

# THE MOTOR WAY

JANUARY, 1908

## Pennsylvania

The Direct Motor-Drive Manufacturing Company was recently organized and incorporated in Philadelphia with a capital stock of \$100,000. Lewis Ryan is president of the company; Louis Chevrolet, well known racing car driver, is vice president, and William Phillips, Jr., is secretary-treasurer. The concern, which has temporary offices at 14 North Fifty-ninth street, will manufacture a new device, which is claimed by its inventor, W. O. Foss, to be one of the most important inventions relating to automobiles made in recent years. By means of the new invention, power is delivered through the rear wheels on one set of gears on high and intermediate speed and through two sets of gears on low speed and reverse, eliminating the transmission with its attendant troubles and annoyances. Hitherto the sliding gear systems with some unimportant variations have been in use. The direct motor drive entirely does away with the gearbox. Three speeds forward and reverse combined are given, with the differential on the rear axle. Stripping of gears is impossible, it is claimed, as there are no sliding gears, all being in mesh at all times, and the different speeds are obtained by the use of positive clutches which are noiseless. When high or intermediate speeds are in use, low speed and reverse are not in motion. All speeds are changed by one lever of the selective type. Large-size ball and roller bearings are used throughout, and all the parts are made of high-grade materials. Among the many advantages claimed for the device are a saving of from 20 to 30 per cent in horsepower, a saving of from 75 to 200 pounds in weight in the construction of a car, and a saving of several hundred dollars in the cost of manufacture. The invention will be applicable to any make or type of car.