

Road Tests of New Models

48 c.c. Vincent Firefly

An Admirable Cyclemotor with Good Traffic Manners and Excellent Performance

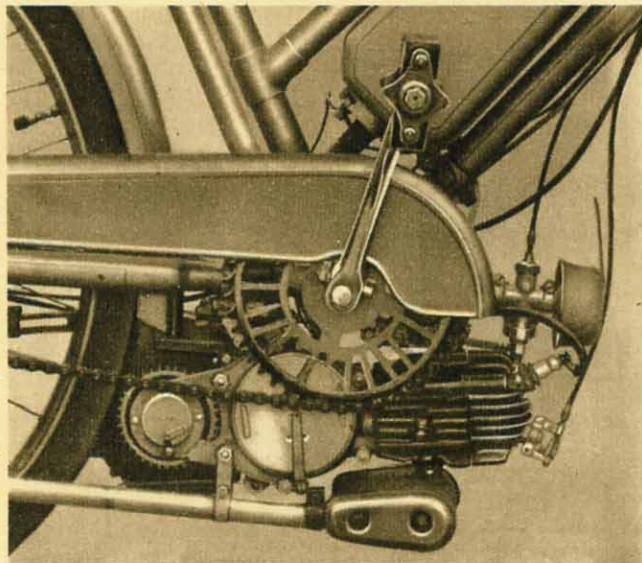
ORIGINALLY designed by H. Miller and Co., Ltd., the electrical concern, nearly two years ago, the Vincent Firefly is one of the latest cyclemotors to appear on the British market. The all-round excellence of the unit's performance places it immediately among the very best of its contemporaries. It is intended for fitting below the bottom bracket of a cycle frame.

The controls of the Firefly are orthodox for a cyclemotor; a combined throttle and compression-release lever fits on the right-hand side of the handlebar while a drive-engagement lever clamps on the left-hand side. Pulling the latter lever towards the handlebar engages the friction roller with the rear tyre; an automatic, spring-loaded catch locks the lever in the engaged position.

Starting the engine was a simple matter, particularly when it was warm. The method most commonly used was to pedal the machine away from rest with the drive disengaged and the throttle partly open; after no more than one-and-a-half turns of the pedals, the drive was engaged. There was invariably an immediate response from the engine, which would then pick up lustily without pedal assistance. An alternative starting method was to pedal away with the drive already engaged and the throttle lever moved outward to operate the compression-release valve; as soon as a speed of approximately 4 m.p.h. was attained, opening the throttle produced an immediate start.

When the engine was started from cold, it was necessary to close the carburettor strangler; it could be opened almost as soon as the engine fired. No difficulty was experienced in opening the strangler with the left foot while the cycle was in motion. Only after the Firefly had been left outdoors overnight in damp weather was it necessary to pedal for more than a very few yards in order to obtain a start; under such conditions pedalling for 30 yards might be required.

The Firefly was used extensively in London traffic, yet pedal assistance was never necessary except when moving off from a standstill, this in spite of frequent baulks on steep, main-road gradients. Used to the maximum, the engine's acceleration and speed capabilities were sufficient to enable the rider easily to maintain station in a moving stream of London traffic. According to the whim of the rider, the machine could be ridden in-



The Vincent Firefly unit fits neatly below the bottom bracket of a cycle frame



definitely at low, moderate, or maximum speeds. No vibration was perceptible, the exhaust note was pleasantly subdued at all times and mechanical noise was notably absent.

Frequent traffic halts presented no difficulty. The hub brakes on the cycle used for the test were below the expected standard; consequently frequent use was made of the engine's retarding effect by closing the throttle and opening the decompressor valve (one movement of the lever) when a halt was required. Once the cycle was at a standstill, the drive was disengaged and a restart duly made by the method first described, namely, engagement of the drive, with the throttle open, after one-and-a-half turns of the pedals.

With more powerful brakes, it would be possible to come to rest with the drive disengaged and the engine running. This scheme offers no advantage, however, since it is necessary in any case to pedal for a few yards when restarting. Additionally, the

INFORMATION PANEL

ENGINE: 48 c.c. (38 x 42 mm) two-stroke with cast-iron cylinder barrel and detachable, light-alloy cylinder head. Roller bearing big-end; ball bearings supporting crankshaft. Compression ratio, 5 to 1. Petroil lubrication.

CARBURETTOR: Amal lightweight, type 308; handlebar-lever throttle control. Combined air filter and strangler.

TRANSMISSION: Rubber-bonded friction roller mounted on countershaft and gear-driven at half engine speed.

IGNITION AND LIGHTING: 9-watt A.C. generator incorporated in countershaft gear; current supplied to ignition coil in base of fuel tank and to front and rear lights.

FUEL CAPACITY: 5 pints.

FUEL CONSUMPTION: 160 m.p.g. ridden moderately; 130 m.p.g. ridden hard.

WEIGHT OF UNIT: 23½ lb complete.

ROAD TAX: 17s 6d a year; 4s 10d a quarter.

PRICE: £25.

MAKERS: Vincent Engineers (Stevenage) Ltd., Stevenage, Herts.

DESCRIPTION: *The Motor Cycle*, 31 January, 1952, and 4 June, 1953.

engine's tickover was not reliable unless set fairly fast. The drive-engagement lever was rather stiff to operate; a nipple pulled off the cable during the test.

In view of the ease with which the Firefly surmounted main-road gradients, a series of tests was undertaken on a quarter-mile-long hill with a maximum gradient, for the last 50 yards, of 1 in 7. From a full-throttle approach, the Firefly crested the hill at 10-12 m.p.h. With a half-throttle approach followed by full throttle opening when the speed fell appreciably, the hill was surmounted easily at 6-8 m.p.h. A restart was readily accomplished halfway up the hill; the engine would continue to pull unaided down to 4-5 m.p.h. on the steepest part of the gradient. Only if the speed fell below this figure was pedal assistance—light pedal assistance—required to keep the engine pulling.

In wet weather, no roller slip was experienced so long as the rear tyre was kept inflated really hard—50 lb sq in or more. The rear tyre was of the tandem type and the inner tube was fitted with a Schrader valve. After dark, adequate intensity of front and rear lights was ensured by the A.C. generator.

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