No. 636,364.

Patented Nov. 7, 1899.

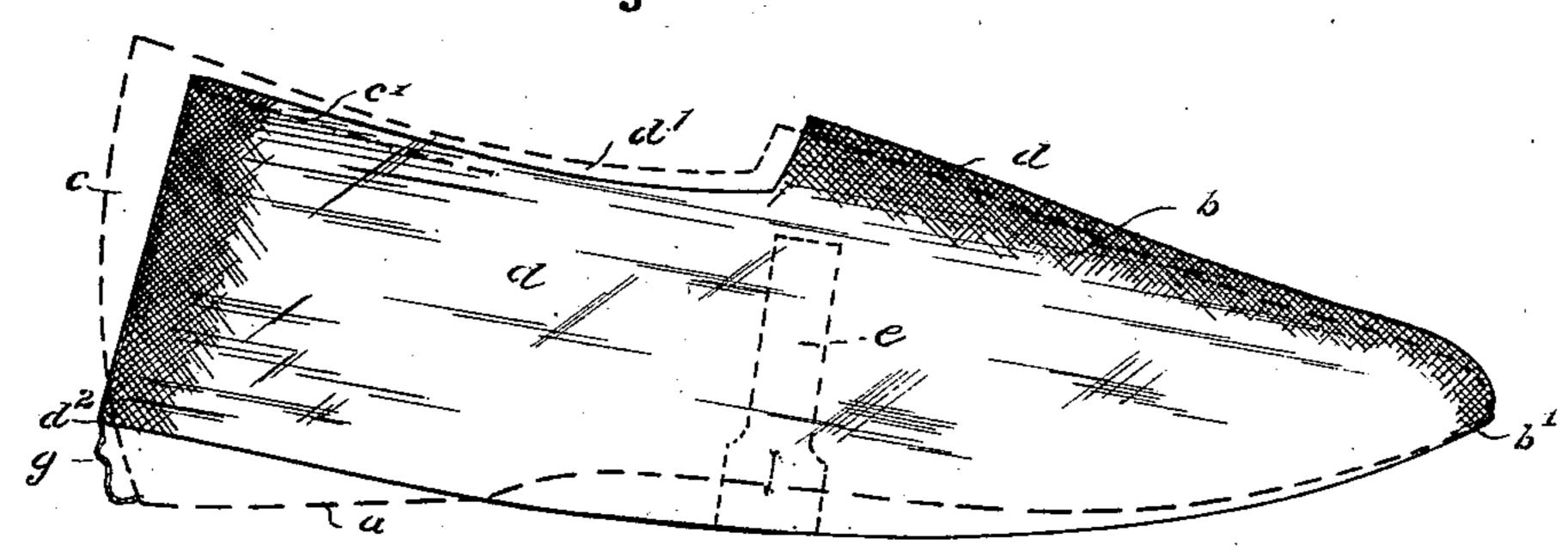
J. STAUB.

(Application filed Feb. 25, 1899.)

SWIMMING APPLIANCE.

(No Model.)

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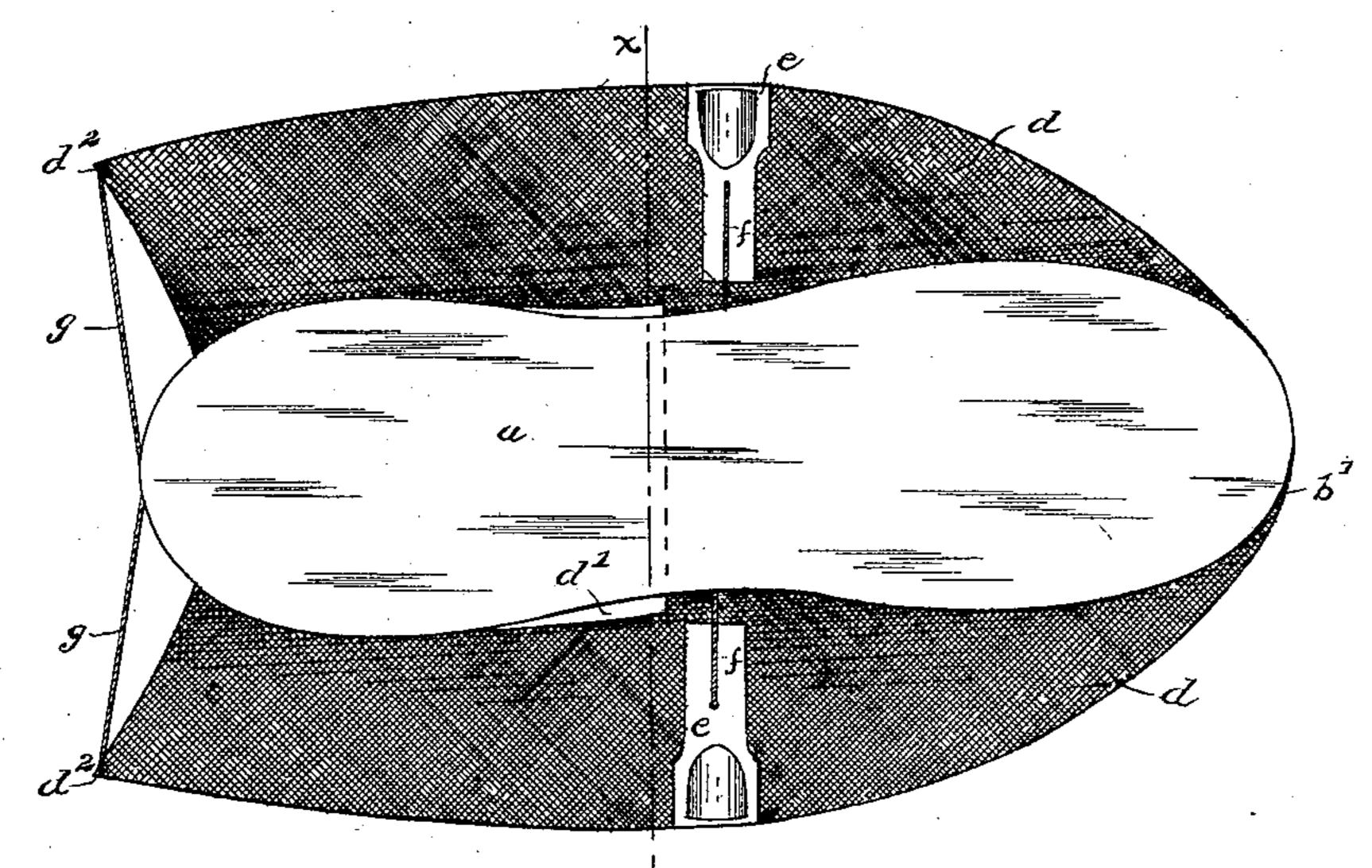
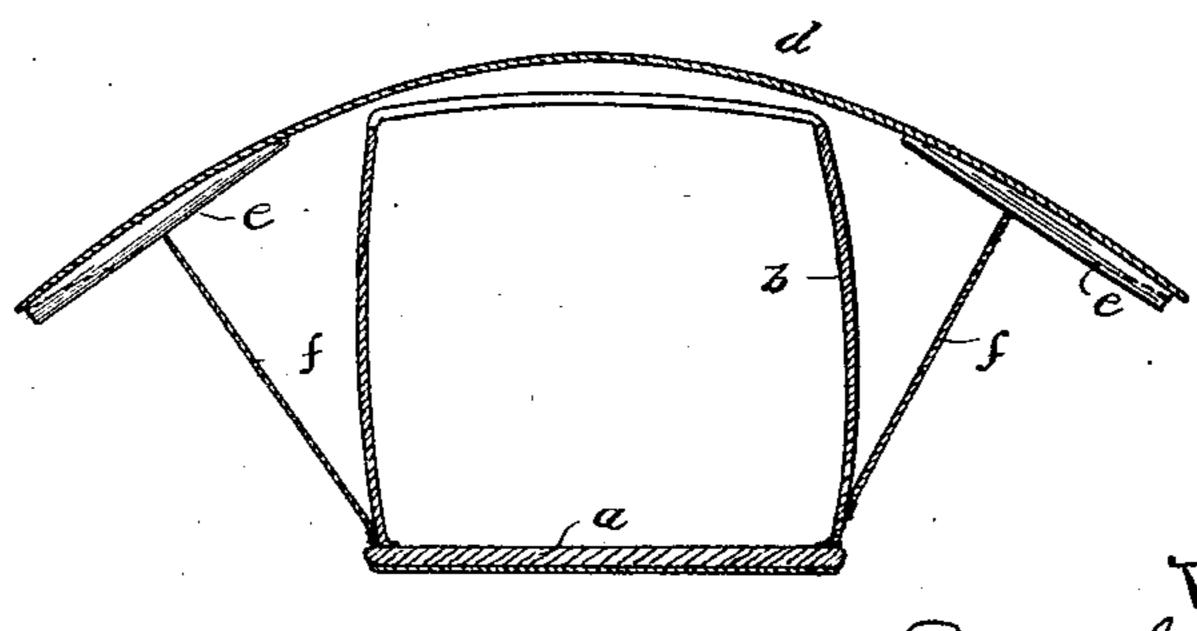


Fig. 3.



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Inventor,

UNITED STATES PATENT OFFICE.

JACOB STAUB, OF CHICAGO, ILLINOIS.

SWIMMING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 636,364, dated November 7, 1899.

Application filed February 25, 1899. Serial No. 706, 787. (No model.)

To all whom it may concern:

Be it known that I, Jacob Staub, a citizen of the Republic of Switzerland, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Swimming Devices, of which the following is a specification.

My improvements relate especially to a shoe to be worn by the swimmer to facilitate the propulsion of his body through the water.

The especial object of my invention is to provide an attachment for an ordinary swimming shoe or slipper which will expand upon the backward stroke or kick of the user and collapse when the foot is brought forward.

In the accompanying drawings, which form a part of this application, Figure 1 is a side elevation of my invention. Fig. 2 is a bottom plan view, and Fig. 3 is a transverse sectional view on the line x x of Fig. 2.

In the drawings I have shown a slipper of common form made up of the sole a, a front section of the upper b, and the rear or heel section c. The material of which the slipper 25'is constructed is preferably canvas with a cork sole. Attached to the slipper at the toe b' and at the upper edge c' of the heel portion is an oval-shaped piece d, which is cut | away at d' to permit the entrance of the foot. 30 This piece d is preferably made of canvas, though rubber or silk or other suitable material may be employed. On the under side of the piece d, at a point about half-way between the toe and heel of the slipper and on 35 either side of the instep, are secured spoonshaped pieces of wood e, the concave portions of which are at the outer edges of the piece d. These pieces are secured to the piece dby stitches which pass through suitable per-40 forations therein or may be attached in any other suitable manner. Secured at the center of the pieces e are flexible stays f, the opposite end of which is attached to the edge of the sole of the slipper at a point under the 45 instep. These stays are of sufficient length to permit the expansion of the piece d until it reaches an angle approximately forty-five degrees to the vertical plane of the slipper. At the rear corners d^2 of the section d are seso cured flexible stays g, the opposite ends of which are secured to the extreme rear edge of the sole a. These stays are of sufficient length to permit a partial expansion of the piece d, but to a less extent than is permitted [

by the stays f. Both the stays f and g may 55 be made adjustable, so that they may be taken in or let out, according to the desire of the wearer.

It will be noted that the portion of the edge of the piece d which is directly over the in- 60 step and extending backwardly therefrom a short distance is free or unattached to the slipper. This construction permits the passage of the water between the foot and the piece d on the backward stroke of the swim- 65 mer. It will also be noted that the length of the spoon-shaped pieces e is almost equal to the distance between the upper edge and the lower edge of the piece d, and thus form a reinforcement and shape-retaining means for 70 this portion of the piece d. By securing the piece \bar{d} at the front or toe of the slipper and at the heel and at the instep in the manner described I support the piece at the points which secure the best results in maintaining 75 a regular or uniform spread of said piece. It will also be noted that by maintaining the spoon-shaped pieces e at approximately an angle of forty-five degrees I obtain a sufficient resistance to the water, and thus pro- 80 mote the forward movement of the swimmer.

It will be apparent that my device does not require any special construction of slipper, but may be applied to the forms in common use.

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

1. In a swimming device, the combination with a shoe or slipper, of a piece of flexible 90 material adapted to cover the foot part, and secured to the toe and heel of the shoe or slipper, and provided with flexible stays, and with braces secured to said stays, substantially in the manner and for the purpose specified.

2. In a swimming device of the character described, a piece of textile fabric secured to the toe and heel of a swimming shoe or slipper, and provided with braces concave on their under side, and stays for securing said braces and said piece of fabric to the sole of a shoe or slipper, substantially as set forth.

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

JACOB STAUB.

Witnesses:

L. HANKE, G. S. NOBLE.