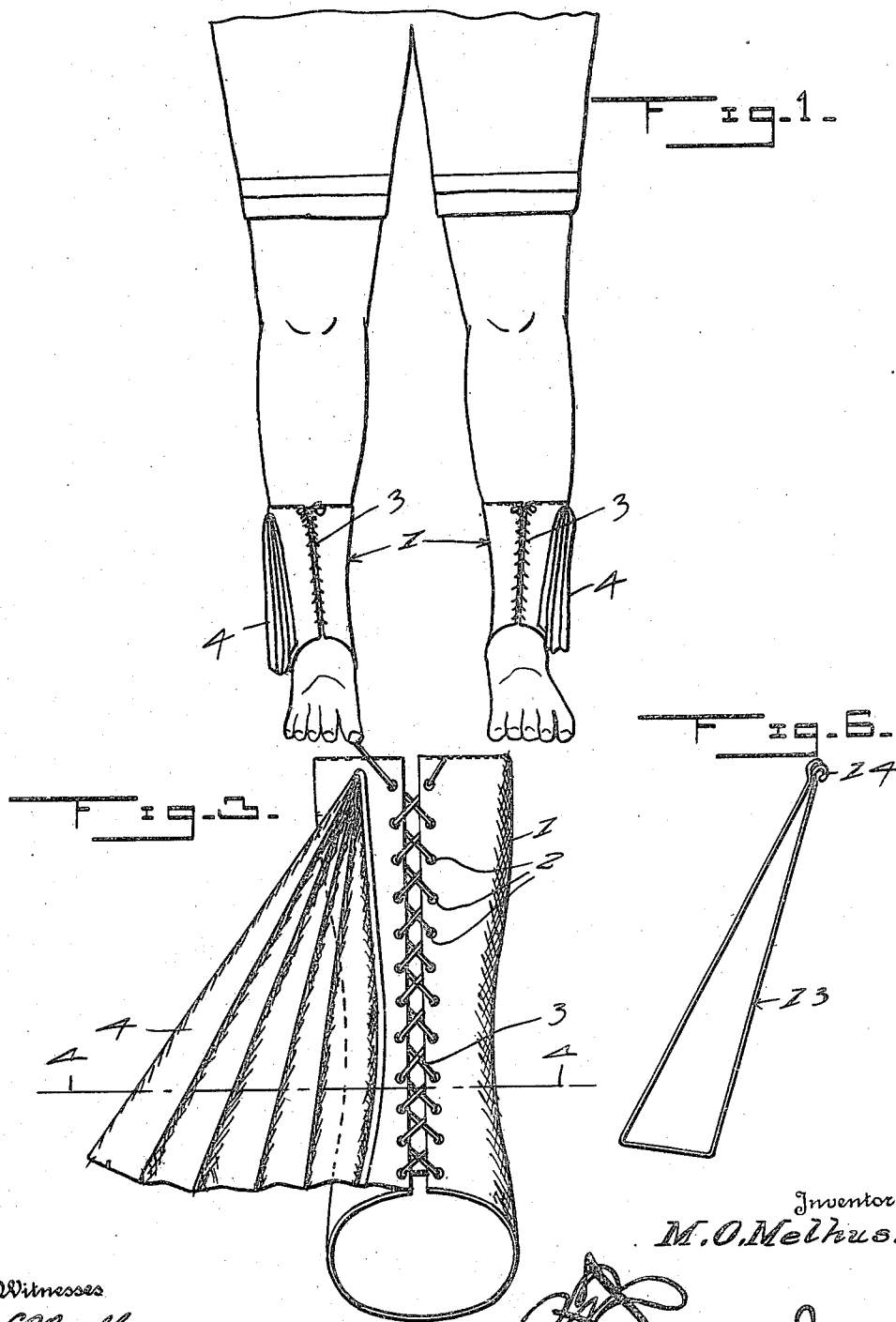


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APPLICATION FILED MAY 11, 1917.

Patented Mar. 26, 1918.
2 SHEETS—SHEET 1.



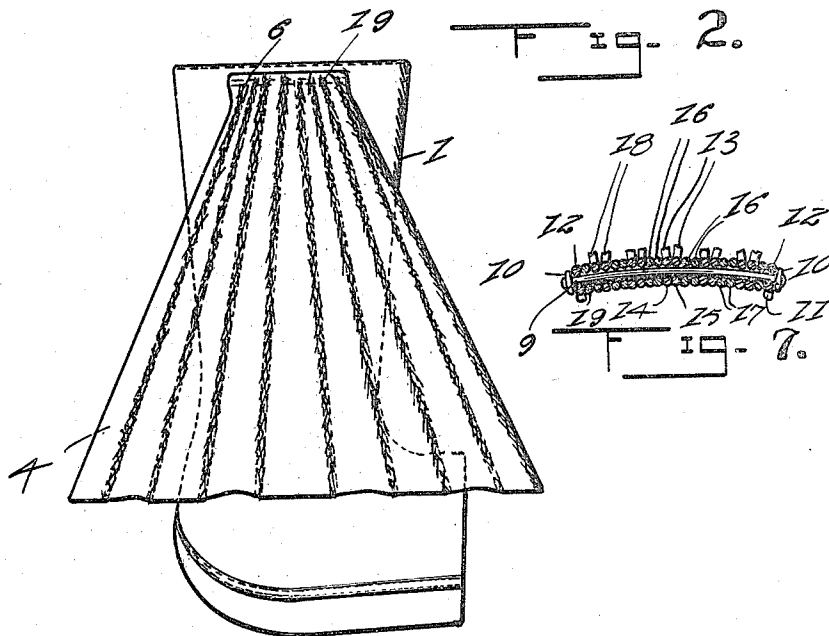
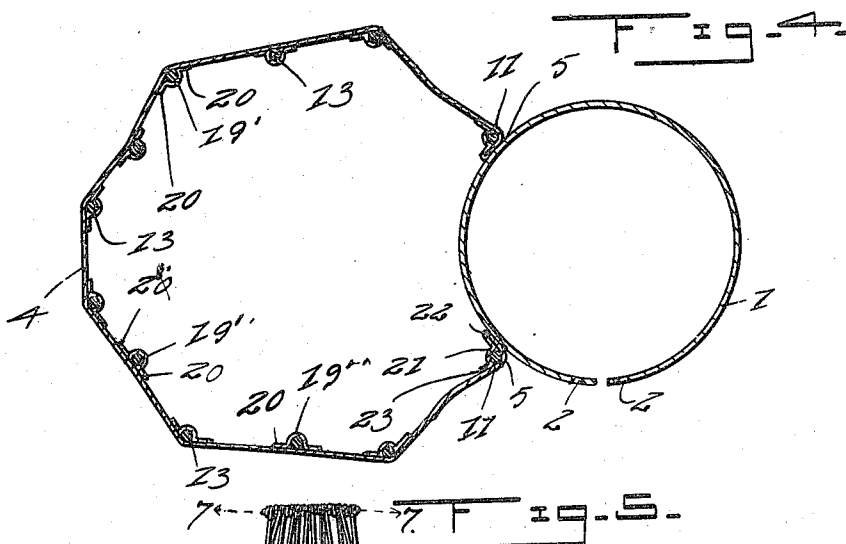
Witnesses
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M. O. Melhus.
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Attorney

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UNITED STATES PATENT OFFICE.

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SWIMMING APPLIANCE.

1,260,931.

Specification of Letters Patent.

Patented Mar. 26, 1918.

Application filed May 11, 1917. Serial No. 167,948.

To all whom it may concern:

Be it known that MONS OLSEN MELHUS, a citizen of the United States, residing at Hollister, in the county of San Benito and State of California, has invented certain new and useful Improvements in Swimming Appliances; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in a swimming appliance.

The object of this invention is to provide a device adapted to be secured to the lower portion of the leg of a swimmer, and is so arranged on the leg of the swimmer as to provide means whereby an increase in speed may be obtained by a person while swimming, and also aids the swimmer in making a treading movement in the water and to assist him while swimming.

A still further object of this invention is to provide a device of substantially cone shape, which is secured to a flexible boot, which boot is adapted to be secured to each leg of the user, and is so constructed that when one leg is brought forward in the water, the device is caused to collapse against the leg of the wearer, while the other leg is forced rearward, the device is caused to be brought into full open position and dispose a great quantity of water, due to the fact that it covers a greater area of surface, thus upon the thrust of the leg through the water, a great amount of water will be displaced, thereby increasing the speed of the swimmer.

A still further object of this invention is to provide a swimming device or appliance, which is capable of being removably secured to the lower portion of the leg of a swimmer and is so constructed as to be collapsed when the leg is drawn upwardly in the water and when forced rearwardly, will be fully opened or extended to displace a greater area of water to increase the speed of the swimmer.

A still further object of this invention is to provide an arcuate bar, on which is journaled a plurality of substantially U-shaped members, which when positioned in a canvas pocket will be substantially cone shaped, and this canvas covering is secured to a flexible boot, which is adapted to be removably laced around the legs of the swimmer.

A still further object of this invention is

to provide an arcuate bar and provide a plurality of substantially U-shaped frames, a relatively large U-shaped frame having the ends of its legs terminating into loops, which are journaled on the arcuate bar adjacent each end thereof, spacing washers arranged on the arcuate bar, and a plurality of smaller U-shaped frames having their legs terminating into loops journaled on the arcuate bar and spaced from one another by the spacing washers.

A still further object of this invention is to provide a swimming appliance of this character, which will be simple, practical and comparatively inexpensive in construction, and one that can be manufactured and sold at a low cost.

With these and other objects in view, the invention consists in the novel combination and arrangement of parts hereinafter more fully described and set forth in the claim hereto appended.

In the drawings:

Figure 1 is a view in front elevation of the swimmer's legs with my improved appliance secured thereto, and the appliance in collapsed position,

Fig. 2 is a side elevation of the appliance,

Fig. 3 is a view in front elevation showing the device detached from the leg of the user with the frame in extended position,

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3,

Fig. 5 is a rear elevation of the collapsible frame,

Fig. 6 is a perspective view of one member of the frame,

Fig. 7 is a horizontal sectional view taken on the line 7—7 of Fig. 5.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

Referring in detail to the drawings, the numeral 1 designates a boot or shoe, which has the toe portion cut off and it is preferably made of duck or canvas, but if so desired, it may be made of any other well known material, suitable for the purpose.

The upper of the boot is provided adjacent its open edges with eyelets 2, in which there is adapted to be arranged a lace 3, for securely fastening the device about the lower portions of the legs of the swimmer, as clearly shown in Fig. 1 of the drawings.

A substantially conical shaped member 4

is secured to the outer sides of the upper 1 as at 5 and has its upper edge secured thereto as at 6. The member 4 is constructed of canvas, duck or the like or any other suitable water resisting material, and when extended is substantially conical shape and has its lower open edge arranged substantially at right angles to the legs of the swimmer to which it is attached.

10 A collapsible frame designated in its entirety by the numeral 8 comprises in its construction, an arcuate bar 9, which is provided adjacent each end with the washers 10. A relatively large U-shaped frame 11 has the ends of its legs terminating into loops 12, which loops are arranged on the bar 9 and abut the opposing faces of each of the end washers or spacing rings as shown in Fig. 7.

20 A plurality of smaller substantially U-shaped members designated in their entirety by the numeral 13 have their arm portions converging and the terminals terminating into loops 14, which are adapted to be journaled upon the arcuate bar 9 at a relatively spaced distance apart.

25 All of the U-shaped members are each formed of a single piece of wire, suitable for the purpose, and have their ends terminating into loops 14, which are journaled upon the arcuate bar 9.

The frame is constructed as follows:

30 The substantially U-shaped member 13 has its loop portions journaled on the arcuate bar 9 at the medial portion thereof, as shown at 15 in the drawings, a pair of spacing rings 16 are secured on the arcuate bar 9 on opposite sides of each of the loops 14 of the central member 13.

40 A pair of the members 13 are then arranged on opposite sides of each pair of the spacing rings 16 and then there is arranged another pair of spacing rings, a third pair of members 13 are journaled on the bar 9 on opposite sides of the spacing ring 17, and these abut the spacing rings 16 arranged between the loops of the last named U-shaped member 13 and the relatively large member 11.

50 The arcuate bar is concealed within a

pocket 19 in the upper edge of the member 4 as shown in Fig. 2, positioning the frame on the interior thereof, the bars 13 and 14 are concealed at a relatively spaced distance apart about the inner surface of the member 4 in suitable pockets 19', which have their edges secured as at 20 to the inner side of the member 4 as shown in Fig. 4. The arms of the relatively large U-shaped frame 11 are secured in the pocket 21 formed by the bending back of the edges of the member 4, as at 22 and securing the same as at 23 in the surface thereof, thus protecting the frame and securing the same to the interior of the member 4, so that it may be collapsed on the drawing of the legs upwardly toward the body in the water and be opened when forcing the legs rearwardly to displace the water to increase the speed of the swimmer.

70 It can be readily understood that due to the flexibility and pliability of the covering 4 of the frame, it will allow the receptacle to collapse during each of the return strokes and extended to displace the water when the leg is forced rearwardly on the forward stroke.

What is claimed is:

A swimming appliance comprising a leg engaging member, means for removably securing the leg engaging member to the leg, a hollow substantially conical shaped receptacle secured to the outer side of said leg engaging member, and a collapsible frame comprising an arcuate bar, a relatively large U-shaped member journaled to the bar, and a plurality of substantially smaller U-shaped members having their legs journaled to the bar and positioned inwardly and above said relatively large U-shaped member and said frame secured to the interior of the receptacle to be collapsed and extended upon different movements of the swimmer.

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

MONS OLSEN MELHUS.

Witnesses:

ANTONE TAIX, Jr.,
S. G. BUTTON.