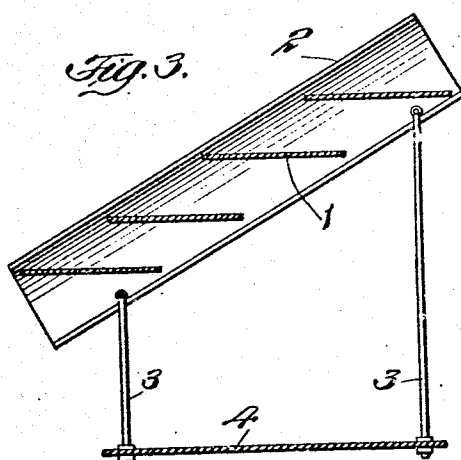
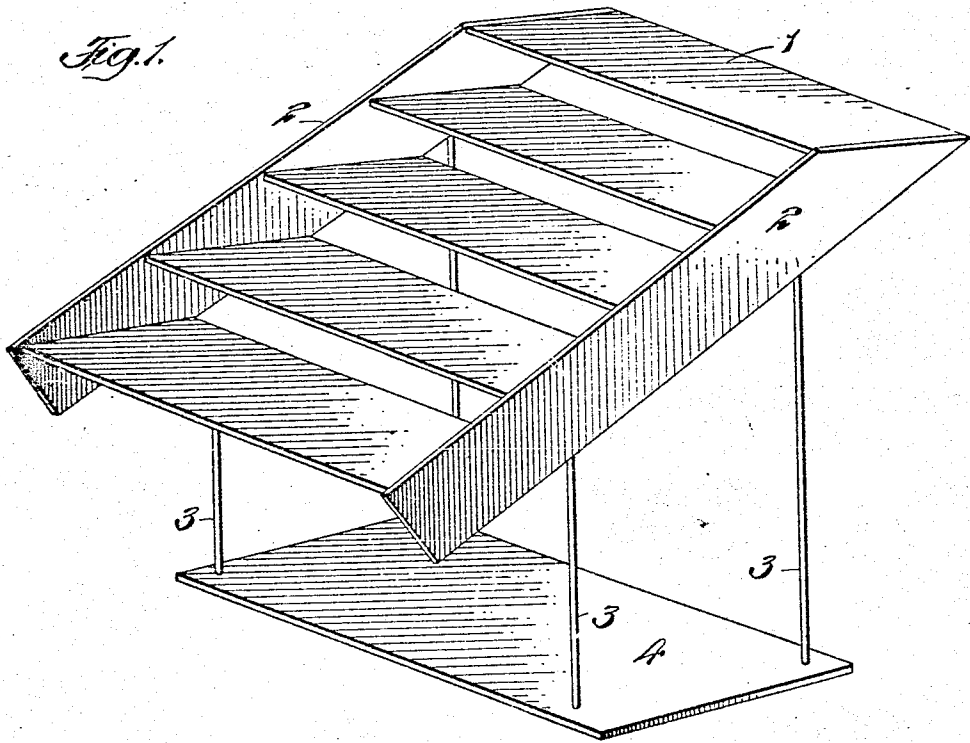


J. CHRISTIANSEN.
AEROPLANE.
APPLICATION FILED OCT. 27, 1909.

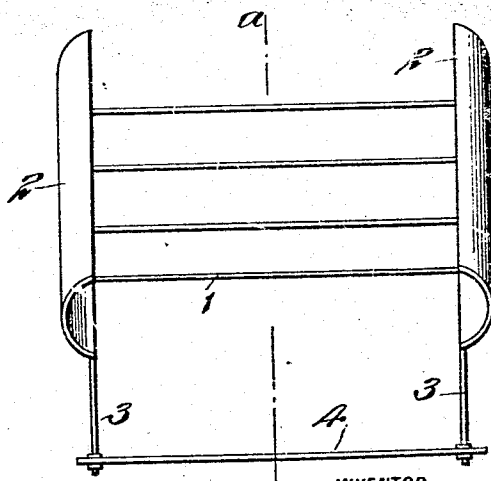
996,456.

Patented June 27, 1911



WITNESSES:

Julius Christensen
Notary Public



INVENTOR
Fig. 2. Julius Christensen
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UNITED STATES PATENT OFFICE.

JULIUS CHRISTIANSEN, OF NEW YORK, N. Y.

AEROPLANE.

996,456.

Specification of Letters Patent. Patented June 27, 1911.

Application filed October 27, 1909. Serial No. 524,884.

To all whom it may concern:

Be it known that I, JULIUS CHRISTIANSEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Aeroplanes, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates especially to the construction and arrangement of the planes in aeroplanes, and has for its object the provision of a simple and effective device whereby the compression of the air below the planes is insured and the air cannot escape at the ends of the planes.

To attain the desired end, my invention consists in certain novel and useful combinations or arrangements of parts, and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims. In the drawings, Figure 1 is a perspective view of an aeroplane embodying my invention. Fig. 2 is a modification of the arrangement illustrated in Fig. 1. Fig. 3 is a vertical sectional view at line *a-a* of Fig. 2.

Like numerals of reference, wherever they occur, indicate corresponding parts in all the figures.

1 are planes made of any approved material the front plane being the lower one.

2 are side-pieces to which the planes are connected and secured. In Fig. 1 I have shown the side-pieces as flat and extending at right angles to the planes. In Figs. 2 and 3 the side-pieces are shown as semi-cylindrical, the concave sides being inside, or next to the planes.

3 are vertical rods extending downward from the planes and carrying a platform 4 for machinery, operatives, etc.

It will be observed that the planes are located one above the other, the edge of each succeeding plane overhanging the plane below it, an arrangement best calculated to obtain the greatest efficiency of the device.

Any number of planes may be used, of any desired width and length, and the planes may be any proper distance apart, as these details of arrangement may be greatly varied without departing from the spirit of my invention, and it will be found that my improved aeroplane obtains the greatest possible sustaining capacity proportionate to

the surface of the planes, and by reason of the combination with the planes of the side-pieces, the sustaining air is confined and compressed and cannot escape at the ends of the planes.

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is:

1. In an aeroplane, a plurality of planes of any desired widths arranged in series the front one being the lower one each plane extending over the preceding plane not more than one-third the width of the preceding plane in combination with air confining side pieces carried by the planes and extending above and below the same substantially as shown and described.

2. In an aeroplane a plurality of planes of any desired widths arranged in series, the front one being the lower one, each plane extending over the preceding plane, not more than one-third the width of the preceding plane, the distance from one plane to the other plane in vertical directions, not being limited in combination with curved side pieces carried by the planes and extending above and below the same.

3. In an aeroplane or plurality of planes of any desired widths arranged in series the front one being the lower one, each plane extending over the preceding plane not more than one-third the width of the preceding plane in combination with curved side pieces carried by the planes and extending above and below the same, substantially as shown and described.

4. In an aeroplane a plurality of planes of any desired width arranged in series, the front one being the lower one each plane extending over the preceding plane not more than one-third the width of the preceding plane, in combination with air confining side pieces carried by the planes and extending above and below the same.

5. In an aeroplane a plurality of planes of any desired widths arranged in series, the front one being the lower one each plane extending over the preceding plane not more than one-third the width of the preceding plane, the distance from one plane to the other plane in vertical direction not being limited in combination with air confining side pieces carried by the planes and extending above and below the same.

6. In an aeroplane a plurality of planes of any desired width arranged in series

the front one being the lower one, the edge only of each plane extending over the preceding plane, the distance from one plane to the other plane in vertical direction not
5 being limited in combination with outwardly curved side pieces carried by the planes and extending above and below same.

7. In an aeroplane a plurality of planes arranged in series, the front one being the
10 lower one the edge only of each plane ex-

tending over the preceding plane, in combination with curved side pieces carried by the planes and extending above and below same.

In testimony whereof I hereto affix my 15 signature in presence of two witnesses.

JULIUS CHRISTIANSEN.

Witnesses:

ABRAHAM WOLFF,

JACOB J. BOWMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
