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 JUNE 1951

COVER designed by Gilbert Herbert. Photograph by courtesy of The Electricity Supply Commission.

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VOLUME 36

6

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

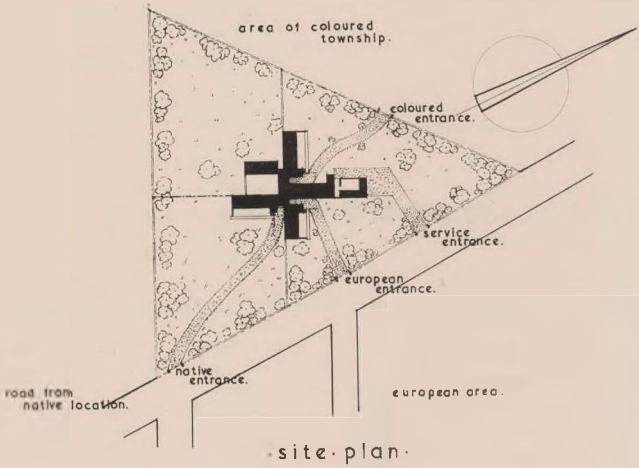
Photograph: R. H. Lardner-Burke.

View of European Dormitory

HELEN BISHOP ORTHOPAEDIC AFTER-CARE HOME

KIMBERLEY

JOUBERT AND OWENS, ARCHITECTS



site plan

The problem was to provide accommodation for the care of 42 (16 Native, 16 Coloured and 10 European) cripple children either after their discharge from hospital or during the periods between treatment in the hospital. Consequently no elaborate orthopaedic surgical equipment is required, but provision was to be made for the convalescence and rehabilitation through medical care, diet, play and schooling of the children. Furthermore the home was to house Europeans, Coloureds and Natives, all with similar facilities but with separate entrances and circulation.

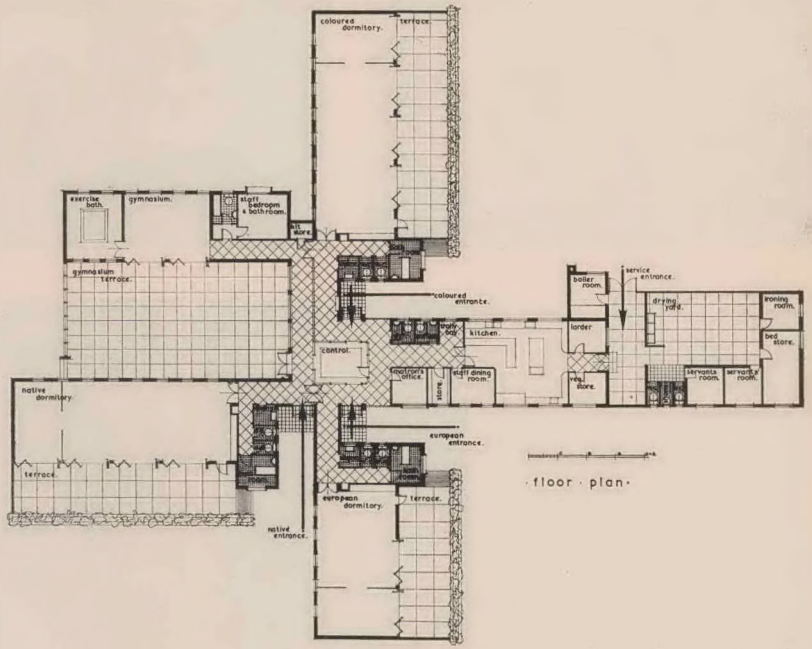
Fortunately it was anticipated that as the children would all be very young no separation of the sexes was required. All dormitories were, however, to be so arranged that only one member of the staff was required to maintain adequate supervision, and because many of the children are in bed for prolonged periods the dormitories were to be cool in the Kimberley summer.

Solution: Owing to the nature of the requirements the solution resolved itself into a scheme whereby each race was zoned into separate wings each having their own lavatory accommodation, and which converge upon the control office. From this point the wards, as well as the gymnasium terrace and kitchen can be supervised.

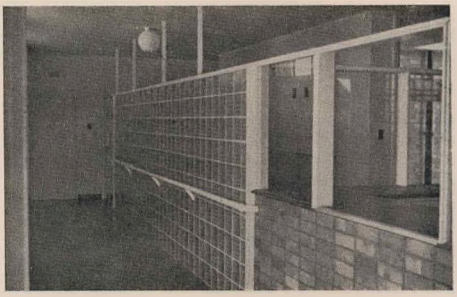
The siting of the building was such that, as a Coloured Township exists on the North West of the site, the Native Location being somewhat to the south and the European area abutting the east boundary, the entrances to the home were accordingly fixed.

Construction: Conventional 11" cavity walls and insulated ceilings are used, the space between the asbestos board ceiling and the corrugated iron being packed with exfoliated Vermiculite. The concrete slab over the central portion is a 11" hollow tile slab. The windows in the wards and the slope of the ceiling are to assist in providing adequate cross ventilation. Heating is by means of electric panel heaters set above the sliding folding doors and below the upper windows.

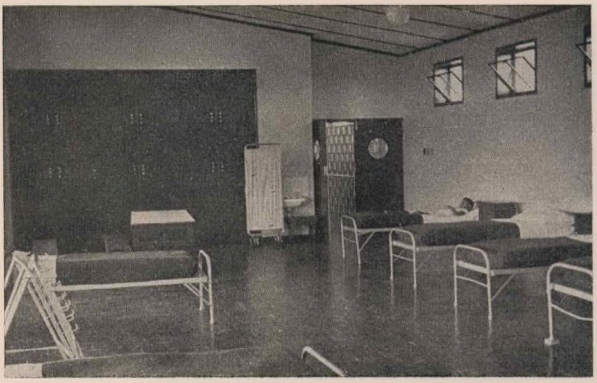
Remarks. The home functions extremely well and the Board of Management agree that all the requirements have been met. The cost of the scheme was approximately £21,000 and was completed in 1950.



LEFT: View across the Native Dormitory, showing the generous verandah space, extending the length of the dormitory and having an eastern aspect.

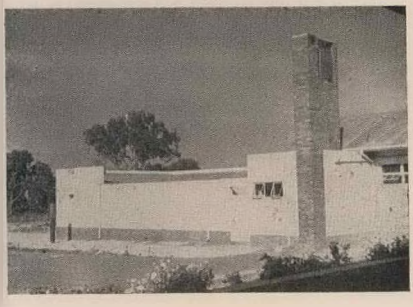


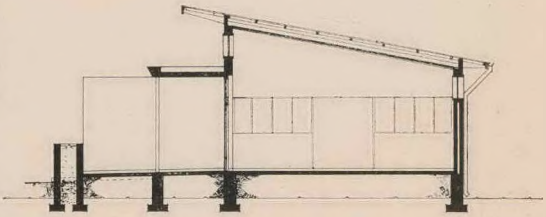
ABOVE, LEFT: Looking across the central office with the Coloured persons entrance and dormitory in the background. ABOVE, RIGHT: Control office and glass-brick screen, seen from the Native entrance.



RIGHT: A corner of the Coloureds' Dormitory.

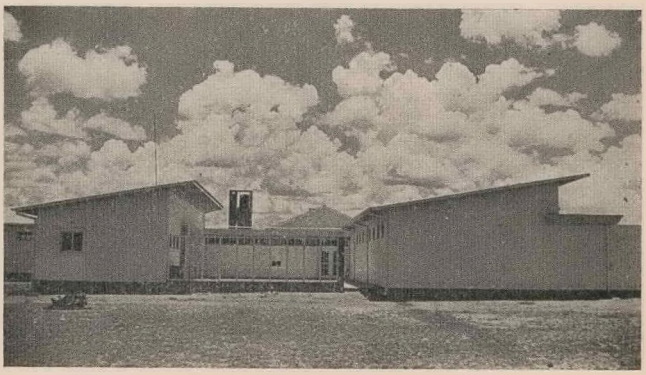
View from north-west, showing the Coloureds' Dormitory.





· sect ion · through · dormitory ·

ABOVE: Screened service yard with boiler room, stack and tank stand.



RIGHT: General view from south-west, showing the exercise terrace flanked by gymnasium and dormitory.

EXHIBITION DESIGN

A REVIEW OF THE FACTORS INVOLVED AND A SURVEY OF SOME OF THE MORE INTERESTING STANDS WHICH WERE ERECTED AT THE RAND EASTER SHOW, MILNER PARK, JOHANNESBURG.

ON AND OFF THE SHOW

By Ernest Ullmann, Industrial Designer, of Display Productions (Pty.) Ltd.

Most unique among the many problems confronting the industrial designer are those connected with planning and building of exhibitions. The scope is wider than usual; Architecture, Painting, Sculpture, Decoration and Display — all play their part from the very beginning, and therefore experience in layout and construction, poster design, lighting and mechanics, colour-psychology and sales promotion come into their own. Subjects of exhibits may range from flowers, clothing, furniture, cigarettes to chemicals or heavy machinery — in short, from any type of manufactured goods or processes to propaganda for an idea or organisation or a whole country. And as the problems are completely different in each case the line of approach to them must vary accordingly.

That unusually wide range of scope makes exhibition designing a unique craft and a very fascinating one. Additional thrills are provided by the demand for speedy completion. The time allowed for designing, construction and finish is usually not more than several weeks from start to finish. This narrow time margin requires a concentration of effort on the part of all people concerned.

Firstly and lastly it rests with the designer's conception and skill, but it also depends on his determination to adhere to his original idea and to defend it against "watering down" by his clients' demands. This fight for one's design to be kept recognisable, not to be crowded out in the end by mass display of goods or unwanted additions, is sometimes the most trying ordeal of the whole job. Where alterations are inevitable, resolute decision and quick improvisation are demanded from the designer, coupled with good "bedside" manners with an impatient and unimaginative client and good humour and the right approach to the, by now fatigued, sub-contractors and workmen.

As in architecture, planning of an exhibition begins with studying the client's particular intentions and needs in relation to a given space. The exhibition site or "stall", usually booked long in advance, is to be studied in detail, as its size, shape and position naturally influence a design from the outset. Sometimes the suitability of a site may have to be questioned and another space suggested and found, if possible.

Expanding South African industries have shown increasing interest in exhibiting their products and since the Empire Exhibition in 1936 we have experience of ever growing demand for more and larger displays. Often the sites available are rather inadequate and ingenuity has to make the best of them.

There may be columns, trees or other obstructions in the way. Also the condition of the floor, roof, level of ground, lights, flow of traffic and visibility are factors to be reckoned with. Finally, the rules laid down by the sponsors of exhibitions as to height, structure, and general specifications have their influence upon the design.

Next, consideration must be given to the nature of materials going into the construction of the exhibit.

In this respect the designer today is fortunate in being able to make his choice from a wide range. Whereas during earlier exhibitions held here little more than cardboard, timber and the ordinary type of wallboard was offered, at present, better, stronger and more appealing materials are manufactured.

After having studied all conditions and requirements, all ideas sorted out, work usually begins with the preparation of sketches of general lay-out. A good design can always be reduced to the size of a postage stamp and its composition still clearly understood at a glance.

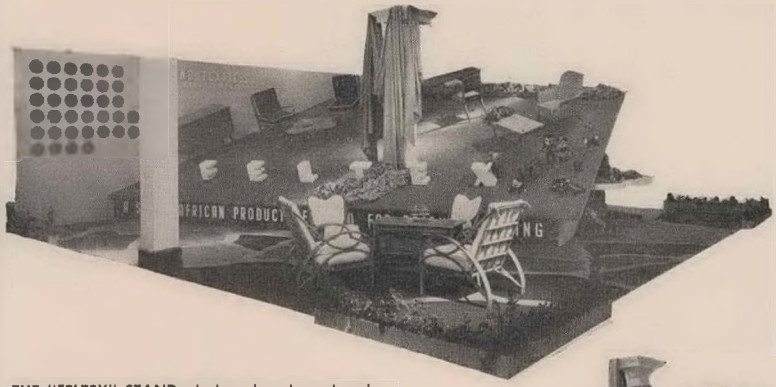
Gradually, this fundamental idea of composition is enlarged upon, and details are developed. Scale drawings are then made, generally followed by the preparation of models. These permit the study of problems of colour schemes, lighting, display, lettering, floor coverings, flow of traffic, seating accommodation, movements etc.

When all seems well, costing is done in detail, and changes often have to be made to comply with a given figure for expenditure, or in compliance with the client's added specific needs. Naturally, although a design is either liked or not by the exhibitor, price consideration is of equal importance.

All planning completed, building operations commence. This work is divided between the studios and the shopfitting sub-contractors. Good exhibition work requires high technical skill and many years of training.

I have recently studied conditions of exhibition building in Great Britain, where industrial fairs are held throughout the year. This has brought about the existence of huge organisations employing many hundreds of craftsmen who specialize in design and building of complete exhibitions. It will take some time before such conditions will prevail in South Africa, where apart from smaller scale shows, the major annual event is still only the Rand Easter Show.

Industrial design is only starting to be recognised in South Africa, and a professional organisation, once established, would considerably help to convince industrialists of its immense importance and value.



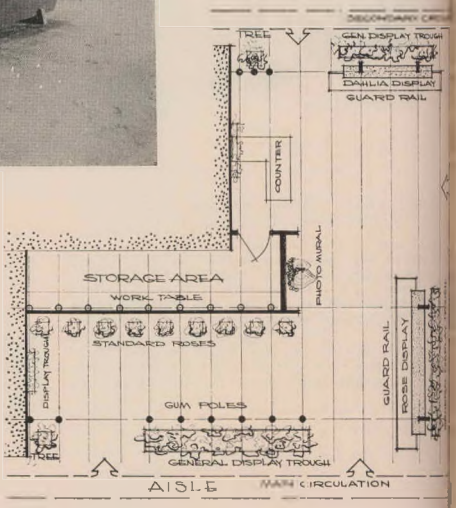
THE "FELTEX" STAND, designed and produced by DISPLAY PRODUCTIONS (PTY.), LTD.

An unusual method of display is employed in this stand of floor coverings to be viewed from three sides. A steeply inclined platform suggests a variety of interior schemes with startling effect; at the same time it provides for suitable displays on side and rear as well as office and storage inside. Note multi-coloured "crazy paving" composed of floor covering materials.

ABOVE: View from the front showing the tilted "floor."
RIGHT: View of the side and rear of the stand, showing additional display space and door to office at right.

S.A. FLOORING INDUSTRIES STAND, designed and produced by DISPLAY PRODUCTIONS (PTY.), LTD.

Dignified display of flooring finishes. Usual reflections off highly polished surfaces are eliminated by the use of indirect lighting through decorative sand-blasted glass panes.



THE FLORA NURSERIES STAND

Designed by Graham F. de Gruchy, Architect.

In the stand for "The Flora" Nurseries at the 1951 Rand Show, a feeling of rusticity was introduced by using stained gum poles for the uprights and overhead beams. These formed the background for specimens of the exhibitors' more general nursery products — trees, shrubs, creepers and woody plants — while, for their roses and dahlias, in which they specialise, more formal display boxes were provided, the separate compartments of which could be clearly labelled, thus avoiding undue attendance upon the public. The wooden frame work of these boxes was painted white and the backing, black. This was done in order to emphasise the natural colour of the blooms.

A small reception counter was provided for taking orders, and also a storage area for the housing and preparation of exhibits.

No attempt was made to conceal the lights: warm white fluorescent tubes were placed so as to form a regular rhythm along the horizontals.

From a circulation point of view, there were no actual points of congestion, although there was the inevitable tendency for people to gather around the displays.

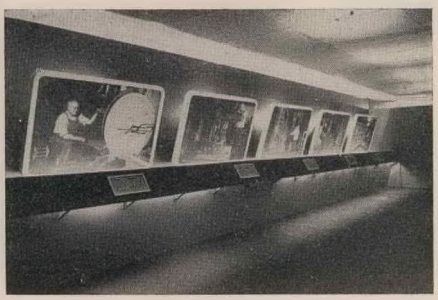
The photomural, showing the clients' sales office and nursery, could well have been dispensed with and another floral display substituted: people were more interested in actual nursery products than in their pictorial representation.

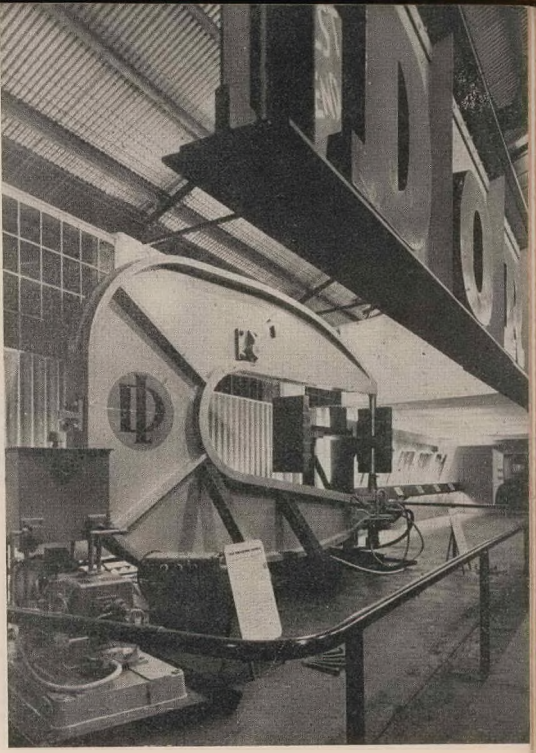
The three principal materials used were gum poles, pine and hardboard. These have all been recovered and can be used for a future exhibit. The colours used were pale blue, primrose, and red brown, together with the neutrals, white and black.

Photographs: l'atelier (Pty.), Ltd.

THE DORMAN LONG STAND, designed by African Industrial Design Services, Ltd.

This stand was surmounted and defined by an enormous steel girder (constructed of wood) apparently precariously supported by a light chain, and together with examples of heavy engineering equipment it included illustrations of engineering processes as pictured below.





FLORANCE SOAP AND CHEMICAL WORKS STAND, by DISPLAY PRODUCTIONS (PTY.), LTD.

A relief carved in a solid block of soap weighing one ton formed the central motif in this display against curved background in Chinese Turquoise, contrasting with side walls of embossed natural plywood.

STAND FOR THE UNITED TOBACCO COMPANIES (SOUTH), LTD., designed and produced by African Industrial Design Services, Ltd.

LEFT: General view of the stand at the Rand Easter Show. BELOW: Part of the progressive display that relates the story of tobacco production and manufacturing processes. Adjacent is the plan of the stand showing circulation and office.

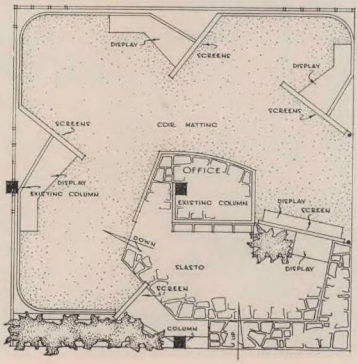
The exhibition programme of the U.T.C. called for a number of stands at various Agricultural Shows throughout the Union. The purpose of these exhibits was to inform the public of the part played by the United Tobacco companies in developing the South African cigarette and tobacco industry over a period of nearly half a century and to show something of the background of their products to-day.

The theme "Pioneers of the Industry" was adopted to tie up with certain current press advertising. The story to be told was a combination of Historical matter, statistics, followed by production and manufacturing details from the seed to the cigarette, supported by the presentation of the actual products. It was decided to express the theme in four main sections at the Rand Show and a corner site 30' x 30' was selected for this purpose. The work involved in the production of a stand of this type is considerable. The designers' problem was further complicated by the fact that the stand had to be transportable and capable of being adapted for sites varying in size and shape at other shows.

The designers therefore decided to use a series of units capable of rearrangement and modification to suit the different sites. These units to be constructed in easily transportable sections to facilitate transport, handling and also storage.

Various plans were developed and finally a model was produced. Each section was to consist of a screen, a showcase and a display unit for packages. Apart from the main theme full publicity was to be given to the company's brands and products. The facia boards carried the name of the company and supported a series of pennants carrying the brand names. Near the entrance to the stand interesting information was put over by means of a push-button quiz machine (not shown in photographs) and at the exit to the stand a mechanised show

Photographs: E. Robinow



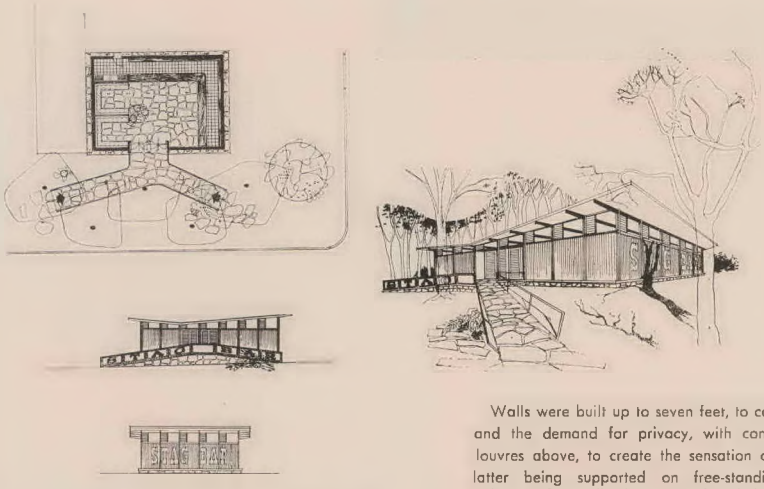
case displayed in turn every brand of cigarette produced by the U.T.C.

A small office was incorporated in the centre of the exhibit for storage purposes which backed on to the central motif carrying the cut-out letters U.T.C. In adaptations of the prototype design the central office is dispensed with and storage facilities found in the angles formed by the screens.

On either side of the Slasto entrance to the stand actual tobacco plants were displayed in troughs.

All display units were prefabricated and assembled on site. The screens were constructed in hard board, and the portions not occupied by display materials faced in limba ply with ducoed surface. The glass topped display cases were faced in limba and lined with cork a material very suitable for the display of tobacco. The packs were displayed in "eggbox units" ducoed white and light blue. The packages were supported back to back on copper wire stretched diagonally through the squares forming the "egg boxes". These units were therefore double-sided displays and formed a break at the end of each section, but by virtue of the fact that they could be looked through the continuity of the complete display was not interrupted.

The lighting of the stand was intended to focus attention on the display screens. For this purpose canopies over each section carried fluorescent tubes. The glass topped cases were also lit by concealed fluorescent tubes.



THE STAG BAR designed by R. D. Middleton

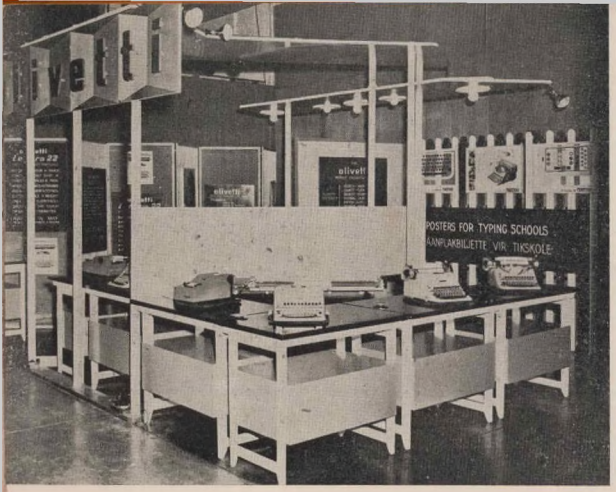
Among the newest pavilions at the Rand Show, the Stag Bar is sited behind a double row of plane trees on a site of 30 by 40 feet. While the site determined the size of the pavilion, the ramps were included to create a point of attraction to the rather sheltered and concealed building. The ramps were further related to the building by making the roof line counterpoise the angle created by their placing. Planning requirements were simple — a maximum length of counter with refrigerators and storage under, and a small wash-up. Seats were added to form two intimate groups.

Walls were built up to seven feet, to comply with regulations and the demand for privacy, with continuous windows and louvres above, to create the sensation of a floating roof, the latter being supported on free-standing coupled wooden columns. Externally, by contrasting their colour with the outer walls, they create a further rhythmic pattern.

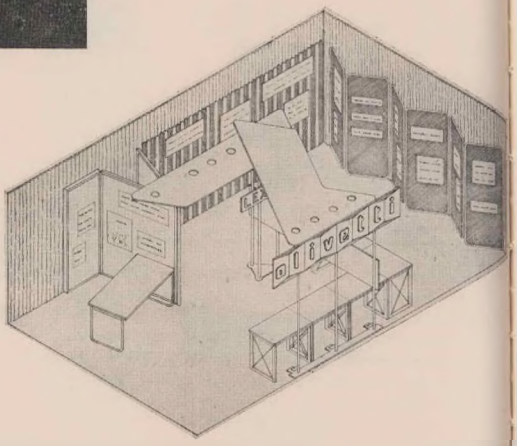
The walls were painted dark terra-cotta, columns, louvres, windows and handrails were picked out in white, while the fascia was turquoise; the ceiling, nicotine; the rafters black and the lettering was in natural wood colour and black.

The lettering was chosen as a type which had the punch and vigour suitable for exhibition purposes, as opposed to the more sterile "good taste" of the customary architectural types.

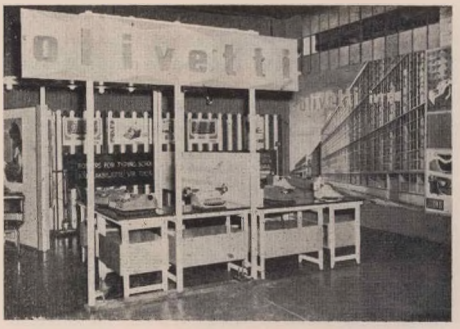
In order to avoid the use of the more banal type of lighting fixture, the designer adopted here a group of fittings made from paraffin lamps fitted with bulbs. — "A fraud, but partly justified by their temporary exhibition character and their Emett-like quality."



STAND FOR MESSRS. OLIVETTI AFRICA, LTD., designed by Kennedy, Furner, Irvine-Smith and Joubert, Architects.



Photographs: S.A. Press Service (Pty.), Ltd.



To overcome the recurrent heavy costs of erecting a new stand for every industrial exhibition, it was decided to design this stand to be demountable into pieces which would comfortably be carried in a panel van.

The whole structure is bolted together with carriage bolts, and the various screens, wall units and ceiling panels are hinged and fold into comparatively small parcels.

The counters are made up of small tables, with folding legs which are braced by boxes when the table is erected. The boxes, which are open on one side, serve as storage for brochures, exhibits, etc.

FACTS ABOUT SHINGLES FROM SOUTH AFRICAN GROWN TIMBERS

By J. A. VAN WYK, M.Sc., M.F.,
Senior Forest Products Officer, Department of Forestry, Pretoria.

Shingles, although not uncommon, are not used extensively as a roofing material in South Africa. This is only natural, as wood is a relatively scarce local raw material and the bulk of it has to be imported. All the shingles used in the Union are consequently imported from the United States and Canada, being mainly Western red cedar *(Thuya plicata)*, with some red wood *(Sequoia sempervirens)*. The relatively small quantity of shingles that has been produced, to date, from locally grown timber has been sawn at the State Sawmills and the Forest Products Institute as an emergency and experimental measure for departmental use only.

Although shingles can, generally speaking, be made from almost any wood, their economic production and use are limited to woods that are relatively cheap and available in large quantities. The wood should furthermore nail easily and not split in nailing. As the shingles are exposed to the weather the wood should be able to withstand the varying conditions of moisture content and the effects of weathering. The wood should, in other words, have a low capacity for moisture absorption and its movement with change in moisture content should be small. It should preferably be straight and even-grained. These characteristics are essential to minimise warping, cupping, splitting and excessive weathering. The usual practice overseas is to use only high grade, selected wood, specially sawn for this purpose.

It can be said, for all practical purposes, that South Africa has no indigenous timbers worth considering for shingles. Although a timber such as Clanwilliam cedar would no doubt make an excellent shingle the small available quantities of it or any other possibly suitable indigenous timber rule them out.

With the increasing amounts of locally grown exotic softwoods becoming available from state and private plantations, it was considered desirable to test their suitability as shingles. With this end in view shingles cut from locally grown pine and cypress have been used experimentally on various roofs at the Forest Products Institute in Pretoria. The first experiment was started during 1932 and subsequently several more were laid down. The roofs were kept under observation and inspections made from time to time.

The resistance of these shingle roofs to hail damage was strikingly illustrated during the afternoon of 17th November, 1949, when probably one of the worst hailstorms ever experienced in the Union struck the city of Pretoria, centering on the west and south western suburbs within which the Forest Products Institute is situated. The shingle roofs withstood the ordeal very creditably. Corrugated iron roofs were badly battered and tiled roofs were completely disintegrated whereas the shingle roofs were only slightly damaged.

The accompanying photograph No. 1 strikingly illustrates the difference between a shingle roof and a tile roof. This shingle roof of South African pine, impregnated with creosote fuel oil, had been up about 5 years at the time and needed hardly any attention after the storm. Photograph No. 2 shows the contrast between an asbestos roof with holes punched right through, an iron roof dented and loosened whereas the adjoining shingle roof shows hardly any damage.

CYPRESS

The first experimental roof consisted of shingles from the timber of *Cupressus lindleyi* which were used on the roof of a log cabin erected during 1932. The dimensions of the shingles were 24" long by 7/16" at their thick end and in random widths from 4" to 8". The shingles were thoroughly impregnated with a mixture of 60% creosote and 40% fuel oil, with an average absorption of 10 to 15 lb. per cubic foot. A row of untreated imported red cedar *(Thuya plicata)* shingles were included for purposes of comparison. The shingles were ungraded except in so far that obviously unserviceable shingles i.e. shingles with loose knots or splits were excluded.

By 1947, after 15 years' service, the cedar shingles were found to have weathered down so badly that many of them were fast becoming paper thin, many had split badly and broken up. For all practical purposes they had become quite unserviceable.

At the last inspection during April, 1950, after 18 years' service the cypress shingles were found to have weathered only slightly, approximately 1/8", the flat sawn ones somewhat more than the edge grained ones. There was only very slight cupping and the knots that were placed in a number of shingles appeared to have had no marked adverse effect. Approximately 30% of the shingles showed splits and checks to some extent. The roof suffered only slight damage in the hailstorm of November, 1949, and is quite free of any leaks. It is generally in very good condition as can be seen from the accompanying photographs Nos. 3 and 4 and the shingles should still be good for many years. This result is particularly gratifying as, apart from the initial treatment in the creosote fuel oil mixture, no further treatment or maintenance of any kind was given to the roof.

1. AFTER THE HAILSTORM IN PRETORIA, NOVEMBER 1949. Roof in the background was of tiles and that in the foreground is of South African pine shingles. The tile roof was completely smashed whereas the shingle roof suffered hardly any damage.

2. Contrast between corrugated asbestos, corrugated iron and South African pine shingles. Note the holes in the asbestos in several places. The corrugated iron is badly dented and loosened whereas shingles on the left were not damaged.

PINE

Timber from several species of pine, mainly *P. patula*, has been used on a number of roofs at the Institute during the last 10 to 12 years.

Experiment No. 1

Shingles from *Pinus patula* were used on the roof of a watchmen's lodge erected during 1937. These shingles were cut 5/8" thick and given a full cell treatment in a mixture of 60:40 creosote and fuel oil.

At the last inspection during April, 1950, after 13 years' service it was found that a small percentage showed slight cupping and twisting. Weathering to the extent of approximately 1/16" had occurred, mostly in the springwood. Some edge-grained shingles were badly checked along the junction of the spring and the summerwood. Knots in the shingles, provided they are sound, do not appear to effect them adversely to any great extent; what distortion had occurred seemed to be due to compression wood and spiral grain. A small number of shingles was broken during the hailstorm.

The whole roof is still generally in a fairly good condition as can be seen from the accompanying photograph No. 6.

Experiment No. 2

This experiment was laid down with the object of obtaining data on the effect of such defects as knots and compression wood on the behaviour and lasting qualities of shingles from various soft pines. For this purpose shingles were sawn from relatively small, crooked, butt logs of *Pinus patula*, *P. caribaea* and *P. insularis*. They were cut 7/16" thick by 18" long and given a full cell treatment in a mixture of 60.40 creosote and fuel oil. These shingles were used during 1938 on the roof of a museum building measuring approximately 2,500 square feet.

It was soon noticeable that a number of shingles showed signs of curling up at the ends and of cupping. These defects became very marked with time. During wet weather these shingles become relatively flat again. The roof, however, did

3. North face of cypress roof of log cabin after 18 years' service. Note badly weathered raw of untreated red cedar shingles along centre of roof.

4. South face of cypress roof of log cabin which took the brunt of the November 1949 hailstorm. The roof suffered no damage and is in excellent condition although it had had seventeen years' service.

5. Watchman's Lodge just after erection in 1937. Roof of *P.patula* shingles impregnated in a creosote-fuel oil mixture.

6. The same lodge, September 1950. Except for a few broken shingles, due to a severe hailstorm in November 1949, the roof is still in excellent condition.

not develop any leaks. It suffered severely from the hailstorm, the curled up shingles being broken off, thus enabling the hail to pierce the roof (Photo No. 7). The damage was so extensive that it was necessary to replace the South facing sides of the roof which suffered the main force of the storm. A careful examination of the north facing sides of the roof, which it was decided not to renew but to allow to continue to a natural end, showed that the roof was generally in a poor condition.

The main defects were shingles curled up, cupped and cracked. Approximately 30% of the shingles could still be classed as serviceable, 20% were badly curled up, 40% badly cupped and 10% cracked. Knots, although generally not causing any of the cupping or curling, were responsible for some of the cracks in the shingles.

Compression wood is mainly responsible for the cupping and curling of the shingles. The results from this experiment clearly indicate that shingles should not be produced from crooked, low-grade logs and the relatively poor showing of this roof is attributed to this fact.

Experiment No. 3

Pinus patula shingles, treated in 4 different preservatives, were placed on a roof during July, 1947. The preservatives used were :—

1. 10% Copper naphthenate in white spirits.
2. F.P.I. Creosote containing 60% creosote and 40% tar prime.
3. F.P.I./P.C.P. solution containing 5% P.C.P., 5% Rosin, 20% Shell diesel oil and 70% Power Paraffin.
4. A mixture of 80% creosote and 20% Fuel oil.

The object of this experiment was to compare the relative efficacy of these preservatives when impregnated into shingles and exposed to the weather, all on the same slope. The accompanying photograph No. 8 shows the condition of the roof in June, 1950, after 3 years' exposure. From left to right the panels are Copper naphthenate, Creosote Tar, P.C.P. solution, and Creosote Fuel oil.

The shingles treated in Creosote fuel oil still present an exceptionally fine appearance, followed by the creosote-tar ones. The appearance of the Copper naphthenate and P.C.P. treated shingles is in general poor, cupping being the most severe defect, but splitting and checking also being very common. The cupping is clearly discernable on the photograph.

Although the experiment has been in progress for too short a period to enable any final conclusions to be drawn it definitely shows that checking, splitting and cupping is retarded by preservatives of an oily nature.

Experiment No. 4

This experiment was designed to test the difference in behaviour of shingles sawn :—

(a) From boards or billets after air-seasoning;

(b) From the green logs direct; bundled straight from the saw and treated in bundles while green and subsequently seasoned in the bundles.

Timber of the following pine species were used:—

P.patula, P.leiophylla, P.taeda, P.longifolia, P.insignis, P.pinaster and P.canariensis.

Due to unavoidable delays the green shingles dried out partly before impregnation and unfortunately their actual moisture content was not recorded.

However, the green shingles absorbed on the average about 6 lb. per cubic foot of preservatives as against 14 lb. per cubic foot for the dry shingles.

The shingles were used in panels on the office roof of the State Sawmill, Pretoria, during 1943. At the last inspection during June, 1950, after 7 years service, there was in general no noticeable difference between the two lots of shingles for each of the various species used. The green-sawn shingles generally showed slightly more cupping than the dry-sawn ones. In the

case of *P.leiophylla* the cupping was very severe for the green sawn ones. Checking and splitting on the other hand is less pronounced for the green-sawn ones. Weathering which was slight was the same for all shingles. Pith where present in any of the shingles was very badly weathered. There is no noticeable difference between the behaviour of the soft pine and the hard pine shingles.

CONCLUSIONS

From these experiments it is evident that locally grown cypress wood, impregnated with a suitable creosote fuel oil mixture, produces an excellent shingle with a long service life. Shingles from locally grown pine timber, similarly impregnated, also gives excellent service provided good quality straight-grained timber is used. It has been clearly demonstrated that shingles produced from poor quality, crooked butt-logs are unsatisfactory.

For South African conditions it is essential that shingles be impregnated with a wood preservative of an oily nature. If so treated the roof needs no maintenance for at least 15 to 20 years.

In contrast with this the controls of untreated red cedar shingles lasted approximately 12 to 15 years. This fact was further confirmed by the inspection of the roofs of 3 private houses in Pretoria. It would appear that it is essential that a roof of untreated, imported, shingles should be maintained periodically by brush treatment with any oily preservative, say, every two to three years.

Results and observations also indicate that it is necessary for our shingles to be sawn somewhat thicker than is normal practice overseas. A thickness of 9/16" as compared with the overseas standard of 3/8" is recommended. The shingle roofs at the Institute also demonstrated conclusively that shingles of this size can withstand the most devastating hailstorm.

It was noted in quartersawn pine shingles that there is a tendency for checks to develop between the summer- and the springwood layers of the annual ring. In flat sawn shingles rather severe checking and splitting develop when the width of the annual ring layer of either spring wood or summer wood becomes rather wide (1" or more) measured along the length of the shingle. It would appear that with relatively fast grown timber (3 to 4 rings to an inch), the best shingles are not the truly quarter sawn ones, but, those more or less intermediate between flat and quarter-sawn. In the cypress shingles there is no marked difference between quarter or flat sawn.

Although it appears that in both pine and cypress sound knots, in well impregnated shingles, have hardly any marked adverse effect, they do cause distortion of the shingles and are inclined to develop splits. For this reason the size of knots permitted in the exposed portion of a shingle should be limited.

The only existing specification for shingles in this country is the one drawn up by the Forest Products Institute and later included by the Bureau of Standards in their S.A.B.S. — No. 5 of 1948. Although this specification allowed considerably more

7. Portion of the roof of the wood Museum Building showing hail damage to shingles made of poor grade timber.

8. Roof of shingles treated in four different Preservatives. Condition after three years' exposure Cupping of shingles treated in non-oily preservatives is clearly noticeable in the lighter coloured panels.

defects than is usual in imported shingles it appears from the results obtained that it could be further relaxed in respect of the size of knots permissable in Grade 1 shingles and also in the preservative treatment specified.

The size of sound tight knots permitted in the lower two-thirds of Grade 1 shingles could safely be increased to $\frac{3}{4}$" and to $1\frac{1}{4}$" in the upper one-third of the shingles. The preservative treatment specified might be extended to include, apart from creosote, any preservative of an oily nature as for instance a solution of pentachlorophenol or copper naphthenate in fuel oil.

From the manufacturing angle the question whether it is possible to produce shingles direct from the green log, and to bundle and impregnate the semi-dry shingles, cannot with the data available at present be answered conclusively. Present indications are, however, that this would be possible.

As a result of the high price of wood overseas the production of shingles in the Union from locally grown timber appears to have distinct possibilities at the present time. In fact a modern vertical type shingle machine, the first of its kind, to be erected in the country, has recently been installed at a private mill in Louis Trichardt for the production of shingles from patula pine timber.

INSTITUTE OF SOUTH AFRICAN ARCHITECTS
CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS

ADDRESS OF THE PRESIDENT-IN-CHIEF, MR. LEO C. AUSTIN

Gentlemen: at the last Annual Meeting of the Central Council, as Chairman of the Executive Committee, I wriggled out of my obligations by telling you that anything I could say would be covered by the Registrar's Report on the activities of that Committee.

This year he has me cornered. But I bear no malice, for, although I have a deep-seated aversion to speaking at any gathering, I am naturally appreciative of the privilege accorded me here to-day.

Before going any further I must frankly apologise for my failure to pay a formal visit to any of the Coastal Centres or the Free State during my year of office. You will, I know, accept my assurance that it just was not possible.

I made it clear when I accepted my present position that owing to certain handicaps I would be precluded from the full performance of the usual functions of President-in-Chief. But I undertook to do what lay within my power. Insofar as that undertaking is concerned, I am content to abide by your judgment.

Once more I do not propose reporting to you on the work of the Executive Committee. I leave that in the able hands of my disiplinarian, the Registrar.

There are, however, one or two matters arising from our deliberations on which I would like to make a few observations.

I have been wondering for some time if the question of Building Costs is now as important as was indicated a year or so ago, by virtue of the Press campaign which was then topical. I say this primarily because, irrespective of or even in spite of Building Costs, the volume of building work now going on throughout South Africa is unprecedented. Nevertheless, we, as the professional participants in and advisers to the Building Industry, have an important contribution to make. I feel I need say no more on this matter at the moment as it will be dealt with in fine detail by Mr. Louw and Mr. Todd, who will both read papers to Congress to-morrow.

Probably the most important matter dealt with during the year was "Qualification of Tenders."

The item appears on our Agenda, and at a later stage I trust we will gain by the discussion on this seemingly inevitable development in the Industry.

Few members outside the Central Council are in a position to realise, even faintly, the enormous amount of work and worry attendant upon the many difficult problems with which we are confronted from time to time. This one, in particular, placed a severe strain on certain of our colleagues, whom I shall refrain from naming for obvious reasons, but to whom I express my personal appreciation and admiration both for their pains-taking labour and its result.

I would be exceeding my prerogative if I attempted to deal now with the unfortunate sequel to the Institute's and Chapter's recommendation to introduce the national agreement reached with the Federation. Remember, by the way, that the agreement was, and still is, conditional upon the so-called "national and universal" application.

The sequel referred to will, I hope, be amicably disposed of before this meeting is concluded. It has, however, brought into sharp focus a most disquieting feature of our own organisation, and that is, the insecure and untenable position of the Central Council as an instrument for negotiation on a national scale.

Gentlemen, this is a matter of extreme gravity. The Institute has gone from strength to strength through unity within itself and the widest collaboraton with other bodies too numerous to mention. Incalculable harm will be done if the impression is gained that we are in effect a somewhat loosely-knit group of Constituent Bodies, without national cohesion, with whom consultation and decision are possible, but not final and binding.

I appeal to you to remove every obstruction to the repair of this rent in our armour with the least possible delay. This can be accomplished with ease if the will is really there. If it is not, I regard the future with misgiving.

I would now like to make a brief comment on the procedure of what is virtually the automatic election of Presidents of the Constituent Bodies to membership of the Central Council. This frequently results in the loss of a member's services after only one year on the Council, and therefore, in my opinion, is a short-sighted policy.

I commend for your consideration the proposition that members should be selected with a view to continuity of at least three years, and that the President of a Constituent Body should, failing selection on this basis, be an Alternate, willing to accept the *duty* of attendance at Central Council meetings, whether his principal be present or not.

In conclusion, I had intended saying something about the secretarial side of the Institute, but as a specific item is being introduced very shortly for this to be dealt with as a matter of urgency, I shall confine myself to a word of sincere appreciation for the overwhelming amount of work done by the Registrar in connection with the Congress which opens to-morrow.

From personal and close contact during the last few weeks I am convinced that the arrangements for Congress will be a success and that we can thank the Registrar for it mainly — without detracting from the valuable assistance rendered him by several individual members of the Institute.

A record of the proceedings of the 5th Congress of Architects and Quantity Surveyors, held in Johannesburg in June, will be published in succeeding issues of the "Record."—Editor.

CONTEMPORARY JOURNALS

COMPILATION BY UGO TOMASELLI

APARTMENTS

The Architects Journal — February 8, 1951. pp. 183-190.
Flats in Bromley Road, Lewisham, designed by Fry, Drew and Partners. A group of 24 maisonettes and 77 flats are designed on a 4-acre level site in the form of three identical three-storey blocks, and one long block containing maisonettes mainly.

Architectural Review. August, 1950. pp. 88-94.
Flats in Rio de Janeiro. L. Costa: Architect. The ground floor of the first block accommodates retail shops, the first floor is planned for small apartments and the upper storeys consist of a mixture of duplex and one-floor apartments. The second block comprises a mixture of duplex and single-floor apartments.

Architectural Review. August, 1950. pp. 123-126.
Flats at Copenhagen. Arne Jacobsen: Architect.

Architectural Review. November, 1950. pp. 285-289.
Flats in Milan. G. Pollini and L. Figini: Architects. An extremely interesting new block with intersecting beams and columns visible on the elevation. The recesses to balconies and rooms are filled in with trellises to give shade from the sun.

L'Architecture d'Aujourd'hui. September, 1950.
The entire issue is devoted to apartments selected from the following countries: England, Mexico, Argentine, Brazil, Cuba, Germany, Belgium, Denmark, America, Hungary, Holland, Italy and Switzerland.

Architectural Record. January, 1951. pp. 95-99.
Hillside Apartments, Berkeley, California. Campbell and Wong. Architects.

ARCHITECTURE

Architectural Review. August, 1950. pp. 81-87.
Mumford on Geddes, by Lewis Mumford. A re-assessment of Geddes' contribution to city planning and civic philosophy.

Architectural Review. August, 1950. pp. 112-122.
Window into Wall, by D. Harrison. In this article the author examines the rationale of different types of window treatment, from the Georgian Sash to the Brazilian brise-soleil and the Californian window wall. He illustrates how climate and geography have brought about effects that are often thought of as being due to the architects' whim, and discusses the technical and economic factors governing window design today.

Architectural Review. October, 1950. pp. 221-232, 259-262.
(1) Report on Brazil, by Alf Byden. This article forms an introduction to a number of projects designed by Osca Niemeyer and Alfonso Reidy, but not yet built.
(2) Architectural Preview from the drawing boards of Alfonso Reidy and Oscar Niemeyer.
(3) *San Giorgio Maggiore*, by Raymond Mortimer. Buildings do not exist *'in vacuo'*; they occupy sites. The faults of San Giorgio Maggiore seen across the lagoon turn into its virtues; what is more, the whole group of buildings on the island exemplifies that most necessary though difficult art "of adding one building to another, using a different style and a different material, so as to achieve balance without recourse to symmetry."

Architectural Review. November, 1950. pp. 307-314.
Temple of Deliverance, by Donald Pilcher. The author propounds the belief that while modern conditions may lead the architect into various specialist fields he must above all be "a specialist in visual form — an artist."

R.I.B.A. Journal. February, 1950. pp. 136-146.
Danish Architecture: An Appreciation, by G. A. Atkinson.

Architectural Record. February, 1951. pp. 116-118.
Architecture and Society. An address by Pietro Belluschi.

Architectural Review. December, 1950. pp. 338-410.
Man-Made America. A special number of the Architectural Review devoted to the American scene comprising: (1) Introduction; (2) Scene by C. Tunnard; (3) Case-Study: City; (4) Recapitulation, by Saul Steinberg; (5) Case Study: Detail; (6) Towards a new environment; (a) Autumn, 1950; The Way Things Are, by Henry Hitchcock; (b) The Way of the Price Mechanism: The Rockefeller Centre, by Winston Weisman; (c) The Way Through Technology: America's Unrealised Potential, by G. Kallmann.

Architectural Record. January, 1951. pp. 91-94.
The Architectural Life. An article by W. Wurster, Dean of Architecture, University of California.

COMMERCIAL BUILDINGS

Architectural Record. March, 1951. pp. 111-119.
Two new architects' office buildings:
(1) Offices of James Britton, Architect.
(2) Offices of Millhouse and Greeven, Architects.

Architectural Record. March, 1951. pp. 120-143
Regional Shopping Centres: Building Types Study No. 172.
Projects illustrated:—
(1) Stonestown Shopping Centre, San Francisco, California. W. Becket and Associates, Architects.
(2) Shopping Centre for the Hecht Co. Abbott, Merkt and Co., Architects and Engineers. In addition to shopping goods stores, the centre will include supermarkets, drug, hardware and specialty food stores. There will also be a bank, post office, Western Union and automobile showrooms.
(3) Two stores for Boston, Mass., planned to share a 550-car parking area. W. Teague, designer.

Architectural Record. January, 1951. pp. 85-90.
Esso Office Building, Baton Rouge. L. Douglass, Architect, Carson and Lundin, Associate Architects.

DOMESTIC

Architectural Review. September, 1950. pp. 152-160.
House at New Canaan, Connecticut. Philip Johnson: Architect. The latest development in "Skin and Bones" Architecture is Johnson's own glass house. Johnson reveals in the article the sources of his inspiration.

Architectural Review. November, 1950. pp. 303-306.
Three houses in Brazil are illustrated.
(1) House designed on to enclosed patios to overcome the prevailing damp, cold wind from the south-east. Architect: Rina Levi.
(2) Patio House at Sao Paola. Architect: D. Calabi.
(3) House at Cataguazes on a sloping site. A. H. Toledo, Architect.

Architectural Record. February, 1951. pp. 108-115.
(1) Small residence in San Rafael, California, on a hillside site. F. McCarthy, Architect.
(2) Residence near Danville, California, planned for a family of four, designed by Anshen and Allen, Architects.

Architectural Record. March, 1951. pp. 105-110.
Angular-shaped house on an 80-acre wooded site in Lake Forest, Ill. G. and W. Keck, Architects.

Architectural Record. January, 1951. pp. 108-111.
Five-level house in Belmont, Mass., C. Koch, Associates, Architects.

GOVERNMENT BUILDINGS

Architectural Review. September, 1950.
Parliament Buildings at Bonn. Architect: Hans Schwippert.

HOTELS

Architectural Record. March, 1951. pp. 89-104.
Slaters Centre, Los Angeles. Holabird and Root and Burgee, Architects and engineers. Unique among commercial hotels, the Slaters Centre comprises: A 13-storey office wing having 150,000 square feet of Rentable space; the hotel portion will have 1,275 guest rooms; the public areas will contain 70,000 square feet of shops and in the basement is to be a 3-level garage.

INDUSTRIAL

The Architects Journal. January 4, 1951. pp. 14-23.
Factory at Duxford, Cambridgeshire, designed by O. Arup and Partners for Aero Research, Ltd., for the production of synthetic resin glues of various types for local and export markets.

The Architects Journal. February 1, 1951. pp. 159-162.
Factory on a 140-acre site outside Darlington for Messrs. Patons and Baldwins. Ample facilities for the welfare of the 3,000 employees in the form of playing fields for cricket, tennis, bowls, football, etc., is provided. The canteen layout is also illustrated.

Architectural Review. August, 1950. pp. 107-111.
Steel Rolling Mill at Scunthorpe. Fred Gibberd, Architect.

Architectural Record. February, 1951. pp. 119-141.
Industrial Buildings. Building Types Study No. 171. Several types of industrial buildings are illustrated.

METHODS AND MATERIALS

Architects Journal. February 22, 1951. pp. 241-259.
Dry Rot. A comprehensive study of dry rot, the fungi which cause it, the method of preventing it and means of eradicating it.
Part 1. W. Findlay discusses the means of recognizing the various types of fungi which cause dry rot and a description of the conditions under which they develop in buildings.
Part 2. Constructional design to prevent conditions arising under which dry rot can develop, including a description of types of preservatives and methods of using them.

Architectural Record. January, 1951. pp. 134-139.
Partitions Function as Columns. Olgyay and Olgyay, Architects. The article covers the idea of "Reinforced Partition Walls as the supporting elements, eliminating separate columns." Illustrated with sketches indicating the proposed methods to be used.

RELIGIOUS

Architectural Record. February, 1951. pp. 87-95.
Two Catholic Churches are illustrated:
(1) Church of Saint Columbia, St. Paul, Minn. Barry Byrne, Architect.
(2) Church of Saint Francis Xavier, Kansas City. Barry Byrne, Architect.

SCHOOLS

Architects Journal. February 15, 1951. pp. 216-220.
A secondary school at Chigwell, Essex, designed by H. Conolly, County Architect.

Architects Journal. March 1, 1951. pp. 280-283.
A primary school at Dagenham, Essex, designed by County Architect H. Conolly for 240 infants and 320 juniors of both sexes, and with dining accommodation for 500.

Architectural Record. February, 1951. pp. 96-107.
(1) Nursery School correlating space and equipment for play and routine activities both in and out of doors. Ernest Kump Co., Architects.
(2) Sunday School doubles as nursery school. Smith and Williams, Architects.
(3) General Science and Housecraft Unit, Queen's College. Ralph Crowe, Government Architect, Bridgetown, Barbados.

THEATRES

Architectural Review. September, 1950. pp. 187-189.
National Theatre at Weimar. Werner Hartung, Architect.

R.I.B.A. Journal. January, 1950. pp. 83-93.
Concert Halls by Hope Bagenal. A paper read to the Royal Institute of British Architects.

TOWN PLANNING AND LANDSCAPE DESIGN

Architectural Review. July, 1950. pp. 2-67.
The Thames as a Linear National Park. Author Eric de Mare presents a study of water in the English landscape, illustrated mainly by his own photographs. The article covers the following.—
(1) Character of the Region.
(2) Case for Linear Park.
(3) Significance of the Towpath.
(4) Technique of Conservation and Development.
(5) Application of the technique: New Marlow.

Architectural Review. August, 1950. pp. 95-106.
The Line of Life: A Study of Four Seaside Towns. In respect of established existing towns one of the duties of the Townscapist is to preserve and strengthen that town's individual character. Gordon Cullen takes four seaside towns and demonstrates in each case how its character can be intensified by proper attention to important features — the seafront, the rivertront and main boulevard.

Architectural Review. October, 1950. pp. 233-248, 249-258.
(1) Trees Incorporated, by Gordon Cullen. The author discusses methods of humanizing modern architecture. One of the methods is the use of free-standing sculpture with the building as a diagrammatic screen. Another method is the provision of trees — not in the traditional landscapist system as a frame for the picture, but rather for the effects resulting when they impinge directly on the view of the building itself, patterning the neutral surface of its wall with shadow and the effect of the silhouette of winter branches.

(2) New Neighbourhood Unit at Pedregulho. Alfonso Reidy, Architect. An outstanding contribution in the field of housing for the lower-paid municipal workers near their places of work. The site covers twelve acres of sloping ground and the complex comprises four blocks of flats, a community centre, health centre, co-operative shops, a laundry and a sports centre with swimming pool, gymnasium and changing rooms.

Architectural Record. January, 1951. pp. 100-109.
Detroit Civic Centre. Detroit's 60-year-old plans for a civic centre are at last being realized. The general site plan has been developed by the City Plan Commission with Saarinen, Saarinen and Associates as consultants. The buildings illustrated include:—
(1) Veterans' Memorial Hall. Harley, Ellington and Day, Architects.
(2) City-County Building. Harley, Ellington and Day, Architects.

TRANSPORT BUILDINGS

Architectural Record. January, 1951. pp. 112-133.
Airport Design. Building Types Study No. 170.
The following articles and buildings are included.—
(1) Airport Design: Its Architectural Aspects, by W. Prokosch.
(2) Logan International Airport, East Boston. Thompson and Lichtner Co., Inc., and Coolidge, Shepley, Bulfinch and Abbott, Associated Architects and Engineers.
(3) Stapleton Airfield, Denver, Colorado. G. M. Musick, Architect.
(4) Airport, Yuma County, Arizona. E. Varney Associates, Architects and Engineers.

THE STUDENTS' FORUM

OF INTEREST ..... No. 1

By JOHN STEINBERG and S. GELGOR

The contemporary interior decorator has not, as yet, in this country, fully established himself, and this type of design has hitherto been largely the work of the architect. What can be found in the field of interior design in this country? Most of the work has been in the hackneyed "traditionalist style." There are, however, a few sparse examples of really exciting design. A design recently completed makes a very interesting study.

The owner-designer is a versatile young man whose hobbies include the varied arts of painting, sculpture, interior decorating and joinery.

On his 3/4 acre site in a fashionable Johannesburg suburb there existed some rather dilapidated outbuildings, comprising a single garage and three servants' rooms. He had at his disposal, for converting these buildings into a fully furnished little house, the sum of £1,500.

The completed house consists of a lounge-cum-entrance-hall, with a little study nook, of 400 square feet in all. There is a 110 square foot dining-room recessed off the lounge; and a small bedroom of 180 square feet also leads off the lounge. A bathroom of 70 square feet and an 85 square foot kitchen have also been provided.

In passing it should be mentioned that the owner did all the finishings himself. Most of the pictures on the walls are his own work, and he even designed some of his own furniture, which were made to his specifications by a well-known firm of local furniture manufacturers.

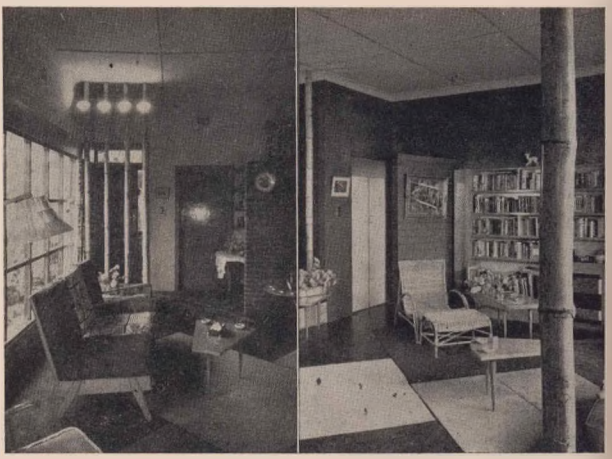
The stable-type entrance door is screened by a low blue-black face-brick flower box, with four varnished bamboo poles, each of which has electric light reflectors which give indirect light off the ceiling, and also by a face-brick and wood bookcase, to door height, which serves as well to define the cocktail nook. Additional light is provided by two standing lamps.

Glass doors and windows stretch over the major portion of the long east wall of the lounge and are curtained off with a full length curtain of a lively design and colour, forming an effective foil to the more sedate colouring of the light oak furniture, grey pelmets and cream frieze above. All built-in fittings are in natural timber with frames picked out in grey and reveals in light green. The maroon material in front of the loudspeaker on the radiogram forms an additional accent.

The dining recess is well defined by the step-up (dictated by existing levels) and another set of bamboo poles, which tend to break up the heaviness of the long terra-cotta coloured Tyrolean wall which returns into the living-room. The other long wall of the dining recess is a pale blue, which is magnificently set off by the short far wall finished in a smooth jet black. The overall green linoleum of the dining-room floor is broken by a well thought out abstract design in yellows, maroon and black, forming a background to the extremely delicate design of the light oak dining table and chairs.

The overall effect of spaciousness is obtained by the pale grey continuous ceiling, the low screen walls, the broken views through the bamboo poles and the distant main accent of the jet black wall.

1 2



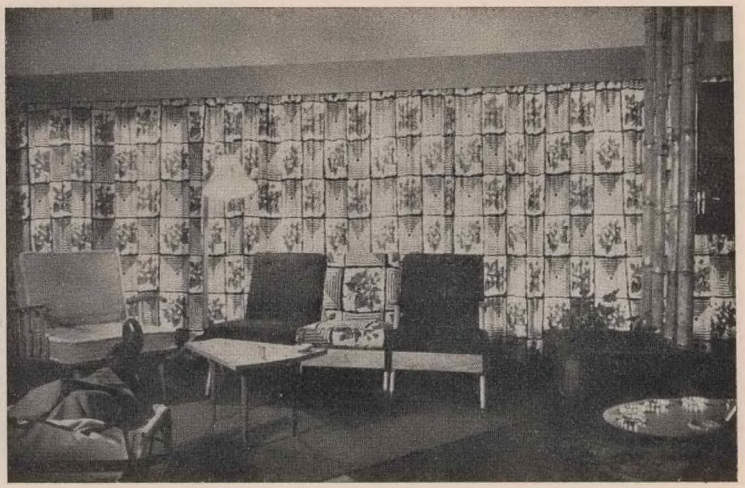
1 View of entrance door and bamboo screen. Note large east window and light reflectors.

2 View diagonally across living room from main entrance.

3 Looking into stepped-up dining recess shows floor patterning and jet-black far wall.

4 From dining recess looking across living room towards study nook.

5 Cocktail nook and radio.



Photography: N. Malan

6 The long east window-wall with its lively curtain pattern. The entrance is at right.

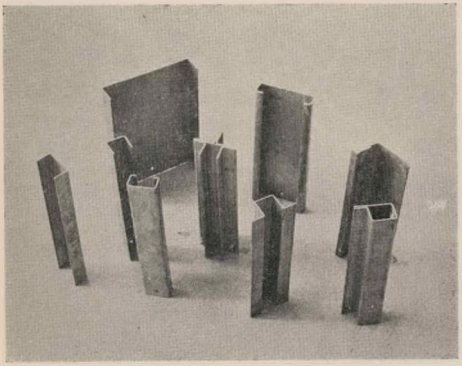
3

4

5

TRADE NOTES AND NEWS

NEW INDUSTRY — COLD-ROLLED SECTIONS



An important industry manufacturing cold-rolled sections has recently been introduced to this country by J. Brockhouse (South Africa), Limited.

The highly specialised process consists of cold-rolling metal strip to give a cross section designed for a specific purpose. Both ferrous and non-ferrous metals can be used and, since these are delivered in coils, it is possible to produce sections up to 100 feet in length, although normal requirements do not exceed 20 feet lengths. The main advantage that this system has over pressed metal sections is that in cold rolling a multiplicity of bends and shapes can be produced in one operation, whereas in pressing numerous operations would be required and would result in heavy tool costs.

An endless variety of shapes provides unlimited scope for applications of cold-rolled section in replacing hot-rolled metal products, extrusions and even timber in many instances. A greater variety of sections are produced for the building trade, i.e., picture rails, door frames, angle beads, special conduits, sliding door channels, office partition sections, roller shutter doors, and even stanchions, trusses and beams have been made from cold-rolled sections. A factor of its popularity is the great strength-to-weight ratio.

CHAMBERLAIN STEEL-FRAMED BUILDINGS ROOF TRUSSES

The Chamberlain Steel-Framed Buildings now being marketed by Chamberlain Industries, Ltd., of Leyton, London, E.10, are of steel construction in accordance with British Standards Code of Practice and are especially for use as offices, garages, warehouses, workshops, hangars, etc.

The buildings are of unit construction, designed to facilitate rapid and easy assembly. They can be provided in widths of 36, 48 and 60 ft. The trusses are placed at 10 ft. intervals, enabling any reasonable length of building to be constructed, and the height can be adjusted as required from 12 to 14, 16 or 18 ft.

The accompanying illustration shows the style of the special roof truss units, together with a simplified form of steel building which may be modified by the addition of differently designed facades.

The steelwork consisting of stanchions, trusses, purlins, sheeting rails and gable ends, forms a complete structure with all the necessary bolts, cleats and connections. One coat of paint is given to all steelwork before despatch, and component parts are manufactured and delivered piece small to save shipping space, suitably marked for assembly.

The corrugated asbestos sheeting, of the Super Six or similar type, includes all the necessary accessories, such as bargeboards, corner pieces, ridges, hook bolts, washers and galvanised fittings. In the case of export orders, 2½ per cent. spares are allowed for breakages.

The asbestos sheets are especially crated and protected against breakages, and information has been received by the makers that all the buildings recently exported with the asbestos sheeting similarly crated have arrived intact.

The patent glazing consists of 6 ft. wired cast glass for roof only, complete with Hercules aluminium glazing bars and lead flashings, with all the necessary clips and fittings. Again, 2½ per cent. spares are included for breakages and losses.

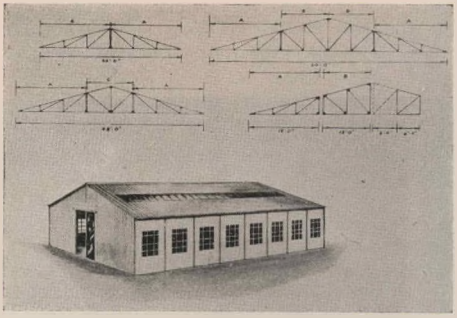
The gutters, constructed of ⅛ in. thickness pressed steel, are complete with the necessary gutter straps, stop ends, outlets and down pipes to each side elevation, with the necessary brackets and shoes.

The 5 ft. square metal sashes are of standard construction and the centre portion opens with pivot hinges for ventilation purposes.

The steel-framed corrugated iron sheeted sliding doors at the gable end of each building provide an opening 12 ft. wide, with height suitable to that of the building and are provided with Coburn track, rails and guides.

A full set of drawings is provided, showing the general arrangement of the building, the details, the foundation plan, the complete, properly marked erection drawings, material lists, shipping specifications, nut and bolt lists, etc., so that complete buildings may be easily assembled and erected on the site.

Three types of standard buildings have been designed, and are known as Chamberlain Buildings Nos. 1, 2 and 3. No. 1 Building measures 36 ft. by 120 ft. by 14 ft. clear height; No. 2 Building 48 ft. by 100 ft. by 14 ft. clear height; and No. 3 Building 60 ft. by 80 ft. by 14 ft. clear height.



BOOK REVIEW

SWEDISH CO-OPERATIVE UNION and WHOLESALE SOCIETY'S ARCHITECT'S OFFICE

1925—1949 — TWO VOLUMES

The world outside Sweden has long been puzzled by certain enigmas of Swedish Architecture.

Why, for instance, was public building in that country in advance of private building — a situation quite the reverse of building in most other countries ?

The comparative luxuriousness of public buildings in Sweden was also to be marvelled at. Why, on the other hand, did Sweden produce architecture of high quality but little daring, and in fact, developed an architectural style which, though distinctive, could not be regarded as in the vanguard of contemporary movements?

The answers to these and other enigmas are to be found in the two volumes to hand. The foreword to the first volume sets out to explain the economic and social background to a large section of building in Sweden, namely, that undertaken by the Co-operatives. It explains the system on which work is distributed to private architectural firms as well as that which is handled by the Society's own architectural offices amounting to some 300 million Swedish Kronor in the last fifteen years.

Although this organisation was originated to deal with the building

of retail shops and factories, it has gradually widened to expend its enormous capital into the provision of communal amenities and housing throughout the country.

Volume I deals mainly with shop and factory design which, from the tremendous breadth of experience gained over the years and properly co-related has been brought to a fine art. A School, a Hotel, a Theatre and some restaurants are also included.

The second Volume deals with housing and domestic equipment.

If we may attempt an assessment here in this brief review, we might say that this architecture has undoubtedly attained its popular success by its compromise of modern architecture with traditional means and, by and large, fairly conventional appearance. In this way, it has been possible to convince public interests of the benefits of national planning without frightening them off with unfamiliar appearance. Presumably the economic crises that brought about radical changes in architectural method in other countries have not been felt in Sweden.

The emphasis is still very much on the excellence of materials and craftsmanship rather than on form and construction. Efficiency, good taste and common sense are very evident, but perhaps at the expense of venturesome experiment, imagination and invention. We must hasten here to point out, however, that in most countries, neither group of virtues can be claimed, particularly in the common run of public building which exhibits neither taste nor venture, neither efficiency nor imagination.

Perhaps the most outstanding quality which runs consistently throughout the work is the undeniable feeling of domestic scale. Outside Stockholm communities are small and compact and can be served by buildings of modest scale. Added to the nordic tendency to scale things down to the individual, the work shown is a most conspicuous lesson in the building of what we might well call a "democratic environment."

C.H.P.

NEW STANDARD SPECIFICATIONS FOR SALT-GLAZED WARE PIPES AND DRAIN FITTINGS

A new standard specification for salt-glazed ware pipes and drain fittings (SASS 204—1950) has recently been published on behalf of the South African Standards Institution by the Standards Council and copies thereof priced at 5/- per copy post free are now obtainable from the South African Bureau of Standards, Private Bag 191, Pretoria.

This standard specification SASS 204—1950 supersedes SASS 9—1931 "Standard Types of Salt-Glazed Stoneware Pipes and Fittings for Use in South Africa," which merely depicted the types of fittings. The new specification is based on British Standard Specification No. 65 for Salt-Glazed Ware Pipes, modified to suit South African conditions. It covers both quality and dimensional requirements and provides all the necessary information regarding essential types of pipes and fittings. Certain fittings that were manufactured in the past but are now considered superfluous have been eliminated from the new specification.

Manufacturers producing salt-glazed ware pipes and drain fittings to SASS 204—1950 may apply to the Standards Council for permission to affix the Council's mark for standard commodities to their products. The presence of this mark on pipes and drain fittings will provide the purchaser with evidence that they have been produced in accordance with the standard specification and that samples thereof are from time to time tested in the laboratories of the South African Bureau of Standards to ensure that the required quality is being maintained.

The attention of local authorities is particularly directed to the fact that the replacement of SASS 9—1931 by SASS 204—1950, as the recognised South African standard specification, will, in many instances, necessitate amendments to their drainage by-laws.

NOTES AND NEWS

TRANSVAAL PROVINCIAL INSTITUTE

REGISTRATIONS

The following members have been enrolled as Practising Members: Messrs. D. Christelis, M. C. Eksteen, J. S. B. Taylor, E. T. Welibeloved and J. Woudstra; as a Salaried Member, Mr. T. McVie.

TRANSFERS

Messrs. P. Epstein and E. Meyersohn, and Miss J. Friendly have transferred from Salaried to Practising Membership. Mr. J. R. Gibbs has transferred from Practising to Absentee Practising membership.

PARTNERSHIPS

Mr. N. H. P. Dellow has joined the partnership of Monte Bryer and Partners.

Mr. Dirksen has left the partnership of Gliksman, Dirksen and Amson, which is now known as Gliksman and Amson.

A partnership has been entered into by Messrs. F. H. Maerdyk, A. Orsmond and K. Kock, known as F. H. Maerdyk and Partners.

Messrs. Woudstra and de Ridder have entered into partnership.

Mr. E. Meyersohn has joined the partnership of Jarrett and Franklin, now known as Jarrett, Franklin and Meyersohn.

R.I.B.A.

During the Festival of Britain period the R.I.B.A. anticipates visits from architects from overseas, and in order to be able to welcome them, are anxious to know when they will be in Britain. Should any members intend to visit the Royal Institute in the coming months they should intimate the fact through the Secretary of their Institute. The R.I.B.A. is arranging an exhibition on "One Hundred Years of British Architecture," which will be on view from July 12th to September 8th. In addition an enquiry bureau is available to visitors.

INTERNATIONAL UNION OF ARCHITECTS

The second Congress will be held in Rabat (Morocco), September 23rd to 30th, 1951. The theme will be "How the Architect acquits himself of his new task." Various tours have been arranged to coincide with the Congress. Further information from Secretary, Organising Committee, 11 Rue Berryer, Paris VIII^{e}.