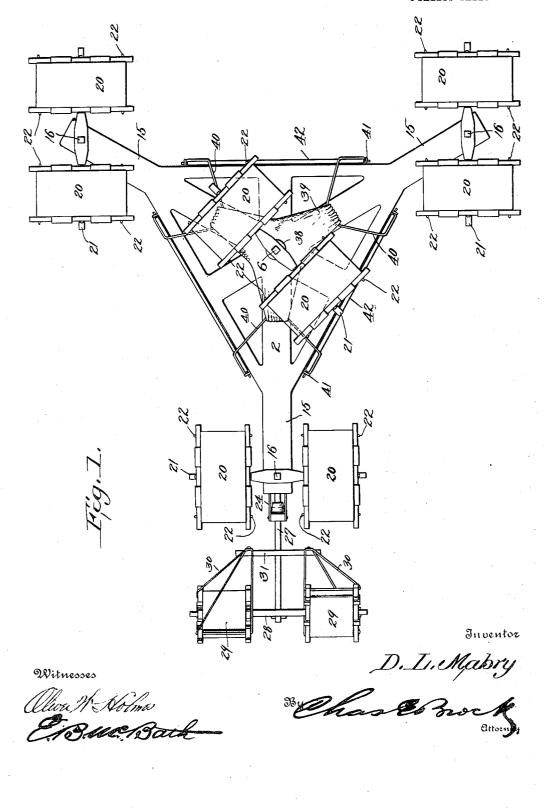
# D. L. MABRY. AEROMOBILE. APPLICATION FILED JULY 22, 1911.

1,046,820.

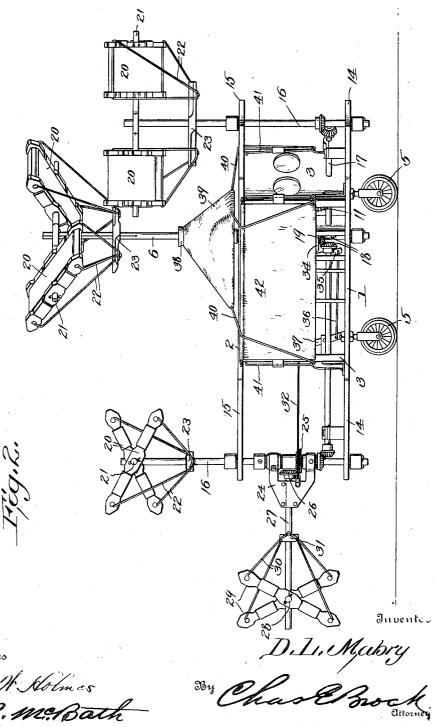
Patented Dec. 10, 1912. 4 SHEETS-SHEET 1.



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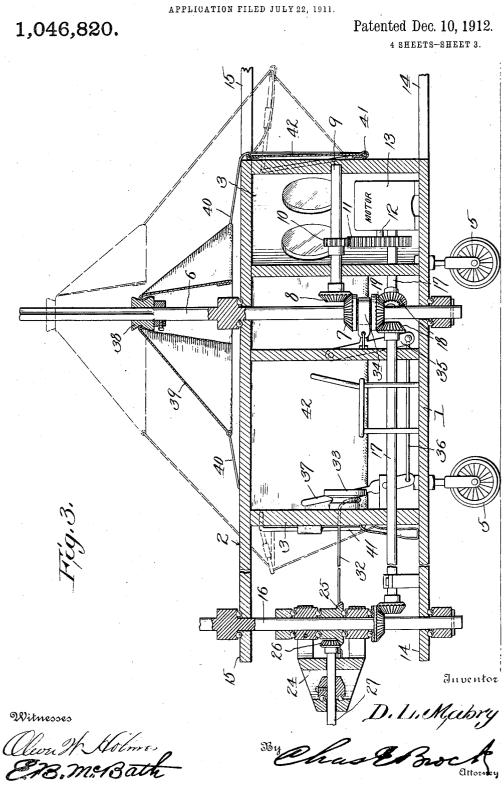
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Patented Dec. 10, 1912 4 SHEETS-SHEET 2.

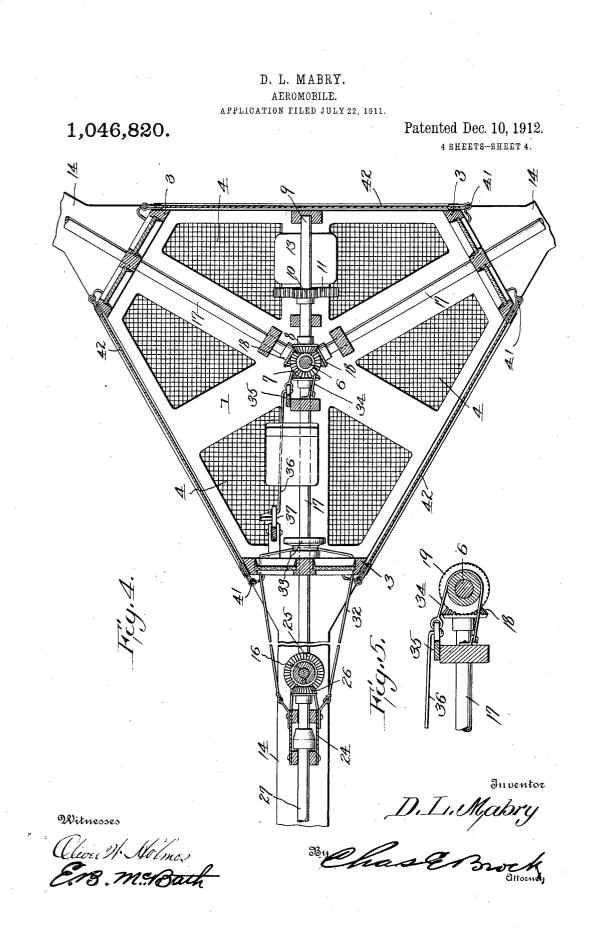


Witnesses

Alwith Kolmes E13. M.Bath



D. L. MABRY. AEROMOBILE.



# UNITED STATES PATENT OFFICE.

DAVIS L. MABRY, OF IDABEL, OKLAHOMA, ASSIGNOE OF ONE-THIED TO O. W. WRIGHT, OF OAKLAND, OKLAHOMA, AND ONE-THIED TO JOHN R. WRIGHT, OF DETROIT, TEXAS.

# AEROMOBILE.

## 1,046,820.

## Specification of Letters Patent.

## **Patented Dec. 10, 1912.**

Application filed July 22, 1911. Serial No. 640,028.

#### To all whom it may concern:

Be it known that I, DAVIS L. MABRY, a citizen of the United States, residing at Idabel, in the county of McCurtain and 5 State of Oklahoma, have invented a new and useful Improvement in Aeromobiles, of which the following is a specification.

This invention relates to an aeromobile, which is designed to carry a large number 10 of passengers and which is provided in addition to the usual lifting and steering planes with an attachment adapted to operate after the manner of a parachute, thereby increasing the safety of the device.

15 The invention also consists of the novel features of construction hereinafter described, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a plan view of the device, certain parts being omitted. Fig. 2 is a side elevation, seats being omitted. Fig. 3 is an enlarged, central, vertical section. Fig. 4 is a horizontal section through the body portion of the device, the passenger seats being formitted. Fig. 5 is a detail sectional view illustrating a frictional brake band.

In constructing the device, I employ two parallel skeleton frames 1 and 2, which are substantially triangular in outline and ar-<sup>30</sup> ranged one above the other. Adjacent their corners these frames are provided with suitable vertical walls or braces 3. The body inclosed by the frames 1 and 2 and the vertical braces 3 forms a triangular box-like de-<sup>15</sup> vice which forms the central body portion of the aeroplane and carries the engine, most of the operating machinery, and provides seating room for the operator and passen-gers. The lower frame 1, forms the floor 10 of the device, the open spaces therein being closed by a suitable wire net work 4. The body portion above described is provided with suitable wheels 5 of the bicycle type. Mounted centrally in this body portion and 15 provided with suitable ball bearings is a vertical shaft 6, provided with a beveled gear 7, which meshes with a beveled gear 8 carried by a drive shaft 9. This shaft is provided with a small gear 10, which meshes <sup>10</sup> with a large gear 11, carried by a shaft 12, of a suitable motor 13.

From the corners of the body portion extend upper and lower parallel arms 14, and 15, said arms being respectively extensions <sup>i5</sup> of the frames 1 and 2. In the outer por-

tions of these arms are rotatably mounted vertical shafts 16, said shafts being of less height than the central shaft 6. The shafts 16, are all driven by horizontally arranged shafts 17, which at their inner ends are pro- 60 vided with beveled gears 18, which mesh with a beveled gear 19, carried by the shaft 6.

It will be obvious therefore that all four of the shafts heretofore mentioned will be 65 rotated in unison from the motor 13, each of the shafts carries a pair of adjustable and normally opposite inclined planes 20, said planes being rectangular in outline and being mounted upon horizontally arranged 70 arms 21. These planes are held in their adjusted positions by means of suitable cords or wires 22 connected to the planes and to lower cross arms 23 also carried by said vertical shafts. 75

It will be obvious that as the shafts are rotated the inclined planes will rotate with them. All of the shafts and planes are substantially alike in construction but the shaft at the front corner is fitted with a suitable 80 horizontally swinging bracket 24, carried by said shaft upon suitable ball bearings and this shaft carries also a bevel gear 25, which meshes with a bevel gear 26, carried by the inner end of a horizontally arranged and <sup>85</sup> forwardly extending shaft 27, which is mounted in suitable bearings formed in the bracket 24. This shaft like the vertical shafts is also provided with a cross arm 28, upon which are mounted obliquely and op- 90 positely disposed rectangular planes 29, held in position by wires or cords 30, se-cured to a cross arm 31. These last mentioned planes form the steering planes and the bracket 24 is adapted to be swung in a 95horizontal plane by means of a cable 32, which winds upon a suitable drum 33, which drum forms a steering wheel operating similar to those employed in the handling of rudders, the drum or wheel being manually 100 operated. In order to slacken speed of rotation of the shafts a friction brake 34 is provided for the central shaft 6, said brake being operated through the medium of a pivoted brake rod 35, link 36 and lever 37. 105

Hinged frames 41 are carried by the sides of the body portion and the said frames are covered with cloth or canvas as shown at 42, which serve as both awnings, as planes, when they are in raised position and as parts of 110

the parachute device. This latter consists | in a collar 38 loosely mounted upon the shaft 6 and to which a fabric parachute device 39 is attached. The edges of this fab-5 ric are connected by suitable cords 40 to the hinged frames 41 so that as the machine descends and the parachute 39 opens up and the collar 38 rises upon the shaft  $\bar{6}$ , the hinged frames will be opened thus bringing 10 the awnings or covering 37 into use for the purpose of checking the descent. It will of course be understood that suit-

able seats may be provided for passengers and these may be arranged in any desired

15 manner.

What I claim is:

1. A device of the kind described comprising a box like structure, a plurality of vertical shafts one of said shafts being ar-20 ranged centrally with respect to the said box like structure, means for rotating said

shafts, inclined adjustable planes carried by said shafts and rotating with them, a collar loosely carried by the central shaft, a parachute carried thereby, hinged frames car-25 ried by the said box structure, and means connecting said frames with the edges of the parachute, whereby said frames are elevated as the parachute opens.

2. The combination with a device of the  $_{30}$ kind described having a central vertical shaft, of a collar loosely mounted on said shaft, a parachute carried by said collar, hinged frames carried by the body portion of the device, and cords connecting said 35 frames with the free edges of the parachute, as and for the purpose set forth.

#### DAVIS L. MABRY.

Witnesses: A. P. BLACK,

H. M. NORRIS.