

PHOTOGRAPHY COLIN CURWOOD

CHEAP AND CHEERFUL

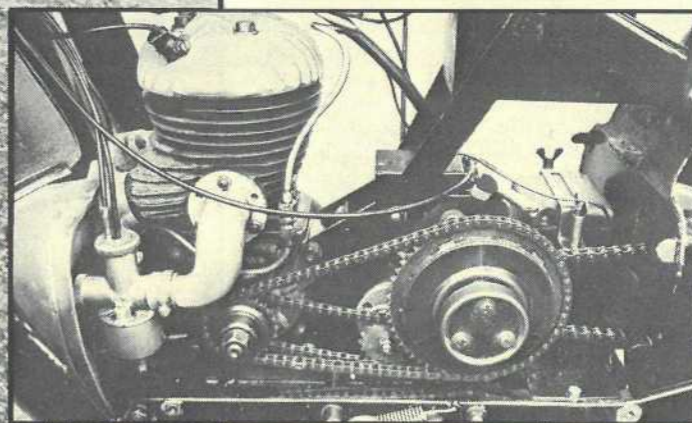
by Peter Watson

OF ALL the cheap 'utility' motorcycles spawned by the Great Depression of the 1930s, the 249cc Francis-Barnett Cruiser was perhaps the most attractive of a largely unlovely breed. Forty-five years on, in the depths of yet another economic slump, it's easy to appreciate why the owner of this 1936 G/39 model regards it with such affection. For it offered far more than cheap, if irksomely slow, transport. It's a fascinating example of sound production engineering in difficult times. The attempt to lure the impecunious onto two wheels struck a true balance between cost and convenience; if the finer points of handling and performance went missing on the way to achieving this ideal, they weren't greatly mourned by grateful owners. At £34 when it was launched in 1933 (road tax £1.50), you couldn't expect everything.

Like many of the designs to emerge from Francis and Barnett's premises in Lower Ford Street, Coventry, Bill King's Cruiser was *different*. As unconventional as the 1923 triangulated frame that consisted of seven pairs of tubes bolted together and gave Francis-Barnett their *Built Like A Bridge* advertising slogan, the Cruiser has a forged, I-section front down member as part of its channel-steel

Left: Styling of the Cruiser is extraordinary for a utility machine.

Below: Drive side view with bonnet removed shows the chain drive to the Miller dynamo and the Villiers carburettor behind a huge alloy expansion chamber.



cradle frame. Its smooth lines are enhanced by voluminous mudguards, leg-shields and a two-piece pressed steel 'bonnet' that encloses the Villiers engine's crankcase and external flywheel, the Albion gearbox, three chains, a clutch and sometimes a two-stroke oil tank. Like the Silent Superb and Pullman models from Coventry-Eagle, the Cruiser represents a stage in the development of a motorcycle design movement that eventually produced the all-enclosed LE Velocette and Ariel Leader.

Like all the products of this lost cause — the desire to expand the motorcycle market by producing an 'ideal' machine for Everyman — the Cruiser was greeted with fervour by the press of the period. 'The Francis-Barnett Cruiser should do more than its share in helping to open up a new market for the motor cycle,' said *The Motor Cycle* in 1933, 'and is an ideal machine, in particular, for the fastidious rider.'

The latter part of that sentence gives you a clue to the Cruiser's main selling point as everyday transport in the British climate. We were fortunate enough to choose one of the foulest days in July, with rain descending intermittently from a dark summer sky in torrents, to assess the Cruiser's claim of the ultimate in weather protection, 1936-style.

Dressed partly in the period costume of a Belstaff riding coat only four sizes too big and a pudding basin helmet only a quarter size too small (provided by the Cruiser's owner Dennis Butler, who dislikes seeing 1930's machines ridden in 1980 apparel), I wobbled off along greasy Hertfordshire lanes slick with recent rain. The Cruiser's steering is deceptively quick, and easily the most sensitive I have ever experienced. The front fork blades are constructed from pairs of welded-up pressings, produced — like the Cruiser's bodywork — by a Francis and Barnett subsidiary, Clarendon Pressings. But these are no crude, light-gauge stampings. The outer pressings are curved and obviously quite stiff enough for a 250 single once reinforced by the flat inner plates.

The frame too belies its whippy, channel-steel look. Underneath there's a full-

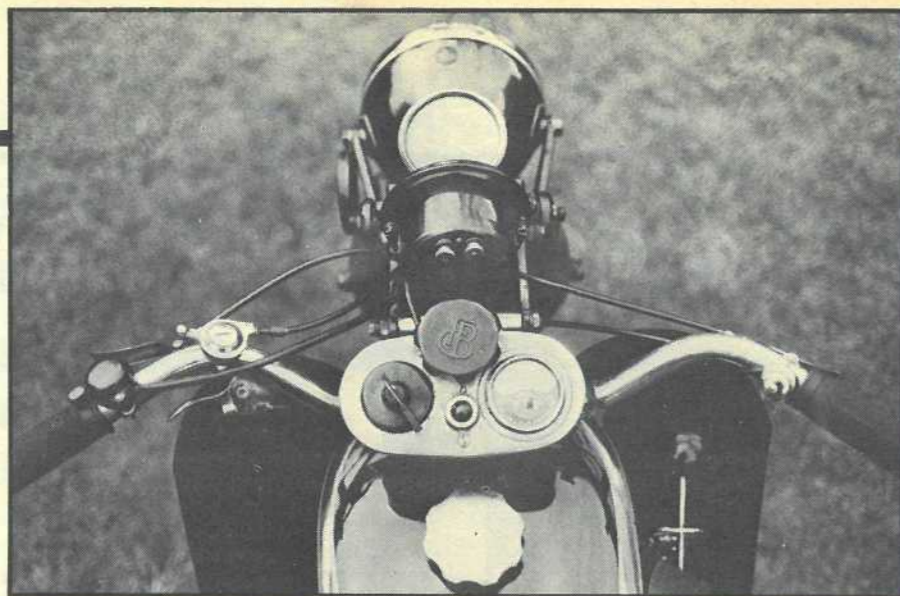
width sump plate between the two rails, and this is cunningly recessed to accommodate the single exhaust pipe which leads from a massive cast aluminium alloy expansion chamber in front of the crankcase to a fishtail silencer inboard of the rear stand. Under the quite amazingly comfortable Terry Dominion saddle with pivot arms stretching forward a good six inches is a toolbox, which promotes stiffness at this junction of frame members. No, it's not a fault of the frame or fork that the Cruiser feels so twitchy at the front: the steering geometry promoted by such a shallow head angle seems to be the culprit.

More difficult to master is the gear-change. At first glance the gate mounted on the right-hand side of the chrome and black tank looks as if it belongs to a three-speed gearbox. But it's a four-speeder, with no convenient notch for second which is, um, a little bit down from first but not too far unless you want third. A novice like myself found it all too easy to slip through third into top. Although the Albion is a smooth and forgiving little box, I now appreciate why motorcyclists saw the arrival of positive-stop gearchange mechanisms as a development without comparison. As the two-lever Villiers carburettor refuses to allow the long-stroke single to idle properly, and there's about half a mile of slack in the scroll-action, straight-pull twistgrip throttle action, you can begin to appreciate my state of mind whenever I had to change down and stop in traffic. A motorcycle cop, awaiting victims on his BMW at the side of a roundabout, stared in disbelief at the muffled figure weaving gently towards him, hands manipulating clutch and gear lever with obvious incompetence. The expected pursuit failed to materialise, but I felt a pair of eyes boring into my back as I escaped in the direction of a well-earned lunch.

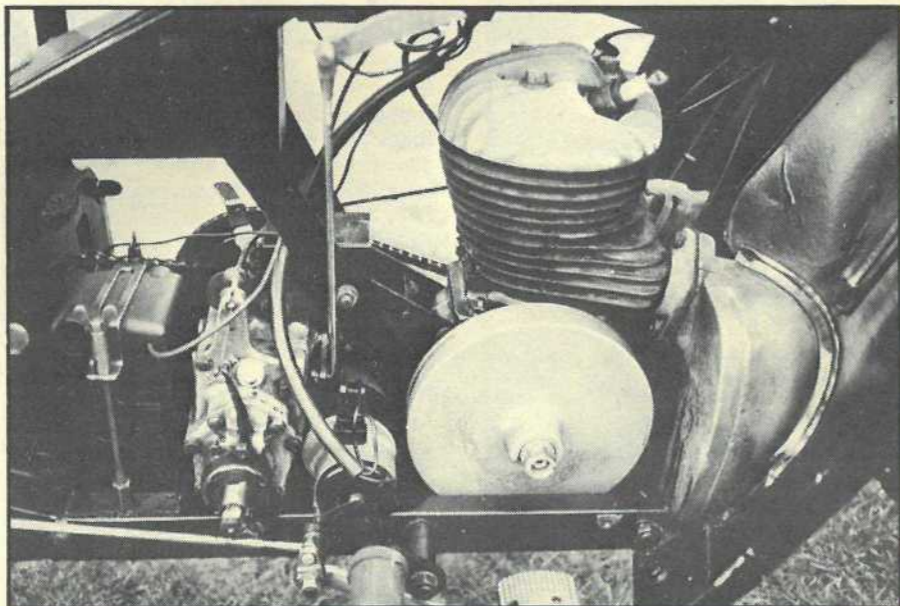
One senses that the Cruiser's brakes are there and apparently in working order, but I have a bone to pick with the tester who wrote that both brakes were 'smooth, powerful and almost foolproof'. And I simply refuse to credit a crash-stop from 30mph in 39 feet. The front brake lever requires a hand with a span not unlike one of Francis and Barnett's famous bridges . . .

Thanks to the strong spark produced by the Miller coil ignition system, starting really is that clichéd 'first kick affair'. You reach down and tickle the carb through a hole in the steel enclosure, adjust the air lever to RICH, lift the decompressor lever and swing the kick-starter down. This last is quickly detachable via a spring-loaded cotter pin, which helps you to remove the whole 'bonnet' (a term the makers themselves adopted) from the engine and gearbox in less than two minutes.

With two wing nuts on a pair of draw-



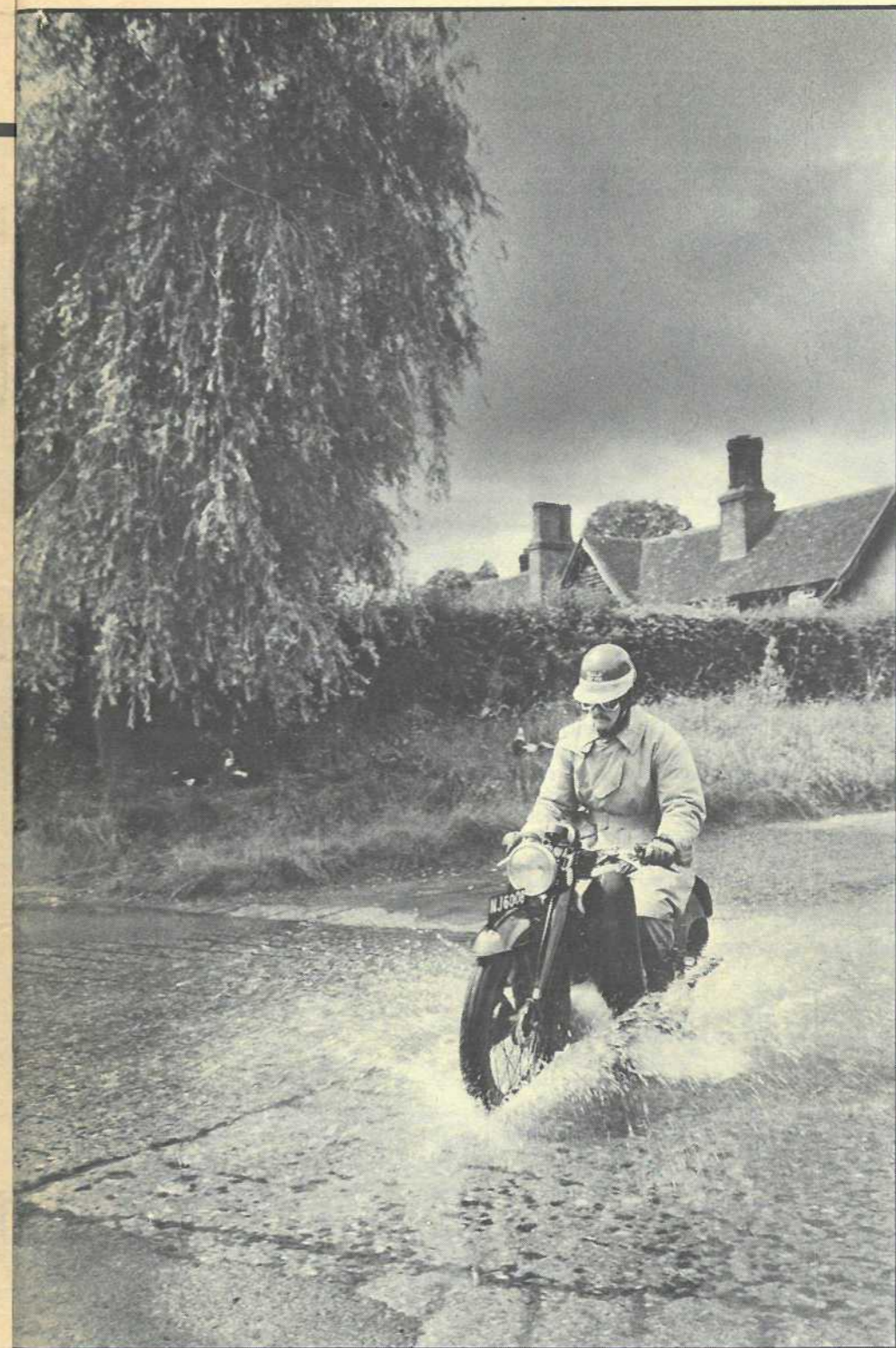
Instrument layout is remarkably modern, with ignition/lights key switch (left) ignition warning light (centre) and ammeter (right).



The Villiers engine has a massive flywheel; Miller dynamo is mounted between the engine and the Albion gearbox. Right: the body really is quickly detachable!

bolts and four 'one wing' bolts to slacken or remove, getting at enclosed components like the battery takes 'little more time than the raising of a car bonnet' as *Motor Cycling* was quick to point out. Four more bolts unscrewed with finger and thumb secure the deeply valanced rear mudguard. And once the top clamp bolt has been freed on the gearbox, primary chain adjustment is cleverly effected by a lever mounted above the box which enables you to pivot the casing on its lower mounting. All very civilised.

Underneath the bodywork you are immediately confronted by exposed chains, sprockets and clutch on the left, for with such a tight-fitting enclosure and that sump plate the makers could dispense with extra chain cases. The inside of the left-hand pressed steel cover is



liberally spattered with oil which is ejected unburnt from the engine. The lubricant is then piped on to the primary chain which, along with the single-row chain driving the 36-watt dynamo — mounted in between the engine and gearbox — helps to fling it around.

Inevitably some reaches the three-spring, four-plate clutch. The clutch is actuated by a shorter than usual pushrod lever on the gearbox casing, but even so the right-hand half of the 'bonnet' needs to be perforated to let it operate.

The clutch is yet another difficulty to overcome in setting off on the Francis-

Barnett. I found that I needed to roll the machine backwards and forwards to engage first gear at a standstill (something remarked upon in a 1937 test), while the clutch proved to be surprisingly vicious when I slowly released the left-hand lever. At first, the Cruiser took off like a startled wallaby, and I could be seen (but fortunately not by Dennis Butler) later executing a desperate front wheel slide while changing from second to third on a greasy camber.

Fortunately, help for the hapless is provided in the form of quite incredible amounts of low-speed torque from the

twin exhaust port, long-stroke Villiers single. Francis-Barnett were associated with Villiers almost from the firm's inception in 1919; the second Fanny B model, launched in 1921, was fitted with Villiers' 2½hp two-stroke single.

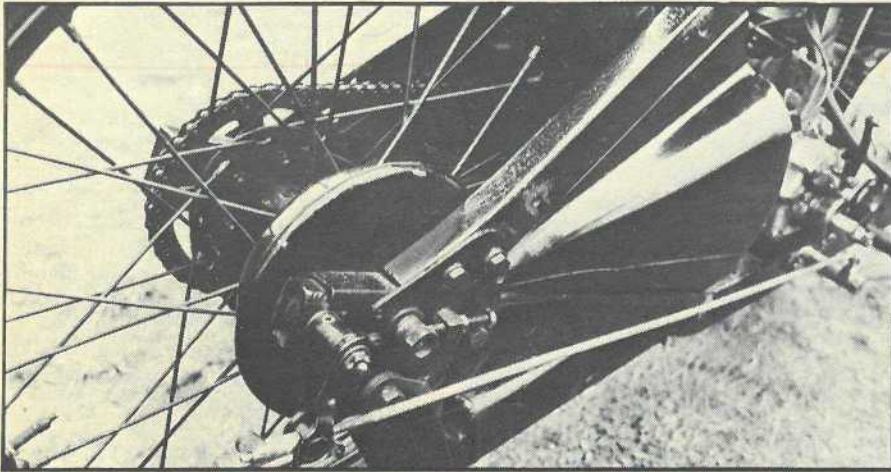
The XIVa motor fitted to this G/39 has a massive (8 x 1.5in) outside flywheel and the ability to pull from as little as 10mph to an indicated 40mph on the Smiths MA speedometer in top gear. It is a deflector-top piston design with a three-bolt alloy head, alloy piston and a seeming inability to stop spinning smoothly once you're under way. Once in top gear you can just concentrate on steering and driving the machine through bends; extravagant lean angles are not recommended either by the owner or me.

It's not that sort of motorcycle and it undoubtedly wasn't sold to sporting types. There was the ohv Blackburne-engined 248cc Red Stag for Fanny B fans who liked a bit more go than that provided by the G/45 Cruiser launched in 1935. This model was powered by a Villiers XVIIa unit, a loop-scavenge single of the Schürle type which produced a shattering 12bhp at 5,000rpm. It was still a 63 x 80mm design, but capable of around 60mph against the Stag's 65mph and a variety of claims for the G/39 Cruiser, which ranged from the believable 40-45mph to the frankly incredible two-way mean of 54mph quoted in a 1933 test, topped by another press claim of 56mph in the same year.

On flat roads the test Cruiser would pull up to 40mph, four-stroking occasionally near maximum revs in each gear, indicating top-end richness perhaps caused by compensating tubes that are failing to lean out the mixture as they should. Yet the engine is in excellent condition — it just fades badly on hills when it will 'slog with almost cart-horse persistency' as noted by an earlier tester. Completely unstressed, the engine never seems to reach a vibration period, is mechanically quiet and has a pleasantly hard-edged exhaust note that would still send a Scott owner to sleep.

The Cruiser's acceleration is similarly somnolent and the engine — heavily shrouded by mudguard, frame member and legshields — appears to run fairly hot, as well it might. Yet the Cruiser had a reputation for tireless longevity in its various forms. During its production life from 1933 to 1939 it was available with the addition of the famed Villiers automatic lubrication system or, like this particular model, with petrol and oil mixed in the flat-bottomed fuel tank, which had been enlarged to take three gallons by '39.

If the slightly more expensive automatic lubrication option was selected a pressurised tank could be found under the right-hand pressed steel cover with its filler protruding conveniently. The tank



feeds oil directly to the cylinder wall, main bearings and roller-bearing big end. It is pressurised from the crankcase: as revolutions and crankcase pressure rise, so more oil is forced out of the tank and through a feed pipe to the engine. There is a sight-feed and provision for the rider to adjust the rate of delivery, but this simple system relies heavily upon airtight sealing at all joints, especially that between the tank filler-cap washer and the neck of the tank.

By 1939 the J39 Cruiser still had its old-fashioned 'three-port' deflector-top piston engine, but petrol lubrication was only available to special order. The loop-scavenge J45 Cruiser's footchange control was a £1 extra on the slower model and the J45 had a flywheel magneto, too. Perhaps it provides better lighting than the Miller dynamo on this G/39, which fails to balance the drain on the battery when you click over the combined ignition/lights key switch which was so admired as a useful novelty in 1933.

Dennis Butler, who runs D C Butler Motorcycles at 8 High Street, Stanstead Abbots, Hertfordshire (0920-870566) also owns a 1928 in-line twin Francis-Barnett Pullman and a 1930 196cc Super Sport. He's that rare combination of a modern motorcycle dealer — Honda, Suzuki, MZ — who's also an enthusiast with a special affection for motorcycles of the 1930s. This Cruiser has been his for four years, during which time it has been gradually 're-restored' following an abortive and thoughtless rebuild as dealer display material for an Enfield, Middlesex, motorcycle shop in the 1950s. He now has the correct silencer and dip-switch and plans to return the kickstart, rear brake pedal and handlebar to their original black finish. The slightly raised saddle suits his six foot frame and will stay where it is: I found it a superbly comfortable riding position.

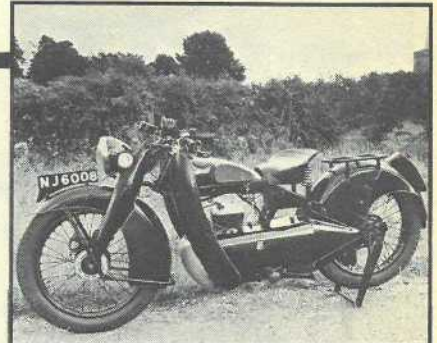
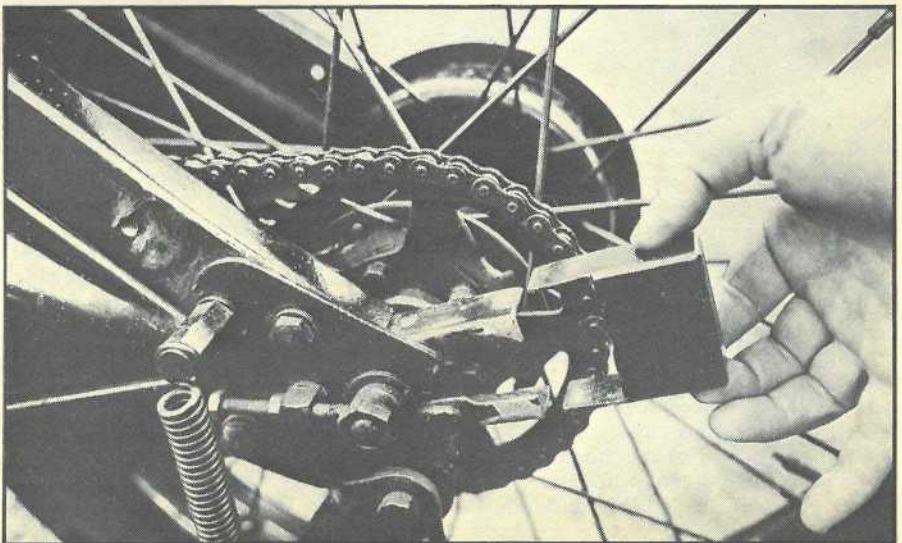
Once I'd got the hang of the Cruiser's

This little cover makes a neat touch at the rear fork end.

The 6in rear brake is feeble; silencer is non-standard.

gearchange and throttle I was able to make full use of the engine's remarkable flexibility. Its power characteristics are the complete antithesis of those dished up by more modern two-strokes, with a side-valve ability to pull evenly from the very bottom of its rev range in top gear. Gently meandering along quiet lanes towards Pelham Furneaux and splashing through a ford straight out of a 1930s postcard, we took things at the Cruiser's unhurried pace.

However, I didn't find the leg-shields quite wide enough to agree with the 1933 tester who claimed that 'no trace of dirt or wet found its way to the rider's city trouserings'. The wader manufacturing moguls may not have quailed, as this same *Motor Cycling* scribe suggested they might, under the onslaught of the weatherproof Cruiser. But here, for all its lack of performance and its marginal handling, is a motorcycle of character and originality — a proletarian with a pedigree.



1936 FRANCIS-BARNETT CRUISER G/39

ENGINE

Type.....two-stroke single
 Bore x stroke.....63 x 80mm
 Capacity.....249cc
 Compression ratio.....n/a
 Carburation.....Villiers two-lever
 Electrical.....Miller 36W dynamo,
 6V/13Ah battery, coil
 and contact breaker ignition

TRANSMISSION

Primary drive.....single-row chain
 Clutch.....multi-plate, dry
 Gearbox.....Albion 4 speed

CYCLE PARTS

Frame.....semi-duplex cradle
 Suspension (front).....girder fork
 (rear).....rigid
 Wheels (front).....3.25 x 19in
 (rear).....3.25 x 19in
 Brakes (front).....5in s/s
 (rear).....6in s/s
 Wheelbase.....54in
 Seat height.....26.5in (standard: see text)
 Ground clearance.....6in
 Weight.....290lb (with fuel and oil)
 Fuel capacity.....2.25gal

PERFORMANCE

Top speed.....40mph (approx)
 Fuel consumption.....95mpg

OWNER.....Dennis Butler, Herts