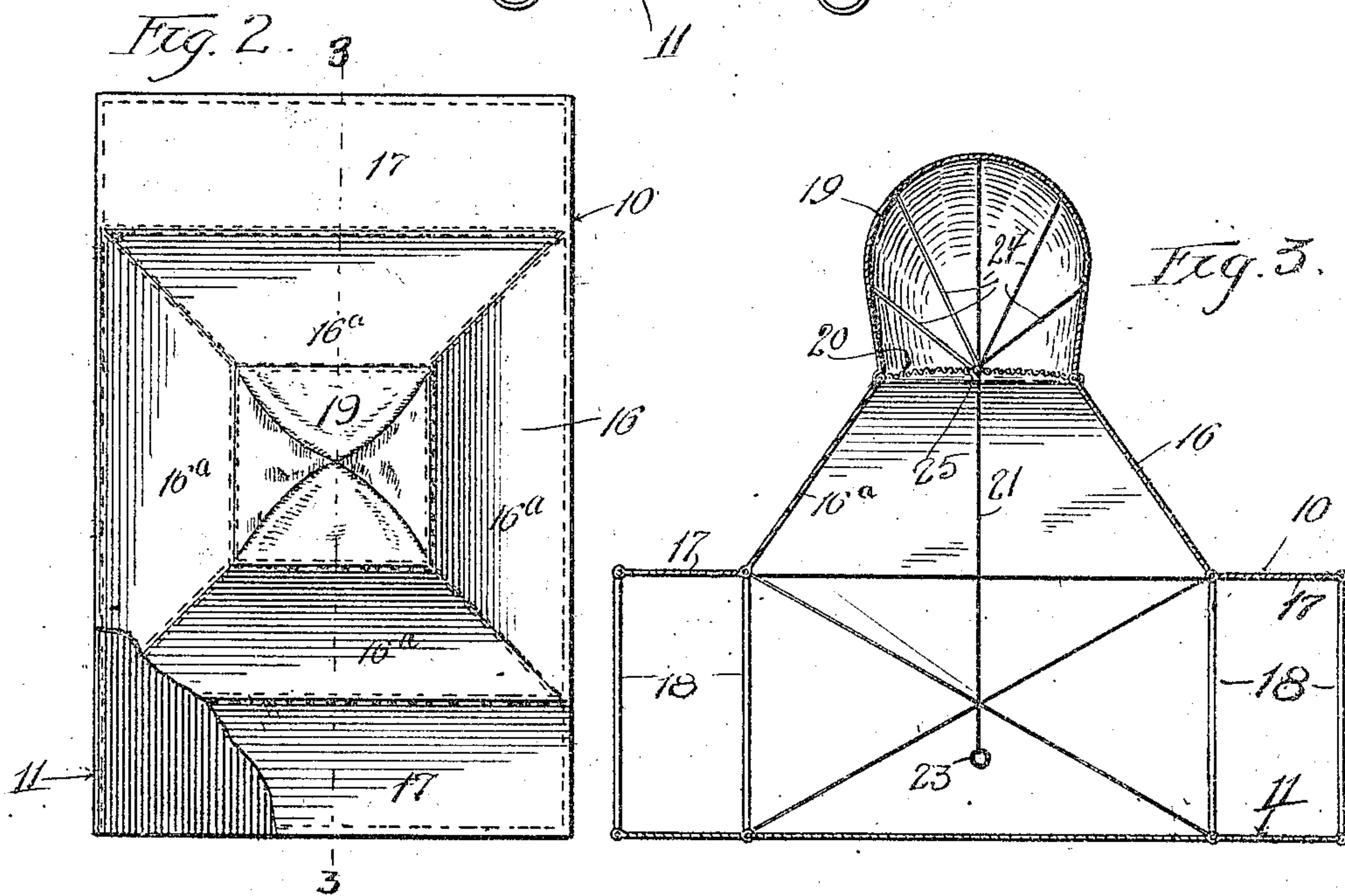
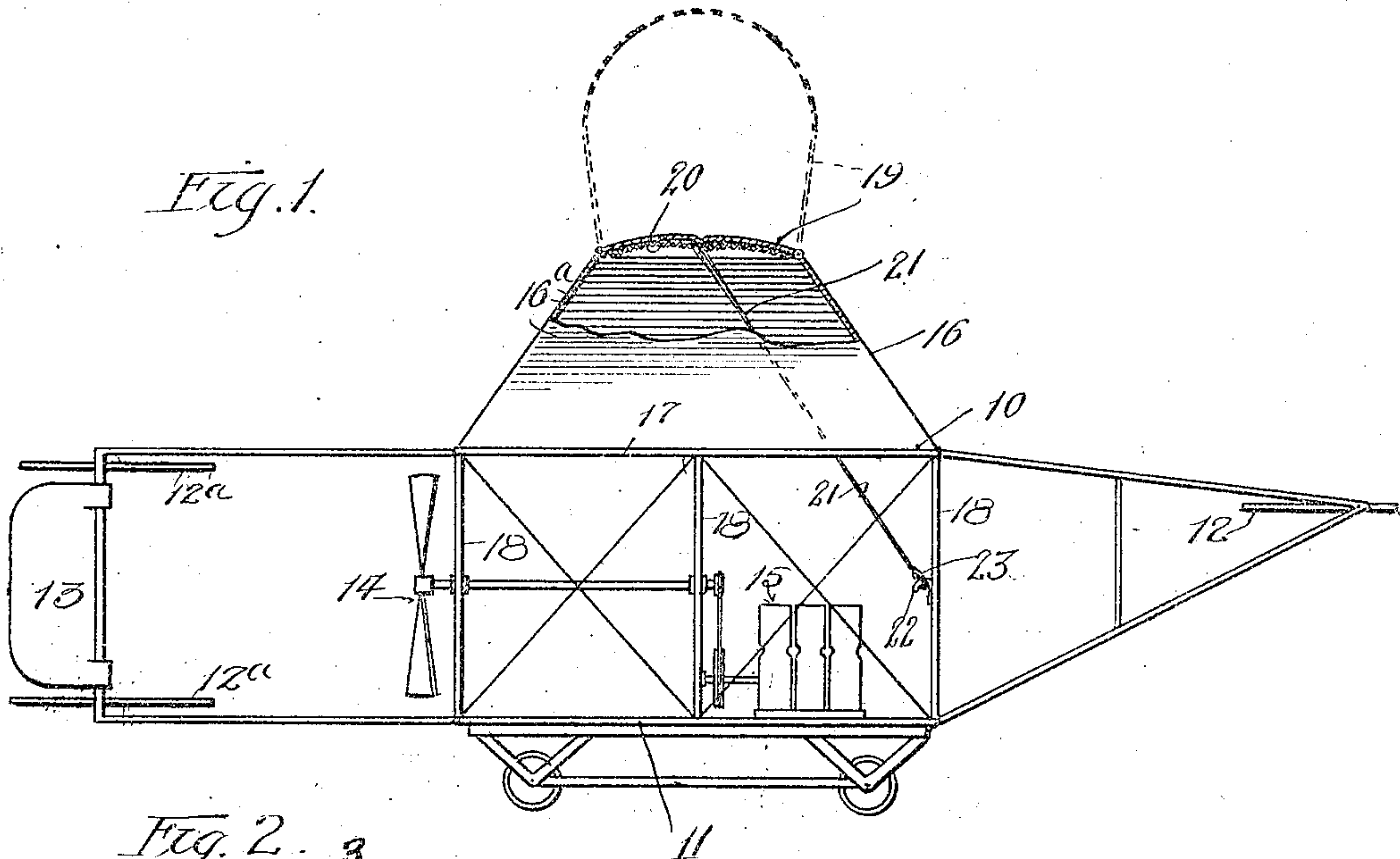


W. W. GREEN.
FLYING MACHINE.
APPLICATION FILED JAN. 16, 1911.

999,448.

Patented Aug. 1, 1911.



Witnesses:
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His Attorney

UNITED STATES PATENT OFFICE.

WILLIAM W. GREEN, OF NILES, MICHIGAN.

FLYING-MACHINE.

999,448.

Specification of Letters Patent.

Patented Aug. 1, 1911.

Application filed January 16, 1911. Serial No. 602,758.

To all whom it may concern:

Be it known that I, WILLIAM W. GREEN, a citizen of the United States, residing at Niles, in the county of Berrien and State of Michigan, have invented new and useful Improvements in Flying-Machines, of which the following is a specification.

This invention relates to flying machines of that class commonly known as aeroplanes, wherein one or more horizontal planes and a suitably driven propeller are employed for effecting an air sustained flight.

This invention has reference more particularly to means for insuring a comparatively safe landing whenever the machine or the driving mechanism thereof become injured or inoperative.

To such ends this invention consists in an aeroplane, having associated therewith or forming a part thereof, a parachute mechanism normally acting as a part of one plane, but capable of instant adjustment, whereby a parachute-like device results therefrom, capable of effectively breaking the fall of the machine to insure a safe landing.

The invention consists in the several novel features of construction, combination and arrangement of parts hereinafter described and claimed.

In the drawings furnished herewith: Figure 1 is a skeleton view of an aeroplane embodying my invention, the view being partly in side elevation and partly in central longitudinal section, Fig. 2 is a plan of the main planes and Fig. 3 is a vertical cross section through said planes, showing the parachute-like extension unfolded.

Referring to said drawings, the machine will be seen to comprise an aeroplane having one or more planes, 10, 11, an elevator or horizontal rudder 12, balancing planes 12^a, a vertical rudder 13, a propeller 14, and a motor 15, operatively connected with said propeller. The two planes are connected by braced uprights 18. With the exception of the upper plane, all of the parts above referred to may be of any of the well known forms of construction and arrangement employed in devices of this class.

As is usual, the planes 10, 11, are approximately rectangular in form, their greater length extending cross-wise of the machine. The upper plane comprises a central dome shaped portion 16, and two horizontal, lat-

erally extending wings 17, 17, that project out from the base of the dome. The sides 16^a, of the dome taper upward from the base and are braced and stretched taut in the manner of the other planes or wings. The dome is open at its base, and closed at its upper end by a foldable parachute like extension 19 which is secured to the sides 16^a, at their upper edges, and held down in an approximately flat condition at the top of the dome. Preferably, a wire mesh support 20, is secured to the dome, at its upper end, upon which the extension may be snugly drawn down as by a cord or other connecting device 21, running to a convenient point near the driver's position, and detachably secured to some part of the machine, as for instance by a hook 22, upon an upright and a ring or loop 23, upon the cord or connecting device. Said cord is connected to the extension or parachute member 19, in such manner that the latter may be held down on the wire mesh support in a substantially flat folded condition, and one means for accomplishing this result may consist in a plurality of cords 24, attached to the main cord and running to different points on the extension 19, said short cords running through a central opening 25, in the support 20.

Many forms of constructions will readily occur to those skilled in the art, for handling the parachute-like extension, but the means shown forms a simple one for the purpose of illustration.

In operation the aeroplane is manipulated as usual, the planes sustaining the load in the air, when driven forward by the propeller. In case of accident to the structure or the stopping of the motor, the extension or parachute member is released from its folded condition by unfastening the cord or connecting device 21, from the hook 22. The extension unfolds and fills with air and together with the dome, acts in the manner of a parachute, retarding the speed of the fall.

The dome and parachute-like extension being located above the main portion of the machine, the latter is suspended from the dome and parachute and maintained in a substantially upright position while descending.

During flight the dome remains filled with air thus serving to buoy up the machine, and

the sides of the dome being tapered and receding from the base, offer but little resistance to the air.

5 I realize that various alterations and modifications of this device are possible without departing from the spirit of my invention, and I do not therefore desire to limit myself to the exact form of construction shown and described.

10 I claim as new and desire to secure by Letters Patent:

1. In a flying machine, a plane having a central, open bottomed dome closed at its top by a foldable extension, which is adapted to be unfolded from its folded condition and means for normally holding said extension in folded condition.

15 2. In a flying machine, a central upwardly tapering dome, open at the bottom and closed at the top by a foldable extension, capable of being unfolded when released from its folded condition, means for normally holding said extension in a folded condition, and lateral, horizontal side wings projecting out from the base of the dome.

25 3. In a flying machine, a central dome, open at the bottom, an open-work support at the top of the dome, a parachute member secured to the top of the dome and arranged to be normally folded down upon said support, but capable of being unfolded when released from said folded condition, means for holding said parachute member in folded

condition, and lateral, horizontal side wings projecting out from said dome.

4. In a flying machine, the combination of two substantially rectangular plane members arranged one above the other, and connecting uprights there-between, the upper member comprising a central dome open at the bottom and closed at the top by a foldable parachute-like extension, normally held in folded position but capable of being unfolded when released from said folded condition, and lateral horizontal side wings projecting from the base of said dome.

5. In a flying machine, the combination of two substantially rectangular plane members arranged one above the other, and connecting uprights there-between, the upper member comprising a central, upwardly tapering, rectangular dome, open at the bottom and closed at the top by a foldable parachute-like extension, normally held in folded position, but capable of being unfolded when released from said folded condition, a wire mesh support for said extension, and lateral horizontal side wings projecting from the base of said dome.

In witness whereof, I have hereunto set my hand this 12th day of January 1911, at Chicago, Cook county, Illinois.

WILLIAM W. GREEN.

Witnesses:

A. J. BROWN,
T. J. FLANAGAN.