MOTOR NOTES.

TO AID THE MOTORIST.

SOME VALUABLE TIPS.

It is quite easy to feel for play in connecting rod bearings, when the crank case is open, by moving the rods up and down by hand. To feel for slack in main bearings is more difficult, because of the weight of the parts which have to be moved. In the case of the rear bearing, for instance, it is necessary to move the flywheel up and down, which is beyond the average man's strength. It may easily be done, however, by placing a jack under the wheel. It should be used with some discretion, simply applying enough lifting effort to take up any play in the bearing. This can be felt by placing the fingers of the left hand on the main journal, where it projects from the rear bearing, and feeling for the slack while, with the right hand, the jack bar is given a slight up and down motion. Instead of a jack, a pinch bar, with fulcrum of suitable height, may be used for the same purpose.

Two methods of starting a stubborn hub cap, as commonly practised in garages may be appreciated. If the cap be on a rear wheel, the car's brake can be locked, but should it be on the front, a block can be forced against the tyre to hold the car steady. A wrench is then placed on the cap and a jack placed to bear against the wrench handle. In this way great pressure can be brought against the cap. If the cap still sticks the only recourse is to heat it with a blow torch, taking care not to blister the paint. Kerosene should then be placed on the thread and the wrench applied before the cap has cooled and contracted to its normal condition.

Occasionally it happens that a motorist has trouble on the road that necessitates the removal of a tyre or demountable rim, only to find that his jack is out of order or has been left in the garage. Instead of par-



MR. ARTHUR GOODWIN, president for the second year of the Motor Trade Association of Great Britain.

tially demolishing the nearest fence, in such circumstances, to get rails with which to lever up the axle, it is much more convenient to let the car raise itself, or, rather, the wheel requiring attention. The "modus operandi" consists in raising one end of a short plank with a block of wood, a couple of bricks, or any other "packing" material handy, thus forming an incline up which the wheel in question may be made to mount by driving the car in low gear. About a foot beyond the high end of the incline the packing blocks are placed. built up to a height of about two inches more than the normal clearance under the axle. On driving the car further ahead the axle drops down on this packing, leaving the wheel clear of the ground. To get the wheel back to "terra firma" it is easy to topple the packing over by pushing the car forward.

When a new valve is fitted to an engine that has had considerable service it will often he found that un-less it is ground in, it does not hold compression as well as the old valve, although the latter may present a very uneven appearance. This has been puzzling to some motorists, who have assumed that as the new valve was ground to a true face in its manufacture, it should make a perfect joint on the valve seat. This would be true if the seat retained its original angle and surface. but after being ground a number of times, with the old valve used as a lapping tool, and being continuously hammered by the latter, in months of operation, the seat may not only lose its original contour angle, but may have a pro-nounced "counter sink," especially if the old valve has been so often ground, or faced off in the lathe, that its diameter has been materially reduced, causing it to seat only on the inside edge of the valve opening. The proper course in such cases is to tool the face of the valve seat with a regular valve seating tool, restoring it to the proper angle as well as a true surface, following this with a light grinding in of the new If a tool is not available, considerable grinding will be necessary. using a coarse abrasive at first to bring the seat detour to approximately that of the valve, finishing up with a smoother compound.

A PHENOMENAL RIDE WITH A

Harley-Davidson Motor Cycle and Side Car

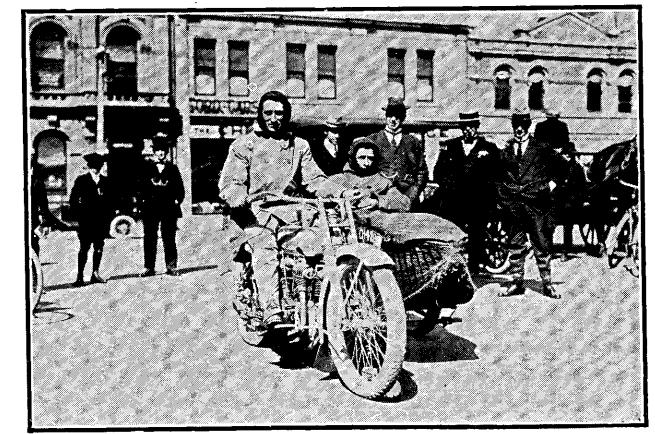
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This Picture was taken on the arrival in Christchurch of Messrs. H. and W. H. Jones after their sensational ride from Christchurch to Hanmer and back, when they established a record, which, although repeated attempts by all the leading machines have endeavoured to break, the record still stands to the credit of the HARLEY DAVIDSON.

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The existing record to Hanmer was smashed by over half an hour, showing the exceptional speed at which the riders were travelling, yet the return journey would have been even faster had it not been for the accident. As it was the ride was phenomenal, judging from the fact that although half an hour was lost, the record still stands unbroken.

The HARLEY DAVIDSON also holds the Australasian Championship, in which Mangham, the Harley rider,



bewildered the spectators by clearing right away from the other competitors, eventually winning by over half a mile.

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