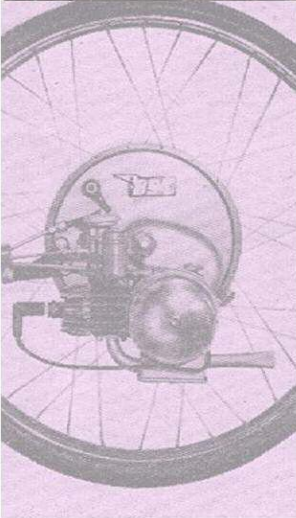


# IceniCAM Information Service

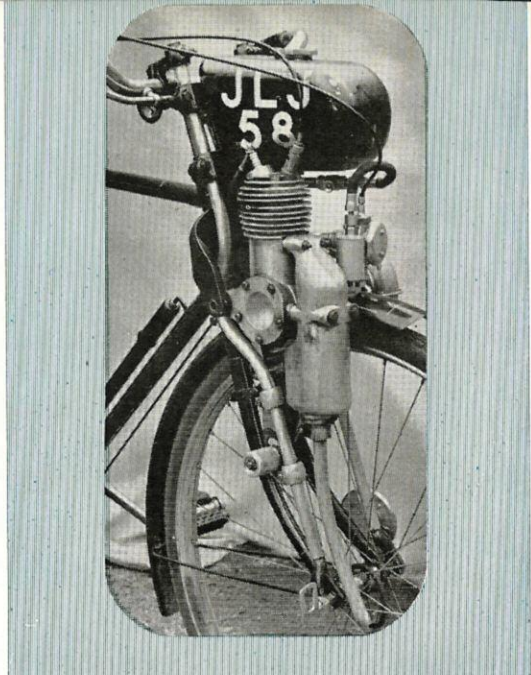


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**PRODUCTION** was announced recently of a new power unit for attachment to pedal cycles. Entirely British in design and manufacture, it is known as the G.Y.S., and the makers are the G.Y.S. Engineering Co. Ltd., the sales office of which is at 44 St. Pauls Crescent, London, N.W.1.

The unit fits on to the handlebars and front wheel spindle, and the drive is direct on to the front tyre by means of a carborundum roller. Power is provided by a 49-c.c. engine with a bore and stroke of 40 mm., which is claimed to be capable of developing 1.2 b.h.p. at 3,500 r.p.m. A Wellworthy lipped crown piston is fitted, and this operates in a Wellworthy liner shrunk and keyed in a light alloy cylinder casting which forms an integral part of the banjo-shaped crankcase. The cylinder head is of light alloy, and is held in position by four studs.

The light alloy connecting rod has



## Cycle Power Unit

**All-British product for fitment to any roadster machine**

phosphor bronze bushes on the small and big ends. The big end is carried on an overhung crank, and the crankshaft, which extends across the front wheel, carries the driving roller and drives the Wico-Pacy Bantam flywheel magneto.

A light alloy stub bolted to the cylinder carries a special Amal carburettor, which is fitted with a strangler for cold starting. The exhaust gases discharge into a light alloy expansion chamber bolted to the cylinder crankcase casting. The outlet discharges by the front wheel spindle.

Carried above the engine on a light alloy back plate is a 3-pint tank for petrol. The bottom lugs of the back plate house a transverse hollow spindle on which the engine pivots, enabling the driving roller to be brought into operation or disengaged from the tyre as required.

Duralumin tubes, clamped at the bottom of the back plate, have phosphor bronze lugs which are free to slide up and down to allow for fork deflection. These lugs fit on special adaptors screwed to the end of the standard wheel spindle.

A flat friction damper plate is carried on the right-hand tube and has a hand adjuster operating a rod attached to the engine crankcase. The damper rod is located in a notch in the plate when the engine is swivelled back and the roller disengaged from the tyre. When the engine is brought into operation, the engine swivels forward and the driving roller is held in contact with the tyre by means of tension spring between the crankcase and the bottom lug of the friction plate. A handlebar lever opens the throttle when moved in one direction and operates the decompressor when moved in the other.

Weighing 14 lb and priced in this country at £21, the G.Y.S. attachment is claimed to be capable of speeds up to 20 m.p.h., and consumption is said to be in the region of 240 m.p.g. or 90 miles to one filling of the tank.

*Mounting, as shown in the above picture, is by means of alloy tubes fixed to handlebars and spindle adaptors, and allows for adjustment*