June 12, 1928. 1,673,292

W. MAXWELL

SWIMMING DEVICE

Filed Nov. 29, 1927 2 Sheets-Sheet 1

FIG. 1.

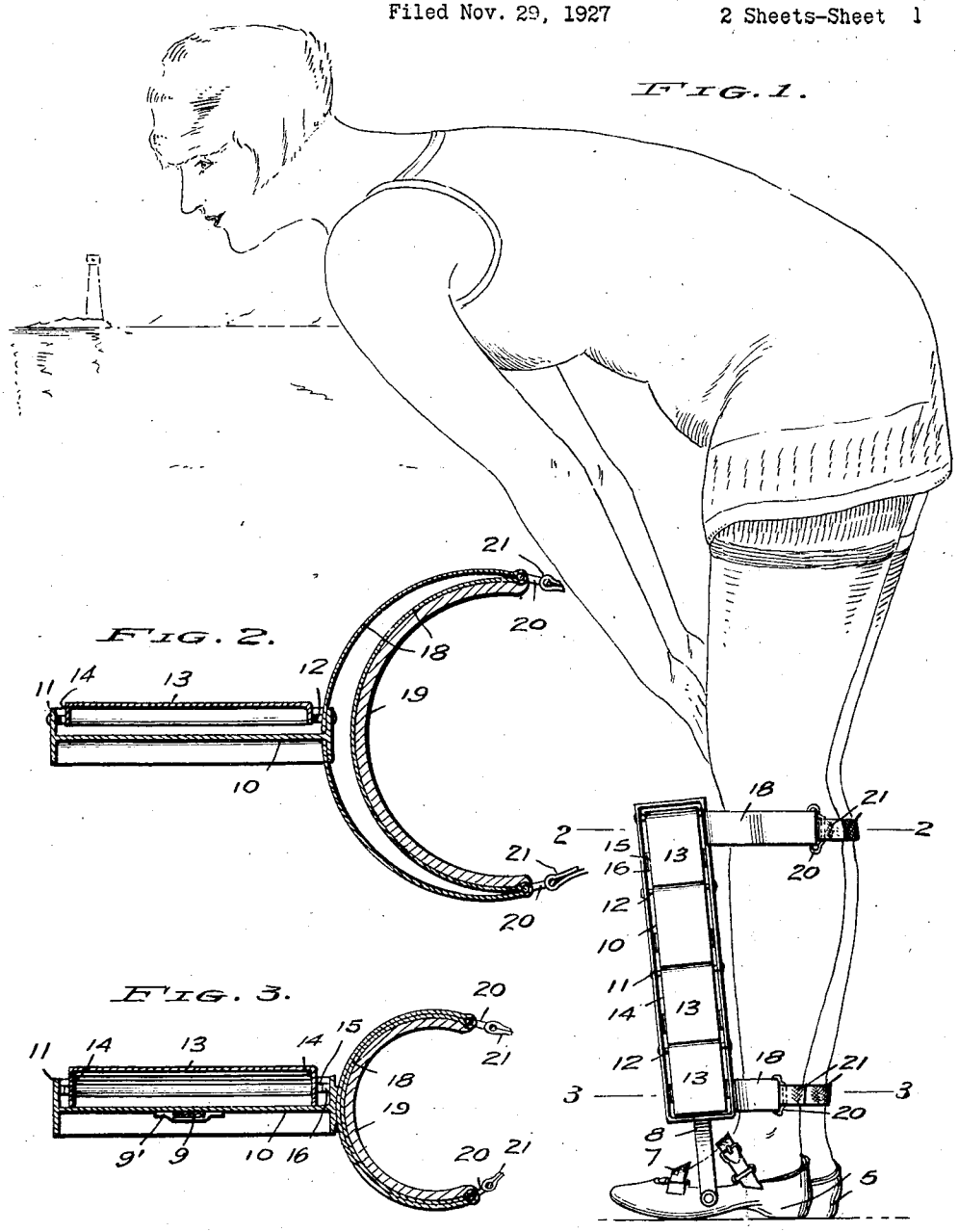


FIG. 2.

FIG. 3.

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FIG. 4.

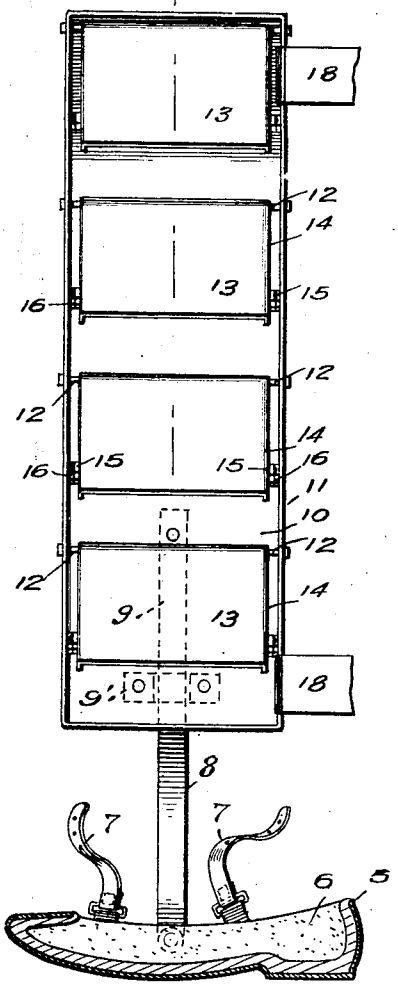


FIG. 5.

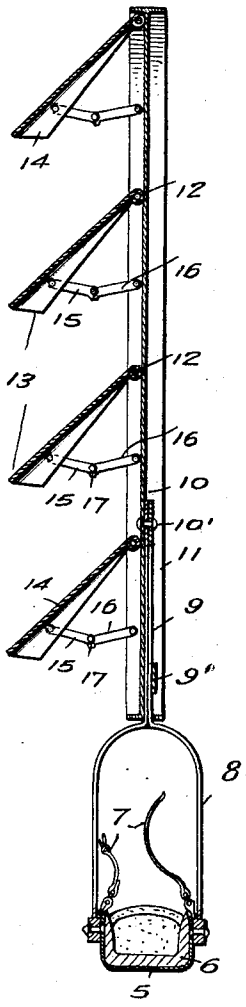
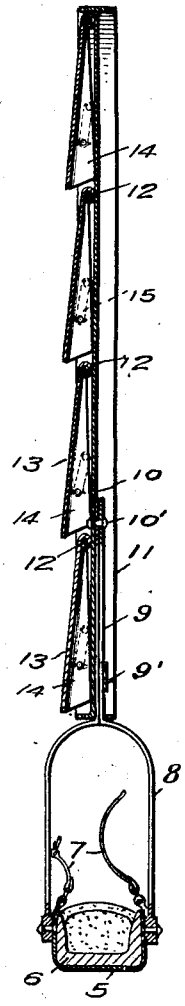


FIG. 6.



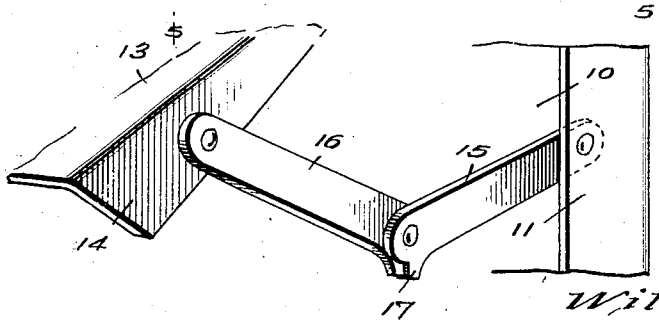


FIG. 7.

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UNITED STATES PATENT OFFICE.

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SWIMMING DEVICE.

Application filed November 29, 1927. Serial No. 236,487.

This invention has reference to a swimming device, the primary object of the invention being to provide a device of this character which may be readily and easily secured to the legs of a person in such a way that when the legs are moved in the usual way while the person is in the act of swimming, the device will operate to assist the person in swimming.

An important object of the invention is to provide a device of this character including a plurality of pivoted blades so constructed that they will swing outwardly to contact with the water when the swimmer pushes rearwardly, the blades closing upon the reverse movement of the legs of the user to decrease the resistance of the swimming device when the legs of the swimmer are brought forwardly to take a stroke.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is a view illustrating the manner of positioning a swimming device constructed in accordance with the invention.

Figure 2 is a sectional view taken on line 2—2 of Figure 1.

Figure 3 is a sectional view taken on line 3—3 of Figure 1.

Figure 4 is an elevational view of the swimming device, the shoe portion thereof being shown in section.

Figure 5 is a sectional view through the swimming device and showing the blades in their open position, the view being taken on line 5—5 of Figure 4.

Figure 6 is a sectional view taken through the device, the blades being shown as closed.

Figure 7 is a fragmental perspective view illustrating the pivoted brace bars that restrict movement of the blades.

Referring to the drawings in detail, the device includes a shoe portion indicated by the numeral 5, which is formed preferably of metal and lined with a suitable soft lining material such as felt or the like, the lining being indicated by the numeral 6.

Straps 7 are provided for securing the shoe portion of the swimming device to the foot of the user. Extending upwardly from the shoe portion and pivotally connected therewith at opposite sides of the shoe portion, are upwardly extended curved arms 8 terminating in substantially straight portions 9 that pass under the strap 9′ of the body portion of the device, the arms being also riveted to the body portion as at 10′, whereby the shoe portion of the device is secured to the main or body portion of the swimming attachment.

The body portion of the device is formed preferably of a length of thin sheet metal and indicated by the numeral 10. Flanges 11 are formed along opposite edges of the body portion, the flanges being provided with openings to receive the pintles 12 of the blades that are pivotally supported by the body portion. The blades are indicated by the numeral 13 and are provided with flanges 14 disposed along the side edges thereof, the flanges being inclined so that they are substantially wide at the free ends of the blades to hold the free ends of the blades in proper spaced relation with the body portion so that when the body portion is moved rearwardly through the water by a person in the act of swimming, water will enter between the blades and body portion, at the free ends of the blades so that the water pressure will cause the blades to swing outwardly to a position as shown by Figure 5.

Pivotally connected with the body portion are the brace bars 15 that have pivotal connection with the brace bars 16 that connect with the blades of the swimming device, the brace bars 15 and 16 being provided with stops 17 to limit the movement of the brace bars so that they will move freely to permit the blades 13 to open and close.

The swimming attachment is held to the leg of the user by means of the curved members 18 that have their inner surfaces padded by means of the padding material 19. Links 20 are connected with the curved members and provide means whereby the securing straps 21 may be secured to the members 18, it being understood that these members 18 are arranged adjacent to the upper and lower ends of the body portion of the attachment so that the attachment or swimming device will be securely held to the leg of the wearer.

From the foregoing it will be seen that

when a swimming attachment of this character is strapped to the leg of a person to use the attachment, the blades will open when the leg of the user is moved rearwardly in the act of swimming, thereby providing a greater surface to contact with the water which will result in the person being forced through the water at a greater rate of speed and with less exertion.

As the leg is bent and brought forward, the blades will of course close to lessen the resistance on the forward movement of the leg.

I claim:

1. In a swimming device, an elongated body portion having flanges formed along the edges thereof, blades having pintles, said flanges having openings to receive the pintles to pivotally support the blades, a shoe section, means for pivotally connecting the shoe section to the body portion, means for securing the shoe section to the foot of the user, and straps for securing the body portion to the leg of the user.

2. In a swimming device, a body portion, blades pivotally connected with the body portion, said blades having flanges formed along the side edges thereof, said flanges being inclined and contacting with the body portion to hold the free ends of the blades in spaced relation with the body portion to permit water to pass thereunder, a shoe section connected with the body portion, and straps for securing the body portion to the leg of the user.

3. In a swimming device, a body portion, blades pivotally connected with the body portion, a shoe section, arms extending upwardly and inwardly from the shoe section and having pivotal connection with the shoe section, a strap on the body portion and under which the arms pass to secure the arms to the body portion, the free ends of the arms being riveted to the body portion, and means for securing the body portion to the leg of the user.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

WILLIAM MAXWELL.