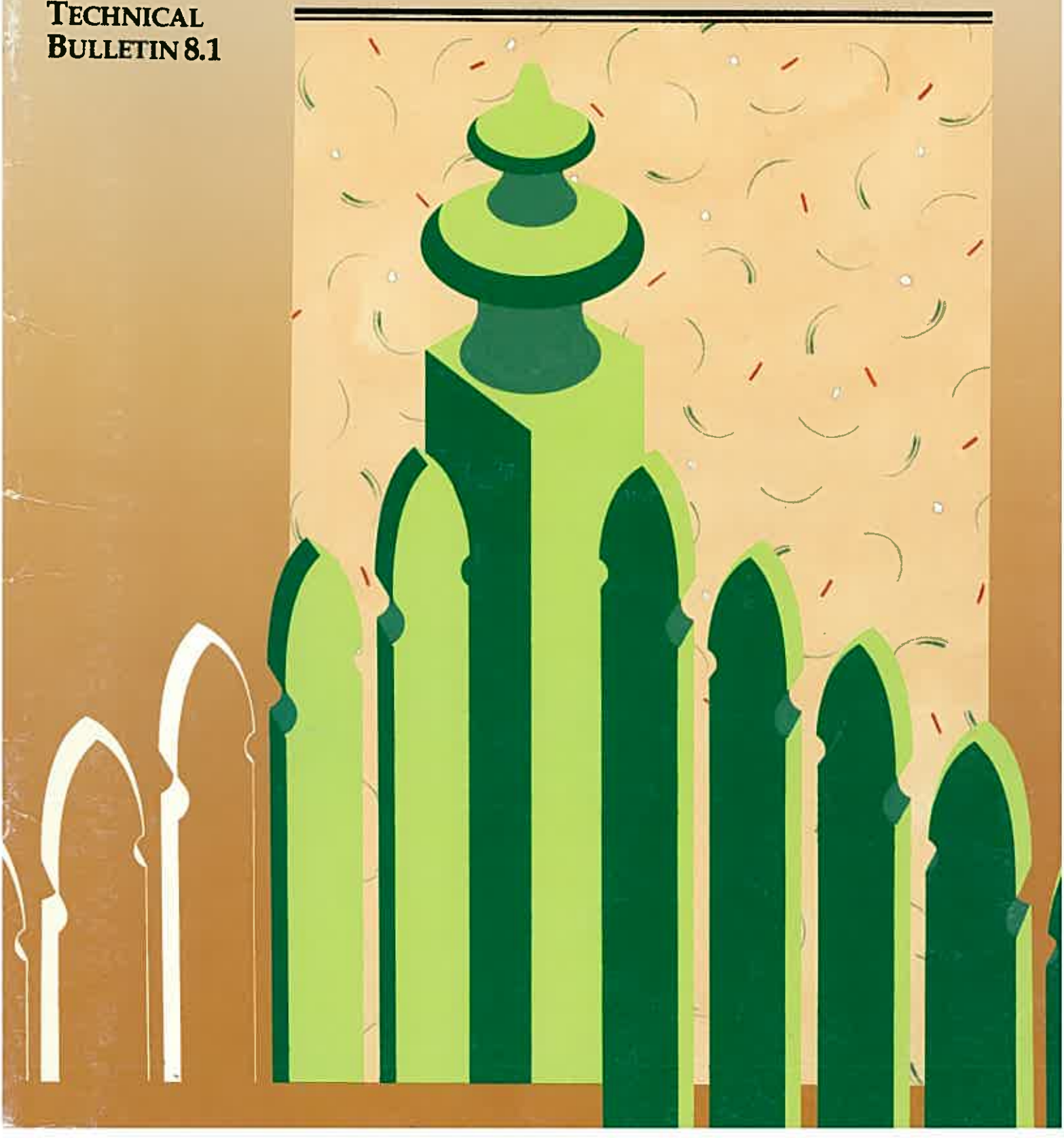
FENCES & GATES

NATIONAL TRUST

TECHNICAL BULLETIN 8.1



FENCES & GATES
C. 1840-1925

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A Guide to Identification, Conservation & Restoration of Historic Fences & Gates c. 1840-1925.

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For the
National Trust of Australia (Victoria)
as part of the Technical Bulletin Series of the
Australian Council of National Trusts.

ACKNOWLEDGEMENTS

This Bulletin sprang from some earlier work by Timothy Hubbard. Dr Miles Lewis generously offered access to his library, several useful leads and constructive criticism for which I am grateful.

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National Library of Australia Card No. and ISBN 0 909710 65 1
Published December 1988

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Note: * indicates refer illustration Appendix 14 - Measured Examples of Existing Fences.

INTRODUCTION

This **Bulletin** describes the various types of fences used in Australia between 1840 and 1925, and is a guide to identifying the date and restoration of existing fences and for the design of new fences in historic contexts. Examples of each type identified have been drawn, wherever possible, from extant fences in situ, as well as from documentary sources.

The **Bulletin** is intended as a guide to specification of regular maintenance and repair of existing old fences, in the restoration of damaged or altered old fences or in the reconstruction of appropriate infill fencing in place of a former old fence or adjacent to existing old fences. In this process, the recommendations of Section 1, Conservation Guidelines should be followed.

The **Bulletin** is directed not only towards architects and the building industry but also to the interested lay public; for this reason a glossary of commonly used architectural and building terms is included.

Fences form an integral, yet remarkably fragile element of the historic environment. A major proportion of historic fences have already disappeared.

Conservation of authentic historic fences cannot be too strongly urged.

1. CONSERVATION GUIDELINES

PRINCIPLES

When making repairs to an existing historic fence or erecting a new fence in an historic context, certain principles should be respected and a procedure followed in order to retain the cultural significance of the fence and/or its setting. These principles and procedures are set out in **The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter) & Guidelines** (revised 28 November 1987), and also in Dr Miles Lewis' Guidelines to Conservation Analyses and Plans', in **Australia ICOMOS Newsletter 1**, 1982, pp. 2-6.

The following summarises and interprets this information with regard to fences, as a practical procedure to be followed:

PROCEDURE

1. By taking detailed photographs and measured drawings, carefully record the existing physical condition of the fence or its site and its context (e.g. other fences in the same streetscape or area).

2. Attempt to identify fences in similar contexts (or buildings of similar scale and date) in the locality, and record these as indications of the former form of the subject fence.

3. Research and collect all documentary evidence of the present fence and its context. This may include early photographs, plans and descriptions. (Sources: LaTrobe Library picture collection, National Trust building files, local historical society collections, MMBW plans, municipal council building surveyor's records, etc.)

4. Refer to this **Bulletin** as an aid in visually identifying the type of fence and its historical period, and locations of similar fences which may be inspected on site as reference archetypes. The examples illustrated here are typical only. Where details are not typical or are rare, this is stated, and these types should only be followed in exceptional circumstances. The type and scale of building that the fence surrounds should also be considered. Generally the degree of complexity of the fence reflected the scale of the building it protected.

5. In the light of this evidence, determine in a few words (100 maximum) the significance of the fence. Which aspects are important, unusual or typical of its time and situation? Assess its style and possible sources for the design, any historical associations, technological value (is it a significant technical solution?), and social value (is it cultural landmark?).

6. Survey also its physical condition. Where are repairs necessary? Which aspects are altered, damaged or missing altogether. It is important to retain as much of the old material (historical evidence) as possible, for future generations.

7. It is then possible to develop a plan for conservation of the fence, knowing which significant aspects should be respected.

In the light of the 'conservation principles' of the **Burra Charter**, plan which of the four main conservation processes (preservation, restoration, reconstruction and adaption) should be followed. It should always be possible to tell new work from the original material in the fence.

Where the project is new infill work in an existing historic environment it is appropriate that this should be low-key, neutral and recessive in character. At the same time the project must respect the broad characteristics of the setting – its scale, fence heights and the rhythmical spacing of pickets or palisades, materials, colour, texture, relation of solid to opening, etc. Replication of historical detail in pastiche is not appropriate.

8. Prepare drawings and specifications for the work to explain fully the conservation plan. These will be submitted for building and planning permits. Some municipal councils have appropriate urban conservation guidelines or fence guidelines. If the fence is situated in an urban conservation area or if the building is classified by the National Trust, ask the relevant National Trust department for advice or comment on your proposal at this point.

9. Fabrication and construction should be carried out by tradesmen experienced with historic fences. These are listed in **Period Building Restoration Trade & Suppliers Directory** under the respective materials. Sometimes municipal council planning departments maintain a register of restoration tradesmen and available components.

10. Mostly deterioration of fences has occurred due to lack of regular protective maintenance. Annual inspection should be carried out to identify the need for maintenance works and to prevent the need for recurring major conservation works.

Repair and Replacement of Old Fences

As outlined in the **Burra Charter**, the aim must always be to retain as much of the original fence material as possible and to replace only what is absolutely necessary.

Timber

Where timber fences meet the ground, rotting invariably occurs. Replacement of the timber plinth may be necessary. Often a fence that is generally sound may be unstable because parts have rotted in the ground. In the past this has often been overcome by reducing the height of the posts and even the height of the fence overall. A better approach is to replace the lower part of the post by splicing new timber to it, or simply by strengthening the posts with metal braces.

Loose pickets should be re-nailed, or even secured with a continuous strip of plain galvanized hoop iron.

Even if the fence has deteriorated so as to require rebuilding, a number of sound elements can often be retained in a replacement.

Although suppliers prefer to fabricate a standard range, it is possible to obtain pickets cut to any pattern. It is not appropriate to erect new picket fences to heights greater than those given in this **Bulletin**. If privacy is required, a hedge should be grown behind the fence.

Iron

Suppliers carry large ranges of cast-iron products, in varying degrees of authenticity, derived from nineteenth-century archetypes. Great care should be taken in matching actual nineteenth-century examples identified **in situ**, from this **Bulletin**, or in contemporary founders' catalogues. Die-casting is frequent in aluminium today, and it is difficult to argue against this practice, but metal hollow sections are inappropriate substitutes as they seldom approximate to cast or rolled sections.

If it is necessary to replicate a particular element, this can be cast in iron, but it will be necessary to leave an example with the specialist foundry. This example should be cleaned by shot blasting and used by the foundry to form a mould for casting.

For a palisade fence, a bluestone plinth is today expensive, but preferable to the alternatives of concrete or rendered brickwork. Roughly worked rusticated bluestone is not a nineteenth-century material and is inappropriate. Coloured mortar is also inappropriate. A weak lime mortar should be used. One possible bluestone substitute material for plinths is finely bush hammered concrete, another could be rendered brickwork.

Replication of cast iron pallisade fences is not encouraged: it is very expensive and authenticity is rarely achieved.

Hedges

High solid masonry fences rarely appeared before 1950. These are **most inappropriate** in a nineteenth or early twentieth-century context. The appropriate method of achieving similar visual privacy and sound isolation is with a hedge or with a hedge behind (the same height or higher) a picket or palisade fence. Hedges are better sound isolators than brickwork or stone and can be relatively fast growing if pruned regularly.

Patent Fences

Most patent fence types identified and illustrated in the **Bulletin** are no longer manufactured, and seldom available.

Design of New Fences

Unless there is local evidence to suggest otherwise, the following is recommended for modern street frontage alignment fencing:

1. Fencing should preferably be 1200 mm in height, to a maximum of 1500 mm (except piers).
2. Fencing should be open or 'transparent' (or backed with a hedge), not solid.
3. Traditional materials and colours should be specified.
4. The rhythm of traditional pickets or palisading should be adopted (i.e. the relation of open to solid components along the length of the fence).
5. Fence types could include plain timber pickets (painted, oiled or stained), simple mild steel rod palisade (with flat mild steel bar rails), chain-link galvanized wire mesh (not plastic-coated), and vertical corrugated iron sheet (painted or 'colorbond' not 'zincalum') with timber capping and plinth.
6. There *should* be a boundary fence. Omitting a fence altogether is equally inappropriate.
7. Fences to side and rear boundaries may be 1800 mm high of palings or corrugated iron.

2.

1840-60, RURAL

BACKGROUND

In the 1840s, before security of tenure was assured for squatters, enclosure was kept to a minimum. Often the only fencing was around a 100 acre paddock to contain bullocks and horses. Twenty or thirty miles could be travelled without sighting a fence, and to detect a post-and-rail fence was to 'see the house'.

In 1844 an interpretation was issued by the Secretary of State for the Colonies, the Duke of Newcastle, which gave security of tenure during lease to squatters, and compensation for improvements such as building dams and fences. As freehold increased, fences followed the boundaries of the purchased land (Kiddle 1961). An Order-in-Council of 1847 promised long leases and pre-emptive rights of purchase to squatters. However, survey and implementation were delayed by the gold rush in Victoria. Wages rose significantly due to the scarcity of labour caused by the gold rush, and between 1851 and 1853 wages virtually doubled, so it became cheaper to build fences than to replace shepherds.

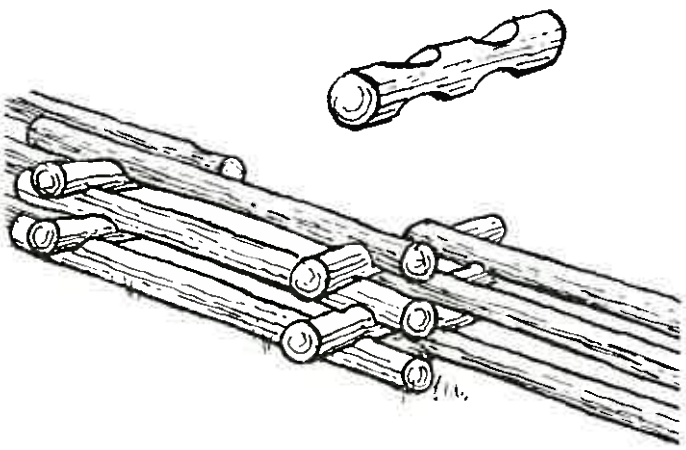
Since the early 1840s Niel Black at Glenormiston had advocated fencing because he felt the sheep would improve if they were left undisturbed, and he shipped large quantities of wire fencing from Scotland to Glenormiston. In advocating wire fencing, John Robertson of Wando Vale had calculated that imported wire fencing was 10 pounds per mile cheaper than post-and-rail fences. The obvious advantages were 'durability, tastefulness, and security from fire'. At first, the new wire fences were adapted to the old post-and-rail system: posts were placed nine feet apart, capped with a timber rail, and five holes were bored for wire.

In 1857 Black's neighbours, the Manifolds at Purrumbete on the Stony Rises, cleared their land and fenced it with dry stone walls, four to five feet high and two feet broad, to enclose miles of their cattle run. A length of 21 feet was considered a good day's work. When the fences had to cross deep gullies, arched culverts could be carefully formed to take the estimated seasonal flow (Walker 1978). By the end of the 1850s few squatters insisted that sheep were better shepherded. Only leased land remained unfenced (Kiddle 1961). By the 1880s shepherds had largely disappeared; they were replaced by fenced paddocks and boundary riders.

FENCE TYPES

Brush Fence (or Deadwood Fence)

Description:
This was the earliest and most primitive type of fence. Grubbed trees and bushes felled during the clearing of bushland were dragged into long lines, with the branches piled on top. More pliable branches were then interwoven amongst the pile and gaps stopped up with brush to form a continuous, roughly constructed, impenetrable reinforced structure.

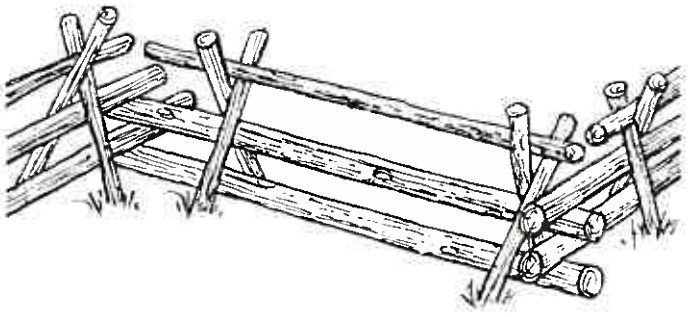


Chock-and-log Fence (Chock-and-rail Fence)

Description:
This type was only feasible where straight spars of timber, 9 to 12 inches (230-320 mm) in diameter and up to 15 feet (4600 mm) in length, were available. Four posts were placed in the ground with 'chocks' between them, at right angles to the direction of the fence. A cut was made in the upper face of the log, another chock placed in it at right angles and another log placed on top. This was repeated up to three or four logs in height. There was a two foot (600 mm) overlap in the logs. When constructed of heavy timber a 'two-chock and log fence' averaged five feet (1500 mm) in height (Walker 1978).

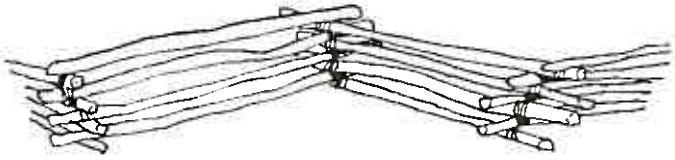
An early contract specification states: logs are to be 12 foot (3600 mm) long by 7 inches (130 mm) thick at the small end and to be well bedded on the chocks with 6 inches (150 mm) overlap. The lower log to be 7 inches off the ground, the chocks to be 3 feet (900 mm) long and 9 inches (230 mm) thick. The bark is not to be included in the measurement of either chock or log.

This fence was very strong and firm against stock, and it required no fastenings or splitting. The best timber was considered to be Murray pine, which was long and straight (Palmer 1961). It invariably replaced the early brush fences, and was generally preferred by selectors into the 1860s and 1870s (Walker 1978).



Forks-and-poles Fence (Cockatoo Fence, or Zigzag Fence)

Description:
A sapling was felled and the next length to the butt, about 8 (2500 mm) or 10 feet (3000 mm) is sawn off and put on one side for the corner post of the milking yard and another length is taken off to be 'run out' or split into rails (Palmer 1961). The residue of the tree was dragged away for use elsewhere on a brush fence. A fork trestle was formed every nine feet; a rail was placed inside the fork and another one placed on top. This was a regional variation, the 'brush and trestles' fence (with trestles of leaning poles or small logs). It was used for small yards (for example horse yards and milking yards), as it was timber-intensive.



Dog-leg Fence

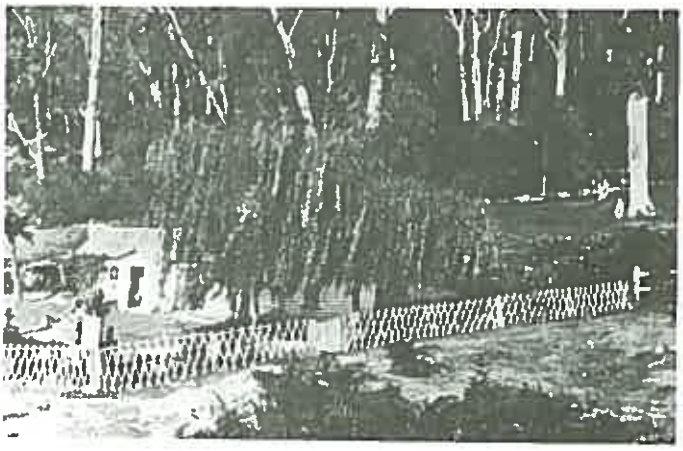
Description:
This fence was made up of five pine or buloke logs, 9 feet (2750 mm) long, each with a v-cut top and bottom at the ends (similar to chock and log), allowing the logs to sit securely one above the other. Occasionally the rails were fastened to live trees as posts.

Palisade Fence (or Kangaroo Fence, Stub Fence or Sapling-and-wire Fence)

Description:
Split trunks, straighter branches and saplings were all cut to a consistent length varying from seven to ten feet.(2150-3000 mm). A continuous trench (two to three feet [600-900 mm] deep) was dug and the timber stood upright in it. The excavated earth was then backfilled and tightly rammed around the uprights. The structure was usually braced against wind load with a sapling part-interwoven through alternate tops and fastened by a rawhide strip (later wired or nail-fastened). There was sometimes further bracing from a forked sapling at right angles to the line of the fence, and secured by a large rock.

Double Post-and-rail Fence (and Harper Fence)

Description:
A double post-and-rail fence, similar to the Harper fence of Western Australia was formed by sinking two posts into the ground about six inches apart and dropping saplings between. Green-hide lashed the posts together (Stone and Garden 1978). This is similar to the drop-slab construction used for walls of early timber buildings.



Basket Fence (Lattice Fence, or Woven Hurdles)

Description:
Split saplings were interwoven between posts sunk into the ground. This fence was cheap and easy to erect. It was common in the brigalow country of Queensland.

A variant was the weaving of an open lattice of split saplings.

Post-and-rail Fence

Description:
An early specification of a stockyard post-and-rail fence reads:

'The posts and rails of split eucalyptus should be 18 inches (450 mm) to 2 feet (600 mm) wide, standing 7 feet (2150 mm) out of the ground and 2 feet (600 mm) into it, the post holes well rammed. The rails are from 9 (230 mm) to 15 inches (380 mm) broad, and from 3 (75 mm) to 5 inches (125 mm) thick; care should be taken to fill up the mortises well; the rails are about 9 feet (2750 mm) in length and not more than 6 (150 mm) or indeed 4 inches (100 mm) apart. When the rails and posts are fairly up, the top rail being about 6 feet (1830 mm) from the ground and the bottom one not more than 6 inches (150 mm), the cap (or capping) is put on. A stout round sapling is fixed upon, from 18 (5500 mm) to 20 feet (6000 mm) in length if procurable, if not shorter, just sufficiently long to pass over 2 or 2½ panels. This is generally morticed and the tops of the posts being tennoned and then the heavy sapling is dropped on. It consolidates the fence, holding the panels together laterally; the height is then raised to 7 feet (2150 mm) which hardly any cow or bullock will try to jump. It will last secure for 20 or 30 years and defy any cattle, even the youngest calves'.
(Palmer 1961)

Hired hands split the rails and posts, whilst the Squatter himself morticed the 10 foot (3000 mm) posts to give 3 feet (900 mm) in the ground and 7 (2150 mm) protruding. Rails were inserted so close together that 'a rat could hardly get through'. (Walker, 1978)

Occurrence:
Post-and-rail fences were popular early enough for small enclosures as yards. By the late 1850s, with more labour available for splitting timber and digging post holes, and squatters becoming serious and prepared to pay for enclosure, post-and-rail fences became more common. Four rail fences were common earlier and Peter Cunningham had recommended them in 1826 (Birmingham et al 1979). However, they were more useful for horses and cattle than sheep. Later it appeared that three rails and later still, two rail fences came to predominance, as labour grew more expensive and settlement moved into drier areas with more expensive timber. However, four rails were really necessary in yards to contain the sheep.

Examples:
Examples of old post-and-rail fences exist near Melbourne at:

- Neerim Road, at Kitmount Street (near Poath Road), Murrumbeena. (Two rail roadside fence)
- Heide Park and Art Gallery, Templestowe Road, Bulleen. (Two rail fence)
- Gulf Station, Yea Road, Yarra Glen (Two rail fences)
- Newmarket Sale Yards, Newmarket. (Four rail fence stockyards)

Early Post-and-wire Fences

Wire was introduced as a fencing material during the extravagant and labour-hungry goldrush years, but it was very expensive at 15 pounds 20 pence per ton (50 pounds per mile, compared with 15 pounds per mile for a brush fence).

In 1857 John Lysaght in Bristol was producing wire for the Australian market, but even by the 1860s there was still only one wire works in Victoria.

Description:
In one fence type, saplings were thrust into the ground and held at the top with wire as early sheep-yard fencing (See Palisade Fence).

The strongest method was to sink wooden posts into the ground at 30 foot (9150 mm) intervals and to string the wire between, supported by four or five non-load-bearing posts or droppers.

Drystone Walling

Description:
Foundations were dug to a depth of at least two feet (600 mm). The outer faces were carefully built up with flatter stones, closely packed with tight-fitting random-rubble stone, with the two relatively smooth faces tapering inwards. The resultant cavity was filled with small stones, rubble and the excavated earth. It was crowned with a row of larger flat capping stones, sometimes held in place with timber wedges. These walls were usually four to five feet high (1200-1500 mm).

Occurrence:
In the Western District of Victoria, these fences still extend for many miles. They surround the former Manifold property, Purrumbete (where they were built from 1857 in preference to the wire fences being erected by Neil Black next door at Glenormiston). They are visible on the Princes Highway from the beginning of the Stony Rises at Stonyford, through into Camperdown. Built to last, they were bush fire resistant, would not rot, were rabbit proof and gave excellent protection to stock in exposed positions from sweeping cold winds. As they were built, the land was cleared of loose stones and rubble (for agricultural purposes). In the Western District, these walls are built of volcanic tufa. In the Kiama district of New South Wales, freestone was used. They are also found in Tasmania, southern New South Wales, and Stanley Chasm in the Northern Territory.

Variants:
With the introduction of barbed wire to Australia in the 1880s (invented in America in the 1870s) a much simpler form of construction became common. Split timber posts were erected every ten feet and the gaps between filled with random rubble stones piled to a height of three feet, with a broad base and an unsteady top. Strained between the posts above this height was a strand of barbed wire. These fences were common to the north-west of Melbourne.

Dry stone walling near Mt. Elephant Western District, Victoria

Hedgerows (and hedges and ditches)

Description:
Hedges were planted or sown as a series of hedge plants, spaced at regular intervals. They were also sown along an existing fence to produce dense replacements. An American account (Butterfield, 1914) recommends the following process for the establishment of a hedge:
'First plough a width of six feet (1800 mm), then cultivate. A trench or furrow is run through the centre of the cultivated strip, deep enough to take roots without binding. Build a wire fence down the centre for stability. Allow a distance of two thirds the height between plants. Sow double line of planting for protection and shelter.'

Hedges were not generally secure in themselves, so a corresponding adjacent deep ditch was necessary. Contemporary farmers' journals published articles on plants 'adapted for live hedges'. Recommended plants included Cape Brown furze, Hawthorn or African Box.

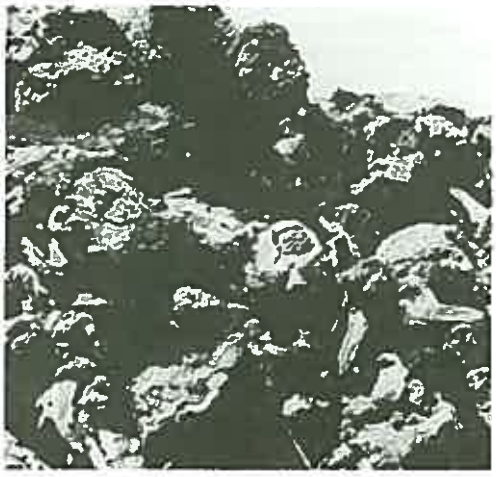
They were useful in cold, wet, treeless areas where they provided shelter and warmth for animals.

Occurrence:
Outside of Tasmania, where hedges of brown gorse still thrive, hedges were not as popular as they harboured rabbits and snakes, were not secure enough in themselves and required too much maintenance in order to become dense. Furze also spread to cover whole areas as a noxious weed.

In Victoria hedges largely died out with the development of wire and wire netting in 1852, except in parts of Gippsland. There is a long run of hawthorn hedge on the South Gippsland Highway between Tooradin and Kooweerup, and near Maffra, hawthorn hedges and ditches are still common. Furze hedges line Banyule road at Lower Plenty on the former Banyule estate (Butler, 1985). Hawthorn hedges have also been identified on the former Hartlands and Leighton Estates, Ivanhoe (Loder and Bayly McBriar 1985). At Drysdale, near Geelong and to the north of Melbourne, vicious boxthorn hedges were grown.

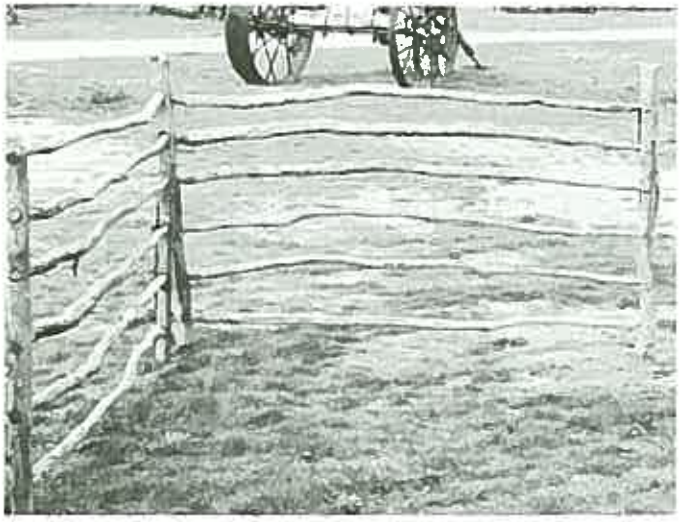
Species:
The plants introduced to Australia as hedgerows to control the movement of stock have mostly grown extremely well in Victoria, and have become 'naturalised'. Several have now been proclaimed noxious weeds and may no longer be planted, e.g. Cape brown - **Cytisus monspessulanus,** hawthorn - **Crataegus laevigate monogyna,** boxthorn - **Lycium ferocissium,** sweetbriar - **Rosa rubiginosa,** bramble - **Rubus fruticosus agg.,** gorse - **Ulex europaeus.** In the cases of hawthorn, boxthorn and gorse, existing hedges of prescribed dimensions may be retained, but new hedges may not be planted. (Whether hedges may be restored by new planting is a matter that would have to be considered by the Vermin and Noxious Weeds Board.)

Species recommended for characteristic rural hedging in a historic (1845-1870) context include: Box - **Buxus serrpervirens,** white thorn - **Crataerigata laevigata,** honey locust - **Glenitsia triacanthos,** privet - **Ligurtium ovalifolium,** osage orange - **Maclura pomifera,** chinese zbar-intae - **Platycladus orientalis** (Lumley 1982, p. 94)



Mallee Root Fences

Description:
In the Mallee, the trees that did exist were rolled over, slashed and burnt and their durable knotty root was excavated. These were carefully packed and stacked similar to a dry stone wall, from a broad base tapering to the top to form an enclosure. They now have a great beauty and affinity for the landscape colour and texture. For smaller enclosures built around the homestead and outbuildings, they helped deter shifting sands (Walker, 1978).



Sheep Hurdle

Portable Hurdles

Description:
Portable timber hurdles were used by shepherds to enclose sheep overnight and later even after fencing had been erected in shearing sheds and sheep yards as temporary enclosures. Constructed from eucalyptus, (often gray box) they had mortised joints strengthened with fencing wire.

3. 1840-60, URBAN

BACKGROUND

In Melbourne in 1851 there were 'no iron railings or balconies in the city. Usually the yards are small, roughly fenced in with stringy-bark palings some 5 or 6 feet (1500-1800 mm) high' (Lancelot 1851, pp. 80 & 102).

As late as 7 May 1856, the **Australian Builder and Practical Mechanic** states:

Iron Castings: There are few wants more keenly felt at the present time in Melbourne, more especially amongst the building community, than a foundry devoted exclusively to the manufacture of metal castings . . .
Wooden palings and corrugated iron should now give place to light and fanciful ironwork, possessing, as the latter does, every superiority over the former in point of beauty, strength and durability.
Corrugated iron, in spite of the ingenuity shown to impart to it an ornamental character (as may be witnessed in the fencing which surrounds the Legislative Council Chambers), possess little to recommend it to the eye over a dwarf brick wall.
No better time than the present can be devised for commencing the manufacture of cheap metal castings, when the authorities have under their consideration the enclosure of our public parks, squares and gardens.
(Robertson 1961, p. 57)

By 12 June 1856 the first advertisement for ornamental castings had appeared in the same journal:

To Contractors and Others – Girders, cantilevers, ornamental railings and corner pieces, bevil and other wheels, pinions and furnace bars. Quartz stampers, from 2 1/2 cwt. (125 kg.) each. All other castings to patterns or drawings, brasses, turning, and boring at moderate prices. – Scott, Clow & Prebble, Richmond Foundry, near the Admiral Napier.
(Robertson 1961, p. 59)

The 1859 Mayes **The Australian Builders' Price Book** still describes iron palisade railings as exceptional, and 'if made in the Colony, double the price of the imported equivalents'. Available in the colony was John Tarbuck's **The Builders' Practical Director** (etc) of 1851-54. It includes a design for an iron palisade fence. The 1862 Mayes **The Australian Builders' Price Book**, for the first time lists cast-iron palisading, and four patterns are offered. This entry remained unchanged until 1886.

Dr Miles Lewis explains that local cast-iron patterns were developed in Victoria in preference to copies of the English castings, because of the presence here of pattern makers (e.g. William Fulton). However, this was not the case in Sydney (Lewis 1972).

The year 1859 was the end of the first gold boom, so many local founders turned from producing quartz-crushing equipment to producing cast-iron for building. At the same time iron-rolling mills began to appear, such as Carron Mills in West Melbourne, using scrap iron. However, the earliest iron palisade fences had cast bar balusters.

By 1860 the better houses were 'often fenced off from the street or road by handmade iron railings or gates' (Meridith 1861). Lewis assumes this to be a reference to plain iron palisade fences. The ground floor balustrade on the verandah at 'Como', South Yarra (in fact a fence), is one of the earliest examples, (c. 1855).

As early as 1839 an advertisement directed at the Australian colonies for a portable iron fence appeared in John Stephen's **Land of Promise.** It stated:

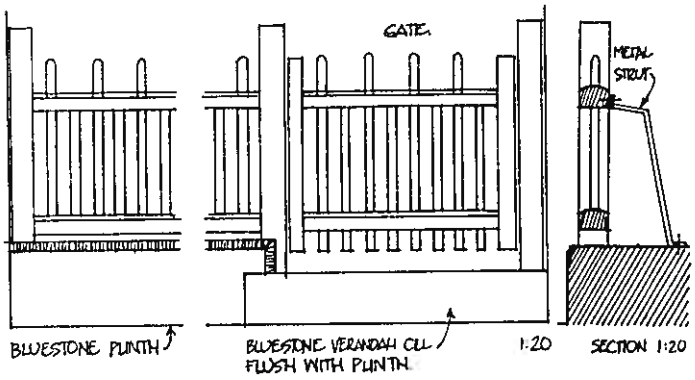
'Porter's Improved Iron Fence, now so generally used in this country [England], and from its portability and other peculiar advantages, so suitable to South Australia, Sydney, &c., is manufactured at 82 Upper Thames Street, and Dowgate Dock (between London and Southwark Bridges)'.

From 1855 Frances Morton, a Liverpool manufacturer, advertised in J. Sternhardt's **Illustrated Guide to Manufacturers** that he was able to export iron fencing to anywhere within one hundred miles of a rail head. Consequently, examples may be seen all over Australia.

Another type of portable prefabricated iron fence was advertised by Motley & Green in 1869 as galvanized-wire cable-strand fencing (Sternhardt 1869, p. 456).

Around 1851 the light timber-frame building from America brought the picket fence with it. The serried picket palisades formed an inexpensive and decorative definition of domestic boundaries. The picket heads 'lent themselves admirably to the attentions of the folk artist. With spiked, stepped, convoluted or pierced tops, their decorated simplicity made a fitting frame to the buildings they protected' (Cox et al 1969, p. 61).

FENCE TYPES



Timber Dowel and Rail Fence

Description:
Square section timber dowels actually penetrate each timber rail.

Examples:
This type is common in Tasmania, but surviving examples are rare in Victoria.
- A fine example existed at the Bank of Victoria, corner Princes and Cox Streets, Port Fairy (1869): once the oldest surviving timber fence built in Victoria, it has now been removed.

Other examples are:
- Single-storey terrace, 95 Princes Street, Carlton;
- 82 Capel Street, West Melbourne;*
- 111 Faraday Street, Carlton;*
- 77 Highett Street, Richmond.*

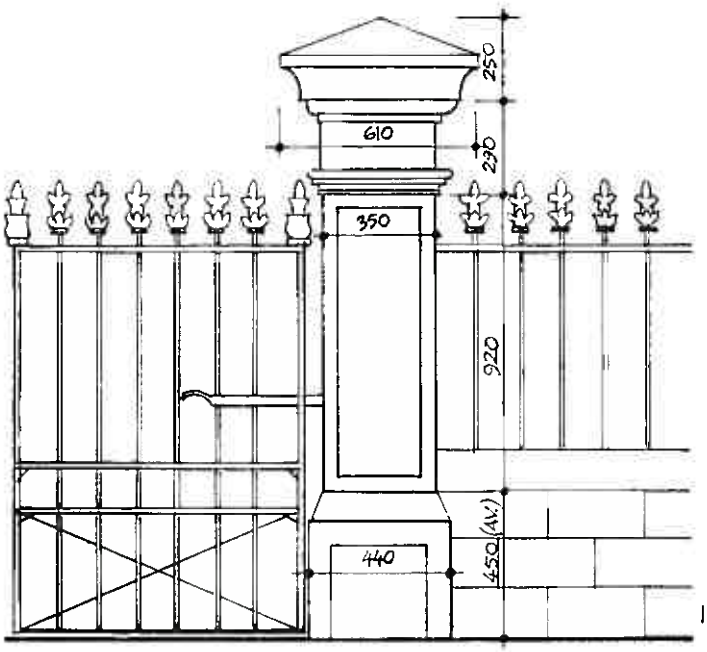
A split-picket fence surrounds the front verandah of a settler's modest cottage.

Early Timber Picket Fence

Description:
In early examples picket heads appear to be either broad V-shaped or flat, formed from split timbers.

Later machined timbers were used, particularly in urban fences.

Examples:
Common in contemporary views of the 1860s, but surviving urban examples of verified date are very rare from this period., e.g.
- 164 Moor Street, Fitzroy*;
- 14 Raleigh Street, St Kilda*;
- 189 Grattan Street, Carlton.*



Cast-iron Palisade Fence

Description:
Railing shafts and spearheads were cast together as a piece, so the shaft could be decorated either with an overall pattern or as a bundle of four staves. They were inserted into drill holes in a bluestone plinth set in molten lead, and penetrated flat metal rails. The palisade generally ran between finely worked bluestone piers.

Another (rare) type of early pier was constructed of cast-iron strapwork, comprising four side panels with a cast-iron capping piece, all riveted or bolted together.

When iron palisade fences were not situated between cast-iron posts, masonry piers were constructed, or the fence was situated between the masonry wing walls of a terrace. In this case, a cast-iron verandah stanchion could act as an intermediate fence post. The masonry piers were of bluestone in grander situations; otherwise they consisted of cement-rendered brickwork. Later the shaft section was frequently of face brickwork, generally tuckpointed. There was generally a very heavy, elaborately molded capping piece, often with a finial. Lateral support was provided by S-curved cast-iron braces on larger fences.

Examples:
Early examples of cast-iron palisade fences in Melbourne are:
- House, 140 Nicholson Street, Fitzroy (1850's)*;
- Terrace, 76-80 Nicholson Street, Fitzroy (1850s)*;
- Glass Terrace, 64-78 Gertrude Street, Fitzroy (1854 & 1856)*;
- Royal Terrace, Nicholson Street, Fitzroy (1854), architect Charles Laing;
- 26-50 and 27-33 Gore Street, Fitzroy (1860), architect Charles Webb;
- Terrace, 39-49 Brunswick Street, Fitzroy (pre-1858).*

Royal Terrace has the same pattern of palisade as 140 Nicholson Street, but has no masonry piers. 76-80 Nicholson Street has piers of cast-iron strapwork.

Corrugated Galvanized-iron Sheet Fence

Description:
From 1850-52 flat and corrugated galvanized cast-iron sheet was imported (Lewis 1972, p. 393). It was displayed at the Melbourne Exhibition of 1858 by Merewood and Rodgers. By the 1870s there were galvanizing works in all capitals. Early sheet had a 5 inch (127 mm) dimension, ridge to ridge of corrugations (although other dimensions were available), compared with the present dimension of 3½ inches (89 mm). There was a timber ridge capping and a timber plinth.

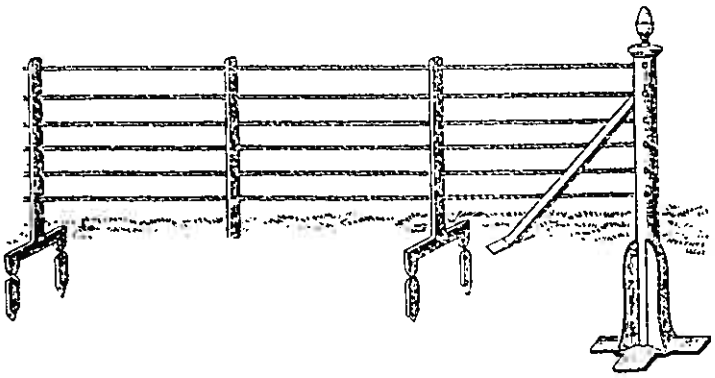
Examples:
Corrugated pressed cast-iron fences surviving from before the 1860s are at the mansion 'Oberwyl' at 35 Burnett Street, St Kilda (1856) and also around the kitchen garden at 'Como' (1847,1855).*

Francis Morton Portable Iron Fence

Description:
This rolled iron bar outer rectangular frame, with bar cross-bracing meeting at a cast-iron rosette acting as a central boss or turnbuckle, was imported from 1855 until local cast-iron manufacturers began to supplant it after 1860. It was advertised in the 1862 Melbourne Exhibition catalogue.

Examples:
- On protective bluestone culverts on the corner of Nelson Place/Parker Street, Nelson Place/Cole Street and Nelson Place/Thompson Street, Williamstown*;
- Also on the corner of Gold and Hodgkinson Streets, Clifton Hill*;
- A balustrade to the front verandah of a portable house at 189 Brunswick Road, Brunswick*, still survives.

Note:
the Williamstown and Clifton Hill examples have apparently been secured at the rosette by welding; the Brunswick Road example is intact. The Old Melbourne Gaol has a similar balustrade.



Motley & Green Portable Iron Fence

Description:
Advertised as wire cable strand fencing between flat iron bar stanchions, the fence turned below ground to form a toe to give dimensional stability.

In the extant examples the wire cable, if it ever existed, has been replaced with rolled steel rod. In some cases details have been formed in wrought iron.

Examples:
- 'Como'(1847,1855), South Yarra;
- At Lechlade Avenue vehicular entrance, and at Lechlade Avenue/Williams Road corner, around the compost heap*;
- Christ Church (1865), corner Punt and Toorak Roads, South Yarra.*

Hooped Metal Rod Overlapped Palisade Fence

Description:
Early rolled rod was formed into hooped overlapped palisades. Details were wrought very simply for fixings, diamond-shaped intermediate spearheads, gate hinges and gate latches. An additional metal bar formed a bottom rail, which was generally fixed to masonry paving.

Examples:
- Single-storey terrace, 307-9 Johnston Street, Abbotsford*;
- Detached two-storey vicarage, 97 Rathdowne Street, Carlton*;
- Single-storey terrace, 171 Grattan Street, Carlton*;
- Terrace, 140-50 Simpson Street, East Melbourne;
- Two-storey terrace, 76-80 Nicholson Street, Fitzroy*;
- Terrace, 11 Agnes Street, Jolimont;
- Terraces 132-6 Domain Street, South Yarra;
- Two-storey house, Park House, 353 Moray Street, (Cnr. Albert Street), South Melbourne.

(Illustrated at left).

4. 1860-1900, RURAL

BACKGROUND

Post and Rail fence with nailed split palings.

The first reference to galvanized wire netting fencing in Australia appeared in 1888; it was an advertisement on the front of J.W.F. Rodgers, **Australian Federal Directory . . .**, for the Iron Wire, Rope & Fencing Company, D. Rowell & Co. of 2 Poets Corner, Westminster. The illustration of chicken wire, described as: 'Superior galvanised steel netting for sheep, kangaroos, etc. Superior galvanized steel netting for rabbits with stakes complete, Patent galvanized steel barbed fencing wire. Patent 'economic' strained wire fencing with Ravell's patent designed brace' (Rodgers 1888).

Post-and-rail fences continued to predominate, but, as timber became increasingly costly, wire became a more competitively priced replacement for timber rails. (Rails continued to be used only for containing large numbers of horned cattle.) The first wire was known as 'black wire'; it was nearly 1/4 inch (6 mm) thick, because it had a lower tensile strength than modern steel wire (Palmer 1961).

In 1862 Mayes' **The Australian Builders' Price Book** (p. 112) specified mesh wire for fencing, from 1/2 inch to 3 inch mesh made with wire from no. 16 to no. 20 gauge, available in rolls of one to four feet (300-1220 mm) width.

By the 1880s there were ten wire works in Victoria, but even in this period wire was still one of the largest iron and steel imports (Palmer 1961).

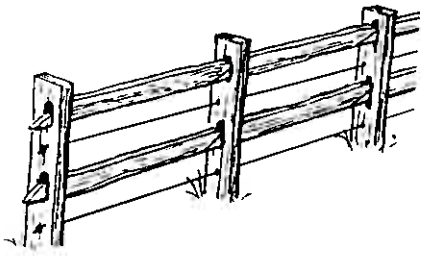
The 1886 Mayes' **The Australian Architects, Builders and Contractors' Price Book and Guide** (p. 139) contained exactly the same advertisement for four patterns of corrugated iron as appeared in 1862.

No other fencing materials are listed for agricultural use.

FENCE TYPES

Post-and-rail Fence

Post-and-rail fences continued to be built, but were becoming less common.



Post, Rail and Wire Strand Fence

Description:
In a two-rail fence one strand of wire ran between the rails, with others below, depending on the size of the stock to be contained (Palmer 1961).

Ravell's Galvanized Wire Strand and Wire-netting Fence

Patent fencing materials were first imported from England by D. Ravell & co. in 1888.

Description:
Four wire strands were equally spaced and strained between timber posts. Chicken wire netting clad the lower half; the upper two strands were of patent barbed wire. It was used to contain sheep and rabbits, and was claimed to exclude kangaroos.

No extant examples are known.

5. 1860-1900, URBAN

BACKGROUND

From 1870-1900 decorative cast-iron designs were required by statute to be registered. The 161 designs registered by 33 manufacturers are listed by Robertson (1961) in an appendix. Between 1884 and 1892 the most prolific of these were Angus McClean, who registered 48 designs, and Cochrane & Scott of Elizabeth Street North, Melbourne. Of the foundries of the 1880s, only T. Main & Sons of 18 Lambert Place, North Richmond, remain under their own name.

The **Australian Ironmonger**, of 1 September 1888, describes Cochrane & Scott's exhibit at the Centennial International Exhibition, Melbourne. It included 'cast-iron gate pillars, for both wicket and carriage gates, in both solid and open patterns. The whole of the ironwork was most elaborately printed, the designs being made prominent in a variety of colours' (Robertson 1960, p. 65-6).

Walter & Grey of 5 Post Office Place West, Melbourne, included in their exhibit 'a pair of massive cast iron gate pillars of a new pattern and suitable for a pair of carriage gates' (Robertson 1960, p. 65-66).

Apart from timber picket fences, cast-iron palisade fences became almost universal in urban Victoria in this period. Dr Robinson points out in **Victorian Heritage** (1960, p. 65-66) that: *'strong posts were necessary to carry the weight of heavy cast-iron gates and were usually large, hollow and square in section. On each face, floral and geometrical open work patterns were arranged above and below a small rosette, or more commonly a lion's mask (occasionally a female head). The (spear) heads of the railings were usually triradiate. The fleur-de-lis pattern is common . . .'*

After about 1860 railings were commonly of rolled steel rod, and rails were of steel bar ('wrought'), though cast rails were still produced as specials.

The catalogue of the Excelsior Foundry (1901) shows nine post caps, one post, seven railing spear heads, one common gate and one elaborate wicket gate.

In South Australia the characteristic cast iron fence is erected over a higher stone plinth which accounts for one third to one-half the height of the fence (Illustrated Appendices 4, 5, 6, 7). The castings are more frequently decorative panels rather than a repetitive palisade of spearheads. Gate posts are generally solid rather than constructed from panels. The predominant Adelaide foundries in the period 1885-1910 were G.E. Fulton, the Sun Foundry of A.C. Hurley and Metters Limited.

FENCE TYPES

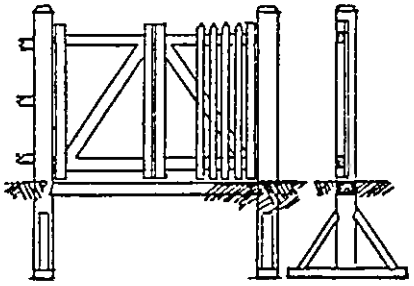
398 Albert Street, East Melbourne.

Cast-iron Palisade Fence

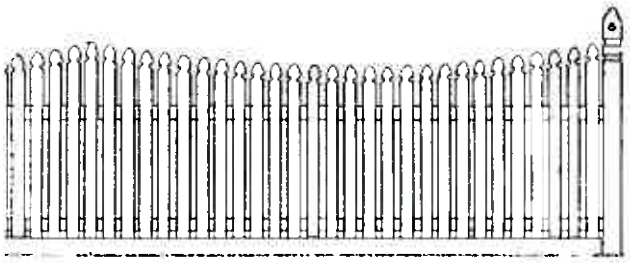
Description:
After about 1860 in Melbourne railings were commonly of plain rolled mild steel rod screwed into cast-iron spearheads. Gate and fence posts consisted of four side panels of decorative cast-ironwork, screwed or bolted together with metal lug attachments. On each face, decorative open-work patterns were arranged above and below a central motif: a lion's mask, a female head or a rosette. The post is surmounted by one of several patterns of post caps. Palisades were single or double (with intermediate railings rising to half-height, above the middle rail). As in the earlier period, railings were set into drill holes in a bluestone plinth filled with molten lead to achieve secure fit, and penetrated holes in the middle and top rails of rolled steel bar.

The rails were rivetted to the gate posts or stanchions. Railings penetrated circular holes drilled into rails. Gates were similarly fabricated with a more substantial rolled steel bar frame of styles and bottom rails. The side rails were capped with cast-iron finial pieces, larger than the intervening spearheads. The gate had a lock or latch above the middle rail; it hung from a cylindrical iron hinge between top and middle rails, and a lower vertical pin hinge was set into the threshold bluestone. A round-headed gate was also manufactured, and some examples remain. Only three extant examples are known of an elaborate wicket gate, illustrated in the MacFarlane, Fulton and Harley catalogue (Robertson 1973, p. 123).

Occurrence:
Throughout Melbourne's inner-ring suburbs, particularly, Parkville, North Melbourne, Carlton, Fitzroy, Hawthorn, Richmond, East Melbourne, South Yarra, St Kilda and South Melbourne.
- Round-headed gate: 197 Drummond Street (Corner McPherson Street), Nth Carlton;
- Elaborate Wicket Gate: 997 Burke Road, Hawthorn (Harley); O'Sullivan Road, Rosebay, NSW. (MacFarlane); Wood Sons Lane, Adelaide (Fulton).



Picket Fence, Nagle (1900)



Timber Picket Fence

Description:
Intermediate and bottom rails were set between posts over a plinth, which varied in depth according to the fall of the ground. Pickets were fixed with two nails to each rail. The picket heads were cut to numerous stock patterns, and if not equal height above ground, increased as they approached the post, or varied to form a sweeping catenary curve from one post to the next.

The posts could be capped with a cast-iron capping piece screwed to the post and bevel-edged (two are illustrated in the 1901 Excelsior catalogue); or the post could be sawn or turned, with an applied cast-lead rosette and a turned or moulded finial piece added. Saw cutting or turning of posts became more elaborate and frequent after 1900.

Pedestrian wicket gates generally continued the pattern and style of the picket fence itself. Gate styles, although deeper in section, could be cut to the same profile as the pickets. Gates were usually single, braced between rails and without their own plinth, the pickets being merely cut to length.

Picket fences were generally painted (for appropriate colours see National Trust of Australia (Victoria), **Technical Bulletin 1.2** December 1983), or of appropriate timber (Baltic pine or cedar) well oiled or varnished.

Occasionally a gable-moulded capping was added as a top finish.

Occurrence:
As for Cast-iron Pallisade Fence, and also in Williamstown, Port Melbourne, Ascot Vale, Brunswick, Northcote, Collingwood and Prahran, etc.*

Corrugated Galvanized Iron Fence with Timber Lattice

Corrugated Galvanized Iron Fence

Description:
Corrugated galvanized iron sheet fixed vertically with cleats to two or three rails (depending on height), generally over a bevelled timber plinth, often with a gable moulded capping and scotia mould added.

Occurrence:
As for Timber Picket Fence and for all classes of buildings (even Parliament House) for side, rear, and even front boundaries.*

Pittosporum hedge

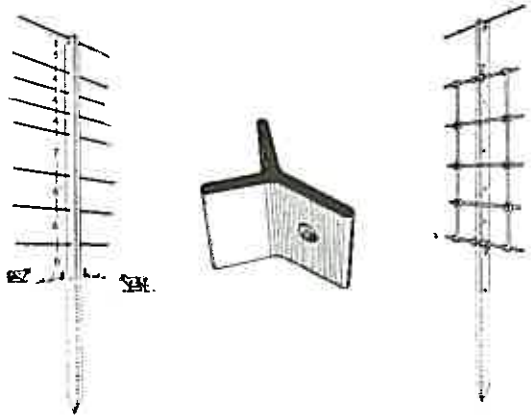
Hedges

Description:
A dense privet, pittosporum, box or melaleuca hedge was grown behind a picket or palisade fence if a sound or visual isolation barrier was required. This was maintained regularly and clipped to a rectangular section generally the same height as the fence itself.

Examples:
104 Melville Road, Brunswick;
37 Mattingly Street, Brunswick.

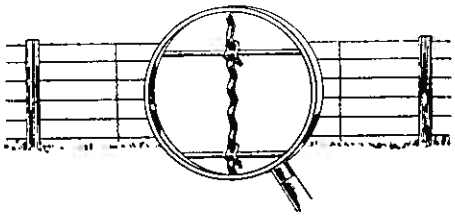
6. 1900-25, RURAL

FENCE TYPES



Steel Girder Fencing

Description:
Steel girder posts appeared for the first time in Mayes 1908 catalogue. The fence was 3 feet 9 inches (1140 mm) in height, constructed of 5 feet 6 inches (1670 mm) posts at 21 feet (6400 mm) centres, with two droppers between each. There were available straining posts with sole pieces and stays with ground plates. Tensioned between were five plain black wire strands with a top strand barbed (barbs at 3 inch (75 mm) spacings), all of 12 or 14 gauge.



Crimped Dropper

The "King-loc" Dropper

Fence Droppers

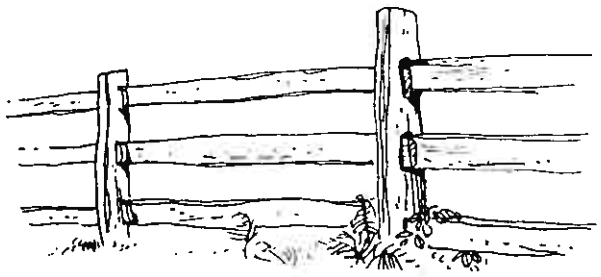
Description:
Patent steel posts and droppers from Petit's, Geelong were specified in the Mayes 1908. These were 1½ x 1 inch (40 x 20 mm) or 1½ x ¾ inch (40 x 20 mm), and had six holes for the wires (at 6, 5, 5, 6, 8 and 12 inch spacings), the top hole being slotted to receive the barbed strand.

Other patent droppers available in 1908 were King-Loc in 30 and 45 inch (760 & 1140 mm) lengths and Pages simple dropper of 22 inch (560 mm) and seven tongue dropper of 42 inch (1060 mm) length (Mayes 1908).

Before 1914, Cyclone were also manufacturing droppers in 6 or 4 gauge steel and in 30, 36, 42, 48 and 54 inch (760, 910, 1060, and 1370 mm) lengths. Two other brands had also emerged: Federation droppers for 5 and 6-strand wire fences and Auto Screw corrugated steel droppers in 15, 25, 34, 46 and 60 inch (380, 630, 1170, 1520 mm) lengths. By 1927 these had been joined by BUZACO galvanized crimped droppers in 4 and 6 gauge and 28-46 inch (710-1170 mm) lengths. By 1934 King-Loc and Crimped droppers were also manufactured by Cyclone.

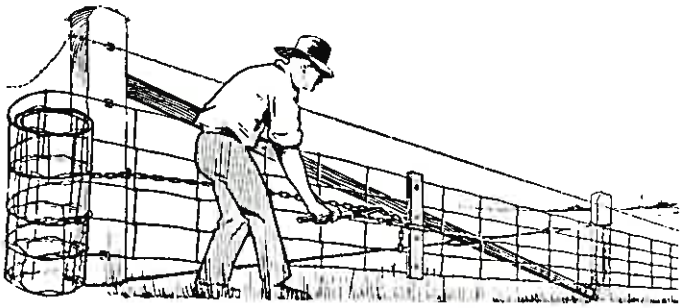
Split Slab Post-and Rail Fence

Description:
Ironbark or stringy bark was still felled, sawn, then split into slabs and fastened to post-and-rail fencing in 1914. The slabs were available in two sizes: 5½ feet x 11 inches x 1½ inches (1670 x 290 x 40 mm) and 3½ feet x 11 inches x 1½ inches (1060 x 280 x 40 mm) (Mayes 1914).



Post-and-Rail Fence

Description:
Stringybark or eucalypt timber was felled, sawn and split for use as three-rail fencing. The posts were 7 feet x 9 inches x 4 inches (2130 x 230 x 100 mm) and the rails 9 feet x 6 inches x 3 inches (2740 x 150 x 70 mm).



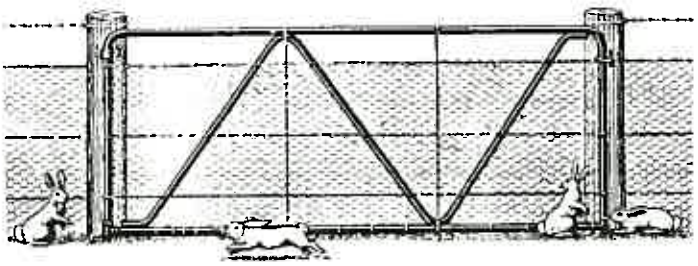
Cyclone Rural Fence

Description:
Cyclone spring coil fence was manufactured, assembled in 5 chain (100 metre) mesh rolls, and gently crimped to give elasticity. It was advertised as being improved by having posts further apart. The fence was in horizontal strands with vertical crossties at 1 foot (300 mm) centres; top and bottom lines were 9 gauge wire, intermediate of 11 gauge and cross ties of 13 gauge.

Cyclone ring lock fence had become available by 1934, and was intended to replace 'old style fencing of plain wire and droppers'. It was available in three types: heavy (10 gauge), light (11 gauge) and high tensile (of lighter material). It was made in the following types:

- 5 horizontal wires, 26 inches (660 mm) high, vertical wires of 12 inch (300 mm) spacing (sheep).
- 6 horizontal wires, 28 inches (710 mm) high, vertical wires of 12 inch (300 mm) spacing (lambs).
- 6 horizontal wires, 36 inches (915 mm) high, vertical wires of 12 inch (300 mm) spacing (general).
- 8 horizontal wires, 42 inches (1065 mm) high, vertical wires of 12 inch (300 mm) spacing (horses, cattle).
- 8 horizontal wires, 30 inches (760 mm) high, vertical wires of 6 inch (150 mm) spacing (pigs).
- 9 horizontal wires, 48 inches (1220 mm) high, vertical wires of 6 inch (150 mm) spacing (farm, factory, dogs).
- 15 horizontal wires, 66 inches (1675 mm) high, vertical wires of 6 inch (150 mm) spacing (farm, factory, dogs).

GATE TYPES



Cyclone Rural Gates

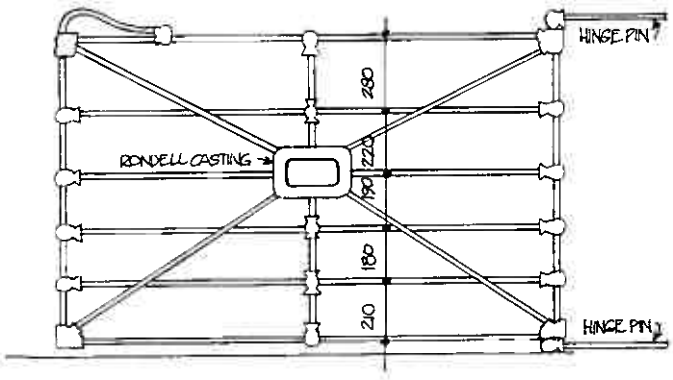
Description:
A timber field gate illustrated in the James Moore catalogue (c. 1895) has five bar rails and three stiles, the inner stile projecting above the top rail to support the metal bracing tie rod. (Refer Appendix I.)

Cyclone's 1910 catalogue illustrated only one farm gate, 10 feet x 4 feet (3050 x 1220 mm), the 'N' type. The N-shaped struts were bolted to the top and bottom rails at their ends, and clipped at the elbows. These were for horizontal taut wires consisting of two strands of 9 gauge wire. (Refer Appendix 10.)

Rabbit net mesh could be used as cladding.

Another two-stay gate of 8 feet (2440 mm) was available. Pedestrian gates were of 1 3/8 inch (35 mm) diameter steel tube with a single 1 1/8 inch (29 mm) stay of 3 feet 6 inches (1065 mm) or 4 feet (1220 mm), both 4 feet (1220 mm) in height.

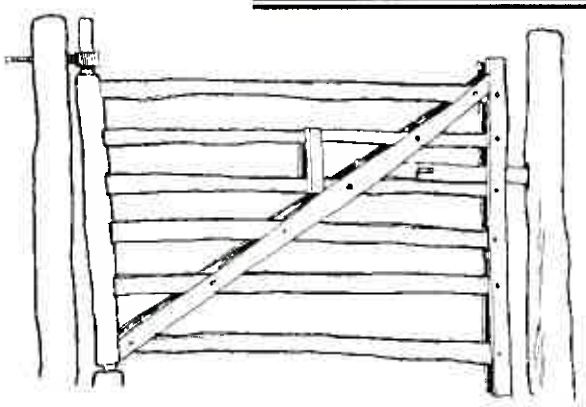
By 1934 the standard height of Cyclone gates was 3 feet 10 inches (1170 mm), and tube junctions were welded. Galvanizing was available. However, the basic 'N' gate style had been joined by a large range of others, and at least seventeen other styles were illustrated in their 1934 catalogue.



Other patent Rural Gates

Description:
H. V. McKay at the Sunshine Harvester Works, Melbourne produced a six bar gate of wrought steel rods (20 mm diameter) which screwed into decorative cast-iron connections. Its dimensions were 1740 x 975 mm)

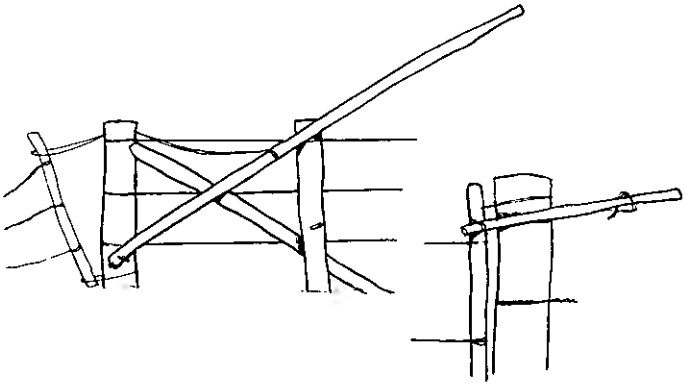
Examples:
- Point Cooke Homestead, off Aviation Road, Point Cooke.*
- Avenue of Honour, Ballarat (South side of road)*.
- St Agnes, Metcalf Road, Kyneton.



Timber Stock Gates

Description:
The gates usually pivot on a metal pin or simply a whittled post end set in a stump sunk in the ground. The top hinge is a metal collar or a length of mild steel rod bent around the post.

The gates are fastened closed with a looped chain or in stockyards by a timber sliding locking piece (Edwards 1978).



Long Lever Gates

Description:
These provide the widest opening. The gate is of wire with a moveable post at one end. The gate wires are terminated with a long lever pivoting from a pin set into the bottom of a fixed post.

A second type has a longer, lighter lever and a holding pin set into another post about a metre away from the gate post.

Dairy cattle gates which are narrower can be fastened with a short lever – a piece of timber attached to the gatepost with a twist of fencing wire (Edwards 1978).

Sliprails

Description:
Consist simply of a couple of light sapling poles thrust through holes in the gateposts or resting on angle iron brackets (Horse shoes performed this function on early sliprails) (Edwards 1978).

7.

1900-25, URBAN AND SUBURBAN

BACKGROUND

Details for construction of fences and gates are found in contemporary building textbooks and amateur handbooks. **The Australian Amateur Carpenter and Builder**, published c. 1900 (although largely derived from the English handbook **Everyman His Own Mechanic**, published twenty years earlier), contained details for the construction of 'garden gates, field gates and park gates' in timber construction of both five and six rails. James Nangle's **Australian Building Practice** (1900; 1911; 1925) contained detailed specifications for the construction of several kinds of timber fences and gates. In 1908 Robert Haddon published his **Australian Architecture**, which also had specifications and construction details of great clarity, which have not yet been identified in field examples.

In 1899 the Cyclone Woven Wire Fence & Gate Co. was established by L. T. Chambers in a small factory in Franklin Street, Melbourne. Fences were woven on the posts by a portable hand-weaving machine. These were the first machine-woven fences, and the first all-steel fences in Australia. Cyclone claimed that they were cheaper than an equivalent timber picket fence.

Shortly after, Cyclone began manufacturing tubular steel gates. Looms were installed to manufacture the Cyclone spring coil fence on a large scale, and the company moved to a larger three-storey factory on the corner of Swanston and Franklin Streets. Manufacture of ornamental wire fabric for garden fencing began, and machines for the manufacture of chain wire installed. In 1924 a new factory was built on a three-acre site in Gipps Street, Abbotsford, and branch factories opened in Alexandria, New South Wales, and in Adelaide.

Other manufacturers of woven wire fencing followed. T. N. Chuck Wire Fence & Gate Co. Pty. Ltd, Brunswick, P & W Chandler Ltd of 234-6 Flinders Lane, Melbourne and 276-94 Brunswick Street, Fitzroy (c. 1931), Leighton Simpson & Co. ('Kangaroo Brand') (c. 1910), the small A & R Thatcher wire works of Fitzroy (c. 1925), and Buzzacott & Co. Ltd., 7 Market Street, Sydney (1927).

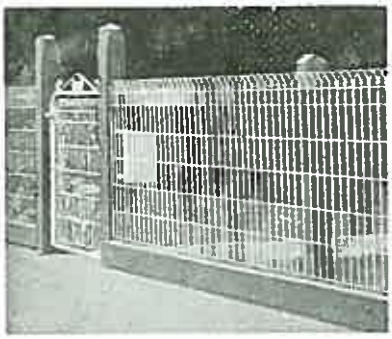
Palisade cast-iron fences diminished rapidly in popularity in this period and **Haddon** (1908) does not mention them. In the advertising pages there was only one advertisement for a cast-iron foundry.

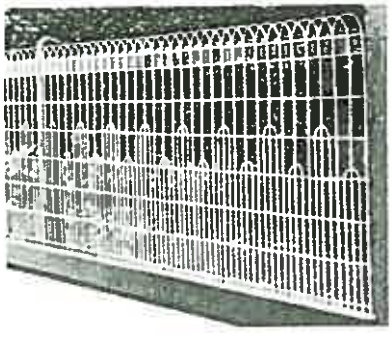
The **Real Property Annual** (1917-8) contains an illustrated advertisement by Plaisted & Sullivan, of the Equitable Building for rolled steel ornamental fencing and gates; which was probably manufactured in Adelaide by Humes.

The 1908 Mayes **The Australian Architects', Builders' and Contractors' Price Book and Guide** describes another fence type (also advertised in **Haddon** 1908) by John Sanderson & Co. of 111 William Street, Melbourne, who were agents for Anchor Fencing Materials, manufacturers of the clamp wire fence. Examples of this type have not been identified.

The 1914 Mayes **The Australian Architects', Builders' and Contractors' Price Book and Guide** mentions for the first time straight, laced, lattice-mesh, ribbon-work fences which, whilst never becoming more prevalent than galvanized chain wire netting, can frequently be identified today.

FENCE TYPES





Cyclone Metal Fence

Description:

Posts and rails could be timber (jarrah) with a decorative timber capping piece to posts (all supplied by Cyclone with a range of six capping patterns), but posts and rails could also be of all-steel construction: 2 inch (51 mm) galvanized steel tubing for posts, and 1⅜ inch (35 mm) tubing for rails. A range of four capping patterns (also two patterns for hitching posts) was available.

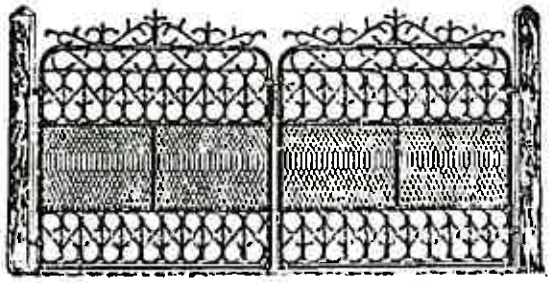
The wire mesh (Style A) consisted of eight crimped 12½ gauge horizontal wires at 6 inch (150 mm) spacing, excepting the two top wires were closely spaced at 2⅜ inches (60 mm) to hold the 'ornament' in place. 'Picket' 9 gauge vertical wires were at 3 inches (75 mm), 2¼ inches (55 mm) or 1¾ inches (45 mm) spacing, and looped over at the top as 'ornament'. Overall height was 3 feet 4 inches (1020 mm).

Style F mesh was similar, except that vertical wires were always 3 inches (75 mm) apart; other intermediate wires rose up to half height then hooped over, giving a spacing at the bottom of 8 inches (35 mm).

A second type of fence was available: 3 feet 6 inches (1060 mm) in height, with style A fabric to 3 feet (910 mm) height, although heights to 4 feet 4 inches (1320 mm) were possible. Each horizontal wire was independently tensioned on its own individual ratchet. At intermediate posts the fabric passed between double tubular steel posts of 1⅛ inches (30 mm) diameter, and set half an inch (10 mm) apart with a common capping piece. A heavy galvanized cable wire stretched above the top rail between capping pieces. Examples of this type have not been identified.

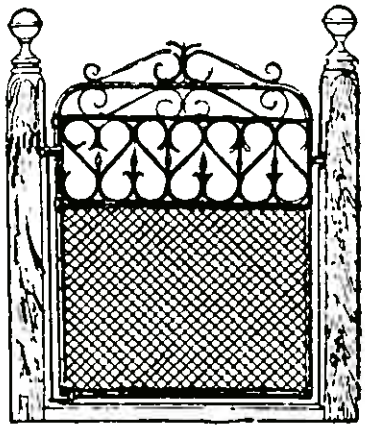
Two other Cyclone fence types were available. The woven wire fence had eight horizontal cables, with a top strand of barbed wire (spaced at 3, 3, 3, 4, 5, 6, 6, 6 and 10 inches (75-255 mm) respectively), or seven cables (spacing 4, 4, 5, 6, 6, 7, and 9 inches (100-230 mm)). Vertical strands were 25½ inches (750 mm) apart, every third strand extending upwards from the horizontal strands to the barbed wire. Timber posts occurred every 16 feet (4.9 m), but could be as far as 22 feet (6.7 m) apart. In 1910 this fence was advertised as very suitable for suburban backyards, and was installed around flower beds in the Fitzroy Gardens, Melbourne. It was still actually woven and constructed on site by Cyclone, using a weaving machine which could be bought or hired.

Flower guard mesh was similar to Style A mesh (no posts were used) in heights of 12, 18 and 24 inches (300, 450, 610 mm). It could be readily curved and was portable, and was commonly erected in public gardens.

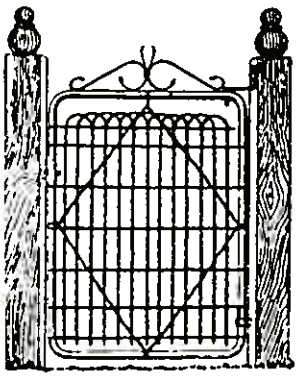


Cyclone Metal Gates

Description:
Frames were formed from 1⅜ inch (35 mm) steel tubing, with no joints in the top corners, for rigidity. These contained panels of ornamental openwork of ⅛ inch (3 mm) flat iron which was riveted together and bolted to frames and cross stays. The lower half or central section could be woven of 14 gauge galvanized steel wire. Increased height was provided by increasing the woven panel height. Four standard patterns were illustrated in the 1910 catalogue (refer Appendix 10), in addition to two further patterns using Style A and Style F mesh. Double and single gates were available in the standard height of 4 feet (1220 mm) and in widths of 3, 3.5, 4, 5, 6, 8, 9, 10, 11, 12 feet (915-3660 mm).



D.W. Chandler "Kangaroo" Single Hand Gate



Leighton Simpson and Co. gate.

Other Patent Woven and Chain Wire Mesh Fence and Gates

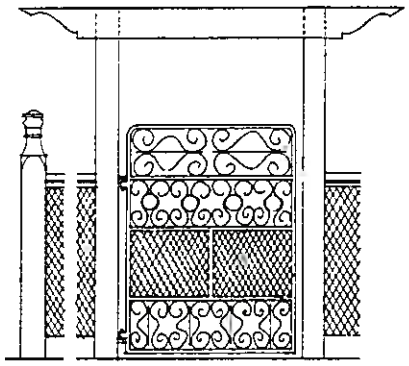
Description:
Chain wire mesh was available for the first time in the 1914 Mayes catalogue, in mesh sizes of 3 inches (70 mm) (8 gauge), 2 inches (50 mm) (8 and 10 gauge) and 1⅝ inches (50 mm) (12 and 14 gauge). By 1922 half-4 inch mesh (10-100 mm) mesh in 8-16 gauge was available. Brass woven wire was also available. To prevent corrosion of the netting, Mayes advised dipping the roll in a mixture of two parts tar, one part kerosene, heated nearly to boiling, then letting it dry before use.

In 1927 Mayes also listed **Buzzcott's** galvanized wire fabric fencing. Mesh sizes were 3, 2¼ and 1¾ (70, 55, 45 mm) in rolls of 2 to 5 feet (610-1520 mm) in height.

T. N. Chuck manufactured fences and gates using 2 inch (50 mm) if it covered the entire panel or 1¼ inch (30 mm) mesh if it formed only a part of the gate. Scrollwork panels above and below the mesh were similar to Cyclone patterns. Gates were hung from timber posts with turned timber finials, rounded or pyramid tops or chiselled in simple patterns. A plain chain wire fence could be finished with a timber gable capping a tubular steel rail over a timber plinth.

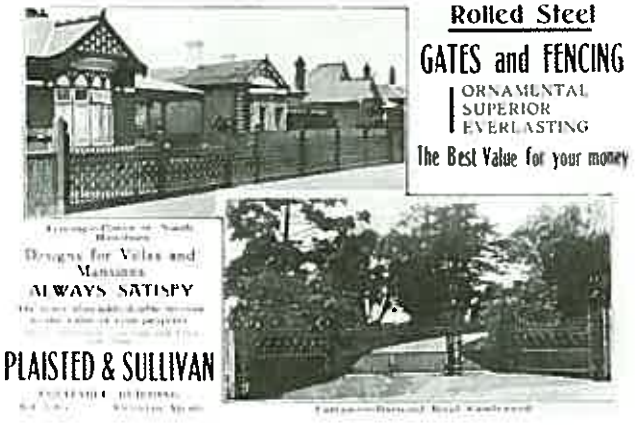
Leighton, Simpson & Co. produced gates in a large variety of patterns with fabric mesh, chain link mesh or a sequence of wrought iron vertical bars. Joints were with tubular connectors or electrically welded. One gate of 'very handsome design' sported a diamond shaped mesh panel within triangular infills of scrollwork. Posts were timber with turned timber finials or metal strapwork 'crowns' (no known examples remain).

D. W. Chandler ('Kangaroo Brand') manufactured fabric fencing within a tubular frame supported by heavy gauge (no. 8) droppers between timber plinth and posts. There were eight patterns, the 'XX', 'F' and 'O' pattern introducing unusual variants by twisting and looping the vertical strands of the mesh. Diagonal straining wires further decorated the gates.



Woven Metal Ribbon Panel Fence

Ribbon-work mesh also became available from 1914, in double strands of 3/16 inch (5 mm) (1 inch mesh), 1¼ inch (32 mm) (1¼ inch mesh) and single strands of ⅛ inch (3 mm) and ¼ inch (6.5 mm) (1 inch mesh), and ¼ inch (6.5 mm) (1¼ inch mesh). In 1927 woven metal panels became available, of 13 gauge straight laced lattice of ½ inch (12.5 mm) mesh in a crimped diamond pattern.



Humes (agents in Victoria Plaisted & Sullivan) patent rolled Steel Ribbon Fence

Description:

Heavy gauge 5/8 inch (15 mm) width wrought rolled curved section steel ribbon in curved shapes were riveted together within a 17/16 x 3/16 inch (28.5 x 5 mm) rolled steel frame. It was advertised in the Real Property Annual (1917, p. 17) by the agents, Plaisted & Sullivan. Four panels were rivetted together to form faces of an open work pier. Erected between timber fence posts or tuck-pointed brick piers.

It was invented by Hume Brothers Cement and Iron Co. Ltd. of 121 Flinders Street Adelaide and distributed in Victoria by Plaisted & Sullivan of the Equitable Building from 1907-8. Hume Brothers established an extensive catalogue in the 1920s. The catalogue claimed that if the cheapest wooden fence for a £500 building would cost £5, then a Humes fence could be erected for £10. A fence 1 foot 5 inches (432 mm) to 4 feet (1220 mm) in height and a 3 feet (990 mm) width gate manufactured by Hume Brothers was specified in the 1914 Mayes Catalogue.

Examples:

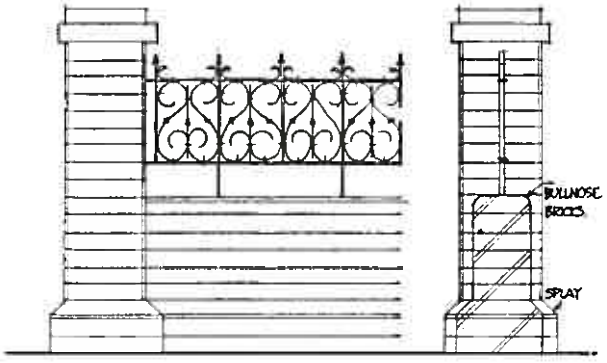
It is seen relatively frequently in South Australia but very few examples exist in Victoria.

- 51 Pine Avenue, Mildura;
- Side fences to the front entrance of the Bendigo Home and Hospital for the Aged, 100-4 Barnard Street, Bendigo;
- 'Coolock House', corner Valentine & View Streets, Bendigo (1910)
- 238 Moray Street, South Melbourne;
- 69 Denmark Street, Kew, has been identified as the fence illustrated in the firm's advertisement; it is in fragile condition, but intact.*

Anchor Clamp Wire Fence

Description:
This is specified in the 1908 Mayes catalogue. It was a mesh formed by horizontal and vertical wires, secured at their crossings by wrought iron clamps. A special clamp pincher was used to crimp the wires and close the clamps. This fencing was used for suburban and agricultural situations. The mesh could be 3 x 12 inches (70 x 300 mm) or 3 x 15 inches (70 x 375 mm) (3 horizontals) or 6 x 6 inches (150 x 150 mm) (5, 6, or 7 horizontals); posts could be 10 or 22 (3050-7700 mm) feet apart.

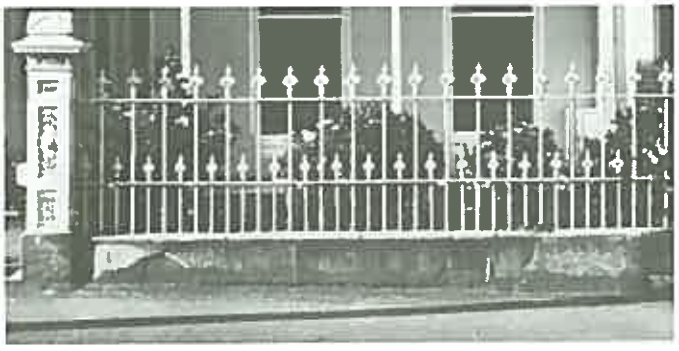
Examples:
No examples have been identified.



Heavy Gauge Rolled Steel Ribbon Fence

Description:
Heavier gauge 5/8 inch (15 mm) width steel ribbon was riveted together, in scroll patterns sometimes situated over a dwarf fair face brick (usually red pressed) wall with brick piers. This is illustrated in the 1937 Cyclone catalogue.

Examples:
- 36 Leslie Street, Essendon*;
- 393 Brunswick Road, East Brunswick*;
- 'Thistle', 409 Rae Street, North Fitzroy*;
- 51 Highett Street, Richmond;*
- Around the entrance to public toilets outside Flinders Street and the former Princes Bridge railway stations in Flinders Street, Melbourne.



Cast-iron Palisade Fence

Description:
Still available in 1914 (but not apparently after the war), this was generally installed between brickwork piers to an average of 4 feet (1220 mm) in height. New patterns did not seem to emerge with the new century as they did with other decorative cast-iron, and these fences must have appeared increasingly old-fashioned. Hydraulic stamped spearheads are listed in the 1908 Mayes catalogue.

Corrugated Galvanized Iron Fence

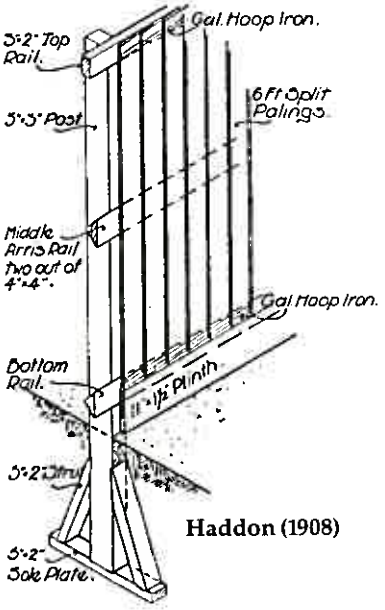
Description:
Fences were clad with 24 gauge 6 feet (1830 mm) wide sheets, screwed on all sides and at the middle to a timber post and rail frame, set over a wooden plinth. Often only the timber frame was painted. The iron could be capped with a gabled timber capping piece, or kept above the line of the top rail and cut in serrations (Haddon 1908, Nangle 1908).*

Split post, rail and paling fence

Description:
A rough but durable fence of timbers split directly from the tree could be built to 5 feet in height. Intermediate posts of 9 x 6 inches (230 x 150 mm) and corner posts 9 x 9 inches with split gum palings of 1 inch (25 mm) by 6-9 inches (150 x 230 mm) width were nailed to them. Posts were sunk 2 feet 6 inches to 3 feet (760-915 mm) in the ground at 8-9 feet (2440-2740 mm) spacing, and three rails tenoned into them. 16 gauge galvanized hoop iron straps of 1¼ inches (32 mm) width were nailed to the palings, and passed through the mortises to secure the palings. The paling tops were aligned to be continuously level.

Sawn palings were also used for a better finish, and were 4-6 inches (100-150 mm) wide and ¾ inch (20 mm) thick (Haddon 1908; Nangle 1900).

Paling Fence

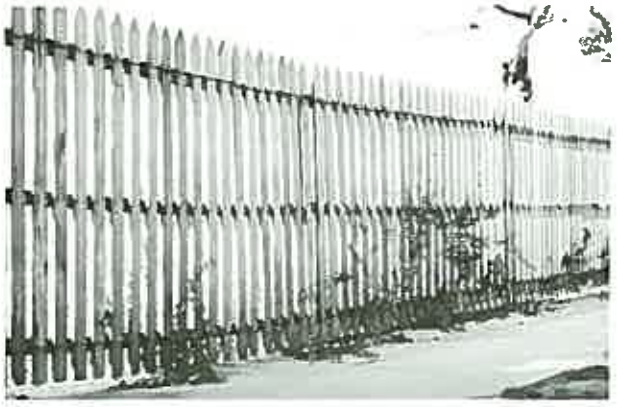


Haddon (1908)

Sawn post, rail and paling fence

Description:
All timber was sawn. Plinth and posts could be 5 x 3 inches (125 x 75 mm) to 6 x 4 inches (150 x 100 mm) redgum or jarrah, with square corner posts, spaced as for corrugated galvanized iron fence with three hardwood rails of 3 x 2 inches (75 x 50 mm) or 4 x 2 inches (100 x 50 mm). Palings for a 6 feet (1800 mm) height fence were slightly feather-edged, set vertically to lap 1½ inches (40 mm) and also strengthened with 24 gauge galvanized hoop iron bent into the shape of the palings and nailed. Mayes (1908) gives post spacings as 8 feet (2400 mm) centres (i.e. two to a rod or 16 feet (4900 mm)).

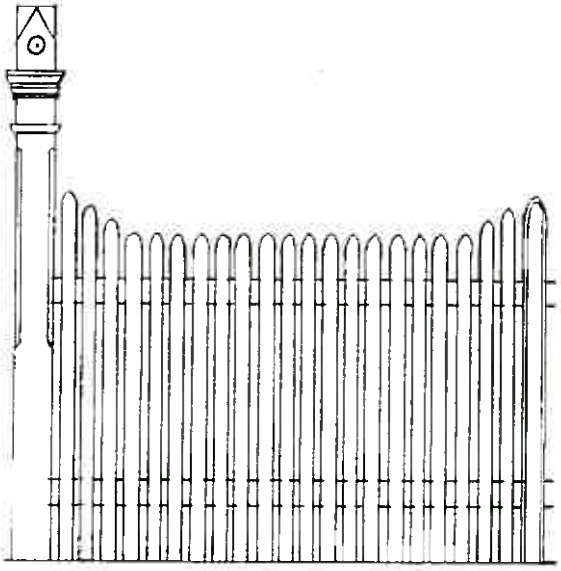
By 1927 close sawn paling hardwood fencing was available, still 6 feet (1800 mm) height posts at 8 feet (2400 mm) spacing. Posts were 9 feet 6 inch x 2½ inches x 6 inches (2900 x 65 x 150 mm) and rails 16 feet x 3 inches x 2 inches (4870 x 75 x 50 mm), and rapidly became the most common method of subdividing suburban backyards (Mayes 1927).



Timber industrial fence

Description:
Around industrial properties a high fence of 3 x 1 inch (75 x 25 mm) hardwood palings 5-8 feet (1500-1800 mm) high with a 60 degree angle pointed head could be used. There were three rails between posts; the palings were spaced with 2⅜ inch (60 mm) gaps and bound to the top and bottom rails with plain 24 gauge galvanised hoop iron strapping fixed with nails.

Examples:
- Former brickworks, Albion Street East, Brunswick. (Lewis, 1982)*;
- Newmarket Stock and Sale Yards, Smithfield Road, Newmarket.*
- Melbourne Grammar School, Domain Road, South Yarra.*



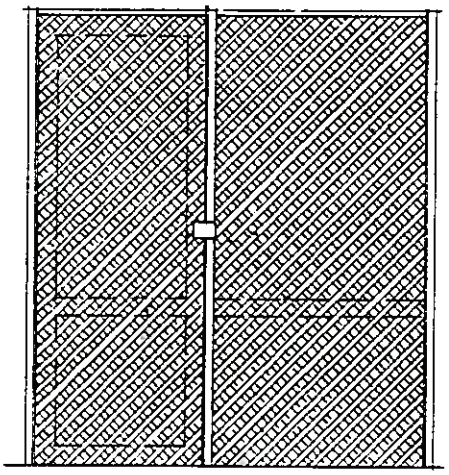
Timber picket fence

Description:
Nangle (1900) specified a picket fence with posts 4 x 4 inches (100 x 100 mm) with tops turned or with a fixed capping piece and spaced at 8-9 feet (2440-2740 mm) centre. Two rails of 3 x 2 or 4 x 2 inches (75 x 50 or 100 x 50 mm) or triangular in section 5½ x 4 inches (140 x 100 mm) called 'arris rails' were tenoned into the posts. The pickets were at 3 x 1 inches (70 x 20 mm) and 2 inches (50 mm) apart. The fence height was given as 4½ feet (1370 mm).

Mayes (1908) specified a 4 feet (1220 mm) height also, for 'pointed, gothic acorn or fancy tops'. Pickets were hardwood or mahogany.

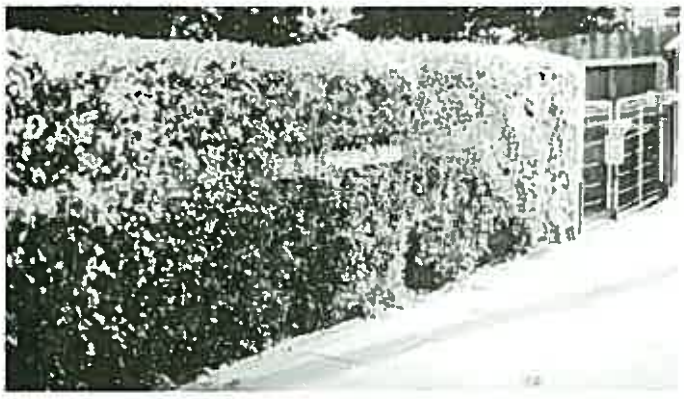
Mayes (1914) described a 'cottage fence' of cured and dressed 4 x ⅞ inches (100 x 22 mm) pickets for a 4 feet (1220 mm) height fence with 5 x 3 inches (125 x 75 mm) posts and 3 x 2 inches (75 x 50 mm) rails. The rails and posts were painted, but the pickets were oiled.

James Moore's catalogue illustrated 40 picket head patterns and 16 post head patterns, as well as 14 turned-post finial pieces. (refer Appendix 1).



Timber lattice fence

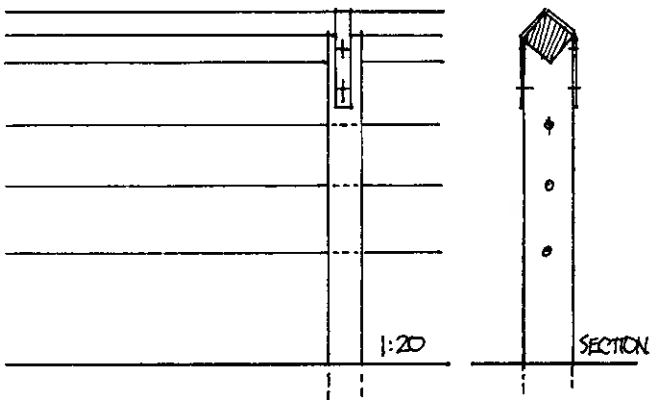
Description:
Timber lattice did not actually appear in Mayes' catalogues until 1927. Available in 3 feet (915 mm) wide sheets of continuous timber lath lattice, it was claimed to be capable of spanning 8 feet (2440 mm). Widths were 1½ x ¼ inches (40 x 15 mm) with 3 x 1 inch (75 x 25 mm) hardwood battens fixed top and bottom. This was used for domestic garden screen fences, typically as a 'side' fence and gate between a detached house and its side boundary fences.



Hedges

Description:
Elliott's **Coles Australian Gardening** (1903) recommended that fences should be 'as inconspicuous as possible . . . kept out of sight as much as possible . . . hidden by vegetation . . . [such as] climbing plants, shrubs and hedges', good hedge plants being: **deciduous**-thorn, hornbeam, privet, sweet briar, and phillyrea; **evergreen**-holly, yew, boxwood, laurel and furze. Various conifers were also popular.

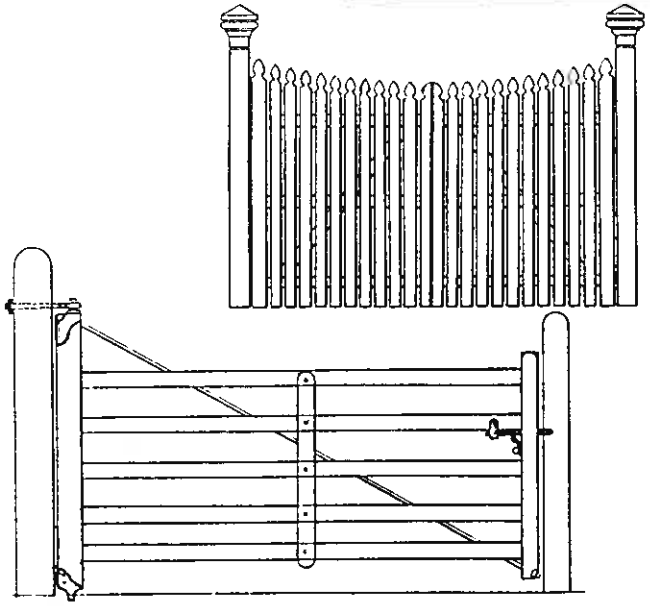
Examples:
- 7 Noel Street, Ivanhoe (high cypress hedge over picket fence);
- 35, 37 & 47 King William Street, Fitzroy (privet hedge over crimp woven wire fence, single storey terraces).



Timber post-and-rail fence

Description:
125 x 80 x 900 mm posts supporting canted rails of 100 x 100 mm, secured by metal strips, were painted white and located as boundary fences for public reserves and as safety barriers in median strips.

Examples:
- Split-level road median strips in the City of Heidelberg, erected between 1914 and 1930: Marshall Street, Devon Street, Invermay Grove, The Panorama, Hawdon Street, Forster Street, Carlsberg Road, Castle Street & Rotherwood Road.*

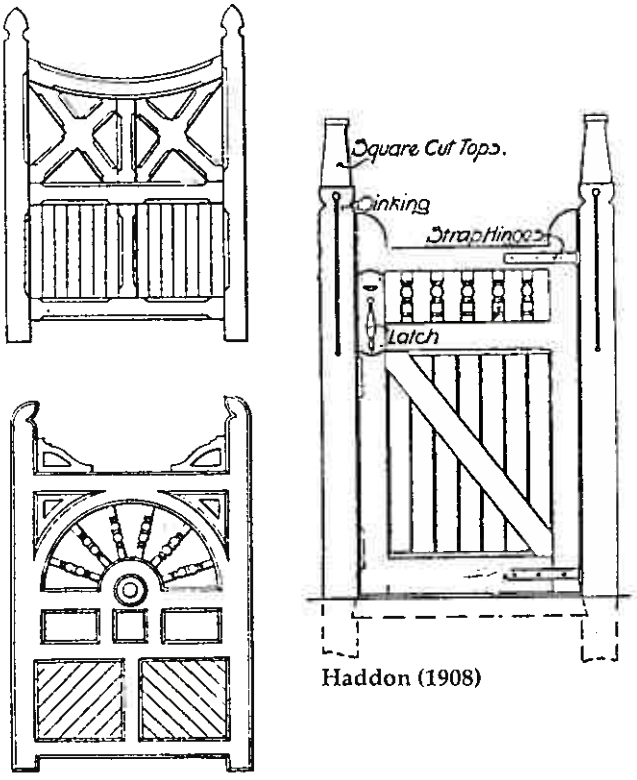


James Moore Catalogue (c 1895)

Timber vehicular gates

Description:
Both Nangle (1911) and Haddon (1908) describe the picket gate as the simplest type. Each gate leaf was framed of vertical stiles and horizontal rails, with a diagonal brace. Pickets to match the fence were nailed to these frames. Gate posts were of red or blue gum, jarrah, ironbark, tallow wood, red or white mahogany, and the gate of jarrah, redwood, red deal, oregon or Baltic pine. Vehicular gates were 7 feet (2130 mm) wide and the height of the fence. Nangle advised stiles 4 x 3 inches (100 x 75 mm), braces and rails 4 x 2 inches (100 x 50 mm), and gateposts of 8 x 8 inches (200 x 200 mm).

Moore's (c. 1895) catalogue illustrated four splendidly elaborate decorative open-work entrance gates, as well as simpler yard gates of 4½-6 inches (110-150 mm) tongue and grooved beaded close boarding, over a ledge and braced frame with moulded capping piece. Moore also illustrated a similar framed gate clad with galvanized corrugated iron in place of the tongue and grooved boarding. No extant examples of Moore's gates have been yet identified.



Haddon (1908)

James Moore Catalogue (c. 1895)

Timber pedestrian gates

Description:
Small gates of one leaf and 3 feet to 3 feet 6 inches (915-1065 mm) wide were known as wicket gates. Nangle (1911) advised stiles and rails of 4 x 4 inches (100 x100 mm), with a lower panel of 4 x 1 inch (100 x 25 mm) tongue and grooved beaded boarding, perhaps placed diagonally, and the upper half filled with 2 x 2 inches (50 x 50 mm) turned spindles housed at bottom and top into the rails. The top rail is surmounted by a moulded capping piece. Similar gates may be identified today.

Haddon (1908) was more adventurous and offered four designs for wicket gates. One had a top rail arched and capped, and deep enough to carry the house name. There was a shallow open panel below with 4 x 7/8 inches (100 x 22 mm) tongue and groove-jointed, both sides of the boarding finished fair face outside with mitred capping. The posts were 6 x 6 inches (150 x 150 mm) with turned tops.

A second design had an external visible bracing spandrels fitted with boarding and the shallow upper panel fitted with turned spindles. The stiles extended above the top rail.

The third was a semi-picket gate with an open frame and a wrought-iron suspender bolted through both stiles. There were two turned spindles inserted horizontally near the top, leaving a square space beside for the latch.

A fourth wicket gate had an upstanding panel at the centre top for the name plate, and the lower section was closed with plain panelling. Shaped finials were planted on the posts.

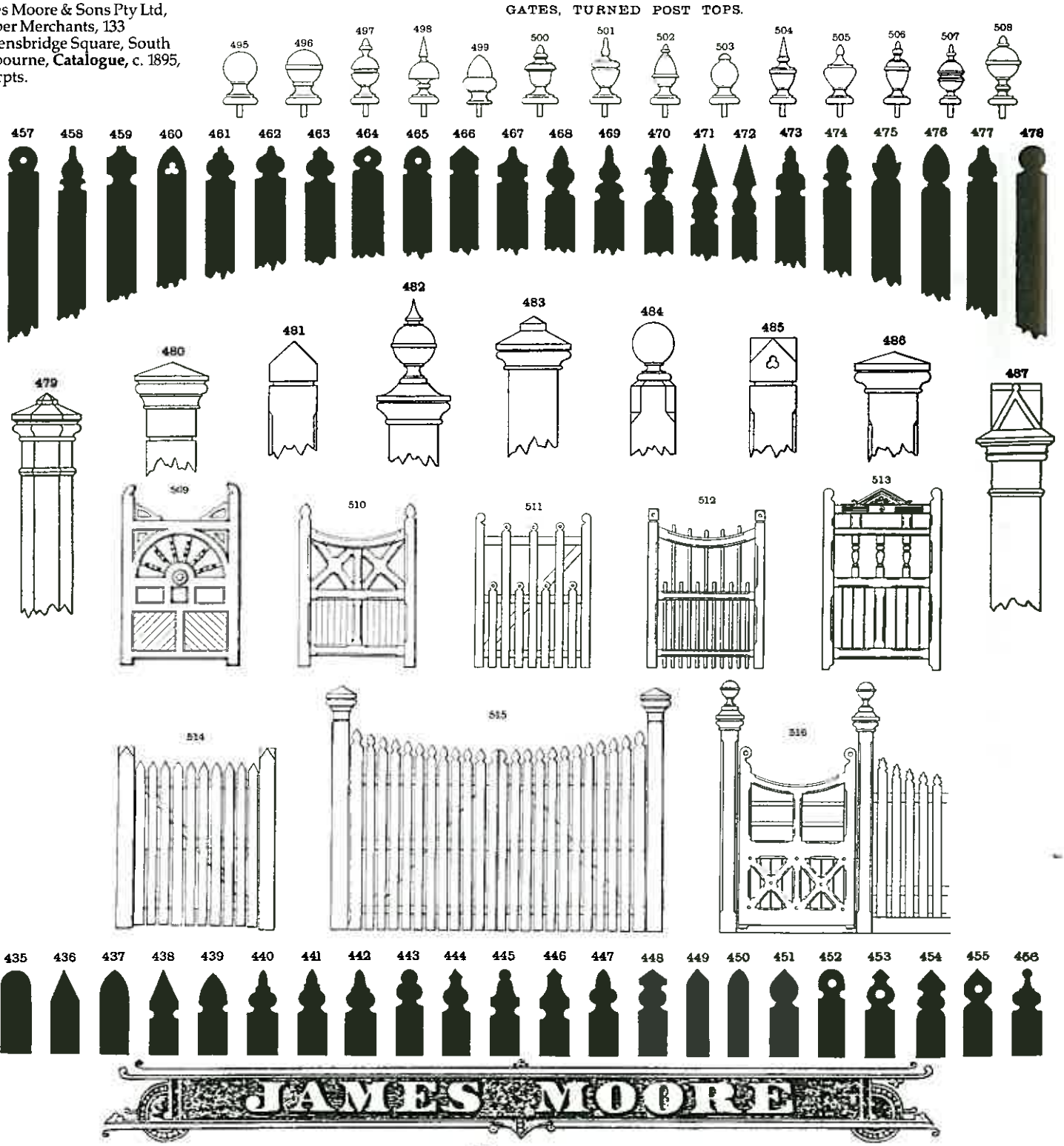
Whilst no extant examples of these designs have been identified certain of their characteristics frequently appeared in timber wicket gates of the period.

A hedge, Cyclone mesh and iron pallisade fences, Parkville.

APPENDICES

APPENDIX 1.

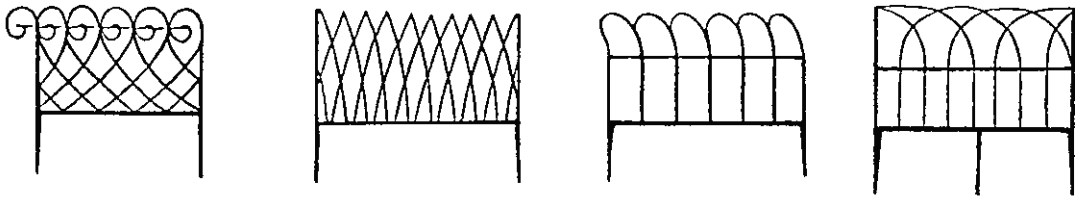
James Moore & Sons Pty Ltd, Timber Merchants, 133 Queensbridge Square, South Melbourne, **Catalogue**, c. 1895, excerpts.



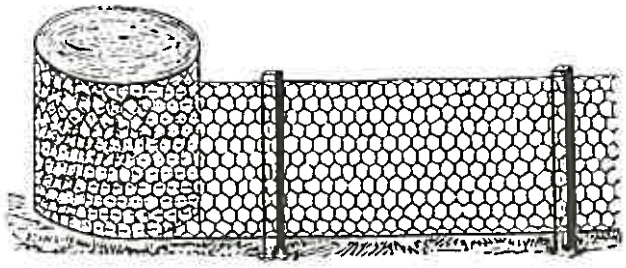
APPENDIX 2.

Macintosh, H. (1877)
Illustrated Catalogue of Plain and Ornamental Iron and Wire Work and Wire Goods of Every Description, Melbourne, excerpts.

ORNAMENTAL WIRE BORDERING.

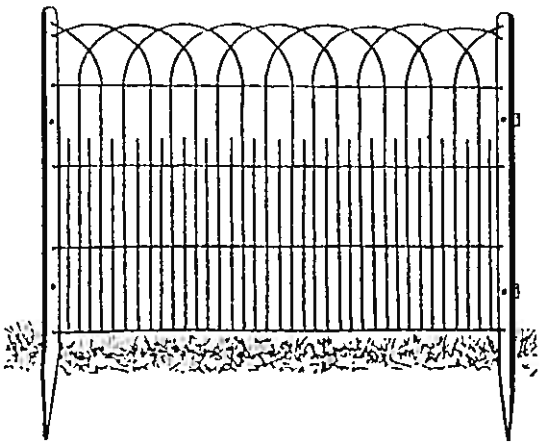


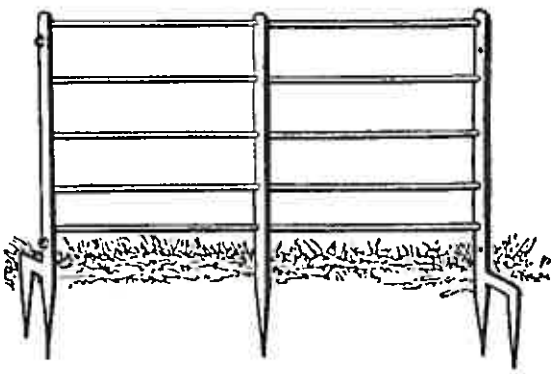
GALVANIZED WIRE NETTING.



WROUGHT IRON HURDLES,

WITH ROUND BARS.



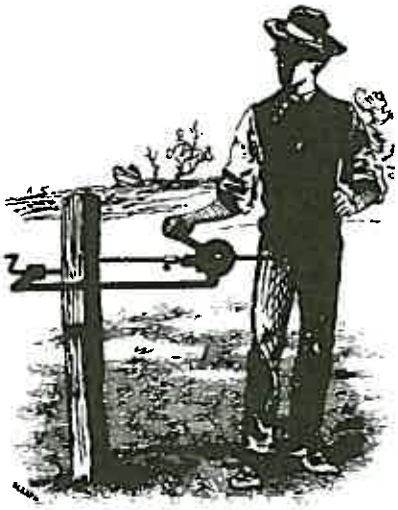


For the permanent and temporary division of grounds and pasture lands against Horses, Cattle, Sheep, &c.

APPENDIX 3.

McLean Bros. & Rigg,
Catalogue of Hardware, etc,
Melbourne 1887, p. 182, 183, 184, 185, 186, 187A, 188.

THE "HOLDFAST" PATENT SELF-FEEDING POST BORER.



This is a very handy machine, and will be found to be a great convenience to those putting up new fences. It is a machine the want of which has long been felt, and we have every confidence in recommending it. By using this machine post boring may be a pleasure instead of a toil.

It is self-feeding, and is made with a clamp to grip firmly to the post. The handle is slotted, so that the leverage may be adjusted as required.

It is of very simple though novel construction, and is strongly made.

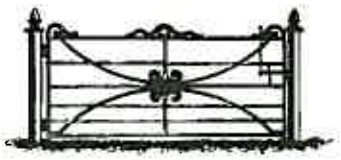
It will bore posts from 2 to 6 inches. The posts can be bored with great facility fixed in the ground.

Price (including two Bits, $\frac{1}{2}$ and $\frac{5}{8}$ inch) **22 3s.**

HILL'S WIRE-CUTTING PLIERS.

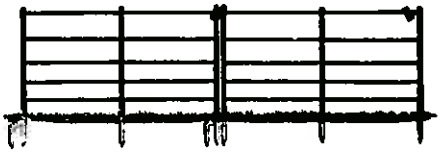
Dark and Bury's Patent Wire Strainer.

GATES AND HURDLES.



We can supply Wrought-Iron Gates for entrances to Carriage Drives, Villa Residences, Churches, &c., also Field and Garden Gates of various designs. They are prepared either for wood, stone, or iron posts, or wrought-iron standards. They are very substantial, and have a nice appearance, while the cost is very reasonable.

Our Hurdles are made of wrought iron throughout, and are of our own manufacture. We have executed numerous large orders with credit to ourselves and satisfaction to our customers. We have no space here to illustrate all of the kinds we make. The cut which we insert shows the Hurdles connected by a link. This is a great convenience when the Hurdles have to be moved about frequently, but the usual plan is to connect them by Bolts and Nuts with iron washers between.

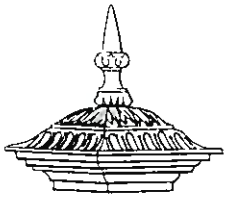


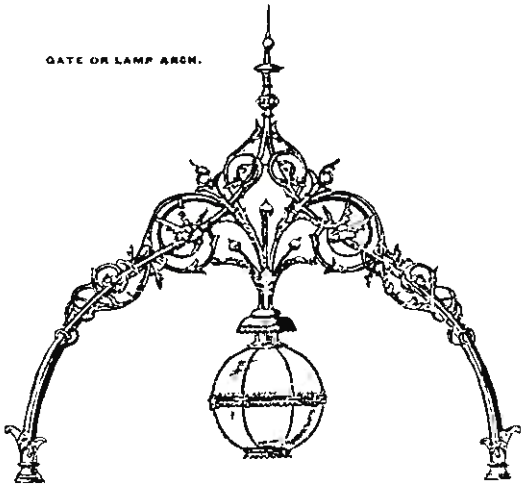
The horizontal bars may be either round or flat, and we shall be glad to furnish quotations for any size or kind preferred.

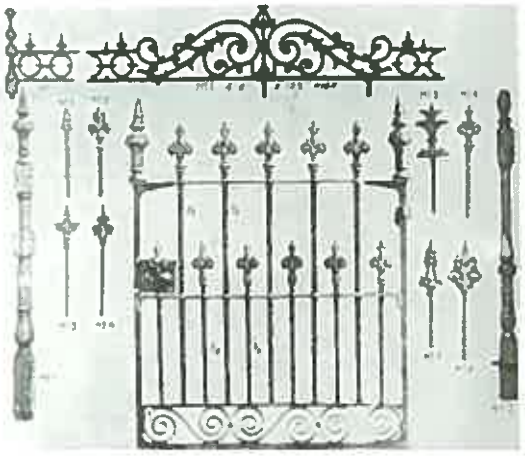
The usual dimensions are 6 feet wide by 4 feet high above the ground. The stakes are made of $1\frac{1}{4} \times \frac{1}{4}$ iron, one end being straight and the other having a prong as shown in our illustration. The bars are usually four in number, and made of $\frac{3}{8}$ inch round iron.

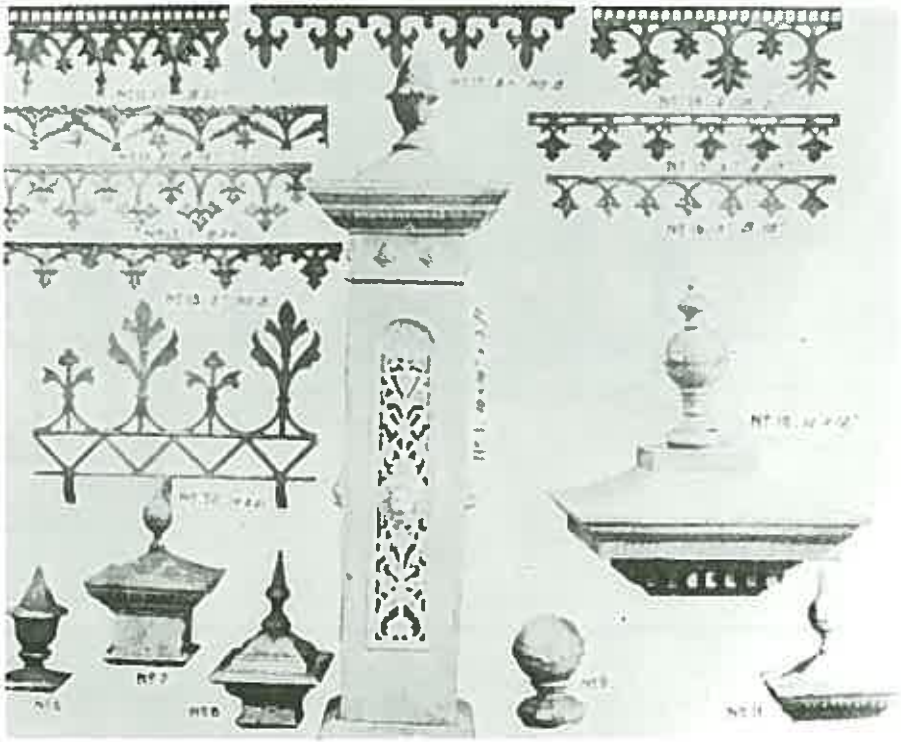
APPENDIX 4.

William Stephens, Excelsior Foundry, cnr of Palmerston Street & Roy Street, South Melbourne. **Illustrated Catalogue**, 1901, excerpts.



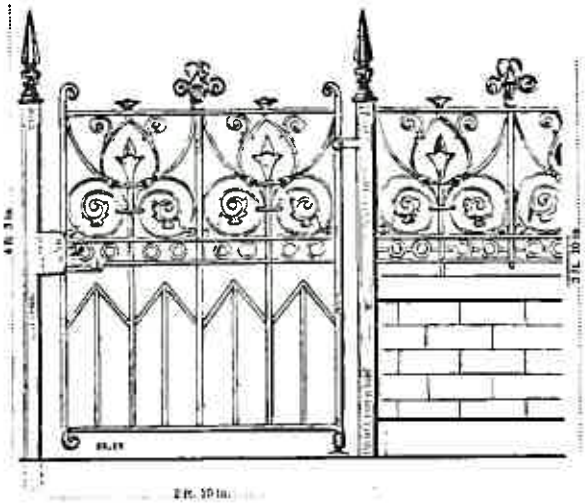


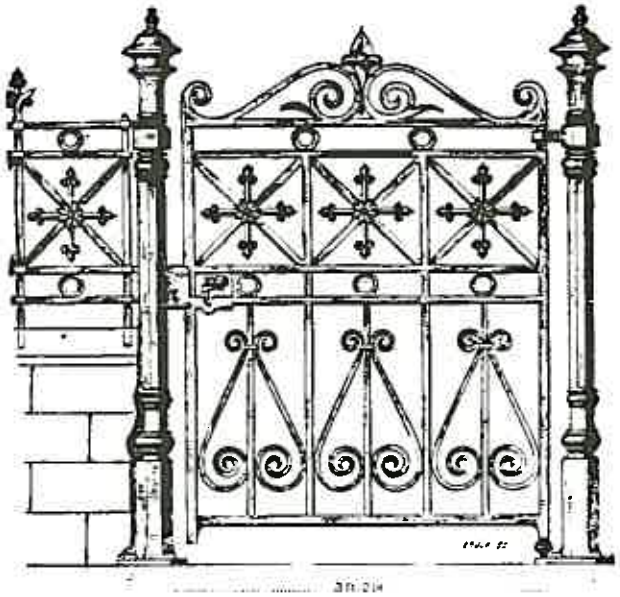


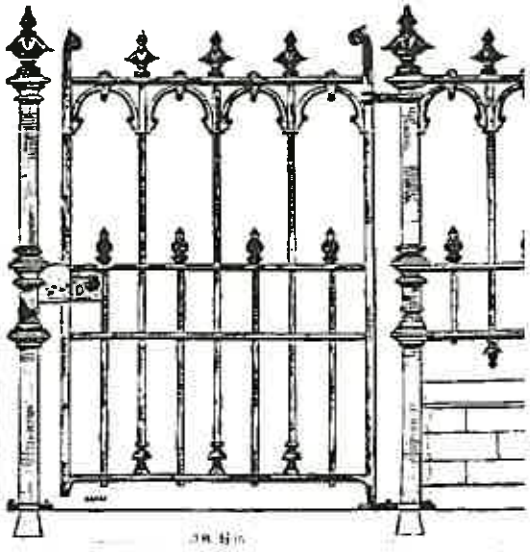


APPENDIX 5.

Fulton, G. E., & Co.
Illustrated Catalogue of Fulton's Castings 2nd ed. Adelaide: V. H. Shering & Co. 1887. pp. 21-30, 32.







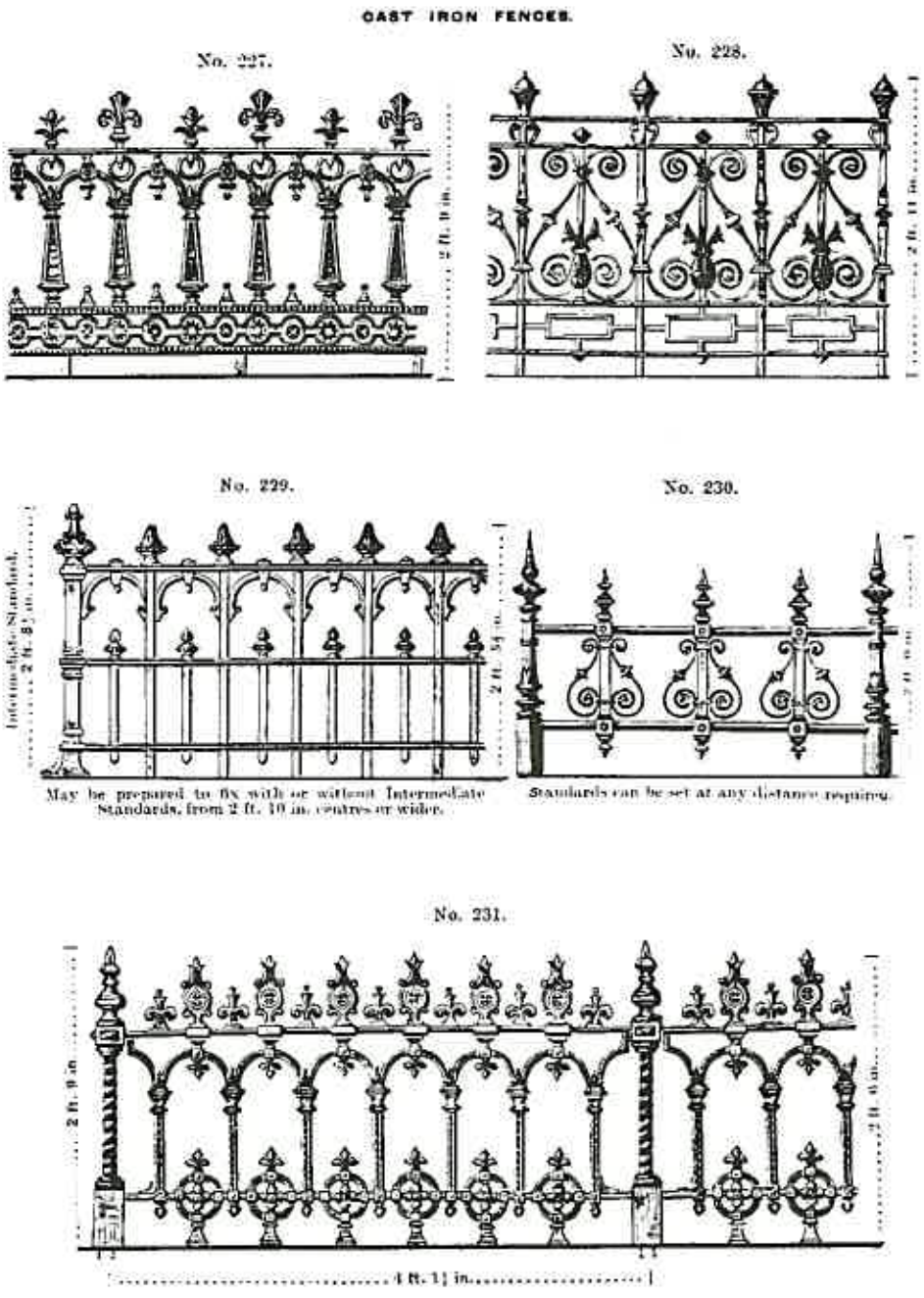
APPENDIX 6.

Sun Foundry of A. C. Hurley & Co. **Illustrated Catalogue**, Adelaide, 1914. pp. 47, 55, 56 & 136.

Cast Iron Fences. Eight pages of the catalogue are devoted to fences. Some patterns are similar to those illustrated as balcony railings, some being shorter, and others about a foot taller, than the corresponding balusters.

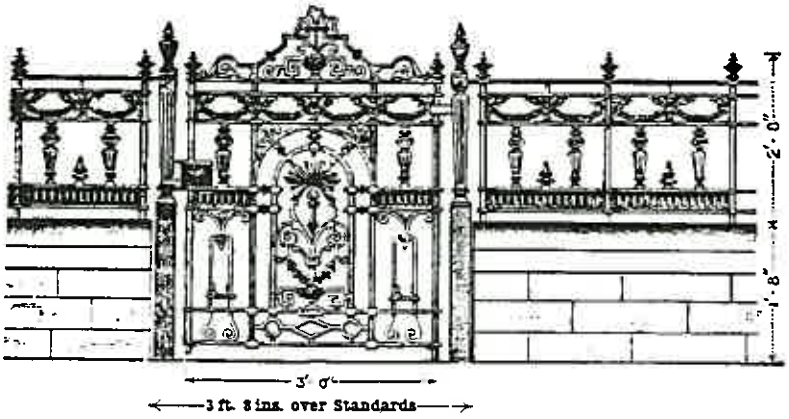
Cast Iron Wicket Gate and Standards. Twenty-seven pages are devoted to gates, many with matching fences. A few of the gates are of wrought iron and some of these have cast iron caps to the pickets.

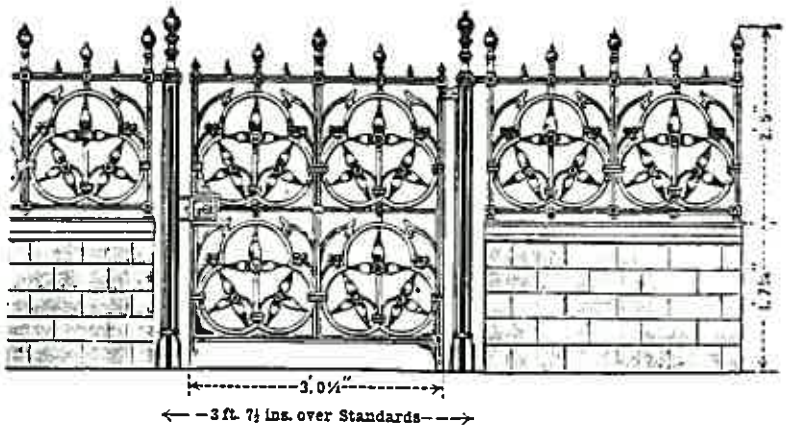
Grave Fences. Eleven pages are devoted to grave fences. It is said that the "Sun" foundry was responsible for almost all the cast iron fences in Adelaide cemeteries.

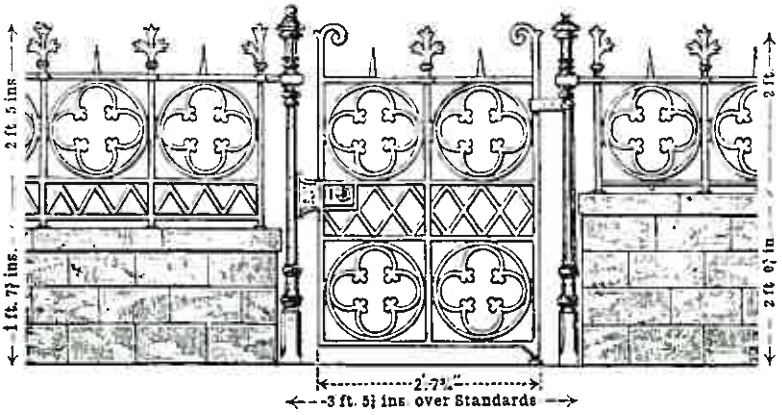


APPENDIX 7.

Metters Limited
Metters Limited (Catalogue)
North Adelaide, Donald Taylor
Collotype Co. pp. 34 & 35.



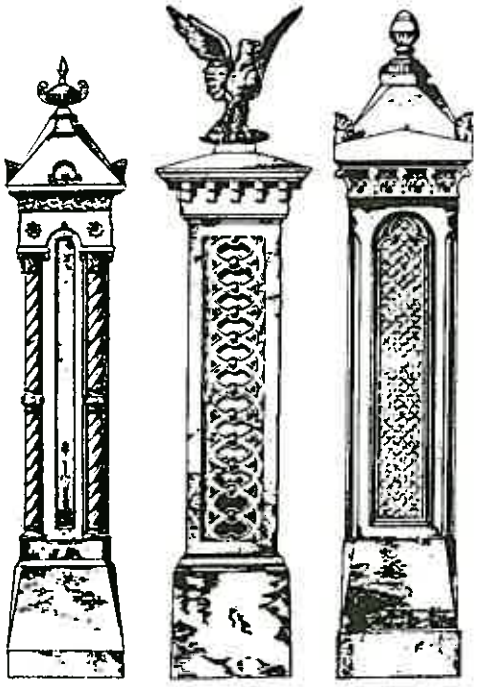


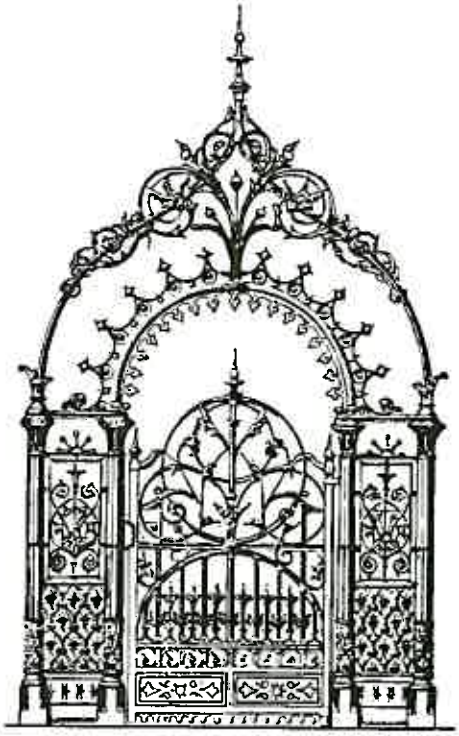


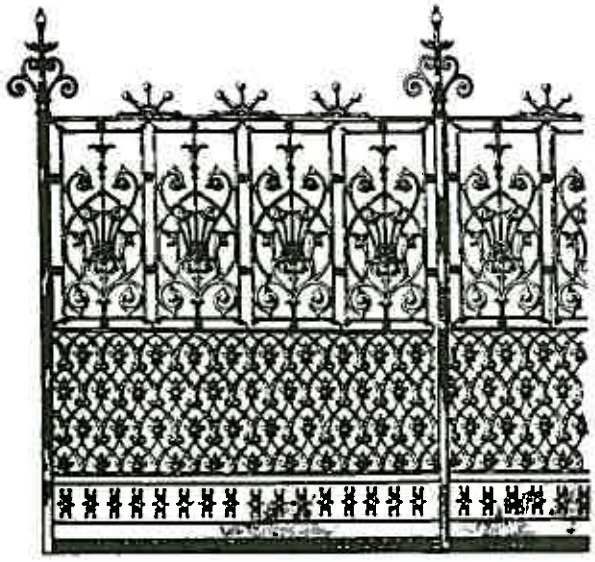
No. 20 Railing. No. 21 Gate. No. 22 Railing.

APPENDIX 8.

Macfarlane, Witter & Co.
Illustrated Catalogue of Macfarlane's Castings Saracen Foundry 6th Ed. Glasgow.
pp. 278, 339.





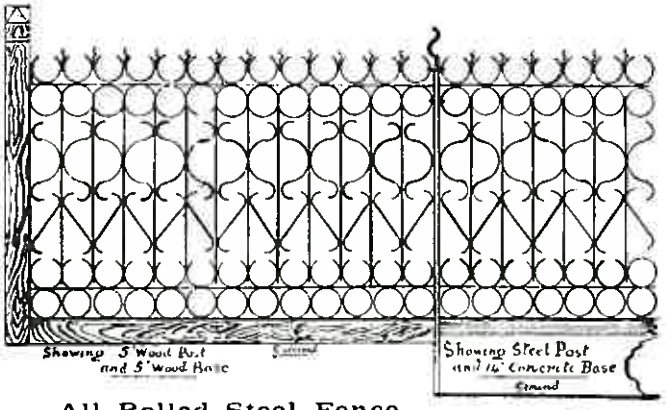


APPENDIX 9.

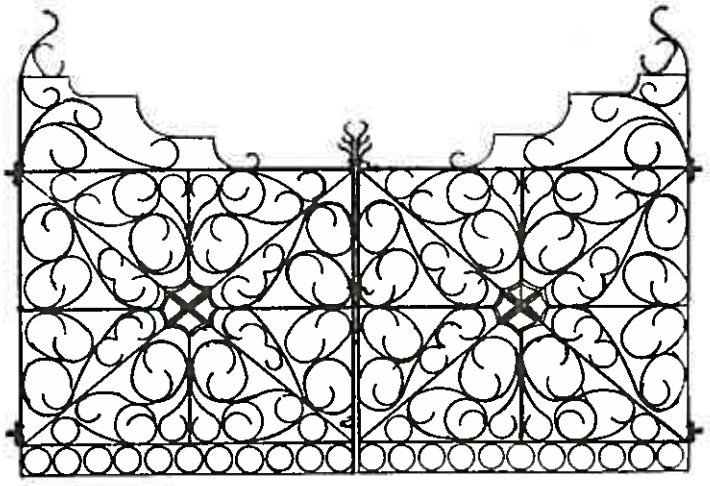
Hume Brothers Cement & Iron Company Ltd. c. 1920 Catalogue Adelaide pp. 54. **Patent Rolled Steel Fences, Gates, Railings, Gratings, Columns, Friezes, Grave Railings, Brackets,** etc. pp. 6, 7, 24-31, 36-41, 44-45.

HUME'S PATENT ROLLED STEEL.

Crested Picket Double Gate.



All Rolled Steel Fence.

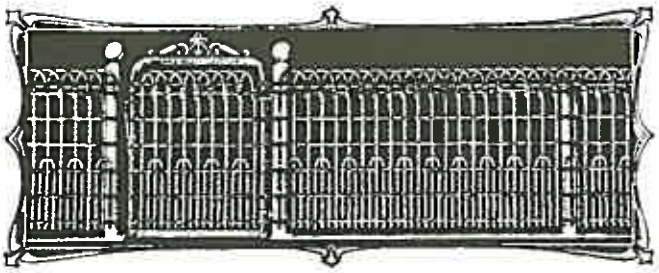


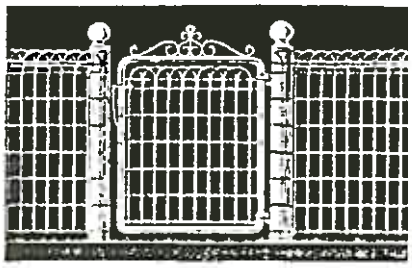
Extra Scrolled Rolled Steel Double Carriage Entrance Gates.

APPENDIX 10.

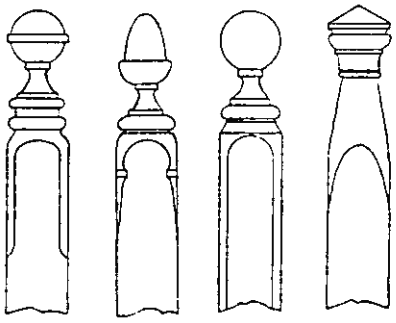
Cyclone Woven Wire Fence and Gate Co., **The Cyclone Fence and Gate Book No. 16** Melbourne, 1910 (1911 ?), pp. 10-13, 22, 26-8, 30-6, 41, excerpts.

CYCLONE ORNAMENTAL FENCE.

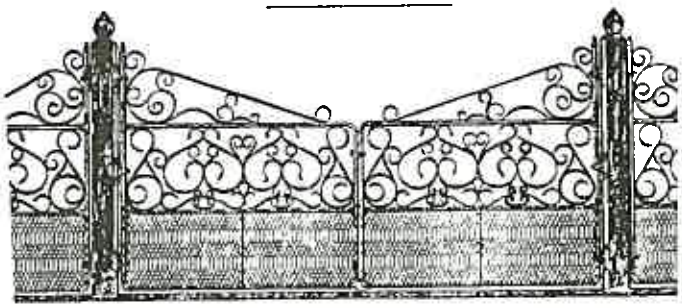




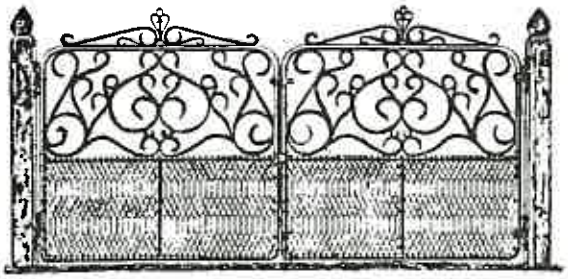
CYCLONE POSTS (Wood)

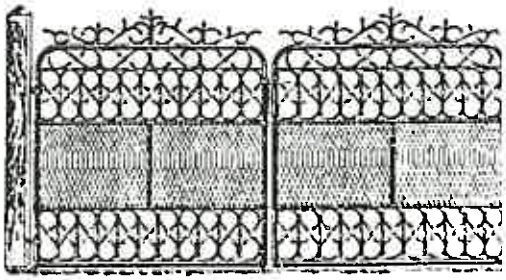


CYCLONE CARRIAGE ENTRANCE GATES.

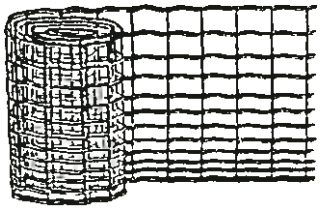


CYCLONE DOUBLE DRIVEWAY GATES





Cyclone Spring Coil Fence



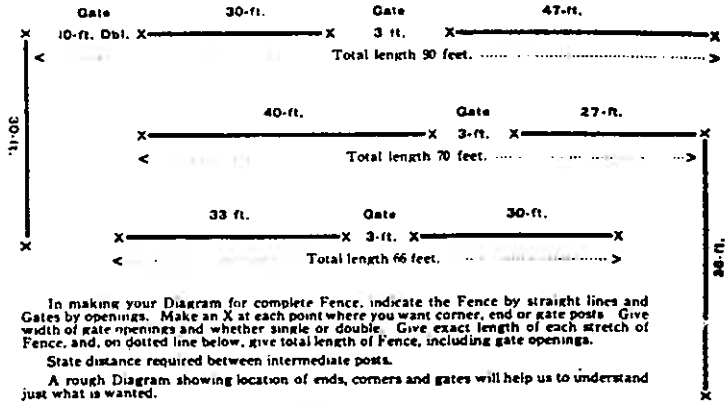
Cyclone Woven Wire Fence

Made in various heights and spacings Woven on the ground

APPENDIX 11.

Cyclone Fence & Gate Co. Pty Ltd,
Cyclone Fence and Gate Catalogue
No. 37 Melbourne c. 1923, excerpts.

EXAMPLE OF DIAGRAM FOR COMPLETE FENCE



In making your Diagram for complete Fence, indicate the Fence by straight lines and Gates by openings. Make an X at each point where you want corner, end or gate posts. Give width of gate openings and whether single or double. Give exact length of each stretch of Fence, and, on dotted line below, give total length of Fence, including gate openings.

State distance required between intermediate posts.

A rough Diagram showing location of ends, corners and gates will help us to understand just what is wanted.

Cyclone Metal Gates are sent out unpainted.

DIRECTIONS FOR ERECTING

CYCLONE ORNAMENTAL FABRIC FENCE

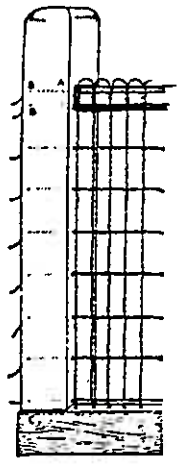


Fig. 29

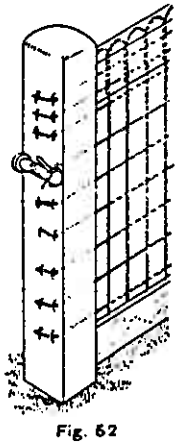


Fig. 62

STRAINING POSTS.—5 x 5 or 6 x 6. Must be set to a good depth and well strutted, with the face standing forward one inch from face of rail.

INTERMEDIATE POSTS.—5 x 3. The closer the better, say eight or nine feet apart.

RAILS.—4 x 2, on edge. Flush with face of intermediate posts, and mortised into straining posts one inch behind face. *See "A" in Fig. 29.*

PLINTH.—6 x 1½. Place the Plinth flat on face of intermediate posts, and check into straining posts to bring back of Plinth flush with front of top rail. *See "C" in Fig 29.* The fabric is dropped one inch *behind* the Plinth and stapled to the back thereof.

For 36 in. Fabric leave a space of exactly 2 ft. 9 in. from the top of Plinth to top of rail. This will bring the two top cables of your fence nicely along the face of the top rail as in Fig. 29. For 42 in. Fabric leave a space of 3 ft. 3 in., and for 46 in. Fabric a space of 3ft. 7 in.

To erect Fabric after the timber work is complete, take a lath and lay it on the roll of fabric, marking on the lath the spacings of the horizontal wires of the fabric. From this, mark on the straining posts the places at which to bore the holes to take the wires through for straining purposes, being careful to see that the two top wires come nicely along the face of the top rail. Bore holes in straining posts in a line with the face of the rail, that is, one inch from the face of the straining post. Unfasten the roll of fabric and stand it up against posts, fasten one end by threading the wire through the straining post, pulling the first crimped picket firmly up against the post. This is best done with a pair of pincers, or some such tool. As each wire is pulled up tight, staple it into position.

CORRECT STRAINING

The secret of correct straining of Cyclone Fencing lies in pulling up each horizontal wire so that the end picket is pulled hard up against the side of post, and having wires stapled firmly with the picket in this position. To attain this result, drive home staples while the strain of the wire is still kept up. Having securely fixed one end, pull the fabric as taut as possible by hand, and put a staple here and there, driven just sufficiently far to hold the weight of the wire. Then thread wires through the holes in the straining post at the other end.

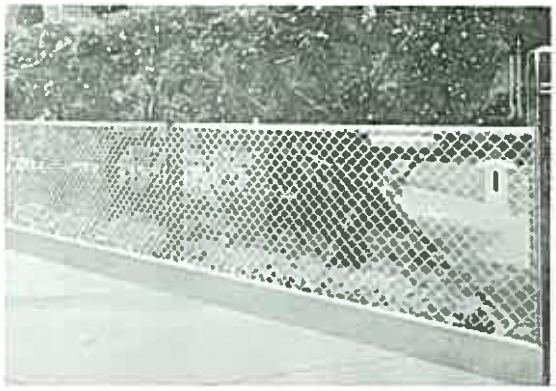
If Fabric is too long, cut out unnecessary pickets, then attach strainer and tighten up sufficiently to give a good strain. If more than one strainer is available, put all on together, and tighten up alternately. Plug up by inserting a small wooden plug in the hole alongside of wire and drive in firmly, so that when the strainer is removed the wire will not slip back. Remove strainer and then fasten wire with staples, then cut off plug flush with face of post, but do not cut ends of wire yet, as it may be necessary again to attach strainer.

Repeat this with each wire until all fabric is drawn tight and each picket in fence is quite plumb. If the pickets at intermediate posts are cut off just below the bottom horizontal wire, the ends of the remaining pickets can be easily put down behind the Plinth, and held there with a few staples. Sight along top of fence before finally stapling up to see that you have a nice true line.

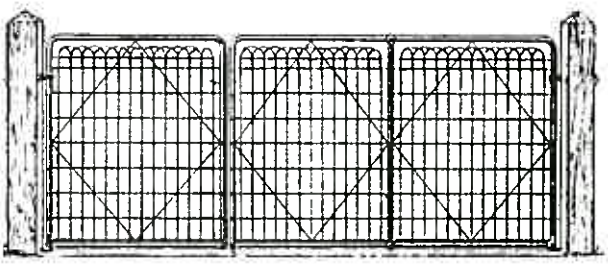
APPENDIX 12.

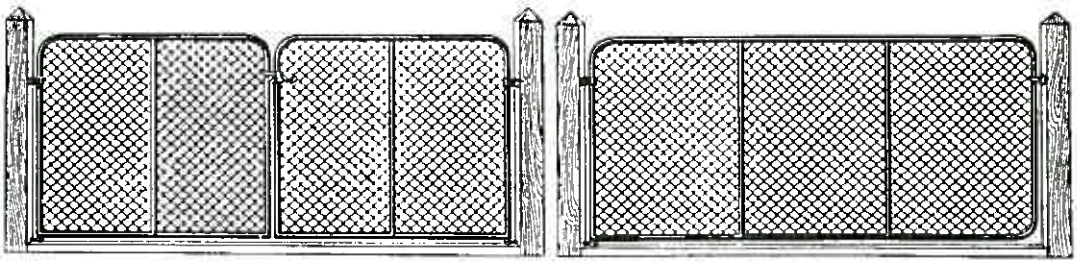
Cyclone Fence & Gate Co. Pty Ltd, **Cyclone Fence and Gate Catalogue No. 46**, Melbourne, 1934, excerpts.

Wooden Plinth, Wooden Posts and Pipe Rail



"Cyclone" Chain Wire Links





APPENDIX 13.

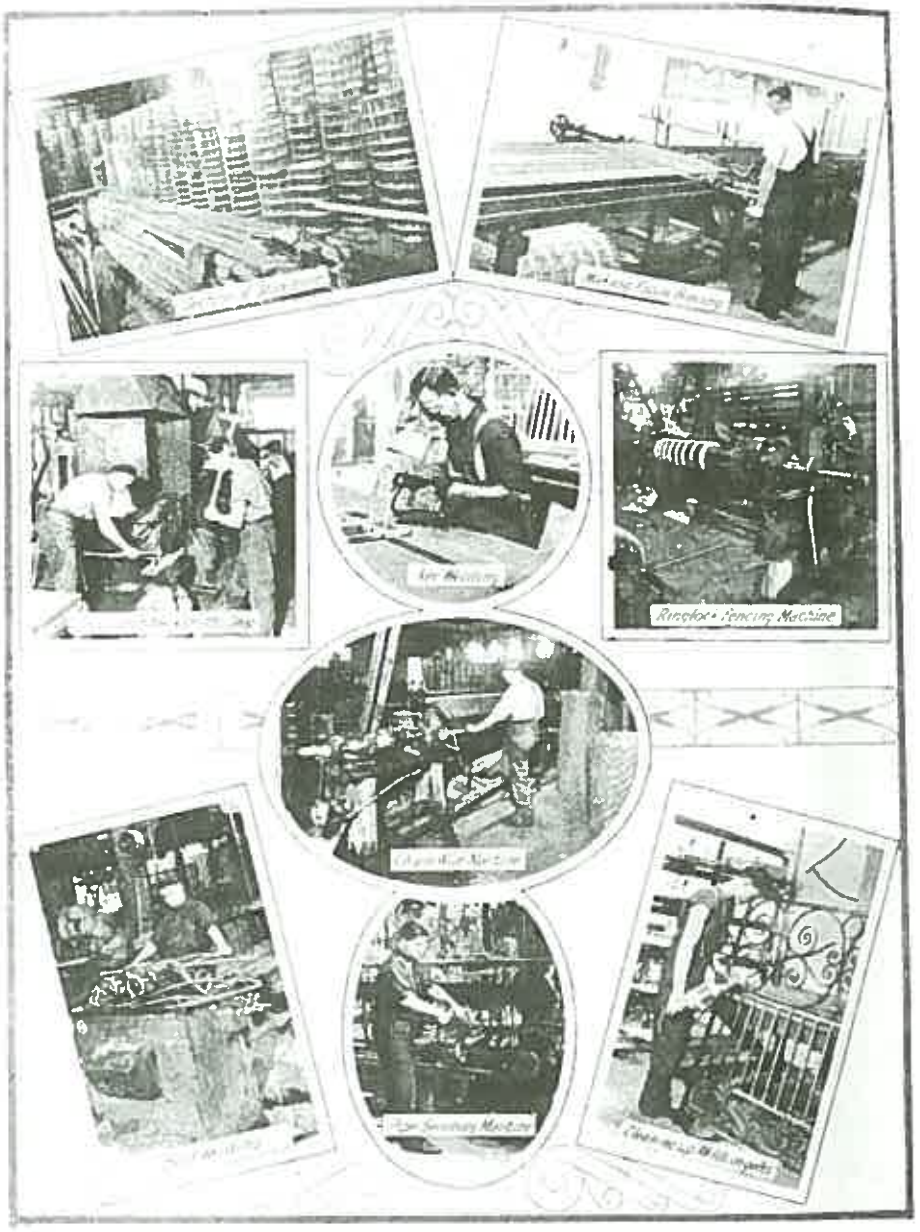
D. & W. Chandler Ltd., Ramsays Catalogue, 1931. **Chandler Fences and Gates**, pp. 120-125.

D. & W. CHANDLER LTD.

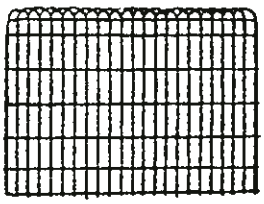
The Biggest Hardware House in Victoria

234-236 FLINDERS LANE, MELBOURNE
F 4175 (4 lines)

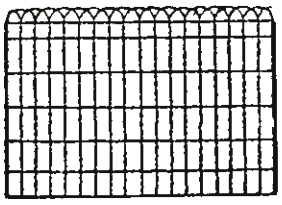
276-294 BRUNSWICK STREET, FITZROY
J 4145 (7 lines)



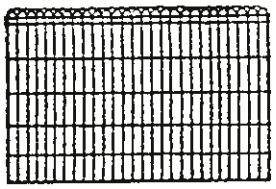
Illustrating some of the operations performed and machines used for the production of CHANDLER GATES and FENCES in our factory at Greeves Street, Fitzroy.



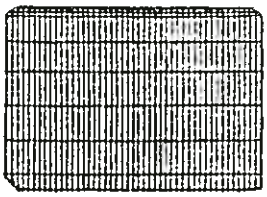
"A" Pattern



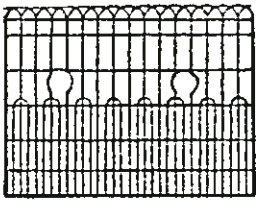
"C" Pattern



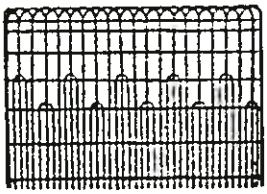
"D" Pattern



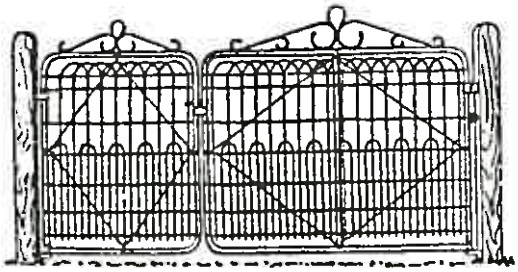
"E" Pattern



"F" Pattern



"FF" Pattern



Chandler Driveway Gate. Double Style.
Matches "F" Fencing.

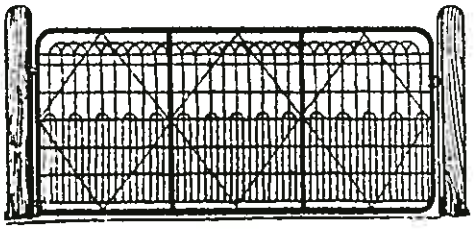
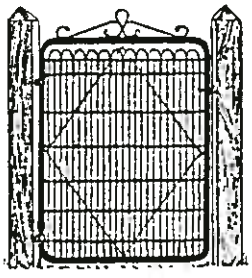
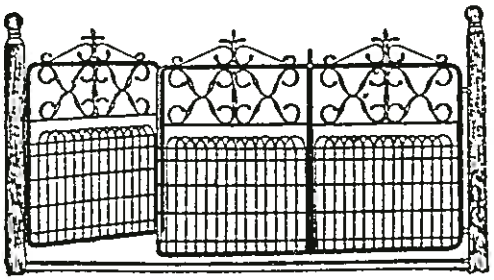
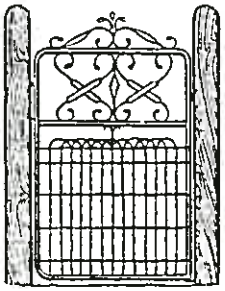


Fig. 202
Chandler Driveway Gate. Single Style.

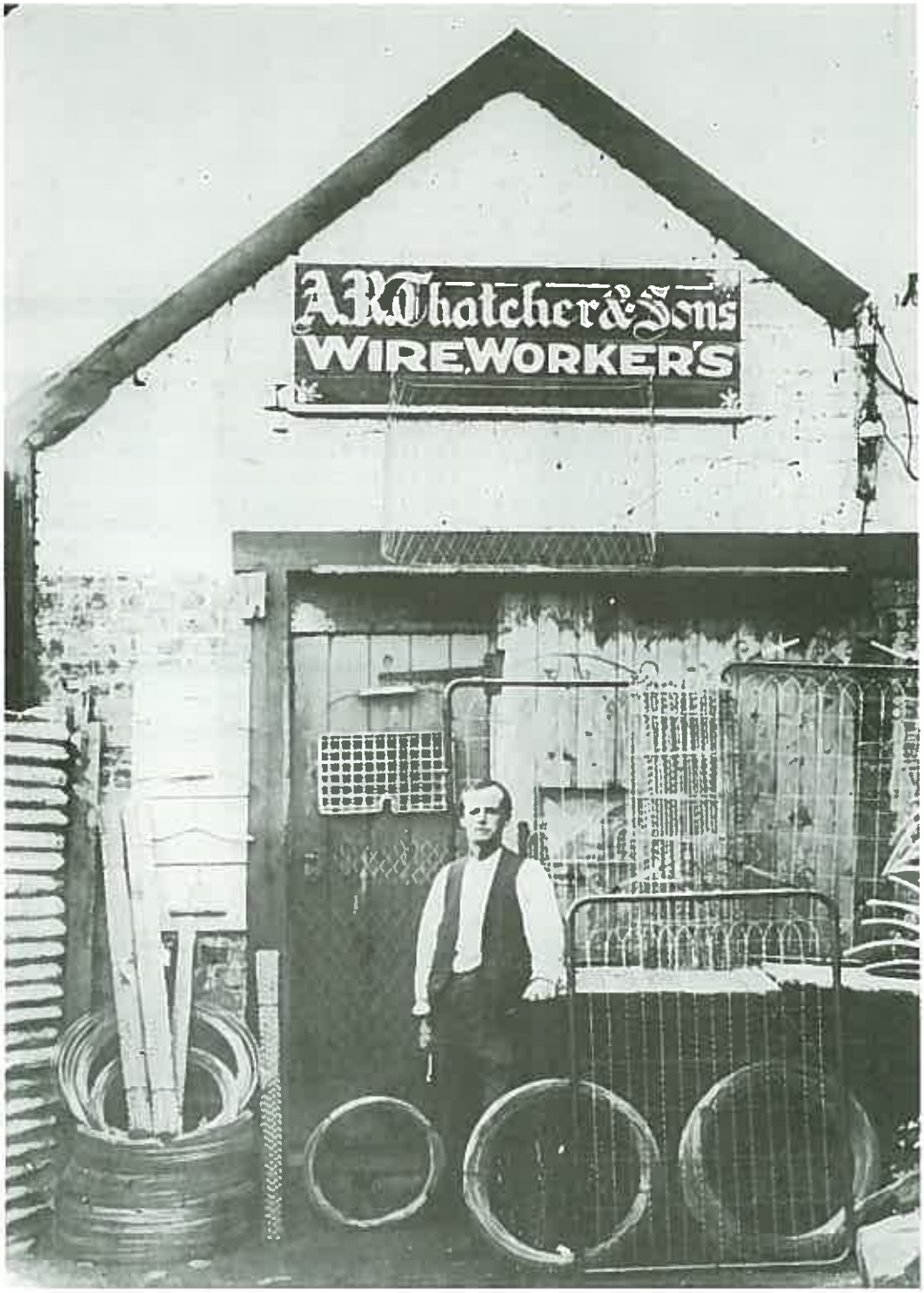


Chandler Hand Gate,
showing "E" Fencing.





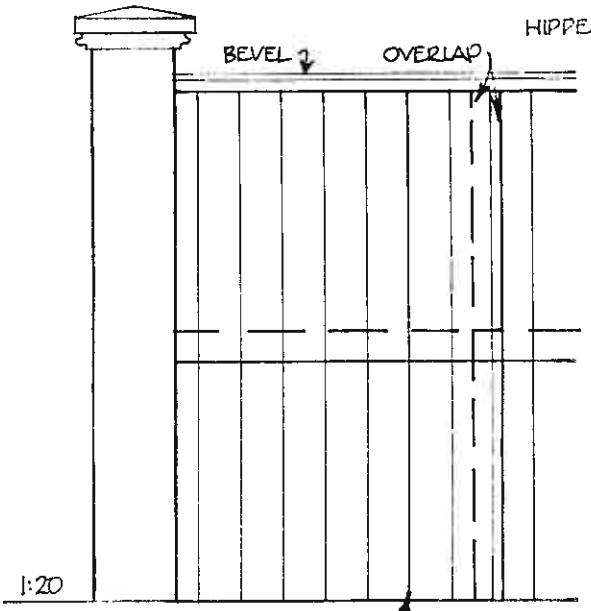
Chandler Hand Gate.
Fig. 143

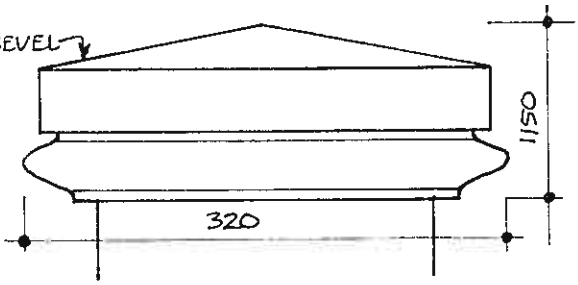

A.R. Thatcher & Sons
WIRE WORKER'S

APPENDIX 14.

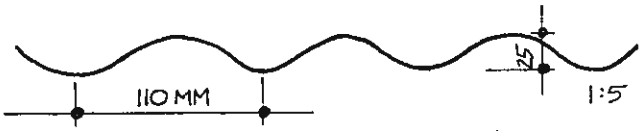
MEASURED EXAMPLES OF EXISTING FENCES

1840-60
Urban

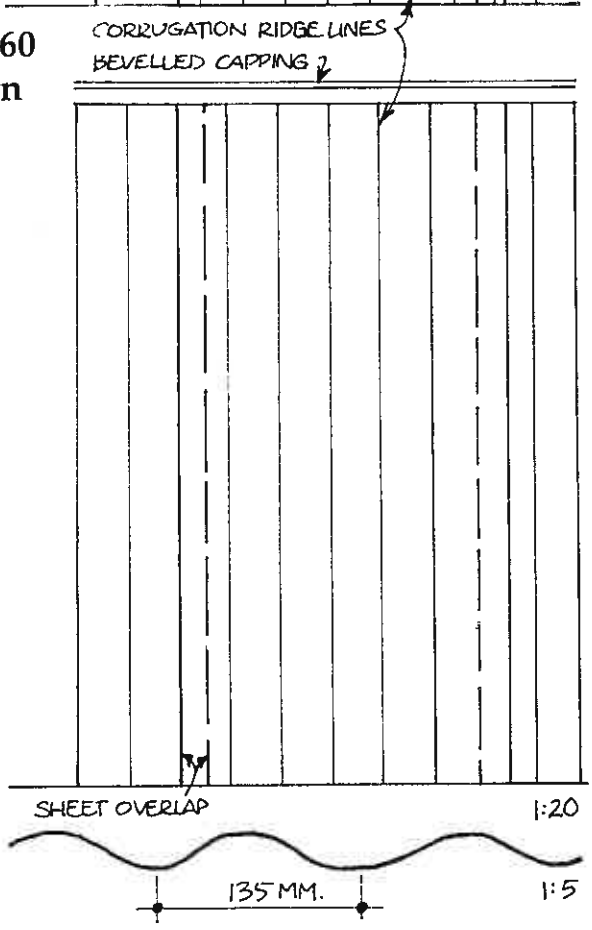


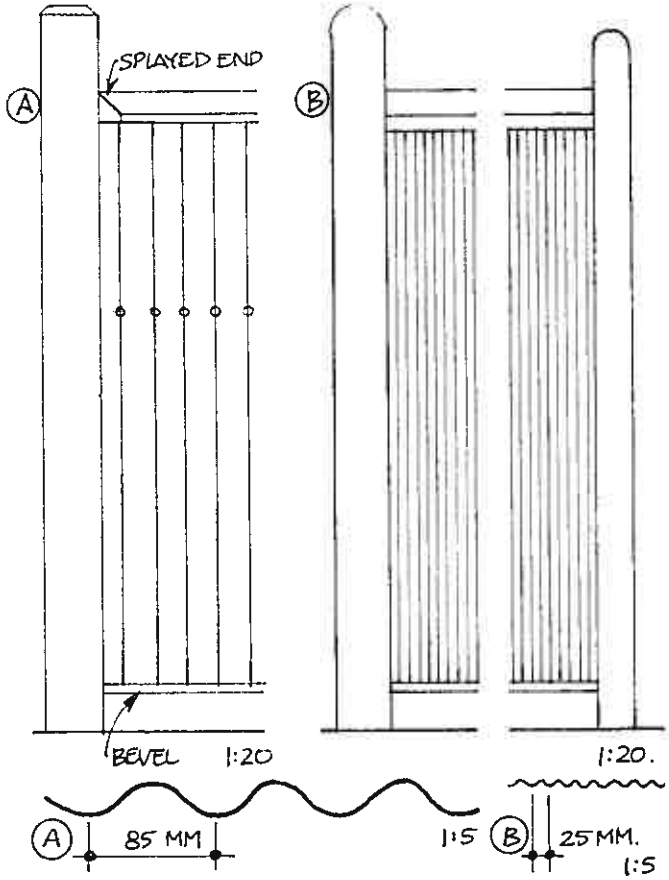


MOULDED TIMBER CAPPING DETAIL. 1:5.

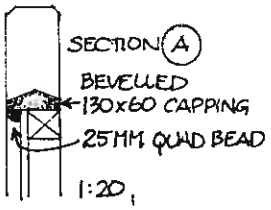


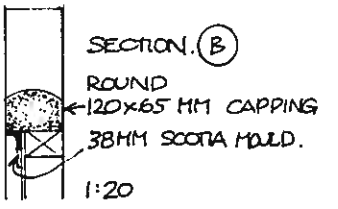
'COMO', COMO AVENUE, SOUTH YARRA (1847, 1855)
EARLY HOMESTEAD. KITCHEN GARDEN.
CORRUGATED IRON: 875 x 710 PRESSED SHEETS.
RIVETED SHEET TO SHEET FIXINGS.
GATE POST: 225 x 225 MM. RED GUM HEIGHT 1570 MM.
BEVELLED TIMBER CAPPING TO FENCE
FENCE OVERALL HEIGHT: 1490 MM.





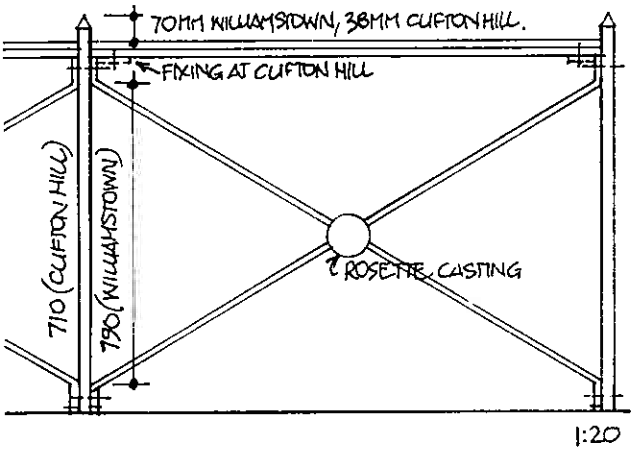
'OBERWYL' 35 BURNETT STREET, ST. KILDA.
(1856) DETACHED 2 STOREY EARLY HOUSE.
CORRUGATED PRESSED IRON SHEET FENCE
IS PRE-1860, WITH VERY WIDE CORRUGATIONS.
SHEET SIZE 1820 x 840 MM.
BEVELLED TIMBER CAPPING.
FENCE HEIGHT 1880 MM.





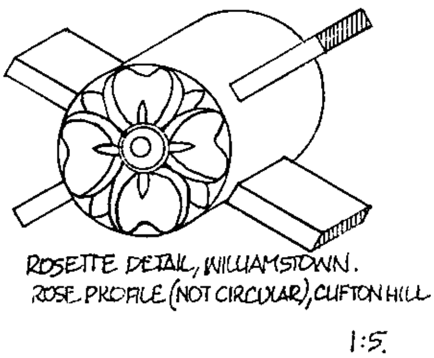
66 THE BROADWAY, CAMBERWELL
(1907) DETACHED, EDWARDIAN HOUSE
RIPPLE CORRUGATED SHEET AS FOR
ST JOSEPHS, DETAIL B..
POST 120x120 (SEE DETAL SHEET)
150x60 MM BEVELLED CAPPING &
TWO COVER BEADS. 225x35 BEVEL PLINTH
HEIGHT 1200 MM

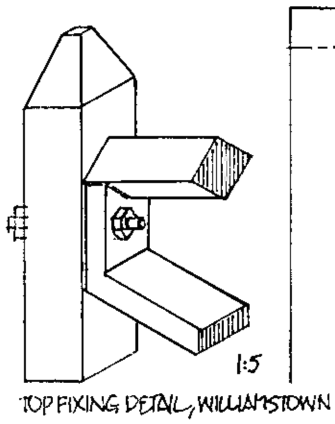
ST JOSEPHS, CNR PRINCES STREET & MAUMSBURY STREET, KEW. (A & B ABOVE)
LARGE DETACHED 2 STOREY LATE VICTORIAN HOUSE.
CORRUGATED ROLLED STEEL SHEET FENCE.
TWO PROFILE TYPES. PLINTH 130x35 MM.
CORNER & GATE POSTS: 140 x 140 MM. HT: 1925 MM.
INTERMEDIATE POSTS: 140 x 95 MM. HT: 1865 MM.
FENCE HEIGHT: 1705 MM.
APPROPRIATE TO 1925.

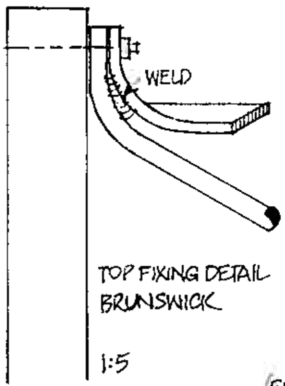


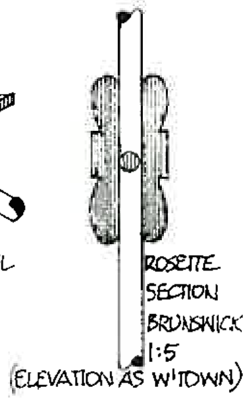
FRANCES MORTON, LIVERPOOL. METAL FENCE (1855 –)
CNR. PARKER STREET & THE ESPLANADE, WILLIAMSTOWN.
OVERALL WIDTH 1410 MM, OVERALL HEIGHT 1050 MM.
TOP RAIL: 25×25MM 'DIAMOND SECTION' BAR.
POSTS: 40×40 MM. SECTION. BRACES: 35×12MM BAR.
BOLTED & WELDED CONNECTIONS. BLUSTONE KERB PLINTH.
CENTRAL ROSETTE (CASTING) 110MM DIAM. 70MM THICK.

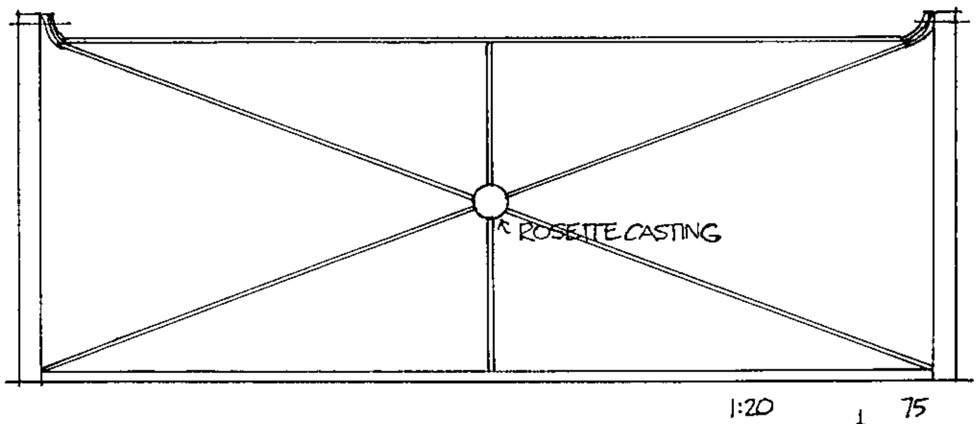
CNR. GOLD STREET & HODGKINSON STREET, CLIFTON HILL
OVERALL WIDTH 1560MM, OVERALL HEIGHT 1110MM.
TOP RAIL 38×12 MM ROUND TOP BAR SECTION.
POSTS: 30×30 MM SECTION.
BOTH ARE SET IN LEAD FILLED SOCKETS IN 280×210MM SECTION BLUESTONE KERBS. USED AS CULVERT GUARD.





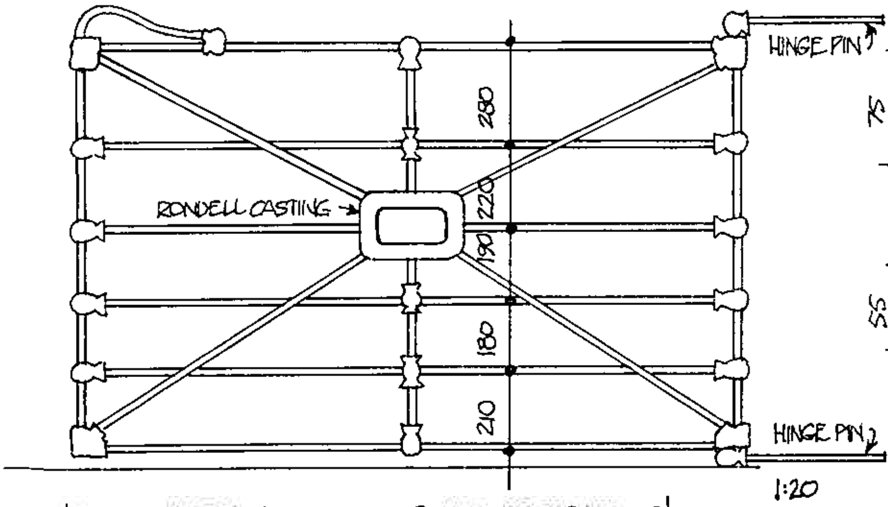


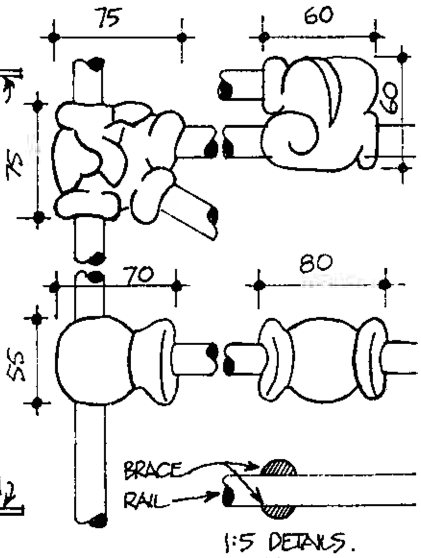




189 BRUNSWICK ROAD.
BRUNSWICK (1854)
BETWEEN VERANDAH POSTS.
OVERALL WIDTH 2350MM
OVERALL HEIGHT 900MM?
POSTS: 55MM DIAMETER
TOP RAIL: 26×6MM BAR.
BRACES: 12MM DIAMETER

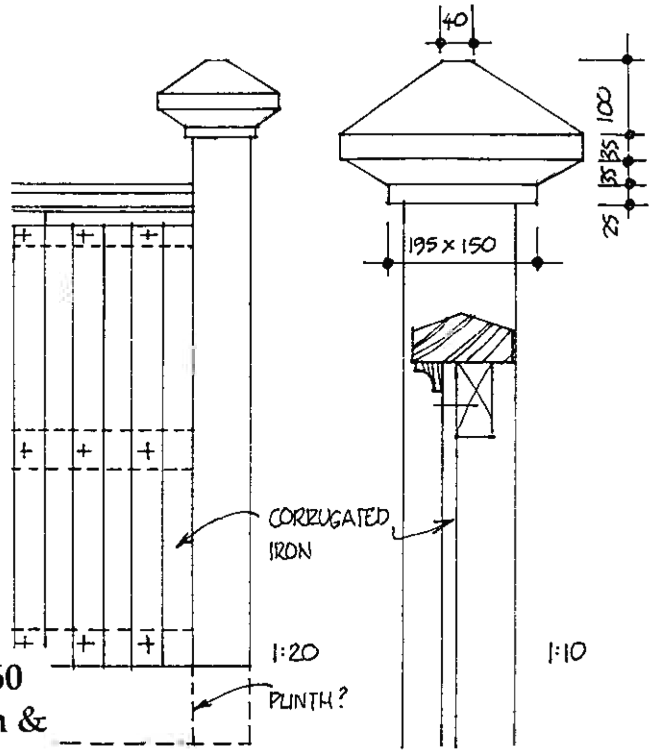
MELBOURNE GAOL
BALUSTRADES
(SIMILAR WILLIAMSTOWN)





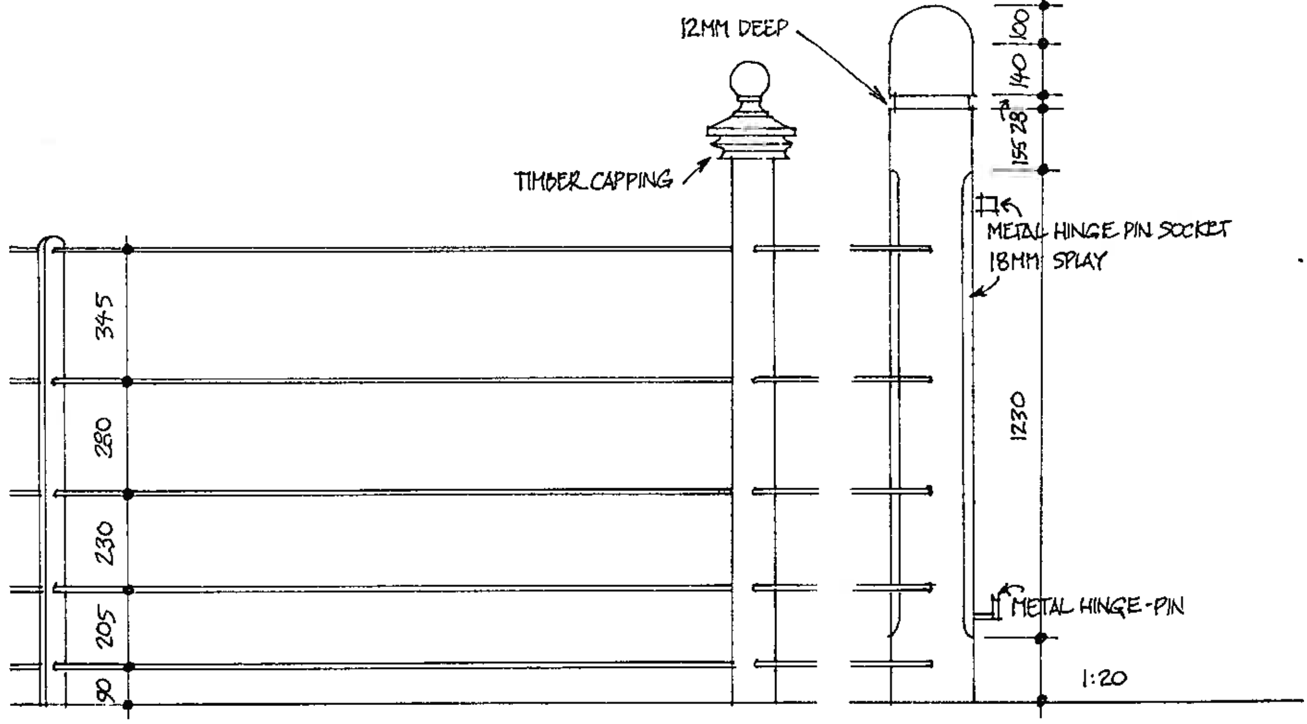
'H.V. MCKAY MAKER, SUNSHINE HARVESTER WORKS' EMBOSSED ON CENTRAL CAST RONDELL.
COLLECTION POINT COOKE HOMESTEAD, STABLES. (DATE UNKNOWN)
ALL RAILS 20MM DIAMETER ROD. BRACES HALF ROUND 20MM. DIAM.
HINGE PINS 380MM LENGTH, 15MM DIAMETER ROD. ALL JUNCTION PIECES ARE METAL CASTINGS (TO DETAIL)
'LOOP' PULL (TOP LEFT) 390×100MM. RONDELL 270×180MM, 45MM WIDTH, 40MM THICKNESS.
HEIGHT OVERALL (TO TOP RAIL) 1080MM. OVERALL LENGTH 1740MM.

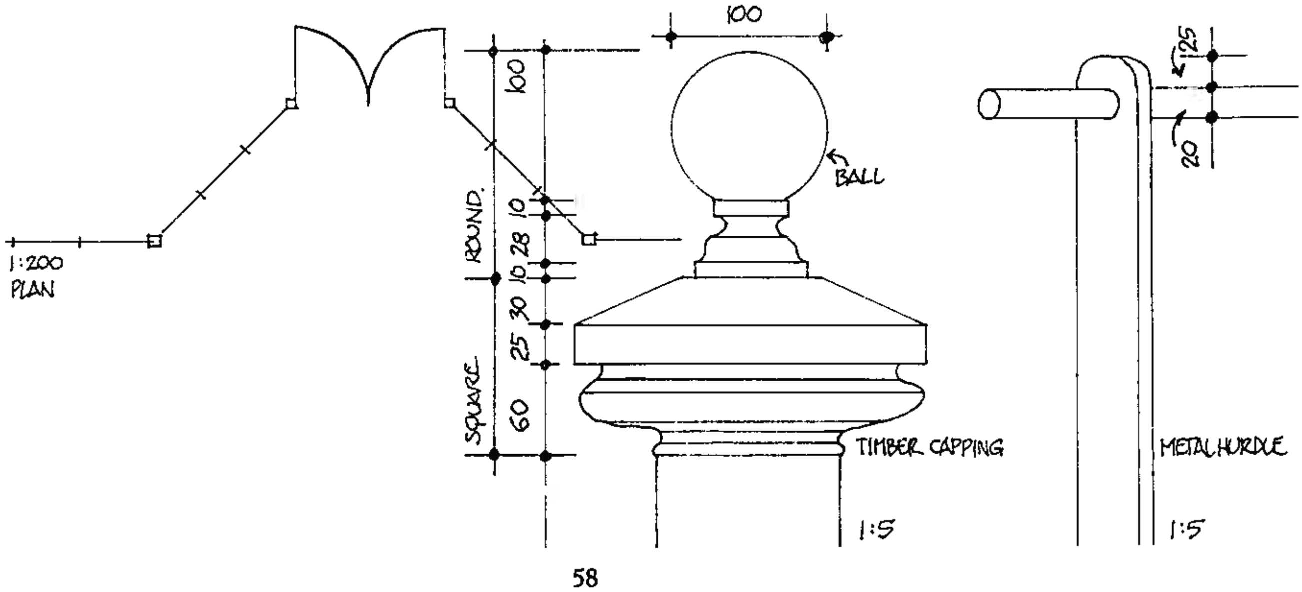
1840-60 Urban & Rural



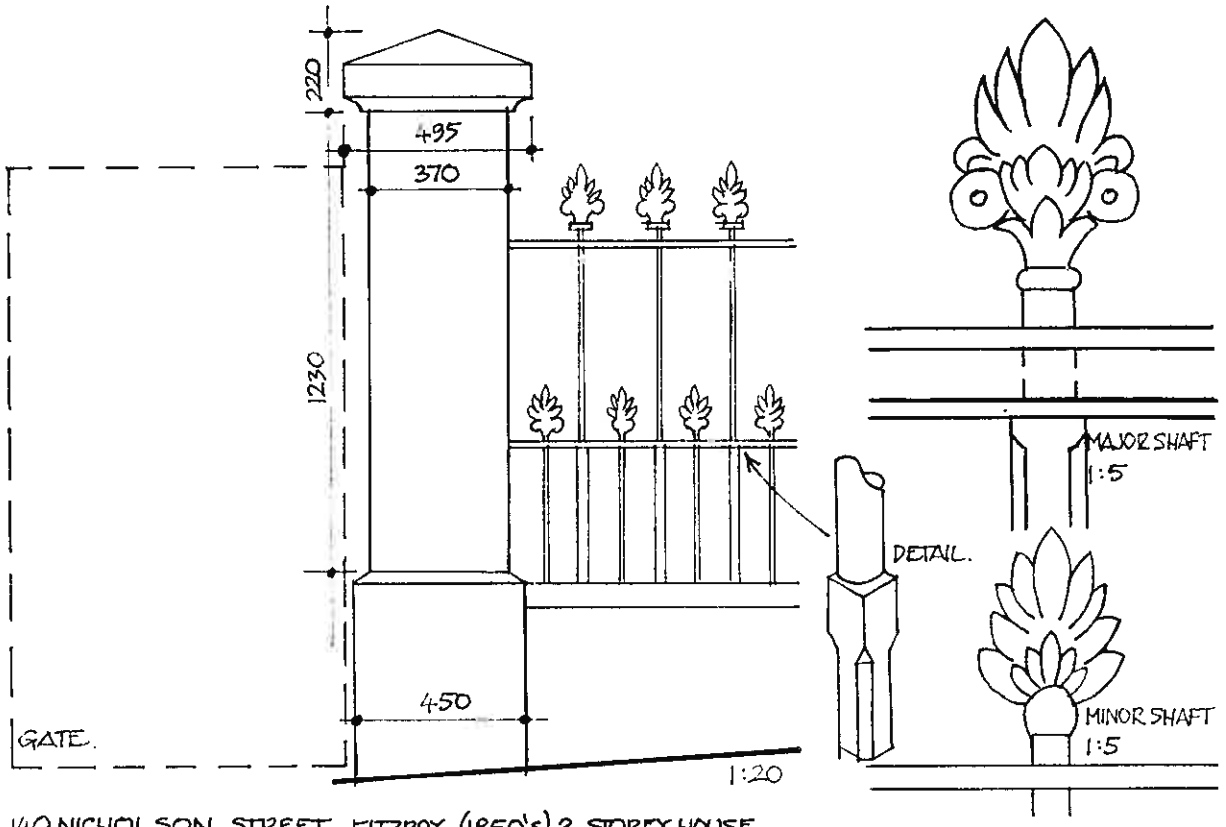
24 REGENT STREET, PORT FAIRY (1847 ONWARDS)
EARLY HOMESTEAD.
CORRUGATED IRON (RIDGES 85 MM CRS.)
POSTS: 145 x 100MM. OVERALL HEIGHT 1600 MM.
RAILS: 100 x 50MM. CAPPING: 140 x 70 MM, BEVELLED.
HEIGHT 1270 MM. SCOTIA : 40 x 40 MM.
POST CAPPING : OVERALL 320 x 280 MM, 380MM HEIGHT
NO PLINTH IS VISIBLE TODAY.

'RAMSGLADE', NEPEAN HIGHWAY, MT ELIZA (CNR SHOTTON ROAD)
HOMESTEAD/FARMHOUSE.
PORTABLE IRON HURDLES (MORETON ?) BETWEEN TIMBER POSTS
ORDINARY POSTS : 120 x 120 MM REDGUM, RADIUSSED TOP.
1765 MM OVERALL HEIGHT INCLUDING TIMBER CAPPING.
CAPPING: 230 x 230 MM HEIGHT 335MM
GATE POSTS : 220 x 225 MM. OVERALL HEIGHT: 1830MM.
METAL PORTABLE HURDLE : HEIGHT 1200 MM (TOP OF TOP RAIL)
RAILS : METAL RODS 15MM DIAMETER (TOP RAIL: 20MM DIAM.)
METAL BAR 'POSTS' : 1225 MM HEIGHT, 10 x 40 MM.
AT 1810MM CENTRES. (SEE DIAGRAMMATIC PLAN BELOW)

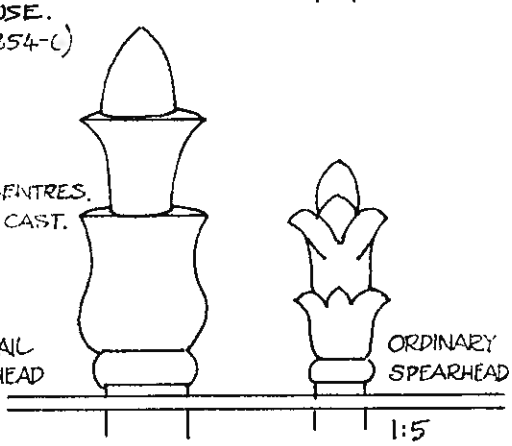


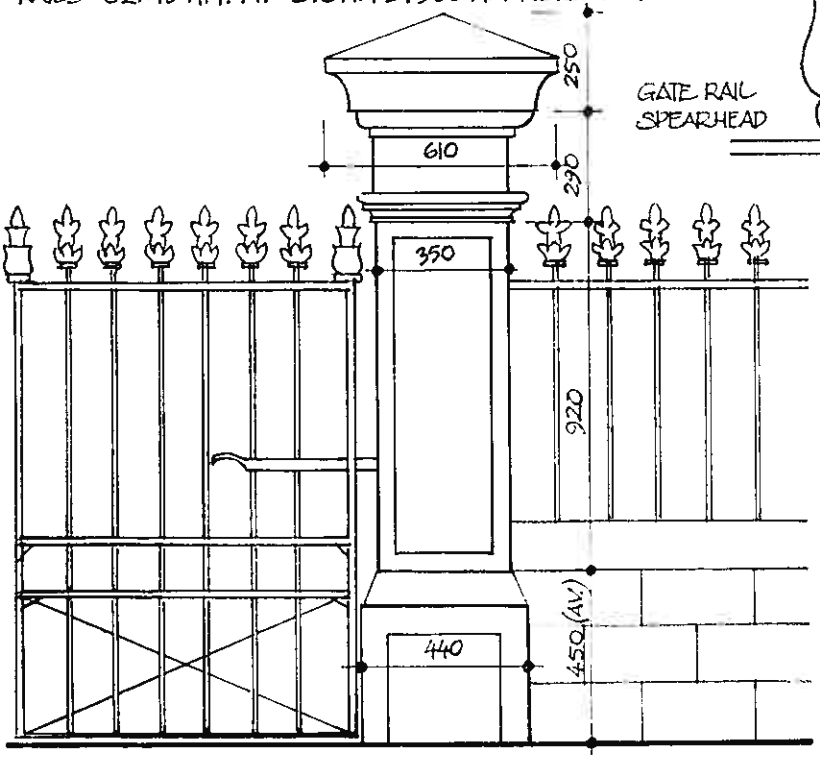


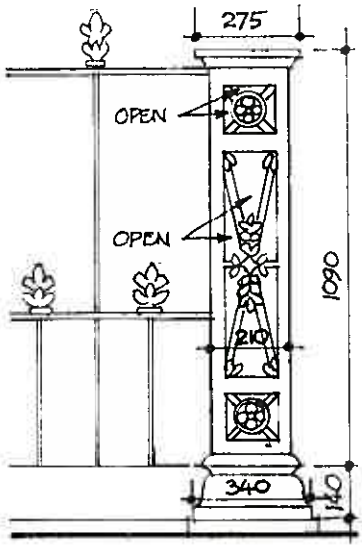
1840-60
Urban



140 NICHOLSON STREET, FITZROY. (1850's) 2-STOREY HOUSE.
'ROYAL TERRACE' 50-68 NICHOLSON STREET, FITZOY. (1854-C)
3-STOREY TERRACE. (WITHOUT THE PIERS). EARLY.
BLUESTONE GATE PIERS. (SQUARE SECTION) DRESSED.
BLUESTONE PLINTH: DRESSED. 270 MM DEPTH.
GATE AS PALLISADE, 880MM WIDTH. ROUND TOP.
MAJOR SHAFTS: 35 MM DIAM, 1100 MM HEIGHT. 195 MM CENTRES.
MINOR SHAFTS: 25 MM DIAM. 525 MM HEIGHT. BOTH ALL CAST.
RAILS: 62×15 MM. AT 370 MM & 900 MM HEIGHTS.



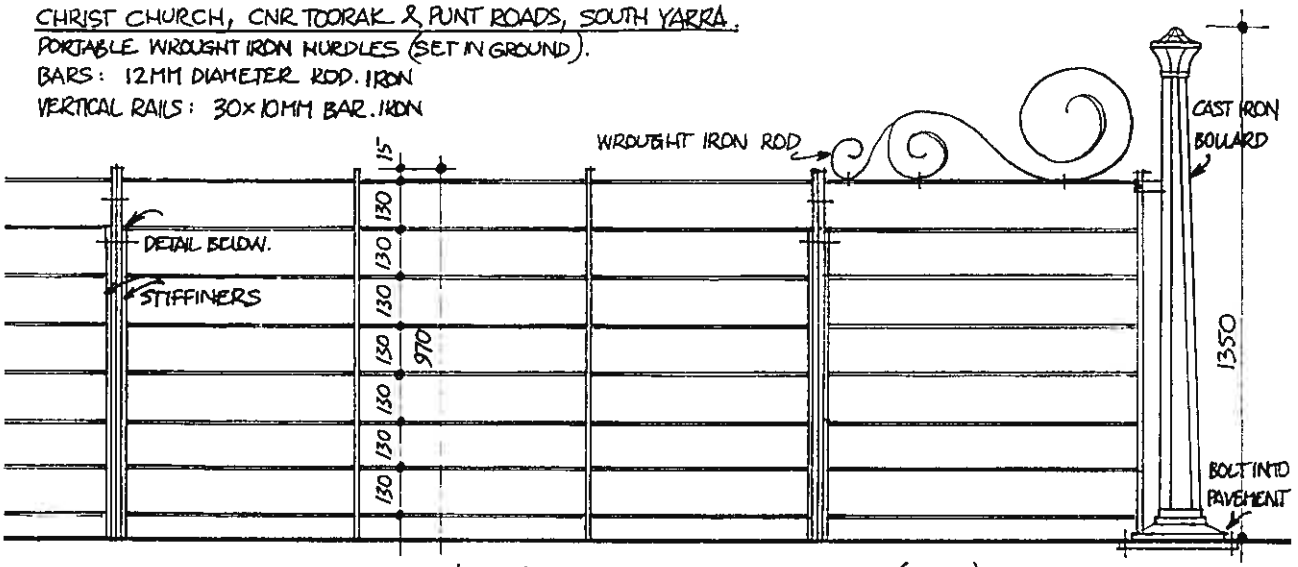




GLASS TERRACE, 64-78 GERTRUDE STREET, FITZROY.
2-STOREY EARLY TERRACE. (1854 & 1856)
PIERS - BLUESTONE, DRESSED & TOOLED. PLINTH ALSO.
GATE - 890 x 1380 MM. RAILS AT 380, 520, & 1170 MM HEIGHT.
SIDE RAILS - 25×25 MM. HORIZ. RAILS - 45×12 MM (AS FENCE).
FENCE SHAFTS - 25 MM DIAM. CAST. 130MM CENTRES, 840 MM HT.
SPEARHEADS - SEE DETAIL.

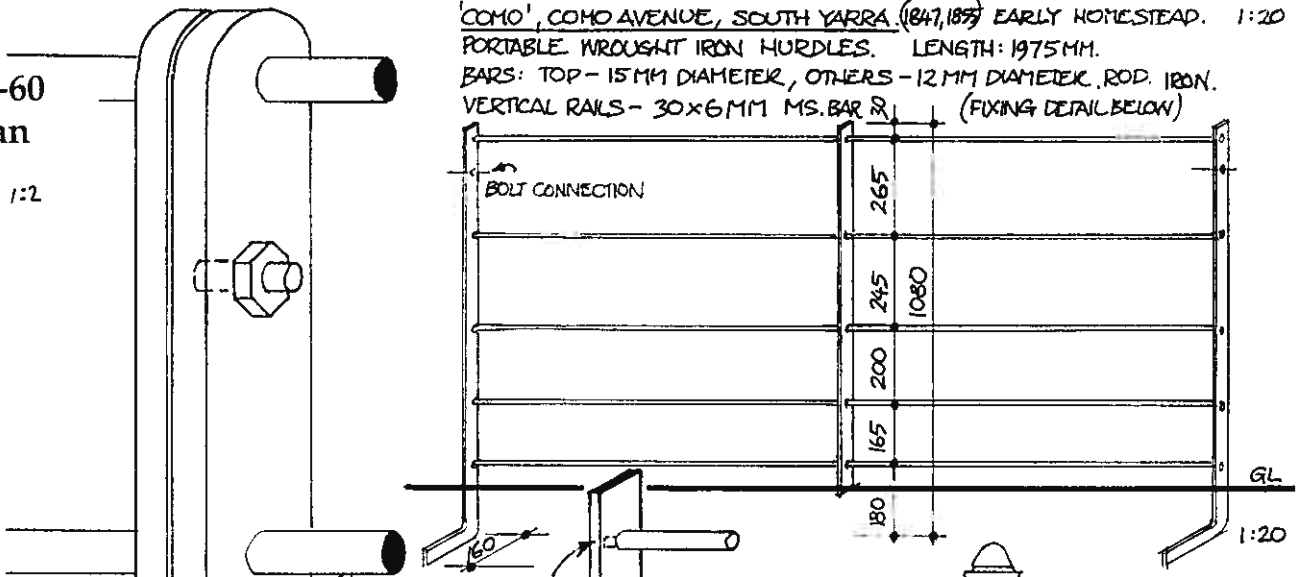
76-80 NICHOLSON STREET, FITZROY. (1850's)
2-STOREY EARLY TERRACE.
PIERS - CAST OPENWORK PANELS BOLTED TOGETHER
PLINTH - DRESSED BLUESTONE.
GATE - AS GLASS TERRACE
FENCE RAILS - AT 395 MM & 1040 MM HEIGHT.
SHAFTS AT 150MM CENTRES. CAST.
SPEARHEADS AS GLASS TERRACE.

CHRIST CHURCH, CNR TOORAK & PUNT ROADS, SOUTH YARRA.
PORTABLE WROUGHT IRON HURDLES (SET IN GROUND).
BARS: 12MM DIAMETER ROD. IRON
VERTICAL RAILS: 30×10MM BAR. IRON

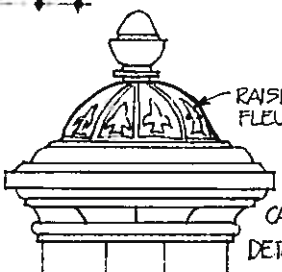


1840-60
Urban

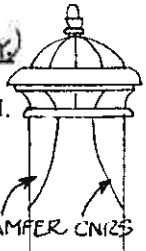
'COMO', COMO AVENUE, SOUTH YARRA. (1847, 1855) EARLY HOMESTEAD. 1:20
PORTABLE WROUGHT IRON HURDLES. LENGTH: 1975MM.
BARS: TOP – 15MM DIAMETER, OTHERS – 12MM DIAMETER. ROD. IRON.
VERTICAL RAILS – 30×6MM MS. BAR (FIXING DETAIL BELOW)

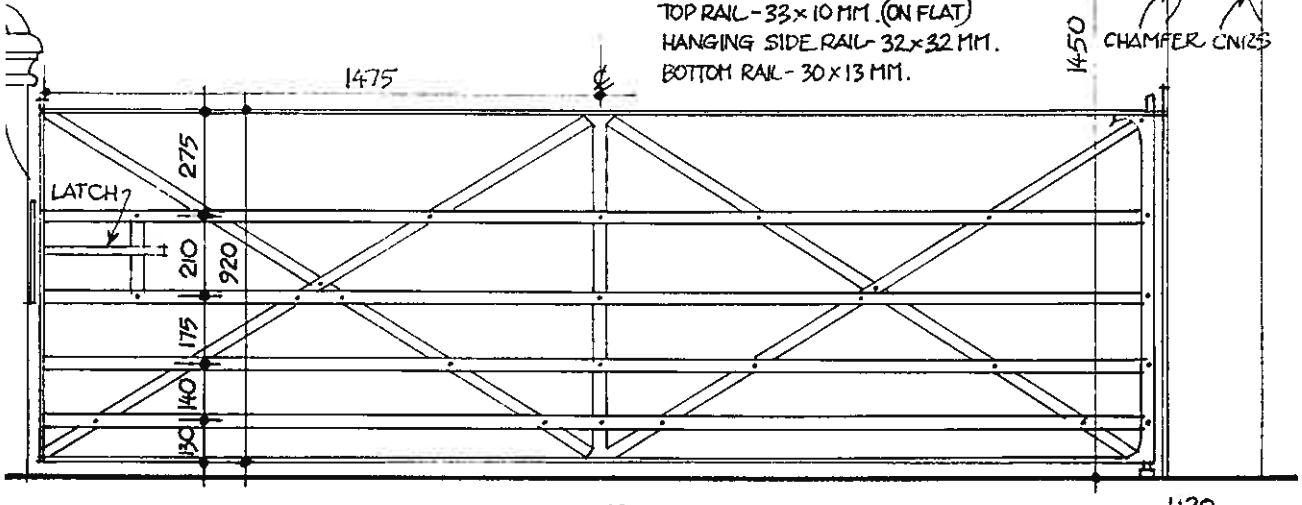


1:2



'COMO' KITCHEN GARDEN GATE (AT REAR ENTRY)
POSTS 250×250MM RED GUM. C.I. CAPPINGS.
ALL RIVETTED CONNECTIONS. ALL WROUGHT IRON.
INTERMEDIATE (HORIZ) BARS-32×7MM (ON FLAT)
MIDDLE (VERTICAL) RAIL-35×10MM (ON FLAT)
TOP RAIL-33×10MM. (ON FLAT)
HANGING SIDE RAIL-32×32MM.
BOTTOM RAIL-30×13MM.





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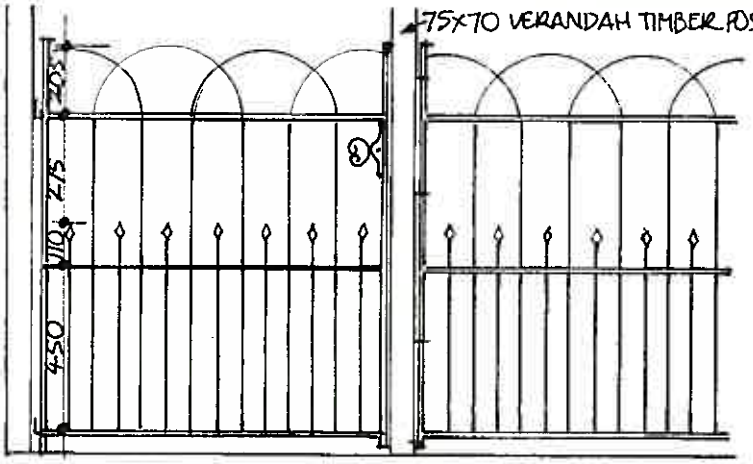
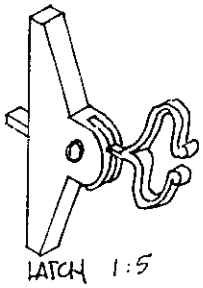
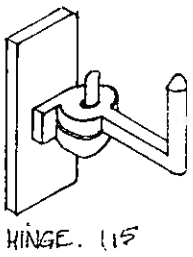
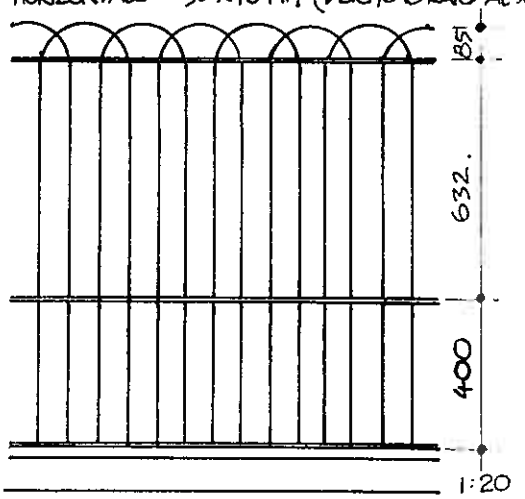
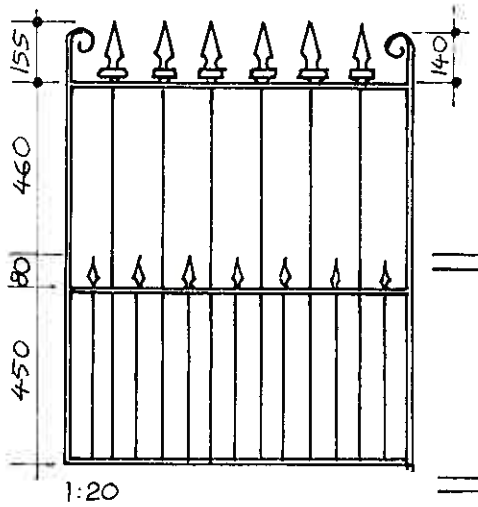


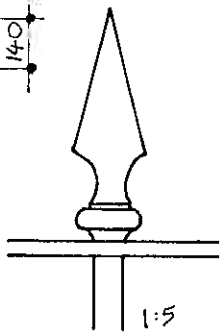




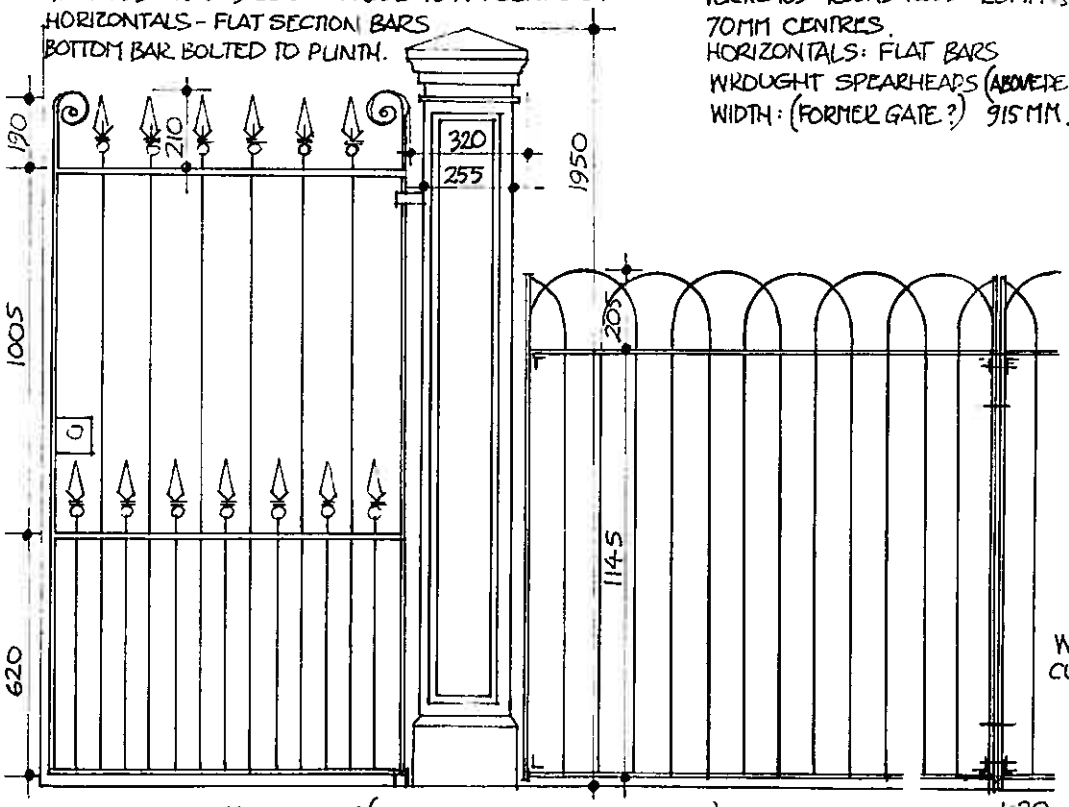
307 & 309 JOHNSTON STREET, ABBOTSFORD. EARLY SIMPLE COTTAGES.
VERTICALS : 10MM DIAMETER ROD. 65MM CENTRES. GATE : 920 WIDTH.
HORIZONTALS : 35 x 10 MM (VERTICAL RAILS ALSO) BAR.



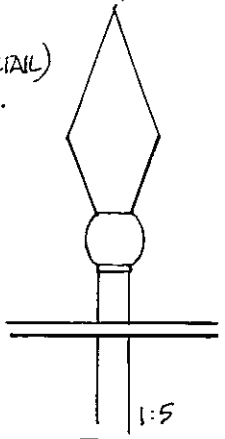


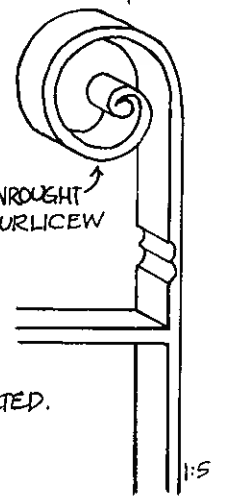


76-80 NICHOLSON STREET, FITZROY.
2-STOREY EARLY TERRACE.
VERTICALS - ROUND SECTION RODS 75MM CENTRES.
HORIZONTALS - FLAT SECTION BARS
BOTTOM BAR BOLTED TO PLINTH.



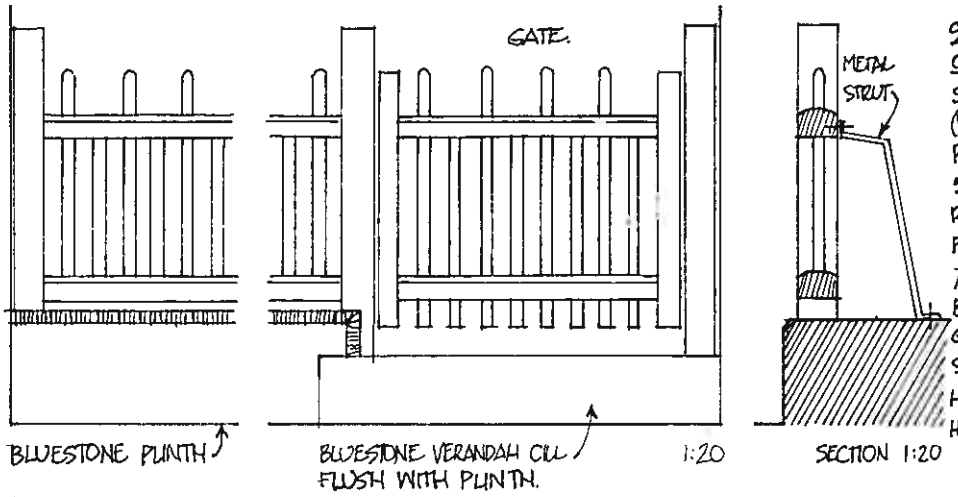
171 GRATTAN STREET, CARLTON.
RELOCATED? SINGLE STOREY TERRACE.
VERTICALS - ROUND RODS 20MM & 15 MM DIAM. 70MM CENTRES.
HORIZONTALS: FLAT BARS
WROUGHT SPEARHEADS (ABOVE DETAIL)
WIDTH: (FORMER GATE?) 915 MM.



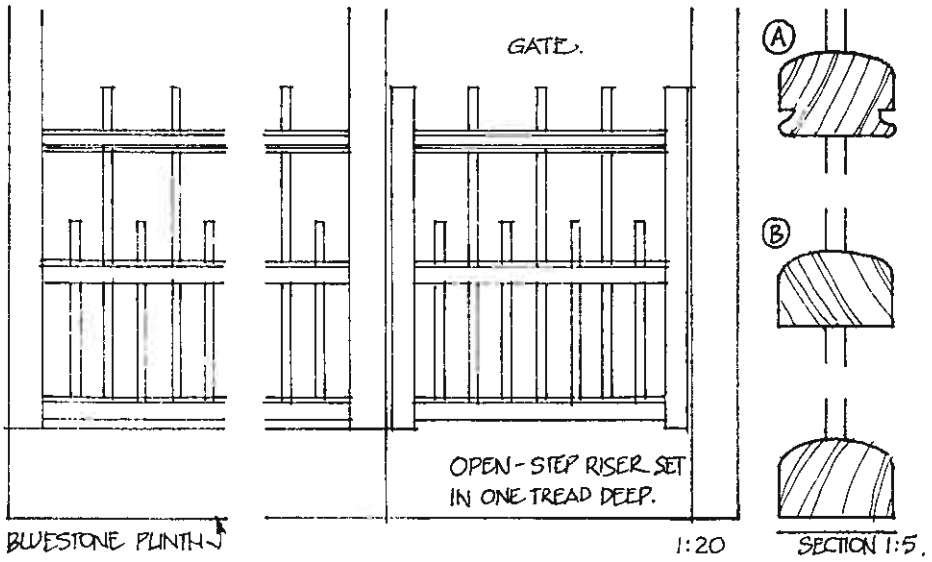


97 RATHDOWNE STREET (CNR QUEENSBERRY STREET) CARLTON.
VERTICALS : 10MM DIAM. HORIZONTALS : 35 x 10 MM. FLAT BAR. ROD STAYS 20MM. BOLTED.
95MM CRS. BOLTED CONNECTIONS. GATE : VERTICALS : 20MM. ROD.
BAY LENGTH 2450 MM. (SPEARHEADS & CURLICUES TO DETAIL) WIDTH 935 MM

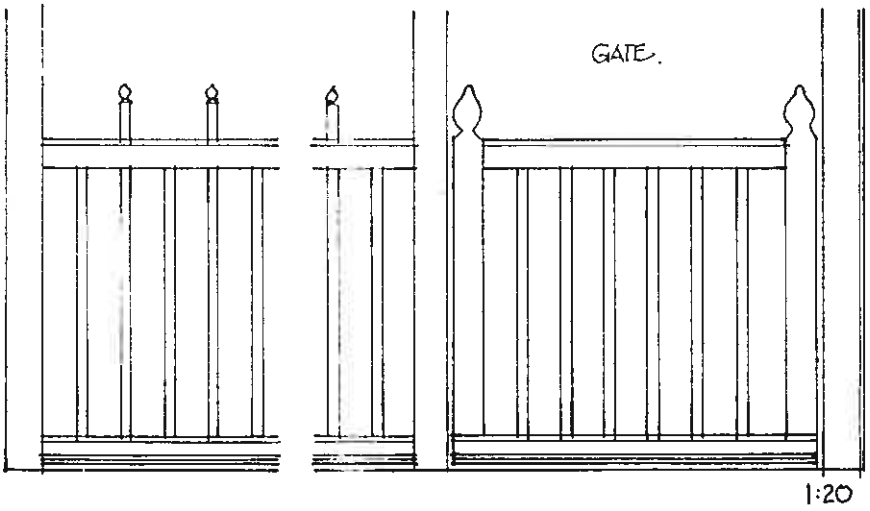
1840-60 Urban



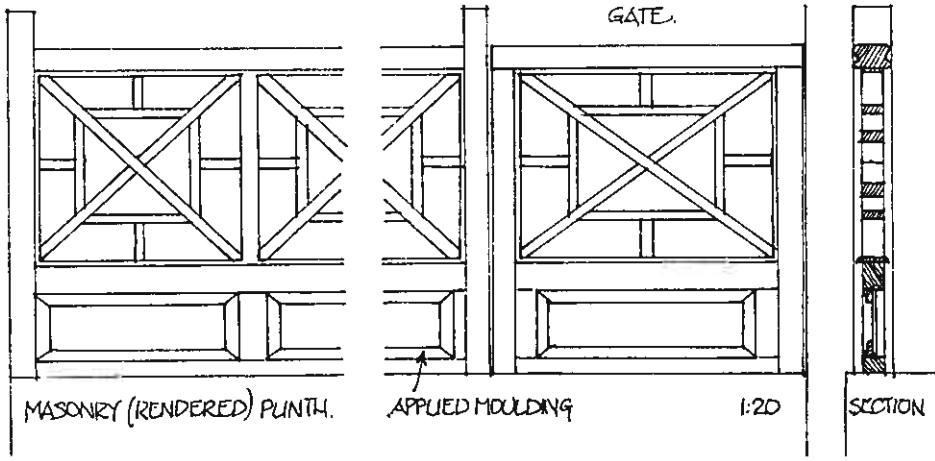
95 PRINCES STREET, CARLTON. ROW HOUSE, SINGLE STOREY, 1860's (VERANDAH ON STREET)
PICKETS: ROUND 60MM DIAM. 50MM GAPS, 630MM HEIGHT
RAILS: 90x60MM, ROUND TOP.
POSTS: 100x80MM. 740MM HEIGHT. FLAT TOP.
BLUESTONE PLINTH
GATE: 820MM WIDTH.
SIDE RAILS: 100x50MM.
HEIGHT TOP RAIL: 520MM.
HEIGHT BOTTOM RAIL: 90MM.



111 FARADAY STREET, CARLTON. ROW HOUSE.
SINGLE STOREY, 1860's VERANDAH ON STREET.
PICKETS: SQUARE SECTION 25x25MM. GAPS: 65MM.
HEIGHT: HIGH: 910MM.
LOW: 545MM.
RAILS: 75x55MM (TO DETAIL)
HEIGHT: TOP: 790MM
BOTTOM: 440MM.
POSTS ARE VERANDAH POSTS.
GATE: WIDTH 800MM.
BLUESTONE PLINTH: 240MM.

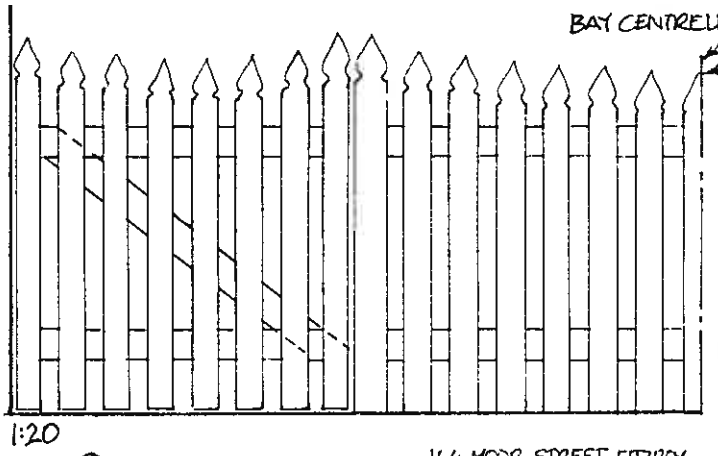


77 HIGHETT STREET, RICHMOND. ROW HOUSE
SINGLE STOREY 1860's VERANDAH ON STREET.
PICKETS: ROUND, 25MM DIAM.
HEIGHT: HIGH: 1015MM.
GAPS: 90MM.
RAILS: 100x75MM.
TOP RAIL (AS B) HEIGHT 870MM
BOTTOM RAIL (AS A)
GATE: WIDTH 970MM.
SIDE RAILS: 100x75MM.
PICKETS HAVE TURNED TOPS
GATE SIDE RAILS HAVE PROFILED TOPS.
POSTS ARE VERANDAH POSTS.

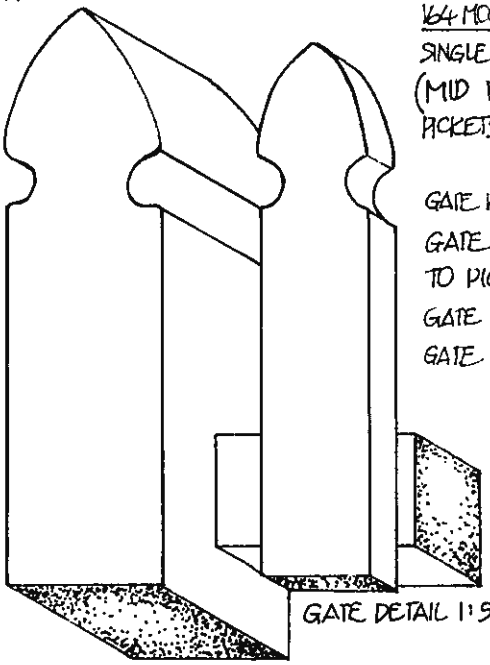


82 CAPEL STREET WEST MELBOURNE.
ROW HOUSE 2-STOREY (1860's)
OVERALL HEIGHT TO TOP RAIL: 870MM.
PANEL WIDTH: 540MM.
LOWER PANEL: 180MM HEIGHT.
POSTS: 110x65MM x 970 MM HEIGHT.
GATE WIDTH: 860MM.
HANDRAIL (AS A) 95x60MM.
LATTICED RAILS: 40x25MM.
MID HORIZ RAIL: 70x40MM.

1840-60
Urban

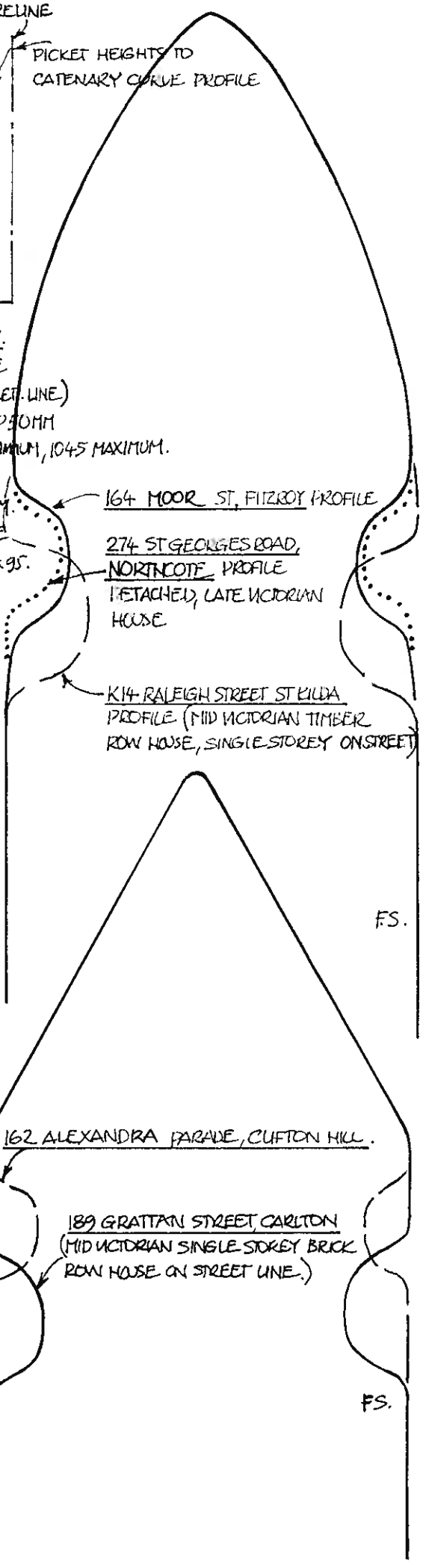


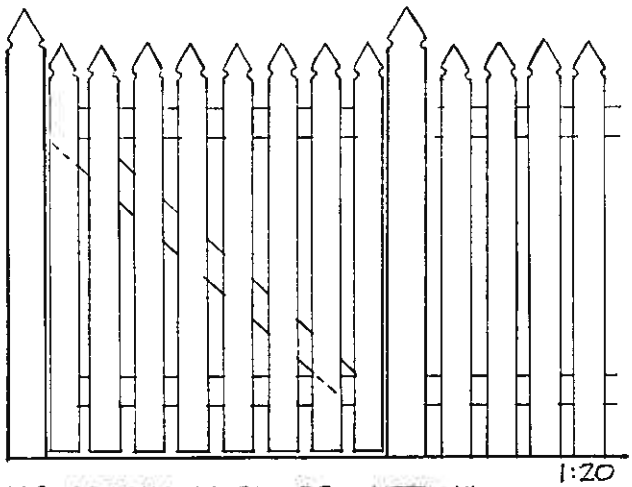
1:20



GATE DETAIL 1:5.

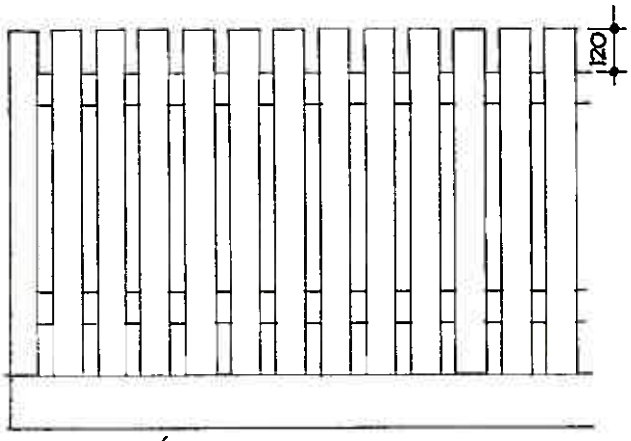
164 MOOR STREET, FITZROY.
SINGLE STOREY ROW HOUSE
(MID VICTORIAN, ON STREET LINE)
PICKETS: 70x20 MM. GAP 50 MM
HEIGHT: 975 MINIMUM, 1045 MAXIMUM.
GATE WIDTH 890 MM.
GATE POSTS 105x100 MM.
TO PICKET HEAD PROFILE
GATE VERTICAL RAILS: 100x95.
GATE MAXIMUM: 990 MM.
MINIMUM: 935 MM





1:20

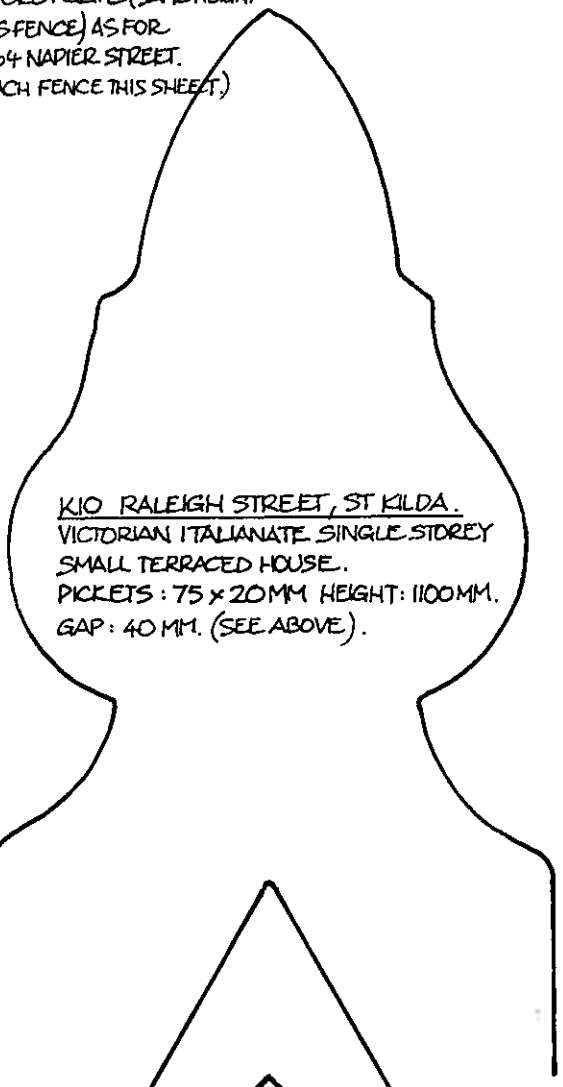
162 ALEXANDRA PARADE, CLIFTON HILL.
(LATE VICTORIAN SINGLE STOREY ROW HOUSE.)
PICKETS. 67x20 MM, 50 MM GAP, HEIGHT 1100 MM.
GATE AS DETAIL ABOVE.



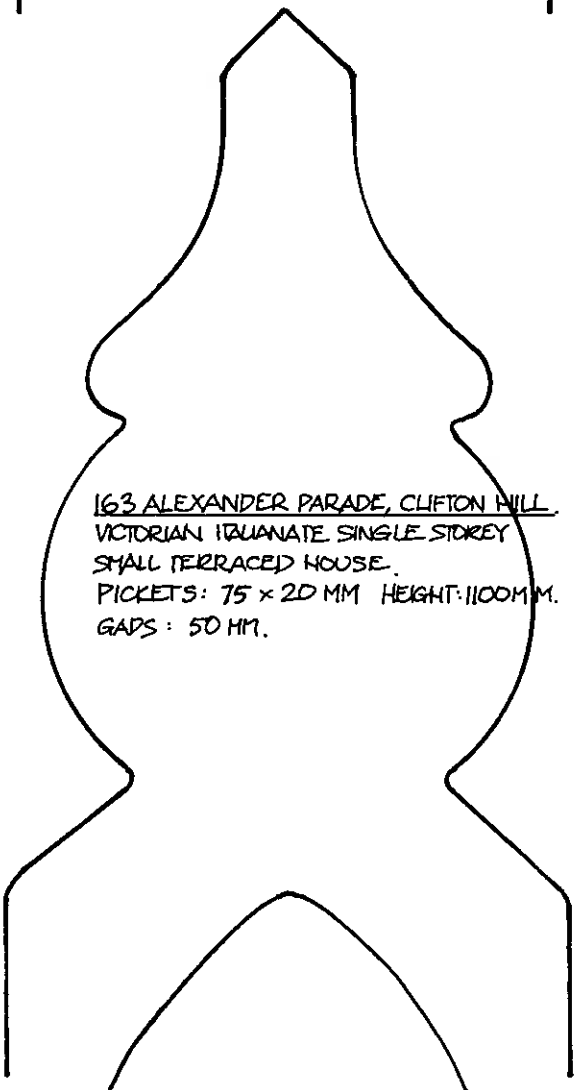
PICKET GATE (SAME HEIGHT AS FENCE) AS FOR 164 NAPIER STREET. (EACH FENCE THIS SHEET)

K12 RALEIGH STREET, ST. KILDA.
VICTORIAN ITALIANATE SINGLE STOREY SMALL TERRACED HOUSE. (SEE LEFT.)
PICKETS: 75 x 20 MM HEIGHT 915 MM.
GAP: 40 MM.

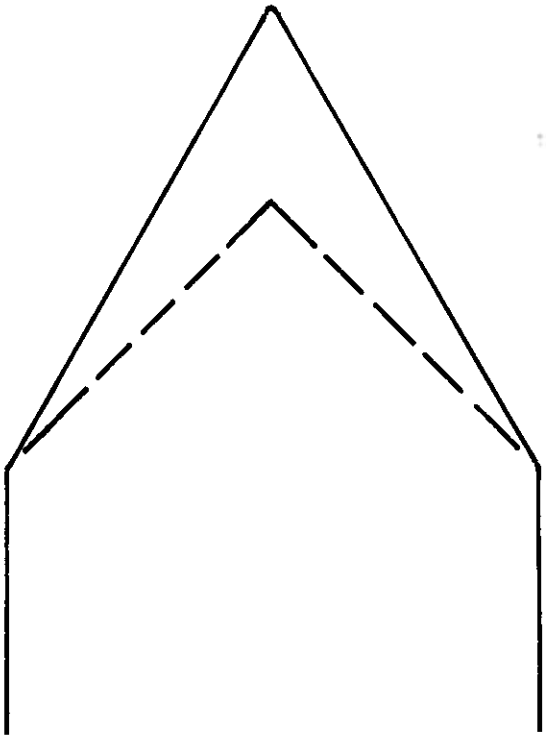
70 SCOTCHMER STREET, NORTH FITZROY.
EDWARDIAN SMALL DETACHED HOUSE.
PICKETS: 70 x 20 MM. HEIGHT 1110 MM.
GAP: 28 MM
POSTS: 120 x 120 MM. RAILS:

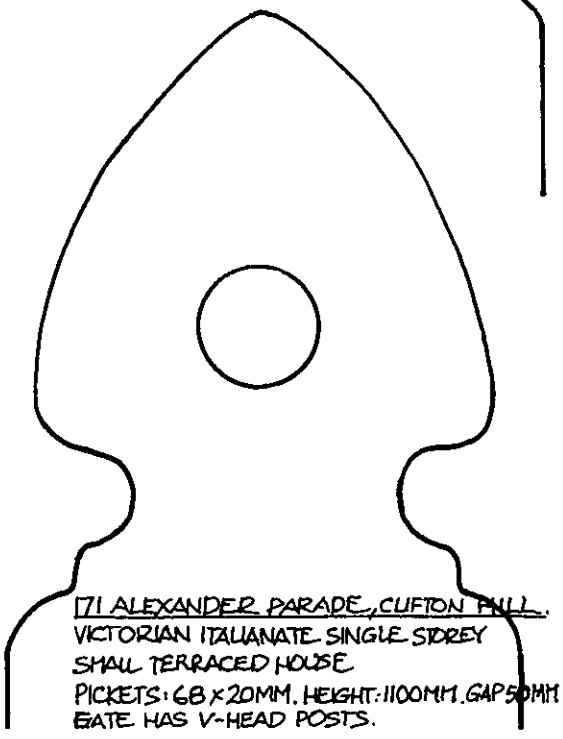


K10 RALEIGH STREET, ST KILDA.
VICTORIAN ITALIANATE SINGLE STOREY SMALL TERRACED HOUSE.
PICKETS: 75 x 20 MM HEIGHT: 1100 MM.
GAP: 40 MM. (SEE ABOVE).



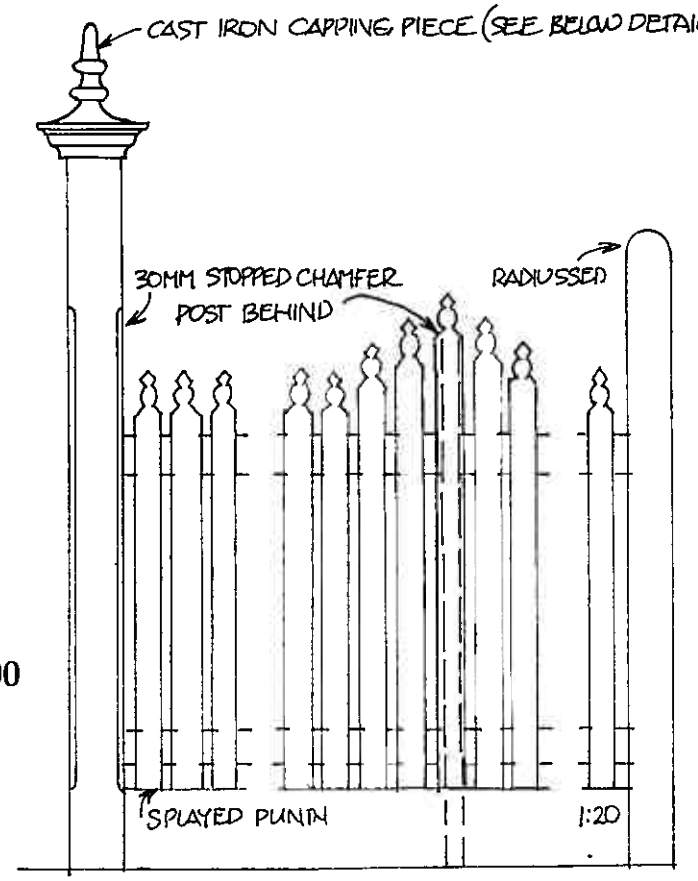
163 ALEXANDER PARADE, CLIFTON HILL.
VICTORIAN ITALIANATE SINGLE STOREY SMALL TERRACED HOUSE.
PICKETS: 75 x 20 MM HEIGHT: 1100 MM.
GAPS: 50 MM.

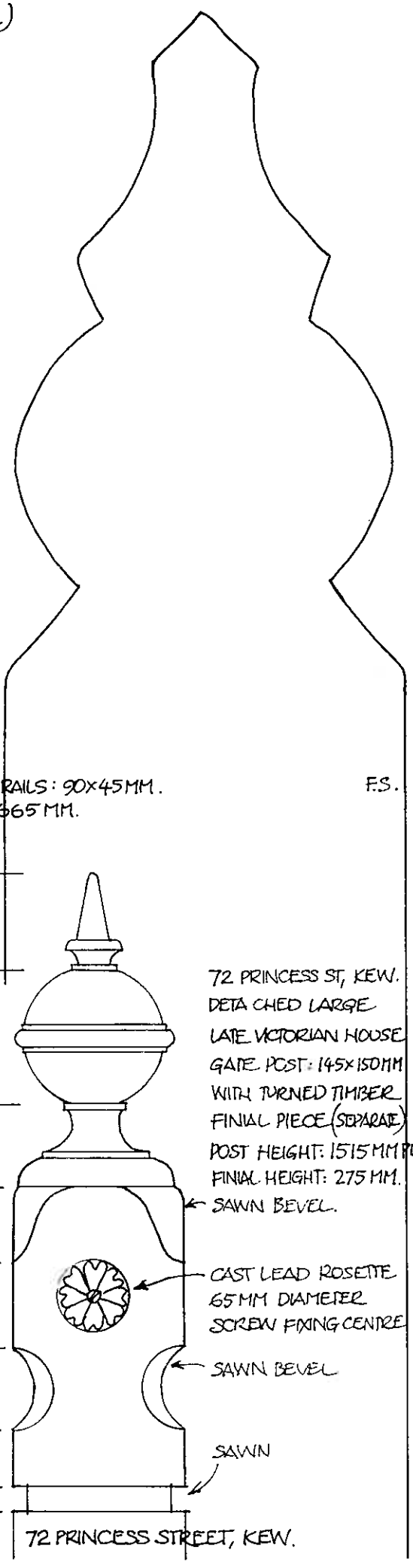




171 ALEXANDER PARADE, CLIFTON HILL.
VICTORIAN ITALIANATE SINGLE STOREY SMALL TERRACED HOUSE
PICKETS: 68 x 20 MM. HEIGHT: 1100 MM. GAP 50 MM.
GATE HAS V-HEAD POSTS.

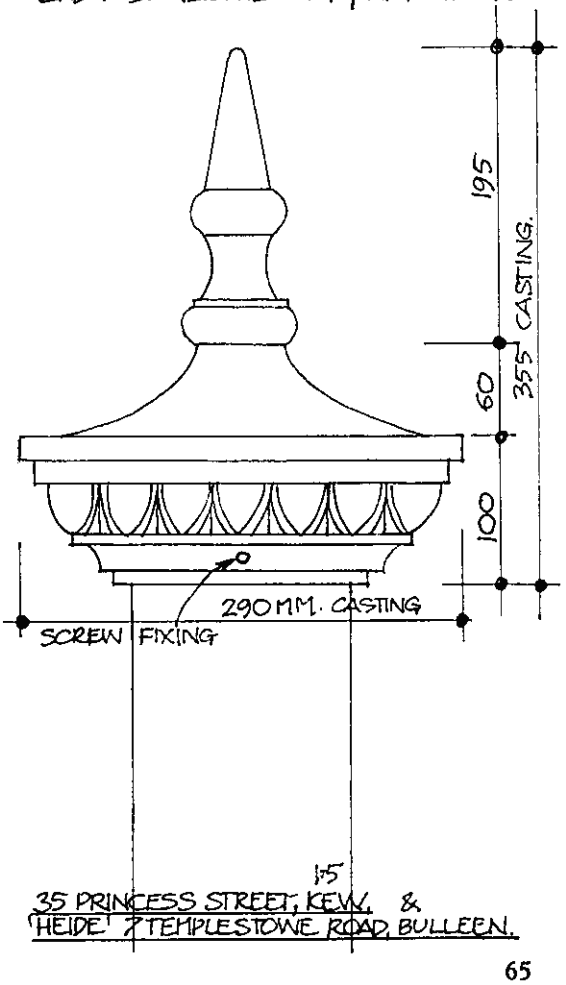
1860-1900
Urban



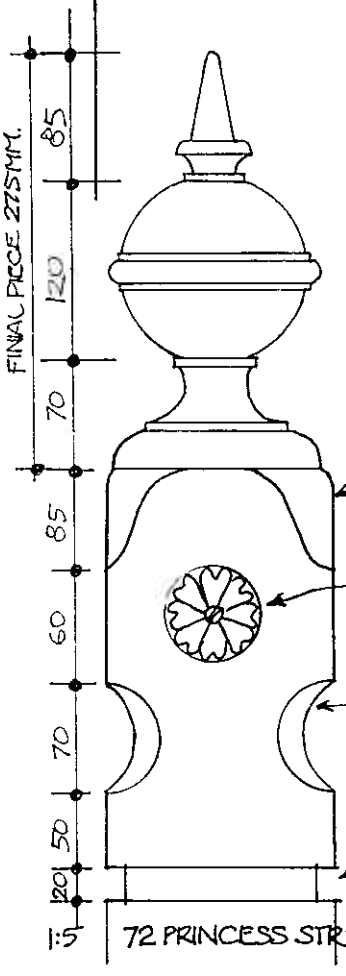


'PRINCESS', 35 PRINCESS STREET, KEW.
LARGE LATE VICTORIAN DOUBLE STOREY TERRACE
PICKET SIZE: 70x20MM, GAP 32 MM.
HEIGHT: MAXIMUM, 1285; MINIMUM, 1100.
PUNTN 220x 45 MM. RAILS: 100x 45 MM. GATE RAILS: 90x45MM.
GATE POST: 140x 140 MM; HEIGHT (PUNTN TO CAPPING) 1665 MM.
END POST: 120x120 MM; HEIGHT 1470MM.

F.S.



35 PRINCESS STREET, KEW, &
'HEIDE' 7 TEMPLESTOWE ROAD, BULLEEN.
1:5

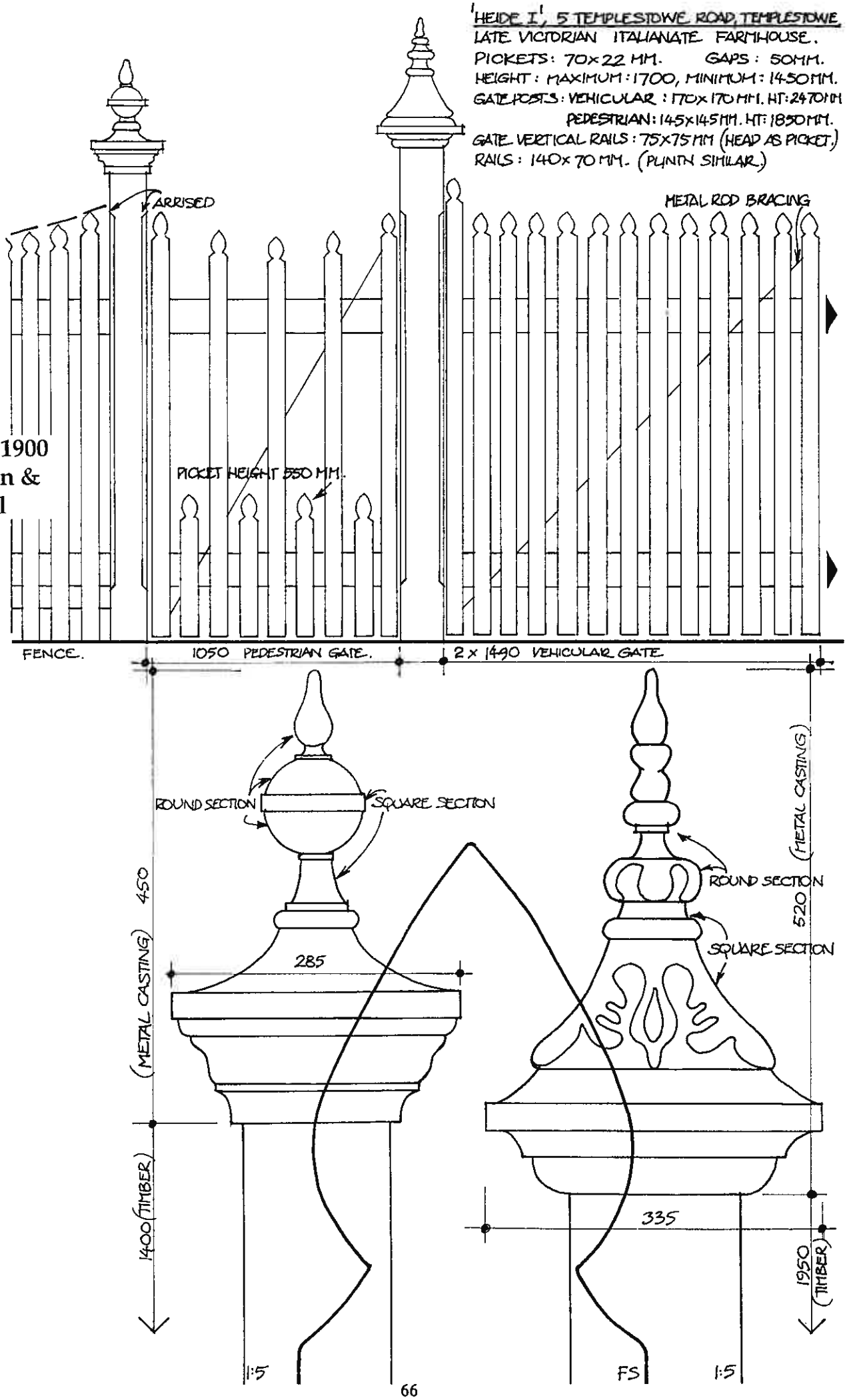


72 PRINCESS ST, KEW.
DETACHED LARGE
LATE VICTORIAN HOUSE
GATE POST: 145x150MM
WITH TURNED TIMBER
FINIAL PIECE (SEPARATE)
POST HEIGHT: 1515 MM PLUS
FINIAL HEIGHT: 275 MM.
SAWN BEVEL.
CAST LEAD ROSETTE
65 MM DIAMETER
SCREW FIXING CENTRE
SAWN BEVEL
SAWN

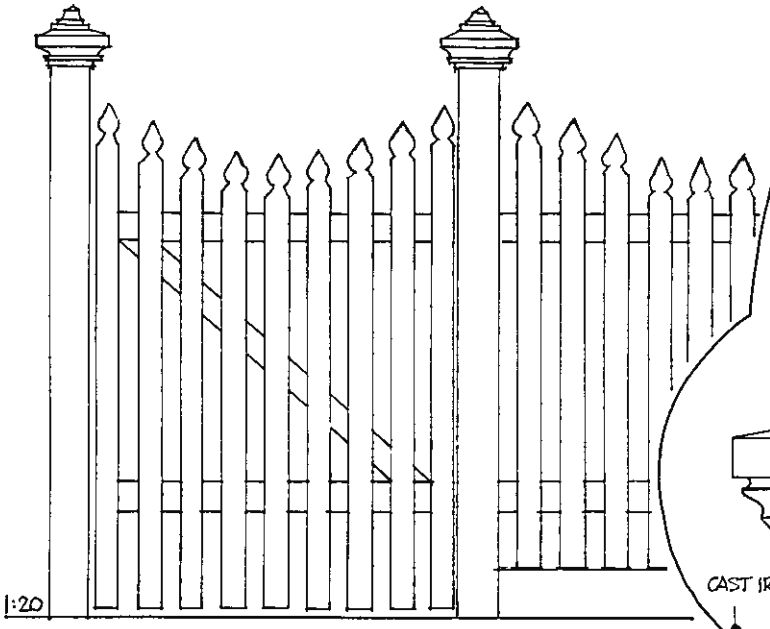
1:5 72 PRINCESS STREET, KEW.

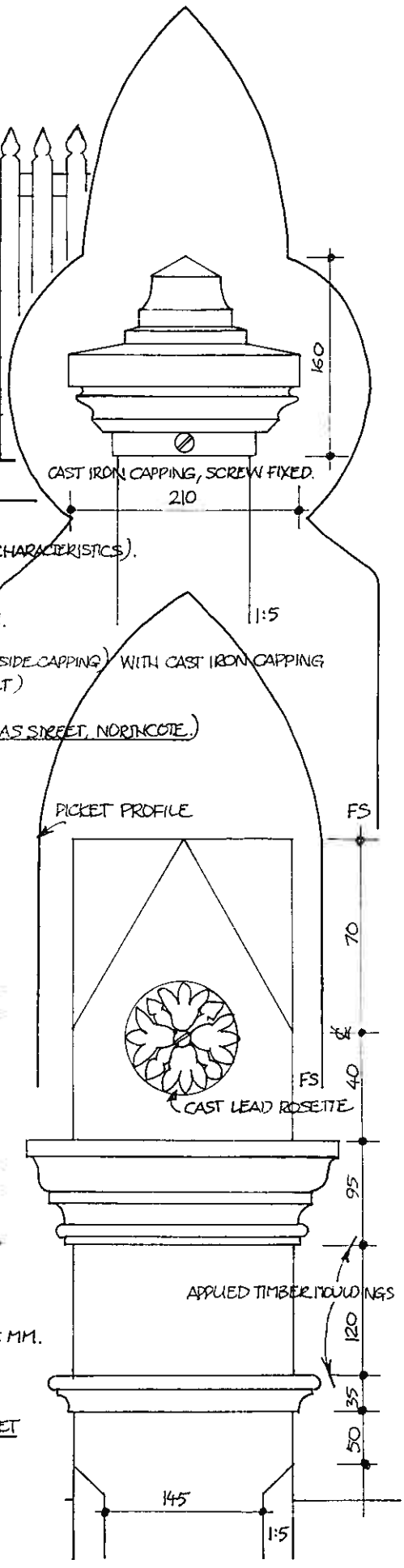
'HEIDE I', 5 TEMPLESTOWE ROAD, TEMPLESTOWE.
LATE VICTORIAN ITALIANATE FARMHOUSE.
PICKETS: 70×22 MM. GAPS: 50MM.
HEIGHT: MAXIMUM: 1700, MINIMUM: 1450MM.
GATE POSTS: VEHICULAR: 170×170 MM. HT: 2470MM
PEDESTRIAN: 145×145MM. HT: 1850MM.
GATE VERTICAL RAILS: 75×75 MM (HEAD AS PICKET.)
RAILS: 140×70 MM. (PLINTH SIMILAR.)

1860-1900 Urban & Rural

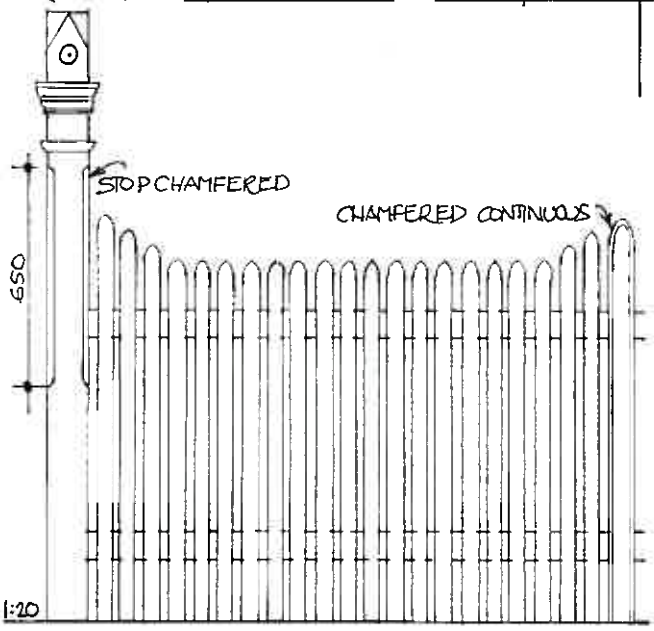


1860-1900
Urban

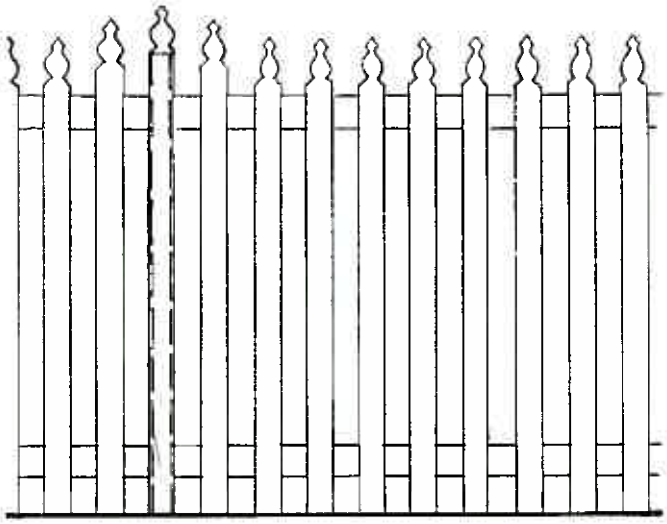




14 KENNILWORTH PARADE, IVANHOE.
LATE ITALIANATE DETACHED HOUSE (SOME TRANSITIONAL CHARACTERISTICS).
PICKETS: 70 x 20 MM GAPS: 55 MM. 21 TO BAY.
HEIGHT: MAXIMUM 1340 MM, MINIMUM: 1200 MM.
INTERMEDIATE POSTS: 120 x 75 MM, 1430 HEIGHT. RED GUM.
(SIMILAR TO 894 LYGON STREET, NORTH CARLTON)
GATE POSTS: 120 x 120 MM, 1470 HEIGHT (TO UNDERSIDE CAPPING) WITH CAST IRON CAPPING
GATE SIDE RAILS: 70 x 65 MM (HEAD PROFILE AS PICKET)
FENCE RAILS: 75 x 50 MM. HARDWOOD.
(SEE ALSO: 169 CHARLES STREET & 'FAIRVIEW', 39 CHRISTMAS STREET, NORTHCOTE.)

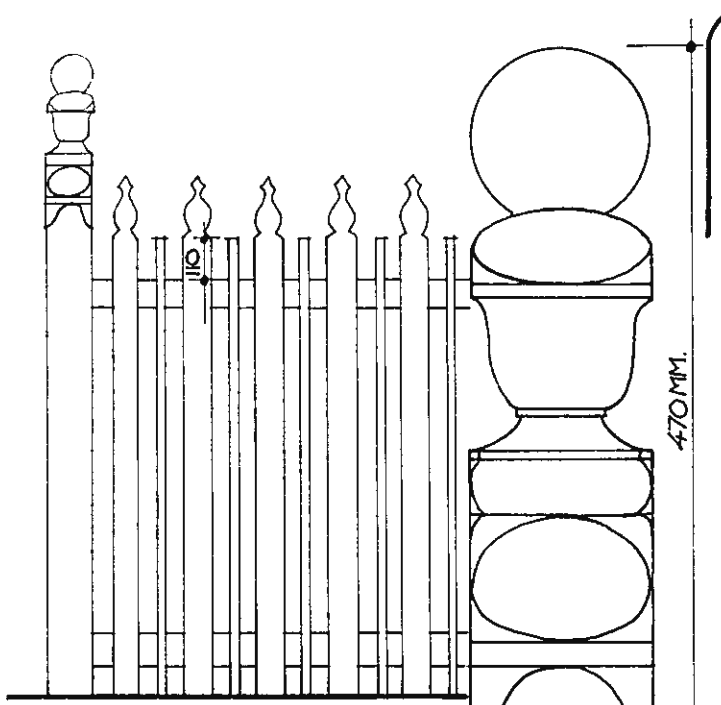


"MOSS BANK", 5 VICTORIA STREET, CAMBERWELL.
ITALIANATE, DETACHED HOUSE.
PICKETS: 45 x 20 MM. GAP 27 MM.
HEIGHT: MAXIMUM 1190 MM, MINIMUM 1055 MM.
INTERMEDIATE POSTS: 120 x 70 MM. HEIGHT: 1190 MM.
GATE POSTS: 200 x 200 MM. HEIGHT 1800 MM.
WITH APPLIED MOULDINGS, SAWN HEAD & CAST LEAD ROSETTE (SCREW FIXING). (SIMILAR TO 72 PRINCESS STREET KEW, BUT DIFFERENT DESIGN.)

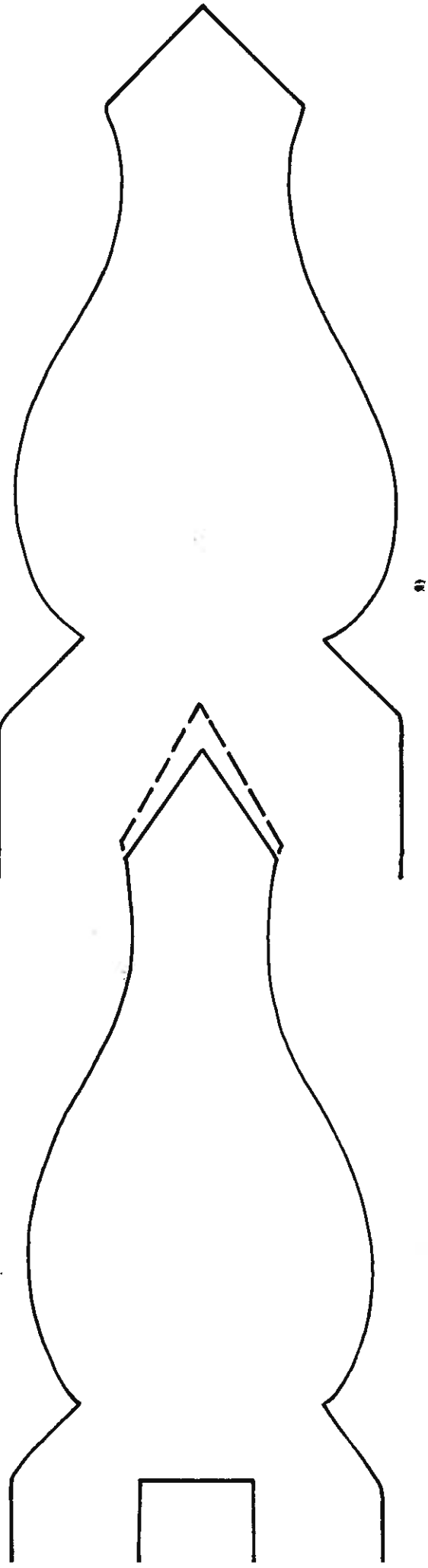


24 KENNILWORTH PARADE, IVANHOE.
DETACHED VICTORIAN HOUSE
PICKETS: 70x20 MM HT 1260 MIN, 1350 MAX.
70 MM GAPS.
POST: 120x70 MM BEHIND MAX HT. PICKET.

1860-1900
Urban

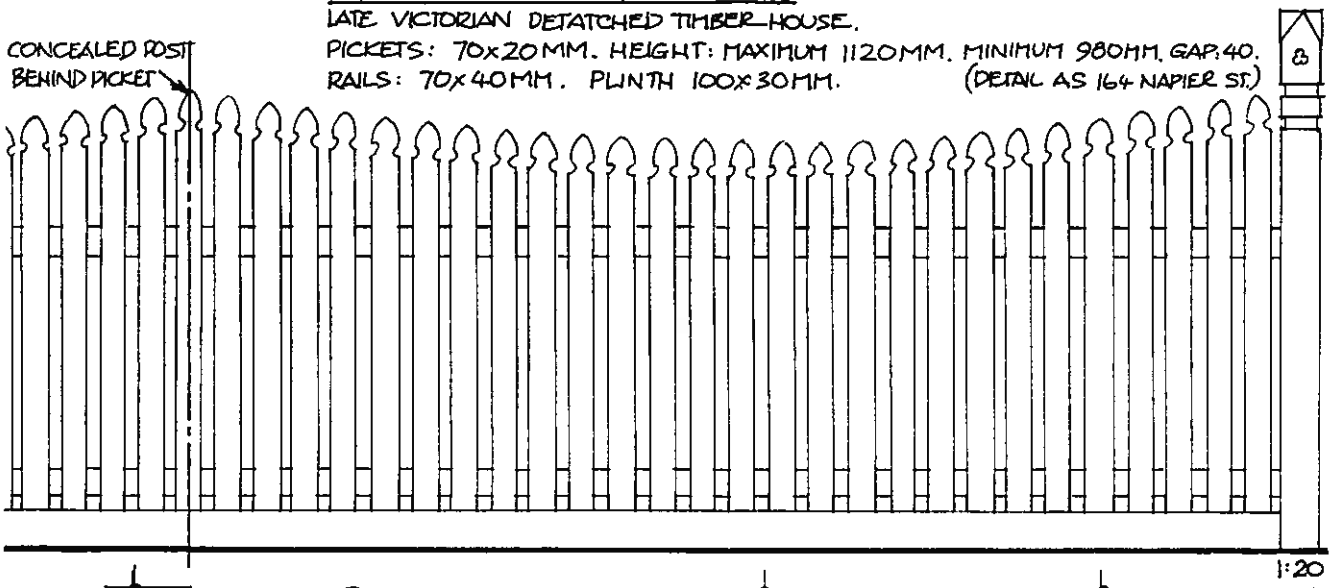


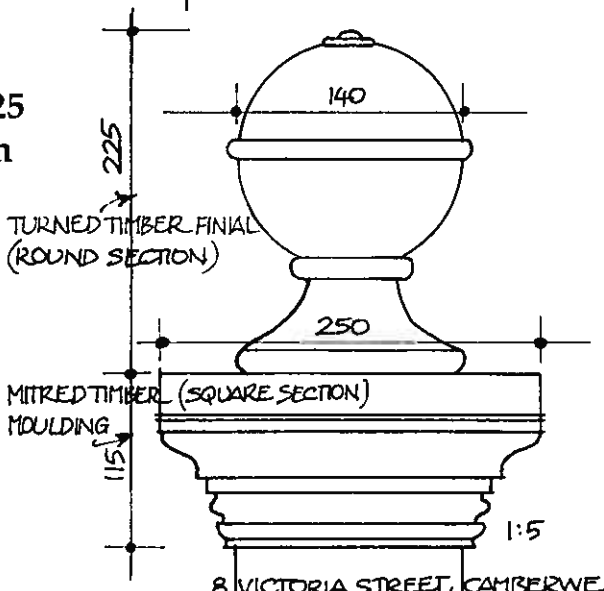
'BLAENAVON', 24 STATION STREET, FAIRFIELD.
TRANSITIONAL DETACHED HOUSE
PICKETS: 70x20 HT 1370. GAP 50 MM
22x20 HT 1290. " "
GATE POST: 120x120 HT 1700
RAILS:
ALSO: 61 ARTHURTON ROAD, NORTHCOTE (BROKEN LINE)
LATE VICTORIAN
PLINTH 100x40
NO ALTERNATE PICKETS, PICKETS RISE TO GATEPOST. MIN 1175, MAX 1210 HT.



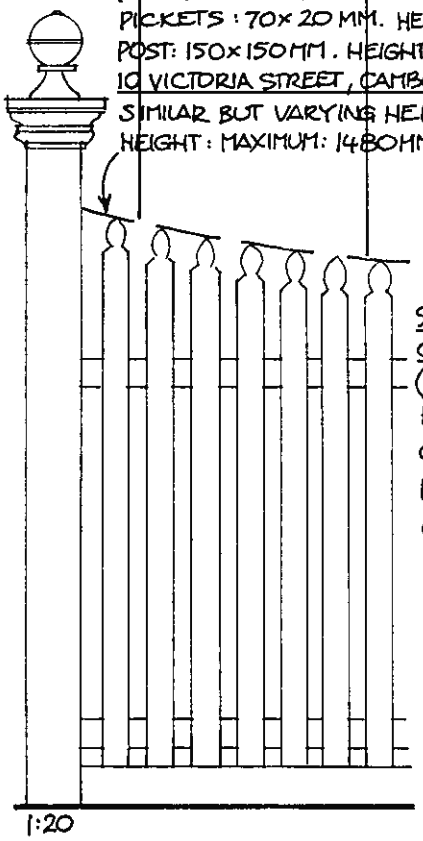
1900-25 Urban

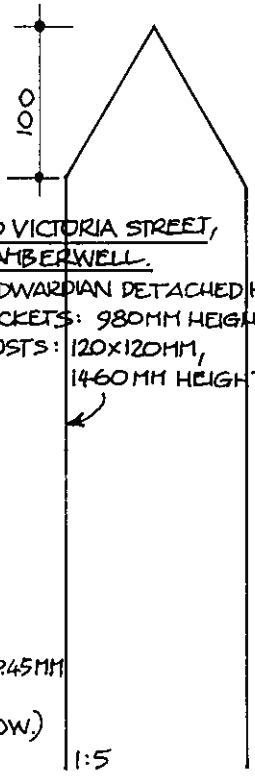
274 ST GEORGES ROAD, NORTHCOTE.
LATE VICTORIAN DETATCHED TIMBER HOUSE.
PICKETS: 70x20 MM. HEIGHT: MAXIMUM 1120MM. MINIMUM 980MM. GAP: 40.
RAILS: 70x40 MM. PLINTH 100x30 MM. (DETAIL AS 164 NAPIER ST.)



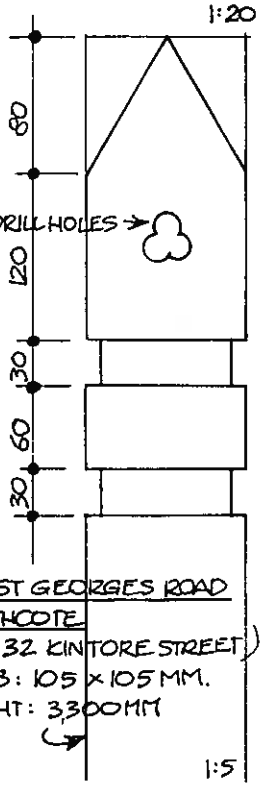


8 VICTORIA STREET, CAMBERWELL.
EDWARDIAN DETACHED HOUSE.
(SEE 9 HARTINGTON STREET, NORTHCOTE.)
PICKETS: 70x20 MM. HEIGHT 1100 MM. GAP 45MM
POST: 150x150 MM. HEIGHT: 2000MM.
10 VICTORIA STREET, CAMBERWELL (SEE BELOW.)
SIMILAR BUT VARYING HEIGHT PICKETS.
HEIGHT: MAXIMUM: 1480MM. MIMMUM 1330 MM.

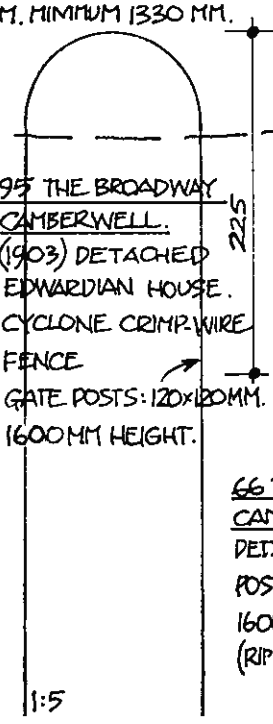




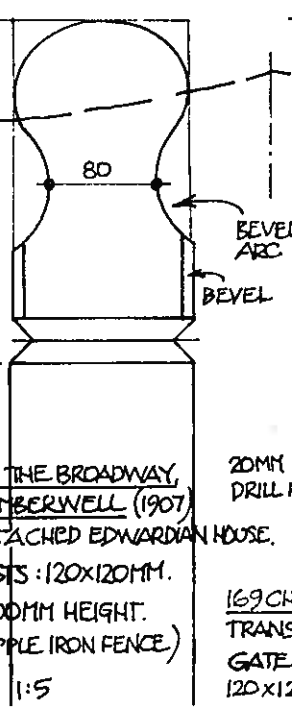
20 VICTORIA STREET, CAMBERWELL.
EDWARDIAN DETACHED HOUSE
PICKETS: 980MM HEIGHT
POSTS: 120x120MM, 1460 MM HEIGHT.



274 ST GEORGES ROAD NORTHCOTE
(SEE 32 KINTORE STREET)
POSTS: 105 x 105 MM.
HEIGHT: 3300MM



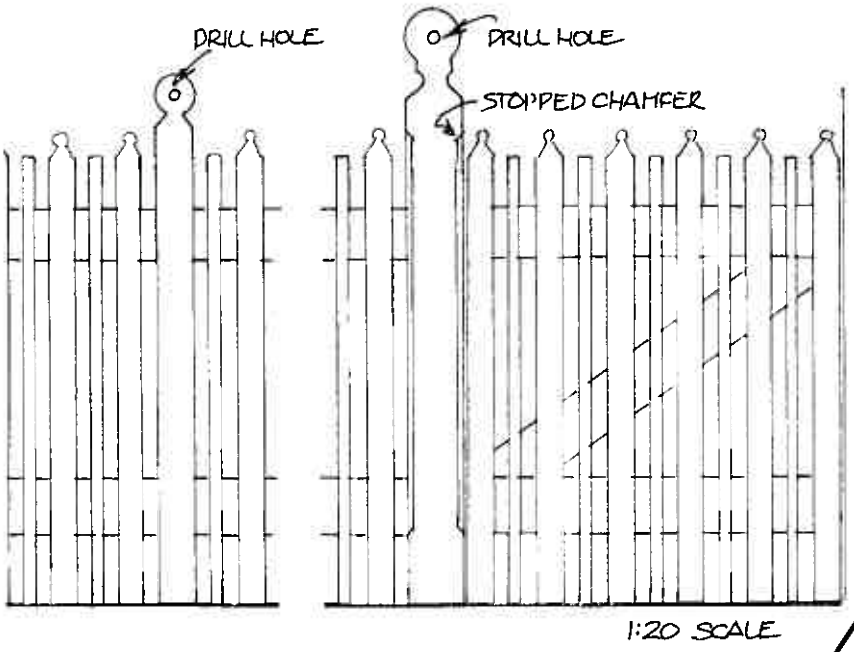
95 THE BROADWAY CAMBERWELL.
(1903) DETACHED EDWARDIAN HOUSE.
CYCLONE CRIMP WIRE FENCE
GATE POSTS: 120x120MM.
1600 MM HEIGHT.



66 THE BROADWAY, CAMBERWELL (1907)
DETACHED EDWARDIAN HOUSE.
POSTS: 120x120MM.
1600MM HEIGHT.
(RIPPLE IRON FENCE)

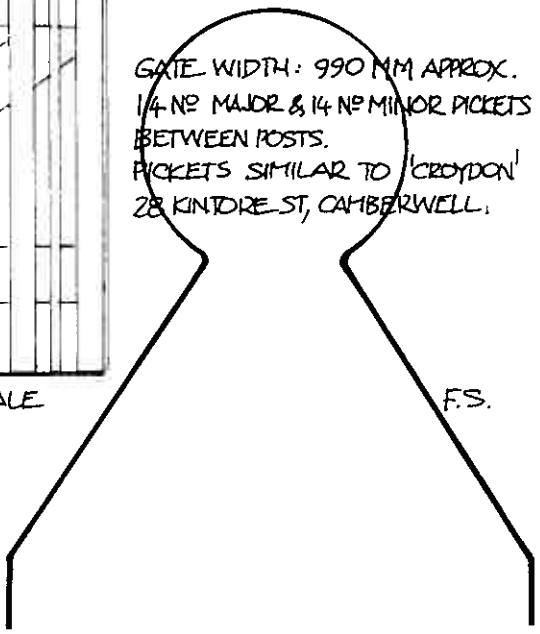
169 CHARLES ST, NORTHCOTE.
TRANSITIONAL
GATE POSTS:
120x120MM RED GUM.

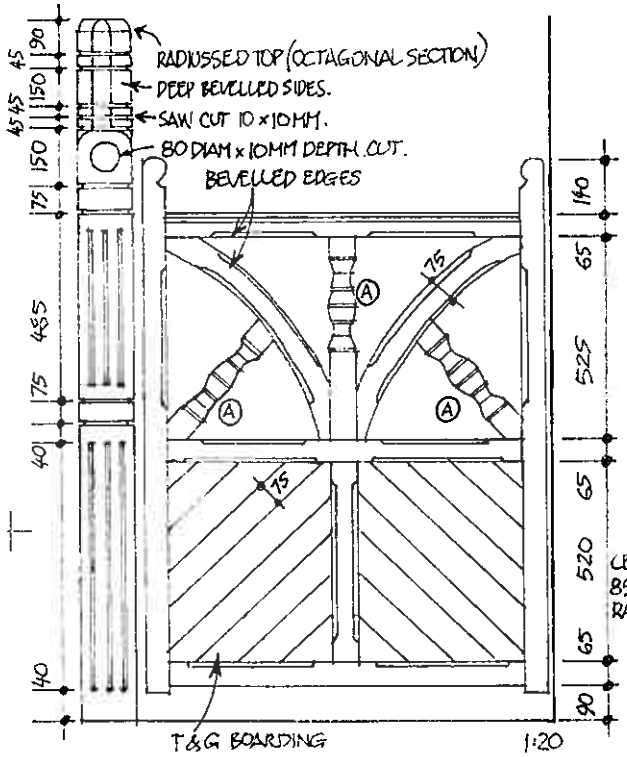
1900-25
Urban

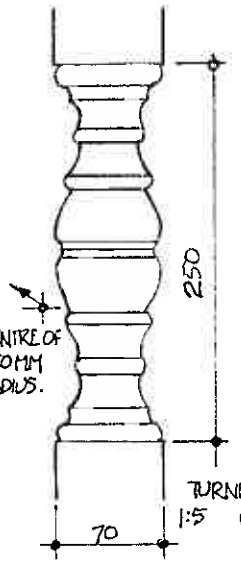


QUEENSBERRY STREET, CARLTON
STATE SCHOOL Nº 2355 (1889)
PICKETS : 70×20 MM HT: 1250 MM
GAP 45MM, 32×20 MM HT: 1180MM
RAILS : 140×70 MM.
POSTS: INTERMEDIATE & GATE: 100×105 MM, HEIGHT: 1400 MM.
CORNER: 145×145 MM, HEIGHT 1580 MM.

GATE WIDTH: 990 MM APPROX.
14 Nº MAJOR & 14 Nº MINOR PICKETS BETWEEN POSTS.
PICKETS SIMILAR TO 'CROYDON' 28 KINTORE ST, CAMBERWELL.



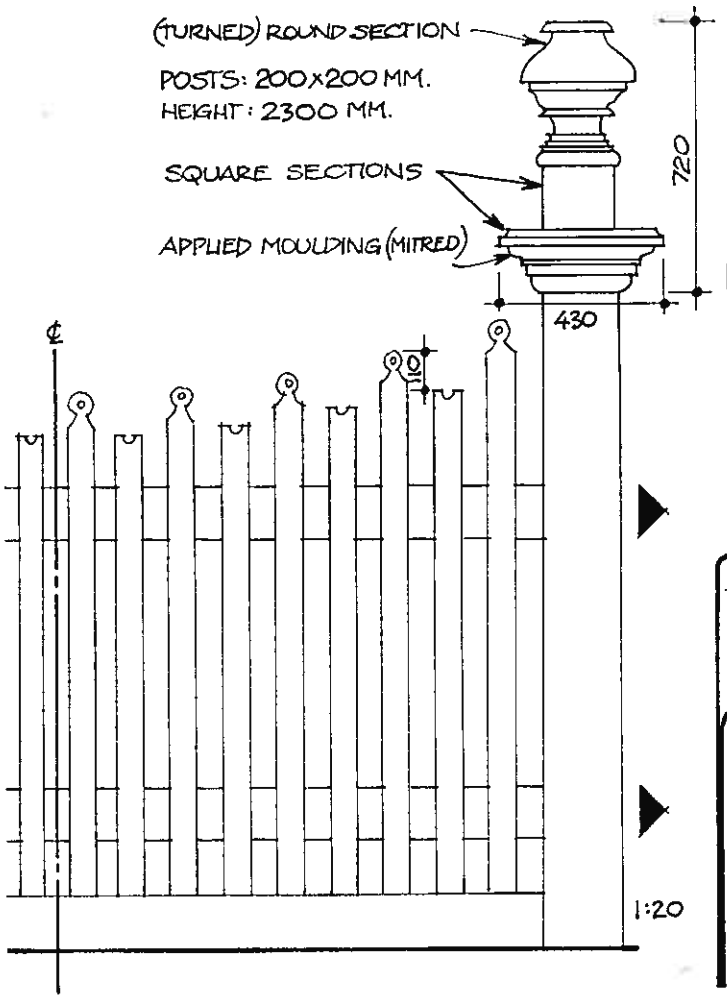


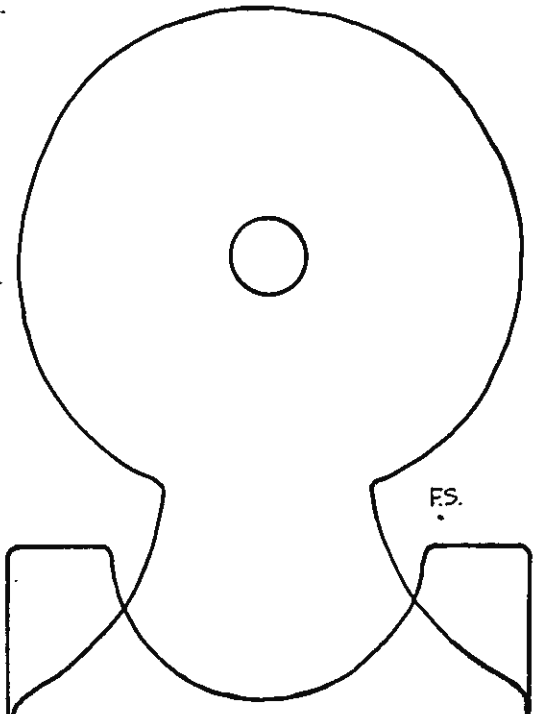


TURNED SPINDLE DETAIL.

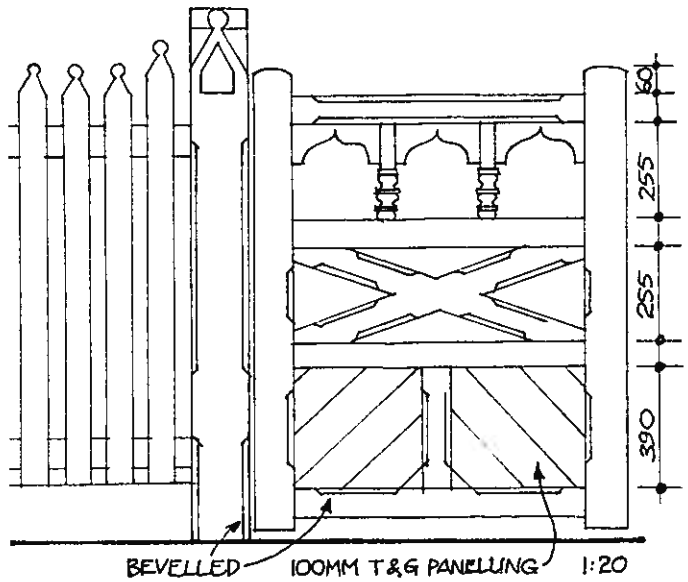
885 RATHDOWNE STREET, NTH. CARLTON.
EDWARDIAN SEMI-DETATCHED HOUSE.
GATE POSTS : 150×150MM, 1860MM HT.
ELABORATELY SAWCUT.
GATE : ALL RAILS 60MM DEEP (×65MM UNLESS OTHERWISE INDICATED).
WIDTH : 1060MM × HEIGHT 1240 MM (EXCLUDING HORNS)

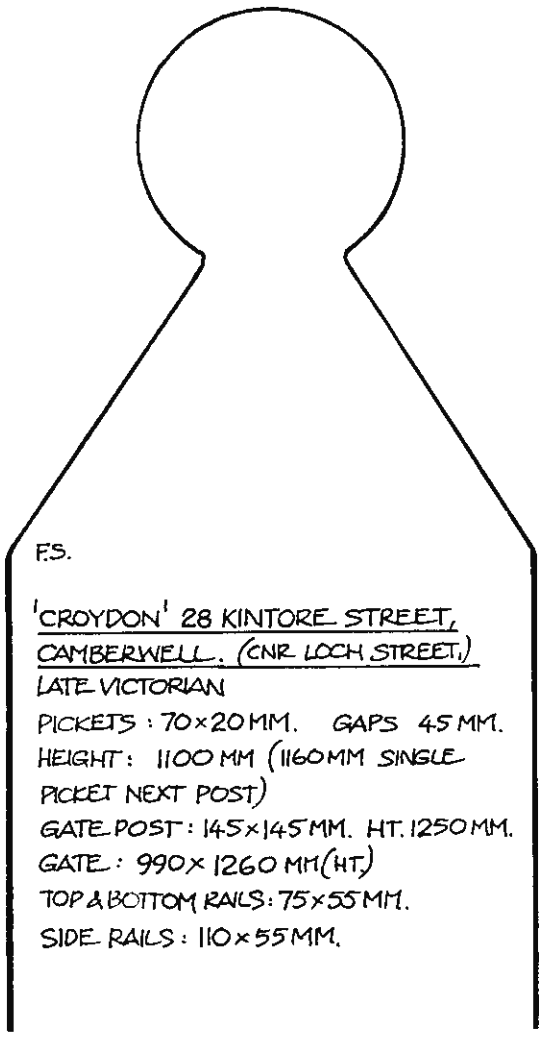
1900-25 Urban



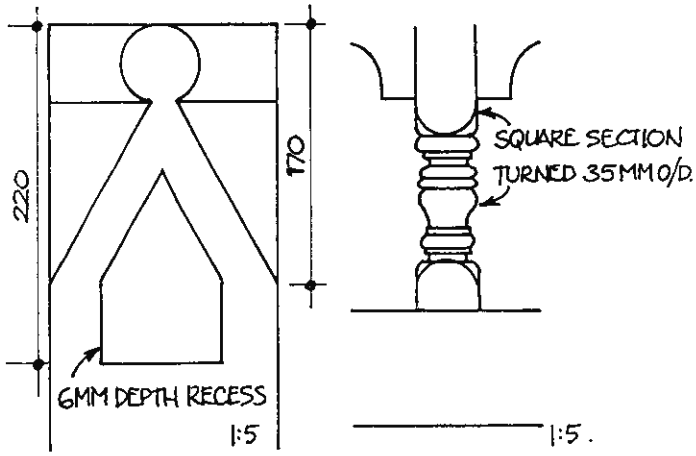


29 KINTORE STREET, CAMBERWELL (CNR LOCH STREET)
LARGE DOUBLE STOREY DETACHED EDWARDIAN HOUSE.
PICKETS: 70 x 20 MM. GAPS 65 MM.
HEIGHT: MAX 1420 MM. MIN 1330 MM.
& SINGLE PICKET NEXT POST 1510 MM.
RAILS: 140 x 70 MM
18 PICKETS TO BAY. GENTLE CATENARY CURVE.



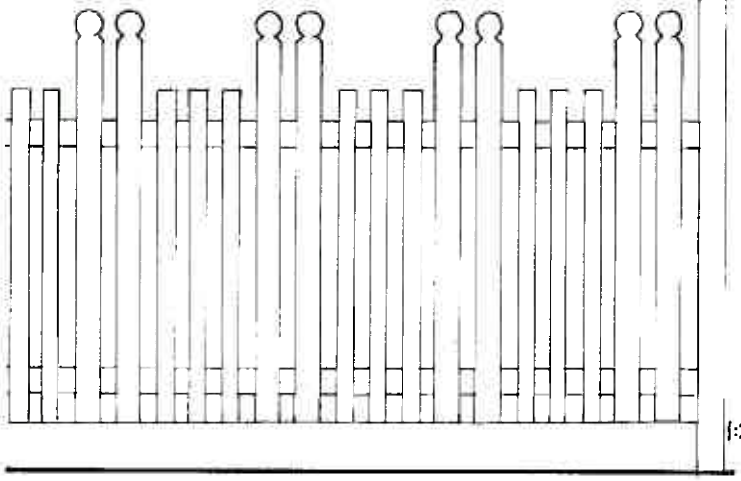


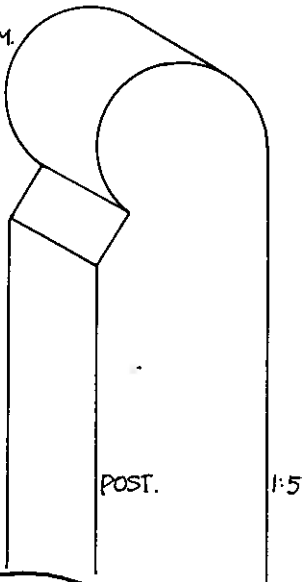
'CROYDON' 28 KINTORE STREET, CAMBERWELL. (CNR LOCH STREET.)
LATE VICTORIAN
PICKETS: 70x20 MM. GAPS 45 MM.
HEIGHT: 1100 MM (1160 MM SINGLE PICKET NEXT POST)
GATE POST: 145x145 MM. HT. 1250 MM.
GATE: 990x1260 MM (HT.)
TOP & BOTTOM RAILS: 75x55 MM.
SIDE RAILS: 110x55 MM.



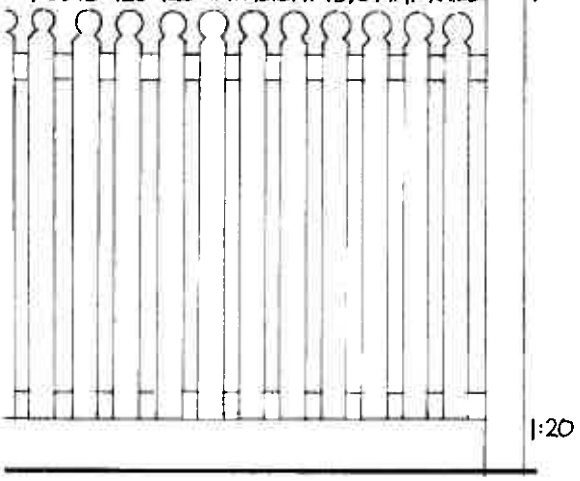
1900-25
Urban

894 LYGON STREET, NORTH CARLTON. (NEAR McPHERSON STREET.)
EDWARDIAN
DENSE HEDGE BEHIND FENCE.
PICKETS: 70x20 MM, 1200 MM HEIGHT; 45x20MM, 970 MM HEIGHT.
40–50 MM GAP. POSTS: 125x75 MM, 1400 MM HEIGHT. RAILS 75x45 MM.



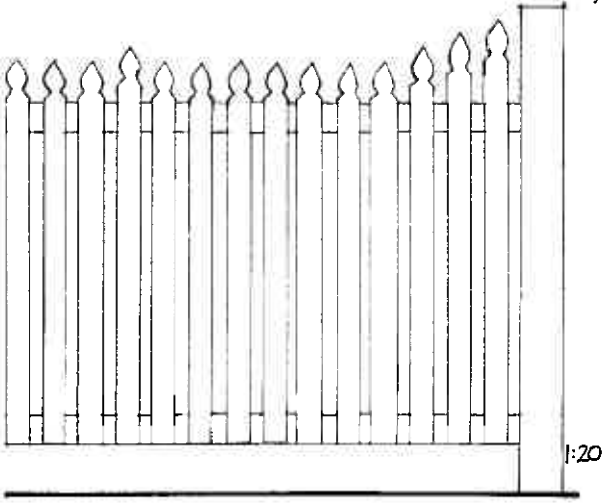


4 SALISBURY AVENUE, IVANHOE.
TRANSITIONAL DETACHED TIMBER HOUSE.
PICKETS: 70x20MM. HEIGHT: 1200 MM GAPS: 45MM.
POSTS: 120x120MM. HEIGHT 1370 MM. RAILS: 75x45 MM.

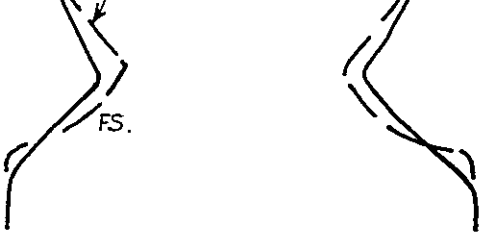


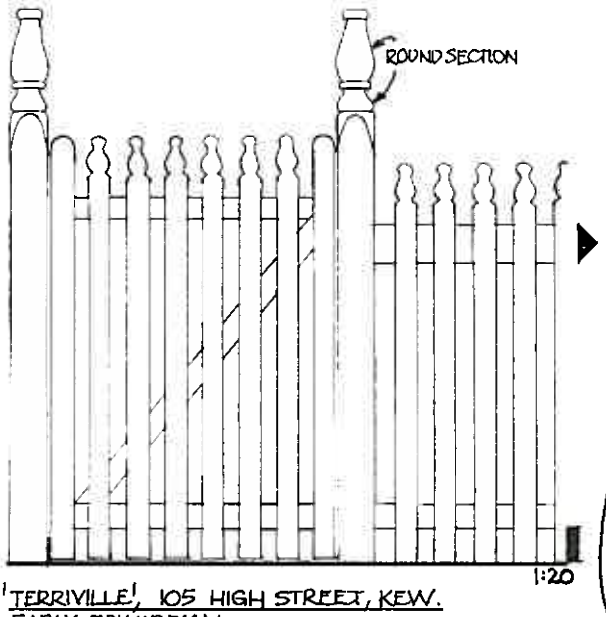
ALSO:
9 GROSVENOR ST, MOONEE PONDS.
49 CHARLES ST, NORTHCOTE
ITALIANATE (1900) TERRACE, 1 STOREY.
4 CLARKE ST, NORTHCOTE.

9 HARTINGTON STREET, NORTHCOTE.
TRANSITIONAL
PICKETS: 70x20 MM. HEIGHT: MIN: 1120, MAX: 1290 MM.
GAP: 40 MM. (SINGLE PICKET: 1160 MM.)

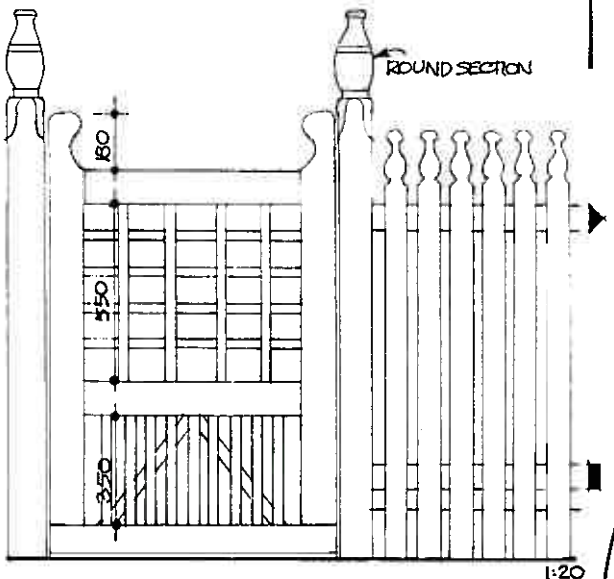


ALSO: 8 VICTORIA ST, CAMBERWELL.
EDWARDIAN.

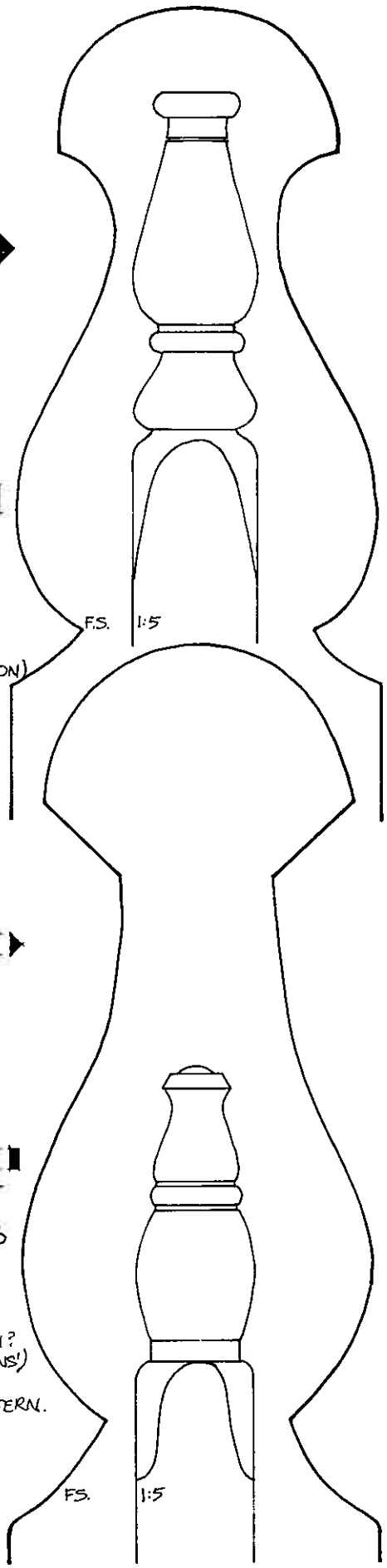




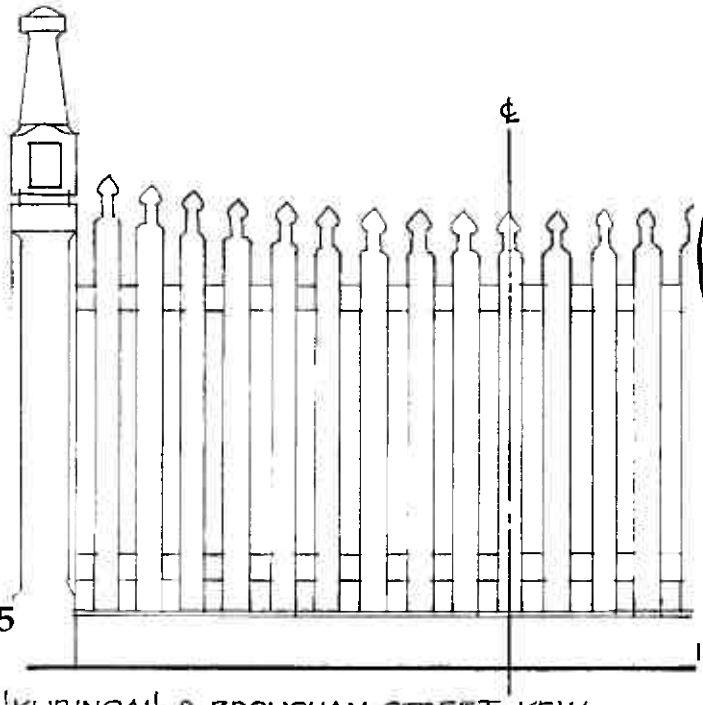
'TERRIVILLE', 105 HIGH STREET, KEW.
EARLY EDWARDIAN
PICKETS: 70 x 20 MM. HEIGHT: 1235 MM
GAPS: 55 MM
GATE POSTS: 120 x 120 MM. HEIGHT: 1725 MM.
RAILS: TOP: 120 x 60 MM (SPLAYED).
BOTTOM: 100 x 40 MM (RECTANGULAR SECTION)
GATE RAILS: HOR. & BRACE: 70 x 45 MM
VERTICAL: 70 x 70 MM.



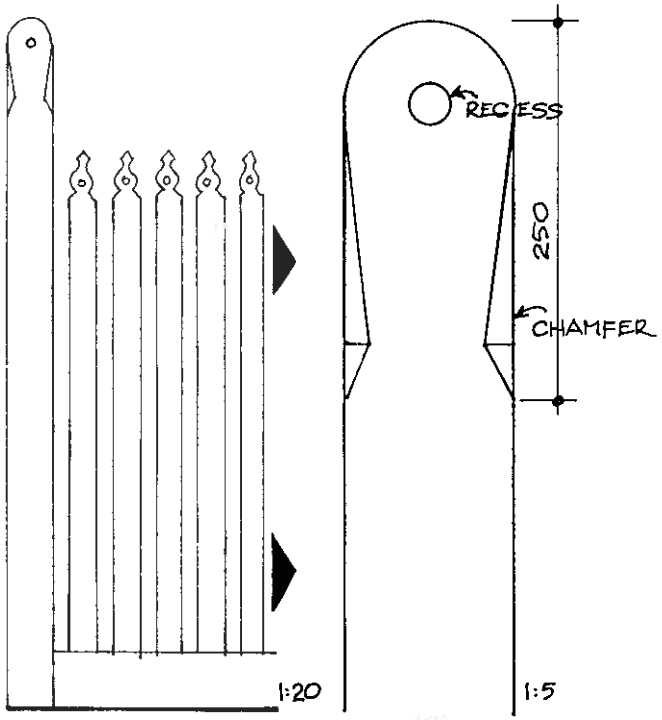
7 NOEL STREET, IVANHOE.
EDWARDIAN DETACHED HOUSE.
PICKETS: 70 x 20 MM. HEIGHT 1335 MM.
GAP: 32 MM.
GATE POSTS: 120 x 120 MM HEIGHT 1800 MM. JARRAH?
GATE: 910 x 1200 MM HEIGHT (EXCLUDING VERT. RAIL 'HORNS')
FRAME 105 x 70 MM. TIMBERS.
CAPPING - SEE PAGE 70 - SIMILAR TO CYCLONE PATTERN.



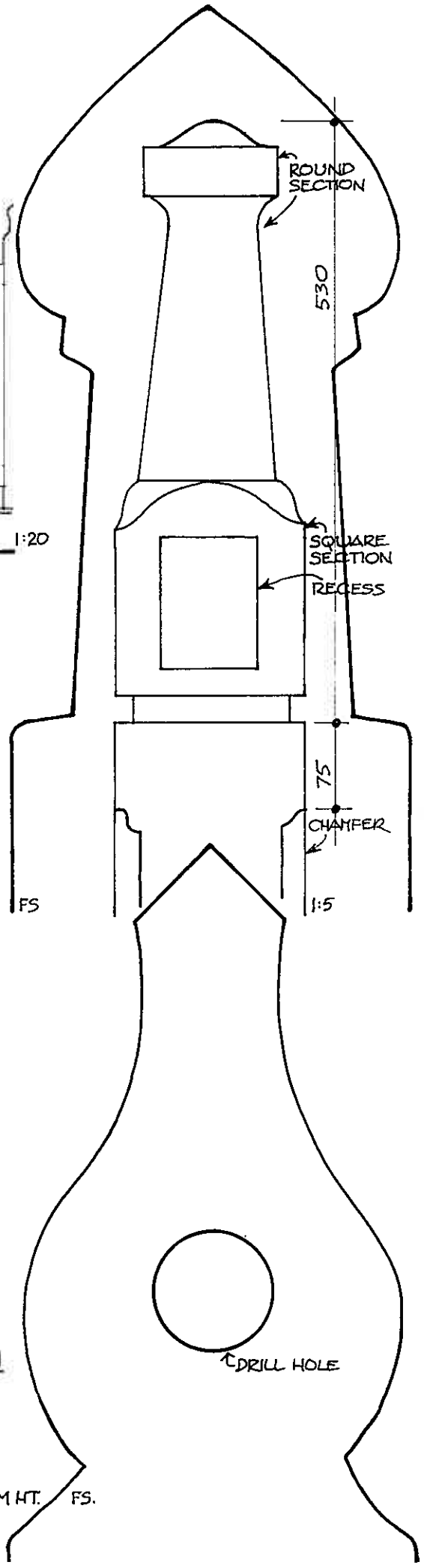
1900-25
Urban



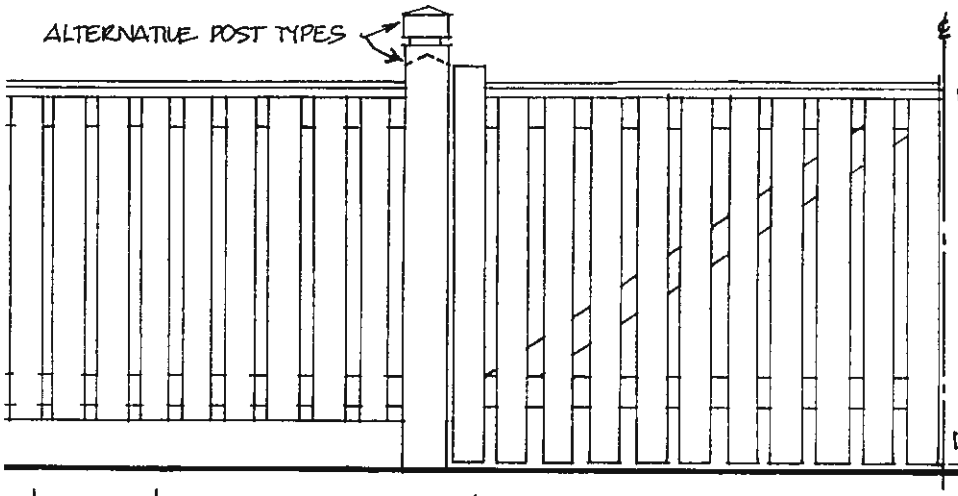
'KURINGAI', 8 BROUGHAM STREET, KEW
(CNR. MALMSBURY STREET.)
EDWARDIAN
PICKETS : 72 x 22 MM. HEIGHT : MIN . 1050 MM.
MAX . 1170 MM.
GAPS: 50 MM.
BAY LENGTH: 2350 MM
POST : 170 x 170 MM. HEIGHT : 1600 MM.
PLINTH : 150 x 70 MM. CHAMFERED TOP.



102-104 PUNT ROAD, WINDSOR. (CNR GLADSTONE ST.)
LATE EDWARDIAN
PICKET: 70 x 20 MM. HEIGHT: 1325 MM
GAPS : 40 MM. RAILS: 135 x 70 MM.
GATE POSTS : 112 x 112 MM . HEIGHT: 1670 MM.
GATE SIMILAR TO FENCE.
WITH 75x75 MM ROUND HEAD VERTICAL RAILS 1340 MM HT. FS.

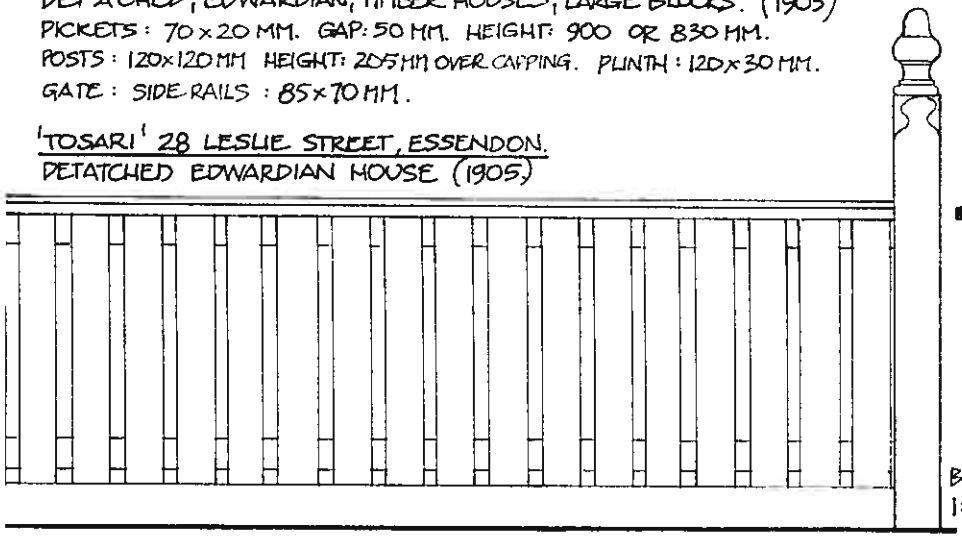


1900-25
Urban

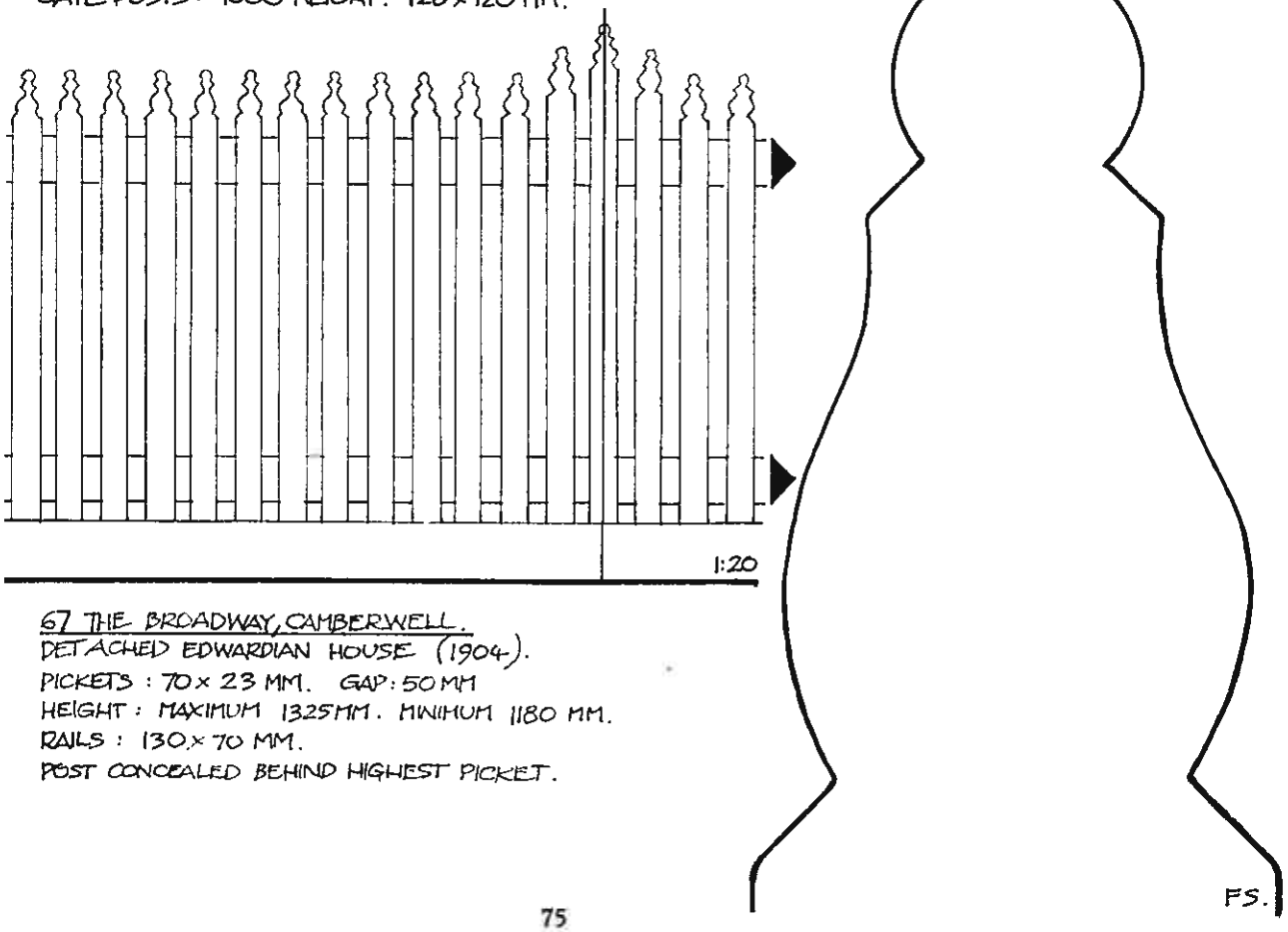


'ST LOUIS' 202 STATION STREET & 'KAIBA' 175 GILLIES STREET, NORTHCOTE
DETACHED, EDWARDIAN, TIMBER HOUSES, LARGE BLOCKS. (1905)
PICKETS : 70 × 20 MM. GAP: 50 MM. HEIGHT: 900 OR 830 MM.
POSTS : 120×120 MM HEIGHT: 205 MM OVER CAPPING. PLINTH : 120×30 MM.
GATE : SIDE RAILS : 85×70 MM.

'TOSARI' 28 LESLIE STREET, ESSENDON.
DETATCHED EDWARDIAN HOUSE (1905)

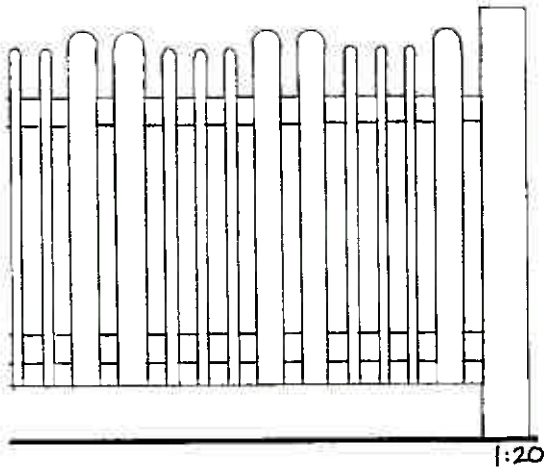


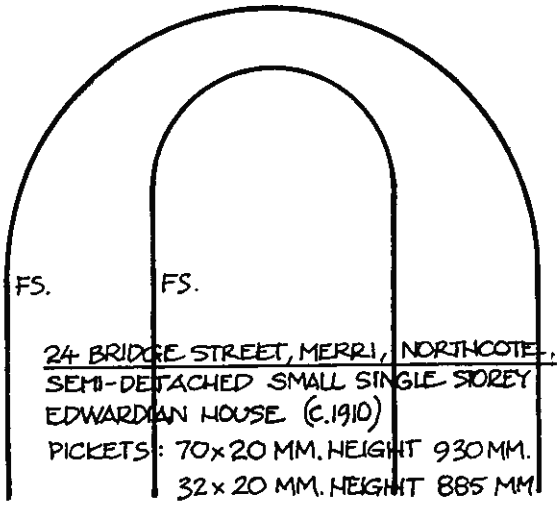
PICKETS : 95×20 MM. HEIGHT : 570 MM. GAPS : 40 MM. CAPPING : 100×45 MM
GATE POSTS : 1080 HEIGHT. 128×120 MM.



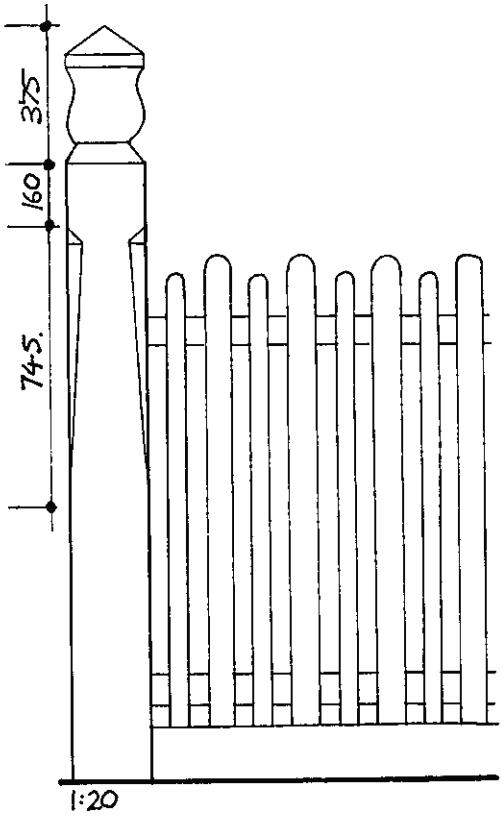
67 THE BROADWAY, CAMBERWELL.
DETACHED EDWARDIAN HOUSE (1904).
PICKETS : 70 × 23 MM. GAP: 50 MM
HEIGHT : MAXIMUM 1325 MM. MINIMUM 1180 MM.
RAILS : 130 × 70 MM.
POST CONCEALED BEHIND HIGHEST PICKET.

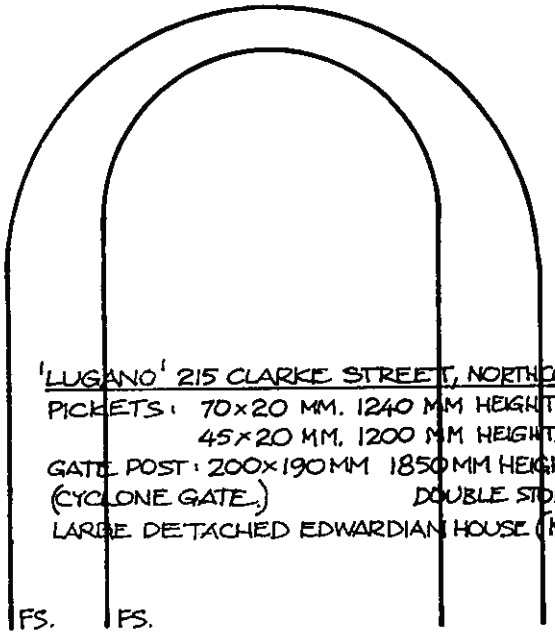
1900-25 Urban



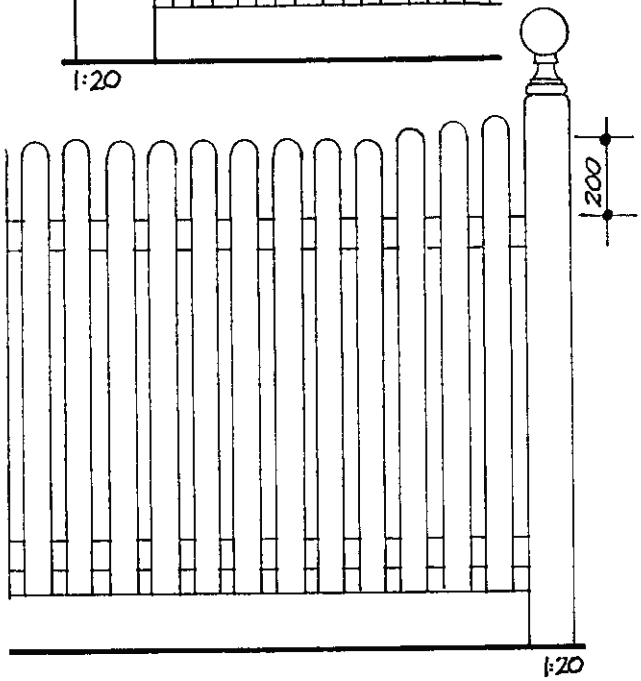


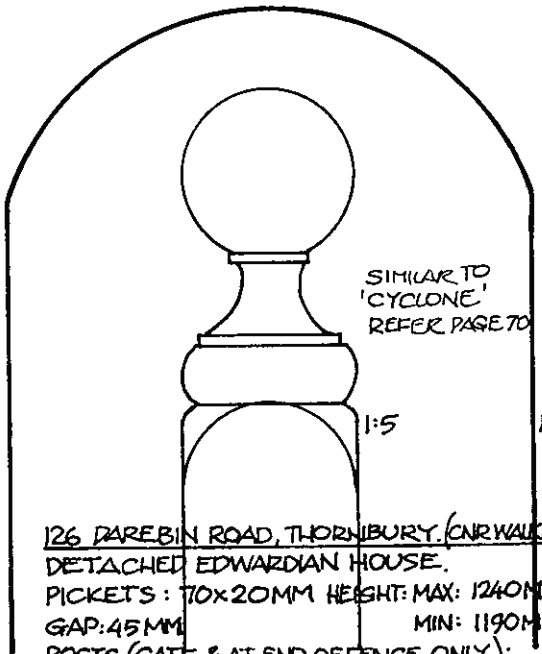
24 BRIDGE STREET, MERRI, NORTHCOTE.
SEMI-DETACHED SMALL SINGLE STOREY EDWARDIAN HOUSE (C.1910)
PICKETS: 70x20 MM. HEIGHT 930 MM.
32x20 MM. HEIGHT 885 MM
GAP: 45 MM RAILS: 75x40 MM.
GATE POST: 120x120 MM. FLAT HEAD.





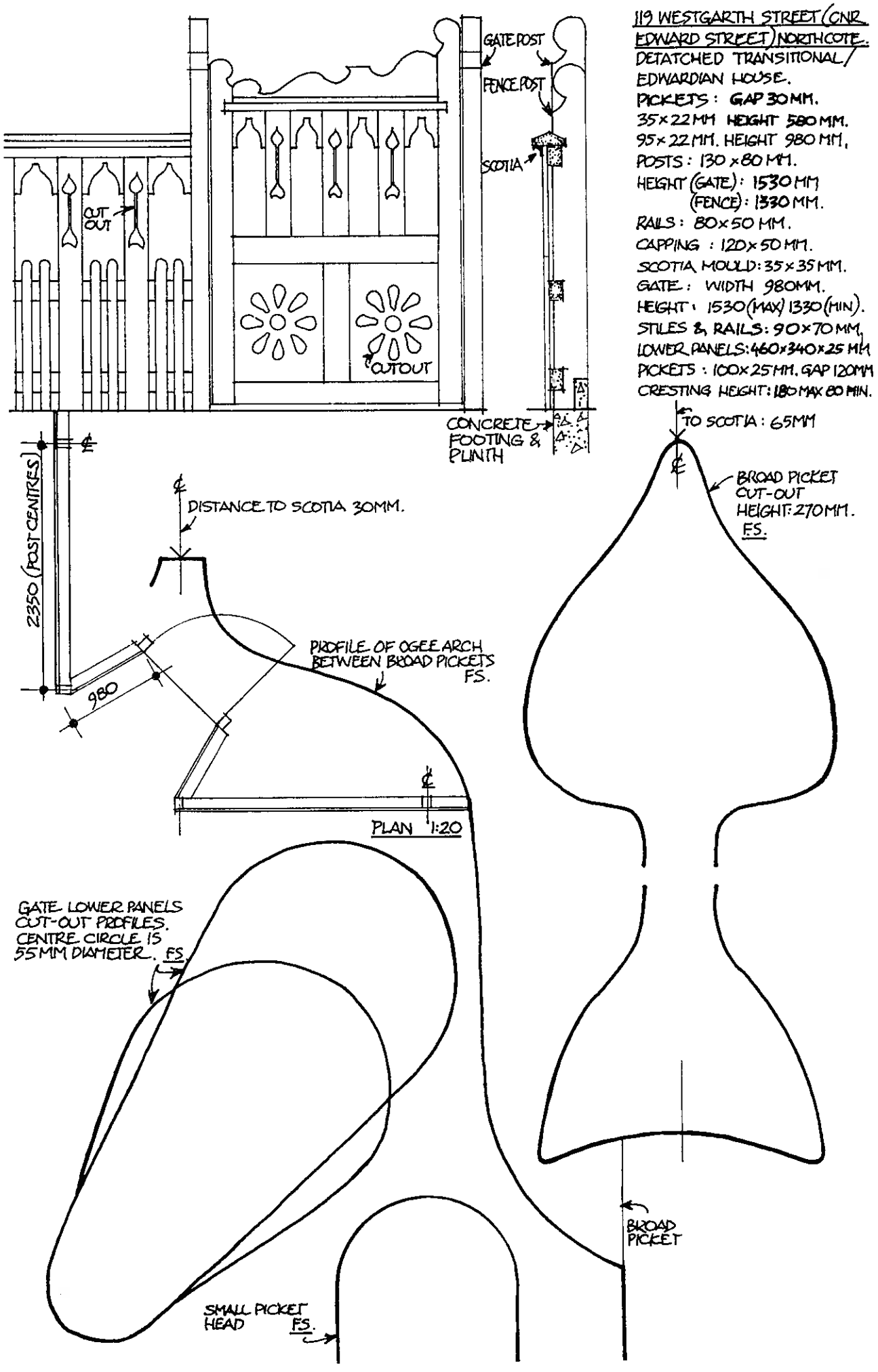
'LUGANO' 215 CLARKE STREET, NORTHCOTE.
PICKETS: 70x20 MM. 1240 MM HEIGHT.
45x20 MM. 1200 MM HEIGHT.
GATE POST: 200x190 MM 1850 MM HEIGHT.
(CYCLONE GATE.) DOUBLE STOREY
LARGE DETACHED EDWARDIAN HOUSE (1912)

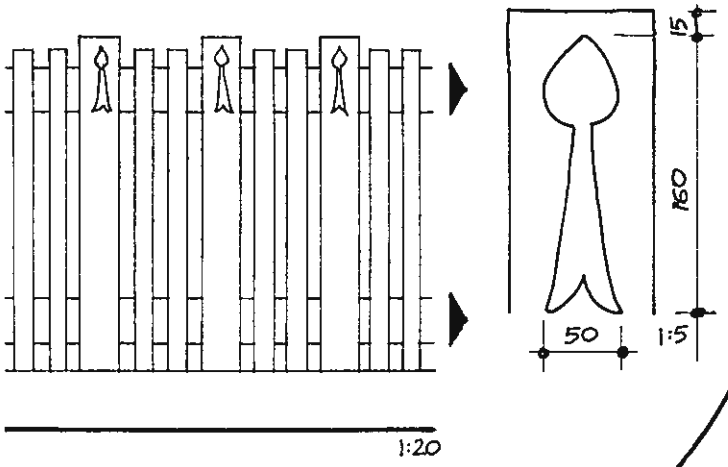




126 DAREBIN ROAD, THORNBURY. (CNR WALKER ST.)
DETACHED EDWARDIAN HOUSE.
PICKETS: 70x20MM HEIGHT: MAX: 1240MM.
GAP: 45MM MIN: 1190MM.
POSTS (GATE & AT END OF FENCE ONLY.):
115x115MM. HEIGHT 1520MM. (SEE ALSO: 9 GROSVENOR STREET, MOONEE PONDS.)
PLINTH 135x25 MM RAILS 70x40MM.

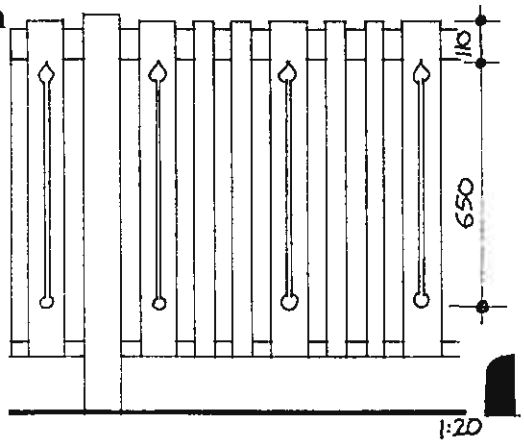
1900-25
Urban

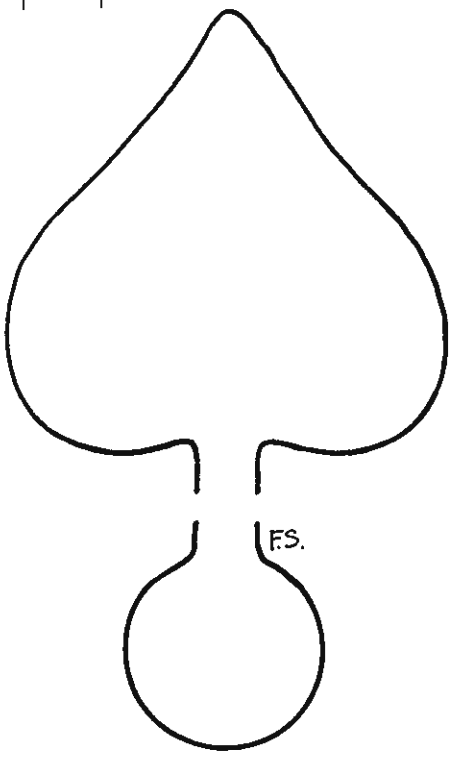




81 MARSHALL STREET, IVANHOE.
DETACHED EDWARDIAN HOUSE.
PICKETS: 100 x 30 MM, 880 HT.
45 x 30 MM, 850 HT
GAPS: 35MM (VARIES)
GATE POSTS: 120 x 120 MM.
(GATE IS SIMILAR TO FENCE.)
RAILS:
PLINTH:

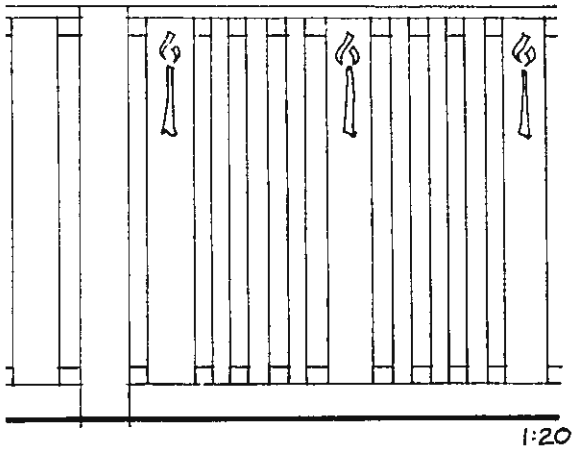
1900-25 Urban

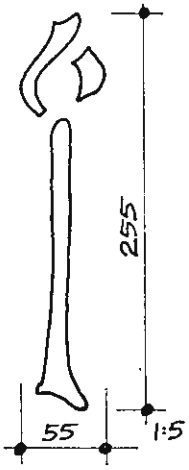




133 GEORGE STREET, FITZROY.
EDWARDIAN

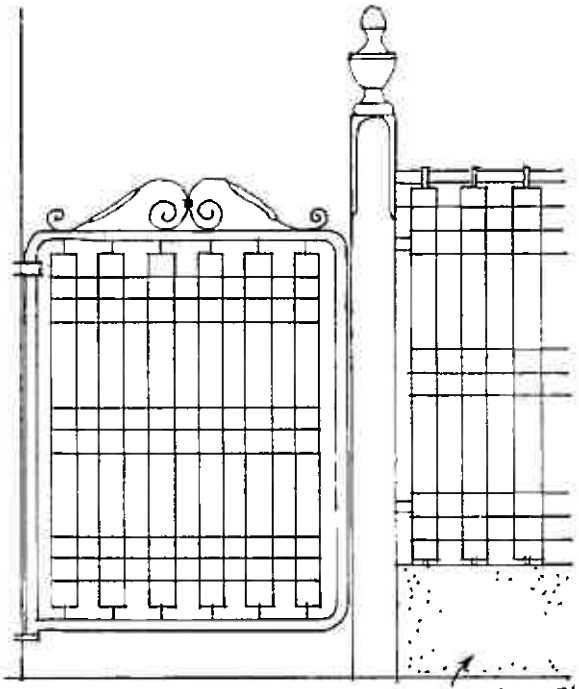
PICKETS: 95 x 23 MM.
47 x 23 MM.
GAPS: 48 MM.
HEIGHT: 900 MM.
GATE POSTS: 100 x 90MM
HEIGHT: 910 MM.
RAILS:
PLINTH:

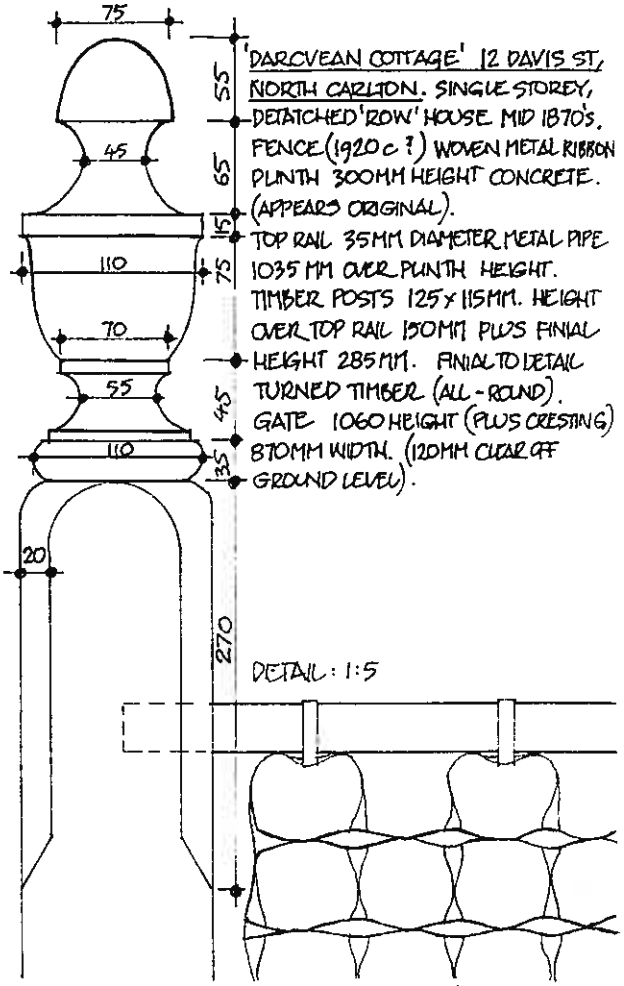




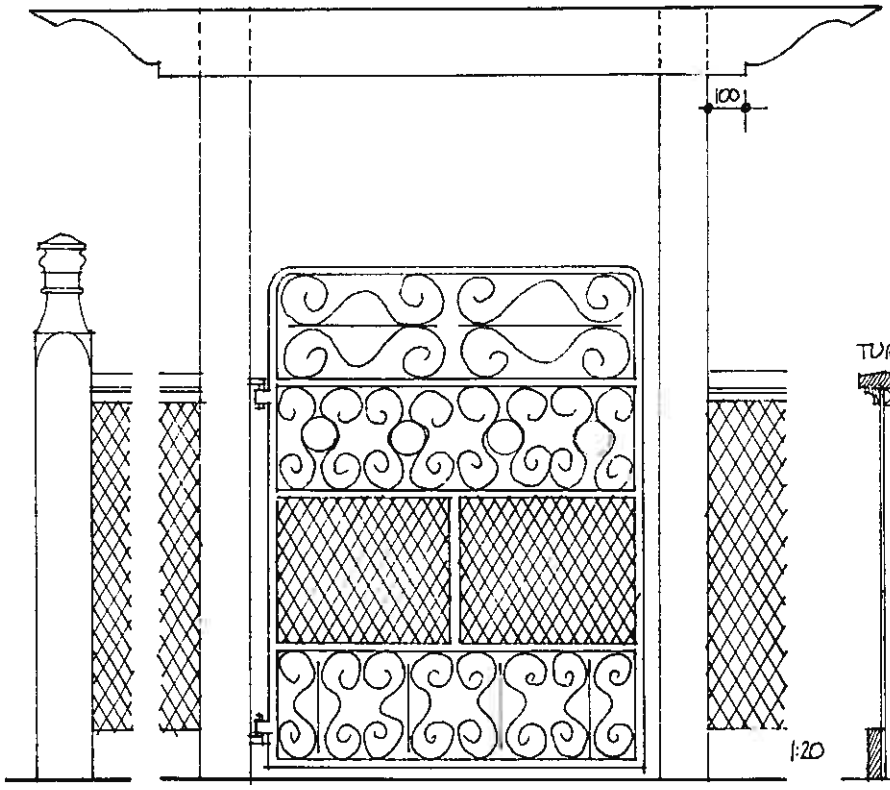
994 BURKE ROAD, CANTERBURY.
LARGE DETACHED HOUSE.
LATE EDWARDIAN.
PICKETS: 120 x 20 MM.
45 x 20 MM
GAPS:
HEIGHT: 1000 MM (INCL. CAPPING)
POSTS: 120 x 120 MM.
CAPPING: 120 x 35 MM.
PLINTH:
RAILS:

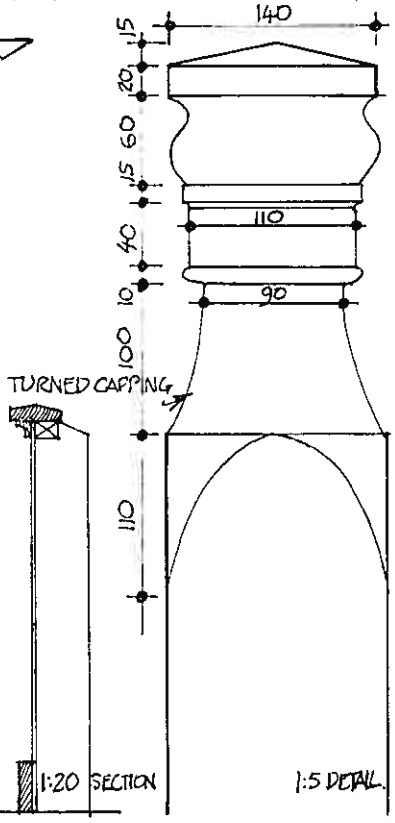
1900-25
Urban





'DARCVEAN COTTAGE' 12 DAVIS ST, NORTH CARLTON. SINGLE STOREY, DETATCHED 'ROW' HOUSE. MID 1870's. FENCE (1920c?) WOVEN METAL RIBBON PLINTH 300MM HEIGHT CONCRETE. (APPEARS ORIGINAL). TOP RAIL 35MM DIAMETER METAL PIPE 1035 MM OVER PLINTH HEIGHT. TIMBER POSTS 125 x 115MM. HEIGHT OVER TOP RAIL 150MM PLUS FINIAL HEIGHT 285MM. FINIAL TO DETAIL TURNED TIMBER (ALL-ROUND). GATE 1060 HEIGHT (PLUS CRESTING) 870MM WIDTH. (120MM CLEAR OFF GROUND LEVEL).

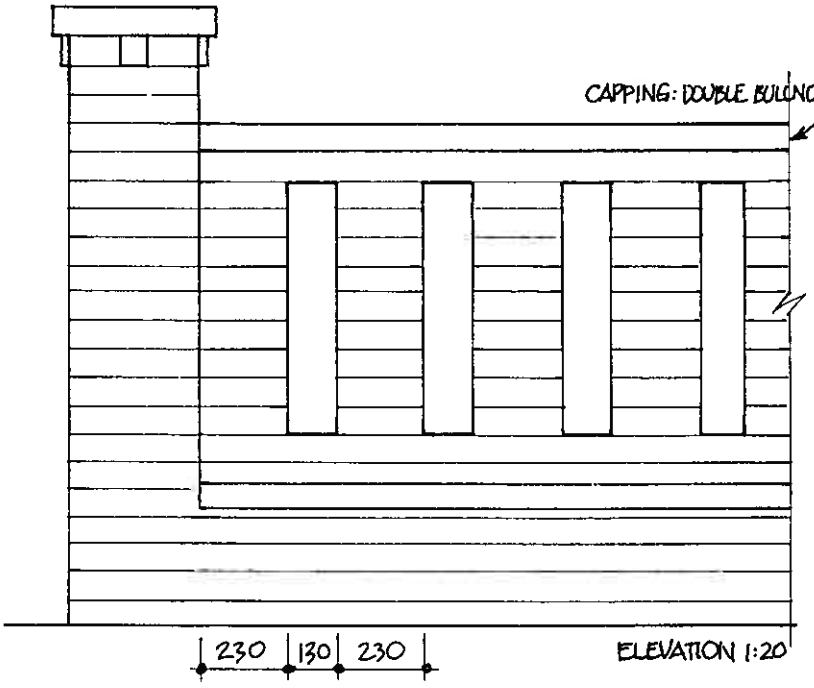




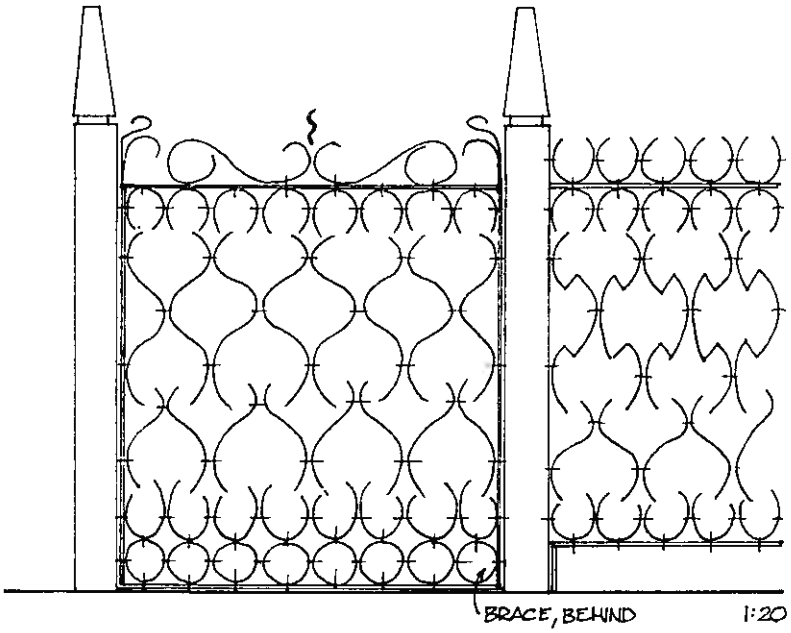
OVERALL HEIGHT FROM GROUND OF LINTEL: 1965 MM.
LENGTH OF LINTEL OVERSAILING PROJECTIONS: 440MM.
LINTEL OVERALL LENGTH: 2260MM.
LINTEL: 195 x 95MM. TIMBER: JARRAH?
GATE & TIMBER POST CAPPING ARE SIMILAR (NOT IDENTICAL) TO CYCLONE PATTERNS. (SEE P70). ALSO AT 259 MT ALEXANDER ROAD, MOONEE PONDS.

653 LYGON STREET, NORTH CARLTON.
DETATCHED HOUSE, EDWARDIAN.
TOP RAIL 130 x 40 MM DOUBLE BEVELLED TOP, WITH SCOTIA MOULD. CHAIN LINK MESH FABRIC.
PLINTH 125 x 30MM. POSTS 155 x 145 MM. SPLAYED TOP.
POST HEIGHT: 1440 MM. TOP RAIL HEIGHT 1070MM.
GATE 1350 x 960 MM METAL TUBULAR FRAME WITH METAL MESH FABRIC & METAL RIBBON DEC. INFILL PANELS.

1900-25
Urban

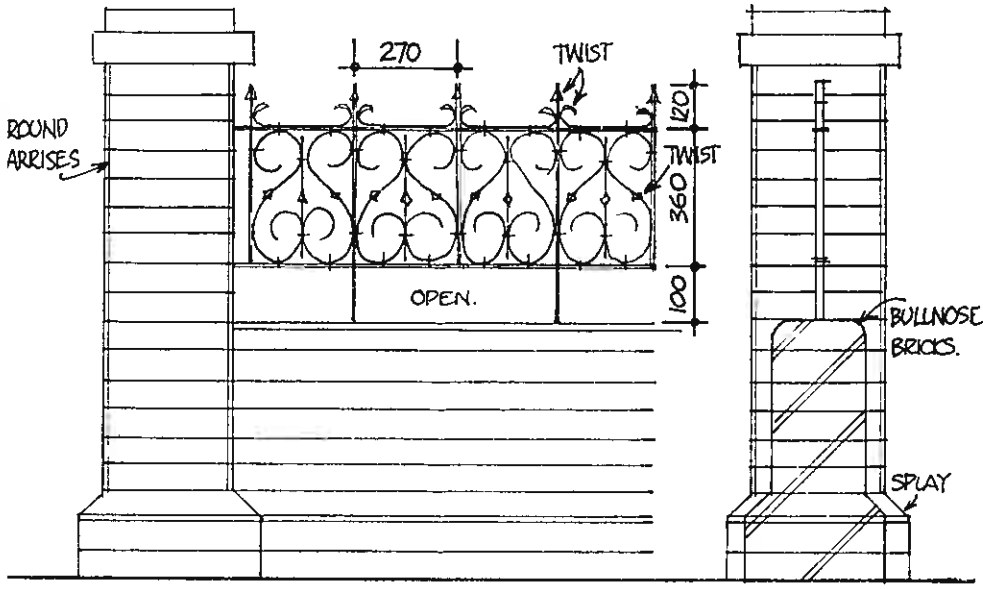


'BROMPTON', 53 MICHAEL STREET, FITZROY.
RED BRICK, DETACHED SINGLE STOREY HOUSE. LATE EDWARDIAN (c 1925)
FACE PRESSED RED BRICK FENCE.
HEIGHT: 1320 MM.
PIER HEIGHT: 1630 MM
PIERS: 350 x 230 MM.
PIER CAPPING: 430x305 MM.
BASE & PIERS: 230 MM.
WALL BODY: 115 MM.
OPENING VOIDS AS SHOWN.
COURSE LINES SHOWN.
BAY O/A LENGTH: 2800 MM.
45° BEVEL BRICK



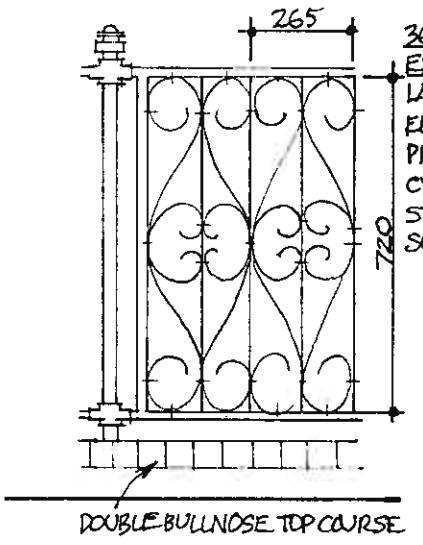
69 DENMARK STREET, KEW.
DETACHED, EDWARDIAN SINGLE STOREY HOUSE. HUMES PATENT (PLAISTED & SULLIVAN), ROLLED STEEL RIBBON ORNAMENTAL FENCE. (SEE ADVERTISEMENT.)
TIMBER POSTS: 115 x 110 MM,
HEIGHT: 1530 MM.
FENCE HEIGHT: 1070. MM.
GATE: WIDTH: 1030 MM.
HEIGHT: 1245 MM.
PLINTH: 120 MM HEIGHT.
PANEL WIDTH: 120 MM.

SEE ALSO: BENDIGO HOME & HOSPITAL FOR THE AGED (FRONT ENTRANCE SIDE FENCES)
100-104 BARNARD STREET, BENDIGO.
'COOLOCK HOUSE', CNR VALENTINE & VIEW STREETS, BENDIGO (1910)
59 PINE AVENUE, MILDURA.
238 MORAY STREET, SOUTH MELBOURNE
& NUMEROUS EXAMPLES IN SOUTH AUST.

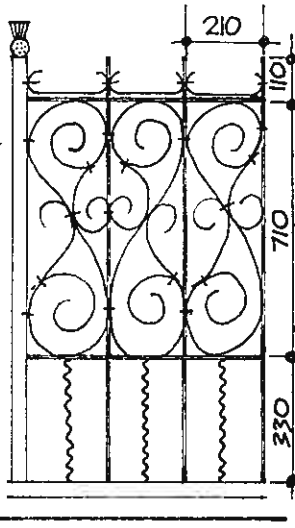


396 BRUNSWICK ROAD, BRUNSWICK.
DETACHED LATE-EDWARDIAN HOUSE.
BRICK PIERS & PLINTH (PRESSED RED)
PIER HEIGHT: 1510 MM.
PIER SHAFT: 350×350MM.
BASE : 475×475 MM.
PLINTH HEIGHT: 670 MM.
DEPTH : 230 MM.
BETWEEN PIERS: 3400MM.

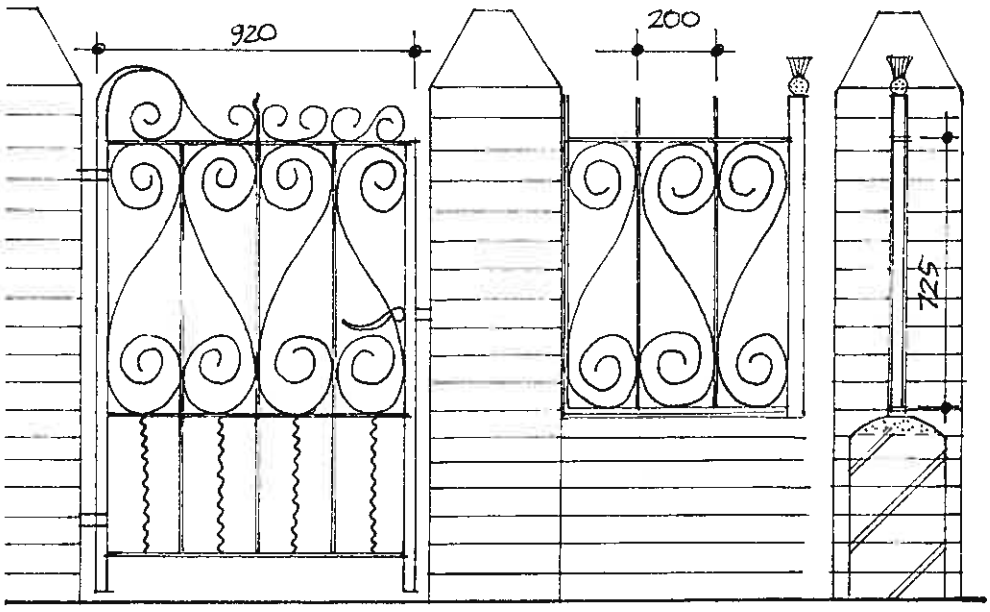
1900-25 Urban



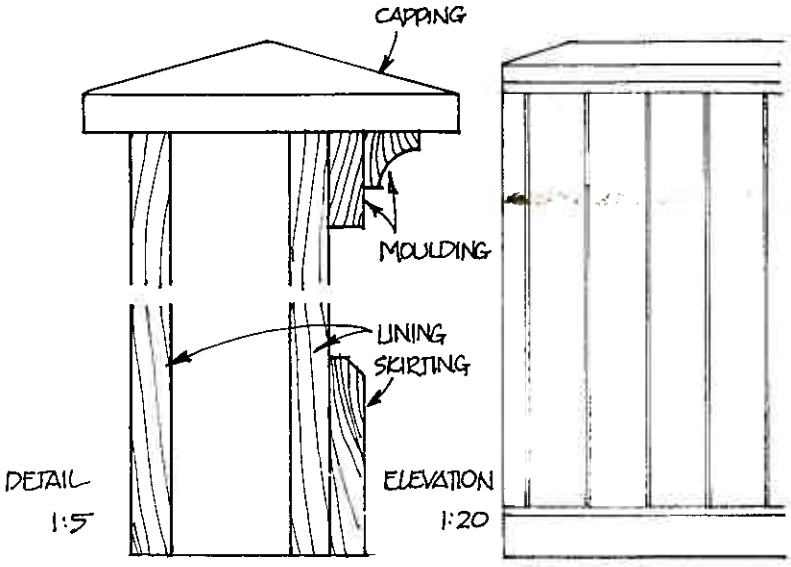
36 LESLIE STREET ESSENDON
LARGE, DETACHED LATE EDWARDIAN BRICK HOUSE
PRESSED RED BRICK PLINTH
CYCLONE TUBULAR FRAME
STANCHIONS: 35 MM DIAM.
SUBFRAME : 25 MM DIAM.



51 HIGHETT STREET, RICHMOND.
EDWARDIAN
BLUESTONE PLINTH, DRESSED.
STANCHIONS 40×40MM MILD STEEL SQ. SECTION.
WITH CAST THISTLE FINIAL.
SUBFRAME: 50×12 MM RECT. SECTION ROLLED STEEL
DECORATION: 23×10 MM. ROLLED STEEL RIBBON.
RIVETED CONNECTIONS.

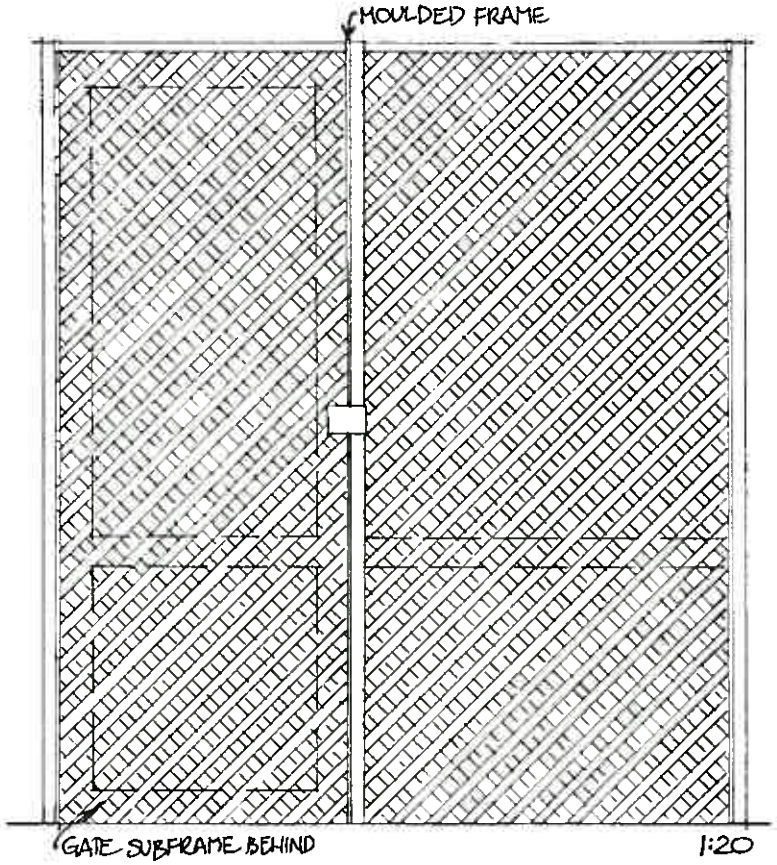


'THISTLE', 409 RAE STREET, NORTH FITZROY.
LATE-EDWARDIAN
DETACHED BRICK HOUSE.
PRESSED RED BRICK PLINTH & PIERS WITH PAINTED CEMENT CAPS.
20 BAYS (4 METRES) BETWEEN PIERS. ONE INTERMEDIATE STANCHION 32×32 MM BETWEEN WITH CAST THISTLE FINIAL.
PIERS HEIGHT 1560MM & 350×350 MM.
PLINTH 230MM DEEP & 485 MM HEIGHT WITH ROUNDED CEMENT CAPPING.
SCROLL DECORATION: 25×6MM ROLLED STEEL RIBBON.

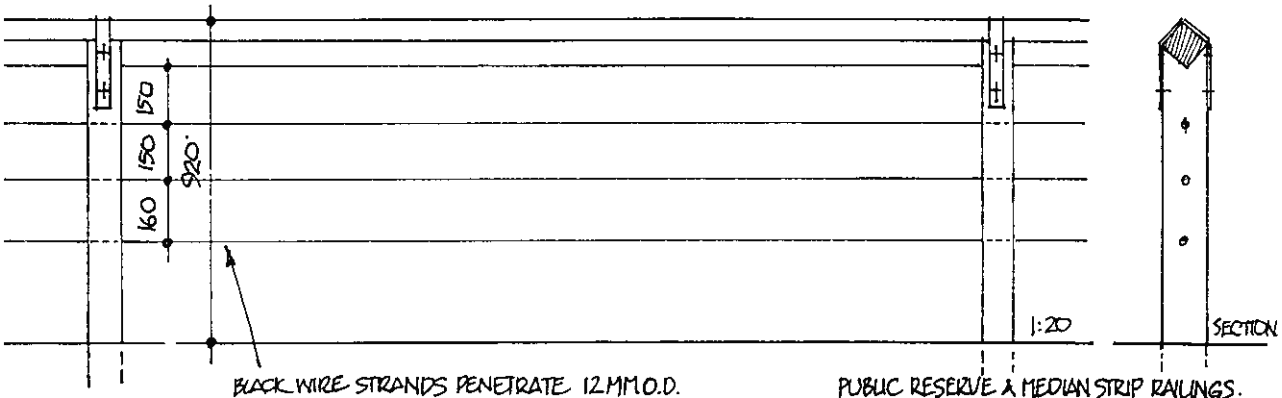


'PRINCESS' 35 PRINCESS STREET, KEW.
LATE VICTORIAN LARGE 2-STOREY TERRACED HOUSE.
SIDE BOUNDARY FENCE BETWEEN STREET BOUNDARY & HOUSE FRONT.
HEIGHT 1360 MM. 80MM
STUDWORK FACED WITH CEDAR V-JOINT LINING BOARDS. BUTTED.
SPLAYED CAPPING: 250×60MM WITH SPLAYED ENDS LIKE HIP.
LINING BOARDS 155×25MM. WITH 130×30MM BEVELLED SKIRTING.
38MM SCOTIA MOULD ON 65×25MM PLATE.

1900-25 Urban



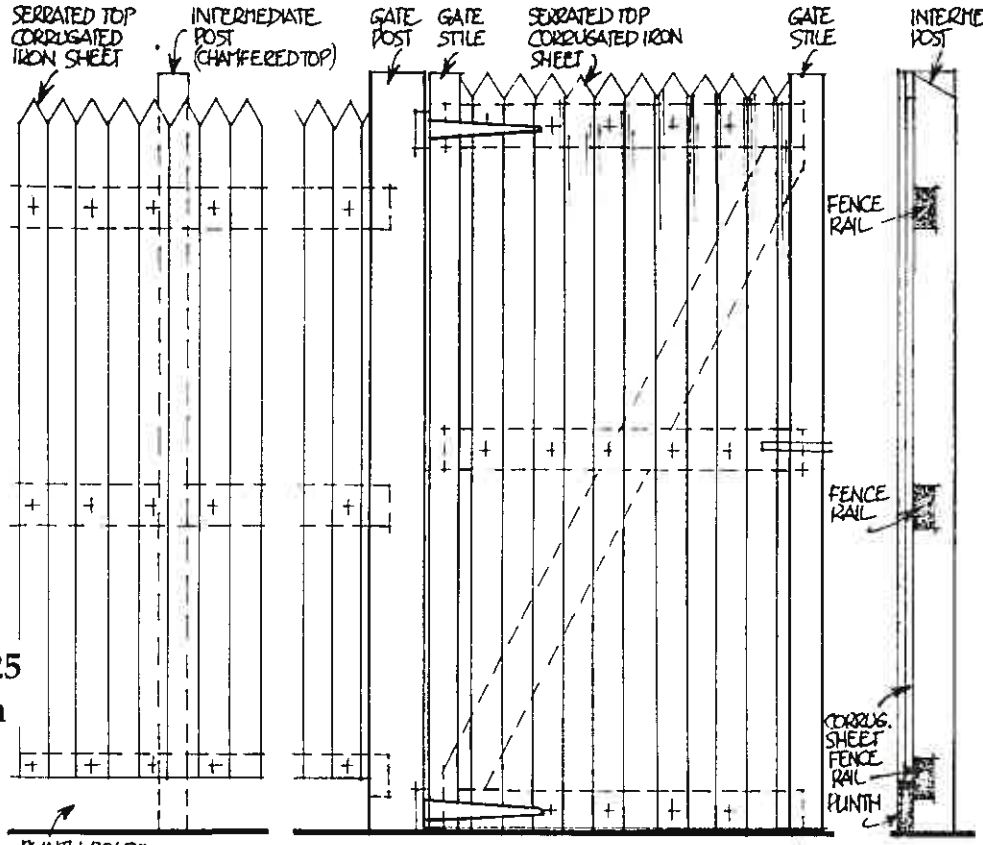
'ST. LOUIS'
202 STATION STREET, NORTHCOTE,
29 CHRISTMAS STREET, NORTHCOTE (c 1905)
175 GILLIES STREET, NORTHCOTE (1906)
DETACHED TIMBER EDWARDIAN HOUSES.
TRELLISED GATE & FENCE USUALLY IN LINE WITH FACADE BETWEEN HOUSE & SIDE BOUNDARY. FENCE TIMBER LATHS: 25×18 MM.
APPERTURES: 35×35 MM.
IN MOULDED FRAME.
SOMETIMES SURROUNDED WITH MORTICED ARCHITRAVE MOULDING.
39 KING WILLIAM STREET, FITZROY.



BLACK WIRE STRANDS PENETRATE 12MM O.D. DRILL HOLES (OPTIONAL)

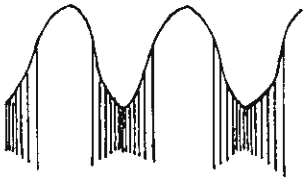
PUBLIC RESERVE & MEDIAN STRIP RAILINGS.
CNR. UNR HEIDELBERG & ROTHERWOOD ROADS IVANHOE & ELSWHERE IN HEIDELBERG (1920's)
TOP RAIL: 100×100 MM. 18GUAGE×38MM METAL STRAPS. POSTS: 125×80MM RED GUM 2600 MM CENTRES.

1900-25
Urban

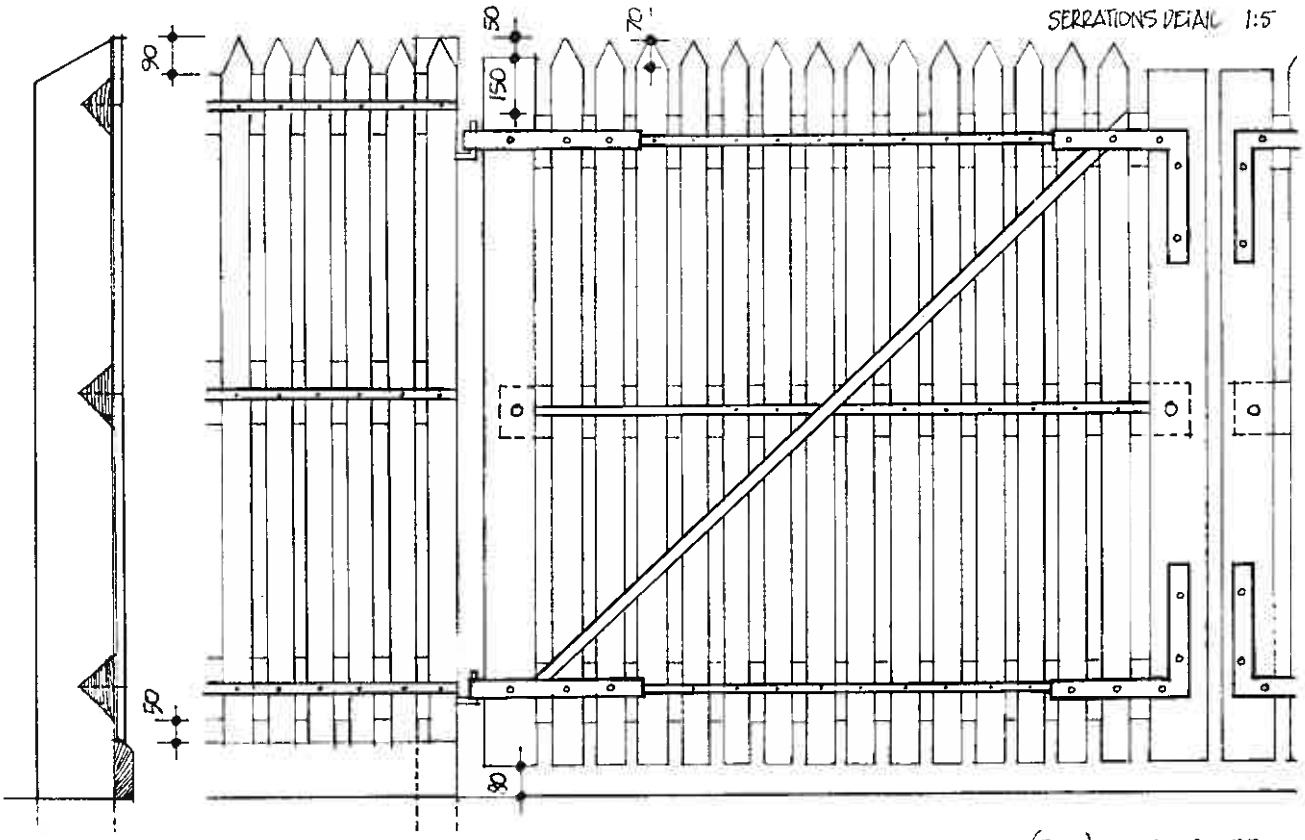


(REFER ALSO P56)

REAR, 107 ROYAL PARADE (CNR DEGRAVES STREET,) PARKVILLE.
LARGE 2 STOREY VICTORIAN TERRACED HOUSE.
HEIGHT (ABOVE PLINTH):
CORRUGATED SHEETS: 1800MM
GATE & CORNER POSTS: 1900 MM.
GATE (O/A) 2000 MM.
GATE & CORNER POSTS: 152 x 148 MM. RED GUM
INTERMEDIATE POSTS: 145 x 75 MM RED GUM.
GATE WIDTH: 1050MM.
GATE STILES: 90x70 MM.
GATE RAILS: 110x90 MM.
PLINTH BOARD: 140x40 MM.
SERRATIONS: 70MM DEEP (CUT RIDGE TO RIDGE.)
FENCE RAILS: 110x70MM.



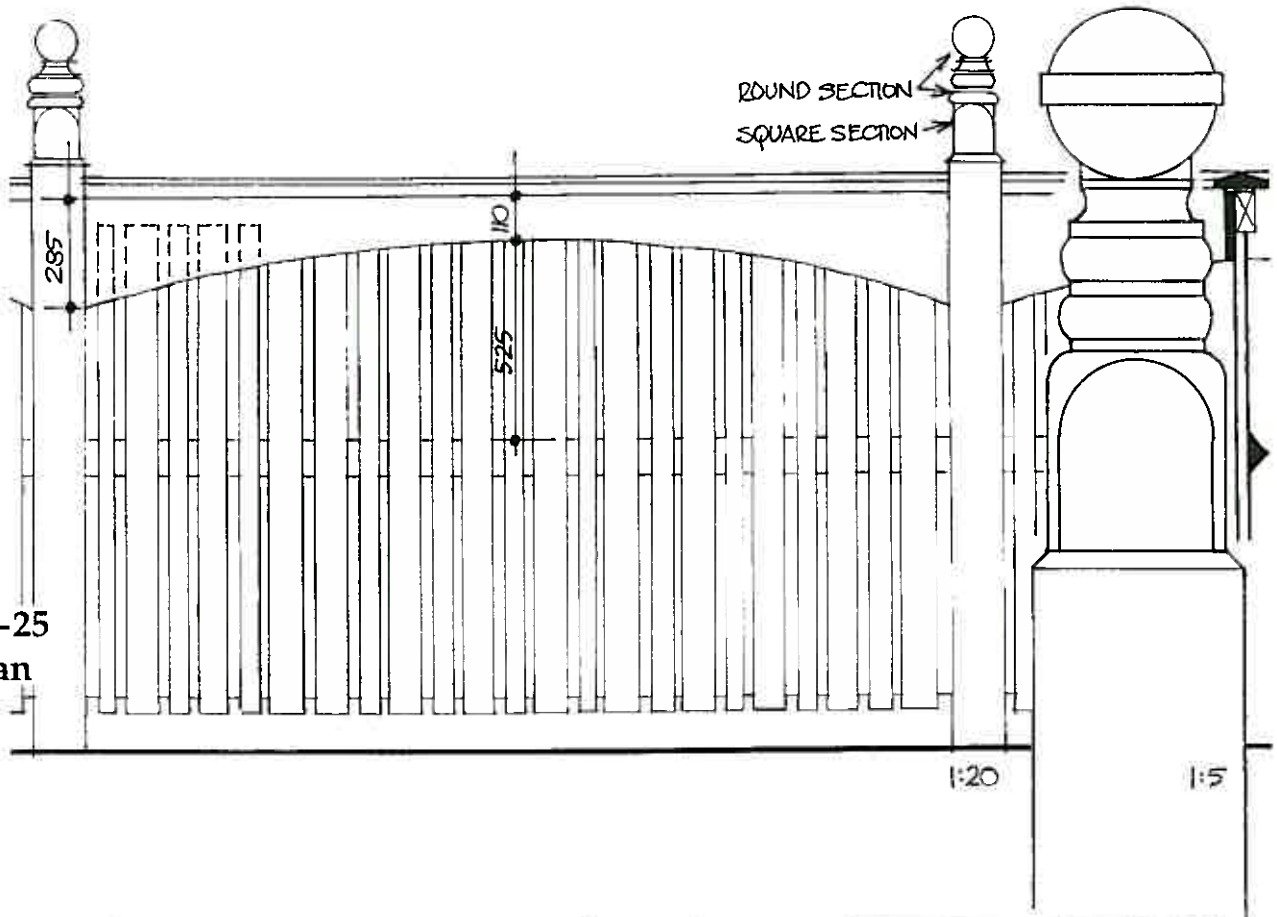
SERRATIONS DETAIL 1:5

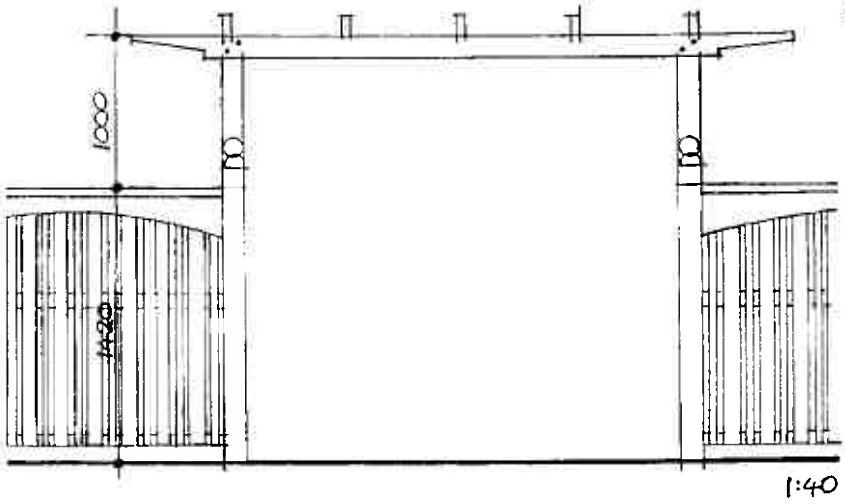


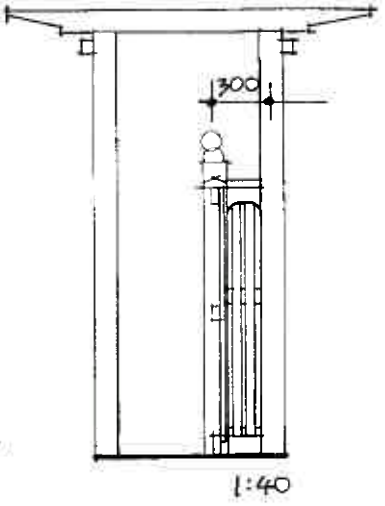
NEWMARKET STOCK & SALEYARDS, SMITHFIELD ROAD, NEWMARKET. INDUSTRIAL FENCE. (UNDATED) ABOVE
PICKETS: 70x22 MM HW. 40 MM GAPS. METAL STRAP FIXING 25MM x 18 GUAGE. RAILS 160x90 MM ▶SECTION
PLINTH BOARD 150x50 MM BEVEL. POSTS: 200x100 MM.
GATE VERTICAL RAILS: 140x70 MM. HORIZ. RAILS: 145x45 MM.
HOUSED JOINT, TIMBER DOWELL CONNECTION. 15MM DIAMETER.
MILD STEEL BRACE, HINGES & ANGLES (355x355 MM) 50x12 MM.
OVERALL HEIGHT: 2000 MM. GATE WIDTH: 1930 MM.

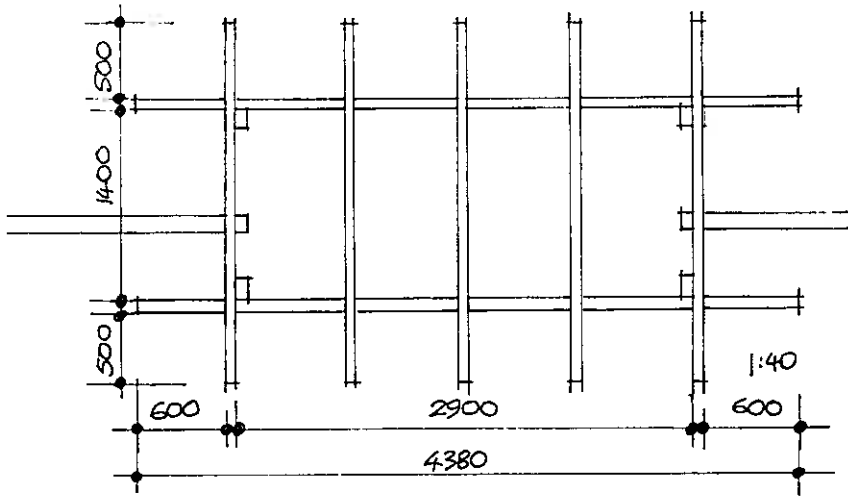
SYMONDS STREET, HAWTHORN (END). SIMPLER TYPE.
PICKETS: 70x22 MM. GAPS: 40 MM. (NOT ILLUS.)
FIXING: 3 MM. WIRE THROUGH STAPLES, EACH PICKET.
POSTS: 120x70 MM RED GUM. HEIGHT 1840 MM.
RAILS: 75x45 MM. (RECTANGULAR SECTION,)
PLINTH BOARD: 140x30 MM (NO BEVEL)
POSTS AT 2800 MM CENTRES
FENCE OVERALL HEIGHT: 1940 MM.

1900-25
Urban



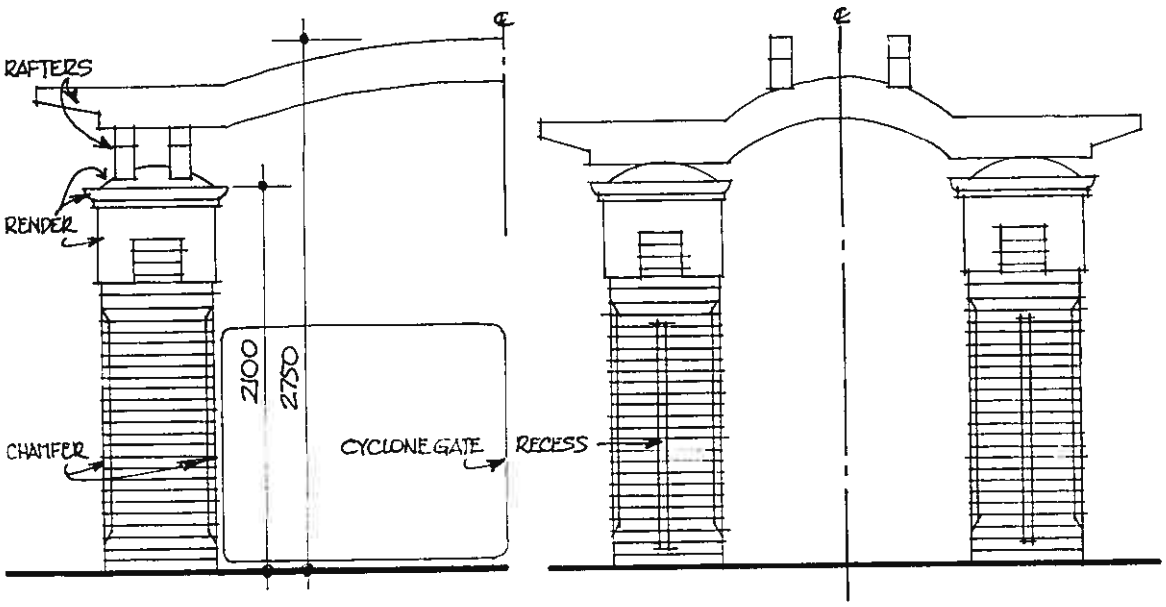


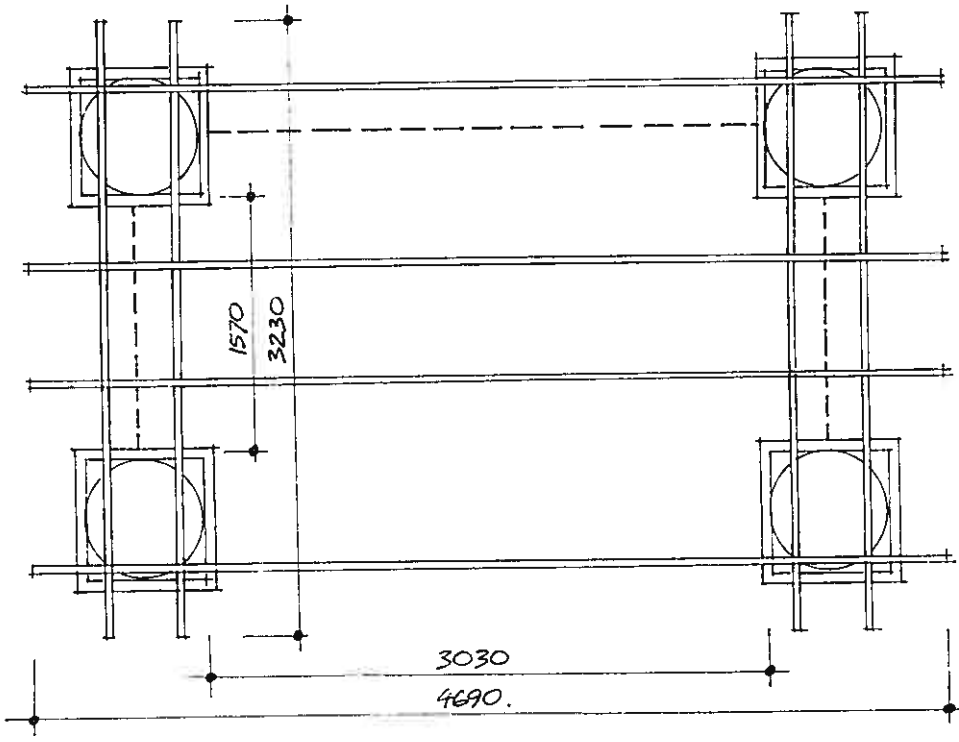




11 LATHAM STREET, IVANHOE. (CNR WATERDALE ROAD) VERY LARGE DETACHED EDWARDIAN HOUSE.
PICKETS: 75x20 MM & 50x20 MM.
GAPS: 30 MM. PLINTH: 140x40 MM.
POSTS: 140x40MM. 1850 HEIGHT.
CAPPING, BEVELLED: 140x40MM.
TOP RAIL: 285-110x20MM.
MID-RAIL: 90 x 60 MM GABLED.
BAY LENGTH (BETWEEN POSTS): 2300 MM
PERGOLA: POSTS: 140x140MM.
TOP RAFTERS: 100x40MM
UNDER RAFTERS: 140x70 MM.
(ENDS TAPERED TO SQUARE SECTION.)

1900-25
Urban





9 UPPER HEIDELBERG ROAD, IVANHOE
2 STOREY DETACHED LARGE LATE EDWARDIAN HOUSE (1920).
RAFTERS : 200×100 MM. VINE COVERED.
PIERS : 590×590 MM. FACE BRICK WITH DEC. RENDER (UNPAINTED)
GATES (BROKEN LINE) : CYCLONE.

REFERENCES

The Australian Amateur Carpenter and Builder . . . c. 1900
Dymocks Book Arcade, Sydney.
Based on (almost a facsimile of) **Everyman His Own Mechanic,** London, c. 1880, which could also have been used in Australia. Describes and specifies the construction of garden gates, field gates and park gates; (see particularly pp. 141-4.)

Barnard, John (1914)
Everyman His Own Mechanic etc.
Wood Lock and Co. Limited, London, Melbourne, Toronto. 9th Edition. (504 pp.).
Page 257 and Plate K Figs. 3 & 4 of this very popular textbook describe the construction of simple field and garden gates as did the earlier editions since 1880.

Bishop, A. H. (1962)
Farm Fence Construction,
Department of Agriculture, Melbourne.
Results of research in farm fence construction method and design in Victoria.

Bloomfield, F. C., Peterson, E. & Brown, E.S. (1958)
The Australian Carpenter and Joiner,
Standard Publishing Co. Pty Ltd., Sydney (1116 pp.); see particularly pp. 343-56.
Provides details and specifications for erection of timber fences of various kinds.

Birmingham, J., Jack, I. & Jeans, D., (1979)
Australian Pioneer Technology: Sites and Relics,
Heinemann Educational Australia, Melbourne. (200 pp.).
Briefly describes the coming of fencing to rural Australia and the early types: bush fences, basket woven fences, zig-zag and chock-and-log fences, and post-and-wire fences of various types.

Boral Cyclone Limited (1983)
Fence Erection Instruction Book,
Melbourne. (14 pp.).
This and other Boral Cyclone trade literature describes the firm's current range of products and present methods advised for fence erection. Other trade literature includes: 'Cyclone Varirake Two-rail Chain Wire Fence', 'Cyclone Builder', etc. There is no comprehensive catalogue.

Buhrich, C. & Rosen, E. (1977)
Fences, Walls and Gates,
Ure Smith, Sydney. (80 pp.).
Handyman's manual of fence construction. Pictorial and very superficial text. Contains a table indicating native and introduced species suitable for hedges, with notes on drought and frost resistance, height, suitability as a windbreak, and a general description of each species.

Burn, R. S. (1870)
New Guide to Carpentry, General Framing and Joinery,
Mc Gready, Ramson & Niven, Glasgow.
One of a series of pattern books under various titles much referred to in the Australian colonies; see particularly plates G and J, depicting stair balusters in wood and iron, and ornamental wood and ironwork in balconies.

Burnett & Co. Foundry
Catalogue
London and Melbourne.

Butterfield, W. H. (1914)
Making Fences, Walls and Hedges,
McBride, Nast and Company, New York. (66 pp.).
Little handbook for the construction of various types of garden fences in the United States at the time. Describes timber picket fences and vehicle gates, wire strand fences, wrought and cast iron, trelliage, drystone walls, concrete. Careful directions for selecting species and planting hedges.

Butler, G. (1982)
Port Albert Conservation Study,
Alberton Shire, Port Albert.
(134 pp.).

Butler, G. (1983)
Northcote Urban Conservation Study Volume 3: Restoration Guidelines,
City of Northcote.
Both of these references include careful systematic typological descriptions of the fences of each building described as part of the building itself. A representative building is described and analyzed for each historic decade.

D. & W. Chandler Ltd, (1931)
Catalogue Pages,
Ramsay's Catalogue, Melbourne (120-5 pp.).

T. N. Chuck Wire Fence & Gate Company Pty Ltd, (c. 1920s).
Catalogue,
Brunswick.

Cox, P., Freeland, J. & Stacey, W., (1969)
Rude Timber Buildings in Australia,
Thames & Hudson, London.
(215 pp.).
Surveys extant primitive timber buildings in Australia, particularly in New South Wales, complemented by excellent photographic record which includes several identified views of split timber fences and of timber picket fences.

Cuffley, P. (1983)
Cottage Gardens in Australia,
Five Mile Press, Melbourne
(248 pp.).
Illustrates and describes various domestic fence types clearly; (see particularly pp. 123-38). Includes facsimile pages from Leighton Simpson & Co. woven wire fencing catalogue (c. 1910) of fences and gates, including their 'Kangaroo' gates.

Cyclone Woven Wire Fence Co., (1902)
The Cyclone Zephyr,
Melbourne.
see Appendix
Earliest known available Cyclone catalogue. Describes and illustrates complete range of gates and fences, both domestic and rural.

Cyclone Woven Wire Fence & Gate Co. (1910, 1911?)
The Cyclone Fence and Gate Book No. 16,
Melbourne. (42 pp.); of this **Bulletin.**

Cyclone Fence & Gate Co. Pty Ltd (c. 1923)
Cyclone Fence and Gate Catalogue No. 37,
Melbourne. see Appendix 11 of this Bulletin

Cyclone Fence & Gate Co. Pty Ltd (c. 1927)
Cyclone Fence and Gate Catalogue No. 40,
Melbourne.

Cyclone Fence & Gate Co. Pty Ltd (31 January 1930)
Cyclone Fence and Gate Catalogue No. 43,
Melbourne.

Cyclone Fence & Gate Co. Pty Ltd (1 November 1933)
Cyclone Fence and Gate Catalogue No. 45,
Melbourne.

Cyclone Fence & Gate Co. Pty Ltd (1 October 1934)
Cyclone Fence and Gate Catalogue No. 46,
Melbourne. (72 pp.); see Appendix 12 of this **Bulletin**.

Cyclone Fence & Gate Co. Pty Ltd (1 October 1935)
Cyclone Fence and Gate Catalogue No. 47,
Melbourne.

Cyclone Fence & Gate Co. Pty Ltd (1948)
Cyclone Fence and Gate Catalogue No. 51,
Melbourne. (72 pp.)

Cyclone Company of Australia Ltd (1964)
Better Fences,
Melbourne. (72 pp.). (includes articles by R. L. Piesse & A. H. Bishop).
Explains new methods for the re-erection of traditional agricultural post-and-wire fences.

Department of Housing and Construction, (1980)
Glebe Project,
Australian Government Publishing Service, Canberra. (179 pp.).
Comprehensive description of the evolution and execution of the Glebe district rehabilitation and conservation project in Sydney. Based on recommendations of a study by sub-consultants (q.v.). It describes in particular the restoration and replacement of the characteristic picket fences of the district; (see particularly chapter 4, pp. 73-81, 87-91).

Edwards, R. (1976)
Australian Traditional Bush Crafts,
Summit Books, Sydney. (143 pp.).
Describes and illustrates various extant examples of early rural fencing, also methods of knotting for wire fencing and seven kinds of primitive timber gates and slip fasteners for gates.

Elliot, W. (1903)
Coles Australian Gardening . . .,
E. W. Cole, Melbourne.
Instructs in the design and placement of fences as elements in the garden plan. Also lists good hedge plants, both deciduous and evergreen; (see particularly pp. 27, 28).

Fisher Lucas Pty Ltd Architects (undated)
Victorian and Edwardian Fencing in St Phillips and Bishopsthorpe,
Department of Housing and Construction (unpublished).

Fitzroy Urban Planning Office (1979)
Guidelines for Conservation Areas,
Fitzroy City Council (42 pp.); (see section 1.4.3, Demolition and Alteration of Contributory Fences, p. 8, and Section 2.4, Fences).
Mentions areas in Fitzroy where original fences are particularly significant. Gives brief general guidelines for height, form materials and colour of new developments and alteration of existing fences.

Grass Implement Co., (1968?)
Fencing in Australia,
Melbourne. (32 pp.).
Technical description of contemporary methods of erecting post-and-wire fences, using droppers and high tensile wire of up to eight strands, and advocating use of pressure treated pine with stapled wires. Brief description of the 'old system' listing their present disadvantages, including a claimed lifespan of only 15-20 years.

Garner, L. (1984)
Drystone Walls,
(Shire Albumn 114) Shire Publications Ltd, Aylesbury U.K. (32 pp.).
Detailed description of historic development, technical construction, regional styles, and state of the craft in Britain today.

Haddon, R. J. (1908)
Australian Architecture,
George Robertson & Co., Melbourne. (544 pp.).
A textbook of designs for building construction, which was very influential in the period. Includes details for construction of timber fences and gates. It describes wire fencing, split gum paling, close fencing, picket fencing, cart gates and four types of pedestrian gates. (Page ix includes an advertisement for John Sanderson & Co., 111 William Street, Melbourne, agents for Anchor Fencing Materials.)

Harvey, D. & Waters, C. (1981)
A Guide to Altering Old Houses,
City of Essendon. (19 pp.).
Brief popular guidelines, clearly illustrating common fence types.

Hubbard, T. (1980)
Trust News
'The First Line of Defence', April pp. 4-5; **'Timber Picket Fences'**, June, pp. 6-7; **'Iron Fences'**, July, pp. 10-11.

Hume Brothers Cement & Iron Co Ltd, (1920s)
Patent Rolled Steel Fences, Gates, Railings, Gratings, Columns, Friezes, Grave Railings, Brackets, etc.,
Catalogue, Adelaide. (54 pp.).
Held Bailleau Library
University of Melbourne

ICOMOS, (1987)
Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter), Adopted 28 November 1987 (12 pp.).

ICOMOS, (1982)
'Guidelines for Conservation Analyses and Plans', **Australian ICOMOS Newsletter** 5 (1) Summer, (6 pp.).
Together these two references establish principles and a procedure for undertaking any conservation analysis, and then for developing a conservation plan, for any place of cultural significance.

Jacobs, Lewis, Vines, Architects (1979)
Parkville Historic Area Study, Melbourne City Council, Ministry of Planning (27 pp.); see Section B2.7, Building Elements and Restoration: Fences, E3 Landscape Fences.
Briefly indicates common fence types in the area, their materials and heights with reference to photographs in each historical period and urges repainting in original colours. Encourages reinstatement of original or compatible fences, and proposes acceptable materials and maximum heights for front and front side fences similarly to reference no. 4.

Jacobs, Lewis, Vines, Architects (1977)
Maldon Conservation Study, Town & Country Planning Board (94 pp.); see section 4.5, Fences, p. 92.

Jacobs, Lewis, Vines, Architects (1979)
Port Melbourne Conservation Study,
Port Melbourne City Council and Australian Heritage Commission (226 pp.); see section 3.1.1, Conservation in Port Melbourne, pp. 84, 84A; section 3.2, B27 Conservation Guidelines: Building Elements and Restoration: Fences, pp. 92, 98; section 3.2, E2 & E3 Front Fences, Front Side Fences, pp. 108, 109.
Gives guidelines similar to, and obviously derived from Fitzroy Urban Planning Office (1979). Describes acceptable heights, materials and forms for front and front side fences in Port Melbourne.

Jacobs, Lewis, Vines, Architects (1980)
Ballarat Conservation Guidelines, City of Ballarat, Historic Buildings Council and Heritage Commission. Chapter 12, 'Fences and Landscaping', (40-2 pp.).
Brief handbook guide to appropriate new fences within different historical periods in Ballarat, their style, materials and height, with one page of illustrations.

Jenkins & Law, Birmingham Works Foundry, **Catalogue,** Melbourne.

Jones, K. L. (1982)
Period Building Restoration: Trades and Suppliers Directory, 2nd edn, Publications Pty Ltd, Melbourne. (165 pp.).
Lists suppliers and tradesmen for New South Wales, South Australia, Tasmania and Victoria.

Kiddle, M. (1961)
Men of Yesterday: A Social History of the Western District of Victoria 1834-1890,
Melbourne University Press, Parkville, Vic., (573 pp.); see particularly pp. 199-200.
Concisely describes the evolution of fencing in the Western District from the coming of the freeholds in 1847: initially bush fences, then 'chock and log' and finally wire, as well as drystone walls.

Lancelott, F. (1853)
Australia As It Is: Its Settlements, Farms and Gold Fields,
Henry Colburn, London. Vol. 2. (304 pp.).

Lewis, M. (1972)
Tradition and Innovation in Victorian Building, unpublished PhD dissertation, School of Architecture, University of Melbourne, Melbourne (486 pp.).
The principle source on the technological evolution of each of the various building materials used in Victoria in the nineteenth century.

Lewis, N. & Associates (1982)
Brunswick Conservation Guidelines, unpublished, City of Brunswick, Australian Heritage Commission; see particularly section 8.2.

Lloyd, C. (1948)
The Australian Carpenter, Macmillian, Melbourne. (212 pp.); see particularly sheets 19-21 (pp. 38-43), which details and clearly describes carpenters' details and specifications for erection of traditional fence types.

McLean Bros. & Rigg, (1887).
Catalogue of Ironmongery, Hardware, Metals, Steam Engines, Machinery and Agricultural Implements,
Melbourne. See particularly pp. 182-8. Fencing wire, barbed wire, fence droppers, wire strainers, wrought iron gates and hurdles and iron fence standards.
Held Public Library Melbourne

McEwen's Mail Order Book
(c. 1920s)
Melbourne. (350 pp.);
see particularly pp. 292-5 for Cyclone fences and gates.
Held Public Library Melbourne

Macintosh, H. (1877)
Illustrated Catalogue of Plain and Ornamental Iron and Wire Work and Wire Gates of Every Description,
Melbourne. (33 pp.).
'Fencing wire, strong ornamental wire guards, strong ornamental hurdles, ornamental wire bordering, croquet ground bordering, wrought iron hurdles, galvanized wire netting.'
Manufactured from works at Cremorne Street, Richmond.
Held Public Library Melbourne

Martin, G. A. (1974)
Fences, Gates, and Bridges: A Practice Manual,
Stephen Green, Vermont (USA).
Reprint of 1887 edition.
Description and illustration of each contemporary rural fence type known in the United States of America in 1887, with appropriate methods of construction of each.
Includes zig-zag rail, stake and wired rail, stake and rider, pole, fences for heaving soils, log post fences, stump fences, wicker and brush fences, stone walls, stone and pole, sod fences, boards (post-and-rail) fences, split picket, barbed wire fences, hedges, portable fences and hurdles, types of timber gates, light iron gates, self closing gates, lifting gates, wickets and styles.

Mayes, P. (1859)
The Australian Builders' Price-Book . . . With an Illustrated Abstract of the Melbourne Building Act, 1st edn.
Sands & McDougall, Melbourne. (80 pp.).

Mayes, C. (1862)
The Australian Builders' Price-Book . . ., 2nd edn.
Sands & McDougall, Melbourne. (112 pp.).
Comprehensive listing of materials and products available to the building industry in Victoria at that date, with specifications, dimensions and prices.

Mayes, C. E. (1886)
The Australian Builders' and Contractors' Price Book,
George Robertson, Melbourne. (139 pp.).

Mayes, C. E. (1908)
The Australian Builders' and Contractors' Price Book, 7th edn, E. W. Cole, Sydney.

Mayes, C. E. (1914)
The Australian Builders' and Contractors' Price Book, 8th edn, E. W. Cole, Sydney.

Mayes, C. E. & Mayes, P. (1927)
The Australian Builders' and Contractors' Price Book, 9th edn, NSW Government Bookstall, Sydney.

Meredith, L. A. (1861)
Over the Straits: A Visit to Victoria With Illustrations from Photographs and the Artist's Sketches,
Chapman & Hall, London.
(284 pp.).

Metters Ltd (1900)
Catalogue,
Melbourne.

Monteith & Sons (1895)
Cast Iron Foundry
Catalogue,
Melbourne.

Moore (James) & Sons Pty Ltd (c. 1895)
Catalogue
Timber Merchants, 133 Queensbridge Square, South Melbourne, Melbourne. See Appendix I of this **Bulletin.**
The catalogue illustrates 44 picket head profile patterns, 16 gate post head types, 14 turned gatepost finials and 16 gate types all in timber and available from the firm. Many are identifiable today. James Moore & Sons Pty Ltd continues in business today (refer Appendix 1 of this Bulletin).

Nangle, J. (1900)
Australian Building Practice,
1st edn, (137-40 pp.).

Nangle, J. (1911)
Australian Building Practice,
2nd edn, (205-8 pp.).

Nangle, J. (1925)
Australian Building Practice: A Treatise for Australian Students of Building Construction, 3rd edn, (381 pp.).
Popular contemporary textbook containing clear descriptions and detailed specifications, with some small-scale drawings of the following timber fence types: (1) split post, rail and split palings; (2) split post, rail and sawn palings; (3) sawn posts and rails and sawn palings; (4) dressed posts and rails and picket battens; (5) ornamental fencing; and also timber, vehicular and pedestrian gates; (refer pp. 206-9, sections 476-87).

Owen, M. (1977)
Antique Cast Iron,
Blandford Press, Poole, Dorset, (127 pp.); see particularly pp. 6-22.
Reproduces facsimile catalogue illustrations of a total of 46 cast-iron palisade spearheads from various catalogues of Coalbrookdale Works, Shropshire; also 26 types of railing shafts and spearheads from the catalogues of Carron Company Works, Falkirk, Scotland. In England shafts and spearheads were invariably cast either as a single piece or separately. Describes the rosettes, cast in lead, used to cover the junction of diagonal bars in fences.

Palmer, H. (1961)
Fencing Australia,
Australian Landmark Series, Longmans, Melbourne. (63 pp.).
Describes the evolution of rural fencing in Australia from the 1847 Act onwards, and describes the 'case for fencing' paddocks and the various types of fences employed: hedges or hedges and ditches, stone fences, forks and poles, brush or deadwood, dogleg, chock-and-log, post-and-rail, and post-and-wire.

Planning Collaborative, (1982)
Kilmore Heritage Study,
Contains valuable sequence of early photographs of townscape in Kilmore clearly depicting fences.

Ramsay's Catalogue (1931)
Pp. 120-5 contains catalogue for D. & W. Chandler Ltd manufacturers of fabric fencing and gates, chain wire, fences, hand gates, driveway gates, square steel tube gates and panels, wrought iron panels, mild steel gates and panels and ringlock fencing; (refer Appendix 13).

Real Property Annual
(no 1, 1912 – no 10, 1921)
Herald and Weekly Times, Melbourne. (48 pp.).

Robertson, E. G. (1961)
Victorian Heritage: Ornamental Cast Iron in Architecture,
Georgian House, Melbourne.
(229 pp.).
Superb photographic essay of cast-ironwork in Melbourne with numerous fine photographs of fences in examples frequently no longer extant. Describes development of iron casting in Melbourne and the various foundries.

Robertson, E. G. (1967)
Ornamental Cast Iron in Melbourne,
Georgian House, Melbourne.
(229 pp.).
Similar photographic documentation. Includes a facsimile of William Stephens **Excelsior Foundry, South Melbourne Illustrated Catalogue,** 1901, reproduces from the original copper plates. It probably also advertises castings by others.

Robertson, E. G. (1974)
Carlton, National Trust Inner Suburban Series, National Trust of Australia (Victoria), Rigby, Melbourne. (184 pp.).

Robertson, E. G. & Robertson, J. (1975)
Parkville, National Trust Inner Suburban Series, National Trust of Australia (Victoria), Georgian House, Melbourne. (184 pp.).

Robertson, E. G. & Robertson, J. (1977)
Cast Iron Decoration: A World Survey,
Thames & Hudson, Melbourne. (336 pp.).
Photographic essay describing examples of cast-iron decoration of buildings throughout the world. Includes facsimile pages from various manufacturers' catalogues, and a bibliographic listing of those known to exist (mostly in the collection of the authors).

Robertson, E. G. (1973)
Adelaide Lace,
Rigby, Melbourne. (207 pp.).

Rodgers, J. W. F. (1888)
Australian Federal Directory . . .,
Contains the first reference to galvanized wire net fencing in Australia (see front flyleaf).

Shire of Maldon (1982?)
Trees and Gardens from the Goldmining Era: A study of the Maldon Landscape, Melbourne. (99 pp.); section 2.1.3, (Fence) Construction Materials, pp. 7; section 4.2, Landscape elements: Picket Fences, pp. 58.
Illustrates types of early boundary fences still found at Maldon. Two are illustrated in detail. Hedges and hedge plants are also described.

Stephens, J. (1839)
Land of Promise: Being an Authentic and Impartial History . . . of South Australia . . . embracing also a full account of the South Australian Company . . . with numerous letters from settlers . . . by one who is going,
Smith, Elder., London. (224 pp.).
Contains advertisement for an early iron fence 'suitable to South Australia'; see p. 224.

Stephens, W. (1901)
Excelsior Foundry, South Melbourne, Illustrated Catalogue,
South Melbourne. (30 pp.); see Appendix 4 of this **Bulletin.**
Catalogue of cast-iron foundries, showing patterns of fencing made in Australia, particularly in Melbourne. No. 58 is reproduced in Robertson (1967); (see pp. 44-65).

Sterhardt, J. (1869)
Illustrated Guide to Manufacturers, London.
Describes and advertises Motley & Green's galvanized wire cable strand fencing and Frances Morton's patent fence; see p. 456.

Streeter, D. & Richardson, R. (1982)
Discovering Hedgerows,
British Broadcasting Corporation, London. (160 pp.).

Tarbuck, J. (c. 1858/1851-4?)
The Builders' Practical Director . . .,
J. Hagger, Leipzig.
Another influential pattern book. Plate 42 depicts designs for an iron railing.

Tibbits, G., Trethowan, B., Harmer, P. & Vines E. (1976)
Beechworth: Historical Reconstruction,
Town & Country Planning Board and Faculty of Architecture, Building, Town & Regional Planning, University of Melbourne, Melbourne. (597 pp.); see volume 3, section 4, Fences, pp. 171-220.
The most useful and comprehensive reference published to date regarding old fences extant in a Victorian country town. Describes character and construction of various types of old fences observed, and those fence types believed to be compatible with particular house types. It also discusses the relative significance of different fences in the town. Sources were old illustrations, specifications, catalogues and advertisements, as well as rare books. A photographic card index of every building was used to develop typological and historical compatibility analysis. Includes reproductions of Cyclone Catalogues no 37 (c. 1923) and no 45 (1933).

Walker, M. (1979)
Colonial Crafts of Victoria: Early Settlement to 1921,
catalogue of an exhibition at the National Gallery of Victoria, Melbourne. (167 pp.); see particularly p. 31.
Illustrates two kinds of rural fences, in public collections.

Walker, M. (1978)
Pioneer Crafts of Early Australia,
Macmillian, Crafts Council of Australia, Melbourne. (172 pp.); see particularly pp. 23-32.
Describes by direct observation at least fourteen types of primitive rural fencing in Australia.

Walker, M.
Rural Fences of Australia
unpublished manuscript, in preparation.

Weale, J. (ed.) (1841)
Design of Ornamental Gates, Lodges, Palisading and Ironwork of the Royal Parks . . .,
John Weale, London. (50 pp. and 50 plates).

Young, C. D. (1750)
A Short Treatise on the System of Wire Fencing, Gates, etc. as Manufactured by Charles Young & Co.,
Edinburgh. (155 pp.).
A manufacturer's catalogue.

GLOSSARY

Arris:
A sharp edge formed by two surfaces meeting at an angle.

Baluster (shaft, railing):
Small section post, used to support a handrail.

Balustrade:
Series of balusters.

Bevel:
An angle other than a right angle (usually 45 degrees), formed at the meeting of two surfaces.

Black Wire:
Early heavy gauge wire, ungalvanized.

Brace:
See **Strut**.

Bush Hammering:
Technique of finishing concrete where the surface is slightly roughened by regular hammering before final set.

Capping, Capping Piece:
The uppermost part, placed on top, continuously, and usually wider than the fence below.

Ridge Capping:
For weather protection pitched sloping to both sides to shed water.

Cast-iron:
An iron-carbon alloy of high carbon content. It is easily poured whilst molten into molds, but too hard and brittle to be formed by hammering, rolling or pressing.

Chain-link Wire Mesh:
Open-weave fabric formed of interlocking wire strands in a chained pattern.

Chamfer:
A right-angled corner cut off at 45 degrees. (i.e. symmetrically).

Stopped Chamfer:
A chamfer that diminishes, gradually becoming a sharp arris (q.v.).

Chicken-wire Mesh:
Open-weave fabric formed of fine gauge wire strands, twisted at their junctions as a diamond pattern.

Close Boarding:
A covering of boards fitted together without gaps, lapped, butted or tongue-and-grooved.

Corner Post:
See **Post**.

Corrugated Iron:
Iron sheet covering formed in continuous wave profile to give rigidity.

Crimped Wire:
Wire formed with regular intermittent undulations.

Double Palisade:
See **Palisade**.

Drawn Wire:
Wire formed by a hot or cold extrusion process.

Droppers:
Intermediate fence posts which finish above ground-level, and used as spacers to horizontal strands.

Drystone:
Masonry wall of closely fitting elements, laid without mortar.

Finial, Finial Piece:
A formal ornament, placed at the top.

Flush:
Two adjacent surfaces placed together on the same plane.

Galvanizing:
Corrosion-resistant coating of zinc applied to steel (earlier iron) sheet.

Gate Post:
See **Post**.

Gauge:
Imperial measure of the thickness of wire of metal sheet.

Groove:
See **Tongue and Groove**.

Hoop Iron:
Metal strap used as bracing tie (often diagonally).

House:
Joint where one piece of timber is set into the other, without altering the thickness overall.

Intermediate Post:
See **Post**.

Iron:
See **Corrugated Iron; Galvanizing; Hoop Iron; Rolled Iron Steel; Wrought Iron.**

Ledge and Brace:
Door or gate formed of vertical close-boarding on a framework of top, intermediate and bottom rails, with diagonal bracing members between.

Lych Gate:
A roofed timber gateway with open sides, as at the entrance to an English churchyard.

Mortise & Tennon:
A socket formed in one piece to receive a tennon (or reduced end) in another piece, to form a joint between them.

Mouldings:
The contours given to a projecting member.

Open Work:
Decorative panel consisting largely of voids.

Paling:
Thin timber close-boarding split or sawn, fixed to a timber frame to form a fence.

Palisade or Railing:
Sequence of iron balusters (or shafts) (q.v.) penetrating iron rails over a masonry plinth, generally capped with spearheads (q.v.) and generally between posts (q.v.).

Double Palisade:
Alternate shafts rise up only sufficiently penetrate the intermediate rail.

Picket, Picket Heads:
Light timber board fixed to timber rails at a regular spacing over a timber plinth and between timber posts. Decorative profile formed at the top of each picket.

Plate, Sole Plate:
The horizontal top or bottom member of a timber frame. Short board placed in the ground to horizontally distribute the weight beneath a post. It may be strutted at 45 degrees to the post.

Plinth, Plinth Board:
Horizontal masonry base. Timber board placed on edge on the ground beneath pickets or palings, fixed to posts.

Post, Gate Post, Corner Post, Straining Post, Intermediate:
A vertical structural element.
Post from which gate is hung, or closes to.
Post at change of direction of fence.
Angled post to support corner post.
Ordinary post, other than end post, corner post, gate post, etc.

Post & Rail:
Timber fence consisting of top, intermediate and bottom rails between (housed or morticed (q.v.) into) regularly spaced posts.

Rail:
A horizontal structural element; see also **Baluster, Shaft, Post-and-rail.**

Railings:
See **Palisade, Baluster.**

Rolled Iron, Steel:
Flat section formed by hot or cold rolling.

Shaft:
See **Baluster.**

Sole Plate:
See **Plate.**

Spearhead:
Decorative cast-iron profile, formed at the top of each metal shaft.

Splay:
A slope across the full width of a surface, often at 45 degrees; a large chamfer.

Steel:
An alloy of carbon, iron or other metals malleable from ingot. Properties vary according to composition, type of heat treatment, and mechanical working but include strength, hardness, ductability, abrasion resistance, corrosion resistance. It can be welded and machined. See also **Galvanizing, Rolled iron steel.**

Stile:
See **Style.**

Straining Post:
See **Post.**

Strut, Brace:
Diagonal structural member supporting another.

Style, Stile:
Side vertical member of a gate frame.

Tennon:
See **Mortise.**

Tongue & Groove:
Continuous mortice and tennon system (q.v.) for joining close boarding elements together.

Turn:
Form mouldings around a cylindrical element.

Wicket Gate:
Pedestrian gate.

Wire:
See **Black Wire; Chain-link Wire Mesh; Chicken Wire Mesh; Crimped Wire; Drawn Wire; Wire Ribbon; Woven Wire Mesh.**

Wire Gauges (ISWG)
4 - 5.9 mm
5 - 5.4 mm
6 - 4.9 mm
7 - 4.5 mm
8 - 4.1 mm
9 - 3.7 mm
10 - 3.3 mm
11 - 3.0 mm
12 - 2.6 mm
13 - 2.3 mm
14 - 2.0 mm
15 - 1.8 mm
16 - 1.6 mm

Wire Ribbon:
Ribbon-shaped metal strands.

Wire Ribbon Mesh:
Open-weave fabric formed with welded joints at the crossings of the strands.

Woven Wire Mesh:
Open-weave fabric formed from intertwined wire strands in continuous regular pattern.

Wrought Iron:
Almost pure iron, it is soft, malleable, tough, fatigue-resistant and easily worked. It may be worked into shape mechanically by forging, bending, rolling or drawing.

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Advertisement in Sternhardt (1869)

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Early palisade fence behind La Trobe's cottage, Jolimont.