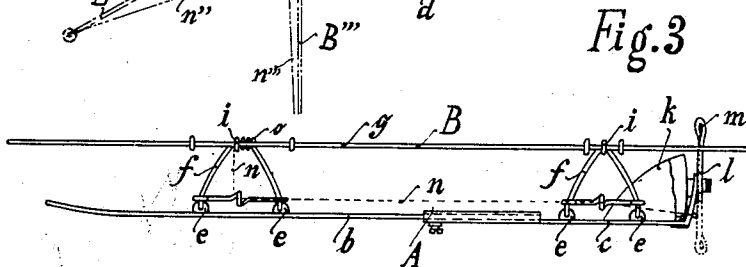
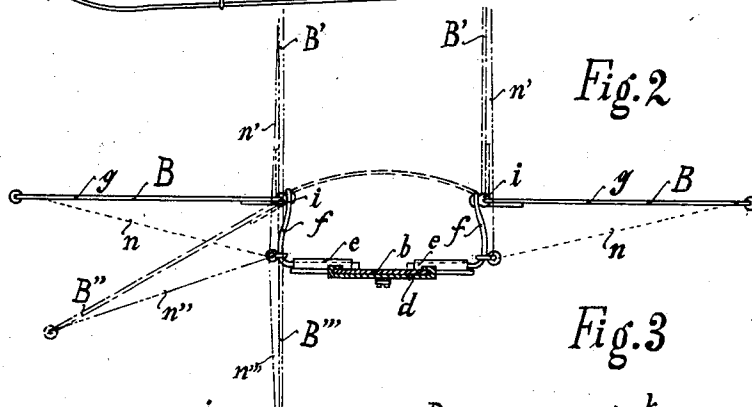
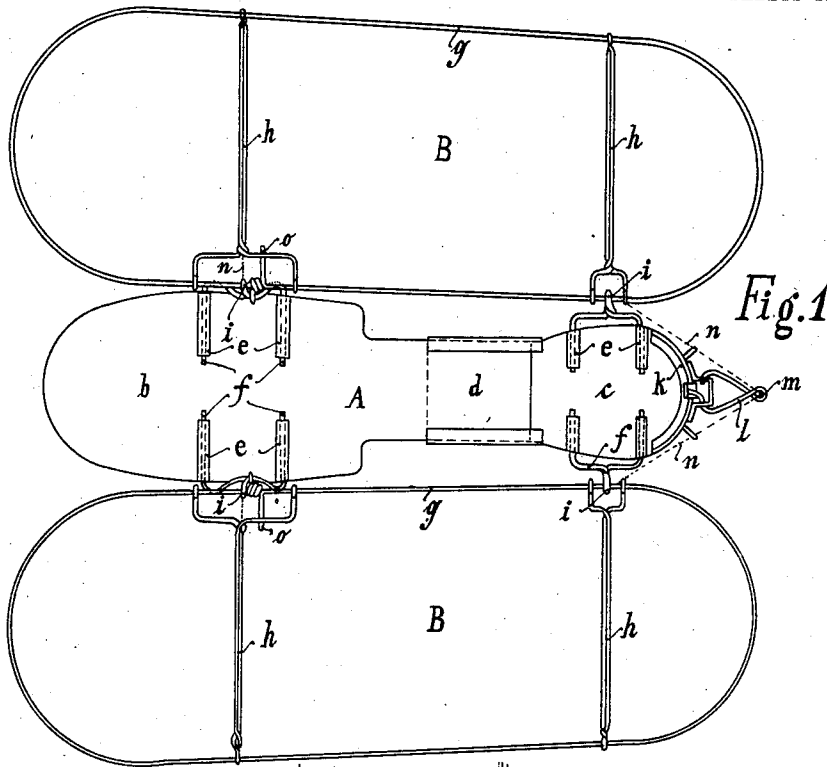


E. JASPER, JR.  
SWIMMING APPLIANCE.  
APPLICATION FILED JUNE 30, 1911.

1,011,964.

Patented Dec. 19, 1911

2 SHEETS—SHEET 1.



Witnesses:

*Wm. H. H. H. H.*  
*Joh. H. H. H.*

Inventor:

*Emmelbeck H. H. H.*

E. JASPER, JR.  
SWIMMING APPLIANCE.  
APPLICATION FILED JUNE 30, 1911.

1,011,964.

Patented Dec. 19, 1911  
2 SHEETS—SHEET 2.

Fig. 4

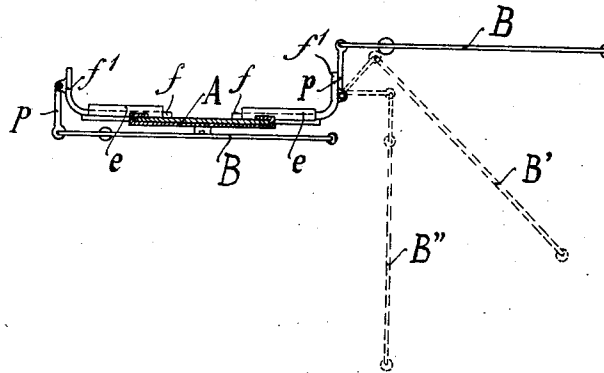
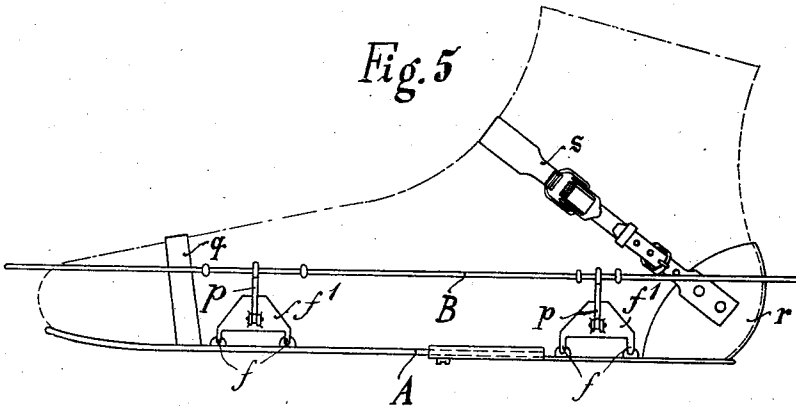


Fig. 5



Witnesses:

*John H. H. H.*  
*John H. H. H.*

Inventor:

*Eugene H. H. H.*

# UNITED STATES PATENT OFFICE.

ENGELBERT JASPER, JR., OF HAGEN, WESTPHALIA, GERMANY.

## SWIMMING APPLIANCE.

1,011,964.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Application filed June 30, 1911. Serial No. 636,231.

*To all whom it may concern:*

Be it known that I, ENGELBERT JASPER, Jr., a subject of the Emperor of Germany, residing at Hagen, Westphalia, Germany, have invented a certain Improved Swimming Appliance, of which the following is a specification.

The present invention relates to a swimming appliance of the kind adapted to be attached to the foot and provided with hinged flaps which open out during the power stroke to act as fins.

The invention consists in the various details of construction and combination of parts as hereinafter set forth and claimed, its main purpose being to provide a device which can be adjusted longitudinally and transversely for differently sized feet.

In the accompanying drawings the invention is illustrated by way of example, Figure 1 representing a plan of the device with opened out flaps, Fig. 2, a cross-section, and Fig. 3, a side view of the same. Fig. 4 is a sectional front view of a modified construction, and Fig. 5, a side view of the same as applied to the foot.

The swimming appliance consists in the first place of a sole piece A which is composed of a toe-plate *b* and a heel-plate *c* having an overlapping portion *d*. The overlapping portion of one plate has its lateral margins turned over so as to grip the edges of the other plate, and means are provided for connecting the plates in a more or less overlapping position, the length of the sole piece being thereby adjusted. Both plates are fitted with two pairs of transversely arranged sockets *e*, each pair being adapted to receive the ends of an upturned fork *f* having its upper part formed into an eye *i*. The forks *f* serve as holders for the flaps B which are composed of frames *g* strengthened by transverse wires *h*. The frames *g* are hingedly held in the eyes *i* of the forks *f* and are actuated by springs *o* which, abutting against the wires *h*, tend to raise the flaps into the position shown dotted at B' in Fig. 2. The forks can be adjusted in the sockets *e* to accommodate feet of various widths. The heel piece *c* is provided with a counter *k* to support the heel of the foot. On the back of said counter a lever *l* is hingedly arranged which lever may be secured in two positions, one of which is indicated by full and the other by dotted lines in Fig. 3. To an eye *m* on the outer end

of the lever *l* cords *n* are connected, said cords being carried from the lever, through guide-eyes *t*, to the outer ends of the wires *h*. The arrangement is such that, when the lever *l* has the position shown in full in Fig. 3, the flaps are prevented by the cords *n* from turning upward beyond the position shown in full in Fig. 2. When the lever *l* is turned down into the position shown dotted in Fig. 3, the cords are slackened so as to allow the flaps to be turned by the springs *o* into the position B' of Fig. 2. The latter position of the elements enables the user to walk comfortably on the sole piece. Before the swimming commences, the lever *l* is turned down so as to prevent, as previously noticed, the flaps from turning upward from the position shown in full in Fig. 2. At the inward stroke of the legs, the flaps are turned down, in opposition to the springs *o*, by the action of the water, B'' in Fig. 2 being the middle and B''' the end position of the flaps. At the outward stroke the flaps are opened out by the joint action of the springs *o* and of the water so as to engage the water and make the stroke more effective. To maintain the cords at their proper tensioning and compensate for the longitudinal and transverse adjustment of the device, wires *h* are adapted to be slid on the frames *g*.

A modified arrangement is shown in Figs. 4 and 5 where the cords *n* and the lever *l* are omitted. The flaps B are here connected at right angles to arms *p* and hinged by means of the same to plates *f'* carried by the forks *f* at right angles to the sole piece. The hinge is arranged so that the opening out movement of the flaps is limited by the upper parts of the plates *f'* as shown to the right of Fig. 4. At the inward stroke, the flaps turn as shown dotted in Fig. 4, B<sup>1</sup> being the middle and B<sup>2</sup> the end position. The length of the arms *p* is adjusted so that the flaps can be turned into overlapping position right down under the sole piece, as shown to the left in Fig. 4, and secured there in any suitable manner. In this position of the flaps the device forms a kind of sandal on which the user can walk with ease. In both instances the device is connected to the foot by a strap *q* carried across the toe-part and a strap *s* carried from the counter *k* across the instep, the arrangement being such that the foot can be inserted under the straps and thereupon the latter tensioned

simply by upsetting a spring-actuated tensioning lever in known manner.

I claim:—

1. In a swimming appliance of the character described, a sole piece comprising two overlapping plates allowing the piece to be longitudinally adjusted, transversely arranged sockets connected to said plates, upturned forks adjustably held with their ends in said sockets, flaps hinged to the forks, means for turning said flaps into a position suitable for walking, and means for limiting the opening-out movement of the flaps during the swimming.
2. In a swimming appliance, of the character described, a sole piece allowing of longitudinal adjustment, transversely arranged

sockets connected to said sole piece, forks adjustably held with their ends in said sockets, plates carried by said forks at right angles to the sole piece, and flaps having right-angled arms and being hinged by means of said arms to the plates, the hinges being located so that the opening-out movement of the flaps is limited by the upper part of the plates, the right-angled arms allowing the flaps to be turned into overlapping position right down under the sole piece to allow the user to walk on the flaps, substantially as set forth.

ENGELBERT JASPER, JR. [L. S.]

Witnesses:

CHAS. J. WRIGHT,  
ALBERT F. NUFER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."