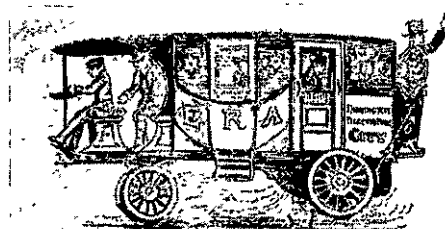


wheel base, and appearance—all these things are in the sealed book to which no man ever will have access. Enough that England led the way in motoring. It is a barren honour, for to France belongs the credit of the development which has become the leading mechanical feature of the twentieth century. The best the patriotic Englishman can say of the matter is that four centuries ago we were leading, whereas now we are not very far behind.

France came to the front a hundred and fifty years later, when, in the year 1770, M. Cugnot astonished Paris by running a three-wheeled vehicle by steam, carrying two people—probably owner and chauffeur. He maintained the giddy rate of two miles an hour. Whether this was the reason why the enterprise was not heard of more, or whether the French Revolution, coming soon after, prevented any other kind of revolution, history has not recorded.

In the year after Montgolfier's first balloon a Cornishman endeavoured seriously to deprive the French of the lead. Mr. Murdoch built a model for use on the Cornish roads, and as the model never got any "forrader" we may presume that the state of the Cornish roads proved a fatal bar. At any rate the attempt appears to have been taken seriously, for this model was sought out years afterwards by the famous Mr. Tangye when he elected to become motorist, and preserved with care in his collection. An agitation is now on foot for placing the same in some museum of antiquities alongside of defunct pioneers of the railway and tramway services. Mr. Trevethick followed later with a machine which he launched on those same Cornwall roads at a speed of ten miles. Mr. Tangye had secured a model of this pioneer also before his death. The horseless began from that time to make progress in the land of its first adoption, and France was not heard of in the running for some time. In 1823 Gurney—Sir Goldsworthy Gurney—brought out the wonderful carriage of which we have the illustration on the last page. It ran to Bath and back sundry trips, and it attained



HANKOCK'S 'BUS, LONDON, 1834.

to a speed of 15 miles an hour. There is a tradition that the Wellers of the period denounced the creature as not only an interference with their privileges, but as dangerous to the lives and limbs of the sacred public; which, if it was at all like its illustration, we have no doubt it was. It ran, however, a long time between Bath and Cheltenham. Later on Messrs. Macaroni and Squire ran a steam 'bus between London and Paddington. It was a carriage of compact type, it carried a multitubular boiler with a fan draught, and was altogether a rather imposing affair. In 1829 the James Anderson steam coach appeared on the Brighton road to the further astonishment of the disgusted Wellers of the period. The illustration gives it a most respectable appearance, setting off its orthodoxy as a mail coach of the ruling pattern. As for the stoker, or chauffeur, we should say that nothing less than a Royal Commission could find any clue of his whereabouts on the craft. This throws a doubt on the correctness of the likeness. As to the artistic success of the picture there can be but one opinion.

All these gorgeous visions were doomed to be swept away by the railway era. England had made up its mind to lead the world with the iron horse, and everything horseless not allied with his equine majesty of iron had to go. The story of how it was shoved out of the way in a free country is one of the most instructive chapters in history. Perhaps the nature of some of the patents applied for may account in part for the public rage against the whole body of the horseless. One of these inventors, for example, took out a patent for a pair of iron poles to propel his machine somewhat in the style of a man walking. It must have looked like a pile driver "on the spree": no wonder the good folk were alarmed. Be that as it may, a long series of persecutions by by-law and statute set in, culminating in 1836 in a law restricting the dimensions of the boilers of these motors out of all possible usefulness. The great engineer who had cowed opposition to the iron horse with his celebrated retort about "so much the worse for the coo," put on his best frown before a Committee of the House of Lords and gave forth the oracular

verdict "that steam carriages would never do at all on roads." To say that steam was worth anything anywhere off the iron road made for that power by the greatest of engineers was thought worse than burglary. The Committee lost no time in recommending the world to have nothing to do with the steam motor, which was not only a danger to itself, but an awful incentive to rash and speculative persons to run themselves and their too confiding friends. The motor of the street thus fell before the rush of the railway companies. The concentrative Briton looks only at one thing at a time. And considering the wonderful success he made of the railways on which he then concentrated his efforts, there is not much reason for finding too much fault with him.

Nevertheless the sacred flame which was later on to find such sparkling vent, through the ignitions of a more appreciative and successful era, was by no means allowed to die out. On the contrary, it was made to illumine the whole Victorian period with a fitful and surreptitious light. Of those who kept that spark alive the most notable was Rickett of Stafford, who turned out in good order and condition a road steamer of 1½ tons weight, and soon after supplied one of 5 tons to the order of the Marquis of Stafford. In 1861 Garrett and Mitchell of Leeds (enterprising city) built one of nearly 7 tons for Sir Titus Salt of Saltair, better known as a weaver of alpaca than as a successful motor proprietor. Still he was bitten with the motor fury, and he spent his money like a man and a millionaire. But the combined terrors of the new system and of the laws and by-laws of the United Kingdom, to say nothing of the police traps of the period, were too much for the man of alpaca, and the machine passed by purchase into the hands of that gay young spark Mr. Frederick Hodges, well known in the later fifties as the wealthy proprietor of a famous London distillery, and one of the brightest and fastest of the practical jokers of that practical joking age of which Sothorn and Toole were the leading lights. This young gentleman took his new purchase out for many a tour through Kent and the southern counties, and made the pace hot for police and peasant and local governing body with equal impartiality. But he did not foster any business capacity of the motor race.

Tangye made a success in 1862 with a vehicle which he drove at a speed of 20 miles an hour, but the fates were not propitious and it went the way of the rest, to the scrap heap or the museum, probably the latter in his case.

The pneumatic tyre was not unknown in those days, having been invented by W. Thomson in 1845, but it wanted the modern developments with which our age is more familiar. Of these the pneumatic came in 1885, after 40 years of solid. The latter inventor was successful as a designer of horseless 'buses, of which he supplied a large number to the order of the Indian Government. They were constructed by Ransome and Sims, they were of 14 h.p., they worked regularly up to 14 miles an hour, their tyres were protected by linked steel shoes, and they regularly carried up to 65 passengers. It is always true that an inventor has more honour in other countries than in his own.

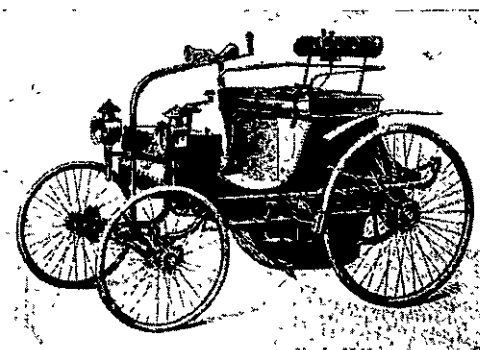
During these years the traction engine had come to stay, but that is another story, except inasmuch as it doubled the persecutions of the motor proprietors. In the same period the law kept pace with numbers of discouraging enactments. The motor inventors also moved along, but the honours were with the men on the other side of the Channel.

#### DEVELOPMENT.

Regarding this portion of the story it is now generally accepted that the modern revival of the motor-car movement dates from 1885. In that year two horseless carriages made their appearance from the designs of Daimler of Deutz (near Cologne) and Benz of Mannheim. There was also a motor by Mr. E. Butler shown in the Exhibition of 1885. All these were of the tricycle order, belt-driven, and all carried limited supplies of fuel, up to some twenty miles only. The Butler type does not appear to have got much further. Benz's developed first into the well-known dog-cart form of which 4000 were sold in England after their introduction by Mr. H. Hewetson into that country. Daimler's developed at once into the four-wheeler, which proved the forerunner of the numerous types of the present day. We give an illustration of the same as the presentment of the first of the modern series, the root from which the motor world has developed to its present tremendous and growing ramifications. These developments followed each other with startling rapidity, the French makers leading in all lines, encouraged by a public which took to the sport with the national verve. The names of Peugeot, Serpollet, Roger, De Dion, Bouton, Panhard, Mayard, Levassor and others jostling one another in the race for fame and profit with startling frequency. It was the greatest rush of invention the world had ever seen in any one direction.

The newspapers were friendly; the instinct of journalism keeping as usual ahead of public opinion by just a nose. In 1893 the *Petit Journal*, the famous paper with the small name and the enormous circulation, announced its now famous Paris-Rouen race, which took place in July, 1894, and in which forty-seven vehicles started. The first to reach Rouen was the De Dion Bouton steam tractor which covered the 97½ miles at an average speed of 12 miles per hour. Five minutes after the steamer came a Peugeot carriage fitted with a 3½-h.p. Daimler-Panhard engine and solid rubber tyres, then a second Peugeot, and later a Panhard car which had wooden wheels and iron tyres. The first prize was divided between the Panhard and the Peugeot; the De Dion steamer secured the second, and a Serpollet steam car the third prize. The great event of the following year, 1895, was the race from Paris to Bordeaux and back, a distance of 750 miles. Sixteen petrol and seven steam vehicles started in the race, and eight petrol and one steam cars arrived back in Paris, the first being M. Levassor on a 4-h.p. Panhard, his time being 48 hours 12 min. However the first prize was given to a Peugeot car, which arrived shortly afterwards, as the Peugeot was carrying four passengers, whereas M. Levassor's car carried only two. This event was notable as being the first occasion of the appearance of pneumatic tyres in connection with long-distance motor-travelling. The Paris-Marseilles-Paris race was the feature of the year 1896 in France. The contest was run off in September in five stages, the distance being 1076 miles. Of the thirty-two vehicles which started twenty-four were propelled by petrol, three by steam, and five were motor-tricycles. M. Bollee, on his voiturette, astounded the world by completing the first stage at an average speed of twenty miles an hour.

Although it was not until November, 1896, that the motor-car became a legal form of conveyance



THE FIRST DAIMLER.

in Great Britain, reports of the great progress which had been made in self-propelled vehicles on the Continent had, of course, reached this country, and, in fact, specimens of the cars had also been brought over, the first one being a Benz, which Mr. H. Hewetson received from Germany in November, 1894. The first public display was at the Agricultural Show at Turnbridge Wells in October, 1895. It was organised by Sir David Salomons, Bart., who had long been interested in the subject, having built an electrically propelled tricycle in 1874-75. The machines exhibited included this gentleman's Peugeot 3½-h.p. *vis-à-vis*, which weighed 13 cwt., and could attain a maximum speed of about fifteen miles per hour on the level; the Hon. Evelyn Ellis's Panhard-Levassor car of the Paris-Bordeaux type, a De Dion-Bouton motor-tricycle, and a De Dion-Bouton steam tractor. The year 1896 was extremely fruitful as regards automobile exhibitions, all of which played a prominent part in "releasing the motor-car from the tyranny of the red flag." In May of that year an exhibition of motor-cars was held at the Imperial Institute, London, and at a special reception to members of the House of Lords and the House of Commons Mr. Evelyn Ellis had the honour of driving the Prince of Wales (now his Majesty the King) on his Panhard car in the galleries and gardens of the Institute. The show was organised by the Motor-Car Club, of which Mr. Harry J. Lawson was the chairman, and among the exhibits was a Bollee voiturette, two Benz cars, the Lutzman car belonging to Mr. H. Koozens, of Southsea, a Roger car (a French copy of the Benz) several Hildebrandt-Wolffmüller motor-bicycles which, according to one who rode them, had practically only two speeds, "one was *ml* and the other twenty miles an hour"—two 4-h.p. German Daimlers, and two Peugeot cars with Daimler motors, a motor tandem bicycle built on the Kane-Pennington system, two De Dion motor-tricycles, an electrical vehicle built in accordance with the Bersey patents by the Universal Electrical Carriage Com-