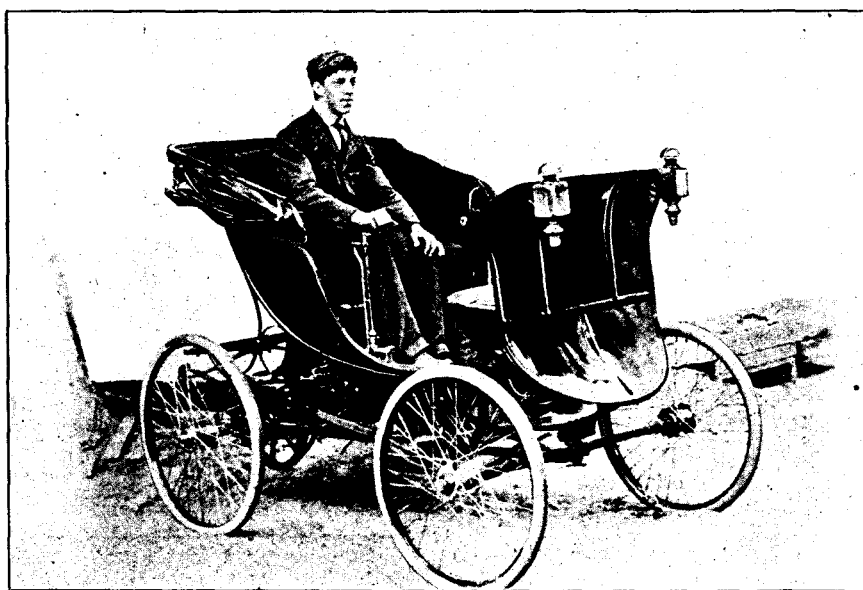


being made to get the business down to a commercial basis. The Daimler Motor Company, which works under the patents of a German inventor, seems to be taking the lead, but they have had some trouble recently in connection with a complaint by Henry Sturmev, the editor of *The Autocar*, in reference to the election of a novice as chairman of the board. The result has been the appointing of an investigating committee of three able persons, whose efforts, it is hoped, will result in good to the shareholders and the industry. Her Majesty's mails are being carried in some places by motor vans. The recent trials of heavy haulage autocars in Liverpool were a failure so far as new methods of propulsion are concerned, there being no entries of electric or hydro-carbon systems, and the steam vans, while showing structural improvements upon those of sixty years ago, have not yet overcome some of the inherent difficulties. In a recent issue we gave a full outline of the Liverpool trials. An American engineer, Hugh Dolnar, makes some caustic and critical comments on the exhibition, and it may be interesting to quote some of his conclusions. In an article in the *Cycle Age*, he says: "Such were the actual results of the Liverpool trial, the wagons in the hands of their builders showing that they had power enough to pull the loads over a bad road, it is

drivers had to pay although they were not liable; the slow speed of the cabs, thus reducing the drivers' margins; poor pay as compared with that allowed drivers of horse cabs. The matter was patched up after a few days by concessions from the company. The London electric omnibuses are not yet running. The real reason for this, as well as for the trouble with the electric cabs, we believe to be the lack of storage batteries that while lighter than those now in use will yet give off more power. The immense dead weight carried by the London omnibuses, each of whose batteries weigh about 1,600 lbs., adds enormously to the perplexities of the problem, and it is safe to say that until a lighter battery equipment is provided the solution will be far off.

In the United States the industry has made very little headway. As the editor of *The Cosmopolitan*—who two or three years ago gave a prize of \$3,000 for the encouragement of the industry in the United States—remarked in an article published in his magazine last month, it is astounding that a people so progressive as the Americans should be so far behind France, and indeed England, in this industry. One explanation of this backwardness is found in the fact that the American roads are about as bad as they can be. Worby Beaumont, the president of the



true, but that otherwise they were wholly unsuited to any existing conditions of transportation now performed by the aid of horses. . . . The heavy, self-driven wagon has not been built yet. It will be built, but no such absurd assertions that failure is success as are contained in the *Automotor's* silly editorial will make it come a day sooner. The situation calls for a calm consideration of facts and results obtained. In all mechanical operations the quickest way out is to recognize failures, and so be in a position to look for elements better adapted to meet actual conditions. None of these wagons shown at the Liverpool trial could do anything whatever towards city trucking, and it does not seem at all likely that any steam engine driven wagon will ever be found suitable for heavy work, loads of say from two to four tons, such as are commonly drawn on two-horse trucks. The heavy truck is a far more difficult problem than the four or six-passenger vehicle, and absolutely must have all four of its wheels driven, and must be able to place itself as quickly as a horse-drawn vehicle can be placed at the curb or on a crowded pier." In London the electric cabs are only partially successful. Recently there was a strike among the drivers, and one of them stated their grievances to be: numerous break-downs of the mechanism, for which the

Society of Engineers of England, remarked to the editor of *The Horseless Age*, when on a visit to New York recently, that the American roads were the worst in the world, and he could quite understand why the horseless carriage industry had not made further progress there. Col. Pope, of bicycle fame, has spent nearly a quarter of a million dollars in exploiting electric equipment for carriages, and from his motor vehicle factory in Hartford has turned out several of the Pope carriages. Their price is \$3,000, their weight about 2,500 lbs., and their carrying capacity only two persons, their running power only about 25 miles; and these limitations and conditions have prevented ready or rapid sale. Col. Pope is now exploiting gasoline with Hiram Maxim at the head of that department. So far, however, nothing striking has been produced. The Duryea motor carriage, of which so much was expected, has sunk into comparative insignificance. This carriage won about \$8,000 in prizes at various races; but attempts to establish companies for its manufacture in New York and in Canada have proved failures, and the sample carriage which was sent to New York under option to capitalists there has been returned to the shops in Springfield. This gasoline carriage is of reasonable weight and speed, though the efficiency of the engine is not great.