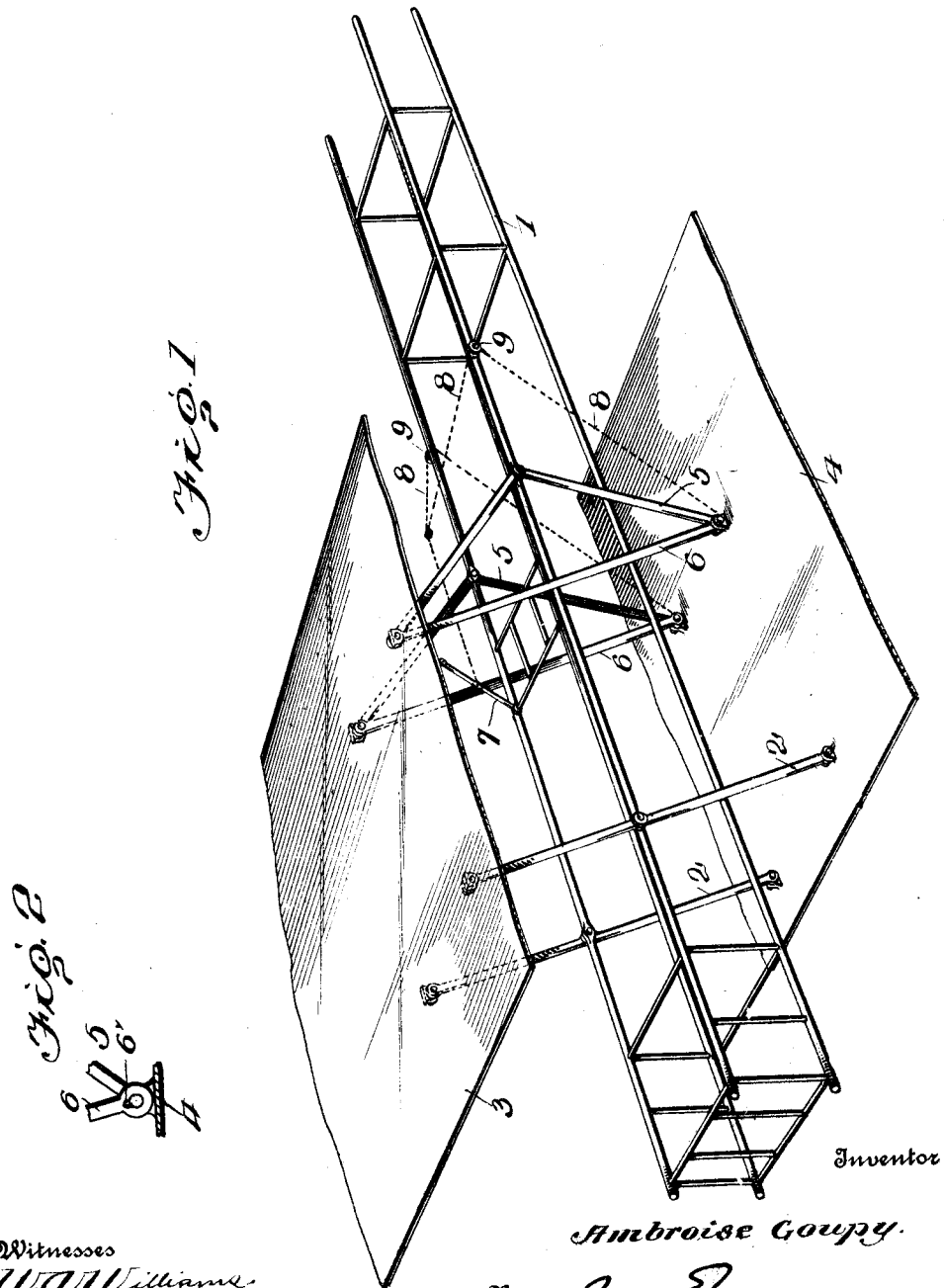


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AEROPLANE.  
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1,065,799.

Patented June 24, 1913.



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# UNITED STATES PATENT OFFICE.

AMBROISE GOUPY, OF PARIS, FRANCE.

AEROPLANE.

1,065,799.

Specification of Letters Patent.

Patented June 24, 1913.

Application filed May 10, 1911. Serial No. 626,271.

*To all whom it may concern:*

Be it known that I, AMBROISE GOUPY, a citizen of the French Republic, and resident of Paris, France, have invented certain new and useful Improvements in Aeroplanes, of which the following is a description.

With the above object in view, the aeroplane includes a frame with planes pivotally connected thereto and located at equal distances from the frame. The said planes are normally disposed one above the other and means is provided for moving the planes edgewise with relation to the frame so that their end portions may be projected beyond each other and so that the planes may be disposed at desired angles with relation to the longitudinal dimension of the frame.

In the accompanying drawing Figure 1 is a perspective view of the aeroplane made in accord with my invention, Fig. 2 is a detail section showing a connection between the lever and the lower plane.

Corresponding and like parts are referred to in the following description and indicated in the accompanying drawing by the same reference characters.

The aeroplane includes a frame 1 to which are pivotally attached arms 2. The arms 2 extend transversely and approximately vertical across the frame 1. An upper plane 3 is pivoted to the upper ends of the arms 2 and a lower plane 4 is pivoted to the lower ends of the said arms. These planes are approximately at equal distances from the points of pivotal connection between the arms 2 and the frame 1. Arms 5 are pivotally connected at their inner ends to the frame 1 and at their outer ends are pivotally connected with the planes 3 and 4 respectively. Arms 6 are pivotally connected at their ends to the planes 3 and 4. The points of pivot of the arms 2—2 to the frame 1 are in vertical alinement with the points of the pivots between the ends of said arms and the planes 3 and 4 when the planes are in normal position. Any suitable means may be provided for shifting the planes 3 and 4 edgewise and as shown

in the drawing such a means includes a lever 7, which is pivotally mounted upon the frame 1, and which is operatively connected by means of cables 8 with the lowermost frame 4. The said cables being trained around pulleys 9 journaled upon the frame 1. Therefore it is obvious that by swinging the lever 7 the cables 8 will be moved longitudinally whereby the lowermost plane 4 will be moved edgewise under the frame 1. This swings the arms 2, 6 and 5 whereby the uppermost plane 3 is moved edgewise in the opposite direction from that in which the plane 4 is moved. Therefore it will be seen that the planes 3 and 4 may be drawn toward each other and the edge of one plane may be moved in advance of the edge of the other plane. While the planes always remain parallel to each other, the said planes as they are moved edgewise as above stated vary in their angular relation to the frame 1, for the reason that the arms 5 are not in alinement with each other, while the end portions of the arms 2 are in alinement with each other. The relative location of the planes when adjusted from the normal to the abnormal, or operative, position, is due to the location of the pivotal points of the arms, and because of there being a slight lost motion between the arms 6, and their pivots, as indicated at 6\* the angle of the planes will vary when the arms are rocked from their normal position.

Having described the invention, what is claimed as new is.

An aeroplane comprising a frame, upper and lower planes normally parallel with each other, arms pivoted to the frame and the planes, pivots connecting the arms to the frame and to the planes the said pivots being in alinement, other arms pivoted to the frame and the planes, pivots connecting said other arms to the planes and to the frame, the pivots between the arms and the planes fitting loosely in the arms to provide a slight lost motion, and the pivots between said second mentioned arms and the frame being located out of alinement with the

pivots between said arms and the planes,  
and means for operating the planes and  
levers whereby the planes are moved edge-  
wise so that their opposite end portions are  
5 projected beyond each other and assume an  
angular relation with each other and the  
frame.

In testimony whereof I have hereunto  
set my hand in presence of witnesses.

AMBROISE GOUPY.

Witnesses:

EDMOND CAILLE,

GASTON PETTIOUR.

H. C. COXE.