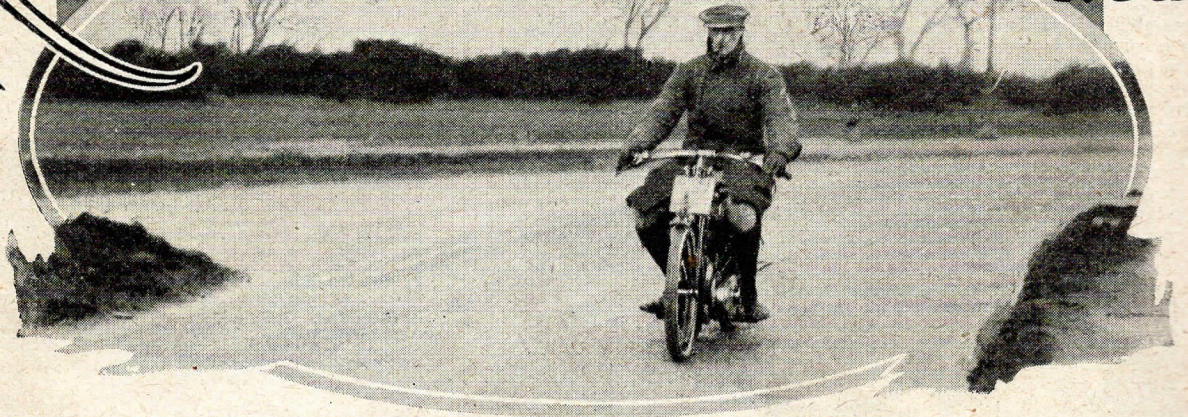


# Road Tests of New Models



The 243 c.c. Calthorpe Two-stroke.

## SPECIFICATION.

**ENGINE:** Two-stroke, 67 × 69 mm.  
= 243 c.c.

**GEAR:** Two-speed, Albion clutch and  
K.S.

**TRANSMISSION:** Chain and  
¾ in. belt.

**TYRES:** 24 × 2¼.

**CARBURETTER:** Mills, single  
lever.

**FORKS:** Druid.

**PRICE:** £47.

IT is no exaggeration to say that nearly half those who ride motor cycles and those who hope to ride in the near future are chiefly interested in the small machine selling at a low price. There are very many people who at present cover their journeys on a pedal cycle who would like to extend their range of action and avoid the exertion necessary with this form of transport, and in addition there is an army of young people, both boys and girls, who require a small machine, at any rate until they have graduated to something larger. To all these and to many others the little Calthorpe will make a strong appeal. Emphasis has been laid on the small size of the machine, but it must not be imagined that it is too small for the average man. Indeed, the writer who is well over the average height stowed himself away quite comfortably and at no time felt cramped.

### For Everyday Riders.

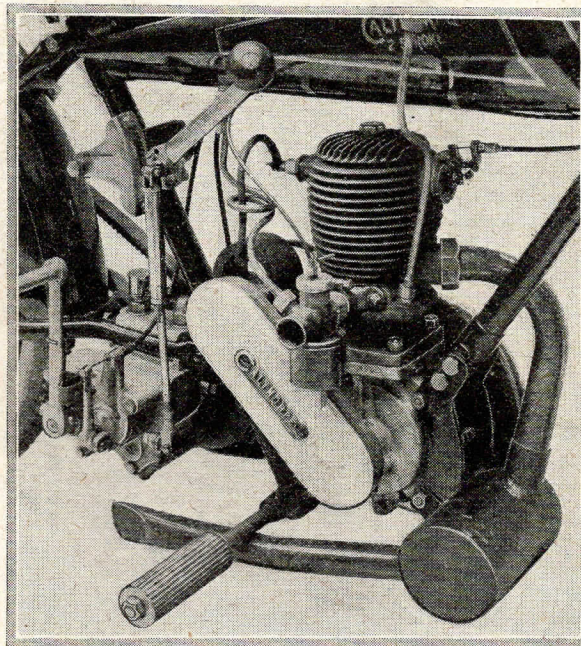
On a machine which is frankly intended to appeal

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to the multitude rather than to the exclusively sporting element, simplicity and ease of control is of the utmost importance, and in these particulars the motor cycle under consideration excels. Including even machines

which sell at high prices, we have never handled one which steered better; true, the maximum speed does not greatly exceed thirty to thirty-five miles an hour, but so perfect is the steering that it is possible to control the little mount "hands off," even in ordinary traffic.

In addition to the controllability of the machine, the port setting of the engine is such that in conjunction with the Mills carburetter, the engine will two-stroke down to the very lowest speeds. Even with the gear lever in neutral and the throttle all but closed, two-stroking is maintained, and with the low gear engaged one can walk beside the machine at an ordinary pace while the engine runs perfectly regularly. First impressions give one the idea that the machine is



Power unit of the 243 c.c. Calthorpe. Oil is fed directly to the cylinder walls and the magneto is in a well protected position.

**Road Tests of New Models.—**

less powerful than is really the case; this is probably due to the even torque and good balance, for in actual practice the little engine carried us comfortably over a gradient of 1-9 on top gear.

**Little to Criticise.**

Few machines, especially in the more moderately priced class, are perfect, but our criticisms of the Calthorpe refer to details only. First, the saddle is too small for comfort, a matter which can be rectified by the purchaser at a small extra outlay. Secondly, there is a tendency to flywheel ring, due probably to the neat cast aluminium chain cover which protects the primary chain. It should be mentioned, in parenthesis, that this chain lies outside the flywheel and is consequently particularly easy of access. The last point, and one which the manufacturers are intending to modify, is that there are a number of comparatively

awkwardly placed clip joints on the handle-bar which are apt to render clutch control a little uncomfortable.

**Oiling System, Brakework and Fittings.**

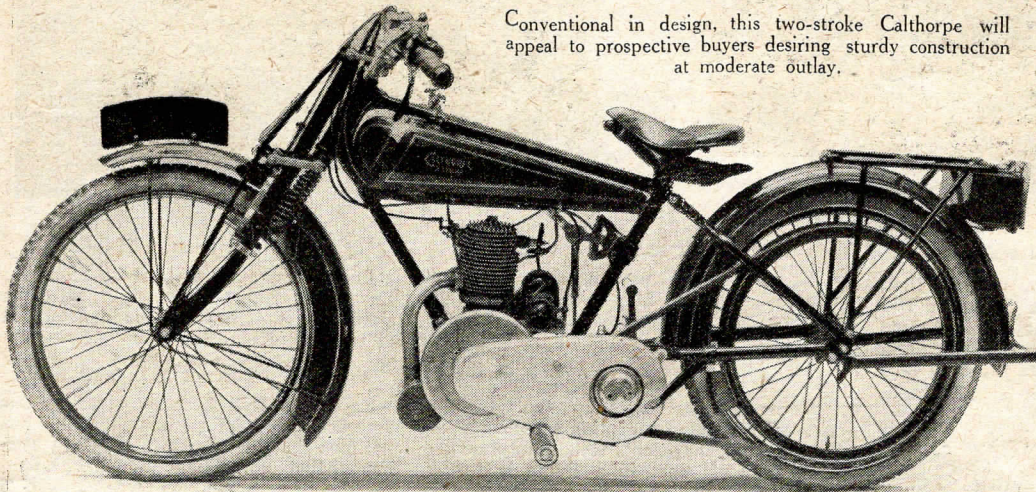
With regard to mechanical features, one finds the magneto well placed behind the cylinder, and an admirable lubrication system which is confined to this make of engine. Oil is fed through a Best and Lloyd sight feed drip to a ring surrounding the cylinder. From this ring a series of small holes passes through the cylinder wall, and thus the piston is lubricated directly and not by splash only.

A simple internal V rear brake is operated by a pedal projecting forward from the pivoting point of the shoe—this arrangement is effective and obviates joints, rods, and toggles. The front brake is of the normal horseshoe type. A single armoured tool bag is mounted at the rear of the carrier, and the frame is low, having a sloping top tube, the saddle position being so low that even the shortest rider has a feeling of security.

**Other Models.**

Similar in all respects except as regards transmission, there are two other Calthorpe models employing the same engine. One model has a two-speed gear without clutch or kick-starter, and a single-gear machine is listed at £36.

Conventional in design, this two-stroke Calthorpe will appeal to prospective buyers desiring sturdy construction at moderate outlay.

**FOR NAVAL OFFICERS.****Details of the Two-Day Trial for the Arbuthnot Trophy.**

**O** PEN to officers on the active lists of the Royal Navy, Royal Marines, R.N.R., and R.N.V.R., the trial for the fine trophy in memory of the late Rr.-Adm. Sir Robert K. Arbuthnot, R.N., will take place on June 30th and July 1st.

Reigate has been chosen as the starting and finishing point, and the competitors will cover one circuit of about 45-50 miles east of Reigate for the first section and about the same distance over a circuit west of that town for the second section of the day's run. The start is to be at 2 p.m. On the following day the same circuits will be covered in the same order but in the reverse direction, and a start will be made at 9 a.m., so that the event may finish about 3 p.m.

These routes will include some of the best known Surrey and Kentish test hills, but there will be nothing freakish in the course, and no roads of excessive roughness likely to damage competing machines.

Each circuit is to be considered as a non-stop section, and competitors will be required to furnish a

full report of all stops, adjustments, and replenishments at the conclusion of each day's run.

**Regulations to Suit Circumstances.**

Owing to the fact that this trial is unique, its conditions differ materially from those of the ordinary reliability trial. Being well aware of the difficulty which officers experience in obtaining leave exactly when desired, the organisers have arranged for the competition to start at 2 p.m., on Friday, and entries will be received until within two hours of the start; intending competitors are requested, however, to acquaint the Auto Cycle Union, 83, Pall Mall, London, S.W.1, of their desire to enter as early as possible.

Previous winners of the Trophy have been: 1919, Lt. E. S. K. Evans-Greaves, R.N.; 1920, Lt. G. P. Glen Kidston, R.N.; and in 1921 the Trophy was jointly awarded to Lt. T. H. Back, R.N., Sub-Lt. H. C. Chads, R.N., Lt. E. V. James, R.N., and Lt. C. Plumer, R.N.