

Goldsworth, who very soon relinquished the lease which was then taken up in September 1901 for a seven year period by a Mr. S. I. Dorum.

From 1908 until 30th June 1916, Messrs. Meakin and Thomas leased it. After their lease expired the council then took over and opened it as a municipal tramway until 1st February 1920, when it was put under the control of the Melbourne and Metropolitan Tramway Board. With the usual amendments to the plant, the engine house ceased operations on the 26th October 1940 - the same time as the closing of the Nicholson Street Engine House.

Today the Engine House (and its adjacent car barn) is standing intact, still under the ownership of the Melbourne and Metropolitan Tramway Board. Its main changes as can be seen in the photograph, are from the advertisements "plastered all over it".

The following plan is quite different from the rest, because intergrated with the Engine House, was the car barn. Although the car barn was next to Engine Houses in two other instances, it was not included in the design like Northcote's.

*Picture of  
motor body repairs*



At the beginning of the thesis, it was shown how the plan of an Engine House took on its standard form. This was clearly a case where form followed function. Although there is no reliable source of information as to who actually conceived the buildings architecture, it is positively known that a prominent engineer of the day, Mr. George Duncan, designed their layout. As previously indicated, Mr. Duncan travelled overseas to learn the latest developments on cable tramways prior to their inauguration in Melbourne in 1885.

Engine Houses, therefore, were initially more the result of an engineer than an architect. The engineer drew up the layout for the necessary machinery, and then erected four walls and a roof over it for protection. Obviously there was no architectural pre-conceived idea as to the form an Engine House should take.

But on closer observation, it can be seen that the Engine Houses were not merely "thrown together" to protect the machinery as perhaps I have just suggested. In fact, even though their form was only a rectangular box, their appearance was given considerable attention. As Boyd would put it, the walls were "not flat plates", and unadorned. Instead, they constituted a real architecture, depicting from the outside as to the nature of the Engine House inside. This therefore means that the architect did have a real part to play in formulating their appearance. In my view, I definitely think they did, for as I shall illustrate, Engine Houses had a certain architectural "flavour" that proved to be characteristic.

At this point it seems logical to ask just what was this architectural "flavour". To begin with it was more than just a "flavour"; it was in fact a style. Essentially it comprised the use of red brick, curved enframed windows, horizontal mouldings, arched openings, and an assortment of ornament. Perhaps it would be best now to discuss a few Engine Houses and to compare their style with the architectural scene generally. At the same time their similarity will be revealed. Planning will not be commented upon, as for this aspect, suitable comparisons are impossible. Similarly no reference will be made to their 150 ft. tall chimney stacks, as these in all cases, were a standard feature.

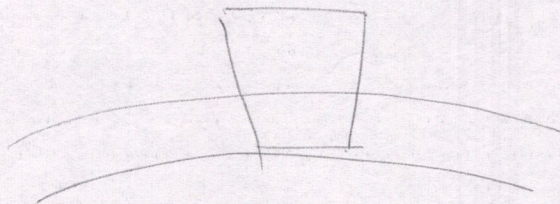
One of the most striking characteristic of the Engine House, was the use of a new material in exposed red brick. In many cases the extent of this produced a simplicity, while in others it was offset by the employment of adornment. Prior to the movement toward red brick, buildings although constructed of brick had plastered over them a cement rendering. This was ruled in fine lines to make a pretence of stonework. The effect was rather dull and "dishonest" to the material concerned. It was referred to as Italianate, and reached its peak in the 1880's. With this in mind, coupled with the fact that red brick was still gaining importance in the 1890's,



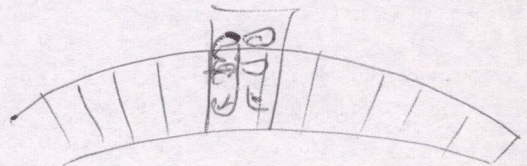
it could possibly be said, that although the Engine Houses were not really ahead of their time (remembering they were built between 1885-90), they were among the beginnings of a new trend.

In contrast there are aspects which retained the Italianate influence over the Engine Houses. The first of these was the employment of parapets. In some instances they were quite ornate (e.g. Nicholson Street) while in others they were merely plain brick (e.g. Brunswick). However, they all performed the same function of hiding the typical hipped slate roof. In general terms, apparently by this period, slate was considered dull and "awaiting" replacement by the warm colour of tiles. As a result the roofs of the engine houses were not displayed.

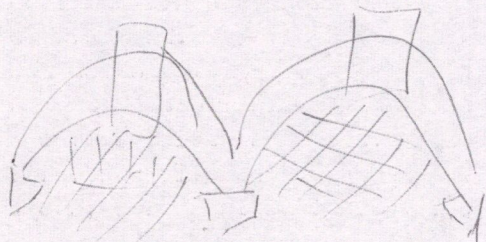
Another feature that illustrates the prolonging of Italianate details is the curved enframed windows. This was perhaps only a logical consequence, as it was well known that architects refrained from using the "ecclesiastical" Gothic for both public and commercial buildings. This feature varied from an arch to the curves of the 17th century Baroque; in all cases, they were climaxed at the peak of the curve by a rectangular moulding. As seen from the cuttings below, this varied from to ornate.



Northcote



Brunswick



Nicholson Street.

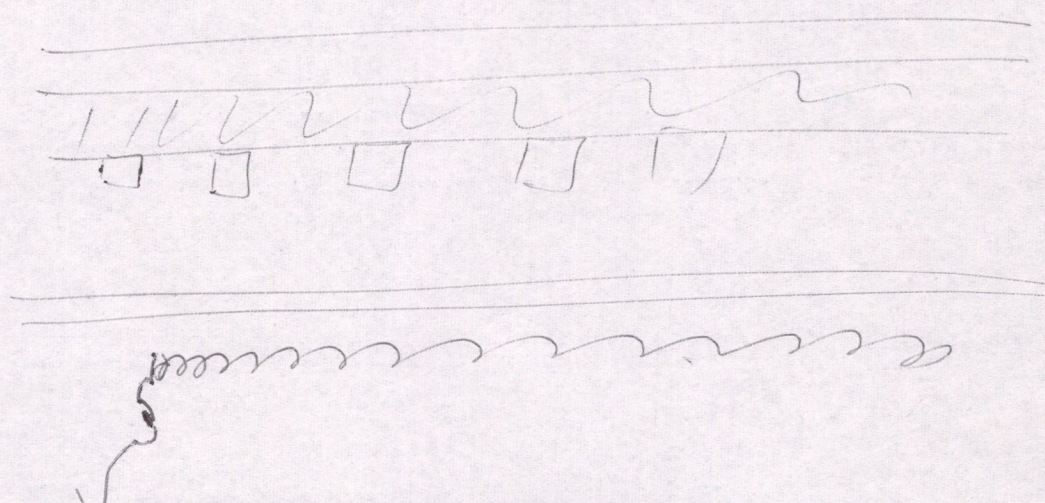
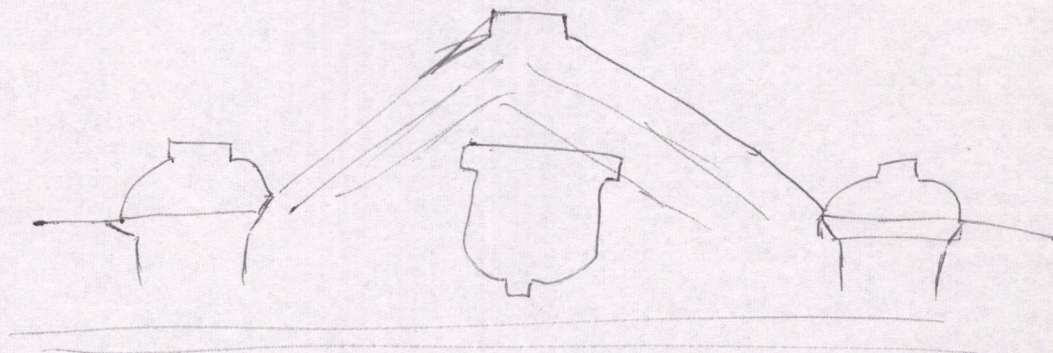
Obviously then, this classic element was not only a characteristic of Engine Houses, but of many buildings of the day. As will be shown later, it was a feature of all tramway power houses.

Now as perhaps previously indicated, the thirty year period prior to the advent of Engine Houses was one of few innovations. It was the period whereby architects ambitiously imitated everything that belonged to the old world. As a result, although the buildings were well constructed they were unusually unexciting, lacking bright ideas as well as subtlety.



Then early in the 1880's the creative spirit seemed suddenly to revive, and architecture rose to the extravagant phase of Victorian taste. This constituted a heavy ornamental style which reached its popular peak in the early 1880's. At first it was used only by advanced architects and on expensive buildings, but soon after, public and commercial buildings followed - Engine Houses included.

The two best examples that illustrate <sup>this</sup> are found on the next two pages - the Toorak and Nicholson Street Engine Houses.



Details of Nicholson Street Ornament

From the above photographs it can be seen more clearly the type of detail and ornament the architects employed. The most interesting feature of these is the



cable effect seen on the lower photograph. This perhaps would be the most extreme ornamentive detail endeavouring to create a "tramway" building. Undoubtedly it was meant to read, "Cable" Engine House. Further ornament can be seen employed in the parapet and the gable with the infill moulded "scrolls". Similarly there are cement mouldings which enframe the windows (previously mentioned), and which run the length of the building at the base of the parapet.

The climax of this ornamental building in both cases lies with the signal box. Although it was not merely a piece of ornament (as it had a definite function) it was similarly treated in the High Victorian manner of increased ornamentation and assorted styles. From the accompanying photograph it appears as though the Victorian desire for excitement led to the adoption of an exotic styled dome.

Although these were the only two Engine Houses with signal boxes the probable conclusion from the above discussion is that Engine Houses were typical of the ornamental buildings of the High Victorian era. But this definitely has reservations, for in the following two examples, the architecture was much more controlled. These are the Northcote and North Carlton Engine Houses.

#### Nicholson Street Signal Box

Now as shown by the drawings, these two buildings still have the same basic elements that constitute the architectural style of an Engine House. These of course, include the enframed windows (with the moulding at the peak), the parapets, with horizontal moulding at their base, the gable, and the arched doorway. (Perhaps it should be mentioned that the reason for the doorway's unusual width was the machinery had to be moved both in and out.) However, there is a marked difference - that is the buildings do not indulge in ornament the same as Nicholson Street and Toorak. This poses two thoughts, that either architects who were advocates of a return to simplicity designed them, or that their designers were truly conscious of street architecture. I think that the latter is more likely to be true. By this I mean that those sites which were situated at busy intersections, in full view of large numbers of people, had their buildings more lavishly treated. Obviously the corner site at North Carlton (Rathdown and Park Streets) did not view the same traffic that was experienced at both the Nicholson Street and Toorak sites. This aspect is further strengthened by the Brunswick Engine



House which had even less ornament than Northcote or North Carlton. (See previous photograph in the history chapter on Brunswick.)

Although ornament was at fever pitch in the 1880's, it would be incorrect to state that the Northcote and North Carlton Engine Houses, were not typical of their time. As can be seen they retained the characteristic mouldings along the parapet, and also (with slight variation) around the windows. The buildings were still typical of the era, but they were more conservative than those first discussed.

Out of the above discussion the point was raised concerning street architecture. Now at this stage, I would like to briefly verify this aspect by the two following photographs.

*near  
Holden*

Side View of the North Melbourne Engine House

*Trows  
don't  
Zays*

*Pol.*

Market Street View of the South Melbourne Engine House



These undoubtedly prove that the architects designing the exteriors were concerned only with those elevations that were to be seen by the general public. Hence, referring back to the beginning of this architectural discussion, it can now be seen more clearly that architects as well as engineers, were both equally responsible for the characteristic style of the Engine House. The engineer controlled areas, planning, and general size, while the architects formulated the cladding with the use of bricks and a near standard set of mouldings. But the concept of the architectural facade was not left entirely to the architect's discretion, for one stipulation by the engineer, must have been the incorporation of a wide doorway for the movement both inwards and outwards of the plant machinery. Perhaps it was the architects however, who gave it its characteristic curve, and thus made it one of the features that is to be recognized with Engine Houses.



To date we have looked at architecture only in a very general sense, and classified the style of the engine house accordingly. Now to be more specific the engine house should be compared with buildings of a similar nature, of a similar period, to really prove whether or not they were typical. However, this task has proved quite difficult, since as previously indicated, engine houses were unique - that is, there was nothing like them either before or after. It was only within a period of six years when these buildings suddenly appeared. The nearest building types, suitable for comparison, are the power houses that housed the machinery that powered electric trams. Now with all these examples, there is definitely a similarity of style, so much so, that one is tempted to think of them in terms of "tramway" architecture. These of course, employed elements that were typical of the day, yet it was the standard manner in which they were assembled that created characteristic "tramway" power houses.

*Bendigo  
Steam Depot*

#### Molison Street

The first building that lends support to this argument, is situated in Bendigo. Proposals for tramways here first originated in 1887, but it wasn't until 15th June 1890, that services commenced. At this stage the line was run by the Sandhurst and Eaglehawk Electric Tramway Co. Ltd., but after three months it collapsed and was taken over by the Bendigo Tramway Co. Ltd.



The type of tram running during these years was one powered by steam, so operated independently, however the building in the previous photograph can be thought of as being analagous to the engine house, because this was the place where the steam trams of Bendigo were supplied with their source of power in the form of fuel and water. In actual fact, this building situated in Molison Street was probably more like a garage.

Although the photograph is partially obscured, there is enough to show the arched opening and horizontal moulding which I maintain are two very important characteristics in formulating the "tramway" style. The fact that the building was of brick, also adds further support to my argument.

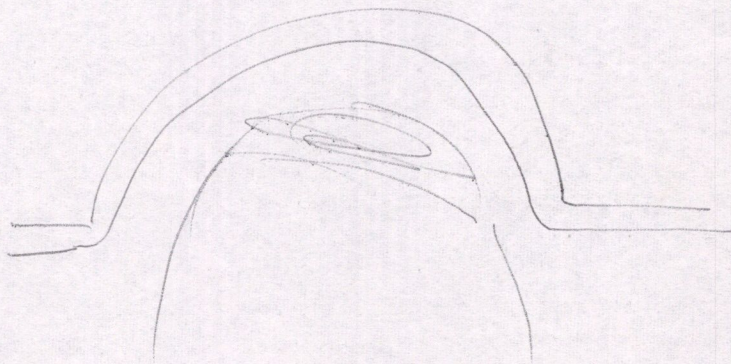
#### Offices of the Bendigo Power House

The steam trams operated with limited financial success until moves were made in 1896 to sell the company. Then in 1899 it was taken over by The Electric Supply Co.Ltd., who proceeded to convert the steam trams to electric trams. Obviously for such an operation, a new power house was required. The above photograph is the view of the offices of this power house, the actual power house itself being separate, but situated directly behind. This comparison is justified because in actual fact a frontal view of an engine house is really a view of its offices - the power plant itself, it must be remembered, was situated at the rear. Located in Hargreaves Street (opposite Nolan Street), it was built by The Electric Supply Co. Ltd. in 1901, the foundation stone being laid on the 28th June of that year. The contractor for the building was T.R. Daley.



Architecturally speaking, the photograph shows the building to be very similar in style to the more simple engine house such as North Carlton. The features that affect this include the horizontal mouldings, the gabled facade, and the curved enframed windows and doors. The vent in the gable also gives firm adherence to engine house architecture. The final similarity is, of course, the use of red brick. Again we see the characteristic style of a "tramway" power house building.

The next building suitable for comparison, was situated in Wendouree Parade Ballarat. Here was sited the power house which operates the electric trams. As this building was originally a flour mill, all but the frontal facade is composed of blue stone. Therefore, my evidence is limited to this one elevation, which apparently was erected by the same company who were responsible for the Bendigo power plant - that is, The Electric Supply Co. Ltd. Financed with English capital they constructed the power house, laying its foundation stone in the frontal facade on the 23rd August 1904. It was not until some twelve months later that the tramways commenced their services.



lights  
Badge

#### Detail of Ballarat Power House

From the above photograph, the horizontal moulding, the curved enframed windows, and the use of red brick, all pertain to the general style of tramway power houses. Obviously the facade is relatively simple and features only a minimum of ornament. It still displays the characteristic style that is found in Melbourne Engine Houses.

The chimney stack for the Ballarat  
River House was built by Jack Russell  
& Jack Russell Junior. They built also:  
The Eureka Starboard Memorial. for a  
sum of six hundred pounds or so.  
This information supplied by John. Jack  
CHRISTON, a great nephew of J. RUSSELL  
JUN.



My next example of comparison of engine houses which will further strengthen my argument, was situated in Melbourne in Mount Alexandra Road Essendon. Here was the power station for electric traction trams of the surrounding district.

*Cooling  
Tower*

#### Essendon Power House

The project was developed by a Mr. A.E. Morgans of Western Australia, whose scheme, after considerable opposition, obtained approval by the Essendon City Council in 1905. The foundation stone of the power house was laid that same year on the 24th May, while services commenced nearly twelve months later, on the 11th October 1906. The building was designed by Messrs. Usher and Kemp, architects of Melbourne.

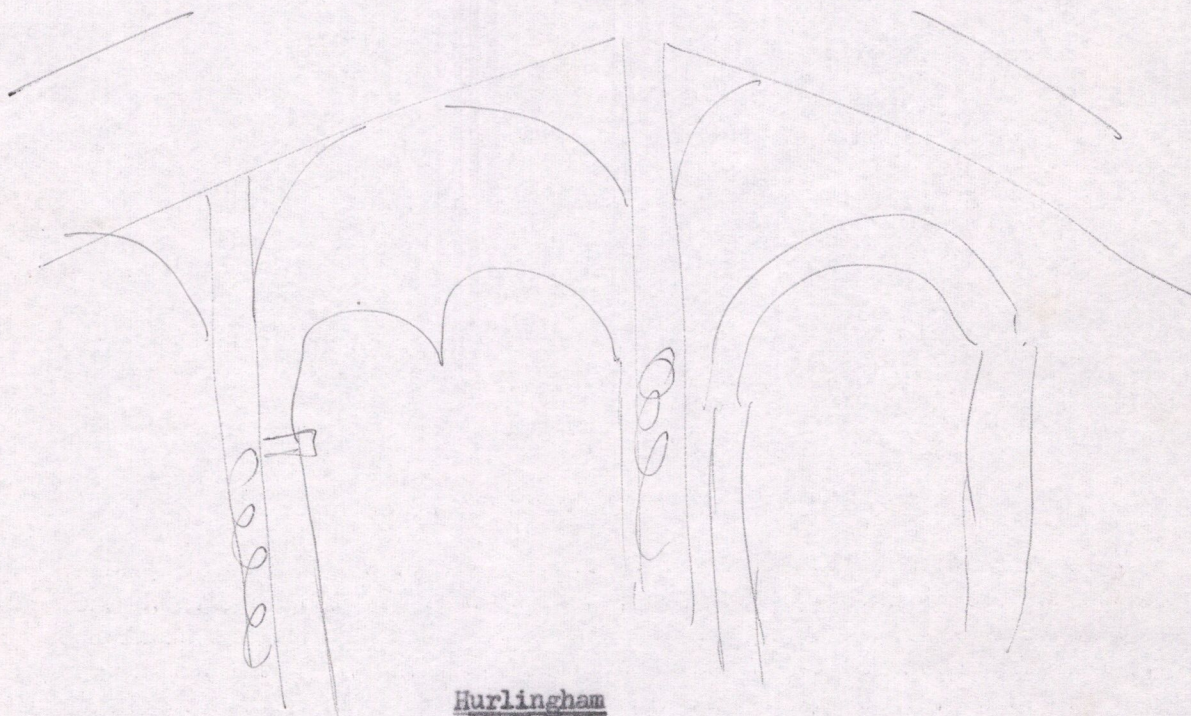
From the accompanying photograph it can be seen that the overall affect is largely the same as the general appearance of any engine house. Constructed of red brick, with curved enframed windows, parapets and gables, the style can only be commented on as truly characteristic of power houses or tramways. The unusual feature with this particular, though, is the 50ft. tall cooling tower which condensed exhaust steam for re-use in the boilers. Engine Houses on the other hand, worked on a slightly different principle and as a result, did not require this dominating feature.

From the few buildings I have used for comparisons, it was noticeable especially with the Ballarat and Essendon power houses, that ornament had fallen by the way. This was because after 1900 there was a general



increasing reaction towards the heavy ornamentation of the High Victorian period. Consequently, as shown by the photograph the latter example conveys reasonable simplicity. However, this does not detract from the characteristic architecture of the engine house, for as earlier indicated, many of these adopted simplicity for ornateness.

Before closing, I think that it should be briefly noted that the features that occurred on the engine houses and their similar counterparts, were neither of a new type, nor belonged to a particular building. For example, curved enframed windows were quite common in domestic architecture.



Hurlingham

This is shown in the above photograph of Hurlingham, which built in the 1880's, is situated at 68 Union Street Brighton. It is to be noted that the curved mouldings over the windows, are practically identical to those found on the Nicholson Street engine house. This illustrates convincingly the interchange of elements from commercial to domestic.

Consequently the conclusion drawn from the foregoing discussion is that Engine Houses were composed of features which were typical of the day. At the same time, it was the formula in which such elements were employed that gave the engine houses and the similar type power houses their characteristic style of architecture. To give a name to this particular style of architecture would be most difficult. The nearest perhaps one could say is that this was "Victorian".



Regarding the origins of this style, there is no real certainty. However, the Melbourne Tramway and Omnibus Company applied it as early as 1875 for a depot situated in Macaulay Road North Melbourne. From the following photograph it can be seen that the arched openings and curved enframed windows were used - elements that went to make up the characteristic appearance of tramway power houses. It is apparent therefore, from the above study, that there is a definite similarity between all early tramway buildings.

*Sackoe Motors*

M.T.&O.CO. Depot - Macaulay Road, North Melbourne.

*Detail of curved opening.*



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