greater prominence by running out from the hipped roof a projection which terminates in a gable.

In its original state the house had a central hallway running from front to back, with a staircase rising out of it. The three reception rooms opened from this hallway. The kitchen was within the main block but with a double storied service wing. This contained servants' accommodation in the upper floor, a typically English custom. The bathroom and W.C. were in a small ground floor addition entered discreetly, like the kitchen, from under the landing. The upper floor contained four bedrooms and what was a small sitting room or boudoir having recess to the balcony. The main bedroom, which was situated above the drawing room, had a small closet and a fireplace. All these features were those which, with innumerable variations, were to become standard on similar houses during the next twenty years.

Tantallon House, again in Rondebosch, although it dates from the early 1890's is a good example of this type even with its Gothic touches. ILL 328

Turning from the double storied villa, it should be noted that the single storeyed version of the asymmetrical villa had arrived virtually simultaneously. The earliest example of these appear to be those built in Wilkinson Street, Gardens, c.1883. Part of a typical speculative development, the novelty of this form is emphasised by the alternation of these with the older symmetrical double fronted form of small house. The plan is an obvious outgrowth of this form of plan. As with the double storeyed version, the drawing room is pushed forward to the line of the verandah. The fashionable bay window also makes its appearance whilst the hipped roof is modified in the same way as that on the double storeyed house. The typical four-roomed plan opening off a central corridor is used. It is difficult to ascertain whether the dining room was originally open to the passage or not. The service wing with kitchen, pantry, W.C. and bathroom is large. This 'Tail' grew in size as the century proceeded. On the rather vestigial verandan there is also an early use of decorative cast iron in a trellis form(34). ILL 329

The slightly earlier houses on Faure Street have small asymmetrical gables but these are still on the line of the main front and may represent a rudimentary asymmetrical villa(35).

The earlier asymmetrical villa, but without any gables to the front, also continued in popularity into the 1880's. The example shown, one of four in Hof Street, is very similar in plan to the earlier houses in Hope Street. This house had a very beautiful teakwood verandah. A similar house was Chauvins Gift at Sea Point. ILL 331 ILL 332

On the Groote Schuur Estate is a cottage with some transitional characteristics. These are a basic four roomed plan but with a substantial lean-to wing running across the back of the house, making it triple pile in plan. A verandah running around two sides make it asymmetrical in elevation. ILL 326

In the field of terrace housing, a number of very substantial groups were erected in the early 1880's. The terrace on the Avenue, Gardens, now altered for the second time and part of a school, was built c.1882. Originally five in number they were exceptionally large, being double fronted. Although still symmetrical in elevation, they exhibited the new taste by having, at the ends of the terrace, wings with gables and also bay windows. The verandahs seem to have been of wooden trellis-work of a very vigorous design. Although both are much altered, they bear a great resemblence to a similar terrace, called Shamrock Terrace in Somerset Road, but these are slightly later. ILL 333

Smaller and typical being only single fronted, the terrace of villas dating from 1883 in St Johns/Hatfield Street, again shows the movement towards a more plastic effect. The end units like the previous example, have projecting wings, complete with bay windows on the ground floor. The terrace was originally symmetrical, the lower units being later additions. On plan, the ground floor and the two reception rooms are large, while the usual back wing contains a kitchen with a bathroom and W.C. A large room, previously a servant's room, is situated above the kitchen and is accessible from the mid-stair landing. Three bedrooms are contrived on the upper floor. ILL 335

As might be expected, in the humblest house form such as the smaller terrace house, the new taste took the longest to arrive,

but by the early 1880's even these appear to have received the status symbol of a verandah. The house shown is one of a long terrace in Woodstock, built c.1880, now virtually derelict. ILL 334
It is of the minimal, three roomed type we have seen before(36). Here it is shown in its contemporary guise with a minimal 4'0" (1,2 M) verandah. Larger single storied terrace housing was similar but of the four roomed, double fronted type with a deeper wooden verandah. Some mutilated examples exist in Maynard Street, Gardens.

Although by 1880, the flat-fronted residual Georgian facades with the accompanying block-like plans were now clearly outmoded, there was a brief flourish at this time as part of the current building boom. Some examples of this in the form of terrace housing are shown.

The group of four, built c. 1880 in New Church Street and now virtually derelict (1978), show the typical tunnel back plan ILL 336
with an entrance passage giving access to the front room and then leading into a staircase hall. Off this is the dining room. The kitchen is an outshut whilst an external privvie, or W.C. is accessible from the yard. Upstairs a room, originally a bedroom, is entered off the landing. Two bedrooms on the first floor complete the accommodation. This provision of a light, single storied verandah is the only real difference between this house and one built say twenty-five years previously.

Slightly later, its immediate neighbour is very similar in plan ILL 337
but demonstrates a certain advance by the provision of a double storied verandah which had cast iron posts in the lower portion. To accept this innovation the upper plan is modified by the provision of a small room which has direct access onto the balcony. This was, as we have seen a common planning device.

A grander version, but still very conservative, is in Bree Street ILL 338
built c.1882 to the design of G. Alexander. It is again semi-detached and single bayed, but the house is unusual in being triple pile in plan having a front drawing room, a middle room, probably a parlour and at the back a dining room. Because of the slope of the ground, the kitchen is in a semi-basement. The upper floor contains three bedrooms, the front bedroom has internal shutters which were becoming a rarity in 1882. The atypically small outshut

contained a pantry on the ground floor, and a bathroom on the first floor. Externally the only signs of the 1880's were the single storied verandah, the large window to the drawing room and the heavy architraves to the front windows.

To end this survey of the 1880's, a few more houses need to be mentioned.

Villa Marina, Sea Point was rebuilt c.1880, the previous house being burnt out. It was probably the work of S. Schutte(37). The plan form was the by now conventional H-shape. On the front elevation this is expressed by a deep set verandah between projecting wings. These had decorative bargeboards and finials whilst the windows were given small hood mouldings. The verandah posts were probably of turned hardwood but could have been cast-iron with sawn wooden brackets. ILL 339

Sunny Brae, Rondebosch, would also appear to date from 1880, the cornice hoods to the windows and the sawn fretwork to the verandah being typical of the time. It demonstrates how widely spread the H-plan was still. ILL 340

Outside the Cape Peninsula there is scant evidence of the new forms. The Pastorie at Malmesbury, built in 1881, was a large building, symmetrical on plan with the corners expressed as pavilions under hipped wings, between these were verandahs of the stickwork variety. The eaves were bracketed and panelled whilst above the windows were flat arches with large keystones. Plaster-work quoining finished the ornamentation. It was a relatively sophisticated rural building. ILL 341

The Searle House at Great Brack River, although much smaller and less ornamented than the Malmesbury Pastorie, dates from 1884(38). Probably of the four roomed cottage type on plan, it had a verandah that ran around at least three sides, a rarity then. This was in the then fashionable stickwork which was a vernacular version of some of the more elegant ones to be found in Cape Town. It also has the curved corrugated iron sheets and sawn fretwork. ILL 342

The Later Houses

Before beginning a description of the later domestic, a few observations about this period are appropriate. As has been noted may times,

previously, the late 1880's saw the start of an enormous boom. This boom lasted into the early 1900's. During this time, in common with all other building types, a vast amount of housing was erected. Houses of all types, from enormous mansions to small terraced cottages, were built in large numbers. This is especially true of terrace housing, a fact not so obvious today when much of this has been demolished. Terrace housing, in an era of high land prices was the ideal speculator's architecture offering maximum returns for minimum outlay. These buildings were invariably erected for rental purposes.

It seems that all these buildings were designed by architects[39] for whom this was a golden age when commissions were easily obtainable and large practices literally sprang into being. Bearing in mind the almost innate Victorian love of richness and the concurrent desire for ornament, it comes as no surprise to discover that the current prosperity allowed those feelings to be finally realized in and on the houses of the time. Reinforcement for this tendency was the stress laid on family life and the need for a visual statement of status or class. Although one might not judge a book by its cover one judged a man by his house. All these forces then, social and cultural, led to the fantastic displays that are ullustrated here. Even the smallest speculator's buildings enjoyed a modest share of ornamentation.

In another sphere, the increased prosperity allowed an uplift in comfort standards where, besides better spatial accommodation, items like bathrooms became more common lower down the social scale, whilst improvements in sewerage allowed the W.C. to come indoors, or at least in the case of larger houses it did. Hot water from boilers became common. Electricity was anotner modern convenience available to some in the 1890's, whilst there were numerous improvements in kitchen equipment.

With the large volume of building and the large number of architects practising, it is inevitable that there must have been an enormous variety of work produced. However, although there is much superficial diversity, many of the houses conform to a limited number of common plan forms. These common plans were used by almost all the architects who usually confined their creativity to elevational treatment where they ranged with breathtaking freedom through the styles

of the past in conformity with the current spirit of creative eclectisism. However, it should be said that there was also a genuine diversity of style. This was brought about principally by the heterogeneous cultural background of the architects and their clients. A brief look at these backgrounds in the biographies of the various architects in practice at the time will give some idea of the enormous range of influences that was brought to bear on the architecture of the time. This is possibly unique in the British Empire at the time

In order to illustrate the typical houses of the more well-to-do middle class the following samples from the practises of two architects, W. Black and A. de Witt have been chosen.

Built in 1899, Villa Fletcher in Sea Point is a very good example of the smaller double storied asymmetrical house of the 1890's. It had a double storied verandah running partly round two faces. The ground floor plan shows the usual suite of reception rooms with the dining room having a bay window. The kitchen was within the main block of the house and there was also the commonly walled yard. Upstairs there were three bedrooms with a bathroom, containing a W.C. and a servant's room. The main bedroom which was above the drawing room also had a bay window. What should also be noted is that a number of rooms opened on the the verandah. They are the dining room and study and two of the bedrooms. The plan was reasonably compact and none of the rooms was very large. The elevations were also quite modest. There were no gables, the roof being a series of hips; The chief ornamentation was the cast iron work on the verandah and balcony. ILL 343

The Villa in the Gardens, for Mr Field also built in 1899 was a much larger and more elaborate affair. It possessed not only a corner turret but a turreted belvidere as well. The rooms are larger than in the previous example, despite the provision of more sumptuous accommodation, it was really not a large house. On the ground floor entry was through a porch into the large hall off which the drawing room and dining room opened. An elaborate stair led up to the first floor. The rest of the accommodation on the ground floor consisted of a breakfast room, kitchen, assorted offices and a servant's room. The first floor contained four bedrooms, bathroom and separate W.C. A stair led up to the ILL 344

mezzanine floor and thence by spiral stair onto the roof of the turret. Two other features not previously noted, were the green house and the conservatory. One opening off the hall, the other being part of the ground floor verandah and into which both the dining room and drawing room opened. The verandah and balcony were very wide being a minimum fo 8' (2,4 m) and a maximum of 11' (3,3 m). The principal elevations were of facebrick with plaster quoins and dressings, the tower was well connected with classically derived motifs. The verandah was of wood with turned posts whilst the balusters may have been of cast iron. The greenhouse was framed up in wood, on a circular central parel, binding the semi-circular arch to the entry porch.

A single storied version of the turreted asymmetrical villa is that built in Sea Point in 1897. Probably because of the fall in the land, the building was planned in two blocks. The main block was very richly ornamented and the service block very plain. On plan the main reception rooms lay off the large entrance hall. Only two bedrooms were provided, the smoking room taking the place of the usual third bedroom. It is also interesting to see that earth closets are the sanitary arrangements. The service block, linked by a covered way, contained kitchen, offices and servant's quarters, as well as the usual walled yard. Externally, the main block was elaborately ornamented, the chimneys had heavy mouldings, the eaves were bracketed and the gables had ornamental bargeboards with filigree panels. Whilst the windows to the bays had classical ordicular surrounds. Heavy quoins completed the effect. The verandah was of wood with turned poles. The work of the main block has a particularly sumptious effect. ILL 345

The villa for Mr Levin at Sea Point c.1895 is another largish house Much more irregular in plan that the previous example. its asymmetry derived chiefly from the shapes of the drawing and dining rooms which were set at right angles to one another. A double storied verandah ran around two sides of this house. Again the accommodation provided was not lavish but all the rooms were large. The elevations were very richly detailed, plasterwork ornament of classical origin was present in great abundance. All the windows on the prominent elevations received ILL 346

heavy architraves; and this, together with rich cast iron work on the verandah, combined to produce the typical exuberance.

The residence of Dr. Murray, also at Sea Point is the last and largest example of Black's work. Built c.1898, and more complex on plan, it contained, besides the usual reception rooms on the ground floor, a consulting room suite with a separate entrace and as well as this a small living unit. In spite of this, it still had only four, very large bedrooms on the upper floor. The front elevation was the only one to receive any ornamentation and what the others lacked, it made up for with a verandah. Almost symmetrical on plan, this elevation was manipulated to give it a studied asymmetry. It was more solid than the other villas with their light verandahs and even then this element was much less prominent. The main entrance was accentuated by a tower which was set off-centre, between two dissimilar pedimented projections. Both have plaster strips whilst the right hand had an elaborate venetian window on the first floor. All the windows were usually framed with many architraves. The verandahs or more correctly, loggias had classical balusters. This whole front seems to have been calculated to achieve the effect of a maximum amount of ornateness. ILL 347

The first example of De Witt's work is Fred Ayers Villa at Rondebosch, built in 1895 and typical of his more florid houses. Basically an overgrown cottage, it possessed all the familiar ingredients popular in current domestic work; the asymmetrical gables, the large bay windows and the elaborate verandah. A De Witt trademark was the witch's hat roof ventilator used more to accentuate the front door than for ventilation. The gable bargeboardings and framing was in-filled with elaborate sawn wood filigree, painted in contrasting colours, whilst the verandah was an absolute riot of motifs, borrowed from a number of sources. There was stickwork, latticework, turned balusters and sawn filigree. The walls of the building were of the popular red face brick banded with cement dressings. ILL 348

C. Foster's villa at Kenilworth was a very large version of the standard asymmetrical house. Built in 1896, the plan was lengthened by the addition of an extra room to what had its origins in a double bay front. This extra room was placed under the L-shaped verandah making an ungainly facade. The materials are the same as ILL 349

these on th. Ayres villa, but the wooden ornamentation to the verandah was less exuberant and more contained within the structural forks and therefore more successful. The steep pitch of the entry porch contrasted oddly with the flatter pitch of the gable roof. The barge boarding to the gable complete with filial pendant acroteria are typical of De Witt's pattern book type ornamentation.

As a contrast to these two rather typical confections, Hunter's Villa[40] in Kenilworth was a design in the more orthodox Queen Anne/Elizabeth style then popular in England. The red face brick ground floor with the slightly overhanging half-timbered, plastered pannelled upper floor, together with numerous gables, projecting porches and windows were some of the features of this style. Others were the prominent chimney stacks and the windows set in mullioned ranges. This house was a rare and yet competent example of this style in Cape Town. Possibly Mr Hunter insisted on the style and might even have obtained the initial plans himself as it seems to have been unique in De Witt's work. ILL 350

The farmhouse of J. Le Roux would seem to have been a face lift or modernization carried out in 1895. All traces of the presumably Cape Dutch house being obliterated by the new front. The old symmetry of the old building was retained however, and even the central ascent of the older gable was echoed by the new. However, this and the two new side gables were given elaborate barge boarding and iron finials whilst a cast-iron verandah ran around three sides of the building. Modern French doors and shutters under segmental arches, together with a quantity of plasterwork quoining, completed this new face. ILL 351

Another house built in 1895 was the P.H. Marais House at Wynberg Rather more grand in its intentions than the previous houses, it was fairly obviously based on the late 19th century Franco-Italian villa. Except for the upper verandah brackets, there is little of the current elaborate woodworkers type of ornamentation here. All the elements were more solid, more directly classically derived whilst the main forms, although quite numerous, were much more successfully combined.. The grouping was very picturesque and in the use of motifs, eclectic. ILL 352

Montana Vista was De Witt's own house. It was also at Wynberg and built c.1899. Although not a very large house it was very imposing, being a tangible indication of the rewards of a large practice. Like the Marais House, its parentage was the Franco-German villa but De Witt seems to have derived a fair amount from the American pattern books of the 1880's. From the photograph it seems that the other elevations might have been more colloquial, but as the house has been demolished this is only conjecture. ILL 353

As a contrast to these villas, the next example is a small, double-storied house built as a speculative venture in Mowbray for H.W. Struben in 1895. Here although the accommodation requirements were simple, the plan was much more asymmetrical than were those of the previous houses. The verandah is not a prominent feature as it was reduced to a small, hardly usable element on the side of the sitting room. None of the bedrooms opened onto the verandah. In elevation, the house was, in form and material, fairly obviously derived from contemporary English work of the Arts and Crafts sort. The character of the house was thus more Nordic and inward-looking that the typical villa and in that sense was not really appropriate to the local climate. The architect was H. Baker (later Sir Herbert). This house must be amongst his earliest work. ILL 354

Two slightly larger and more typical, medium sized villas are worth mentioning. The first is Struan House in Upper Orange Street This was possibly the work of J. Parker and dated from c.1897. It was a magnificent example of a corner turreted house making the most, architecturally, of its awkward, triangular corner site. ILL 355

Glastonbury, Kenilworth, completed in 1898 was another largish house. Its rather ungainly block-like appearance was modified into the desired asymmetry by end projections. These carried very elaborate barge boards, finials and filigree insets. The entrance was accentuated by a porch which was placed in uncomfortable juxtaposition with the adjacent window. The usual wooden verandah was in this case only single storied. The dormer windows with pediments were a 'Queen Anne' touch. The plaster dressings were relatively restrained being confined to quoining and window hoods. ILL 356

Mount Leonie, Fresnaye, dates from c 1897. With its tower and turret

over the entrance porch, it is fairly typical of the larger, single storied villas of the period. The prominent gable adjacent to the entrance tower has the usual elaborate barge boards and panelwork. The typical bay window is in this case battlemented. The verandah is roofed with corrugated iron and has turned posts. ILL 357

Four small villas built as a row in Sea Point, c.1894, are chosen as good examples of the stylistic variations on the theme of the asymmetrical villa.

The first house had a prominent off-centre gable with modest bargeboards. The motif of triangular infills appears to have been derived from the 'Queen Anne' sun-ray ornament. The verandah ran across the front of the house and at least part of the side. It had turned posts and curved valance boards. The prominent chimneys were of facebrick with plaster bands and mouldings. ILL 358

The second villa also had a prominent gable but the ornamentation here was in the form of half timbering. This was also the motif of the entry gablet. The verandah to each side of this was treated differently. In both these houses the verandah was an extension of the roof. ILL 359

On the third house, the gable was brought forward and the entrance marked by a small turret. The vestigal verandah was of turned posts with a fretwork frieze. In contrast to the first two this house is plastered with architraves to the windows and with the inevitable quoining. ILL 360

The last house is perhaps more typical that the previous ones. The projecting gable was on the line of the verandah and had bargeboards with an infill of turned woodwork. The windows were given heavy architraves complete with keystones, shoulders, and scrolls. The corrugated iron verandah ran around two sides, it had turned wooden posts, small sawn brackets and a frieze partly of turned wood and partly sawn work. ILL 360

Mrs Hutton's house, Wynberg, dates from c.1892 and is a good example of the more modest asymmetrical house of the early 1890's. ILL 362

Two houses from outside Cape Town that deserve special mention are another Searle House at Groot Brak River and a farmhouse at Woodville near George. The former, Riversyde, was built in 1897

and is probably unique in the area for being surrounded by a double-storied verandah, a fact which was commented on at the time[41]. It is certainly an atypical house form in the Western Cape. The Woodville farm house was built c.1890 and demonstrates the longevity of the Georgian villa form in the rural areas. Except for the popular heavy Gibbs type surrounds to the openings, the basic form has remained unchanged. ILL 363 ILL 364

Outside of Cape Town, this is also the decade when even the humble vernacular village house became Victorianized. It would be too cumbersome to give anything more than a brief indication of the more typical house forms and their appearance. However, to give a more complete coverage, a few examples will be shown.

The houses in the photograph of the Market Square at Oudtshoorn date from just before 1894 and their various forms show the evolution and possible variations of the more vernacular type of house. ILL 365

The house just right of the centre represents the simplest type of two rooms[42] with possibly a third in a back wing. The off-centre door leads straight into a room. Obviously the ceiling space is still used for storage in the Cape way, which is a mark of these houses. The roof was now of corrugated iron laid at a lower pitch while the house seems to be wider than its vernacular cousins. Its immediate neighbour seems to have been slightly bigger and more sophisticated with larger openings, more fashionable window surrounds and of course a verandah (still wooden). This and the house on the extreme right probably typify the smaller Victorian cottage of the 1890's. The terrace houses on the left are similar to the first house but have the pronounced long and short work surrounds that were in great vogue in the regions at the time[43].

The house at Robertson is very similar to the more sophisticated of the Oudtshoorn examples and is probably contemporary. It is slightly more pretentious with a gable over the entrace. Vestigal touches of Cape vernacular remain in the gables. The houses at Wellington are other examples and are yet more sophisticated with central gables. This type is found throughout the Boland and at this level it is hard to decide whether it is Cape Dutch Victorianized or the Victorian villa absorbed into the continuing Cape tradition. ILL 366 ILL 367 ILL 368

The semi-detached villa, both in its double storied and single storyed versions, also underwent considerable stylistic changes during the early 1890's. Although it had obvious limitations in assuming the asymmetry of the free-standing villa, nevertheless, though still based on the previous two-roomed tunnel back plan the double storeyed variety managed to achieve a more picturesque effect than previously. ILL 370

The house chosen from a row of identical villas in Moray Place, Gardens, dates from 1895. Here the plan was pushed out of the previous rectangular format, to allow the inclusion of a bay window to the drawing room whilst the dining room projects beyond the block, thus providing for a projecting gable above. This coupled with an off-centre fron gable allowed the building to achieve the richer massing desired. The double storied verandah, partly cast-iron and partly wood, completes the effect. ILL 369

In the large, single storeyed, semi-detached villa it was virtually impossible to achieve all the accommodation required without a long rambling plan, with an equally long rambling corridor. The unusual plan adopted in the example chosen which was built in Breda Street c.1895, is an attempt to provide this accommodation while still presenting the desired front. Here, the two-sided verandah with the drawing room and larger dining room arranged in an L-shape was adopted, with the rest of the accommodation provided in a double banked wing at the rear. A passage of phenomenal length zig-zags through the house from the front to the back door. A great deal of rich plaster work ornamentation is used on the front elevations and it seems from the chimneys that at least the front part of the house was faced with the imitation red facebrick then popular. ILL 371

The smaller single-storeyed, semi-detached villa was no different on plan and in elevation from the smaller asymmetrical villa, the only difference being that they were joined along a party wall instead of being 3' to 4' (900-1,200 m) apart as they were usually.

The promulgation of Cape Town's first set of comprehensive building and health regualtions in 1889 had a great effect on domestic architecture, and particularly on terrace housing. The most obvious of these were the requirements for a minimum yard space, the

provision and positioning of a W.C. or privvy, and the raising of party walls above the roofing as a fire precaution. These regulations, plus the new architectural fashions for Mansard roofs and decorative cast-iron balconies,produced a very different looking building from the average one built prior to 1890. In plan, however, the basic two room tunnelback was still used with little variation. As with all types of domestic buildings, the 1890's saw the erection of a tremendous volume of terrace housing, perhaps more so than any other type. In certain areas such as the Gardens, Tamboerskloof, Sea Point, Green Point and to a certain extent, Observatory and Mowbray the double storied variety was favoured while the single storeyed terrace was also found in all these areas as well as scattered throughout the older suburbs as well.

The villas in upper Buitenkant Street were built in 1895, the architect being W. Black. In plan they follow the typical tunnel back format with a ground floor drawing room, back dining room and kitchen in wing. Upstairs are three bedrooms with a bath and servant's room off the half landing. What is chiefly of interest externally is the way the corner has been handled with the typical turret so beloved of the period. Although now truncated the turret still gives the building the richly picturesque feeling so desired and which, although costly was paid for even in what is ordinary speculator's architecture. Interestingly, the tower was used to form an octagnal recess off the dining room and bedroom. The roofs followed a Mansard formula with prominent chimneys, whilst the verandahs have the obligatory display of cast-iron, although from the original drawings it appears that woodwork was intended. ILL 372A

The terrace of double storied houses in Gordon Street, Gardens, originally known as Montague Villas, was built c.1898. In plan they are very novel. Instead of the tunnelback layout, the unit is divided into three by cross walls, the inner third containing the top lit staircase and very ingeniously, the bathroom at the top of the house. The outer two thirds contains the usual living and bed rooms. There is reason to suspect the plan was evolved elsewhere and was brought to Cape Town by one of the newly arrived architects. Externally, the terrace is interesting with certain unusual features. There is no ground floor verandah, the first ILL 373

floor balcony with its cast-iron columns spans between party walls. The roof, with some structural justification, is a pseudo-Mansard. It has a steep pitch, which is covered with slate towards the road and has a flatter corrugated iron clad pitch to the rear. The steeply pitched gablets, some on the line of the verandah and some on the line of the roof, are a picturesque touch. The half timbering within the gables is a 'Queen Anne' motif, whilst the rest of the plasterwork ornamentation is classical in origin.

The following photographs were chosen to give an impression of the different architectural treatments of the double storied terrace house and also its geographical distribution.

The first terrace is in Sea Point and was probably built about 1895. It consists of five identical units, no attempt being made to compose it into one elevation. Besides the cast iron verandahs, the chief feature is a small half-timbered gablet. ILL 374

The second terrace, also in Sea Point accommodates itself to the slope by staggering the units but also tries to compose itself by emphasising the end units by means of large gables. ILL 375

The third terrace in Mowbray is richer in treatment than the first two by having double-storied bay windows and slightly more in the way of ornament. ILL 376

The last terrace which dates from c.1904, although essentially like the previous examples shows the increasing concern for simplicity. It has virtually no ornamental plasterwork, all the chimneys and parapets having plain mouldings. The cast-iron is of an Art Noveau character. ILL 377

Among the single storeyed row housing, the largest type was the four room plan with a large service wing. This consisted of a central passageway with two rooms on either side, lighting from front and back. In the wing was the kitchen, bathroom and service rooms. The architectural treatment was dependant on the architect, but in small terraces usually took the form of gables at the ends as terminal features.

The example shown was built as part of a series of terraces in 1897 in Strubensway, Mowbray, for H.W. Struben. They were designed by H. Baker and except for minor details, such as the wooden bracket to the cast iron column they are indistinguishable from the average terrace. ILL 378

The smallest of the terrace house types were the single fronted ones, with the rooms front and back, opening off a through passage. The kitchen and sometimes a bathroom were positioned in the wing, just as in the larger terrace houses, this plan had a long history. In the 1890's it acquired a second bedroom in the wing beyond the kitchen. The example shown was built in 1896 in Lee Street to the design of W. Black. The three smaller houses are grouped together and are terminated in elevation by gables. The minimal verandah had cast iron columns and brackets. The single, larger, four roomed dwelling had the standard plan for this type. ILL 330

The following is a series of photographs showing the variety of treatment of, and geographical distribution of the single storeyed terrace houses. Dates given are approximate.

The terraces shown in the first photograph were in Green Point, just behind Somerset Road. They were built c. 1895 and are those three single storeyed groups in the centre of the picture. They were of a very simple additive form, the only attempt to vary them being the usual and here, awkward addition of small gabled projections to the terrace ends. ILL 379

Iona Terrace, Rondebosch, is much smaller being only three units in length. Here the shorter length contributes to a more successful composition, terminated by the usual end gables and bay windows. There is also a small gablet to emphasise the centre unit entrance. It is probably just post-1900. ILL 380

Albert Terrace, Tamboerskloof, which is also probably post-1900 is a simple additive form of group housing using the standard four room type of cottage. There is no attempt to form it into any sort of composition with such things as terminating features. Its chief charm is in its staggered form climbing the steep slope and the large amount of decorative cast-iron on each house. ILL 381

A number of large houses were also built in the 1890's, the grandest of these was Travato, Wynberg. Designed by H. Baker for Carl Jeppe it was completed just prior to the Anglo-Boer war, during which time it was used as a convalescence home. Following the current English country house planning techniques, the house is grouped around a large, double-volumed living hall. The main block has virtually symmetrical facades, with a separate entrance and garden elevations. The service wing is set at 45^{o}, a then fashionable device contrived ILL 382

to visually shorten the house's 'tail'. This reached its zenith in the butterfly form of Luyten's houses. The architectural treatment is mostly 'Queen Anne'. The red tiles, textured plaster walls and stone plinth, as well as the simplified renaissance details are all elements of this style. What has been added though, are the classically treated verandahs. More typical are houses such as Bordeaux at Sea Point and Glengariff at Three Anchor Bay. Bordeaux was enlarged c.1894 by the De Villiers-Graaf family into an imposing symmetrical Italianate mansion complete with an entrance tower and double-storied verandah. The lush plasterwork ornamentation is, as we have seen, typical of the time. ILL 383

Glengariff, whilst not as big, was also a verandah house, but given a richer treatment than most. Its entry tower is asymmetrically placed in keeping with the prevailing picturesque taste. Detailing is in the current free renaissance fashion. ILL 384

Hillside House, Green Point, is possibly later, from c.1904(44) Its general appearance is again fairly typical of the 1890's. The most interesting element though is the gables which are a fairly direct derivation from then current 'Flemish' types found on commercial work. ILL 385

The 1900's

The wealth acquired by architects during the 1890's bore fruit in the early 1900's with a number of them being able to undertake extensive travel overseas(45). This allowed them to gain first hand knowledge of current overseas work including, of course, English domestic architecture which then enjoyed a high international reputation through the work of such men as R.N. Shaw, C.F. Voysey and Baillie-Scott. These ideas were supplemented by the professional journals and magazines and even by popular books(46). Thus domestic architecture moved quickly in the direction of English examples with Arts and Crafts influences being by now both prominent and well diffused. This led, in the Cape, towards a feeling for simpler and more solid forms, with a rejection of excessive ornamentation and a stress on the use of natural materials, such as stone, brick and tiles. There was also an emphasis on good workmanship especially in internal work. In this they were assisted by the growing sophistication of the local building industry.

Herbert Baker's influence on the refomation, as it were, of contemporary work has been stressed[47] but although he was obviously a prominent memoer of the profession and exerted some influence through his work and writing, his influence would seem to have been on the younger architects[48]. This bore fruit much later, being probably at its height after the First World War. There is no evidence to suggest that his contemporaries did not derive their influences from the same sources as he die rather than through him[49].

The following examples are chosen, not to exhaustively illustrate the new movement, which anyway falls outside the scope of this thesis, but rather to show how it evolved out of the previous architecture, and to demonstrate its 19th century roots. A further section will show how the typical architecture of the 1890's continued to flourish both in Cape Town and region right up to the time of the Union. As an example, the appetite for cast-iron was still so great as to cause a local foundary[50] to commence producing its own c.1902.

The villa in Oranjezicht, built in 1905, is an interesting and instructive contrast with Black's work of five to six years previously. A comparison between this house and, for example, the Villa Fletcher[51] will reveal many changes. On plan the most obvious change is the reduction of the verandah to a stoep though it is in the same position and still has a vestigal connection with the dining room. This room is no longer the largest reception space, a process of change actually started in the 1890's. Terminology has also undergone some changes with a large den, a sort of masculine lair, instead of the more dignified and bookish study. Upstairs there are proportionately more bedrooms (five) most of them smaller than was normal earlier. There is also the provision of cupboards in most rooms, which is again, rare before this. Despite these changes, however, it is on the outside that the major innovations are to be seen. Here, the new feeling for simpler and more solid massing is recognizable. Gone are the light decorative verandahs, the complex roof forms and the rich ornamentation. Instead the house sits primly under its neat tiled roof. Projections are more simply geometrical while the use of natural materials such as stone, facebrick, rough cast and clay tiles is derived from current English work. The use of battered forms in the buttress to the ground floor and in the

ILL 386

chimney as well as the rough cast to the first floor with its distinctive bess cast suggest a strong superficial influence, of the work of C.F.A. Voysey[52]. Lastly, there is the use of casement windows instead of the previously universal sash type.

Hayward's House, Kenilworth, was built at the same time as the Oranjezicht Villa to the designs of H.H. & W. Reid. It is a much more recognizable derivation from current English domestic architecture, in fact it was called 'the old English type' in a contemporary journal.[53] The dormer windows were apparently considered a touchstone of this type. The internal planning was very similar to English practice. The entry porch led into a living-hallway, complete with inglenook. Off the hall through a wide arch was the lounge, the informal living area whilst a small formal dining room was still provided. A separate service stair to the upper floor was part of the plan, something that was abandoned in houses of this size during the 1890's but necessary here because of the living-hall. The usual elaborate array of kitchen and offices, was provided even in what was a modest house. Externally the walls were covered with rough cast, the foundation walling was of red facebrick and the roof was of English tiles, all vernacular materials. The most obvious feature, the complex massing of the assorted roof shapes was again typical of contemporary English design. ILL 387

Yet another house was that for Mr Cartwright in Claremont[54]. Designed by C.H. Smith, it was much larger than the previous examples. The planning generator here was a large octagonal hall containing the principal staircase which was entered theough a vestibule and off which all the principal rooms led. The two largest rooms, the dining room and parlour were en-suite connected by a large folding door, an arrangement harking back to late Georgian practice. These two rooms were given a rather large amount of inglenooks, built in seats and niches popular at the time. There was also an observatory off the dining room. The large verandah was only accessible through the conservatory. A large drawing room and a study completed the suite of rooms. The kitchen etc., were confined to a quadrant of the plan. Although partly rearranged, the plan still has a strong resemblence to the 1890's villa. Outside, the house was not as advanced as the previous two ILL 388

and although it restored the fripperies and complexities of the previous boom it still had period dress, in this case half-timbering of the 'Elizabethan' kind. The verandah, although simpler, has an ungainly Victorian quality.

The mansion of Mr Bertram in Constantia is the largest home in the group selected. It was planned in the English country house tradition in two blocks, a main block and a service wing. The planning generator was again a large hall, complete with fireplace. In this case it was a large livinghall from which a grand staircase rose. This livinghall opened onto a verandah and oneither side were the main reception rooms. The drawing room had the inevitable inglenook. Entry was through a porch and vestibule. Other rooms opened off this and from a passage. Externally the house was still in the Victorian grand tradition with the garden elevation being the principal one. This was treated symmetrically with twin gables between which there was a recessed verandah. The curvilinear gables with semi-circular windows were similar to those on Groot Schuur; but as gables of this type were in vogue in the late 19th century anyway, this comparison might be misleading. Local stone was used to face the lower floor whilst imported stone was used for the balconies and portico. Caleb Keene, possibly South Africa's first interior decorator, was responsible for much of the interior work (55). The architect was W. Adamson. ILL 389

Despite these examples, though, the majority of domestic work continued in much the same vein as previously. Mr Loopuyt's home in Rondebosch was built in 1904, to the design of A. De Witt. It could have been built ten years previously and has a marked similarity to 'Monte Vista'. Here the contrast between light wooden verandahs and the solid cubic quality of the house itself is most marked. ILL 390

The aptly named Model Villa, Gardens, dates from 1903. With its large gable decked with all manner of plasterwork ornament, its entry porch and spire and its locally made cast iron(56), it shows the late Victorian exuberance still operating amongst the lower order of architect/designers. In this case it was possibly the builder ILL 391

himself. It is a real speculator's house in that all the decoration is confined to the front elevation; even the quoins do not go around the corner. The treatment of the gable is worth commenting on as about this time it seems to have become popular to dispense with bargeboarding and turn it into a parapet gable. This is probably an influence derived from the gable form popular in commercial work of the 1890's.

Even in the smaller and remoter villages all the elements of the new style had arrived by the 1900's. Some houses were almost exact copies of fashionable suburban villas but most show some concession to their semi-rural sites. They are generally much larger than their urban prototypes as well as being simpler in ornament. They also had a tendency to symmetry, especially on the main elevation. The following is a selection to illustrate the range.

The house at Prince Albert was a very sophisticated example with asymmetrical gables , bay windows and a wooden verandah around two sides. ILL 392

At McGregor, the Pastorie was a simpler building with asymmetrical gable ends again with bay windows, between which was a wooden verandah with cast-iron balusters. The plaster panels on the bay windows hint at rustic design and workmanship. ILL 393

Another Pastorie, this time at Hopefiled, was a very large and ungainly version of the suburban asymmetrical villa. The two small terminal blocks were rather dwarfed by the bulk and length of the main block. The bay window was carried up into three separate gablets, a novel but ugly treatment. The cast iron verandah was complete with posts, brackets, frieze and double curved corrugated iron roof. ILL 394

Merindol at Riebeck, built in 1904, shows the current villa idiom as applied to a fram house. Symmetrical arches, two gables with bay windows and a cast iron verandah around three sides of the building. ILL 395

Two houses from Robertson continue this survey. The first is very like the Pastorie at Hopefield with the large main block terminating in small, bay windowed projections. This building has a particularly fine array of cast iron on its verandah. ILL 396

The second house is the normal asymmetrical villa but is distinguished by an amazing feature which is something which starts as a bay window and ends up as a fully fledged turret, capped by a steeply pitched roof. ILL 397

The houses in Mossel Bay seem to have been much simpler than elsewhere and there is little of the 1890's exuberance here. The small terrace dated 1907 is one of the few with any features such as corner turrets and bay windows. Much more typical is the square block-like stone house with a double-storied wooden or part cast-iron verandah. An example is shown. These were also built during the 1890's. Also shown is a small semi-detached version. ILL 399 ILL 400 ILL 398

Outdshoorn is often regarded as possessing a number of very fine Victorian houses. This is certainly true in essence, but most if not all of these buildings, are actually Edwardian. Nevertheless, it can be said that what took place here was a final flowering of the late Victorian villa in all its ornate glory. Two typical turreted asymmetrical villas are shown replete with all their cast-iron finery. ILL 401 ILL 402

Lastly to show how overwhelming was the fashion for this type of villa, is a house c.1900, from Stellenbosch. ILL 372

Some observations on domestic architecture

When first undertaking this study it was hoped that some sort of broad comparisons between the house types of the various South African regions could be undertaken but unfortunately the present stage of knowledge precludes this in any great detail. Much remains to be done in this field. Nevertheless, some remarks are in order.

As noted previously the real verandah house, that is the bungalow form with a verandah around three of four sides, was rare in the Western Cape. There was some inclination towards this type in early Victorian times as witness Woodville. This was possible an indigenous Anglo-Indian influence. However, in the late 19th century there were, as far as can be ascertained none in Cape Town, two in Brak River, and possibly a few at Oudtshoorn. There was a distinct flowering of a specific type of verandah house in the small towns after the Anglo-Boer war, Laingsburg for example has a number. Oudtshoorn has probably the finest of these. Otherwise the verandah house in Victorian times is more distinctive of the colonial architecture of Natal[57]. The Cape had no splended houses like

Trevean, Durban, or Sar Souci. Pietermaritzburg[58]. It would also seem that the same is also true to some extent of the Transvaal which also possessed a number of fine verandah houses. The reason for this distribution is most obviously climatic, although this was not necessarily the final arbitrater, as witness the earlier verandah houses at Wynberg. Other contributing factors was the general tighter urban development of Cape Town, the smaller suburban sites not allowing the extensive use of the verandah in the same way as the more dispersed layouts in Natal. For the larger villas the extensive, all enveloping use of the verandah tended to make for a simple form which was at odds with the desire for irregularity and display which we have seen characterized late Victorian houses. Although much has been made of the asymmetrical villa as being typical of the late 19th century, symmetry was not completely discarded and there did exist many examples of very carefully designed front facades. But symmetry was generally confined to these facades only.

At its humblest level there also evolved the Victorian vernacular house. This, as has been shown, was the basic, four roomed house. It has a distinctive section which, in its final form, has a front lean-to verandah, a main double pitched roof covering the front rooms with a lean-to covering the rear range, the derivation from the single pile north-European cottage is fairly obvious and its ability to grow from the basic two rooms into a reasonably convenient house form ensured its widespread use. Its evolution was not confined to any particular part of South Africa[59] and the chief regional variations appear to be in the use of materials. In the Western Cape, corrugated iron was commonly used for the roofing, especially of the lean-to but it was seldom ever used for the house, whereas in the Transvaal, timber framed and corrugated iron clad houses were the order of the day from the 1880's on. By this time the full, four roomed, verandah house had become the norm[60]. In this it was responding directly to the local building traditions of the lack of them and of course the availability of, or lack or materials. Otherwise, this house form can be seen in facebrick as in Pietermaritzburg, in stone and in plaster and brick elsewhere, each variation giving it a distinct character.

REFERENCES CHAPTER TWELVE

1 Meeks. The Railway Station P 85

2 See article in The Architectural Review, Aug. 1848, P 63 et seq.

3 Dutton. The Victorian Home P 1

4 This was also common practise in Natal, see Kearney, Architecture in Natal P 17

5 See Chapter Fifteen

6 Steegman. Victorian Taste, P 100

7 Ibid. P 107

8 Architectural Review, Aug. 1948

9 See advertisement by Brink in Cape Argus, December 1866

10 See Brunskill, Vernacular Architecture P 100

11 See Chapter Fourteen, P 341

12 Lewcock. Early Nineteenth Architecture in S.A. P 121

13 See Chapter Fourteen P 342

14 It can clearly be seen as such in Millard's Panorama of 1859

15 It is visible without the verandah in Millard's Panorama

16 The door is off centre in the Panorama, the roof forms are also complex

17 Brunskill, P 107

18 eg. Brown. Domestic Architecture, Plate One

19 The detailing appears to be similar to the Mutual Life Building, See ill 150

20 Noble. The Cape Colony, P 35

21 See Chapter three p 73

22 eg. Loudon's Encyclopaedia

23 Pocock's Panorama 1848

24 See Biography, P 110

25 The service wing appears to have been the original earlier cottage

26 These are possibly slightly later

27 There are some similarities to Wynberg House

28 This was originally a truncated cone

29 From McFarlanes, Glasgow

30 It is found at this time both in Australia and America

31 See advertisement

32 See Cape Argus Weekly, 30 Jan 1884

33 See Struben, Taken at theFlood P 243

34 From MacFarlanes, Glasgow

35 See Chapter Sixteen for a more detailed disucssion of this

36 See ill 281

37 There are drawings of the verandah posts in his notebooks (Cape Archives)

38 See Frankin, The Story of Great Brak River, P 97

39 A large variety of these exist amongst the drawings of W. Black

40 Designs like this are found in American Pattern Books of the 1880's

41 See C.F. Juritz, 700 Miles by Cart Through The S.W. Circle

42 This is assumed as the door is off centre

43 Examples also exist in Mosselbay

44 The gables form is post 1900

45 W. Black for example travelled extensively in the early 1900's

46 eg. The Studio and the Architectural Review

47 See Greig, Herbert Baker in S.A. P 222 et seq

48 eg. J.M. Solomon

49 Baker was also of necessity much on the periphery while in S.A.

50 See Chapter fourteen P 365

51 See ill 345

52 eg. Charley Wood 1899

53 S.A. Architect and Builder, March 1905, P 105

54 This must be the same Cartwright who commissioned Mansion House See P 254

55 S.A. Architect and Builder, April 1905 P 145

56 Phoenix Foundary. Cape Town

57 See Kearney, Architecture in Natal P 41 et seq

58 See Illustrations No's 356-8, 347-8 in Kearney

59 Examples are widespread cf. Kearney P 161

60 See P 290

CHAPTER THIRTEEN - GARDENS

'IN THE PERIOD OF WHAT, ON THE ANALOGY OF "HIGH FARMING" CAN FAIRLY BE CALLED "HIGH GARDENING", WHICH BEGAN ABOUT THE MIDDLE OF THE NINETEENTH CENTURY? THE SCIENCE OF HORTICULTURE WAS GREATLY ADVANCED - AND THE MANY GARDEN STYLES OF THE PAST WERE COMBINED IN VARIOUS, MOSTLY UNSUCCESSFUL SYTHESES, UNTIL, AT LAST, WHAT I HAVE CALLED THE PARADISE GARDEN EMERGED AS THE DOMINANT FORM'(1)

This review of gardens is intended to give some idea of the setting into which domestic architecture was placed and perhaps also to give an indication of the prevailing garden taste. Also included is a short note on the public parks.

The Botanical Gardens were started in 1848 when a Board of Commissioners was appointed to superintend the layout and maintenance of the whole of the western half of the Government Gardens with a view to the establishment of a public Botanical Garden(2). During the years that followed, work proceeded to this end. The illustration shown is of the layout c.1862(3). It will be seen that the cultivated section stretched up as far as Perth Street or to approximately where the axis of the National Gallery crosses the Garden. As originally laid out, the Garden started immediately behind old St. George's Cathedral, but this lower portion was expropriated for the S.A. Library and Museum Building in 1857. A sour note in the Commissioner's annual report of that year records this(4). The central walkway appears to have been a legacy of the old vegetable gardens, if early maps of the area are accurate(5). The only public entrance at that time was the one opposite Government House at which a porter was stationed(6). Somewhere prior to 1855, the gardens had acquired a committee house as well as conservatories. The committee house, which originally had Gothic touches(7), survives in a battered form in the north-west corner. The conservatories have gone but, in a Bowler sketch, one which was in a whimsical Gothic can be seen. In 1856, the large fountain on the central walkway was constructed. The centre piece survives. Amongst other other early 'furniture' was the statue of Sir George Gray erected in 1864.

ILL.403

The layout, with its combination of formal axis and winding paths,

is typically early Victorian in conception. It seems that this layout was mostly the work of one, Thos. Draper, the gardener, who had previously been employed by Baron van Ludwig(8).

The Gardens proved very popular, one of the attractions in the 1850's being the performance by a military band every Wednesday afternoon(9). Despite its popularity, it should be noted that the aims of the garden were not chiefly recreational but scientific and educational. Dr. Pape, one of the Trustees, outlined this in 1855 when he stated that *'A garden without an educated and experienced botanist has no claim to be called botanical and can be of little service to science and the public'*(10). He was also scathing of the then state of the garden, claiming that it was chiefly a place of recreation or amusement.

Its further development is not appropriate here as only its original mid-nineteenth century form is relevant.

De Waal Park is the only other large public garden developed in Cape Town during the Victorian period. Originally part of the land acquired by the municipality for the building of the Molteno Reservoir, it was laid out as a municipal park in the mid-1890's. A short history of this development follows(11).

The idea of opening the park to the public was first proposed in 1894 and in June 1895 is received its present name in honour of F.De Waal, a prominant citizen. The layout was devised by the City Engineer and was submitted by him in a report of September 1895, but the records are obscure. Over the next few years, work proceeded on the development of the park. Paths were put down and young trees planted in 1894. The approach road was also improved that year. In 1897, new walls were laid out. An old fountain was brought out of store and re-erected in the park in late 1898, while yet more walks were laid out, this time in the upper portion. The trees were also thinned out and in the following year a variety of them were planted along the paths. The furnishing of the park was completed in the early years of this century by the construction of a bandstand. ILL.404

In its original layout, the park was dominated by a central point, a circular piece of lawn containing the fountain. From here the ILL.404A

two major wa. ways ran at right angles to meet other ones that ran around three sides of the trapeziodal site. All these walks were lined with trees. From these walks small paths meandered into the blocks of lawns and skirted around elliptical or round centre pieces. The bandstand is situated in the small roundel in the upper right hand block. The now mature vegetation tends to disguise the former layout of the park.

Outside Cape Town, a number of towns also acquired their public gardens during the 1890's. Formal layouts were the order of the day while the two most important items of furniture were the bandstand and fountain, both of which were usually of cast-iron. The photo graph of the Gardens at Paarl, c.1910 shows this layout to perfection. ILL.405

Turning from parks to public gardens, that of the International Hotel is worthy of note. It was a very fashionable spot at the turn of the century. The centre piece of this layout was a large, octagonal bandstand principally of cast iron but with both wrought iron and wooden fretwork embellishments. The bandstand was the architectural set piece for that continually popular 19th century fashion for outdoor military band performances which we noted earlier. A similar structure was also erected in the Botanical Gardens in 1892. ILL.406

The grounds of the Mount Nelson, home of the Hamilton-Ross family, would appear to be typical of the larger mid-nineteenth century villa. Fortunately both the plan, not very detailed but reasonably accurate, and a view, a sketch by Bowler, survive. A good idea of the layout can therefore be had, especially as both are virtually contemporary, the plan of 1862 and the sketch of 1865[12]. The house, which is pre-Victorian, was set half-way up its plot and off-set to one side. It was approached up an irregular curved driveway which led into an elliptical roundabout. From here, as can be seen from the view, the approach was via two short flights of steps separated by terraces. These steps were bracketed with large urns. On the terrace was a fountain and statuary. Everything seems calculated to echo Loudon's works: *'We consider the architectural accompaniments of terrace walls, gateways, alcoves, stone seats, steps, pedestals, urns and other mural and sculptural ornament* ILL .407

essentially requisite'[13] Planting in this area seems to have consisted of lawns and ornamental trees irregularly placed. The whole effect, although industriously localised, is one of considerable charm; this was very obviously a pleasure garden. The area at the back of the house would seem to have been a large kitchen garden. The Deanery, also demolished, was a near neighbour in Orange Street only about a quarter the area of the grander Mount Nelson. It was also developed as a pleasure garden. Somewnat smaller in layout, a map of 1862[14] shows an axial driveway returning around a fountain. This was a feature much in vogue in Cape Town from around the 1850's and persisting until about 1880. ILL.408

The garden of Bertam Place, represents a reasonable typical layout of a larger town villa of the mid-1880's. An oddity is the placing of the house right up against the one corner of its plot, but this seems to have been caused by using the previous house, Bertram cottage, as the service wing for the new house[15]. The larger house was set up upon a slight podium and was approached obliquely by a central driveway which arrived in a gravelled forecourt. The rest of the layout had a number of paths following the periphery of the site linking together what seem to have been sheds or gardens. Large lawns dominate the planting with scattered trees or shrubs. On each boundary there was a screen of trees. A small walled service court was tucked away in the corner of the site. ILL.411

Villa Marina was re-built in the early 1880's, and there is reason to believe that the illustration chosen gives an accurate and detailed idea of the larger Sea Point villas garden layout. What is remarkable is the large site, stretching as it did between beach and main roads. A high wall enclosed the whole site which was divided roughly into halves. The front portion contained the house, surrounded by the pleasure garden. This had a formal entrance on Beach Road from which the driveway led up to the house, running around a large axial fountain set in a parterre. This, as previously observed, was a common feature of the time. An offshoot led into the service court. Besides the fountain, the garden contained straight gravelled walks, peripheral paths and patches of lawn. The large bridge and flagstaff was typical of the Sea Point Beach properties[16]. A small obelisk or fountain was the other man-made object in this area. A ILL.410

side entrance which led up the back courtyard completed the front layout. Behind the dividing wall there was a tennis court, whilst tne rest of this area was given over to an extensive kitchen garden laid out very formally in rectangles divided by paths. This reminds one how much produce was still home-grown.

Tne two houses in Hof Street are virtually identical in plan and very similar in garden layout. They were laid out in the early 1880's and give a good idea of two medium sized suburban villas villas with a still sizeable plot of ground. Like the Villa Marina, they are divided into a front and back garden. The front garden, although much smaller is still the pleasure garden, being planted with shrubs and trees but it is too small for any driveway, being approached axially by a path. The back area was again the kitchen garden with stalls and stables; for both there is a side or service entrance. The whole property is surrounded by the ubiquitous wall, much lower in front. ILL.409

Turning from the detached house to terrace housing, Avenue Terrace had large front gardens, a rare feature in buildings of this sort Surrounded by heavy and elaborate boundary walls, a central pathway divided the lawns. There were also a number of irregularly planted trees. Service was via a back lane into an enclosed yard. ILL.412

The terrace in Hatfield Street also dates from the early 1880's and although the internal accommodation is quite substantial[17], this terrace with its nominal front gardens, about 20' (6m) deep is a forerunner of the terraces of the 1890's with even more minimal gardens. As elsewhere, large boundary walls and piers continued the architecture of the house into the garden which, here, was only big enough for shrubs or a single tree. ILL .413

During the 1890's, the high price of land seems to have forced even relatively large houses onto very small plots with the consequent lack of any real garden. This was especially true in the inner Cape Town suburbs. Struan House and its neighbour are both typical of this. Struan House was approached axially from a corner of its triangular, walled site and the house, which was set up on its podium, was encircled by a path. The service area was placed at the back of the house and was walled, but here there was no space at all for a ILL .414

kitchen garden. The function of the odd portion behind the neighbouring house is not clear. Planting in the garden was confined to shrubs but a screen of trees appears to have been planted along the upper Orange Street boundary.

REFERENCES CHAPTER THIRTEEN

1 Hyams. A History of Gardens and Gardening, P 283

2 Select Committee of 1855, MS 136 and 143, Parliamentary Annexures (C.A.)

3 From Snow's map 1862

4 See 1857 Annual Report (C.A.)

5 See Rach's map of 1783

6 Select Committee Report

7 Measured drawings exist in the Architectural Library, U.C.T.

8 Select Committee Report

9 Ibid.

10 Ibid.

11 Following information based on the Minutes of Municipal Gardens Committee 1894 - 99 (C.A)

12 See Bradlow. Thomas Bowler, P 26

13 Loudon. Encyclopaedia, P 771

14 Snow's map

15 See P 302

16 See Murray. Under Lion's Head, P 126 et seq

17 See P 307

CHAPTER FOURTEEN MATERIALS AND DETAILS

Attitude Towards Materials:

Much was written about the use and abuse of materials by architectural theorists during the 19th century. Pugin appears to be the first popular writer to apply the principles of morality to architecture. One of these was a demand for the 'honest' use of materials. This honesty entailed not disguising one material as another or using it in any form as a substitute(2). Ruskin developed this theme further in 'The Seven Lamps of Architecture' (1849). The Lamp of Truth (3) outlines these deceits as structural, surface and operative. A structural deceit is the suggestion of a mode of structure or support other than the true one; while a surface deceit is the painting of surfaces to represent some other material than that of which they actually consist. The operative deceit is the use of cast or machine-made ornaments of any kind(4).

Many other sources could be quoted to show this concern with the nature of materials, but it is perhaps more fitting to end with something which is more typical. This quotation runs as follows: *'Everyone readily admits that the merit of buildings is greatly enhanced by their being constructed with genuine and permanent materials - people want to have things appear costly, but to come cheap, and in order to gratify their unreasonable humours, several ingenious persons have set their wits to work, and invented a variety of artifical substances and compounds and sold as substitutes for natural materials; and some of them imitate them so perfectly as to be equally beautiful in appearance'*(5).

A little known aspect of Victorian architecture is the attempt, made later in the century, to come to terms with the urban environment and its industrial atmosphere by using materials with hard glazed surfaces in their buildings(6).

However, although these thoughts and attitudes undoubtedly shaped the way in which the leading architects approached the use of building materials in Great Britain, there is little evidence of this having much effect on the buildings of the Cape, except as part of the groundswell of Victorian culture. The reasons for this are not hard to find, for before the 1880's, the Cape was a small, poor

colony with no core of well-established architects[7]. The single exception to this was the churches built by and under the influence of Sophy Gray. For convenience, these were dealt with earlier[8].

Nevertheless, although there are virtually no locally expressed opinions specifically on materials, we can infer fairly easily from the buildings erected what these attitudes were. Although fashions changed, the Victorians had a ranking system for materials. First and foremost, stone was considered to be the most desirable material, retaining its prestige well into the Edwardian era. Whenever sufficient funds permitted it, it was used on all major public buildings[9] and on the larger commercial establishments as well. Very rarely was it used on houses. Nevertheless, even this was not often done until the 1890's. For example, as late as 1884 even the Houses of Parliament had to make do with a granite base and a facebrick superstructure. The reason for this, of course, was the lack of an easily worked local free stone.

For the average building prior to 1890, both commercial and domestic, plastered brickwork was used as a substitute for masonry. The cheapness of this method allowed at least a superficial attempt at fashion at a fraction of the cost of stone. This substitution was not confined to the Cape however; 'compo' fronts were also widely used in Britain for the same purpose[10]. The lack of a good local facebrick also provided problems. Prior to the Victorian period, English facebricks had to be imported for this purpose[11], and this continued throughout the 19th century, at great expense. Not all facebrick used, though, was imported and examples of local facebrick such as the old S.A. College Laboratory (1880) can be given, but these bricks would have been as expensive as the imported article.

During the 1890's, the fashion for using red facebrick with stone dressing[12] stimulated the demand for local facebricks, which gradually became more freely available. As usual, cheaper substitutes were also used; one method was to use facebrick with cement dressings in lieu of stone, and another was the use of an ingenious imitation facebrick plaster[13].

The local attitude towards the various machine-made objects of utility and ornament that poured forth from the industrialised

nations of, firstly, Europe and, latterly, North America, was one of virtually unreserved acceptance. Paper maché ornaments, cast-iron fireplaces with their marble surrounds, decorative cast-iron columms and brackets and pressed metal ceilings, all these were used with no apparent qualms; in fact, it is only during the last decade of the century and the opening years of this century that there are any signs of an 'arts and crafts' feeling for materials. One of the earliest signs of this is an article written in 1884 in the S.A. Illustrated News, where the author actually mentions W. Morris(14).

After this, architects such as Baker(15) began, in some buildings, (such as the Rhodes Building) to show more feeling for the effects of natural materials. Other architects such as Black, (in his houses of c.1905) also show this change of direction(16).

The charge of 'jerry-building' was often brought by early 20th century architects against the work of the proceding generation(17), and it is appropriate to examine this allegation here against the background of this study. It is not surprising that with poor local materials, relatively expensive imported items, as well as scarce and therefore expensive skilled labour, that the average building was not very well built, especially those of the speculative variety. It is recorded, for example, that in 1884 it was not uncommon for three houses to fall in one day in Papendorp (Woodstock) during the rainy season(18). As these buildings were constructed of 'green' bricks with walls one brick thick and with 1" roof timbers, this is hardly surprising. Even as late as in 1885 in Oudtshoorn, a particularly wet season could wreck havoc on a number of buildings(19). Where minimum cost and maximum returns are required, and as the vast majority of buildings were built for speculation then, this condition must apply very broadly. Nevertheless, this is more of a social condition and is not particularly confined to the Victorians or even initiated by them(20). Nonetheless, it can be safely said that boom conditions, especially Colonial boom conditions, were not conducive to a good average building.

As well as this though, there were problems inherent even in the better class of 19th century Cape buildings, especially the complex

ones of the 1890's which are often the products of hurri ' initial design. Verandahs, for instance, appear to have been very flimsily constructed and badly detailed. Materials like cast iron and soft wood were used together with little apparent thought for the future, hence their seeming inability to last more than thirty to forty years. In fairness, though, the previously mentioned factors of high material and labour costs would have made these items unrealistically expensive if they had been well built. It is also questionable whether these buildings were intended to last very long, the response being one of the typical pioneering sort of satisfying immediate requirements and letting the uncertain future look after itself.

Despite this, the best buildings of the times, such as the Houses of Parliament or the Metropol tan Methodist Church, are very well detailed and built, but of course they were very costly.

Lastly, it should be pointed out that all buildings, especially older buildings, require constant maintenance as all materials are more or less subject to the effects of weathering, more so in the severe climate of the Cape.

Perhaps one of the most remarkable of the characteristics of Cape Victorian architecture, is the economy with which its decorative elements were used. These are almost always found only on the principal facade, sometimes on the sides of a building, but never on the back. Thus, for instance, any elaborate bracketing of the eaves will turn the two front corners and stop. This is understandable in early Victorian times but, even during the opulent 1890's, this economy was practised, although here an exception can be made for the asymmetrical houses[21], where this treatment was taken around one side elevation as well. The surfaces and openings of the unimportant walls though, were left as plain as the proverbial pikestaff.

It also appears that prior to the 1870's, almost all the joinery for buildings was handmade in Cape Town, although the bulk of the wood was imported, but from this decade on doors and windows take on a standardised air and in fact most of these elements, along with the ceiling and floor boards, skirtings and architraves, were

imported ready made, usually from North America[22]. It was cheaper to buy the industrially produced articles than make them with scarce and expensive local labour. Thus the run-of-the-mill buildings of the last two decades could, perhaps, without much exaggeration be called catalogue houses, composed as they were (are) of a miscellaneous collection of elements and materials from all over the industrialised world.

Roof Forms:

Roofs are often the most restraining influence on the development of plan forms. This is particularly true where materials are limited and technical skill is low. The most obvious solution to the problem of providing a reasonably trouble-free, water-shedding cover to a building in these circumstances is the simple, double-pitched roof, the slope of which is distated by the type of covering material. In more sophisticated circumstances, however, there is also an aesthetic factor involved. Georgian architecture favoured the wall surface with the roof being as unobtrusive as possible, while the Gothic revival was greatly concerned with the manipulation of roof forms. ILL 315

Prior to 1870, the low double pitched, hipped roof was the almost universal Cape roof form[23]. This fitted neatly and economically over the rectangular villa plan of the period. It remained in use until well into the 1880's. In larger buildings, a series of these roofs was used to cover the space below. These were often hidden by parapets on the important face of the building. Verandahs were treated as additions, which they clearly were, and roofed with separate low-pitched or curved roofs. Any additions to the basic rectangle were contained under similar hipped wings. The Cottage Orné roof form was a variant of this but had a much steeper pitch because it was thatched. Into the roof, a number of former windows were usually worked[24]. As they derived mainly from the Romantic tradition, this dominant cottage-like roof was acceptable. The smaller verancular buildings had the basic double-pitched roof with any variety confined to the treatment of the gables, the Cape Dutch influence favouring a pronounced end gable while the English tradition favoured hips or hipped gable ends[25]. The disciplines of the roof only allowed the plan to grow in wings, giving rise to T and L or U shapes. The H shape of larger suburban houses popular ILL.278 ILL.299

in the 1840's and lasting until the 1880's, is most probably derived from this form.

The advent of corrugated iron in the late 1860's allowed a low pitched outshut to be added to the rear of the single room deep plan of the average small house. This enabled it to become a double, or in other cases, a triple piled plan wihtout necessitating any radical change in roof construction methods. The addition of the front verandah, dating from the early 1870's, completed the evolution of the late 19th century small house. The low pitched outshut was added to the hip roof form as well, both in its single and double storeyed versions. ILL.326 ILL.329 ILL.336

During the 1870's, the arrival of new ideas caused a demand for more irregular plans and varied roof shapes. During this time, the first gabled additions were made to the basic hipped roof. This roof was given an L-form. By 1880, this had culminated in the familiar late Victorian off-centred gabled shape for both single and double storeys. From here on, the taste for irregularity and picturesqueness caused a large number of variations on this theme to be built, culminating in the multi-gabled, corner-turreted house of the 1890's. It should also be noted that the various offices at the rear were given simple lean to's. The 1900's saw a reaction towards simpler pyramidal forms. Another invention of the 1890's was the asymmetrical pitched roof with the steep pitch on the important elevation and the flatter pitch to the rear. This is to be found on terrace houses and commercial buildings. ILL.313 ILL.358 ILL.328

Roof Materials:

Slate

This was considered to be the superior form of roof covering right throughout the 19th century. This popularity seems to have been partly due to their widespread use in Britain, especially after the duty was removed in 1831[26], and partly because of the ease of handling for importation. They were all imported from Britain, there being no exploitable deposits of slate in the Cape[27]. The chief sources of the material in Britain was, at first, on the Pembroke-Carmarthen border, and later from North Wales around Bangor[28].

Slate came in an enormous range of sizes: V'Z Empresses 26"x16"; small Empresses 26"x14"; Princesses 24"x14"; Duchesses 24"x12"; small duchesses 22"x12"; Marchionesses 22"x11"; wide Countesses 20"x12"; Countesses 20"x10"; ;ide Viscountesses 18"x10"; Viscountesses 18"x9"; wide Ladies 16"x10; broad Ladies 16"x9"; Ladies 16"x8"; wide Heade-- 14"x12"; Headers 14"x10"; small Ladies 14"x8"; narrow [illegible] 4"x7"; small Headers 13"x10"; Doubles 13"x7"; wide Doub.es 12"x8"; small Doubles 12"x6"; Singles 10"x8" and Units 10"x6".

The following were imported: Duchesses, small Duchesses, Marchionesses, Countesses, wide Viscontesses, Viscountesses, wide Ladies and Ladies. Countesses and Viscountesses were the most popular, however. Early prices are not available but throughout the 1860's Countesses sold at about £13 per thousand, and dropped to £10 per thousand in the 1870's[29]. Slate began to lose popularity in the late 1890's, probably because of the growing preference for clay tiles, popularised by 'arts and crafts' architects, such as H. Baker. In the late 1900's, locally produced tiles came on the market.

Corrugated Iron

Although generally known as corrugated iron, this material is more accurately known as galvanised corrugated sheet iron, it being the product of two distinct processes. The popularity and influence of this material is discussed elsewhere[30], but here its history will be discussed in some detail.

Corrugated sheet iron appears to have been invented about 1829[31] and became available in Britain in the early 1830's. It is mentioned in the 1833 edition of Loudon's 'Encyclopaedia'[32]. It was not galvanised and had to be painted with oil or paints. It was also quite expensive, from £5 to £10 per 100 sq.ft. Its chief use was in roofs, especially over such places as markets and warehouses. These first sheets appear to have been of a very heavy gauge[33], probably to retain strength when the inevitable rusting set in. Even by the 1840's it was still not a popular material[34].

However, during the middle 1840's, the process of galvanising, or more correctly the zink-tinning of iron, was applied to the material[35], thus more or less solving the problem of rusting. It

was during this time that the first sheets appear to have been sent abroad. The first mention of it in Cape Town is an iron store of 1847[36], but it is not known whether this was of corrugated, galvanised iron. The California gold rush of 1849-1850, and the Australian gold rush of the 1850's, saw a tremendous rise in the use of this material, chiefly in the form of prefabricated houses[37]. It was also in use by the Federal Public Works Department of the United States in the 1850's[38]. A corrugated iron store was erected in Durban in 1851[39], and the first definite corrugated iron building in Cape Town was the Iron Coaling Station, prefabricated in England, sent out and erected in 1854[42]. From then on it appears to have become increasingly available[43]. It was considered as a standard alternative to slates by the Civil Engineers Department in 1859[44].

During the 1860's, its popularity increased[45], and its use became widespread. It was used on the first Cape Town Station in 1863, not only for the roof but for the walls as well. The Building Committee for the Fraserburg N.G. Church in 1866 specified a 'Zinkdak'[46].

A large number of proprietary names can be quoted, viz. Morewoods, Tuppers, Braby & Co. and Vavaseurs[47]. By now the sheet thicknesses was down to 24 to 26 gauage, and lengths went from 6' (1.8m) to 9' (2.7m). It had also become cheaper at £1.4.0 per 100 lbs[48]. In the early 1870's a very light sheet, 28 gauge, was introduced chiefly, it seems, to take advantage of the potential market at the diamond diggings[49].

It was also during the early 1870's that the first curved sheets were introduced[50]. These sheets were especially for use on verandahs, finally displacing flat sheets of galvanised iron and zinc, as no supporting structure was needed.

The demands created by the boom towns of Kimberley and Johannesburg kept up the popularity of this material through the 1880's and 1890's. This continued into the 20th century with the Anglo-Boer War. Later came the revulsion against it as a cheap and nasty material. Its chief use in Cape Town and region always seems to have been for roofing and then only on cheaper structures or well out of sight on the more pretentious buildings.

Thatch

As it was a cheap, easily obtained material, thatch was most generally used in rural, village and even suburban buildings. The best thatch came from Vleis; Rietvlei, near Cape Town, being a prime source for this area. Some attempt was made to control the cutting of reeds by the issue of Government licences. Within the City of Cape Town, however, it was not very much used as its combustibility outweighed its advantages. There appears to have been only one thatcher in the town in 1859(51). It became illegal to use it and a number of other combustible materials within a radius of one mile of the twon house under the byelaws issued in 1861(52).

After the terrible fires of 1866 at Swellendam and those of 1875 at Stellenbosch and Wellington, thatch began to be replaced by corrugated iron in the larger towns and villages. The popularity of thatch amongst the upper civil servants in early and mid-century can partly be explained by its place in the cottage ornee tradition.

The Cape Flat Roof

It should be noted that the flat roof was still in use in Cape Town in the late 1860's(53). It had also been adopted for use in the Gaol rebuilding scheme of the 1860's with disastrous results(54), necessitating an expensive re-roofing programme. The following is a quotation from a letter to the Colonial Secretary from the Assistant Civil Engineer in 1837 about the Government House stables. After advising the substitution of a slate roof for the present flat one, he goes on to say: *'many of the beams in the present roof are rotten, as well as a considerable part of the plaster. To put it in a state of substantial repair would cost as much as a new roof and would not then be as good. Besides which a flat roof requires constant attention and repair, iron decays and is never dry as a pitched roof'*(55). Another illustration of the constant maintenance required by the flat roof are the figures engaged in patching a roof in Captain Sherwill's 'Panorama of Cape Town' in 1849(56).

A typical specification of a Cape flat roof is that given by Skirrow in a specification of 1833(57). It is as follows: *'The roof is to be laid in the usual Cape mode with good shell lime and shells as*

well as all exterior walls plastered with shell lime'.

Lead

The traditional lead covered flat roof does not appear to have been much used. Possibly the earlier failings discouraged furtner use(58).

Zinc

In domestic work, zinc in the form of flat sheets was used principally for roofing verandahs, it being the most satisfactory material until the advent of the curved, corrugated iron sheets. On public buildings, though, it seems to have been considered the most suitable material right up until the middle 1850's. An advertisement of 1855(59) gives the following list of buildings roofed in zinc: St. George's Cathedral, the two Dutch Reformed Churches, the north side of the Lutheran Church and the Dutch Masonic Lodge. After this it was probably displaced by corrugated iron except for very good class work, and where there were very difficult forms to cover, such as the roofs on the corner pavilions to the Houses of Parliament.

Shingles

Wood shingles, although apparently common(60) in the early decades of the 19th century, seem to have passed into complete disuse by the 1840's. They were apparently displaced by slate, this possibly being hastened by expensive fire insurance. The Cape Town Municipality regulations of 1861 forbade the use of combustible roofing within one mile of the Town House. This must have completed its demise.

Roof Pitch:

A slight, but steady, increase in the pitch of house roofs can be detected over the last half of the century. The standard pitch in 1850 was 25^{o}; this increased to 27^{o} - 28^{o} in the 1860's and by 1890 a 30^{o} pitch was standard. There were, of course, variations during this time, houses of 'Gothic' or 'Cottage' character had steeper pitch, up to 55^{o}, but these were rare. Even during the 1890's, roofs went as low as 25^{o} or as high as 40^{o}, usually because

of practical considerations. In the 1900's, the increasing use of tiles and the use of simpler roof forms, led to an increase up to 40^{o}.

The fashionable asymmetrical section roof of the 1890's was usually of the order of 60^{o} in front and $12\frac{1}{2}^{o}$ to 15^{o}, at the rear. The opportunity was taken to use slates or, later, tiles on the steeper slope and cheaper corrugated iron on the rear.

Roof Construction:

The construction of roofs appears to have been one of the most conservative aspects of building construction at the Cape during the 19th century. Except for large spans, that is over 30'0" (9m), the universal roofing system used was that of the king-post truss. This ILL 416
average span of approximately 25'0" (7.5m). These trusses were placed at about 10'0" (3m) centres. The usual configuration of tie beam, king-post, principal rafters and braces supported a ridge piece and purlins upon which the common rafters, spaced at 12" to 18" (,30m to ,45m) centres, sat. Examples of these are shown. ILL 416

With the use of corrugated iron, the common rafters could be dispensed with, the sheets themselves spanning from the purlins. By the late 1870's, it would appear that even with a slate covering, the common rafters had been omitted, the trusses then being closer space. By ILL 416
the 1890's, a certain amount of refinement, such as reducing the size of the various elements, had taken place, but the king-post was still the dominant truss. By this time though, other, more sophisticated forms were in use, such as the bowstring truss as used in schools and a lattice truss, used in the asymmetrical pitched roofs.

During the period 1840 to 1870, most of the wood specified for timber construction was Memel (Baltic fir) but, by the end of the century, it was almost invariably a variety of North American pine.

Slates were either fixed to boarding or battens. The former method ILL 417
seems to be the most common, 9" x ¾" (225 x 68mm), 12" x 1" (300 x 25mm) rough boarding, being used for the purpose. The slates were then nailed onto this using composition nails boiled in oil[61]. A mirimum of 3" (75mm) overlap was given in the case of Countess slates or 4" (100mm) for Duchesses[62]. Where battens were used,

these were in the order of 3" x 1" (75 x 25mm)[63]. The fixing and overlap were the same as for boarding. In better class work, it would appear that slates on battens were also rendered underneath with mortar to increase their weather resistance.

Although an excellent roof in its day, the slates were not really proof against the Cape winds. The action of the strong wind with its constant buffeting, loosened the roof, producing leaks.

The method of fixing corrugated iron does not appear to have changed much from the time of its earliest use. A specification of 1863[64], gives the following directions: 'cover the same with Tupper's best galvanised iron, secured to purlins with 3" galvanised iron screws with lead washers bedded in white lead and having a lap of not less than eight inches'. Purlins were usually in the order of 3" x 3" (75 x 75mm).

In the best work all the various roof and gutter flashings were carried out in lead, 4 to 5 lbs lead being the usual quantity specified[65]. In cheaper work, zinc was used[66] and from the 1860's onwards, galvanised iron flashings were used for ridges and hips on both corrugated iron and slate roofs.

The standard treatment for the eaves, except where this was hidden behind a parapet, was to project 9" (275mm) and to box it out very plainly in wood. A cast iron or galvanised iron gutter of varying size, usually 5" to 6" (125 to 150mm) was fixed to the fascia board. The profile of the gutter was of the O.G. type. During the 1870's and 1880's, the fashion for bracketed eaves was met by the use of precast concrete elements, which were fixed by an iron spike into the brickwork under the eaves.

Although cast-iron roof crestings are shown on a drawing of 1868[67], it would appear that these, along with the other cast-iron accountrements, only began to be popular in the 1880's, having their hey-day in the 1890's,when they were to be found on all types of buildings.

Ventilators:

As architectural elements, ventilators do not appear to have existed until the 1850's. Two early examples date from 1852 and from 1858 ILL 418A ILL 418B

After this, it became common on churches to provide ventilators in the form of fleches or dormers such as the ones shown. By the late 1880's, ventilators became a prominent, designed element on the roofs of schools and hospitals. Patent galvanised iron ventilators such as Boyles, were in wide-spread use in the 1890's, especially in conjunction with corrugated iron roofs. ILL 418C ILL 418D ILL 418F

Chimneys:

The accompanying illustrations give a fairly accurate indication of the evolution of the chimney from a simple brick shaft, topped by a simple weather moulding as shown, to the very elaborate concoctions of the 1890's, and then back to the simple tapering form of the 1900's. Occasionally a more elaborate type is found, as on the S.A. Museum and Library. Generally speaking, chimney pots are seldom used but did become more common in the 1890's. The few surviving examples before that date appear to be mainly of the 1850's and to be of a Gothic type imported from Britain. A squared, fairly elaborate type is found on houses dating from the 1890's, an example of which is shown. The round, tapered, locally produced pot became the standard chimney capping from the 1900's on. ILL 419 ILL 420 ILL 421 ILL 419D ILL 421A ILL 421D

Bricks:

The nominal size of bricks produced locally throughout the Victorian period was 9" x 4½" x 3" (275 x 112 x 75mm). Well-burnt bricks actually measured somewhat less than this, being usually about 8¾" x 4¼" and some earlier bricks being as small as 2½" in thickness. Underburnt bricks were larger than the nominal size, often being as large as 9½" x 4¾" x 3".

Cape bricks varied enormously in quality but they were mostly very poor, this stemming chiefly from a shortage of suitable fuel(68). Two types of brick were made until the introduction of the first proper kiln in 1897. These were known as hards and slops(69). Hards were produced by mixing the best clay with coal dust and burning them in the traditional stacked kiln, as is still used in country districts today(70). This produced a reasonably sound brick which was again divided into two classes, best hards and seconds. The former was held to be as good as imported bricks(71) and could be

used for facework. The seconds were generally used for better class work and for most buildings between the foundations and the window sills. They could not be left exposed[72]. Slops or commons, were produced by burning bricks made of brick earth with wood. They were generally produced in the upper parts of lable valley[73]. These bricks were very porous and not very strong, as they were not properly bu They could only support a single storeyed house[74].

Good clay is available over virtually the whole Cape Colony. In the early Victorian era it was customary to make bricks on site[75]. There were also numerous small brickfields, especially in the 1860's, but in the 1870's and 1880's, these seem to have concentrated at Observatory and Mowbray with one large one at Green Point.

Because of their unreliability bricks were often specified by the maker's name; Exksteen's bricks being regarded as a superior brick in the 1840's and 1850's[76], while Spenglers was considered a good brick c. 1860[77].

Although facebricks were made locally, most large buildings used the imported article. The most likely explanation for this is that the relatively primitive methods used and the small scale of production could not guarantee colour. References to imported English facebrick occurs throughout the 19th century, the Houses of Parliament, for example, are faced with dark red Suffolks[78].

Another factor contributing to the popularity of imported facebricks was the high cost of local bricks; good hards could cost as much as £4.10.0. a thousand in 1860. At that time the average price for seconds was between £ .17.6. and £2.8.0. Slops cost 18/- to 24/- a thousand. The reason for this was the scarcity of fuel locally, and the consequent need to import coal.

Brickwork:

Because of the poor quality of brick, external walls were never less than 1½ bricks (14" or 35m) thick. This was to prevent rain penetration. Internal walls were generally one brick thick although, very occasionally, a half brick wall was used. However, because of the poor bond, these are very rare. Facebricks, presumably because of their cost, were actually applied as a veneer to the buildings, ILL 423

the headers being most snapped to save bricks, the occasional one being bonded into the wall behind. Most face brick walls are thus two bricks (18" or 450mm) in thickness[79].

The mortar generally used was ordinary clay and this was still in use in domestic work in the 1900's. This gave a joint of about ½" (13mm). For better class work such as public buildings, external work was laid in a sand/cement mortar[80] and from 1889, the Cape Town City Engineer insisted on its use in all larger buildings[81].

Bonds used were English bond for one brick walls and the same for one and a half brick walls. Facebrick was generally laid in Flemish bond. ILL 423

Brickwork was generally carried across openings by a low segmental arch comprised of a soldier course set in lime mortar. Windows were usually backed by a wooden lintel. Where a larger opening was required, windows were often fixed in couples or even in triples with brick piers, usually 9" (275 mm) thick between each window. This is only found in later work, though.

Building Stone:

Although the Cape abounds in stone, there is actually a scarcity of suitable building stone, especially sandstone[82]. This is especially true of the Western region where it is only present as Table Mountain sandstone and at Nieuwoldtville, Oudtshoorn and Mosselbay. Nevertheless, a number of stones were used for building purposes in Cape Town and region.

The most commonly used stone in Cape Town was 'bluestone', the local name for an altered shale from the oldest geological formation, the Malmesbury beds. It was chiefly used for foundations and rubble walling. Bluestone is very hard and very difficult to shape and finish[83]. Although called bluestone, it has a large variety of colours ranging from green to buff and brown. It occurs low down on the slopes of the Table Mountain Valley and so was readily available for quarrying. There are many disused quarries along these slopes. The Strand Street quarry was worked for this stone right up until early this century. The Sacred Heart Convent in Somerset Road (1877), is an example of this stone, although it was very

expensive to bring it to this degree of finish(84). The Metropolitan Methodist Church is another example of a similar stone but here the stone is hammer dressed.

Another commonly available stone was 'iron stone' or ysterplaat stone, a decomposed granite found on the Cape Flats. This was only suitable for foundations, being too stratified for working.

Table Mountain sandstone is a close grained quartzide, ranging from red, brown, blue and grey to white. It is most suitable for rock-faced ashlar work and can take a chiselled finish but is not capable of being finely worked. It was used throughout the 19th century, examples being the Anglican Church at Kalk Bay and St. George's Cathedral. The cathedral has a hammer finish.

There is no freestone in the Cape Peninsula and this led to the importing of suitable store. Palmiet River stone from near Port Elizabeth was often used when finely dressed stone was required. St. Pauls, Rondebosch, is partly built of this stone, while the Harbour Board's Offices was also faced with it(85).

Other imported stone included some from Caledon(86) and even Bath stone. The City Hall is faced with this.

There is no local limestone, but there is a deposit at Saldanha Bay which was worked in the 1890's. Two major buildings which were faced with it were the S.A. Museum and the Old General Post Office but the quality of the stone seems to have varied so much that it was not used again.

Granite is readily available in Cape Town and was available from two quarries, the first being that at Kloof Nek and the other at Clifton. It is of a coarse variety with a marked sheet structure which restricts the size of block available. However, it has been used quite successfully; the Rhodes Building and the base of the City Hall being two examples of this. The use of granite only appears to have come about from the 1860's on, chiefly because of its use in the new harbour works at the Alfred Dock. Before that it was occasionally used, Sir Antony Oliphant's house in Harrington Street(87) being a rare example. This is almost certainly because of the expense of hand dressing.

The best variety of granite available locally is that from the southern end of Paarl Mountain. It works to a white-grey finish. The availability of cheap transport from 1863 on, in the form of a railway, led to its extensive use in Cape Town. The base of the Houses of Parliament is in this stone as is the Australian Mutual Building. Other buildings in which it was used were the base of the Old General Post Office, the Union Castle Building and the S.A. Mutual.

Outside Cape Town, the two most famous stone building areas are Mossel Bay and Oudtshoorn. Here free-working sandstones are available. The stone at Mossel Bay is not so freeworking as that at Oudtshoorn. It is a yellow-brown colour and was obtained from quarries near the lighthouse. Two examples of this stone are the Custom's House and St. Peter's Church.

The sandstone of Oudtshoorn is fine grained of a full yellow or light brown. There were a number of quarries near the town. Prominent buildings of this stone are the Moeder-Kerk(88) and St. Judes.

Apart from these areas, there is little good building stone, the local stone generally being used for rubble walling. At Riversdale, a blue slate stone, somewhat like blue-stone, was used on St. Matthew's Church(89). At George, a rough stone, hard to work, was used on St. Mark's Cathedral(90). At Caledon, freestone quarries are reported in the 1870's. A superior freestone is noted in 1860 at Tulbagh(91).

Stonework:

Besides the castle, there was virtually no exposed stonework prior to 1850. This is almost certainly because no local stone besides granite would work to the fine ashlar finish required prior to then. The first examples of dressed stonework are to be found in the churches of the 'correct' Gothic revival. Example A is a portion ILL 424
of St. Paul's, Rondebosch, showing the roughly dressed sandstone set in random rubble walling which was the best that it could be brought to then. The dressings, which are brought to smoother surface and properly squared, are of imported Palmiet River stone. A rare example of stone in domestic work is that on Dock House (1861).

Here blue-stone roughly dressed and squared is set with finely worked granite dressings. The cost of this would have precluded it on ordinary work. Example B, from St. Aloysius Hall (1868), is a part of a form of polygonal masonry carried out in small units of blue-stone with occasional bands of facebrick. Again, this is confined to the show front of the building. Example D, a portion of the Metropolitan Methodist Church (1879), shows the blue-stone, hammer dressed, squared and coursed with imported dressings. It presents a fine appearance but the expense through wastage must have been high. Example C, St. Paul's, Bree Street (1878), shows the ubiquitous blue-stone but with polychromatic brick banding and dressing. This would have been a cheaper alternative than D. Example E is the basement of the Houses of Parliament (1885). Here the granite has been worked to a fine, lightly hammer dressed finish and set in regular coursing with a recessed joint. Another example is the 1880 additions to St. Paul's, Rondebosch. Here the sandstone has received a hammer dressed finish and set in squared masonry occasionally brought to course. Example F is typical of the handling of sandstone in the 1890's where a rougher texture was acceptable but it was still squared and set in regular courses.

Foundations:

ILL 422

Because of the porosity of the Cape brick, stone foundations were universally used. Blue-stone or sometimes iron stone was the material from which all the foundations were constructed in Cape Town. In other areas any convenient surface stone was used. Blue-stone seems to have been favoured because its stratified nature allowed it to be quarried in roughly squared blocks, making it easier to lay. It was almost always laid in clay mortar even on large buildings, but occasionally a Portland cement mix was specified on a particular building(92).

Where slop bricks were used, this stonework was carried up to window sill level to keep the bricks from becoming too damp(93). The usual width of foundation below the one and a half brick external wall was 2'6" (750mm).

During the late 1890's this form of foundation began to be replaced by concrete as part of the City Engineer's drive to improve building construction methods(94).

Cement:

This was not produced locally until the 20th century. It was generally imported from Britain throughout the 19th century. The type of cement most generally used up to the middle of the century was Parker's 'Roman' cement(95). This was made from cement stones found on the foreshore of the Thames Estuary and around Harwich. By a combination of burning, slaking and crushing, it was made into a powder for use. Roman cement was imported until the 1870's. In 1845 the first reliable Portland cement was produced(96). This was made by mixing crushed limestone and clay with water, drying it out, putting it in a furnace to calcinate and finally grinding it into a powder for use. It was in use in Cape Town by the 1860's.

Concrete:

The first mention found of this material, i.e. a compound of stone, sand and cement, is in connection with the foundations of the new chancel of St. Paul's, Rondebosch, in 1848(97). It was also used in large quantities in the foundations of the S.A.Library and Museum buildings in 1858(98), but it was not in general use until enforced by the Cape Town Municipal regulations of 1896(99). The mix required was 1 to 8.

Stucco:

Stucco or 'compo' to give it its 'trade' name, was a mixture of Roman cement and clear gritty sand in equal parts (1842); it was trowelled until set(100). Portland cement was also used instead of Roman cement in the latter part of the century. Compo was seldom used in the Cape and then only for the highest quality decorative work because of the expense in importing the cement.

Plaster:

The most commonly used form of plaster, both internally and externally was that composed of lime and sand. An 1834 specification gives the following proportions: externally, two coats of shell lime and sharp sand mixed two to three; internally three coats on lathing was required. The plastering of walls on to lathing seems to have been used only in exceptional work. It is an imported British practice

and is found only in ceilings after this. Another specification, this time of 1840, gives a proportion of one to two for a shell lime,and sand plaster for external use. Plaster of this nature was generally used for most work right up until 1910, presumably until Portland cement was produced locally. Occasional exceptions are met with, such as the use of cement gauged plaster inside the Metropolitan Methodist Church to tone down the reflection from the walls. A Portland cement render is used on the spire of this church but the mix is unknown. The Cape Town building regulations of 1896 give the following proportions for plaster: lime one part, to three parts sand or one part cement to six parts sand.

Plasterwork:

The usual treatment of external plastered brickwork was to rule in courses at about 9" (225mm) apart to imitate stonework, but this was done only on the front facade. In most cases this imitation stonework was only nominal but sometimes great care was taken to simulate it.

Almost without exception the favourite way of making the external corners of a building was quoining. In the simplest case, raised flat bands of plaster were used to imitate the long and short of corner stonework. On more elaborate work, rusticated margins were introduced or even vermiculation. Sometimes a slightly raised diamond shape was used as well.

Facebrick, used with cement dressings or with stone on better quality work, became very popular during the 1890's, especially the use of dark reds pointed with white or black cement. Subsequent generations have, however, painted most of the buildings that have survived, so few remain in their original state.

At this time, there was also a vogue for imitation facebrick. Here the plaster was coloured a deep brick red and then grooved both horizontally and vertically to represent brickwork. Into these grooves was laid a raised white pointing. This can be deceptive, as it was obviously meant to be.

Terra cotta facings, following the vogue in Britain and America, were introduced into commercial buildings around 1900(101). Colours vary

from yellow buff to earth red. They were all made in Britain and sent out to Cape Town. The hard impervious finish made them an excellent substitute for stone.

Joinery:

IN the field of joinery, what is perhaps remarkable is the continuity in the use of certain profiles on the commonly used mouldings. Architraves preserve virtually the same shape throughout sixty years. This is shown graphically. However, they do diminish in depth reflecting a desire to save money at the expense of effect. Bolection mouldings, on the other hand, show both an increase in size and profile, becoming very heavy. The use of a lightly moulded bottom panel on front doors, a typical Georgian touch, was replaced by a bolection moulded panel similar to those above. Skirtings were made in a variety of sizes and had a common profile. Almost without exception all joinery, that is doors and windows, mouldings etc. were imported ready made, especially after the 1860's.

ILL 425

ILL 426A

Doors:

The front doors of houses were always the most elaborate. A hardwood such as teak was generally used although pine was also used, especially during the 1890's even on quite expensive houses. There were two types of door, the two leaf and one leaf. It is difficult to ascribe any priority to either of these, quite substantial houses being found with single leaf doors and quite small cottages with double leaf ones. However, the larger buildings inevitably had a more elaborate door. During the 1890's, the double leaf seems to have passed out of fashion completely. The semi-circular or elliptical fanlight with its elaborate tracery persisted into the 1840's but, by the 1850's, the straight-headed fanlight with simple rectilinear subdivisions generally set out with squares in the corners, was in use. This type persisted, with the exception of some more decorative shapes in the 1870's, until the last decade when there was a trend towards roundheaded fanlights. Narrow side lights remained in use throughout the century in larger houses. The trend, as shown by the examples, was from light, complex but elegant designs to simpler ones which in turn became more and more elaborate, chiefly with machine-made mouldings. This reached its zenith,

ILL 426A

ILL 426D

ILL 426A

ILL 426B

ILL 427C

ILL 427D

as with the other building elements, around 1900.

Internal Doors:

In the better houses of the 1840's and 1850's, six-panel doors remained in use. The moulding to the panel was usually part of the surrounding frame and not planted like later work. During the 1870's, the four-panel door became the norm, being used well into this century. A softwood such as deal or pine was generally used. Common door sizes were: 2'6" x 6'6" (750 x 2,000mm) and 2'8" x 6'8" (800 x 2,050mm). Earlier doors sometimes went up to 3'0" (900mm) in width. ILL 428

In the 1870's, it became popular to have glazed doors in the passage dividing off the service part of the house. These were generally single leaf with simple rectilinear tracery in the upper panel,often with a similar fanlight above. The glazing was of a rough-cast, obscure glass with coloured or embossed glass side panels. ILL 428C

Windows:

The double action sliding sash was the universal window throughout the century. Early windows were either six pane (3 x 2) or twelve pain (3 x 4) depending on the size of the window. During the 1870's the two pane began to be used and by the 1880's, even the smallest houses in Cape Town had them, in front at least. By the 1890's, the full pane window was supreme but again mostly in front. A curious aspect of speculative building of the 1900's was the use of a full lower pane with a six light pane above. This was probably a belated genture to the Queen Anne style. Casement windows in domestic work are very rare; those on the Government House Gardens Cottage seemed to have been used for stylistic reasons. Casements are more in keeping with a 'Gothic' design. ILL 429 ILL 430

A mixture of different types of wood seems to have been used in the better work. The specification of the S.A. Library called for the frames to be of the best red or yellow deal with sashed of teak. However, most windows were of deal or pine. As with most items, certain standard sizes were available. Some of the common ones were 6"0" x 3'4" (1,800 x 1,000mm); 6'6" x 3'8"; 6'8" x 2'0"; 6'8" x 3'0"; 6'8" x 3'4" and 6'8" x 3'8".

Shutters:

These were generally known as 'Venetians' and were usually fitted in pairs to most of the rooms of a house, even on quite humble homes. They remained in use throughout the century. They were almost always of a hard wood such as teak, but also came in pine. They were mostly imported in standard sizes to match the windows.

Internal Shutters:

These were a Georgian custom which slowly passed out of fashion. They required elaborate workmanship as the example shows. ILL 429E

Window Surrounds:

The treatment of window surrounds on the more elaborate architectural works has been dealt with elsewhere in this study(102). In this section I will only be concerned with the domestic scale.

The simple punched hole type of window opening with no elaboration of the reveals, was the usual treatment on most buildings up until the 1870's, and this lasted into the 1880's. During the 1860's, however, a desire for a more fashionable appearance was met by the use of such items as hood mouldings and raised margins. It was about this time that the bracketed cornice came into fashion. This lasted into the early 1880's. The example shown is a curious hood moulding of 1874. During the 1880's a variety of raised margins were used on the more elaborate house, whilst in the 1890's a huge variety of richly moulded and pedimented forms were used to frame the window opening. The variety is bewildering. Even on quite humble dwellings, flat plaster bands were formed into complex shapes around the window void. ILL 429 ILL 430

Shop Windows:

The story of the shop window in the 19th century is quite simply that of bigger and better. If we compare the illustration which shows shop windows of the 1840's and 1850's in Adderley Street, it will be seen that they are still of the multi-paned Regency type. The next example shows shop fronts of c.1864 illustrating the use of large panes of plate glass. The largest panes seem to be in the order of 4' x 7' (1,200 x 2,100mm). In the 1870's, even larger ILL 6 ILL 150

panes were used but the wodth appears to be still in the region of 4' to 5' (1,200 - 1,500mm). It was during the 1890's that the first truly enormous sheets were used, firstly on the new large stores in Adderley Street. Panes as large as 10' x 7" (3,000 x 2,100mm) were used on Garlicks in 1893[103].

Glass:

This was yet another imported item, mostly from Britain but German and Belgian glass is mentioned[104].

In the 1840's, Crown glass was virtually the only type used at the Cape. It was made by molten glass being formed into circular plates of four to five feet in diameter. From this the panes were cut. The largest squares produced by this method were 33" x 25". It was available in three qualities and sold by the crate, the price being the same but the difference being in the number of tables contained[105]. Plate glass, that is glass cast in large sheets and polished, was available in the 1840's, but was expensive[106].

The abolition of the excise duty in 1845 stimulated a great demand for glass and a huge variety of types was manufactured by the 1870's. In 1876, three main types were available in England: crown, sheet and plate [107]. The production method of crown had not changed but slightly larger sheets, up to 38" x 24" were not available. Sheet glass was formed by blowing a cylinder, cutting it open and flattening it out. The best quality was patent plate which was the most popular glass. It was sold by weight, e.g. 15 ounces to 42 ounces per square foot. There were four qualities. The maximum sizes varied from 55" x 36" to 75" x 45" (1,380 x 900mm to 1,900 x 1,125mm). Plate glass itself was available in sizes up to 80 square feet and came in two qualities. Its usual thickness was ¼" (6mm), but thicker was obtainable. Besides clear plate there was rough plate for use in roofing, skylights, etc. It was not polished. There was also patent rough plate which was an obscure glass. It was also made in a fluted variety.

Besides these, there was coloured glass, available from the 1840's onwards. This was obtainable in plain colours such as red, violet, blue and green. From the 1860's, also obtainable in Cape Town, were

ornamental and embossed glasses. These usually had small patterns cut into the coloured background, or cast in. They were very popular from the 1870's on in French doors or glazed passage doors and eventually in the small lozenge-shaped verandah end window, which became a leitmotif of late Victorian vernacular.

The sizes of panes available varied enormously and a huge range was imported; only a few typical will be given, but suffice it is to say that sizes increased vastly over the period studied. In 1828, 7" x 9" (175 x 225mm) was common. In 1845, 9⅝" x 7⅛" (244 x 183mm), 10½" x 8⅜" (263 x 207mm), and 12½" x 10⅛" (316 x 256mm) was available while the following year, as large as 16" x 14" (400 x 350mm)was imported. By 1858, sizes varying from 24" x 15" (600 x 375mm), 30"x 9" (750 x 225mm), 40" x 28" (1,000 x 700mm) to 60" x 18" (1,500 x 450mm) and 55" x 45" (1,375 x 1,125mm) was obtainable. A plate glass ranging from 50' x 30" (1,250 x 750mm) to 75" x 60" (1,875 x 1,500mm) was advertised in 1865. In 1877 sizes ranging from 7" x 9" to 45" x 30" were still commonly available.

Sizes actually used in windows that I have measured are as follows: 12" x 9" (c.1850); 14" x 12" (c.1874); 12" x 18" (c.1877); 16" x 32½" (c.1899); 30" x 36" (c.1890).

Cost, I have not been able to follow accurately, but in 1837, a 12" x 10" cost 1/3 which meant a total of 15/- for glazing a 12 pane window, a large item, equal to about 3 days pay for a skilled workman.

Ceilings:

The usual form of ceiling in the early Victorian period continued to be that made of lath and plaster (108). Strips of wooden lathes about 1½" x ¼" (38 x 6mm), were nailed direct to the joists or tie-beams at close centres to form a key for a two coat plaster finish(109). This was generally about 1½" (38mm) in thickness. It was still in use in the 1870's, but by the 1880's seems to have been completely ousted by timber boarding, even in high class work e.g. Hawthornden.

Cornices were formed in-situ, often of decorative patterns. This was one of the last areas of craftsmanship to be practised at the Cape. IN the best rooms, ceiling rosettes of elaborate character were formed; a pre-1880 photograph of the interior of the S.A.Library(110)

shows a pair of these.

Ceiling rosettes of papier mache and carton pierre imported from England were also available and used. That shown is an example exhibited at the Great Exhibition of 1851[111]. ILL.431

'Ploughed and grooved' ceiling boarding was available from the 1860's and was the universal ceiling by the 1880's. It was usually in the form of matchboarding, 6" (152mm) in width, with a dummy groove in the centre[112]. Matchboarding of only ½" (13mm) in thickness was available in the 1870's [113]. Its relative cheapness and ease of erection ensured its popularity. Pre-cut moulded wooden cornices of various sizes, ranging from 1½' (38mm) to 6" (152mm), were used to finish the ceiling. In the best rooms of larger houses, quite elaborate designs were formed on the ceiling by the use of moulded timber sections. These were then often painted in rich colours[114].

In rural areas, calico ceilings were still used, often as a temporary measure.

Pressed metal ceilings do not appear to have come into general use in Cape Town until the 1900's[115]. These were in embossed plates about 2'0" (600mm) square and fitted together to form patterns and designs. Deep pressed metal cornices of equal elaboration completed the effect. They provided a rich, if somewhat mechanical ceiling. As was usual, a vast variety was available.

Ceiling heights varied but ground floor ceilings were seldom less than 11'0" (3,3m), more usually 12'0"(3,6m), and sometimes as much as 14'0" (4,2m). Upper floors varied from 10'0" (3,15m) to 12'0" (3,6m).

Floors:

The suspended timber floor was by far the most common. The material used at mid-century was generally memel but towards the end of the century, this had been replaced by North American pine. A typical size of boarding used in 1858 was 6½" x 1 1/8" (165mm x 28mm) although 9" x 1" (225 x 25mm) deals were common in cheaper work[117]. By the 1890's, 6" x 1" (152 x 25mm) tongued and grooved boarding was standard. These boards were nailed to joists set 12" (300mm) apart. The joists varied in size according to the span, but were seldom

less than 4½" x 3" (118 x 75mm) and sometimes as much as 9" x 6" (225 x 152mm). The joists spanned from wall plate (generally 4½" x 3") to wall plate. It was usually supported on sleeper walls or piers at 6' to 7' (1,830 to 2,100mm) intervals. The underfloor space had to be sufficient to prevent the timbers rotting and a Cape Town byelaw of 1899 required this to be a minimum of 2' (600mm).

Upper floors were also of timber, the boarding being of the same size and thickness as below. Joists were also placed at 12" (300mm) centres but as clear spans were required, deeper timber sections were used. A rough rule of thumb seems to have been 1" (25mm) of depth of timber for 12" (300mm) of span[118]; thus a span of 22' (6,6m) required an 11" (275mm) timber. The width was standardised at 2" (50mm).

Encaustic tiles, such as those produced by Mintons, became popular in the 1880's[119]; previously they had been used only in churches[120]. Their principal use was in entrance halls and passages but later, stoeps were finished with them and, finally, patns. They were available in a variety of colours, the most popular being ochres and earth reds. Usually they were set in a repetitive, geometric pattern with a border. Brick floors, because of the poor quality of the local brick, were seldom used. Floated concrete floors were also expensive because of the imported cement but were used occasionally as kitchen floors[121]. Linoleum was in use from at least 1890[122].

Fireplaces:

The imported cast-iron grate or 'register stove' continued in universal use right through the period, the elegance of the Georgian models giving way to the more solid types typical of High Victorian design. The semi-circular head in various designs were most popular in the 1870's and 1880's. In the early 1890's, the square-headed grate with an inset of ceramic tiles in the splayed sides was fashionable and is found in the 'best' rooms of the time. ILL 432

The fireplace surround was of two types, one of wood and the other of imported marble. Earlier surrounds, such as those shown are generally of wood and still have delicate Georgian characteristics such as roundels, whereas later designs are robust concoction- ILL 432A ILL 432C

machine cut timber. Prefabricated marble surrounds varied from being quite plain to elaborate, depending on where they were used. Their colour varied from white-grey to dark liver-red. Occasionally there was a touch of polychromy. ILL 433B

The fireplace with some sort of mirror overmantle was invariably the chief architectural feature in the rooms of most houses.

Stairs:

The timber dog-leg staircase was the general form of staircase, particularly in houses, where it was usually of unequal lengths so as to give headroom under the landing(123). Windows were often incorporated into these landings. The general structure of the stair was of boxed softwood treads and risers carried on a wall, and outside stringers planning between landing beams. Widths varied between 2'6" (750mm) and 4'6" (1,350mm). A typical tread was 10" (250mm) with a 1" (25mm) overlap. Risers were generally in the order of 6½" (165mm). Service stairs were, of course, much narrower and steeper. Earlier newel posts, although turned to give a profile, were quite light. Later ones were often massive affairs. Balusters also shared this characteristic as they were plain timber sections of the order of ½" x ½" (13 x 13mm). Later balusters are usually heavier and were turned. In the larger houses from the 1880's onwards, cast-iron balusters were often used(124). During the 1890's, staircases were usually incorporated into elaborate hall screens(125)

Bay Windows and Gables:

These are dealt with together as in their most characteristic form they are inseparably welded together. ILL 434

As described elsewhere, the prominent, front-gabled roof is rare in Cape domestic architecture before the mid 1870's. After this, it became increasingly common, and by the 1890's it was a leit-motif of the typical late Victorian house, persisting well into the 20th century. The earlier gables were given elaborate wooden barge-boards and finials, as shown in the examples. After the late 1870's, the stylistic treatement of the gable became linked to that of the bay window that was invariably placed below it. An exception to this ILL 434A

was the half timbered gablet found on the terrace houses of the 1890's.

The bay window, that desideratum of Victorian domestic architecture is rare in Cape houses before the late 1870's, only being found on substantial villas of the mid-century. Examples of these are 20 Breda Street. Taunton House and Dock House. This is almost certainly due to the twin factors of cost and lack of local building skill. Even in North America it was then reckoned a costly item[126]. The standard form of bay window was a semi-octagon, with a large window flanked by two smaller ones in the splayed walls. In the earlier forms, the bay is placed on the side of the house so as not to disturb the symmetry. The usual form of roofing was to place a steeply-pitched lean to or flat galvanised or zinc roof over the bay The other treatment was to give it a flat roof and parapet. By the early 1880's, it had spread to the smaller villa where it became associated with the gable. ILL 316 ILL 316 ILL 329

For examples of the different treatment of the gable and bay window ensemble of the 1880's, see examples shown. By the 1890's. however, the variety becomes bewildering and only a few examples are shown. About this time a cheaper form of bay window was evolved by carrying the semi-octagonal form up to the roof, which was then carried over it. During this time, a last innovation came into being. This was the curvilinear gable, derived fairly directly from commercial buildings of the 1890's. This reached extraordinary heights of decorative exuberance in plaster and pre-cast ornament. ILL 435 ILL 435

The Verandah:

Verandahs invariably formed a distinctly independent structural element and so could be treated in a wide variety of ways which were more dependent on fashion and means than on other factors. As the integration of the verandah in the planning of the house is dealt with elsewhere, here I will be concerned with its structural forms and the materials used. ILL 436 ILL 437

Wood was by far the most popular and widely used material throughout the 19th century. Two distinct lines of treatment can be ascertained. This was based on the type of wood used.

Teakwood verandahs of the lattice work and trellis type which originated in the 18[illegible] and whose evolution and development have been traced at some length by Lewcock[127], continued in popularity into the 1850's, but by the late 1870's had become light single storeyed structures in elegant latticework. By the mid-1880's, they had disappeared completely, ousted by cast-iron or heavier wood structures.

Verandahs of softwood were originally of a simple post and beam variety, such as those found on the cottage ornee. Decoration was confined to the valance boards. Often in the more utilitarian work, the structure was equally utilitarian. During the 1870's, decorative brackets, often of a very elaborate shape, were added. During the 1880's this evolved into a fully blown 'stick style' in tne more elaborate, double storeyed versions. Here square sectioned, machine-cut timbers were composed into a variety of geometric patterns. Simpler versions are found in government work of the time. During the 1890's, the use of turned timber posts with pre-cut fretwork came into fashion to suit the more elaborate taste of the time. The 'stick style' persisted into the 1900's.

During the 1850's and 1890's, iron gas-pipe sections were used for verandah columns. These were of 2" to 3" (50 to 75mm) in diameter, usually completely plain but occasionally with small wrought iron brackets.

Early verandah structures were often quite substantial and therefore expensive. The teakwood frame with a zinc roof was the most common. The advent of corrugated iron simplified the roof, whilst the use of curved sections from the mid-1870's enabled such a light and cheap form to be evolved that it came within the reach of most types of houses, new and existing. (See illustrations for examples of the typical sections used in the late 19th century).

Light cast-iron columns were used intermittently to support verandahs throughout the century; examples from the 1840's and 1860's were in existence. However,these were all of the load-bearing,structural type without the distinctive decorative brackets of the later, specifically designed verandah poles. Columns of various lengths and designs are to be found advertised in newspapers from the late

1860's on. Ornamental columns for verandahs are specifically mentioned in the earliest McFarland's advertisements of 1879[128], but there is no surviving ironwork of this type earlier than c. 1882 and no indication in contemporary photographs or sketches of its use earlier than this. Some of the first examples of ornamental cast iron as used, are of a single storeyed trellis work type[129]. The more characteristic column with bracket and balcony panels appear to have come into use in the mid-1830's, e.g. Bertram Place. The ILL.318
1890's and the first few years of the 20th century were the hey-day of its use. The most typical examples complete with columns,brackets, ILL.385
panels and friezes date from this time. Outside Cape Town again it was around the turn of the century that it came into vogue, viz. at Outdtshoorn. ILL.402

From 1900[130], a local variety was produced by Messrs, Hudson and Hopkins at the Phoenix Iron Works. They produced a whole range, of which a number of examples remain[131]. Products of this foundry are found regionally. Most of the items shown in the catalogue of c.1903[132] have an Australian origin, with the majority coming from McLeans Foundry, Melbourne. This argues strongly for either Hudson or Hopkins having worked at that particular foundry before arriving in Cape Town[133].

Until c. 1903,all cast-iron was imported and even after this the majority still came from Britain. McFarlane of Glasgow seem to have been the chief suppliers, but others were the Falkirk Iron Company and the Sun Foundry, Glasgow. There was also some English cast-iron and at least one surviving example from the above mentioned McLeans of Melbourne[134].

Around 1910, there was a rapid decline in the popularity of cast-irson as only rural examples are found after this. Cast-iron was always a relatively expensive item and was often used in conjunction with decorative timber work. A cheaper form of verandah was to have a cast-iron lower structure and a wooden upper balcony. Often wooden brackets were used with cast-iron columns and even cast-iron brackets with wooden columns.

Sanitary fittings:

Patent water closets of various types were available and used through-

out the 19th century. However, they were at first found in public buildings[135], and in the houses of the more affluent. In Cape Town itself their widespread adoption was hindered by the lack of a proper sewerage system. It was only in the middle 1890's that this was put in hand. Until then, most W.C's discharged into cesspools.

Cape Town municipal regulations of 1861 required all premises to possess at least one closet. The great majority of these were privies of the bucket type which were emptied nightly by a municipal contractor. In rural areas, earth closets were common.

Paint:

Limewash was the cheapest and most commonly used coating. It was used on all types of buildings, both internally and externally, where it helped to preserve the weathering qualities of the lime plaster. It could be coloured by the addition of various tinting agents usually coloured earths or minerals. A number of these were available locally[136]. However, strong colours were not produced.

Oil colour paint was generally applied to woodwork and ironwork. The number of coats varied but a minimum of two was used internally with three on better work[137]. Three coats was the minimum used externally with an extra coat for better work[138]. Ironwork was often primed with a coat of red lead[139]. A large variety of colours was available. An advertisement of 1846[140] gives the following shades: Lamp Black, Prussian Blue, Purple Brown, Red Lead, Venetian Red, Yellow Ochre. Turkey Amber, Chrome Yellow, also Black, Green and White Lead.

During the 1870's a number of proprietary paints became available, paints such as 'Torbay paint' and 'Carsons paint'[141]. The latter was, for instance, advertised as capable of being applied to wood, iron, brick, stone and compo. It was available in a large range, viz: White, Light Stone, Bath Stone, Cream, Light Portland Stone, Buff, Oak Lead, Bright Red, Park Red, Chocolate, Lime Brown, Pine Green, Bright Green, Deep Green and Blue'[142].

Copal varnish was available in the 1850's and various other varnishes, such as Mandels' varnish, were available later on.

Distemper, basically a refined limewash, was also in use, but its lack of robustness confined its use to cornices and upper wall surfaces.

Colours Used:

According to Lewcock[143], whitewash together with cream, ochre and greys were the predominant colours that buildings were painted just prior to 1838. The favourite colour for external woodwork was green. This penchant for whitewashing, at least for the cheaper buildings, continued until the 1860's at least[144] but amongst the more'English' buildings there appears to have been a taste for the more fashionable cream and buff[145]. By the 1870's, the revulsion against 'chalk white and Spanish green' seems to have arrived at the Cape Although not much direct evidence remains, it is obvious from the tones of contemporary photographs that many buildings must have been sporting the new, darker coats of paint. We know from Howard's description[146] of 1876, that warehouses built in the early 1860's were painted yellow with white dressings, which also appear to have been the colours of the Commercial Exchange at the time. He also mentions the then prevailing custom of painting buildings in light brown oil paint. Another colour mentioned by Howard is that of the Colonial Offices, which were then buff with purple-brown woodwork. In 1889, the exterior of the Groote Kerk was painted in drab and chocolate. 'A very colourful appearance' was a contemporary comment[147].

During the 1890's a number of colour schemes were in vogue, of which one of the most popular was a creamy-ochre with woodwork and cast-iron a deep red-brown. Another very popular scheme was cream with woodwork and verandahs painted green, with portions of this picked out in white. During the 1900's, pale yellow with a light green woodwork was in vogue.

It was customary to paint verandah roofs in contrasting stripes. These were usually dark green and white, although a dark red and white is not unknown. This fashion seems to have been derived from English Regency architecture where this form of painting helped to emphasise the tent-like quality of the verandah.

REFERENCES CHAPTER FOURTEEN

1 ——

2 Pugin. True Principles, P 34

3 Ruskin. The Seven Lamps of Architecture,P 56

4 Quoted by P vsner. Some Architectural Writers, P 145

5 Brooks. Modern Architecture P

6 Curl. Victorian Architecture, Its Practical Aspects P 92 et seq.

7 See P 73

8 See P 183 et seq

9 eg. The G.P.O. 1897, see P 358

10 See Hitchcock. Early Victorian Architecture in Britain, P 344

11 Lewcock. Early Nineteenth Century Architecture in S.A. P 379

12 See P 7 et seq.

13 See P 554

14 Illustrated S.A. News, 11 Oct 1884

15 Baker had a strong arts and crafts background, see Greig. Herbert Baker in S.A.

16 See P 232

17 See article by J.M. Solomon in African Architect, June 1911

18 Illustrated S.A. News 1885 P 48

19 Oudtshoorn Courant. 21 May 1885

20 Summerson. Georgian London, P 152

21 See illustrations

22 This is confirmed by the advertisements in contemporary newspapers

23 See Ill 415

24 Lewcock, P 79

25 Ibid.

26 Davey. A History of Building Materials P 153

27 See P 349

28 Davey, P 153

29 From advertisements

30 See P 290

31 Loudon, P 321

32 Ibid.

33 Prince Albert's Ballroom at Balmoral was 18 gauge (1851)

34 Not mentioned in Gwilt's Encyclopaedia of 1842

35 Advertisement in The Builder of 1843

36 Laidler. The Growth and Government of Cape Town, P 310-311

37 See article by C.E. Petersen, Journal of the Society of Architectural Historians, Dec 1965

38 See Journal of The Society of Architectural Historians, March 1966

39 Kearney. Architecture in Natal P 19

40 -------

41 -------

42 See Illustrated London News, 185

43 It features in advertisements in 1857

44 Found on a printed questionaire of 1859

45 It was advertised with increasing frequency

46 See P 194

47 From advertisements

48 Cape Argus, March 1870

49 Appropriately named The Buffalo Brand

50 Advertisements in Cape Times 1877

51 From Cape Almanac of 1859

52 See Government Gazette 10 Dec. 1861

53 Mentioned in advertisement in Cape Argus in 1866

54 See P223

55 Letter of 21 Dec 1837, correspondence of the Surveyor General (C.A.)

56 See illustration No

57 Letter Dec. 1833, correspondence of the Surveyor General (C.A.)

58 Lewcock, P 385

59 In Cape Almanac of 1855

60 Lewcock, P 320

61 Specification of 1858 in P.W.D. Contract Book of that year (C.A.)

62 Ibid.

63 Ibid.

64 For Somerset East Gaol in P.W.D. Contract Book 1863 (C.A.)

65 Specification 185[illegible]

66 Specification of 1866, P.W.D. files

67 See Ill 162

68 City Engineers Report in Mayor's Minutes of 1898

69 See Select Committee Report, S.C. 9 of 1860, Parliamentary Annx (C.A.)

70 In 1977 there was a brickyard of this sort outside Caledon

71 See S.C. 9 of 1860

72 Ibid.

73 Ibid.

74 Ibid.

75 Most advertisements for land mention this as an inducement

76 Mentioned in Roeland St Gaol Specification of 1855

77 S.C. 9 of 1860

78 Mentioned in P.W.D. file on Houses of Parliament

79 eg. The Houses in Upper Harrington St. See P

80 Specification of 1866. P.W.D. files

81 Bye law 229 of 1889

82 See W. Wybergh, Building Stones of S.A.

83 See Howard; Building Stone of S.A., The S.A. Architect and Builder Aug 1904

84 Ibid.

85 Ibid.

86 Statistical Register of 1870

87 Lewcock, P 309

88 See P 191

89 Statistical Register 1860

90 Ibid.

91 Ibid.

92 eg. on the Searcher's Office of 1866. Spec in P.W.D. Contract Book

93 Specification of 1833. Surveyor General's correspondence (C.A.)

94 Bye law 224 of 1889 and Mayor's Minute of 1900

95 Davey, P 104

96 Ibid. P 107

97 Vestry Minutes of 1848

98 Report of the Building Committee 1859. Annx. 112 1860 (C.A.)

99 Mayor's Minute 1900

100 Davey, P 118

101 See The Journal of The Society of Architectural Historians, May 1973

102 See Chapter Eight

103 See Cape Times, 19 Sept. 1893

104 Gwilt. An Encyclopaedia of Architecture 1876 Ed. P 54-

105 Gwilt. 1844 Ed. P 510

106 Ibid.

107 Ibid. 1876 Ed. P 543

108 Lewcock, P 387

109 Specification in P.W.D. Contract Book, 1858

110 Displayed in Reference Library (1978)

110 From Illustrated London News

112 From surviving buildings

113 Advertisements in contemporary newspapers

114 There was one in Oakledge, see P302

115 eg. at Oudtshoorn church in 1861. Also Lewcock, P 388

116 Mentioned as being new in C.T. Guide of 1900 P 298. They were imported from Canada

117 Specification in P.W.D. Contract Book of 1861 (C.A.)

118 From various specifications in P.W.A. Contract Books

119 See Bertram Place, P302 as an example

120 See P188

121 eg. Montague Villas P 319

122 Item in Report of Chief Inspector of Public Works, Statistical Register 1891

123 See illustrations

124 eg. Bertram Place C 1885

125 eg. Villa Field, see P 311

126 Vaux. Villas and Cottages, P 108

127 Lewcock, P 310

128 Cape Argus 1879 (various dates)

129 Such as the Villas in Wilkinson Street (See P 306) and Hawthornden (P 304)

130 The Foundary appears to have changed hands at this time

131 eg Model Villa, see P 325

132 Still in possession of the Foundary (1978)

133 Cast Iron appears to have declined in popularity during the 1890's in Australia

134 See Rennie, Buildings of C.T. P 189

135 eg. The S.A. Library and Museum, 1854

136 Lewcock, P 411

137 1858 Specification and 1861 Specification

138 Ibid.

139 1858 Specification

140 Cape Town Mail Sept. 1846

141 Cape Argus Jan 1873

142 Ibid.

143 Lewcock, P 417

144 A Lady. Life at the Cape A Hundred Years Ago P 1

145 This is deduced from an examination of remaining buildings

146 Howard, in article in S.A. Architect Engineer and Surveyor, Sept 1907

147 Cape Times, 24 July 1880

CHAPTER FIFTEEN THE INFLUENCE OF CLIMATE

THE FORMS OF BUILDINGS ARE FAR FROM BEING ARBITRARY AND ACCIDENTAL IN THEIR ORIGIN. THE CLIMATE, THE BUILDING MATERIALS AND THE PECULIAR CHARACTER OF THE NATION EXERCISE A VERY ESSENTIAL INFLUENCE ON THEM, AND CAUSE THEIR DIVERSIFIED APPEARANCES, WHICH VARY AS MUCH AS THE PHYSIOGNOMY OF COUNTRIES AND THE SITUATION OF NATIONS. WHATEVER IS PRODUCED BY THESE CAUSES IS SINGULAR IN ITS KIND AND IN HARMONY WITH ITSELF[1].

It will have become obvious throughout this study, that Cape Colonial architecture operated in a different way to that of its parent and nowhere is this more obvious than in the maker's attitude towards climate and the modifications demanded by this factor. With rare exceptions, the colonists did not view architecture as an art, their meagre resources militated against the production of masterpieces in the then accepted form. Thus, the harsher realities of colonial life seemed to have brought out the utilitarian strand that also ran through Victorian architecture. Concentration on this aspect will enable us to see what has been called the 'inner style'[2] of the architecture rather than dwellings on the superficialities of the various stylistic revivals, which in the case of most colonial architecture, is only skin deep.

This concern for human comfort and a concurrent commitment to raising the standard of material life is actually pre-Victorian, although its flowering took place in the later 19th century. A very early and well-known exponent of this utilitarianism was J.C. Loudon. In the preface to his very influential 'Encyclopaedia of Village and Cottage Architecture', first published in 1833, he makes the following comments:

'On examining into the actual state of this art (Architecture), *it will be found that the improvements which have been made in it in modern times are chiefly confined to those departments which are open to the understanding and amenable to the judgement of mankind generally, we mean, such as relate to comfort and convenience in the arrangement, warming, lighting, heating and so. of rooms: Whereas the department of taste in building is little in advance of what it was two thousand years ago'*[3]. Further on he observes that:

'Another cause which has retarded the progress of all arts and professions is the practice common in most of them of implicitly following precedents; or of adhering rigidly to rules (made perhaps in a former age and consequently adapted to a less advanced stage of civilization) instead of testing these precedents and rules by fundamental principles and adapting the latter to the state of society for the time being'(4). This idea of relativity is further elaborated as follows: *'According to our views of this subject, all arts, whether of design and taste, or of utility and convenience like everything else relative to man, are progressive and change with the changing condition of society'*(5). Elsewhere in the preface he states categorically that *'The foundation of all true and permanent reality is utility'* and that *'The principle of expression of purpose is of universal application in architecture'*(6).

However, it would be wrong to maintain that Loudon was a functionalist in the modern sense of the word. He was quite happy to use the various historical styles as he felt they were appropriate but he was by no means a protagonist of any particular style(7).

To revert to one of his previously quoted phrases, it is this testing of these precedents and rules by fundamental principles that is the key to the scientific approach, an approach which is now our cultural norm. Nevertheless, as Pevsner has pointed out(8), there was always a gap between Victorian architectural theory and its practice and however well the problems were isolated and solutions offered in their writings, in action architects inevitably fell back on precedent, designing within a recognised style or a variation of one of them.

Nevertheless, as has been noted elsewhere, the stylistic influences acting on local architects were several times removed from those of the forerunners of the art and therefore considerably diffused. There was not, until the very end of the century, a large body of 'professional' architects at the Cape. These also seemed to blend into prevailing practice. Even at the amateur level there was a strong leaning on precedent. This is not to suggest that there ever was such a thing as a coherent body of theory to guide Colonial architecture or even that the prevailing pragmatism was necessarily the first choice of the architects rather than some-

thing that was forced on them by circumstances.

Applying this attitude very specifically to the problem of the adaption of the architecture to the climate, it can be said that although it was highly influenced by utilitarianism, the solutions were sought by the modification and adaption of precedent which of course included the historical styles. Perhaps the key to the understanding of this lies in the following sentence: *'climate is therefore only modifying and not operative'*(9).

The principal difference in climate experienced by the European colonist at the Cape was the summer heat. Winter is neither as rigorous nor as long as its northern European equivalent and in the following section I will examine the practical methods used by the colonists to adapt their architecture to the local conditions. If a disproportionate amount of space seems to be devoted to domestic architecture, it is because here much energy and ingenuity was directed.

Siting and Orientation:

Public and commercial buildings were seldom sited or planned with climatic conditions as the primary consideration, other factors being more important. The unpleasant consequences of bad orientation, for instance, were either ignored or attempts were made at ameliorating them. For this reason then, I will concentrate mainly on domestic buildings.

Victorian house planning, especially that of the country house, was very concerned with the choosing of a 'healthy' situation for a new building. Innumerable examples of this concern could be quoted from contemporary writing(10) on the subject, but I will confine myself to one book, R. Brown's 'Domestic Architecture'(11):

'One of the most essential qualities of good situations is that which is always the most conducive to health; and which must be on a knoll, sheltered by rising ground on the north and east, with a gentle declivity towards the south-east, an openness and airiness of country blended together, with a good home and distant scenery to the south-east and south-west. Gentlemen who intend to build, and have the power of fixing upon a spot where such are presented to their choice, should select a cheerful, animating, and pleasant situation,

sedulously avoiding the proximity of marshes, or ground having a clay foundation, or where there are ponds of stagnant water'.

Within the immediate vicinity of Cape Town, there are available a wide variety of micro-climates, ranging from the maritime one of Sea Point to the sylvan of Wynberg. This fact was well-known to rich inhabitants who quickly sought out the more favoured spots. The Victorian move into the suburbs took place in Cape Town as it did elsewnere but unlike most other towns, a wide variety of choice was available to those who could afford it, the merits of each place being extolled in the property advertisements of the day. It would appear that cooling breezes in summer and a well drained position in winter was prized. Too many trees near the house although welcome in summer was a drawback in winter. A number of factors such as these had to be considered and balanced out.

Turning to specific requirements, one of the chief of these governing the choice of site outside the immediate vicinity of Cape Town was the availability of drinking water. A constant supply of pure water from a spring or well was the ideal as a brief glance at property and land advertisements in contemporary newspapers will confirm(12). Later in the century the periodic lack of water was the chief factor threatening the growth of Cape Town itself(13).

Sewerage was only a problem within inner Cape Town, most houses outside initially had enough land for the convenient siting of cesspools or french drains. In this regard. siting on a slight slope was considered preferential as it removed drainage away from the house.

Having settled the utilitarian aspects of siting, it would appear that the prime factor after this was the orientation of the principal front of the house towards a desirable view, even if this resulted in an unfavourable aspect. For instance, all the early views in Sea Point face out to sea, even though this is west and uncomfortable in summer. Another example is Wynberg House where the front facade was orientated towards False Bay, giving it a southerly aspect. In many areas this orientation towards a view often coincided with with a favourable aspect, thus in Table Valley this usually gave a northerly orientation while in the southern suburbs, the view across

the flats towards the mountains gave an easterly orientation. However these options as to siting were only exercised where there was sufficient land available. For the vast majority of houses there was little option and they faced the street regardless of aspect.

Except in rare instances, there is virtually no evidence to suggest that the internal layout of houses was conditioned by such factors as orientation. Plans, as shown elsewhere, tended towards a standardised layout in which the relationship and even the sizes of rooms were fixed following a traditional pattern. Thus the major rooms were placed at the front of the house and these were given preference in the initial siting of the building. It was then much a matter of luck as to the resulting orientation of the minor rooms such as the bedrooms, although the internal planning usually resulted in some sort of rough justice, i.e. the service rooms were given the least favourable orientation.

The exceptions referred to above were those great and relatively rare houses designed by architects. Strubenheim[14] shows all the signs of a considered layout with the best rooms orientated east and north. By the turn of the century however, architects at least seem to have taken the orientation of individual rooms seriously and in an article of 1907, the following orientations were favoured: the dining room should face east, the living should have a north-west aspect, bedrooms and bathrooms should face east, the kitchen should have a south-east aspect and the pantry a southerly one. One consistent trait was that of the planning of the kitchen. This, as has been remarked on before, was often isolated from the house or at least placed in a wing. Although this was mainly for the prevention of the spread of fire, another good reason was the removal of a source of unwanted heat, smells and possibly noise.

The planning of the w.c. also presented a problem. Primitive plumbing and drainage required it to be isolated from the rest of the house and yet convenience required it to be easily accessible. As improvements were made it moved firstly from being an isolated element to being attached to the house, but still entered from outside and finally, inside.

From planning we turn to those elements which were specifically

climate modifiers.

The Verandah:

As the origins and early history of the verandah in South Africa have been adequately traced by Lewcock[15], I will confine myself here to its use and development during the latter half of the 19th century.

As early as 1857, the verandah was noted as being the most specially 'American' feature in the country houses of the United States[16] and by 1884, the remark was being made vis-a-vis the houses of Cape Town and suburbs[17]. The writer of this remark also claimed that the introduction of the verandah locally was due to the Anglo-Indian visitors earlier in the century.

In domestic architecture, the verandah was the prime climate-modifying element and as such performed two functions. Firstly it provided a shaded place where the occupants of the house could sit out and secondly it cooled the house by shading the walls from the direct rays of the sun, thus eliminating a heat build up. These two factors were clearly appreciated in contemporary house design as both were mentioned in the 1884 article ; in fact the writer advocated the use of a verandah around three sides of a house. This verandah or stoep, he maintained, should be sufficiently deep and covered with creepers or fitted with blinds. It should also be paved if possible with stone mosaic. Even as late as 1907 when the mania for vernadahs had passed an article on house planning still advocated a north facing one[18], but private instead of the semi-public ones of the 19th century.

The configuration of verandahs follows certain types. By far the most common and certainly one of the earliest, was the one which extended across the principal facade of the house. It was either single or double storied. This continued to be the most popular type throughout the century. Another early type was the single-storeyed verandah that ran around three sides of the house,whilst a third type was that which ran between the two wings at the front of a house. Later variations were the part-front verandah, the L-shaped verandah and the more complicated ones of the 1890's which followed the outline of the corner turrets.

The architectural treatment of the verandah always reflected its

derivation. Even in the complex turret houses, it was clearly an addition, separately roofed and very tenuously connected aesthetically, and even practically to the main body of the house.

Obviously, as a shading device, the most effective use of a verandah is on the north face of a building in the southern hemisphere; nevertheless, it is not without some use on the west and east sides of a building. Thus only on the south face can it be considered redundant or ineffectual. All the early Victorian houses in Table Valley, for instance, had north facing verandahs but this was possibly because the best view was this way. It would seem, however, that the verandah was treated more as a shading device than as an extension of the house in early Victorian times and that as it became more fashionable. It was felt that it had become indispensable even if it had to face south. Certainly from the 1880's on, verandahs faced the street, whatever the orientation. This has also been observed in Australia[19].

The depth of the verandah or balcony is obviously another clue to the builder's or designer's intentions with regard to its use. On many small terrace houses this seldom exceeds 4' (1,2m)[20], which virtually precludes its use as an extension of the house and unless facing due north is also much too shallow to offer much shade. A more common width was from 6'-8' (1,8m - 2,4m)[21], which is more realistic in terms of usability and shading. Some verandahs were as wide as 10' (3m), but these were on the larger houses Approaching this width, the problem of dark interiors especially in winter, was encountered. To this end, it would appear that on some houses certain portions of the verandah were widened to provide usable space,whilst elsewhere the verandah was left narrower[22].

The last aspect of the domestic verandah to be covered here is its relationship to the adjacent rooms. In this respect it is hard to generalise. Most of the earlier suburban cottages and villas derived from the cottage ornee tradition and had immediate contact with their verandahs through french doors from the major rooms. In the more formal, double-storeyed villas, it was often only the upper floor rooms that communicated directly with the balcony[23]. Later in the century, even if the verandah was clearly designed for use, the lack of privacy in the immediate surroundings often resulted in

it only being usable through the front door. In the urban situation, this meant that in double storeyed terrace houses only the upper floor had any intimate contact with the balcony. In single storeyed houses with an L-shaped verandah, only the dining room opened onto the verandah[24]. This is understandable if we remember that this was usually the living room of the house, the drawing room being the 'best' room and thus not for informal living. Another factor that also operated here was, of course, a climatic one, the cold rainy winter obviously being a check on the year round use of the verandah that was almost possible further north in Natal.

As the verandah was probably the most widespread element in colonial domestic architecture, it is hardly surprising that a number of regional characteristics can be noted even in the relatively small area encompassed by this study. However, before mentioning some of these, it should be noted, that like many other aspects of Victorian architecture, it arrived in the regions fairly late in the century. It was not until the late 1880's at the earliest that its use became widespread and its heyday was during the years after the S.A. War. As an element it was not just confined to new houses but was also grafted onto older buildings. From a purely practical point of view this addition can be seen as an eminently sensible attempt to adapt the building more successfully to local climatic conditions, a factor which should perhaps be more seriously taken into account when the restoration of these buildings is contemplated, however incongruous aesthetically the result may be.

At Mossel Bay, where most of the verandahs appear to date from the 1890's and 1900's, the typical verandah was the simple rectangular one in single and double storeyed versions. These ran across the front of the house,most of which were situated on the north-facing slope of the town looking over the bay[25].

In Oudtshoorn, probably because of the wealth of the town at the turn of the century but also due to the hot dry climate, the verandah was especially favoured and many of the larger houses have them running around three sides[26]. Even the smaller cottages have deep front verandahs.

In the area stretching from Wellington to Somerset West, a simple

verandah of a wooden framework, roofed with corrugated iron and embellished with fretwork or stickwork became part of the Victorianised vernacular[27].

It has often been claimed that the verandah was introduced into Europe from the Far East by military architects[28], certainly its advantages as a simple and easy way of providing covered access to rooms of diverse use must have made a direct appeal to the military mind and it is the use of the verandah in an institutional context that I will consider here.

Bearing the above in mind, it would seem no accident that the architect of two of the earliest examples of the institutional use of the verandah was an officer in the Royal Engineers, Col. Lewis The buildings referred to are the military hospital, Woodstock and the Old S.A. College, known as the Egyptian building. The hospital had a single storeyed verandah across the front of each wing linking the wards and ancilliary offices whilst the Egyptian building has the rooms in each wing linked by the open verandah. The military hospital faced north-west so some advantage was gained for the rooms behind the verandah, but in both cases it would appear that covered access was the prime consideration.

Although not illustrated here, the military camp built in Wynberg, c.1861[29], and the various additions on Robben Island carried out in the 1860's, continued the use of the verandah. Two of the public buildings of this time that used verandahs were the Searcher's Office, Cape Town[30], and the Dock Offices, Simonstown[31]. The verandah ran around three sides of the building in both cases and appears to have derived from current domestic practice. Nevertheless, the difference is still in the primary use of the verandah for access.

In the later 19th century, the verandah became a stock item in the design of public buildings but most of these were built outside the region covered by this study and are therefore outside its scope. Only two, dating from the late 1880's, can be mentioned. The first, a very fine example of what was achieved elsewhere, is the project for additions to the new Somerset Hospital[32]. Here very extensive use of the verandah is made, both for circulation and for

shading; the verandah running along the front serving primarily this purpose. The other building is the new Lock Hospital[33]. Here, a verandah runs the length of each wing, shading the wards behind from the north and east sun respectively. They would also have served as areas for sheltered sitting out.

Although the first commercial building to possess a verandah was built in the mid-1850's and at least one with a roofed balcony as early as 1867, it was not until the mid-1880's that the typical late Victorian shop with its verandah of cast iron evolved[34]. Examples of these earlier fronts are the Y.M.C.A. building (1884)[35], Stuttafords, (c.1885), and Hodgsons, (c.1885). The last two are additions to existing buildings. From this time, very few shops were built without a verandah. It is difficult to understand why the use of the verandah had not become more common earlier as cast iron had been freely available during the 1870's, and it was during this decade that shop windows had increased in size to a point where they required some protection from the sun. Nevertheless, it seems that once the advantage of shade and shelter to both the goods on display and to the potential customer was realised, it became an indispensable part of shop design. Local climatic conditions would also favour a rigid structure to any tarpaulin or canopy. During the 1890's, the City Council's campaign to rid the city centre of stoeps gave the verandah movement an added impetus, as it appears that the council either gave permission for the substitution of light verandahs for stoeps or even paid for them with municipal money[36]. These verandahs were at first usually light, single storeyed affairs. However, during the later 1890's, the first floor, roofed balcony increased in popularity, providing shade to the upper rooms and a place to sit out where these floors were residential,as they often were in the suburbs. In large shops such as Stuttafords, this first floor balcony provided the ideal opportunity for the provision of a tea room, attractively situated as it was above the hustle and bustle of the street. This particular balcony was a later addition dating from just after the S.A. War[37].

Early hotels generally followed domestic practice in the use of the verandah. It was invariably reserved for the use of the rooms which opened out on to it, e.g. Coghills Hotel[38]. This usage persisted

throughout the 19th century even in urban situations, e.g. the White House Hotel. However, a number of exceptions to this can be noted. The Masonic Hotel[39] had a balcony accessible from the street and was on the level of the public rooms. It was used in the manner of the old Cape stoep. Originally open, it was roofed in the late 1870's. Another very posh exception was the first floor balcony of the Grand Hotel[40]. This was definitely designed for use as an outdoor room, being furnished accordingly, complete with potted plants, a tribute to the persistence of Cape social customs. Another place where a verandah was given over to outdoor living was the spa at Caledon, the first building dating from the mid-1890's.

Shutters:

The louvred shutter, often used in conjunction with the verandah, was the chief window-shading device used during the 19th century. Its use prior to 1838 has been noted by Lewcock[41]. It was known locally as a 'Venetian' or even as a 'Jalousie'[42]. Its use was not confined to houses alone but appears to have been used chiefly in this field. They were also used to screen french doors. Its normal form was the two leaf one in which a single leaf covered half the window. A rarer form was that where the one leaf was again subdivided vertically and hinged. The chief advantage here was easier manipulation in upper floor windows. Shutters were so popular that they were standardised,as were the sash windows that they covered.

The chief advantages of the louvred shutter was, of course, the exclusion of the direct sun,while still allowing a reasonable amount of light and air into the room. Another advantage was their ease of operation. They also offered security. However, there were certain restrictions on their use, especially with wide or close-coupled windows. They also did not fit with certain styles, e.g. Tudor. Often they were used for only some of the windows on a house and not on others, even on the same face.

Another device which apparently came into use in the 1880's was the fixing of a small decoratively pierced wooden plate to the top of sash window frames. Screwed onto the outside, this plate allowed for a certain amount of ventilation while securing the window against entry. It has only been observed in the immediate vicinity of Cape

Town so it would appear to have been chiefly an early form of burglar guard.

Internal shutters were another Georgian legacy. Unlike curtains, tney allowed a room to be virtually completely darkened. With a locking bar at the back they also offered security. At the Cape they persisted in common use until the 1870's, although examples can still be found as late as the 1890's[43]. The exact reason for their passing out of fashion is not known but expense is probably the chief one. Another could be the fashion for an inner lace curtain which would have interfered with the use of the shutter.

Ventilation:

The ventilation of buildings, especially places where people gathered in large numbers, as well as hospitals, received a great deal of attention in Victorian architecture. Even the popular handbooks on domestic architecture had sections devoted to current theory and practive. Many systems were evolved to ensure that stale air was efficiently removed and replaced with fresh, without discomforting the occupants. A review of these methods is contained in Gwilts Encyclopaedia (1872 Ed.). They all appear to work on the principle that stale air rose and that therefore the upper portion of a room should be ventilated in some way. Whether these ventilating systems worked as well as their inventors claimed, is open to doubt. There is a wry comment to this effect in Gwilts. Nevertheless, a whole host of roof ventilators were invented and sold during this period. A wide variety of these were imported and used especially during the last decade. They were mostly used to alleviate the heat built up in corrugated iron roofs.

One of the earliest building types to demonstrate this concern for ventilation was the hospital. In this respect, the military hospital was deficient as, although its wards were placed in pavilions, they were coupled together lengthways, thus not allowing for adequate cross ventilation. Although the principles of hospital ventilation were known to the selection committees of the New Somerset Hospital[44], it appears that these were more or less disregarded when the final design was drawn up, as it certainly does not conform to the pavilion principle. It should be pointed out that two different aims were

sought here. The first was the avoidance of contagion by cross ventilating each ward separately into the open air. The second was the comfort of the patient by cooling draughts. In practice, these could be combined, a fact which was put into effect by the P.W.D. when designing the never-built extensions to the new Somerset Hospital of 1889. Here the wards were laid out as pavilions with openings into courtyards on either side to achieve maximum ventilation. This principle was obviously a key factor in the design demonstrating yet again the strong thread of utilitarianism that runs through Victorian architecture. A large roof ventilator placed on axis as a vertical accent is another sign of this.

Another contemporary building was the new Lock Hospital. Here, because of the awkward site and security needs, it was not possible to put windows in the external walls of the wards. To overcome this, a series of ventilation ducts was devised to draw in fresh air low down and discharge it above head height. The exhausting of stale air was taken care of by ceiling rosettes which were ducted up to the large ventilator which also vented the roof space.

In church design it appears that the use of the open timber roof that had started to come into vogue in the 1850's brought with it the problem of internal heat build up. This was due to the steepness of the roof pitch which exposed large areas to the summer sun. This problem was usually worsened by the use of dark slate as a roof covering and inadequate insulation, invariably not more than 1" to 1½" (25 to 38mm) of boarding and stained dark. An early report of this dates from 1861, which comments on the Lady Grey Infant School[45] which, although not a church, was similarly constructed.

In an attempt to alleciate these conditions, ventilators were fitted to the apex of the roof to exhaust the hot air accumulating there and provide an internal air flow. One of the earliest attempts at this would appear to be St. Aloysius Hall (now an annexe to the National Gallery) built in 1868 to the design of S. Stonestreet. It has a large hall on the upper floor with an open 'Gothic' character. This is ventilated through two small wooden ventilators which in all respects appear to be part of the original structure[46].

In the 1870's, the use of prominent, architecturally treated venti-

lators had become part of church design. The Wesleyan Church at Stellenbosch had a large ventilator serving as a fleche[47]. The Metropolitan Methodist Church also demonstrates this awkwardness, although in this case, perhaps not so obviously. In a report of 1874[48] mention is made of the fact that the clerestorey windows open and that the 140' (43m) tower was also intended to act as a ventilator to the main body of the church. The architect of both these churches was C. Freeman. It is no accident that his experiences gained in Natal, where this problem is more acute was brought to bear here. The Round Church in Sea Point, another of his designs of this time, is also capped by a large ventilator-cum-fleche.

By the 1890's, an architectural compromise between the functional needs for adequate insulation and ventilation and the aesthetic desire for an open roof seem to have been met by a part-ceiling which allowed for a large, well-ventilated pocket in the apex of the roof. By increasing the distance between roof covering and ceiling at the sides as well as allowing this to exhaust into the upper air pocket, conditions were further improved. The ventilation of the church proper was undertaken separately through ceiling roses and ducted into the large ventilator. The Methodist Church at Sea Point illustrates this practice very clearly. ILL.439

In public buildings, the first signs of especial concern for ventilation can be found in the goal-building programme of the late 1850's. Here though, concern was only for the adequate ventilation of the cells themselves through vertical wall ducting[49]. In larger buildings, little attention was paid to this problem at mid-century. The S.A. Public Library and Museum building for instance had no roof ventilation at all and, it appears, relied mainly on the height of its public rooms to dissipate any of the problems of heat build up. That this is inadequate can be felt on any hot day now, so the museum room with its original skylights must have been stifling. In the design of the Houses of Parliament, an attempt to provide adequate ventilation to the two chambers can be seen. Here three ceiling roses in each room were ducted through the roof to discharge through mushroom-headed ventilators in the open air[50]. These were tucked away discretely on the inner slopes of the roof as it was obviously felt that they would not harmonise with the design. The Magistrate's Court on Church Square is possibly the best example ILL.440

of the full flowering of the concern for ventilation in public buildings. Built in 1890, it has a number of features which should be examined in detail. Firstly it has a prominent, architecturally treated roof ventilator cum-turret. The court itself has the usual ceiling roses (three) exhausting through tapering ducts into cowl-like ventilators. Besides this, it has fresh air inlets where air drawn in from the small, internal courtyard is ducted along horizontally and then discharged through vertical branches at a position just above normal head height. The object here was obviously to avoid draughts. Thus a complete system of intake and exhaust had devised. Unfortunately the building has long since ceased to exist and I have not been able to find any comments on its effectiveness or otherwise. The smaller room adjacent to the courtyard seems to have had a variant of this system. Relying completely as it did on natural methods of air flow, it illustrates very effectively the often forgotten Victorian concern for comfort.

On houses, not over-much attention was paid to roof ventilation, although from the 1850's on it was common practice to cut small ventilating holes in the eaves' overhang, but no corresponding provision was made at the apex of the roof. On houses with gables, though, it was common practice to place a grill there to promote roof ventilation. Internal ventilation was chiefly through the use of windows, the double sliding sash being by far the most widespread type in use. This type, with its ability to provide separate adjustable openings top and bottom, was very effective in use. The Cape Town Building regulations of 1889[51] were the first to lay down standards of domestic ventilation. Regulation 217 required that at least half of every window be made to open and that the top of the windows be at least 7'0" (2.3m) above the floor. Permanent ventilation was also required (Regulation 218) in all rooms without a fireplace. In practice, this was provided by air bricks at a high level.

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REFERENCES CHAPTER FIFTEEN

1 Brooks. Designs for Cottages and Villas, p 21

2 Meeks. The Railway Station, Chapter One for discussion of this.

3 Loudon. Preface

4 Ibid.

5 Ibid.

6 Ibid.

7 Ibid.

8 Pevsner. Studies in Art, Architecture & Design, P 111

9 A. Brown. Domestic Architecture,P 69

10 See Downing. The Architecture of Country Houses, P 271 and Vaux. Villas & Cottages, P 260

11 Brown. P 91

12 eg. Cape Monitor. July 1853 advertisement for lots in Sea Point

13 See P 23

14 See ill 324

15 See Chapter Eight in P.hD. Thesis

16 Vaux. Villas and Cottages, P 111

17 S.A. Illustrated News, 11 Oct 1884, P 314

18 See Jagourd in S.A. Architect and Builder, Jan. 1907

19 Boyd. The Australian House, P 50

20 See ill. 334

21 See ill. 343

22 See ill. 344

23 See ill. 318

24 See ill. 371

25 See ill. 401

26 See ill. 402

27 See ill. 367

28 See definition in Webster's Shorter English Dictionary

29 See Cape Monthly Magazine, Feb 1861

30 See ill. 163

31 See ill. 165

32 See ill. 260

33 See P 277

34 ill. 209

35 ill. 189

36 See Mayor's Minutes 1893

37 This was deduced by a comparison of photographs
38 ill. 240
39 ill. 238
40 ill. 248
41 Lewcock. Early Nineteenth Century Architecture in S.A. P 382
42 Part of a description of the Mount Nelson Hotel
43 eg. The Arabian cottages in Pepper street
44 See P 274
45 Cape Monthly Magazine, Feb. 1861
46 These can be clearly seen in an 1884 panorama
47 ill. 80
48 Cape Argus. Sept 1874
49 These appear on the drawings
50 Also appear on 1884 panorama
51 See P 74

CHAPTER SIXTEEN. CONCLUSION.

'THEIR AGREED STYLE WAS A RENAISSANCE OF THE RENAISSANCE, A GOTHIC GAME PLAYED WITH NEO-CLASSICAL COUNTERS, NOT VERY DIFFERENT FROM THE GAME THAT HAD BEEN PLAYED ALL OVER EUROPE THREE CENTURIES BEFORE. THE NINETEENTH CENTURY PLAYERS WERE MORE CONSCIOUS THAN THE SIX-TEENTH CENTURY PLAYERS HAD BEEN OF THEIR AUDIENCE, MORE OFTEN TEMPTED INTO PICTURESQUE POSES, INTO DISPLAYS OF UNNECESSARY VIRTUOSITY.
IN COMMON WITH ALL UNINHIBITED ARTISTS THEY HAD NO TASTE FOR ELABORATION, AND THEIR CHOSEN STYLE, THE WEALTH OF THEIR AGE, AND THE DUCTILITY OF THE MATERIALS NEAREST TO THEIR HAND, BRICK AND TERRA-COTTA, MADE ELABORATION EASILY OBTAINABLE'(1).

Colonial architecture is by definition derived from that of the mother country. In this respect, Cape Victorian is explicable as a variant of British Victorian and it would be possible to trace virtually every form and motif back to its British source but, although this might be necessary and even occasionally rewarding, it would ultimately be a sterile exercise if the main purpose was to demonstrate that the architecture was merely an assemblage of derived forms. In the same way that historians have begun to peel back the historical trappings of Victorian architecture to reveal its 'inner style' and to give it serious consideration in its own right, so too, colonial architecture should be seen as having its own existence.

There is also the temptation, open to all historians, to explain architecture in terms of its derivations, which of course can be useful, but often misses the essential qualities of the buildings being studied. This is particularly true when primary emphasis is placed on the visual qualities of the architecture and the socio-economic factors whihc, in colonial building, was virtually para-mount, are ignored. Goodheart-Rendel is probably the first historian to pose the question, in assessing Victorian architecture, of not 'where from' but 'how used'(2). This positive approach emphasises the triumph of 19th century architecture which, while still operating within the historical styles, was able to adapt them for use in the evolution of many new building types.

Having demonstrated in the body of this thesis my concern for the broad background against which a particular architecture evolved, I feel that an important connection should be made. This is in the field of domestic architecture. This is not surprising as it is here that English Victorian architects were particularly concerned and something of this concern manifested itself in the colonies. This is not to say that innovation was absent elsewhere. The connection which is to be made is that between two sister colonies, rather than that between the mother country and its off-spring which is considered normal and logical. It is argued that it is just as logical for colonies to derive some of their architectural influences one from the other, as these were often well placed because of the boom/slump cycles of the 19th century, to be profited from. Although only a couple of specific influences will be traced, the field is, I believe, potentially far richer and influences could possible be traced from contemporary American architecture. Unfortunately, our present stage of knowledge does not allow us to make these comparisons. This is primarily because architectural history has, until recently, been concerned with the chief monuments of a nation or the main movements and not with the regional, more mundane buildings which, bearing in mind the backgrounds of most colonial architect and builders, were their most obvious models. Thus it is out of this 'provincial' milieu that the typical forms of colonial architecture were born.

The two domestic types whose origins I have tentatively traced are the late Victorian terrace house and the asymmetrical villa.

The terrace house in South Africa would seem to have originiated in Cape Town in the early 1820's and by 1840 was in general use(3). Some of the double storeyed versions were very closely modelled on their English Georgian prototypes. As a type, it enjoyed considerable popularity, especially for speculative purposes, throughout the 19th century. Except for a few at Port Elizabeth and the occasional one elsewhere, it remained a house form that was mostly confined to Cape Town. It was also virtually unknown in the outlying towns and villages until c.1875. Both the single and double storeyed earlier versions were without verandahs, but these became increasingly popular after this. Both forms derived their plans from the contemporary English 'tunnelback'. However, prompted by the first

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comprehensive building regulations of 1889, the external form of the double storeyed version changed very suddenly: party walls rose as parapets, verandahs became an integrated part of the aesthetic instead of being tacked on, and there was a plethora of plaster ornaments of classical origin. What caused the change is known but the origin of the architecture has not been traced. Certainly, reference to Britain in 1890 will not uncover the ready-made aesthetic which it definitely appears to be. However, if we turn to Australia, in particular to the cities of Sydney and Melbourne, it is here that we find the most likely model(4). Here, the boom conditions that had lasted from the discovery of gold in the 1850's until the 1880's had caused a massive growth in population(5). There had developed in both cities large areas of terrace houses, especially the double storeyed varieties which used exactly those elements, i.e. decorative cast-iron and cement plaster ornaments and similar forms to those that we find on the terrace houses of the 1890's in Cape Town(6). ILL.373

In the single storeyed terraces built in the late 1890's with their prominent parapet and gablets, we also find a link with similar but earlier houses in Australia. Bearing this in mind, a remark by a passing traveller comparing Woodstock, an area virtually given over to terrace houses, with an Australian suburb, reinforces this view(7). ILL.379

In order to establish the Australian connection more strongly, it is best to review all the known links. Until 1879, Cape Town was the standard port of call on the direct routes to and from Australia, and even after this it remained an important stopping off point. Of the architects who practised in Cape Town, we know at least one, W. Black, who was actually trained in Melbourne in the 1880's(8), and who therefore must naturally have used this [illegible]ge when in practice in the 1890's. Another contemporary architect was Green, who had had extensive Australian experience in the 1880's. An earlier architect, although not previously mentioned, was W.B. Hayes, who had worked in Australia prior to joining the Cape P.W.D. in the mid-1870's(9). He appears to have had a relatively short career in Cape Town though, moving, it is surmised, to Bloemfontein c.1878, where he had just won the competition for the design of the now well-known Tweetoring Church. Nevertheless, during his brief stay in Cape Town and with his known association with Architects such as

C. Freeman, he must have provided a link with contemporary Australian practice.

The movements of builders are virtually impossible to follow but there is evidence of Australian artisans arriving at the Cape in the mid-1890's[10]. Lastly, there is the case of cast iron designs being imported from or pirated from those of a foundry in Melbourne[11]. There are even examples of the cast-iron itself being imported[12]. There is, therefore, much circumstantial evidence to prove that Australian architecture, particularly of the common sort, would have been well-known in the Cape building world.

The sudden arrival of the asymmetrical villa in Cape Town, c.1880, ILL.329
has been noted elsewhere[13]. At our present stage of knowledge it cannot be positively said to have had its South African origin in Cape Town and it is possible that might have been introduced slightly earlier in Durban or Port Elizabeth. However, it spread very quickly and by the mid-1890's would seem to have become the standard format for the average 'spec villa' throughout the country.

The most intriguing aspect of its history is its parentage. There is little precedent for it at the Cape, symmetry being the rule of the day right up until the 1870's. All the experiments with asymmetry, with one exception which we will come back to, were tentative and apparently not seeking to synthesise the gable, bay window and verandah onto one facade. Pre-supposing it to be something that was then imported as an idea in toto, it is natural to assume that it came from the mother country. Certainly, its ancestors can be found in the pattern books of around c.1830. These were the picturesque cottages and lodges[14], but there seems to be a step missing, or to use a different terminology, these would appear to be the grandfathers, not the fathers. If we again turn to the sister colony of Australia, it would seem that the asymmetrical villa was a widespread type[15] which had evolved there during the 1840's and, by the 1860's, had reached a remarkably similar form to those of the 1880's in Cape Town, both in plan and elevation[16]. At present, no positive evidence can be offered in terms of the known movements of significant people etc., although it is quite possible that the asymmetrical villa evolved independ-

ently of its Australian forerunner and a single quasi-asymmetrical villa may be a clue to this[17]. I suggest that it was derived fairly directly from Australia as an immediately available model towards which domestic taste at the Cape was definitely beginning to turn. ILL.315

The double storeyed asymmetrical villa would, by the same token, appear to have Australian origins. It certainly does not predate the single storeyed version and, if anything, it is perhaps later. This form was to become widespread as did the even more 'picturesque' developments such as the corner-turreted houses. These would seen, with their L-shaped verandahs and with gables to each of these elevations, to represent a fusion of the imported asymmetrical villa with the slightly earlier Cape development of the bungalow house[18]. ILL.327 ILL.314

Summary:

What has emerged very clearly in this thesis is the long Georgian twilight at the Cape, a period of slow transition from the earlier simple forms to the later, more complex architecture. This was most certainly due to the economic condition of the colony which was very uncertain for the first half of the Victorian period. There was, therefore, during this time little money to be spent on buildings and thus little to attract architects to the country. High Victorian architecture is pre-eminently an architecture of affluence which also required a certain professional expertise. Both the affluence and expertise were in short supply at the Cape during the decades from 1840 to 1870. For this reason then, there was little in the way of stylistic innovation during this period except for the importation of 'correct' Gothic Revival, c.1850, and a brief flowering of 'Italianate' commercial architecture in the 1860's. In essence, though, both these were fairly straightforward provincial copies of early Victorian English architecture[19].

It is only with the prosperity of the 1870's, following the discovery of diamonds, that the first tentative steps were taken away from the box-like structures of the previous era. This was more in step with the picturesque aesthetic which had now become the High Victorian norm[20]. In these buildings, which are still closely tied to their

English prototypes, can be seen the glimmerings of what was later to become the full blown style of the 1890's. Some of these emerging characteristics were the irregular plan and the picturesque silhouete, as well as a greater richness of ornament and the increasing use of the verandah. Thus this period from 1870 to 1890 can be seen as a time of transition, hence the earlier use of the term, proto-colonial.

An exportant factor at this time was the arrival of a number of professional architects. It is also at this time that the first attempt to set up a professional body took place[21]. These architects had a large hand in forming the new architecture. The 1890's can thus be seen as the flowering of Cape colonial architecture. This, we have noted, lasted into the 1900's, being in itself overwhelmed by Edwardian architecture, c.1910. That the architecture of the 1890's was an architect's architecture, there can be little doubt; but it does appear that this robust architecture by the 'professional' man was well received and liked by its patrons and that in its forms and lavish but free use of ornament,it caught the mood of the times completely. This is, of course, in contrast to the architecture which succeeded it which emphasised well-bred simplicity and was in 'good taste'. With the single exception of Baker and Masey, none of the architects practising in Cape Town around 1900 could be described as 'art-architects'[22].

The architecture followed very broadly, and with the usual time-lag, all the popular Victorian cultural movements. Thus Regency, with its flirtation with different styles, developed into early Victorian with the 'battle of the styles'; Gothic versus Italian, taking place, although as shown, 'Gothic' made little headway outside its use in churches at the Cape. Lastly, came 'Queen Anne' but because of the scarcity of appropriate local materials this is hardly a Victorian style at the Cape.

However broadly it followed the English movements though, architecture was still different from that in Britain. As different as, for example, American or Australian architecture, and it is this difference that is most worth investigating.

It would be hard to point out any particulatly outstanding buildings,

none of wh h would compare with the best British protytypes. Nevertheless, there are some which reached a high level of competence, such as the Metropolitan Methodist Church, but this is not what is really impressive about late Victorian Cape architecture. Its strength lies in the ability of the architects of the time to evolve a series of appropriate building types which ranged from a whole series of housing forms to a very effective street architecture. Even in the relatively hidebound field of church architecture some reasonable attempts to adapt the prevailing Gothic to the climate and materials can be observed. In this, the prevailing 'creative eclecticism'(23) fortunately coincided with the prosperity which allowed the architects much greater freedom to innovate and synthesise than before.

It should also be noted here that, with the exception of some regional variations in house design, the various features of which still have to be documented, that from about 1890, a distinct South African architecture as such, was in existence. This is a form of architecture in which the various building types throughout the country, shared a common set of characteristics. In many ways this architecture was similar to Cape Dutch, in that it was a local growth using in its own way the stylisms of the mother country (in this case, countries). It can be argued, though, that it was more successful in coming to terms with the climate, but of course it did have the advantage of prosperity and the Industrial Revolution.

To turn to the concept of 'style', it is obvious that just as the purity of any particular style ceased to be of any real concern to architects during the Victorian period, so stylistic labels were increasingly loosely applied. This was particularly true at the Cape and was especially so during the 1890's. Even the labels became increasingly vague with descriptions such as 'Free Renaissance'. This was only a general term and applied to the source of the details. Often the terms used are totally inaccurate architecturally speaking, such as the description of 'Elizabethan' for the Valkenburg Asylum.

The advantage of a 'style' in architecture is that it provides an appropriate vocabulary of form and detail in which the respective building types can be designed. This allows for a repertoire with which both the architect and layman is familiar and thus buildings

can be easily recognised and 'read'. In this respect Cape architecture was perhaps more fortunate than some of the more advanced European countries. The poverty of the country saved it from the more exotic earlier styles whilst, by the 1890's, a fairly simple variety was used and understood, i.e. Gothic for churches, with some Non-Conformist chapels in Classical forms and Italian for commercial. The strong thread also allowed a number of utilitarian structures to become what has been termed, decorated sheds. However, the architectural ornament and its particular style was always important, especially if one bears in mind the associational qualities these had in the Victorian aesthetic.

In 1902, the settlement at the Cape was 250 years old. In this time it had grown from a fortified post into a substantial city whose population had increased tenfold during the Victorian era alone. This rapid growth if, of course, typical of the industrialising city but Cape Town's growth was fortunately not as extreme as many other colonial cities. Nevertheless, at the turn of the century she was still the largest city in southern Africa and, more importantly, was both the mother city and the gateway to an economically expanding sub-continent. As such, the city was probably at the peak of her affluence and served as a base from which many businesses which had become household names, such as Garlicks and Stuttafords, directed and expanded their commercial empires. There were also the town's own fledging industries at Salt River and Observatory.

The city centre possessed all requisite appointments of the then civilised world. It had a number of suitably large, dignified public buildings, an Opera House and other places of entertainment, large departmental stores, comfortable hotels and a good station, all grouped on or near Adderley Street. The street itself was now hardened and the pavements were covered for most of its length, providing an environment considerably in advance of that of only a few years previously. There was also a proper sewerage system and an adequate supply of pure drinking water.

From here, ran a network of trains and trams into some of the pleasantest suburbs in the world, where a large array of houses sprawled on the slopes of the mountain, each suburb with its own

miniature high street.

In the immediate hinterland, a recently completed railway network allowed the towns and villages their own share of the current prosperity. This boom was then being manifested architecturally.

The picture thus emerges of a period of confident prosperity, despite the recent political upheavals of the Anglo-Boer War.

As might be expected, the architecture of the time mirrors this confidence, being like the people a mixture of practicality and extravagance, often a bit brash and occasionally a little pompous. However, it behoves us to treat our heritage from this phase of our past with more understanding than we have done hitherto.

REFERENCES CHAPTER SIXTEEN

1 Goodheart-Rendel. English Architecture Since Regency P 171 et seq

2 Goodheart-Rendel. Ibid. P 15

3 Lewcock. P 300

4 Herman. Victorian Sydney P 78

5 Boyd. Australia's Home, P 31

6 See Robertson, Cast Iron, A World Survey, ill. 398

7 Pennefather. Three Weeks in S.A. Otago Dairy Times 1898

8 See P 112

9 Mentioned in evidence given before a Select Committee see of 1876

10 See Cape Times Weekly, 23 Aug 1893

11 See P 367

12 Rennie. The Buildings of Central Cape Town, Vol II P 139

13 See P 306

14 See examples in Loudon's Encyclopedia

15 Boyd. P 36

16 Compare ill. with illustration on P 51 in Australia's Home

17 See P 301

18 See ill. for what is assumed to be the development pattern

19 See Pp 181, 220

20 Meeks. The Railway Station P 2

21 See P 92

22 Kaye. The Development of the Architectural Profession in Britain

23 Meeks. The Railway Station P 11

BIBLIOGRAPHY

A. Official Documents

All at the Cape Archives unless otherwise noted.

Archives of the Chief Inspector of Public Works:
Series Contracts and Correspondence: P.W.D.

Archives of the Surveyor-General: Series Correspondence.
(1834-1848): S.G.

Archives of the Colonial Secretary: Series Letters Received
from Sundry Committees: CO.

Archives of the Master of the Supreme Court:
(a) Series Death Notices: MOOC.
(b) Series Wills: MOOC.
(c) Series Insolvencies: MOIB/MOIC.

Archives of the Town Clerk, Cape Town:
Series Committee Minutes, Mayoral Minutes, Correspondence
and Rate Books: 3CT.
Mayors Minutes: 1893-1904: (S.A.L.)

Archives of the Town Clerk, Mowbray, 3/MWY

Archives of the Town Clerk, Wynberg, 3/WBG

Archives of the Colonial Secretary: Series Cape
of Good Hope Blue Books and Statistical Registers: CO.

Archives of the Secretary, Table Bay Harbour Board: CHB.

Archives of the Controller of Customs, Cape Colony: CCT.

Institute of South African Architects Accession: A.1286.

Cape of Good Hope Government Gazettes 1840-1900.

Acts of Parliament, Cape of Good Hope 1854-1900.

Annexures of Parliament, Cape of Good Hope 1854-1900.

Census Returns, Cape of Good Hope 1891.

B. Manuscripts

Transcript of Bishop Griffiths Papers (St. Mary's Archives)
Account Books, 1840-1846, St. Mary's Cathedral (" " ")

Vestry Minute Books, 1848-1882, St. Paul's Rondebosch (St. Pauls)
Diocesan Records, 1848-1865; See of Cape Town (Wits)
Diocesan Letter Books, 1848-1880; See of Cape Town (Wits)

Minutes of the Building Committee, 1854-1860, The Congregational Church, Cape Town (C.A.)

The Memoirs of C.O. Hager (N.G. Archives, Cape Town)

Notes on Architects and Builders in the Western Cape
R.R. Langham-Carter (U.C.T.)

Account Book 1884-1888. R.H. Morris (R.H. Morris & Co. Cape Town)

700 Miles by Cart through the South-West Circle, 1899
C.F. Juritz (S.A.L.)

Onderwys in Die Paarl Gedurende de 19de EEU J.M.C. Franck.
Thesis for D.Ed. at Univ. of Stellenbosch (S.A.L.)

The F.K. Kendall Drawing Collection (U.C.T.)
The Day and De Wet " " (")
The Church of the Province Collection (")

The Catherine Cloete Sketchbooks (S.A.L.)
The Gordon Sketchbooks (C.A.)

Victorian Fences - a Survey. Meyerowitz & Alexander (U.C.T.)

Account Books and Correpondence relating to the Building of the S.A. Library (S.A.L. Archives)

C. Published Works.

General

Briggs, A London	Victorian Cities Oldhams 1963
_____ London	Victorian People Penguin 1965
Clark, G. (Ed) Oxford	Oxford History of England Clarendon Press. 14 Vols
Fowles, J.	Sydney in 1848
Quennel, C & M London	A History of Everyday Things in England 1948 4 Vols. Batsford

General : South Africa

Abrahams, I.
Cape Town
The Birth of a Community.
Cape Town Hebrew Congregation, 1955.

Alheit, W.A.
Woodstock
1½ Eeu van Genade 1788 - 1988, N.G. Kerk van Swellendam
Ptd. Nederduitse Gereformeerde Kerkpers, 1948.

Baker, H.
London
Cecil Rhodes by his Architect.
Oxford University Press, 1934.

Boyle, F.
London
To the Cape for Diamonds,
Chapman & Hall, 1873.

Bradlow, F & Cairns M.
Cape Town
The Early Cape Muslims
A.A. Balkema 1979.

Bradlow, E.
Cape Town.
Thomas Bowler
Balkema. 1955.

Burgers, W.A.
Piketburg
Piket teen 'n Berg
C. Burger, 1975.

Burrows, E.H.
Cape Town.
Overberg Outspan.
Maskew Miller, 1952

Bryce, J.
London
Impressions of South Africa
MacMillan 1897

Chase, J.C.
London
The Cape of Good Hope
P. Richardson, 1843

Coates, P.R.
Cape Town
Track and Trackless
Stuik 1976

Cory , G.
London
The Rise of South Africa
Longmans, 1919

De Villiers, S.
Cape Town
Robben Island
Struik 1971

Dreyer, A.
Cape Town
Eeufeesgedenkboek van Bredasdorp, 1838-1938
Nasionale P rs, 1938.

_____
Publishers not mentioned, 1929
Jubileu Gedenkboek van gemeente Mooreesburg 1879-1929

———— Gedenkboek van die N.G. Kerk
Somerset Oos 1925

———— Kerksouvenir van Wynberg 1929
Cape Town

Fergusson, G. The Builders of Hugenot
Cape Town Maskew Miller 1927

Finch, J. To South Africa and back
London Ward, Lock 1890

Fourie, J. Eeufees - G denkboek Gemeente van Hoepfield 1851-1951
Stellenbosch Pro Ecclesia Drukkery 1951

Franklin, M. The Story of Great Brak River
Cape Town Struik 1975

Frost, E.C. The History of the Gardens Presbyterian Church
Cape Town.

Froude, J.A. Leaves from an South African Journal
New York. Funk and Wagnalls 1883

Gray, R. Visitation Journal 1850
London S.P.C.K. 1853

———— Three Months Visitation 1855
London Bell and Dandy 1856

———— Visitation of Diocese of Grahamstown 185?
London S.P.C.K. 1857

Greef, M.S. Eeufees-Gedenkboek van die Geref. Gemeente Oudtshoorn 1853-1953
Elsies Rivier Nasionale Handelsdrukkery 1953

Gutsche, T. The Bishop's Lady
Cape Town Howard Timmins 1970

Hattersly, A.P A Victorian Lady at the Cape
Cape Town Maskew Miller 1951

Heese, J.A. Die Kerk in Die Wolke Eeufees - Gedenkboek, Uniondale 1866-1966
Elsies Rivier, Nasionale Handelsdrukkery 1966

———— N.G. Kerk Gedenkboek Worcester 1821-1921
Observatory Pro Ecclesia Drukkery 1970

Hopkins, H.C.
Stellenbosch
Eeufeesgedenkboek van die N.G. Kerk Darling 1853-1953
Pro Ecclesia Drukkery 1953

———
Stellenbosch
Eeufees - Gedenkboek van die N.G. Kerk Heidelberg (Kaap) 1855-1955
Pro Ecclesia Drukkery 1955

———
Die N.G. Gemeente Somerset Wes. 1901969

Hugo, A.M. & V.D.Bijl J.
Cape Town
Die Kerk van Stellenbosch
Tafelberg 1963.

Juritz, C.F.
Cape Town
N.G. Kerk, Drieanker Baai Sovenir 1880-1980
Ptd. Townsend, Taylor and Snashall 1930

De Kiewiet, C.W.
London,
A History of South Africa
Oxford University Press 1940

Kohler, C.W.M.
London
Memoirs
Hurst and Blackett 1946

Kotzé D.A.
Stellenbosch
Die Gemeente Fraserburg 1851-1951
Pro Ecclesia Drukkery 1951

Kotzé J.G. Sir
Cape Town
Biographical Memoirs and Reminiscences
Maskew Miller 1934

Lady A.
Cape Town
Life at the Cape a Hundred Years Ago
Struik 1963

Laidler, P.W.
Cape Town
A tavern of the Ocean
Maskew Miller 1926

———
Cape Town
The Growth and Government of Cape Town
Unie - Volkspers. 1939

Legg, T.
Claremont
Some Facts in the History of the Parish of St. Francis Simonstown.
Peninsula Herald 1903

Leighton, S.
Cape Town
Notes on a South African Visit
A.A. Balkema 1975

McIntyre, D.
Cape Town
The Diocesan College
Juta & Co. 1950

Murray, J.
Cape Town
Mrs Dales Diary 1857-72
A.A. Balkema 1966

Murray, M.
Cape Town
Under Lion's Head
A.A. Balkema 1963

N gen, C.C.
Stellenbosch
Eeufees Napier 1848-1948
Pro Ecclesia Drukkery 1948

Noble, J.
Cape Town
A Descriptive Handbook of the Cape Colony
Jutas 1875

_____
Cape Town
Cape of Good Hope Handbook
S. Soloman 1886

Oberholser, J.A.S.
Paarl
Gedenkboek van die N.G. Gemeente Tulbagh 1743-1943
Ptd Paarlse Drukkers 1943

_____
Gedenkboek van die N.G. Gemeente te Wellington 1940

_____
Cape Town
Kerksoeweinier van Villiersdorp 1844-1944
Nasionale Pers 1944

Picard, H.
Cape Town
Gentleman's Walk
Struik 1968

_____
Cape Town
Grand Parade
Struik 1969

Porterville (no author)
Cape Town
Jubileum - Gedenkboke van die Gemeente Porterville 1879-1929
Nasionale Pers 1929

Riversdal (no author)
Cape Town
Eeufees - Album van die N.G. Gemeente Riversdal 1838-1939
Nasionale Pers 1939

Ritchie J.F.
London
A Brighter South Africa
Unwin 1892

Ritchie, W.
Cape Town
The History of the South African College
Maskew Miller 1918

Scoltz D.A.
Fraserburg en sy Kerk 1851-1976

Smit A.P.
pe Town 1945
Gedenkboek van Die N.G. Gemeente, Swartland

Smit, M.T.R.
Bloemfontein
Gedenkboke N.G. Gemeente Knysna 1851-1951
Sentrale Pers 1951

Steyn, G.F.
Mossel Bay
Gedenkboek N.G. Kerk, MosselBai, 1845-1945
Ptd. Mossel Bay Advertiser 1945

Storrar, P.
Cape Town
Portrait of Plettenburg Bay
Purnell 1978

Struben H.W.
Cape Town
Recollections of Adventures 1850-1911
T.M. Miller 1920

Struben, R.
Cape Town
Taken at the Flood
Longmans 1968

Summers R.F.H.
Cape Town
A History of the South African Museum
A.A. Balkema 1975

Theal, G. Mc.
Cape Town
History of South Africa (11 Vols)
Struik 1964

Tromp, A.H.
Elsies Rivier
Robertson 1853-1953
Ptd Nasionale Handelsdrukkery 1953

Underhay, J.P.G. &
Hopkins, H.C.
Ceres, 100 Jaar Oud 1855-1955

Vanghan, I.
Cape Town
The Diary of Iris Vaughan
Howard Timmins 1969

Victorin, J.
Cape Town
Travels in the Cape 1831-52
Struik 1968

Vos, K.
Cape Town
The Church on the Hill
Struik 1972

Wagener, F.J.
Cape Town
Rondebosch Down the Years
Ptd. Cape Times 1957

Walker, E.A.
London, Etc.
Lord De Villiers and his Times
Constable 1925

———— ——
Cape Town
The South African College and the University of Cape Town
Cape Times, 1929

Webster,
St Pauls, Rondebosch 1934-1934

Wood, M.
London
A Father in God
McMillan 1913

ARCHITECTURE

Adams, H.
London
Modern Cottage Architecture
Batsford 1904

Aster, G.
Leipsig
Villien Und Kleine Familien Houser
J.J. Weber 1894

Blackie & Sons
Villa and Cottage Architecture
1868

Bloxham, M.
London
Principles of Gothic Ecclesiastical Architecture
Bogue, 9th Ed. 1849

Boyd, R.
London etc.
Australias Home
Cambridge Univ. Press 1952

Brandon
London
Brandon's Analysis of Gothic Architecture
Pelham Richardson 2 Vols 1847

Brown, R.
London
Domestic Architecture
Quaritch 1852

Builder's Dictionary
1778

Burchard, J & Bush-Brown A
London
The Architecture of America
Gollancz 1967

Bury, J.T.
London
Rudimentary Architecture Part 2
Crosby-Lockwood 1877

Clark, K.M.
London
The Gothic Revival
Constable 1928

Clarke, B.F.L.
London
Church Builders of the 19th Century
S.P.C.K. 1938

Croft, G.B.
New York
Progressive American Architecture
Judd 1875

Curl, J.C.
Newton Abott
Victorian Architecture; Its Practical Aspects.
David & Clarles 1973

Dean, T.D.W.
Sketches in Architecture 1807

Dobson, E.
London
Art of Building
Crosby Lockwood 10th Ed 1877

Domestic House Planner & Sanitary Architect
London — Ward Lock — 1891

Downing, A.J.
New York — The Architecture of Country Houses
Dover Pub. Co. 1969 (Original 1850)

Dutton, R.
London — The Victorian Home
Batsford — 1954

Early Melbourne Architecture
1840-1888
London — Oxford Univ, Press — 1953

Eastlake, G.
New York — The History of the Gothic Revival
Leicester Univ. Press 1970 (Original 1871)

Fergusson, J.
London — History of Modern Styles of Architecture
Murray 3rd Ed. — 1891 2 Vols.

Ferriday, P. (Ed.)
London — Victorian Architecture
Jonathan Cape — 1963

Floyd, T.B.
Pietermaritzburg — Town Planning in South Africa
Shuter & Shooter — 1960

Freeland, J.H.
Melbourne — The Australian Pub
Melbourne Univ. Press 1966

Girouard, M.
Oxford — Victorian Country Houses
Clarendon — 1971

_____
Oxford — Sweetness and Light
Clarendon Press — 1977

Gloag, J. & Bridgewater
London — A History of Cast Iron in Architecture
Allen & Unwin — 1948

Goodheart-Rendel, H.S.
Constable — English Architecture since Regency 1953

Goodwin, F.
London — Domestic Architecture
Bohn — 1850 2 Vols.

Gotch, A.
London — The Growth and Work of the R.I.B.A.
Simson & Co. — 1934

Gwilt
London — Encyclopaedia of Architecture
Longmans 1842 Ed. and 1872 Ed.

Greig, D.
Cape Town — Herbert Baker in South Africa
A.A. Balkema 1970

Hart, A. & R.G.U.
Oxford — A Memoir of the Rev. G. Duthie, M.C. of Belvidere
Oxford Univ. Press 19[illegible]

Herbert G.
London — Pioneers of Prefabrication
John Hopkins Univ. 1978

Herman, M.
Sydney — The Early Australian Architects and their Work
Angus & Robertson 1954

_____
Sydney — The Architecture of Victorian Sydney
Angus & Robertson 1956

Hersey, G.
Baltimore — High Victorian Gothic
John Hopkins Press 1972

Hitchcock, H.R.
Newhaven — Early Victorian Architecture in Britain
Yale Univ. Press 1954

_____
Harmondsworth — Architecture; 19th and 20th Centuries
Penguin Books 1958

Hobhouse, M. — Thomas Cubitt, Master Builder

Jenkins, P.
London — Architecture and Patron
Oxford Univ. Press 1961

Kaye, B.
London — The Development of the Architectural Profession in Britain.
G. Allen and Unwin 1960

Kearney, B.T.
Cape Town — Architecture in Natal 1824-1893
A.A. Balkema 1973

Kerr, R.
New York — The Gentleman's House
Johnsons Reprint Co. 1972

Knowles, C & Pitt P.
London — The History of Building Regulations in London
Architectural Press 1972

Knight-Sturgess W. — The Origins of Cast-Iron in America 1970

Lambton, L. — Vanishing Victoriana

Leary, F. & J.
Sydney
Colonial Heritage
Angus & Robertson 1972

Loth & Sadler
Boston
The Only Proper Style
New York Graphic Society 1975

Loudon, J.C.
London
Encyclopaedia of Cottage, Farm and Villa Architecture
Longman, Rees, Orme, Brown, Green & Longman 1833 Ed. & 1853 Ed.

Lewcock, R.B.
Cape Town
Early Nineteenth Century Architecture in South Africa
A.A. Balkema 1963

McRae, M & Adamson A.
Toronto
The Ancestral Roof
Clarke Irwin 1963

Meeks, C.
London
The Railway Station
The Architectural Press 1957

Mercer, E.
London
English Vernacular Houses
Royal Commission for Historic Monuments 1976

Muthesius, S.
London
The High Victorian Movement in Architecture
Routledge 1972

Nicholson, U.P.
London
The Builder and Workman's New Director
Knight & Lacey 1825

Nilsson, S.
London
European Architecture in India 1750-1850
Faber 1968

Papworth, J.B.
London
Rural Residences
Ackermann 1868

Pallisers American Architecture
New York
Ogilvie 1899 Ed.

Parker, J.H.
Oxford etc.
A Glossary of Architectural Terms
J. Parker & Co. 1850 Ed. 3 Vols.

———
Oxford
An Introduction to the Study of Gothic Architecture
J. Parker & Co. 1874 Ed.

Pevsner, N.
London
High Victorian Design
Architectural Press 1951

_____ London	Studies in Art, Architecture and Design Thames & Hudson 1968
_____ Oxford	Some Architectural Writers of the 19th Century Clarendon Press 1972
_____ London	A History of Building Types Thames & Hudson 1976
Picton-Seymour, D. Cape Town	Victorian Architecture in South Africa A.A. Balkema 1977
Port, M.M. London	Six Hundred New Churches S.P.G.K. 1961
Pugin, A. & A.W. London	Pugin's Examples of Gothic Architecture Bohn 1838-39 3 Vols.
Pugin, A.W.N. Edinburgh	Contrasts Grant 2nd Ed. 1898 Original 1841
_____ London	The True Principles of Gothic Architecture Weale 1841
_____ London	Foliated Ornament Chatto & Windus 1875
Rennie, J.W.L. Cape Town	The Buildings of Central Cape Town Cape Provincial Institute of Architect 1979
Rickman, T. Oxford	An Attempt to Discriminate the Styles of English Architecture J. Parker 6th Ed. 1881
Robertson, E.G. & J. London	Cast Iron Decoration - A World Survey Thomas & Hudson 1977
Ruskin, J, London	Seven Lamps of Architecture George Allen 8th Ed. 1901
Saint, A. New Haven	Richard Norman Shaw Yale Univ. Press 1976
Scully V. New Haven	The Single Style and the Stick Style Yale Univ. Press 1971
Seabourne, M London	The English School 1370-1870 Routledge & Kegan Paul 1971

Service A.
London
Edwardian Architecture and its Origins
Architectural Press 1975

Simon J.D. & Miller, F.
London
The House Owners Estimator
Crosby-Lockwood & Son 1889

Steegman, J.
London
Victorian Taste
Nelson 1970

Thompson, P.
London
William Butterfield
Routledge & Kegan Paul 1971

Vaux C.
New York
Villas and Cottages
Dover Publishing 1970 (Original 1864)

Vincent, J.
London
Country Cottages
Hardwicke 1861

Walton, J.
Pretoria
Homesteads and Villages of South Africa
Van Schaik 1956

Walker, T.L.
London
Architectural Precedents
Library of Fine Arts 3rd Ed. 1841

White, J.
Cambridge
The Cambridge Movement
Cambridge Univ. Press 1962

D. NEWSPAPERS

Cape Argus 1857 - 1858; 186· - 1880; 1892-1895
Cape Argus Weekly 1883 - 1885; 1889
Cape Monitor 1850 - 1857
Cape Register 1893

Cape Times 1840; 1876 - 1877
Cape Times Weekly 1892 - 1905
Cape Town Mail 1844 - 1847
Evening Phoenix 1882 - 1885
Mossel Bay Advertiser 1876 - 1879
Oudtshoorn Coerant 1881 - 1895; 1897 - 1900
South African Advertiser and Mail 1861
South African Commercial Advertiser 1842; 1848 - 1853
South African Illustrated News 1884 - 1885
Wynberg Times 1882 - 1885

F. Guides and Almanacs

Cape of Good Hope Almanac 1835 - 1889
Cape Town Directory 1893; 1897 - 1898
Jutas Directory of Cape Town 1897 - 1905
Argus Annual and Cape of Good Hope Directory 1888
continued as Argus Annual and South African Directory 1889 - 1894
Continued as Argus Annual and South African Gazetteer 1895 - 1897
Guide to the Cape Colony 1879
Cape Town Commercial Directory 1885
Cape Town of Today 1890; 1892
Cape Town Guide 1894; 1900; 1904

E. PERIODICALS

Africana News and Notes 1955 - 1978
The Architect 1879
The Architectural Review 1948 - 1978
The Builder 1845 - 1851
Cape Church Monthly and Parish Record 1892 - 1894; 1905 - 1906
Cape Illustrated Magazine 1890
Cape Monthly Magazine 1857 - 1862; 1864 - 1865
Cape Quarterly Review 1881-1883
The Church Builder 1862 - 1867; 1870 - 1872
The Diocesan College Magazine 1887; 1928
The Lantern 1877 - 1884
South African Architect, Engineer and Surveyor 1903 - 1907
South African Association of Engineers and Architects 1892 - 1899
South African Illustrated Magazine 1900 -1901
South African Magazine 1867 - 1869
South African Library Quarterly Bulletin 1946 - 1978
Who's Who 1908

THE ARCHITECTURE OF THE WESTERN CAPE, 1838 TO 1901.

A Study of the Impact of Victorian Aesthetics and Technology on South African Architecture.

Dennis John Charles Radford

A Thesis Submitted to the Faculty of Architecture
University of the Witwatersrand, Johannesburg
for the Degree of Doctor of Philosophy

Johannesburg 1979

Volume Two

CAPTIONING

The sequence use in the captions to the illustrations is as follows: Number, Description of Building, Location (where streets are given, the location is central Cape Town), Date, Architect (if known), and finally The source of the illustration. Where the source is not acknowledged, the drawing or photograph is by the author.

The following abbreviations for sources are used:
C.A. = Cape Archives
S.A.L. = South African Library, Cape Town.
U.C.T. = Jagger Library, University of Cape Town
N.G.A. = N.G. Church, Archives, Cape Town
A.?. = Africana Museum, Johannesburg
F + P = Forsyth & Parker
R + A = Ravenscroft & Anderton
An asterisk after the building's identification means that it has been demolished or greatly altered
The bar scale on the plans is divided into metres as well as feet

While the author has taken care to make the measured drawings as accurate as possible, the prime object of these is the indication of plan types, therefore they should not be regarded as any substitute for the detailed measured drawings required for restoration purposes.

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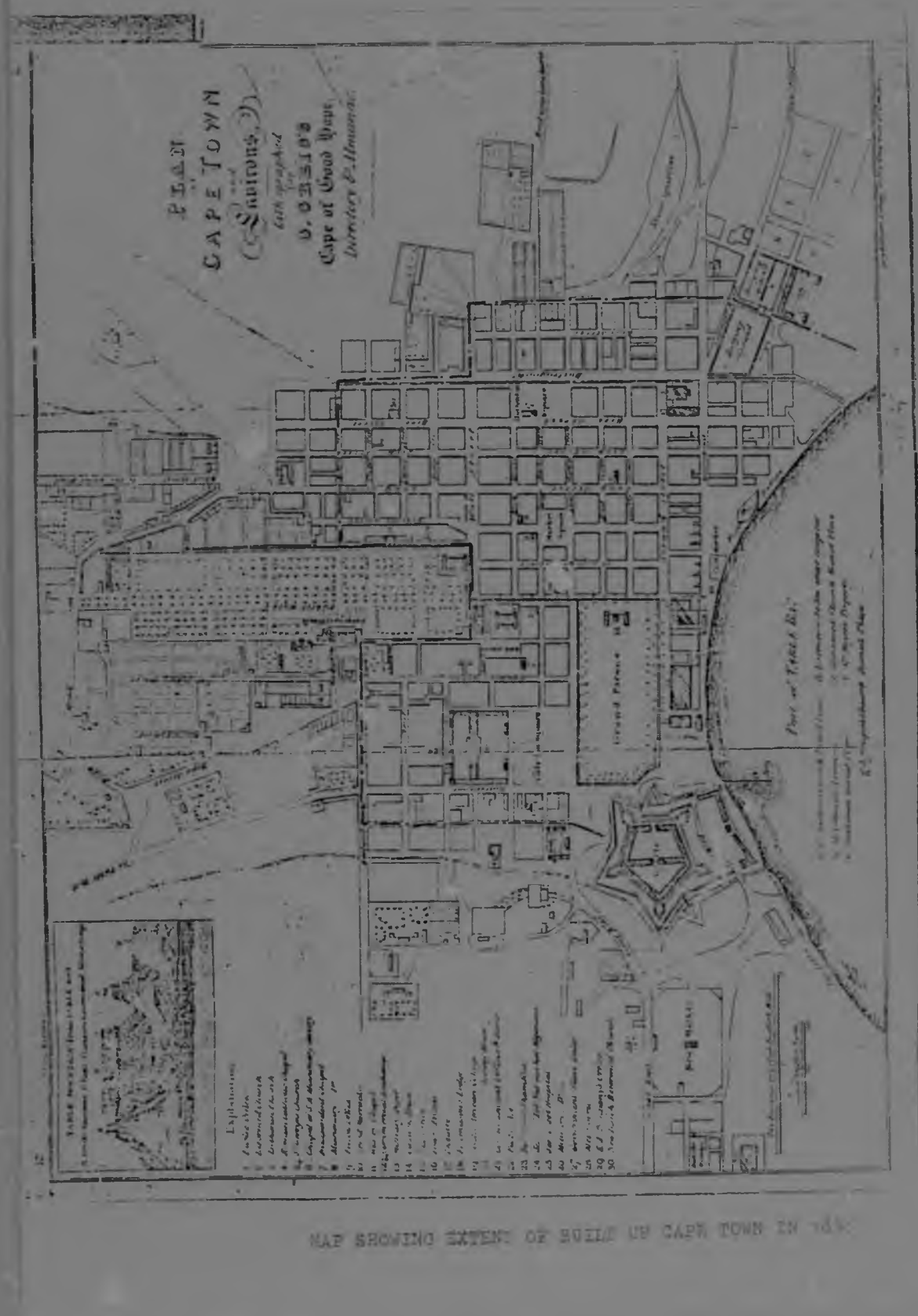
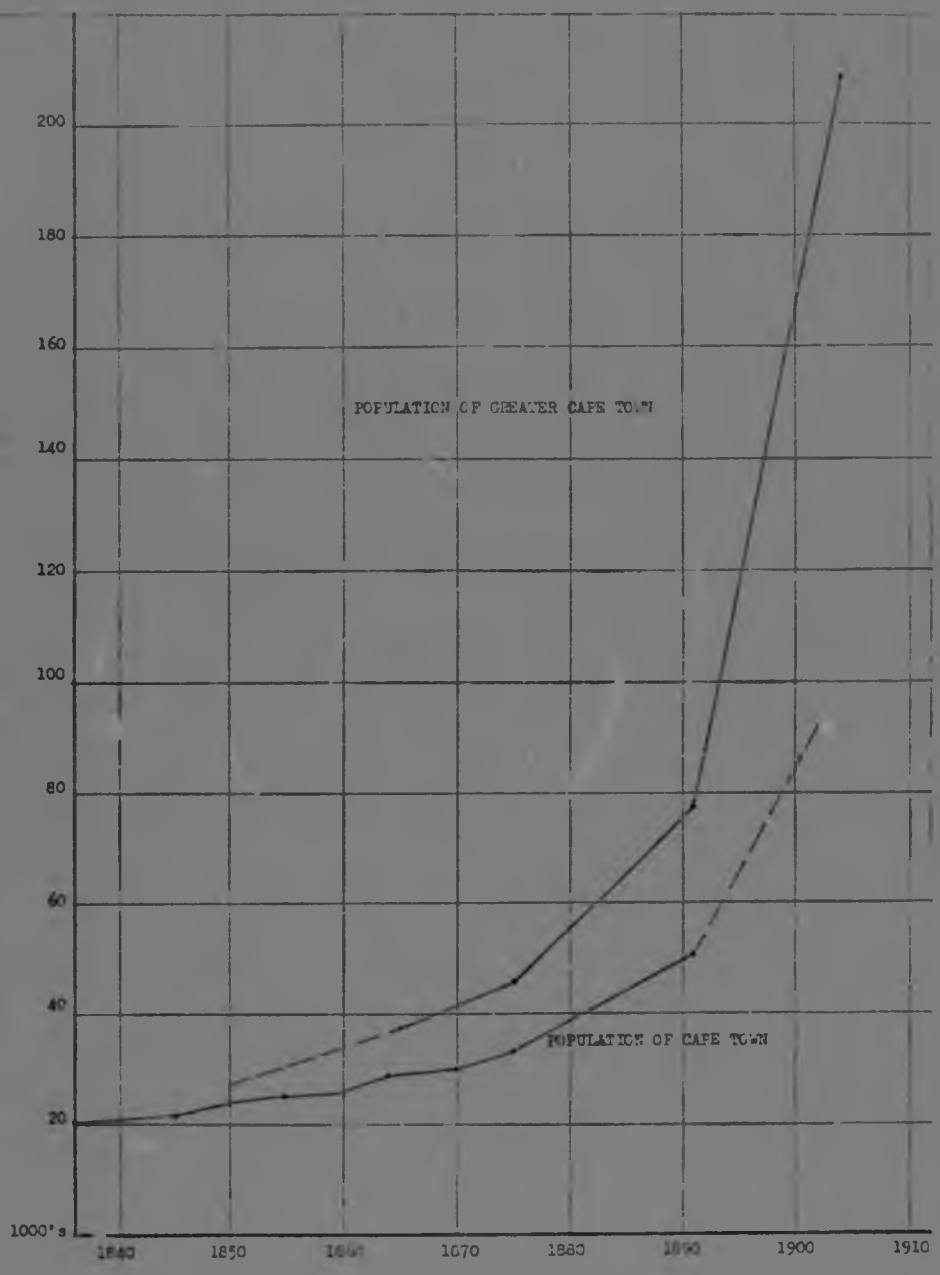
DISTRICT OF
CAMDEBOO
DISTRICT OF
GRAAFF-REINET
DISTRICT OF
UITENHAGE
DISTRICT OF
ALBANY
DISTRICT OF
SOMERSET
DISTRICT OF
CRADOCK
DISTRICT OF
COLESBERG
DISTRICT OF
CLANWILLIAM
DISTRICT OF
WORCESTER
DISTRICT OF
STELLENBOSH
Elephant R.
Centres of Distric
Cape town,
Stellenbosch,
Swellendam,
Graaff Reinet,
Uitenhage,
Graham's town,
Beaufort West,
Worcester,
Somerset East,
Clanwilliam,
Port Elizabeth,
Cradock,
Colesberg.
English Miles



MAP SHOWING EXTENT OF BUILT UP CAPE TOWN IN 1[illegible]

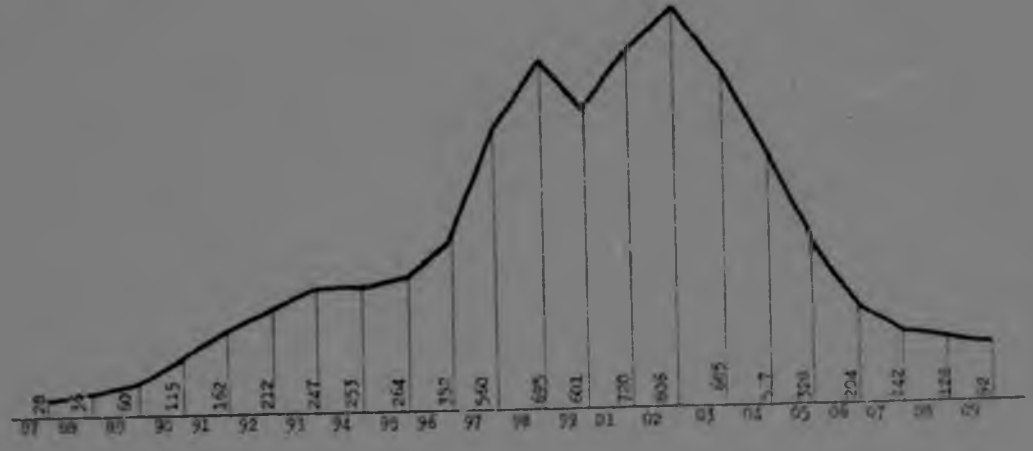
GRAPH OF CAPE COLONIAL EXPENDITURE



GRAPH OF POPULATION GROWTH.

DIAGRAM

Showing the number of plans approved in each year since June 30th, 1888. Municipality of Cape Town.



ADDERLEY ST. C 1850 (C.A.)

ADDERLEY ST. c 1862 (Cat.)

ADDERLEY ST. C 1875 (C.A.)

ADDERLEY ST. C 1895 (C.A.)

ADDERLEY ST. © 1905 (C.A.)

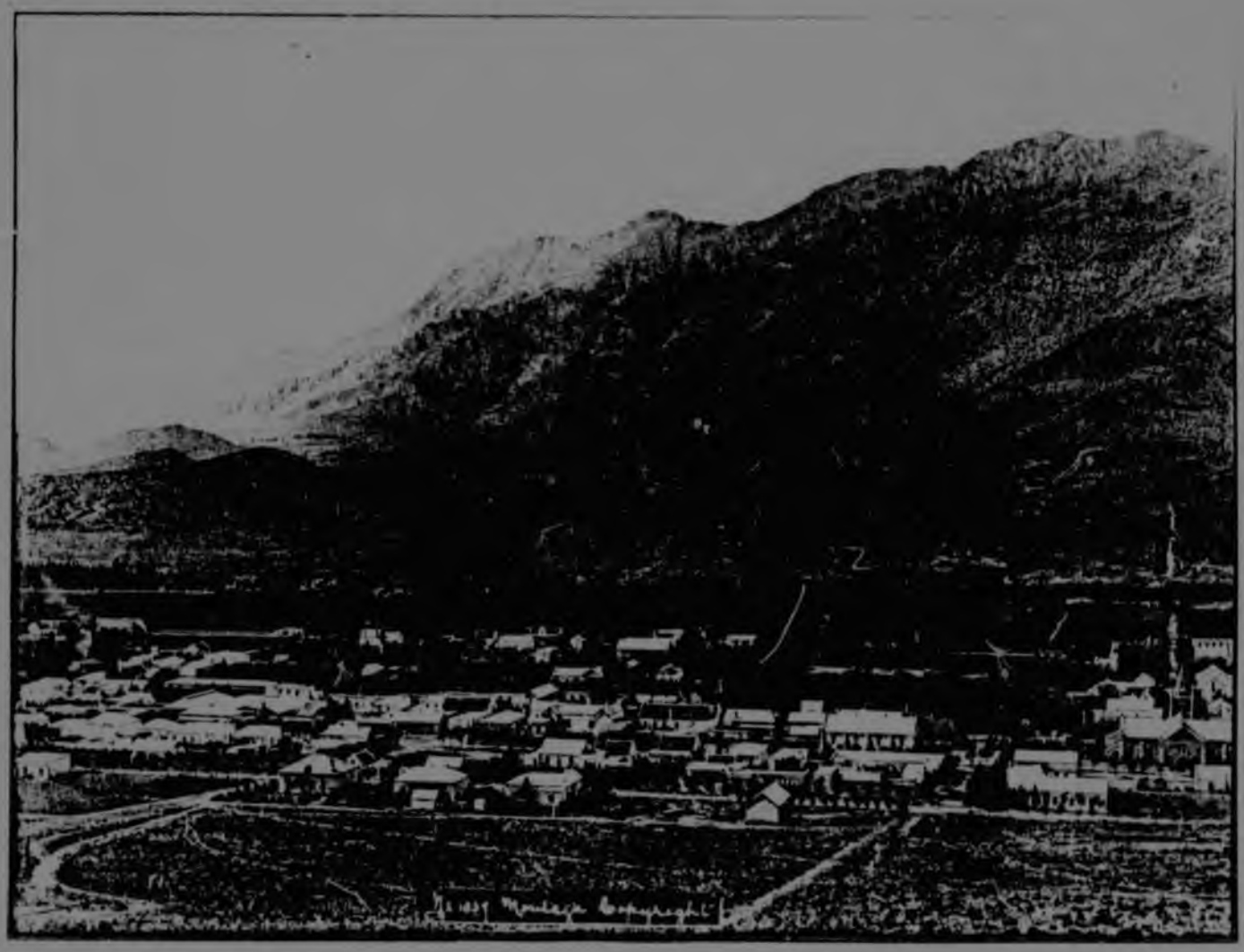
PRINCE ALBERT C 1905 (C.A.)

MONTAGU, PLAN C 1900

12

PIQUETBERG, TOWN PLAN C1860 (SURVEY-GENERAL C.T.)

13



MONTAGU, C 1905 (C.A.)

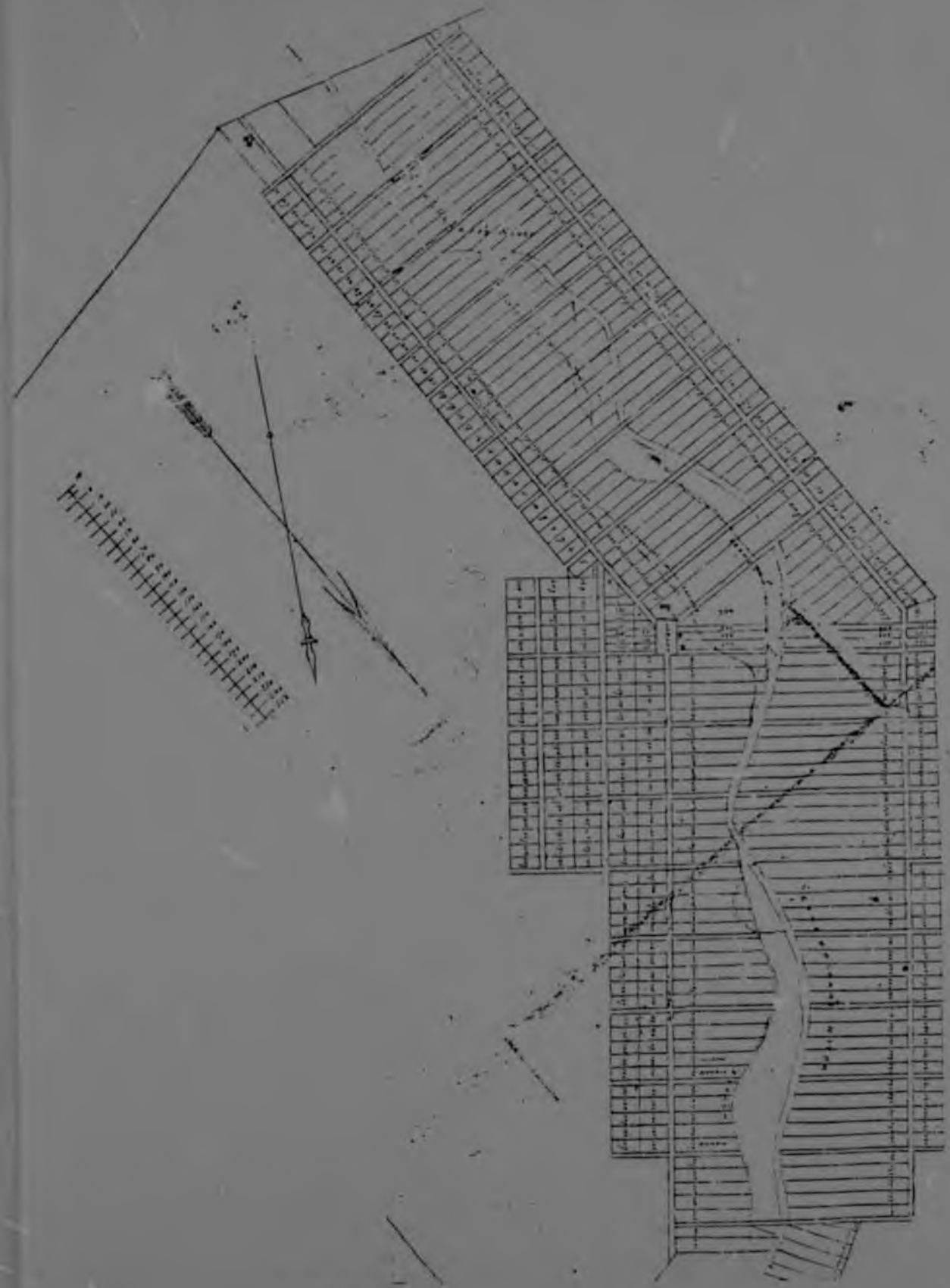
HOBOKEN, PLAN C 1900

15.

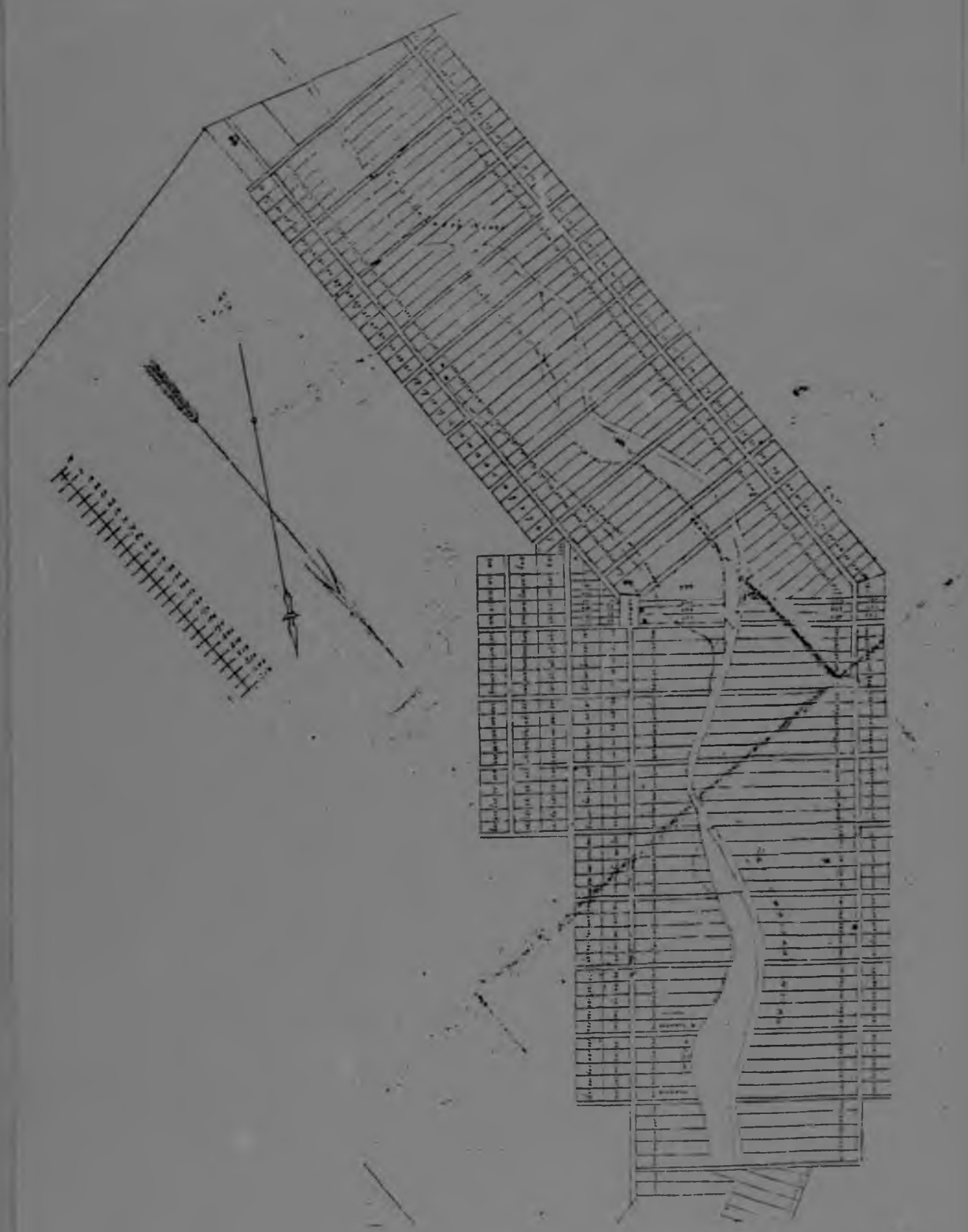
BREDASDORP, PLAN C1900

16.

BREDASDORP, C 1905



AMSTERDAM, PLAN C 1866 (C.A.)



OU. ISHCORN, PLAN C 186

(C.A.)

x 2753/1860

PORTERVILLE

1169

19.

PORTERVILLE. PLAN C 1860 (SURVEYOR-GENERAL C.T.)

WESLEYAN CHURCH * , SIMONSTOWN 1828 COL MICHELL (S.A.L.)

20.

N.G. CHURCH * BREDASDORP 1842 (N.G.A.)

21.

WESLEYAN CHAPEL *, WYNBERG 1850 S. MCDOUGALL (A.F.)

22.

ST PAULS * RONDEBOSH 1834 COL MICHELL (S.A.L.)

23.

VILLA AT STRAWBERRY HILL. (A DESCRIPTION OF MR WALPOLE'S VILLA ETC)

24.

ST LUKES, CHELSEA 1824 J.SAVAGE

25.

ST JOHNS * WYNBERG 1839 J. SKIRROW (C.A.)

27.

GROOTE KERK 1846 J. SCHUTTE (C.A.)

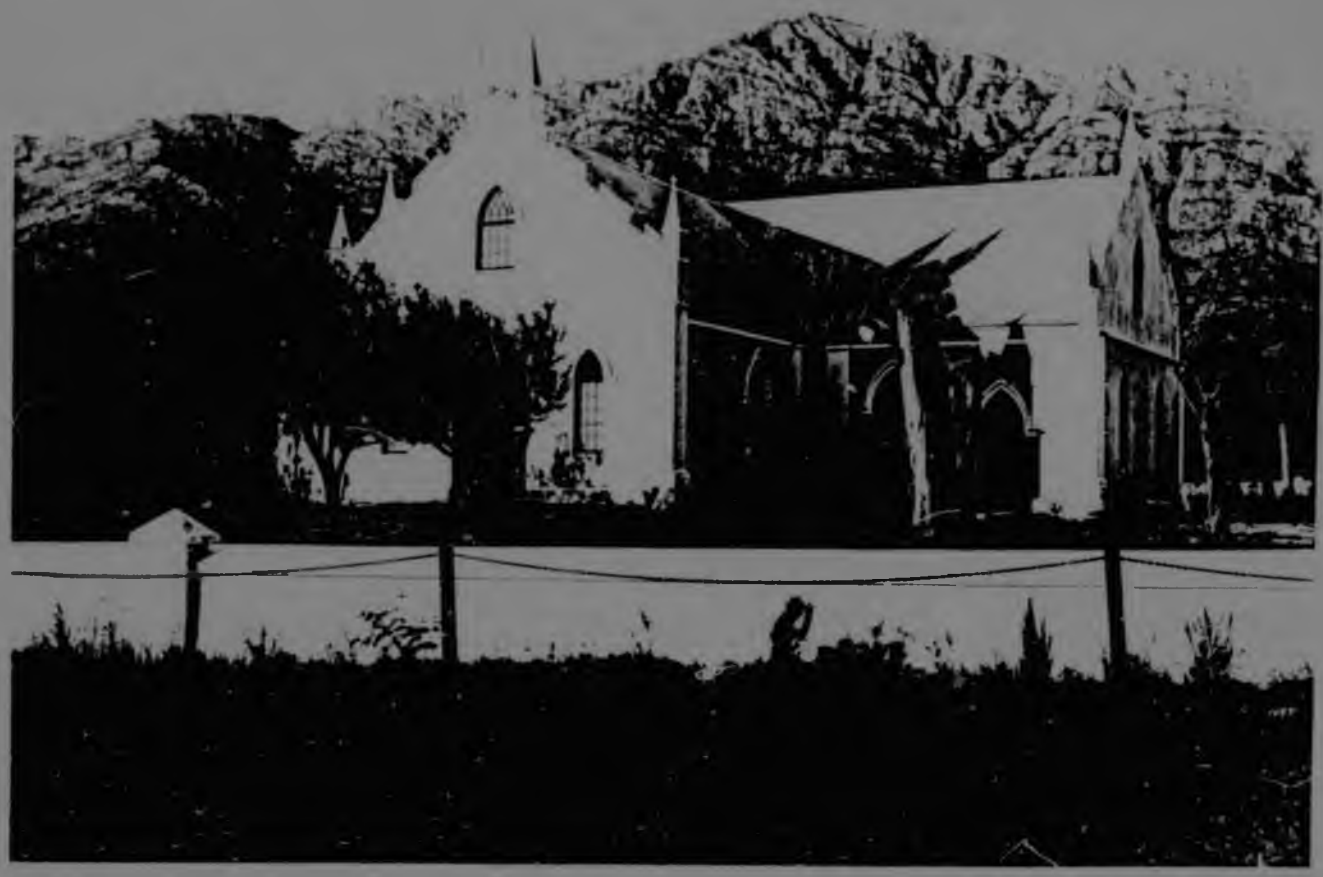
N.G. CHURCH, ✱ RIVERSDALE 1845 J. BARRY (C.A.)

29.

N.G. CHURCH, * ROBERTSON 1856 (H.G.A.)

N.G. CHURCH, MALGAS 1853 (COOK AND FRANSEN, OLD HOUSES OF THE CAPE)

N.G. CHURCH, TUIBAGH c 1837 (C.A.)



N.G. CHURCH, FRANSCHOEK, 1847 (G.A.)

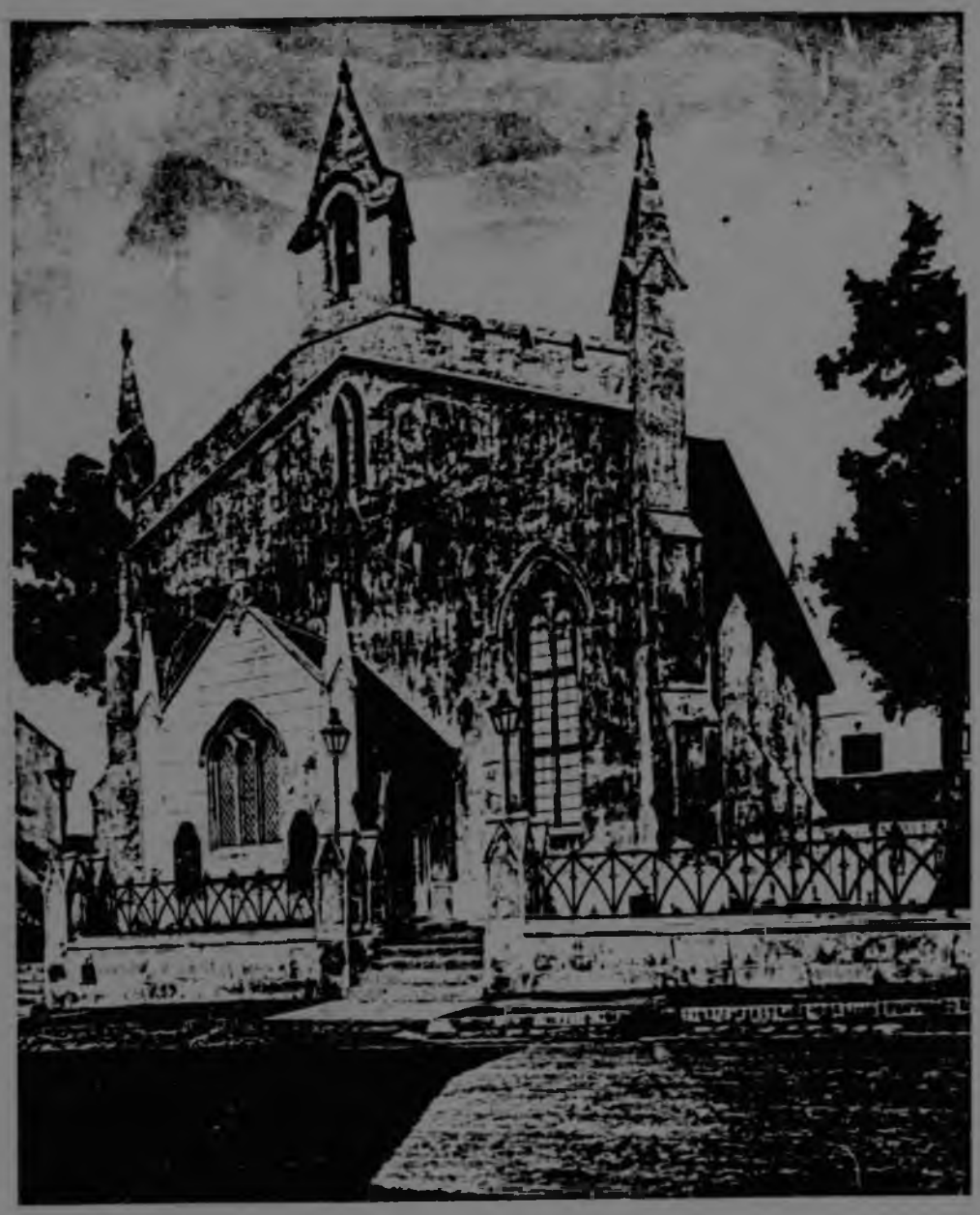
N.G. CHURCH, SIMONSTOWN 1856 (C.A.)

33.

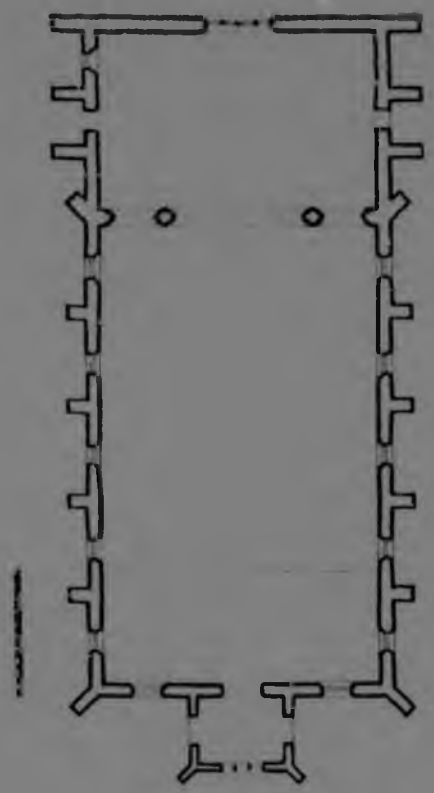
N.G. CHURCH *, WORCESTER c 1832 (AFTER D'OYLY)

34.

ST MARY'S CATHEDRAL C.T. 1851 SPARMANN & HAGEN (C.A.)

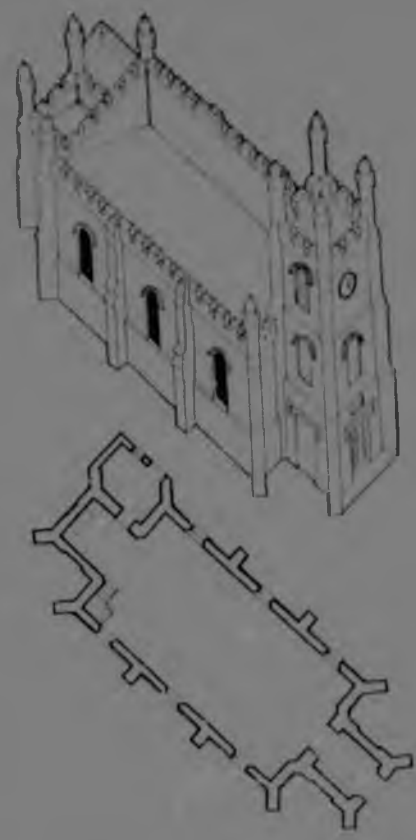


HOLY TRINITY * HARRINGTON ST. 1846 (C.A.)



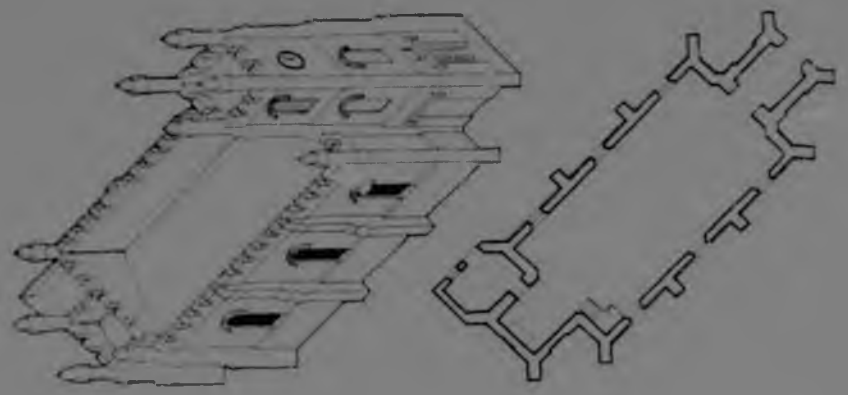
HOLY TRINITY - PLAN

36A



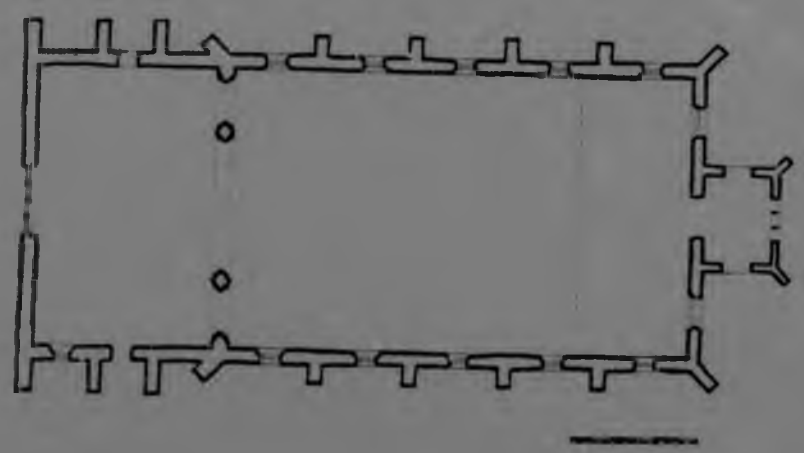
CHURCH, WORSEN ISLAND 1841 COL.BELL (R.C.T.)

37.



CHURCH, BOBBEN ISLAND 1841 Arch. HELL (U.C.T.)

37.



HOLY TRINITY - PLAN

36A

FREE SCOTTISH CHURCH ★ GREEN MARKET SQUARE c 1850 P. PARADISE (U.S.)

ST OSWALDS, LIVERPOOL , 1842 A.W. PUGIN (THE PRESENT STATE)

39.

ST TELLO, CILFYNDEN, WALES 1863 R.J. WITHERS (THE CHURCH BUILDER 1863)

40.

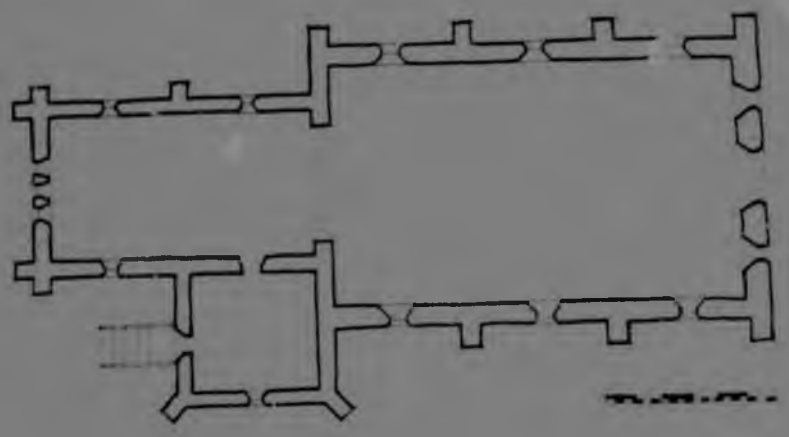
ALL SAINTS, LONDON 1859

W. BUTTERFIELD (THE BUILDER 1853)

ST SAVIOURS ✱ , CLAREMONT 1854 .S GRAY (C...)

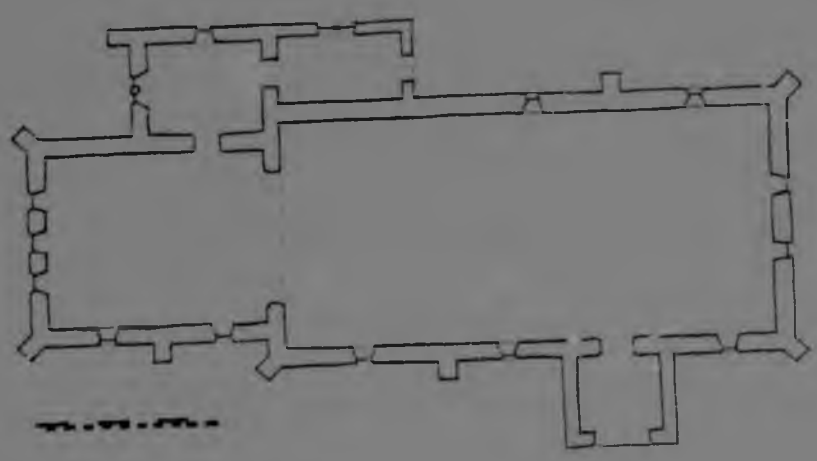
ST. PAUL'S, RONDEBOSCH IN 1865.

ST PAULS, RONDEBOSCH 1854 W. BUTTERFIELD? (C.A.)



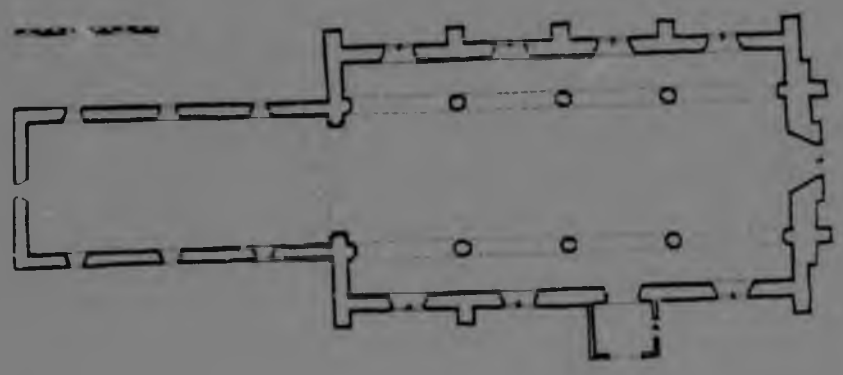
44

ST JOHNS, CLANWILLIAM, 1865 S. GRAY



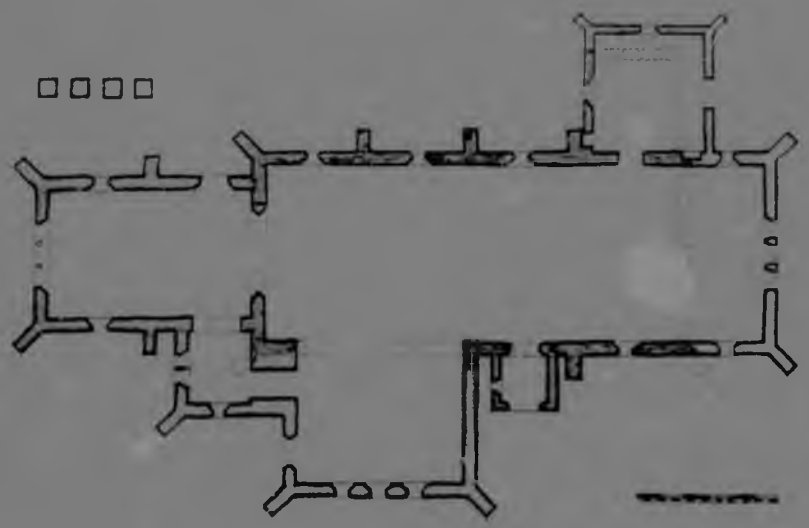
45

ST MATTHEWS, RIVERSDALE 1856 S. GRAY



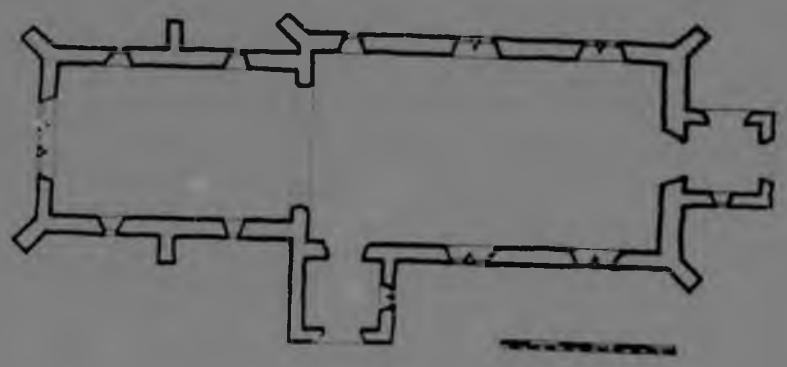
46

ST PAULS RONDESOSCH (1854) PLAN



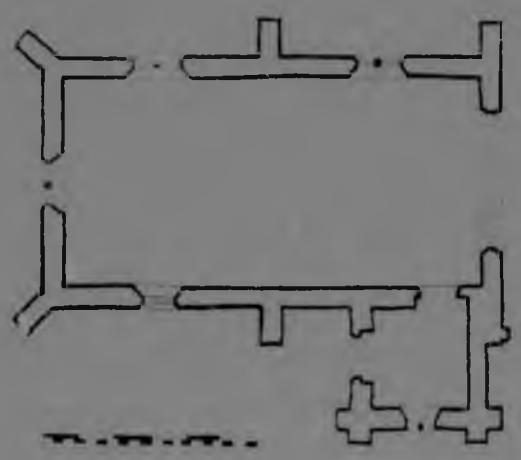
ST JUDES, OUDTSHOORN 1863 G. WALLIS

47.



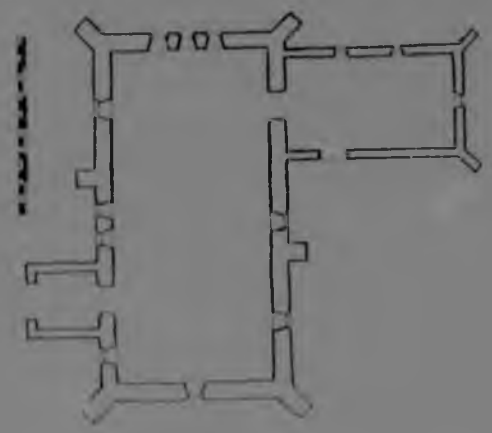
48.

HOLY TRINITY CALEDON, 1850

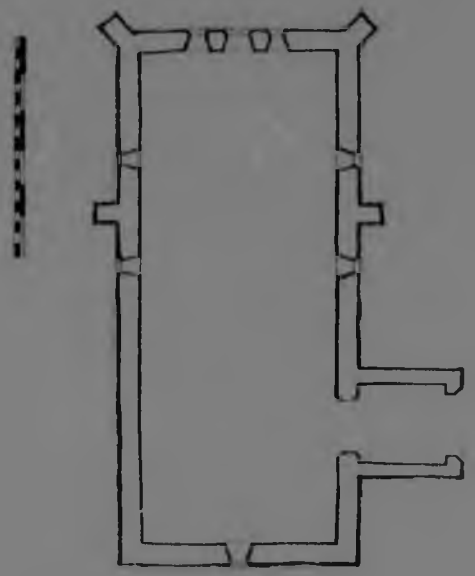


49

ST GEORGES, NYSNA 1855



ALL SAINTS, CHELSDALE. 1879

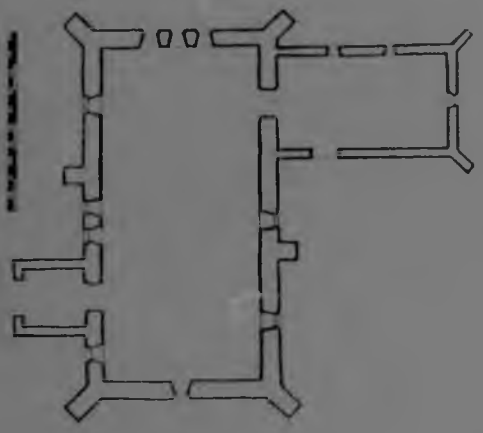


S. GRAY

ST JOHNS, SCHOCNBERG 1854

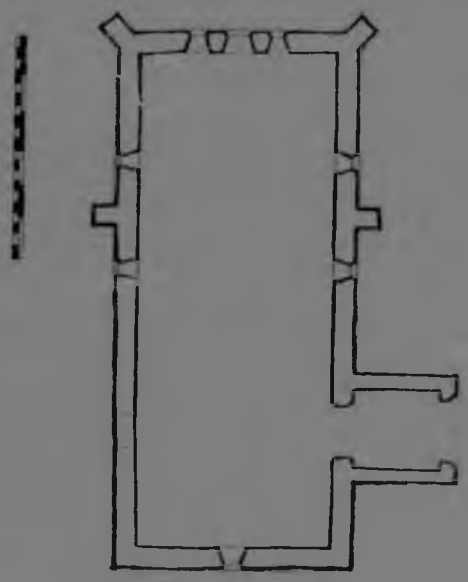
S. GRAY

ST JOHN'S - AXONOMETRIC



ALL SAINTS, UNIONDALE. 1875 S. GRAY

50.



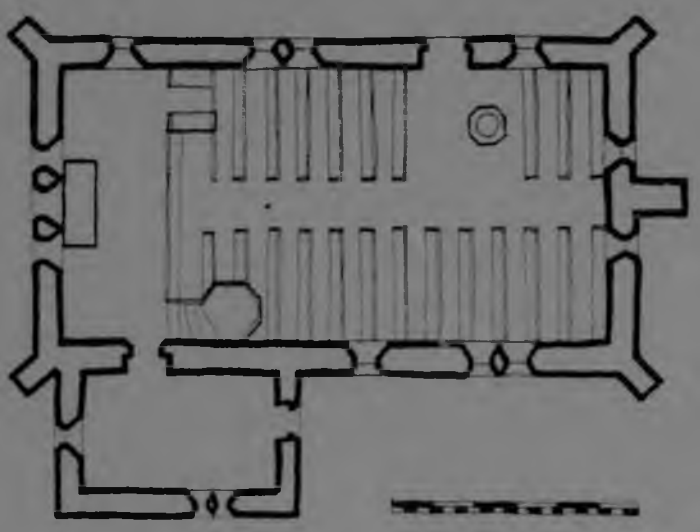
ST JOHNS, SCHOONBERG 1854 S. GRAY

51.

ST JOHN'S - AXONOMETRIC

CHRIST CHURCH &, SWELLENDAM 1855 S. GRAY (1855 VISTATION JOURNAL)

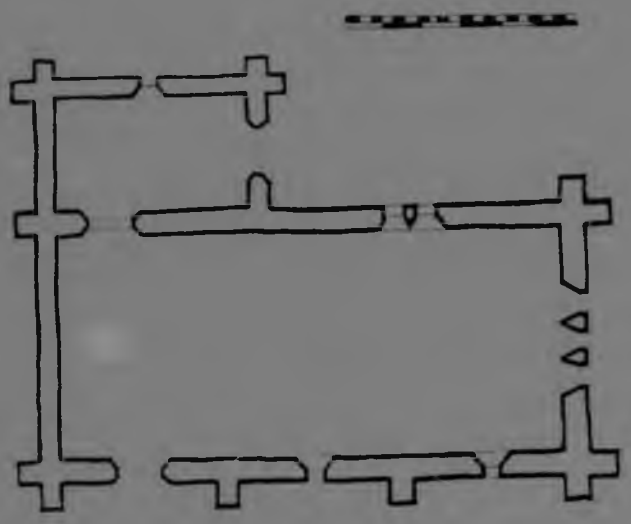
52.



ANGLICAN CHURCH, COLESBERG C1850 S. GRAY (C.A.)

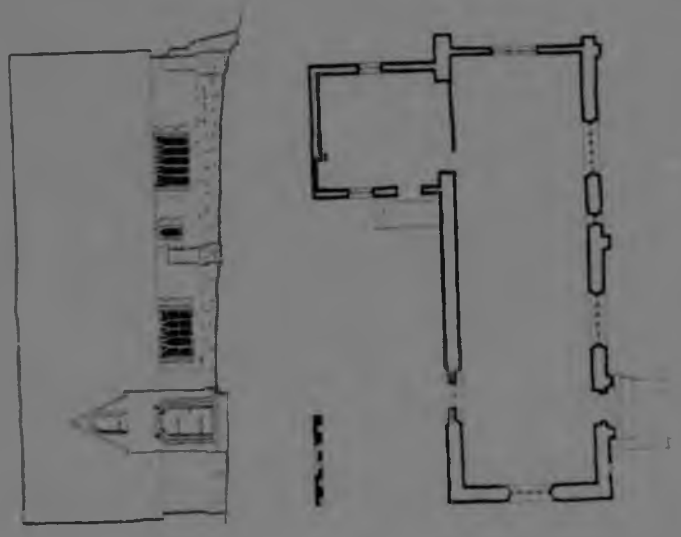
53.

ST THOMAS * , RONDEBOSCH S. GRAY (C.A.)



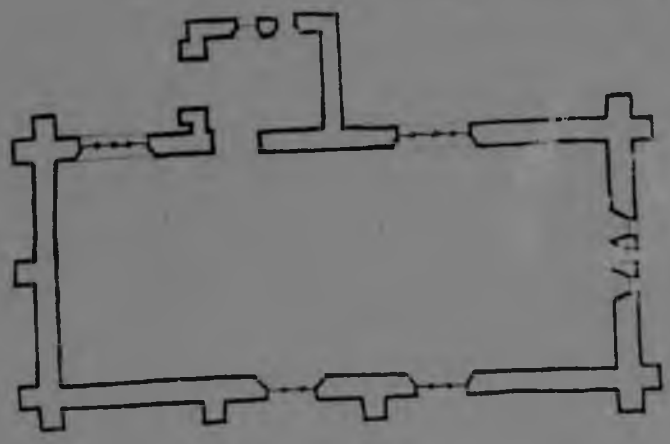
D'URBANVILLE CHAPEL C 1860 S. GRAY

56.



NEWLANDS CHAPEL, 1857 S. GRAY (U.C.T.)

55.



ST THOMAS #, RONDEBOSCH 1864 S. GRAY (C.A.)

54A

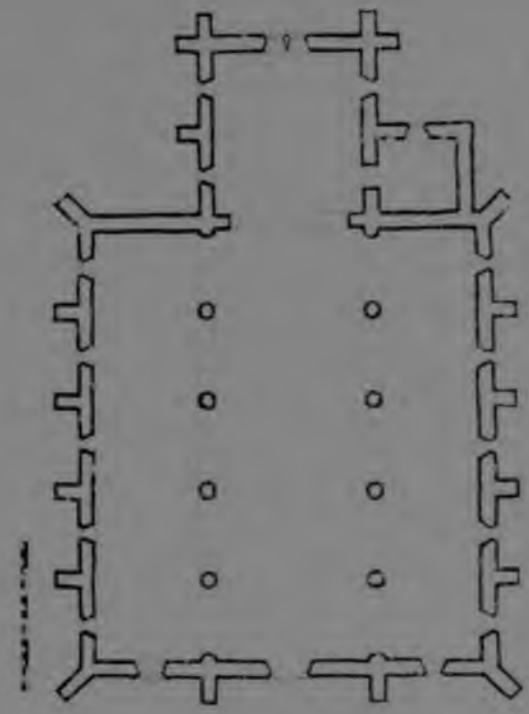
ST MARKS, GEORGE 1852 H.J. UNDERWOOD (C.A.)

HOLY TRINITY, BELVIDERE 1855 H.J. UNDERWOOD? (C A.)

ST MARYS ✱ WOODSTOCK 1865 S. GRAY (C.A.)

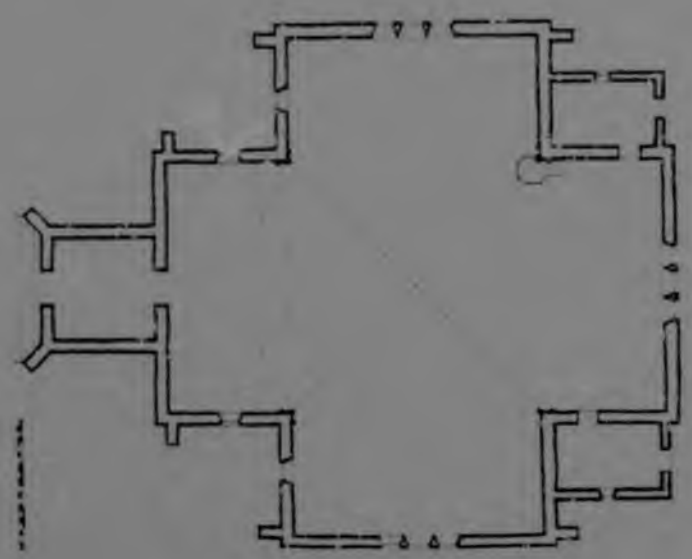
09

ST MARTIN, LONG ST 1853 P. PENKETH (C.A.)



ST JOHN'S - PLAN

61.



ST MARTIN - PLAN

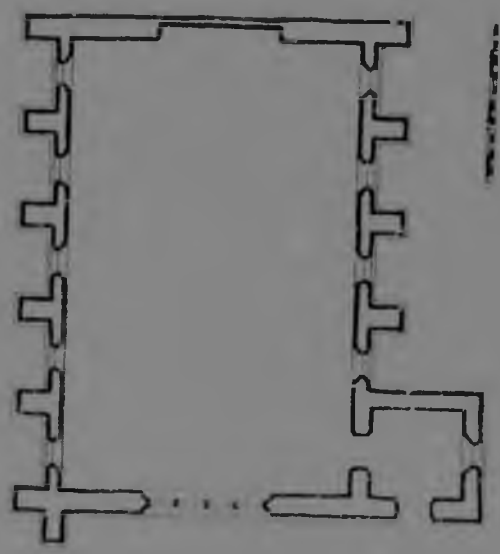
60A

514

ST JOHNS * LONG ST 1857 PENKETH & CALVERT (G.A.)

Engelse Kerk

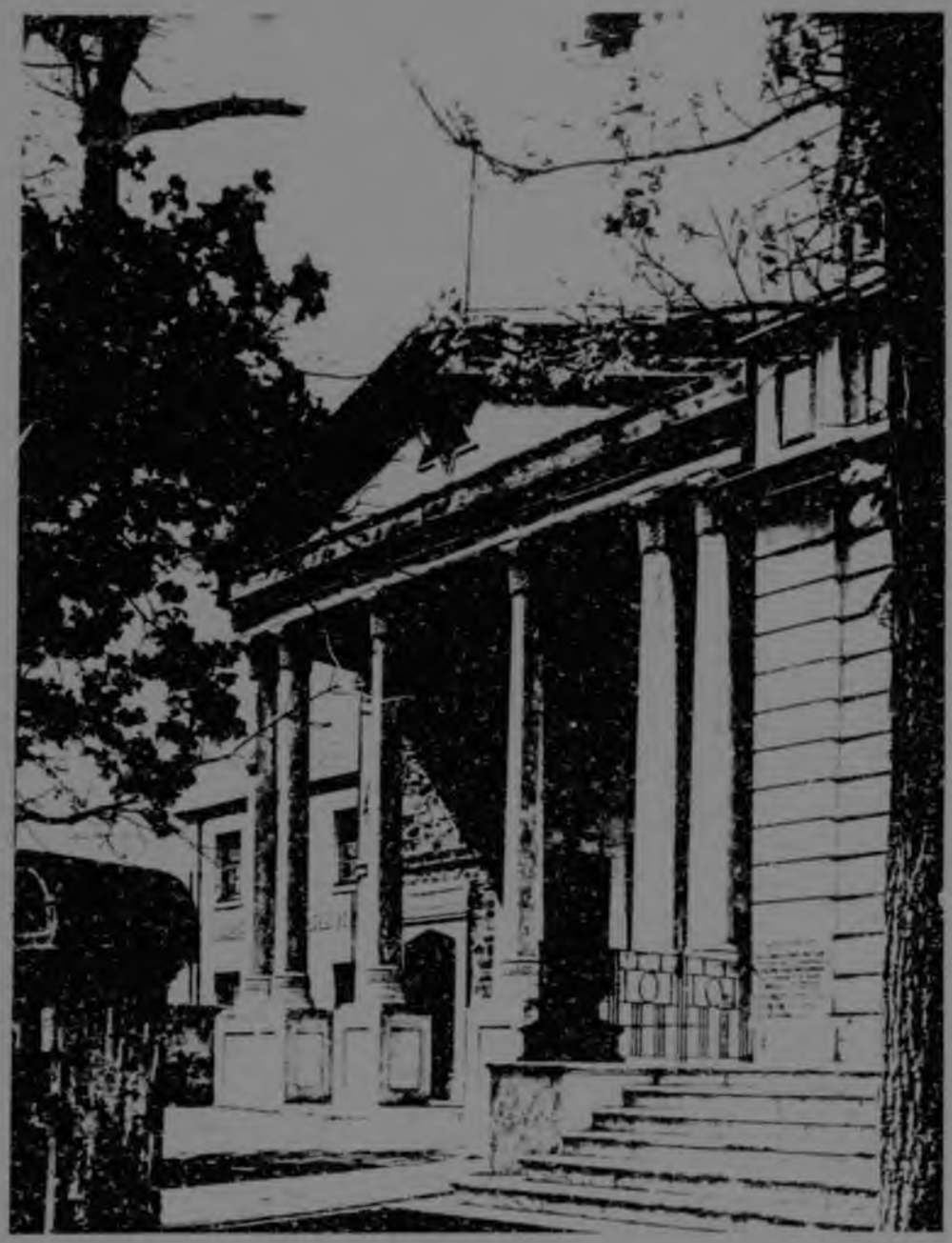
ST MARYS ✱ STELLENBOSCH 1853 P. PENKETH



CONGREGATIONAL CHURCH ✱ PLAN

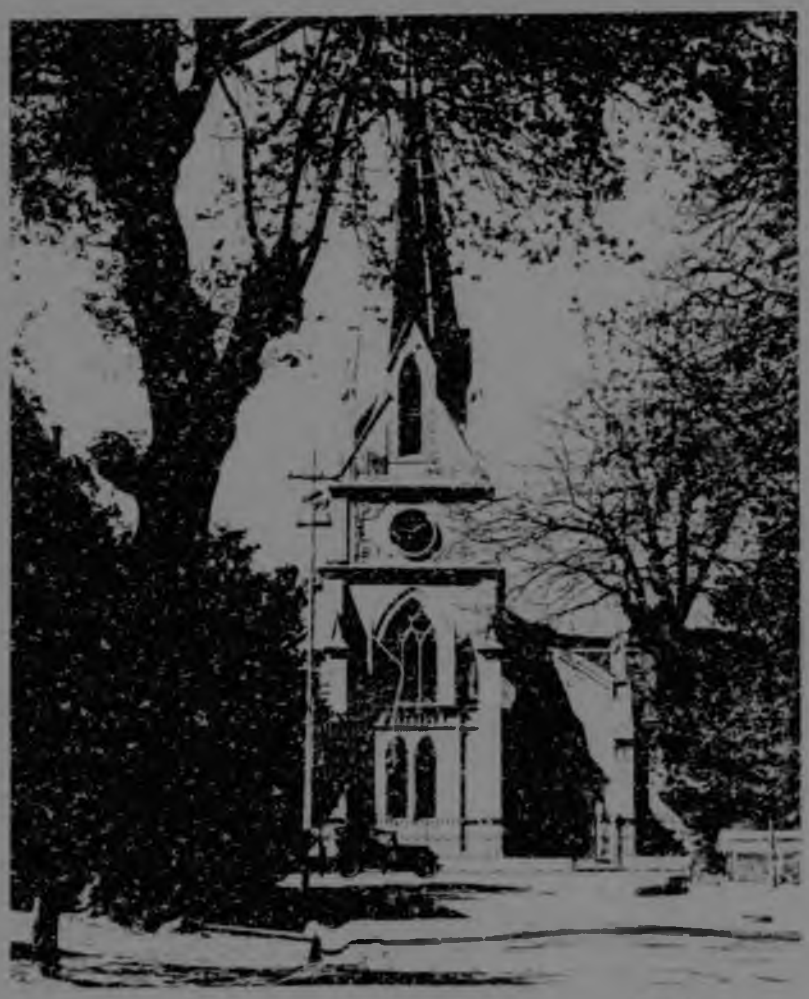
CONGREGATIONAL CHURCH, CALEDON SQUARE, 1868 P. PENKETH (C.A.)

N.G. CHURCH CUDTSHOORN 1879 WALLIS/HAGER (C.A.)

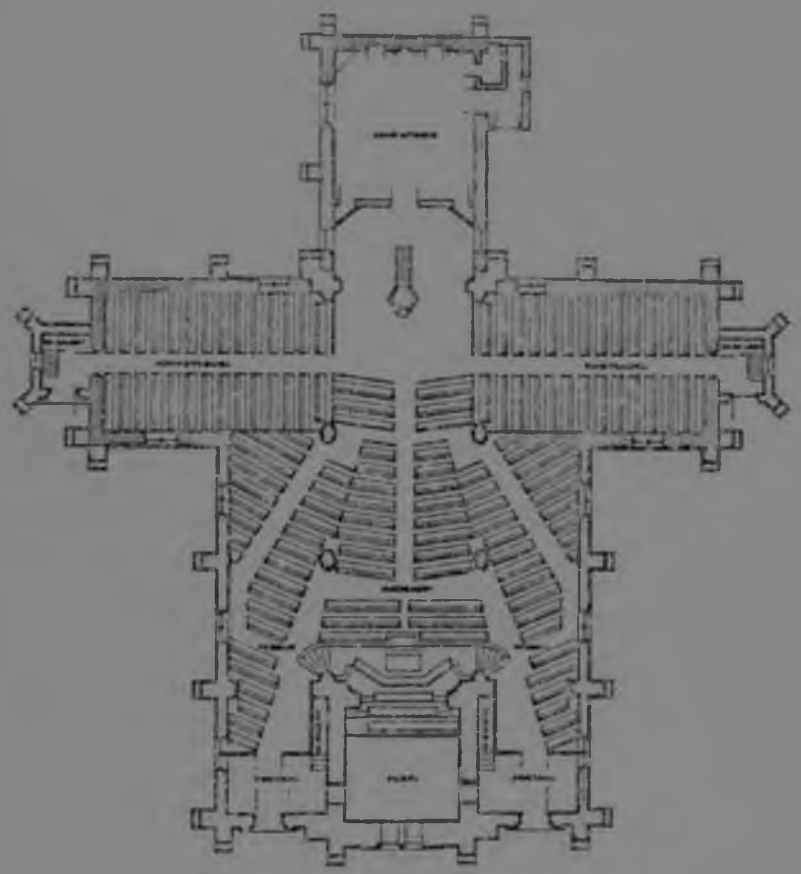


SYNAGOGUE, CAPE TOWN 1863 J. SOOD (C.A.)

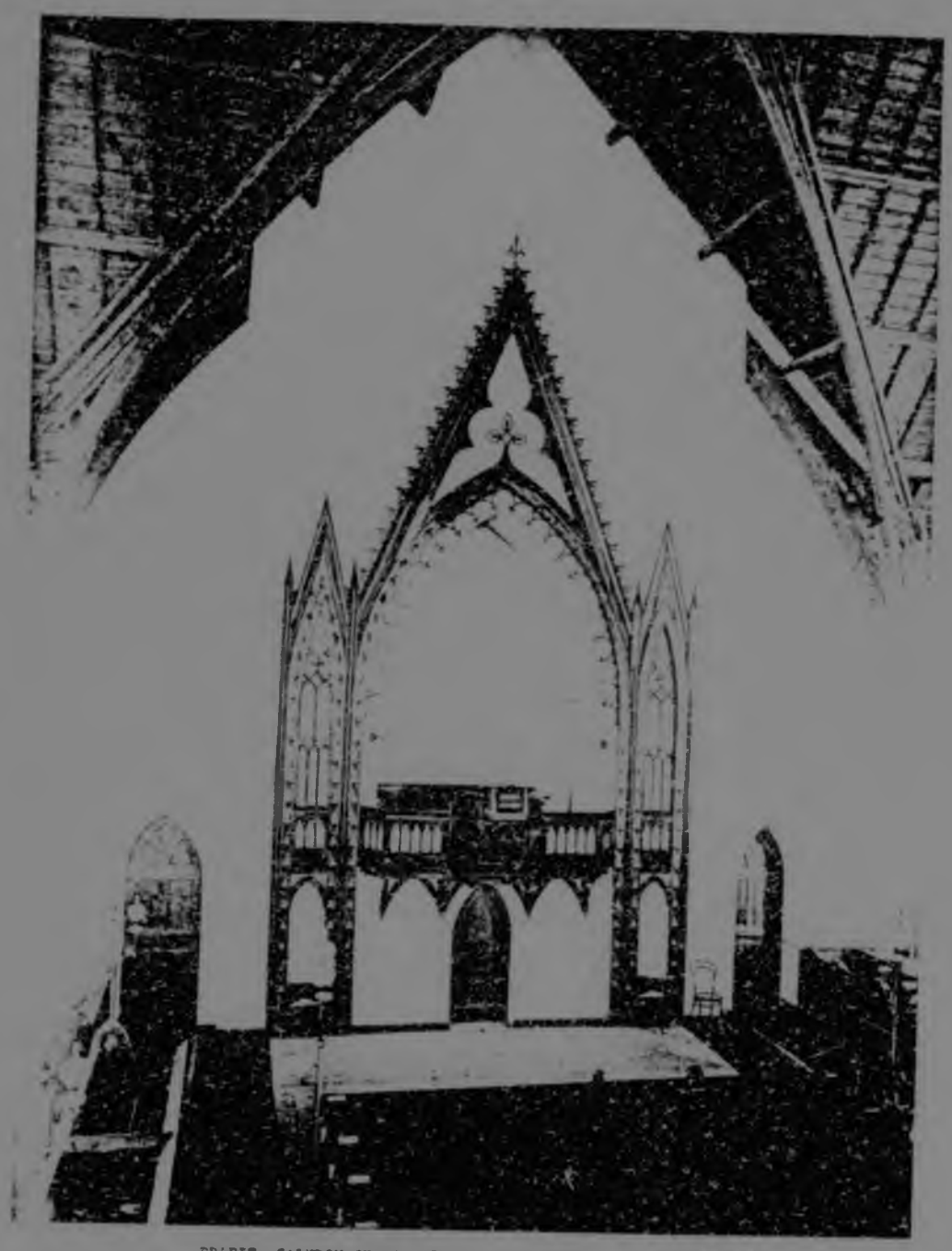
LUTHERAN CHURCH, STELLENBOSCH 1854 C. HAGER



N.G. CHURCH STELLENBOSCH 1863 C. HAGER (C.A.)

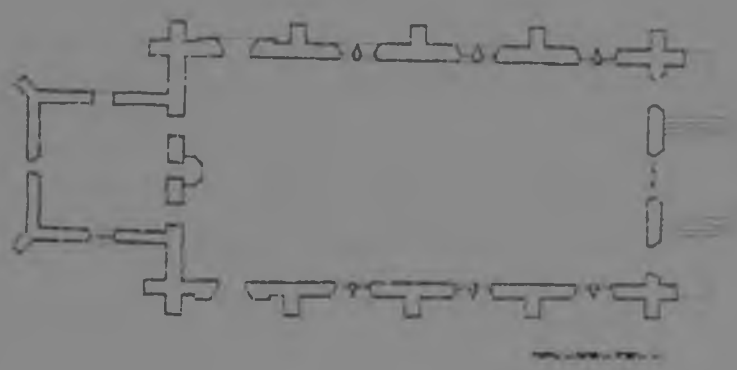


GRONDPLAN VAN DIE NED GEREF. KERK STELLENBOSCH
MET AANDUIDING VAN VROEËRE GEDEELTES WAT NOG BESTAAN



PULPIT, CALEDON CHURCH 1875 C. HAGER (C.A.)

N.G. CHURCH, CLANWILLIAM 1864 C. HAGER (C.A.)



N.O. CHURCH * TULEAGH 1871 C. MAGEN (C.A.)

N.G. CHURCH *, HEIDELBERG 1875 C. HAGER (N.G.A.)

71.

N.G. CHURCH * SWELLENDAM, 1874 BATTENBERG (N.G.A.)

72.

N.G. CHURCH * CALEDON 1875 C. HAGER (C.A.)

N.G. CHURCH FRASERBURG 1866 C. HAGER (N.G.A.)

74

N.G. CHURCH * UNIONDALE, 1884 C. HAGER (N.G.A.)

75.

HOLY TRINITY, KALK BAY 1874 H. WOODYER (C.A.)

METROPOLITAN METHODIST CHURCH 187(J. FREEMAN

CONVENT OF THE SACRED HEART C 1877 C. FREEMAN (U...T.)

78

ST PETERS, MOSSEL BAY 1879 J. WELCHMAN

79

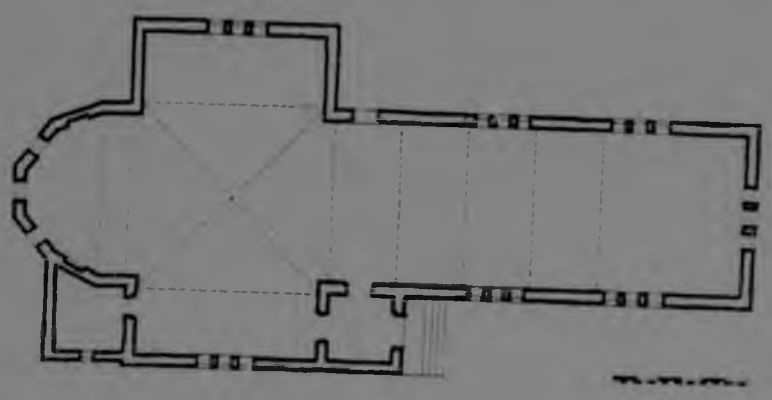
Nº 4

SIDE ELEVATION

WESLEYAN CHURCH #, STELLENBOSCH 1878 C. FREEMAN (U.C.T.)

ST DOMINICS, WYNBERG 1879 C. FREEMAN (C.A.)

ROUND CHURCH * SEA POINT, 1878 C. FREEMAN (C.A.)

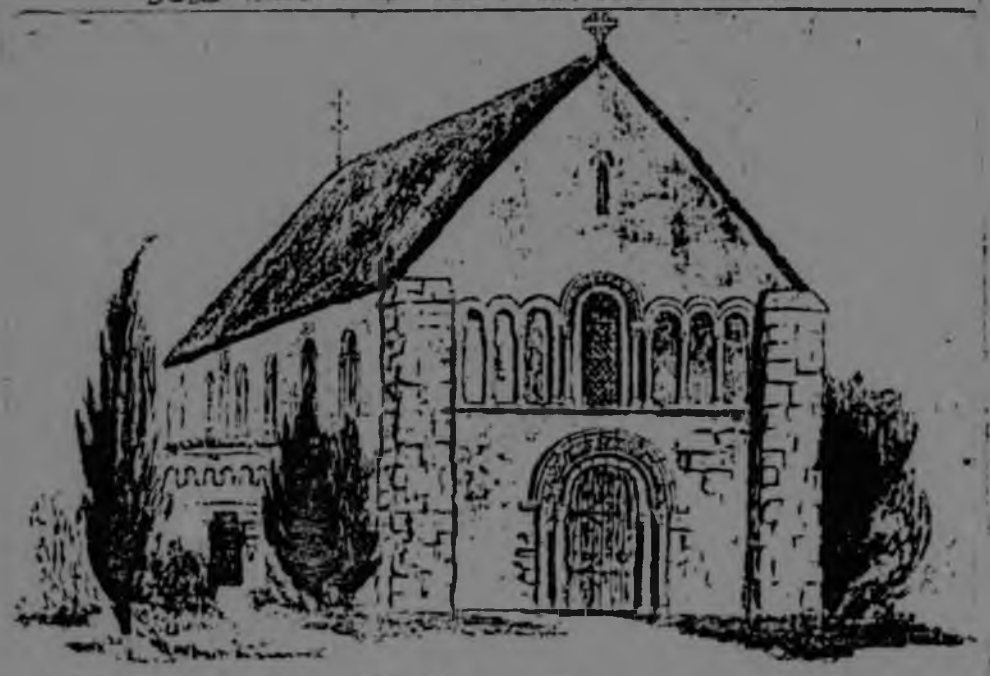


ST PAULS. BREE ST 1879 E. KNOX

DIOCESAN COLLEGE CHAPEL. RONDEBOSCH 1880 E. KNOX (S.A. ILLUSTRATED NEWS 1884)

84.

Proposed plan of Church of St. James, Sea Point. ? 1850-60. Now Church Hall

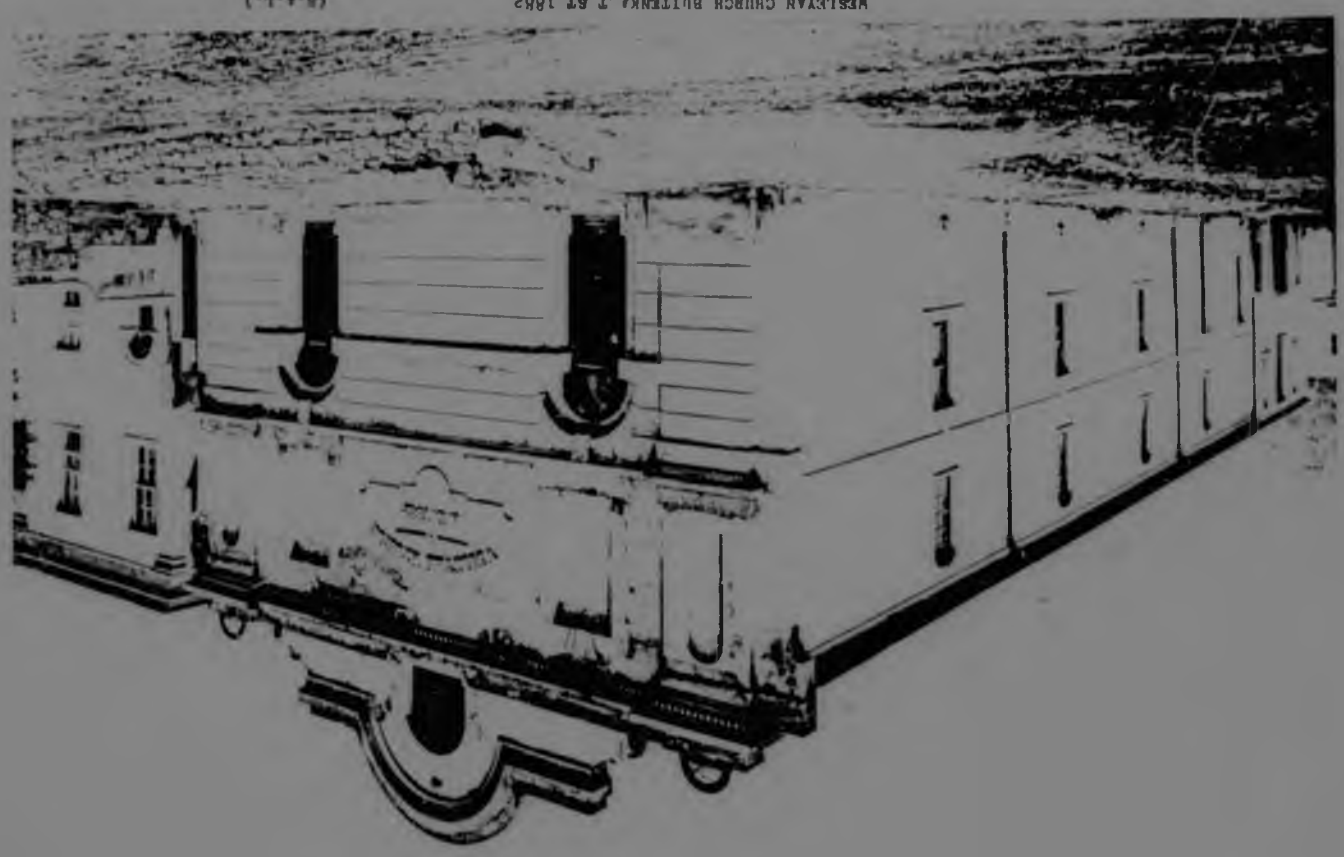


Originally said to be a Brewery. Alterations not quite according to Plan

ST JAMES, SEA POINT, 1873 G. PINKER (C.A.)

85

BAPTIST CHURCH #, WALE STREET.1882 C. FREEMAN (BAPTIST CHURCH)

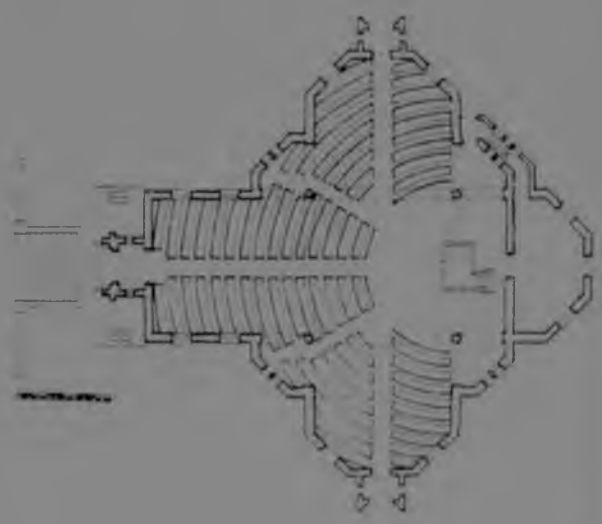


WESLEYAN CHURCH, BUITENKO .T ST. 1882 (S.A.L.)

WESLEYAN CHURCH, SALT RIVER . 1883 (S.A.L.)

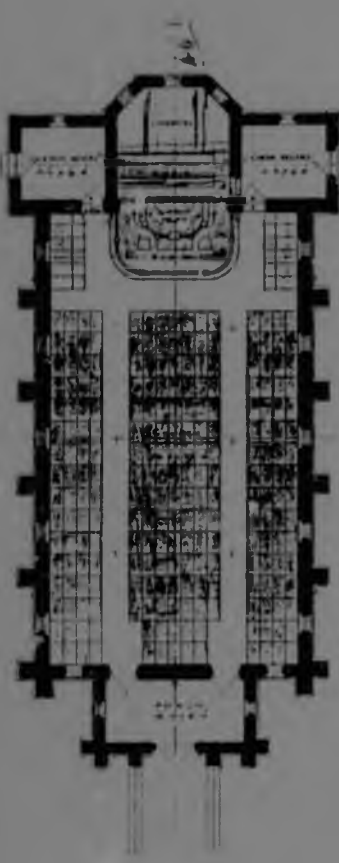
ST JOHNS, WYNBERG. 1883 G. RANSOME (S.A. ILLUSTRATED NEWS 1884)

ST JOHNS, WYNBERG, 1883 G. RANSOME (S.A. ILLUSTRATED NEWS 1884)



N.G. CHURCH, WYNBERG. 1889 (C.A. AND U.C.T.)

ST PHILIPS, DISTRICT 6.1885 G. ALEXANDER (C.A.)



FRONT ELEVATION.

METHODIST CHURCH, SEA POINT, 1898 J. PARKER (F + P)

92.

CONGREGATIONAL CHURCH SEA POINT, 1896 J. PARKER (C.A.) 93

ST JAMES CHURCH, ST JAMES c 1900 (C.T. GUIDE 1904) 94.

ST ANDREWS, NEWLANDS, 1894 H. BAKER

95

CHAPEL, MAITLAND CEMETARY C 1900

96

ST JAMES, SEA POINT, 1898 G. RANSOME (C.A.)

WESLEYAN CHURCH, ROSEBANK 1899 H. JONES (U.C.T.)

98.

ST GEORGES CATHEDRAL 1897 BAKER & MASEY

99.

N.G. CHURCH, WOODSTOCK 1897 J. PARKER? (C.A.)

PRESBYTERIAN CHURCH, WOODSTOCK 1899 J. PARKER (O.A.)

N.G. CHURCH MALMESBURY 1864-1897 STONESTREET/FREEMAN (C.A.)

N.G. CHURCH , WELLINGTON 1898 C. FREEMAN (U.C.T.)

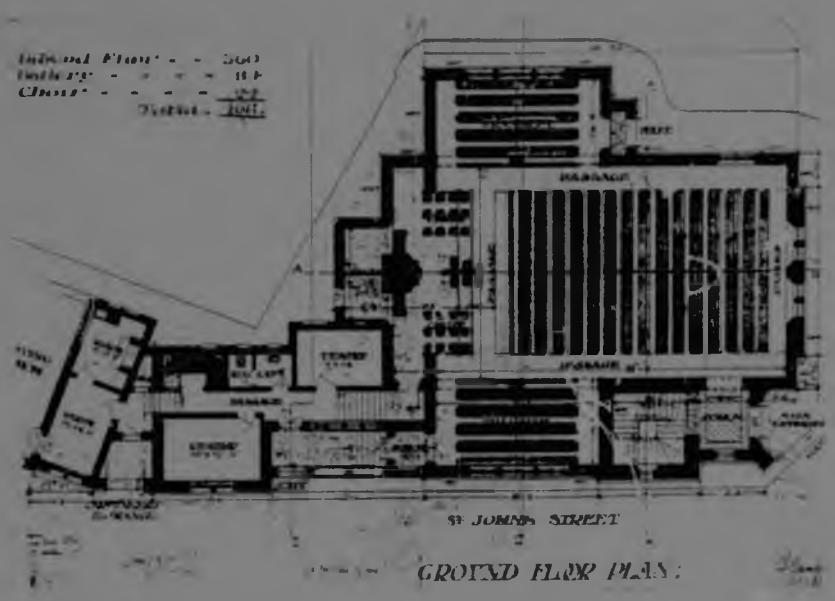
103

N.G. CHURCH * WORCESTER 1898 C. FREEMAN (U.C.T.)

104

N.G. CHURCH, HOPEFIELD 1905 HESSE (C.A.)

N.G. CHURCH, ROBERTSON 1905 (C.A.)

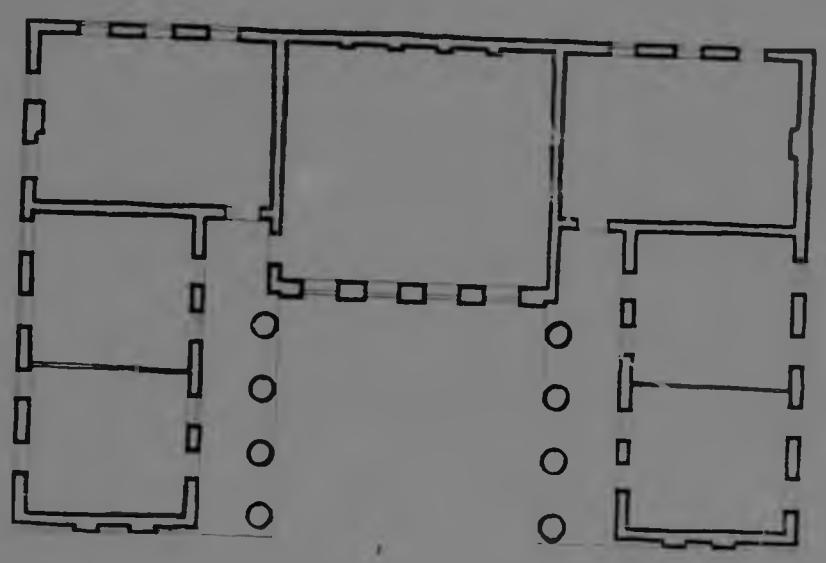


GROUND FLOOR PLAN.

PRESBYTERIAN CHURCH, UPPER ORANGE STREET 1904 J.PARKER (F+P)

HE SCHOOL OF INDUSTRY * WINBERG, C1844

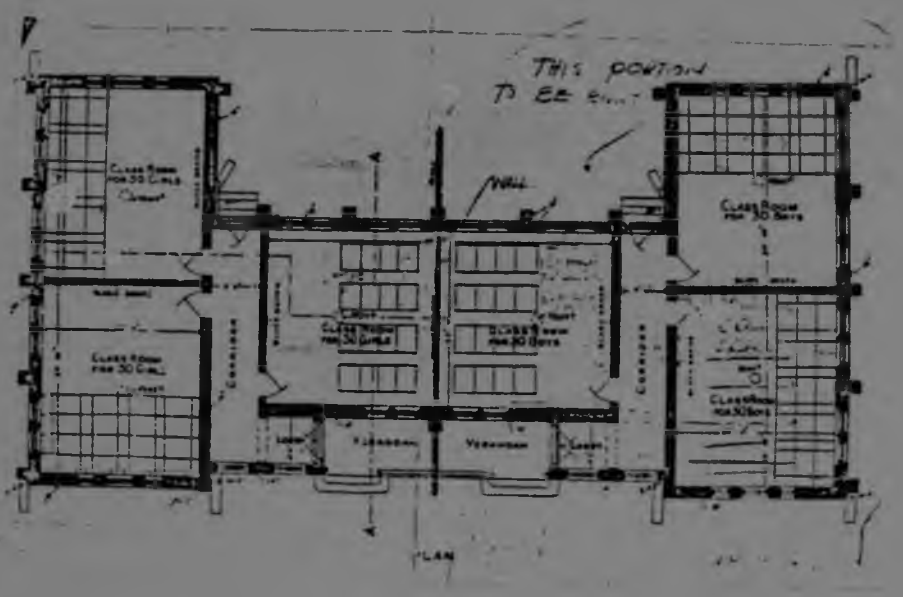
SCHOOL CHAPEL * SEA POINT 1946 J. CARLIN (C.A.T.)



EGYPTIAN BUILDING S.A.C. 1341 COL. LEWIS (U.C.P.)

ST GEORGE'S GRAMMAR SCHOOL * 1850 G. HC DOUGALL

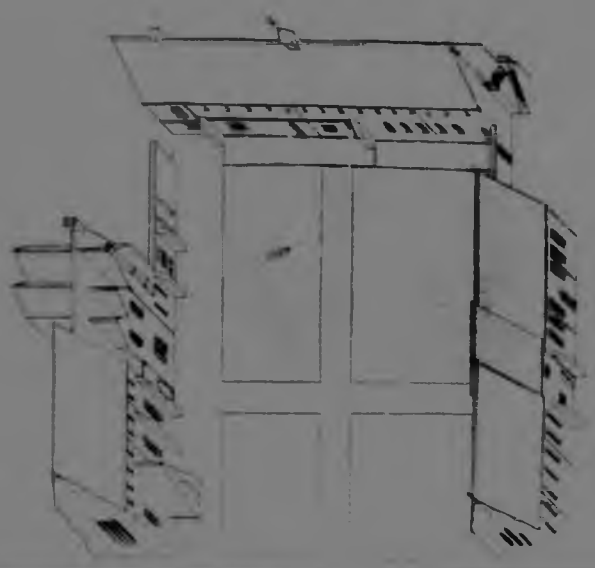
111



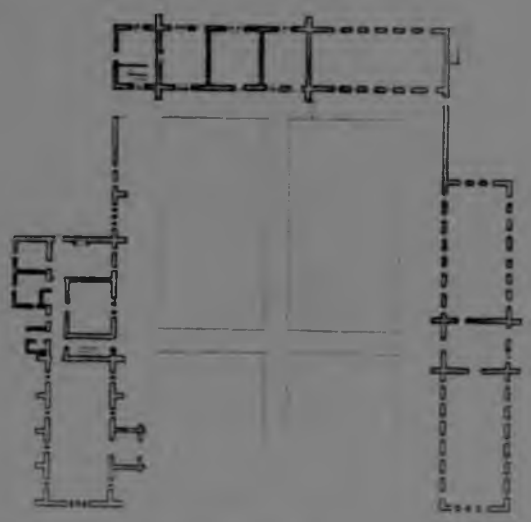
T -PLAN SCHOOL C 1897

112.

DIOCESAN COLLEGE RONDEBOSCH 1862 W. WHITE (C.A.)



DIOCESAN COLLEGE, AXONOMETRIC



DIOCESAN COLLEGE, PLAN 1862

LADY GREY SCHOOL * 1850 W. BUTTERFIELD [illegible]

PAARL GYMNASIUM

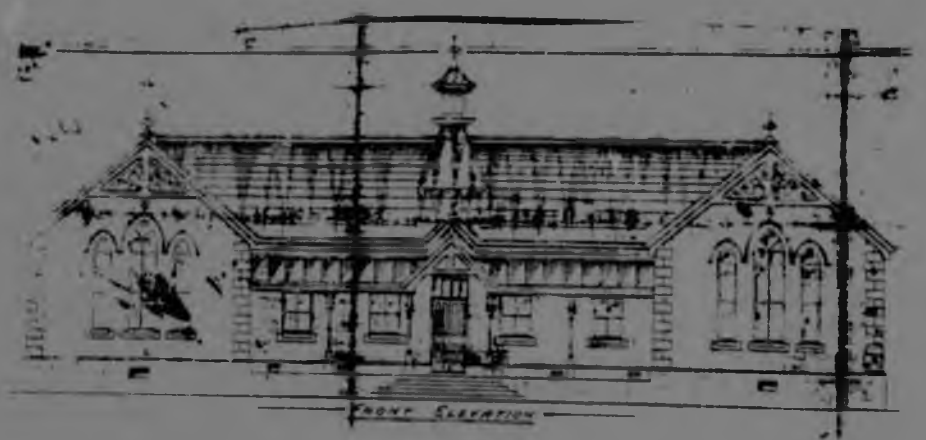
S.A.C. SCHOOL 1874 [illegible]

S.A.C. PHISICS BUILDING, 1881 [illegible]

WELLINGTON 1875

CUMMINGS HALL, [illegible]

VICTORIA COLLEGE, STELLENBOSCH 1886 C. HAGEN (S.A. ILLUSTRATED NEWS)



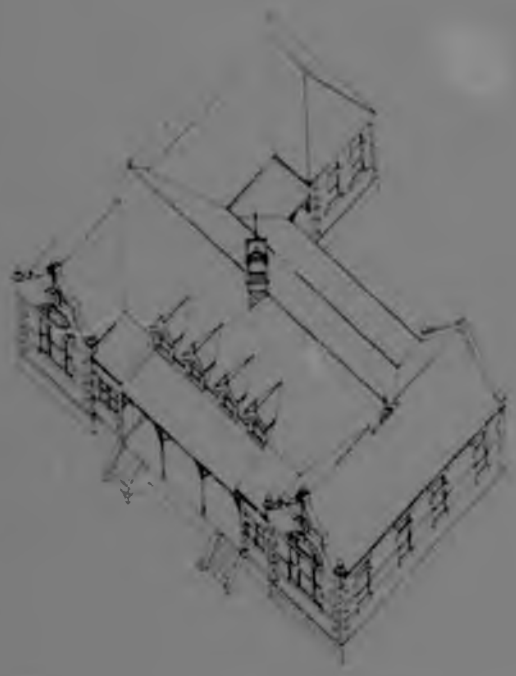
MONTAGU SCHOOL 1893

G. ALEXANDER (R+A)

121.

SOMERSET STRAND SCHOOL * C189

122.



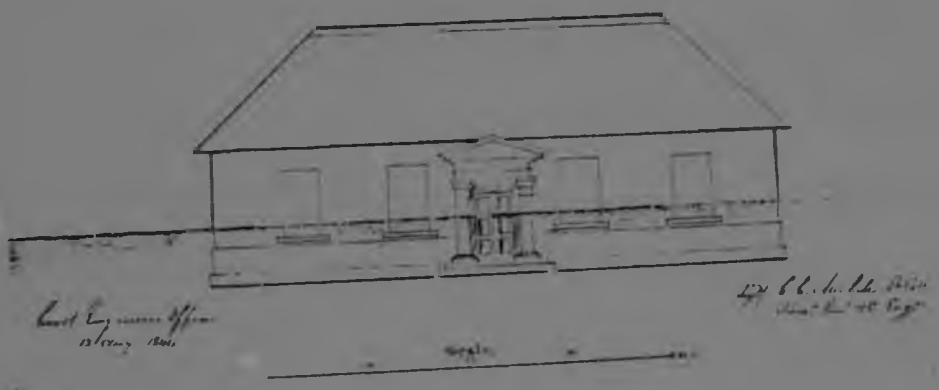
Plan of Design -

WORCESTER BOYS SCHOOL * 1897 .. BLACK (R + A)

NAPIER SCHOOL 190

POST OFFICE, * CAPE TOWN C 1845 COLONIAL ENGINEER (C.A.)

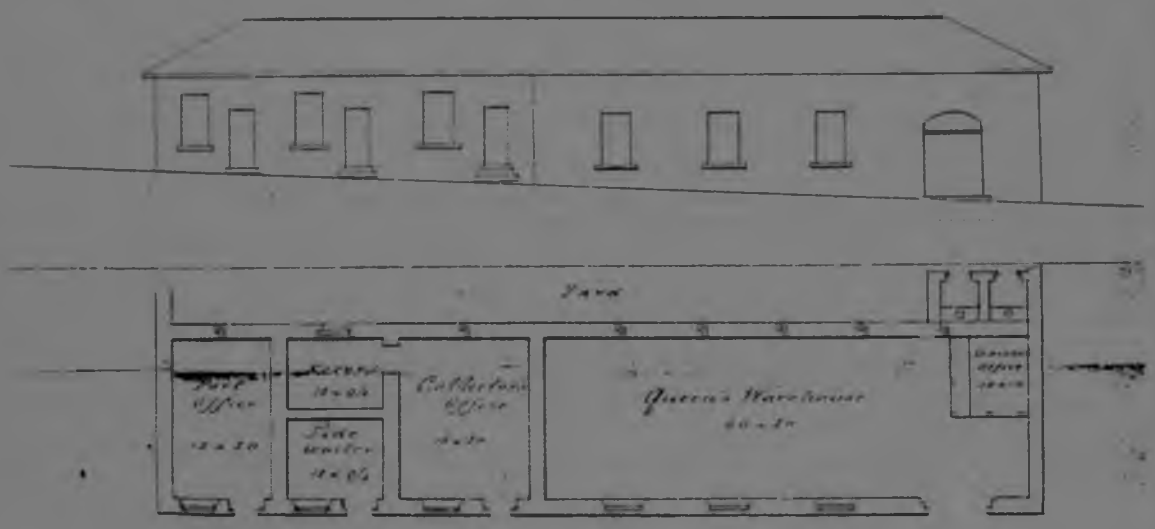
125.



PUBLIC OFFICES * GEORGE, 1844 COLONIAL ENGINEER (C.A.)

126.

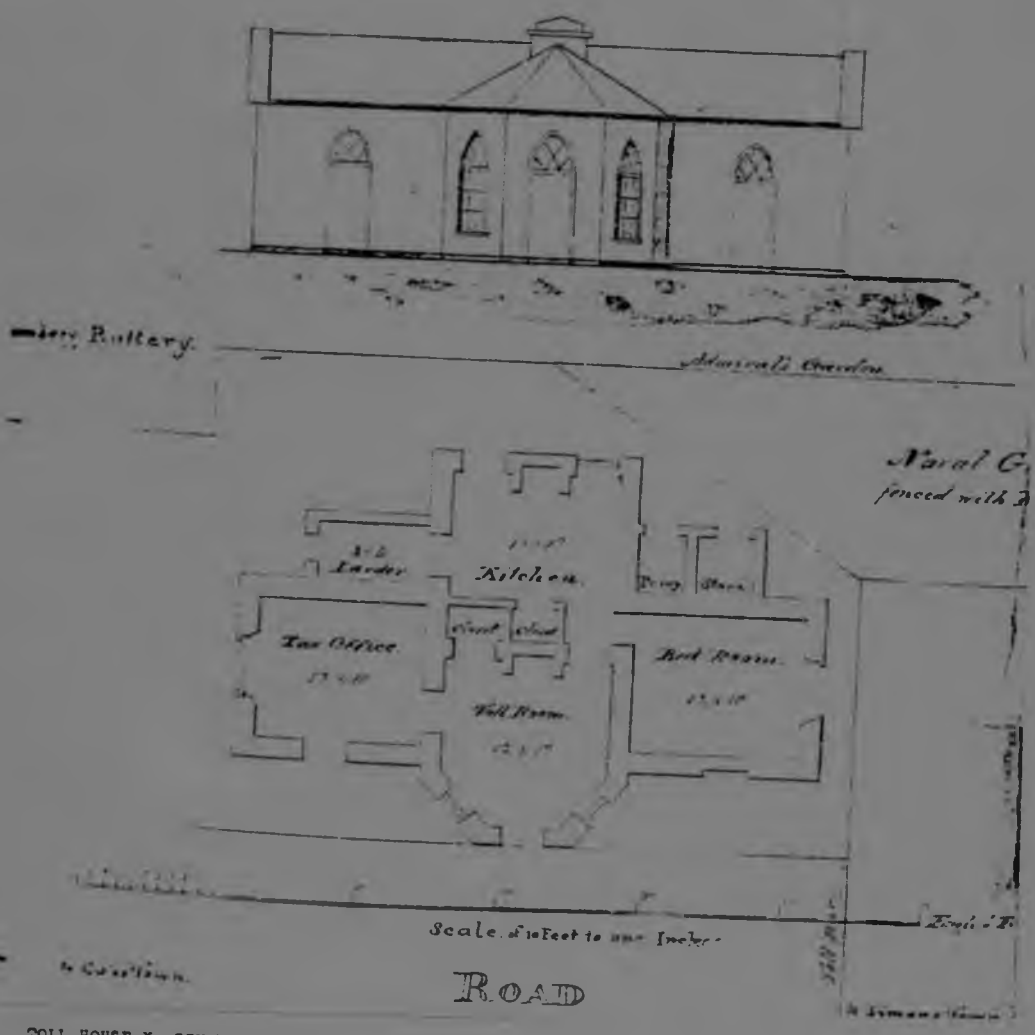
Outline Sketch
Elevation & Plan
Custom House
Simons Town



CUSTOMS HOUSE #, SIMONSTOWN, 1844 COLONIAL ENGINEER (C.A.)

PLAN and ELEVATION

of the Toll House proposed to be built at SIMONS TOWN.



TOLL HOUSE * SIMONSTOWN, 1839 F. HOPE (C.A.)

128.

ASSEMBLEY ROOMS, CAPE TOWN 1844? (C.A.)

LEVICKS AND SHERMAN & ST GEORGES STREET C 1844 (C.A.)

HAMILTON ROSS #, ADDERLEY STREET C 1848 (C.A.)

B. A. BANK' ST GEORGES ST. c1840 (C.A.)

133.

REFORM CLUB, LONDON, 1840 C. BARRY (SURVETOR, ENGINEER & ARCHITECT 1840)

134.

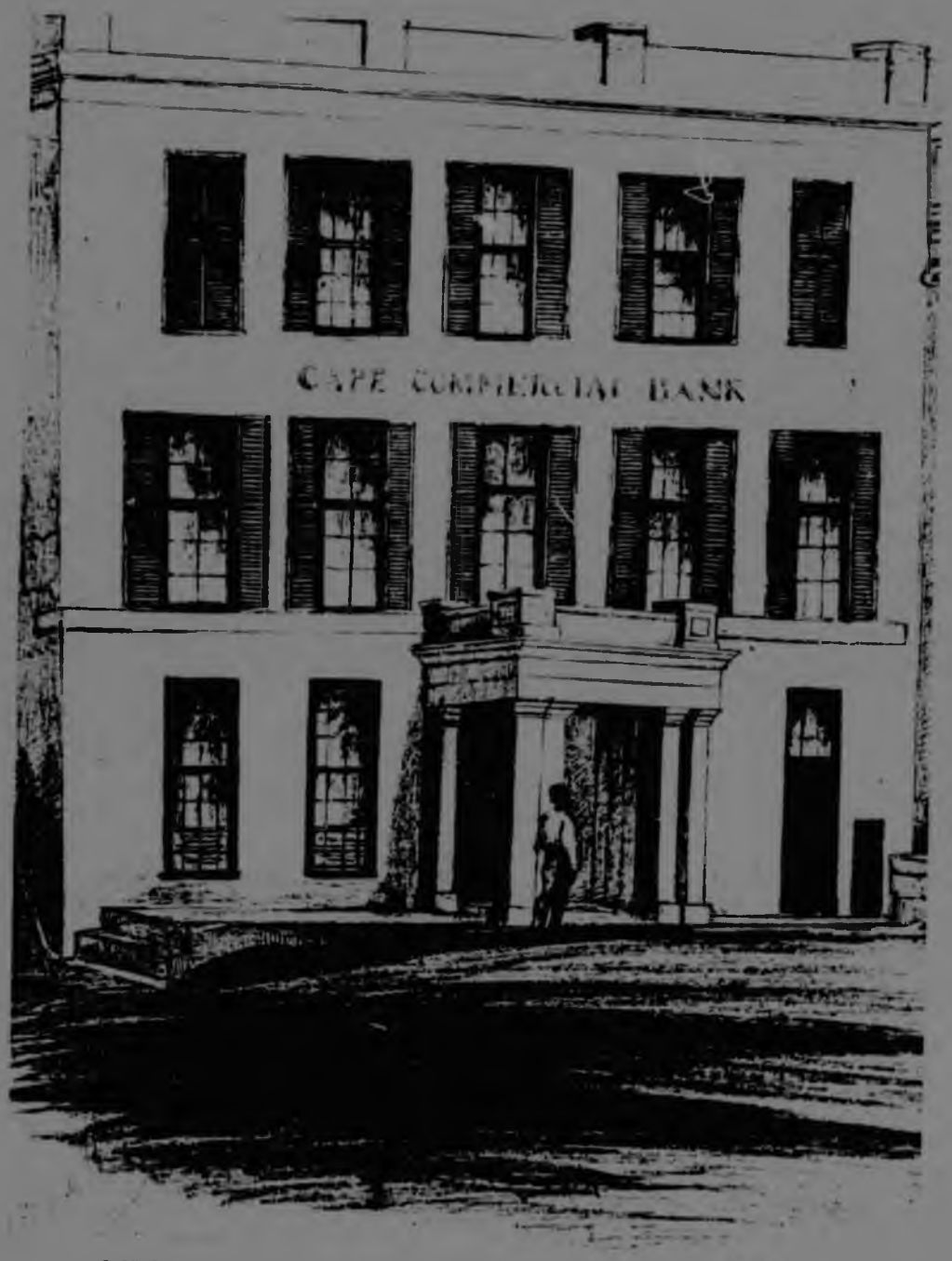
NATIONAL BANK, GLASGOW, 1844 J. GIBSON (ILLSUTRATED LONDON NEWS 1844)

135.

COMMERCIAL ASSURANCE OFFICE, LONDON 1848 J. GIBSON (BUILDER 1849)

136.

HEYWOODS BANK, MANCHESTER 1849 J. GREGAN (BUILDER 1849)



CAPE COMMERCIAL BANK * ADDERLEY STREET C1853 P. PENKETH? (C.A.)

THOMSON AND WATSON * ST GEORGES STREET C 1855 (G.A.)

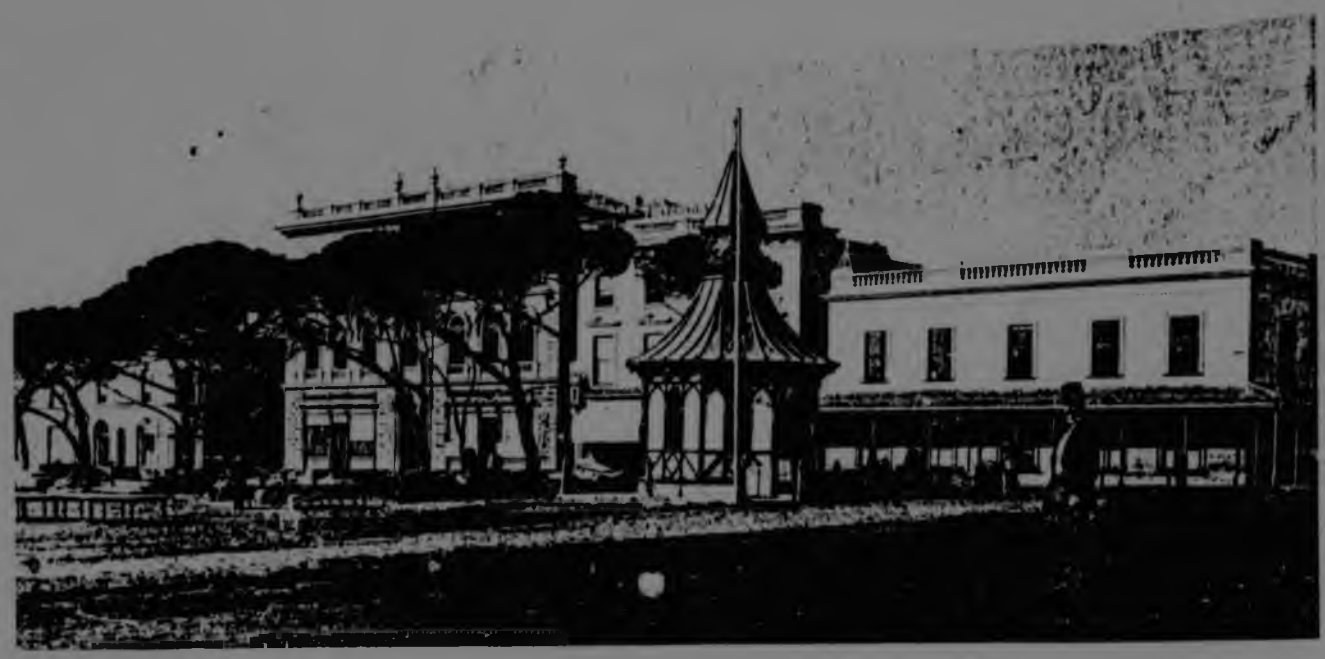
SAUL SOLOMAN'S PRINTING WORKS * ST GEORGES STREET C 1855 (S.A.L.)

J. LONG * ST GEORGES STREET 1854 W. KOHLER (C.A.)

140.

ST GEORGE'S STREET PREMISES * C1855 (C.A.)

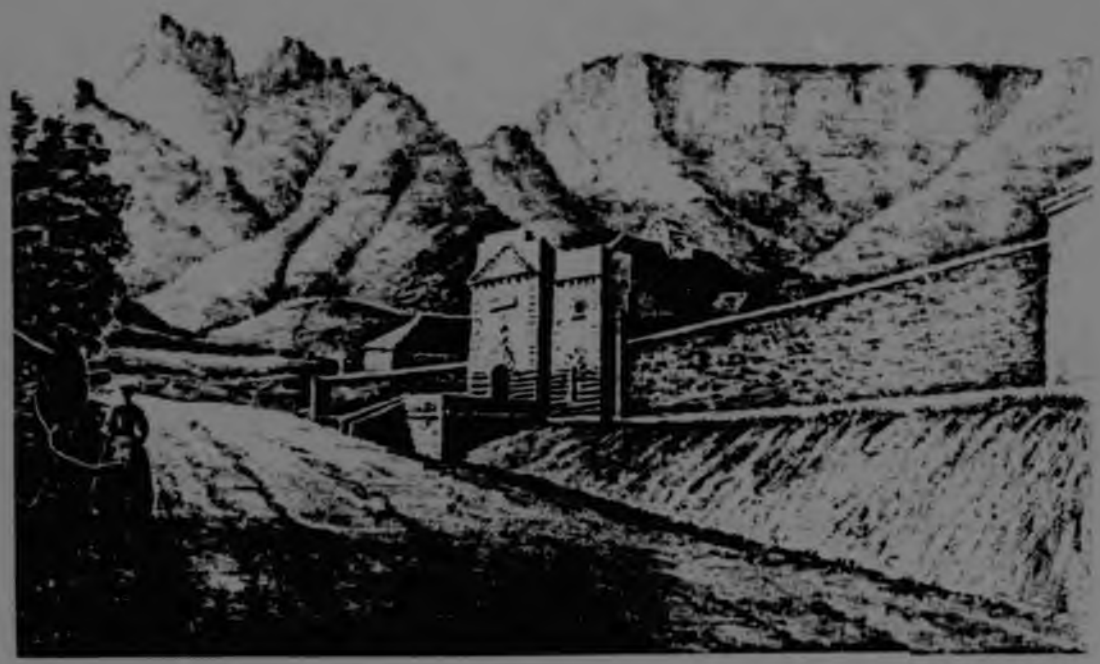
141.



TELEGRAPH OFFICE* C 1851 FLETCHER AND CARTWRIGHTS * . C 1855

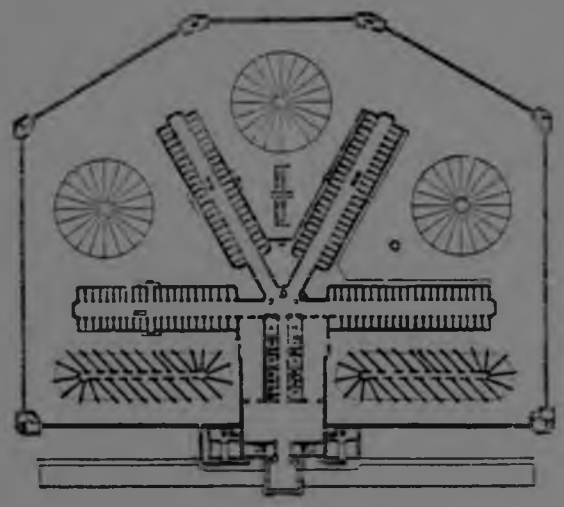
143.

WESTERN PROVINCE BANK * . PAARL 1858 P. PENKETH (S.A.)



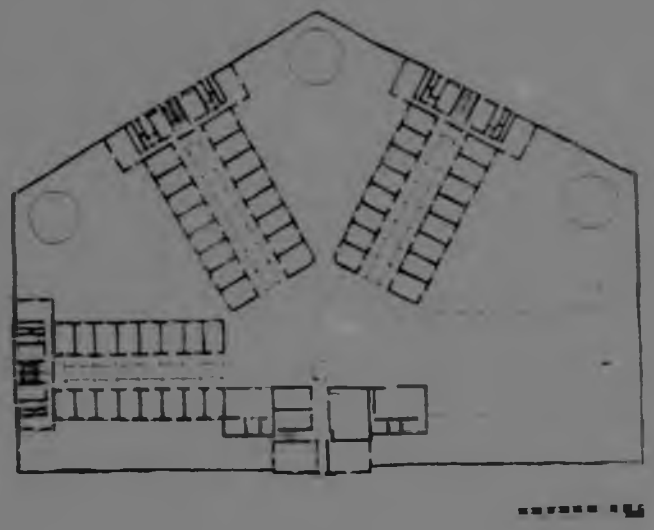
ROELAND ST GAOL. 1859 COLONIAL ENGINEER (C.A.)

ROELAND STREET GAOL ORIGINAL DESIGN OF ENTRY BLOCK (C.A.)



PENTONVILLE GAOL, LONDON, 1843 C BARRY (BUILDER 1847)

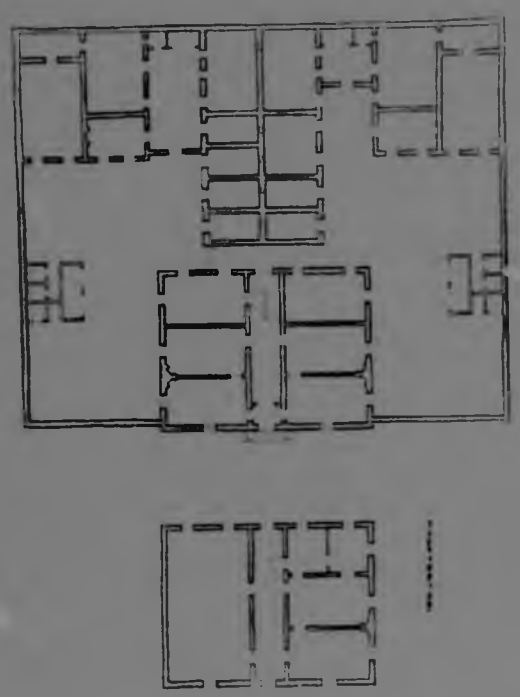
145.



ROELAND STREET GAOL ORIGINAL PLAN (C.A.)

144A.

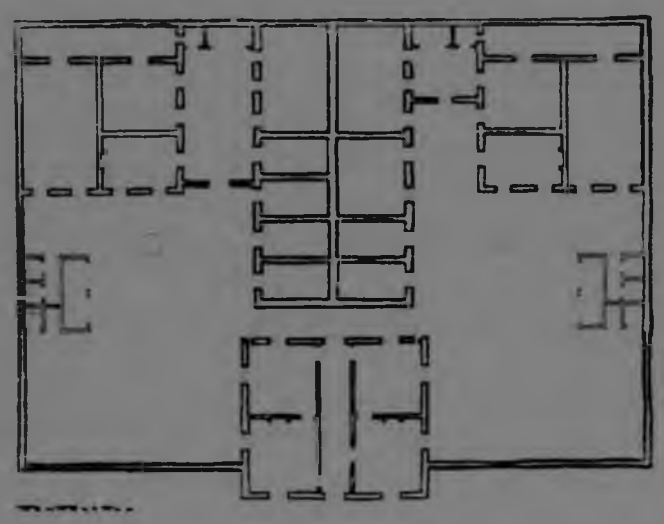
MALMESBURY GAOL # C 1861



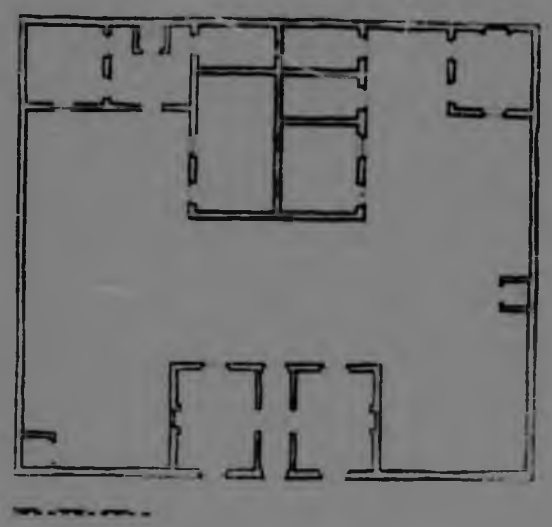
SECOND CLASS GAOL. C 1860

(COLONIAL ENGINEER (C.A.)

WORCESTER GAOL C 1862



THIRD CLASS GAOL C 1860 COLONIAL ENGINEER (C.A.)



AMENDED THIRD CLASS GAOL C 1860 COLONIAL ENGINEER (C.A.)

S.A. LIBRARY AND MUSEUM CAPE TOWN 1864 W. KOHLER (BOWLER)

150.

MUTUAL LIFE BUILDING * DARLING STREET 1864 J. BISSET (C.A.)

151

THORNE AND STUTTAFORDS * DARLING STREET C 1864 (S.A.L.)

ANDERSON AND MURISON ✱ ADDERLEY STREET C 1862 (C.A.)

THE UNION STEAMSHIP COMPANY'S OFFICE, ADDERLEY STREET.

UNION STEAMSHIP COMPANY * ADDERLEY STREET C 1862 (C.T. GUIDE OF 1892)

PROTECTEUR BUILDING * GREEN MARKET SQUARE 1863 TUPPEN & STONESTREET (C.A.)

154.

GROOTE KERK BUILDING * ADDERLEY STREET C 1864 J. BISSET (C.A.)

155.

WHITEHALL * GREENMARKET SQUARE C 1862 (C.T. OF TODAY 1892)

STANDARD BANK * ADDERLEY STREET 1867 TUPPEN & STONESTREET (CAPE TIMES) STUTTAFORDS BUILDING * C 1871

THE COLONADE * GREENMARKET SQUARE C 1867 (C.A.)

WAREHOUSES * ADDERLEY STREET C 1862 WELCHMAN AND READ (S.A.L.)

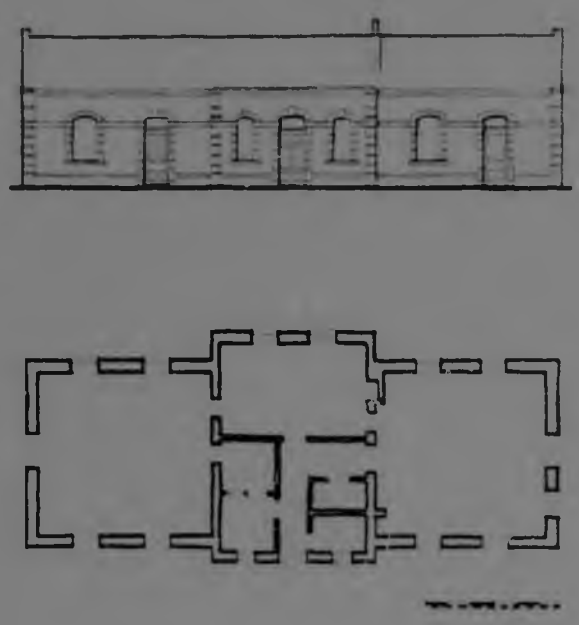
HARBOUR BOARD OFFICES * ADDERLEY STREET 1864 TUPPEN AND STONESTREET (CA.)

SAILORS HOME & DOCK YARD 1862 WELCHMAN (C A)

PROPOSED POST OFFICE CAPE TOWN 1868 (C A)

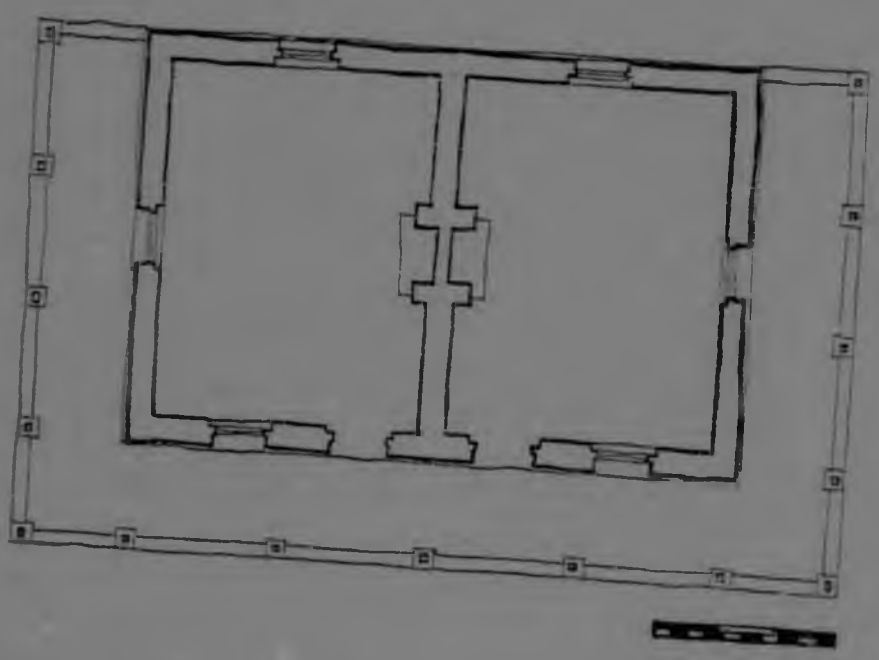
SEARCHERS OFFICE & CENTRAL CAUSEWAY 1866 STONESTREET (C.A.)

163.

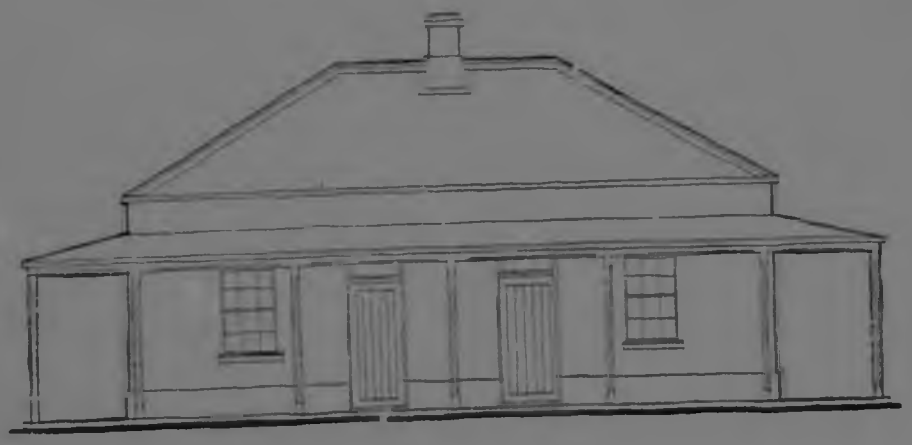


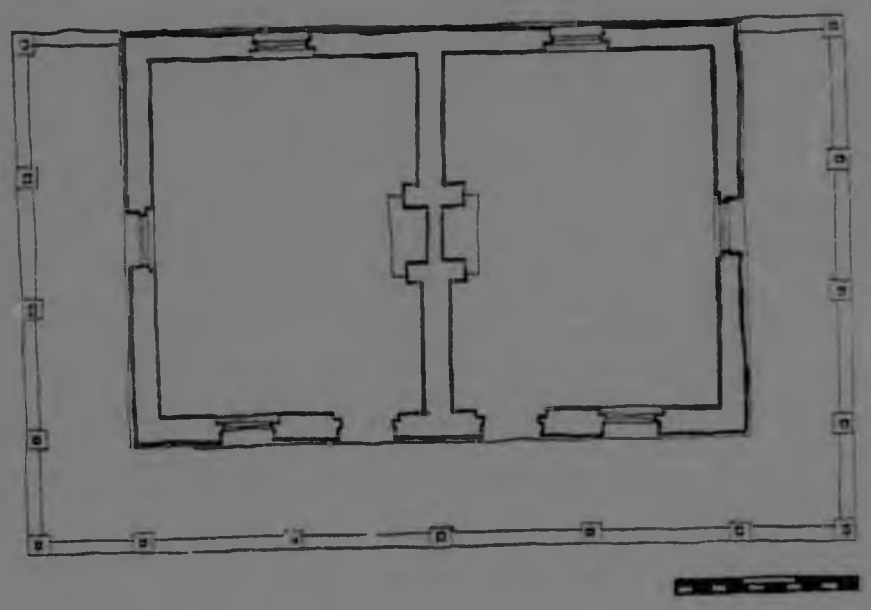
HARBOUR MASTERS OFFICE CAPE TOWN C 1868 T.ANDREWS? (S.A.R.& H)

164.



HARBOUR OFFICES * SIMONSTOWN C 1864 P.W.D. (C.A.)





HARBOUR OFFICES * SIMONSTOWN C 1864 P.W.D. (C.A.)

PUBLIC OFFICES & SWELLENDAM C 1868 P.W.D. (C.A.)

SHIPMENTS BY EVERY STEAMER
OF
DRAPERY, READY MADES,
BOOTS AND SHOES,
HABERDASHERY, MILLINERY,
GLOVES, TIES,
SMALL WARES.

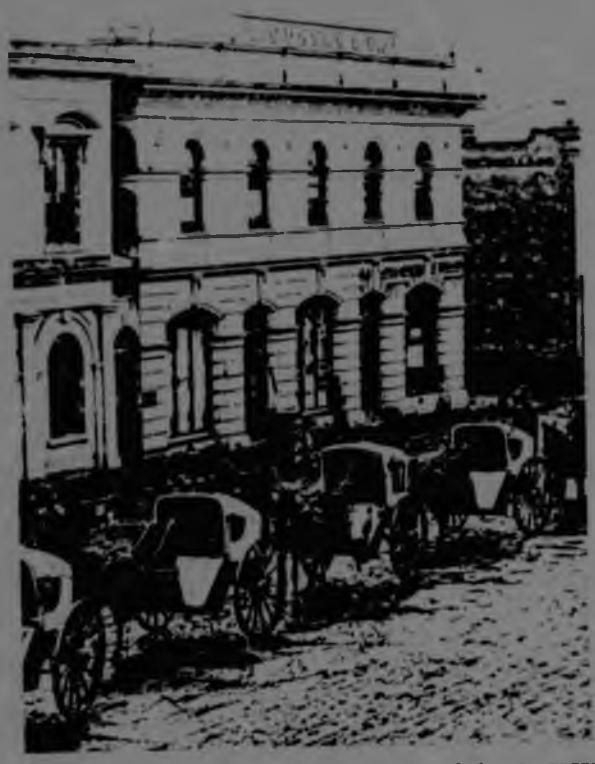
ALL KINDS OF FANCY DRESS GOODS IN COTTON
SILK AND WOOL AND THEIR MIXTURES.
NOVELTIES EACH SEASON.

HODGSON & CO., 70, ADDERLEY ST., CAPE TOWN, GENERAL IMPORTERS.

HODGSON'S ✱ ADDERLEY STREET C 1871 (C.T. OF TO-DAY 1892)

CORNER OF STRAND AND BREE STREETS–PREMISES OCCUPIED BY J. GARLICK

GARLICKS # STRAND STREET C 1876 C. FREEMAN (THE LANTERN 1879)



DUNCAN & CO # ADDERLEY STREET :1876 C. FREEMAN (C.A.)

S.A. BANK * ST GEORGES STREET 1877 C. FREEMAN (AFB)

BUILDING * CNR OF ST GEORGES AND CASTLE STREETS C 1875 (C.A.)

171.

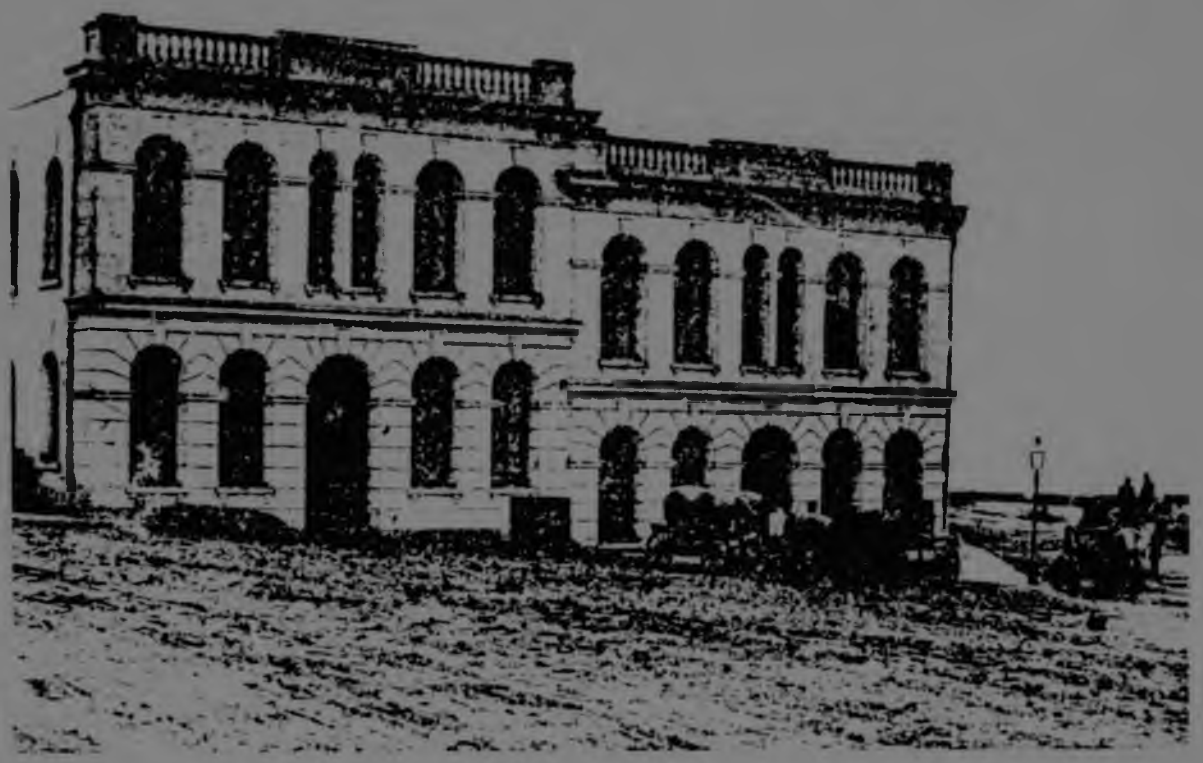
VAN RYN'S WINE STORE * BUITENGRACHT C1874 (C.A.)

172.

S.A. CHAMBERS * ST GEORGES STREET C1875 C. FREEMAN ? (C.A.)

ISAAC AND CO * LONGMARKET STREET C 1875 (LANTERN 1878)

174.



FLOWER'S BUILDING ✱ DOCK ROAD C 1876 (C.A.)

HOUSES OF PARLIAMENT, WINNING DESIGN 1875 C. FREEMAN (C.A.)

HOUSES OF PARLIAMENT, WINNING DESIGN 1875 C. FREEMAN (C.A.)

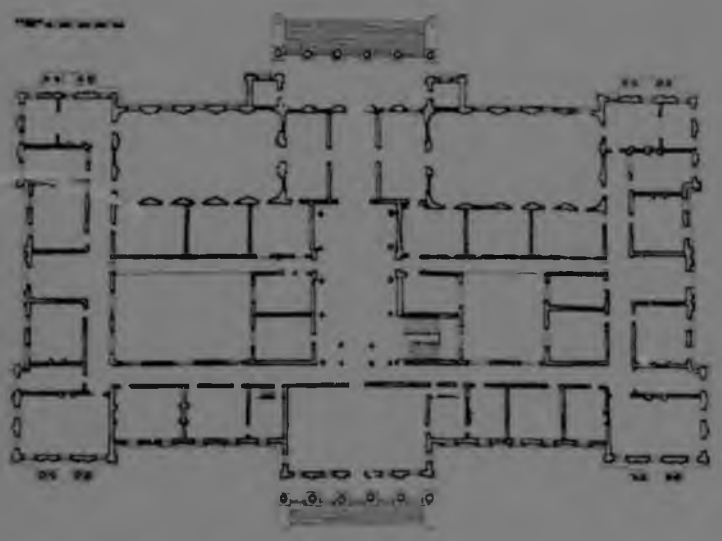
777.

POST OFFICE & ST GEORGES STREET 1874 C. FREEMAN (C.A.)

THEATRE ROYAL * BURG STREET 1884 C. FREEMAN (C.A.) 178.

CLAREMONT HALL C 1879 E. KNOX? (U.C.T.) 179.

Y.M.C.A. STELLENBOSCH 1874 C. HAGER (C.A.)



HOUSES OF PARLIAMENT 1879 PLAN (C.A.)

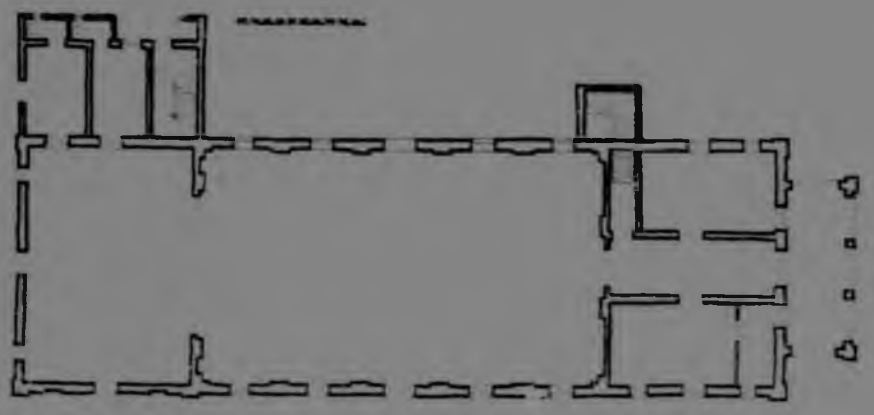
HOUSES OF PARLIAMENT 1885 H. GREAVES (C.A.)

DRILL HALL CALEDON SQUARE 1884-1889 TENNANT/DEWIT (C.A.)

ALFRED CLOCK TOWER 1883 (S.A.2 & H.)

TOWN HALL * PAARL 1881 (C.A.)

TOWN HALL * MALMESBURY 1884 G. ALEXANDER (C.A.)



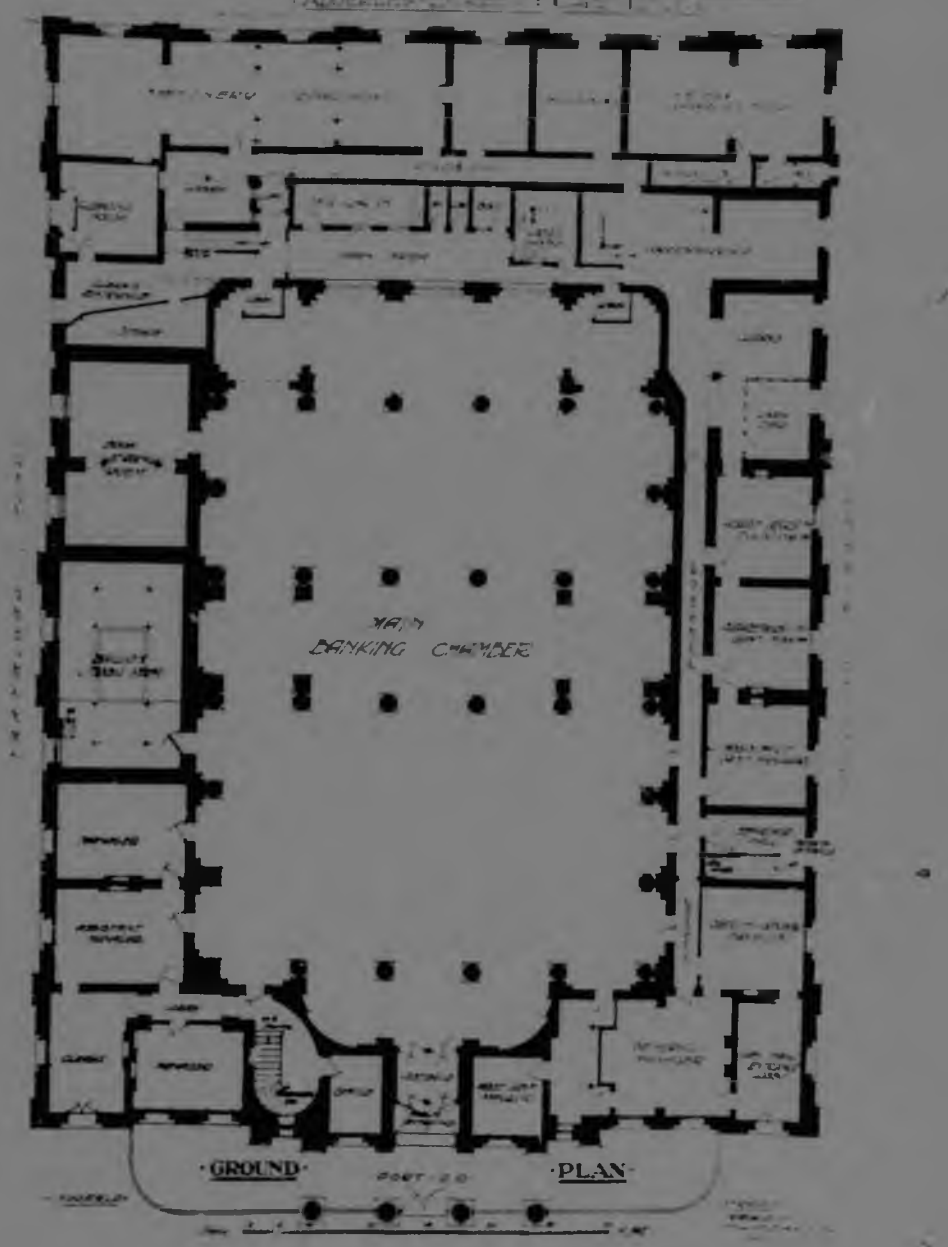
TOWN HALL * SEA POINT 188 G. RANSOME (C.A.)

FRONT ELEVATION

187.

ST.NDARD BANK & ADDERLEY STREET 1884 C. FREEMAN (H & A)

THE STANDARD BANK OF SOUTH AFRICA LTD



187A

A,B.C. BANK * ADDERLEY STREET 1880 G. KNOX (C.A.)

189.

Y.M.C.A. * LONG STREET 1884 C. FREEMAN (C.A.)

THE PREMISES OF B G. LENNON & CO., LIMITED.
CHEMISTS, ADDERLEY AND STRAND STREETS.

LENNONS BUILDING & ADDERLEY STREET 1886 A.DE WITT (C.T. GUIDE 1894)

190.

THE PREMISES OF GEO. FINDLAY & CO.,
GENERAL HARDWARE MERCHANTS, GRAVE STREET.

FINDLAYS * GRAVE STREET C 1880 C. FREEMAN (C.T. GUIDE 1894)

191.

THE OFFICE OF THE SOUTH AFRICAN ASSOCIATION
FOR THE ADMINISTRATION OF ESTATES. &C.
SAFE DEPOSIT, CHURCH SQUARE.

S.A. ASSOCIATION * CHURCH SQUARE 1888 C. P. [illegible]MAN (C.T. GUIDE, 1894)

193.

SCOT BROS * C 1880 (EVENING PHOENIX 1883)

194.

J.D. JONES * C 1880

(EVENING PHOENIX 1883)

ıre - Capetown

J.C. SMITH BOERERLEIN c 1880 C. FREEMAN (C.A.)

COLONIAL MUTUAL BUILDINGS.

COLONIAL MUTUAL * ADDERLEY STREET 1889 G. RANSOME (C.T. GUIDE 1894)

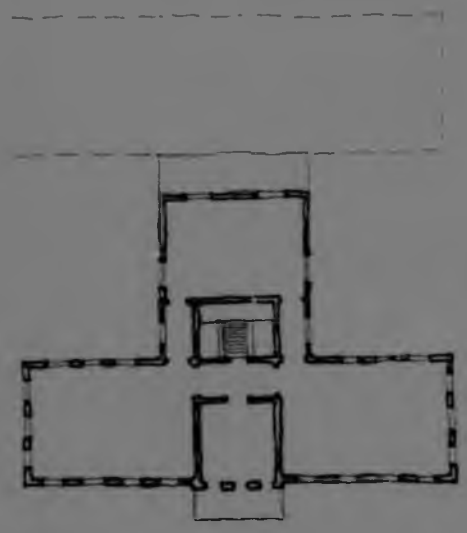
BUILDING # MALMESPURY C 1885 (C.A.) 197.

BUILDING WORCESTER C 1885 198.

G.P.O. & ADDERLEY STREET H. GREAVES (C.A.)

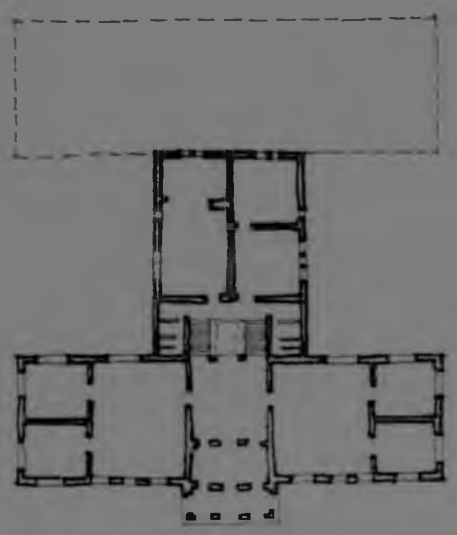
FRONT ELEVATION.

S.A. MUSEUM CAPE TOWN 1897 VIXSEBOXSE (P.W.D.)



S.A. MUSEUM - PLANS

(CAPE TIMES 1893)



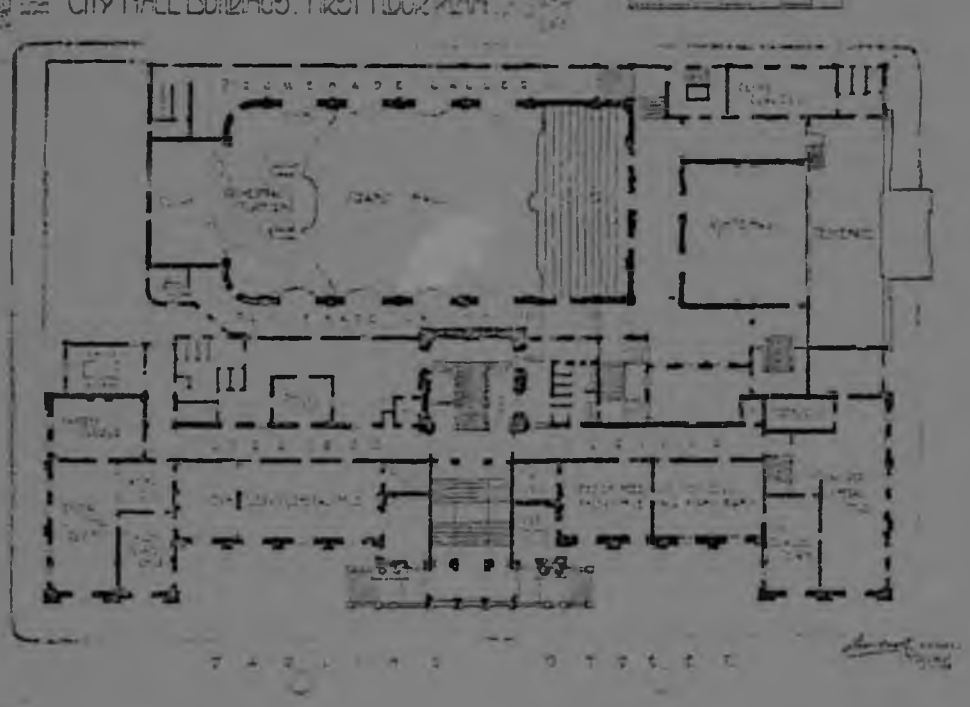
200A

(C.A.)

MAGISTRATES COURT & CHURCH SQUARE 1891 H. GREAVES

TOWN HALL MOWBRAY 1900 TULLY & WATERS (C.A.)

THE CORPORATION OF THE CITY OF CAPE TOWN:
CITY HALL BUILDINGS. FIRST FLOOR PLAN.



CAPE TOWN CITY HALL 1905 REID & GREEN (C.T. GUIDE 1900)

PRODUCE AND FEATHER MARKET.

PRODUCE AND FEATHER MARKET * 1898 (MAYOR'S MINUTE)

FISH MARKET

FISH MARKET # 1900 • E.SIMPKINS (MAYORS MINUTE)

TOWN HALL WYNBERG 1898 W. BUCK (C.A.)

205.

TOWN HALL RONDEBOSCH 1899 G. ALEXANDER (C.A.)

206.