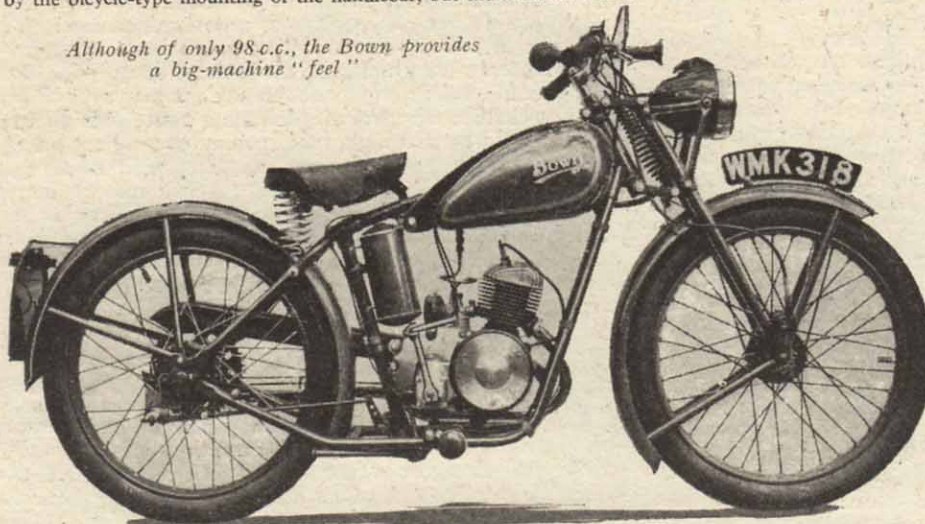


## ROAD TESTS OF NEW MODELS

WITH its rich maroon finish, relieved by chromium plating, the 98 c.c. Bown is possibly one of the most attractive-looking lightweight motor cycles available today. Careful planning of the machine as a whole results in the rider gaining an impression of sitting on a much larger model, and each of those on the Staff who rode the Bown remarked upon the ease with which one could accommodate oneself to the machine.

The only available adjustment to the riding position is that afforded by the bicycle-type mounting of the handlebar, but the machine tested

*Although of only 98 c.c., the Bown provides a big-machine "feel"*



proved to have just the right proportions for riders varying from 5ft 8in to almost 6ft. The saddle height of 27½in and well-placed footrests ensured that the rider's legs were not cramped at an acute angle; with this and the sit-up handlebar, an extremely comfortable posture resulted.

Starting was simple and certain in all circumstances provided that, from cold, the carburettor was liberally flooded, the strangler control closed and the throttle about one-third open. Two, or sometimes three, digs at the kickstarter invariably started the engine, and almost im-

mediately the strangler could be fully opened and ignored until the next cold-start was made. It was necessary to use the toe-portion of the foot to start the engine; otherwise the foot would foul the footrest. If, on the machine tested, the full travel was used, the kickstarter crank was held in the "down" position owing to a protruding footrest hanger bolt. The effort required to start the engine was negligible; the kickstarter could even be operated successfully by hand.

To select bottom gear quietly by means of the handlebar control it was necessary to ease the machine forward slightly; silent engagement was then certain. The clutch, which could be operated by one finger, was sweet and positive in its action. Even after the fierce standing-start tests had been completed, no adjustment was required.

Except during a restart on a steep hill, the clutch could be fully engaged in the first foot or two of motion without any transmission snatch being apparent. At approximately 14 m.p.h., top gear would be engaged by a slow movement of the handlebar lever and the machine could then be left in this gear except when traffic conditions reduced progress to a crawl.

Downward changes could be made silently and positively by leaving the throttle open, withdrawing the clutch to its fullest extent and pushing the gear lever right home. Although there is no positive stop for "neutral," no difficulties were experienced over finding this position; the "neutral" marked on the top portion of the gear-change proved to be slightly out of place.

Both the steering and the general handling of the Bown were excellent. Even on wet wood blocks and tramlines there was no feeling of instability; the machine was remarkable in that an exceptionally high degree of confidence was conveyed under adverse conditions. On corners any selected line could be held without the slightest trace of "wander."

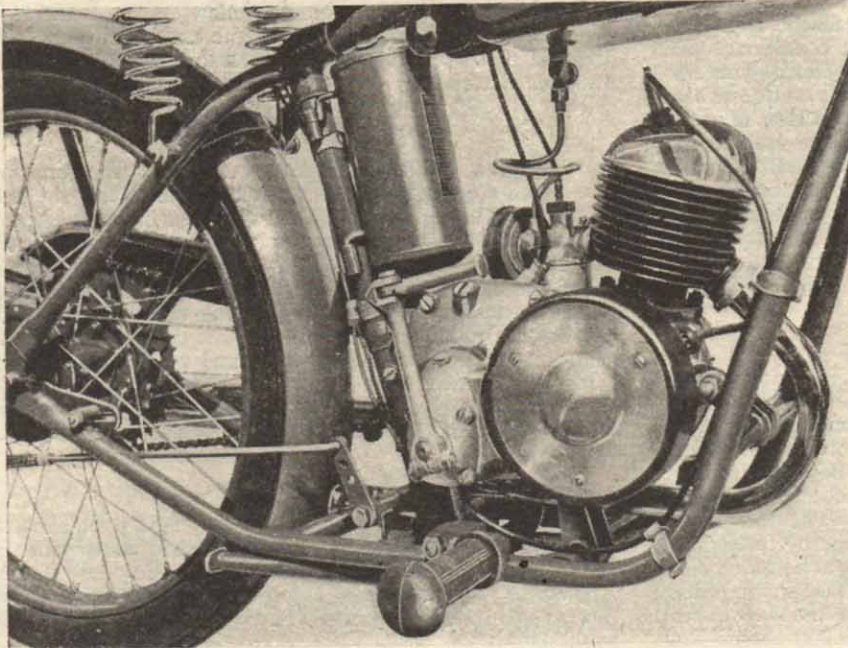
A girder-type front fork is fitted. This absorbed most road shocks, although on very poor cobbled surfaces there were occasions when the spring clashed—apparently on rebound.

At 30 m.p.h. the Bown was at its best maximum cruising speed; much above this speed the engine would start to fuss and the raucous exhaust note, besides attracting unwelcome attention from other road-users, was tiring to the rider. By the time the machine had covered some 400 miles, the exhaust was only slightly less obtrusive. More effective silencing was greatly desired.

At no time during the test was there any engine-fading. After a full-throttle burst lasting over three miles, the engine was only sufficiently hot to prevent the rider holding a hand on the fins. The brakes, although inclined to "shriek" in the earlier stages of the test, were very efficient; the rear-brake pedal could, with advantage, be cranked out from its present position near the frame so that it comes more directly below the rider's foot.

This point, which was mentioned when the machine was taken over, was stated to have been attended to and would automatically be rectified in the next batch of machines. The front mudguard proved effective. Even after a run in heavy rain it was found that scarcely any dirt had been thrown on the frame or engine, and little or none reached the rider's legs—a most excellent and all-too-rare feature. The rear mudguard was found to be equally good.

On the whole, the engine and gear box



*A large-capacity and highly ingenious toolbox is fitted on the seat tube*

# speed Bown

with Appealing Characteristics

were commendably oil-tight. Merely faint traces of oil became apparent on the exterior of the gear box. Oil was reaching the rear chain from the gear box and some of this was thrown on to the centre stand and rear wheel. As a result the rider's shoe was liable to become oily when the stand was operated.

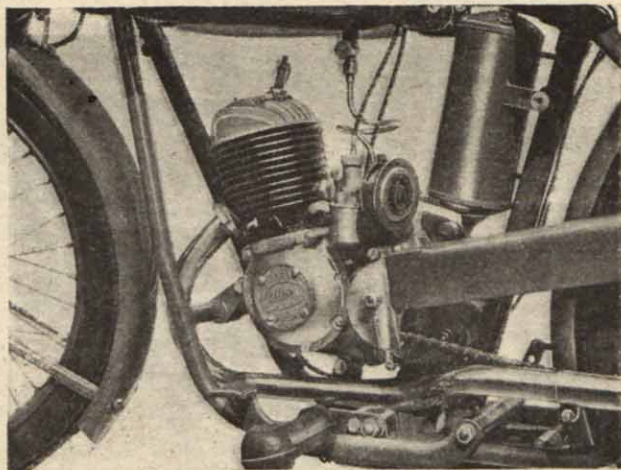
An ingenious, large-capacity, cylindrical toolbox is fitted on the seat tube and is thus placed so that the tools suffer a minimum from road shocks. To a certain extent the box is tamper-proof. In spite of a close-fitting lid with some 3/16in overlap, during a storm of unusual violence some water managed to find its way inside. During the test the only time the comprehensive toolkit was used was to adjust the rear chain after 400 miles had been covered. This operation proved to be extremely simple and took only five minutes to complete.

## Dual-purpose Stand

The high-lift centre stand was reasonably easy to operate. It could be a little more accessible to the toes. The machine would rest on either the front or rear wheel; it was merely a question of pressing down one end of the machine or the other—no weight was necessary to hold the machine down. The speedometer lighting cable proved to be too short and pulled out when the machine was placed on the stand.

The Villiers direct-lighting set gave a light sufficient for the maintenance of daytime speeds. Full power, it seemed, was obtained from the headlight almost as soon as the machine was under way, and even at very low engine speeds there was sufficient light for such jobs as manoeuvring into a garage.

Two-stroking, in general, was good. As usual, on the overrun and when the machine was running lightly, four- and sometimes eight-stroking was marked. Hill-climbing capabilities were excellent. All the main-road inclines encountered in the 500 miles were tackled in top gear with the speedometer needle rarely falling below 25 m.p.h. During the test a hill with a gradient of 1 in 9 with a short section of 1 in 6 was tried and the Bown climbed this at about 12 m.p.h. in bottom gear. Restarts on the 1 in 9 section were just possible, although the clutch was abused to some extent.



Unusual with a 98 c.c. mount, the machine has a duplex-cradle frame

Mechanical noise from the engine was negligible and could only be heard when the machine was stationary and the engine merely ticking over.

In thick traffic the Bown was a delight. It was possible to ride to a standstill and balance, for seconds, with the feet on the rests. The nippy acceleration ensured that the rider could hold his own with the usual run of vehicles.

Throughout the period of the test, the rear brake was adjusted once and, as mentioned earlier, the rear chain had its initial slack taken up; apart from this, no attention was needed at any time, and at the end of the test there were no indications that further adjustments were desirable.

To sum up, the Bown is an excellent machine for the rider who wants to combine general utility riding with modest touring—this at the lowest cost consistent with comfort and efficiency.

## Information Panel

### SPECIFICATION

**ENGINE:** Villiers 98 c.c. (47 x 57 mm) single-cylinder two-stroke with two-speed gear in unit. Roller bearing big-end; ball bearings supporting mainshafts. Flat-crown die-cast, aluminium-alloy piston. Detachable light-alloy cylinder head. Petroil lubrication.

**CARBURETTOR:** Villiers "Junior" single-lever type with air filter and strangler. Twistgrip throttle control.

**TRANSMISSION:** Villiers two-speed in unit with the engine; gear change operated by handlebar lever through control cable. Top, 8.47 to 1. Bottom, 13.05 to 1. Cork-insert clutch running in oil. Primary chain  $\frac{3}{8}$  x 0.225in in oil-bath case. Rear,  $\frac{1}{2}$  x 0.305in with guard over top run.

**IGNITION:** Villiers flywheel magneto.

**LIGHTING:** Villiers direct. Twin-filament 12/12 w main bulb. Dry battery in headlamp for parking.

**PETROIL CAPACITY:** 1½ gallons

**TYRES:** Dunlop studded, 19 x 2.50in, front and rear.

**BRAKES:** 4in internal-expanding, front and rear.

**SUSPENSION:** Bown link-type front fork with central compression spring.

**WHEELBASE:** 48in.

**SADDLE:** Wright. Unladen height, 27½in.

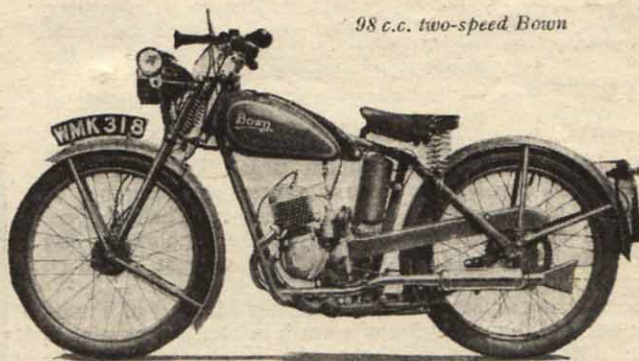
**WEIGHT:** 138 lb with approx. ½ gallon of petrol.

**PRICE:** £59 16s 5d; with Purchase Tax (in Britain only), £75 19s 6d.

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

**MAKERS:** Bown Cycle Co. Ltd., Tonypandy, Glamorgan

98 c.c. two-speed Bown



### PERFORMANCE DATA

**MAXIMUM SPEED:** Bottom: 29 m.p.h.  
Top: 38 m.p.h.

**ACCELERATION:**

	10-20 m.p.h.	15-25 m.p.h.	20-30 m.p.h.
Bottom ... ..	3.2 secs	4.8 secs	—
Top ... ..	4.4 secs	5.2 secs	6.2 secs
Mean speed at end of quarter-mile from rest: 38 m.p.h.			
Time taken from rest to 30 m.p.h.: 13.2 secs.			

**PETROIL CONSUMPTION:** At 20 m.p.h., 151 m.p.g. At 30 m.p.h., 128 m.p.g.

**BRAKING:** From 30 m.p.h. to rest, 30ft (surface, dry, coarse-granite chippings set in tar).

**TURNING CIRCLE:** 11ft

**MINIMUM NON-SNATCH SPEED:** 11 m.p.h. in top gear.

**WEIGHT PER C.C.:** 1.4 lb.

# IceniCAM Information Service



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