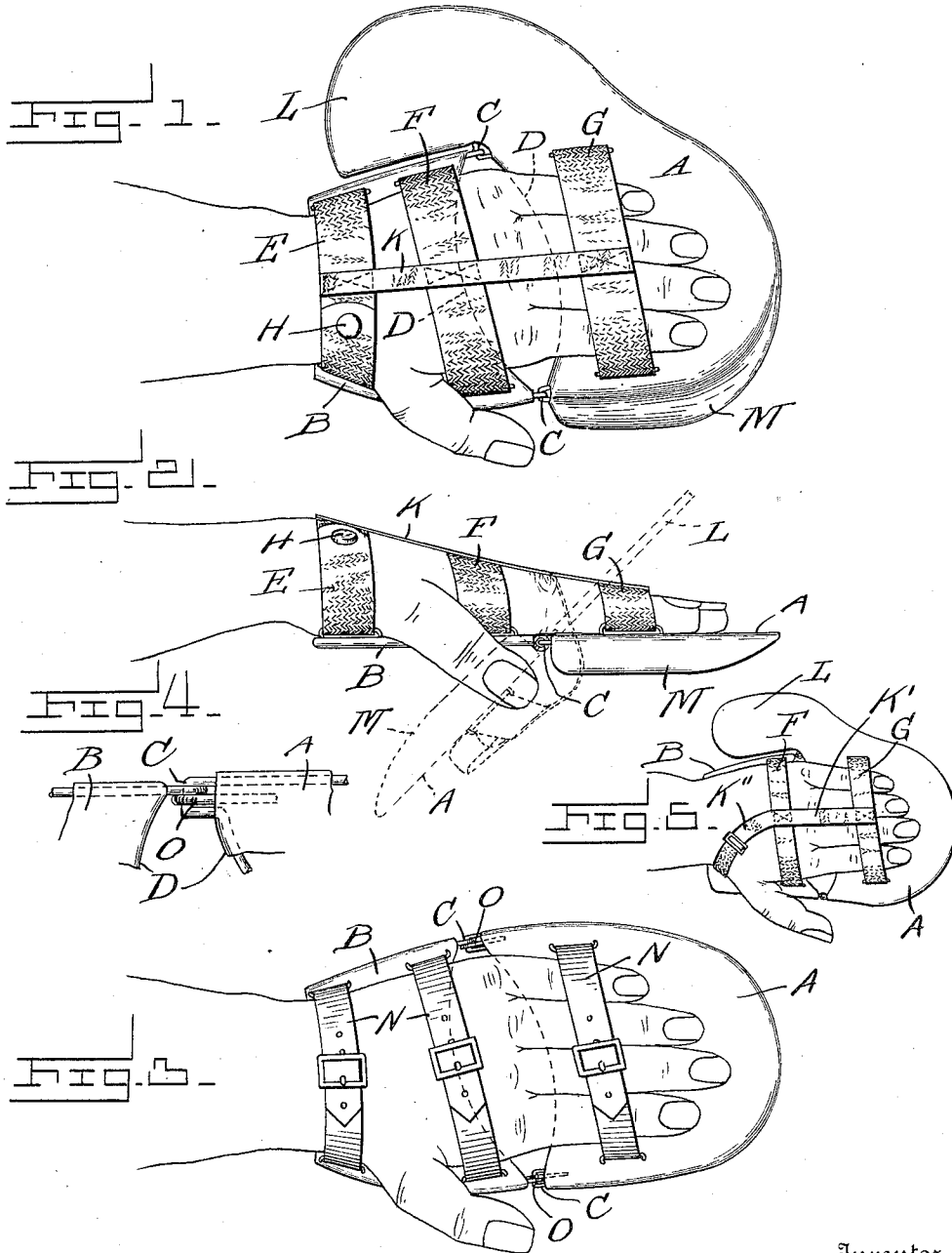


J. W. SNELL.  
SWIMMING DEVICE.

APPLICATION FILED JUNE 19, 1912.

1,051,169.

Patented Jan. 21, 1913.



Inventor

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# UNITED STATES PATENT OFFICE.

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## SWIMMING DEVICE.

1,051,169.

Specification of Letters Patent.

Patented Jan. 21, 1913.

Application filed June 19, 1912. Serial No. 704,648.

*To all whom it may concern:*

Be it known that I, JOSEPH W. SNELL, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Swimming Devices, of which the following is a specification.

My invention relates to swimming devices, and consists in devices for attachment to the hands of a swimmer, whereby he is enabled to exert greater power and attain greater speed with less exertion than ordinarily, it being also useful for learning to swim.

I will now describe my invention, which is illustrated in the accompanying drawing, in which—

Figure 1 is a plan view of the preferred form of the device in position on the hand of a swimmer; Fig. 2 is a side view of the same, showing in dotted lines the closed position of the hand in the forward stroke; Fig. 3 is a view similar to Fig. 1, showing a simpler form of the device, embodying some of the features of my invention; Fig. 4 is a detail view of one of the modified features, and Fig. 5 is a partial plan view of another modification.

The improved swimming device consists essentially of a front or finger plate A and a rear or palm plate B, both made preferably of thin metal and hinged together at C, C, the edges of the two plates between the said hinges being concaved, as shown at D, D, so as to leave a space between them to prevent any pinching or cramping of the flesh of the hand in closing or bending the same.

To hold the device in place upon the hand, I provide bands, secured on the rear sides of the plates and adapted to pass over the back of the hand. These bands may be of elastic material or may be straps. In either case they may be adjustable in length. In Figs. 1 and 2, I have shown three such bands of elastic material, E, F, and G, the two latter, for the reception of the fingers and middle of the hand, being continuous, while the wrist-band E is divided and provided with fastening means H, such as a glove fastener. The ends of the bands are secured permanently to the respective plates. The three bands are connected centrally by an elastic strip K which, when the plate A is swung to the position shown in

dotted lines in Fig. 2, is naturally extended and therefore assists in the return straightening movement of the hand into the position shown in full lines. The strip K also holds the bands in position and prevents any tendency for the fingers to slip out. A modified form of this construction of attaching means is shown in Fig. 5, in which the wrist-band E is omitted and the strip K' is continued rearwardly and laterally to one side of the plate B, where its end is secured, thus forming a retaining loop or band for the thumb to pass through. K'' represents a slide buckle for adjusting the length of the strip, and similar means may be employed also on the bands F and G, as will be obvious. To further assist in the return movement and to give a greater surface for the propelling action, I provide the plate A with an extension L at one side which, as it lies on the other side of the pivotal axis from the main portion of said plate, assists in the return movement to the straight position of the hand, by the counter-pressure of the water thereon in an act of bringing the hand forwardly preparatory to a fresh stroke.

Another feature of the invention, which is illustrated in Figs. 1 and 2, is the provision of a curved or concave flange M on the shorter edge of the plate A, said flange starting from the hinge C on the thumb side and tapering off toward the forward edge of said plate. This flange, which is not an essential feature of the device, gives the swimmer a greater purchase on the water when swimming "man-fashion".

In Fig. 3 I have illustrated a simpler form of the device with some modifications, which are adapted for use also with the form of Figs. 1 and 2, as will be obvious. In this case, the plate A is neither provided with the counter-arm or extension L nor with the flange M. The bands for holding the device on the hands are in the form of straps N, instead of elastic bands, while the hinges or pivots C, C, are provided with springs O, O, normally tending to hold the plates A and B in alinement.

It will be understood that the elastic bands of Figs. 1 and 2 may be made extensible by means of buckles or any other suitable means, and that the springs O, O, can be used in addition to the elastic bands, if desired. In short, various combinations of

the features shown in the two forms can be made without departing from the spirit of my invention, as expressed in the following claims:

- 5 1. A swimming device of the class described, comprising two plates hinged together, means to secure the same upon the front of the hand so that the pivotal axis of the plates lies parallel to the line of the  
10 knuckles, and yielding means tending to normally hold the said plates in alinement.
2. A swimming device of the class described, comprising a plate shaped and adapted to rest on the palm of the hand, the  
15 forward edge of said plate being concaved, a finger plate hinged to the palm plate at the forward corners of the latter, retaining bands on the backs of said plates by which the same are secured to the hand and means  
20 tending to normally hold said plates in alinement.
3. A swimming device of the class described, comprising a plate shaped and adapted to rest on the palm of the hand,  
25 another plate adapted to rest on the front of the fingers, hinges connecting said plates on opposite sides of the hand, and a rearward extension from said finger plate on one side of the hand beyond the corresponding hinge, whereby, in the forward  
30 movement of the hand through the water, the pressure of the water on said extension tends to bring the plates into alinement.
4. A swimming device of the class described, comprising a plate provided with means for securing it to the palm of the hand, a second plate provided with means  
35 for securing it to the fingers, hinges connecting said plates at the sides of the hand, the

edges of the plates between said hinges being 40 spaced apart to prevent pinching the flesh in the closing movement of the hand, yielding means tending to hold the plates in alinement, and a curved flange on the front and one side edges of said finger plate to 45 give greater purchase on the water.

5. A swimming device of the class described, comprising a plate provided with means for securing it to the palm of the hand, a second plate provided with means 50 for securing it to the fingers, hinges connecting said plates at the sides of the hand, the edges of the plates between said hinges being spaced apart to prevent pinching the flesh in the closing movement of the hand, 55 yielding means tending to hold the plates in alinement, and an extension on said finger plate rearwardly beyond the hinge on the side of the hand opposite the thumb to give a greater purchase in the swimming 60 stroke and to assist in bringing the plates into alinement on the forward stroke.

6. A swimming device of the class described, comprising two members adapted to be secured to the front of the hand and 65 hinged together so as to permit a closing action of the hand, the front or finger member having an extension along the side of the hand beyond the pivotal line of the plates, as and for the purpose described. 70

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH W. SNELL.

Witnesses:

HENRY B. WILLSON,  
EDWARD D. SUGDEN.