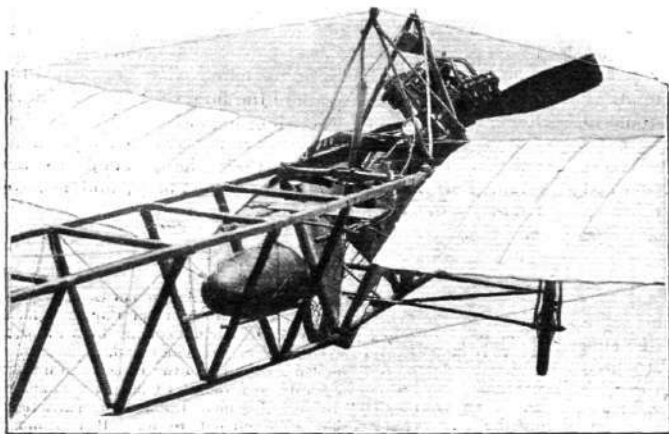


THE MACFIE BRITISH AEROPLANE.

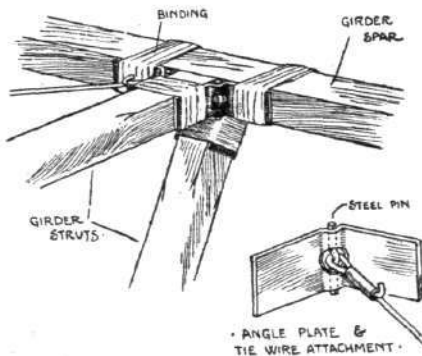
(Concluded from page 154.)

THE skid was specially designed for use on the sand over which the first experimental trials were carried out. It is very light and is provided with a combination of elastic and steel springs, as shown in one of the accom-

panying sketches. The shoe itself is pivoted to a vertical wood column that is free to rotate in its supporting brackets, being rigidly bolted to the frame of the machine, while those behind are each so fastened by a single bolt that they possess a certain amount of hinge action, which is employed for purposes of warping. The details of the attachment of the rear spars to the main frame of the machine is shown in one of the accompanying sketches.



View of the Macfie monoplane, showing the position of the pilot's seat and the overhead frame used in the trussing of the main wings.



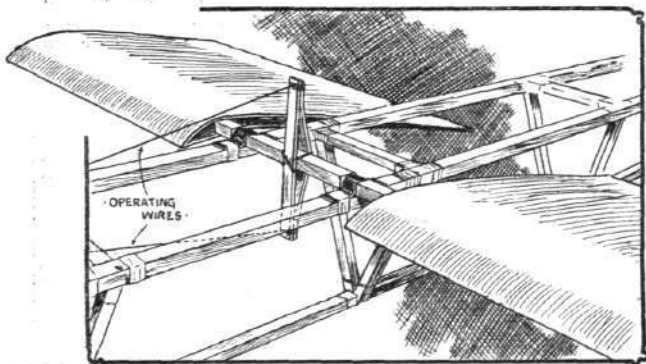
Sketch showing how the joints are made on the Macfie monoplane.

panying sketches. The shoe itself is pivoted to a vertical wood column that is free to rotate in its supporting brackets.

The Wings, Elevator and Rudder.

The wings of the Macfie monoplane have a span of 28 ft. 6 ins., and a chord of 6 ft. 6 ins., which gives an aspect ratio of 4.4. They are set at a dihedral angle and are double surfaced. A feature in connection with their plan form is the removal of their trailing corners for a distance of about 3 ft. from the extremities along the trailing edge.

The ribs are spaced along the spars at intervals of about twelve inches, and each rib consists of a built-up member representing the camber of the wing section. The details of this construction are also shown in an accompanying sketch, where the principal dimensions of the rib are given and also the method by which it has been made as light as possible. Further light is also thrown on these details of construction by an accompanying photograph, which



Sketch showing the mounting of the elevator on the Macfie monoplane.



View showing a portion of the skeleton framework of the elevator on the Macfie monoplane.

The surface material, for which Continental fabric No. 100 B has been used, is laid on a skeleton framework consisting of two main spars and a set of shaped ribs in each wing. The main spars are of I-section, those in front

shows a portion of the skeleton framework of the elevator tail. There are some differences between the actual details of this member and of the main frame, but the same system is followed in both cases. The ribs, it will