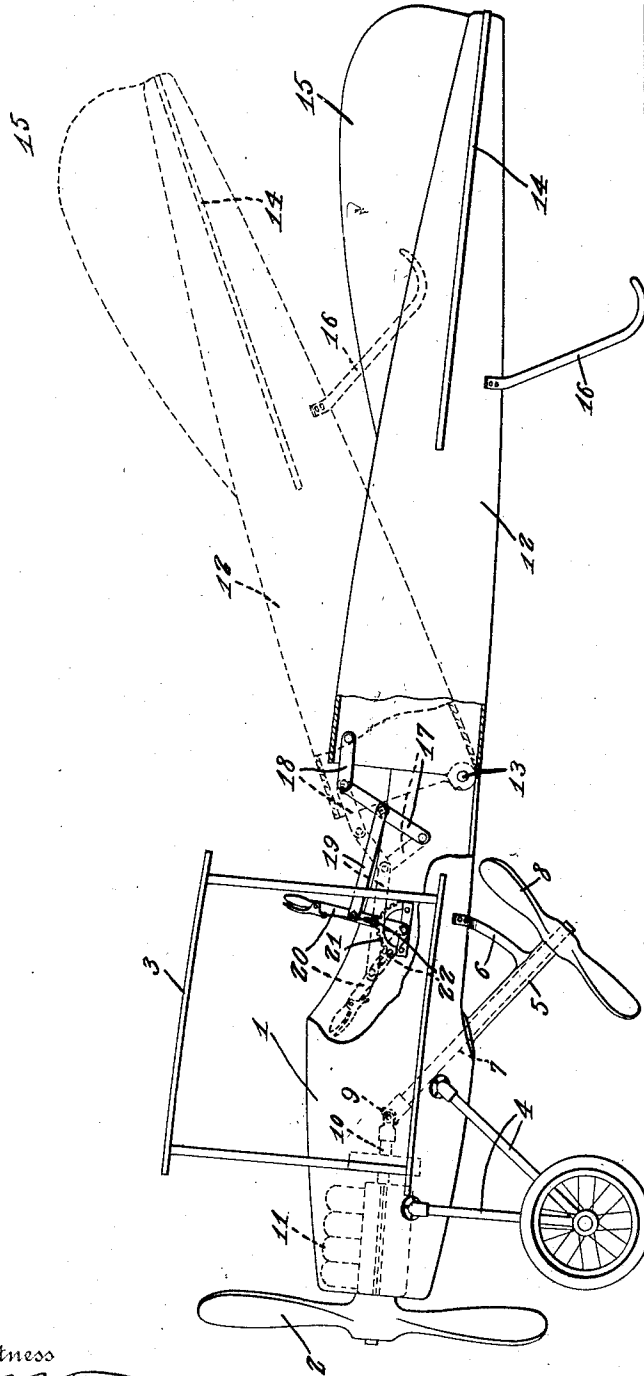


A. CARTWRIGHT.
AEROPLANE.
APPLICATION FILED JAN. 22, 1919.

1,329,368.

Patented Feb. 3, 1920.



Witness

J. R. Dimes

Inventor
A. Cartwright,

By *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

ANDREW CARTWRIGHT, OF BLANKET, TEXAS.

AEROPLANE.

1,329,368.

Specification of Letters Patent.

Patented Feb. 3, 1920.

Application filed January 22, 1919. Serial No. 272,501.

To all whom it may concern:

Be it known that I, ANDREW CARTWRIGHT, a citizen of the United States, residing at Blanket, in the county of Brown and State of Texas, have invented a new and useful Aeroplane, of which the following is a specification.

This invention relates to aeroplanes, one of its objects being to provide means whereby the machine can leave the ground at an abrupt angle, thereby to facilitate starting in wooded localities or wherever there are obstructions that would prevent the ascent of a machine of the ordinary construction.

A further object is to provide a machine having a jointed body under the control of the aviator, there being a supplemental propeller for use in directing the machine in its abrupt ascent.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claim, it being understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as set forth in the appended claim.

In the accompanying drawing, which is a side elevation of the aeroplane, the preferred form of the invention has been shown, the arrangement of the parts relative to each other when the machine is to make an abrupt ascent, being indicated by dotted lines.

Referring to the figures by characters of reference, 1 designates the front portion of the body of the machine, designed to contain the aviator, the engine and the controlling mechanism. The usual propeller 2 is located at the nose of the body and the sustaining places 3 are connected to the section 1, as shown. Running gear 4 is secured to and extends under the section 1 and inclined downwardly and rearwardly from the bottom of section 1 is a sleeve 5 suitably braced, as at 6, and having a shaft 7 journaled therein. A supplemental propeller 8 is secured to the lower end of the shaft 7 while the upper end thereof is connected, by a universal joint 9, to the drive shaft 10 of the engine 11.

Hingedly connected to the rear end of the

section 1 is the rear section 12 of the body, the point of connection being indicated at 13. This rear section carries the tail planes 14 and rudder 15 and also the supporting runner 16.

A lever 17 is pivotally mounted in the rear portion of section 1 and is connected at its upper end to a link 18 attached to the upper portion of the section 12. Another link 19 connects the lever 17 to an operating lever 20 located where it can be reached readily by the aviator and a toothed segment 21 and locking dog 22 are provided for holding the lever and other parts in any positions to which they may be adjusted.

When it is desired to make an abrupt ascent the aviator starts the propellers and then shifts the lever 20 so as to change the angle between the front and rear sections of the body as indicated by dotted lines. The propeller 8 exerts an upward thrust upon the machine and assists the propeller 2 both in pulling the machine forward and in elevating it. The propeller 8 need only be used when the abrupt ascent is being made. By making the body jointed as shown, the short landing of the machine can be effected.

What is claimed is:—

An aeroplane including a body having front and rear sections hingedly connected at the bottom, sustaining blades connected to the front section, a propeller carried by and in front of said section, a motor carried by the front section, a downwardly and rearwardly inclined propeller shaft carried by the front section and extending therebelow, a propeller on said inclined shaft and supported close to the bottom of the front section adjacent the jointed end thereof, a tail plane upon the rear section, a lever fulcrumed on the front section, a link connected between said lever and the rear section, means for shifting the lever to change the relative angular positions of the sections, and means for locking said sections in any position to which they may be adjusted angularly.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ANDREW CARTWRIGHT.

Witnesses:

W. J. BOLER,
OAK LEWIS.