

New 13-lb. French Road Racing Bicycle

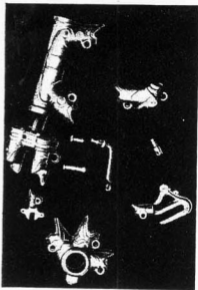
A NEW duralumin machine has just appeared in France under the name of the "Caminargent," which presents certain constructional features of interest.

The "Caminargent" is built up entirely with bolted lugs, no welding being employed anywhere. The tubes are octagonal in section and the bolting arrangements are carefully designed to avoid any possible weakening of the tubes, whilst the last mentioned are cork-filled at their extremities to absorb vibration, as duralumin alloys are, in their present stage of development, sometimes liable to rather rapid fatigue and molecular disintegration.

The steel employed in ordinary good-class cycle tubing is tested for a shear strain of 60 kg. per sq. cm., whilst the duralumin used in the "Caminargent" will only support 42 kg.

Whilst the resistance is thus less, the density of the light metal is only 2.7 as compared with 7.8 for steel. It is thus possible to double the section when employing aluminium, and as a result we have a tube with a much higher resistance—84 kg. per sq. cm., with a weight reduction of 30 per cent.

The construction of the front-fork head is interesting. The lower end of the steel tube has a flange pierced with a number of holes and the aluminium lug taking the forks is cast on to this. The metal running into the holes forms a very solid joint. The forks themselves are in duralumin, like the rest of the machine, including handlebars and saddle pillar. No plating is needed and the machine is simply polished. The weight, all on, is 6 kg. for the road-racing model and 8.9 kg. for the full roadster.



The component parts of the new French bicycle.