



TheMotor.

MOTOR NOTES.

By "ACCUMULATOR."

Sooty Cylinder.

It is a very important item in the case of the engine to mitigate the constantly recurring troubles arising from sooty deposits in the cylinder.

This accumulation is due to a variety of causes—too much oil in cylinder—bad quality oil—faulty mixture and combustion—and also road dust.

It is advisable from time to time to inject a little kerosene into the cylinders—it is no good doing this on starting out for a run as the kerosene is immediately expelled with the exhaust gases—rather do it on stalling the car at the end of a run.

I saw a good plan suggested in a Home contemporary—it was to fit a small cup to the injection pipe providing it with a tap—then just before stopping the engine fill the cup and turn the tap on—then almost immediately switch off—the kerosene is therefore sucked in and covers the walls of the cylinder.

Road Dirt.

It is not properly realised what a large amount of road dirt is sucked through the carburetter into the cylinders of a car—but a moment's thought will make it plain that this dust and dirt must play an important part in sooting up the cylinders. This condition of affairs may to a very small extent be improved by a wire gauze baffle—though I think that some experiments with say sponge or cotton wool as a filter would produce good results—Have any of our readers investigated in this direction?

Light Motor Cycles.

It is wonderful the way in which the light motor cycle has taken on all over the world. We may expect to see in the future a great advance in this direction, and many more makes on the lines of the Mota-Sacoche machine will place this form of locomotion within the reach of all; the great economy of the Mota-Sacoche is sufficient guarantee of this—since the lightness of the maintenance bill is what is required.

Mishap and Relief.

Mr. Cleland's "Stewart" car will soon be on the road again—it will be remembered that a few weeks ago he had the misfortune to be precipitated into the creek on the Ngahauranga Gorge while on the up grade. Just as he was taking a curve, the bank gave way, with the result that the car rolled over sideways, making two somersaults, and landing on its side 15 feet below.

Marvellous to relate, no one was hurt, though everyone admitted to feeling very badly shaken. It was fortunate that Mr. Garnet Holmes, who was on his way up to Palmerston on Messrs Holmes & Allen's fine "Clement," arrived at the right moment,

and he was able to convey the party back to town; returning with a staff of men to rescue the car.

Motor Stamps.

Bosnia and Herzegovina have adopted a stamp with a motor mail van on its face, a departure which may be adopted in other countries before long. This form of acknowledgment of the utility of the self propelled vehicle is, for the present a novelty.

A Deserved Compliment.

Prince Fushimi is reported to have been greatly interested during his visit to the Alexandria Works of Argyll Motors, Limited, on the 20th May last and to have complimented the directors who received him upon the magnitude of the business in hand, as well as upon the plant of their organisation.

About Speeds.

When you run a mile in

Min. sec.	Miles per hour.
5 0	You are running 12
4 30	" 13½
4 0	" 15
3 30	" 17½
3 0	" 20
2 25	" 21 4-5
2 30	" 24
2 15	" 26½
2 0	" 30
1 50	" 32½
1 40	" 36
1 30	" 40
1 20	" 45
1 10	" 51½
1 5	" 55½
1 0	" 60
59	" 61
58	" 62½
57	" 63½
56	" 64½
55	" 65½
54	" 66½
53	" 68

A Clean Body.

I have used a splendid preparation for cleaning the body work of cars; it is called "Sacabolite"—it is made up in two gallon tins and consists of a thick brown liquid; to apply it, put about half a cupful into a bucket of warm water and then sponge it on after all mud has been removed, next finally wash off and dry in the usual way—the beneficent feature of Sacabolite is in the way it removes grease and leaves a good lustre on the paint work. The Stewart Co. stock it here, and I would advise our readers to give it a trial.

The Trolley Head.

Mr. Garnet B. Holmes of Messrs Holmes & Allen has left New Zealand for a trip to America, England and Europe with a view to closing several negotiations in connection with the well known trolley-head. It is his intention also to look closely into the motor car industry with a view of securing the "best things" to bring back to New Zealand. He expects to be away about a year.

Novel Comparisons.

A correspondent of *The Railway News* has established the following instructive comparisons between a train, a horse bus, a motor

bus, and an electric tramcar. A train seat is carried 420 miles for 3s.; a horse bus seat 26 miles for 10d.; a motor bus seat 34 miles for 1s.; and an electric tramcar seat 60 miles for 7d. Also a seat in each of the foregoing vehicles is carried 185,640 miles for the respective total amounts: train, £66 6s.; horse-bus, £357; motorbus, £273; electric car, £90 4s 10d. I observe that the motor-bus cost is taken at the high figure of 1s per mile.

THE ALL IMPORTANT CARBURETTER.

A carburetter functions correctly if—

(1) The degree of vacuum in the float feed chamber remains normal at all speeds.

(2) If the proper relative proportions of petrol and air remain constant at all speeds and at all degrees of opening of the throttle valve.

(3) If before gaining access to the cylinders the petrol is absolutely atomised and completely blended with the air.

Air Cooling.

At first one is inclined rather to pooh-poooh air-cooling, as there are several minor disadvantages, such as the smell of burnt oil and the great quantity that one has to use; also in place of the radiator, the open space protected by wire, which leaves the cylinders exposed, makes the engine more noisy than one hears with a nicely fitting bonnet. On the other hand, one does away with the water arrangements, which, of course in certain countries, is an immense advantage. The time has not yet come for dogmatising on the point. For the present it is certain that some very reliable runs have been done with the air-cooler in rough country.

Nuts and Bolts.

The use of a spring washer with Castle nuts is excellent practice but very rare. As regards the easy handling of bolts and nuts on cars, I have strongly advocated that all bolts be fitted with a "screwdriver notch." This costs little and weighs nothing, does not weaken the bolt head, and allows of it being either held or turned with great ease and with a tool which is universally available. Of course, large bolts well screwed home must be started out with a spanner, but they can almost always be driven the rest of the way with a screwdriver, thus saving much time.—A correspondent in *Auto-Car*.

Motoring, Near Sight, and Danger.

If, as the speeds of the motor traffic increase, the sight of the motor driver were also to increase the case against allowing the near-sighted to grapple a driving wheel would be less strong. It makes one think; one must know all the points of the motor, and have a license after proper test. But one must also see; and there must be a test of that. Some people think this test should be similar to the test of locomotive drivers' sight, though not necessarily quite so severe, although to be really effective it should not fall short of the severity of the test for a locomotive driver; and other people who urge that short sighted men hunt, shoot, golf, etc., forget that these men have nothing to do with the control of a moving vehicle; therefore they are not suitable to be cited as examples in comparison with an automobile driver. As regards the case of a cyclist, well! logically he ought to be subject to test also, most certainly if he runs a motor cycle and