

(No Model.)

P. CURRAN.
SWIMMING EQUIPMENT.

No. 476,039.

Patented May 31, 1892.

Fig. 1

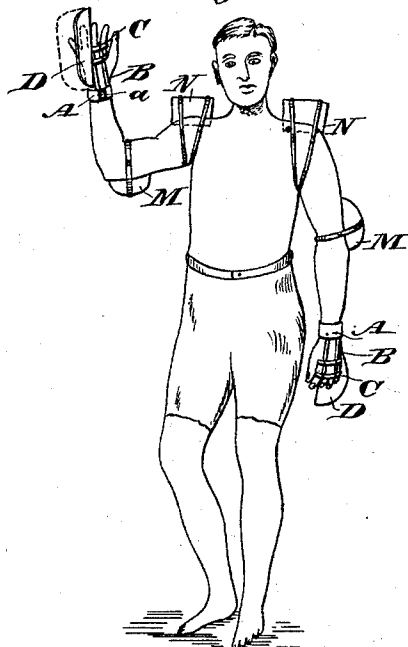


Fig. 2

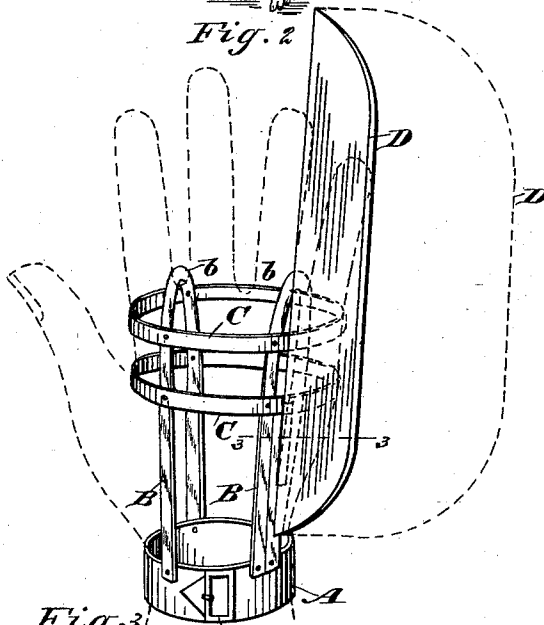
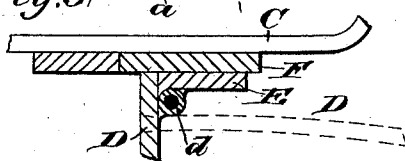


Fig. 3



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PATRICK CURRAN, OF HOQUIAM, WASHINGTON.

SWIMMING EQUIPMENT.

SPECIFICATION forming part of Letters Patent No. 476,039, dated May 31, 1892.

Application filed September 16, 1891. Serial No. 405,855. (No model.)

To all whom it may concern:

Be it known that I, PATRICK CURRAN, of Hoquiam, in the county of Chehalis and State of Washington, have invented a new and useful Swimming Equipment, of which the following is a full, clear, and exact description.

The object of this invention is to provide feathering-paddle attachments for the upper limbs of a swimmer, which will afford means to rapidly propel the wearer through the water when the legs and arms are moved in the usual manner.

A further object is to furnish floats for the arms which will partly support the swimmer, reduce fatigue, and conduce to safety by their conjunctive use.

To these ends my invention consists in the construction and combination of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a swimmer equipped with the improved attachments. Fig. 2 is an enlarged detached view of an appliance that in duplicate is secured to the hands of a swimmer. Fig. 3 is a broken transverse sectional view of parts shown in Fig. 2, taken on the line 3 3 in said figure.

The appliance shown in Fig. 2 consists of a wristband A, provided with a buckle *a* to permit adjustment on the part of the upper limb of the swimmer that it is secured upon. Two looped bands B of flexible material are secured to the wristband A by their ends, the bights *b* of these folded parts being designed to engage the swimmer's hand, as indicated by dotted lines in Fig. 2. Any suitable number of encircling bands C are secured upon the looped bands B in such a relative position as will adapt them to encompass the palm of the hand near the fingers, these several bands forming a support and means of attachment for a feathering-paddle blade D.

As represented in Figs. 2 and 3, the blade D is formed of a thin plate of sheet metal or other suitable material of a length and width proportioned to suit the physique and muscular strength of the wearer, having its straight inner edge that is nearest to the hand in service hinged to a leaf-plate E. The plate E is

affixed upon the securing-bands, already described, by its direct attachment to the base-plate F, that is longitudinally located on these bands and secured to them by any preferred means. The hinge connection *d* between the leaf-plate E and base-plate F is such as will allow the joint to flex when the arm and hand of the wearer is retracted after a stroke, the sweep of the limb and hand causing the blade D to swing outwardly from the fourth finger and lie in a plane substantially coincident with that of the extended hand when a stroke is made, said position being shown by dotted lines in Figs. 1 and 2.

There being a duplicate device such as has been described provided for each hand of a swimmer, it will be apparent that an increase of area is thereby afforded for these members that will enable a person wearing the same to effect a more rapid progress, the flexure of the blades, as stated, causing them to feather in one direction, while the rule-joints *d*, provided therefor, retain them in a spread condition when a stroke is made.

To compensate for the added weight of the attachments placed on the hands of a swimmer, a float M is secured near each elbow, and also on each shoulder a float N. (See Fig. 1.) The floats mentioned are made of cork, or may be of fabric that is waterproof and constructed to permit inflation with air.

A proper proportion is given to the floats M N to maintain the swimmer in an easy position in the water, preventing a submergence of the head and allowing all muscular exertion to be applied as a propelling force, and, furthermore, to buoy the arms, as before intimated.

When the bather is equipped with the several attachments that have been described, the speed of progressive movement will be increased by the action of the blades D, as these present no impediment to a free contraction of the lower limbs, and from their simultaneous outward projection effected at each kicking stroke of said limbs act forcibly upon the water, supplementing a similar action of the paddle-blades D.

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

1. The combination, with a wristband that

is adjustable, looped straps each attached by
the ends oppositely on the wristband and
adapted to engage their folded parts with the
hand between the fingers, and encircling
5 bands attached to the looped straps and wrist-
band, of a base-plate attached upon the en-
circling bands and wristband, and a paddle-
blade rule-jointed by one edge to the base-
plate, substantially as described.
10 2. The combination, with a wristband, a
buckle thereon, looped straps each having its
ends oppositely attached to the wristband and
engaging the folded portion between the wear-
er's fingers, and two encircling bands affixed

on the looped straps so as to embrace the 15
hand, of a base-plate secured on the encir-
cling bands and wristband to lie in the palm
of the hand, a leaf-plate thereon, and a pad-
dle-blade rule-jointed by one edge to the leaf-
plate, substantially as described. 20

3. In a swimming equipment, the floats M
N, that are attachable upon the arms and
shoulders of a swimmer, substantially as de-
scribed.

PATRICK CURRAN.

Witnesses:

C. W. HODGDON,
FRED. E. BURLEW.