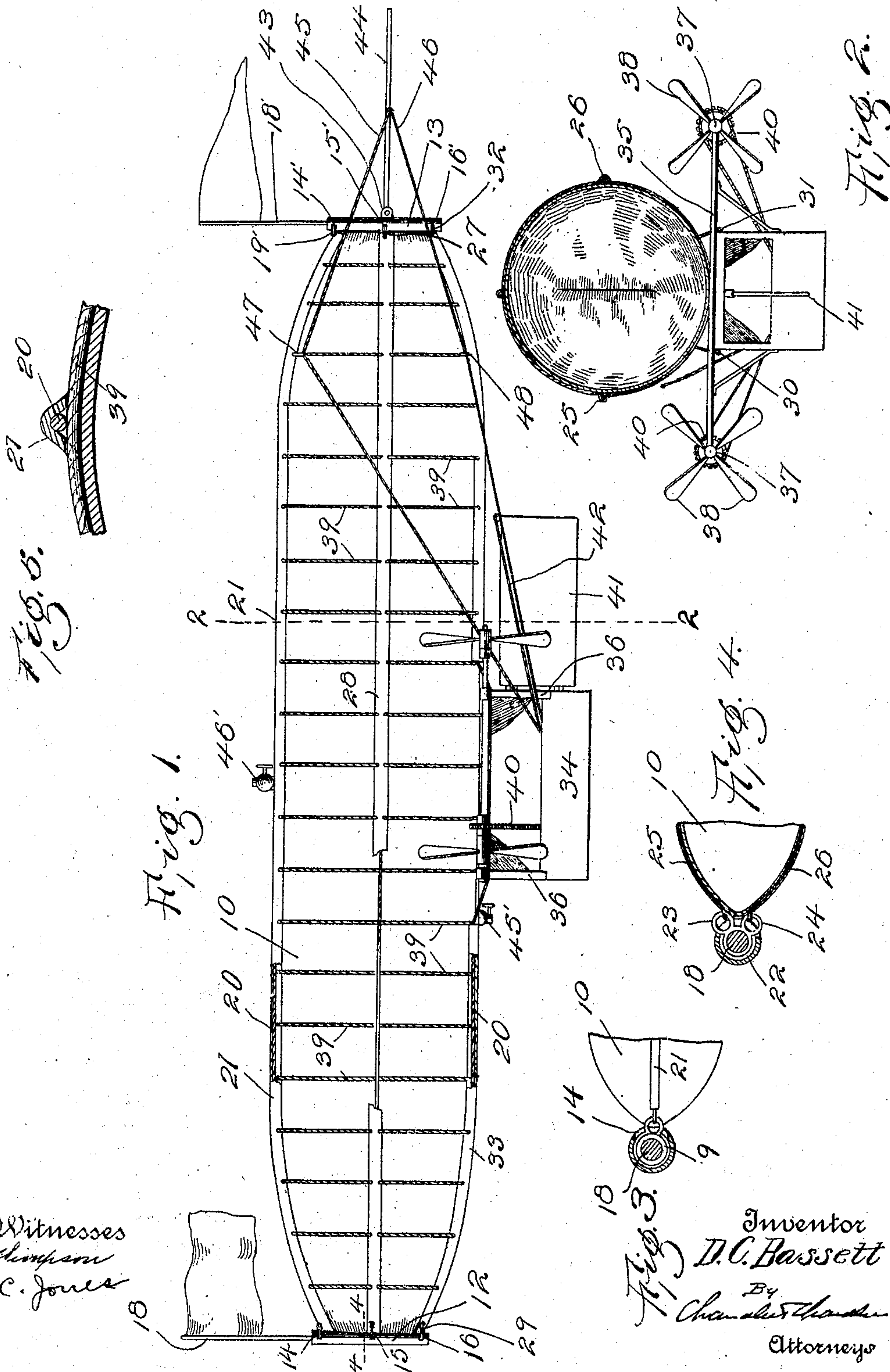


No. 806,049.

PATENTED NOV. 28, 1905.

D. C. BASSETT.  
AIR SHIP.

APPLICATION FILED DEC. 1, 1904.



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# UNITED STATES PATENT OFFICE.

DEWITT C. BASSETT, OF WOONSOCKET, SOUTH DAKOTA.

## AIR-SHIP.

No. 806,049.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed December 1, 1904. Serial No. 235,064.

*To all whom it may concern:*

Be it known that I, DEWITT C. BASSETT, a citizen of the United States, residing at Woonsocket, in the county of Sanborn, State of South Dakota, have invented certain new and useful Improvements in Air-Ships; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to air-ships, and has for its object to provide a ship of this character which will have a maximum buoyancy and rigidity, which may be easily navigated or steered, and which may be propelled at great speed.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation, with parts broken away and illustrating an air-ship embodying the present invention. Fig. 2 is a vertical section on the line 2-2 of Fig. 1. Fig. 3 is a horizontal section through the tubular upright at the forward end of the ship with the adjacent portion of the gas-bag and illustrating the manner of connecting the upper staying-cable. Fig. 4 is a view similar to Fig. 3 on line 4-4 of Fig. 1 and showing the manner of connecting the side staying-cables with the tubular upright or stem. Fig. 5 is a transverse section through the upper portion of the balloon and including the longitudinal cable and the strips.

Referring now to the drawings, there is shown an air-ship comprising an elongated gas-bag 10, of suitable material, the end portions of which are alike and terminate each in a vertical edge 11, against which are disposed the tubular uprights 12 and 13, respectively, which form the stem and the stern-posts for the air-ship.

In the rear face of the stem 12 are formed transverse slots 14, 15, and 16, respectively, and in the slot 14 is disposed one member of a double eye 19, the other member of the double eye extending from the slot rearwardly and directly above the gas-bag. The member of the double eye lying within the stem 12 is let into the face of the stem, so as to be flush therewith and receive in connection with the

stem a flagstaff 18, which serves to prevent withdrawal of the double eye from the stem. The stern-post 13 is similarly slotted, as shown at 14', 15', and 16', and in the slot 14' is engaged one member of a double eye 19', which is fitted in the same manner as the double eye 19 and is held in place by means of the flagstaff 18'. Connected to the outer members of the double eyes 19 and 19' is a cable 20, which extends along the top of the gas-bag 10 and is secured to the latter by means of a strip of fabric 21, disposed thereover and cemented or otherwise attached at its edges to the gas-bag. Engaged in the slot 15 is the middle member 22 of a triple eye in the same manner as the inner member of the eye 19 and through which the flagstaff 18 passes, the members 23 and 24 of the triple eye lying close against the side of the gas-bag and having engaged therewith the stay-cables 25 and 26. In the slot 15' of the stern-post 13 is engaged a triple eye 27, the outer eyes thereof corresponding to the eyes 23 and 24, having the rear ends of the cables 25 and 26 attached. Over the cables 25 and 26 are disposed strips of fabric 28, which are cemented or are otherwise secured to the gas-bag, so that these cables are held against the sides of the gas-bag midway between the top and bottom thereof. In the slot 16 is disposed a second triple eye 29, through which the staff 18 is engaged, the outer eyes thereof corresponding to the eyes 23 and 24, having cables 30 and 31 attached thereto, which are attached in turn to the outer eyes of a triple eye 32, engaged in the slot 16' of the stern-post, the cables 30 and 31 being held against the gas-bag by fabric strips 33, disposed thereover and cemented or otherwise attached to the gas-bag excepting at the central part thereof, where said cables hang away from the gas-bag to connect with the car or cab.

The car or cab is shown at 34 and is made of wicker-work or other suitable light material, and at the front and rear ends thereof are transverse beams 35, having suitable braces 36 and at the outer ends of which are bearings in which are mounted propeller-shafts 37, carrying propeller-wheels 38. The cables 30 and 31 pass beneath the beams 35 and hold the car or cab close against the bottom of the gas-bag.

About the gas-bag at regular intervals are passed cables or ropes 39, the fabric strips 21,



28, and 33 being cut to permit cables 39 to pass beneath the longitudinal stay-cables, the fabric strips serving to prevent these circumscribing cables or ropes from shifting longitudinally of the gas-bag.

Within the car 34 may be arranged any suitable style of motor provided with any desired means for reversing it and for driving the propellers in the same or opposite directions through the medium of their chains or belts 40. To the car or cab 34 is pivoted a rudder 41, designed to swing in a horizontal plane and to which may be attached cords or ropes 42 for operating it to steer the ship to the right or to the left. The stern-post 13 is provided with ears 43, between which is pivoted the forward end of a rudder 44, the rear or free end of which is adapted to move vertically to steer the ship upwardly or downwardly. To shift the rudder 44, cords or ropes 45 and 46 are provided which pass over suitable direction-pulleys 47 and 48, respectively, and thence to the car or cab 34.

For filling the gas-bag a valve 45' is provided in its bottom directly adjacent to the car, and a vent-valve 46' is provided at the top of the gas-bag over the car for operation in the usual manner.

It will be noted that in this construction the stem and stern-posts, together with the stay-cables and the circumscribing-cables, form a normally flexible frame, which when the gas-bag is inflated becomes rigid and serves to hold the gas-bag from bending in any direction. In this way ease of steering is insured.

What is claimed is—

1. An air-ship comprising a gas-bag having vertical edges at its ends, a tubular stem at the forward end of the bag against its vertical edge, a tubular stern-post at the rear end of the bag against its vertical edge, said posts being slotted, eyes engaged in said slots and having members lying exterior thereto, staffs engaged in the stem and stern-posts and through the eyes, and stay-cables connecting the outlying portions of the corresponding eyes.

2. An air-ship comprising a gas-bag having sharp vertical end edges, tubular uprights against the end edges and provided with slots, eyes engaged in the slots and having portions lying exterior thereto, staffs engaged in the uprights and through the eyes, cables extending longitudinally of the gas-bag and connecting the outlying portions of the corresponding eyes, strips secured over the cables to the gas-bag, circumscribing-cables around the gas-bag and passed beneath the longitudinal cables, a cab having transverse end beams beneath which certain of the longitudinal cables are passed, shafts journaled at the ends of the beams, propellers carried by the shafts, means for rotating the shafts, and means for steering the ship.

In testimony whereof I affix my signature in presence of two witnesses.

DEWITT C. BASSETT.

Witnesses:

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