

A steam postal van has been sent to Ceylon from the Lancashire Steam Motor Co., of Leyland, England. It will carry a ton of mail matter in bags, and will make an average speed of ten miles an hour on ordinary country roads.

The Velo states that in France during December there were 708 accidents—52 deaths and 656 injuries—due to horses, and only 21 automobile accidents (causing one death) in the same period. There are about 4,000 automobiles running in France.

"Inshaw's Steam Wagon," or lorry, is running in Birmingham, made by the son of the worthy machinist of that name, whose early production of a steam carriage was illustrated in *The Canadian Engineer* last year from a photograph obtained from another member of the family.

The Municipal Council of Paris, France, has reduced autocar speed to 12 kiloms, in the Bois de Boulogne. The French correspondent of the Autocar suggests that the authorities should take in hand the task of regulating the horse traffic, and thus remove the chief source of danger to the automobilist.

The Motor Trades' Association has been organized in England "to afford mutual protection to its members, and to promote such measures as may be found useful in the interest of the motor industry in the United Kingdom, including the encouragement of invention, regulation of prices, and arrangement of shows."

The Autocar, of London, England, says everything points to a big motor year during the next twelve months, most of the manufacturing houses having experienced no "dead season" this year, as they have sufficient orders to keep them fairly busy all winter. One firm sold four motor cars in one week. The position of the autocar to day is immensely superior to what it was twelve months ago.

Belgium, Germany and the United States will contest with the French champions for the Gordon-Bennett cup. It is reported that Mr. Riker and Mr. Winton have offered to represent the American Club, and that the former is having an electric car built specially for the race, which will be over a course of 125 kiloms. M. A. Lemaître is having a 100 h.p. car with 8 cylinders built for this race.

The British Motor Car Club offer eight cash prizes, four of £100 each and four of £50 each, for the following inventions: An exhaust deodorizer, an automatic starter, the best ignition, and the simplest and cheapest design of motor and car complete. The winners of the prizes will retain to the full their interest in the inventions, which the club will assist them to get properly patented throughout the world.

A correspondent of the Autocar suggests "power-vehicle" as a comprehensive generic name for automobiles, while classes would be named "power-carriages," "power-carts," "power-wagons," and these again would divide up into sub-classes, as "power-landau," "power-victoria," etc. He objects to "motor," because of the many confusing senses in which it can be used. By the way, "Steamobile" appears in the Automotor journal.

The makers of steam carriages in the United States have struck a snag in a law which requires that anyone operating a steam road engine must be an expert engineer and be properly certificated. The Locomobile Co., who manufacture the Stanley steam carriage, are trying to get the regulations modified to allow the issue of "third or fourth class" certificates to owners of steam cars, who show themselves proficient in their use.

The Automobile Club of England is organizing a 1,000 miles efficiency trial, with the full approval of automobile manufacturers of Great Britain. The London Daily Mail has voluntarily offered prizes of \$500 for the first, \$250 for the second car coming through the trials best, and in addition, \$50 to each car successfully accomplishing the journey. This club has been asked to officially take charge of the English automobile section of the Paris Exhibition.

The Autocar has made a careful calculation and reports that during 1899 very close on 2,000 automobiles of various kinds were made in or imported into Great Britain—this number being about equally divided between autocars and various descriptions of motor cycles. The trade in 1900 is likely to be increased at least 50 per cent.—most probably doubled. The demand will be higher than this, but the ability to supply will affect the total at end of year.

The Autocar urges the British War authorities to investigate autocars as the German military man and the Emperor did, to their great satisfaction, the cars having carried weights up to 2¼ tons over bad roads, up hills, across stony and sandy track, and even on loose ploughed lands, and finally two baggage and two passenger wagons, heavily laden, satisfactorily competed with the Brocken railway in crossing the Brocken. The Emperor highly praised the performance.

The Chinese ambassador visited Coventry, Eng., in December, was met at the station by a fleet of motor cars, and after inspecting the factories made a speech in which he said: "The services rendered by the motor car to the field gun in time of war, as well as to the collection and distribution of mails in time of peace, are simply invaluable, and I have no doubt that when all our roads in China are restored these vehicles will be introduced into the far East, as well as they are now introduced into the West."

Here is an item from the Horseless Age of New York: "The Canadian Government has been experimenting for some time with various motive powers as a propelling force for mowers, reapers and other agricultural machinery. The tests have been made at Montreal, and one of the most recent was the driving of a gang plough by a gasoline motor, built by the Haynes-Apperson Co., Kokomo, Ind. It is said the motors will be attached to other farm machinery and produced in quantities."

H. Wilcke has written a pamphlet on "The Haulage of Goods on Common Roads," in which he shows that cheap production necessarily involves cheap transport; that British railways have made competition with other countries a difficult matter, instead of helping the producer; that within at least forty miles radius all transporting of goods can be done quicker and cheaper by self-propelled vehicles on common roads than by railways, and that all works on farms, no matter where, may thus have the equivalent of a railway siding.

New York has a new motor—not adaptable yet to carriages, but likely to develop on that line. It is called the "Secor," uses kerosene or heavy oil, feeding oil and air in chemically correct proportions straight into the cylinder, exploding by electric spark. It has neither oil pump nor vaporizer, exhaust invisible and almost odorless, while the motor runs 300 or 400 revolutions a minute, and governs so perfectly as to be able to drive a dynamo for variable electric lighting without going more than one volt out of the way—which is as good as steam engine performance.

The power required for motor vehicles may be gathered from the following figures showing tractive resistance, pounds per ton—ordinary metal tires and plain bearings being used: Railroads, 10; tramways, 30; good asphalt, 13; asphalt, 22; poor asphalt, 29; wood paving, 30; good setts, 35; best macadam, 42 to 46; good macadam, 50; ordinary macadam, 60 to 80; soft macadam, 97; best gravel, 57; cobbles, 60; ordinary cobbles, 130; very bad cobbles, 240; best clay, 110; hard dry clay, 100; sand road, 360; loose sand, 560. The authorities for above figures are Telford, Whyte-Smith, United States Agricultural Bureau, and Society of Arts.

A striking illustration of the unfairness of the British law limiting the speed of autocars to 12 miles per hour is shown by examining the time-table of the Tally-Ho Independent stage-coach, which ran between London and Birmingham in 1830. The distance, 100 miles, was covered in 7½ hours, the average speed, allowing for changes of horses, being over 13 miles per hour, and the actual speeds being as follows for the seven sections into which the trip was divided: 16.17, 18.75, 11.85, 14.64, 12.45, 16.50, 14.59. Only in one case is the speed below the autocar limit; yet this was in the days when the main highways were carrying their maximum of traffic, and were the only means of intercommunication, except canals.

Jenatzy, the famous French chauffeur, has driven his torpedo-shaped car, the "Jamais Contente" (never content), for one kilom. at the rate of 106 kiloms. an hour, and offers to bet \$20,000 that he can drive it 100 kilom. in sixty minutes. The bet will likely be taken up by sporting men, and Jenatzy will risk this tremendous stake, as well as his life, on the result. The car would have to carry about two and a half tons of batteries, and this enormous weight added to the friction in flying over the