SOUTH AFRICAN ARCHITECTURAL RECORD

THE JOURNAL OF THE CAPE, NATAL, ORANGE FREE STATE AND TRANSVAAL PROVINCIAL INSTITUTES OF SOUTH AFRICAN ARCHITECTS AND THE CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS

CONTENTS FOR OCTOBER 1951

E D I T O R
W. DUNCAN HOWIE

ASSISTANT EDITORS
UGO TOMASELLI
GILBERT HERBERT

VOLUME 36

10

 Annual subscription £1 10s. direct to the Secretary, 612, KELVIN HOUSE, 75, MARSHALL STREET, JOHANNESBURG. 'PHONE 34-2921.

BUSINESS MANAGEMENT: G. J. McHARRY (PTY.), LTD., 43, BECKETT'S BUILDINGS, JOHANNESBURG, P.O. BOX 1409. 'PHONE 33-7505

AMSTEL STATION • AMSTERDAM

ARCHITECT : H. G. J. SCHELLING; IN CONJUNCTION WITH THE DEPT. OF THE CITY ENGINEER, AMSTERDAM.

The recent announcement that more people enter the Union through Palmietfontein than via any of the sea-ports has served to underline the truism that this is the age of air travel. The spread of air services on a national and international scale has been prodigious, and soon air travel on an interplanetary basis may be more than a fantastic dream. The recent letter to the Editor of a local daily paper asking in all seriousness whether the first flight to the moon has yet taken place may be premature; but, if we are to believe Mr. Willy Ley — and his book "The Conquest of Space" makes fantastically credible reading — it may be premature by only a decade or two.

However, despite the enormous potential of air travel, and despite the more immediate competition of road transport, the railways remain the basis of the mechanized transport systems of all countries. Judging by the world-wide spate of railway station building since the war — replacing the casualties of bombing, shelling and natural obsolescence — and judging by the enormous capital sums being expended on railway development, the "iron horse" is by no means a dead horse yet.

The railway station is a twentieth-century building housing a twentieth-century function on a twentieth-century scale; the scale of space-time. Its history has been the struggle for a suitable physical form, a suitable aesthetic expression. In the search for form it is natural to turn to precedent; but the railway station as a modern function has no historical precedent, and this method of procedure has led only to the architectural futility of the Pennsylvania Station in New York — the American "Baths of Caracalla." However, in Europe, the beginning of the century had seen a more rational approach to this problem, and in Tony Garnier's project for a Central Station (1901-4) one sees an early essay in functional design, of which Giedion writes: "At a time when railroad stations are customarily executed in the style of huge monuments, Garnier returns to actual functions, and exploits the new materials: glass and reinforced concrete." Here is being established the rationale and the precedent of the new expression. And later, in New York, a precedent of another sort, a precedent not of form but of scale, of space-time planning, was being established. The Grand Central complex," writes Christopher Tunnard, "is much more than a railway station . . . It is a place occupied daily by a group exceeding the population of a major city (370,000 people) and a yearly number exceeding that of the Soviet Union — yet it has no inhabitants. One can buy all the necessities of life there (and all the luxuries), do business, sleep and leave anonymously with all the other anonymous guests . . . Under the blue vault there is the feeling of being in a vast Beaux Arts Cathedral." There is here no space-time *aesthetic*, "nothing is bared, no structural members show," but the space-time *concept* is there, latent perhaps, latent in the engineering, in "the hidden engineering which is the marvel — the engineering which provides access to 200 shops and 14,000 offices in eighteen buildings."

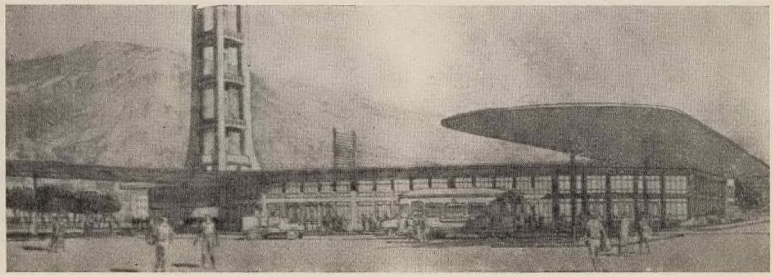
In many parts of the world, new railway stations are being built. In Rome, the great new station is being completed; in Johannesburg we are still in the early stages of construction. The station at Plymouth is still a project, planned but not yet built. In war-ravaged Holland the station at Rotterdam is in ruins, and Dutch architects still face the problem of its reconstruction. If these architects have the need for precedent, they need only make the short journey by fast electric train from Rotterdam to Amsterdam, and they will travel from urgent problem to successful solution; for there, in the Amstel Station, they will find the summation of the functional aesthetic originating with Garnier, together with a fine demonstration of the space-time concept of planning which has as one of its starting points the Grand Central complex.

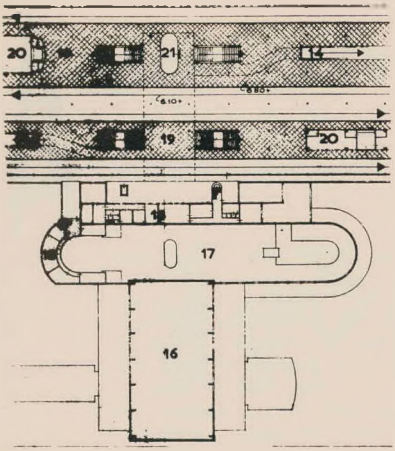
Amstel Station is a building complex in concrete, steel and glass; an austere composition in simple shapes. It is a tentacular building, sending arms out into the city, arms that are railway lines and roads and tramtracks and pedestrian subways. It is a building of various approaches: its approaches are part of the complex, yet eventually they become part of the city too, so that one cannot say: Here the complex ends. It is a demonstration of a continuity in environment, an environment seen in movement, which is the essence of the space-time concept. It is a building handling movements: movements of people walking at four miles per hour, and movements of trains travelling at fifteen times that speed, movements of cars and of cycles and of trams. And, as on a planning level, it forms a continuous environment through the use of movement, so on an aesthetic level it creates a continuity of space through the use of transparency.

Here is a building which houses a specialist function of a machine age; and which in its aesthetic expresses a machine technology. It also expresses in its scale that its function is communal; that is to say, it caters for a large scale social activity. Yet, while it is designed for the large crowds that will throng its concourse and platforms, nevertheless in its detailed handling and its modulation of space, it still bears a subtle relationship to the individuals who go to make up the crowd. And that, perhaps, is the fundamental architectural and social problem of our time: to find a relationship between the part and the whole, between the individual and society: to find an expression which, while not lacking in humanity, is yet consistent with that larger scale and pattern which technology and a communal social organization has given to our times.

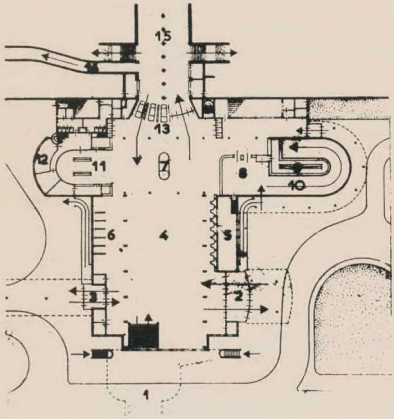
GILBERT HERBERT

Central Station: Tony Garnier (1901-4). It is interesting to compare this photograph with the general view of Amstel Station (Photograph no. 3)





PLATFORM LEVEL.



HALL FLOOR LEVEL.

INDEX.

1. Pedestrian tunnel under roadway. 2. Entrance. 3. Exit. 4. Concourse. 5. Ticket offices. 6. Arrivals and departures boards. 7. Kiosk. 8. Luggage dept. 9. Left luggage. 10. Ramp to the luggage tunnel. 11. Waiting room. 12 Hairdresser. 13. Ticket collector. 14. Ramp. 15. Tunnel to platform. 16. Upper part of concourse. 17. Upper part of secondary hall. 18. Offices. 19. Platform. 20. Waiting room. 21. Signal box.

GENERAL DESCRIPTION

The Amstel station is a simple two-platform through station.

The permanent way is elevated, necessitating a long, high retaining wall facing the station square.

The main building abuts onto this wall about half way along its length, and is oriented at right angles to the permanent way.

The platform level is 4 m. 40 cms. above the level of the concourse. The roadway slopes up about 2 m. 20 cms. towards the main building, whilst the tram-track slopes downward, enabling a pedestrian tunnel to be driven under the road.

The main building divides the station square into two parts, one for arriving passengers and one for departing passengers.

The basement includes cycle park, central-heating boiler-room and staff toilets.

LOAD-BEARING STRUCTURE

Foundations: Reinforced concrete substructure on 20 m. reinforced concrete piles.

Frame: Main building: steel portal frames, mainly electrically welded (D.I.E. 50 sections with plates welded between the flanges). Platform canopies: steelwork.

Floors: Main building: reinforced concrete.

Roof: Main building: pumice concrete slabs on fabricated steel lattice beams.

Staircases, tunnels and ramps: Reinforced concrete.

NON-LOAD-BEARING STRUCTURE

Walls: Main building: brickwork. Platform canopies: glass in light steel frames.

FACINGS AND PAVINGS

Floors: Passenger concourse: Norwegian quartzite slabs (60 x 60 cms). Platforms: concrete slabs.

Roof: Non-bituminous roofing felt covered with 4 mm. sheet copper (Tecuta).

Walls — exterior: Brickwork mainly in shallow format bricks. Plinth: Swedish granite. End Elevation: French limestone slabs (Bois Fleuri).

Walls — interior: Lower part: shallow format brickwork. Upper part: plastered.

Ceilings: Rough plasterwork.

Columns and beams: Cased in concrete (except portal frames to concourse and platform canopies).

Staircases: Main: Norwegian quartzite slabs.

JOINERY AND INSTALLATIONS

Door and window frames: Steel.

Doors: Exterior: steel. Interior: timber.

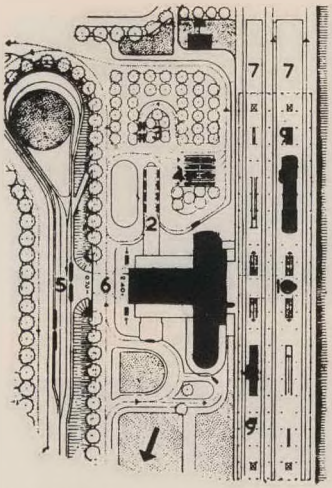
Heating: Rapid-circulation, hot-water central heating with two coal-fired boilers.

Lifts: 4 No. goods lifts; capacity 3,000 kg., travel 4 m. 40 cms., speed 0.32 m/sec.

FINISH AND SURFACE TREATMENT

Exterior: Brickwork to walls: glazed in light colours. End elevation: decorated with bronze statuary group.

Interior: Brickwork to walls: grey glazed. Plasterwork to walls: natural colour. Rough plasterwork to ceilings: painted light grey, cream and white. End walls: Decorated with murals in bright colours (9 x 20 m.).

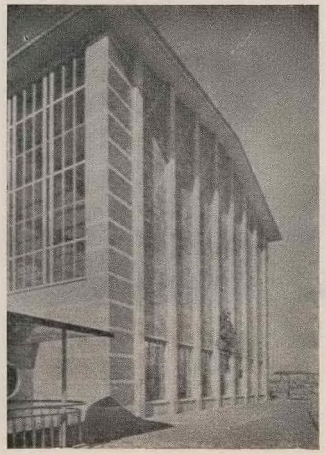


1. Main building.
2. Covered taxi stand.
3. Reserve taxi stand.
4. Bus stop.
5. Tram stop.
6. Pedestrian tunnel under the road.
7. Platform.
8. Restaurant and waiting room.
9. Toilets.
10. Signal box.

Sculptor : Theo van Reijn.

2—5. General views of the station.

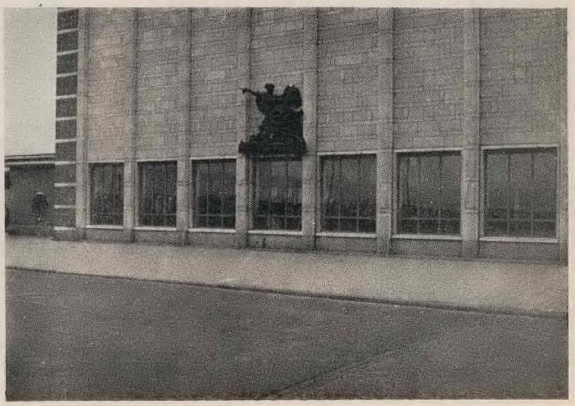
2.



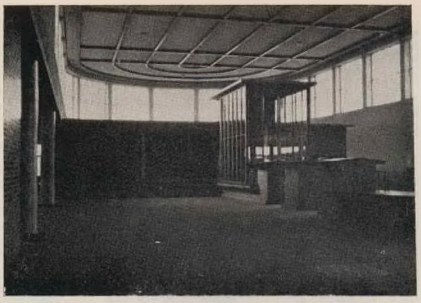
3.

4.

5.



6. General view of the main concourse.



7. The luggage depot off the main concourse.

8. View looking across the platforms.

9. The covered taxi stand at exit.

10. Bronze sculpture at main stairs to concourse.

11. Arrivals and departures board.

Acknowledgements :

1. References: Giedion, "Space, Time and Architecture", Harvard University Press, 1946.
Tunnard, "Scene", in the Architectural Review, December 1950

2. Photographs: 1. From "Space, Time and Architecture". 2. Bouwcentrum, Rotterdam. 3—11. Gilbert Herbert.

3. Diagrams and General Description: Bouwcentrum, Rotterdam.

HORTICULTURIST OR GARDEN PLANNER

AN ADDRESS DELIVERED AT THE THIRTEENTH CONFERENCE OF THE INSTITUTE OF PARK ADMINISTRATION (S.A.), DURBAN, 1950

By Councillor E. Leighton Black, A.A.Hon. Dip. (Lond.), A.R.I.B.A., M.I.A.

To-day, in the stark utility of our modern cities, the creative skill of the landscaper, the garden architect, the gardener, or what you will, is more essential than in any other age prior to the growth of the industrial conurbations in which we now live. Yet never has his skill been so restricted, his ability so ignored, or his usefulness so limited.

To many, the present day Municipal gardener is but a survival of Victorian snobbery: a keeper of horticultural oddities and a minder of once fashionable broadwalks. A man, in fact, whose very activities are unrelated to the needs of the city dweller and, therefore, largely redundant. Yet, had he the courage to accept the challenge of contemporary need, he might well eclipse the eminence of his 18th Century compatriot.

From the dawn of the Italian Renaissance to the end of the 18th Century, the gardener fulfilled a role as a designer of effects and a planner of space comparable with that of the Architect. His was the function of creating the background and the setting for the buildings, and of softening the rude contours designed by the Architect. And, as the two arts evolved towards the graciousness of the 18th Century, the gardener became increasingly important to a society, who eschewed the crude and the garish, and demanded a subtle relationship between nature and building, and the building and man, so that the whole creation blended into a humanised design in which the individual fitted with grace and appropriateness.

It is when one studies the designs of the Villa Lanti and Fontainbleau, Versailles and Chatsworth, or the like, that the true greatness of the gardener becomes evident :— the subtlety of his slow transformation from the rigid formality of the building, through the devious stages of lessening formality, to the informality of the natural landscape; the aptness of his setting for contemporary living; the baldness of his spatial planning and the effect of this spatial planning upon subsequent city plans.

It is, I think, no exaggeration to suggest that Wren's plan for London was influenced, not only by the work of the Italian Renaissance architects, and in particular the gardens of Vignolia both in Italy and France, but by the early works of Le Nôtre, whose gardens at Versailles, started some four years before the fire of London, were to have such a considerable effect upon subsequent landscape and city planning throughout the length and breadth of Europe.

The influence of Le Nôtre's work is certainly seen in the plans of Rastadt and Petrograd, which were designed by his disciples, in L'Enfant's plan for Washington and in the plans of Karlsruhe and Berlin, and, not least, in the remodelling of Paris initiated by the Revolutionary Committee of artists and carried to fruition by that triumvirate — Soldier, Engineer and Gardener — Hausmann, Deschamps and Alphand.

But, as this Renaissance school of landscape design developed to its full magnificence under Louis XIV and Louis XV, and began to dictate the design of both town and garden in Europe, a new approach was being formulated in England: There, under the influence of Evelyn — that famous diarist — and William Kent and his so-called romantic school of 18th Century gardeners, there was being evolved a style which was a complete reaction to the artificiality of the formal renaissance garden, and aimed, instead, at the creation of a series of natural effects :— a style both more human and picturesque, and one, in its turn, which was to influence the planning of towns and gardens, and even to change the character of the whole English countryside.

* * *

The openness of the Georgian town with its tree planted residential squares and terraces, of which parts of London and Bath, Cheltenham and Lemmington are so typical, was the product of this new approach. (The motif, of course, that of building about a square or rectangle, is of an earlier origin.) But the full effect of this natural or humanising school on city plans was not to manifest itself until comparatively recently.

In the 18th Century the gardener, both French and English, was a man of no mean importance. With the dawn of the industrial era however, there arose a new people — a race which excused its own ineptitude with that trite phrase: "God created man, man built the cities." And, in this new age of Midas, the gardeners' creative skill had small place; circumscribed by a profit conscious society, his ability was channelised into the creation of minor monstrosities for the new rich, instead of being employed upon the humanising of the fast developing, rigidly patterned town, as it had been before. Gardens, in fact, were assessed more because of the oddity of the plants and pavilions than because of the quality of design, or because they could be tagged with the name of Capability Brown rather than because of their humanising planning.

If one but reflects upon the Woods' development at Bath, the planning of central Nance or Craig's plan of Edinburgh Newtown, to cite but three random and -varying examples to which you, no doubt, can add, it may be appreciated how real a contribution the gardener could have made to the towns that splurged to Metropolitan stature during the 19th and 20th Centuries, and of which our own, incidentally, are not untypical.

The greatest tragedy of this 19th Century lies, perhaps, in its disruption of the general evolution of the Arts, for it was this disruption that not only disestablished the gardener as a planner and creator, but broke the liaison between gardener and architect, and ultimately transformed him into the horticulturist — the producer of plants instead of the designer of gardens.

Nevertheless, this century's old association and common purpose was not easily rendered: It was during the first thirty years of the 19th Century that Nash planned and completed London's Regent Street and Regent's Park development — a scheme in which the two arts were integrated into a unified development of outstanding merit. It was in 1850 that Paxton — the Duke of Devonshire's gardener — made that notable contribution to modern architecture — the Crystal Palace. It was at the beginning of this century that Olmstead and Burnham, and similar landscapists and architects, were drawn together to form the American Institute of Town Planning. Again, it is this early association that in Sweden, where the impact of industrialisation has been a gradual progression, permitted the appointment of an architect as Director of Parks and Gardens, and in New York City has enabled Moses, as director of a similar department, to bring to fruition the Riverside Drive project and a variety of town planning.

Great plans are rarely the product of one brain, unless in that brain there is combined the knowledge of many; so it is that in planning a city, the Engineer, the Gardener and the Architect are but complementary; each dependent upon the other and each equally indispensible: The Engineer for the constructional works and the services; the Architect for the planning and the designing of buildings and street furnishings; the Gardener for the humanising, the picturesque and that essential balance between the artificiality of cities and the truthfulness of Nature.

The 18th Century town plan was largely a one mind conception to meet the needs of the few. To-day, when all and sundry are forced to live within the confines of a city, we are faced with the necessity of designing and adapting towns to supply the multiple needs of a variety of age groups and a confusion of interests within each age group; and of achieving these within the bounds of certain economic limitations. Now it is because of these economic limitations that the gardener has again become so important, for the medium of his creations is the cheapest of all: the natural plant and the natural material.

Anatole France, I believe, once said "the crowd on the boulevard never grows old"; to-day that is still a truism, because the boulevard caters for a particular age group and a particular need which remain unchanging. Similarly the whole city caters only for a particular type and particular needs; and therein lies the danger; for such particularised cities tend to produce a stereotyped city dweller, whose growth and natural development is stultified and distorted by this restricted environment.

Lewis Mumford — a Professor of the Humanities and a writer of importance in town planning circles — has pleaded for a review of man's life cycle in the hope that planners may better understand, that in our multifarious society, the child world of 'make believe,' the privacy of courting, the child cares of the married and the rumination of the aged are as worthy and important as the needs of commerce and industry. Mumford's plea is a mere reiteration of the biblical enjoinder that man does not live by bread alone and to which we, unlike our forebears, have turned a deafened ear.

In the cascading fountain and grotto of the Renaissance period lies the stimulant to fantasy, both childish and mature; in the English maze and Diana temples lays the seclusion for the lovers; in the yew enclosed Dutch sunken garden lies the seclusion and shelter for the elderly dreamer; in the miniature garden of old Japan lies the solace of the mystic. Each in its way a definite solution to a definite social need of the period.

* * *

Yet if there is lacking to-day the thoroughness and versatility of Le Nôtre, who would seem to have met the whole gamut of social needs, from the summer ambulations of a gossiping court, to Marie Antoinette's whim to play the rural maid, within the ambit of one estate, these are at least a series of scattered examples which supply certain contemporary wants and warrant consideration.

In the continuous communal gardens, onto which the houses back in Raeburn and the American Green Belt townships, is a solution to the only child's want of freedom and companionship, the aid to adult community responsibility and, also, the danger-free access from home to school.

In the Soviet Parks of propaganda and culture there is an attempt to create an environment, in which the subconscious mind absorbs an appreciation of certain political ideologies and cultural arts, just as has the child mind absorbed the mythical tale of Peter Pan by contemplation of that statue in Kensington Gardens.

In the Battle of Flowers at Nice and the Mexican Fiestas, is the forgetfulness and release from the pent-up frustration of workaday life, which is denied present day society, the jettisoning of responsibility and the disregard for age.

In the lakeside gardens of Stockholm and the Boulevard cafés of Paris, with their kaleidoscope of interests, is the haven of the lonely, and the warmth of a token companionship.

In Germany's Black Forest and her Alpine slopes lay the antidote to a demoralised nation glutted with a surfeit of unnatural substitutes.

To these, one might continue to add like a travelogue scenes from the water gardens of Delhi to the Greenhouses of Kew; from the Jesuit Gardens in China to the Arlington Cemetery in Washington, but they are all mere incidents in a pattern without co-ordination or system.

In Stockholm, however, there is a system; and, in referring to the work of Hogler Blom — its Director of Parks and Gardens — I do so, not because he is an architect, but because he is a true successor to Le Nôtre and he, at least, is directing a conscious effort which bears study. With the realisation that his ideas were not necessarily those best suited to the public requirements, Hogler Blom introduced a system of questionnaires, first for school children and then for adults, which ultimately were elaborated and expanded into a correspondence department to ascertain the public's true need. And as this developed, it not only directed his programme, but it built up a wider public interest in the activities of his department. An interest which has even assumed the shape of people donating old houses and gardens to the cause, which this man so nobly serves, and of thereby providing public gardens and buildings in congested areas which the city itself could ill afford to purchase.

From this correspondence a host of needs became apparent :— Fourteen year olds want to kick a ball; so Blom provides fenced miniature football fields. Nine year olds want to dam streams and form pools; so dammable streams are provided. Six year olds want to play at busses and road hogs; so gaily painted old chasses, engineless and wheelless, are supplied. Four year olds like to clamber and climb; so logs and wood stumps are set up for juvenile alpinists. The minding mothers and the escorting fathers likewise require amusement and interest while the children play and this too is provided.

Some people like to grow flowers, some don't and can't. Yet, as the weary winter enters spring, the city dweller delights in the early spring flowers which he so rarely sees. In Stockholm a few concrete tubs are set up at a street corner in a random group for all to see — just a few spring flowers to lighten the dreary office route of the Swedes.

After a sunless winter the human loves to bask, so a disused cobbled corner, by a bridge abutment, is converted with a few shrubs, some painted seats and temporary striped awning and Stockholm has another sun-warmed coffee garden for the sandwich luncher.

The child learns most by example, and so can the adult learn. A park seat cast in the mould of 18th Century relic, redeemed from the scrapheap, costs little, but recaptures a departed charm. A sculptural group in silvan setting is better seen than in a local Museum and lends greater enchantment. And each helps to educate these people of Stockholm.

A sculptor employed on a monthly wage, as were Michael Angelo and his renaissance compatriots, produces better work at less cost than that bought in the open market and work better suited to its garden environment than that acquired indiscriminately; so Carl Millias is a Municipal employee.

It is better to coerce than forbid. A barbed wire fence forbids, a hedge coerces; so in this far northern city they separate the outdoor cafe tables by a barrier of flowers, and nobody moves tables or chairs. We separate traffic lanes with islands and barriers of steel, they use cobble stones, because nobody drives over cubbles for pleasure and cobble stones don't obtrude upon the eye as do our inelegant barriers of steel and concrete.

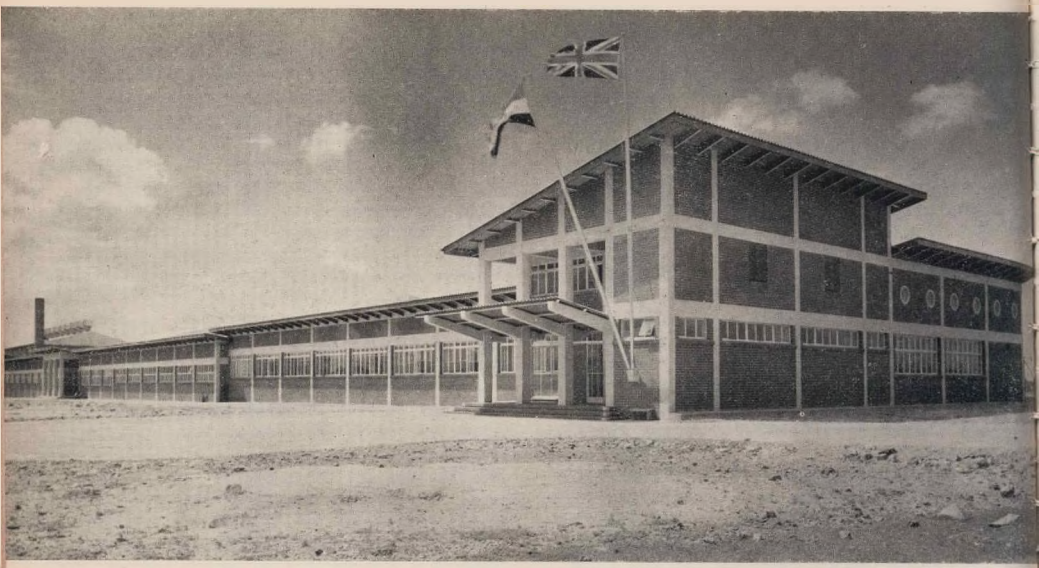
In some ways Stockholm is unique. It has been named the Venice of the North, but vandals and obstructionists are the same the world over, and in this respect she was not very different from any other city. With the aid of a type of "Silly Symphony" film cartoon however, in which "Peter" does all the things small boys would but should not do, and ends by rueing the day, the public have been slowly trained to communal responsibility and vandalism has been reduced.

* * *

Stockholm, of course, is not Durban, Cape Town, or Johannesburg, and what is appropriate there is not necessarily fitting here. What Stockholm spends on its Parks and Gardens Department I do not know, and whatever it is, its tourist traffic alone probably justifies it, but all that is of small moment. What is important however, is Hogler Blom's approach to a problem and his quiet crusade towards the humanised city.

Life is already sufficient grim and lacking in lightness and that sense of fun which the Austrian Baroque, with its barley sugar columns and its angels in Roman helmets, typified, without perpetrating this grimness in our urban environment and encumbering our children with a barren artificiality. Yet if we would have it otherwise, then the future rests with the gardeners. Accept the challenge and our children will be truthfully, sane and mentally balanced; fail, and we may expect the Wellsian Automatoms.

To many that may appear an over dramatised statement, or one more befittingly applied to the large industrial cities of Europe and America. But let each of you reflect upon the intensity of development in his own city during the past two decades, and then judge whether we are not travelling the self same road that has resulted in squalid awfulness of Metropolitan congestion elsewhere, and decide whether the time is not ripe for us to take heed and call a halt to the present drift for you can buy neither health nor happiness.



THE NEW CRITTALL-HOPE FACTORY AT PORT ELIZABETH

JONES AND McWILLIAMS, ARCHITECTS

This new factory for Messrs. Crittall-Hope Metal Windows (S.A.) Ltd., was completed in 1950. It comprises the main factory area, with necessary stores and services for the fabrication of steel windows and doors, with the ancillary staff accommodation including change rooms, canteens, etc., together with the administrative offices.

Both the administrative and welfare blocks are of reinforced concrete frame construction with 11 inch cavity panels faced with blue-grey bricks, externally and stock bricks internally.

The corrugated asbestos cement roof is laid on 9 inch by 3 inch, and, in some cases 12 inch by 3 inch rafters, the ends of which are tapered and rounded where exposed at the eaves.

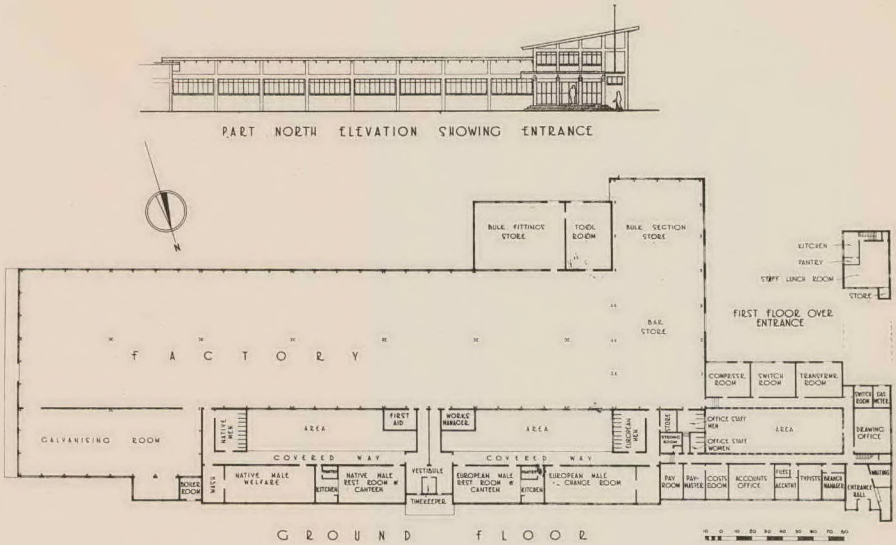
Crittall-Hope windows are, of course, used throughout, and floors are of hardwood blocks on the concrete slabs.

The factory portion is in steel frame with steel roof trusses carrying an asbestos cement roof, the ends of the sawtooth roofs being filled with double sheets of flat asbestos cement with staggered joints.

The building owes much to the colour scheme, which is based on the colours usually favoured by the company in the preparation of their catalogues — blue and orange. All external woodwork is painted blue, the underside of eaves and the portico is orange, and the steel windows are painted white.

The floor of the Entrance Hall is laid in polygonal slabs of quartzite some of which, on either side of the entrance door may be lifted so that plants (Rubber trees, Bamboo, Elephants' Ear, Begonia, etc.) could be placed in the recesses. The planting holes would be levelled up with the floor surface with quartzite chips. This has not yet been carried out.

The total cost of the complete building was £90,000 in 1950.



The portico to the main entrance hall, Administration Block. The panel walls are in blue-grey face bricks, windows are painted white, external wood work blue, the portico and the underside of eaves orange, reflecting the colours used in the company's catalogues. Roof is corrugated asbestos cement.

Photography: The Middlebrook Studio, Port Elizabeth

hata : E. Rabinow

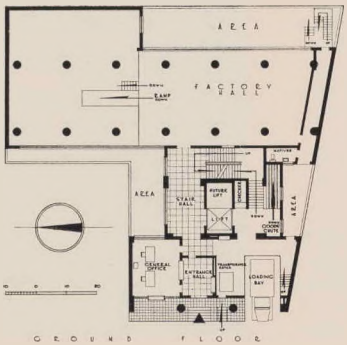
DOWNING HOUSE

FOR MESSRS. HORTORS LTD.

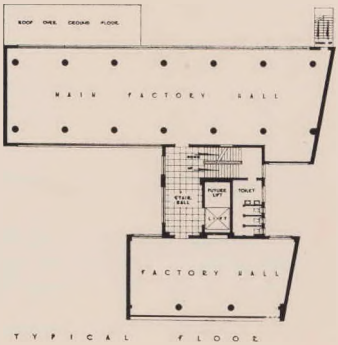
JOHANNESBURG

ARCHITECTS

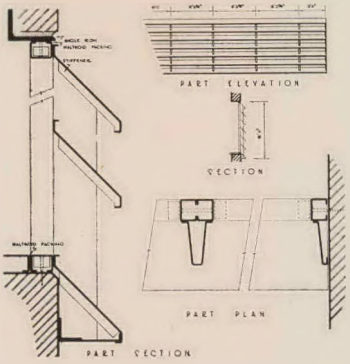
COWIN AND ELLIS



GROUND FLOOR



TYPICAL FLOOR

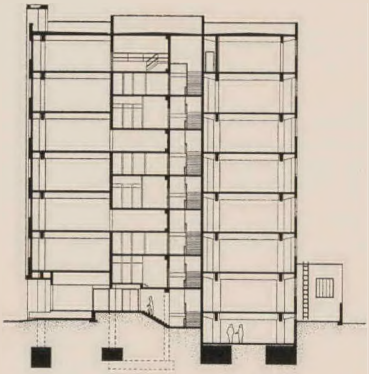


Details of the steel louvres protecting the windows on the west (street) elevation from the penetration of the afternoon sun, and giving an even distribution of light. These and the plastered surfaces on the west facade are painted ivory, and the facebrick is of a buff colour. The louvres were manufactured by Messrs. Wire Industries, of Johannesburg.

The building is situated in Harrison Street, Johannesburg, on an irregular "L" shaped piece of ground and comprises, partial basement, five floors of factory space and one floor of change rooms for Employees. Each factory floor consists of two factory halls with the lifts and stairs off the connecting link between these halls. The factory has been designed to carry a superimposed load of 500 lbs. per square foot on each factory floor, over the whole of the floor area. This has been done in order to allow the owners the utmost flexibility in the placing of heavy machines and the storage of paper, the requirements of which may alter in the future and necessitate a revised layout of machines.

A normal concrete framed construction was adopted with brick filling to the panels. Test holes prior to building revealed a rock outcrop on one half of the site only and no indication of rock on the other half to a depth of approximately 40' 0", the face of the outcrop being practically vertical in the middle of the site. The foundations especially on account of the heavy loading, therefore had to be carefully designed in order to prevent an unequal settlement of the building. For this purpose concrete piles some of which exceeded 50' in length were adopted on half the site; the columns on the other half having concrete bases spread over the substrata of rock.

Finishes externally are plaster and face brick and internally face brick dadoes with plaster over and finished in "Kemtone" washable distemper. On the west facade horizontal steel louvres were installed in order to obtain an even distribution of light and at the same time shutting out the direct rays of the afternoon sun.



SECTION

WEST ELEVATION

TRADE NOTES AND NEWS

NOTES ON SOME OF THE PATTERNS NOW AVAILABLE FROM JOSIAH PARKES & SONS (SOUTH AFRICA) LIMITED. JOHANNESBURG.

1.—CYLINDER NIGHT LATCHES.

The conventional pattern has been available for some time. These may now be master keyed as simple suites, or as the more complex suites under sub and grand master keys. This is of vital interest to the owners and executives of hotels, factories, large blocks of flats and many other types of buildings. Special machinery has been recently imported, together with trained personnel to do this class of work. Every care is taken to ensure that copies of genuine UNION master and servant keys are supplied only on authority of the owner of the suite. If the owners of suites or users of the servant keys co-operate in this, the security given by the latch is greatly increased.

A new pattern of Night Latch — No. 1066 — has recently been introduced with a chromium plated latch and staple. This is automatically deadlocking against end pressure; this means that once the door is shut, it is impossible by normal means for someone outside the door to push a piece of celluloid or steel between the door and the door jamb to thrust back the bolt of the latch and so gain access to the room. This trick is a favourite method with burglars, which is of course defeated by the automatic mechanism of this new latch. In addition, it is possible by a reverse turn of the key to deadlock the inside turn knob. This means that if the latch is fitted to a part-glazed door, and is deadlocked by the reverse turn of the key, a person breaking the glass and putting through a hand to turn the knob from the inside, cannot do so. This added security should be of interest to the house-holder or flat-dweller with a partially glazed door, who might be worried by the burglar when the dwelling is unoccupied. Unfortunately production of this pattern is limited by the supply of raw materials, which at the moment are in short supply.

2.—RIMLOCKS.

This type of lock is primarily used for non-European housings, and the pattern in production is approved by the Public Works Department. It is being supplied for Housing Schemes all over Southern Africa.

A change of design is shortly to be made so that local steel may be used.

3.—MORTICE LOCKS.

2 Lever Mortice Sash Locks with flat and full rebated forends have been available for some considerable time.

Recently a new pattern of three lever Sash Lock has been introduced giving as standard, 36 differs. These differs are all obtained on the levers and there are no sash or other wards in the lock, which defeats what are often called "skeleton keys." This lock no. 2277/3" is available only in limited quantities.

The most recent addition to the range is of the 4 Lever Locks to the specification of the Public Works Department. These consist of 6" horizontal Mortice Locks and 4" Mortice Sash Locks both with flat or rebated forends, and of a 3" Mortice Dead Lock. These are supplied with standard 24 differs but can be made up specially with practically an infinite number of differs. They can of course be master keyed in either simple or complex sub-suites, with the master and servant keys operating from both sides. This quality of lock is a new departure in this factory, and because they are largely hand-made by personnel sent from the English factory, the output is limited.

4.—PADLOCKS.

Both a 1¾" and 2" pattern of padlock are available, though the output of these is practically all taken by the various customers in the Hardware Trade who specialise in supplying the Mines.

5.—CABINET LOCKS.

Recently a 2" Cabinet Lock with dead or spring bolt has been introduced for the makers of steel lockers and steel furniture. These have a standard range of 800 differs and can be Master keyed.

Deliveries are unfortunately far behind, but everything possible is being done to increase production to meet the demands and at the same time to increase the range by the introduction of new pattern to help meet the demand.

PORCELAIN ENAMEL

The days when refrigerator walls absorbed objectionable food odours are gone forever. Porcelain enamel, a non-porous, glass-like material is being used as the interior coating in many highest quality refrigerators.

To offset the widespread opinion that porcelain enamel will crack or chip from steel before the yield point of the base metal is reached or exceeded, some porcelain enamellers have devised spectacular demonstrations. One such demonstration uses an automatic hammer that delivers and records thousands of blows to a porcelain enamelled surface, with no effect whatever.

Soon door knobs, hinges and other building hardware may be available in distinctive new designs and dozens of different colours. The material: lifetime porcelain enamelled steel. The hardware may be decorated with over-glaze decals, stencils, hand painting and other porcelain enamel art techniques. The design on the highly durable finish never will fade or wear away.

When perfected, a new production technique—electrostatic spraying—is expected to lead to speeded-up production and ultimately to lower costs of many porcelain enamelled products. Although still in the experimental stage, this process has been used successfully in the production of some range oven parts. Electrostatic spraying also will permit greater uniformity and control than is possible with present spraying processes.

A porcelain enamel that bends has been developed by an American midwest stove manufacturer. This material has made possible substantial savings in storage space and faster production. This exceptionally thin coating—only approximately 0.003" thick—is applied to flat sheets before they are formed into stove and oven liners.

Coal and grain chutes made of porcelain enamelled steel regularly outlast ordinary steel conveyor chutes by as much as ten times. This special grade of porcelain enamel is highly resistant to abrasion. In addition, the smooth, glass-like surface reduces friction, thereby speeding up loading operations.

BOOK REVIEW

"MYSTERY AND REALITIES OF THE SITE", by Richard Neutra. Morgan & Morgan, New York, 1951. 64 pp. 47 illustrations. 3.75 dollars.

In the past few years we have seen a good many illustrations of Neutra's work and have admired them deeply. We must admit, however, a complete blindness to its real significance which now becomes highly apparent through Neutra's own brief text to the latest publication of his work, "The Mysteries and Realities of the Site."

The title was the first surprise because one had thought that Neutra had no time for mysteries and lived in a world of almost laboratory like rationale.

The work illustrated in this present book makes no consessions to romantiscism and contains architecture of the most relentlessly functional character but what emerges is the idea of highly mechanised building applied in the service of bringing men far closer to nature than ever before, a truly humane ideal.

An architect's work speaks a very clear language of its own but the message is often lost in photography. We welcome then, an utterance by the architect himself to clarify intentions which may not be otherwise apparent

In this little book, on the site architect as author and an astonishingly good photographer have joined forces to put over a message which is, though miniature in length, perhaps the

A house in the desert

Next to the moon, the desert is the strongest challenge to man as a rugged and almost uninhabitable place. The house in the desert is again an "import," based on a multiplicity of importations, the first of which is water, brought hundreds of miles to make the valley smile. Pumped up to the mountain's base, water makes itself felt in the sudden oasis carpet of green grass. Yet never would it do to deny the desert even in the lawn; the desert is allowed to send an outcrop of its bonelike boulders through the well tended grass.

"Gay flags mark the spot where a new and happier section of suburbia is going to sprout, a site with all that human hearts crave. But severe realities, economic determinants bear cruelly down on it. Little money is budgeted for planning and design and a mere minimum for the cheapest, straigtest line of engineering. Those bulldozings and pavings and painfully silhouetted powerlines, with rugged poles topped by sheet-metal transformer cans, soon eat into the dream of a site.

It is a dream finally ravished by a shrill alarm clock that signals the dawn of the day of opening — the opening of the subdivision. When the selling starts, nymphs and spirits have long since fled — vanished like shadows before the steamrollers of glaring monotony. Insult is heaped on injury when such man-made monotony is now "relieved" by man-made horrors of variety and the speculative builder camouflages his twenty-five dollars worth of floor-plan with a diversity of three or four F.H.A. insured fronts, or synthetic variations of asphalte shingle colours.

The song of birds has died down and instead of the sweet scent of meadows or the pungency of sagebrush the more civilized fumes of creosote and gasoline now permeate the air. Alien to the place, dead-level lawns are now being shorn by clashing new-fangled mowers where only a few months ago characteristic hill slopes and ground swells gave a specific physiognomy to the site and granted it personality. There was animation in the landscape when the morning breeze blew over its weeds or the late afternoon sun goldened it and threw long shadows into the gentle folds and deeper draws of the ground, covered in a thousand years by an indigenous layer of topsoil. It is now all thrown into the wind, gone with it.

Even the clouds seem to have grown foreign and indifferent to the place, once in mysterious correspondence with them. The physiology of the spot and its physiognomy, its original individuality of character, have been diluted, annihilated.

Could there have been profit in keeping its recognizable character and catering to its innate properties as expressed in a peculiar physiognomy? Is it childish or is it wise to harbour awe and consideration for natural constellation and configuration, to work with its grain, to underline it instead of countercrossing it?

My experience, everything within me, is against an abstract approach to land and nature, and for the *profound assets rooted in each site* and buried in it like a treasurable wonder. The ancients thought these vital assets spirits. By listening intently, you can hear them miraculously breathe in their slumber. You may subtly awaken them to startling new values of design truly assured of duration, growth and never-ending life."

Extract from "Mystery and Realities of the Site" by Richard Neutra.

most significant comment on contemporary architecture since the publican of "Esprit Nouveaux."

Neutra has revealed himself as a brilliant writer capable of saying something of immeasurable importance with incredible brevity. This book is, in fact, a piece of sheer poetry.

After the short text by Neutra there is a series of photographs, each a gem in itself and each brilliantly captioned by the publishers "Morgan and Morgan". Then the book is rounded off by a further few pages by Neutra.

The "Mysteries and Realities of the Site" is more than a book, it is a gem that will become one of the joys of learning about architecture, an inspiring and classic utterance.

In support of so sweeping an acclamation the editors have decided to publish an extract from the text and this appears on the preceding page together with one of the photographs with its telling caption.

H. C. PINFOLD.

BRITISH FURNITURE TODAY, by Ernö Goldfinger. Alec Tiranti Ltd., London, 1951. 7s. 6d.

This delightful little book comprises 16 pages of text and diagrammatic illustrations, together with 98 photographic illustrations of types of furniture and fittings, including some attractive lamp designs.

The book aims to show some of the contemporary examples of furniture of progressive design, and while the illustrations are far from being a comprehensive catalogue of all that is available the range is catholic and the examples, I believe, well selected.

The text points to aims of modern furniture design and translates these in terms of the social and economic factors in which modern society has its roots, as well as production methods of the mechanical era. It is an attractive and stimulating little book and well worth the small price for its purchase. *W.D.H*

NOTES AND NEWS

CHAPTER OF S.A. QUANTITY SURVEYORS.

TRANSFERS :

The following members have transferred from Salaried to Practising membership: A. A. C. Anderson, B. E. Basson, F. P. Caietta, G. W. Doig, P. G. Griffith, E. S. Gritten, N. C. Jackson, A. T. Jones, R. M. Lanesman, P. B. Lee, H. A. Livingstone, W. van Eyssen and C. Walker.

PRACTICE :

Mr. G. W. Doig is practising with Margo and Margo, Architects and Quantity Surveyors. Mr P. B. Lee and Mr. W. van Eyssen are practising on their own account.

PARTNERSHIPS :

Mr. A. T. Falconer has entered into partnership with Mr. A. A. C. Anderson, the name of the firm remaining Andrew T. Falconer, at 914, Geneva House, Parliament St., Cape Town.

Mr. J. G. Hudson has entered into partnership with Mr. F. P. Caietta, the name of the firm remaining John G. Hudson, at 305 Grand Parade Centre, Castle Street, Cape Town.

Messrs. C. L. F. Borckenhagen and Louw have entered into partnership with Mr. E. S. Gritten and Mr. N. C. Jackson, the name of the firm remaining unchanged.

Messrs. Roos and Roos have entered into partnership with Mr. P. C. Griffith and Mr. T. B. Jamieson, the name of the firm remaining unchanged.

Messrs. Farrow, Laing and McKechnie have entered into partnership with Mr. A. T. Jones and Mr. C. Walker, the name of the firm remaining unchanged.

Mr. L. Novis has entered into partnership with Mr. R. M. Lanesman, the firm having the style Leslie Novis, at 315/7, Central House, Central Street, Pretoria.

CONCRETE ASSOCIATION OF SOUTH AFRICA

The retirement of Mr. A. E. Wynn, B.Sc., A.M.Am. Soc. C.E., M.(S.A.)I.C.E., M.I. Struct.E., from the position of Director of the Concrete Association of South Africa has been announced.

Mr. Wynn came to the Union in 1938 to form the Concrete Association for the cement-manufacturing industry and in the last thirteen years the Assocation has deservedly earned a reputation for providing a technical service for users of cement and concrete which is of great value and highly appreciated throughout the country.

Born and educated in Birmingham, Mr. Wynn has had a very wide experience in concrete construction in several countries, including England, Canada, U.S.A., Spain and South Africa. He has written numerous articles and pamphlets on concrete design and construction and his books on "Formwork" and "Estimating & Cost Keeping" are accepted throughout the English-speaking world as standard text books, and his "Modern Methods of Concrete Making" has been translated into Spanish and is used as a text book in Mexico.

In addition to the work he has done for the Concrete Association, Mr. Wynne has served on many public bodies and organisations, and in particular, the time and energy he has devoted to the preparation of standard specifications and model building regulations for S.A. Bureau of Standards has been of great value.

Mr. F. S. Fulton, B.Sc., A.M.I.C.E., A.M.Am.Soc.C.E., will succeed Mr. Wynn as Director of the Concrete Association.

VAN RIEBEECK FESTIVAL FAIR

For three weeks next year 27½ acres of Cape Town's new foreshore will be a vast " shop window " for the greatest accumulation of industrial, commercial and agricultural exhibits ever to be seen in South Africa.

Inside the 15 acres of covered exhibition halls, visitors to the Fair will see the products of the primary industries of the country follow a sequence of manufacture until they emerge as the finished products of our many and varied secondary industries. Outside, several of the larger South African industries, a number of overseas firms and nations and the four provinces of the Union will be on display. Here visitors will also see a life-size model of the town hall and " square " of the village of Culemborg — birthplace of Jan van Riebeeck, and will be able to enjoy all the fun of the fair at the largest and most up-to-date amusement park ever presented in this country. Pathways, impressive facades to pavilions and halls, fountains, restaurants and refreshment counters, flags and music will all contribute to make every visit to this festival fair an inspiring and memorable occasion.

The general plans of this Fair have been finalised and it is now possible to describe the layout of the main exhibits. Built round the new railway goods sheds, which will be turned into exhibition halls, the showground is shaped somewhat like a huge kite with the apex pointing symbolically towards Cape Town's Van Riebeeck statue. Half a mile in length and over a quarter of a mile wide, the Fair covers twice the area of London's Southbank Exhibition, one of the focal points of the Festival of Britain.

Over 1,000 plots and stands are available to industry, commerce and agriculture in the Union, but, as many of the larger firms are taking blocks of stands, it is expected that the final number of exhibitors will be from five to six hundred. All the provinces are planning large provincial exhibits, foreign nations have enquired and booked space for national exhibits and many of the principal foreign concerns trading with South Africa have booked plots in the show-grounds for their exhibits.

The main hall, 1,440 ft. by 375 ft., will house five major exhibitions. The first will cover our " Wealth in Land and Sea " and will present a complete display of agriculture and fishing with complementary processing industries.

After food will come the " Riches from Metal," an exhibition devoted to mining, engineering, building and finance. This exhibition has been remarkably well patronised and will provide startling evidence of the rise of South Africa's manufacturing industries.

The " Transport and Travel " exhibition will probably be one of the most interesting from the visitor's point of view, and the housewife will undoubtedly be attracted to the Modern Home exhibition.

The final exhibition in the main hall deals with the " Energy in the Earth " and will cover the supply and distribution of fuel, power and chemicals.

In addition to these exhibitions, a sixth display will be presented in the 880 ft. long by 75 ft. wide secondary hall, adjoining the main hall. Entitled the Wonders from Fibre, it will illustrate one of the most important facets of South African economies. Forestry, printing, wool, cotton, the great textile industry and a lavish fashion display will be included in this mass demonstration of a great and ramified industry.

Electricity and water, if required for exhibits, will be provided free of charge to exhibitors. Facilities are also to be provided for the erection of stands and pavilions in Cape Town, although intending exhibitors have been advised to have these designed in their own areas to avoid a rush on Cape Town display studios. Accommodation, always a problem for a Fair of this size, is receiving special consideration and the Organisers hope that eventually 100,000 visitors wil be accommodated in Cape Town and its suburbs.

The exhibition halls cover most of the lower section of the showground and will be flanked by pavilions occupied by overseas concerns and by some of the larger South African industries. The entrance will be decorated by an imposing facade, which will be designed to match a special exhibit, covering 120,000 sq. ft. and displaying one of the most important of South African industries. This exhibit will be spread over a half circle and will be separated from the main halls' entrance by the Van Riebeeck Parade.

SEVERAL OTHER DISPLAYS

Several other pavilions and displays will cover the ground between the 120,000 sq. ft. exhibit and the main entrance off Castle Bridge Road. On the left, looking towards the Castle Bridge Road, space has been set aside for the exhibits of the four Provinces.

Much of the showground will have a tarmac surface and the entire ground will be specially hardened. The roadways between the pavilions and displays will be improved by gardens, refreshment stalls and probably fountains.

SITUATION OFFERED

Qualified or well experienced architectural assistant required immediately. Apply in writing stating qualifications, experience, salary required and when able to commence duties. Humphries & Gilham, Chartered Architects, Voortrekker Street, VEREENIGING, P.O. Box 364.

SITUATION WANTED

Hollander, age 40 years, married with three children, is most anxious to obtain position of architectural assistant, anywhere in Union. Holds certificate of Medium High School of Architecture, has worked as carpenter, superintendent, draughtsman, assistant and now chief architectural assistant to leading architect in Amsterdam. Experience covers dwellings, houses, schools, church, town hall, exhibitions, rebuilding and town planning. Replies to Editor or direct to W. Heisterborg, Boriplein 16huis, Amsterdam O., Holland.