

# OLYMPIA CYCLE AND MOTOR-CYCLE SHOW, 1912.

At the moment no one knows precisely along what lines the new vehicle is likely to develop—whether it will eventually become a motor-car in miniature, parking altogether of the design and construction of the car, or whether it will ultimately become a developed type of the passenger-carrying motor-cycle. So far as I am concerned, I think it will prove to be that the cycle-car will be essentially a small car. Certain it is that the most practical types to be seen to-day are those which have been designed on miniature motor-car lines, though it must be admitted that some of the most practical of them all are of the three-wheeled variety. However, in this matter of the evolution of the cycle-car there is nothing to be done but to wait and see. The confidence of the trade in the future of the cycle-car may be gauged from the fact that a new weekly paper called "The Cyclecar" has just made its appearance. Eighty thousand copies of No. 1 have been printed, and everybody at all interested in motoring should secure a copy of what is really a remarkable production.

which is the adoption of a new piston which has two rings, one at the top and the other at the bottom of the trunk. This gives the piston a bearing on the cylinder wall at these two points, while the intervening wall is recessed, which not only makes for lightness of construction, but affords much better facilities for lubrication, because of the oil-retaining character of the recessed portion of the piston. The R.W. motor-cycle is made in four models, with the option of a 400-c.c. or 750-c.c. motor in each, the higher-powered engine necessarily entailing extra cost. The models, as noted, are the single-

tions are appreciably lower than those ruling last year.

Many valuable additions have been made to the list of Dunlop accessories. One of the most attractive is what is known as a "magazine outfit." A neat tin case is divided into small compartments, each containing some article required in repair work, just sufficient for the job, and the tubes can be thrown away when empty and refills inserted in the nest.

While so much attention is given to the power cyclist's needs, it must not be assumed that his pedalling brother is neglected. In this branch of manufacture the Dunlop Co. is as progressive as any other, and amongst the new patterns for 1912 is an extra heavy sprint one for road racing with sides protected by thin mottled rubber, and a new beaded-edge pattern for carriers. Dunlop roadster, special roadster, featherweight, racing, and juvenile—and there is equal variety in the collection made up of Warwick, Cambridge, and Edinburgh tyres, the popular Pericles replacement cover, both wired and beaded, finishing the list.

### RALEIGH Stand No. 66.

One of the very few firms which has remained deaf to the handshakes of the motor-cycle is the Raleigh Cycle Company, which exhibits a full range of its "all-steel" models, varying from the "Modelle Superbe," at fifteen guineas, to the "Popular road-racer," at less than six pounds. The most notable improvement to be observed is the adoption of a detachable rear fork-end, which greatly facilitates the changing of a tube, which can be accomplished without disturbing the chain-adjustment. Various little detail improvements have been made, and the 1912 Raleighs are fully up to the high standard set by the products of the well-known Nottingham firm.

### TRIUMPH Stand No. 49.

The Triumph motor-cycle certainly led the fashion for a number of years, and it is in no small measure due to its influence that motor-cycling weathered the bad time through which it passed during the middle years of the last decade. When others of the great cycle-making firms abandoned the manufacture of the motor-cycle and appeared to think that as a commercial proposition it had no future, the Triumph concern held to its faith, and went on steadily improving its

machines, and, incidentally, increasing its output of motor-cycles, until the Triumph practically stood for motor-cycling. Even now, when the motor-cycle has become a sound, reliable machine and a popular means of locomotion, the Triumph well holds its position among the most popular machines of the time. Therefore, their stand is always a centre of attraction at the Show, and this year it arouses no less interest than of old. Five types of motor-bicycle are shown, all of the 24-h.p. single-cylinder variety, including free-engine, three-speed, and single-gear models. There is practically no change to record, save in still further refinement of detail. A full range of the Triumph pedal cycles is also exhibited.

### STURMEY-ARCHER Stand No. 143

On the stand of Messrs. Sturmeley-Archer Gears (Limited) are shown examples of the well-known three-speed gear for pedal cycles, bearing the name of the firm. The chief interest, however, is in the combined three-speed and free-engine gear for motor-cycles, which is shown in section, together with a whole series of the component parts of this interesting gear. It is noteworthy in that the direct drive is on the third, or "top," speed, as distinct from others of its

kind, in which the direct speed is the intermediate, and in which the drive on top has to be taken through a train of pinions. Manifestly, the Sturmeley-Archer practice is the better, since by the greater part of the driving of a motor-cycle is done on the highest gear, which should thus be as free from wear and friction as possible. As, in the Sturmeley-Archer, the whole gear is locked up solidly on "top," this desirable state of things is achieved.

### LEA AND FRANCIS Stand No. 73

As I have already mentioned in passing, for the first time Messrs. Lea and Francis are showing motor-cycles, and when I say that these machines are fully up to the standard set by the firm's pedal cycles it will be understood that they are, indeed, excellent. The 24-h.p. twin-cylinder Jap engine is used, with chain drive through a two-speed countershaft gear. I have not space in which to even mention the many refinements which are embodied in the design of the Lea-Francis, but the reader may take it that the only thing which does not appear to have been studied at all is the cost of production. It is evident that where a thing has been thought to be good, it has been adopted, with the result that there is certainly nothing better to be seen at the Show.



The Rudge-Whitworth Motor-Cycle Fork. geared machine, the Tourist Trophy type, the "free-engine" model, and the "Rudge-Multi."

As usual, this firm exhibits a most representative show of pedal-cycles, embodying all the well-known features of Rudge-Whitworth design and at prices ranging downwards from the "Aero-Special de Luxe" at something over £12 to the Rudge-Wedge "Popular" at little more than a five-pound note. Altogether, the Rudge-Whitworth exhibit is quite up to its usual standard of interest, and should not be missed by the visitor.

### DUNLOP TYRES. Stand No. 116.

The enormous development of motor-cycling is demonstrated as much in the tyres as in the machine section of the Show, and nowhere more conclusively than at the stand occupied by the Dunlop Rubber Co. Certainly Dunlops have never made a stronger appeal to the power-cyclist or shown greater diversity of goods made specially for him. In tyres, tubes, and accessories new patterns are exhibited, all called into existence by the demands of the rapidly-developing motor-cycling movement. Of entirely new tyres there are a round half-dozen, most of them designed for passenger-carrying machines. At the head of the group is the "Pillion," an exceptionally strong, rubber-studded cover of 650 by 65 mm., with a very deep-beaded beaded edge, suitable for cycle or side-car. Next come two extra-heavy tyres, again rubber-studded and beaded, the first size fitting a 2 1/2 in. rim, and 26 by 2 1/2 in., the first size fitting a 2 1/2 in. rim. For Tourist Trophy and other racing models there is a new wired-on tyre. Since the company increased the range of rubber-studded covers the ribbed patterns have been cut down to one, this being the 28 by 2 in. Butt-ended tubes are also shown in some variety, and one size, the 650 by 55 mm., will be interesting to the steadily-increasing number of riders who favour larger economical tyres. The Dunlop motor-cycle belt finds, as it deserves, a prominent place on the stand, for it has done its share during the season in the winning of so many races and hill-climbs, and now stands high in the estimation of discriminating riders. The prices of the belt in its various sizes and sec-

### Tyres and Accessories.

Not the least interesting part of the Show is the section devoted to tyres and accessories. Here, again, the influence of the motor-cycle is the paramount one. New patterns of non-skidding treads; new types of tubes for passenger-machine use; butt-ended tubes to save the motor-cyclist the work and trouble of removing his wheels in order to change a punctured tube; new devices for the easy storage of tools and accessories of the machine; new lamps; speedometers; sight-feed lubricators—everything, in fact, that can make easy the way of the motor-cyclist, be he simple tourist or speed-man. Most decidedly the necessary section ought not on any account to be missed, for there is simply a mine of interest in it.

### AMONG THE EXHIBITS.

#### RUDGE-WHITWORTH. Stand No. 96

In the 1912 models of the Rudge-Whitworth motor-bicycle there are many improvements to be noted, and some of them are almost to be described as revolutionary. For instance, this firm has made one very radical departure in the construction of the motor. Roller bearings are now fitted to both ends of the connecting-rod, a practice which I believe is absolutely new in internal-combustion engine practice. Bearings of both ball and roller type have been used with success on the big-ends of car and motor-cycle engines, but never to my knowledge has either type been used in the bearing of the gudgeon-pin. Messrs. Rudge-Whitworth may be trusted to know what they are doing in this matter, and they tell me that they have adopted these bearings as the result of most exhaustive tests. Not only do they generate less friction than the plain type, but they have actually been found to have ten times the life of the phosphor bronze bearing. The latest pattern of Senspray carburetter is fitted, and the very adequately designed gauze air-filter should be noted. A little refinement which has been introduced into the design of the machine is the placing outside the front mudguard of the stays and the front brake fork, the object being to lessen the amount of mud and water which usually finds its way down these fittings to the front wheel hub. In addition, a new type of hub flange is employed, which drains all the water that comes down the spokes away from the bearing-cups. Large grease chambers are now provided in each pair of shackles of the spring forks. The multi-speed gear has been much improved, and has been made practically weather-proof. Another point in the construction of the motor is to be noted,

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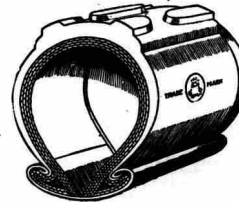
# DUNLOP

## STAND No. 116

OLYMPIA CYCLE AND MOTOR-CYCLE SHOW

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Dunlop "Special Roadster," "Roadster," and "Featherweight" cycle tyres, all rubber-studded pattern. Tubular sprint tyres, NEW EXTRA-HEAVY SPRINT TYRE, for road racing. NEW DUNLOP CARRIER TYRE, beaded edge. Warwick, Cambridge, and Edinburgh tyres. "Pericles" replacement cover. Full range of accessories.



### THE NEW DUNLOP "PILLION" TYRE

(as illustrated above), 650 x 65mm.

Specially manufactured for driving wheels of passenger-carrying motor-cycles, and for cycle-cars. A new pattern Dunlop butt-ended tube is now made in six sizes, one suitable for this tyre.

### THE NEW DUNLOP EXTRA HEAVY TYRE

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Heavy rubber-studded Dunlop tyres, wired or beaded pattern, for solo work. New rubber-studded Dunlop tyre, for speed work. Dunlop side-car tyre, 26 x 2 1/2 in., beaded only. Warwick rubber-studded tyres.

### THE NEW DUNLOP MAGAZINE OUTFIT

(as illustrated above). Patent No. 23738/1911.

This has only to be seen to be appreciated. The receptacles contain the exact amount of chalk or solution requisite for one repair, and can then be thrown away. Always tidy. Refills obtainable.

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