

(No Model.)

W. ADELMANN.
SWIMMING APPARATUS.

No. 496,105.

Patented Apr. 25, 1893.

Fig:1.

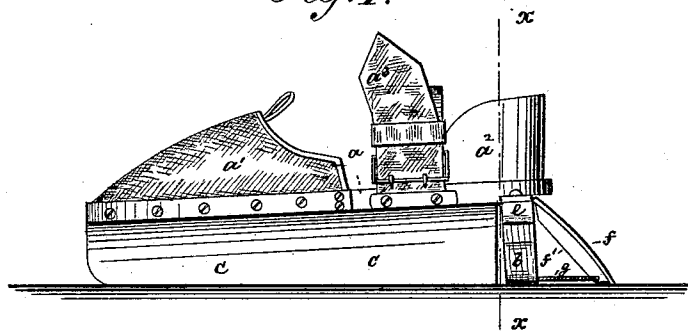


Fig:2.

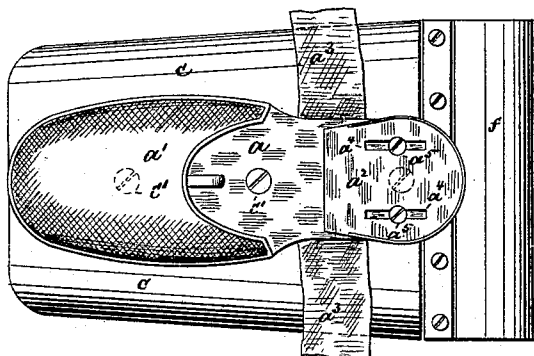


Fig:3.

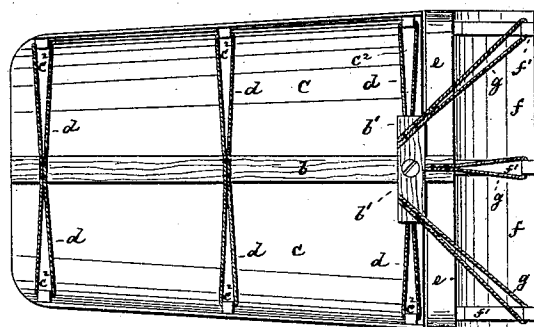


Fig:5.

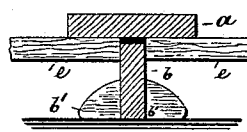
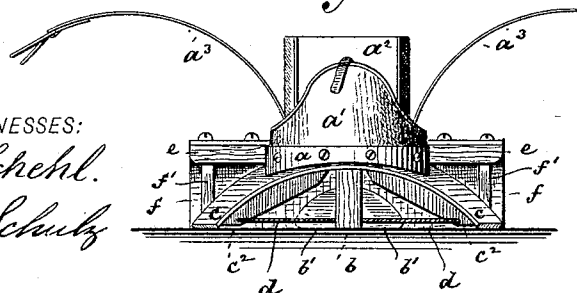


Fig:4.



WITNESSES:
A. Schehl.
Wm. Schultz

INVENTOR
W. Adelmann
BY *Noeder & Briesen*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WOLF ADELMANN, OF JERSEY CITY, NEW JERSEY.

SWIMMING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 496,105, dated April 25, 1893.

Application filed October 20, 1892. Serial No. 449,497. (No model.)

To all whom it may concern:

Be it known that I, WOLF ADELMANN, of Jersey City, Hudson county, New Jersey, have invented an Improved Swimming Apparatus, of which the following is a specification.

This invention relates to an apparatus which may be strapped to the foot and gives an increased purchase on the water during swimming.

It consists in the various features of improvement more fully pointed out in the claims.

In the accompanying drawings: Figure 1 is a side view of my improved swimming apparatus. Fig. 2 a top view; Fig. 3 a bottom view and Fig. 4 a front view thereof. Fig. 5 is a cross section through the frame, on line *x, x*, Fig. 1.

The letter *a*, represents the sole or base plate of a swimming shoe, provided with a pocket *a'*, for the toes, a heel plate *a''*, and a strap *a'''*, so that the shoe can be securely attached to the foot. The heel plate *a''*, is slotted as at *a'''*, for the reception of two screws *a''''*, by which the heel plate is adjustably secured to the sole *a*. Thus the shoe may be lengthened and shortened to fit differently sized feet. From the lower side of the sole *a*, there projects downward a central longitudinal rib *b*, provided near the heel with a transverse arm *b'*, the whole constituting a cross, upon which the wearer may walk to reach the water, without injuring the swimming wings or webs hereinafter described.

The main swimming web consists of a curved flexible plate of rubber *c*, passed between sole *a*, and rib *b*, and projecting to both sides of the shoe to an equal extent. The web *c*, is attached to the sole *a*, by screws *c'*, that also serve to attach the rib *b*, to the sole. The lower side of web *c*, is re-inforced by a set of ribs *c''*, perforated at their outer ends for the reception of stays or strings *d*, secured at their center to the rib *b*. These stays serve to prevent the web from folding forward as

the shoe is pushed backward through the water and thus the web constitutes a yielding scoop that opens as the shoe is pushed backward and closes as the shoe is drawn forward. In this way the purchase on the water is increased while making a stroke and undue resistance is prevented while drawing the legs under the body.

In the rear of arm *b'*, there is attached to the sole *a*, a cross arm *e*, of a length substantially equal to the width of the entire shoe. To this cross arm there is secured an additional rear swimming web *f*, having the re-inforcing ribs *f'*. These ribs are perforated near their outer ends for the attachment of strings or stays *g*, by which the free edge of the web *f*, is connected to the cross arm *b'*. The object of this web is to form a back for the scoop, of which the web *c*, forms the sides.

It will be seen, that my improved apparatus may be strapped to the feet at the bathing house and that the wearer may walk freely on land and swim with it after entering the water.

What I claim is—

1. The combination of a sole with a supporting rib *b*, a laterally extending curved web *c* projecting over the rib and with flexible stays that connect the ends of the web to the rib, substantially as specified.

2. The combination of a sole with a supporting rib, a laterally extending curved web projecting over the web and with a rearwardly extending web, substantially as specified.

3. The combination of a sole with an adjustable heel plate, a supporting rib *b*, *b'*, a laterally extending curved web *c*, a rearwardly extending web *f*, and with flexible stays for securing the free ends of the webs to the ribs, substantially as specified.

WOLF ADELMANN.

Witnesses:

F. V. BRIESEN,
A. JONGHMANS.