

# MOTOR CYCLISTS' MECCA



## RANGE BY RANGE REVIEW OF THE MOTOR-CYCLE EXHIBITS AT THE MOST

### A.J.S.

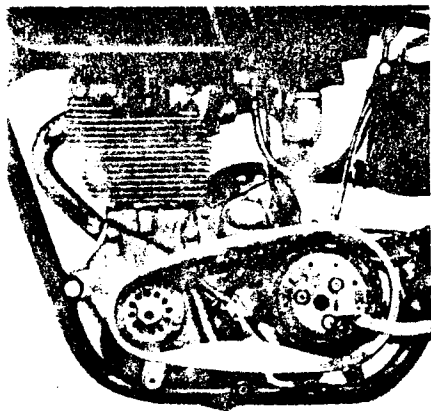
TEN years ago the A.J.S. range comprised five models—347 and 498 c.c. single-cylinder roadsters and trials mounts and the 7R racing three-fifty. As an indication of changing times, the Woolwich concern now produces no fewer than eight basic engine types and a total of 17 listed models ranging in capacity from 248 c.c. to 646 c.c. Roadsters, trials and scrambles machines and a road racer—all are included.

Introduced last March, the Model 14 is a lively cruiserweight with an over-square (69.85 x 64.85mm) 248 c.c. overhead-valve engine which incorporates a number of unusual features. For example, the light-alloy cylinder head is obliquely mounted on the iron barrel, both cam followers are of trailing type and the oil container is concealed within the engine side cover. An alternator provides current for ignition

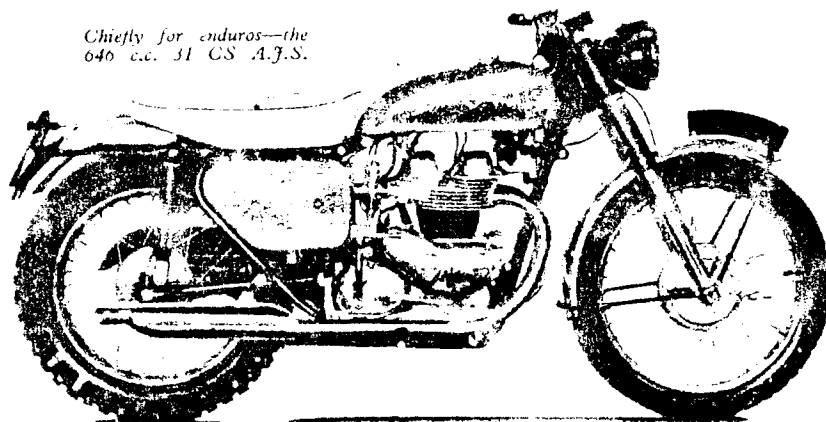
and lighting. Though apparently in unit with the engine, the four-speed gear box is a separate assembly in a cylindrical casing, rotatable for primary-chain adjustment.

Mainly tubular in construction, the frame utilizes steel pressings for the cradle portion. On the roadster model (available with or without a rear chaincase) 17in wheels are employed with full-width hubs,

*Power unit of a famous racing model—the 349 c.c. 7R A.J.S.*



*Chiefly for enduros—the 646 c.c. 31 CS A.J.S.*





# Come Round The Stands

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front and rear forks and the hubs, all of which give a 25 lb weight saving.

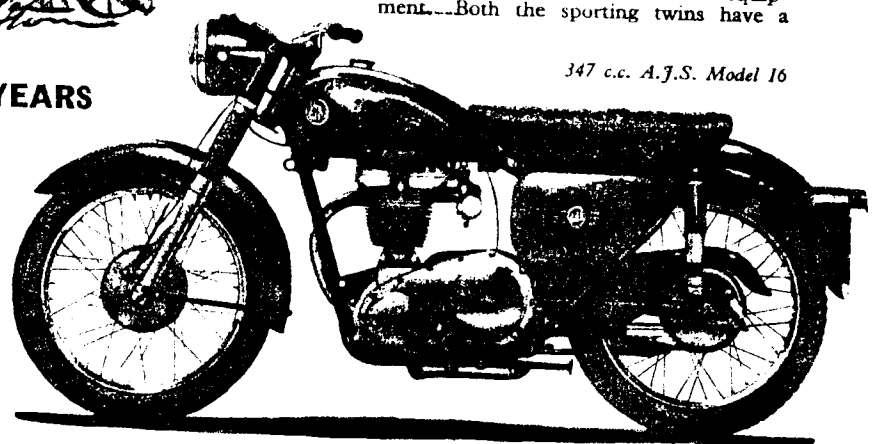
Engines of the scramblers, though superficially similar to the roadster and trials singles, have an appreciably shorter stroke, integral pushrod tunnels, fiercer valve timing and other differences to suit them for their duties. All the competition models mentioned have polished light-alloy mudguards.

Main change to the sturdy 498 c.c. parallel-twin engine is the use of an alternator on the standard Model 20 in place of the separate magneto and dynamo which continue to be utilized on the other five-hundred twins. These comprise the deluxe roadster, scrambler and Sports Twin—in effect a scrambler with road equipment...Both the sporting twins have a

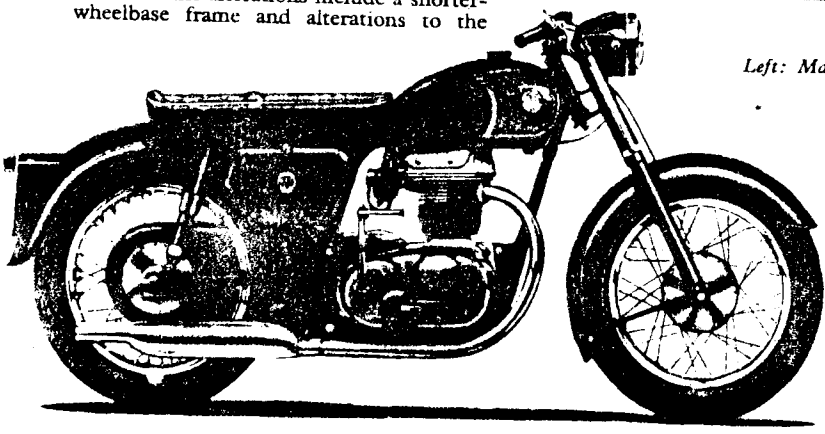
## STIMULATING LONDON SHOW IN YEARS

but the newly announced scrambler features 19in wheels, fabricated hubs and an engine that is more highly tuned.

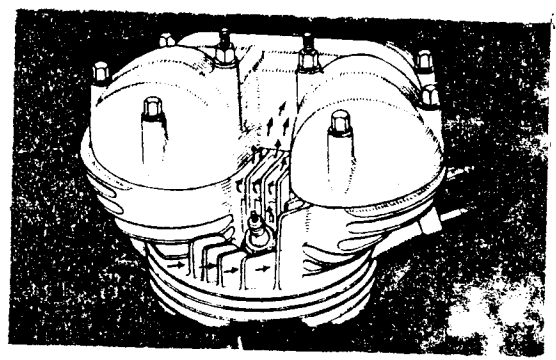
The 347 c.c. Model 16 and 498 c.c. Model 18 roadsters are orthodox singles improved in minor respects for the coming year. Power unit of the much-modified trials mount is basically the three-fifty but with a light-alloy cylinder barrel and tuned to produce plenty of power at low r.p.m. The machine alterations include a shorter-wheelbase frame and alterations to the

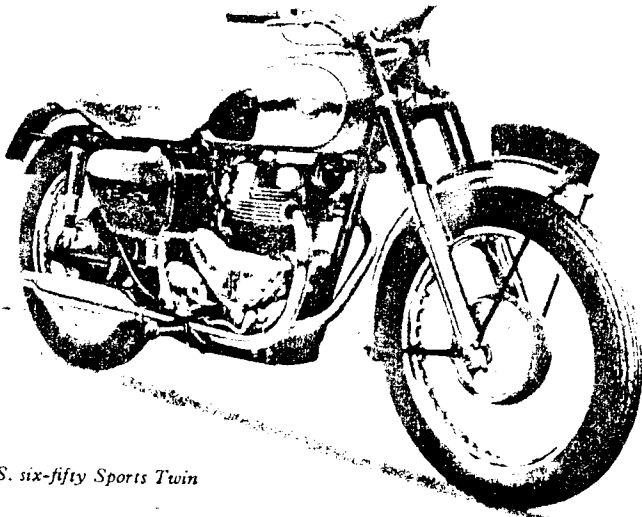


347 c.c. A.J.S. Model 16

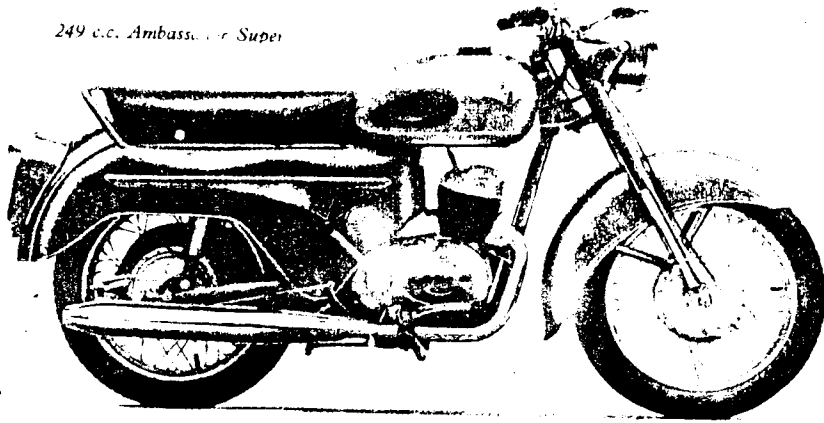


Left: Making its Show debut—the 248 c.c. A.J.S. Model 14. Below: Diagonal finning on the Model 14 cylinder head.

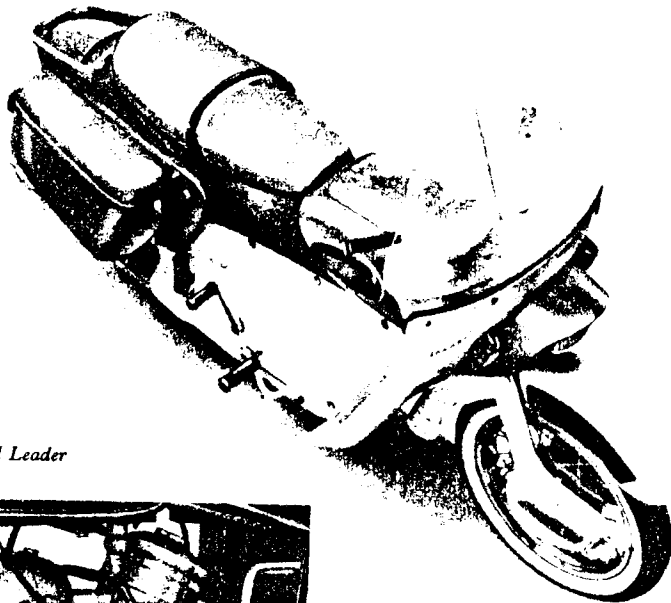




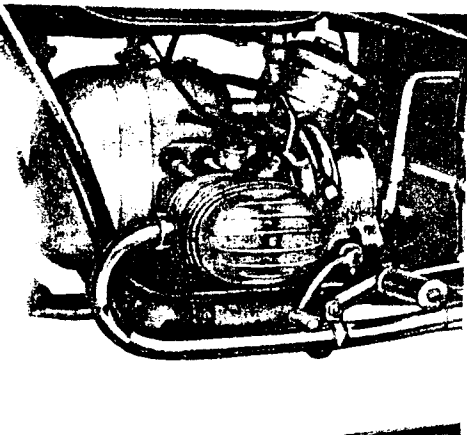
A.J.S. six-fifty Sports Twin



249 c.c. Ambassador Super



Two-fifty Ariel Leader



Power unit of the 494 c.c. R50 B.M.W. flat twin

slanted exhaust system and light-alloy mudguards.

Previously of 592 c.c. capacity, the larger twins have grown up to 646 c.c. by a lengthening of the stroke from 72.8mm to 79.3mm. Here again there are standard (alternator equipped), de luxe, scrambler and Sports Twin variants within the Model 31 group of six-fifties. An unusual but important detail of the A.J.S. twin-cylinder engines is the use of a crankshaft main bearing between the big ends.

Rounding off this impressive range is the ever-popular 349 c.c. 7R racing model. It has engine measurements of 75.5mm x 78mm and valve operation by a chain-driven overhead camshaft. Engine and gear box are housed in a duplex cradle frame and the machine is fully equipped for its purpose. As usual, development work will be carried out during the winter and full details of the 1959 specification will not be released until next spring.

Stand 51

### Ambassador

**C**HIEF focus of interest on the Ambassador stand is one of the smartest models at Earls Court—and that is not surprising, for it hails from a smart place, Ascot! Designated Super S, it is a two-fifty two-stroke twin powered by the zestful Villiers 249 c.c. Mark 2T unit. And it wears a neatly tailored, easily cleaned pressed-steel skirt which envelops much of the rear wheel.

Featured on the newcomer is an Ambassador telescopic front fork which embodies two-rate springing. The wheels are of 17in diameter and they incorporate 7in-diameter brakes. Novelties in the specification include tuned twin electric horns and a rubber-mounted fuel tank held in place without the use of fixing bolts.

Next in engine size in the three-model range is the 197 c.c. Envoy, available to choice with three-speed or four-speed versions of the Villiers Mark 9E power unit. Like the Super S, the Envoy has a single-loop frame, with lengths of 14in x 16-gauge tubing brazed into the malleable-iron steering head lug and welded together where they meet behind the gear box. A sub-frame bolted beneath the Vynide-covered dual-seat and at the rear of the power unit supports the rear mudguard and provides upper mountings for the Girling rear suspension units. The front fork is of M.P. manufacture, and carries a 6in-diameter Miller headlamp. Direct or rectified lighting is available.

A similar general specification is employed for the third Ambassador, the 173 c.c. Popular, except that the frame is of all-welded construction and brake diameter is 5in, as distinct from 6in as on the 197 c.c. model.

Stand 57

### Ariel

**F**OR Show after Show the famous Ariel horse, symbol of the marque for many years, has pranced above a range of models built on traditional lines. And make no mistake, that comprehensive selection of single-, twin- and four-cylinder overhead-valve machines is still very much in the picture. But this year a glamorous, seduc-

it might well be the first of telescopic type.

The engine is a two-stroke with vertical, cast-iron cylinder and light-alloy head. Power output is 14.5 b.h.p. at 5,200 r.p.m. Of 2.1in diameter, the wheels are shod with 3.00in-section tyres and equipped with full-width light-alloy hubs. The Scrambler model exhibited is a souped-up version of the Blizzard. Stand 70

### Maserati

**WHAT** has a 75 c.c. ultra-lightweight in common with a grand-prix racing car? Where the Maserati firm is concerned, the answer is an exceptionally high standard of engineering. Just one model is available in Britain, the L/75/T2. Regardless of its small engine size, the machine is a fully equipped motor cycle. It is powered by a two-stroke built in unit with a three-speed gear box controlled by handle-bar twistgrip. Stand 79

### Matchless

**THE** Matchless range caters for the requirements of a very large number of motor cyclists. Within the programme are 17 models—singles and twins—from two-fifties to six-fifties. While most are roadsters there are no fewer than five scramblers, a trials model and a pukka road-racing machine.

For those who like plenty of power, the G11 six-hundred twins have been increased in capacity to 646 c.c. and rechristened G12. Because of the limitation imposed by the cylinder centres, the greater swept volume has been achieved by lengthening the stroke from 72.8mm to 79.3mm; the generally similar G9 498 c.c. power unit remains substantially unaltered.

Four versions of each capacity of twin are available. They are the standard (which for 1959 has an A.C. generator instead of the traditional separate magneto and dynamo) and de luxe roadster, the scrambler and the Sports Twin variants. The last two have tuned engines, siamesed exhaust systems and polished light-alloy mudguards; the Sports Twins are, in effect, scramblers with road equipment. On all twins save the scramblers a handy new fuel tank of 4½-gallon capacity replaces the previous 3½-gallon tank. On the standard and de luxe twins the mudguards are more shapely and of deeper section than those fitted to last year's G9 and G11 roadsters.

Identical new mudguards are found also on the 498 c.c. and 347 c.c. roadster singles. Their engines have an alternator similar to that of the standard twins. By comparison, the three-fifty and five-hundred scrambler engines have magneto ignition, larger bores and shorter strokes (86mm as against 93mm) and the cylinder barrels are of light alloy with integral pushrod tunnels; the compression ratio, porting and valve timing are altered to give the necessary top-end performance.

Because of its lower-speed duties, the trials engine is basically the long-stroke three-fifty but with a light-alloy barrel, lower compression ratio, more gentle cams and magneto ignition. Ease of handling

has been enhanced by the 1½in shorter wheelbase and 25 lb lower weight than for 1958, achieved by extensive modifications to the front and rear forks, rear sub-frame and hubs.

A compact two-fifty, the G2 was introduced early this year and is a thoroughly modern, good-looking medium-weight machine. Though in general its over-square 248 c.c. 18 b.h.p. overhead-valve engine follows Matchless practice, it embodies novel features. The plane through the valve stems is inclined to the machine's centre line, with the exhaust port offset to the right, and the cylinder axis lies ¼in ahead of the crankshaft axis to minimize piston noise.

The oil container is concealed within the engine right-hand side cover which also embraces the end cover of the separate gear box, giving the appearance of unit construction. Since the gear-box shell is cylindrical it can be rotated on its mounting against the rear of the crankcase to adjust the primary chain.

An unusual detail of the otherwise tubular frame is the use of steel pressings to form the cradle. Telescopic front and pivoted-fork rear suspensions follow normal practice. The roadster has full-width hubs and 17in-diameter wheels shielded by domed mudguards. The scrambler variant, introduced for 1959, has 19in wheels,

light-alloy mudguards and a tuned engine.

Replacing the twin-cylinder G45 racer comes the 496 c.c. (90x78mm) G50 single, based on this year's successful prototype. Stand 47

### Monark

**NOT** only has the 247 c.c. Adler twin we knew of old assumed a new name—Monark Adler—but it has taken on a new appearance. The model is now being made in Sweden and is shown with extensive side panelling and with combined legshields and windscreen that hold promise of a high degree of weather protection.

But underneath its new dress the model is very little changed. The front fork is of leading-link design and the rear suspension is by pivoted fork. Stand 73A

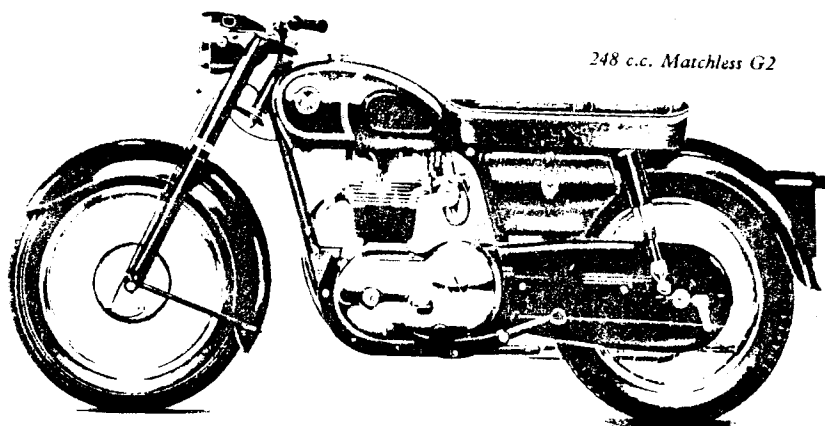
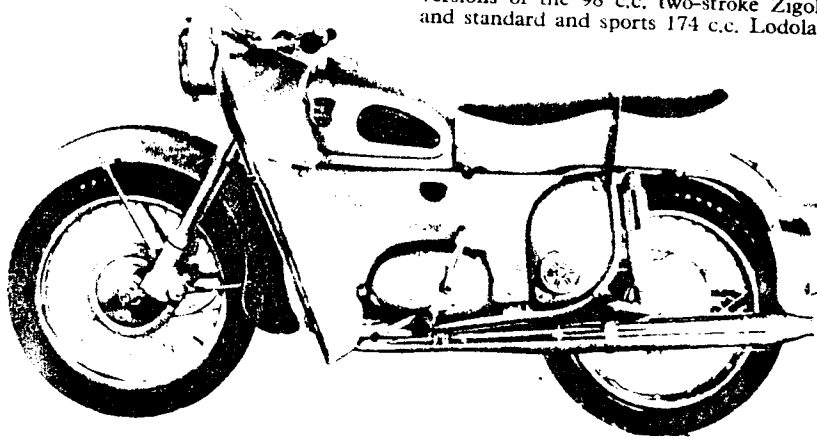
### Motobecane

**A**MONG the surprise exhibits are three visitors from France—Sports Special 175 Motobecanes; importation is to begin right away. Features are a light-alloy cylinder with cast-iron liner, light-alloy head, Gurtner carburettor and New fly-wheel magneto. Transmission is through a four-speed gear box with rocking-pedal control. Suspension is by telescopic front fork and pivoted rear fork. Stand 75

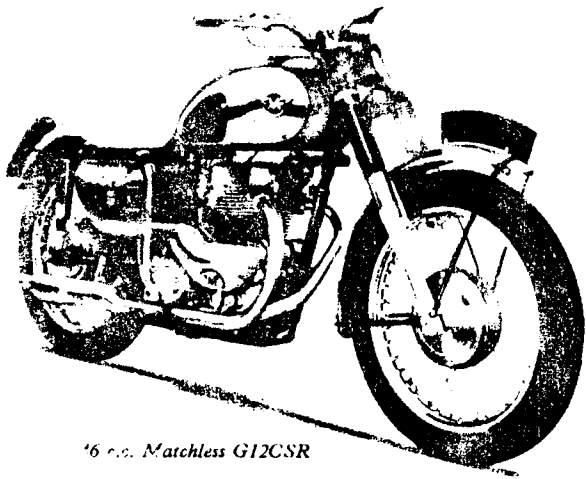
### Moto-Guzzi

**ON** the one hand is displayed the most fabulous racing machine ever built—the Moto-Guzzi vee-eight; on the other, examples of the most straightforward production designs imaginable. The Moto-Guzzi roadsters are lightweights—a 73 c.c. Cardellino, Series I and II and touring versions of the 98 c.c. two-stroke Zigolo and standard and sports 174 c.c. Lodolas.

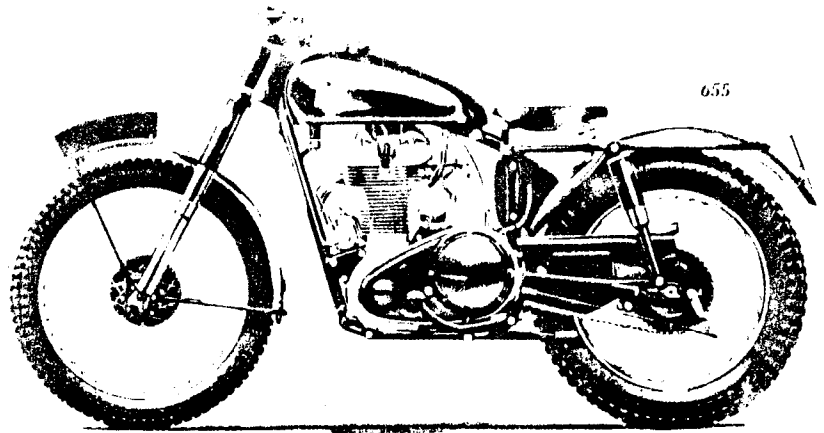
The new-look Monark Adler with side panels and comprehensive weather protection



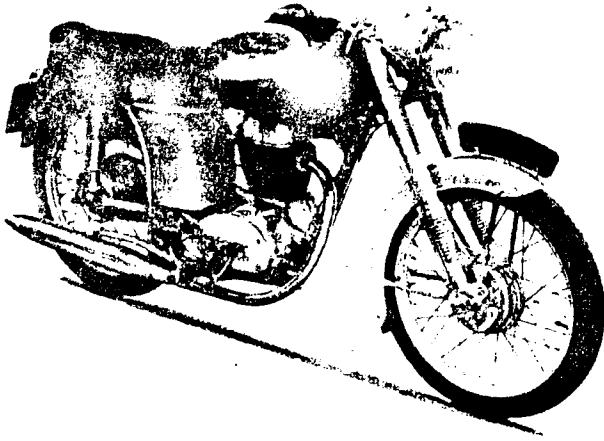
248 c.c. Matchless G2



46 c.c. Matchless G12CSR

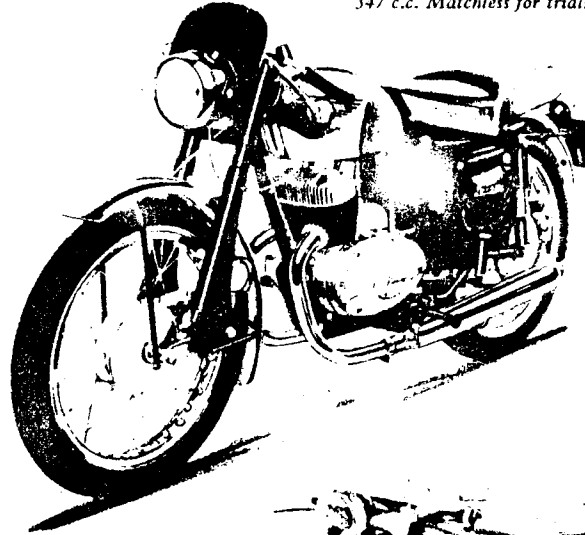


347 c.c. Matchless for trials—the G3C



The Cardellino is a newcomer to the London Show. Cobby and with a decidedly racy air, it has a composite, tubular and pressed-steel frame with telescopic front and pivoted rear forks. Zigolo-wise, the rear fork is controlled by coil springs and friction dampers. The engine breathes through a rotary inlet valve.

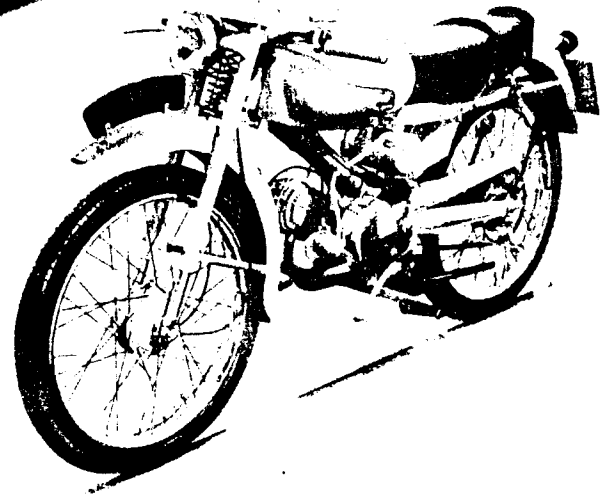
Basically similar to the standard model, the sports Lodola features a larger- $(3\frac{1}{2}$ -gallon) tank and light-alloy rims. The compression ratio is raised to 9 to 1 and power output is 11 b.h.p. Stand 68



Above, left: Sports Speciale Motobecane 175 from France

Above, right: New Norman—the B3 Sports two-fifty

Right: Moto-Guzzi 73 c.c. Cardellino with rotary inlet valve



## Norman

TWO jaunty looking sports roadsters, alike in specification except for engine size and brake diameter, make their Earls Court debuts on the Norman Stand. Major model of the pair is the B3/2T Sports, fitted with the twin-cylinder 249 c.c. Villiers Mark 2T two-stroke power unit; the smaller model has the 197 c.c. Mark 9E single from the same manufacturer. A four-speed gear box is standardized for the twin while three or four speeds are available to choice for the one-nine-seven.

Both sports models have  $2\frac{1}{2}$ -gallon fuel tanks recessed at the rear for the rider's knees. Other features are narrow, dropped handlebars, competition-type footrests and light-alloy mudguards. The frame follows usual Norman practice and has a single front down tube to which are bolted steel

plates which form the engine cradle. The front fork is of Armstrong leading-link pattern and the pivoted rear fork is controlled by oil-damped spring units.

Curved, pressed-steel panels with in-built compartments for battery and tool kit enclose both sides of the rear sub-frame. Front and rear brakes of the 197 c.c. model are of 5in diameter while the two-fifty has a similar rear brake but a 6in-diameter front brake. Tyre sizes for both models are  $2.75 \times 19$ in on the front wheel and  $3.00 \times 19$ in at the rear.

In touring trim the 249 c.c. B3/2T Roadster Twin and the 197 c.c. B2S/9E Roadster have a basic specification similar to that of their sports counterparts. The

frame mid-section enclosure has been restyled for 1959 and a handlebar of somewhat flatter shape is now fitted. Both machines have  $3.00 \times 19$ in tyres at front and rear.

Smallest of the Normans is a one-fifty, designated B1S/31C, which, of course, indicates that it is powered by the 148 c.c. Villiers Mark 31C unit. Rectifier-and-battery lighting is installed as standard.

The remaining model is a rugged 197 c.c. trials mount, the B2S, fitted with a tuned version of the Villiers Mark 9E engine. Standard gear ratios are 7.4, 9.4, 13.05 and 21.8 to 1 but they can be varied by the use of alternative rear-wheel sprockets available at extra cost. Stand 32