

BIRMINGHAM'S 'JOYBIKE'

An 80 c.c. Enclosed Mo-ped Selling for Less than £60



INCREASING rail fares and the coming rise in insurance rates emphasize the appeal of the genuinely low-cost utility machine. In this category is the "Joybike," a hand-built mo-ped now in limited production by H. V. Powell, Ltd., of 96 Birchfield Road, Birmingham, 19.

Much of the "Joybike's" specification is unusual, beginning with the J.A.P. two-stroke engine of 79 c.c. (46 mm. by 48 mm.), which is more than half as large again as the general run of mo-ped motors. Claimed output is 1 b.h.p. at 2,500 r.p.m., and at cruising speeds between 25 and 30 m.p.h. in open country fuel consumption is said to average 120-130 m.p.g.

Hitherto the "Joybike," as developed over the past two years, has been powered by a Trojan engine in a "bare" frame, but the 1961 version has full enclosure, with frontal legshield, q.d. side panels and built-in panniers. The all-in price is £59 15s.

The straight tubes of the frame are welded into pressed-steel fabricated lugs at the steering column and saddle bracket, the "bottom bracket" being formed within a triangular welded housing.

Suspended in engine plates which act as part of the top chainstay structure, the engine is inverted and drives a primary V-belt, the driven pulley carrying a sprocket for the final chain drive.

There is no clutch; instead, the lower pulley may be moved to slacken or tighten the belt. The "Joybike" is pedalled away with the belt slack, then a handlebar lever is operated to increase pulley tension and the momentum of the machine starts the engine, which remains "in gear" while the rider freewheels. A normal twistgrip controls the throttle opening of the Amal carburetter.

A second handlebar lever releases the pulley from the driving position, easing the tension of the belt so that the engine can idle while the machine is brought to a stop.

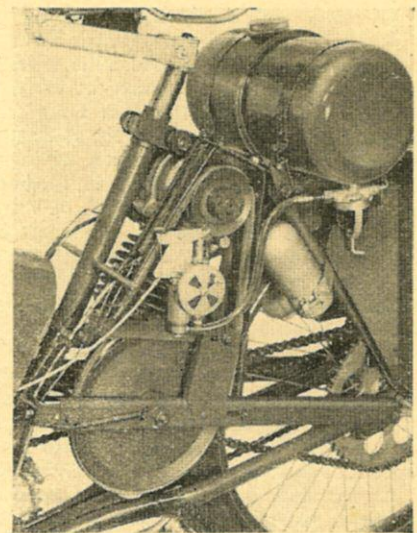
There are three independent braking systems. Handlebar levers operate an internal-expanding front brake and a friction shoe working on the lower pulley; in addition, there is a back-peddalling brake in the rear hub.

The standard specification includes a Wipac filter in the flexible fuel line, between the nine-pint tank and the carburetter. The lighting system consists of an A.C.-output flywheel-type Miller generator and a 4-in. headlamp with an 18-w. bulb.

The rear wheel is rigidly mounted, but a well-proportioned and fully adjustable sprung saddle provides a comfortable ride. At the

front are coil-sprung telescopic forks of Powell manufacture; 2-in. by 23-in. Dunlop tyres are fitted front and rear.

On a short test run, the "Joybike" proved almost as simple to handle as a pedal cycle. The engine, brand new, showed a natural hesitation in picking-up for the first time, but after that it provided very reasonable acceleration and all the speed that could be used in a built-up area. There was plenty of power, too, for hill-climbing. Braking was more than ample. The exhaust was reasonably quiet and the lights adequate. In short, a very practical and easy-to-manage utility vehicle.



Belt primary transmission from the inverted engine; the driven pulley is raised to relieve belt tension for "declutching."

YOU ONLY ARSKED . . .

with acknowledgments and apologies to BERNARD BRESSLAU

Needless Detail

Q What size main-jet should I fit? I understand this has some effect on the performance of the engine.

Bow, E.3.

J. FAUNCEWATER-THAKE

A We think that this query should have been sent direct to the carburetter factory. They have so much experience that they do not really need to know the make, model, capacity or any of the details which have been omitted. After all, one does not want to confuse the issue, does one? Or does one?

Quick, Quick, Slow

Q My two-carburetter, twin two-stroke refuses to start. It fires once then stops. I find this irritating. Have you any really sensible suggestions?

Nether Whacking.

"DISILLUSIONED"

A The explanation is that one-half of your engine is trying to go forwards, the other half backwards. The result is given by the formula:

$$\text{RPM (f)} + \text{RPM (b)} = 0$$

As you are doubtless aware, the throttles on your model are, in the deathless words of an

anonymous Teutonic translator "controlled contemporaneously from the gas-torsional handle via some derivation-piece." Undoubtedly your derivation piece has become deranged, possibly by quasi-inversion.

There could be other explanations, of course, but this seems the most likely.

For the Record

Q Boy, do I dig that flint-spark gimmick! Even though the plugs wot I fit are real cool, like I mean real cool, man. Every now and then they go square, get out of the groove and one might say become unhepped, like crazy. Who flogs these things anyway? If you can give me the message so I can case the joint, then me and the gang will all have one each.

Chelsea, S.W.

"TOP TEN TIM"

A We doubt if any such articles still exist; even in musketry circles, this ignition system has been almost ousted by the percussion cap, invented, we believe, by a Scots clergyman. However, there may be one in the _____ Museum* in which event you could knock it off under cover of some diversion created by your colleagues.

* Name and address on receipt of 6d.—cash.

Q Next year I shall be breaking the World's Fastest record. Where can I get sprockets cut to give me a top gear ratio of 1 to 3, instead of 3 to 1? It is clear to me that therein lies the secret of success, as my present mount gc's faster in top gear than it does in second and much faster than in bottom.

Chortling-in-Wedlock.

"BUD"

A It is often said that "one cannot see the wood for the trees," likewise "the onlooker sees most of the game." So it is in your case, for you have hit on the one idea which has so far eluded the experts(?).

Our congratulations, and the best of British luck to you in your venture.

Gettin' the Low-down

Q I think that the milk-bar cowboys are wrong. I have mounted my bars on the front spindle, which besides being much more uncomfortable enables me to operate the front brake directly with my thumb.

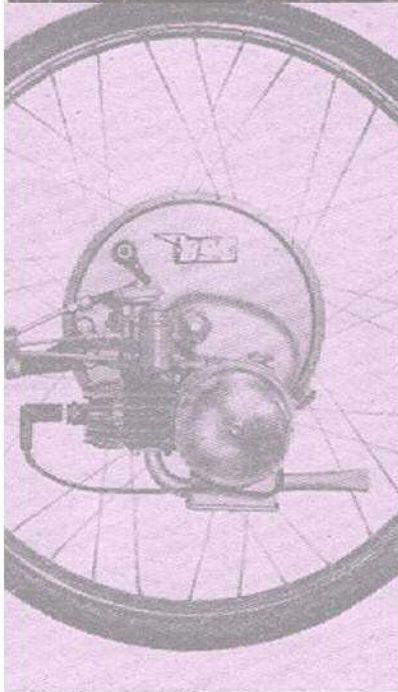
Sidcup.

"CAFE AU LAIT-DOWN"

P.S. Of course, I can't stop very quickly.

A What a splendid idea! Have you tried mounting the footrests on each side of the rear number-plate? With the aid of some "Scotchlite" paint and the deft ankle-action developed by rock 'n roll, your shoes would constitute the solo rider's direction indicator par excellence!

IceniCAM Information Service



www.icenicam.org.uk