

The Fiat A.22 engine is holder of the world's long - distance record (Rome-Brazil).

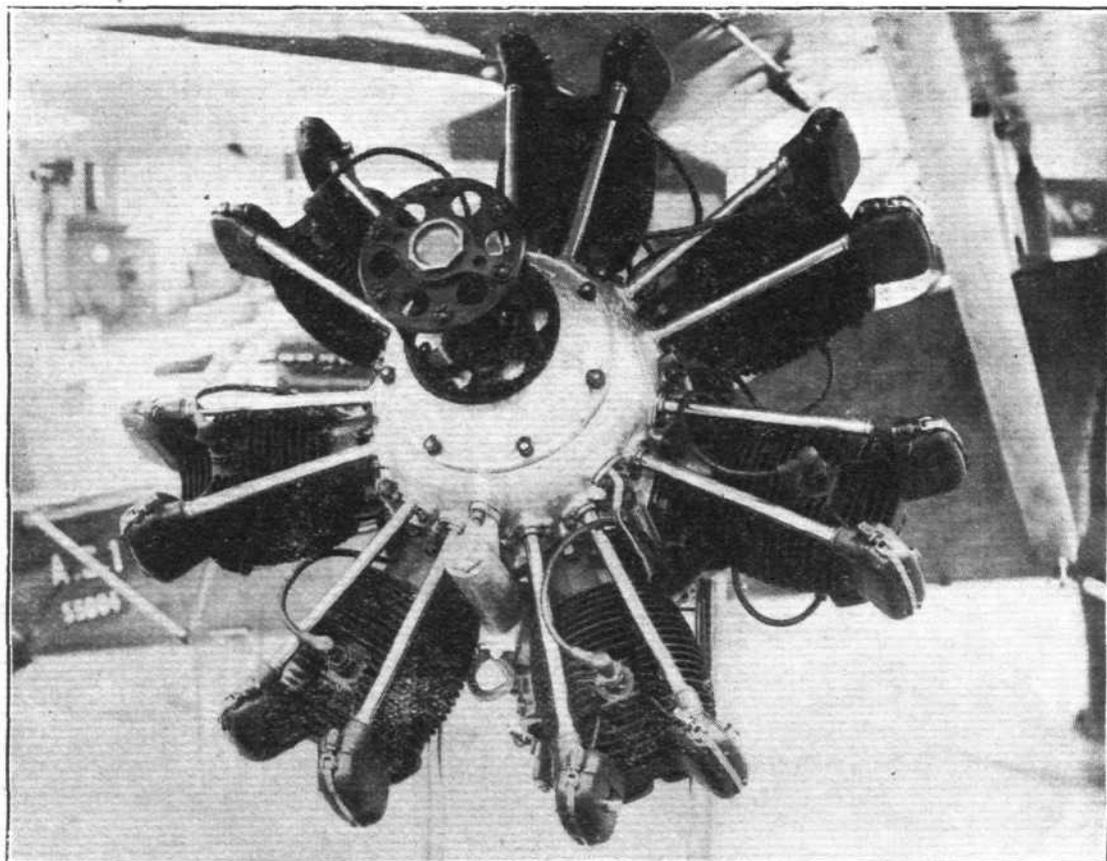
**Fiat**

Three Fiat engines are being shown on the Fiat Stand and one in the Romeo monoplane shown on the Stand of the Italian Air Ministry. The engines shown on the Stand are the A 25 1,000 h.p. twelve-cylinder water-cooled 60° V type, the 600 h.p. 22, also a twelve-cylinder water-cooled 60° V engine, and the A 50, a 90-h.p. seven-cylinder radial air-cooled engine of attractive appearance, this being the type of engine fitted in the Romeo monoplane previously mentioned.

The two water-cooled engines have a direct-drive and are of similar appearance, one being an enlarged version of the other. They are of orthodox design and construction, the only unusual feature (for a Continental make) being that the carburetors are located between the banks of cylinders. Three Fiat water-jacketed carburetors are fitted on the larger engine and two on the smaller. In each case separate cylinder construction is employed, the jackets being formed by welded-on sheet steel casings. The heads and valve ports are formed integral, the common aluminium casing fitted to

the tops of the heads housing the twin camshafts and valve gear only; four valves per cylinder are provided. The auxiliary drives are encased in a very clean housing at the rear end of the crankcase, the two Marelli magnetos being mounted horizontally, one on either side, whilst the water pump casing is bolted to the bottom of the crankcase. The vertical spindle of the water pump is driven by a shaft fitted parallel to the vertical shaft mounted below the timing gear, the rearmost shaft driving the oil pumps. The camshafts are bevel driven by the usual inclined shafts, these being totally enclosed. A gas starter distributor housing is fitted between the lower ends of the inclined shaft casings. The large engine is provided with four sparking plugs per cylinder. The crankshafts of these engines are carried in seven plain bearings, the big-ends also being of the plain split-bushed type.

The A 22 engine is famous as the holder of the world's long distance non-stop record (Rome-Brazil). It has a bore and stroke of 135 mm. and 160 mm. respectively, and develops a normal output of 570 b.h.p. at 1,900 r.p.m. and a maximum



The Fiat A.50 is a 7-cylinder radial air-cooled engine. The normal power is 90 b.h.p. at 1,600 r.p.m., and the maximum 100 b.h.p. at 1,800 r.p.m.