

has been employed, erring on the large size, as all motor cyclists desire their motors to go fast; now this gives a good engine at good speeds, but when going slowly in traffic the engine has no power and will not pull, and the reason it will not pull is because the rush of air past the jet is weak and flabby and will not spray the petrol, and a bad mixture is the result. **A single jet and choke tube cannot be made to do both**, and it is necessary to have **two jets and choke tubes, one for slow strong pulling and one for speed.**

Our new Carburettor has this combination in a perfect form, as it has a third or intermediary jet, which is a distinct advantage on all machines except the Scott. On this machine, however, our two-jet model seems to be better, and motor cyclists using it will get results from their motors that **hitherto they have deemed impossible**, making their engines really flexible, enabling them to pull stronger when going slow in traffic, and **enormously increasing the ease of starting**, no wasteful "flooding" being generally necessary.

Now another point. The sizes of the jets and choke tubes govern the action of all engines, and in single-jet Carburettors, better or worse results are obtained by varying one or the other; the same applies in two-jet Carburettors, so that in any Carburettor you must get the right combination, and the right combination can only be obtained by experiment on the road.

A new engine wants a different combination to one that is thoroughly "free," and no two engines of the same size want **exactly** the same. To tune an engine **perfectly**, you will have to constantly experiment on the road, by changing these parts to ones slightly larger or smaller. You might want a score of these parts to get the really exact combination; it is a very troublesome duty taking the Carburettor to pieces each time, even if you had the parts. In the **Binks New Instrument** six jets are supplied, which can be changed about in a moment.

The Carburettors are sent out fitted with suitable jets, and the engine will start up instantly, and then you can do the final tuning-up in a short time on the road: an interesting and simple operation. Our Carburettor is designed to give **perfect results** and not merely good results. Many firms send Carburettors out that will at once give decent results, but no provision is made for **improving** these results. Our New Carburettor is sent out ready to give decent results, but **absolutely perfect** results can be almost at once obtained by the rider in a few miles spin on the road. Many riders are satisfied at the way their motors go, thinking they cannot be made to go better. What their machines are really capable of when fitted with our New Carburettor, comes as a revelation.

It is now a well-known fact in scientific circles that if you make a tube a portion of which is reduced in area (like the choke tube in a Carburettor) it is possible to make gas in water flow through it, without creating any practical loss of flow owing to the reduced area. In other words, it is possible to neutralise the bad effect of the choke tube. You **must have** a choke tube, otherwise you cannot have a sufficiently strong rush of air past the

jet to spray the petrol, and this choke tube prevents you filling your cylinder with gas when going at racing speed; but by constructing it a certain way you can get almost as much gas through it as if it was not there. This fact will be appreciated by racing men and hill-climbers. We believe, if you have a machine that is tuned up to the finest possible pitch, and will do so many miles per hour with any other Carburettor, it is possible to add considerably to its speed by fitting ours.

IN ORDERING A NEW MACHINE.

Ask that our Carburettor is fitted. Some makers, while freely admitting its superiority, object to use them, solely on account of the extra cost, but it is worth while to pay an extra 15/- when you are spending £50, to get the best Carburettor it is possible to get. We will undertake the entire responsibility of its being satisfactory, or if you order your machine without a Carburettor, the makers should allow you the price of same off the invoice. You can then buy one of our instruments from us, and we will undertake to exchange it for the ordinary Carburettor if you fail to approve of it in actual use. If you will bring or send your new machine to us, we will fit it on free of charge.

Insist that our Carburettor is fitted; do not be put off with **excuses**. There is not a single modern car made to-day that is not fitted with an automatic Carburettor. If any firm were to endeavour to sell cars fitted with Carburettors in which the air had to be adjusted for every change of speed, they would be looked upon as being hopelessly out of date, and it is only a matter of a very short time when all motor bicycles will be fitted with automatic Carburettors.

We are constantly being asked, "Why don't makers fit them as a standard?" The reason of this is, that they cost twice as much as they pay for what is usually supplied, and as long as the makers can sell their output with a cheaper article, they do not like paying me twice as much for my Carburettor. The motor cycle business is so good, and the ordinary Carburettors answer the purpose to a certain extent, and do not wish to upset the routine of their works by fitting other makes of Carburettors. This is a short-sighted policy, but it exists to a lamentable extent.

It is for **you to insist** that the fitting of my Carburettor is a condition of the order. You will then **get** it, and when you have got it, and you find that you do not like it, we will willingly exchange it for a similar type of two-lever Carburettor, which would, in the ordinary way, have been fitted. A good deal of care is necessary in buying a motor cycle, if you want to get the best of everything. We are open to help you in this direction if you are in any doubt. Factories are so systemized now-a-days that the very slightest alteration causes an incredible amount of delay and extra cost, and new things can only be taken up by the public **insisting** on them. Other important inventions, like the Dunlop tyre for instance, were tabooed by the whole trade when first introduced.

C. BINKS LTD., Carburettor Manufacturers, **Church St., ECCLES, Manchester.**