April 30, 1946. J. D. C. BROWN 2,399,461

AERIAL AIRFIELD

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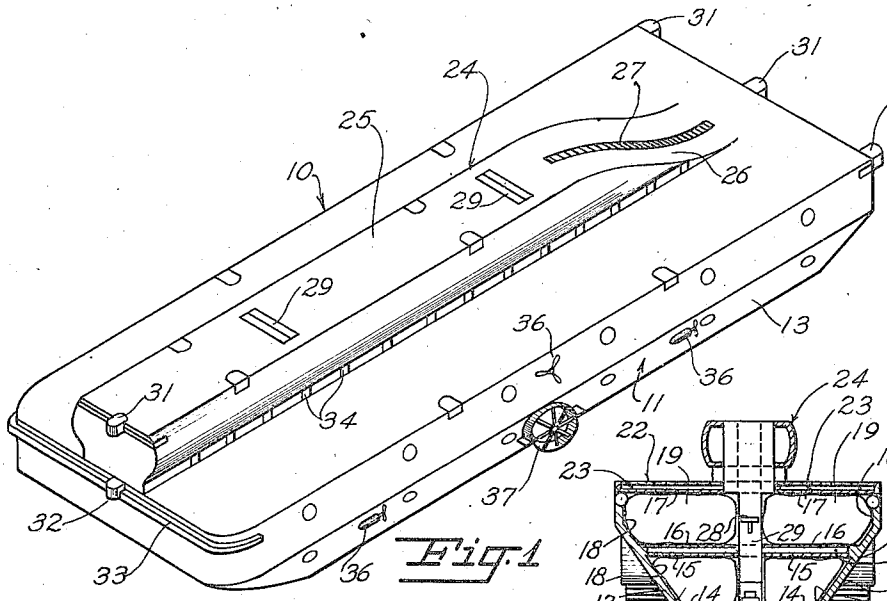


Fig. 1

Fig. 2

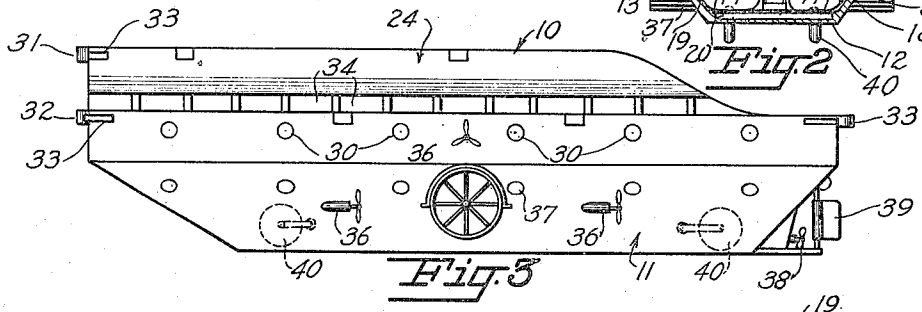


Fig. 3

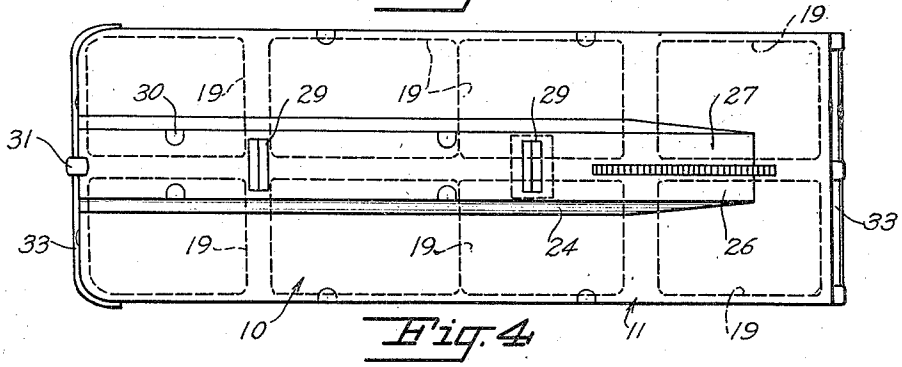


Fig. 4

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AERIAL AIRFIELD

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7 Claims. (Cl. 244—30)

This invention relates to airfields and more particularly to a mobile airfield, movable to desired locations on land, water and in the air, and it consists in the constructions, arrangements and combinations herein described and claimed.

It is a cardinal object of the invention to provide an airfield wherein great buoyancy is provided, enabling the structure to be employed in the transport of many planes, guns, personnel, and war and defense equipment generally, as well as providing a plurality of runways from which planes and other craft may take off or land.

More specifically it is an important object of the invention to provide a boat-like structure divided into a plurality of superposed compartments for housing balloon envelopes adapted to be inflated by a gas, the compartment being arranged in vertical spaced relation providing additional compartments for storage and cargo purposes, as well as accommodations for personnel of the craft.

It is also an important object of the invention to provide a craft in which a take-off runway is provided longitudinally thereof, positioned above the main deck of the craft, affording ample clearance for taxiing purposes, both when taking off or landing a ship, one end of the runway including a ramp structure whereby an airplane or the like may gain access thereto, and in addition elevator means are provided whereby planes may be carried directly between different interior deck levels as well as the runway.

Additional objects, advantages and features of invention will be apparent from the following description considered in conjunction with the accompanying drawing, wherein

Figure 1 is a perspective view of the craft and airfield.

Figure 2 is a vertical cross section therethrough.

Figure 3 is a side elevation of the airfield.

Figure 4 is a top plan view thereof.

There is illustrated an airfield, generally indicated by the reference character 10, consisting of a hull structure 11 in the present instance, being shown as having a flat bottom 12, inclined sides 13 and respective forwardly and rearwardly inclined stem and stern, although other lines may be followed in order to obtain a desired streamline effect, so as to overcome resistance when employed in water or in the air.

The hull 11 is divided transversely by deck structures 14, 15, 16, and 17, providing respective compartments 18, in which inflatable balloon envelopes 19 are disposed.

As may be seen in Figure 2, a fuel or ballast compartment 20 is provided beneath the deck 14, while between the decks 15 and 16 an intermediate hold 21 is provided, admirably suited for cargo, machinery and the like, while between the deck 22 and the deck 17 a compartment 23 is formed, the latter being used as a repair shop, or storage space as desired.

Extending longitudinally of the craft 10, a superstructure 24 is shown extending from the stem and stopping inwardly of the stern of the craft. The roof 25 of the superstructure functions as a runway from which aeroplanes may take off, and in order that such planes may be brought up to the roof, a ramp 26 is provided, which may include an escalator 27. In addition, it is contemplated to use elevators 28 operable through shafts 29, the latter extending from the deck 14 and opening upon the roof 25 of the superstructure 24.

Concealed gun emplacements 30 are arranged at suitable points in the craft and upper and lower pilot houses 31 and 32 are likewise provided, while observation walks 33 are arranged at front and rear of the craft. Deck and tunnel rooms 34 are provided in the lower portion of the superstructure.

From the description thus far set forth it will be seen that three separate runways are provided, namely, the roof 25 and the deck portions 22 disposed upon the sides of the superstructure 24.

It will be apparent that with the balloon envelopes inflated, the craft will rise into the air and upon proper manipulation of the air propellers 36 the craft may be readily steered.

When the craft is to be employed in the water, propulsion is obtained through operation of side wheels 37 and propeller 38 and steerage is effected through the rudder 39 as will be apparent.

In order that the craft may travel upon land driven wheels 40 are provided in the hull of the craft, retractable upwardly therewithin when used in water or land.

It will be understood, of course, that my airfield may be constructed in different sizes, depending upon particular requirements, and the balloon envelopes for encasing the gas, preferably helium, will be proportioned accordingly to produce the necessary buoyancy and lift to the craft.

While I have shown and described a preferred form of my airfield, this is by way of illustration only, and I consider as my own all such modifications in structure as fairly fall within the scope of the appended claims.

I claim:

1. A mobile airfield comprising a hull divided into a plurality of compartments, an inflated balloon in each compartment affording buoyancy to the hull, the upper portion of the hull having a deck the full length thereof, a superstructure medially and longitudinally of said deck affording aeroplane runways upon the sides of the superstructure, and said superstructure having an upper deck affording a further runway.

2. The structure of claim 1 in which the superstructure stops short of the stern of the hull and ramp means extended between the deck of the hull and the deck of the superstructure.

3. The structure of claim 1 in which the superstructure stops short of the stern of the hull, a ramp extended between the deck of the hull and the deck of the superstructure, and an escalator means formed in said ramp extending throughout the length of the ramp.

4. A mobile airfield comprising a hull divided into a plurality of compartments, an inflated balloon in each compartment affording buoyancy to the hull, the upper portion of the hull having a deck the full length thereof, a superstructure medially and longitudinally of said deck affording aeroplane runways upon the sides of the superstructure, said superstructure having an upper deck affording a further runway, elevator shafts formed medially and extending vertically of said hull, extending from a lowermost deck and opening upon the deck of said superstructure, an elevator in each of said shafts, said superstructure stopping short of the stern of the hull, a ramp extending between the deck of the hull and the deck of the superstructure and an escalator means formed in said ramp extending throughout the length of the ramp.

5. The structure of claim 4 in which side wheels are provided upon said hull for propulsion in water.

6. The structure of claim 4 in which projectable driven land wheels are provided for propulsion on land.

7. The structure of claim 4 in which the hull includes driven air propellers for steerage purposes when afloat in the air.

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