J. WELLS.

SWIMMING DEVICE.

APPLICATION FILED JULY 5, 1910.

993,927. Patented May 30, 1911.

Fig. 1.

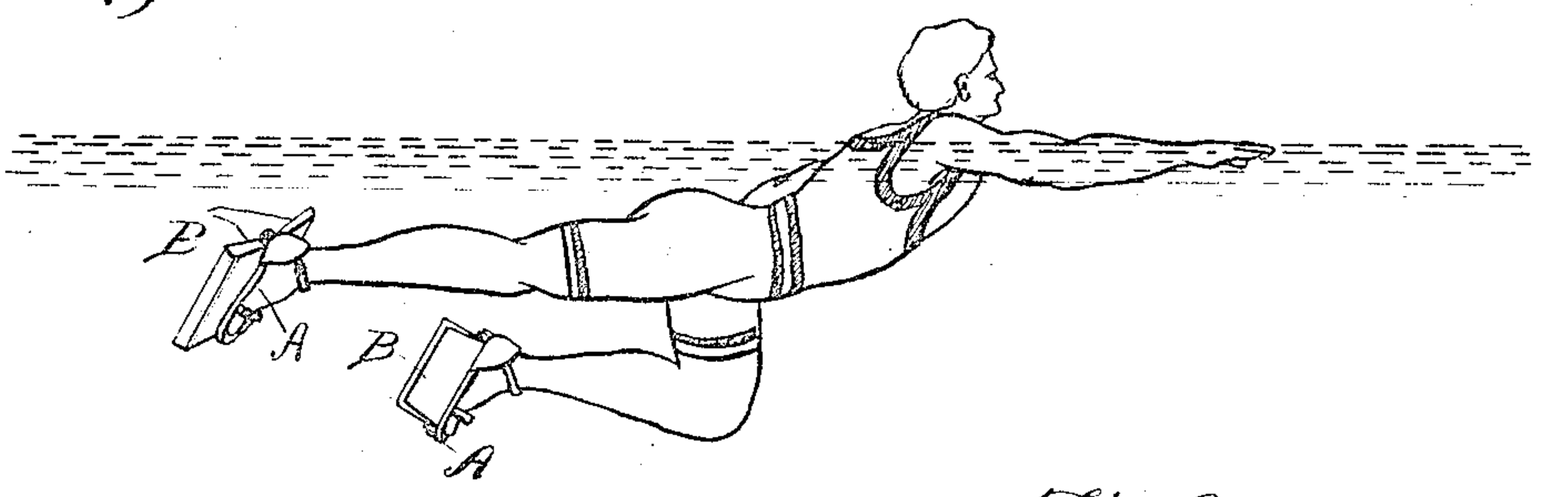


Fig. 2.

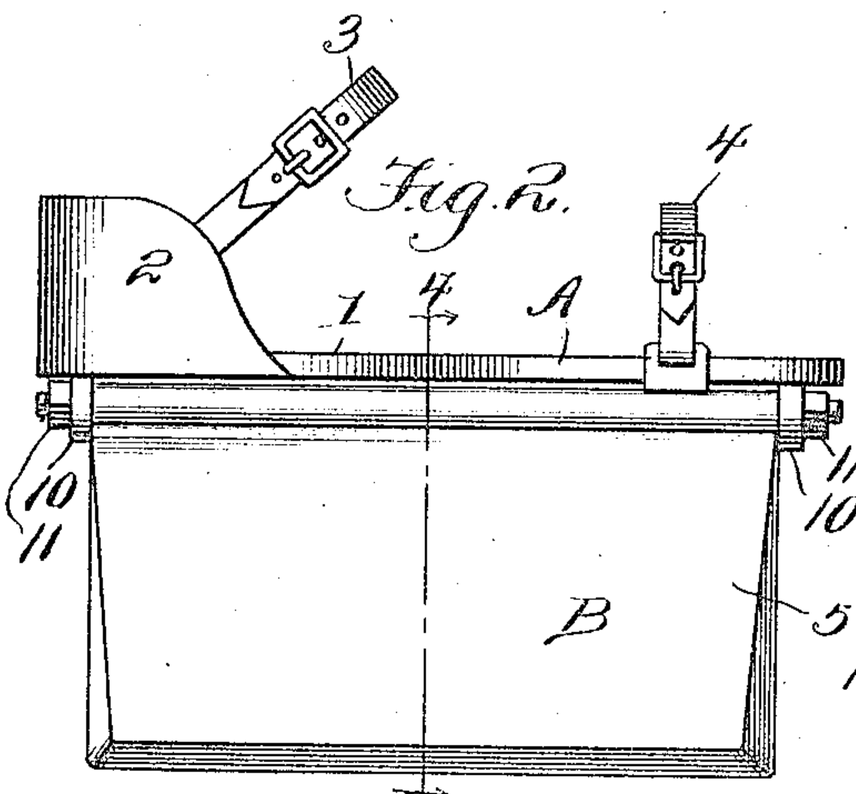


Fig. 3.

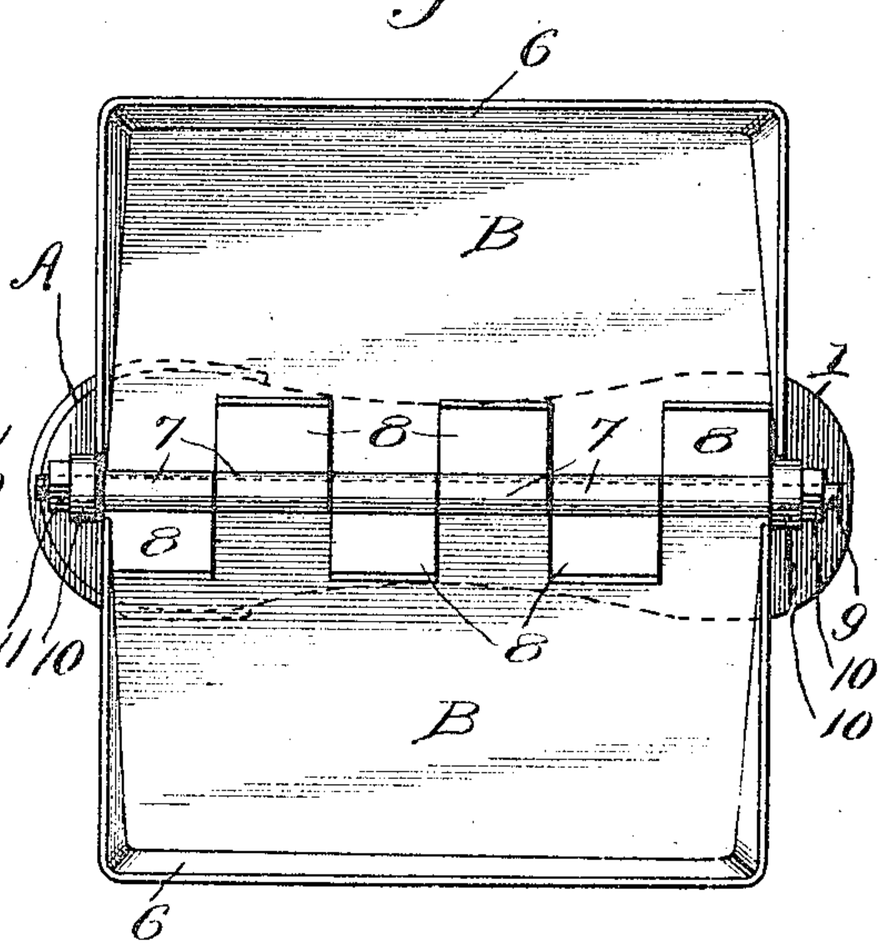


Fig. 4.

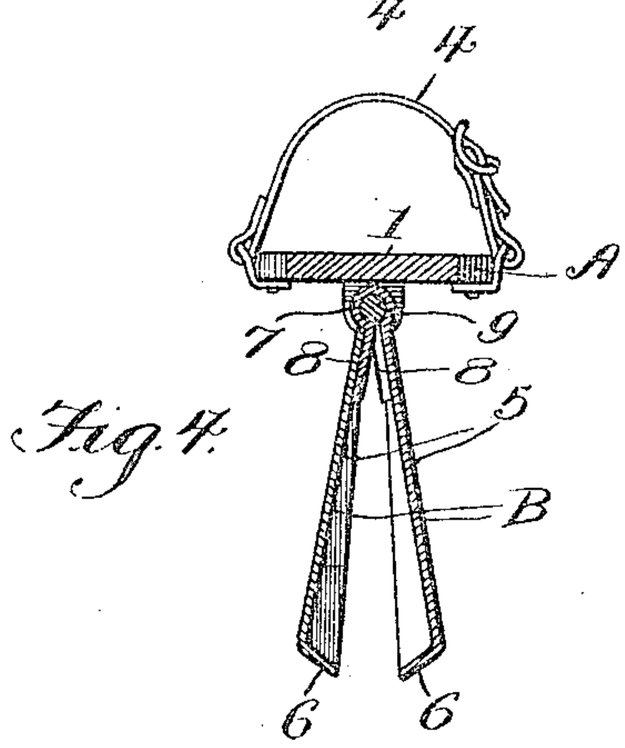
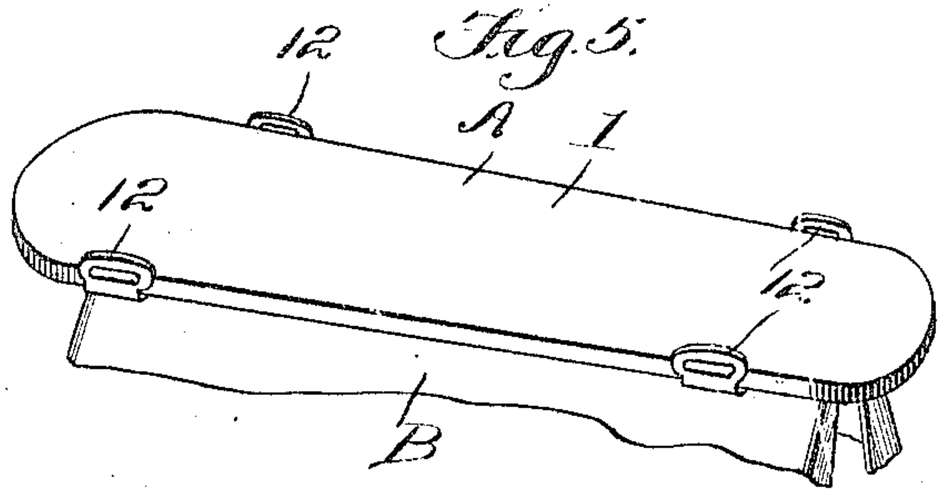


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN WELLS, OF FARMERSVILLE, TEXAS.

SWIMMING DEVICE.

993,927. Specification of Letters Patent. Patented May 30, 1911.

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To all whom it may concern:

Be it known that I, JOHN WELLS, a citizen of the United States, residing at Farmersville, in the county of Collin and State of Texas, have invented new and useful Improvements in Swimming Devices, of which the following is a specification.

This invention relates to swimming devices which are adapted to be secured to the limbs of a person whereby the user may be enabled to swim faster and farther and also to make deeper dives than can be made ordinarily.

The principal object of the invention is the provision of a device of this character which may be applied to either the feet or hands or both and by the use of which a greater surface is presented to the water as the operator makes successive thrusts thereby enabling one to make rapid speed through the water.

Another object of the invention is to provide a novel swimming device, preferably secured to the feet of the operator, which consists of a foot engaging plate or sole provided with a pair of hinged wings on the under side thereof.

With these and other objects in view, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawing:—Figure 1 is a view of the device positioned on the feet of a swimmer. Fig. 2 is a side elevation of the device with the wings in closed position. Fig. 3 is a bottom plan view with the wings open. Fig. 4 is a sectional view on the line 4—4 of Fig. 2, and Fig. 5 is a detail perspective view of a modified form of wing plate.

Similar reference numerals are employed to designate corresponding parts throughout the several views.

Referring more particularly to the drawing, the invention consists essentially of a suitable foot engaging plate or sole A having pivotally arranged on the underside thereof a pair of hinged wings B which are adapted to open upon a propelling or kicking thrust of the operator to present a maximum area for increasing the efficiency of the stroke. It will also be manifest that when the device is retracted by the operator preparatory to a successive stroke the wings will close so as to present a minimum resistance area.

The foot engaging plate A consists of a sole 1 substantially the shape of the bottom of the foot and is provided at one end with a heel guard 2 having an ankle engaging strap 3. The opposite end of the foot sole is provided with a toe engaging strap 4.

Pivotally arranged on the bottom or underside of the foot-sole 1 is a pair of hinged wings 5, which are preferably constructed of sheet metal. Each of the wings 5 have their outer edges inclined outwardly as at 6 to increase the efficiency of the propelling stroke. The longitudinal edges of the wings 5 are each provided with a series of spaced pintle eyes 7 each having a downwardly and outwardly extending stop lug 8, as clearly shown in Fig. 4, to limit the closing movement of the wings. The eyes 7 of one of the wing sections are arranged between and in alinement with those of the opposite one so that the pintle 9 can be readily and quickly inserted through the eyes. The wings 5 are pivotally mounted upon the pintle 9 between the pintle bearings 10 through which the pintle passes and is secured by a nut 11. The width of the wings when closed will be slightly less than the width of the foot sole 1 so that a minimum resistance area will be presented.

It may be deemed desirable to attach the device to the hands of an operator, in which case the wing plate 1 is provided at its ends with a pair of strap engaging eyes 12, by which the device can be securely fastened in operative position.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention relates, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that such changes may be made when desired as are within the scope of the claims.

Having thus described the invention what I claim as new is:—

1. In a device of the class described, a foot engaging plate, wing sections pivotally arranged on the underside of the said element pintle eyes alternately arranged on

the inner longitudinal edges of the said wing sections, each pintle eye consisting of a tongue bent to form an eye at the inner edge of the wing sections, each of said tongues terminating in an angularly projecting stop with respect to its wing section and adapted to limit the inward movement of the respective wing sections.

2. In a swimming appliance, a limb engaging element hinged wing sections having their outer marginal edges inclined outwardly and adapted to grip and retain the water to increase the propelling efficiency of the stroke, spaced pintle eyes on the inner longitudinal edges of each section, said pintle eyes being alternately arranged, stop lugs formed on each of the pintle eyes to limit the closing movement of the wing section, a pintle passing through the said eyes and detachably connected to the limb engaging element.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN WELLS.

Witnesses:
P. P. MINN,
W. B. YEARY.