



“Doretti” BRITISH SPORTS CAR PRODUCED FOR U.S.A. MARKET

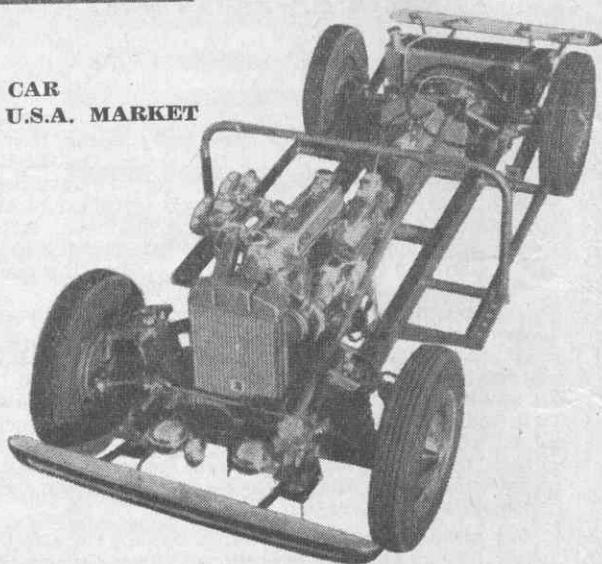
Designed especially for the American sports car market, the Doretti is a snappy little two-seater capable of over 100 m.p.h. The motor is similar to that used in the new Triumph “TR2,” with twin carburettors. Bodywork, which is made by the Swallow Coachbuilding Company, can only be described as luxurious.

Body construction is of steel and aluminium, provision being made for the easy removal of main panels and wings in the event of damage. It has a two-seater open sports body with all-weather equipment, and the one-piece windscreen can be detached easily and replaced by aero-type screens. Leather-covered sponge rubber safety pads are provided to the instrument board and cockpit, and there are two adjustable bucket-type seats, the effective cockpit width being 46 in. and the maximum interior width 48 in.

The instrument board is well-furnished, with 5 in. tachometer and speedometer dials, while there is luggage space behind the seats and in the rear locker, which also contains the spare wheel and tool kit. The one-piece bonnet is hinged at the front and is locked from the cockpit. Flashing type indicators are op-

tional fittings, while at extra cost the makers can provide knock-on wire wheels, a high-speed kit, heater and tonneau cover.

Principal dimensions are: Wheel-base, 95 in.; track, 48 in.; front, 45½ in.; rear, ground clearance, 6 in.; turning radius, 18 ft. 3 in.; length, 152 in.; width, 61 in.; height with hood, 51 in.; laden weight, 2000 lb. Tyres are 550 x 15 and the fuel tank holds 12½ Imperial gallons.



50 YEARS OF ENGINE IMPROVEMENT — Continued

Now the same efforts are proportional, first, to the parts in motion, so that it will be necessary to lighten pistons and rods. They are proportional, too, to the speeds of the pistons. Hence the necessity of another move, which will consist in increasing their sturdiness in the same time as we make them lighter. Here is the first of those many compromises which sway all automobile problems. The makers are frequently faced by conflicting conditions which they must, however, harmonise. It is easy to understand that, in this case, the solution could only be achieved through the co-operation of metallurgists.

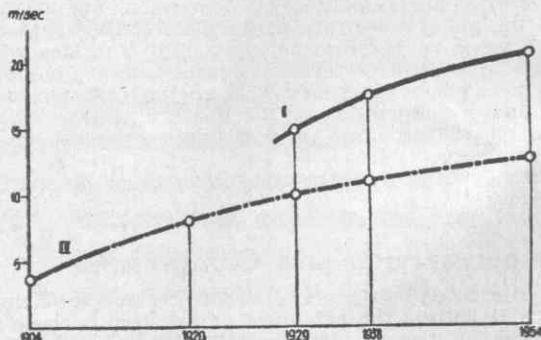
A few figures will enable us to estimate the improvements which have taken place.

In 1904 the piston speed average value was 4 m/sec.

In 1920 it rose to 7 m/sec.

In 1938 we had 11 m/sec.

In 1950 this value is 12 to 13 m/sec. for merely series engines, whereas some racing car engines achieved piston speeds reaching 20 m/sec.



Increase of pistons speeds

I Racing cars

II Serial cars

(To be continued)