July 25, 1933. E. E. STONER 1,920,036

SWIMMING MACHINE

Filed July 29, 1932 3 Sheets-Sheet 1

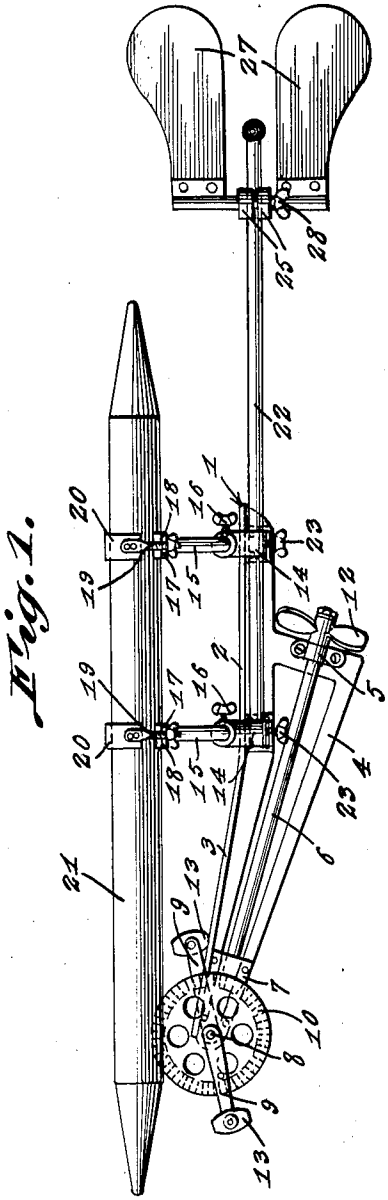


Fig. 1.

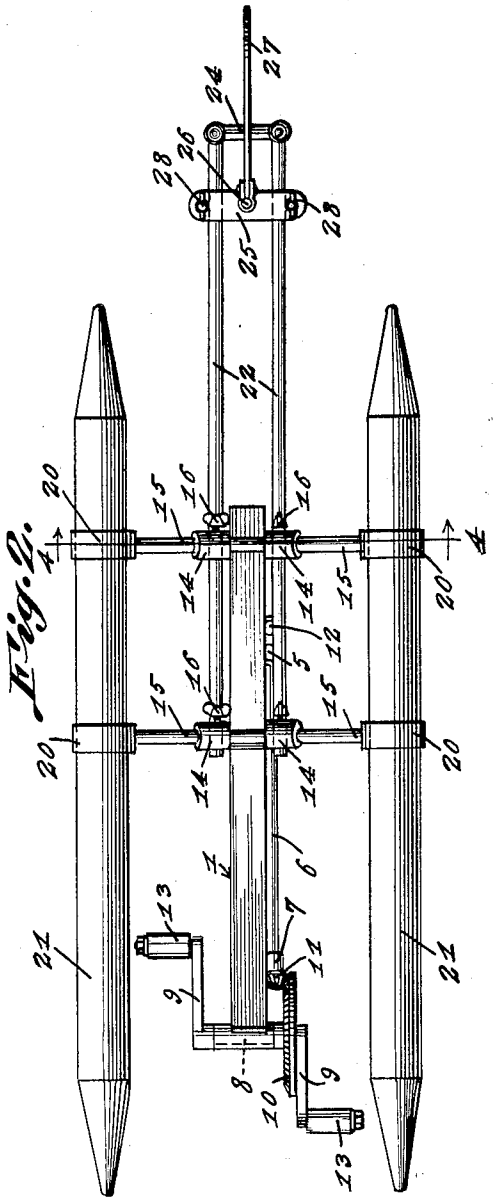


Fig. 2.

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SWIMMING MACHINE

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Fig. 1.

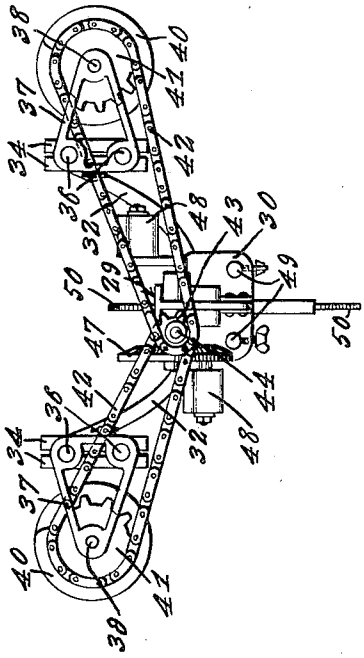


Fig. 2.

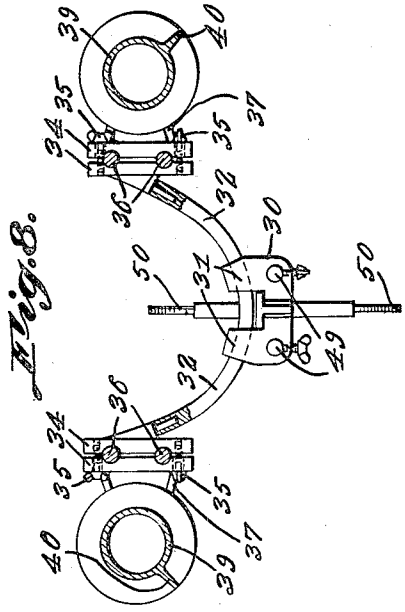


Fig. 3.

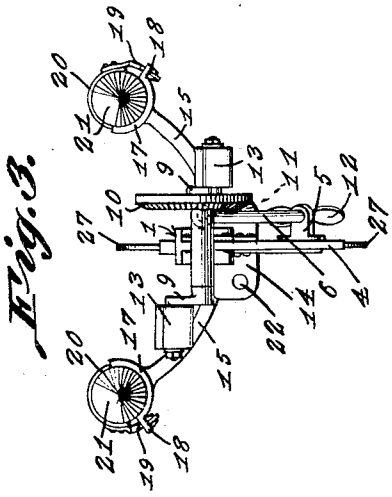
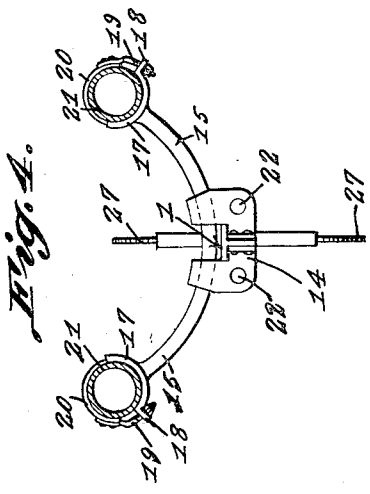


Fig. 4.



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SWIMMING MACHINE

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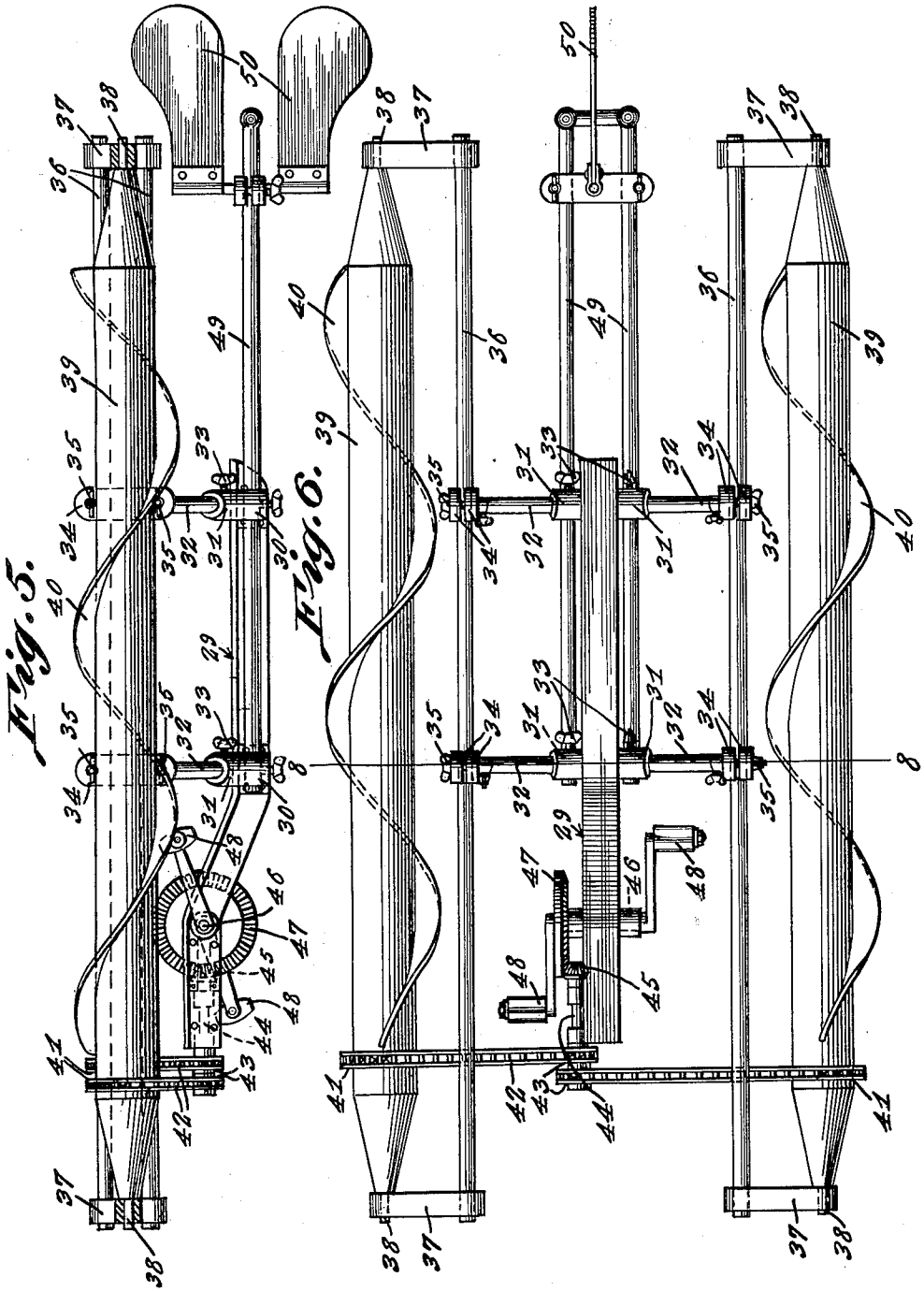


Fig. 5.



Fig. 6.

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Patented July 25, 1933 1,920,036

# UNITED STATES PATENT OFFICE

ELMER E. STONER, OF STROUDSBURG, PENNSYLVANIA

## SWIMMING MACHINE

Application filed July 29, 1932. Serial No. 626,006.

This invention relates to swimming machines, and its general object is to provide a swimming machine that is made up of detachably associated parts, that can be assembled and disassembled in an easy and expeditious manner, and by employing detachable parts, the machine can be conveniently carried when disassembled and stored in minimum space.

Another object of the invention is to provide a swimming machine that can be manually propelled through the water at a great speed and is not only comfortable to ride upon but is easily manipulated.

A still further object of the invention is to provide a swimming machine that is simple in construction, inexpensive to manufacture and is extremely efficient in operation and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a side elevation of a machine constructed in accordance with one form of the present invention.

Figure 2 is a top plan view thereof.

Figure 3 is a front view.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 1, looking in the direction of the arrows.

Figure 5 is a side elevation of a modified form of the present invention.

Figure 6 is a top plan view of the form as shown in Figure 5.

Figure 7 is a front view of the modified form.

Figure 8 is a sectional view taken approximately on line 8—8 of Figure 6.

Referring to the drawings in detail, the reference numeral 1 indicates the body of the form of the machine as shown in Figures 1 to 4 inclusive and this body includes what may be termed a horizontal portion 2 and an inclined portion 3. The major portion of the body is substantially T-shape in cross section as will be noted upon inspection of Figure 4, in order to provide a flange which depends from the top of the body and extends longitudinally thereof. Formed with the flange and depending therefrom is a keel 4 having secured to its rear end a bracket 5 which is provided with a bearing for rotatably receiving the rear end of the drive shaft 6.

The forward end of the body has secured thereto a hanger 7 that is provided with an opening in its outer end, and the opening receives a bearing to accommodate a stub shaft 8 which has secured to its ends crank handles 9. The stub shaft 8 has also fixed thereto a bevel gear 10 which meshes with a pinion 11 the latter being secured to the forward end of the drive shaft 6, whereby upon rotation of the bevel gear 10 through the instrumentality of the crank handles 9, the drive shaft will be rotated for driving the propeller 12. The crank handles have pedals 13 which are secured to the outer ends thereof, and these pedals are rotatably mounted, as well as being substantially oval shape in cross section to provide a convenient hand grip for the user of the device.

Secured to the flange of the body 1 and disposed adjacent the ends of the horizontal portion thereof are brackets 14 which extend above the body and terminate at their upper ends in sleeves for the purpose of receiving curved tube members 15 that are secured in the sleeves through the instrumentality of set screws 16. The tube members are designed to accommodate the body of the user and are curved for that purpose.

The upper ends of the tube members have secured thereto substantially U-shape members 17, and each of the U-shape members have formed with the outer ends thereof slotted ears 18 for the purpose of receiving bolts 19 that are fixed to one of the ends of straps 20, while the opposite ends of these straps are secured to the U-shape members as best shown in Figure 4.

Secured to the U-shape members through the instrumentality of the straps, bolts and slotted ears are pontoons 21 that have pointed ends.

The brackets 14 have arranged therein openings to accommodate parallel rod members 22 that are secured in the openings through the instrumentality of set screws 23, and these rod members have secured to the rear ends a cross rod member 24.

The rod members 22 and rod member 24 provide a frame which extends a considerable distance beyond the ends of the pontoons, and adjacent the rear end of the rod members 22 are secured strips 25 that carry a shaft 26 mounted for rotation therein. The shaft 26 is vertically disposed and has secured to its opposite ends rudders 27 which extend upon opposite sides of the cross rod member 24 as best shown in Figure 1. The strips 25 are secured to the rod members 22 by set screws 28.

In the form of the invention as disclosed in Figures 5 to 8 inclusive, it will be noted that I employ a body 29 that is likewise substantially T-shape in cross section and this body includes horizontal portions and an intermediate inclined portion.

Secured to the depending flange of the T-shape in cross section body are spaced brackets 30 having formed therewith sleeves 31 which have passing therethrough curved tube members 32 that are fixed in the sleeves by set screws 33.

Detachably associated or otherwise secured to the outer ends of the curved tube members 32 are clamping brackets 34 which include cooperating clamping plates held associated by set screws 35 and these clamping brackets have secured thereto rod members 36 arranged in parallelism as best shown in Figure 8. The rod members 36 have secured to the ends thereof V-shape brackets 37, and the outer ends of the V-shape brackets have bearings formed therewith to accommodate stub shafts 38 that are secured to the ends of the pontoons 39 whereby the pontoons are mounted for rotation as will be apparent. Formed with the pontoons and spirally arranged thereon are propelling fins 40.

The pontoons have secured to the forward ends sprockets 41 which have trained thereabout sprocket chains 42 that are also trained about sprockets 43 secured to a shaft 44, and this shaft has also secured thereto a pinion 45. Journaled in the forward horizontal portion of the body 29 is a crank shaft 46 that has fixed thereto a bevel gear 47 and this bevel gear meshes with the pinion 45. The crank shaft has mounted for rotation on its ends pedals 48 whereby upon rotating the crank shaft through the medium of the pedals the shaft 44 will be rotated for rotating the pontoons through the instrumentality of the sprocket chains and their sprockets for propelling the machine through the water.

The brackets 30 are provided with openings which have secured therein a rod frame 49 that is elongated in formation and extends rearwardly as will be noted upon inspection of Figure 6, and secured to the rod frame 49 are clamping strips which carry rudders 50.

From the above description and disclosure of the drawings, it will be obvious that I have provided a swimming machine that includes detachably associated parts that can be assembled and disassembled in an expeditious manner and with very little effort.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

A swimming machine comprising a body having an inclined forward portion and a horizontal rearward portion, propelling means for said machine and having connection with the respective portions of said body for disposal at an inclination, a depending flange included in said body, brackets secured to the flange and provided with openings, curved tube members secured to the brackets, pontoons detachably secured to the tube members, parallel rod members extending rearwardly from the body and detachably secured in the openings of the brackets, a cross rod bridging the rear ends of the parallel rod members, strips secured across the parallel rod members adjacent the rear ends thereof, a shaft mounted through the strips for rotation about a vertical axis, and rudders secured to the opposite end portions of the shaft for disposal above and below the rod members.

ELMER E. STONER.