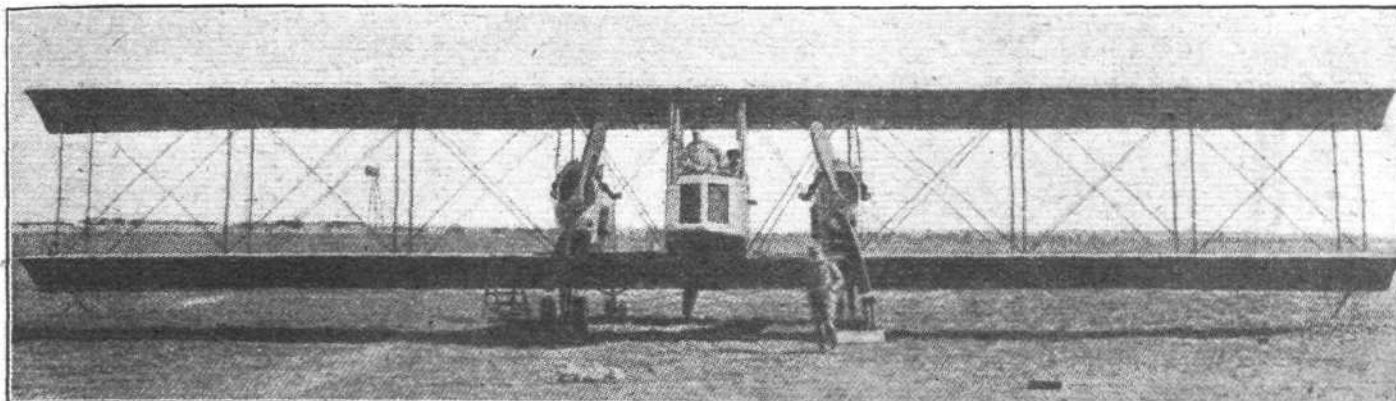


# THE AMERICAN-BUILT CAPRONI BIPLANE

THE Italian Caproni biplane, which was developed during the War, and played a by no means small part in same, was from the first unique on account of its original design, viz., in having two fuselages and a nacelle, each with its own power plant. Not entirely original, perhaps, as regards twin fuselages, for the French Nieuport firm brought out an experimental monoplane having two fuselages, but it was a single-engined machine, and the fuselages merely served as outriggers for the tail. In the Caproni biplanes, which have

parts were systematically eliminated and replaced with parts and materials of American standard types and qualities.

The main planes are built up in five sections, corresponding sections in upper and lower planes being of equal length. The centre section, which measures some 16 ft., carries, on the lower panel, the central nacelle, the two fuselages and the undercarriage, and thus forms a main self-contained unit capable of easy transport within a minimum of space. The intermediate and outer extensions, which measure about



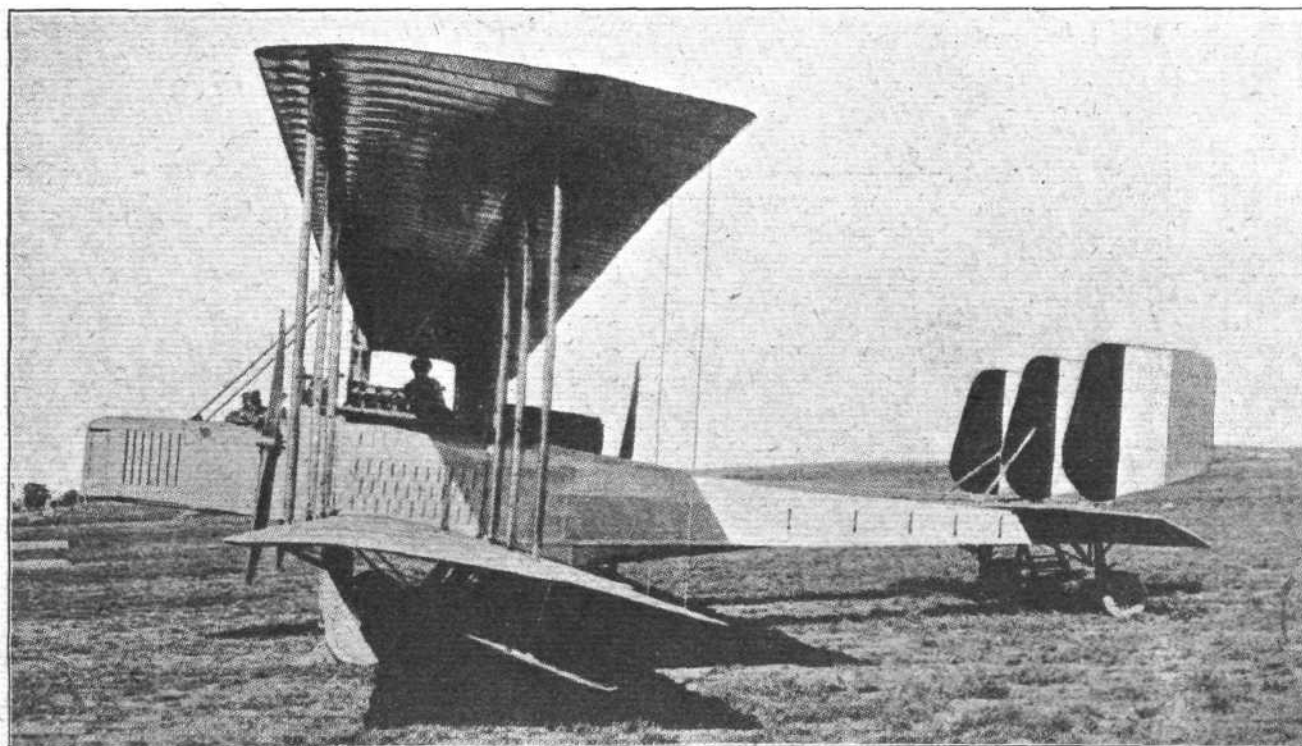
Front view of the American-built Caproni biplane

changed only as regards types of engines and minor details since the first one was laid down in 1915, the two fuselages not only carry the tail but carry in the nose of each an engine driving a tractor screw, whilst between the fuselages is a nacelle carrying the crew and, at the rear, a third engine driving a pusher screw.

The Caproni was one of several types of Allied machines which were to be manufactured in America for use in the theatre of war, and at the time of the Armistice everything was ready for the mass production of the Caproni biplane. Several were, as a matter of fact, constructed, and the accompanying illustrations and data refer to a machine manufactured by the Standard Aircraft Corporation of Elizabeth, N. J. The American Caproni differs from its Italian prototype only in minor details, the general design being identical. It is equipped with three low-compression Liberty engines of 330 h.p. each, which being more powerful than previous power plants necessitated an increase in some of the dimensions, and to make quantity production possible, special materials and

18 ft. 6 ins. and 13 ft. respectively, also take up little space, and are fitted to each other and the centre section by means of male and female box fittings and pins. A modification of the Eiffel No. 36 wing section is employed, the camber of the under curve being 3.267 ins. and that of the upper curve 7.618 ins., and the maximum ordinates occurring 31.496 ins. and 39.37 ins. respectively from the leading edge. The maximum thickness of the section is 4.665 ins., occurring 55.118 ins. from the leading edge. The main spars are of the box type, the centre section and the intermediate upper plane section spars being of ash, and all others of spruce or Douglas fir. They are wrapped with fabric between ribs and measure 1 1/2 ins. by 3 1/2 ins. All the ribs, double ribs and box ribs are of white wood and ash, and the capstrip is screwed in position and not nailed.

There are altogether nine bays in the complete wing structure, disposed three for the centre section, two for each intermediate and one for each outer section. All incidence wires are No. 10 steel wire, except in the centre section, where



Side view of the American-built Caproni biplane