C. PETERSON.

AIRSHIP.

APPLICATION FILED JUNE 15, 1917.

1,270,200.

Patented June 18, 1918.

2 SHEETS—SHEET 1.

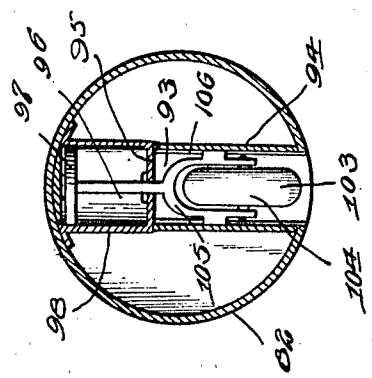


Fig. 4.

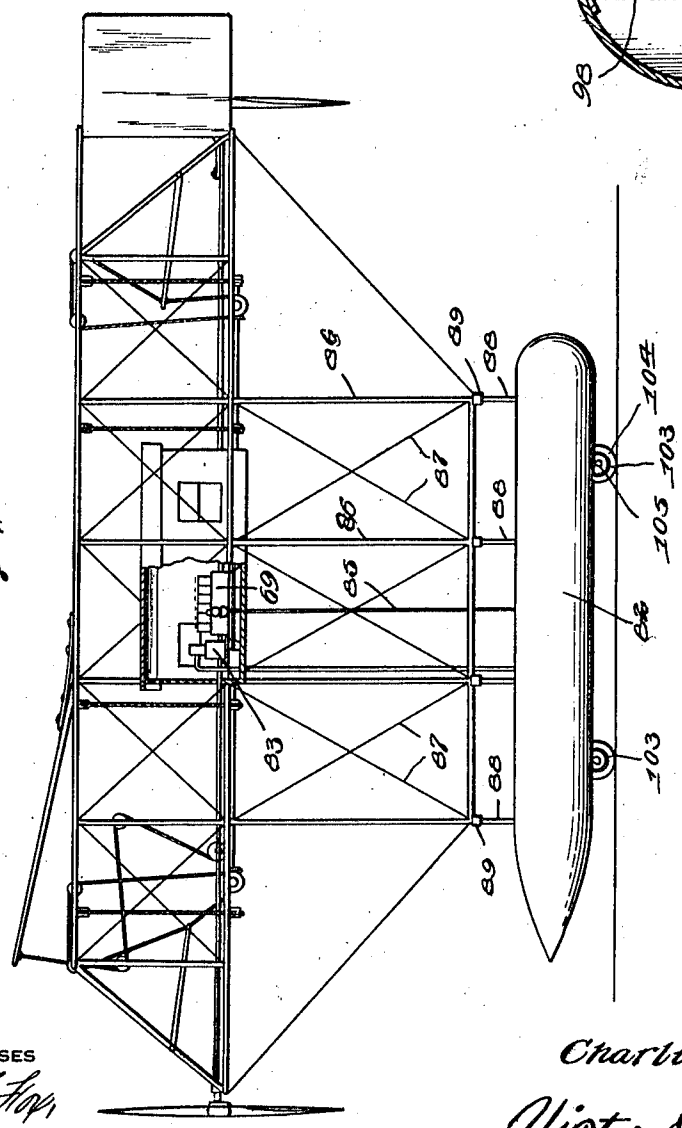


Fig. 1.

WITNESSES

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2 SHEETS—SHEET 2.

Fig. 2.

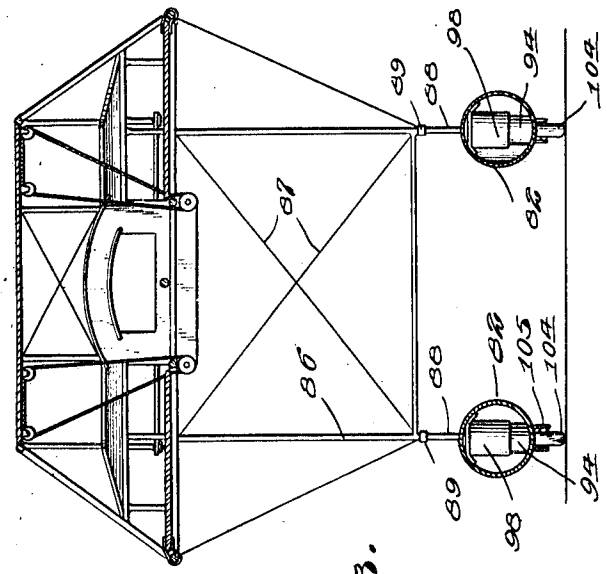
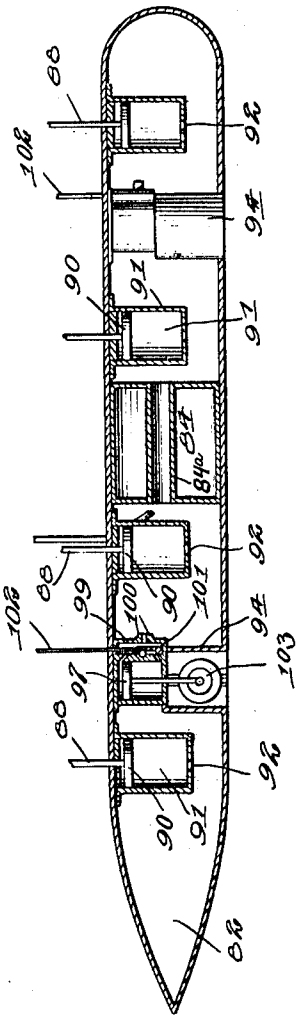


Fig. 3.



WITNESSES

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CHARLIE PETERSON, OF FLORENCE, WISCONSIN, ASSIGNOR OF ONE-FOURTH TO HARVEY BOWMAN, OF FLORENCE, WISCONSIN, AND ONE-FOURTH TO CHARLES ERICSON, OF COMMONWEALTH, WISCONSIN.

AIRSHIP.

1,270,200. Specification of Letters Patent. Patented June 18, 1918.

Application filed June 15, 1917. Serial No. 174,948.

To all whom it may concern:

Be it known that I, CHARLIE PETERSON, a citizen of the United States, residing at Florence, in the county of Florence and State of Wisconsin, have invented new and useful Improvements in Airships, of which the following is a specification.

This invention relates to improvements in air-ships and especially with reference to the provision of means for absorbing the shocks when landing and to prevent injury to the air-ship or the operator thereof when landing.

The invention also relates to the provision of pontoons of novel construction for floating an air-ship on water, preventing the same from capsizing, and also adapting the air-ship to be started from and landed on the earth as well as on water as may be desired.

The invention also relates to the provision of cushioning connections between the frame of the air-ship and the pontoons or base or landing elements thereof which prevent concussions by absorbing shocks and thus prevent injury to the frame or other parts of the air-ship when the same is landed.

In the accompanying drawings:—

Figure 1 is a side elevation of an air-ship provided with pontoons and cushioning connections constructed and arranged in accordance with my invention.

Fig. 2 is a longitudinal sectional view of one of the pontoons or floats.

Fig. 3 is a transverse sectional view through the air-ship and the pontoons.

Fig. 4 is a detailed transverse sectional view of one of the pontoons.

An air-ship is indicated at 1 for the purpose of this specification. The frame of the air-ship is provided with stanchions 86 which extend down from the sides thereof and are connected together by crossed guys 87. Said stanchions are here shown as tubular and each is provided at its lower end with a plunger rod 88 secured thereto at 89 and provided at its lower end with a piston or plunger 90 which operates in a vertical cylinder 91. The said cylinders are arranged and secured in pontoons 82. Said pontoons are cigar shaped, constitute floats and may be made of sheet metal or other material and are arranged under the frame and at suitable distances apart and are supplied with compressed air by a suitable air compressing pump 83 which is operated by an engine such as indicated at 69 and with which the air-ship is provided. Each pontoon is provided in its center with a gasolene tank or compartment 84 from which gasolene may be forced up through pipes 85 to the carbureters of the engine.

The cylinders 91 are provided at their lower ends with openings 92 so that compressed air is admitted to said cylinders from the pontoons and caused to force the pistons 90 upwardly. The pistons and the compressed air containing cylinders form cushioning connections between the stanchions of the air-ship and the base members formed by the pontoons and serve to absorb shocks when the air-ship is landed and hence obviates concussions and injury to the air-ship when landing.

In the lower side of each pontoon near the front and rear ends thereof are truck receiving chambers 93 which are open at their lower sides and are formed by cylindrical walls 94 which extend upwardly and inwardly in the pontoon. Each of these chambers is closed at its upper side as at 95 and provided with a central opening for the passage of the vertically arranged piston rod 96 of a piston 97 which operates in a cylinder 98. Each cylinder 98 is provided at one side with a chest 99 which communicates with one of the compressed air container chambers or compartments of the pontoon through a port 100 and in each of the said chests is a slide valve 101 to admit compressed air to the cylinder either above or below the pistons to elevate or depress the latter as desired. Each slide valve is provided with a rod 102 by means of which it may be manually operated to control the movement of the piston.

Each pontoon is provided with trucks 103 for landing on and starting from the earth, each truck, comprising a wheel 104 and a fork 105 in which the axle of the wheel is mounted. The forks are secured to the lower ends of the piston rod 96 so that the trucks may be raised and lowered by the fluid pressure mechanisms comprising said cylinders, valves and pistons, to arrange the trucks in the chambers 93 out of the way when the machine is in flight or is used as a hydroplane and to project the trucks downwardly

and extend their wheels below the pontoons when the machine is to be raised from or to land on the earth. To guide and hold the truck vertically their forks are arranged for vertical sliding movement in suitable guides 106 in opposite sides of the chambers 93.

The fluid pressure mechanisms for projecting and retracting the truck also form pneumatic cushions therefor which serve to absorb the shocks when landing and also serve to equalize and distribute the weight of the machine on the trucks.

While I have shown herein and described a preferred form of my invention, I would have it understood that changes may be made in the form, proportion and construction of the several parts without departing from the spirit of the invention and within the scope of the appended claim.

Having thus described my invention, what I claim is:—

An air-ship having a pontoon below the same to float the air-ship on water, said pontoon having compressed air receiving chambers in its ends and a gasolene storage chamber between said compressed air receiving chambers, and a tube extending through the gasolene receiving chamber and connecting the compressed air receiving chambers, and compressed air operated shock absorbing devices having pneumatic connection with said compressed air receiving chambers.

In testimony whereof I affix my signature.

CHARLIE PETERSON.