H. C. FISK.
STABILIZER FOR AEROPLANES.
APPLICATION FILED FEB. 3, 1913.

1,072,710.

Patented Sept. 9, 1913.

Fig. 1.

Fig. 2.

Henry C. Fisk.

Inventor

Witnesses

U. V. Williams

Lena M. Meyer

By Browne Phelps

Attorneys
To all whom it may concern:

Be it known that I, Henry C. Fisk, a citizen of the United States, residing at Stafford, in the county of Tolland and State of Connecticut, have invented certain new and useful Improvements in Stabilizers for Aeroplanes, of which the following is a specification.

My invention relates to certain new and useful improvements in stabilizers for aeroplanes, and the object of my invention is to provide a device of this character which is adapted to be attached to an aeroplane of any type which may be found desirable, whether the same is a monoplane, a biplane or other construction, and which attachment will operate to keep the machine to which it is attached in its proper position and prevent overturning.

A further object of my invention is to provide a stabilizer which, should the machine be partly overturned for any reason, will cause the same in its descent to right, consequently preventing the dangerous falls which now occur, caused by the machine being tipped either forwardly, backwardly, or sidewise at too great an angle.

With the foregoing and other objects in view, my invention comprises broadly the placing of a plane, preferably of circular or similar outline, which plane is dished, above the supporting plane or planes of the machine.

My invention further consists in certain constructions, combinations and arrangements of parts, the preferred form of which will be first described in connection with the accompanying drawings and then the invention particularly pointed out in the appended claims.

Referring to the drawings wherein the same part is designated by the same reference numeral wherever it occurs, Figure 1 is a front elevation of an outline of a biplane with my invention attached thereto, the same being shown in section; Fig. 2 is a central section taken at right angles to Fig. 1.

5 Designates an aeroplane which is shown as being of the biplane type. It is to be understood however that the particular type of aeroplane forms no part of my invention.

Extending upwardly from the top of the supporting plane of the biplane illustrated are uprights 6 of any suitable height, and 7 are the guys by means of which the uprights 6 are rigidly held against the strains imposed thereon. Secured to the upper ends of the uprights 6 is my stabilizing plane 8. This plane can be constructed out of any suitable materials and in any suitable way, the materials and particular manner of constructing this plane forming no part of my invention. This plane is dished and in the form shown has the flat central portion 9 surrounded by the upwardly and outwardly curved portion 10, the essential part of this stabilizing plane being the upwardly and outwardly curving portion 10, and constructing the plane either circular or oval in form. As this stabilizing plane is located at a distance above the supporting planes and because of the upwardly and outwardly curving sides thereof, it will always tend to keep the machine on an even keel and when the machine departs from this position to return it thereto.

Experiments with my construction have shown that my stabilizer will return an aeroplane to an even keel no matter what position the aeroplane is when it is launched into the air, provided the height at which it is launched is sufficient to give the stabilizing plane time to perform its function.

I realize that considerable variation is possible in the details of construction and arrangement of parts without departing from the spirit of my invention, and I therefore do not intend to limit myself to the specific form shown and described.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. The combination with the supporting plane of an aeroplane, of a stabilizing plane, means for supporting the stabilizing plane above the supporting plane, said stabilizing plane having a central portion surrounded by an upwardly and outwardly extending portion.

2. The combination with the supporting plane of an aeroplane, of a stabilizing plane, means for supporting the stabilizing plane above the supporting plane, said means comprising a plurality of uprights, guys extending from the uprights to the supporting plane, said stabilizing plane comprising a central portion surrounded by an upwardly and outwardly extending portion.

3. The combination with the supporting plane of an aeroplane, of a stabilizing plane, means for supporting the stabilizing plane
above the supporting plane, said stabilizing plane being of circular form and comprising a central portion, and an upwardly and outwardly extending portion surrounding the central portion.

4. The combination with the supporting plane of an aeroplane, of a stabilizing plane, means for supporting the stabilizing plane above the supporting plane, said stabilizing plane comprising a flat central portion surrounded by an upwardly and outwardly extending curved portion.

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

HENRY C. FISK.

Witnesses:

JOHN E. FISK,
FRANCIS M. PHELPS.

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