## K. F. HÖGLUND. SWIMMING DEVICE.

(Application filed Feb. 3, 1900.)

(No Model.)

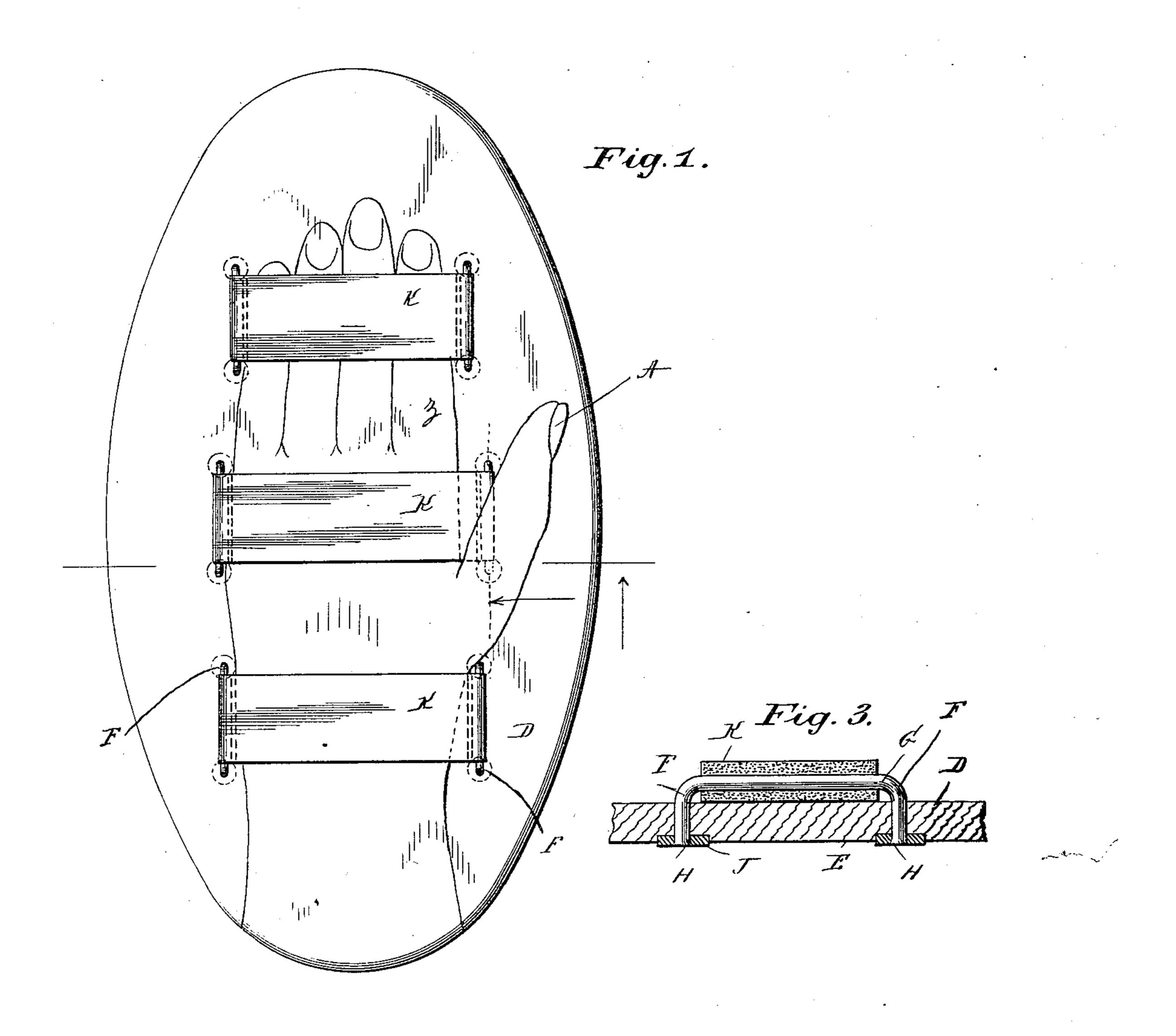


Fig-2. K

WITNESSES: Sohn Buckler, Hill Stewart,

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ATTORNEYS

## United States Patent Office.

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## SWIMMING DEVICE.

SPECIFICATION forming part of Letters Patent No. 662,069, dated November 20, 1900. Application filed February 3, 1900. Serial No. 3,883. (No model.)

To all whom it may concern:

Be it known that I, KARL FREDRIK HÖG-LUND, a subject of the King of Sweden and Norway, residing at Gotarsvik, Lillkyrka, 5 Orebro Lan, Sweden, have invented certain new and useful Improvements in Swimming Devices, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains 10 to make and use the same.

This invention relates to swimming devices; and the object thereof is to provide devices for attachment to the hands whereby the speed of swimming may be accelerated 15 and by the buoyancy of which the swimmer is enabled to float upon the surface of the water with greater facility.

With this and other objects in view my invention consists in the construction and ar-20 rangement of parts hereinafter specified.

In the accompanying drawings, forming part of this specification, in which like reference characters denote like parts in the several views, Figure 1 is a plan view of a 25 swimming device constructed according to my invention; Fig. 2, a transverse section thereof on the line xy of Fig. 1, and Fig. 3, a longitudinal section thereof upon the line zz of Fig. 1 and upon an enlarged scale.

In the practice of my invention I provide a swimming device the body portion of which consists of a relatively thin disk A, of cork, wood, hard rubber, or other buoyant or semibuoyant substance, and the disk A is prefer-35 ably of an elongated oval form, as shown clearly in Fig. 1, and the top edges thereof are curved downwardly at B, as shown more clearly in Fig. 2, whereby a sharp periphery C is formed. The bottom and top of the disk 40 A comprise, preferably, plane and unbroken surfaces, respectively, D and E. Secured to the disk A are a plurality of pairs of fastening devices F F, each of which latter consists of a yoke-shaped length of wire or simi-45 lar substance G, which projects above the upper surface D of the disk A and the ends of which are passed through said disk and provided beneath the under surface E thereof with heads H, which are secured in position 50 by nuts or washers J. In the drawings I have shown three pairs or sets of the yoke-shaped devices F, and said devices are so arranged

that one thereof of each pair lies laterally of the longitudinal axis of the disk A. Each pair of the devices F is provided with a band 55 of rubber, rubber tape, or other flexible material K, each end of which is passed about the projecting portion of one of the devices F, and the extreme ends of said bands K are connected with the body portion of the bands 60

by cords or wires L.

From the above description it will be seen that the disk A is provided above its upper surface D with three transversely-arranged flexible strips or bands K, and in fitting or 65 securing the disk A to the hand the palm or inner surface of the hand is engaged with the upper surface D of the disk A, and the hand is slid longitudinally of said upper surface, bringing the ends of the fingers beneath one 70 of the end bands K, the central part of the hand beneath the intermediate band K, and the wrist beneath the other end band K. The thumb will preferably lie above the intermediate band K and be free from restraint 75 thereof.

In swimming the disk A presents a greater bearing-surface to the water, and thus assists materially in propulsion of the swimmer. The rounded or downwardly-curved edge por- 80 tions B allow the withdrawal of the disk A from the water at the termination of the stroke with less resistance than would otherwise be presented, and the sharp periphery C allows the disk to be moved laterally through the 85 water with very little resistance opposed to such movement. In floating the buoyancy of the disk A, which, as above described, is preferably composed of cork, wood, or rubber, enables the swimmer to rest upon the surface 90 of the water with greater ease.

I do not limit myself to the specific construction and arrangement of parts herein described, but reserve the right to vary the same within the scope of my invention.

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

1. A swimming device of the class described, comprising an oval disk of buoyant material, 100 the edges of the upper surface of which are curved downwardly and the extreme periphery of which is sharp-edged and a plurality of securing devices which are arranged in a

series longitudinally of said disk, each of said securing devices being arranged transversely thereof, and consisting of a pair of yoke-shaped devices the ends of which are passed through said disk and provided beneath the lower surface thereof with heads secured in place by means of washers, and a flexible strip, each end of which is passed about one

of said yoke-shaped devices, above the upper so surface of said disk and further secured to the body portion of said flexible strip, sub-

stantially as shown and described.

2. A swimming device of the class described, comprising a disk of buoyant material, and a plurality of securing devices which are arranged in a series longitudinally of said disk,

each of said securing devices being arranged transversely thereof, and consisting of a pair of yoke-shaped devices, the ends of which are passed through said disk and secured thereto, and a flexible strip, each end of which is passed about one of said yoke-shaped devices, above the upper surface of said disk, substantially as shown and described.

In testimony that I claim the foregoing as 25 my invention I have signed my name, in presence of the subscribing witnesses, this 5th day

of January, 1900.

KARL FREDRIK HÖGLUND.

Witnesses:

GUSTAF. ARVIEL JACOBSSON, ALBERT LARSSON.