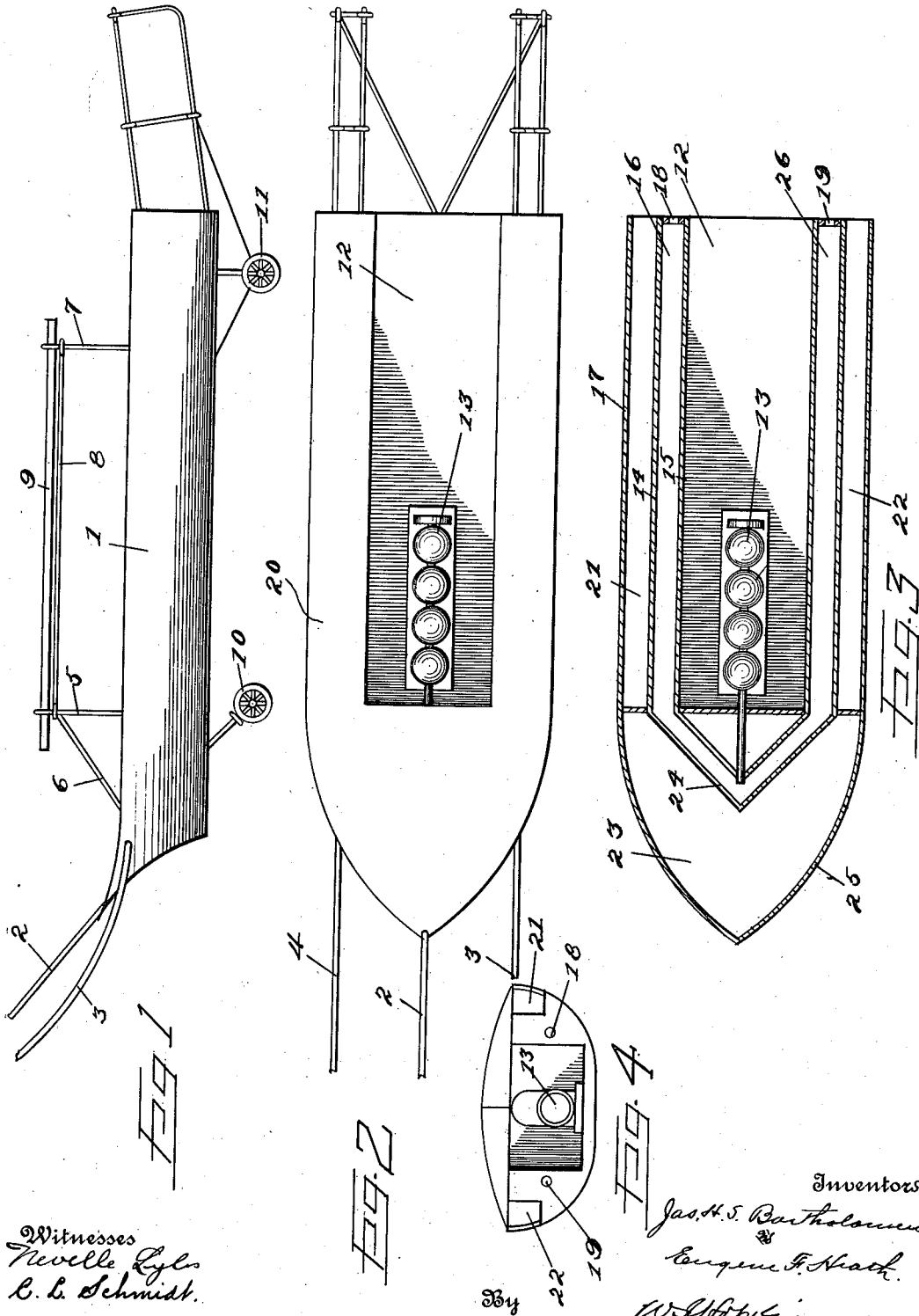


J. H. S. BARTHOLOMEW & E. F. HEATH.
 BOAT, CAR, OR CARRIAGE.
 APPLICATION FILED DEC. 19, 1911.

1,046,721.

Patented Dec. 10, 1912.



Witnesses
 Neville Lyle
 C. L. Schmitt.

Inventors
 Jas. H. S. Bartholomew
 &
 Eugene F. Heath.
 W. J. Hopkin
 Attorney

UNITED STATES PATENT OFFICE.

JAMES H. S. BARTHOLOMEW, OF OCCIDENTAL, AND EUGENE F. HEATH, OF SANTA ROSA,
CALIFORNIA.

BOAT, CAR, OR CARRIAGE.

1,046,721.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed December 19, 1911. Serial No. 666,856.

To all whom it may concern:

Be it known that we, JAMES H. S. BARTHOLOMEW and EUGENE F. HEATH, citizens of the United States, residing at 5 Occidental, in the county of Sonoma and State of California, and Santa Rosa, in the county of Sonoma and State of California, respectively, have invented certain new and useful Improvements in Boats, 10 Cars, or Carriages, of which the following is a specification.

This invention relates to cars or carriages in the form of a boat, to be attached to and suspended from the under side of 15 aeroplanes.

The boat may be built of any suitable material and has a compartment extending around its two sides and one end thereof for the circulation of the hot exhaust gases 20 from the engine, for the purpose of supplying heat to prevent oils, etc., from chilling and for the further purpose of supplying heat for the operator at high altitudes. The exhaust outlet from these chambers is 25 located in the stern of the boat and thereby aids more or less in the propulsion of the aeroplane while in flight.

The boat is so constructed as to support the aeroplane in an up-right position, 30 when the same is placed or descends upon the surface of a body of water.

The object of attaching a boat of this character to an aeroplane is for its use in the saving of life in cases of accident at sea. 35 It is more particularly intended for use along the coast for life saving stations.

Further objects and advantages of the invention will be set forth in the detailed description which now follows:

40 Figure 1 is a side elevation of a boat or car constructed in accordance with our invention. Fig. 2 is a plan view of the boat or car. Fig. 3 is a horizontal view of the boat or car. Fig. 4 is an end view of the 45 boat or car.

Like numerals designate corresponding parts in all of the figures of the drawings.

Referring to the drawings, numeral 1 designates the outer side of the boat. The

boat is supplied with up-rights or standards 50 2, 3, 4, 5, 6 and 7, for attaching it to an aeroplane not shown. The up-rights 5 and 7 are held rigid by spacing bar 8. A horizontal bar 9 is suspended from the under side of the aeroplane for direct support of 55 the boat. The body portion of the boat is supplied with wheels 10 and 11 for use when it is resting on the ground. The body of the boat is also supplied with a cock-pit 12, for the reception of an engine 13. A deck 60 20 surrounds the boat. Compartments 21 and 22, formed by walls 14 and 17 surround the two sides of the boat, and compartment 23, formed by walls 14 and 25 encircles the bow of the boat. The chamber 65 16 is formed by walls 14 and 15. The outlets for the final exhaust gases are located in the stern of the boat at 18 and 19. It is to be understood that the invention is not limited to the precise construction herein set 70 forth, but includes in its purview such changes as may be made within the scope of the appended claim.

Having now fully described our invention, what we claim is: 75

In a boat, car or carriage having an insulated compartment extending along two sides and across one end thereof for the reception of heated gases with an outer compartment running parallel thereto for 80 the more perfect conservation of the heat; means for conducting to the first aforesaid compartment, heated gases and orifices at the rear end of said compartment for the discharge of said gases thereby aiding in 85 the propulsion of the said boat, car or carriage.

In testimony whereof we affix our signatures, in the presence of two witnesses.

JAMES H. S. BARTHOLOMEW.
EUGENE F. HEATH.

Witnesses as to James H. S. Bartholomew:

H. S. BARTHOLOMEW,
S. B. BARTHOLOMEW.

Witnesses as to Eugene F. Heath:

JOSEPH DRUT,
Mrs. A. D. LUND.