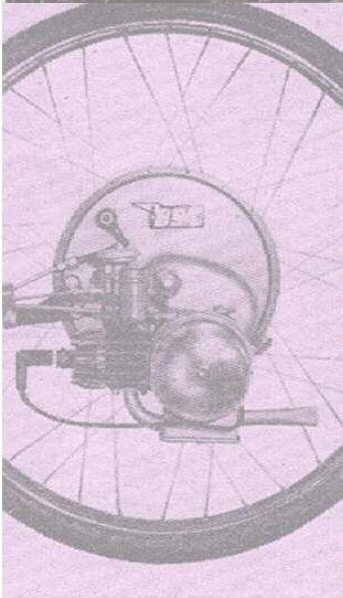


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ROAD TEST REPORT

British Salmson CYCLAID

BELT DRIVEN CLIP-ON

THE tester finished his first test ride on the *Cyclaid* and handed it over to his colleague with the remark, "You can throw away one of your legs when you ride this one".

The statement is almost literally true for there is no machine we have yet seen that can compare with this Scots built belt driver for power right down to something like one rev. per minute. It is quite an exceptional performance in the cyclemotor world but one that is much needed by many riders and even more potential riders.

The *Cyclaid* is mounted over the rear wheel and drives by endless "V" belt to a rim attached to the spokes of the standard wheel. This system of drive, of course, does not interfere in any way with the use of variable speed gears and allows any type of cycle braking to be used at will. No adaptation of the standard cycle is required at all for fitting the unit.

A single cylinder two-stroke of 31 c.c. capacity, the engine has an aluminium alloy cylinder and head held by through bolts to the split crankcase. A steel liner is press-fitted into the cylinder. Helical gears provide a reduction between the crankshaft and pulley shaft, the overall gear ratio being $18\frac{1}{2}$ to 1. Claimed power output is .7 h.p. at 3,500 r.p.m. The flat-topped tank has a capacity of 3 pints and is fitted with a flush apron at the rear which screens the crankcase and driving pulley and also provides the flat surface for the rear index number, dispensing with the need for a separate number plate.

The quality of material and high

precision engineering workmanship are exceptional and this is reflected in the performance and in the confidence the makers exhibit in their service arrangements. The fitting is simple and neat, the front end of the chassis hinging on a special pin that replaces the standard seat pillar bolt while the rear is carried on a spring mounting on a very sturdy fork over the wheel and fitting to the wheel spindle. This fork is adjustable to different wheel and frame sizes by the provision of alternative bolt holes.

On the Road

A certain start hot or cold sets the standard for first impressions of sheer handiness. One thrust on one pedal is sufficient to get the machine on its way without pedal assistance at all. The twist grip throttle can be opened without inhibition from the first yard and the machine then accelerates smoothly and surprisingly quickly right up to its maximum.

The *Cyclaid* is not fast, top speed on the machine tested being a trifle under 20 m.p.h., but within this range the performance was high all the way. Minimum speed was impossible to judge, the machine apparently coming to a standstill and then getting away again without pedals and without any sign of snatch from the transmission. The belt drive and the shock-absorbing spring on the rear engine mounting combined to provide a drive that was smooth and dead silent at all speeds. This silence also was notable in that the reducing gear-drive could not be heard at all. This is a startling contrast to any other gear-driven

cyclemotors we have met and does demonstrate that, given the right design and high enough quality in material and workmanship, gear drive can be all advantage. The exhaust was not as quiet as we would like by *Power and Pedal* standards, but was still quieter than most and had a deep, pleasant quality that led one observer to describe it as "a cheerful sounding little engine."

As might be expected, the quality of low speed pull combined with low gearing makes the machine an exceptional hill climber. Hills which normally require pedal assistance on most cyclemotors were taken without moving the pedals at speeds of 12/15 m.p.h. all other cyclemotors and much heavy goods traffic being passed on the way. It took a really savage grade to bring in the pedals at all and even then only light assistance was called for. London readers who know that famous brute, Muswell Hill, with its awkward approach, long drag and fierce bit of 1 in $7\frac{1}{2}$ near the top will be impressed to know that the tester climbed this easily, riding all the way up with one hand in his pocket. The passers by and other cyclists pushing their machines up the hill were certainly most impressed!

Traffic handling was delightful. The lightweight of the unit left the light roadster type cycle handling exactly as it would without an engine fitted except that there was no need to pedal if the machine was moving enough to be balanced at all. Wriggling through stationary traffic was dead easy and the "one-push" getaway from the front of the queue when the green light came up ensured complete safety and no obstruction of the other traffic.

Not Yet Perfect

As an instrument of powered cycling, particularly in towns and in hilly or even mountainous districts, the *Cyclaid* is quite

outstandingly good but there are some mild criticisms to be made.

Mainly because of the low gearing some vibration could be felt when the machine was over-running the engine down hills and, as there is no means of disengaging the drive from the saddle, this could make the machine less attractive to handle over long distance main road runs.

The two controls, twist grip throttle and lever decompressor could be usefully combined in a dual action grip that would afford complete one-handed control, but this, of course, can be done by the owner if desired.

Main criticism is perhaps the least important, that of appearance. The belt drive is wonderfully efficient and very nearly the ideal drive for cyclemotor use but it does look old fashioned and this in utter nakedness combined with the appearance of the rather prim-

looking flat tank do seem too reminiscent of the "Good Old Days" to belong in the present cyclemotor era. A modern shaped tank, a light guard over the pulley and upper part of the belt and a cleaning up of the too sturdy supporting forks would do much to make this unit look as attractive as it really is. However, those riders who believe that handsome is as handsome does will buy it for the job it does and be well rewarded.

Conclusions

The Cyclaid is a first class job from every angle and provides the complete answer to those who need an attachment unit that requires no special cycle or fitments to give its best. For the elderly or partially disabled it is unbeatable in presenting cycling with all the work taken out of it.

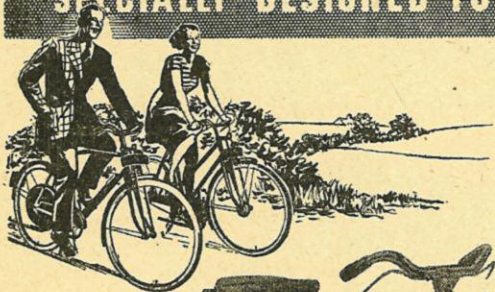
The high quality of the unit ensures freedom from trouble and when eventually wear does take

place the manufacturers meet it with an exchange service covering the complete engine with carburettor and magneto at the fixed rate of £5 a time. This, apart from its value as a service, will be a major factor in keeping up second-hand values of these units. At £24 complete the Cyclaid is excellent value for money.

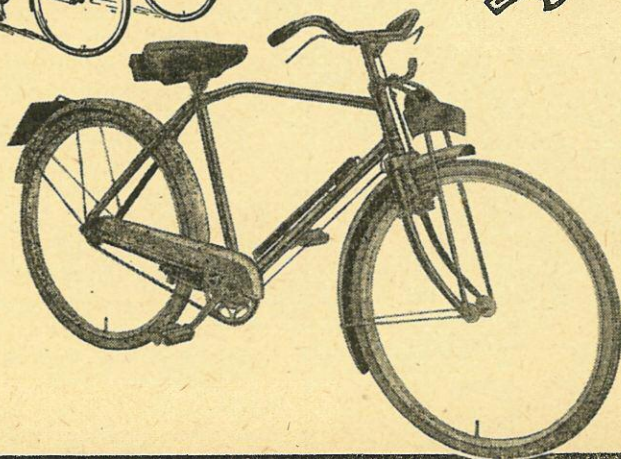
Specification

CYCLAID, 31 c.c. two stroke, steel-lined alloy engine with detachable head and barrel, gear reduction and belt drive to rear wheel by special belt rim provided. B.H.P. 0.7 at 3,500 r.p.m. Speed 19½ m.p.h. Petrol consumption throughout test 212 m.p.g. Petroil ratio on test 28 to 1, S.A.E.20. Total weight including belt and rim 19 lbs. 4 ozs. Price complete £24. Makers: British Salomon Cyclaid, Ltd. Industrial Estate, Larkhall, Lanarkshire. (London Office: 76 Victoria Street, S.W.1.)

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