

2 Sheets—Sheet 1.

No. 464,227.

Patented Dec. 1, 1891.

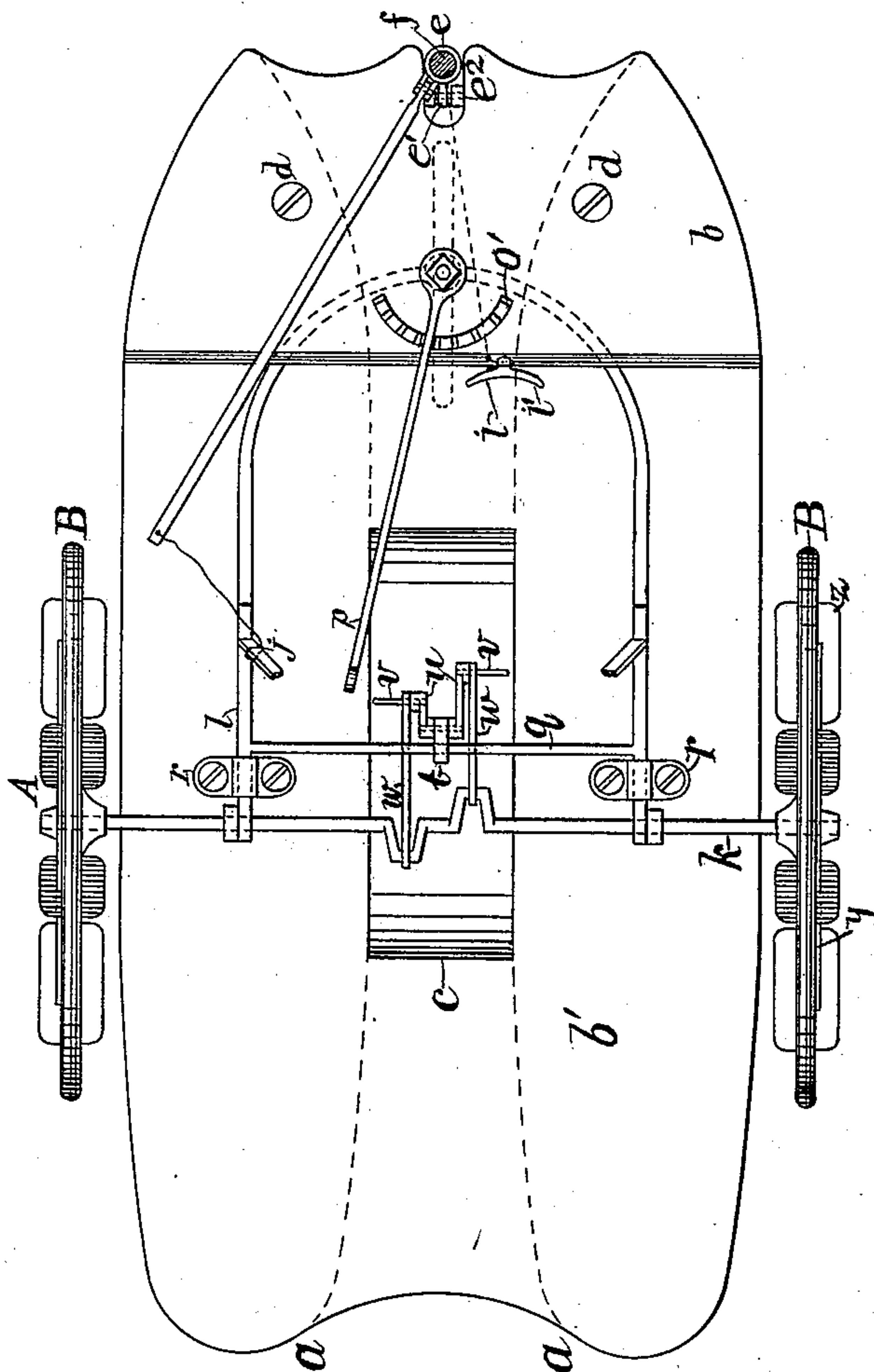


Fig. 1.

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(No Model.)

2 Sheets—Sheet 2.

T. J. OLSEN.
COMBINED LAND AND WATER VEHICLE.

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Fig. 3.

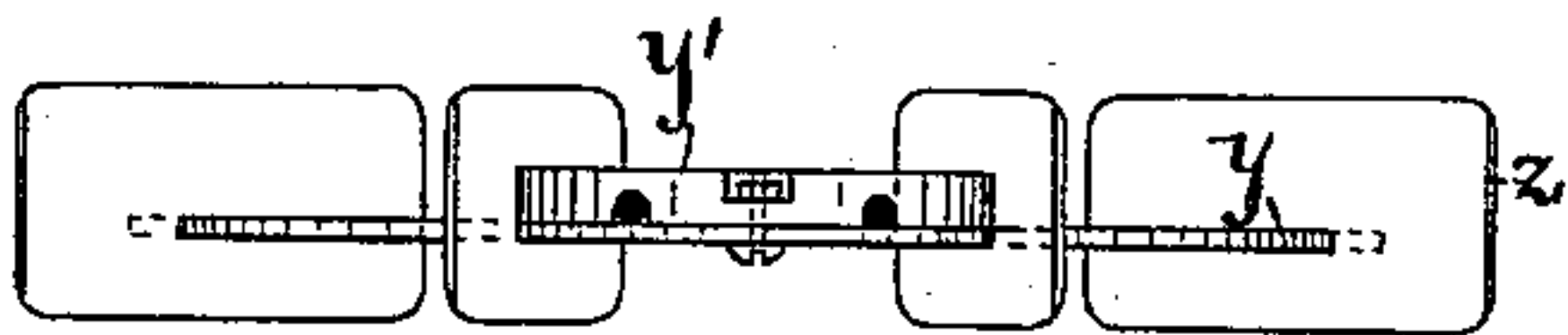
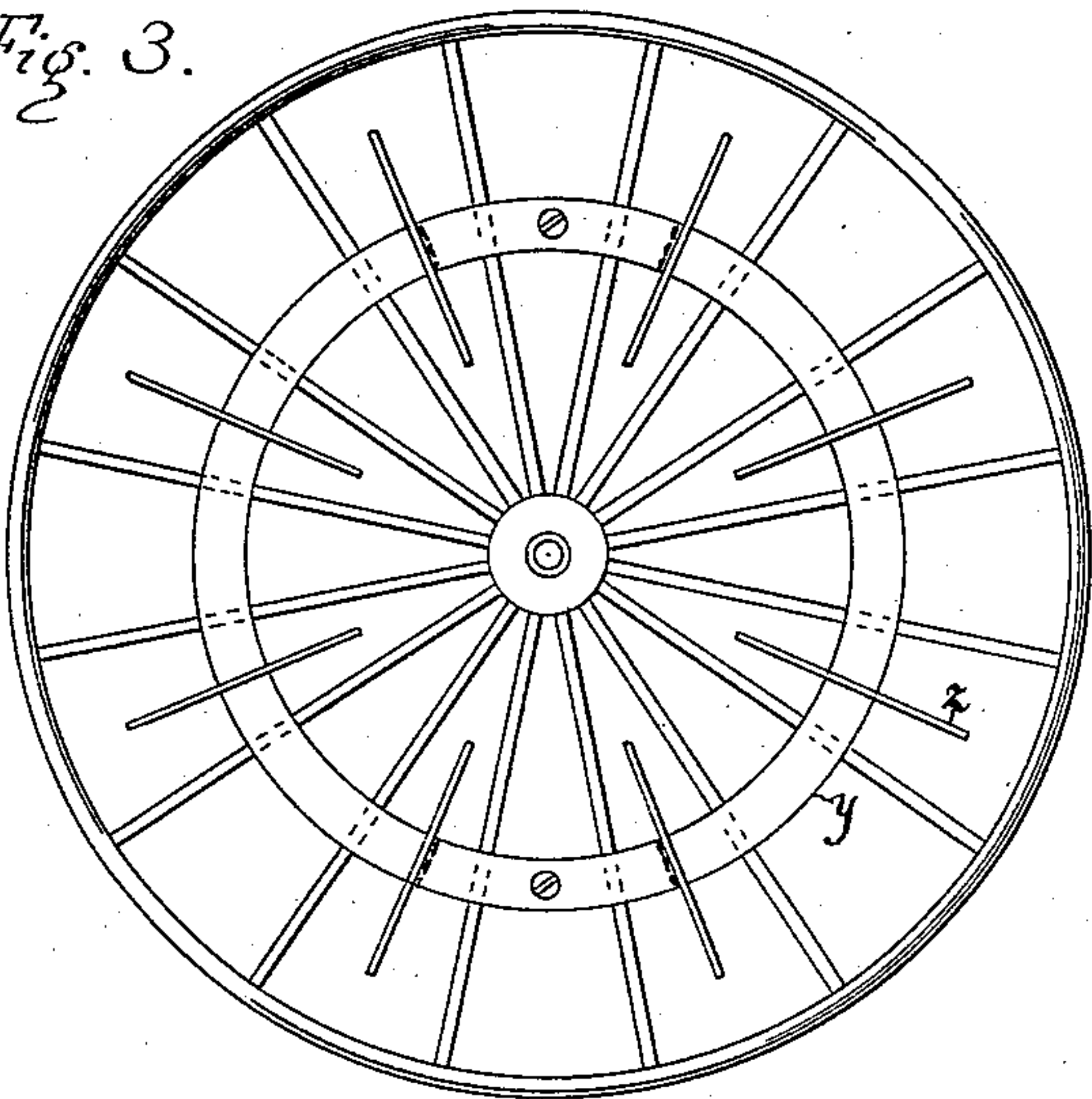


Fig. 4.

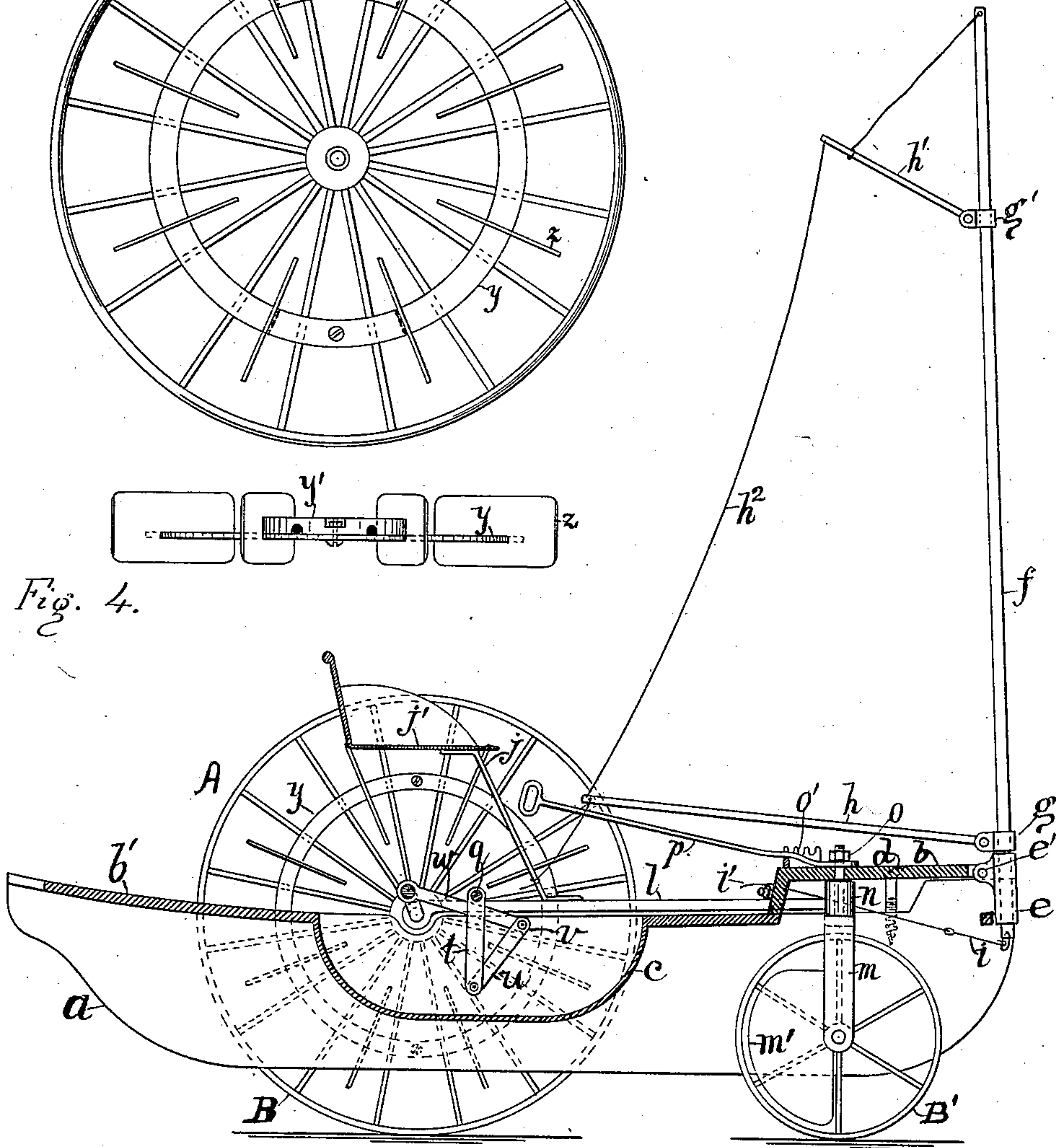


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

THORE JOHAN OLSEN, OF CHICAGO, ILLINOIS.

COMBINED LAND AND WATER VEHICLE.

SPECIFICATION forming part of Letters Patent No. 464,227, dated December 1, 1891.

Application filed August 1, 1891. Serial No. 401,430. (No model.)

To all whom it may concern:

Be it known that I, THORE JOHAN OLSEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Combined Land and Water Vehicle, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 shows my combined land and water vehicle in plan view. Fig. 2 shows the same in sectional elevation cut longitudinally by a vertical plane near its center. Fig. 3 shows in vertical elevation a driving-wheel in side view provided with paddles. Fig. 4 shows Fig. 3 in plan view.

Like letters refer to like parts.

The object of my invention is to produce a new vehicle for exercise and pleasure to be adapted to be used as a combined machine on either land or water, and which may readily be converted into a device for either element alone; and to attain said desirable ends I construct my said device in substantially the following manner, namely:

I construct a tricycle and a boat each of such form that they may be united into one machine, after which they may as one machine be used as either a land or water vehicle. For this purpose I construct two boats *a a*, which are parallel side by side and connected by decks *b* and *b'*. Said boats are placed a sufficient distance apart to hold a tray *c* between them. The deck *b* is raised so as to form a step between it and the deck *b'* and extends across the front of the boats both for the purpose of accommodating necessary mechanism under as well as upon it, and also to give a better appearance and to keep water from splashing over the bows of the boats. Said deck is fastened to the boats by bolts or screws *d*. Said boats may be made of cork, or they may be made of paper or other suitable material, so as to make them very light and buoyant as well as strong and durable. In the center of the front edge of the deck *b* is a sleeve *e*, with a lug *e'*, which turns on a transverse bolt or rod *e²*, held on said deck, from a vertical to a horizontal position. Into said sleeve is set a mast *f*, provided with an upper and a lower hinged yard-

arm *h'* and *h*, each attached to a ring *g'* and *g*, carrying a sail *h²*. Said mast is adapted to turn on its axis in said sleeve. Through this simple construction the sail may be furled and unfurled and turned in any direction to catch the wind or laid down on the deck at any desired angle. Said mast projects through the sleeve *e* and is there attached to a rope *i*, of which the opposite end is fastened to a belaying-pin *i'* when the mast is vertical. To the above or vessel part is attached the wheeled vehicle A, formed of the wheels B, crank-axle *k*, to which is attached the rigid frame *l*, and fixed hub *n*, carried by the turn-post *m* on the wheel B'. Said crank-axle is fixed in its wheels and turns in bearings at the rear of the frame *l*. Said frame is formed of two rods which arch toward each other and meet the hub *n* on its opposite sides, where they are firmly attached, and through said hub passes the vertical spindle of the turn-post *m*. Said spindle is held in place by a nut *o* or other suitable device. In this case the spindle also passes through the deck *d* and a steering-lever *p*, arranged to hold on and turn said spindle as the lever moves in a horizontal plane, and is held in any position when placed between the teeth of a toothed segment or semicircle *o'*. Through said construction the front ends of the boats and tricycle are held together, while the rear end of the tricycle and boats are held together by straps *r* over the frame Z, secured to the deck *b'*. On the rear end of said frame is a cross-bar *q*, from which depends a carrier *t*, from the lower end of which rise pivoted arms *u*, which project upward and carry treadles *v*, which are connected to the cranks of the axle *k* by connecting-rods *w*. The parts *q* and *t* retain their places rigidly.

To the spokes of the wheels B are attached flat metal rings about or somewhat larger than half the diameter of said wheels. Said rings *y* pierce blades *z* at or near their center, which are rigidly attached to each other. Said blades serve as paddles when in the water to propel the vessel. The rings *y* are attached to the wheels B by means of blocks *y'*, notched to receive two adjacent spokes at a designated place, which makes said rings self-centering to the wheels B, to which they are held by a single bolt *y²* through the ring and

center of said block, and are therefore easily and quickly removed or attached to said wheels. A seat j' is carried on braces j , secured to the frame l .

5 The wheel B' carries the front of the vehicle and runs midway between the boats and between the legs of the turn-post. To the rear edge of the turn-post is rigidly attached a blade of sheet metal or wood m' away from
10 the ground, which serves as a rudder in the water.

My said device, as shown in the drawings, is rigged to run on land or water. The sail, in favorable wind, is to help its propulsion.
15 When it is desired to change it to a simple wheeled or land vehicle, the fastening devices which hold the tricycle and boats together are removed. This drops the boats to the ground, after which the vehicle or tricycle
20 A is separated from the boats and the parts belonging to each vehicle replaced to their respective places. In the latter case the rings y are removed from the wheels B. By means of the twin boats a the stability as well as
25 the buoyancy of the boats is brought to a maximum condition, and consequently the greatest safety on water insured to such a craft.

What I claim is—

30 1. The combination, with a tricycle having

a frame in a horizontal plane, to which are attached a seat and propelling mechanism, of a boat under said frame, and straps connecting said frame and boat, substantially as specified.

2. The combination, with a tricycle having 35 a frame in a horizontal plane, to which are attached a seat and propelling mechanism, of permanently-attached side-by-side boats under said frame, and straps connecting said 40 frame and boats, substantially as specified.

3. The combination, with a tricycle having a frame in a horizontal plane, to which are attached a seat and propelling mechanism, and 45 removable rings provided with paddles attached to the driving-wheels of said tricycle, of a boat provided with adjustable mast and yard-arms, and straps to suspend said boat from said frame, substantially as specified.

4. The combination, with a tricycle having 50 a frame in a horizontal plane, to which are attached a seat and propelling mechanism, of a removable ring provided with paddles attached to the driving-wheels and concentric therewith, substantially as specified.

THORE JOHAN OLSEN.

Witnesses:

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