



Newsletter

December 2017

Update

Well here is my first poor attempt at a newsletter. I should first point out that this is not really a job I relish and anyone with basic computer skills could easily do this !!! Volunteers please step forward

It's been a fairly busy time for most members I suspect.....

The AGM in October was it's usual fair – with discussions on our program of events, voting of the dignitaries, club finances, membership etc. All in all it was quite well attended with about 20 members coming to add their thoughts. I know it's not the most interesting of evenings - but then we are all members of the same club – and if we want it to succeed and grow - then this is the place and time to let everyone else hear our thoughts.

Novembers meeting was a talk from the almost established North East Rider Volunteers Scotland section of the Blood Bikes (NERVS). In common with other Blood Bike groups nationwide, NERVs was formed with the objective of providing a free transportation service to the Health Service.

Other groups throughout the country provide transportation of medical samples and treatments, medical equipment (such as will fit on a bike, or even a car), donated breast milk, and blood and plasma. But not people!

NERVs is affiliated to the Nationwide Association of Blood Bikes (NABB). NABB states that they “consist of independent Blood Bike Group Charities who work with their local hospitals, Air Ambulance services, and other NHS sites transporting medication, medical equipment, X-rays, scans, samples and human donor milk”.

Because NERVs only recently formed, they are still in the process of discussing their proposals with the Healthcare Providers.

They are looking for any kind of volunteer – riders, admin, fund raisers, general organisers etc so if you feel you can spare them some time – give them a call. They are on the web and Facebook.

NEXT MEETING:
6th February 2018 Oldmeldrum British Legion 7.30

Decembers meeting was a talk in Cuminestown from Jacqui Furneaux - organised mainly by Jacqui and The Bike Bus but also financially contributed to by our club. Her talk lasted just over the hour and covered her 7 years of travelling round the world on her Royal Enfield. She had a wealth of stories to tell covering every scenario you could imagine – well worth the effort of getting to the venue on one of the first heavy snow fall nights of the year. Indeed – her flight was re-routed through Dublin then to Aberdeen – so it started late but was well worth the wait. There was a raffle held – with the proceeds going to the aforementioned Blood Bikes – and John Addison won first prize !!!!

And so to our Xmas meal held at the Newmachar Hotel. Once again the weather tried its best to put us off - but we were all up to the challenge from the snow and some 26 of us managed to attend. There were only 2 who couldn't - but they were coming long distances. I've included a couple of pics taken on the day.

That's all for now folks, - don't forget if there any budding publishers out there – I'd love to hear from you.

Ride Safe (when it's warmer !!)

Nick

Ps I have also included an article passed on to me by one of our members – makes interesting reading. If anyone has anything to contribute just pass it my way and it'll get slipped in somewhere / sometime !!!

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Up and running!

Those readers who have monitored progress on my long term project, the 1912 Champion motor cycle, might be interested (and perhaps not a little surprised) to hear that it is now complete and working as it should (**photos 1 and 2**). It has done several hundred miles on the road, some of those as a competitor in the annual Banbury Run organised by the Vintage Motor Cycle Club Limited and held this year on 18 June 2017. The 60 miles round trip to and from the event (held at the Heritage Motor Museum, Gaydon, Warwickshire) plus the 35 miles of the event proper were all dealt with comfortably and without drama. It even started readily when asked to in front of a large crowd! Many old engines get an 'attack of the sulks' when asked to perform in public but this one behaved impeccably - on that occasion at least.

Specification

Some notes on this machine may be of interest:

Manufacturer: Built by the Champion Cycle Co. of Robin Hood Street, Nottingham. They were an established builder of bicycles and also made a light car.

Engine: 4HP JAP built by J. A. Prestwich of Tottenham, North London. It is a 'side valve' engine and both the inlet and exhaust valves are mechanically operated by a single cam. The engine has a bore of 85.5mm and a stroke of 85mm giving a swept volume of 488 cubic centimetres. This engine was unusual for the period in that it is 'square' i.e. the bore and stroke are virtually identical. In those days most designers favoured 'long stroke' engines. All bearings in the engine are of phosphor bronze and the piston is of cast iron. The cast iron flywheels, when assembled with their crank pin, connecting rod and shafts, weigh the best part of a quarter of a hundredweight. Lubrication is 'constant loss' via a Best 'semi-automatic' drip feed system mounted on the fuel tank. I expect to use approximately one pint every 250 miles at the rate of one drip every $2\frac{1}{2}$ seconds.

Carburettor: Brown & Barlow Universal model. For more details see item 2 in the notes below.

Magneto: Bosch ZE1. This make was used almost exclusively by manufacturers prior to World War I and for one very good reason - it works very well even at relatively low engine revolutions.

Forks: 'Druid' side spring, girder type made by A. Drew & Co of Birmingham.

Wheels: Fitted with 26in. dia. by 2in. bead edged tyres. I would have preferred $2\frac{1}{4}$ in. but they are currently unobtainable. Bead edged tyres must be run at high pressure to keep them on their rims. I run with 40 pounds per square inch in the front and 45 in the rear. Running with less on this machine can result in tyre creep.

Tank: Holds approximately $1\frac{1}{2}$ gallons of petrol and 3 pints of lubricating oil.

Transmission: All chain drive via a Jardine Mark 21, 3-speed, countershaft gearbox made by John Jardine Ltd. of Nottingham. This item is probably a later fitting but I have, to date, been unable to determine exactly when it was made. I am inclined to think it may have been produced just post World War I but cannot be sure. It is pleasant and relatively easy to use and the cork lined clutch is light to operate and takes up the drive smoothly.

Brakes: Front brake is of the stirrup type acting on the wheel rim and controlled by the right lever on the handlebars. Rear brake is foot operated (left) and acts on the inner surface of the dummy belt rim fixed to the rear wheel spokes.

Saddle: Leather covered, sprung pan type. This was also a commercial item made by a company such as Lycett or Brooks

Stands and carrier: Stands are fitted front and rear. The carrier is of the tubular pattern with brazed lugs and fitted with twin, pannier toolboxes.

Silencer: Plated down pipe to a large 'pepper pot' cylinder running transversely across the frame then a long plated tailpipe to the rear of the machine. The 'pepper pot' cylinder is fitted with an exhaust cut-out device that bypasses the tailpipe and, in effect, provides a straight through exhaust. This device is not recommended for use in built up areas (or if the police are about).

Mudguards: Valanced front mudguard. Rear mudguard is fitted with side wings to prevent spray. The back part of the rear mudguard is quickly detachable, complete with the carrier, to facilitate rear tyre repairs.

Foot boards: Cast aluminium with rubber mats.

Accessories: The lighting set was made by Powell and Hanmer of Birmingham. Only a front light is provided and the lighting medium is acetylene gas generated in the cylinder at the rear of the lamp. The bulb horn is by Desmo of Birmingham.

Notes

1. The kick start fitted to this machine is of the 'low geared' type and depressing the lever does not rotate the engine through a full 4-stroke cycle. The best drill is to find top dead centre on the compression stroke and allow the kick start lever to return to the top of its stroke. Then, having lifted the exhaust valve using the handlebar lever, depress the lever through one full stroke. This will position the engine such that the exhaust valve is fully open. Allow the lever to return to the top of its stroke and apply a vigorous starting kick with the exhaust valve lifter lever released. This will usually achieve a start after two or three attempts if cold - first kick if hot. Failure to follow this routine results in, not only the engine refusing to start, but 'kicking back' in a most painful manner. Occasionally, this can be accompanied by loud 'back fires' in the silencer. Sound just like a rifle shot they do!

I have no means of measuring same but the compression ratio feels high for an engine of this era when 4 to 1 was considered rather daring.

2. The machine is fitted with a carburettor that has a variable jet (**photo 3**). In effect the jet size can be varied from zero to approximately 0.05in. diameter - even as the engine is running if the need arises. This is achieved using the small lever mounted at the base of the mixing chamber. However, there are no graduations or markings to denote the actual setting and one must rely on experiment and the sound of the engine to find the optimum for any given circumstances. To add to the intrigue the lever is mounted on splines so if you remove it for any reason it is important to put it back in the same orientation or your carefully worked out settings will be lost.

For normal running the engine seems to work best when the jet is approximately half open. I set the operating lever on its splines such that it lines up with the clamp screw that fixes the float chamber to the carburettor body as in photo 3. This setting can be varied slightly to suit weather conditions. For a cold start the lever should be moved towards the engine approximately 30 degrees to open the jet. It can be returned to its normal running position as the engine warms up. Both hot and cold starts need the extra air lever (choke lever) on the handlebar to be closed and the throttle lever one third to one half open. Flooding of the carburettor is not normally necessary even when cold. Under normal running conditions the extra air lever can be fully opened. Some hours were spent in establishing the above information about the optimum settings. Fuel consumption has not yet been accurately measured but I expect better than 60 miles per gallon based on existing data.

3. It is best not to rely on the brakes when riding the machine. Powerful braking was not a major priority in 1912. The front brake complies with the law but is not much good at stopping you. Using it also removes the nickel plating from the rim. The rear brake is improving as it beds in but is never likely to be able to lock the back wheel. Best to keep your wits about you and, if you need to stop quickly, engage a lower gear to take advantage of engine braking before applying the rear brake. Long, steep hills can be descended quite safely in second gear.

4. Steering and handling are quite good for the period. The long wheel base coupled with the engine being well forward seems to give good weight distribution. The machine is no less comfortable than those I have ridden that are 10 or more years younger. However, large potholes are best avoided.

5. Top speed has not yet been established. Most engines of this era peak at approximately 3,000 revolutions per minute. With the overall gearing fitted (4.8:1) this equates to a theoretical top speed in the direct, top gear of 48 miles per hour (mph). More important is the ability to cruise at 25 to 30mph on little more than half throttle. At such speeds the engine is smooth and unstressed. The machine has covered 30 miles of country roads in 1¹/₄ hours.

6. The lighting set and bulb horn would not have been supplied by Campion as few manufacturers bothered with such things at that time. These would have been supplied, at cost, by the local friendly dealer before the machine was collected by the first owner. A horn and license holder were needed to comply with the law but a lighting set was not if you did not intend to ride the machine at night. Apart from a short period during World War I, a rear light was not essential until 1927. However, a red, rear reflector is usually reckoned to be a necessary fitting to meet legal requirements.

6. The term 'Campionite' was used by the Campion Cycle Co. in some of their advertisements to describe users of their machines. It seems I now comply with the key requirement to be known as such.

Photo captions:

1. *Off-side view of the author's machine.*



2. *The near-side view. The primary chain case is an aluminium alloy casting.*



3. *The Brown & Barlow Universal carburettor with variable jet*

