

Netherlands Power Wheel

An Ingenious Auxiliary Unit for Cycles

SINCE early days, designers have experimented on the lines of dispensing with long transmission systems and driving a wheel with an engine mounted on, in, or near the hub. Successful bicycle attachments on these lines are already widely known and a newcomer, seen at the Amsterdam Show, was the Wingwheel, which is manufactured in Holland. A young Dutch engineer, M. Geersink, is responsible for the design of this neat, 38 c.c. two-stroke auxiliary. Cylinder and crankcase are carried on the right-hand side of the hub and the Norris magneto, in a hemispherical light-alloy castings, is housed on the left. The large-diameter hub embraces the gear transmission and also an automatic clutch which slips when maximum power is being delivered by the engine (some 0.6 b.h.p. at 4,000 r.p.m.).

Disconnection of the drive is achieved by sliding the driving gears out of mesh with final-drive pinion on the inside of the hub shell. A compound pinion is moved sideways by a chain, the operating lever of which is on the left side of the unit. For shock absorption, the final-drive pinion is mounted on rubber cushions.

The crankshaft passes right through the hub to drive the flywheel magneto. Slots in the shaft engage with the larger end of the compound pinion mentioned earlier, the smaller end of which engages with teeth of the pinion on the inside of the hub shell. The compound pinion is in two parts, the larger end of Novotex fibre material, the smaller of steel, and they mate in a conical joint, the Novotex being the female and the steel end the male. Contact is maintained by spring loading, which "gives" at loads above the engine's maximum output. The reductions given in the transmission result in an overall gear ratio of 20 to 1.

The engine is a straightforward two-stroke; bore

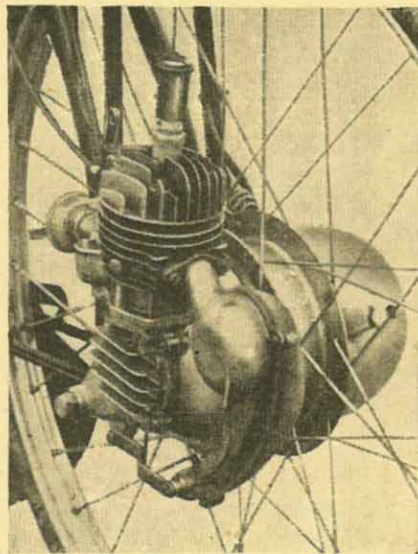
and stroke are 35mm and 40mm respectively. It has one inlet, one exhaust and two transfer ports. The light-alloy piston has two rings, and is mounted on a fully floating gudgeon pin retained by circlips. A 14mm sparking plug and a compression release valve are situated in the detachable light-alloy head. The crankshaft, which is carried on two roller bearings, has an overhung crank for the big-end which operates on rollers. Lubrication is by a petrol mixture of 1 to 20. The Norris flywheel magneto is conventional and has a 6 volt 4 watt lighting coil. The carburettor is a circular-float type Bing. Weight of the engine complete with wheel is 17½ lb.

Smooth Pick-up

Fitting a Wingwheel to a standard bicycle is done by turning the front fork through 180 degrees. Lugs formed on the outer engine castings are then connected to the fork ends by bolts; the lugs are pushed to form bearings. Slight movement of the wheel is controlled by two barrel springs anchored to the fork legs by bolted clips. The springs resist engine torque reaction and road shocks.

A short test run showed the Wingwheel to be easy to drive, very docile and possessing the valuable characteristics of a clean, smooth pick-up from speeds as low as 4 m.p.h. Exhaust noise is negligible and the unit was reasonably quiet mechanically. Steering of the cycle was unaffected by the additional weight of the engine unit. A comfortable cruising speed was 18 m.p.h.; fuel consumption proved to be approximately 220 m.p.g.

The Wingwheel is being marketed by Messrs. N. V. Infica, 672, Keizersgracht, Amsterdam. The price in Holland is approximately £30.



Crankshaft of the Wingwheel passes through the hub to drive the flywheel magneto

British Wins at Bordeaux

TOMMY Wood gained a first and second in the Circuit de Bordeaux last Saturday. He won the 500 c.c. race on a Norton, beating Georges Monneret (Norton) by 3.5 seconds. Third was W. Gerber (A.J.S.) and fourth, Leslie Harris (Norton). In the 350 c.c. race Wood, on his Velocette, fell on the first lap, but nevertheless finished second. The winner was Gerber (A.J.S.). Third was C. W. Petch (A.J.S.), M. Albisser (Puch) won the 125-175 c.c. event.

Police Are Hosts

THE Metropolitan Police were hosts to some 200 motor cyclists last Saturday evening at their clubhouse at Chigwell Hall, Essex. This social evening follows the recent affiliation of the Bow District Garage Motor Cycle Club (Metropolitan Police) to

the A.C.U. and the guests were members of North-East London, Bemsee, Bohemian, West Ham, Hford Light Car, Mont' Christie and other clubs.

S. A. Coles organized the film show and after the pictures of the T.T. and other classic events, he displayed some of his own excellent shots of Goodwood and the Spanish Grand Prix. Dancing to a small band followed at 10.30 p.m.

The social, excellently organized, was informal, friendly and in all ways a great success. The police are to be congratulated for their enterprise which can only lead to still better relations with motor cycle road users. Chief Inspector Pitcher, the chairman, in a short speech of welcome, gave the good news that other "open" club evenings are to follow.

The Police club at Chigwell Hall has a ballroom, a large assembly room, canteen and bar, and stands in 140 acres of ground.

Secretary of the Bow District Garage Motor Cycle Club (Metropolitan Police) is P.C. W. Mold, Bow District Garage, London, E.3, and membership is open to all members of Metropolitan Police and civilian staff.

TWO new sizes of Dunlop Trials Universal tyre are now available. These are the 3.00×19 at £3 0s 4d and the 3.50×19 at £3 17s 9d.

ENTRIES for the Two Days' Trial, to be organized by the Lion M.C.C., must be in the hands of the secretary, Miss P. Russell, Dummore, Dumbarton, by May 16; the secretary is in a position to arrange hotel accommodation.

ON May 9 the Ravensbury M.C.C. starts its first course under the R.A.C.-A.C.U. training scheme. The organizer is Mr. D. A. Brown, and the training ground is at Poplar Road School, Morden. The Mid-Derbyshire M.C. is also about to launch a section under the scheme.

THIS year's Birmingham-Banbury Vintage Run is to be organized as part of the Midland Centre Rally, and in connection with the Festival of Britain celebrations in Birmingham. The date is Sunday, July 29, and the first machine will start from Banbury at 10.31 a.m. Finish will be at Fort Dunlop.

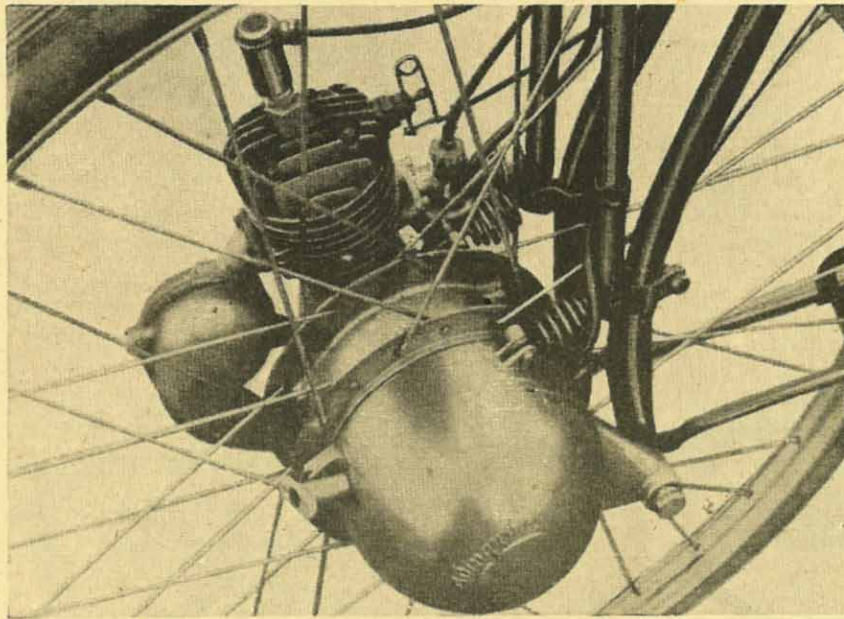
J. BROCKHOUSE & Co., Ltd., mention in connection with the Indian Brave exhibited at the B.I.F. Castle Bromwich, that, while the machine is manufactured by Brockhouse Engineering (Southport), Ltd. solely for the U.S. market, the 248 c.c. engine is available as a motor cycle power unit to both home and overseas markets.

AS usual, the Birmingham M.C.C. is organizing an air trip to the Senior T.T. The aircraft will leave Elmdon Airport, Birmingham, at 7.30 a.m., Friday, June 8, and is due back at approximately 9.30 p.m. The cost of £5 15s includes use of a coach on the Isle of Man, where the proposed vantage point is the Bungalow. The secretary of the Birmingham M.C.C. is Mrs. M. Barrett, the Motodrome, Colebrook Road, Greet, Birmingham, 11.

A CONCOURS D'ELEGANCE is to be organized on Saturday, July 21, by the Eastbourne and D.M.C.C. The judging will be carried out in Devonshire Place, Eastbourne, which is a main road on the sea-front leading to the bandstand (it will be closed to traffic for the afternoon). Entry fee is 7s 6d per machine. There will be classes according to the ages of machines. Secretary of the meeting is Mrs. H. W. Hookham, 57, Seaford Road, Eastbourne.

"ACHIEVEMENTS 1950" is the title of the latest edition of the Castrol "speed annual" just published. Produced in photogravure with a coloured cover by Gordon Horner, of *The Motor Cycle* and *The Autocar*, the 40-page booklet includes many superb pictures of last year's races. Copies are obtainable free of charge by sending a postcard to C. C. Wakefield & Co., Ltd., Dept. A, Grosvenor Street, London, W.1. Since the first of these annuals was published, over five million copies have been produced.

UP to noon last Monday, entries for the International T.T. Races in the Isle of Man next month totalled 70 for the Senior, 91 for the Junior, 25 for the Lightweight 250 c.c. class and 14 for the 125 c.c. class. A cable from Spain was received on Monday reserving entries for three Montesas in the 125 c.c. class, these in addition to the 14 entries already recorded. Entries do not close finally until noon on Saturday. It appears, therefore, that the Junior, at least, will be over-subscribed. The limit is, of course, 100 for each race.



Movement of the Wingwheel relative to the fork is controlled by two barrel springs

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