

Some New Motor Accessories.

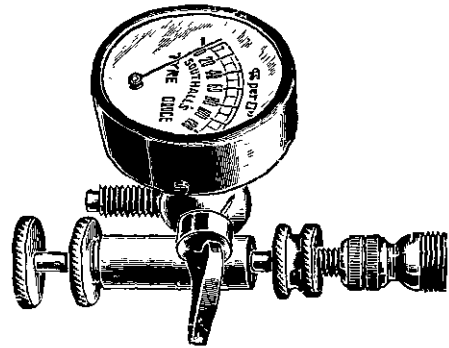
The Southall Tyre Gauge.

An apparatus for accurately ascertaining the pressures inside pneumatic tyres during the process of inflation.

It is no exaggeration to state that fifty per cent. of pneumatic tyres at the present time are being run very much under inflated, thus ruining the fabric. The pressure gauge attached to the pump is far from satisfactory, as the delicate mechanism of the gauge is strained to its maximum at every stroke of the pump, which soon causes it to become inaccurate. When gauge is in perfect order it only registers the pressure going through pump tube to tyre, which is often considerably more than is actually in the tyre. It is very often out of order owing to being fixed on the pump and put along with other heavy tools in the car.

hours; while the car, which was a 14-16 h.p., continued to burn merrily for some time. After recourse had been had to liberal applications of water, brought in buckets and other suitable vessels at hand, the owner of the car contemplated with mixed feelings the entire destruction of the body, wiring, and cape-cart hood, which will involve him in a repair bill of over £100.

An English automobile company (Daimler) has established a scholarship system at its works. The scholarships are to be awarded to successful candidates at an examination that is to be held in July of next year. A two years' course of instruction at the Coventry works is to be provided for the holders of the scholarships, and this privilege will be accompanied by maintenance grants of £100 in one case and £20 in four other cases. There is also a clause entitling the company to retain the services of the recipients of the grants for a subsequent period of two years at a salary of not less than £150 a year. The examiners will be Professor Sylvanus Thompson and Dr. Hele-Shaw.



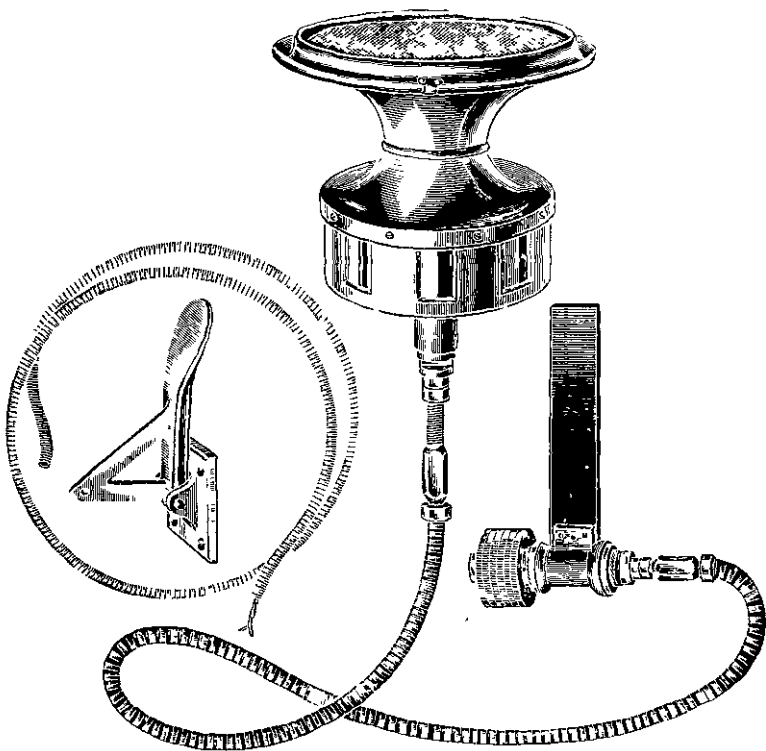
SOUTHALL TYRE GAUGE.

The Paris "Breakdown" Contest.

On 15th December took place the Concours des Pannes, or "Breakdown" Contest of the Parisian publication *L'Auto*. The idea of this contest was that some derangement was effected in the mechanism of all competing cars and the drivers were required to locate the trouble, the one doing so in the shortest time being declared the winner. The time limit was 25 minutes. Great interest was shown in the event, and there were nearly a hundred contestants. The entries were divided into five different groups.

In the first trial the magneto was short circuited by means of tinfoil. The time required for remedying the trouble varied from one minute 28 seconds to 25 minutes. In the second test the inlet pipe was stopped up. Only a single one of the competitors succeeded in removing the obstruction within the time limit. It was amusing to see the drivers hunt and try for the difficulty. In the third trial the carburettor was choked by a piece of paper. The time required for eliminating this trouble varied between the limits of 4 minutes 45 seconds and 7 minutes 6 seconds. In the fourth trial the gasoline tank was shut off and the ignition connections were interchanged. About one-half of the nine contestants succeeded in overcoming these defects, their time ranging from 1 minute 23 seconds to 7 minutes 6 seconds. The final test, consisting in the location of an open contact on the interrupter, was only successfully passed by a single competitor.

In connection with these hunts for derangements in the mechanism there was a competition in interchanging tires, which were supposed to have been punctured. The best time for renewing all four inner tubes was 9 minutes 46 seconds, and it is of interest to note that both of the prize-winners followed the practice of removing the outer cover and the inner tube together after having first fully unscrewed the security bolts.



NEW MOTOR SYREN.

Speed Indicator and Watch Combined.

The new speed indicator can be supplied in any of the usual types, together with a high-class lever watch specially constructed to withstand vibration.

A chart which is an ingenious contrivance driven by the clock, is marked off in hours and miles per hour; an arm, to which is attached a pencil, traces the speed at which the car is travelling at any time during a 12 hours run.

New Motor Syren.

One of the best syrens on the market. Has a very loud tone.

We are indebted to the Scott Motor and Cycle Co., for the accompanying illustrations.

NOTES.

All motorists will need to take warning from an accident which recently befell the chauffeur in the employ of Mr. John Duthie, of Wellington, who somehow endeavoured to fill his petrol tank by the light of an ordinary oil car-lamp. After having placed the lamp within about six inches of the petrol tank opening, he proceeded to fill up, and when the task had been almost completed the fumes arose, and the whole tank immediately ignited. The chauffeur was instantly overcome by the fumes, and remained unconscious for two

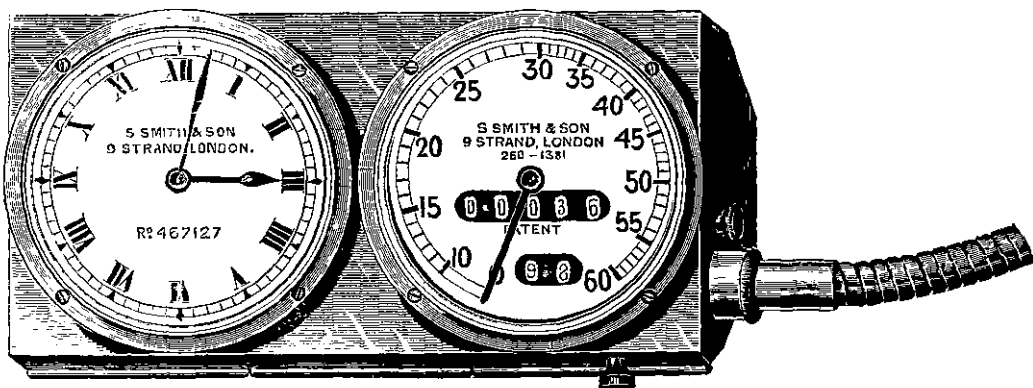
The new British patents and designs acts became operative on 1st January, 1908. This act makes compulsory the working "to an adequate extent" in the United Kingdom of patents having the benefit of the protection of the British patent laws, and will force, it is claimed, the manufacture in the United Kingdom of many articles now made in the United States for export to the United Kingdom. The motor trade is consequently expectant

In Germany automobiles used for commercial purposes are exempt from the heavy taxation imposed on pleasure vehicles, but it seems that the tax collectors are not always easily convinced that a car is used mainly for commercial work. It is reported that a butcher in Wiesbaden, who owns a convertible goods and passenger vehicle, has had the collector fasten the delivery body to the frame with a seal, so as to quiet all suspicions of the tax department.

Invercargill Motor Race.

On page 306 we give illustrations of this event. The first picture shows the winner of the first prize (silver cup)—Mr. E. B. McKay (16 h.p. Russell Touring Car). This car has already covered 8,000 miles, first set of tyres lasted between five and six thousand miles. The petrol consumption equalled 27 miles per gallon. Mr. McKay was the first motorist to go to Lakes Te Anau and Manapouri and back without accident.

The other illustration gives a group of Russell Car Winners, with their respective passengers. From right to left—First Prize, Mr. E. B. McKay (16 h.p. Russell); Second Prize, Miss A. Johnstone (16 h.p. Russell); Third Prize and Fastest Time, Mr. W. A. Printz (25 h.p. Russell), Mrs. W. A. Printz at the wheel—this lady drives her car on the Orepuki roads, which are about the worst in New Zealand.



SPEED INDICATOR AND WATCH.