J. B. FELICETTI.

MANUALLY PROPELLED VEHICLE.

APPLICATION FILED FEB. 27, 1917.

1,222,613.

Patented Apr. 17, 1917.

2 SHEETS—SHEET 1.

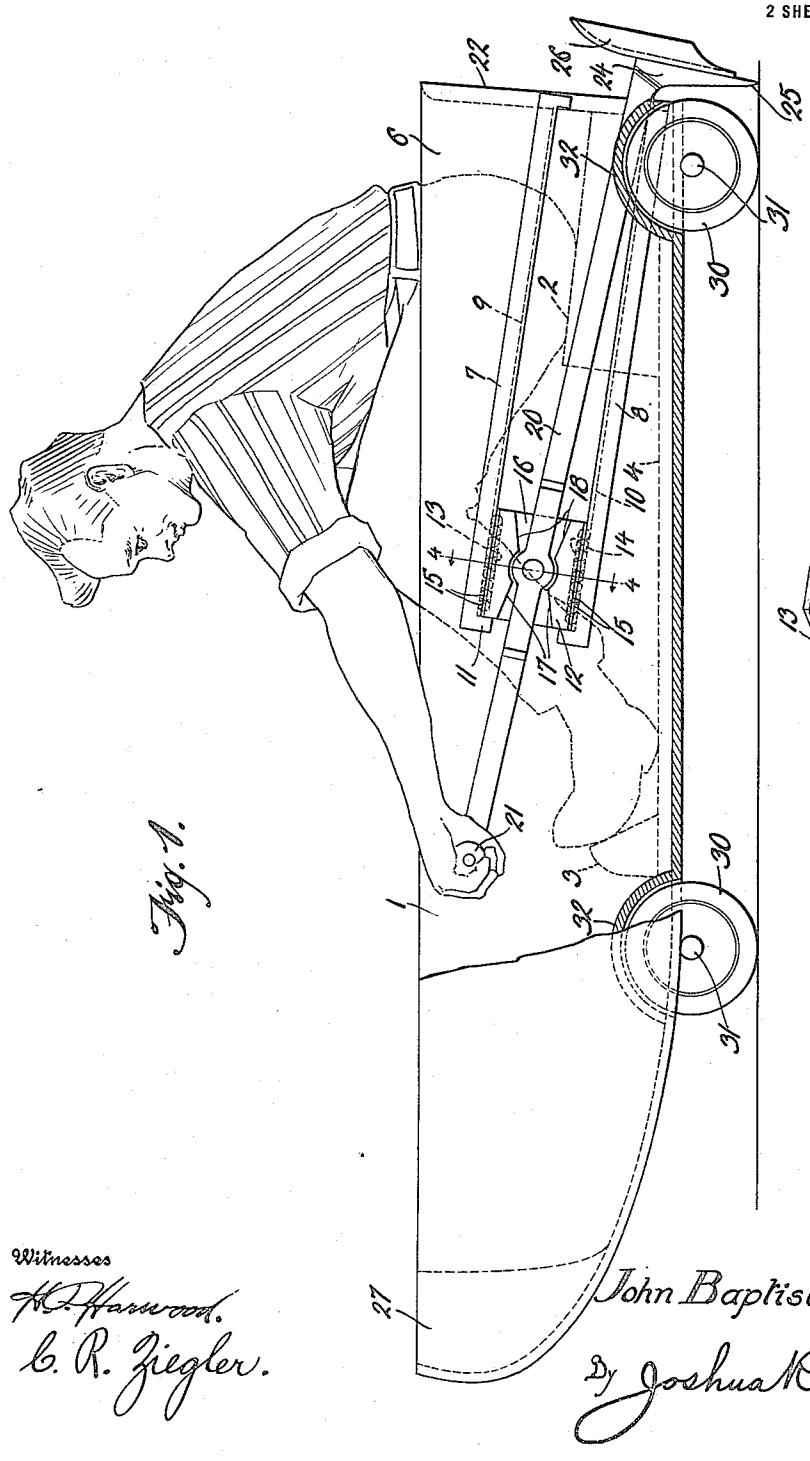


Fig. 1.

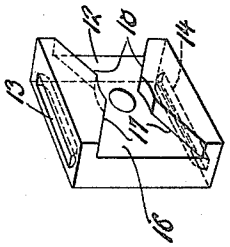


Fig. 5.

Witnesses

H. C. Harwood.

C. R. Ziegler.

Inventor

John Baptiste Felicetti.

By Joshua R. H. Potts.

His Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

J. B. FELICETTI.

MANUALLY PROPELLED VEHICLE.

APPLICATION FILED FEB. 27, 1917.

1,222,613.

Patented Apr. 17, 1917.

2 SHEETS—SHEET 2.

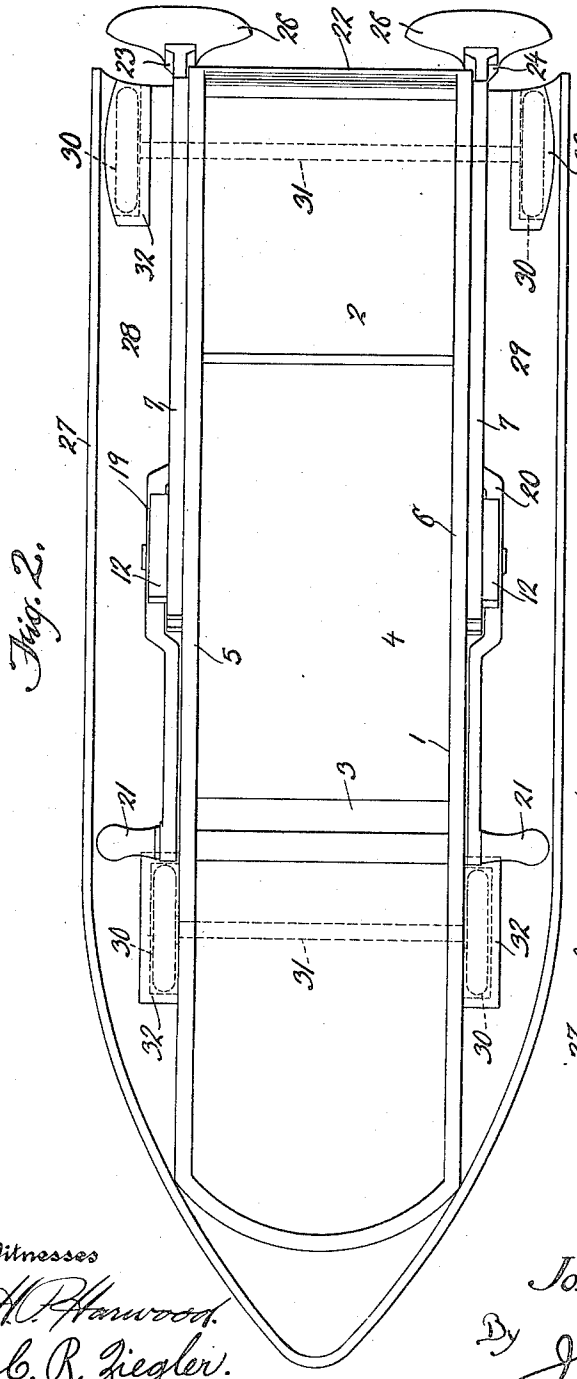


Fig. 2.

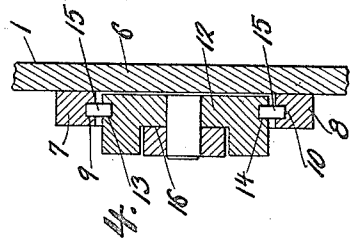


Fig. 4.

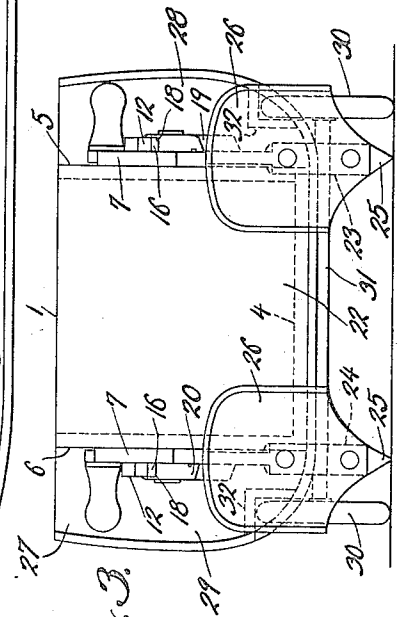


Fig. 3.

Witnesses

H. P. Harwood.

C. R. Ziegler.

Inventor

John Baptiste Felicetti.

By Joshua R. H. Potts.

His Attorney

THE NORRIS PETERS CO. PHOTO-LITHO. WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN BAPTISTE FELICETTI, OF PHILADELPHIA, PENNSYLVANIA.

MANUALLY-PROPELLED VEHICLE.

1,222,613. Specification of Letters Patent. Patented Apr. 17, 1917.

Application filed February 27, 1917. Serial No. 151,186.

To all whom it may concern:

Be it known that I, JOHN BAPTISTE FELICETTI, a subject of the King of Italy, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Manually-Propelled Vehicles, of which the following is a specification.

My invention consists of an improved manually propelled vehicle. One object of my invention is to provide a vehicle of the above described type which can be easily and quickly propelled by a person sitting therein.

Another object is to so construct my invention that it can be used for pleasure or exercise, either on dry or moist ground or in water as a boat.

Another object is to make my invention of simple construction and so that it can be manufactured and sold at a reasonably low cost.

These objects, and other advantageous ends which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawings in which—

Figure 1 shows an elevation of my invention and in which a part of the outer shell is broken away to illustrate the operative elements thereof.

Fig. 2 is a plan view of my invention.

Fig. 3 is a rear elevation.

Fig. 4 is an enlarged section on the line 4—4 of Fig. 1, and

Fig. 5 is a perspective view of one of two slidable blocks which forms a part of my invention.

Referring to the drawing, 1 represents a hollow body portion which is elongated and open at the top. This body portion has a seat 2 at its rear end and is preferably provided with a foot rest 3 which extends transversely thereof and above the floor 4. The sides 5 and 6 of the body portion 1 are, as illustrated, made vertical.

To the outer surface of each of the sides 5 and 6 are secured two rails 7 and 8. These rails are spaced apart and on their inner oppositely disposed faces are provided with grooves 9 and 10 respectively. The opposite ends of these rails are provided with oppositely disposed extensions 11 and form stops for blocks 12, there being one block which is slidable between the rails 7 and 8 on each side of the body portion.

Each of these blocks at opposite edges is provided with recesses 13 and 14 which are arranged to be placed adjacent the grooves 9 and 10 on the rails 7 and 8. Anti-friction rollers 15 are disposed between the recesses 13 and 14 and the rails 7 and 8 as clearly illustrated in Figs. 1 and 4.

The rails 7 and 8 thus provide slideways for the blocks 12. Each of the blocks has a recess 16 in its outer face, each of said latter recesses providing inwardly converging edges 17 and 18.

Operating levers 19 and 20 are pivotally mounted at points between their lengths, the pivotal axes of these levers passing through the blocks 12, the arrangement being such that the levers 19 and 20 pivot on said blocks and within the recesses 16.

The edges 17 and 18 formed by said recess act as stops to limit the pivotal movement of said levers in opposite directions. The forward ends of the levers 19 and 20 are provided with handles 21, while the rear ends of said levers extend beyond the back 22 of the body portion 1 and have downwardly turned shoes 23 and 24. Each of these shoes is pointed at its lower end as shown at 25 so as to dig in the ground for the purpose of moving the body portion forwardly in a manner hereinafter more fully described.

Each of the rear faces of the shoes 23 and 24 has a blade 26 secured thereto, and these blades are dished and curved inwardly as clearly shown in Figs. 1, 2, and 3, and assist to propel the body portion when my invention is used on moist or wet ground or in water.

The body portion 1 is surrounded at its front, sides, and bottom by a shell 27, this shell being in the form of a boat but is open at its rear end. The width and depth of the shell 27 is such that the levers 19 and 20 and handles 21 will project within the spaces 28 and 29 formed between the sides 5 and 6 of the body portion 1 and the sides of the shell 27.

Wheels 30 are provided adjacent the forward and rear ends, the axles 31 of said wheels being secured to the bottom of the shell 27, a portion of the wheels extending

within casings 32 which are formed in the bottom of said shell and between the body portion 1 and the outer sides of the shell.

In the operation of my invention on land, a person sitting within the body portion 1 and on the seat 2, can conveniently place his feet against the rest 3 and with both hands grasp the handles 21 which are positioned between the sides 5 and 6 and the shell 27.

The handles 21 are slightly raised to cause the levers 19 and 20 to move on their pivots and thereby dig the pointed ends 25 of the shoes 23 and 24 into the ground. A pulling movement of the arms, which actually results in a pushing movement of the levers 19 and 20, causes the body portion 1 and with it the shell 27, to be propelled forwardly and roll upon the wheels 30. After momentum has been attained, the inertia of the vehicle will cause it to continue to move forwardly until the handles 21 are moved downwardly to free the shoes 23 and 24 on the ground. Continuous movements of said levers cause the vehicle to be moved forwardly.

Great speed can be attained by such a vehicle on level or inclined ground and can be used as a pleasure vehicle or as a practical means of conveyance. It can be used on sandy beaches and in the water, the blades 26 assisting as paddles or oars when the device is used in the water, it being noted that even though the rear of the shell 27 is open as illustrated, the body portion being closed at its sides and ends, will serve to keep a person, sitting therein, afloat.

It will be further noted that by having the shell 27 extend beyond the sides 5 and 6 of the body portion 1, the hands of the operator will be protected from the water when the device is used as a boat. Furthermore, the operator will have his hands and fore-arms protected against injury due to bumping with another vehicle or the like during the operation of the device.

The provision of the anti-friction rollers permits the blocks 12 to freely move within their slideways, and I preferably arrange the rails 7 and 8 at an incline so that the active movement of the levers 19 and 20 occurs when there is a relative downward sliding movement of the blocks 12 within their guideways, the blocks 12 being movable upwardly during the recovery of the stroke and when energy is not needed to propel the vehicle.

The edges 17 and 18 of the recess 16 within the blocks 12 form limiting means or stops for the levers 19 and 20, the angular disposition of said edges being pre-determined to permit the shoes 23 and 24 to dig into the ground a pre-determined extent, so that it is impossible for a novice to injure any of the several parts in view of the fact that the levers can only be moved a pre-determined amount and that amount can be figured by the designer of the machine in order to give the best results.

It will be noted that the shoes 23 and 24 form impact members as do also the blades 26, the shoes 23 and 24 tending to impact with the ground while the blades 26 serve to impact with the water when the device is used as a boat or on moist ground.

While I have described my invention as taking a particular form, it will be understood that the various parts of my invention may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A manually propelled vehicle, comprising a hollow body portion, means on said body portion forming guideways, blocks slidable within said guideways, levers pivotally connected to said blocks, handles on said levers, and impact members on said levers, substantially as described.

2. A manually propelled vehicle comprising a hollow body portion, rails secured to the outer surface of said body portion and spaced apart to provide guideways, blocks slidable between said rails, levers pivotally connected to said blocks, handles on said levers arranged at one side of their pivotal connection with said blocks, and pointed impact members on said levers and arranged at the opposite side of said pivotal connection, substantially as described.

3. A manually propelled vehicle comprising a hollow body portion, rails secured to the outer surface of said body portion and spaced apart to provide guideways, said rails having longitudinally extending grooves formed in their oppositely disposed surfaces, blocks slidable between said rails and having recesses formed in their edges adjacent the grooves in said rails, anti-friction rollers mounted in said recesses and being designed to roll within said grooves in the rails, levers pivotally connected to said blocks, handles on said levers, and impact portions on said levers, substantially as described.

4. A manually propelled vehicle comprising a hollow body portion, rails secured to the outer surface of said body portion and spaced apart to provide guideways, said rails having longitudinally extending grooves formed in their oppositely disposed surfaces and arranged at an incline, blocks slidable between said rails and having recesses formed in their edges adjacent the grooves in said rails, anti-friction rollers mounted in said recesses and being designed to roll

within said grooves in the rails, levers pivotally connected to said blocks, handles on said levers, and impact portions on said levers, substantially as described.

5. A manually propelled vehicle including a body portion, blocks slidable relatively to said body portion, said blocks having recesses formed therein, said recesses being shaped to provide converging edges, levers pivotally mounted on said blocks and having portions extending within said recesses, said levers having impact portions, handles on said levers, said converging edges on said block being operative to form stops for limiting the pivotal movement of the levers, substantially as described.

6. A manually propelled vehicle comprising a hollow body portion, rails secured outside of said body portion and extending at an incline, blocks slidable between said rails, levers pivotally connected to said blocks, handles on said levers, and impact members on said levers, substantially as described.

7. A manually propelled vehicle comprising a hollow body portion, rails secured outside of said body portion and extending at an incline, blocks slidable between said rails, levers pivotally connected to said blocks, handles on said levers, impact members on said levers, and a shell surrounding said hollow body portion and spaced from the sides thereof, said levers being located between the sides of the body portion and the shell, substantially as described.

8. A manually propelled vehicle comprising a hollow body portion, rails secured outside of said body portion and extending at an incline, blocks slidable between said rails, levers pivotally connected to said blocks, handles on said levers, impact members on said levers, and water impact blades on said levers, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN BAPTISTE FELICETTI.

Witnesses:
C. R. ZIEGLER,
CHAS. E. POTTS.

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