F. LEITNER.
ATTACHABLE SWIMMER'S DEVICE.
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1,192,650. Patented July 25, 1916.

FIG. 1.

Inventor:

Frank Leitner
To all whom it may concern:

Be it known that I, FRANK LEITNER, a citizen of Hungary, and resident of the United States, residing at Roebling, in the county of Burlington and State of New Jersey, have invented new and useful improvements in Attachable Swimmers’ Devices, of which the following is a specification.

My invention relates to a device adapted to be secured upon the lower portion of each leg of a swimmer and the objects in view are to provide means for an increase of speed may be obtained by a person while swimming, and to aid a swimmer in making a treading movement in the water.

My invention consists of a small umbrella shaped device designed to be secured on the calf of the leg and near to each ankle of a swimmer and so constructed that as one leg is brought forward in the water the device is caused to close to a collapsed condition upon that leg, and while the other leg is forced rearward the device on this leg is caused to be brought to a full open condition and dispose a large area of the surface cover of the device to thrust against the water by the swimmer, and whereby an increase of speed is obtained in swimming, or to aid in making a treading movement in the water.

In the accompanying sheet of drawings Figure 1 represents the position of the swimmer in the water and also indicates the workings of the device on the arms as well as the legs in an open and closed position. Fig. 2 represents a perspective view, showing my device in a partly open position, with one side of its cover of canvas partly open. Fig. 3 is a perspective view of the arm swimming device, Fig. 4 is a sectional view of a portion of Fig. 2, and Fig. 5 is an end elevation of the device shown in Fig. 3, with the straps engaged.

Like reference characters indicate like parts.

The frame of my device, body A, consists of a ½ inch wide leather strap, lined with felt, as indicated by 1 and a buckle attached on one end of the strap, as indicated by 2, which can be made of either brass or iron. The other end of the leather, body A, is perforated and can be adjusted according to the thickness of the leg.

No. 3 indicates an angle of 3/8 inch thickness, ½ inch wide and ½ inch deep in which two holes are drilled. One side of the angle is attached by a copper rivet, 4, to body A and the other part of the angle is attached to the rib of this device, 5, with rivet, 6. The extreme lower end of the rib is fastened to the canvas by strong cotton, practically sewed. The center of the rib is also strengthened by a small leather strap which runs through the canvas as shown on Fig. 4 at 13.

No. 7 indicates a very soft leather whereby the canvas, 8, and the body A are attached together so as to form a hinge for the canvas, 8, all around body A.

No. 9 is a patent button which is used on both sides of the canvas and with which, after swimmer attaches the device, the canvas can be brought into a closed and fastened condition so as to form an umbrella shape when in use, as shown on Fig. 1, right foot. No. 10 also indicates a strap 1 inch wide which is attached to body A and used on the bottom of the foot to avoid slipping.

No. 11 indicates another ¼ inch wide strap attached to 10 with copper rivets, 14, and perforated on one end, 11, with a buckle on the other end, 12, which prevents 10 from working back and forth on the foot.

No. 13 on Fig. 4 indicates ¼ inch square leather lace attached to the rib, 5, and riveted to 10, as shown by 14.

No. 16 indicates a perforated leather strap ½ inch wide on both sides attached to a leather band, 18, and the upper end fastened by a copper rivet, 17, to the band, 18. This strap, 16, is for the purpose of adjusting the device to suit or fit swimmer’s leg as indicated by 13.

No. 18 as described, is a leather band or strap attached to 16 by a copper rivet on both sides, as indicated at 17, and used to fasten the device to the upper part of the leg, or underneath the knee with buckle, 19.

Fig. 3 is an open view of the device applied to a fore arm which is used in connection with the device on the leg, as shown in Fig. 1. At Fig. 1 it is shown in an open or active and collapsed or inactive position on the swimmer’s arm. The device shown in Fig. 3 is shown on the left arm of the swimmer in Fig. 1, with the wings outspread and as it would appear when the arm to which the device is attached is thrown out in the water. On the right arm of Fig. 1 is a view of the device with the wings coming to a collapsed condition as the arm is drawn toward surface of the water.
is a detail view showing how the frames of the wings, hinges, etc., are connected to the body of the device. The body, A, of the device consists of a 1 1/2 inch leather strap lined partially with felt, 1, to cover and protect the arm when fastened thereto. No. 2 indicates a buckle on both ends of body A which can be made of either brass or iron fastened or sewed to body A for securing it free ends together. No. 3 indicates a loop which is used for the locking of the end of the strap of body A after buckled, as shown in Figs. 3 and 5. No. 4 indicates a 1 1/4 inch wide square shaped cork which is attached to body A, cut half round inside to fit the shape of the arm, and riveted or sewed to body A at 5, and supporting the wings, 9, as can be seen in Fig. 5 at 4. No. 6 indicates a center board to which is riveted a body A on both ends. No. 7 indicates brass hinges screwed to 6 and 9 at 8. No. 9 indicates the wings of the device which can be made of wood or other suitable material. No. 10 indicates a brace made of wood or other suitable material and screwed to wing, 9, by a brass screw at 11, to prevent wings, 9 from cracking or splitting from the force of the stroke. It also keeps the wings, 9, from coming to a fully closed condition, as shown in Fig. 1 on the right hand of the swimmer.

By practical demonstration I provide a device of the characters herein mentioned all that is necessary to afford a great increase of speed in swimming and without any extra exertion on the part of the swimmer. This device may be used to great advantage in the water in giving aid to support a person from drowning. Furthermore, by my construction and arrangement of parts, I provide a device that may not only be used by swimmers, but also by those desirous of learning the art of swimming, as it lessens fear of drowning and is a device that is inexpensive to manufacture.

What I claim and desire to secure by Letters Patent is:

In a swimming device for the leg, upper and lower and intermediate leg encircling straps, connecting means for the ends of each of said straps, side straps joining said encircling straps, the upper strap being adjustable vertically relative to said intermediate strap, a canvas web connected to said intermediate strap by means of a leather hinge, and connecting means for the ends of said web.

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

FRANK LEITNER.

Witnesses:

JAMES HARGA,
JULINS MEZANKO.