

the Council installed electric traction (1913), the Lancashire and Yorkshire Railway inaugurated an electric train service from Bury to Holcombe Brook (which survived until 1951). This was a sure indication of how important this mode of transport was then regarded.

In the summer of 1922 Railless Limited of Moorgate Street, London, E.C. demonstrated a new type of single motor railless car at Dover. The car had just been completed for Ramsbottom. It was brought to Dover for inspection and tested on very steep gradients, including a 1 in 10 stretch. The demonstration made a great impression on Mr. E. H. Bond, the Manager of the Dover Corporation Tramways, who declared himself to be in favour of replacing the town's tramways by this form of traction—this suggestion as early as 1922. Track renewals were heavy and it appeared, at the time, that Dover would adopt the trolleybus. This straw did not indicate the direction of the wind, however, and the trams succumbed to East Kent buses in 1937.

In Bolton, trials were carried out pre-1914 with both petrol and steam buses. Services commenced in 1908 to Darcy Lever and Brownlow Fold, operation continuing until the tramways were opened on these sections in 1910 and 1911. Bolton's second and more successful attempt was in 1923 with three Leylands. Rawtenstall ran buses as early as 1907, when an Orion, 'The Rossendale', was put on the road. This was followed by Ryknields the next year. Like Bolton, however, these early efforts were failures. Rawtenstall had to wait until 1924 before bus operation began in earnest. It was no surprise, therefore, when Ramsbottom's first buses, Thornycrofts, entered service in 1923. Five years later Leylands, the subsequent mainstay of the fleet, came onto the scene. By now it was evident that the days of the trolleybus in Ramsbottom were numbered; the solid-tyred vehicles must have contrasted strongly with the recently acquired, and more modern looking buses. In addition to this, the system was running down. So on 31st March, 1931, the town said farewell to the small venture in electric traction. The poles remained in place for some years afterwards and to trace the route, even if one did not, in fact, have any knowledge of the former system was not difficult. The bus fleet increased as the years went by and in 1947 double-deckers were introduced.

Had Ramsbottom's tramway plans materialised the route would have been from Holcombe Brook to Edenfield (as the trolleybus one), but the tramway plans included Rawtenstall. The gauge was to have been 4 ft. 8½ in. Bury, where electric tramways were constructed during 1903-04, had proposals for extensions to Holcombe Brook and Stubbins as well as to Rawtenstall via Edenfield. The aforementioned would have affected Ramsbottom and, as the Bury gauge was also 4 ft. 8½ in., through running would have been possible.

Now a little about the system itself. The fleet consisted of seven R.T. vehicles. Details exist of Nos. 1 to 6. The cars had six windows and an open platform at the rear. The words 'Ramsbottom Urban District Council' appeared on the lower panels. The maximum weight, when loaded, was five tons. The trolleys permitted a radius of 16 ft. from the centre of the trolley wire. The seating capacity was 28 and transverse seats were used. The cars had direct chain drives, each with two 20 H.P. motors and series parallel controllers. Electrical equipment was by Siemens and the bodies were built by Lockwood and Clarkson of Leeds. The vehicles were of a special composite construction. 'Garcke' for 1928 states that all seven cars had two

motors, but the last one No. 7 (already mentioned) appears to have been a single motor car. Messrs. Clough Smith erected the overhead which was of the tramway type, the poles being of bracket arm construction. Overhead junction work of the E.M.B. type was designed and manufactured by Electro-Mechanical Brake Company. The power was at 10,000 volts, transformed at the substation to line voltage of 500 and supplied eventually by the Lancashire Electric Power Company.

The proposal for a free trial of a Cedes-Stoll vehicle in Ramsbottom in 1913 came from the Council and this must have been the case with several municipalities at that time—always ready to obtain better rolling stock and equipment for the system, ears always tuned to any new development.

In the late summer of 1938, whilst on the way to Bury, the writer encountered the remnants of the Ramsbottom trolleybus system, seven years after its demise. The poles were indeed very similar to tramway ones. As a matter of fact Edenfield-Holcombe Brook could well have been taken for an abandoned tramway route. The poles themselves were on the heavy side with lamps suspended from the brackets. The colour was dark olive and the appearance was not too pleasing on the eye. That was all that remained of an Urban District Council's pioneering efforts in the field of trolleybus operation a quarter of a century earlier.

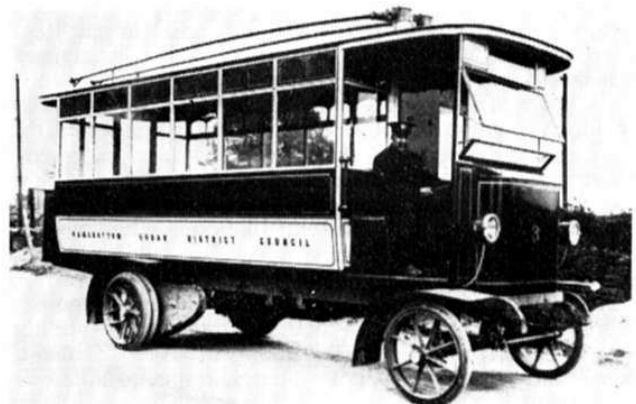
Most of the early trolleybus systems did not last the distance—Dundee closed in 1914, Stockport in 1919, Keighley's first routes in 1921 and Aberdare in 1925. Ramsbottom was, so to speak, the last of the lights to go out. Various factors, such as difficulties in obtaining replacements and the ever developing motorbus, contributed to the downfall of the early trolleybus pioneers. It seems that, in the early days, the trolleybus held great promise. What might have been a boon to municipal transport never really 'arrived'. In view of the fact that trolleybuses in the pioneering era had a future less certain than that of the tram, Ramsbottom certainly took a courageous step in adopting this form of transport.

#### Acknowledgement

The writer wishes to express his thanks to the Librarian of the Institution of Electrical Engineers for the use of the library facilities. Amongst these were the bound volumes of both 'The Tramway and Railway World' and 'The Tramway and Light Railway Journal' for the year 1913.

Certain details on Ramsbottom have also been taken from the excellent publication 'Great British Tramway Networks' by W. H. Bett and J. C. Gillham.

In addition I send my sincere good wishes to Miss U. B. Murphy, B.A. A.L.A. of Ramsbottom Public Library for kindly providing me with points of information contained in the captions.



(Right), Here can be seen the influence of the tramcar in the early trolleybus designs.