

The rolling stock which was in use when electric trams commenced to operate during 1905 consisted of electric motor cars, steam trail cars and horse and steam stock, but as electric trams gradually took over their duties the steam (motors) were gradually placed out of service, whilst their trail cars were then utilised as electric trail cars and were renumbered for this purpose, and are mentioned later on in this article.

In the early days of electric traction there were many types of vehicles, which during their life had been altered, so that by 1948 four distinct types generally remained in traffic and they are as follows:-

- " T Y P E S " -

- (1). Four-wheel, single truck, end loading saloon type cars.
- (2). Eight-wheel maximum traction bogie, two compartment cars. Originally the larger cross seated section was open, or convertible by means of steel shutters and windows sliding up under the roof. All cars of this type are now run as centre and end loading cars. These cars are equipped with air slipper brakes in addition to the usual wheel brakes, air and hand operated, and were built for the Graham's Hill route.
- (3). The centre entrance drop centre maximum traction bogie cars, placed in service with two end saloons and a central drop centre with open cross seats through which entrance was gained into and out of the car. This design of car being popular in Adelaide, Melbourne and Brisbane, whilst Wellington and Dunedin also designed trams on this style of body. However to suit Christchurch conditions the open cross seat portion has been enclosed leaving a central doorway for entrance into the car.
- (4). Bogie end loading saloon cars with transverse seating arrangement following a more typical design of tram, being originally double ended and having separate driving compartments, but are now single ended and have no bulkheads at all.

- " D E S C R I P T I O N " -

Numbers. 1 to 5. Were originally four wheel combination centre saloon and end open cross seat cars (California) type, longitudinal face inwards seats fitted into the saloon and seated all told 36 passengers, and with clerestory roofs. These cars have been converted into end loading saloon cars with longitudinal seats accommodating 28 sitting passengers. They were built by John Stephenson of New York, and placed in service during 1905, being mounted on a Peckham 35 inch diameter 4 wheel truck powered by two 25 H.P. G.E. 54 type motors and weight complete being 19 tons.

No. 1 was converted into a trail car during 1944.
 No. 2 became a staff lunch car in 1946.
 No. 3 is now out of service and awaits dismantling.
 No. 4 being used as an advertising car.
 No. 5 is now out of service and awaits breaking up.

Numbers. 6 to 9. Conforming to the No. 2 type originally with a central open section with cross seats, and longitudinal inside the end saloons seating 44. With the centre aisle necessitated by the "Davey Clause" of 1911, they now seat 40. Built by Beon Bros, of Christchurch in 1906 with clerestory roofs, being mounted on Peckham 33" diameter maximum traction bogies, powered by two 40 H.P. G.E. 67 motors, weighing in roadworthy condition 15 tons.

Numbers. 11 to 20. These cars now conform to the second type of car mentioned above. Originally placed into service as half saloon and half open cross seat type cars seating 49 passengers. The open cross seat portion has been closed in leaving a centre side entrance as well as end entrances. Built by Brill and Co, with clerestory roofs, mounted on maximum traction bogies and were placed into service during 1906. Their motor power, braking equipment and weights vary.

No. 11; 12; 15 and 17. Have 2-50 H.P. G.E. 203 motors, with Air-wheel, Hand-wheel, Air slipper brakes and weigh 14 tons.

Numbers.

21 to 23. Of the new No.1 type, i.e. End loading saloon cars. Originally built as four wheel combination (California) type with Clerestory roofs by John Stephenson of New York and placed into service during 1905-1906, but since altered. Having 4.33" diameter wheels and mounted on a Peckham truck, with 2.55 hp. G.E. type motors and weigh 10 tons. Cars Numbers 21 and 22 are fitted up for coupled set operation.

Numbers.

24 to 26. Originally placed into service as Double deck cars, enclosed and loading saloon on lower deck with longitudinal seating for 32 people, the open top deck seating 44 on transverse seats. They were placed in service during 1905, powered with 2.55 hp. motors, and mounted on Peckham M.T. bogies. Until about 1917, they ran the entire Sumner service, but were slow in loading. An accident that year caused their withdrawal, being converted into single deck four wheel trail cars and re-numbered as 143, 144 and 145. Their former numbers then being allotted to the present 2nd type of cars, i.e. 162-171 type.

Number.

30. This car was unique in so far as New Zealand tramways are concerned, as it was built as a Combination Baggage and passenger car, being of the end loading saloon type with longitudinal seats for 44 passengers. Had Clerestory roof, 11 side windows, mounted on a Peckham 35" diameter M.T. Bogie powered by 2.67 h.p. G.E. motors and weighed 14 tons. Its final use was that of a Bicycle car for staff, running between Cathedral Square and Moorhouse Avenue depots. In 1946 and 1947 and old steam trailer No.103 was altered to carry Bicycles and was hauled along by No. 30. No. 30 was broken up in July 1947.

Numbers.

31 to 33. Of the New No.1 type. Originally built as four wheel combination (California) type with Clerestory roofs by John Stephenson of New York, and placed into service during 1905-1906, but since altered and otherwise similar to the earlier cars of this type. They were all fitted up for coupled set operation, but are now used for training new drivers.

Numbers.

36 - 37. Originally placed in service as stated for the New 3rd type of car in use during 1906, and have since been altered to conform with the above-mentioned type of car.

Numbers.

150-161. Similar generally to the new 3rd type of car both in original and converted conditions except that back to back cross seats were installed in the end saloons instead of longitudinal seats, seating accommodation before a centre aisle was cut though the drop centre was 32 but now seating only 48 passengers.

Numbers.

162-171. Of the Number 2 type of car, being used exclusively on the Cashmere Hills, and Paparua routes, being equipped with air clipper brakes and have arch or oval type roofs. The original open cross seat section has since been enclosed in with the exception of two panels at either end. The running boards are removed, except under these two panels. They have always seated 44 passengers. Boon Bros. were their builders, Numbers 162 to 171 during 1912, and 24 to 26 during 1917. Weight 15 tons. Mounted on Peckham M.T. Bogies. Motors in Nos. 162 to 169 are Two G.E. 202-50 h.p and in 170 and 171 Two G.E. 203, 50 h.p. Nos. 162 to 169 were rebuilt in 1944 and 1945 with longer end platforms and sloping end windows giving a wider doorway and reflection protection for drivers.

Numbers.

172-196. These are of the 4th type, and being a larger type of car with oval roof of the end loading saloon type with 12 side windows, being mounted on equal wheel four motored bogies and designed for multiple-unit operation, jumper cables being fitted for such operation between cars. They are capable of speeds up to 35 m.p.h. when running single or as coupled sets without trailers. They run regularly as coupled sets on both the Sumner and Riccarton routes until 1933. The Sumner Express of those days consisted of Two such cars hauling two trailer cars and must have been an impressive sight rolling over the causeway even more perhaps whilst rounding its way around Cathedral Square. Originally 48 seats were provided, but they now seat 32 which has been gained by adding seats in the rear platform. The window arrangement is similar to the once popular American scenic convertible type in that they can be raised up into the roof. With the exception of 195 - 196 by (G.I.S.) shops they were built by Boon Bros and placed in service between 1902 and 1906 and mounted on Brill 26" diameter equal wheel bogies with 4.40 h.p. G.E. 247a type motors and weight is 17 tons. 145

Numbers. They were the first one man tyre cars to operate in Christchurch, being
203-205. originally placed into service during 1921 and constructed by Boon as Brill Radial axel 4 wheel end loading saloon cars with oval roof and 6 side windows. In 1927 they were rebuilt into one man type motor cars, still as 4 wheel type with 30" diameter wheels with 2-42 h.p. G.E.247 type motors, and fitted as originally with cross seats with a centre aisle and as such were placed into service on the St-Martins line. Two trolley poles was a unique feature for these 4 wheel cars. Their weight in running order amounting to 7.5 tons. In 1945 No.203 had its seats and doors removed when it was then used as the Bicycle cars No. 203 went back into service as a trail car, and No.204 out of traffic.

All cars are painted in green and cream in a pattern of which individual panelling and window frames have been picked out in these two colours varying in style according to the body design of each car. Westinghouse straight-air brakes and hand wheel brakes are fitted to all cars, whilst with the exception of the older four wheel cars and N.T.Rogie cars Nos. 11 to 20, fitted with one trolley pole only, the remainder carry two trolley poles being of the fixed head type.

-"TRAIL CARS (Converted from Steam) Newly CONSTRUCTED."

- Numbers. A centre entrance bogie double deck trailer constructed by ~~splicing~~
51. ~~top~~ former steam tram trailers together during 1905. Year of withdrawal is not known, but its body and trucks were seen in 1938.
- Numbers. Were five open trailers, single deck, and single truck, back to back
103-109. seats, longitudinal type, with undergear similar to steam trail stock, from which these cars may have been converted from.
- Numbers. Originally built as enclosed cross seat cars (Palace Type on the same
110-115. principle as the English side door compartment carriages). They have been converted into an end loading saloon type of car now seating 28 of cross seats through which a centre aisle runs. No.110 has a Peckham four-wheel truck whilst the remainder have ordinary steam trail type of undergear.
- Numbers. These cars are as long as the N.T.bogie motor cars and mounted on a
124-125. 4 wheel radial axel truck and originally placed into service with oval type roof and of the convertible open cross seat type cars placed in service during 1916 being built by Boon Bros. They have since been converted into end loading saloon type of cars seating 40 passengers, and the long running board along each side of the car has been cut away leaving only sufficient length of it where entrance is made into each end of the car. They have always been used as trail cars.
- Numbers. Transverse or cross seat, end loading, centre aisle saloon, Brill,
124 ; 125. four-wheel radial axel, oval roof type of car placed into service between 1917 and 1921, and were built by Boon Bros. Excepting Nos. 203, 146-149. 204 and 205 which were converted into Motor cars they have remained as originally placed into service.
- Numbers. These are Brill Radial four wheel axel trailcars, with a flat roof,
143-145. 6 side windows, with fascia windows on top, and are end loading saloon, with longitudinal seating for 32 persons. They were originally built as the bogie double deck cars Nos. 24 to 26 and were altered into trail cars after 1917.
- Numbers. Are convertible bogie trail cars with cross seats for 44 passengers.
116-123. They are now operated as end and centre entrance saloon type cars with that portion of the running board removed not needed for entrance into the car. They have oval or arched type roofs with internal bearing type bogie trucks, and built during 1917 and 1921.

-"SERVICE STOCK"

- No. 1. Work car which is a 2,000 gallon track cleaning and water sprinkler, built in America and is still in service.
- Nos 2-3. These were Bogie type 5,000 gallon cras with four 55 hp motors, and sprinkled and cleaned tracks until 1926, also being used as snow plough trams until 1950. They were also built in America in 1906 and had Peckham equal wheel bogies.

No. 25. A former passenger car converted into track cleaning car and in use.

No. 205. Originally of the 124 type later as a motor car and is now the the Bicycle car in place of bogie No. 30.

Line Car. This is a four wheel vehicle electrically driven with two trolley poles had hand brakes only. An overhead wire maintenance tower mounted centrally over the car, with a storage compartment at one end of the car. Its one 55 h.p. motor was suspended in the four wheel truck, which C.T.B. constructed for this purpose. Now out of service.

Of the rolling stock just dealt with there have been no records obtained dealing with electric cars which carried the numbers 10, and from 27 to 29, but it is quite possible that these numbers were in use on former steam trail cars which have long since been placed out of service and not replaced with electric rolling stock.