lower winys, as in so many other German machines, have rounded wing tips. As the radius of the arc forming the rear edge is longer than that of the front, the wing tip resembles somewhat that of a propeller blade. Each of the lower wings has 17 main ribs, and four steel tube compression struts.

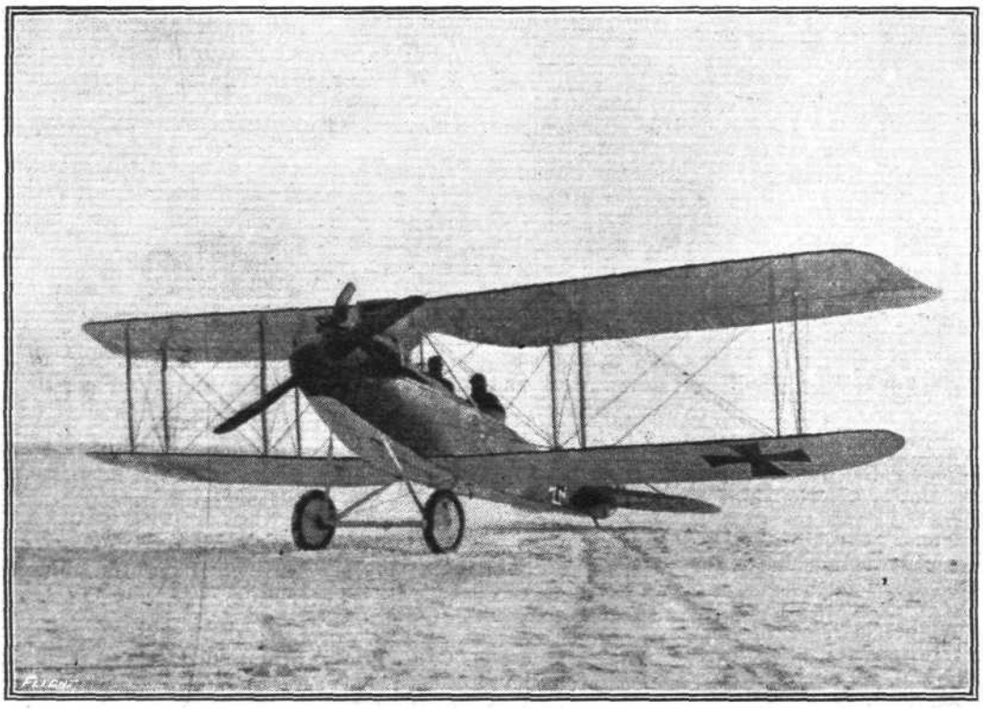
The interplane struts, of which there are two on each side of the *fuselage*, are oblique. In section, the inner front struts measure 0.105 m., and the rear strut 0.130 m., while the outer front strut measures 0.090 m. and the rear outer strut 0.085 m. The gap between the wings is 1.85 m., and the total lifting surface is 33.5 square metres, of which the upper wing is 20 square metres and the lower wing 13.5.

Tail.—The tail plane, which is not adjustable, is not so deep as in previous types. In plan, the leading edge of the tail plane is approximately a semi-circle. This tail plane is supported on each side by struts attached at their other end to the bottom rail of the *fuselage*. Two other struts brace the tail plane to the vertical fin. The struts under the tail plane are provided with a series of sharp-edged metal points. It appears probable that the object of these is to prevent the landing crew, when wheeling the machine about, from catching hold of these struts, thus possibly bending them. The elevator is in two parts, each of which is partly balanced by a triangular forward projection. The rudder, which is built up of metal tubes, is of the usual type, and the control cables pass inside the *fuselage*, guided at points through small wooden tubes.

The Fuselage.—The construction of the *fuselage* is of the current type, with four *longerons* and struts and cross members, braced by piano wire. Front and rear are covered with three-ply wood, and the middle with fabric. The propeller (a Heine) has a diameter of 3.17 m. As on all other German machines, the propeller boss is enclosed in a "spinner."

Engine.—The motor fitted on the Rumpler is either a 260 h.p. Mercédès or a 250 h.p. Maybach, both having six vertical cylinders. When the Mercédès is fitted, it is slightly tilted to the right, in order to allow the induction pipes to pass between the legs of the *cabane*. With the Maybach, which offers less encumbrance, this arrangement is not necessary. The motor is supplied with fuel from two tanks. The main one (about 220 litres) is placed under the seat of the pilot, the second, the service tank (about 70 litres), is placed at the back of the pilot between him and the gun ring in the gunner's cockpit. The quantity of fuel carried allows of a flight of four hours' duration. The covering over the engine leaves the top of the cylinders exposed, and encloses a Spandau machine gun operated by the motor.

The exhaust pipes run from the six cylinders to a common chimney, curving upwards and backwards. The chimney itself is divided, about half way up, into three branches, probably in order to obtain a certain amount of silencing effect. As in previous models, the radiator, which is semi-circular in shape, is placed on the front legs of the *cabane*. In front of it is a series of small slats, which can be moved so as to be either parallel to or at right angles to the direction of flight. This is, of course, done in order to make it possible for the pilot to adjust the cooling according to the altitude at which he is flying.



Another view of the 260 h.p. C. IV-type Rumpler biplane.

Behind the motor is the pilot's cockpit, and behind him again that of the gunner. Supported on a gun ring in the rear cockpit is a Parabellum machine gun. Pilot and gunner are very close together. In the gunner's cockpit there is a bomb rack of the usual type, carrying four bombs. An opening in the floor permits of taking photographs, and the machine carries a wireless set. The landing chassis is of the V type, with rubber shock absorbers. There is no brake fitted on this machine. An external drift cable runs from the nose of the *fuselage* to the foot of the inner front interplane strut.

* * * *

A Mid-Air Surrender.

A "KAMERAD" story to hand *via* Amsterdam tells of the occupants of a German aeroplane surrendering in mid-air. According to this report a number of Allied machines surrounded the Germans, who, seeing the hopelessness of resisting, went southwards, "obediently flying in the midst" of the Allied squadron.