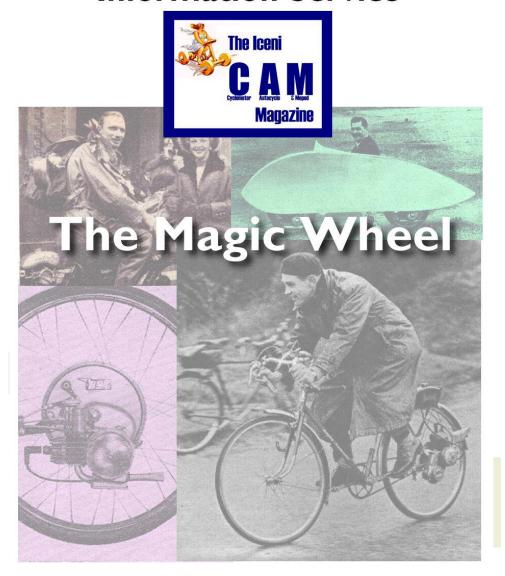
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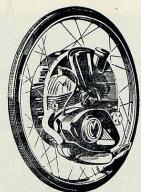
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VOL. 1 NO. 3

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THE MAGIC WHEEL

A QUARTERLY MAGAZINE FOR CYCLEMASTER OWNERS

Not to Hurry!

"Not to worry" has become quite a catch-phrase. We use it when we want to assure someone that the worst seldom happens. Cyclemotorists might be well advised to take the alternative catch-phrase used in the title to this article, and make it their own.

We say this in all seriousness, because once or twice of late we have seen unmistakable evidence that some users are completely forgetting the sole reason for the advent of the auxiliary cyclemotor at all, which was to assist the cyclist—not to provide him (or her) with the means of attaining speeds for which the pedal bicycle was never intended.

What particularly disturbed us was the arrival of one or two letters, addressed to the editor of The Magic Wheel, claiming speeds that were so unsafe for a bicycle that we would never dream of mentioning them. The writers ended by asking, "Can any of your readers beat this?"

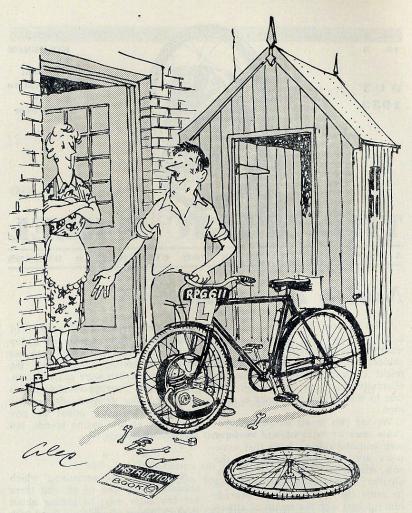
Frankly, we do not know, and we are not going to try to find out. If that sounds blunt, we are sorry, but this is a subject upon which we feel blunt!

The first experimental models of Cyclemaster were capable of a top speed considerably higher than we thought desirable; consequently the production models were geared down.

When the more powerful engine was fitted, our designers deliberately harnessed the extra power to give more pull at low engine speeds, not faster road speeds.

Road safety is something which concerns every one of us, and there are few safer ways of getting about than by means of a bicycle fitted with The Magic Wheel—provided the power is used as it was meant to be used; that is to save the legs of the rider, and enable him to travel farther with less effort. But if a cycle with an auxiliary engine of any make is used in the wrong way—for speeding—then it may easily become a danger to the rider, and to others.

Quite apart from road safety, however, there is the sheer commonsense of the thing. Allow Cyclemaster to do its job of helping you, and it will give first-class service. Abuse it and there will be trouble. The writer of an excellent article in a recent issue



"I told you I could do it myself!"

of The Motor Cycle and Cycle Trader suggested that users should be reminded, right at the start, that the object of an engine unit is to assist the cyclist, not to supplant pedalling completely. We couldn't agree more (or, if you prefer the expression, "he can say that again").

And Mr. M. M. Steiner, who told in The Motor Cycle how he went to Rome and back on a Cyclemaster, concluded his article thus: "You cannot ask a baby engine to do what it was never meant to do, and a motorized bicycle is certainly not a full motor cycle. But" (he added) "a cycle that is, in effect, a motor vehicle, and which gives you great mobility, is a major social development."

It is just that. Cyclemaster is revolutionizing the lives of tens of thousands of people, providing them with cheaper and much more convenient travel, bringing more happiness into their lives. Which was the whole idea.

Not to hurry, please.



Skeletons of prehistoric men revealed by excavations at Maiden Castle.

Digging Up

HISTORY

By Keith Brian

It all began when I was marooned one night in a small hotel on the edge of Dartmoor. A violent thunderstorm was raging, and I sought refuge. Mine host showed me to my room, and told me there was only one other guest; rather a "queer" chap, who had stayed before.

"He goes round digging up things."

I feared the worst, and was very pleasantly surprised.

My fellow guest and I began by talking about Stonehenge; he agreed with me that it was probably the only historic monument in this country of which everybody had heard.

"And, of course," I added, "everybody knows it was connected, in some way, with the Druids, but I must admit that there my knowledge ends." I soon realised that my knowledge of Stonehenge had never even begun! It was built about 2000 B.C.—long before there were any Druids.

Arriving at Dates

How is it possible to date something which was erected nearly four thousand years ago? The answer is, "By digging up things."

Geologists can tell us, roughly, the age of the earth and of various kinds of strata. If, in a certain kind of strata which the geologists say formed the surface of the earth four thousand years ago, we find flint instruments which bear obvious signs of having been made by man, then it is a pretty safe deduction that the men who made them lived somewhere round about four thousand years ago. Thus, that particular kind of flint instru-

ment is dated. If, when the archaeologist is busy digging, he finds similar flints (even though they may be in a different part of the country) he can assume that the antiquity he is excavating goes back, roughly, to the same period.

The most surprising thing about Stonehenge—at least, I found it so—is that it is only one of scores of stone circles. They crop up all over the place—the Merry Maidens in Cornwall and the Rollright stones in Oxfordshire are two groups which I have seen. I hope to see many more.

The most amazing stone circle is one of which very few people seem to have heard—the one at Avebury. This was so huge that its remains enclose most of the modern village of Avebury.

Burial Mounds

Tumili, or "barrows," are to be found practically everywhere. They are ancient burial mounds, some high, some hardly noticeable, some round, some long. Many have been exca-

vated, and yielded valuable finds in human remains, and in pottery, tools, and weapons.

As a general rule the long barrow is older than the round one. A useful way to remember this is that the "long" barrow was built a "long time" before. The approximate period of the long barrow is around 2000 B.C.—about the time of the people who built Stonehenge. The round barrows, which are seen much more frequently, were mostly built between 1800 and 700 B.C.—that is, during the Bronze Age. Bronze has been found in the round burial places, but not in the long ones.

Maiden Castle stands some two miles south of Dorchester, on the way to Weymouth, and is easily seen from the main road. It is a gigantic earthwork, carved out of a low hill. There is a way in and a way out; try to get into it any other way than prehistoric man intended you to and you'll have to scale a sixty-foot rampart, go down into a dry ditch, up another rampart, down another ditch,



A colossal cromlech at Lanyon near Penzance.



A perfect specimen of stone circle on Cleator Moor, Cumberland.

up again—in some places there are as many as five ramparts.

It must be seen to be believed. Words or pictures cannot convey any adequate idea of the place. Goodness knows how many tons of earth had to be shifted to make the outer rampart alone, for it runs all round the lozenge-shaped castle—a distance of one and a half miles!

These ramparts are broken at either end of the castle to form the gateways, as it were, but there is no straightforward opening. The gaps are staggered, so that you have to thread your way around the ends of the ramparts.

The whole structure of Maiden Castle is suggestive of war, and for many years the idea held that it was a place of refuge. When news came that an enemy was approaching, the people for miles around rushed to the castle and took refuge behind its massive earthen walls.

That theory, however, is beginning to be badly shaken. One rather determined student of the subject took the trouble to estimate how many troops would be required to man the ramparts adequately, and he came to the conclusion that a quarter of a million men would hardly be enough.

Maiden Castle is certainly the finest earthwork of them all, but there are other specimens which run it very close.

You can find them everywhere—in the Home Counties, if you be a Londoner, or in Cornwall or Cumberland. They are all prehistoric, and all very wonderful.

Roman Roads

If you cycle from Dorchester to Bridport, the main road suddenly makes a sharp turn to the left, while the old Roman road upon which it was built continues straight on, up hill and down dale, its whiteness in sharp contrast to the tarmacadam of the modern road that swings away from it so contemptuously.

That this road was based upon a prehistoric one is almost certain. There are tumuli dotted along it;

There is a fine cromlech. A cromlech consists of two or more great stones. At one time such stones were supposed to be monuments, but the idea now is that they are burial chambers, such as have been found inside tumuli, with the earth washed away.

Just off the main road from Blandford to Salisbury there is another fine piece of Roman road, standing up some four or five feet above the fields, and stretching away on either side as far as the eye can see; while at Blackpool Bridge, in the Forest of Dean, I found a little gem. The earth has been carefully taken away, and there is the road, just as it was when the Romans trod it.

When the Romans came to Britain they found the people mining iron in that Forest, and, in the way of conquerors, took over the mines. They worked them thoroughly, and the result, today, is "The Scowles" (if you go by an Ordnance Survey map) or "The Devil's Chapel" (if you prefer local nomenclature).

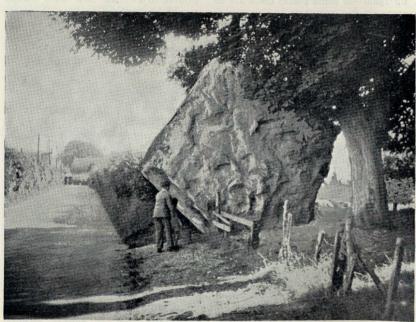
If you happen to be in the district be sure to see The Scowles. I would even advise you, if you can, to make a special visit to the Forest of Dean just to see them.

Great chasms yawn open at your feet. You can clamber down the precipitous sides, and pick your way in and out of the workings.

There are many other kinds of prehistoric remains. Hut circles, for instance; flint mines; pit dwellings and a host of other relics of the distant past.

All are clearly marked on the inchto-the-mile Ordnance Survey map.

I sincerely hope that no archaeologist will think I have tried to make this a learned essay upon the science of rediscovering the past. I have attempted nothing of the kind. But-I quote from a book called "Earthworks of England "-" Generations of men have walked over scores of such things without ever noticing their existence." Well, generations cyclists have ridden by them, too. If I have encouraged even a few to decide to seek out the history that lies but a short ride from their own homes I shall be well satisfied.



The 15-year old boy and his small brother give some idea of the size of one of the huge stones at Avebury.

What We Have Done Since Wheel Number One . . By The Editor

The earliest Cyclemasters produced were regarded by engineers whose opinions command respect as masterpieces of design and production.

We never went quite so far as that, but we felt that they were pretty good, and the letters that began to come in from those who bought "The Magic Wheel" in the early days proved that we were justified in feeling that way. Many of those first models are still in service, giving every satisfaction after more than three years of constant use, and showing every sign of going on for a lot longer.

No man has ever made anything, however, which could not be improved, and behind Cyclemaster there are engineers who have only one object in life—to improve the breed. They will try any idea that looks promising (we have had some most useful suggestions from enthusiastic owners) first on the bench, and then in experimental engines used under everyday working conditions.

The same sort of thing happens with everything mechanical—radio, television, motor-cars, refrigerators, and what have you. But where Cyclemaster is concerned there is one very important difference. Generally speaking, when improvements are introduced into a car, for example, the only way to get the benefit of them is to sell the old model and get a new one. Not so with Cyclemaster. There is no such thing as an obsolete wheel, and the oldest one on the road could, if the owner wished, be brought into line with those produced yesterday.

Very few, if any, owners would want to go to that extreme, not only because it would cost quite a lot, but because there are some changes (the more powerful engine, for example) which they might not be at all interested in.

On the other hand, there are many who would want to take advantage of one or two of the other modifications, especially those involving only a few shillings, and we have had a lot of letters asking us to give details of the changes in this magazine.

Well, here they are. I do not propose to give any details of how to do the various jobs, because that would mean devoting too much space to matters of only limited appeal. But what I shall do is describe the various modifications one by one, and give details of what each would cost (a) for the parts required, and (b) the approximate cost of labour if the job is done by your dealer.

If you have the mechanical ability to carry out the work yourself, you can order the parts from your dealer and we will send you the necessary instructions.

Schrader Tyre Valve

(From Wheel No. 10071)

A few of the very earliest wheels had just the ordinary rubber-tube type of cycle tyre valve, but as the correct pressure is so important with a heavier wheel going at slightly faster speeds this was soon replaced by a Schrader valve, which permits the pressure to be accurately measured with a gauge. To get the benefit of this conversion, all you have to do is make sure that the next inner tube you buy has the right sort of valve.

Back-Pedalling Brake

(From Wheel No. 50001)

Cyclemaster owners do not need reminding that The Magic Wheel,

with its low centre of gravity and other features, is the safest form of power assistance there is. The backpedalling brake was introduced with the sole purpose of making it safer still. The law says there must be two brakes, independently operated. They could both be rim brakes with handlebar controls, but cyclists, like other people, have only two hands, and it wasn't easy to manipulate clutch lever, throttle control, and two brake levers in an emergency (which is when brakes matter most!) Besides, rim brakes tend to slip in wet weather, so it is just as well not to rely upon them entirely. With the Cyclemaster back-pedalling brake you have easy and absolute control in all circumstances.

The total cost of the necessary parts is £4 4s. 0d. We would not advise any owner to attempt to make this conversion himself; the labour charge should be around £1 10s. 0d.

New Petrol Tank

(From Wheel No. 55636).

This need not concern anyone very much—the old tank had a wide flange to it, the modern one hasn't. We made this change primarily to simplify production. If there be an advantage from the owner's point of view it is that the new tank would be easier to repair in the unlikely event of a leak. The cost of the parts is £1 1s. 6d., with labour around 3s.—but my own advice, for what it is worth, is not to worry.

More Powerful Engine

(From Wheel No. 73501)

There has never been any doubt in the minds of anybody that the original 25 c.c. engine "did the job." Many owners felt, however, that a little extra power would be an advantage, not to give more speed, but to have a little more in reserve, especially for hill-climbing. After due consideration and much experimental work, we had to agree that they were right, and accordingly the capacity was in-

creased to 32 c.c. This gave about one-third extra pulling power at low engine speeds; petrol consumption is not seriously affected.

Although this really does sound like a major change, the entire job can be done for just over three pounds—£1 18s. 0d. for parts and approximately £1 5s. 0d. for fitting them.

Magneto With Lighting Coil

(From Wheel No. 76751)

This change has been enormously popular. The advantages of getting current from the engine, instead of relying on batteries, do not need emphasizing. What is well worth mentioning is that whereas with the ordinary cycle dynamo an output of three watts is about the most that can be expected, our dynamo gives, at all reasonable speeds, nine watts. This means that you can devote eight watts to the headlamp-and that really is a light—leaving one to spare for the tail lamp. As this change involves a complete new magneto, the cost of the parts is £4 10s. 3d., but the labour charge should not be more than 5s.

Clutch Shaft Assembly

(From Wheel No. 91043)

The chain sprocket on the clutch shaft was originally held in position by a collar and pin. There was a tendency for the collar to come into contact with the inside of the wheel drum under excessive load, and to overcome this we shortened the shaft and fixed the sprocket with rivets. The cost of the new parts is £1 13s. 0d., with labour about £1 10s. 0d., but my advice as with the new petrol tank, would be to leave well alone.

Spoke Washers

(From Wheel No. 91450)

Now this little improvement is well worth carrying out. For quite a while now we have been fitting small brass washers under the head of the wheel spokes. Long testing showed that this increases the load carrying capacity of the wheel, and reduces any tendency for the spokes to fracture. The washers cost 3d. a dozen and you'll want 36. Don't do the job yourself unless you are quite happy about your ability to true-up the wheel after you have re-built it. The dealer charge will only be around 12s.

Shorter Sparking Plug

(From Wheel No. 96664)

We have always fitted K.L.G. plugs. At first these were slightly longer than similar types, but they have now been re-designed. We were glad of this, because it gave a little extra clearance between the top of the plug and the wheel drum, but it would be a waste of money to make the change for the sake of it; just see that you get the short plug next time you buy a new one. Usual price—5s.—and this is something anyone can fit!

Longer Wheel Spindle

(From Wheel No. 99701)

We increased the length of the wheel spindle solely to meet the wishes of those who wanted to fit carriers, pannier sets and so on. Unless you are interested, there is not the slightest need to make the change. If you are, then the parts cost 7s., and the doing of the job about 6s.

Wider Rim, Stronger Spokes

(From Wheel No. 102065)

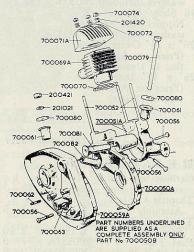
We introduced a wider rim, oversize tyre, and heavier gauge spokes when it became evident that really heavy people were riding Cyclemasters, and that the wheels were being widely used in tandems, tradesmen's cycles, and so on. There is no reason at all why you should make this change unless there are special circumstances which make it advisable—and your dealer will advise on this. It will cost you £1 3s. 6d., plus a new tyre and tube, plus about 12s. for the work.

B.E.C. Carburettor

(From Wheel No. 104451)

This is the most recent improvement. The new carburettor has a special easy-starting device which does not involve closing a choke which has to be opened again once the engine is running. Flooding of the B.E.C. carburettor is almost impossible; adjustments can be made merely by removing the cover plate —it is not necessary to dismantle the carburettor. But the many thousands of Cyclemaster owners who have had nothing but satisfaction from their engines generally would see no reason for making the change just for the sake of the thing. Those who do, however, can get the new carburettor complete, plus all the parts that go with it, for £2 13s. 7d., and the dealer will charge 6s. or so for making the conversion.

FOR THE OWNER WHO "KNOWS HOW"



If you have the necessary mechanical knowledge and ability to carry out servicing work on your Cyclemaster yourself, a copy of the Workshop Manual will be one of the best investments you ever made.

Above you see a small reproduction of one of the many illustrations. The complete dismantling and re-assembly of the engine is described in minute detail. The cost is only 5s. 4d., post free, from Cyclemaster Ltd.

THE PARTS YOU'LL WANT

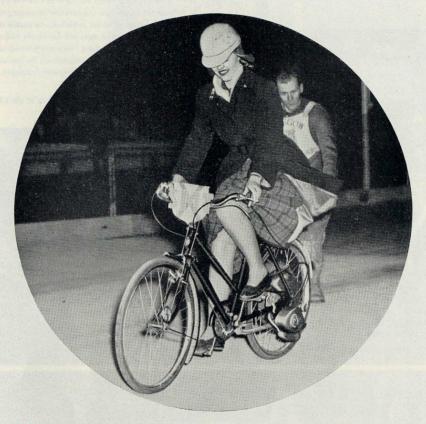
The article on the preceding pages describes modifications made to Cyclemaster from Wheel No. 1, and gives the total cost of parts, with approximate labour charges.

Below we detail the parts you will require if you wish to carry out any of the modifications yourself, and have the necessary mechanical aptitude. All are obtainable from your dealer.

Description of Part No. Price.				Description of Part	Part No.	Price	2.
Spoke Was	shers £	Back-Pedallin					
36 washers (3d.			9	Brake	-	s.	d.
Shorter Sparking Plug				Drum and Hub Assembly	700102D 3	10	0
K.L.G.	F.50 Sparking Plug	5	0	36 Spoke Washers (3d. doz.) Engine Suspension	700327		9
Address States of the Centre State				Bracket Brake Arm	700251A 700249	10	6
Longer Wheel				Eccentric Engine	700215	Spine.	
Spindle	14 4002	1	C	Mounting Bush	700248	1	9
Spindle Brake band	14-4003	1	6		Total £4	1	0
assembly	14-3602	5	6		Total £4	7	_
	Total £0	7	0	New Petrol Ta	ank		
			-	Tank	700290C	18	6
Wider Rin	n			Carburettor Cover	700294B	3	0
26" x 1\frac{3}{4}" Rim 18 Long Spol		17	6		Total £1	1	6
Nipples (2d.			A south				0,000 I
washers included) 700305 3 0				More Powerfu	T & DESCRIPTION		
18 Short Spokes and Nipples (2d. each—				•			
washers included) 700304 3 0			0	Engine	700256A	15	0
26" x 1\frac{3}{4}" Outer Cover			Cylinder Cylinder Head		7	6	
(Price on Applica-				Piston Assembly	700258A	15	6
tion to Dealer) 26" x 1\frac{3}{4}" Inner Tube							
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		_	_	Magneto with	a detail he ha		
Total £1 3 6				Lighting Coil			
plus tube and cover				Magneto and Rotor (Wipac Series 90)			
B.E.C. Carburettor					I.G1122 4	10	0
Carburettor				Note.—If the old '!	Bam-		
complete J.99 1 10 0 Throttle Control			0	tamag' Magneto is			
				returned, the price of the New Magneto is			
Assembly	L.50	7 6		reduced to £3.1			
Throttle Cable Standard	e L.59	2	10	Lighting Lead			0
Fuel Tap	700331A	7	6	Grommet	700296	1	3
Induction Pip		2	6		Total £4	1 10	3
Rubber Fuel			3		_	- 0	
Carburettor C	700294C	3	0		ntah		
Tiate	Verne Teach of			New Type Cl		0 -	
	Total £2	13	7	Shaft		£ s.	
	The same of the same			Assembly complete	700276B	1 13	0

WHAT A LOVELY

idea



One of the charming young ladies who took part in the novelty race at Glasgow Speedway. Photo by courtesy of The S.M.T. Sales and Service Co., Ltd.

When, at a meeting of the Glasgow Speedway, four lady spectators were asked to volunteer for a special novelty race the following week, the response was overwhelming. So much so, that the Tigers' Manager, Mr. Ian Hoskins, had a bit of a job to decide which four to select. The essential qualifications were (a) ability to ride a bicycle (b) easiness on the eye.

The idea was to run, as an interval attraction, a Cyclemaster relay race, each team consisting of Two Tigers and one lady volunteer. After each lap the teams had to hand over not

only their machines, but also their crash helmets.

Although the young lovelies could all ride bicycles, none had any experience with Cyclemaster, but they all turned up a short while before the meeting was due to start, and after a little coaching were going around the cinders as though they had been handling Magic Wheels all their lives.

The whole event was a great success, and very popular with the spectators. The winners were Tommy Miller and Larry Lazarus, with Miss Sheila Fraser as their buddy.

PICTURES YOU HAVE SENT US



I. The beauty of spring. Mr. A. J. Woodley and friend in a Worce Roundsman which won second prize in a trades week procession London, please," wrote Mrs. B. Tandy of London. We gather for registration letters just about sum it all up. 4. A miniature of real thanks to the charming lady who allowed us to use it, Mrs. Bloiseem to be debating whose turn it is to ride the Cyclemaster. A 6. Officials of Edinburgh Corporation inspecting three Mercury use by supervisors of street orderlies—to enable them to cover a Cyclemaster has been in daily use for nearly two years by a mer A. Clare and Son of Liverpool. He visits billiards clubs to look aft the equipment. 8. These Cyclemasters do get about. This snot Circle was sent to us by Miss Margaret Trudingen, who with a finland and Norway.

Pictures 2 and 6 are published by courtesy of the S.M.T. Sales and





tershire orchard. 2. A decorated in Musselburgh. 3. "A quart to the point cover picture—with our very mfield, of London. 5. The turkeys snap from Mr. Redknap, of Pinner, bicycles (Cyclemaster model) for more ground in less time. 7. This noter of the staff of Messrs. E. and er the tables and generally service upshot of two north of the Arcticitiend covered 1,700 miles through

service Co. Ltd., of Scotland.











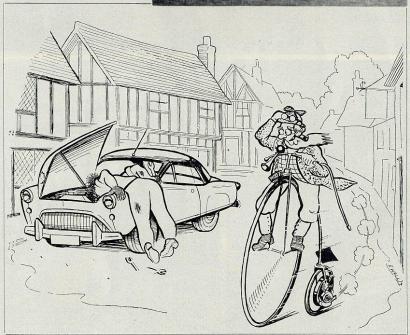
FACT

Everyone who visited the Royal Tournament, or saw it on Television, was amused by this Penny-Farthing (special Cyclemaster model!). The Officer ic Royal Signals Display, in giving us permission to use the photograph, wrote "Needless to say, we have had no trouble with your wheel, but the large wheel of our first Penny-Farthing collapsed!"



FANCY

This joke sketch was sent in by the artist weeks before he, or any other member of the general public, had any idea that the Royal Signals were going to produce just such a machine. Pure coincidence.



"Never did like them new-fangled moty-cars".

THE THINGS YOU SAY!

We receive hundreds of letters every week, and they are all replied to promptly by post. Most of them deal with matters of interest only to the owners concerned. When points of general interest are raised, the letters, with brief comments, will be set aside for publication in this feature.

Exchange Indicated?

Dear Sir,

I am nearly sixty, and until recently had not ridden a bicycle since my early twenties. Our married son occasionally borrows the car when he wishes to take the family out, and when he does so he comes to collect it on his Cyclemaster. Some weeks ago while he had the car I had to go to our village-two miles away. knew how his machine worked, and as the matter was urgent decided to try my luck. Since then I have used his Cyclemaster so much that it has become a family joke, and the other evening I heard my wife saying to him, on the telephone, "I think dad hopes you want the car tonight!'

(One solution seems to be a straight swop; exchange is no robbery. Better still, why not a Cyclemaster for yourself, as an auxiliary? Some of our most enthusiastic users are well over seventy.-Ed.)

Pool—or Super-Duper?

Dear Sir, In "Just Ticking Over," The Idler asked if the reader who found the best grade fuel "not so hot" was

correct.

I always used the best, thinking that Cyclemaster deserved it, but I never seemed to be able to get my engine to sing along like others. I tried all sorts of things—changing plugs, using less oil—but no go. Then one day I tried Pool, partly because I could not afford the best at the time, partly as an experiment. I have had no trouble since, and get more power, cleaner running, more m.p.g. N.K. Leicester.

Dear Sir,

My Cyclemaster performs much better on branded petrol. Since

December I have had no trouble at all with the engine, though naturally it has been decarbonized; I have not even had to clean the plug since the middle of May (letter dated July 3). But having changed my address and work, the engine has less to do.

Cheltenham.

Dear Sir.

I agree with the reader who states that the best performance was achieved by using Pool. Other types of petrol certainly appear to create the symptoms mentioned-plug oiling up, smoking, etc.

D.B.W. Morden.

(We have received many letters on this subject, and experiences seem to be very mixed. The answer seems to be "you pays your money and you takes your choice."-Ed.)

Ready-mixed Petroil

Dear Sir,

We all know that petrol and oil have to be well mixed to give best results. Fine, while one is at home, but on the road. . . . I should say it is difficult to get the proper mix at any garage-and are they all willing to supply small quantities?

S.G.C. Edmonton.

Dear Sir,

Is it possible for garages to be asked to sell quart corked bottles of petrol and the proper oil, mixed ready for filling up? One garage I asked for petrol just flatly refused to serve less than a gallon, but most garages, while not being prepared with a quart ready mixed, were generally willing to render this service-but an oily jug, open to all the dust of garage and road-was used for mixing. Notts. Miss E.A.H.

(We know only too well that a few garage people are still rather churlish in this matter, but most proprietors are business men who realize that nearly 90,000 Cyclemaster owners are worth catering for. So far as having small containers ready is concerned, until quite recently it was a very serious offence to add anything to petrol before sale; that law has now been relaxed and we are confident that British enterprise will soon meet a growing need.—Ed.)

2/- for Parking

Dear Sir,

Early in July I travelled some sixteen miles to the Kent County Agricultural Show. The charge for parking cycles was 6d., but as my machine was motor-assisted I was forced to pay 2s. Had I not made a special attempt to see this year's show I should have returned home rather than pay. Perhaps you will kindly publish my letter in order that fellowusers may get cracking on bringing about a fairer ruling concerning taxation, parking fees, and so on.

Faversham.

(The charge was extortionate. We urge all readers not to pay such fees if they can avoid it, and whenever possible to let us have full details so that we may take the matter up.—Ed.)

Right on the Beat

Dear Sir,

I find your magazine of great interest to a highly-satisfied Cyclemaster owner like myself. I am a police constable with a large rural beat which involves riding up and down hilly districts in the vicinity of Snowdon, and I often wonder how I was able to patrol such an area before I obtained the unit. Many of my friends scoffed at the idea that such a low-powered machine could carry me (17-stone) in this district; they have now changed their minds. Caernarvonshire. G.I.

(Thank you, sir, for letting us know that Cyclemaster has made the policeman's lot a happy one.-Ed.)

Failing the Test

I was failed in my test on the grounds of "alertness" and knowledge of Highway Code. I have been riding a cycle, cycle and sidecar, tandem and sidecar, racing tandems, lady-back tandems, for 47 years. My first race was in 1909. For sixteen

years I was a member of London racing clubs. I used to ride on an average 15,000 miles a year up to the age of 35, and still ride long distances. I owned and rode three motor cycles during the Great War. Forty-seven years accycling. Yet I am failed. accident-free

H.I.M. Oxon.

(We fully sympathise with Mr. H. J. M.—who, incidentally, gave us full details of his racing. We are all too conscious of the methods of some of the examiners, and have often raised this matter with the authorities. We shall continue to do so.—Ed.)

Cycling Days Not Over

Dear Sir,

I don't know how to tell you how much I owe to my Cyclemaster; I thought I should never see the lovely country again. You see, I am a disabled man with fibrositis in legs and spine, and I thought my cycling days were over. Thanks to Cyclemaster, I can still get out, and I must say it is a great pleasure, especially now that I can take my wife with me. We own a tandem, and I wish you could see the look in her eyes when we are in the country, as she has never had this great happiness, as I have.

Birmingham.

(We, in turn, find it a little difficult to tell Mr. S.W.P. how much letters like his mean to us. We wish him and his wife many years of happiness.—Ed.)

Separate Groups?

Dear Sir,

I do not disagree with the view expressed (in the article "Freedomthe Key to Safety" in our last issue) that a separate road group should be formed for cyclemotors, but I feel that this group should include autocycles and small motor cycles up to, say, 125 c.c. I feel that anyone capable of managing a Cyclemaster is competent to drive a small motor cycle. By all means have a separate group, but let it include small motor cycles or the position regarding licensing and driving tests will be more absurd than it is now.

Princes Risborough.

(We don't know that we go all the way with Mr. R.A.B., but we are delighted to publish his point of view.—Ed.)



A very beautifull hostel-the 17th Century Houghton Mill on the river Ouse, in Huntingdonshire.

We have received so many letters from Cyclemaster users stating that they were not allowed to use Youth Hostels that we wrote to the Association and asked if they would care to let us have their point of view. They said they would, and we gladly give them the hospitality of our columns.

Anyone touring by Cyclemaster will not be admitted to youth hostels. Expressed in that way it sounds rather officious, and seems to hint that the Youth Hostels Association of England and Wales has singled out Cyclemaster-owners!

In point of fact, the Y.H.A. has no objection to Cyclemasters as such. It is true that members are not allowed to use youth hostels when touring by Cyclemaster, but neither are they admitted if they are touring from hostel to hostel by car, bus, motor-cycle or any other form of mechanically-propelled or power-assisted machine. The reason is not one of antipathy, but simply that the Y.H.A. was not founded for that particular kind of touring.

The object of the Association is to help young people explore the country on foot, by bicycle or canoe. The phrase used colloquially is that members must travel "under their own steam." The founders of the Association believed that type of travel to be the best way of touring the country and really getting to about the many wonderful things it contains. The Y.H.A. is a democracy, run by its own members, and the fact that they have steadfastly refused to relax the rules shows that they still believe the pioneers were right. Many users of mechanically-propelled vehicles have at one time or another sought to use hostels, and have suggested that the Y.H.A. is unfair to debar them. The Y.H.A. considers it has as much right to exclude motorists from hostels as, say, a cricket club has to prevent people from playing football on its wicket!

The Y.H.A. does not, of course, debar cycle-motorists from membership . . . it merely states that they must not use their machines when hostelling. There are a number of motorists and motor-cyclists in the Y.H.A. but they leave their machines behind when touring.

Incidentally the Y.H.A. is not concerned with how a member reaches the area in which he is going to hostel. He may travel by public transport or he may use his car, Cyclemaster or any similar vehicle, provided he then leaves his vehicle in a garage until the end of his tour.

Safe . . . Simple . . . But it Broke the Law!

By "Tandem"

Before I tell the story of how I converted my tandem, I must say that after I had done all the work I discovered that the law had been changed and I was breaking the regulations! That was a blow. I hope, though, that by the time this article appears I shall have made an honest machine of it—it is perhaps too much to hope that the law will have been changed again.

All my life I have been a cyclist. Some years after I married, my wife and I bought a tandem. When our two youngsters came along, we added a sidecar to the tandem. We enjoyed our cycling—but none of us grow any younger. So we pricked up our ears when we heard about Cyclemaster.

I bought one and had it fitted to the tandem. Within five minutes or so I got the hang of the controls.

Steering Improved

Before long, I found that by replacing the sidecar with a trailer, the steering and general handling of the outfit was greatly improved. So we changed to a trailer, and that's how, in all innocence, I broke the law.

Steering, as I have said, improved greatly; and although the overall length of the combination was increased, no difficulty in cornering was encountered. I did not expect the engine to give the outstanding performance that it gives with a solo machine, but I found that very little pedalling was required on the flat, and I have met with very few hills which could not be climbed with a small amount of pedal assistance.

I have been using the machine throughout the week for work (without trailer!) and outside working hours the whole family (plus the dog) took every opportunity for a trip out.

But I now stand condemned as a law-breaker. The combination of tandem and trailer is illegal; tandem and sidecar have the blessing of the law. And here's the craziest bit: I was told that if I turned the tandem into a three-wheeler, I could legally tow a trailer!

So the only answer is to have a third wheel fitted.



The writer with his law-breaking machine! Photo by courtesy of Stanley Godfrey & Co., Guildford,

JUST TICKING

OVER . . . By The Idler

I didn't know that so many Cyclemaster owners were so familiar with the scenery of Malaya. You remember the charming little lady on the cover of our last issue? We said that behind her was St. Andrew's Church, Singapore. You'd be surprised how many readers have written to tell us (very nicely, of course) not to talk such nonsense. The building in the photograph is the Victoria Hall; the church is some 150 yards on the left of the lady, and therefore not in the picture. Incidentally, as one or two readers mentioned, the church happens to be a cathedral! We have been daily expecting someone to tell us that the way the girl is wearing her hair proves she comes from Siam or somewhere, and therefore couldn't be Burmese, but so far that hasn't happened.

We've told the fellow who gave us the wrong information that the next time we ask him to identify a piece of scenery, he's got to pay more attention to the background and less to the girl. He's a married man,

anyway.

* * *

I'm not going to alter the bit about the nationality of the girl, because when I wrote it, it was true. But, believe me, the very next day there came a letter from St. Neots, Huntingdon, saying, "I am surprised to see the girl on the cover described as Burmese; surely she is a Straits Chinese!"

Which only proves once again that if you wait long enough you get what you expect.

cxpcci.

Scores of letters came along saying saying nice things about the magazine. There were so many that the Editor began to go around with a face of gloom muttering, "Woe unto

me when all men praise me." The one which gave me the greatest pleasure, personally, was from an owner who had unfortunately had to take to his bed through illness. He was unable to get out and about, and wrote, "the magazine couldn't have arrived at a better time."

* * *

Among the pictures we published on the centre pages of No. 2 was one of Mr. A. R. Baker, in the invalid carriage he built himself Several readers wrote to ask how he starts it. So we wrote to Mr. Baker, and he replied, "Tell those ladies and gentlemen, I start my motor the same way as they do, only with my arms instead of my legs." (A second look at the photograph makes the chain quite obvious, and one wonders why one missed it.) Mr. Baker added, "Or you can tell them I get the wife to push me off and then she runs behind in case it stops to push me off again. She gives me a good push off on Monday (wash-day) to stand me the week."

Another thing that a second look at the picture reveals is a wicked twinkle in Mr. Baker's eye. I hope I never become crippled with rheumatoid arthritis, but if I do I hope I can be as cheery about it all as he is.

* * *

There were several suggestions that we should put two or three pages at the disposal of readers for the exchange of hints and ideas about maintenance, adjustments and so on. The Editor tells me he is afraid that would not work out with a magazine which appears at quarterly intervals. Of course, he is right, as editors always are. Let us reduce it to absurdity, and imagine that immediately you saw issue No. 2 you had

written to ask how other readers manage when starting off uphill. That letter would have reached us in July, but the earliest it could have appeared would have been in this number—published in October. Other readers might have written in right away, but their replies could not appear until No. 4—published in January 1954.

A feature of that kind requires very frequent publication if interest is to be sustained. The way we prefer to work is to reply to any such queries at once by post, and any points which are of general and lasting interest will be dealt with either in a special article, or by the Engineering Manager in his "Tips Worth Remembering." We feel sure that those readers who made this suggestion will agree that on the whole this is the better way.

The fact that we welcome suggestions, and take them very seriously, is shown, I think, by our response to the reader who asked if we could give information about modifications and improvements made to Cyclemaster. An article dealing with every change since the machine was introduced appears on another page.

I have just received a copy of R.O.C., a staff magazine published by Reckitt and Coleman Ltd. It is one of the best productions of this kind I have ever seen.

Among many interesting articles in it is one by a pensioner (who retired in 1949) about his experiences with Cyclemaster. He does not mention his age, but as a pensioner he cannot be young. Yet he once travelled from Norwich to London in nine hours, including two stops. It is "commonplace" for him to spend a day cruising around the countryside for some 60 to 70 miles. Included in his article was this paragraph: "The piston travels up and down no less than eighteen times for each revolution of the rear wheel. Therefore, if you feel tempted to keep your



The Cyclemaster pennant to which the Editor refers in a paragraph below.

clutch engaged and let her rip down a long, steep gradient . . . don't."

There's another angle to that, though. We hope that no reader took this advice to mean that the thing to do is disengage the clutch and then "let her rip." Over-revving the engine is bad for the engine, but coasting hell-for-leather down a long, steep hill is likely to have even worse results for the rider. It is, in fact, a highly dangerous practice, and the only wise way to go down any hill is to keep the clutch engaged, and travel at reasonable speed.

We have had a great number of requests from enthusiasts for a Cyclemaster pennant, and as we always try to do what we are asked, we have produced one. It is illustrated above. The colours are red, with white lettering. The flagstaff, so to speak, fits on to the number plate and is held by a small setscrew. The price is 1s. 3d. post free from Cyclemaster Limited. To everyone who buys the fitting we present the pennant, with our compliments.

A rather good story appeared in an article written by Mr. M. M. Steiner (for The Motor Cycle) about a trip to Rome and back. He was riding

a lady's cycle, and in Besançon a French priest remarked that he had a machine rather like a woman's machine, but not quite—it was a modèle écclésiastique. "I gaped a little," says the author, "before it sank in that the French clergy, who always cycle in their cassocks, need a special clerical model."

* * *

There's been an awful lot of silly pother over number plates recently, with big, strong policemen telling inoffensive little cyclemotorists that if their number plates face to the front they are being very wicked, and liable to prosecution. Nothing of the kind. The appropriate regulations make it quite clear that the plates may be visible from the sides or the front.

* * *

I wonder how many Cyclemaster owners realize just how much there is in the efficient manufacture of such a small engine? I knew there was a great deal of complicated machinery and so on, but the magazine Machinery has shaken me by publishing three articles in different issues on the

subject. Already they have devoted twenty pages and thirty-four illustrations to the manufacturing of Cyclemaster; more articles are to follow.

* * *

The Daily Mail Motor Cycling Guide for 1953 is packed with all the information any motor cyclist or cyclemotorist could want, and contains a special chapter on the Cyclemaster engine, 1s. 6d. Any bookseller. Courtenay Edwards edits the booklet.

* *

Another most excellent publication is the Cyclemotor Manual, written by the staff of Motor Cycling. This tells you everything about types of cyclemotor, general principles, legal requirements, riding and maintenance. The technical bits are very clearly written and illustrated. I liked the introduction, in which the cyclemotor is likened to the Genie in the bottle—a willing slave, to be used all the time or to be retained in reserve as an "extra pair of legs" at the whim of its master. 6s. Any bookseller.

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to Know ..

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TIPS worth REMEMBERNG

By The Engineering Manager

Every time a spark jumps across the points of your plug-and it does that thousands of times a minuteinfinitesimal fragments of metal are burnt away from the electrodes (that is the wire arms between the ends of which the spark flashes).

The amount of metal thus lost is so small that a good plug will go on functioning efficiently for a long while, but just as constant dripping wears away a stone, so does constant sparking eat away metal and so widen the gap, thus making it progressively more difficult for the electricity to jump across it. As this happens, running becomes erratic; starting becomes quite an effort, and ultimately you can't start at all.

This goes for any engine, even that in a luxury, multi-cylinder motor car. If there are four, six or cylinders, however, one inefficient plug can only be a nuisance, whereas if there is only one cylinder, and the plug gap in that gets too wide, you've

had it.

So the first point I want to make is—do look after the plug in your Cyclemaster. The points should be inspected at least every 300 miles.

How to do it? Well, the first thing is to have a good, reliable gauge. You can get one, specially made for Cyclemaster, from your dealer for 2s. 3d. It has two strips of metal on a wire ring. One strip is eighteenthousandths of an inch thick, the other fifteen thousandths. Take the plug out, clean the points, and then try the thicker gauge. It should just pass between the points. The other gauge should go quite easily. If you get that answer, you know your plug gaps are right. If they are too wide, they must be closed down until the thick gauge is tight in the gap and the thin one goes easily. Adjust by using pliers gently on the side electrode only. Never attempt to move the centre, upright electrode, or you may damage the insulation and so ruin the plug.

Get into the habit of doing this regularly; it is a simple job, well worth the few minutes it takes.

A rather important point to remember if you check the spark by removing the plug and turning the engine (as described in the instruction book) is that there is much less resistance to the electricity in the open air than there is when the plug is under compression in the engine. A weak spark outside may mean no spark inside.

Garage people will tell you that the most frequent cause of difficult starting with any kind of petrol engine is over-choking. If she doesn't go first time, and the owner keeps trying with the choke closed (or, in the case of the current Cyclemaster engines, with constant use of the easy-starting device) then a heavy dewy mixture gets sucked into the combustion chamber, and it just will not burn.

You should use your choke (or easy starter) only when the engine is cold. If you have been using the machine and it is still warm, or, in hot weather, no matter how long the machine has stood, try to get away without doing anything to enrich the mixture.

If she is ever really stubborn, and you have been using either the choke or the easy-starter, never think that something serious has gone wrong until you have tried this simple tip. First, turn off the petrol at the tap. Next, open the throttle as far as you can. Then pedal a bit in the usual

Continued on page 64

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way, with the clutch out. Let the clutch in, and if you can pedal on like that, do so. Otherwise, keep letting the clutch in and out. This will cause air only to enter the combustion chamber (remember that the petrol is turned off) and so weaken the mixture. The word the experts use for this is "scavenging." After a while the mixture will become just right, and the engine may fire, although it won't run for long until you turn the petrol on again!

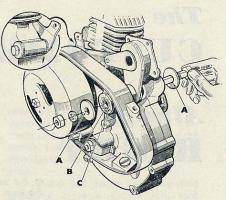
Talking of mixtures that are too rich reminds me to mention the importance of the air cleaner. Most of us are well aware that the petrol filters must be kept clean . . . but seldom give a thought to the gauze that is fitted to keep the air clean. Yet if it does its job it simply cannot help becoming more or less clogged after a time, and when that happens the entry of air is restricted just as effectively as if you closed the choke—and the results can be exactly the same, too. It is like your trying to breathe with a gag over your mouth and nose.

So give that air cleaner a birthday now and again. It only takes a few minutes, and there are very clear directions, with drawings, in your instruction book.

* * *

A little of what you fancy does you good, but one can always have too much of a good thing. Once or twice lately I have seen engines with the threads in the crankcase (where the cylinder studs go) so badly damaged that the studs just wouldn't hold. Now the nuts on those studs must be tight, but it is always important to remember that Cyclemaster is more like a watch than the engine of a ten-ton truck. So the rule must be —firmly, but gently.

We hope that you will never run into this trouble, but if you do we have made it as cheap as we can for you to get out of it again. Instead of buying a new crankcase you can get



One of the engine mounting bolts being placed into position. The big washers (A) must bite right home on to the steel sleeves (B) which are surrounded by soft rubber bushes (C).

special studs with a slightly different thread, and all that is necessary is to re-tap the holes in the crankcase. Your dealer can get the parts and do the re-tapping for you. The thread on the new studs is 9/32'' Whitworth.

If you'll have a look at the drawing above you will see one of the engine suspension bolts being placed into position. This, as you will note, is a long fellow, with one or two retainers in the form of washers and a nut. It passes through two steel sleeves, and between these sleeves and the engine casing are soft rubber bushes. The purposes of these bushes is to absorb vibration, but that doesn't mean that the mounting can be slack. It is not enough, when tightening up, to get the big washers home to the rubber only. They must really get a bite on to the steel sleeves. You can feel when this has happened, and it is just as well to put a spanner on the nut from time to time and check that all is well.

There is a similar arrangement at the front end of the suspension bracket, only in this position the bolt screws into a tapped hole in the bracket itself. The same tightness is necessary, but you put your spanner on the bolt head. After you have tightened the bolt, make sure that the lock nut, which goes between bracket and engine casing, is also well up.

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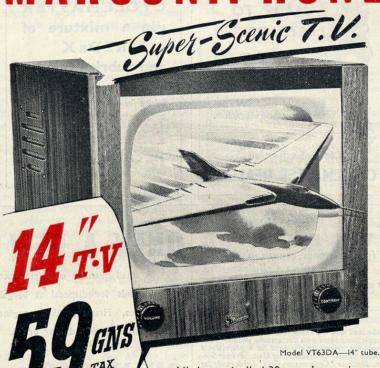
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