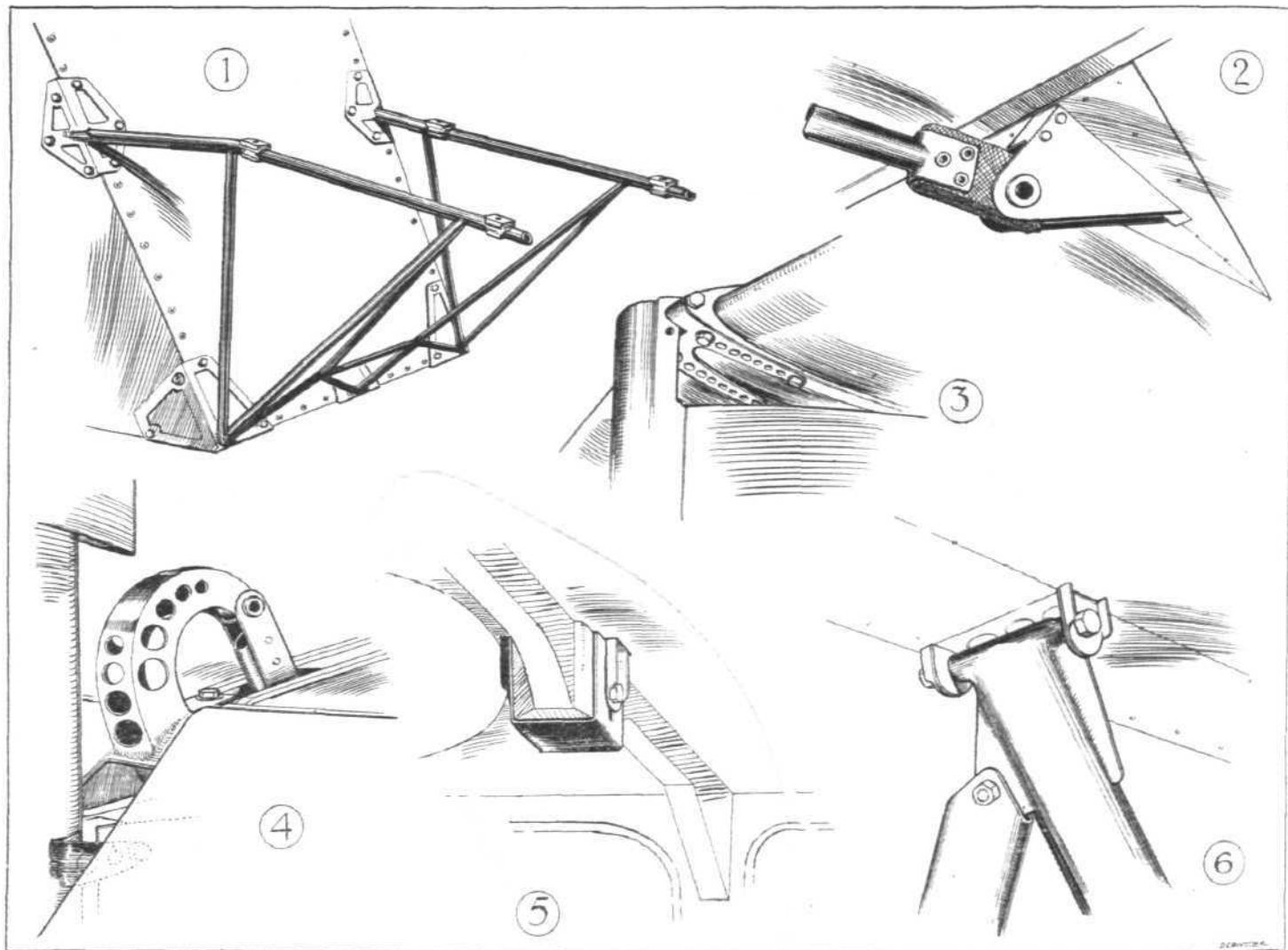


of the Koolhoven monoplane F.K.41. Mr. Koolhoven himself was, it will be recollected, chief designer of Armstrong-Whitworth aircraft during the war, and later designed the B.A.T. machines, one of which was the first commercial aircraft to make its appearance in this country. The aircraft slump sent Mr. Koolhoven to Holland, where he has worked since, and produced a number of types. The F.K.41 is one of his latest, and the Desoutter Aircraft Company has acquired the world rights for its construction, and not merely the British rights, as we stated by mistake last week. At the present moment the shops at Waddon are being prepared for the quantity production of these machines, Mr. Handasyde being hard at work designing and building jigs, etc., in order that complete interchangeability of parts may be assured. The machine will, in future, be known as the Desoutter three-

was explained last week that the type of engine cowling shown in the photographs will be altered. At the same time the opportunity will be taken to change slightly the curvatures of the deck fairing in front of the windscreen, thereby further improving a view that is already very good. Certain other minor modifications are now contemplated, mainly relating to the tail and undercarriage, but these will not essentially change the original design.

The Desoutter monoplane is of the semi-cantilever type in that the monoplane wing, although having the appearance of being attached to the fuselage and braced on each side by outboard struts, is in reality, structurally, a parasol monoplane carried from points outboard on the wing, and merely located on the fuselage. The weight of the machine is taken on the struts sloping outwards from the lower longerons, and in the



["FLIGHT" Sketches

**THE DESOUTTER MONOPLANE :** Some constructional details. The tubular engine mounting is shown in 1. Note the rubber pads interposed between the engine bearers and the feet of the engine to reduce vibration. A flexible (rubber) connection is made between the engine crank and its operating tube, as shown in 2. The tail plane adjustment is shown in 3, and the elevator crank in 4. Fig. 5 illustrates the fitting which locates the wing in relation to the fuselage, but which permits deflection of the wing spar. The attachment of lift strut to rear spar is shown in 6.

seater monoplane, but at present no name for it has been chosen from the innumerable names beginning with "D." As regards price, no definite figure may be quoted yet, but we understand that it is estimated that it should be possible to market the machine at a price which is not much higher than that of the present types of light 'plane two-seater. In view of the comfortable cabin and two seats in addition to that of the pilot, there should be a large demand for the type, not only for use as a private owner's touring machine, but also for air taxi work.

Simplicity is the keynote of the design of the Desoutter monoplane, both aerodynamically and structurally. The high-wing monoplane arrangement gives a cabin free of obstructions, while the view downwards and outwards from the passengers' seats is excellent. The three-section windscreen in front, placed close to the pilot, provides a splendid view forward, and even when the tail is down the pilot can look past one side or other of the engine quite readily. It

centre of the spar there is a fitting, in the roof of the cabin, which permits a small vertical movement of the spar, such as would take place due to a slight deflection under load, but no sideways movement. Thus, as a structure the wing is a parasol monoplane supported on the outboard struts only. This form of support relieves the bending in the centre portion somewhat, while shear loads that arise with other methods of support are also reduced.

This feature is one of the most interesting in the fundamental conception of the Desoutter monoplane. The only objection that might be raised is that with a one-piece wing which neither folds nor pivots into a fore and aft position, the hangar space required is somewhat larger than would otherwise be the case. There are those who hold that the extra strength and simplicity, as well as lower initial cost, of the non-folding wing more than makes up for the possibly slight extra cost of housing.

Structurally the Desoutter monoplane is a very simple