

*The 1930 400cc
Matchless Silver Arrow*

Matchless
IN NAME & REPUTATION



FAILURE of previous "ideal" designs by other makers should have warned them but the Collier Brothers, founders of the Matchless marque, had to have a go and the result was the silent running springframe Silver Arrow of 1930, the final year of the vintage era. If ever a design ought to have sold it was this one yet in the three years it was made the total sale was less than 2,000 of which 1,422 were, it is said, sold in the first season. This illustrates the falloff in demand...

For this test I only had to go to my own garage to take out a low-mileage one-previous-owner example recently refurbished for me to concours standard by Tom Dewey.

For the background to this and other ideal designs one must take into account the excessive influence of the motorcycling press. Not content to report events, the learned pressmen of the day felt it their duty to influence design. Week after week they castigated manufacturers for continuing to produce old-fashioned noisy, intractable singles and tried to cajole industry into building quiet, well-mannered multis. Sometimes the dream pictures painted of a vast untapped market waiting for the "right" bike persuaded a maker to produce an ideal design.

The story was always the same. The breathtaking first announcement in the books with lavish section drawings and fully detailed description, perhaps even a brief ride-up-the-road impression. Lovely copy for the books. Lovely free advertising too.

But the motorcycle enthusiast, though ever ready to write letters and argue in pubs about ideal machines, was seldom prepared to back his opinions with his cheque book. Wait and see how it goes was always his attitude. Difficulty was the attributes of these ideal machines — the smoothness and good manners, the comfort and the easy starting — were not easily demonstrable. Speed and handling could be deduced by following racing results. Deep down, every enthusiast was a boy at heart hankering after something a bit naughty and rorty and not yet ready for a bath-chair job...

Dirty and dangerous

The "man in the street" (a vast untapped market) could not be reached through normal motorcycling advertising media. Motorcycles to him — and the occasional venture-some her — were nasty, dirty, dangerous, noisy things. The newspapers said so and it was pretty obvious to the bystander. If only the enthusiasts had bought these ideal machines and used them sensibly the man in the street might have taken notice and changed his opinion of motorcycling and history might have been written differently.

Sad to relate when occasionally a so-called enthusiast bought a super-silent machine (it was well known that noise was the biggest obstacle to public acceptance) you could bet he would tune the silencer to "improve" the note...

Complete removal of the silencer will not wring a rude noise from a Silver Arrow. The combination of tiny pots (by the standard of the day), soft sidevalve timing and two cylinders sharing a cast-iron manifold and exhaust pipe, does not produce enough sound to be important.

Nor enough horses to alarm the timid.

Sophisticated Specification

But if the Matchless designer did not provide performance to excite, he provided sophistication to intrigue. A silky, silent-running power unit, looking more like a little four than a mere twin, was set in a true spring frame and tricked out with de luxe trimmings. Coupled brakes had a separate and over-riding hand control for the front. There was hand adjustment from the saddle of front and rear springing, and an instrument panel on the handlebar with concealed lighting of the instruments.

If disqualified from George Brough's "Rolls Royce of Motorcycles" class through lack of cylinder capacity, it was a strong contender for a Little Rolls tag.

Not that the makers were exactly bashful in their advertising matter. Take this catalogue introduction: "The

most outstanding advance in MotorCycle construction which has ever been achieved. A Motorcycle which is as silent, as smooth running, and as comfortable as a high grade motor car....Possessing every good feature of previous types of Motorcycles including moderate cost, handsome appearance, handiness, rapid acceleration and high maximum speed, (65 mph), its absolutely vibrationless engine, its extraordinarily comfortable spring frame and its exceptionally easy starting place the Silver Arrow in a class by itself."

How does this paragon shape up in fact? Ad men and politicians seem to enjoy immunity from the necessity of being truthful but this spiel is not too far out. Certainly it is as quiet and smooth running as a quality car of its period. Vibrationless too at normal speeds but if overrevved, or even taken near its rev limit, it shakes vigorously in protest.

The rapid acceleration and high maximum speed claim — the makers were not so naive as to believe that prospective purchasers of even an ideal machine would not be interested in performance — makes me raise an eyebrow... Acceleration is car-type, no kick in the pants but a steady increase in speed which is deceptive. The Matchless responds best to gradual opening of the throttle, not a grand slam. In fairness it must be compared with contemporary sidevalves and twostrokes of similar capacity and would, I think, see them off despite being much heavier.

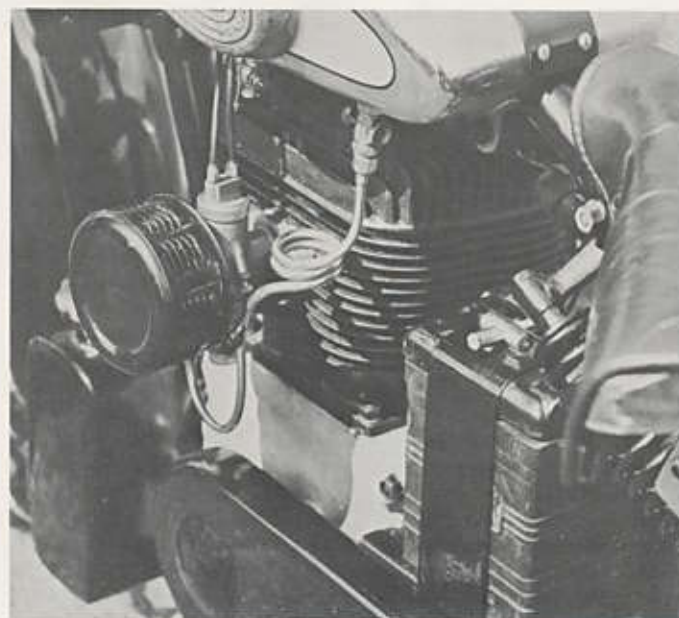
Speediness unimportant

As to maximum speed I would not like to be dogmatic. The maker claimed 65 mph. Owners' claims at the time varied from 60 to 70 mph. Mine might exceed 60 but only with the assistance of wind and gradient. Vintage speedometers may vary. But maximum speed is the last consideration when riding an Arrow. One luxuriates in the armchair springing, adjustable as one purrs along from a floating Boulevard ride to a firm one which yields only to a real bump. The jockey is soothed by the low-pitched hum of the exhaust and the sewing-machine sounds of the engine.

Pedestrians turn their heads, not because of the noise, but because of the lack of it. Mine makes a rhythmic clatter from its timing chest and this is thrown up by the saddle tank to mar an otherwise silent machine but the noise is unnoticeable to the bystander.

The brakes are well engineered, the floating link coincident with the rear suspension pivot cutting out all sawing from suspension movement, but I do not really like coupled brakes and cannot get used to the forks chattering under braking when I have only used the footbrake.

Accessibility (apart from the gearbox and clutch adjustment underneath the magneto platform) is first class,



(Opposite page) Allen, on his own Silver Arrow, circulates for the camera. (Above) The tiny Amal carburetter feeds the 16 bhp motor through passages in the cylinder block casting

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(Above) Clutch-home, feetup, trickling. (Below) Tappets are behind the chrome plate which is retained by a single thumb nut. Though monobloc, the cylinders are actually narrow-angle V-twin

particularly the tappets covered by an inspection plate secured by one knurled nut. The maker's claim to exceptionally easy starting is an understatement. All that is necessary is a gentle stroke of the kickstart pedal. When the engine is warm it can be done by hand pressure alone. Never can there have been an engine of this size so easy to start.

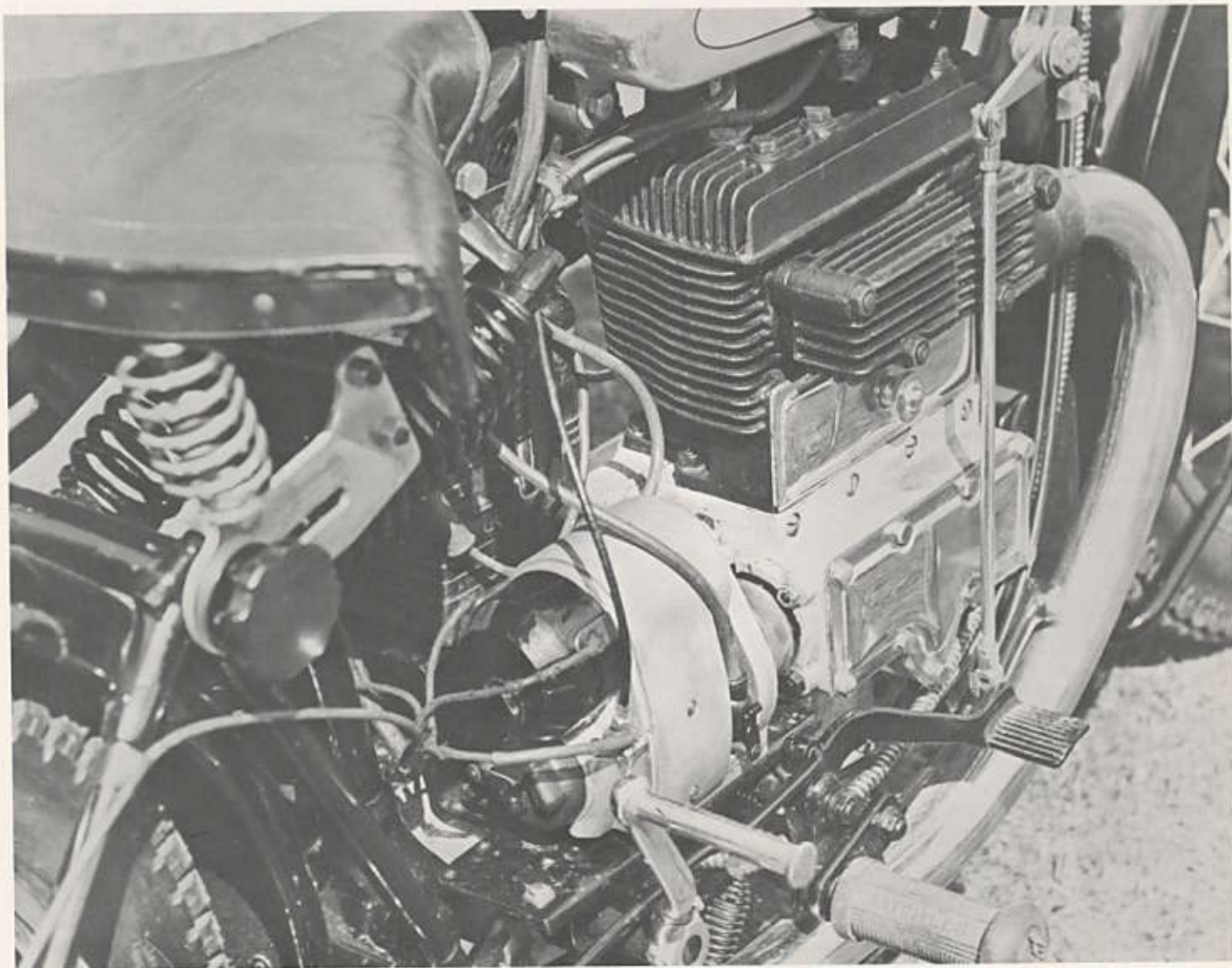
Already I have written enough to explain to the experienced historian why the Silver Arrow did not sell in big numbers. It was much too nice and refined for all but the elderly and timid. By no stretch of imagination could it appeal to the sporty types whose word could make or damn a machine. Yet J.J. Boyd Harvey, one of those soldiers of fortune who would ride anything in trials if the maker would loan a machine, took a Silver Arrow through the Scottish Six Days earning constant mention for the silence of his passage and a Gold at the end of it.

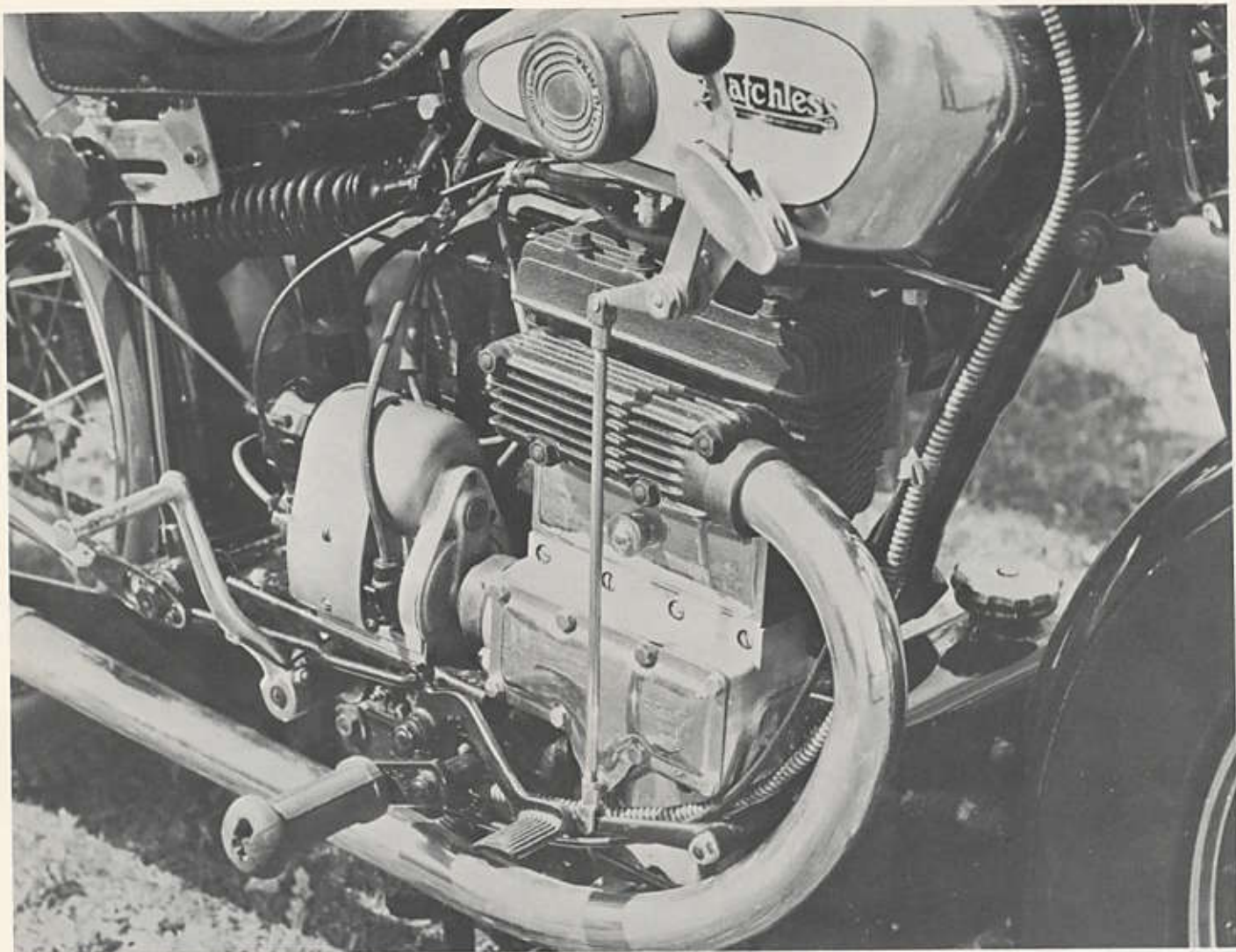
Oilcarrying bashplate?

He must have been a superman! A trials machine the Silver Arrow is not. Too heavy, no bottom end plonk for nadgery and that front-of-the-engine oil tank looks awfully vulnerable despite the catalogue assurance that it could not possibly be damaged even if the machine were ridden over boulder-strewn mountain tracks.

Trials considerations apart, the steering is first-class. It may not have that race-bred ring of confidence but continued use breeds respect. On loose gravel or wet grass, when pride can so often precede a fall, the Silver Arrow has a happy knack of getting out of a slide almost before the rider realises he is in one.

Today, ownership of a smart Arrow is coveted by many for survivors are not numerous and some of those left are in a poor state of repair. So you can readily see that mine has a proud place in my stable, just as the model — for all its sales non-success — has a niche in history.

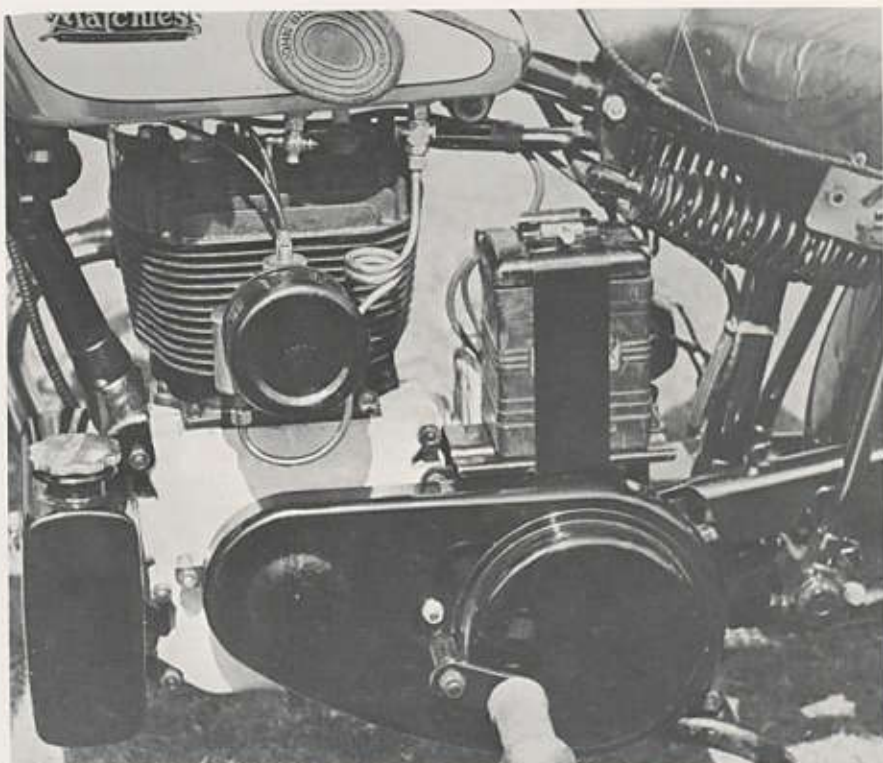




(Above) The inaccessibility criticised by Titch in his text. (Below) Coupled front brake can be over-riden by the hand lever

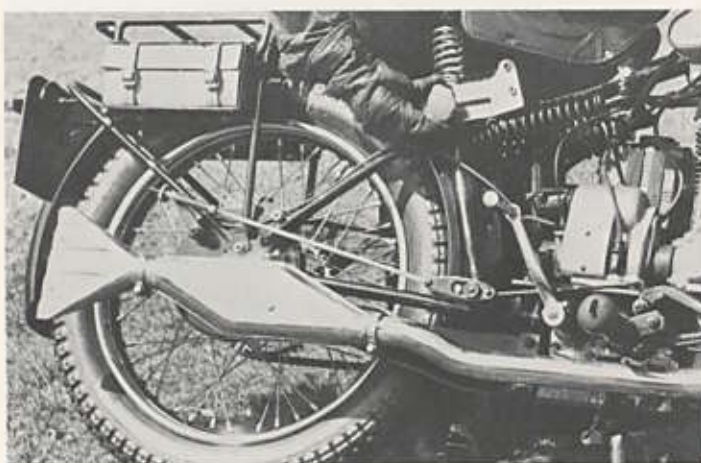
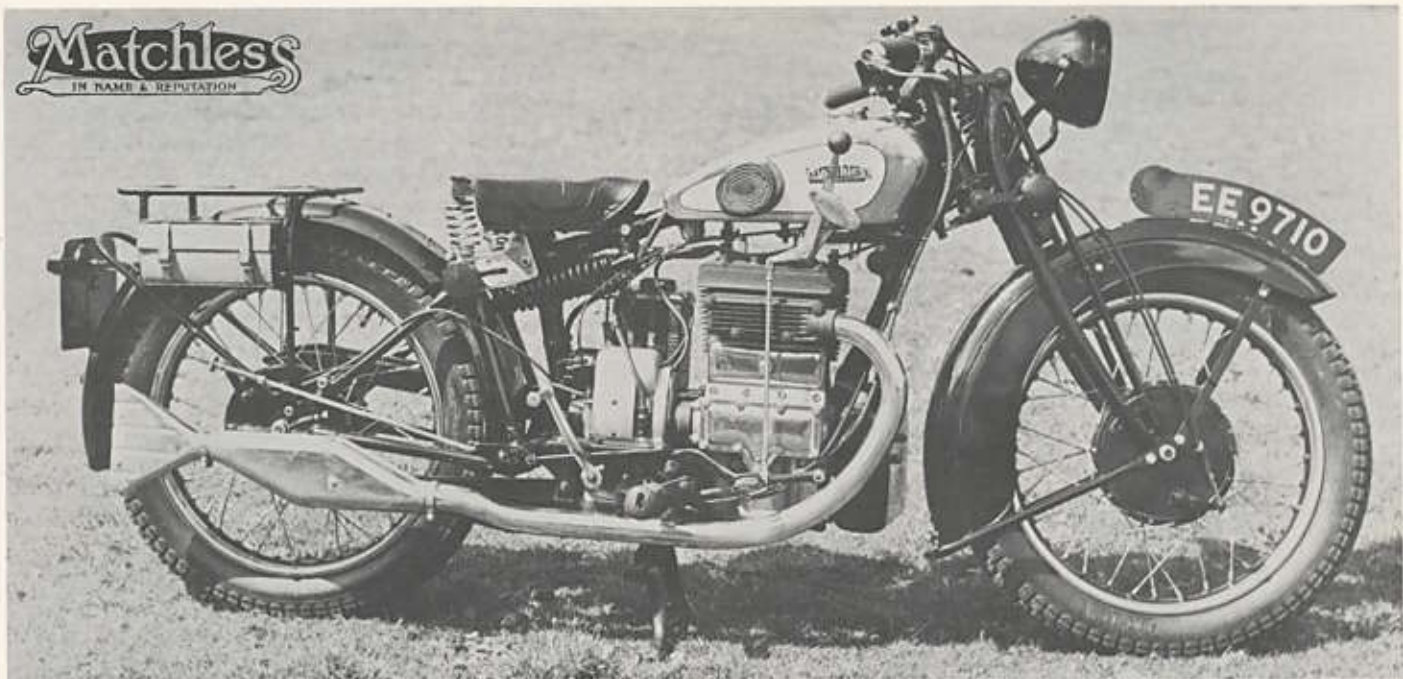


It doesn't look like a V-twin and even the sparking plugs are both perpendicular. The longitudinal camshaft is driven by skew gear and extended to drive the magneto. Four-pint oiltank at front is bolted direct to the crankcase. Connecting ports do away with all oil pipes. Coupled brakes from rightside foot pedal include a floating link to isolate brake action from suspension movement

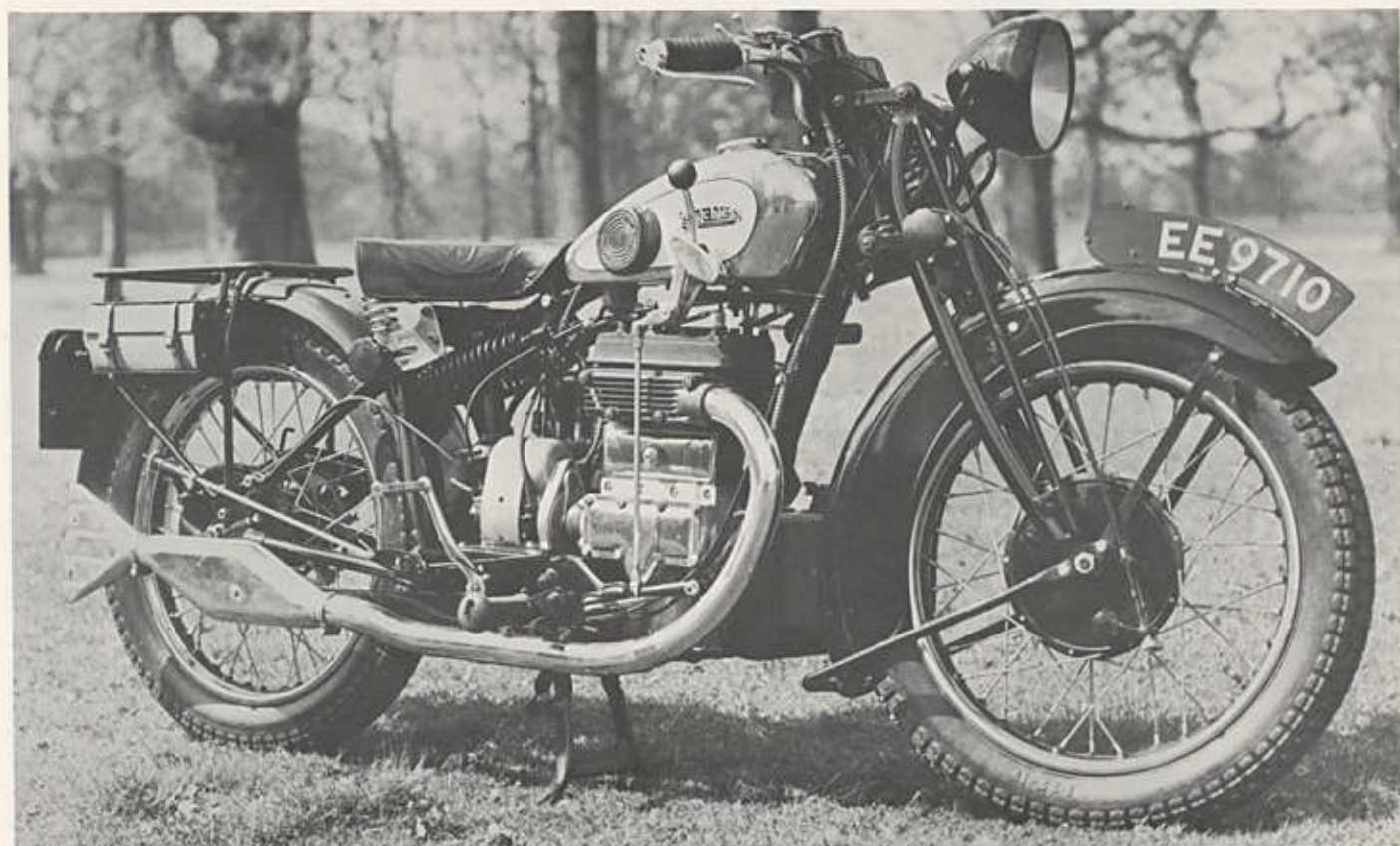


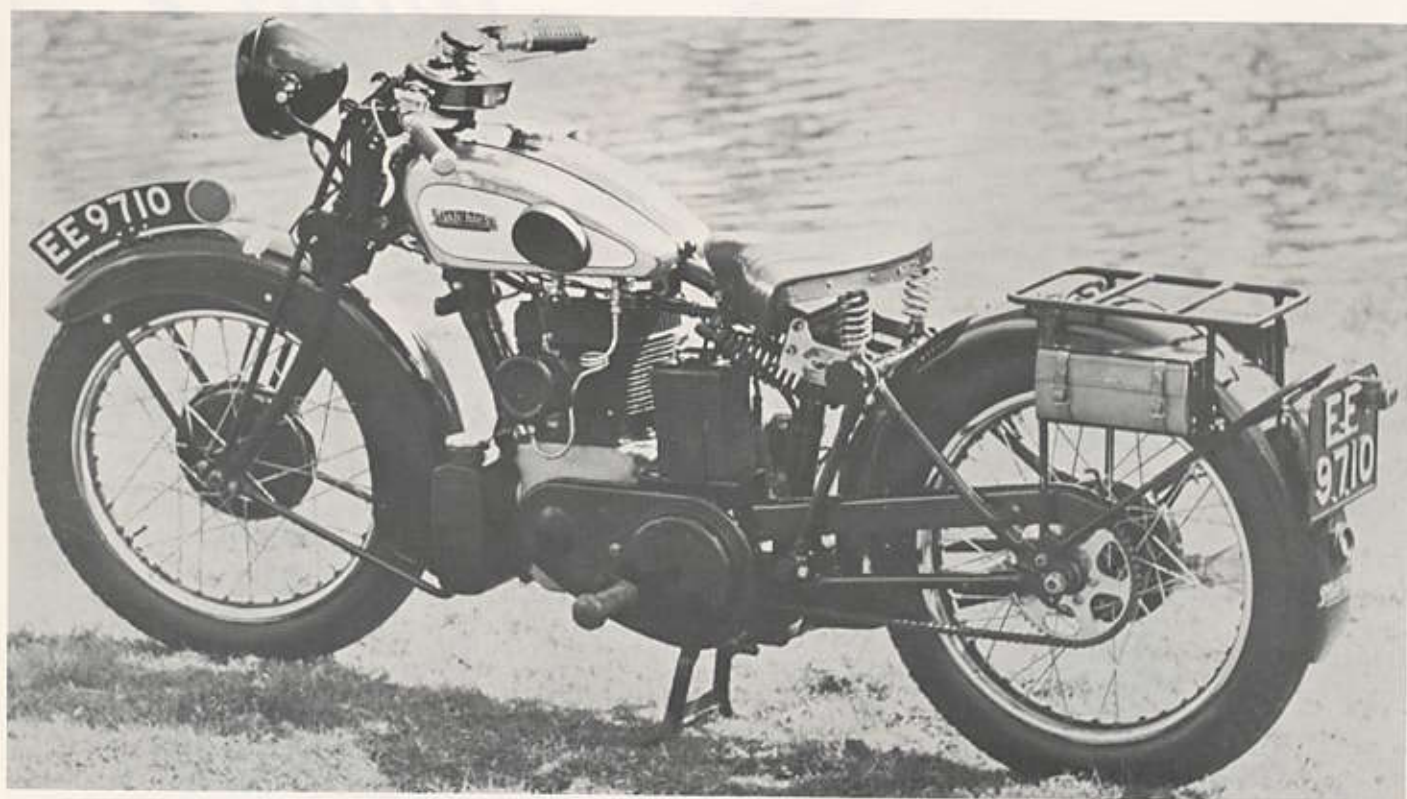
more Matchless overleaf

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(Left) Hand adjuster for rear suspension; can be operated on the move too. (Below) Instrument panel has concealed interior lighting. (Below) Note inverted control lever on twistgrip-side only. Rear mudguard is qd





DATA

Engine: Matchless aircooled monobloc 26-degree V-twin. Onepiece detachable cylinder head. Side valves operated by car-type camshaft, skew driven from crankshaft. 54 x 86 mm bore and stroke. Makers' claimed output: 16 bhp at 5,000 rpm.

Lubrication: Dry-sump from oil tank bolted to front of crankcase; no external pipes.

Ignition: Lucas magneto or Magdyno, directly driven through rubber coupling from camshaft.

Carburation: Amal carburettor bolted to leftside of cylinder block. Induction tract cored through block between cylinders.

Transmission: Sturmev-Archer three-speed gearbox with cork-insert dry-plate clutch. Chain primary drive fully enclosed and lubricated from engine. Chain final drive.

Frame: Diamond type with rear fork pivoted on Silentbloc bushes and controlled by coil springs and friction dampers under saddle. Matchless girder front forks with central spring and hand-adjustable damper.

Wheels: Wellbase rims for 26 x 3.25-inch wired-edge tyres (4-inch section optional extra). Internal-expanding brakes coupled to foot pedal with independent hand control of front brake. Hubs on taper-roller bearings.

Tanks: Saddle tank with petrol capacity of 2½ Imperial gallons. Oil tank in front of engine and holding four pints.

Dimensions: Saddle height 29 inches. Handlebar width 29 inches. Weight 308 pounds.

Original finish: Frame, mudguards and wheels black. Tank chrome plated with white side panels and black lining. Black and white enamelled tank optional. Exhaust system, handlebars and small fittings chrome plated.

Performance: On top gear approximately 60 mph. On second gear 40 mph. On bottom gear 15 mph. Petrol consumption 75 to 85 miles per Imperial gallon.