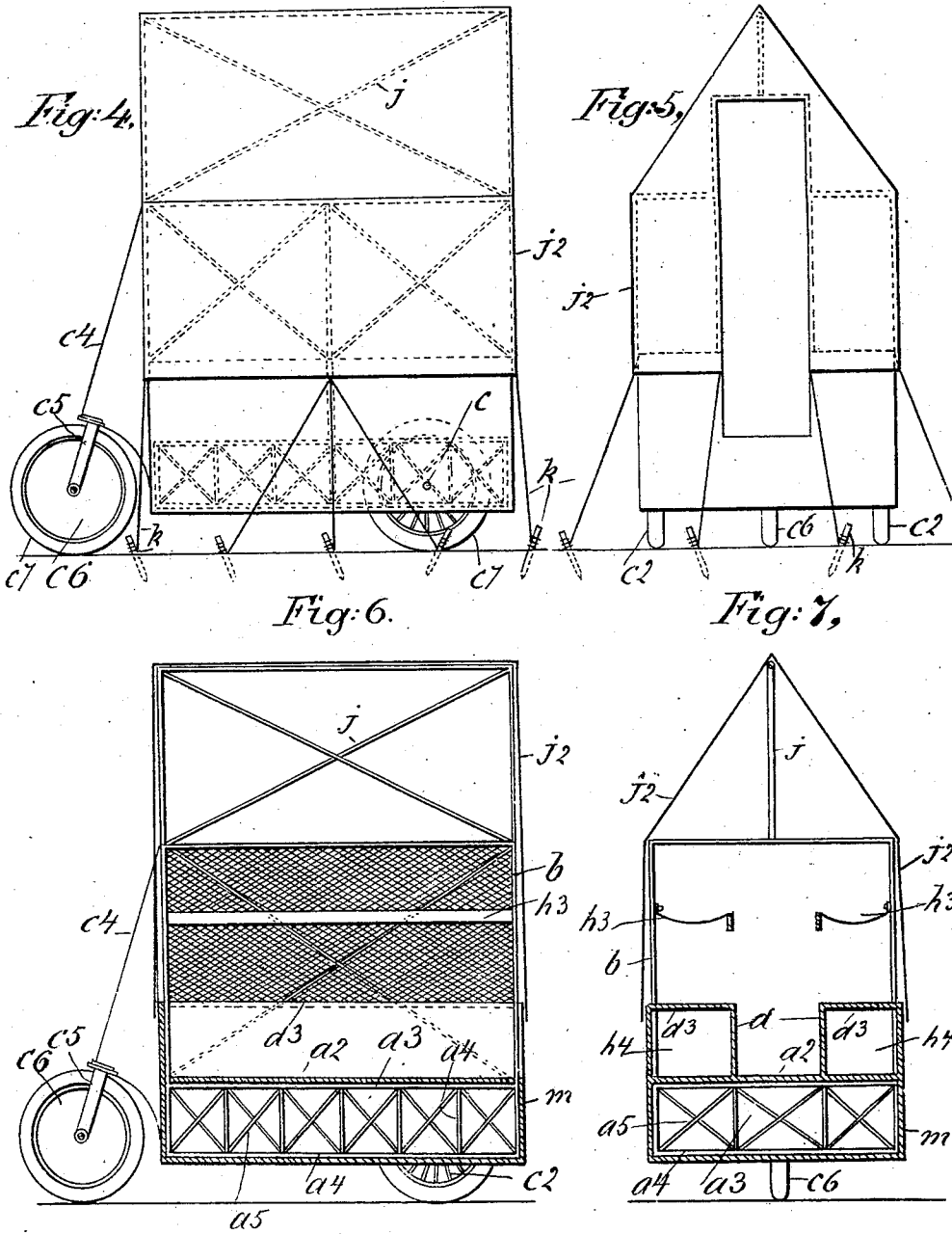




S. N. POLISHOOK.  
TRAVELER'S CYCLE.

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2 SHEETS—SHEET 2.



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## TRAVELER'S CYCLE.

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*To all whom it may concern:*

Be it known that I, SAMUEL N. POLISHOOK, a citizen of the United States, and residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Travelers' Cycles, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved vehicle of the class specified designed to take the place of wagons, horses, tents and other apparatus of this class, now usually employed by civil engineers, miners, explorers, sportsmen, soldiers and others, which combines all the elements of such apparatus, and which is so constructed as to be convenient in operation and may be propelled either by manual or other power, and which may, when desired, be made to serve as a boat for crossing streams or other bodies of water.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a side view of a traveler's cycle or vehicle made according to my invention; Fig. 2 a plan view; Fig. 3 a vertical transverse section on the line 3—3 of Fig. 2; Fig. 4 a view similar to Fig. 1 but on a reduced scale and showing my improved cycle or vehicle as used for a tent; Fig. 5 a rear end view of the device as shown in Fig. 4; Fig. 6 a sectional side view of the device as shown in Fig. 5; and, Fig. 7 a transverse sectional view of the device as shown in Fig. 5.

The bottom part of the body portion *a* of my improved vehicle is made watertight and is oblong and box-shaped in form and is provided with a horizontal partition *a*<sup>2</sup> below which is a chamber *a*<sup>3</sup> formed by horizontal side and transverse end truss-frames *a*<sup>4</sup> which are braced transversely and longitudinally as shown at *a*<sup>5</sup> so as to give the desired strength and rigidity, and these truss-frames may be made or constructed according to any of the well known methods, the object being to provide the greatest amount of strength consistent with a minimum weight. The bottom part or watertight portion of the body of the vehicle is preferably about six and one-half feet long, four and one-half feet

wide by two and a quarter feet deep, but it will be understood that the body of the vehicle may be made of any desired dimensions, and the top part *b* of the body portion of the vehicle comprises a suitable metal frame covered with wire mesh at the sides and rear end, said frame being composed of corner and middle posts having diagonal side and end braces *b*<sup>2</sup>, and the dimensions thereof being substantially the same as those of the bottom part.

In the rear end of the watertight bottom part of the body portion of the vehicle and beneath the partition *a*<sup>2</sup> which forms the floor of the body of the vehicle, is a transverse axle *c* provided with wheels *c*<sup>2</sup> which are placed in watertight housings *c*<sup>3</sup> and which extend, as shown, a predetermined distance below the body of the vehicle, and the body portion of the vehicle is provided at the front with a central bow-shaped extension *c*<sup>4</sup> through which is passed the shaft of a fork *c*<sup>5</sup> in which is mounted a solid wheel *c*<sup>6</sup> by which the vehicle is steered or guided, and the wheels *c*<sup>2</sup> and *c*<sup>6</sup> are preferably provided with rubber tires *c*<sup>7</sup>.

The bottom part of the body portion of the vehicle is provided with equally spaced longitudinal partitions *d* forming a central longitudinal space *d*<sup>2</sup> at the top of which are horizontal benches *d*<sup>3</sup>, the end portions *d*<sup>4</sup> of which are hinged at the sides of the top of the body part of the vehicle as shown at *d*<sup>5</sup>, and in the opposite corner portions of the rear end of the bottom part of the body of the vehicle are telescopic seat supports *e* provided with seats *e*<sup>2</sup> which may be raised above or lowered beneath the benches *d*<sup>3</sup> or the parts *d*<sup>4</sup> thereof whenever desired, and in front of the seat supports *e* are other vertically arranged telescopic supports *f* provided with wheels *f*<sup>2</sup> which may be grasped by the parties sitting on the seats *e*<sup>2</sup> so as to enable such parties to brace and support themselves in the operation of propelling the vehicle as hereinafter described. Beneath each of the seats *e*<sup>2</sup> is a pedal shaft *e*<sup>3</sup> provided with pedals *e*<sup>4</sup> and geared in connection with the axle *c* by means of a drive chain or similar device as indicated at *e*<sup>5</sup> in Fig. 1, and with this construction it will be apparent that parties sitting on the seats *e*<sup>2</sup> may propel or aid in propelling the vehicle.

In the front corner portions of the bottom part of the body of the vehicle are other telescopic seat supports *g* provided with seats *g*<sup>2</sup> adapted to be raised above or lowered beneath

the front hinged portions  $d^4$  of the benches  $d^3$ , and beneath each of the seats  $g^2$  is a pedal shaft  $g^3$  provided with pedals  $g^4$  and geared in connection with the axle  $c$  by a drive chain or similar device  $g^5$ , and with this construction it will be apparent that parties sitting on the seats  $g^2$  may propel or aid in propelling the vehicle.

In front of each of the seats  $g^2$  is a wheel  $g^6$  geared in connection with the shaft of the fork  $c^5$ , or which may be geared in connection with the shaft of said fork as indicated at  $g^7$  in Fig. 1, or in any desired manner and by means of which a party or parties sitting on the seat or seats  $g^2$  may guide the vehicle, and in front of each of the wheels  $g^6$  is another wheel  $h$  in operative connection with a brake  $h^2$  as shown in Fig. 1.

The benches  $d^3$  may be employed as bunks when necessary and the top portion of the body part of the vehicle which is inclosed by wire mesh is also provided at the opposite sides with other bunks  $h^3$  which may be constructed and held in place in any desired manner, and which, if desired, may be taken down and folded up at any time, and the central side compartments  $h^4$  formed by the longitudinal partitions  $d$  may serve as chambers in which bedding and other material may be stored, and beneath the horizontal partition  $a^2$  which forms the floor proper of the bottom part of the body of the vehicle is another space which may be employed for the purpose of storing any articles which the crew of the vehicle may desire, and the bunks  $h^3$  may be made of detachable and movable sections so as not to interfere with the parties sitting on the seats  $e^2$  and  $g^2$  for the purpose of propelling or operating the vehicle.

It will be understood that when the vehicle is being operated the end bench members  $d^4$  are raised into the position shown in Fig. 3 and the seats  $e^2$  and  $g^2$  are also raised into the position shown in said figure, and when the vehicle is not being propelled or is serving simply as a housing for the crew the said seats are lowered as indicated in dotted lines in Fig. 1 and the bench members  $d^4$  are also lowered.

The body part of the vehicle is provided at its rear end and above the horizontal partition or flooring  $a^2$  with a tight door  $i$  which may be opened and closed when desired, and I also in practice, provide a detachable propeller  $i^2$  having a shaft  $i^3$  geared in connection with the axle  $c$  as indicated at  $i^4$  in Fig. 2, and as partially shown in Fig. 3, and in crossing a stream or other body of water the propeller may be attached and the vehicle may be made to serve as a boat, the propeller  $i^2$  operating to propel the same through the water, and the solid wheel  $c^6$  serves as a guiding or steering means.

In the construction shown and described

provision is made for a crew of four, and means is provided whereby all the members of the crew may, when necessary, aid in propelling the vehicle, and it will be understood that the construction or gearing by which this is done is similar to the gearing of ordinary cycles; but my invention is not limited to the propelling mechanism shown and described, and if desired an ordinary gasoline or other motor may be placed in the bottom part of the body portion of the vehicle beneath the partition or flooring  $a^2$  and geared in connection with the axle  $c$ , and in this event the vehicle may be steered or guided from one of the seats  $g^2$  as hereinbefore described.

It will be understood, of course, in crossing a stream or other body of water the vehicle is buoyed up by the watertight bottom part of the body portion thereof, and air chambers or bags may also be provided if desired for the purpose of adding to the buoyancy of the body part of the vehicle.

In Figs. 4 to 7 inclusive I have shown my improved vehicle in use as a tent or house for the crew. In order to do this a light truss-frame  $j$  is placed on top and connected with the top portion of the body part of the vehicle, and a covering  $j^2$  of canvas or other suitable material is drawn over said frame and may be drawn down over the top part of the body portion of the vehicle which is composed of wire gauze, as clearly indicated in said figures, and the machine can be secured in position by means of stakes and cords as shown at  $k$  in Figs. 4 and 5. This, as will be seen, forms a closed tent or house in which the crew may live, and said tent or house may be heated when desired by a stove placed between the benches  $d^3$  or located at any desired point within the body portion of the vehicle.

The upper bunks or berths may be composed of canvas or any other suitable material and may be taken down and folded up whenever necessary, and the top framework  $j$  when not in use may also be taken down and folded up or packed in small bundles and placed in the side compartments  $h^4$  or in the bottom chamber  $a^3$ , or the bunks  $h^3$  and other detachable part of the apparatus may be folded up and suspended from or connected with the outer sides of the body portion of the vehicle and carried thereby.

The truss-framework and entire bottom part of the body portion of the vehicle is inclosed by wood or other suitable material as shown at  $m$  so as to be made watertight, and in practice the truss or other framework of the bottom part of the body portion of the vehicle may be constructed in any desired manner, but is preferably made of steel tubing so as to give the requisite strength with a minimum amount of weight.

The entire cost of the apparatus and of operating the same will be much less than the cost of horses, wagons, tents and the like usually necessary for the use of travelers, explorers, miners, engineers and others, and it will be understood that the horizontal partition or flooring  $a^2$  may be provided with suitable doors to permit of access to the bottom chamber  $a^3$  and of an examination of the propelling mechanism whenever necessary, and in this way I provide a vehicle of the class specified which may be made to serve as a boat when desired, and as living quarters whenever necessary, and which will answer all the purposes of wagons, tents, horses and boats and which may be as conveniently operated as any vehicle for the purposes specified as now constructed and at a much less expense.

Although I have given the various dimensions of the body portion of the vehicle, it will be apparent that said vehicle may be made of any desired size or dimensions, and changes in and modifications of the various features of construction as herein shown and described may be made without departing from the spirit of my invention or sacrificing its advantages.

In the form of construction shown the brake  $h^2$  is operated by a rod  $o$  having an eccentric connection at  $o^2$  with the wheel  $h$ , but my invention is not limited to any particular form of brake mechanism, and although I have shown and described a brake mechanism operating in connection with the front wheel  $e^6$ , it will be understood that a brake mechanism operating in connection with the axle  $c$  may be employed and any suitable apparatus of this kind which will operate as a brake on the rear axle may be substituted for that herein shown and described, and said brake apparatus may be operated by the wheel  $h$  or by devices located elsewhere.

It will also be understood that a suitable compensating mechanism may be employed in connection with the axle  $c$  or the wheels connected therewith, and suitable speed regulating devices may also be employed as in other vehicles of this class, and if desired the wheels  $c^2$  on the axle  $c$  may be provided with "coasting" devices by means of which they will be free to turn with the axle  $c$  when the pedals or pedal cranks are not operated, and a reversing mechanism for the vehicle may also be provided together with a suitable reversing mechanism for the propeller.

The front part  $c^4$  of the body portion of the vehicle through which the crank or shaft of the fork  $c^5$  passes also forms a front chamber which, in practice, may communicate with the bottom chamber in the body portion of the vehicle below the floor or platform  $a^2$ , or if desired the said front chamber may com-

municate with the spaces or chambers above and below the floor or platform  $a^2$ , and if it is desired to apply a brake to the rear axle to be operated by the wheels  $h$  or one of them, the mechanism for operating said brake would be passed downwardly through the chamber formed by the front part or casing  $c^4$  and the chamber or chambers formed by the bottom part of the main body portion of the vehicle.

With the body of a vehicle made in the form shown and described and of the dimensions indicated, the heads of the crew sitting on the seats  $e^2$  and  $g^2$  will extend above the body part of the vehicle and a clear view is thus obtained in all directions; but my invention is not limited to any particular dimensions for the body portion of the vehicle, nor to the height thereof, and if, in practice, it is found desirable for the crew to be entirely inclosed when operating the vehicle the front of the body portion thereof may be provided with suitable windows through which a proper view may be obtained, and while I have shown and described the top of the body portion of the vehicle as composed of wire gauze or wire mesh, it will be apparent that the use of this material is not absolutely necessary and any other suitable material may be substituted therefor.

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

1. A vehicle of the class described having a body portion the bottom of which is watertight and composed of truss-frames above which is placed a horizontal partition, said truss-frames and partition having a watertight inclosure, the sides of the body part being also provided above said partition with longitudinal benches the end portions of which are hinged at the outer sides of the vehicle, the top part of the body portion being composed of an open framework covered with wire mesh and being provided with detachable side bunks.

2. A vehicle of the class described, having a body portion the bottom of which is watertight and composed of truss-frames above which is placed a horizontal partition, said truss-frames and partition having a watertight inclosure, the sides of the body part being also provided above said partition with longitudinal benches the top end portions of which are hinged at the outer sides of the vehicle, the top part of the body portion being composed of an open framework covered with wire mesh and being provided with detachable side bunks, an axle mounted in the rear bottom part of the body portion of the vehicle and provided with wheels, and said body part of the vehicle being also provided

with a forward extension in which is mounted a shaft provided with a fork having a guide wheel, means whereby the driving axle may be operated, and devices for controlling the guide wheel.

3. A vehicle of the class described, provided with a body portion the bottom part of which is watertight, said bottom part being provided with a horizontal partition below which is a watertight chamber, a driving axle mounted in the rear end portion of said chamber and provided with wheels having watertight housings, the body portion of the vehicle being also provided with a front extension in which is mounted a guiding fork provided with a wheel, means for operating the driving axle, and devices for operating said guiding fork.

4. A vehicle of the class described, provided with a body portion the bottom part of which is watertight, said bottom part being provided with a horizontal partition below which is a watertight chamber, a driving axle mounted in the rear end portion of said chamber and provided with wheels having watertight housings, the body portion of the vehicle being also provided with a front extension in which is mounted a guiding fork provided with a wheel, means for operating the driving axle, and devices for operating said guiding fork, said body portion of the vehicle being also provided with longitudinally and vertically arranged partitions forming a central longitudinal chamber and longitudinal side chambers.

5. A vehicle of the class described, provided with a body portion the bottom part of which is watertight, said bottom part being provided with a horizontal partition below which is a watertight chamber, a driving axle mounted in the rear end portion of said chamber and provided with wheels having watertight housings, the body portion of the vehicle being also provided with a front extension in which is mounted a guiding fork provided with a wheel, means for operating the driving axle, and devices for operating said guiding fork, said body portion of the vehicle being also provided with longitudinally and vertically arranged partitions forming a central longitudinal chamber and longitudinal side chambers, and the top part of the body portion being composed of an open framework covered with wire mesh and provided with side bunks.

6. A vehicle of the class described, comprising a water-tight body portion having a horizontal partition, an axle mounted in the bottom rear part of the body portion below said partition and provided with wheels having water-tight housings and which extend below said body portion, said body portion being also provided with a front guide and supporting wheel mounted forwardly there-

of, and means for operating said axle and said front guide and supporting wheel.

7. A vehicle provided with a body portion the bottom part of which is composed of truss frames and made water-tight, said bottom part being provided above the truss frames with a horizontal partition forming a bottom chamber, a driving axle mounted in the rear portion of the bottom chamber and provided with wheels mounted in water-tight housings and which extend below said body portion, said body portion being also provided with a forward extension in which is placed a steering shaft provided with a guide and supporting wheel, and devices for operating the driving axle, and means for operating said guide and supporting wheel.

8. A vehicle provided with a body portion the bottom part of which is composed of truss frames and made water-tight, said bottom part being provided above the truss frames with a horizontal partition forming a bottom chamber, a driving axle mounted in the rear portion of the bottom chamber and provided with wheels mounted in water-tight housings and which extend below said body portion, said body portion being also provided with a forward extension in which is placed a steering shaft provided with a guide and supporting wheel, and devices for operating the driving axle and means for operating said guide and supporting wheel, said body portion being also provided with an openwork top and means for inclosing the same.

9. A vehicle, comprising a body portion, the bottom part of which is water-tight and the top part composed of openwork material, said bottom part being provided with a horizontal partition forming a water-tight bottom chamber and said bottom part being also provided above said partition with longitudinally arranged side chambers adapted to form bunks and the sides of the openwork top part being provided with bunks, and means for propelling and guiding said vehicle.

10. A vehicle, comprising a body portion, the bottom part of which is water-tight and the top part composed of openwork material, said bottom part being provided with a horizontal partition forming a water-tight bottom chamber and said bottom part being also provided above said partition with longitudinally arranged side chambers adapted to form bunks and the sides of the openwork top part being provided with bunks, and means for propelling and guiding said vehicle, and for inclosing the openwork top thereof.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 4th day of August 1906.

SAMUEL N. POLISHOOK.

Witnesses:

C. E. MULREANY,

C. J. KLEIN.