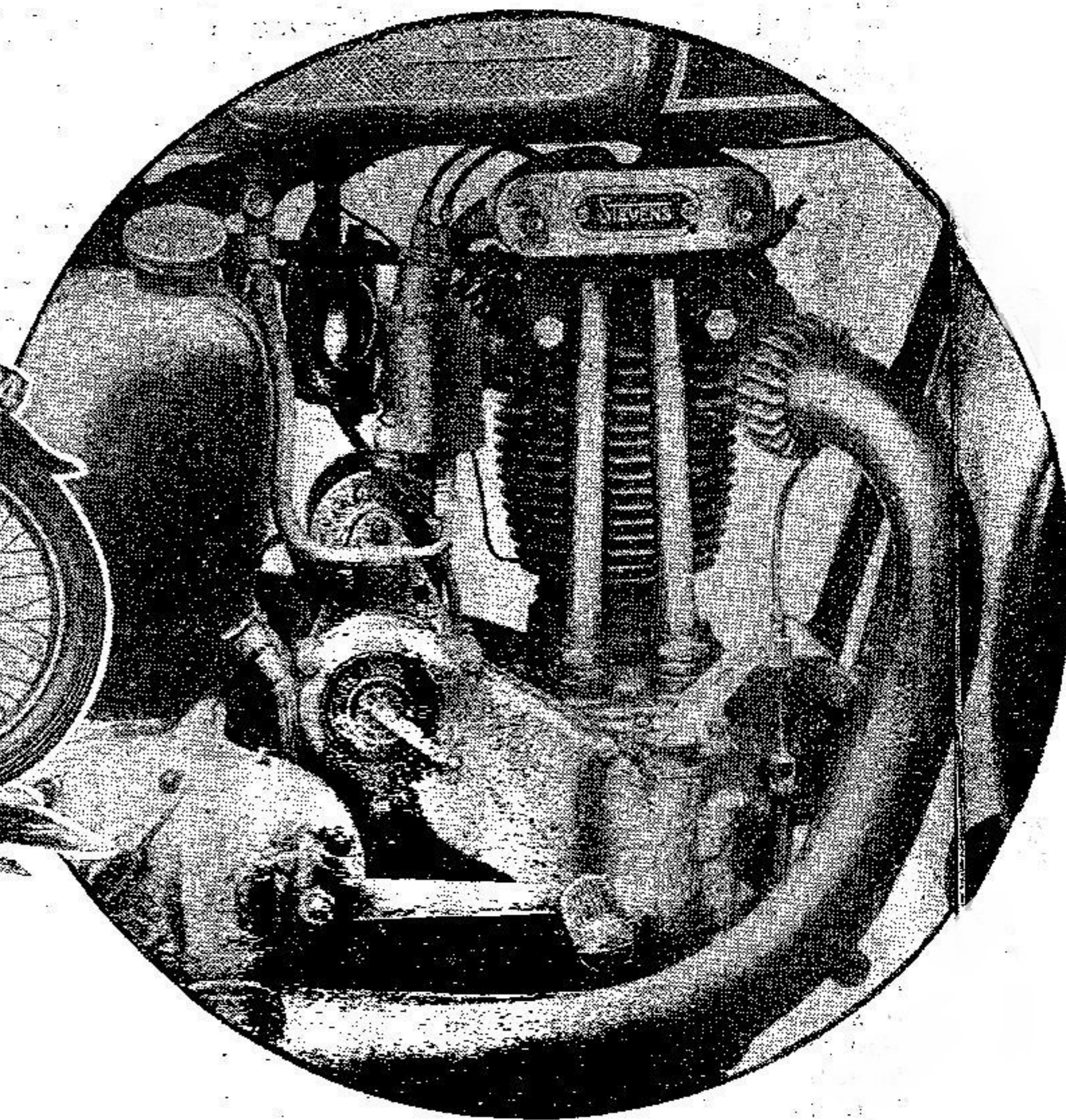
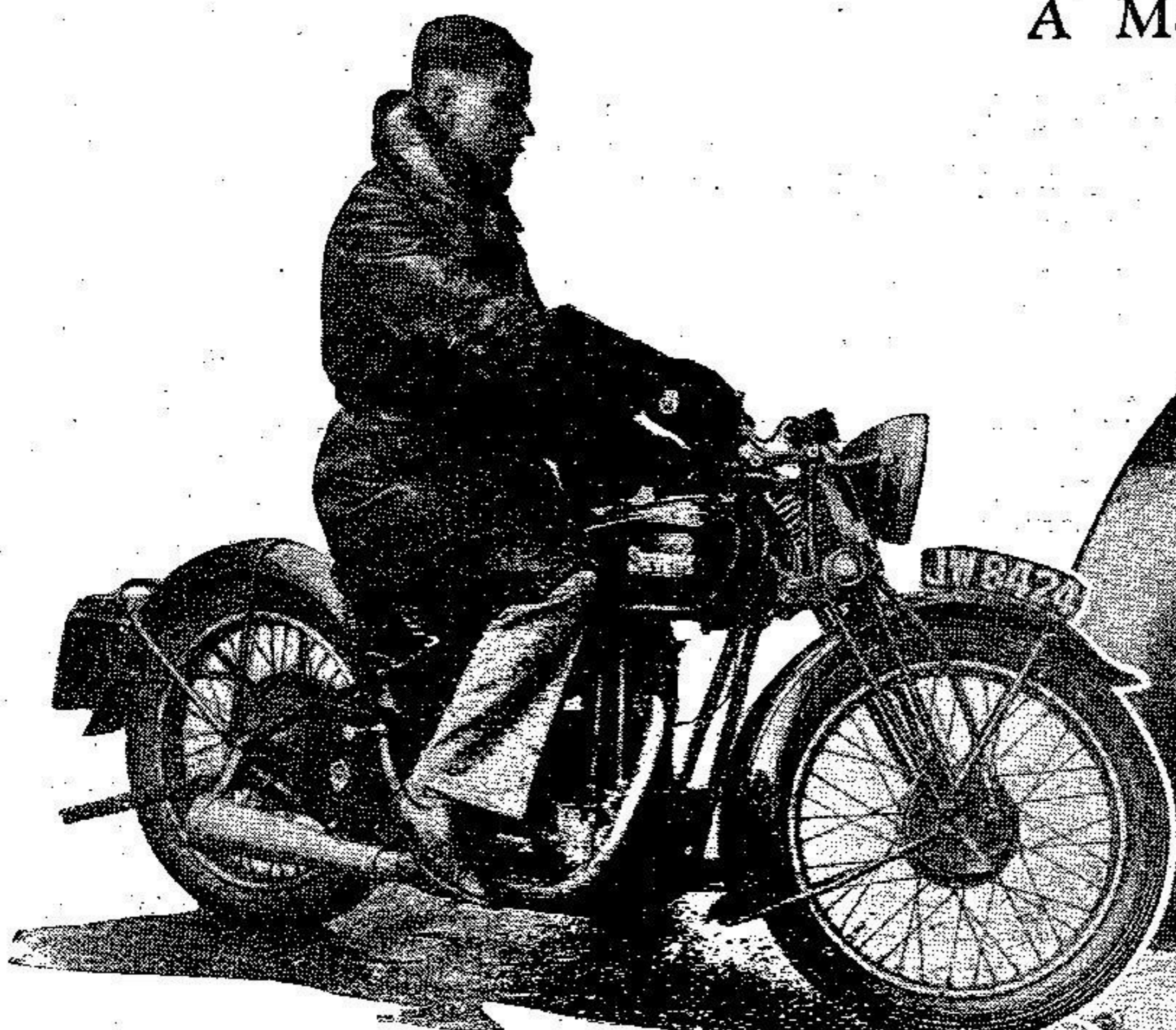


## Road Tests of 1936 Models

# THE MODEL L.L.4 350 c.c. o.h.v. STEVENS

*A Machine that is Orthodox—Yet  
Different*



**T**HERE is something about the very look of the 350 Stevens that commands admiration and respect; something suggestive of "rightness" in every particular—of smooth, surging power, for instance—of splendid controllability—and of great safety.

It must be obvious, however, that *Motor Cycling's* road test reports are not based on mere impressions, and the Stevens people must be heartily commended for producing a machine which displayed in practice all those fine qualities which its looks seemed to suggest.

Within a mile or two of riding, after collecting the machine from Euston Station, the road tester became aware of three well-marked characteristics of the Stevens. First, the engine was particularly free from vibration and "fussiness"; secondly, the exhaust note was pleasant and unobtrusive; and thirdly, the handling of the machine seemed remarkably good, even if the head bearings were a wee bit on the stiff side, which is quite in order with a new machine.

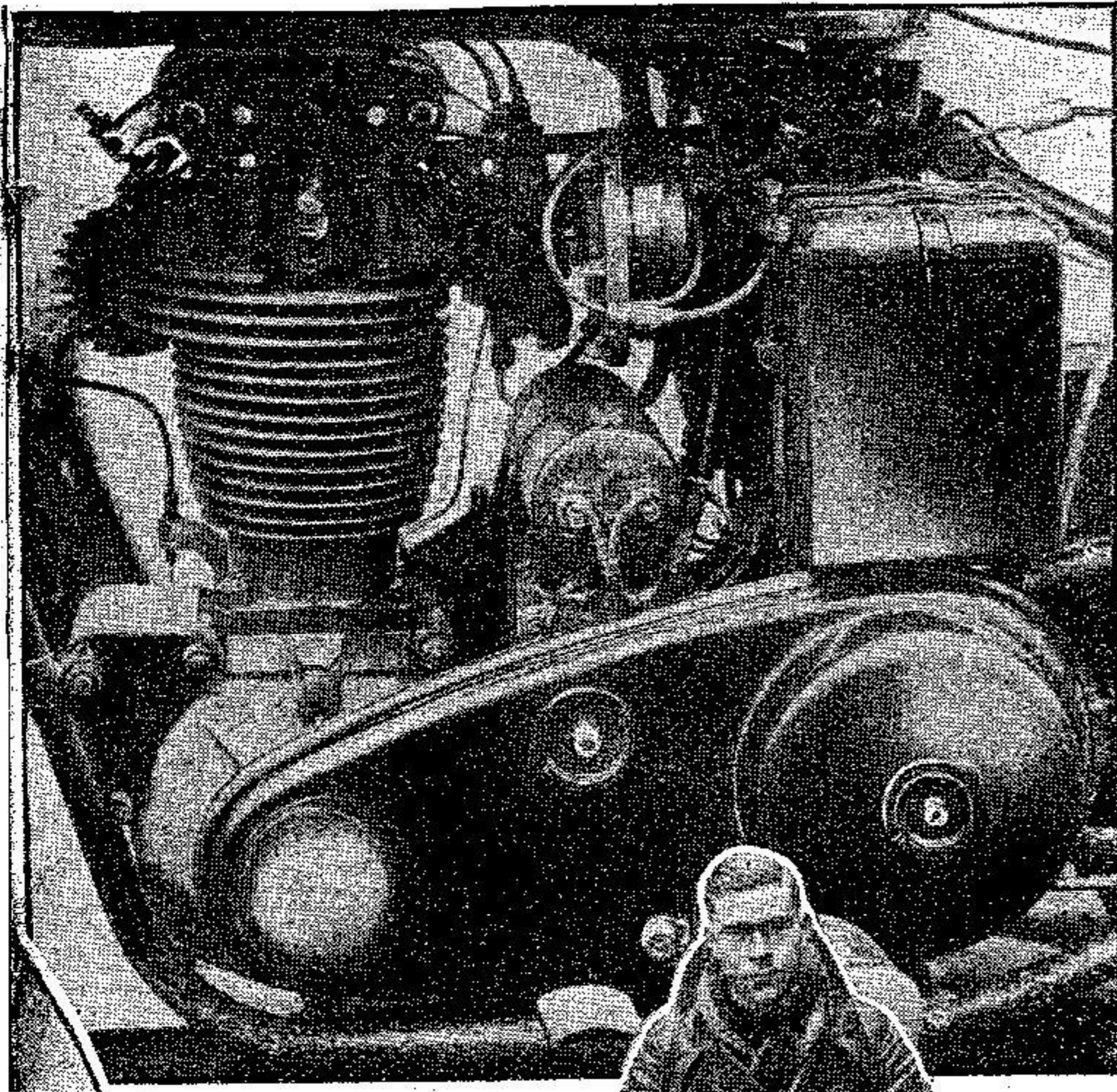
Naturally, however, a fair opinion could not be given until many more miles were covered, so the Stevens was carefully run in until such time as it was reasonably possible to put it through a thorough test.

When that time came and when all the working parts were bedded down, one of the first things on the programme was a long main-road run. The Stevens acquitted itself really well, and in spite of the fact that the roads were really treacherous owing to the recent frosts, it was possible to maintain an average

*(Left) Manœuvrability is one of the Stevens's best characteristics and the weight is well distributed. (Above) The timing side of the high-efficiency 350 c.c. o.h.v. power unit. Note the accessibility.*

speed in the region of 40 miles an hour in safety and confidence. The machine's comfortable cruising speed under normal conditions was just over 50 m.p.h., and at that speed the motor was turning over sweetly and smoothly. The top gear maximum was apparently 69 m.p.h., but there seemed little doubt that the machine was rather undergeared. That speed represented 5,130 r.p.m. on a ratio of 5.61 to 1.

In the third ratio the useful maximum of 60 m.p.h. was obtained (representing 5,710 r.p.m.), and that gear was a joy to use, not only because of the excellent flow of power from the engine as the revs. rose, but also because the actual gear operation was quick and simple. Incidentally, this ease of operation applied to all the changes. As regards deceleration, the brakes were well in keeping with the excellent performance, and from



(Above) Everything is neat, clean and compact about the Stevens, and the oil-bath chaincase can be detached in less than a minute.



(Right) "Steady as a rock" would be a suitable expression to apply to the handling of the L.L.4, and the riding position was found to be admirable.

the legal limit in a restricted area, stopping distances were 34 ft. (using both "stoppers") and 43 ft. (using the rear brake alone). The engine showed no trace of roughness on the overrun, and "compression braking" was satisfyingly efficient.

### Fine Steering

As has been already remarked, the machine showed fine qualities in the matter of handling at speeds up to 30 m.p.h., and this proved even more noticeable at much higher speeds. Both front and rear wheels "stayed put" under the worst conditions, and cornering was a safe and effortless business; incidentally, a ribbed road-racing front tyre was fitted. It was never found necessary to use the steering damper, but one rather interesting point about the steering is that the pressure of the front tyre made a very great difference;

if it was too low the machine had to be forced round bends, and if it was too high the wheel "hopped" a trifle.

In the matter of comfort there was room for no complaint. The fork action was just right, the saddle large and well sprung, and a suitable riding position easily obtainable. Long rides could be carried out with much less fatigue than is usually the case.

During the course of the test, a very great deal of town riding was done, most of it in the heart of London, and once again this aristocrat among motorcycles gained the tester's hearty approval and affection. At 30 m.p.h. in top gear the engine ran smoothly and without complaint, while from a standing start that speed could be attained (using second and third gears) in a surprisingly short time. The minimum non-snatch speed (with ignition advanced) was 19 m.p.h. on the top gear of 5.61 to 1, while in third (7.18 to 1) it was 14 m.p.h.

### The Controls

The position of the various controls was exemplary. The clutch, for instance (which was light and positive in action), is operated by a pleasingly placed straight-pull lever, while the throttle control is a quick-action twist-grip of the thin type. Both front and rear brake operations were satisfactory, the former being well above the average.

"Walking pace" motorcycling is, of course, very important as regards traffic work, and in this the 350 Stevens excelled. It was not only that the steering was so delightful, but also that the 350 c.c. power unit pulled like a steam engine at low revolutions and tended neither to oil up nor to pink. Incidentally, this freedom from detonation came as rather a surprise, since the machine has quite a "hot" high-compression engine.

Starting called forth more praise; "first kick" was the order of the day, no matter how frosty that day happened to be. Naturally, the controls had to be set properly, but providing the magneto was half advanced, the throttle one-quarter open and the air fully closed, then a gentle tickling of the carburetter and a good swing on the kick-start would bring forth that pleasant "boom boom boom" from the megaphone silencer.

The silencer was extremely efficient, and the volume of noise seemed to decrease rather than increase with higher revs. Mechanical noise, although not excessive, was, perhaps, greater than is usual these days, and was accentuated by the exhaust silence. It appeared to be confined, however, to the valve gear.

Petrol consumption, at normal touring speeds, was in the region of 80 m.p.g., and although this is very creditable, the criticism must be raised that no reserve tap is fitted. The oiling system is not of the full dry-sump type and yet the consumption of oil was particularly good, being about 1,500 m.p.g.

The lighting system is by Lucas Magdyno, and the large headlamp gave a splendid beam. Charging rates were:—On "charge," 7 amps.; on "dim," 5 amps.; on "bright," 3 amps. The high-frequency hooter gave an unusually pleasant note.

As regards the more technical side of the test, it must be pointed out that accessibility on the Stevens is of a very high standard, so that maintenance should be an easy business. Particularly commendable in this respect are the chain adjustments and the battery fixing.

Other interesting points of the specification are the

## Brief Specification of the 350 c.c. o.h.v. L.L.4 Stevens

**Engine:** 350 o.h.v. Stevens, bore 74 mm., stroke 81 mm. = 349 c.c. Valves operated by direct lift of separate cams; inlet valve lubricated by breather. Duralumin rockers and push rods. Aluminium piston with three rings and large diameter hollow gudgeon pin.

**Lubrication:** Oil is fed from a separate tank by submerged adjustable mechanical pump to the big end, which by splash lubricates the cylinder wall, piston and timing gear.

**Gearbox:** Four-speed gearbox of close-ratio constant-mesh type with multiple-plate clutch. Foot or hand control optional, to order.

**Transmission:** Drive by Renold chains, front one being enclosed in special oil-bath case. Rear chain automatically lubricated. Cush drive on engine shaft.

**Brakes:** Cam operated internal expanding type. Brake drums of special long-

wearing metal. Diameters: 7 ins. rear, 6 ins. front.

**Frame:** Full cradle duplex type; crankcase does not form part of frame.

**Forks:** Heavy-duty central barrel spring type with adjustable spindles, fitted hand-adjusting steering and shock dampers.

**Handlebars:** Semi-upswept type, fully adjustable and insulated by rubber. Controls readily adjustable; principal Bowden controls fitted "Bowdenex".

**Tanks:** Petrol tank rubber mounted and enamelled black with gold and blue lines. Capacity 3 gallons. Oil tank on seat pillar; capacity 3 pints.

**Ignition and Lighting:** By Lucas Magneto. Large headlamp—7-in. glass. High-frequency horn and "stop" lamp.

**Wheels:** Chromium-plated rims; fitted front 26-in. by 3-in. ribbed Dunlop tyre, rear 26-in. by 3.25-in. studded Dunlop tyre.

**Exhaust System:** Optional upswept or downswept; megaphone silencer with detachable baffles.

**Price:** £54.

**Extras:** Smith 80 m.p.h. trip speedometer, £2 10s.; chromium-plated tank, £1 10s.; carrier, 10s.; pillion seat, 12s. 6d.; pillion rests, 6s.

**Makers:** Stevens Brothers (Wolverhampton), Ltd., Retreat Street, Wolverhampton.

**Insurance:** Under a *Motor Cycling* policy—London postal area and Glasgow: Fully Comprehensive, £7; Third Party only, £3. London Metropolitan Police Area (excluding the postal area) and Lancashire, south of the Ribble: Comprehensive, £6 5s.; Third Party only, £2 12s. 6d. Elsewhere: Comprehensive, £6 5s.; Third Party only, £2 5s. Where a sidecar is permanently attached 40% is deducted from these premiums.

### STEVENS ROAD TEST (Contd.)

"non-bending" footrests (with special friction mounting) and the three-gallon petrol tank.

Although the whole design of the machine is on quite orthodox lines and is, in fact, typical of the modern o.h.v. single, there are many detail points on the Stevens which combine to make it a most refined motorcycle.

Examples of these pleasing little things are the rubber-mounted handlebars, the very simple tappet adjustment, the oil feed to the rear chain, the special fork friction damper and the rear stop lamp. A point that simply must be mentioned is the oil-bath primary chain-case, which is so easily detachable that the chain and clutch assembly can be completely exposed in less than a minute.

### On Rough-stuff

No road test of a snappy sporting 350 would be complete without reference to performance "on the rough." Here again this remarkable machine seemed every bit at home, and standard tyres or no standard tyres, it behaved like a works competition job. There seems little doubt that the competition edition of this model must be well up to its work.

The type of going over which the machine was tried out included lanes with very deep frozen ruts as well

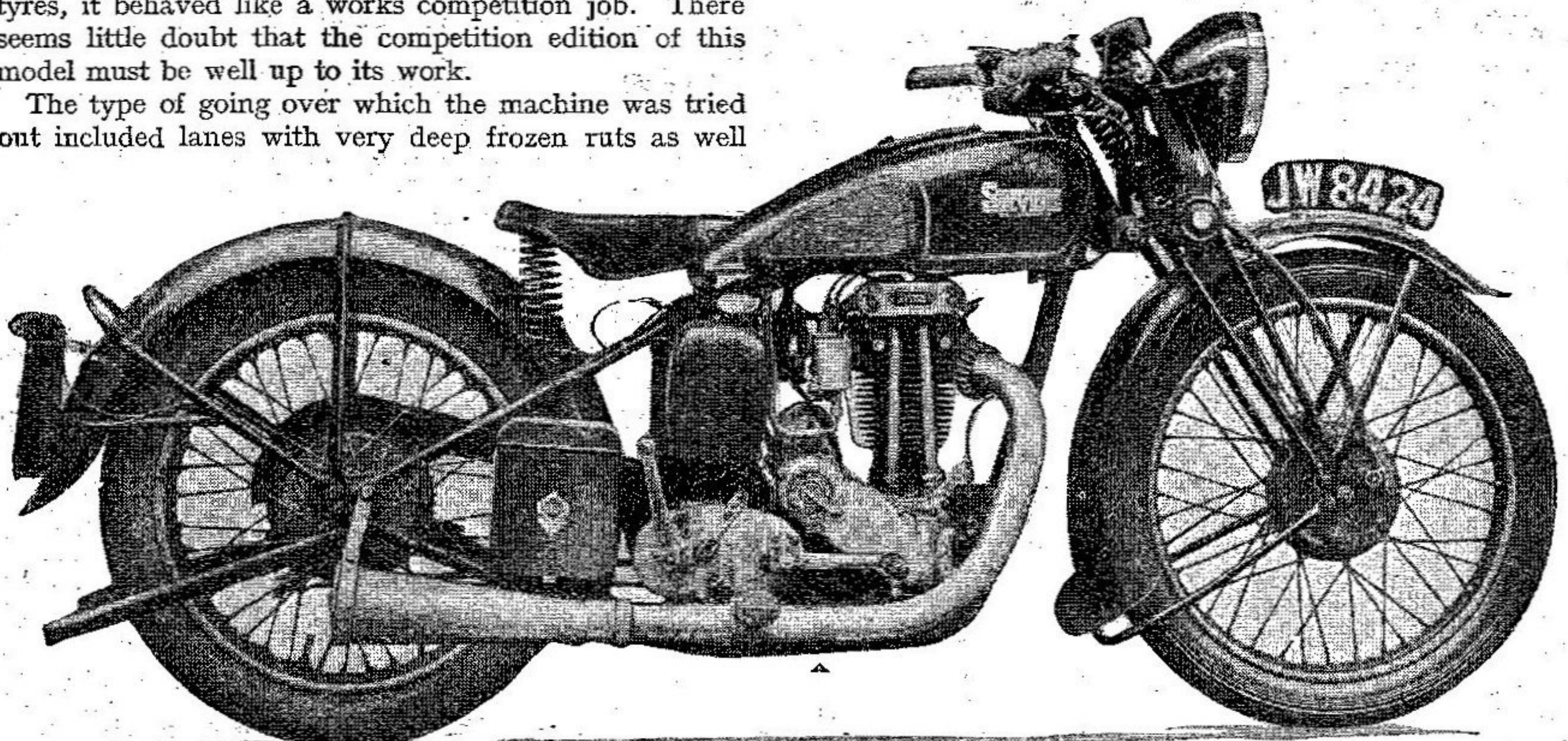
as rocky paths and really stiff gradients, but it did not seem to matter what form the "rough-stuff" took, and it was remarkably easy to preserve an even keel, owing probably to the excellent weight distribution.

### A Competition Edition

The competition edition of the 350 Stevens costs £59 complete and has a specially tuned engine with polished ports and stronger valve springs. Special gear ratios are available. Competition tyres are fitted and special spare parts are included.

Summing up, it can be stated that for a 350 c.c. mount at a very moderate price the L.L.4 Stevens struck *Motor Cycling's* tester as ranking among the highest. Sentimentalism can find no place in a report such as this, but it was with great regret that the machine was sent away after so many enjoyable miles.

Thus was the very complete test of a thoroughbred 350 brought to a conclusion. Although the report may seem a paean of praise from beginning to end, the Stevens deserves it all, and the manufacturers must be heartily congratulated on their production.



£54 is all that is asked for this fine example of modern motorcycle manufacture. Careful workmanship is evident from stem to stern, and the whole appearance is pleasing in the extreme. Note the megaphone silencer, which in practice justified all the claims that are made for it.