

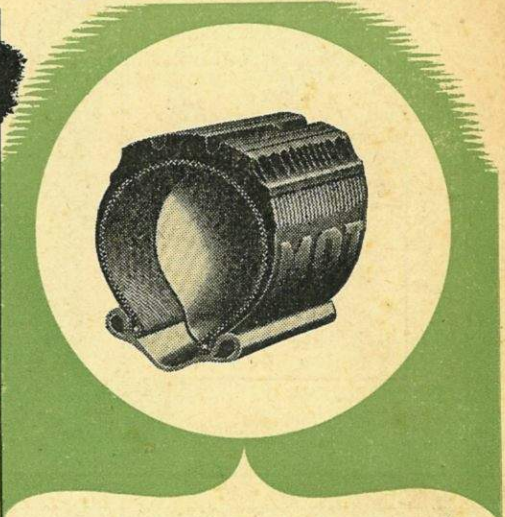
POWER & PEDAL

The Journal of the Cyclemotor

THERE IS A

DUNLOP TYRE

FOR EVERY
MOTORISED CYCLE!



DUNLOP TANDEM

A wide section tyre which has already earned a great reputation on roller drive power units. It is available in size 26 x 1 1/4 and 26 x 1 3/8. The tread pattern gives low rolling resistance with high durability.

	Dunlop Tandem Cover	Dunlop Tandem Tube (With Schrader Valve)
26 x 1 1/4 Wide Section	15s. 0d.	5s. 9d.
26 x 1 3/8 Wide Section	15d. 0d.	5s. 9d.

DUNLOP MOTORETTE

A new tyre specially designed for auxiliary engined cycles. Produced in three sizes for use with motor attachments irrespective of whether the drive is by roller, chain, belt or gear.

The tread compound of this wide section tyre has special abrasion-resisting properties for extra long mileage. Also the ribbed tread pattern provides an ideal path for the driving wheel of roller drive units. The casing is reinforced to withstand the higher speeds and strains of motorised cycling

	Dunlop Motorette Cover	Dunlop Motorette Tube (With Schrader Valve)
26 x 1 1/4 Wide Section	15s. 0d.	5s. 8d.
26 x 1 1/4 x 1 1/4	16s. 6d.	5s. 8d.
28 x 1 1/4 Wide Section	16s. 6d.	5s. 8d.



DUNLOP CARRIER

This tyre recommended for motor wheels has a Dunlop Roadster pattern tread with a reserve of strength to give trouble free running under really hard conditions. Already fitted as original equipment on power wheels with 26 x 1 1/4 rims it is also available in Oversize for 26 x 1 1/4 rims to provide additional traction and comfort.

	Dunlop Carrier Cover	Dunlop Carrier Tube (With Schrader Valve)
26 x 1 1/4	16s. 6d.	5s. 11d.
26 x 2 x 1 1/4 Oversize	21s. 2d.	6s. 0d.

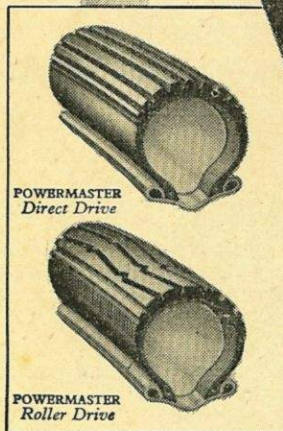
Made to give you ★ EXTRA DRIVE

★ EXTRA MILEAGE ★ EXTRA SAFETY

For greater

strength - maximum flexibility

and longer life - on every type
of motorised cycle



Enjoy the safety and comfort of the Avon 'Powermaster' whether yours is a direct or roller drive motor. 'Powermaster' is made in alternative tread patterns to give the utmost traction and longest life on any type of motorised cycle. It is an oversize tyre which has great strength and flexibility yet offers no increase in rolling resistance or drag.

Direct drive 26" x 1 3/4" for 1 1/2" 16/6. 26" x 2" for 1 3/4" 21/2.

Roller drive 26" x 1 3/4" for 1 3/4" 15/-.

Tube, with Schrader valve (recommended pressure 35 lbs.) 5/8.

Fit the **AVON**
POWERMASTER

THE WRIGHT SADDLE FOR MOTORISED BICYCLES

Designed **SOLELY** for
power-assisted Cycles

LUXURIOUSLY-SPRUNG MATTRESS interior with thick felt underlay, for armchair comfort.

VYNIDE WATERPROOF SEAT, 10 1/2 in. x 11 1/2 in., combining large seating area with perfect pedalling freedom.

POWERFUL SHOCK ABSORBING TENSION COILS for extra protection under bad road conditions.

DOUBLE GIRDER PIVOTED FRAME, for strength and resilience.

CHROMIUM-PLATED REAR COILS and clip for distinctive appearance.

Specify **THE WRIGHT S65/3**
POWER CYCLE Saddle
for your new machine...



PRICE
25'6
RETAIL

THE WRIGHT SADDLE COMPANY LTD., SELLY OAK, BIRMINGHAM, 29

★ You will enjoy cycling more if you choose the **WRIGHT** saddle

POWER & PEDAL

THE JOURNAL OF THE CYCLEMOTOR

Editor: FRANK L. FARR

Editorial and Advertising Offices:

197 Temple Chambers, London, E.C.4 Telephone: Central 0048

FIGURES

SOME play has been made in certain circles of the fact that the sales of cyclemotors during 1953 appeared to have shewn a slight drop against those for the previous year.

Actually, of course, the complete figures are not yet available for comparison and the latest we have seen in the Trade press refer only to the second quarter of the year, ending June 30th. These shewed a drop of 3,000 on the quarter as compared with 1952 and this slender evidence has been sufficient for those people who want to believe it to say that the advent and initial success of the Cycle-motor movement in Britain was a flash in the pan.

How wrong these self delusory people are is demonstrated by a further examination of their own figures from the Ministry of Transport returns. For the first nine months of 1953 the total number of new registrations of cyclemotors was 35,164 out of a total for all classes of motorcycles, solo, side-car and three-wheelers of 113,631 over the same period. In other words this new type of vehicle which was only introduced into this country in 1948 now accounts for over one third of the total new

registrations for all classes and is easily the largest single class in the field.

This is a conspicuous success and clearly demonstrates that the market was more than ready for this new means of personal transport. All that the first set of figures quoted proved was that in one particular season the *rate* of increase in the sales of cyclemotors was a little below that of the boom year of 1952. Never-the-less it is worth while giving some thought as to why there was this slight slowing down and it is hardly likely to be found in one single factor.

Frankly, and at the risk of courting some disfavour, we will state categorically that some of the units sold have not been good enough in the hands of the completely non-mechanical general public and this situation has been much worsened by the undeniable fact that local service, both as to the first choice of the machine for the job and later repair and maintenance, has been and still is bad.

The cycle trade's, many of them complaining that they cannot make a living out of selling cycles these days, have in too many instances either ignored the new market altogether or, much worse, sold

units without studying the need of the customer and equipping themselves to meet it. Where there is a real agent, with an interest in the cyclemotor market and the necessary spares, stocks and plant, he is full up with service work and knows that all these customers will be his when next buying. But the stories of bad service or no service at all from some helpless, unhappy riders have reached their friends and reacted against some new sales.

On the manufacturing side there is a lesson in the (fact and it is a fact) that the two most successful names in the British market are the two whose whole business is cyclemotors. That is the real clue to that end of the business. We do not suggest that any old established and well equipped cycle or motor cycle firm cannot make and sell good cyclemotors; to the contrary, we wish more of them would. But we do suggest that if they do this they must take it seriously. The cyclemotor is the most popular means of personal transport of the *next* decade at least, with a potential market of millions. It is not a sideline to something else, but a full time job for somebody.

COMMENT

by

CLIP-ON

I SAID it this time last year and I'll say it again, come what may in slush-bound desolation before this appears in print. The shortest day is past, the sun will rise imperceptibly higher day by day and the mind of the hardy Briton turns once more to the Beauties of Spring and the Joys of Summer.

Before I am considered certifiable by a shivering readership may I admit that I have just spent a pleasant evening *indoors*, by a nice warm fire, looking at maps and discussing future wanderings with a cyclemotoring friend. Perhaps the real point of this discourse is less to suggest that we all wrap ourselves in wool and sally forth now than to make the point that there is a great deal of real pleasure to be had from discussing in comfort the possibilities of the coming season and the requirements for enjoying it.

One of these requirements, of course, is the right cyclemotor and right equipment for the job, and it is of real value to study what is available now rather than leave it to hasty decision later on. A study of our advertisements and a line dropped here and there for more detail may make a lot of difference to a tour in six months time or more and, I repeat, there's real pleasure in it too.

Suitability

It seemed to us on this journal the most ordinary idea in the world that we should seek to encourage newcomers to the ranks of cyclemotorists to choose their units on the basis of their requirements, but few things have caused more ques-

tion and answer and even argument than our simple recommendation "the right machine for the job".

What seems obvious to the experienced road user is not always even understandable to the tyro and the job of advising demands a severe cross-examination of the prospective buyer in order to elicit the precise nature of his requirements.

Some factors crop up more often than others, of course, and one of the commonest we have run up against is the matter of the value of a clutch.

A rider whose normal daily journey consists of a cold start at one end and a continuous, non-stop ride to the other, need not use a clutch at all and there is no reason on earth why he should pay for one and carry its weight around with him on all his mileage. Contrariwise the town rider, who has a dozen sets of traffic lights to negotiate and the riding conditions that this type of territory provides, will find it a boon and a blessing to be able to keep his engine ticking over at stops and get away "on the green" without delay or effort. The young and lusty can get away with a permanently engaged engine without noticing it and enjoy the benefits of low first cost, light weight, and mechanically sweeter running, from the really direct drive. An elderly or unpractised person, could find that uncomfortable and even dangerous and would be correctly advised to pay the extra and save the effort.

This is the sort of advice that everybody selling cycle-motors *should* be giving. I wonder how many are!

Tricycles

I was most interested to read in the *Magic Carpet*, the journal of the Invalid Tricycle Association, that a West Country firm has recently commenced production of a new pedal tricycle.

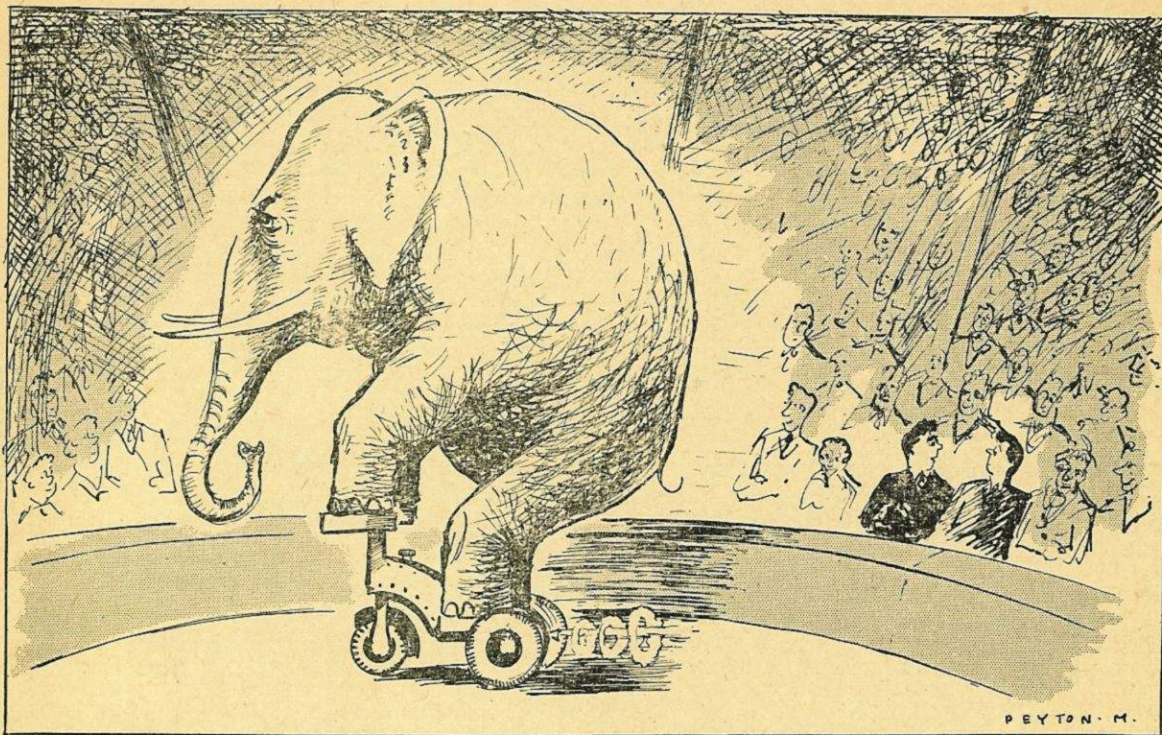
This is a vehicle form that has been much neglected in this country but it really represents the almost perfect answer in cycling for the elderly, infirm and nervous. It is quite remarkably safe and easy to handle and can carry plenty of kit usefully.

This particular machine, the *Harding*, has the two wheels at the front, both 18in. diameter and a normal 26in. x 1½in. rear wheel carrying the brakes. This rear wheel could take an engine drive and the paper quotes the *Cycle-master* as a suggestion. With that unit the whole outfit would cost under £50 and for that could provide many years of active riding to a lot of people in this country where the average age level is steadily rising.

It is to be hoped that the powered tricycle of this price range will be publicised widely, not only for the benefit of its own potential market but also to focus attention on the fancy prices our less fortunate disabled road users have to pay for the pre-historic looking contraptions that are thrust on them—many of them at prices way up in the light car world and beyond the reach of those who need them most. There is a big field for the cyclemotor type of power unit here.

Cycle Sizes

Chatting with an agent the other day, a man very well experienced in the cyclemotor field, he remarked casually that "the nineteen-inch frame is now generally accepted as the correct thing for our purposes". I was delighted to hear this as I have as yet seen little sign in the Trade adverts for the cycle side of our



"Cruel? Not at all. There's a little cyclemotor engine that does all the work."

business that the need for short seat tube frames had been fully recognised.

Nevertheless this produces its problems too, and this particular agent was actually discussing the difficulty (he had found it an impossibility) of fitting a certain engine to a small framed machine. I know of at least one manufacturer who has taken this factor into account in his design, but only one. It would be a curious paradox if the cycle trade made machines for cyclemotors on correct lines only to find that the motors would not fit the new cycles.

Tandem Problems

Quite a number of people write in to suggest that we give special attention to tandems and their power unit problems, and the Editor is of course, only too anxious to oblige. The difficulty is that we

have not yet been able to find out what the problems are! Whenever we get down to cases it seems that there are no basic differences in requirements for cyclemotor engines on tandems, and all the established makes seem to fit or be easily adaptable except perhaps, the *Cuciolio* by reason of the complication of its pedal drive.

Some confusion has arisen because in one make at least the passenger can operate the disengaging gear but the driver cannot. This wording is deliberate; for although both crew on a tandem are riders and there is no passenger in the ordinary sense when pedalling, I think the Law would take a dim view of a dual control system under power. In the case of the machine mentioned it is not intended that the disengaging gear shall be used in transit or movable from the saddle anyway.

Still a Hass

Mention of the Law brings me once again to my favourite Aunt Sally. Not many people who looked at Peter Lee Warner's machine at Earl's Court seemed to appreciate the significance of the "L" plates carried by the man who had just ridden round the world the hard way.

The truth is that Peter had been pinched and was duly penalised for speeding in Hyde Park on the day of his return to England. At the same time it was noted that he had never passed a motorcycle driving test although he had held a car license for some years. In this particular case the police decided not to press the charge and contented themselves with a formal warning, no doubt to avoid too great a publicity for the undeniable Cyclemotoring Fact that the Law is indeed a Hass,

Correspondence

The Editor is not responsible for the views expressed by his correspondents. Letters should be typed or written on one side of the paper only and may be signed under a nom de plume for publication, but must be accompanied by the sender's name and address

Let's Be F(r)iends

Dear, oh dear, why is T. Weymouth Pringle rattled, he has no need to be really, I am sure that both he and you Mr. Editor will admit, that one can only get a super publication by criticism, adverse or otherwise, and the first essential is to print articles appropriate to the publication, and, its bevy of readers. I admit, and so I am sure will JKY234 of Bradford, that the Photography articles were well, and to those who are interested, beautifully written, and very useful—to the Photographer—but I still contend that if one is sufficiently interested in any particular hobby, one will buy the appropriate magazine, and enjoy it.

In his last sentence T.W.P. says "a man without a hobby is a poor creature indeed", how right he is, but because others of our readers do not share the *same* hobby, are they poor creatures? or do they all share the right or *chance* to read articles in *Power and Pedal* appropriate to *their* hobby. On that principle what a source of information this paper of ours would become, it would be a priceless addition to the already vast field of Encyclopaedias on the market but not for 4d.

No, T.W.P., you did not commit a crime, and that was not implied in my letter, but please admit that the experiment was not successful. Above all, let us be friends and let me apologise for the word 'fiend' I am afraid you have misconstrued my meaning, in this little corner of the country, a "fiend" is only a

"fan" I am sure you could not object to that expression.

Many thanks to you Mr. Editor, for allowing so much of your valuable space, and JKY of Bradford, also D. Hayward of S.W.16 for their letters on the same subject.

NORMAN CORRIGAN,

Grimsby.

Stands

The recent correspondence in *Power and Pedal* about Stands for Motorised bicycles interests me as the stand on my machine is useless except on a hard level surface in still air; and it is seldom that these conditions exist simultaneously at the place where one wants to leave one's steed. I have tried carrying a wooden packing piece to put under one side of the stand but this involves stooping, wangling the machine and at the same time messing about with the piece of wood, if one does not happen to have lost the last named object. Then one has to stoop again to pick up the piece of wood on de-parking, which is a nuisance for sexagenarians. I have been intending to devise a suitable gadget for some time but so far I have not been able to think of anything better than two sockets clamped, one on each side of the bike frame, and two wooden struts of suitable length to fit into these. The struts could be carried in spring clamps.

So far I have not been unfortunate enough to have a puncture in the back wheel with a cyclemotor, but have often contemplated the joys of such an event, in anticipation of which I carry string for

tying stones to the front wheel in order to raise the back wheel off the ground. I realise that stones are not always easy to find, particularly on a dark night and one might have to fill one's shoes with dirt and use them in lieu of stones. It would be interesting to have some notes on "The manipulation of cyclemotors preparatory to and during tyre repairs" by some learned reader of your excellent journal.

I have the honour to be, Sir,
Your illiterate reader,
OPT-I-MIST.

Seaford.

Small Section Tyres

I wonder how many other "Roller Drive" cycle-motorists are in the same difficulty as myself?

After many enquiries it seems that 26 x 1 $\frac{1}{4}$ "Power Drive" tyres are not made, only 26 x 1 $\frac{3}{8}$ upwards, yet there must be hundreds of motorised cycles with 26 x 1 $\frac{1}{4}$ wheels. As the wheel of my cycle was almost new when I became mechanised the thoughts of buying a 26 x 1 $\frac{3}{8}$ rear wheel are not very pleasing.

The makers of my motor *Power Pak* suggest using Dunlop tandem tyres, which I have tried but at the most I only get 1,250 miles from them. Other *Power Pak* users I have talked to claim double or treble my own mileages using various makes of "Power Drive" tyres.

I have been sorely tempted to try squeezing a 1 $\frac{3}{8}$ tyre into my 1 $\frac{1}{4}$ rim against the advice of my dealer, but at 15/- a time such

experiments can be rather expensive. The motor has been checked for correct fitting so the trouble seems to be that the tyre is unsuitable.

Other readers' views and experiences would be appreciated and may I join other readers in saying how much I look forward to *Power* being monthly.

H. KIRKLAND,
Leicester.

(The last meeting of the National Council of the National Association of Cycle Traders passed a resolution from its Croydon Branch "recognising the need for the 26 x 1½ in. tyre suitable for use with motorized bicycles" and inviting manufacturers to produce it—ED).

Power Pak Synchro

Regarding *Power Pak* engines overheating, I must insist, after extensive enquiry and personal

experience, that this is sheer imagination unless of course the poor wee thing is coked up solid.

I've tried flogging mine unmercifully for 30 miles full-bore, including 40-plus down hills, without difficulty; it gets warm, of course, but overheated certainly not. This with best quality petrol, *Esso* extra included. After some 28 years experience with two-stroke engines I've found that 100 octane aviation spirit is the last word in fuel.

A tip for *Pak* synchromatic owners. I bought a flywheel-mag removing tool, drew off mag, drilled a small hole in the back-plate, soldered one end of a length of H.T. cable to condenser wire of contact-breaker and passed it through the drilled hole, fixing other end to a chrome horn button on handle bar, thus enabling me to stop engine without wearing clutch lining or jarring engine.

I must say I heartily endorse your repeated remarks that all motors are too noisy. After all, it is not a difficult matter to silence even a two-stroke without much loss of power, so why isn't it done? The Germans seem to be able to do it.

HAROLD STRIPE

New Malden

Tandem Problems

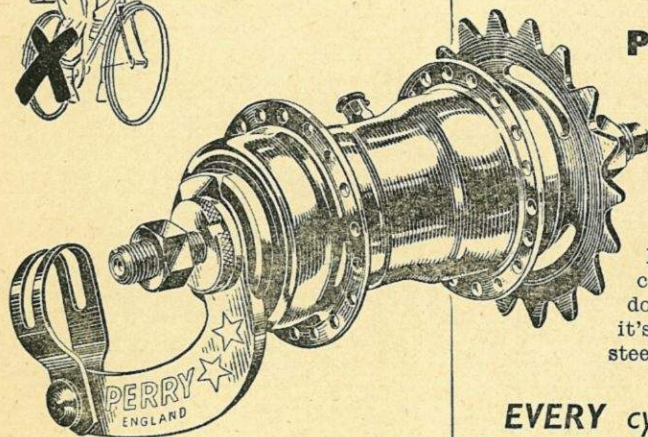
Power and Pedal has been a very interesting magazine. I would suggest that you treble the size of it and charge 1/- per copy. Please keep the articles confined in the main to details of the various units, service articles, readers' modifications, and a fair amount of space for readers' opinions and experiences.

I am interested to know which is the best unit for a tandem. At the moment I favour a *Power Pak* Synchromatic Drive, and should be interested to hear from readers as

ALWAYS CYCLE IN SAFETY—FIT A



PERRY Back-peddalling Brake



X marks the spot where the PERRY coaster hub brake fits on your bicycle, to give you that extra stopping power which makes all the difference. Operated by backward pressure on the pedals, the PERRY safety brake gives you absolutely controlled braking, whether for coasting slowly down hills or sudden emergency stops. And, because it's a foot-brake, your hands are always free for steering, signalling and handling controls.

EVERY cycle is better for a
PERRY COASTER HUB BRAKE

—all the safer to cycle with!

Ask your dealer for a demonstration,
or write for free descriptive literature
to Perry Chain Co. Ltd., Tyseley, Birmingham, 11.

to the performance and RELIABILITY of this unit when attached to a tandem.

I contemplate changing the wheels to 26 x 1½, using Dunlop "Motorette" tyres, fitting a tandem hub brake in the front wheel and a Perry or Eadie Coaster Hub in the rear wheel.

As the *Excelsior* Auto-cycle has similar braking arrangements I assume that they will be adequate for a tandem driven at a cruising speed of 18/20 m.p.h.

I noticed the *Firefly* Unit on the tandem on the Vincent Stand. It seemed to me that the special tandem fittings were fitted too close to the left toe of the rear rider.

I should be very interested to know if anyone has experience of the *Firefly* or the *B.S.A. Winged Wheel* when attached to a tandem. An article on these lines would appeal to many.

A. W. ATTFIELD

Bournemouth.

Published with Pleasure

I wonder if I may encroach on your space to give praise to a local dealer and repairer?

Some time ago I had a slight accident with my machine (a *Cuc-ciolo-Hercules*) which necessitated the machine going in for repair. The repairer asked me to give him a few days to study the problem and promised to let me have the machine back in about 10 days. The whole unit was stripped down by him, rebuilt, and tested and returned to me in 1 week. When I fetched the machine I quite expected to have to pay at least 50/- for the time and trouble he had gone to, and was amazed when all I was asked to pay was 10/-. In addition to this I was told that he guaranteed his work, and if the machine did not give perfect service I was to take it back!

Now, Sir, when I do a good job of work, I like to be told I have done

so, and that is the purpose of this letter—to pay honour to someone who does give real service.

His name and address is:—

BOB WILSON,
Cycle Dealer,
36 Carlton Hill,
Carlton, Nottingham.

H. E. KEMP

Nottingham.

Soppy

After about 15 months my *Cycle-master* started slinging oil around methinks oil seal gone! Did not relish the job of fitting new one, so did a bit of thinking—oil loses its nature after a time and the thin worn out oil can get through anywhere—so emptied out clutch chamber and renewed oil, now after a month not a sign of oil throwing—have thought instruction book would have informed one of such happenings, apart from that my *Cycle-Master* is a "Gem".

That article about 50 year-old spoon brakes is rather soppy, after all we want to know what the future is doing not what grandpa did, what about the trouble of "whiskering" Plugs and the new Petrols?

Why do cyclemotors run better in winter than summer?

Dozens of questions are waiting to be answered.

Methinks your little mag will have "had it" if it does not pull up its socks.

JOHN GREELY.

Bristol.

Rollers, Coke, etc.

Your correspondent Mr. E. A. Burn has received a fair answer regarding roller-drive, which is now so efficient, that it has been proved that when correctly adjusted, it actually makes a tyre last longer than pedal operation. I am sure that if he were to appeal locally, someone would be only too willing to help him over all difficulties. Advert in a local paper, or appeal

to the Secretary of a nearby motor-cycle Club would serve.

J. R. L. brings to mind the decoking of exhaust pipes some forty years ago. One end was plugged with an elegant lump of clay, strong caustic solution was then poured in until the system was full, left overnight, then emptied well clear of anything the caustic solution might contaminate, the pipe and silencer washed out, filled with pebbles or old nuts and bolts and thoroughly shaken up. Crude but efficacious.

P. C. Scott of S.W. 16, has no reason to ponder on rear springing. You see primarily the motor attachment is an economy job. Alternatively he can immediately get Cyc-Auto, or any attachment that will require swinging arm, or another of the many arrangements incurring unproportionate expense.

Eric Kinnard and Co., Dollis Park, Finchley, N.3. would soon do the necessary, provide the "akkers" were forthcoming.

Many thanks for a most interesting Journal.

S. WRIGLEY

N.8.

Pilgrim's Progress

Viewed in retrospect, Aquata's "Pilgrim" series of articles shew a sublime indifference, on his part, to the multitudinous times his mount has developed mechanical or other defects; or a dogged and patient perseverance that I understand is lacking in the present generation.

I'm sure that if I had experienced one quarter of the trouble he appears to have put up with during his cyclemotoring career, I would have ceased months ago to be an enthusiastic reader of your excellent publication.

Most cyclemotors surely are robust, reliable little jobs capable of performing efficiently under a variety of conditions, not mechan-

ical crossword puzzles to provide amusement (or otherwise) for the tinker-minded.

Or maybe I'm lucky ???

JOHN D. CUNLIFFE

Runcorn.

(Pilgrim's experiences cover six years with one machine that was itself a prototype—the record is not bad at all—ED).

Ideal Machine

A complete back wheel unit with a 4-stroke engine mounted in a horizontal attitude on a frame above the wheel, and driving by belt. The piston, cylinder head and barrel would be of aluminium alloy, the last item being provided with a steel liner. The pulley shaft would be geared down to permit a good sized pulley, thus avoiding slip, and a clutch would be incorporated. Ignition would be by flywheel magneto with no lighting coil, and I should insist on easily adjustable

points. The engine supporting frame and everything else, where practicable, would be of light metal alloy. This framework should also be made to act as a guard to prevent one's clothes getting caught in the belt and brake. The brake would take the form of a fibre lined shoe acting on the inside of the belt rim.

The clutch and throttle controls would be operated by a single twist grip and the brake by *Bowden* cable. The belt should be easily removable and adjustable.

Admittedly initial cost would be higher than with a 2-stroke engine, but this is offset by considerably lower cost of running and maintenance. Also the 4-stroke retains its efficiency and freedom from temperamentalities much longer than the 2-stroke; it consumes far less petrol is much cleaner and requires decarbonising at less frequent intervals.

If the engine pulley is not too small, the belt provides a trouble

free drive, while tyre-ground oily dust or dirty chains are eliminated.

I prefer an independent dynamo to provide light with either Pedal or Power.

If anyone decides to manufacture to this specification, I hope they will present me with one, for the idea.

G.H.W.

Seaford.

Most readers know that we have to cut letters for length and one sadly maintains that we "murdered" his in our last issue. We make it a rule of principle never to write anything into a reader's letter, even to clarify a point.

The Editor is always glad to have letters from readers "just for a chat" but those intended for publication must be brief, on one subject and on one side of the paper only.

Cyclemaster

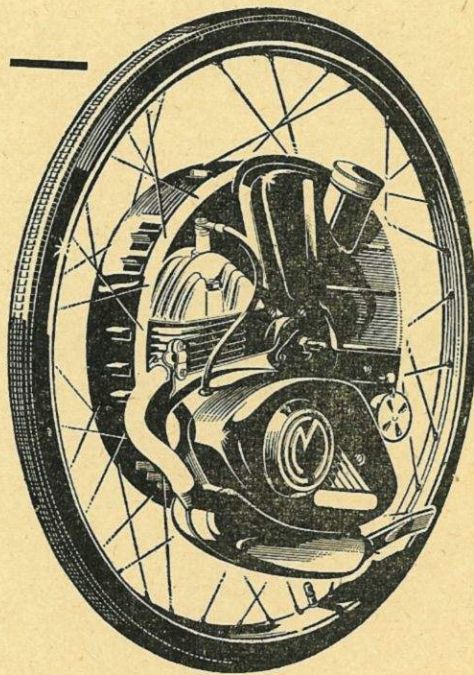
SAVES MONEY GIVES PLEASURE

Want to save money on fares?... to get home from work fresh instead of dog-tired?... to get a lot more joy out of life at week-ends? Then fit the magic wheel that wings your heel to your own bicycle or tandem. Write for coloured brochure and free copy of magazine.

**The Proved Product
with 90,000 owners in this Country**

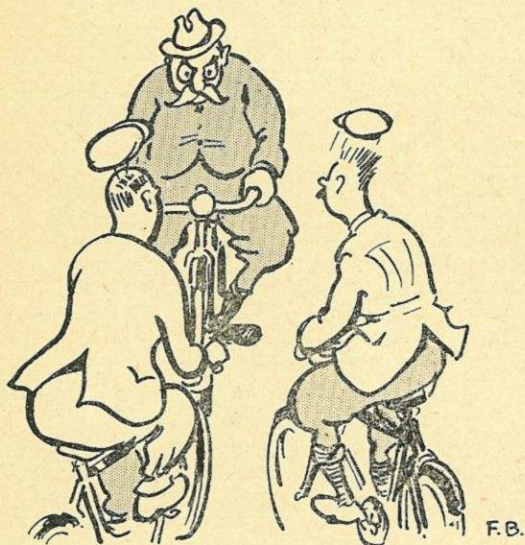
£27.10 including special wheel, tyre, back pedalling brake, lighting dynamo. 6 months guarantee

**230 m.p.g.
20 m.p.h.**



CYCLEMASTER LTD. (DEPT. T.10.) 38a ST. GEORGE'S DRIVE LONDON, S.W.1

In Which Pilgrim is Served



F.B.

IN the early nineteen hundreds, when the golden quid was universal currency, replacement parts for bikes were by no means cheap and the need for these necessary items sometimes unexpectedly arose.

On holiday at Folkestone during high summer of 1907, Sydney and I were returning there, gently riding abreast on our bikes through the main street of Canterbury, when, approaching dead in front of us, on his wrong side of the road, was a retired Colonel type on a very stout roadster. My machine had reached me at least third hand, and though serviceable was aged.

We kept our course, thinking the Colonel would naturally either give way or dismount. He did neither. We met head on, wheel to wheel and over we both went.

When we had sorted ourselves out, the Colonel was full of apologies and freely admitted his

by

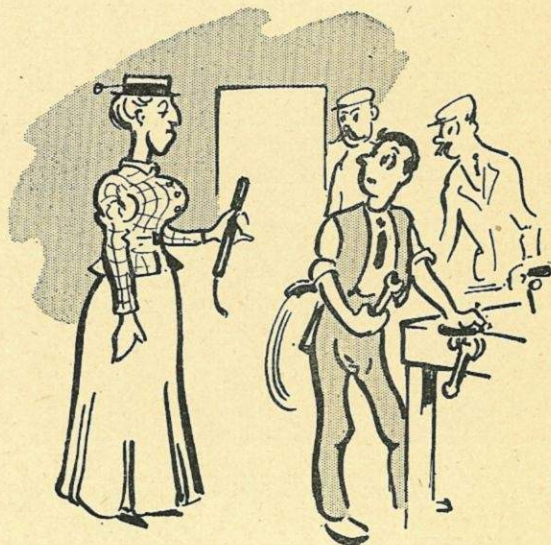
Arquata

responsibility for the mishap. This had scarcely affected his machine, but my front wheel was hopelessly buckled.

He led me into a large ironmongery store, which ran a sideline of bicycles and their parts, where the aproned assistant, with prompt diagnosis, prescribed a new front wheel.

The Colonel paid the 8/6 charged for supplying and fitting the new front wheel, and apologising again off he went (Incidentally 8/6 represented 340 cigarettes in those days).

So that was the end of that, and we later returned, but the job was not quite finished. While waiting, the exact female counterpart of the Colonel came in. Very tall,



F.B.

very county, and, notwithstanding her well-bred manner, very much annoyed.

She complained in emphatic language about a bicycle pump she had purchased there only a short while before. "Utterly useless" was one of the many terms she applied to that miserable pump. The assistant oozed concern and requested permission to inspect the offending article.

He gave it the works in the usual manner and Sydney and I were intrigued as to what came next, when the pump protested with bursting squeaks that it was sound in wind and limb. So what?

Having deferentially suggested inspection of the bicycle which the assistant gathered had been

left in the road, the lady led the way without, while Sydney and I continued our speculations within.

Followed a brief spell, when the pair re-entered, the lady first, wearing a mollified if slightly bewildered expression, the assistant following, barely concealing an amused grin as he glanced in our direction.

Yes, the matter would be attended to and would Madam be so good as to return later in the day.

At that she departed and the assistant spilled the beans. Her bike had got the father and mother of all punctures in its back tyre.

That was 46 years ago, but shopping is a little different today. Then—the customer was always right. Now—he can be wrong, or so a garage chap told me the other day when I went to get a bottle of SAE 10 for my *Velo-Solex*.

I had bought there the last of a series of at least three bottles about six weeks before. I produced from my panniers the empty bottle and just said "10 please". The attendant looked at the bottle, then at me. "We don't keep it". Quietly I explained that this very bottle had been bought there a while before. "Then it didn't contain 10". I said it did.

At this the attendant got annoyed. Rhetorically he enquired whether I knew more about his job than he did. Ever since he'd been there they'd not had a drop in the place.

This *impasse* was interrupted by a car driver poking his head out of his off side window to enquire in a belligerent manner when was he likely to be served as he was there before this gentleman (me) anyway.

The hackles of the attendant were up well and truly by this time and seizing the opportunity given

me by this secondary conflict, now in full swing, I remembered the yellow cap was on the bottle when I had put it in the pannier. It had fallen to the bottom *en route*. The subsidiary conflict terminated, the attendant returned to resume with me.

I said nothing, but just held out my hand, holding the distinctive yellow cap embossed with "10".

The attendant gave a quick glance at the bin containing bottles of oil of various grades, stepped over and looked at the top row—10's, all of them.

I was embarrassed at his confusion as he explained.

He had always thought they were "racers"—whatever that may mean.

(MORAL: You can afford to be polite if you know you're right, anyway).

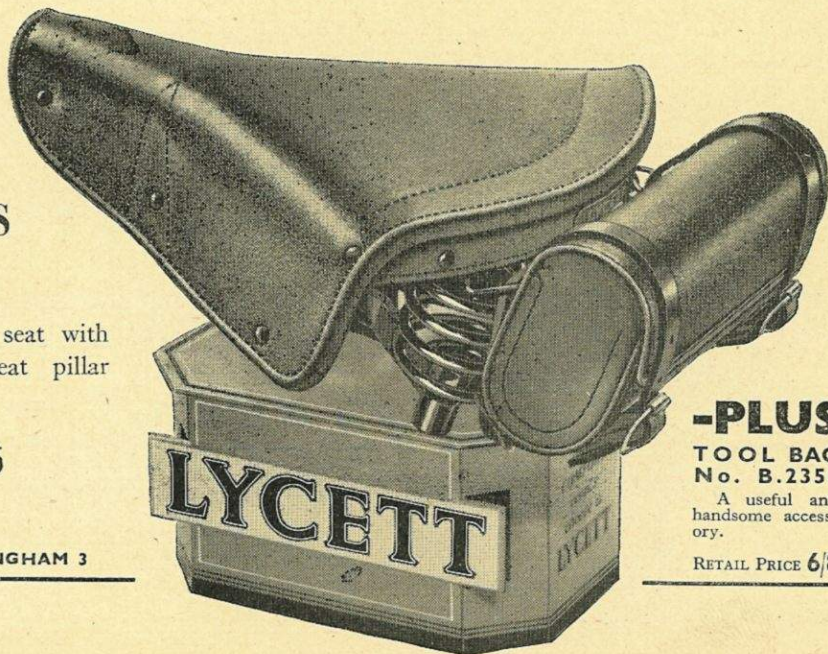
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RETAIL PRICE **6/8**

“Is Your Decoke Really

IT was a service depot of the Ford Motor Company that cured me of the ritualistic habit of decarbonising engines when, just after the war, they almost flatly refused to decoke my old “eight” when I asked them to. They stated firmly that it would do no good at all, would increase oil consumption and cause all sorts of minor troubles.

“What makes you think it needs decarbonising?” they asked.

I replied that the engine lacked power and pinked like blazes, symptoms which, on the basis of twenty years of motoring experience, I was convinced indicated the need for the operation.

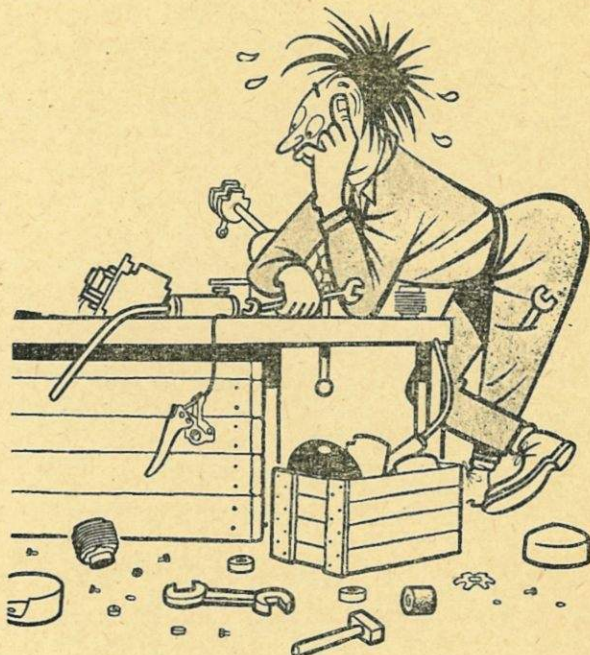
“Are you sure the apparent lack of power isn’t just that the pinking is stopping you from putting your foot down?” they countered.

Faced with that one suddenly, I was not quite so sure—Perhaps! I didn’t know.

“Bring it in and let us tune it up a bit. You’ll find it goes alright after that.”

I took it in and they did “tune it up a bit” and I had it back the same afternoon, running perfectly, for a charge of only a few shillings. That car is no longer in my hands, a fact I have always regretted since, but I still see it occasionally and drove it only a few days ago. That same engine now has over 40,000 miles to its credit, still performs splendidly and the head has never been off yet.

Not all motor car metal is as good as Ford’s and most engines have to be opened up occasionally for the valves to be ground in. At the same time the carbon is cleaned off the head and pistons and the whole operation is called a decoke,



(Acknowledgements to N.V. Motorenfabriek Pluiver, Rotterdam)

but really the need is dictated by the condition of the valves rather than the carbon in the combustion chamber in nine cases out of ten.

So far so good, but where do we come in? Two strokes don’t have valves and the question of grinding does not arise but we are told to tear the engines apart every 2,000 miles or so and many of us find it necessary more often—Why is this?

Well I still argue that it isn’t necessary and there is at least one classic example to be quoted. In the International Six Day’s Trial, the toughest motorcycle reliability trial in the world, one of this year’s competitors, M. Muller of Switzerland, rode a 250 c.c. *Java* which had already competed and

won gold medals in the 1951 and 1952 I.S.D.T’S. It still had intact the official seals from the previous two years’ trials, shewing that it had never been opened up in that time. The machine was in daily use at home and had been ridden from Switzerland to Czechoslovakia for the event.

The owner says that the only maintenance the engine ever gets is the regular cleaning of the exhaust port and silencing system, and if that is good enough for the I.S.D.T. I should say it ought to be good enough for any kind of motorcycling or cyclemotoring.

To reconcile this experience with the facts of life for our own engines it is necessary to check up on the actual conditions under which our

Necessary ? ” asks OLEO

engines run. It is generally accepted that the hard carbon that forms especially in the ports, is the result of burnt oil, and the softer stuff in the head and sometimes round the plug, comes from incomplete combustion of petrol. Recent developments, however, have tended to suggest that this division is oversimplified and I have heard of one cyclomotor company who tested an engine on the bench with less and less and finally no oil at all, but still raised carbon in the ports.

It seems probable then that the carbon in the engine is a result of burning “petrol” rather than petrol *and* oil and the first thing to get straight is the carburation. Because of the high ratio of metal to flame area in our tiny engines they tend to run cool as compared with the larger bore motorcycle engines, while to get easy starting under all conditions and maximum output on full throttle our usual mixtures are rather “rich”. This is a very bad combination from the carbon point of view as it means

too much petrol going in most of the time and not enough heat to burn it completely.

If we would be content to give the engine a couple of minutes to warm up from a cold start and have our full-throttle performance highest under slightly favourable conditions instead of when slogging uphill at low revs we could use a weaker mixture. This would give more miles per gallon, although this is not very important with our very economical engines, but it would also mean better combustion and less carbon.

A factor which has not been given the attention it deserves is the choice of fuel. Memories are amazingly short about some things and I find that most people have already forgotten the advice given by all the petrol companies in pages of expensive press advertising when the premium grade fuels came back. Almost every announcement then made contained the warning that the value of the high octane fuels would only be felt if

ignition timings were slightly advanced from the point at which they had been effective on “pool”. Very few people bothered and a number of wisecracs are even now running round saying how much better performance they get on standard than premium spirit.

As cyclomotor engines have no automatic ignition controls and most of them only one gear, the range of speed in everyday use is quite high and the timing, therefore, rather critical. Although these little units will run a mile out on timing they can only give their best if it is correct for the fuel grade used. The careful owner will stick to one *grade* of fuel (This does not mean one *brand*) and have his engine timed to suit that grade. If your engine appears to like one grade more than another it probably, though not quite inevitably, means that it is timed for that particular octane rating and burns ALL that fuel that goes into the cylinder.

Then comes the matter of oil.

again you said it..

“Some little while after the second decoke T.S.L. was discovered and used in the proportions of 20 to 1 Using . . . T.S.L., over 5,000 miles have been done without taking the cylinder head off”

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DECOKES—*continued*

This has already been extensively dealt with in these pages and I will not repeat the arguments in general. However, I must re-affirm that I have never yet met a cyclemotor that needed heavier lubrication than SAE20(W) at a petrol/oil ratio of 20 to 1 with the carburettor setting described above; that I would prefer an even lighter oil if generally obtainable from the point of view of carbon deposit; and that my personal experience with a special two-stroke lubricant at 24 to 1 has been most satisfactory.

We have now reached the point in the argument where it is contended that an engine getting the right strength of mixture of the right petrol in the right proportions with the right oil will not create an unduly heavy deposit of carbon in running. But some deposit will form and the place where it forms most to the detriment of performance is in the exhaust port and silencing system.

There are some machines, of course, that are so laid out that it is difficult, in one case I believe impossible, to get at the exhaust system without moving the cylinder head, but in most cases the whole pipe and silencer can be taken off

in one and separated, if separable, on the bench. The drill then is to turn the engine by hand until the piston is at the bottom of its stroke, when you can see right through the port if the plug has been removed to admit a little light. An electric torch held over the plug hole is a help here. Then scrape all the carbon out of the port, leaving the metal smooth and clean.

The best tool for this job cannot be bought from any cycle stores or agent, but it is cheap, safe and most effective—an ordinary nail file!

This has a point to clear the corners of the port, an edge strong enough to break up hard scale, a filing surface to clean off the port walls into a near-polished state and yet is soft enough to do no damage whatsoever, even if it slips on to the piston or rings.

For the exhaust pipe and silencer a long screwdriver is the most popular instrument for breaking up and poking out the deposit, but the actual choice of tool will vary according to the design of the system. Some are not demountable at all and have to be "cooked" over a fire or gas ring to remove the coke or boiled in a solution of caustic

soda (3 pints to a gallon of water). This, however will also remove the enamel and must not be used on aluminium in any circumstances.

Always fit a new gasket when replacing the pipe. This avoids leaks, seats the flange firmly without distortion and facilitates removal next time. Check the plug for condition and gap—if in doubt, replace it. Then, if all the things I have mentioned are in order, it will be quite a long time before your need to touch the engine again.

AUXILIARY TANK

WE have received a sample of a new spare petrol tank for cycles from the well-known firm of **LONGBOTTOM & Co.**, of Keighley, Lancs. (The Clip People).

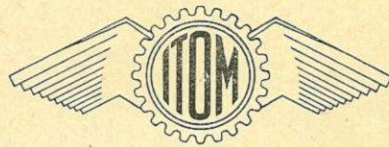
The tank is of half-a-gallon capacity, triangular in shape and designed to hang from the cycle crossbar, being held in place by a butterfly-nut on a clip to the down tube. Dimensions are 10in. x 10in. x 13in. by 4in. wide and the construction is really solid. A valuable point is that the screw filler cap covers an orifice large enough to take the nozzle of a normal petrol pump.

"The *Itom* has really amazed us...

it works like a Trojan, climbs Yorkshire hills better . . . faster . . . on the level . . . hammered it 15-20 miles a day in some foul weather, not a cough, not a single stoppage . . . It has the best compression of any engine I've handled."

(From the report of a well-known agent on first meeting the Itom "Tourist" 48 c.c. unit. The original may be seen at the offices of "Power & Pedal" by permission of the Editor)

**For details of the
ITOM 48 c.c. Super Cyclemotor:**



Write: "ADIMAR"
or **26 Brixton Road**
London, S.W.9
Phone: RELIANCE 3272

Flashes

REAR stands of the motorcycle type strong enough for pedal starting are reported by readers to be available from *Brown Bros.*, *Gt. Eastern Street, E.C.2.*, and from *G. Metherell, Merton Road, S.W.9* priced at about 12/6.

KENT tourists may be interested in a very strong recommendation from a reader for the food and accommodation at the *Rose Cafe, 164 High Street, Deal. Phone: Deal 1299.* It is specially noted that you don't get stung double price for a double room.

IMPROVEMENTS in the *Britax* cycle recently road tested are announced.

The double action Twist Grip, incorporating an exhaust valve lifter, is now a standard fitting,—as are the steering lock stops, forward-reach handle-bar extension, and the heavy autocycle-type mudguards and stays.

A special rear hub is now fitted to all machines, the sprocket being secured to the hub by four bolts.

LEGALISED, the use of flashing light direction indicators from January 1st this year. The Ministry of Transport asked wide publicity for this change to "help avoid accidents which might occur if road users were unaware of the new system".

THOSE who like a sidecar to keep the machine upright on winter roads may like to know that the sidecar duty has been reduced for electrically propelled bicycles, and for motor cycles not exceeding 250 c.c.; it will now be 10/- instead of £1. 5s. 0d. Owners of cycles affected by this change cannot on this occasion renew their licences at a Post Office. They

can do so only through the Local Taxation Office of the Council whose name appears in their registration books.

THE M.O.T. is going in for better signposting of London.

A map, prepared by the Ministry of Transport and Civil Aviation, showing the through routes is already available through booksellers at 4/-. It is proposed to have enlarged copies of this erected at points on the periphery of London with directions to assist travellers to find any locality. Smaller copies of the map will also be posted at suitable sites inside London.

A COLLEAGUE reports very good service over three months with the new *Avon "Powermaster"* tyre in use with a carborundum roller. The tread is almost unmarked and the tyre grip is perfect.

CLUB NEWS

THE first Annual General Meeting of the London Motor-assisted Cycle Section of the British Two-Stroke Club will be held at the "Star", Walworth Road, the usual club room, on February 16th at 8 p.m.

Notices will be sent out to members but other interested riders will be welcome at the meeting although of course, non-members may not vote on resolutions or to elections. The Agenda for the business meeting will be as follows:

- 1 Report from the Acting Secretary on the work of the Section during the past year.
- 2 General discussion on plans and ideas for the 1954 programme
- 3 Election of Officers: Chairman; Vice-Chairman (also Captain and Vice-Captain on the road); Secretary; Competition Secretary; Treasurer.
- 4 Any Other Business may be brought up by members on the spot

The "Star" is on the corner of Walworth Road and Deacon Street, near Elephant and Castle Station. Buses 4, 12, 45, 48 and 196 pass the door.



This is the latest Smith's speedometer for use with motor-assisted cycles. Note the neat handlebar clip flying.

Reader's Experience

Daily Work Routine with a Cyclemaster

I AM a municipal officer controlling a number of employees scattered over a Borough of over 7,000 acres on various jobs, as well as visiting various personages of devious professional and social ranking, on matters relating to administration of the department. This I used to do on a pedal cycle and found that at the end of each day I was physically and mentally exhausted, so on 25th June, 1952 I licenced and put on the road at 5 p.m. Cyclemaster 70171 and in the twelve months ending the 25th June, 1953, it had logged 7165 miles.

The Cyclemaster was fitted into a *Raleigh* cycle of normal design, the enclosed chain case discarded and a half chain guard fitted. The Hub-dynamo in front wheel retained, and the North Road upturned handlebars changed for a pair of flats. (Hands do not jump about so much). A cycle stand of the double legged folding type fitted near bottom bracket which will hold the cycle upright on grass or other surfaces if level.

The bottom rear wheel tube broke near the engine clip soon

after fitting, but was welded up with a smaller tube placed inside. I have had four broken spokes in engine wheel, easily replaced myself without taking tyre or tube off the wheel, but ride the machine over grass football pitches and other unsurfaced areas.

The first de-coke was done at 1,300 miles, the second at 2,200, and none since, except for taking the exhaust pipe off and cleaning the port out with a small screw-driver with the piston at bottom dead centre, and then blowing the carbon by running the engine for a few seconds before restoring the exhaust pipe. This is done when the exhaust note starts to become muffled and the power begins to fall off, and it is surprising how a small amount of carbon can cause these symptoms.

Between the two de-cokes a great difficulty was found in starting; it was so bad that the engine would only fire if the plug was absolutely shining and clean. This was done on 24 occasions in one day; in fact on two occasions it was felt that the unit would be returned to the makers as a gift with

a letter stating the writer's feelings in no uncertain terms. A two-stroke expert (not the dealer) found that the ignition was at fault, the timing was out by an appreciation mentioned above the firing point was checked and found correct and the carburettor needle was moved into a weaker mixture (2 from top). Now, unless the plug is getting sooted up, the starting is very easy.

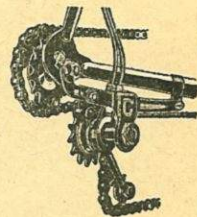
Some little while after the second de-coke T.S.L. was discovered and used in the proportions of 20 to 1 (one petrol tank cap measure to a quart of petrol). Using *Shell* petrol and *T.S.L.*, over 5,000 miles have been done without taking the cylinder head off and only cleaning out the exhaust port at about every 500 miles. The carbon is soft and easily comes out and the top of the piston appears to have only a slight deposit on it.

Petrol consumption was checked just before the second de-coke, the tank and carb were run dry, a measured pint of petrol-oil mixture put in and the machine run in the usual manner which is stop and start and left at times for a

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considerable period. 30.3 miles were recorded on the speedo, which equals 242.4 miles per gallon. This has not been checked since using *T.S.L.* but would appear to be improved.

In still air (no wind) and fairly level roads 25 m.p.h. has been made and held at full throttle but with a tail wind and level road over 30 m.p.h. has been done on several occasions, but not held for very long. We purr along at 19-20 m.p.h. and usually cruise at this speed. High winds do pull the speed down but not so that pedal assistance is required except over humped railway bridges and starting away in traffic.

The machine is run at all times with the clutch in and only taken out just before the engine stalls at low speed and the back pedalling

brake used in emergency, all normal braking done by front brake. Wet weather has no adverse effect on performance, in fact it is the opposite, the road holding is good in a good downpour and the running less noisy.

In winter I am attired in a Harris Tweed overcoat which is on the long side, double texture leggings and cap. The last two items are easily slipped off and left on machine when visiting people. Gauntlet gloves—these stop a draught up the sleeves—and, always carry for wet weather an ex-army brown oilskin without the pack pouch which goes over the overcoat in winter or raincoat in summer. Should the day be really bad I wear rubber boots and a pair of shortened leggings.

Correct adjustment of final drive

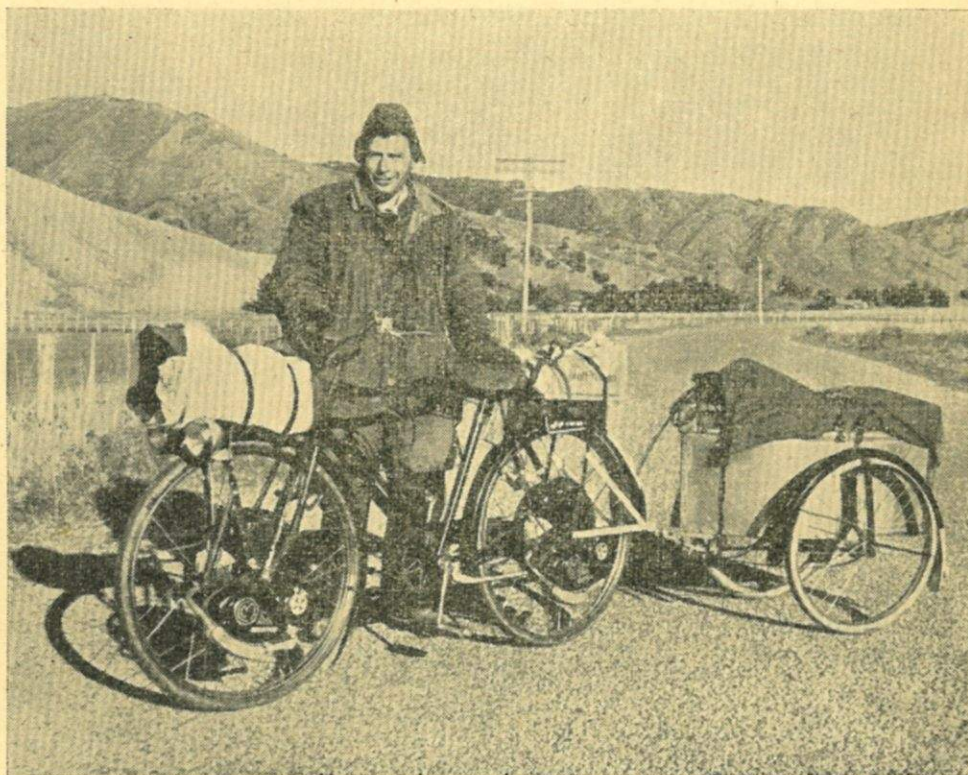
chain will reduce chatter also tyre pressures will vary and also vary chatter. A little experimenting is worth while, a slightly soggy front tyre will take out a lot of bumps. I have fitted a tension sprocket from a *Cyclo* gear to the pedal chain and this keeps the chain taut and stops the chain from slapping the ribs of the wheel drum.

Whiskering of plug points can be reduced by cleaning filter in air intake more frequently than makers instruction, in *paraffin*, as this does not dry out so much as petrol.

My log book shows that the machine was on the road 270 days in the twelve months and this gives an average of 29.85 miles per day. The missing days are made up of some Sundays, Holidays and illnesses.

Another Cyclemaster Story

This one might be entitled "Mad Dogs and Englishmen". Bill Greaves is over 60 and his hobby is touring the world the hard way. He has covered over 12,000 miles with this two-engined cycle and trailer and this picture comes from New Zealand.



ROAD TEST REPORT

The HORSY

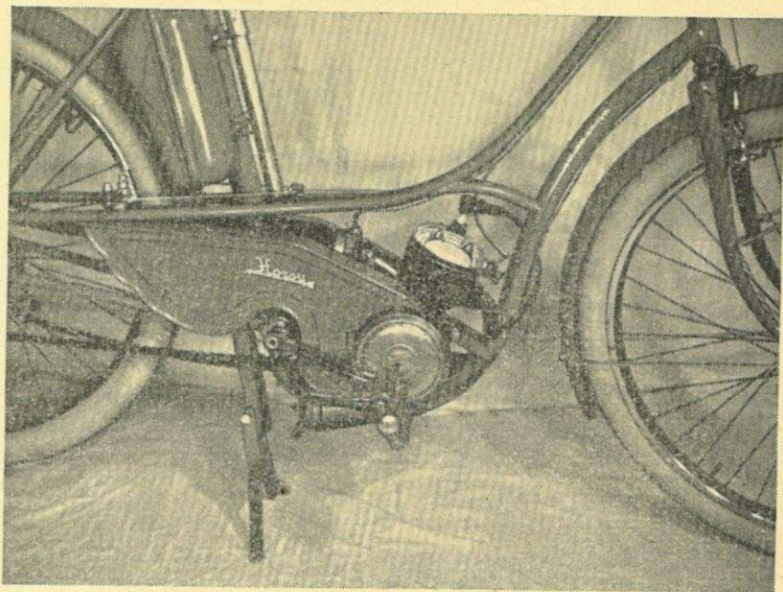
A New French Autocycle

SO few cyclistmotorists in this country have ever known the feel of a properly designed, one-piece, modern machine that reporting on such a model needs a slightly different approach from the report technique used for attachment units. It is not simply that there is a cycle as well as a motor to be described, but a new and complete machine which produces completely new reactions.

The test of this newly arrived French machine brought this up sharply because of the fact that, from the first turn of the pedals, the rider was at home on a machine that definitely "belonged". The riding position as collected and the unfamiliar controls made no difference to this feeling of security and comfort and the start was made from the centre of London in rush hour traffic quite as a matter of course. It was not until home was reached, after a couple of calls *en route*, that the *HORSY* was even looked at closely at all.

In general appearance the machine is fairly typical of modern French motor-assisted cycles. The "open" frame has curved twin top tubes swinging down from the steering head to the rear hub, to link cleanly with the seat and chain stays and rear fork ends. The down tube forms a complete loop enclosing engine, primary drive and countershaft, and the final drive is by chain on the offside of the machine. The pedal drive is on the near side, quite independent of the power unit and tensioned by jockey pulley.

Front forks are of the conventional "D to round," tapered



The neat lay-out, immensely strong loop frame of the full cradle type and the independent chain drives are shewn in this picture. The high grade finish is in light green.

cycle type and the 1 $\frac{3}{4}$ in. wheels are shod with 2-in. Dunlop balloon tyres. The brakes are of the modern French heavy calliper type which have the shoes mounted on lugs brazed to the frame and compensated movement to the cables.

Controls are rather unusual by our ideas there being no way of disengaging the engine by hand, this being done by a small trigger behind the flywheel, not operated from the saddle. The left hand twist-grip, however, gave such a wide range of movement with such positive control for the decompressor valve that this could be really opened to make pedalling with the engine in very easy indeed and should avoid all burning troubles and regrinding jobs on

this component. The right grip controls the throttle and the starting choke is a neat little plate on top of the carburettor which is pushed down with the finger tip before starting and then automatically opens when the throttle is opened.

How it Goes

Those readers who have had some experience of the already popular 48 c.c. *VAP* engine will not be surprised to hear that it has really top class performance in the *HORSY*. It starts at a turn and takes over the drive immediately unless the pedals are deliberately used to speed the getaway. From 10 m.p.h. to a mean maximum of just over 30 m.p.h. there is real

acceleration all the way and main road hill climbing is quite exceptional by any standards.

On several occasions downhill bursts of over 40 m.p.h. were made without any sign that the engine was working except for an increase in the vibration felt through the pedals. The machine steered and held the road perfectly at these speeds. The big tyres, with the front one run slightly soft, absorbed all the shocks and made it seem that spring forks would be an unnecessary luxury. Road adhesion, accelerating or braking was very good, wet or dry.

The brakes themselves were powerful and progressive but on the machine tested they screeched rather. This would probably have worked itself off with use. If not, then slightly softer blocks would cut out the trouble and make things a bit smoother as well.

The Howl

The engine itself was commendably quiet despite its high performance, and the easily demountable exhaust system was as neat as it was effective. But the effect was quite spoiled for us by the howl from the primary gear drive. Some

of these continental manufacturers should go in for making sirens, hooters and loud hailers. Certainly they have a genius for producing the biggest possible row from the smallest imaginable mechanical contrivance. We examined the gears and found them clean cut and well meshed so the fault is in the design rather than construction. We know from the excellent sales of another very bad offender that this matter of mechanical noise does not appear to worry many modern riders, but it will discourage many of the older ones and is not good for the Movement in the regard of the public.

Good Looks

This noise is the only real criticism we have of the machine. It looks right and feels right either under power or pedals, is very strong and remarkably light in weight at 69½ lbs. The light green lined finish looks good and durable as well.

The whole machine gives an impression of solidity and durability and we feel confident in saying of it, as of all the best of the auto-cycles, that it will pay for its extra shillings in a long and trouble-free life. We understand that it will be available with British lamps and

horn at an inclusive price almost immediately and it should find a ready market among those who mean to take their cyclemotoring seriously.

Specification

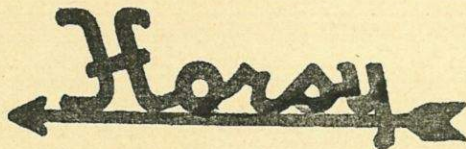
HORSY Autocycle : Full loop frame with double top tubes, solid front forks and brazed up rear end. 5-pint tank under saddle. Carrier fitted as standard. Wheels 1½ in. with Endrick rims and heavy gauge spokes. Tyres 2 in. (600 c.m. x 50 c.m.) Dunlop balloon. Engine final drive on offside by 3/16th in. chain with slotted fork end adjustment. Pedal drive by 1/8th in. chain on nearside with jockey pulley tensioner.

ENGINE, 48 c.c. VAP with geared primary drive to unit countershaft. Drive-engaging pawl on flywheel. Twist grip throttle control with self-cancelling choke. L/hand twist-grip decompressor. Flywheel magneto with lighting coils. Petrol consumption 176 at 25 m.p.h. All up weight, 69 lbs.

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Reader's Experience

Autocycling For Women

by

Maud Norton

MMOTOR-CYCLING is for young bloods with a craze for speed, but for a woman like myself, who will not see fifty again, an auto-cycle is ideal. Last year I picked up a second-hand one. It was a ten year old *Coventry Eagle*, with a *Villiers* "Junior" engine, 98 c.c. After running round the county on it, I decided to make a journey from Shrewsbury to Scarborough, a matter of about 200 miles.

I set off on August Bank Holiday Saturday about 8.30 a.m., over the Pennines *via* Woodhead and on to Leeds where I arrived about 7.30 p.m. and decided to stay the night. I did the rest of the journey *via* Tadcaster, York and Malton the next afternoon.

On the return journey I left Scarborough about 8.30 in the morning and drew up at my own home at 8.30 in the evening, just twelve hours after I had left Scarborough, so achieved my ambition of doing the whole journey in one day.

Some people advised me to rest the little engine every thirty miles, but I discovered that after doing

about thirty miles, it was just nicely warming up and really getting going. On the return journey I only had two short halts for food.

It was on one of these halts that I was asked if this was the auto-cycle that was going from John O'Groats to Land's End. I wouldn't mind trying it.

There are no gears on this little auto-cycle, and to climb hills you can only open the throttle and trust to the extra power it gives you. But I sailed up all the hills, including crossing the Pennines, like a bird. I may have travelled 20-22 miles an hour on the flat, but up the hills, especially the steep ones, it would not be more than 14-15, if that. At Marple, I went beautifully up a big hill, and thought I had reached the top, when I found I had to make a sharp turn right, with another long steep hill in front of me. The auto-bike never faltered.

As I crossed the Pennines on Bank Holiday Saturday, coach after coach passed me taking people back from the Lancashire coast resorts to Sheffield and district, and most of the passengers turned round to wave and cheer me on. I was chugging gently up the hills, with no effort to myself, and yet with plenty of time to admire the scenery. I could feel the glori-

ous fresh mountain air on my face and the heat of the sun on my back.

I have been asked if I wasn't frightfully tired after sitting for twelve hours perched on a little saddle with no rest to my back. Well, I admit I was a little bit stiff. As I made my last turn for home, I had some difficulty in raising my arm to make my signal, and my friend had to help me off the bicycle when I arrived but I took it easy the next day, and after that, felt simply grand.

I was glad to find I needn't leave all my adventurous days behind with my youth. The auto-cycle allows for touring with time to admire the scenery, the feel of the air on your face, the sound of the wind in your ears, the joys of motoring without being cooped up in a car, the pleasures of cycling without the effort of pedalling, the feel of the engine beneath you without the fast speed of an ordinary motor-cycle, which is not for women past their first youth. I felt proud of the remarks of one garage hand where I stopped for petrol, when he enquired where I had come from and where I was going to, "I'm glad to find someone in the country still has some guts." Not a very polished remark, but a very pleasant one to the ear.

If you are meeting *Power & Pedal* for the first time,
you will probably want to become a regular reader.

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Test Report

PUNCTURE SEALING COMPOUND

WE have recently received from Messrs. E. J. Gall of Nottingham a sample tube of a puncture sealing material sold under the trade name of *Puncture-Prufe*.

A test was carried out, using an old cover that had once been scrapped as the tread had entirely disappeared and a tube with several patches already on it. In the course of a six weeks test on the road no trouble was experienced but the tyre was removed as the cover was now worn to the canvas and no longer safe to ride.

Holes were made with large rough nails and it was found that the large hole caused by pushing through a 3in. slightly rusty nail would not seal itself. However ordinary cold patching proved quite effective and it was noted that the quantity of the sealing solution that had come out through the hole did not impair the adhesion of the patch.

Smaller holes were found to seal themselves up to the size of large pinholes and the experiment of patching with a prepared patch from a normal tyre kit but without solution held well enough to be a satisfactory emergency repair.


It would appear, therefore, that the material is of definite value and should eliminate altogether the nuisance of the "slow" puncture.

The solution is *NOT* recommended for use with tyres using Schrader type valves.

CORRECTION

SOME hasty and unchecked writing in our test report of the TELELINK Spring Fork Attachment in the last issue resulted in an error in the technical description.

There are no compression springs in the design and the words "compression springs control sliders" etc., should come out. Actually the tension springs out-

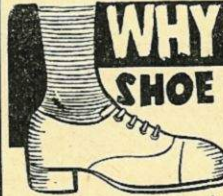


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side the main fork legs take the weight of the rider, which we described as the "static load", while the movement of the fork is controlled by the *Niedhart* rubber dampers located in the head linkage. The sliders in the fork legs look after side thrust and braking stresses but merely transmit movement from the wheel spindle to the progressive damping system. It is this combination of spring loading, progressive damping and free movement that affords the range of re-action for which the design is so notable.

A.C.U. MODEL COMPETITION

The A.C.U. has pleasure in announcing its Model Motorcycle Competition for which cash prizes totalling over £100 will be awarded; the winning models will be exhibited on the A.C.U. Stand at the 1954 Motorcycle Show.

Models from the earliest types to the present day machines are required. While they should be accurate in appearance, they need not be actual scale models and should not exceed 10 in. in length. No parts need be working or capable of movement, but in all other respects they should faithfully represent the original. Any medium may be used. These models will form a display which will become famous as the MOTOR CYCLING CAVALCADE.

The closing date for the receipt of entries is the 30th September, 1954, and the results of the competition will be announced on the 31st October, 1954.

£20 and an engraved souvenir plaque to the winner, a second prize of £10 and a third prize of £5 will be awarded in each of three classes, "Pioneer", "Vintage", and "Modern."

Conditions of entry are simple, and there is no entry fee. Entry forms and conditions of entry may be obtained from the Secretary, Auto-Cycle Union, 83 Pall Mall, S.W.1.

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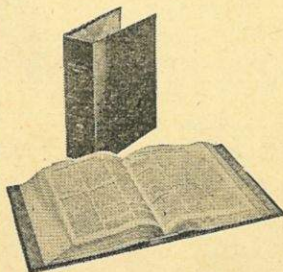
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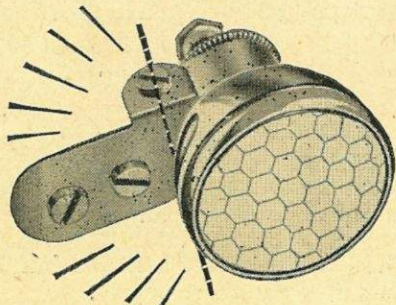
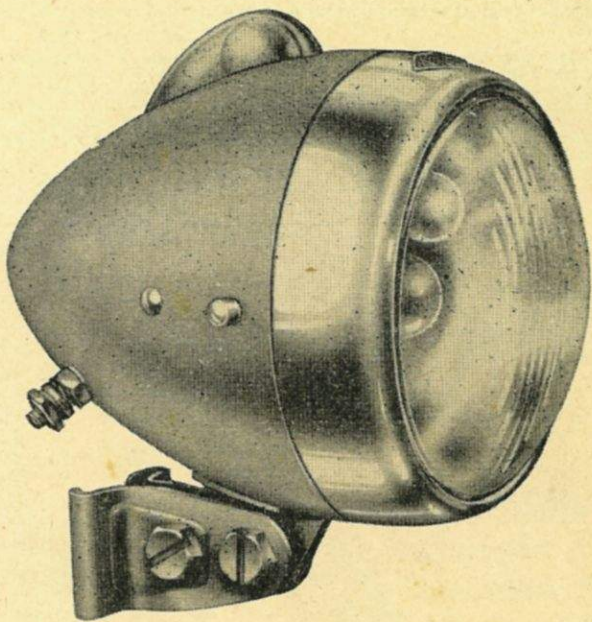
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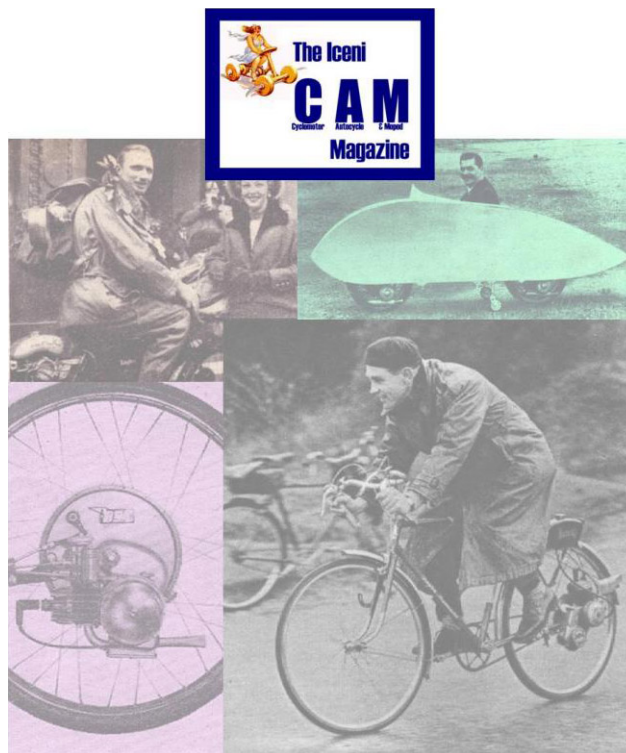


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