

(No Model.)

J. USTER.  
SWIMMING APPARATUS.

No. 587,499.

Patented Aug. 3, 1897.

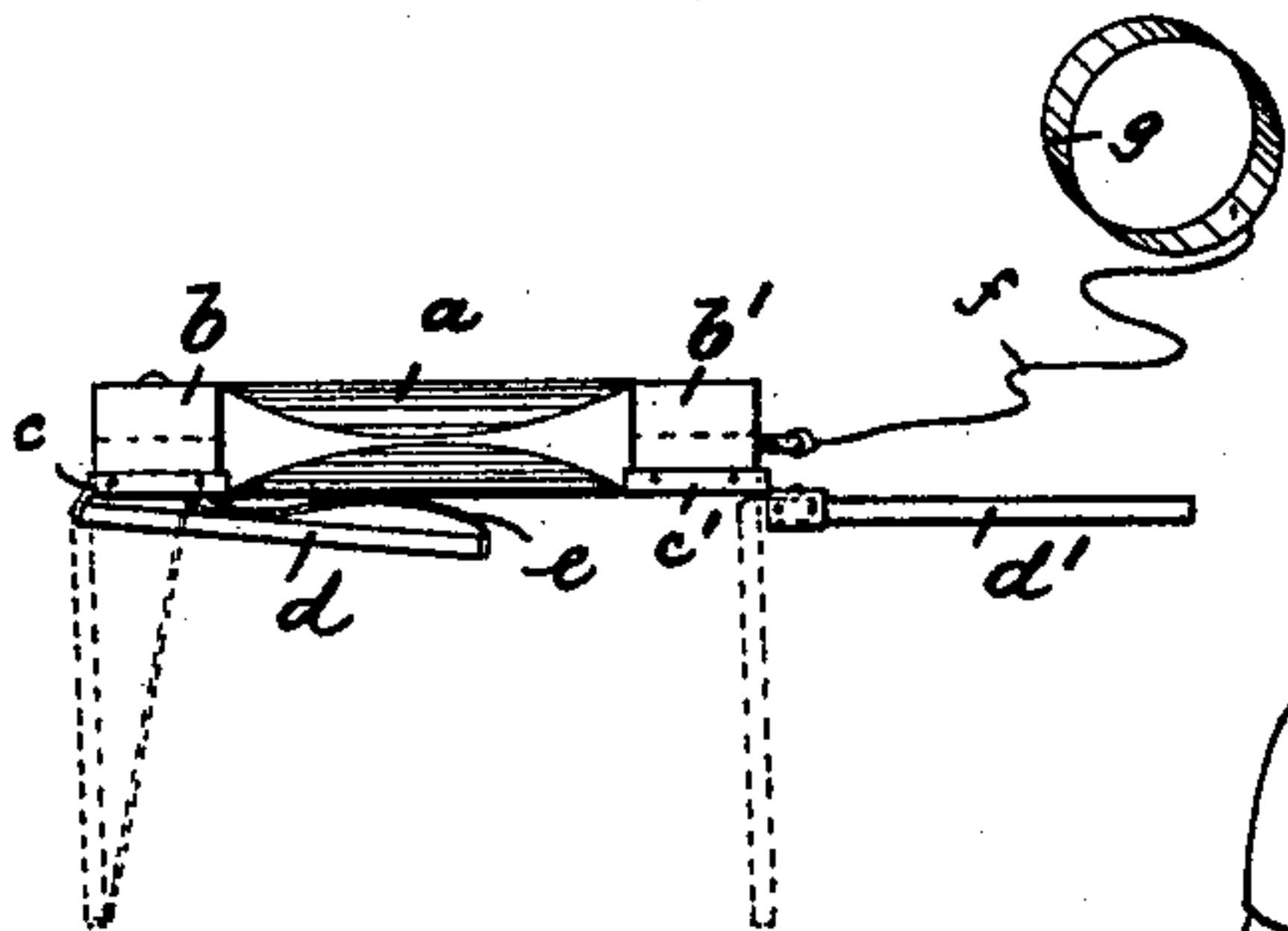


Fig. 2.

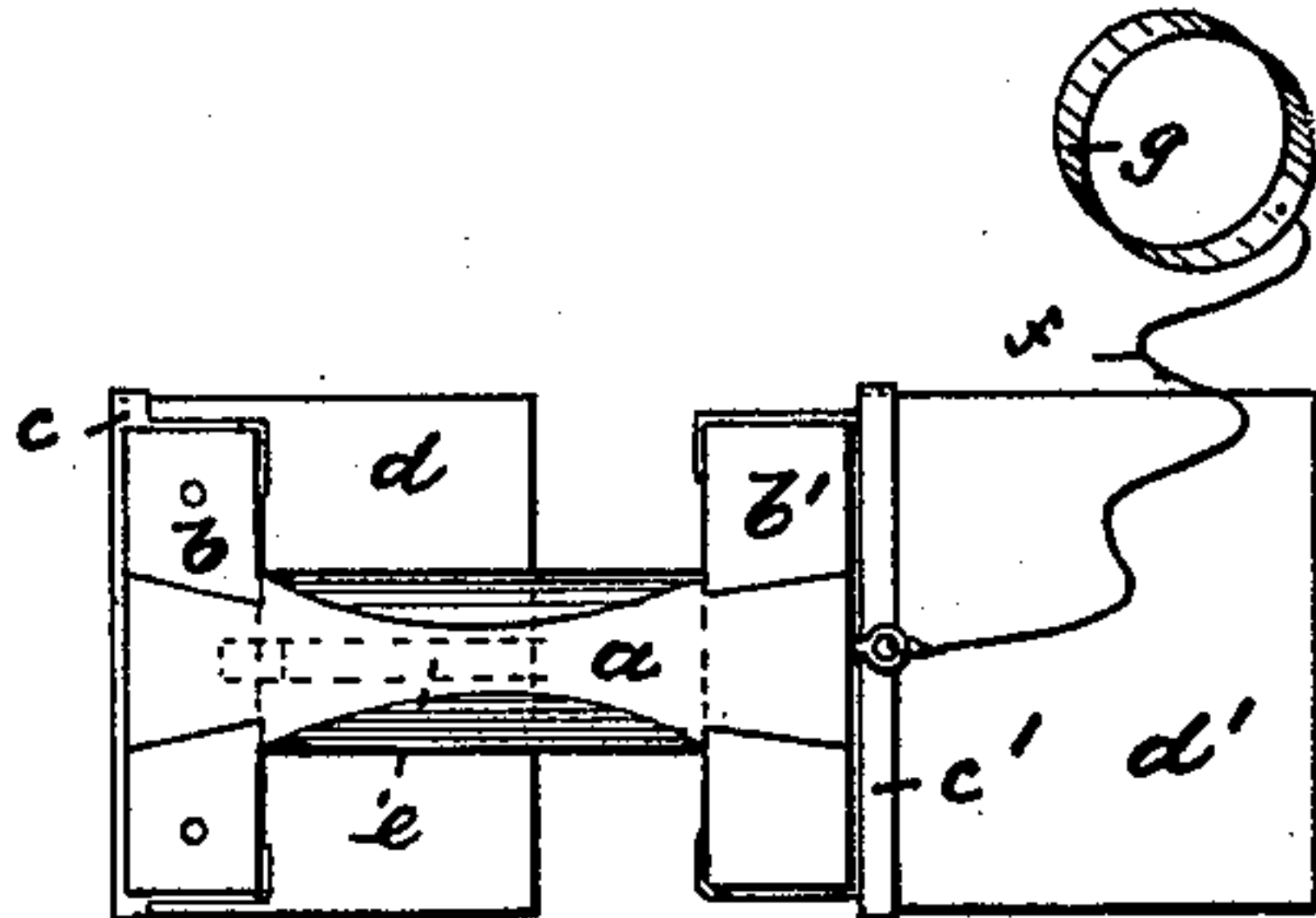


Fig. 3.

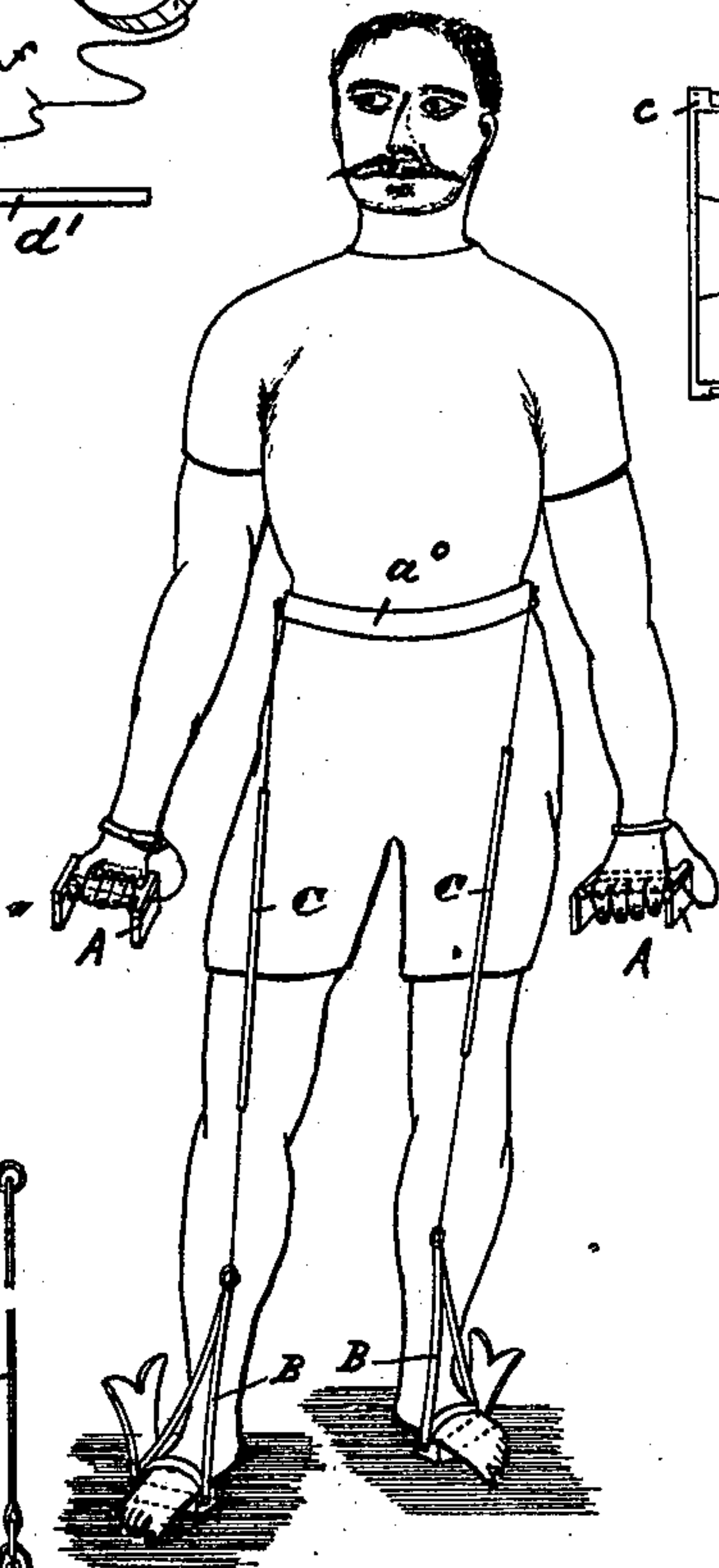


Fig. 1.

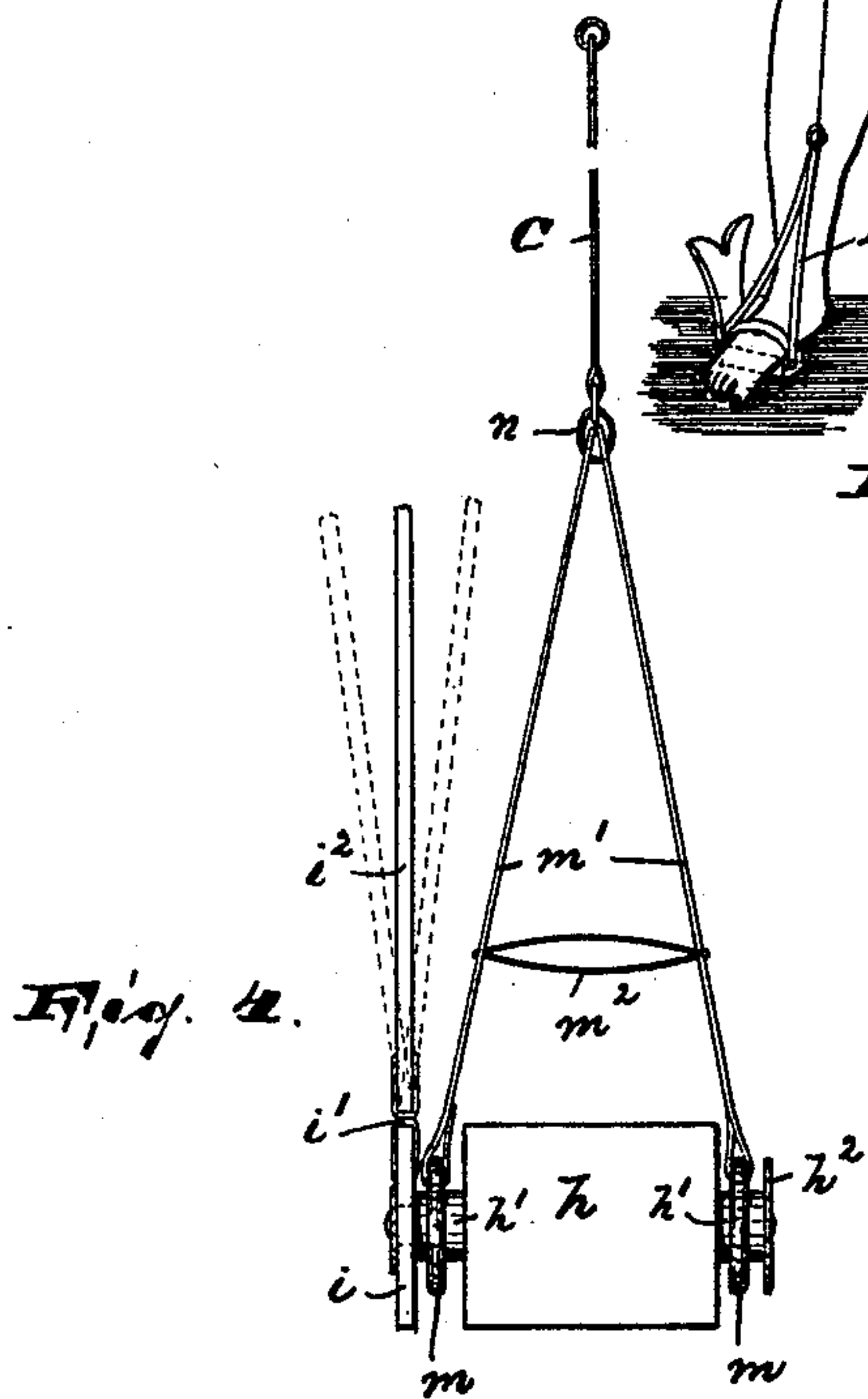
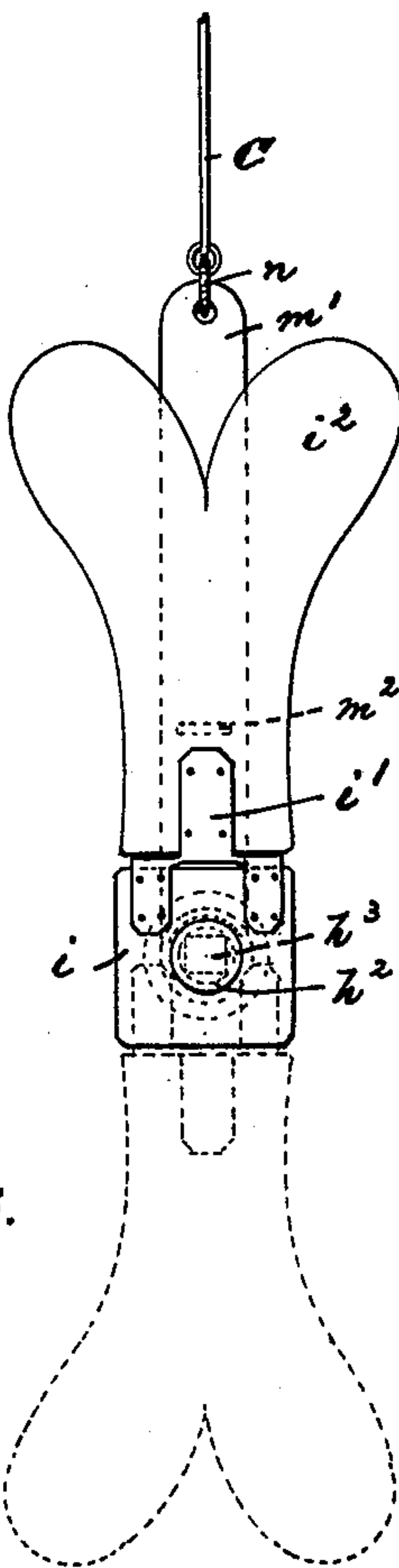


Fig. 4.

Fig. 5.



WITNESSES:

Wm. D. Bell.  
L. Snyder.

INVENTOR:

John Uster

BY Partner & Co ATTY'S.

# UNITED STATES PATENT OFFICE.

JOHN USTER, OF PATERSON, NEW JERSEY.

## SWIMMING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 587,499, dated August 3, 1897.

Application filed May 4, 1897. Serial No. 635,045. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN USTER, a citizen of the United States, residing in Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Swimming Apparatus; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My present invention relates to means for propelling a person through the water; and its object is to provide a swimming apparatus which can be quickly attached to the body of a person, of simple, strong, and durable construction, reliable and efficient in operation.

The invention consists in the improved swimming apparatus to be attached to the feet and hands of a person, and in the combination and arrangement of the various parts thereof, substantially as will be hereinafter fully described, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a view illustrating my improved swimming apparatus adjusted to the body of a person, the fins of the foot attachments being turned upward to prevent the interfering with and to facilitate the walking; Fig. 2, an enlarged side elevation of one of the hand-paddles; Fig. 3, a top plan view of Fig. 2; Fig. 4, an enlarged front elevation of one of the foot attachments or paddles, the fins being turned upward; and Fig. 5, a side elevation of Fig. 4 and also illustrating in dotted lines the arrangement of the fin when in operative position.

In said drawings, A A represent the hand-paddles, and B B the feet attachments or paddles, the latter connected with a belt  $a^0$  by means of the elastics C C, as clearly illustrated in Fig. 1.

The hand-paddle consists of a handle  $a$ , provided at the ends with the cross-arms  $b b'$ , (at right angles to the handle,) provided at

their under sides with leather hinges  $c c'$ , to which latter are secured the blades  $d d'$ , respectively. The blade  $d$  is hinged to the outer lower edge of the cross-arm  $b$  and is limited in its downward movement by means of the strap  $e$ , secured to the outer end of the blade  $d$  and the under side of the cross-arm  $b$ , respectively. The blade  $d'$  is hinged to the outer lower edge of the cross-arm  $b'$  in such a manner that its downward movement is limited by its upper edge engaging the under side of the cross-arm  $b'$ , as will be manifest. To one of the cross-arms is secured a string or cord  $f$ , carrying at its free end an elastic wristband, by means of which latter said paddle is secured on the arm, even when it is released from the grip of the hand.

The foot attachment or paddle consists of a square block  $h$ , provided at each end with a rounded pin  $h'$  and a disk or flange  $h^2$ . One of said pins  $h'$  is squared at its outer end, as at  $h^3$ , on which squared portion is arranged a plate  $i$ , provided at one of its edges with a leather hinge  $i'$ , to which latter is secured a fish-tail-shaped fin  $i^2$ . On each of the pins  $h'$  is loosely arranged a ring  $m$ , to each of which is secured a strap  $m'$ , connected at their upper ends to a loop or ring  $n$ , which in turn is connected to the elastic band C, as clearly shown. An elastic strap or band  $m^2$  is intermediately arranged between the straps  $m'$  and is connected thereto in any desired manner and is adapted to be slid over the foot, so as to hold the block  $h$  in close proximity to the sole of the foot.

It must be remarked that the fins  $i^2$  are arranged on the outside of the feet and when in working position project downward and rearward from the feet—that is to say, the blocks  $h$ , together with the plates  $i$  and fins  $i^2$ , are turned into the position illustrated in dotted lines in Fig. 5.

When the swimming apparatus is to be used, the paddles and the feet attachments are arranged as indicated in Fig. 1, and after the person has reached sufficient depth of water the blocks  $h$  and fins  $i^2$  are turned or swung downward. When the hands are pushed forward, the blades  $d$  and  $d'$  will swing upward and rearward (into the position illustrated in full lines in Fig. 2) and thus offer very little resistance to the water,



while when the hands are pulled toward the body the blades will open—that is to say, arrange themselves at substantially right angles to the handles—and thus produce a great resisting surface to the water, thereby causing the body to be rapidly drawn or forced forward. To facilitate the forward movement, the feet are first pulled inward toward the body and then pushed backward, the fins in the last-mentioned movement being forced into an angle to the feet, thus offering additional resistance to the water and thus assisting in propelling the body forward, as will be manifest.

I do not intend to limit myself to the precise construction shown and described, as various alterations can be made without changing the scope of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a swimming apparatus, a hand-paddle comprising a handle, a cross-arm at each end of said handle, a blade hinged to each of said cross-arms, and means for limiting the movement of said blades, substantially as and for the purposes described.

2. In a swimming apparatus, a hand-paddle comprising a handle, a cross-arm on each

end of said handle, a blade hinged to each of said cross-arms, means for limiting the movement of said blades, and an elastic band connected with one of said cross-arms, substantially as and for the purposes described.

3. In a swimming apparatus, a foot attachment or paddle, comprising a square block, a pin on each end of the block, a plate carried by one of said pins, a fin hinged to said plate, a ring loosely arranged on each of said pins, and means for securing said rings to the body of a person, substantially as described.

4. In a swimming apparatus, a foot attachment or paddle, comprising a square block, a pin on each end of said block, a plate carried by one of said pins, a fin hinged to said plate, a ring loosely arranged on each of said pins, a strap connected to each of said rings, a belt, and an elastic connection between said belt and said straps, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of April, 1897.

JOHN USTER.

Witnesses:

ALFRED GARTNER,  
LOUISE SNYDER.