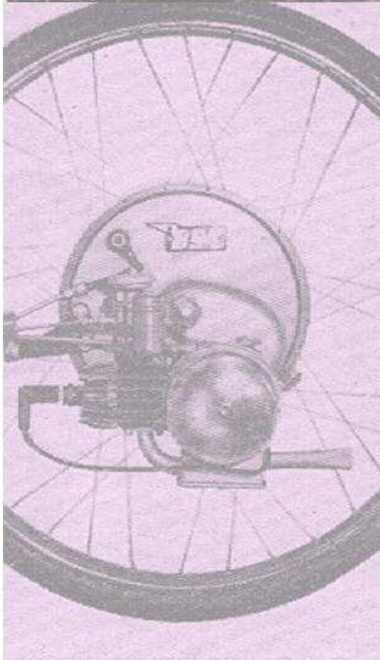


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ROAD TEST REPORT

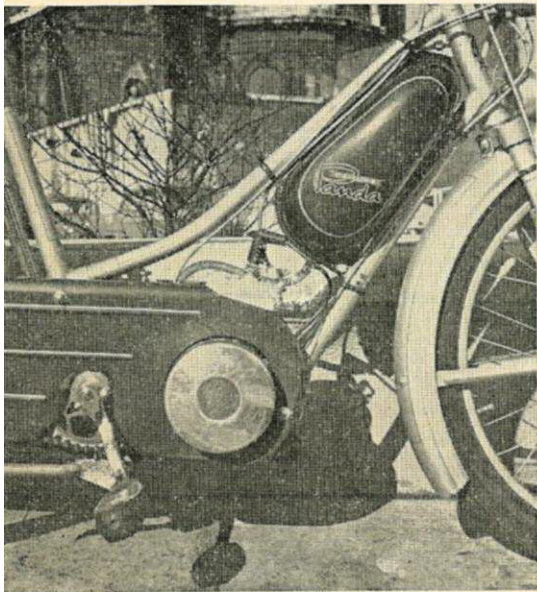
PHILLIPS

"PANDA"

A New British Light Autocycle

AS the last of Britain's 200,000 odd attachment engined machines are retired from active service the demand has arisen for replacements in the form of light, simple mo-peds designed in the cycle-motor tradition. One such machine that was shewn at Earl's Court last November and attracted much interest is the Phillips "Panda" built by an established cycle manufacturing company as a logical development of their earlier successful motorised cycle.

Close-up of the flywheel side. The large one-piece shields protect the chains from road dirt and the rider from the chains. Engine cooling is not masked and the essential accessibility of the plug is retained.



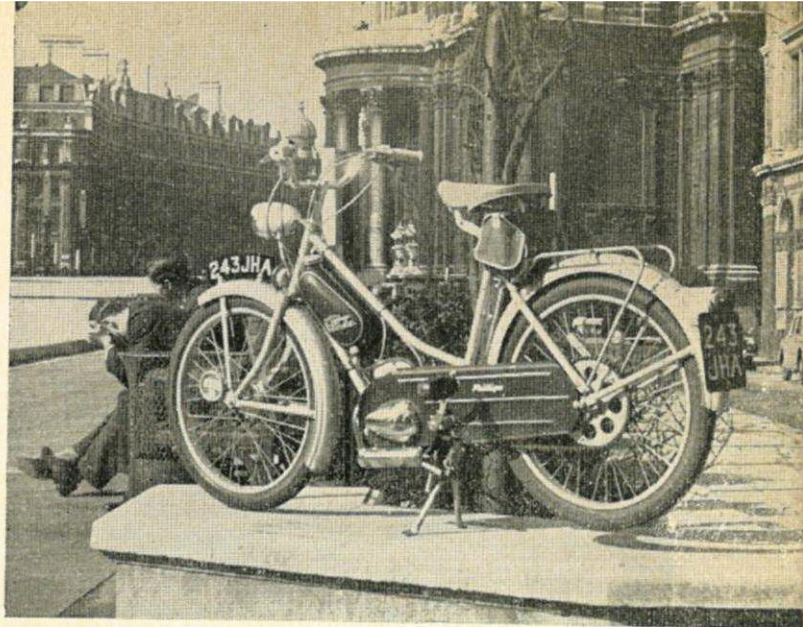
Although very much conventional bicycle at first glance the frame of the *Panda* is in fact specially designed for mo-ped use and is of the full "cradle" type with the down tube passing right under the engine and rising again to the bottom bracket. This bracket carries the pedal shaft on nylon bearings to cut out maintenance problems and also the brazed on bracket for a very sturdy central stand.

Front forks are unsprung with cast crown, butted column and lined blades to combine strength with resilience, while the rear end of the frame is conventional cycle with cranked seat stays, both the *Lycett L.100* saddle and the wide raised handlebars are fully adjustable for height which, with the 17-inch seat tube, provides a range of seating positions suitable for almost all sizes of rider.

The *Rex* engine is basically the same as that which has already served with complete satisfaction for several years in the Phillips "Motorised Cycle" model. It is a slightly "over-square" unit of 49 c.c. with an alloy cylinder, with cast iron liner. The *Miller* flywheel magneto incorporates 18-watt lighting coils. A three-plate, hand-operated clutch is mouted in unit with the engine. The entire exhaust system is mounted on the engine itself. The carburettor is a *Bing* with oil-wet filter.

Light and Easy

As modern mo-peds go the *Panda* is very light at under 70 lbs. dry and we had an early opportunity of appreciating this when the machine was delivered to us with the fuel tank empty causing us to begin the test under pedal power alone. In this connection we may say that the machine pedals surprisingly easily and, although no-one would travel that way for pleasure, it is certainly quite practicable.



Starting is easy either way: by pedalling off against the decompressor, when the engine picked up within five or six yards every time, or by kicking down a pedal with the machine on its stand and the rear wheel off the ground.

Even from a cold start it is possible to drive off on the clutch and engine alone although naturally a quicker take-off is achieved by adding three or four turns of the pedals as well. Those slight upgrades that make such hard work of starting a clutchless machine are not noticed on the *Panda* and the low speed pulling power of the engine makes it unnecessary to abuse the clutch on any uphill starts.

From about 6 m.p.h. up to 25 m.p.h. the acceleration is good and though there is a little more speed left this has to be waited for. Two-stroking is even throughout the range and we could cruise comfortably at almost any throttle opening without fuss.

For some strange reason, probably a hangover from narrow section bicycle tyre experience, the instruction book gives recommended pressures just about double actual requirements with the 23-inch by 2-inch tyres fitted. In practice we found that 18 lbs. in the front and 23 lbs. in the rear gave a good all round compromise in comfort and road-holding for a 13-stone rider. On these pressures comfort is good, very good for an unsprung machine. The *Lycett* saddle gives a first class ride and the range of adjustment offers a correct riding position for any physique.

Steering is of the natural bicycle feel that one takes for granted in the first minutes of riding and the road holding, even on bad surfaces is extremely solid and safe. Heavy braking produces no judder and the machine can be banked well over on fast bends with complete confidence provided the "inside" pedal is kept clear of the ground. Both brakes are adequate and smooth in operation.

The all-alloy engine runs cool and a very soft plug is fitted as standard, but seemed to like continuous full throttle driving and plug condition indicated that all was well within. Until some carbon is collected in the exhaust system the machine is not as quiet as it should be when the throttle is well open but this is likely to improve with age. Mechanical noise is negligible, thanks probably to the absence of a gearbox.

Naturally, with a single speed unit, one of the important questions is on its hill climbing abilities. The *Panda* does well here, taking normal main road hills in its stride with very little drop in speed, but also being able to pull slowly and remarkably quietly on about half throttle with *light* pedal assistance on real gradients. Stop and restart tests on 1 in 10 demanded pedal assistance, of course, but this was never hard work and compared favourably with some of the heavier two-speeders we have ridden.

Ready Market

There are few criticisms to be made. The tank capacity of just over 6-pints limits fill-ups to half gallons and cruising range to under 100 miles. It seems a pity also that a light machine than can be pedalled and is sold to appeal largely to a market of non-mechanically minded cyclists should not have provision for standby lighting that can be used without the engine. Even if the batteries and case have to be extras the provision for using them could be built in.

Appearance also came in for some criticism at the Show, especially from foreign observers and indeed it can

Nearside view showing the polished clutch casing and fuel tap that can be operated from the saddle.

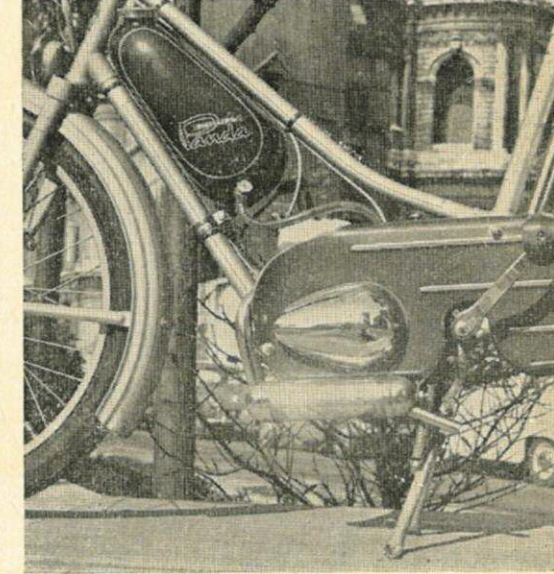
hardly be said that the *Panda* is "styled" at all by modern standards. But we find that there is a large section of the British public that really prefers the unashamed bicycle background to be plain to see and gains confidence from its familiarity.

For the many readers of *Power and Pedal* who have bemoaned the demise of the 98c.c. autocytle, the advent of the *Panda* brings fresh hope. The modern 49 c.c. engine has much the same power output as its pre-war designed predecessor and the whole machine has similar characteristics to the old autocytle but it is lighter, more comfortable and cheaper, which is all advantage. We see a ready market for this machine from both old and new generations of riders.

Specification

ENGINE : Bore : 40.5 mm. x Stroke : 38.25 mm., Capacity 49 c.c. Compression ratio : 6 to 1. Alloy cylinder, head and piston with iron liner. Roller big end, ball bearing mains. Clutch : dry multi-plate, hand-operated. Overall gear ratio 17.3 to 1. Carburettor, "Bing" 1/12/27, Magneto "Miller" 6-volt.

FRAME : Tubular cradle type, unsprung with brazed lugs and integral bracket for pedal drive.



TRANSMISSION : Separate chains for power and pedal drives with jockey pulley adjustment for pedals.

BRAKES : 3½-inch internal expanding front. Pedal operated Coaster rear.

ELECTRICS : 3½-inch headlamp, tail lamp and electric horn. 6-volt, 18-watt lighting coils. (Headlamp 15/15 watt. Tail lamp lamp 3-watt).

MANUFACTURERS : Phillips Cycles, Smethwick, Birmingham, 40
PRICE : £55. 2s. 6d. (Including P.T.)

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BOOK REVIEWS

Expedition Everyman

A USEFUL and amusing personal travel book is "Expedition Everyman" by S. H. Hough author of "A Pound A Day Inclusive". For the nervous novice setting foot or wheel for the first time on the Continent, Expedition Everyman provides helpful advice and pretty comprehensive information. For the more travelled who want to go further he suggests route and sights to be seen. The book is usefully illustrated by maps and pictures. Price 3/6.

France 1959

France 1959 is a Tour de Force by the French Government Tourist Office giving a calendar of events throughout France during the year. It is in the form of a book with remarkable and fascinating colour illustrations which make it into a kind of modern fairy tale. It is a booklet well worth having both to study for this year's holiday and to keep as a typical memento of France at her best and loveliest. Free from French Government Tourist Office, 178 Piccadilly, W.1.

It's features like these that make the

PHILLIPS Panda

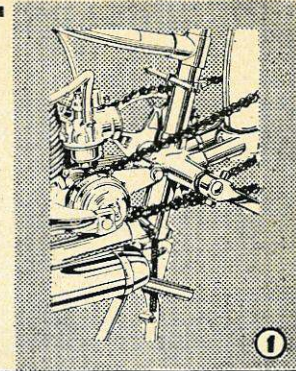
the moped for your money

A moped with **all** the features you're looking for - at the price you want to pay! That's the lively Phillips 'Panda', British-built, easy to ride, economical to run. Before you decide you **must** see the 'Panda'. At your dealers now!

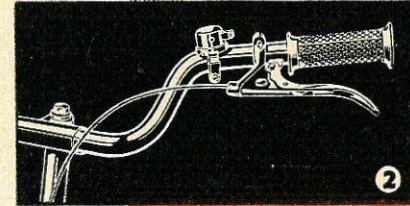
1 Unique combined casting for bottom bracket with Nylon bearings, rubber bushed engine mountings and strong bipod stands.

2 HAND-OPERATED CLUTCH
Experience has shown that a clutch is very necessary on a single gear moped. The easy-to-operate handlebar control clutch on the Phillips 'Panda' gives safe and easy handling in traffic and instant starting from stationary.

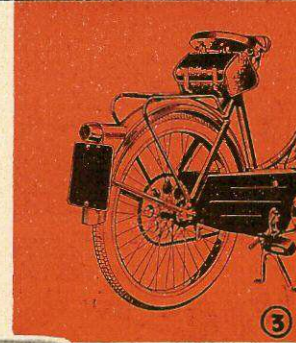
3 Low riding position (saddle to ground 31in.) Powerful hub brakes and 23in. x 2in. tyres provide maximum safety and comfort. Ample mudguards and chain-guards give all-round protection.



1



2



3



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Corrections

Errors occurred in both our Road Test Reports last month. The Saddle on the *Phillips "Panda"* is actually a *Wright "E.1"*, and the wording of our reference to the suspension of the *Surrey Rambler* sidecar should have read: "Springing is between the wheel and the chassis. The alternative possibility in sidecar design is to have the springing between the body and the chassis".