

MARCH, 1953

MONTHLY 4

POWER & PEDAL

The Journal of the Cyclemotor

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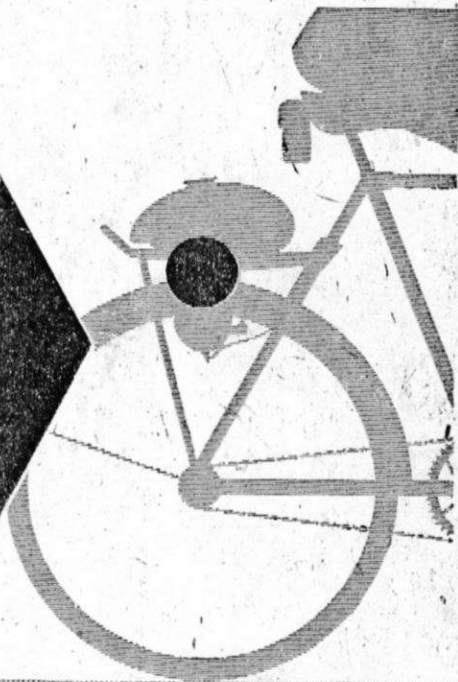
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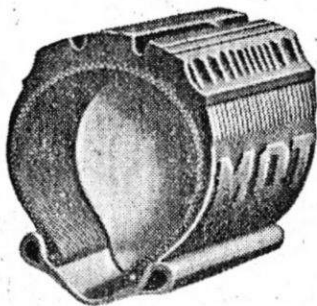
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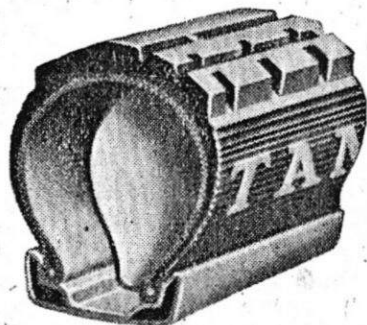
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Editor: FRANK L. FARR

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Freedom—The Key to Safety

IN view of the steadily increasing average age of the working population of Britain, the vital need of Industry for greater mobility of manpower and the steady rise in cost and lowering of efficiency of public transport services, the advent of the cyclemotor must be regarded as a socially desirable phenomenon. In any case the cyclemotor has arrived and has come to stay so far as the future is foreseeable at all, but the fact that it is unquestionably socially desirable to have this cheap, effortless, personal transport available to the population demands recognition from the various Authorities who govern our lives and this recognition should be followed by positive efforts to encourage the development of these machines in the right directions.

The factors that the buyer takes into consideration in selecting his machine are varied; initial cost, economy of running, performance, ease of handling, servicing and, by no means least, appearance, all count but there is one other factor that tends to be taken for granted and that is safety. To fulfil its social function completely the cyclemotor must above all things be safe.

In Britain, as in the Continental countries where these machines are more firmly established as part of the national life, there are two distinct trends in cyclemotor development. One sets the accent on performance, high power output from the engine plus a cycle designed or adapted for comfort and

control at higher speeds than the ordinary cyclist attempts. If these machines are properly designed and built for the job they have to do they are still not high-speed vehicles and are safe both for their users and the public. But in our view the true cyclemotor follows the opposite design trend, that of the genuine motor-assisted cycle, travelling at cycle speeds, quietly, economically and with absolute safety.

This is the type of machine that should be given every possible encouragement by the Authorities as a new, essential and desirable asset to our social life, and it is not difficult to see that this encouragement is not forthcoming as yet.

The cyclemotor is still classed as a motorcycle for taxation, legislation and administration purposes and is hemmed in by paper restriction, excrescent number plates (in themselves a danger) and the farce of a driving test that qualifies the licensee to ride a racing projectile with an engine twenty times the size of the cyclemotor. At the moment there is nothing to prevent a young cyclist from passing the test on a borrowed cyclemotor and then using his license to ride a four hundredweight machine capable of 100 m.p.h. or more and, by the same token there is nothing to encourage a man to buy the safe, simple, cyclemotor rather than the bigger, faster motorcycle.

Is it really necessary for a man to have to fill in a form every time he pays four and tenpence for

a quarter's road tax? We think not. It is a nuisance, as much of a nuisance to the Post Office and County Tax Offices as to the user, and as much nuisance in the case of the cyclemotor as for a ten ton lorry, certainly no encouragement to buy.

If we are to raise the national efficiency by making the people mobile without effort and independent without cost, saving time, energy and money for productive effort, we must free the new instrument of travel from petty restriction *and by doing so we can add to the safety of our roads.* By making it easier to own and ride a cyclemotor we can encourage people to use it in preference to heavier and faster machines, and even if they aim higher later on we will assure that they have at least had a year or two of experience of powered motoring before embarking on greater responsibilities.

We can do this if the recommendation (4t) of the Report on Motor Cycle Accidents by the Ministry of Transport's Committee on Road Safety is followed and a separate Group is created for cyclemotors, cutting across the present artificial division between motor attachment and autocycle, and if this Group is given freedom and encouragement to expand.

Only the users can make the roads safe; only the manufacturers provide the safe machines; but the Government must provide the incentives—and the greatest incentive in the world is freedom.

COMMENT

by

CLIP-ON

The Blue Lamp

MOST of Britain and certainly the London area have had an unusually heavy dose of fog during the past weeks and, among other nuisances of greater and lesser variety, the cosh boys and smash-and-grabbers took advantage of their opportunities. The press and radio reported nightly that the police had been answering 999 calls on bicycles instead of in cars and this news immediately set me thinking how useful the cyclemotor would be to the Force.

Think of the advantage of being fully and comfortably mobile in full uniform and equipment, able to travel in absolute silence at any time by simply disengaging the engine, covering a beat five times instead of once in a given period of time and having a vehicle that can be concealed in any doorway or hedge in a moment, all this apart from the advantages in fog, of course. There are on the market machines fully capable of giving years of safe, reliable service under the heaviest of policemen (although the Copper ain't what he used to be in the matter of *avoirdupois*), running as quietly as a normal car under power, cheap to buy and operate and requiring no special training to use. It all seems well worth an experiment on someone's part.

The Red Lamp

A Private Member's Bill recently before Parliament on the subject of rear lamps on road vehicles gave me quite a shaking by some of the arguments and figures put forward.

It was categorically stated that poor rear lights caused 3,400 accidents a year and the inference was

drawn that new cars, most of which had two rear lights, were less frequently hit from behind because they were more easily seen.

Now this is all against my training, principles and experience and does not seem to me to be ordinary common sense.

In the first place I understood throughout my thirty-five years on the road that the onus of a fore and aft collision is on the overtaking traffic. In other words, if you can't see where you're going you should be able to stop before you get there. Secondly, the number of pre-war vehicles on British roads greatly exceeds that of post-war and must expect to figure in a higher proportion of accidents of all kinds. Thirdly, the driver who crashes into the back of another vehicle at night *must*, in sheer self-defence, say that the other vehicle was badly lit, or unlit, and this is often the only evidence available as the hit vehicle very often gets its tail lamp smashed anyway and cannot prove that it was ever alight. Fourthly, the modern cars being in the main faster, especially in acceleration, they do most of the overtaking and are themselves rarely in a position to be hit from behind.

All the evidence goes to suggest not that the old cars were badly lit behind but that the new ones had poor lights and bad visibility in front. This is much nearer the truth of the story and the House would do well to see it this way. We cycle-motorists travel at moderate speeds and are always being overtaken by motor traffic, but we cannot be expected to carry some six watts of blazing ruby light on our tails because the chap in the

car behind can't see where he is going. Apart from ourselves, the acceptance of the principle that you have to be auto-illuminated or hit on the road is going to be pretty unpopular with the pedestrians.

The Hobby Approach

A correspondent remarks, in the course of a pleasant, chatty letter, that he is hoping to try out a Lohmann soon and gives this interesting reason: "The very conception of this engine fascinates me, something in the same way that I believe the late G.B.S. remarked about Leica cameras, lovely things to play with even if they did not take pictures."

This approach to the acquisition of a cyclemotor is very different from that of the utilitarian rider, and I wonder how many people are coming in from this angle. I myself, although I have not made or operated a model anything since my schooldays, find a great fascination in the power plants of the model planes, boats, trucks and trains that modern youth takes so much for granted and I can well imagine that the man whose cyclemotor is bought purely for pleasure will require other qualities from it than the simple ability to keep on keeping on which is the only demand of the daily-to-and-from rider. The current move in the formation of cyclemotor clubs will be of special interest to such users and the Trade might well offer encouragement to amateur experimenters for research.

Rear End Rollers

Several disgruntled people have approached me in the past few weeks with complaints that their rear wheel roller-drive machines

slung an awful lot of mud around and now we find that this is being offered as an explanation for rapid free-wheel wear. The idea is being generally checked and will be reported on in due course, but I have to admit that the three machines I was called upon to examine all suffered from the same fault, that too much had been taken out of the mudguard.

After all the motor cannot add to the "goo" that is picked up by the tyre and that remains the same as it did without the motor, speed for speed. But if a large gap is cut in the guard at its topmost point the whole of the underside of the engine becomes smothered with mud slung up by the wheel, and it is then available for fresh slinging around by the steel roller. However, there must be a certain amount of spray flung downwards even with the correct cutaway and it may be that the user of a rear roller driven machine needs either a full chain guard or a Coaster hub to avoid free wheel trouble.

Gears without Boxes

An interesting visitor dropped in to see the editor the other day, Mr. John Latta, an engineer and the designer of the Tailwind cyclemotor that performed so well in the A.C.U. Trial last year. The special feature of the Tailwind is that it has a two-diameter roller so that a change of gears can be effected whilst riding. In practice this means that a slightly higher gear than is usual can be used as the normal running ratio, thus giving quieter and more economical running, *not* higher maximum speed, and a real low gear is available to climb hills without effort.

Mr. Latta lives in Berkhamsted and has hills all round him so the Tailwind was designed "for his own smoking" as it were. "I am an old man," he said, looking

years younger than I felt, "and I weigh fifteen stone. I don't like pedalling up hills so I let the motor do the work".

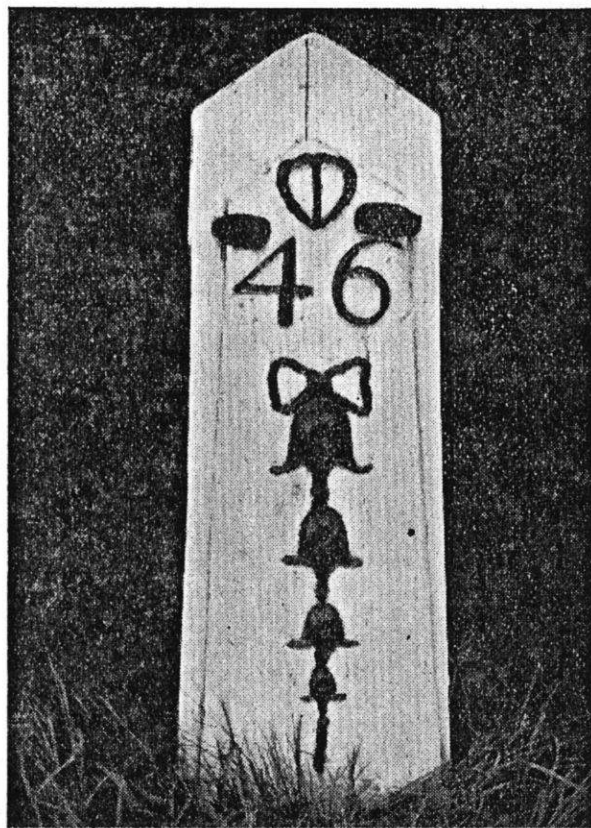
Of course, one of the great advantages of the cyclemotor is its extreme simplicity and most of us will view each successive suggestion of complication with some doubt, but there is so little extra in the scheme of the two-diameter roller that we may all find it worth while. There are some parts of Britain where the cyclemotor is just not usable because of hills. The Tailwind could end that.

To save answering the hundreds of letter from readers who want to know who makes it and where it can be bought, may I make it clear that the machine is not in production and Mr. Latta is still experimenting or, might I say, happily playing with his invention.

THE PELHAM MILESTONE

*One of a group
of six between
the villages of
East Hoathly
and Maresfield
in Sussex.*

*46 miles to
Bow Bells.*



Our Photographs

At last a reader's prizewinning picture exactly fills the bill, a roadfaring subject with an interest in the unusual. May we have more?

The guinea goes to Mr. W. F. Bunce of Paddington.

THE *New* MOTOR ASSISTED CYCLES

by

PROFESSOR A. M. LOW

IT might be thought that the Motor-Assisted Cycle is so simple so obvious and so inexpensive that very little can be said of either its history or its future. This is not so. The idea is old but it has taken nearly fifty years of intensive research to render possible the wonderful device which has now become so popular.

Cycle-motors have become part of everyday life. There are tens of thousands, hundreds of thousands, of users all over England and the Continent who have learned to rely on this method of travel for work and pleasure. Cycle-motors have brought increased scope to business men and women, they have given many hours of leisure to their riders, they have saved congestion and made vast numbers of every age free from the dictatorship of the time-table.

The motor-cycle in its full form is one of the most economical and efficient means of transport known to science. Properly driven it is safe and trustworthy, as witness the fact that the police motorcyclists have suffered less accidents than their car driving colleagues. Observe too, that in international trials accidents are few and far between. It is, by the way, a fact that motor-cycles have led design on every car for the two-wheeler was first in the field and it is noteworthy that in the most useful of all sports Great Britain is still supreme.

We are liable to speak of "efficiency" forgetting that this word has many meanings. Relatively small motor-cycles can travel at 100 miles per hour, another can do 200 miles per gallon or more, and there are many other types of efficiency. That is exactly what the public should now realise.

Think of the pedal cyclists who use their machines for work or holiday, and ask them why not



Our distinguished contributor. Professor Low is the President of the British Two-stroke Club. He is seen here with his own machine

use a motor-cycle? Some will speak of risk, others of expense, and some will say 'Noisy machines that tear about the country,' forgetting that this criticism implies not the machine but the rider. It cannot be made too clear that the motor attachment is exceedingly efficient at its work when properly used and properly applied.

For a moment consider a technical point. Internal combustion engines are not really suitable for traction for they have no starting torque. They should run hot for efficiency of one kind and cold for efficiency of another. They must, in short, habitually be fed with too much petrol in order to secure comfort or flexibility. On very small engines such as are fitted to pedal cycles this apparent

waste of fuel does not matter to the particular efficiency that the rider wants. He is not the sporting young man, but he demands comfort, reliability, reasonable quiet, lack of vibration and economical upkeep.

Every one of these requirements is ready to hand on cycle-motors. The two-stroke engine, and this is more used than types which may be more thermally efficient or which give more actual power, is essentially simple. They have smooth torque, can be cleaned very quickly and in small capacities they can run cool without mechanical trouble.

The term efficiency properly applied means a great deal to the motor attachment. In some quarters, the fact that a 50 cc. machine

can be made to travel not far short of 60 m.p.h. may seem of considerable importance. In practice it matters nothing at all to the cycle-motorist. A 60 m.p.h. engine would be uncomfortable, noisy and even dangerous to its driver. It is quite wrong to claim as efficient a fast machine when this is its only accomplishment.

On most pedal cycles a speed of 12 m.p.h. is ample. Weight is important, vibration is a serious thing and any attempt at high speed merely shakes the cycle to pieces, breaks spokes and uses the brakes in a manner that no pedal cycle can safely withstand. High speed is a menace to the successful progress of cycle-motors.

There are now many examples of small capacity attachments which are light, reliable, safe and so simple that they can be fitted and forgotten. Forgotten with an important exception. It is that the rider

need do no work and can travel thirty or forty miles in a day without fatigue and with weather protecting clothing that would be impracticable for a pedal cyclist.

For the station, for shopping or happy days in the country, always remembering that this is for the cyclist to whom fifty miles is a long way, the Cyclemotor is hard to beat. The machine can be kept in the hall or kitchen, it can be pedalled on bad hills or in trouble, it can be ridden without any practice worth mentioning. It is just a cycle that 'goes by itself'. Never think of it as a motor vehicle. Leave that idea to the Inland Revenue.

Let us hope that a type of machine which began its career fifty years ago such as the front driven Werner, the Singer with its engine in the back wheel and the old auto-wheel, can soon enjoy less formal taxation treatment as is permitted on the continent. We

do not complain at £1.0.0. for a licence but the complication of L plates and other irritations should be removed. It is time that number plates were replaced by a tab carrying a number and the registration receipt.

One final caution. Go easy with baby sidecars, heavy tandems and all attempts at speed. Use cyclemotors for their proper purpose and you will bless the day when research provided enough power from a tea-cup sized engine to carry you along without much payment in money and none in labour. The new Cyclemotor is an achievement. Not long ago an engine of three times the size and weight would have been needed to give only a part of the service which is ready for you. Try it yourself. Then you will thank the engineer for the relief he offers in terms of both business and pleasure.

PROPOSED CYCLEMOTOR SECTION OF THE BRITISH TWO-STROKE CLUB. FIRST MEETING OF INTERESTED PERSONS TO DISCUSS FORMATION

On Tuesday, February 10th, a small group of interested persons met at the British Two-Stroke Club's clubroom at the "Founders Arms", Hopton Street, S.E.1., to discuss with Mr. Jeary, Secretary of the Club, the proposed formation of a section for cyclemotors.

Mr. H. E. Evans, on whose initiative the idea of the section has come into being and who is acting as temporary honorary secretary pending the formation of the section as a unit, informed the meeting of the progress he had made to date.

It was decided to try to organise a Rally of Cycle-Motorists in Surrey on Easter Sunday as a start-off to a programme of club events. Full details will be given in next month's *Power & Pedal* of this and other events.

Mr. Jeary advised that the regular club nights of the B.T.S.C. would be the 3rd, 17th, and 31st of March and every alternate Tuesday thereafter. Interesting speakers, lantern slides, etc., are part of the attraction of friendly evenings in pleasant surroundings at the "Founders Arms".

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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

Manufacturer on Oils

I was interested to read the articles on the above subject in your February issue—particularly that by "Oleo".

On page 11 he says (referring evidently to the VeloSolex) that the only trouble of any regularity with this "cool-running, lightly stressed, etc, engine" is carboning up from use of over-heavy oils. This is quite true but he adds, "it may well be that it is peculiarly sensitive to the grade of oil used".

We have no more trouble than any other small petrol two-strokes from grade and proportion of oil used.

May I put the matter in a light which it seems has not been given enough importance.

(1) Is the "lubrication factor" of the *mixture* much different between SAE 10 and SAE 30 when diluted by 16 or 25 times the amount of petrol?

(2) If there is (as I think) not much difference, then surely all that matters is how the oil concerned burns i.e. what deposits it leaves behind it.

Our very wide experience over 7 years and almost 400,000 machines on the road, has led us to believe that suggestion 1 is nearly enough correct and point 2 is of primordial importance when choosing the grade of oil to recommend.

Over here we recommend (Energol) SAE 10 as we know that it leaves smaller carbon deposits than an SAE 20 or 30.

In fact, if we found our engine was improperly lubricated by a reasonable viscosity oil which left no carbon deposits after combustion we should try to change our engine design so that oil could provide

the necessary lubrication. We would not straightway recommend a heavier oil.

In sum, lubrication should be much less of a problem to the oil "blender" than the clean burning of the mixture.

For Solex (Cycles) Ltd.,

J. D. RICHARDS.

Dress for Some

May I first congratulate and thank you for your publication and contribution to the question of clothing.

As a rider of some 3 years on what must be the dirtiest type of cycle-motor i.e. the front wheel type, I have found that a good storm coat with a fleece lining will keep one's body dry and warm whilst a pair of Wellington boots will look after the feet and legs. A pair of shoes can be carried in the pannier, it only requiring a few minutes to change

The dress may not be strictly "City" but is presentable.

Worcs.

C.R.F.

p.s.—I don't think that a bob a month would hurt us or kill you.

C.R.F.

Fancy Dress

I am very glad to receive my second copy of *Power & Pedal* even it was a month late. I agree with another writer I would rather pay a bob than no book.

I am not in harmony with you office wallas over the question of clothes—most of you will go by bus or tube on a bad day anyhow.

I want a serviceable pair of leggings *that I can put on quickly and easily without tearing.*

Now, have you ever heard of Grenfel cloth? I want leggings

with a 'front' like bib and brace overalls the neck band to have a buckle in it to adjust length (no seat) legs with spats and instep chains with full length zips up the back seam.

This will obviate hopping about on one leg trying to thread a large boot through them finishing very early by tearing them. Also, made this way the leg could be tailored much neater.

The lap a most vulnerable point is kept dry, and the ladies would not have to wish for trousers to button them to.

For ladies I suggest a waterproof apron worn under the normal raincoat would be very effective.

Parkstone

CLAUDE FUDGE.

A Plea for Simplicity

As a fellow "Cycle-Motorist" I was indeed pleased to find among the numerous periodicals for sale one such for which I had constantly been searching, and may I wish you continued success in a magazine which has within its bounds an object of future travel for the lower income group. It is upon this feature that I am compelled to write to you for I deeply feel a great significance in trying to progress with cycle-motor attachments in very much the wrong direction. Your article by Mr. H. Holt, was indeed interesting but so contradictory, and I would indeed like to express my opinion of his views. I must give due credit to Mr. Holt in regard to his extensive experience in this field and humble myself in admitting that I am merely an owner rider of but two years, but this is really a major point for whereas he has knowledge to his credit I have views of a purchaser who's satisfaction is the aim of production. To attack the point of contradiction in the article it is simple to follow the revolutionary ideas from the origin of the cycle-motor to the motor-cycle, and as a parallel we can foresee the same intentions of the present innovation

when we find a producer of a modern motor asking bicycle manufacturers to build their machines with stronger frames, thereby creating a new branch of the trade. Surely if we allow the progress of the cycle-motors to expand in the accepted direction of greater power there is little hope of their being in production for any longer than their arrival at the stage as an Auto-cycle. I would give great stress on one simple point which appears to be sadly overlooked, and that is that the only reason why the cycle-motor has been received by many thousands as a welcomed invention is that it has allowed a poor cyclist to make his load lighter without giving the same effect upon his pocket. In short the arrival of the motor attachment enabled the working class man a chance to obtain mechanical assistance at a price within his income. Perhaps a study of comparison between cash buyers and H.P.

terms hirers will convince producers of this point. I whole-heartedly feel that what is required of this "motor" is solely a cheap and efficient means of transport. If I want an Autocycle and am able to pay for it I will get one from a producer who has specialised in this commodity and similarly if I want a motor cycle I have a tremendous range of makes to choose from, but if I cannot afford either of these higher powered, sturdier built machines I must keep pedalling—or—buy a cheap motor to fit on my present bicycle thereby keeping the cost down to a minimum. So in conclusion let it be agreed among our benefactors that the requirements of the needy is for a *cheap* motor which is efficient, easily maintained and assembled, with a good market for all spare parts, incorporating an engine to give the best performance in keeping with its mounting on a light-framed bicycle, with the added

security of reliable braking power and lighting. With these aims in view the continued success and popularity of cycle-motors is assured. Bourne End G. F. GARDENER

With Portable Wall!

I think the articles in January issue are just the job. The sort of information that was hard to come by previous to the publication of *Power & Pedal*.

Incidentally I wonder what happens to calliper brakes when Palco shock absorbers are fitted.

I am not very fond of hanging all sorts of things around my bicycle such as stands, etc. Even the ugly number plates one is compelled to wear on a motorised job spoil the whole effect of what I consider is a really beautiful piece of engineering—"rightness" to coin a word.

It has always been a mystery to me that for years, whenever a

POWER and PEDAL

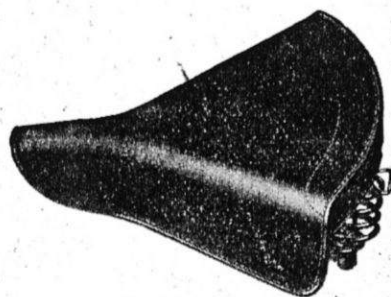
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THE S.186 REQUIRES NO SPECIAL FITTING, JUST PLACE ON SEAT PILLAR AND TIGHTEN NORMAL CYCLE SADDLE TYPE CLIP IN THE USUAL MANNER.



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cyclist with a saddle bag fitted wishes to lean his cycle on a wall or hedge it always had to take the weight on the corner of the bag.

I wonder what would be your reaction to a little telescopic tube with a rubber capped end to be pulled out just beyond the saddle bag or handlebars greatest width when one wished to lean the cycle and released to slip back with spring pressure at other times and clipped to the seat pillar just under the saddle

If I can come across the material and find time to "mock" one up I will send it along for your comments if you consider the idea worth while.

Thanks again and good salés.

Hereford ANTHONY R. STONE.

A Lightweight for a Lady

I came upon the first issue of *Power & Pedal* by chance just before Xmas on a railway bookstall, but I have seen to it that chance did not prevent me from getting subsequent numbers by placing an order with my newsagent for regular supplies. I feel that the price could well be increased by 50 per cent. and still give excellent value for money. I think it is a fine effort and much needed.

Two years ago, with not a little trepidation, I motorised my cycle. I say "with trepidation" truthfully for I am not mechanically minded in the least degree, in addition to which my husband is as "unmechanical" as myself.

I found that the machine was temperamental in starting and the weight was more than I could comfortably manage. Sometimes she would go like a bird and at others I would pedal till I was exhausted trying to inspire her to life. I approached the agents who checked and decided that everything was in order but the fault still occurs.

However, I have decided to change to a lighter weight power unit so that, if anything goes wrong, I can at least get home under my own power and not be too exhausted by carrying the "sleeping partner". I would appreciate any comments that other users care to make either for or against the three models I am considering, Lohmann Minimotor and Power Pak, which might help me in making a choice.

I am only wanting the motor for pleasure and recreation; it hasn't got to do a given number of miles per week all the year round.

May I wish you continued success with your enterprise.

Witney (Mrs.) M. WATERMAN.

Cyclemaster Choke

I read in your excellent Journal the "Road Test Report" on the Cyclemaster

"The irritation of dismounting after a few yards and opening the choke". It must be shared by many of your readers.

I found a way out which may be of interest to them.

I connected up my old three-speed quadrant which was on the crossbar using the same cable as I had before to the movable part of the choke by just making a small hole, and bending up the end of the cable.

By attaching a spring through the same hole, and connecting the other end to the end of the exhaust pipe I found I could open and close the choke without dismounting.

I trust this will be a useful hint to some of your readers.

N.11 S. H. WARD

Learning the Hard Way

Thanks for the *Power & Pedal*. It's just what's wanted and don't cut down on Readers letters either as it is by other people's experiences we learn. I am the owner of a 1949 July Mini-Motor and have had some heart-breaking exper-

iences but am now emerging through the mist of ignorance with the help of other Mini riders, one in particular whom I met at Charing in Kent. He was the owner of a tandem, propelled by a "Mini" with wife in the rear and sidecar occupied by his little girl. If this letter should catch his eye in his home at Buckinghamshire I wish to thank him many times for the valuable help in hints he gave me, firstly in tyres. I always used the tandem variety in the rear wheel which when after the first hundred miles the tread soon disappeared in thick dust which gathered round the rear hub and engine fins, soon showing the canvas at six hundred miles. I now use Firestone Power Drive and have substituted my metal roller for a carburandum one with excellent results. I have the tensioned spring at the back of the tank which was not strong enough for the job. I have inserted light chain cum light spring either side of the tank in the loops provided in the underside of the tank, to the holes in the bottom of engine stays. The arrangement is a non-skidding device much needed in wet weather in these older type engines. I have an inflated air cushion which absorbs all shocks, and makes comfortable riding. I see some of our Readers have touched the 30 mark on their "Minis". My best to date is sixteen or seventeen to the hour and I always ride flat out. My first fifteen hundred miles was done at 12m.p.h. The engine is still in good shape at 3,000. My longest trip is 70 miles in one day. My ambition is a run to Scotland, four hundred miles and back. If any reader has done a similar journey his experiences would be helpful especially when travelling by night. My petrol mixture is six measures of oil to one gallon of petrol. Best wishes to *Power & Pedal*.

Pluckley

"HIGHWAYMAN"

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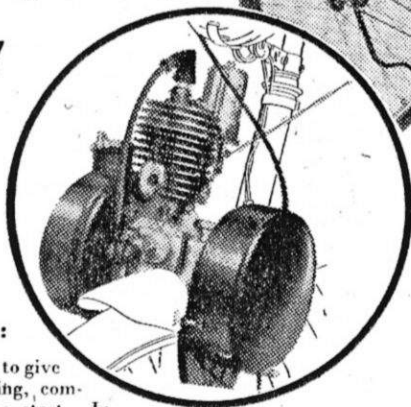
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Focus on DRESS

by

W O A D

THE Ancient Briton considered that a wolf skin for cover and a spot of blue paint for decoration was quite enough for all the sartorial requirements of a reasonable man.

If he had known the lengths to which his progeny would go in later centuries in the complexities of civilised life he would undoubtedly have said that the whole idea was more than crazy and that such people as needed a huge industry for the sole purpose of covering their skins were likely to be a pretty decadent lot. In coming to this conclusion, however, Mr A. Briton would have been leaving out the most important lesson of history which is that as people change and develop, their requirements change too.

It may be thought that this is so obvious that it does not need to be stated, but this is far from the case. There is always a strong body of opinion, especially in this country, that is firmly convinced that "what was good enough for my father and grandfather is good enough for me", and, as some of these people are quite high up in the world of industry, the result is that new demands often have to wait some time for their fulfilment.

Something like this is one of the several reasons why the clothing requirements of the modern methods of personal transport are not yet met, but it is not just a simple matter of saying that motorists need this, cyclists need that or walkers need something else. When the numbers in these three classes alone

run into many millions the requirements of the individuals must be many and varied, so far so that, right down to the last detail, probably no two individuals need *exactly* the same clothes. Furthermore the existence of a large and growing army of cyclemotorists in Britain is not yet appreciated for the social force and potential market it is. Here then is our dress problem.

The cyclemotor is used both for business and pleasure which immediately establishes a need for two *different* types of clothing.

Most cyclemotors are used all the year round, which demands dress for four seasons of the year.

The army of users includes industrial workers, shift workers, uniformed workers, professional people, office-going types, short distance riders, out-all-day-in-all-weather sufferers, young, not-so-young, middle-aged and elderly, comfortably off and damned hard up.

We also include both sexes.

And a quarter of a million differing personal tastes.

Just how many kinds of cyclemotoring clothing are indicated in the foregoing list we are not even prepared to guess, but it is certainly a huge and interesting market and one that is definitely not catered for at the moment. To be travelling or working out of doors in the climate of these Isles requires the constitution of an ox but the hide of an ox will not do for the nurse going her rounds of mercy, even if the call comes in the middle of the night! What is available that will do?

The ordinary dress of the bus and tube user is a reasonable basis for starting this survey. There are

a number of raincoats, macs and overcoats on the market at a wide range of prices and affording very reasonable weather protection under normal conditions. But the warm overcoat that is necessary for the cold day can become an awful, clammy, water-laden object after a mere half hour in heavy rain, the waterproof mac provides no comfort and only compromises in protection against both cold and wet. It is true that the manufacturers of special clothing for motorcyclists have produced some coats that are both warm and waterproof but these have some serious disadvantages from the point of view of the majority of cyclemotorists.

They are nearly all too heavy for even modest pedalling or walking. Most of them are frightfully complicated for getting in and out, all flaps, straps and buckles. They are expensive. And *they look exactly like motorcyclists' clothing*.

This is the real bogey. For the factory or transport worker on duty this does not matter much; off duty it will, but for nearly all the pleasure riders, the housewives about their shopping or personal calls, the office, bank and shop workers, the doctors, vets and nurses, the protective clothing must protect while still looking smart and normal. It must be wearable on or off the machine, strong, light, warm waterproof, easily cleaned and reasonably cheap. All this repetition is not accidental—the point must be driven home that *all* these requirements must be met in garments that are available in various styles and colours to appeal to the individuals in the market. We do *not* want a cyclemotorists' uniform—we want nice clothes that can be worn on cyclemotors.

Frankly *Power & Pedal* has searched in vain so far. We have not found a warm waterproof coat that looks smart and stays clean, nor gloves and shoes to match, and the problem of male headgear seems to us insoluble. If there are any manufacturers who believe that they are marketing the solution to our problems we shall be glad to receive and publish full details of their wares. However, there is a gleam of hope, a new Process that may yet revolutionise the clothing world, the Silicone process of making fabrics water repellent.

In accordance with the usual editorial policy "we asked the makers", and we are indebted to J. Walter Thompson, Ltd. for interesting material from the Bradford Dyers Association and to British Nylon Spinners, Ltd. for the illustration. May we hope that before long their work will have banished the Ancient Briton from the industry and at last provided the answer to the English climate.

WE ASKED THE MAKERS:

At the British Industries Fair in 1951 a range of new rainwear fabrics was exhibited that had been made water repellent by the Silicone Process of proofing developed by the Bradford Dyers Association, Ltd., under the name of BraDsylda Proof

Silicones

One of the commonest, most useful and widely distributed mineral substances is Silicon. It is found in soil, clay, rock, sand and from it a large variety of chemicals known as Silicones are produced and used for innumerable industrial purposes. After many experiments a flexible water-repellent film has been devised from Silicones which can be applied successfully to the fibres of delicate fabrics without affecting the "breathing power"

or the handle and appearance of the material.

Skill and Experience

Of course, the discovery of the value of Silicon to the textile trade does not mean that anyone can take a handful of sand, grind it to powder, rub it into a fabric and produce a showerproof finish. All the skill and knowledge of the Silicone synthesist coupled with the finishers' experience in the development of the art of textile dyeing and finishing is required to produce the chemical to prepare the cloth, and apply the finish. The Bradford Dyers Association Ltd., have in this latest achievement, produced a finish for the newest textiles which is not only water-repellent, but which is in a high

degree resistant to dirt, odourless, porous, maintains its efficiency at low temperatures and does not alter the feel and appearance of the fabric to which it is applied.

Synthetic Fibres

The present position is that the process has so far been only applied commercially to acetate rayon, nylon and "Terylene" polyester fibres and in this range of materials many beautiful and practical garments have already been made and marketed. The golfer with the suit of nylon comprising a sports jacket and over-trousers illustrated on this page shows how these materials can be applied to sportswear.

However, the real need of the cyclist is in overcoats and

Continued on page 20

Proofed Nylon for Sportswear

•
Silicon proofed Nylon Poplin is used for this sports jacket and over-trousers. The Silicone proofing allows the fabric to breathe.

•
"Flintwear" suit by
HOWARD FLINT, LTD.

(Picture by courtesy of
British Nylon Spinners Ltd.)



How Many Lady Readers Have We?

Judy Cowell drew these pictures of her own ideas for garments of practical use plus good looks for the woman rider.



Two things are required of any garment designed for cyclists of either sex; firstly protection and warmth, secondly durability and lightness. When these three requirements have been met, please can we have some gaiety, some design and a little imagination in clothes.

Above are two ideas for the cyclist who must arrive at the office looking as smart as the colleague who came by train or even by car.

The first sketch shows a three-way jacket—three-way because the belt is detachable and so are the pockets, which are wide enough and deep the after office dance date. If you are the pocket Venus type take

the belt and pockets off altogether and you have the jigger type jacket that goes anywhere.

The girl on the bicycle has chosen a more simple and conventional style; she will probably wear it for some eight months of the year. Therefore it is in the material that

she must look for warmth, durability and lightness.

Once again be gay. Choose a servicable mixture with flecks of bright colour, and let the hood be lined with a bright tartan, spotted material or even stripes. These linings could be inter-changeable,

AUSTRALIAN EPIC

This story was not written for publication. It is a letter sent to the Netherlands Agents and passed by them to Motor Imports Ltd. in London who in turn sent it to us. It is a great cyclemotor story and we publish it with real pleasure and with sincere respect for a very gallant lady

Dear Sirs,

I am writing to ask if you will be good enough to forward this letter on to the manufacturers of the Berini Bicycle Motor. I should like very much to tell them what a Godsend mine has been to me! I am an Australian, visiting England and the Continent. Four years ago I lost my left leg at the thigh as the result of a shocking accident. I procured an artificial limb but found that I must still use crutches. You can well imagine what a terrible blow this all was to me as I was 49 years old. Two years after my accident I designed a light tricycle and had it built by Bruce Small, Ltd. of Melbourne, who are also agents for the Berini. I found that, with only one leg to pedal it was much too hard work for me as I have to pull my own weight as well. Quite soon after this my friend showed me an advertisement in our Melbourne paper for Berini Motors on sale at Bruce Small's in Elizabeth Street, Melbourne, so one morning I took myself into Town upon my trike, some two miles, and talked the matter over with the salesman at the shop. I thereupon left the trike with them at 10.45 a.m. and called back at 4.30 p.m. and there stood my trike with the Berini attached.

After a little explanation I was able to drive off with the engine ticking over beautifully, and now since that day I have covered over 3,500 miles. As stated in your booklet—only two minor troubles ever arise (presumably oiled plug and blocked jet—Ed.) and these I can usually cope with myself.

Being of an adventurous nature,



Mrs. Schleebs with her "Berini" engine tricycle

I decided that I must see something of England and the Continent before I died, so I set off for England on the *S.S. Moreton Bay* with the trike aboard on September 27th 1952. I was put ashore with the trike at most ports and was able to cover 15-20 miles per day sight-seeing, arriving in London on November 7th. I have spent many days riding about London. All this time the trike ran well.

On November 20th I left Victoria for Dover and Calais and here are the names of the cities I visited and where I spent many wonderful days riding about on my trike,

thanks to the Berini.—Paris, Dijon, Lyons, Cannes, Nice, Monte Carlo Monaco, Menton, Savona, Albisola, Genoa, Pisa, Rome, Florence, and yes!—Venice, Brussels and Ostend, and now back in London, I am arranging to set off for Bath and do it in easy stages.

The engine is still running well but I feel that the friction wheel is not gripping enough and it is not pulling quite so well—I expect this is due to wear and tear. I have followed out your instructions in the last detail and I expect that is why I have had such good service from my machine. The point of this letter is to ask if you can send me another friction wheel that will reach my London address before I leave for Australia on February 27th.

Please can you tell me how long you think my motor will continue to give me good service. I fear I shall not be in a position to buy a new one in Australia as I gave up my invalid pension and sold my cottage to make this last bid before I must take to a wheel chair. Still, I am not complaining as I am thankful I am not blind. I am enclosing a little snapshot of myself and trike. Of course, I carry quite a lot of luggage and my crutches fit over the handlebars.

I trust this long letter will not bore you and that you will advise me about the friction wheel, and I must again compliment you upon the fine work you put into your tiny machines else they could not give the wonderful service they do.

In England I am a member of the Invalid Tricycle Association. They produce a quarterly magazine, *The Magic Carpet*. I was asked to write an article upon my travels for it, and I have taken the liberty of mentioning my Berini motor. I would be most grateful for an early reply to this letter.

Thanking you, Sirs.

I remain,

Yours gratefully.

(Mrs.) VICTORIA M. SCHLEEBES

THIS TYRE BUSINESS

is so important to the cyclemotorists that we think these readers' letters and our contributor's reply will be of general interest.

So Much for Tyres

I am a new reader of your magazine, and was stimulated to write to you by the comments of "Clip-on" in the November issue.

I really had to have a hearty laugh on reading his comments on TYRES.

Well, my first back tyre did 180 miles, when I fitted my motor. I then tried a tandem tyre, and it lasted a fortnight, about 650 miles. I then fitted a new and larger back wheel to take the "Power drive" tyre, which I am still using. I have done nearly 1,000 miles on it so far, and there is still a little tread left.

So much for tyres!

About your magazine. I for one welcome it. I approve of your presentation, since I feel that economy minded pedal-cyclists would not buy an expensive magazine.

So my best wishes for the future.
Northampton R. Goode.

Tyres Again

I must challenge "Hevea" on his statement that 60lbs/sq. in. is more than twice as much as a tyre inflator can cope with let alone the inflator's arms. I have a Mk. II Minimotor 1951 and have recently fitted a standard size "Firestone" powerdrive tyre which I can inflate quite comfortably and quickly to 60 lbs and more should I wish. I usually keep it above 50lbs for everyday use. Cannot "Hevea" cast his mind back to his racing days? What pressure did he have in his "sprints and tubs" nearer 100lbs than 30lbs I expect, I did in mine.

Southampton A. C. LANGHAM

Tyre Sections This Time

Journalism without controversy is like beef without mustard, but "Hevea's" remarks on tyre pressures are more than controversial—they're just wrong!

60lbs. "more than twice as much as necessary". Believe me, a cycle-motor rear tyre at 30lbs. is almost flat!

In comparing pressures with those employed in car tyres he has overlooked the fact that the cross-section of the tyre is many times smaller.

He will have little difficulty in inflating a cycle tyre to 60lbs.: he has evidently not tried it! Ask him to inflate a modern H.P. cycle road-racing tyre to what he would consider the correct riding pressure and then put a gauge on it! He'll have a shock.

Best wishes to your most interesting journal.

Yours Very Truly,
Southsea J. E. C. MOOREY.

Poor Matter

I was interested to read HEVEA'S amusing condensation of current factual and manufacturers' literature; as usual with contributions of this type he is sadly astray with his own padding.

No doubt the experts can put him right on technical matters. It is the dogmatic statement that executives don't ride bicycles: that no publicity man would be seen dead on one or has first hand knowledge of the goods, that calls for reply.

Practically every big manufacturer has one executive actively interested in cycling, two have type designers who are clubmen and one publicity man is ex-racing, Herne

Hill and road, an enthusiastic cyclist and a life member of the C.T.C.

It beats me why you publish and presumably pay for such poor matter.

TYRMAN

(This correspondent did not respond to the invitation in our last issue to comply with the rules by sending his name and address but we are publishing his letter as the only one airing this point of view—

ED.)

Unrepentant, Hevea Replies

Every "popular science" writer knows that he is sticking his neck out by attempting to present factual, technical material in condensed form and non-technical language, but this does not matter if the objective of the writing is achieved. The object of my "Focus on Tyres" article was to try to stop some of the senseless and shocking slaughter of tyres that has gone on in Britain for the past three years, costing money to the users, prestige to the tyre makers and future business to the power unit manufacturers, especially the producers of the simple, cheap and efficient roller-drive machines. That some good is already done is evidenced by correspondence received so I am content that the article suited its purpose.

The main blame for the slaughter was laid at the doors of the sales and publicity organisations of the tyre makers for failing to study the needs of the market and for pretending that, while a range of about half a dozen tyres per maker was needed for the ordinary pedal cycle, one tyre could fulfil all the requirements of the more vulnerable and exacting cyclemotor. I made it clear on the strength of evidence and experience that good, trouble-free tyre mileages were only a matter of using the right tyre for the job, and I insist that high pressures are no substitute for the rightness. Furthermore, I maintain that whatever the tough-guy-with-a-pump could do,

ordinary rider *does not* pack all those pounds per squinch into his tyre.

I have no idea what pressures I used in my racing tubulars twenty-five years ago since my only gauge in those days was the pressure of my two thumbs, but this has no bearing on the problem. 30 lbs. per square inch in a 26 x 1 3/4 tyre is quite a good pressure and if we are to go higher and run our tyres so hard that they don't show a flattened spot where they touch the ground we might as well use solids and be done with it—The rollers would probably love them! The pneumatic tyre is expected to be a cushion from road shocks as well as a transmitter of power, but of the five tyre makers who gave material for that survey only one, Michelin, says of his cyclemotor tyre that "it requires no special attention to pressures".

There is no point in having a motor to make cycling easier and

pleasanter if one has to run the driving tyre so hard that spokes, frame and rider suffer shocks, fatigue and fracture, and I insist that 30lbs. is ample for comfortable and efficient service *if the right tyre is used*. If, as one correspondent above suggests, the tyre is flat under load at this pressure then the tyre is of too small a section for its job and is being overloaded anyway.

The remedy for this state of affairs is for each tyre maker to produce at least two different power-drive tyres and/or advertise and sell his tyre for the use for which it was designed. At the same time the engine makers should test the tyres and recommend the correct type of each make, as they now do with grades of oil. Is this asking too much of the Trade? Meanwhile there is always the *Power & Pedal Q* and *A* service.

HEVEA

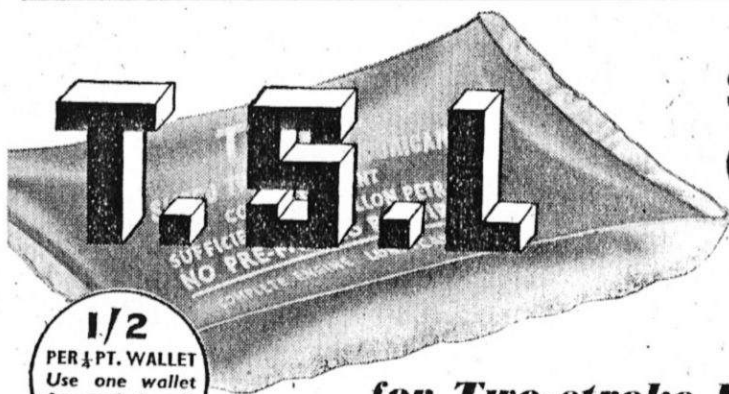
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Recently, the Technologists of Slip Products and Engineering Co., Ltd., under the expert direction of their Chairman—Baron Rolf Beck—an Engineer and Chemist, who has devoted his life to the improvement of automotive chemicals, evolved a special inhibited lubricant, for two-stroke engines. They call it "T.S.L."

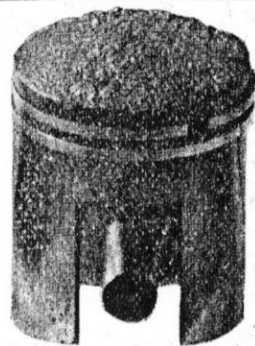
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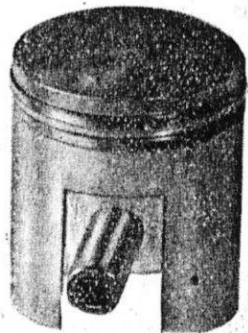
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ROAD TEST REPORT

PERFORMANCE

The 38 c.c. Mosquito

SINCE reading the account of that remarkable performance at Pau, when a *Mosquito* engine ran for fifty-five days and nights in the hands of eight riders, to cover nearly the circumference of the world at an over-all average of 19 miles per hour, we have been eagerly awaiting the opportunity of trying out a specimen of this famous Italian engine. Now the chance has come and it has proved every bit as interesting as we could have hoped.

Sheer performance is much of the fascination of the machine. Hill-climbing, that makes the pedals unnecessary and real acceleration right from standstill to maximum are something of note in the cycle-motor field, but there is more to it than that. There is the compactness of the unit, less than four inches wide and snuggling out of the way under the bottom bracket, the light weight that makes the engine completely unnoticeable when the cycle is being pedalled with the power unit free and the extraordinary way the unit complements instead of overshadowing the cycle itself.

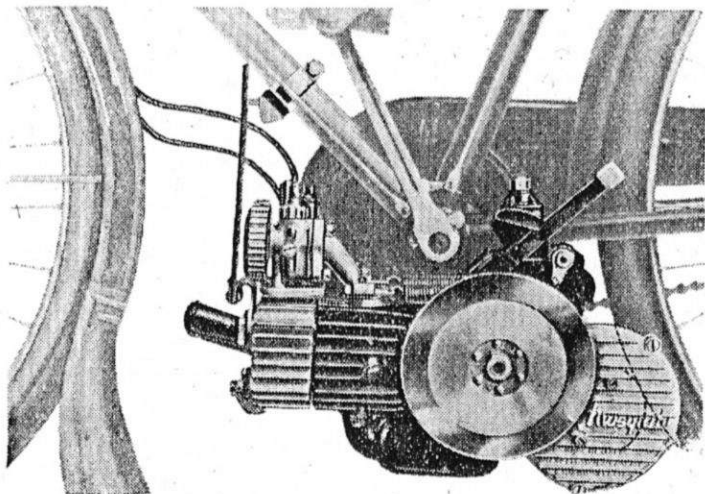
The 38.c.c. two-stroke engine is a complete unit, all in one piece, swinging on a hinged bracket under the cycle, forward to the "free" position and rearward to engage the roller with the tyre, at a point, incidentally, where it cannot sling mud! The roller itself is unusual in that its diameter and *ergo* bearing surface on the tyre is much greater than usual, in that it is geared down from the crankshaft by approximately 2 to 1 and that it contains within itself

the high tension magneto, that so efficiently provides the sparks. There is an outside flywheel on the nearside of the engine, the carburettor is mounted high-up in front and the sparking plug has a completely waterproof cover.

The three-ringed piston is of cast iron, rather long in the skirt and because of its relatively low coefficient of expansion, able to fit closely into the also cast iron cylinder. The four-stud head is, of course, of light alloy. A neat and effective silencer bolts almost straight on to the exhaust port and feeds off into a short tail pipe. The only extraneous fitting is the petrol tank, a three pint cylinder clipped to the seat tube of the bicycle and feeding by gravity and a short, flexible pipe to the carburettor. The front end of the engine is supported by a strong spring-steel stay from the down

tube and the engaging lever locks positively into a gate to hold the engine in either the in or out positions.

Starting was dead certain at all times. The petrol tap turned on (obvious but often forgotten) the "tickler" depressed a couple of times and the choke set in the rich position meant a start in three pushes of the pedals from cold. With the temperature at around freezing it took some fifty yards to get the motor pulling well and another fifty before regular four-stroking indicated the need to lift the choke, which was easily done from the saddle by the rider's left toe. In more moderate weather these distances were more than halved. Once running, the engine had a fascinatingly purposeful way of getting at its work, more than willing, even eager. From almost a standstill and without touching



Light, Lively and Powerful

the pedals it would accelerate straight up to its mean speed level road maximum of about 22 m.p.h. taking all normal gradients in its stride.

The exhaust note was modest, although still a shade loud by the picky standards of *Power & Pedal*, but it was quieter than many and from the saddle could hardly be heard against a breeze. It was, therefore, more than a pity that this quietness was lost to some extent by a "Spitfire" whine, most noticeable under load about half-way up the rev. range. The source could not be positively identified but it appeared to come from the geared roller drive. It was not by any means offensive, but it marred perfection.

As might be expected from the careful attention to engine design and particularly the iron piston, the *Mosquito* will stand full throttle flogging indefinitely. During the test period we encountered the gales that devastated so much of the Eastern parts of Britain and one ride was undertaken straight into the teeth of the blustering wind. The throttle was parked wide open for mile after mile with the speed never above fifteen m.p.h. and gusts bringing it down to around 8 m.p.h., but the pedals were not used and it was the rider who demanded a rest, not the engine. Conversely, under favourable conditions of following wind or down grade, the revs went up smoothly way beyond the peak of the power curve. Speeds up to 30 m.p.h. were reached in a number of occasions and held as long as the rider's conscience permitted without any sign of distress from the engine and without any burning or whiskering of the plug points. The makers quote 4,200 r.p.m. at 20 m.p.h. and the Smith's speedometer fitted appeared to be accurate so that engine must have been turning over around the 6,000 mark and seemed quite happy.

The rear tyre on the machine tested was a standard Dunlop Roadster of

only 26in. x 1½in. with a studded tread, perhaps not the ideal tread for the job, but there was no roller slip on the motor drive except when deliberately provoked as by cramming on the brakes with the throttle open. Part of the test was made without the decompressor lever fitted and starting under these conditions in the wet did provide slip under *pedal* pressure. It would seem therefore, that the roller grip is just right for the job. No fancy tyre pressures were used and a short run deliberately undertaken with a soft rear tyre did not produce any untoward results.

The "Alfa" Spring Fork

Apart from the *Mosquito* engine, the test was also of another Italian component of great interest to cyclistmotorists, the "Alfa" girder type spring fork.

Let it be said here and now that we have nothing but unqualified praise for this delightful fitment. The fork is light, efficient, immensely strong, much more so than any standard cycle fork and really beautiful to look at. It adds an air of purposeful grace to the machine without obtruding itself in any way.

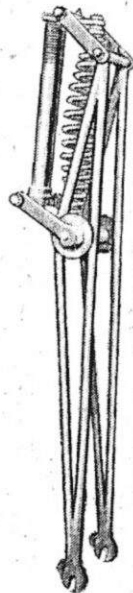
The cycle used was an ordinary sports-roadster machine of popular make with a rigid frame, 1½in. Endrick rims and calliper brakes. The "Alfa" fork looked as if it had been designed with the machine and offered perfect "hands-off" steering at any speed. It was only the occasional shock of a mighty smack under the *back* wheel that provided the reminder of the good work the forks were doing in taking really big bumps in their stride. Safety, both in control when travelling fast on bumpy roads and in the tremendous addition to front wheel adhesion under the brakes, was greatly increased and we suggest that even without motors, serious cyclists both tourist and racing might find the extra

couple of pounds weight of the spring forks worth carrying for the real advantage in braking and roadholding.

There are built-in dampers to control spring rebound and these effectively prevent any up and down rock. Except when taking full advantage of the braking efficiency given by the forks, the movement is not noticeable at all from the saddle.

"Nothing but unqualified praise"

The "Alfa" Spring Fork



"Mosquito" and "Alpha"

It is difficult to find serious criticisms of this excellent engineering combination but, as *Power & Pedal* always insists, there is no such thing as the best cyclistmotorist, only the best for a particular job. Not every rider sets a premium on high performance and some of the utility clan may prefer a quieter, handier machine. Older riders too are not always keen to bend down to reach petrol tap, choke and engaging gear, but for the "really" cyclist (Do cyclists still use that term?) who wants to become a "really" cyclistmotorist the *Mosquito-Alpha* products will certainly pull.

continues on next page

Being subject to Import Duty neither the engine nor the fork is particularly cheap, and it is to be hoped that a manufacturer will soon be found with the plant capacity and material allocation to make these excellent components under license in Britain. But, for the man who has a few pounds to spare to pay for what he wants, and wants a light, lively cycle of real performance plus a light lively engine to go with it, the *Mosquito-Alfa* combination approaches the ideal.

SPECIFICATION

MOSQUITO two-stroke engine by Meccanica Garelli, Milan. Bore 35mm. x Stroke 40 mm., 38 c.c., cast iron piston, alloy head, needle bearing big end, roller mains, Ball-bearing steel driving roller geared down 2 to 1. High tension, static-coil, magneto built into roller. Underbracket fixing, separate petrol tank. Total weight dry 17½ lbs. Price (Inc. Duty) £31.10.0 Mosquito Motors, Ltd. Moorfields, Liverpool, 2.

ALFA girder fork with adjustable dampers and single, central compression spring. Available for standard 21in. or 23in., cycle frames. Price (Inc. Duty) £4.17.6 Bob Sergent, Ltd., Moorfields, Liverpool, 2.

WIPAC 1-88

THE Wipac, dry-battery horn set, referred to in our January issue has now been tested for some weeks on the editorial machine and has proved quite satisfactory and definitely preferable to the "squeaker" previously fitted.

The motor cycle type clip was dispensed with and the horn itself mounted direct and without adaptation on the seat tube pin, where it is completely protected from knocks or weather by the rear half of the saddle. In this position the rider does not hear much of the warning sound but the effect on pedestrians

at ranges up to 100 feet was immediate without being startling.

Four U-2 batteries are housed in a cylindrical container which was mounted below the crossbar and the switch button is on the handlebar in reach of the rider's left thumb.

It could hardly be expected that this instrument would be a road clearer and we found that the lorry in front did not automatically move over when we pressed the button. But the warning of approach was adequate for all normal needs, pleasanter than the bulb type which it replaced and safer because the hand remains on the bar when operating the switch. We are considering the experiment of running wires from the batteries to the head lamp to replace the inadequate reserve battery there and provide a really safe light for momentary halts in traffic. Further report will be made on this later.

The 1-88 is definitely suitable for cyclemotors and will appeal to those who like tidyness and efficiency at the modest expense of 27/-.

MRS. SCHLEEB'S BERINI

see page 15

(Import Motors, Ltd., advise us that they have now serviced Mrs. Schleeb's machine. The friction roller was not worn, nor was the tyre, and the falling off in power that she complained of was due to the impact of "Pool" on an engine that had done 1,500 miles since its last decoke. Decarbonizing was the only service required and the machine and owner went away happy. The engine has now done nearly 4,000 miles in a little over two years).

DEGREASER

WE have recently tested a very efficient and economical degreaser for industrial use known as D.G.A. 50, that should be extremely valuable for many things from the decoking of an exhaust

pipe to cleaning the garage floor.

D.G.A. 50 when used in the strength of 8 ounces to each gallon of water will remove oil, grease or combinations of these with other foreign matters even after years of accumulation.

Whether the oily matter is of mineral, vegetable or animal origin does not affect the efficiency of the material which can be used with the same degree of certainty in every case; the response to its treatment will be assured.

The material, when used as directed, appears to have very effective properties as a degreasing agent. It is sold in bulk only at 68/9 per cwt bag. Sole distributors: Resday and Co., 197 Temple Chambers, E.C.4.

FOCUS ON DRESS

—continued from page 13

we are still thinking of wool or worsted, tough tweeds or soft, smooth gabardines—what of this sphere.

The answer is that so far the Silicone Treatment of organic fabrics is still in the experimental stages and no marketing dates can be given. But there is plenty of room for hope. The experiments are completely successful at laboratory levels and it only needs the working out of practical, commercial applications for us to be able to go to our tailors and buy just the clothes we want to wear for our normal, civilised use, then wear them with the comfortable knowledge that we will be rain as well as cold proof.

New designs have to be created for our approval of garments that stay put in a wind and allow reasonable freedom of movement but it can be done and, seeing what the Bradford Dyers Association has already achieved, we feel that it will be done soon.

Flashes

Road Accident Figures

The provisional figures for December bring the total for the year 1952 to 208,141. This is 8,352 less than in 1951. Included in the total were 4,705 killed, a decrease of 545 on 1951; and 50,371 seriously injured, a decrease of 1,998.

Except for the period of petrol restriction, the total is the lowest since 1930, and the number of killed the lowest since records were started in 1926.

Save Your Head

Every encouragement is being given to motor cyclists by the Royal Automobile Club to wear a touring cap of the type which will shortly be recommended by the British Standards Institution.

Candles

At the December meeting of the Council of the National Association of Cycle Traders the following Resolution was moved by the Liverpool Branch and agreed by the Council:—

"That this meeting of the National Council is of the opinion that the poor quality of cycle lamp bulbs should be brought forthwith to the notice of the manufacturers and that this meeting further considers that the price charged for such bulbs is too high and instructs the general secretary to make representations accordingly".

Power & Pedal is of the opinion that any price is too high for poor quality bulbs.

Esso Company's Three-grade Plan

The top grade, "Esso Extra", produced by the exclusive combination of catalytic cracking and polymerisation processes, will be

sold at 4d. per gallon above the present ordinary grade.

The Company will market a second premium grade of petrol under the name of "Esso Mixture", at a price of only 2d. per gallon above the present ordinary grade.

A third grade will be sold under the brand name of "Esso", at the same price as the present ordinary grade.

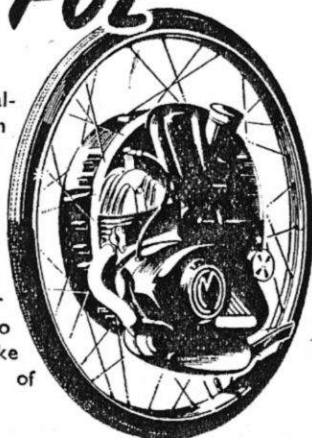
With this three-grade plan the Company's aim is to provide at a fair price, an Esso grade of fuel suitable for every vehicle, irrespective of age, type or performance.

P.T. off Cycles?

Mr. Julius Silverman has presented a petition from the workers in the Birmingham Cycle Industry asking for Purchase Tax to be lifted from cycles to reduce unemployment and reduce "the state of crisis" in the industry.

REST and be THANKFUL

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Question and Answer

Address your queries to Q & A, and enclose SAE if postal reply is required. Full information must be given if our replies are to be helpful.

Q.

My engine when running on a straight road runs perfectly but when it comes to the slightest slope it starts to misfire badly. The timing has been checked and found O.K. and the carburettor is found to be working correctly.

I am running with the mixture set between rich and weak. If I change to rich mixture the engine four-strokes and if I change to weak it pulls badly. The engine has just had a complete decarbonize.

A. B. HAYFIELD.

Smethwick.

A.

Your trouble is obviously caused by an air leak and, as you have just decarbonised, you should check first on the parts you have disturbed.

Did you fit new gaskets in the cylinder head and inlet stub? Were the faces of the head, cylinder, stub and flange perfectly clean and free from grit when re-assembled? Was the decompressor valve ground and seated? Have all nuts been evenly tightened since the engine has been run after the decoke?

If all these things are in order, the carburettor is tight on its stub and the sparking plug has its washer in place, then the trouble may be more serious, e.g. leakage at the bil seals. The engine should run well when hot with the mixture control in the "weak" position.

Q.

I intend crossing France to Spain and back on my cyclemotor, if I am lucky, this April. I weigh 12½ stone and have a sleeping bag, tent and other odds and ends

to carry also. Can you give me what you think is a reasonable weight to load a bike up to? Could you advise what spare parts to take on the journey.

R. EDWARDS.

A.

As French cafe and Spanish Fonda (village inn) accommodation is quite cheap, we are inclined to suggest you leave the tent, etc., behind. We consider that the maximum safe touring load for an ordinary, sturdy, roadster is about 220 lbs. from which you have to deduct your own weight and that of the engine to arrive at the figure available for baggage.

Regarding spares, traditionally the spare you most need on a tour is the one you have not got, but the small towns of France and Spain abound with capable mechanics who are experts at making-do. We can only suggest a spare piston with rings and pin complete, a dozen rear wheel spokes, trimmed to length, and a spoke key.

USE THIS ORDER FORM

FILL UP THIS FORM AND HAND IT TO YOUR NEWSAGENT, or, in case of difficulty, send it with your cheque or postal order for 5/6 to HORACE MARSHALL AND SON, LTD., Publishing Department, Temple House, Tallis Street, London, E.C.4.

Please supply "Power & Pedal" monthly until further notice to me at the address given below.

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Name

Address..... Age.....

Make of Power Unit Registered Letters and Number

Estimated Total Value of Cycle & Motor (including accessories).....

1. State number and particulars of all cycle accidents or losses during the last three years
.....
2. Do you require COMPREHENSIVE, THIRD PARTY FIRE AND THEFT OR THIRD PARTY Insurance ?
.....
3. Do you or any person likely to drive the cycle suffer from any physical or mental infirmity, impaired sight or hearing ?
.....
4. Has any insurer at any time in respect of your motor-cycle insurance or that of any person likely to use your cycle :
 - (a) Declined to insure ? (a)
 - (b) Required increased premium or special or altered terms (b)
 - (c) Cancelled or refused to renew ? (c)

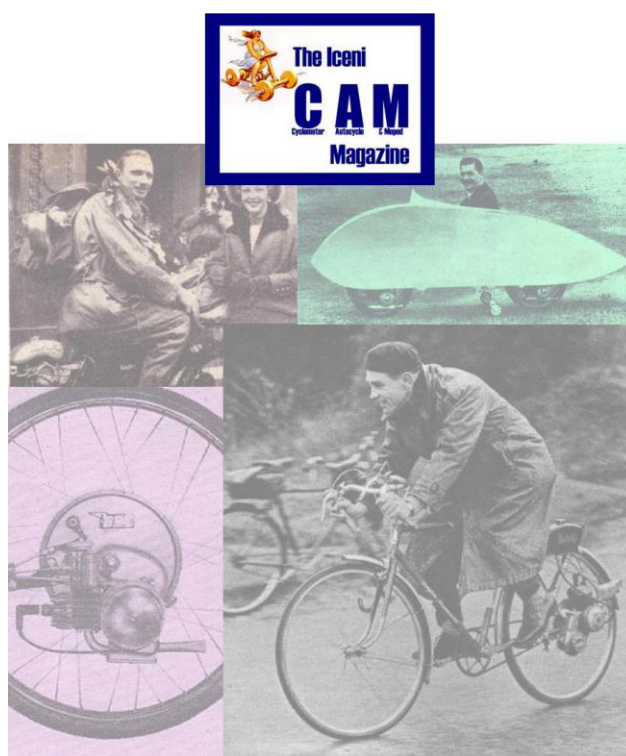
DECLARATION

I declare that I am the owner of the above cycle/s and that the above statements are true and complete in every respect and that the cycle/s insured will be kept in good and thoroughly sound condition. I further declare and agree that if such statements and particulars which I agree shall form the basis of and be considered as incorporated in the policy to be issued by the **UNITED KINGDOM FIRE AND ACCIDENT INSURANCE COMPANY LIMITED** are in the writing of any person other than myself such person shall be deemed to have been my agent for the purpose of filling in same and the Insurer shall not be affected by the knowledge of such person, whether also an agent of the Insurer or otherwise.

Date..... Signature

Name of Hire Purchase interest (if any).....

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