No. 805,672. PATENTED NOV. 28, 1905.

W. P. SAMMS.

SWIMMING APPLIANCE.

APPLICATION FILED APR. 21, 1905.

Fig. 1.

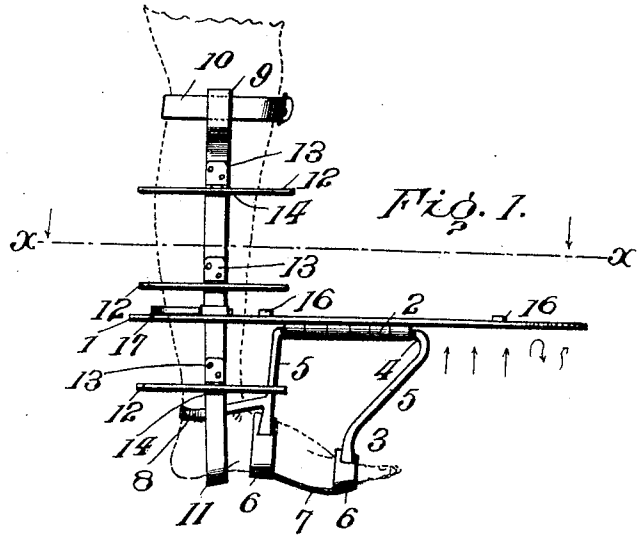


Fig. 2.

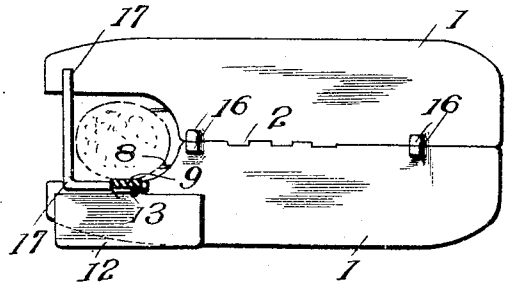


Fig. 4.

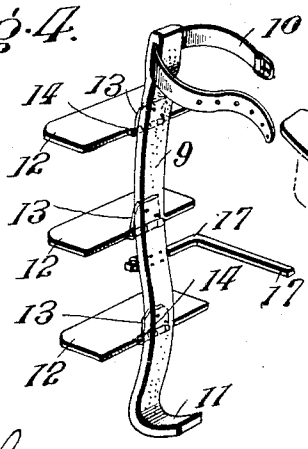
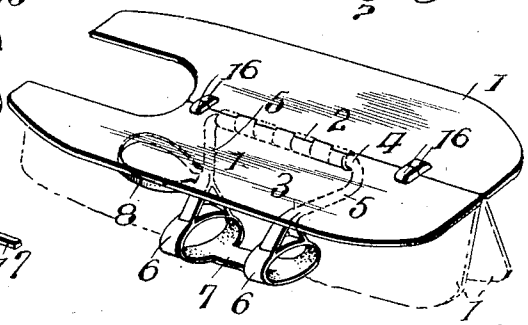


Fig. 3.



Witnesses

Wm. Smirle

Chas. Morris

Inventor

W. P. Samms.

By R. H. B. Lacey, Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM P. SAMMS, OF ENTERPRISE, OREGON.

SWIMMING APPLIANCE.

No. 805,672. Specification of Letters Patent. Patented Nov. 28, 1905.

Application filed April 21, 1905. Serial No. 256,782.

To all whom it may concern:

Be it known that I, WILLIAM P. SAMMS, a citizen of the United States, residing at Enterprise, in the county of Wallowa and State of Oregon, have invented certain new and useful Improvements in Swimming Appliances, of which the following is a specification.

This invention consists of a novel form of swimming device or appliance adapted to be secured to the arms or legs of a swimmer to enable him to propel himself through the water with greater speed than can be accomplished by the use of the natural members of the body.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a side elevation showing the invention applied to a leg as when in actual use. Fig. 2 is a horizontal sectional view on the line X X of Fig. 1 looking downwardly. Fig. 3 is a perspective view showing the preferred form of the appliance constructed to be secured to the foot of the swimmer. Fig. 4 is a view of an appliance embodying the invention and adapted to be used in connection with the construction of the device shown in Fig. 3.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In carrying out the invention an appliance constructed in accordance therewith is adapted to be attached to the arms or legs of a swimmer, being preferably applied to the latter, however, in the actual use thereof.

Specifically describing the construction of the appliance, the same comprises, essentially, a plurality of wings or blades 1, hinged or pivotally secured together, as shown at 2. The blades 1 when extended form a web for the member of the body which carries the same of such a size as to greatly increase the speed of the swimmer through the water, said blades having a water-surface of an area greatly exceeding that of the natural member of the body, facilitating progress in a manner which will be obvious. The blades 1 and 2, because of the hinged connection thereof, are adapted to feather or close toward each other as the swimmer moves his legs or arms forward in the strokes thereof, the appliance thus offering comparatively no resistance to passage through the water in the above action. As soon, however, as the swimmer carries his legs or arms rearwardly the wings or blades 1 open, and thus gain a purchase with reference to the body of water through which they are forced.

The preferred means for securing the appliance to the foot is shown in Fig. 1, and consists of a frame 3, comprising an upper bar 4, which forms a pintle connecting the blades or wings 1 and the sides 5. The sides 5 of the frame 3 are provided at the lower extremities with foot-loops 6, adapted to receive the foot of the wearer, said foot-loops being connected together by means of a bar 7. The rear portions of the blades or wings 1 are cut away from the inner edges thereof, so that said blades will not come into contact with the leg of the swimmer as they move downwardly and feather or close together. The foot of the swimmer when received in the foot-loops 6 of the frame 3 is prevented from displacement therefrom by means of an ankle-loop 8, which connects with the rear side 5 of the frame 3 and is adapted to embrace the ankle of the swimmer to accomplish the purpose above mentioned. It will be understood that the frame 3 may be made of any light material, metal, or the like having the necessary rigidity.

If desired, the device shown in Figs. 1 and 4 may be used in connection with the device above described or alone, as found desirable, and this device consists, essentially, of a bar 9, adapted to extend longitudinally of the leg from the heel to the knee, said bar being attached to the leg by means of a suitable strap or like part 10 at its upper portion. The lower extremity of the bar 9 is extended laterally, as shown at 11, to pass beneath the foot of the swimmer to take the strain of the pressure against the wings or blades 12 of the bar 9 off of the strap connection 10 to increase the comfort of the wearer. The blades or wings 12 are provided with stops 13 adjacent the points of connection 14 of said wings with the bar 9, and these stops 13 are adapted to engage the bar 9 to limit the upward movement of the wings or blades 12, permitting said blades to feather or move downwardly to offer the least resistance to the water as the leg is drawn forward in the stroke.

As before mentioned, the devices as shown in Figs. 3 and 4 may be used together or separately, and the blades or wings 1, carried by the frame 3, are limited in their outward and

spreading movement by means of stop-lugs 16, projected upwardly from the adjacent edges of said wings and adapted to abut when said wings reach an approximately alined position.

If desired, when the devices shown in Figs. 3 and 4 are used together to form a single appliance the bar 9 may have a transverse stop member 17 attached thereto, and this may be a stout rod or the like extending rearwardly and laterally from the bar 9 to engage the rear extremities of the wings or blades 1 as the latter lift or spread.

Having thus described the invention, what is claimed as new is—

1. In a swimming appliance of the class set forth, the combination of a frame adapted to be attached to the foot, blades or wings pivoted to the frame, a bar adapted to be secured longitudinally of a side of the leg, a plurality of wings pivoted to the bar, and a rod projected rearwardly and laterally from the bar and adapted to engage the upper sides of the wings which are pivoted to the frame first mentioned, so as to limit the spreading or opening movement of these wings.

2. In a swimming appliance of the class set forth, the combination of a frame adapted to be attached to the foot, blades or wings pivoted to the frame, a bar adapted to be attached longitudinally of the leg, a plurality of wings or blades pivoted to the bar, and means carried by the bar for limiting the movement of the wings or blades carried by the frame first mentioned.

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

WILLIAM P. SAMMS. [L. S.]

Witnesses:

CHARLES H. ZURCHER,

WILLIAM YANDELL.