

## THE TRAMWAYS OF BENDIGO.

Bendigo is the fourth largest urban area in Victoria. The population of the residential area is approximately 40,<sup>3</sup>000 people, and includes the City of Bendigo (30,190 in 1961), the Borough of Eaglehawk (~~approximately 5,200~~ <sup>4,930</sup>) and Kangaroo Flat (portion of the Shire of Marong) and the western edge of the Strathfieldsaye Shire. Gold was discovered in the area in 1851, and the usual "rush" followed. The Municipality of Sandhurst was proclaimed in 1855 and was declared a city in 1871. Although 25,000 were estimated to be in the area one year after gold was found, the population was 28,700 in 1881, and has seen little increase since (most of the additional people settling beyond the actual Municipal boundary). Subsequent to a poll of ratepayers, the name was changed to Bendigo in 1891.

The twin communities of Sandhurst and Eaglehawk were relatively early in considering the possibilities of operating street tramways within their boundaries. Various proposals were made from 1887, usually offering horse, cable and electricity as the motive power. At this period, the street transport/~~was~~ <sup>available</sup> was by horse-drawn cabs, and appears to have been reasonably well organised (under licence from the local Councils). It was quite a large/industry, with at least 111 cabs on regular routes and 32 on Hackney carriage stands. Some 220 horses (valued at about £3,000) were used, and the cabs cost between £30 and £100 each (total value about £6,000). Approximately £10,000 was spent per year to feed and shoe the horses, and road maintenance charges were estimated at about £2,000 per year. The Councils had to keep the foregoing facts in mind when considering tramway offers from "Melbourne capitalists". The Councils of Sandhurst and Eaglehawk formed themselves into a "Tramway Conference" to discuss the building of a tramway from the Sandhurst railway station to Eaglehawk, and later included the Council of the Shire of Marong when the proposals were extended to include another route running from Kangaroo Flat to White Hills. After many offers, much discussion, legal problems and residents petitions, a tender was finally accepted for the construction of the tramway (in single track, mainly, with passing loops), to be operated by electric battery powered tramcars.

The materials were ordered in 1889 by the successful Company, and local construction commenced. Due to a tramway "boom" in England, and industrial troubles, the plant, equipment and tramcars were very late in arriving, and it was not until 10th. April, 1890, that the first trial trip could be run. It was not really successful, and the car had to be modified, as was the case with the remaining seven cars. The Sandhurst and Eaglehawk Electric Tramways Company Ltd. carried its first official passengers on 14th. June, and gradually extended towards Eaglehawk, as additional trams were commissioned, which point was reached by late July. However, the tramcars



proved unequal to the task of climbing the several hills along the route, and failures were numerous. The service was withdrawn on 23rd. September, 1890, after some 13 weeks of operation. Subsequent recriminations at Shareholders Meetings showed that no Manufacturer would accept a contract which included "penalty" clauses, the cars were not tested <sup>properly before</sup> ~~being~~ being shipped from England, the ~~main~~ wiring was too light, and the motors and accumulators were not sufficiently advanced, technically, to operate under the local conditions. The Company tried to raise additional capital to convert to the overhead trolley wire system, but failed, and subsequently sold out to the Bendigo Tramway Company Ltd. in 1891, with the shareholders losing practically all of the £44,000 subscribed capital. ~~Electric Supply Company of Victoria Ltd. during the~~

The new Company ordered five small steam locomotives (called steam tram motors) from the Baldwin works in U. S. A., and converted the four wheel battery trams to bogie cars to be towed by the motors. The service opened on 1st. February, 1892, and proved an immediate success. Additional cars were ordered locally, and three more motors from the Phoenix Foundry, Ballarat. Unfortunately, the depression of the 1890's was soon to hand, and the number of passengers dropped considerably. At the same time, maintenance of the motors was heavier than expected, and the track began to deteriorate quickly, resulting in much unexpected heavy maintenance and relaying. The Company spent most of its life "off dividend", and was unable to build the second route from Kangaroo Flat to White Hills. Efforts were made from 1895 to sell out, but did not succeed until 1899. The Electric Supply Company of Victoria Ltd., an English firm, purchased the steam trams and the small local electricity company with the intention of converting the former to electric trams and greatly expanding the latter. The steam tramway was now mostly double track (described as being in "fair condition"), and was served by eight motors, eight bogie trailers and eight four-wheel trailers.

A completely new track was laid for the electric trams, being mostly single (with passing loops) between the Bendigo railway station and Eaglehawk. Twelve trams were ordered, being four-wheel combination (centre ~~main~~ saloon and open ends) cars. The steam tram trailers were retained as trailers to the electric trams, and at least three were soon ~~used~~ used to build four more electric trams. The new service commenced on 15th. April, 1903, with trials having been run ~~since~~ since 8th. The Company soon constructed additional routes to Quarry Hill, Lake Weeroona and Golden Square, but trams have never <sup>run to</sup> Kangaroo Flat or White Hills. In September, 1905, <sup>five</sup> ~~six~~ double deck horse trams were received from Ballarat for use as trailers, and the heavier ex-steam cars became disused but were not finally scrapped until about 1913. (The same Company had ~~just~~ electrified the horse tramways in Ballarat in August, 1905).



The ex-horse trams continued in use until November, 1925, when they were withdrawn and scrapped. Two new electric trams were built in 1913, being four-wheel "summer" cars (cross seats with tip-over backs, and no side panels). They were built with windshields (to protect the motorman during inclement weather), and the other cars were so fitted by about 1920. The year 1913 also saw six of the original trams converted to permit one-man operation on the Lake Weeroona to Golden Square route.

The State Electricity Commission of Victoria was created by Act of Parliament to be the main electricity supply authority for Victoria, and was vested with power to generate same or to purchase existing electricity supply companies. Negotiations were carried out with the Electric Supply Company of Victoria Ltd. during the late 1920's, and it was agreed that the S. E. C. should purchase the Company from 1st. July, 1931. However, to work in with the S. E. C.'s. overall plan, the Company's franchise was extended to 30th. June, 1934, with this additional period being under S. E. C. supervision. During the early 1930's, nine of the original tramcars were scrapped and replaced by surplus four-wheel combination cars from Melbourne, which latter group was supplemented by a ~~number~~ further five similar cars (14 in all). Subsequently, six ex-Melbourne and one <sup>of the</sup> original trams were converted for one-man use to replace original one-man cars which were scrapped. The track and overhead was by now in a generally worn condition, and the S. E. C. ~~undertook~~ undertook a rehabilitation programme during 1934-35, in conjunction with unemployment relief (from the depression). The system was thus thoroughly ~~maintained~~ overhauled and placed in good condition. The only extension (since 1903/4) was from Lake Weeroona to North Bendigo, to serve the Commonwealth Ordnance Factory, and was opened on 23rd. November, 1942.

The post-war era saw further rolling stock changes. The S. E. C. agreed to a Union request that the six remaining original electric tramcars should be scrapped, and it was decided to replace them with six "Birney" type (saloon) cars from Geelong (also operated by the S. E. C.). The former were withdrawn during 1947 and the latter ~~Six~~ Four arrived between 1947 and 1949. ~~Some~~ maximum traction bogie cars were bought from Melbourne in 1945 and 1947, with two more in 1952. When the Geelong tramways were closed in 1958, five more maximum traction cars went to Bendigo, making a total of eleven of these units at Bendigo. Several of the ex-Melbourne single truck trams were thus able to be scrapped during the early 1950's., with only five remaining (all one-man cars). In 1960, it was decided that one bogie car should be sent from Bendigo to Ballarat and two single truck cars sent from Ballarat to Bendigo, in order that the rolling stock position in each city should be rationalised. The increasing use of private motor cars in the 1950's caused not only a decline in passengers, but an increase



in the number of accidents between motor cars and trams, particularly at night. The S. E. C. has equipped its trams with tail lights, reflector tape, ~~and~~ diagonal painted lines on bumpers and fascias, and brilliant canopy lighting over the years in an effort to make the trams more visible. This has been partly successful, but casualties have been a steady problem, and have included four of the "Birney" trams - of which two have been written off as too badly damaged to be repaired under the circumstances. The present rolling stock position is, therefore, ten bogie trams, seven single truck ~~trams~~ trams, four "Birney" trams, and one cleaner car. The latter was converted from one of the 1913 "Summer" cars in 1953, and replaced an earlier type car.

The years 1964/65 have seen two major bridge rebuilding projects undertaken in Bendigo which have affected the tramways. The Nolan Street bridge on the North Bendigo extension was replaced by a new structure during the middle of 1964, with very little interruption to the tramway service. Subsequently, the Golden Square and Eaglehawk routes have been directly involved in the replacement of the old structure at Charing Cross. This work has been carried out in three stages and was more complex, being a triple unit bridge of considerable length through the wide space around the Alexandra Fountain. There has been very little alteration to the track layout of the electric trams since 1905, but about one-third of the changes/~~was~~ <sup>have</sup> taken place in connection with these bridge works. Although the S. E. C. has always felt that it should not have to operate tramways (being the electricity supply authority), it has done so since Parliament so provided in 1929. The system has been kept in a good serviceable condition, although the steadily increasing annual deficit has always dictated that a minimum amount of money be spent. The S. E. C. endeavoured to close the Golden Square route (traversed by the privately operated Kangaroo Flat bus route) in ~~the~~ July, 1955, but did not succeed. In February, 1962, the Commission notified that it would petition Parliament to abandon the whole system, but this did not come to fruition. The current position is that the S. E. C. continues to operate the Bendigo tramways, and apparently will do so for an indefinite period. Track maintenance continues and rolling stock is being steadily overhauled and returned to service in an attractive interior colour scheme. It would thus appear that electric tramways will serve Bendigo for some years yet. The year 1965 sees the 75th. anniversary of the battery trams, whilst it is 62 years since the electric trams commenced their unbroken service. At present, there are 8.64 miles of route, comprising 2.43 miles of double track and 6.21 miles of single track.