

# 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

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E D I T O R VOLUME 35

W. DUNCAN HOWIE

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NORTH ELEVATION

## HOUSE IN CRAIGHALL FOR THE ARCHITECT

BY C. F. DE GRUCHY, M.I.A.

No design project, which it is intended should go beyond the drawingboard stage, is ever without its practical problems and considerations, and foremost among these is the matter of cost. This is of particular importance in the case of the so-called small house, which is to accommodate the man of limited means, and at the same time is to satisfy general architectural principles.

In the house in Craighall the main factors governing the design were that the cost could not exceed £2,500 and family requirements at the time dictated a minimum of two bedrooms. Also it was desired that the house should be complete except for the possible addition of another bedroom wing.

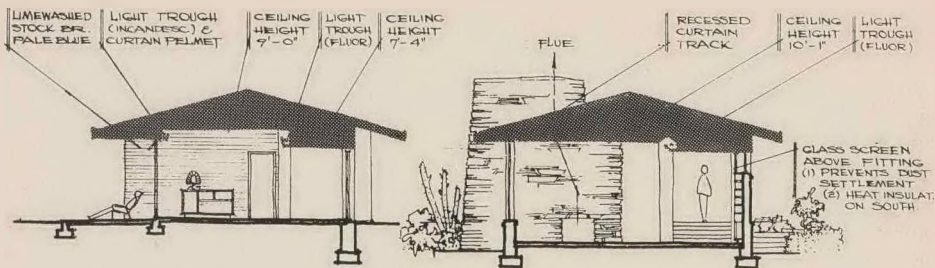
Care was taken to choose an unrestricted site in a township where compliance with stipulations as to the use of building materials such as roof covering were not necessary concomitants of purchase.

As the site was not unduly limited it was possible to orientate the house to take advantage of solar planning: all living rooms were placed on the north, all service rooms were placed as an insulation barrier on the south. Wide overhanging eaves were also employed. To reduce glare an attempt was made to equalise internal and external light intensity by having, as far as was economically possible, large window areas.

To keep cost at a low level a simple building shape was adopted and inexpensive materials were used; for example, corrugated iron roofing, limewashed stock brick externally, stone paving, and one coat cement plaster internally. Hot water and plumbing services were carefully grouped to avoid heat loss and also to effect economy.

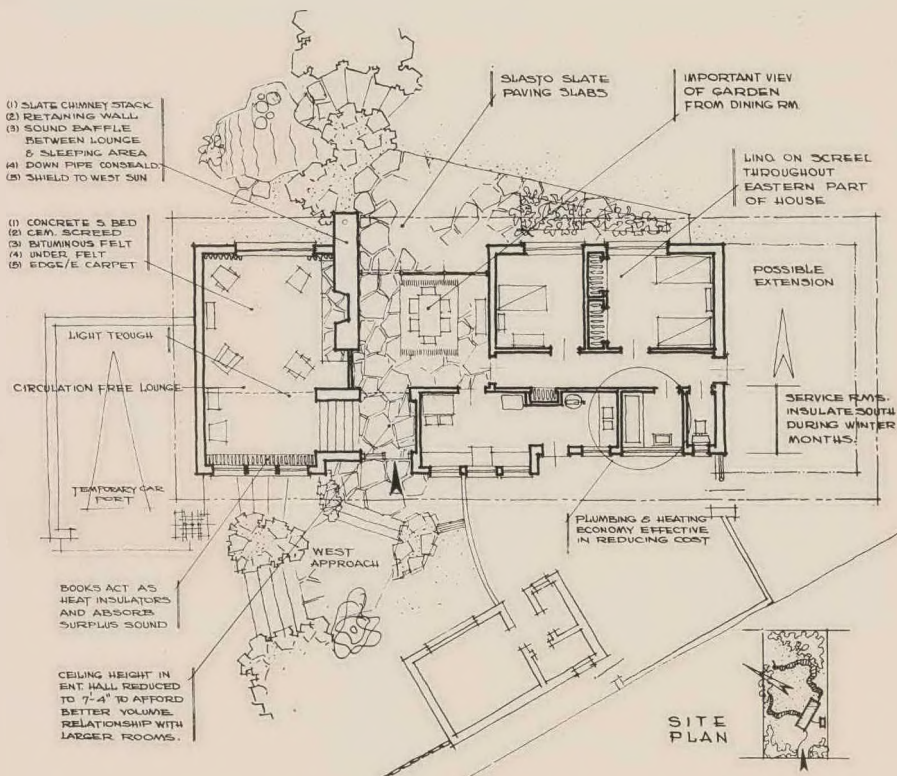
As a precaution against possible burglary, the house was so planned that the bedroom wing could be isolated and a system of fixed panes and movable pivot hung ventilators were used to avoid the unsightliness of burglar bars. The lounge and dining room, however, were not burglar-proofed as the contents of these rooms do not seem to hold the same attractions for would-be burglars as do clothing and money.

Experimental light troughs, working on the principle of indirect artificial lighting were used extensively for general illumination, and in the main were successful; some, however, have since been modified. It is felt that the use of wooden troughs could be exploited still further — not only can they be very effective both from practical and aesthetic points of view, but they are inexpensive and more in keeping with the domestic atmosphere than most of the metal fittings on the market today. Maximum flexibility was aimed at by



SECTION THROUGH DINING RM & ENT. HALL

SECTION THROUGH LIVING ROOM





THE DINING ROOM WITH A VIEW OF THE TERRACE BEYOND, FROM THE ENTRANCE HALL.



THE LOUNGE WITH LARGE NORTH WINDOW. LOWER FLOOR GIVES INCREASED CEILING HEIGHT.

allowing extra plug points to carry stand and table lamps should higher light intensities be required.

In the matter of general interior decoration, whole walls of fabric were used rather than curtaining merely covering the actual window areas. Colour was also experimented with to obtain decorative effects.

It was felt that stone of some nature was in keeping with an open fireplace and although mountain stone would have been preferred, the idea was discarded as it would have added considerably to the cost of the house. As a substitute, the chimney stack was formed of "slasto" slate.

Although the house was conceived as an architectural

whole, the accent was placed in internal design — not only from the point of view of having the maximum convenience in the matter of housekeeping, but also in attempting to create a feeling of spaciousness within restricted dimensions: volumes were controlled by adjusting ceiling height in relation to floor space, definite divisions between the main living areas were avoided and a complete glass wall was incorporated in the dining room so that the garden would tend to merge with the house.

In general an attempt was made to resolve the design problems of a small house by making use of contemporary biotechnic principles.





DETAIL OF NORTH FRONT SHOWING  
SEPARATION OF LOUNGE BY CHIMNEY STACK.



VIEW FROM THE NORTH-EAST.



The North elevation.

## RESIDENCE IN HURLINGHAM, JOHANNESBURG

FISHBECK AND KNUTZEN, ASSOCIATED ARCHITECTS.

The house was designed under Building Control limitations to meet the requirements of a young married couple. While the site presented difficulties in that it was long and narrow, the gentle slope and view towards the North and the access street on the South boundary provided the ideal basis for planning and arrangement of a private garden area.

The house was designed as a long narrow band across the site close to the South boundary so as to make the most of the garden space on the North, which is consequently completely shielded and screened from the street.

The greatest difficulty encountered was the narrowness of the plot, which necessitated making a pinched L-shaped plan for the servants' quarters encircling the service yard. These were screened from both the important aspects by the garage on the South and the Loggia screen wall on the North. Space was left behind the loggia screen wall for a future shower and change room for a swimming pool, which will be placed adjacent to the loggia in the garden.

Since all the principal rooms were made to face North, a

three-foot eaves overhand directly over the windows was provided to exclude the direct summer sun but permit sun penetration into the rooms in winter.

The whole scheme has been made as simple as possible and the use of too many materials has been avoided. Roofing is of shingles and the external walls are partly "Slasto" and partly limewashed stock brick, with ruled horizontal joints and flush vertical joints.

Originally the house was to have been roofed with an inverted pitch so that only the long sweep of the fascia board would have been visible on the North and South elevations. The fascia on the North elevation would have been extended to the outer extremity of the loggia providing a clean single line instead of existing trellis extension of the pitched roof.

The conventional finishes have been used internally, and the floor of the whole house, with the exception of the kitchen and toilet facilities, is covered with carpet on underfelt or screed.

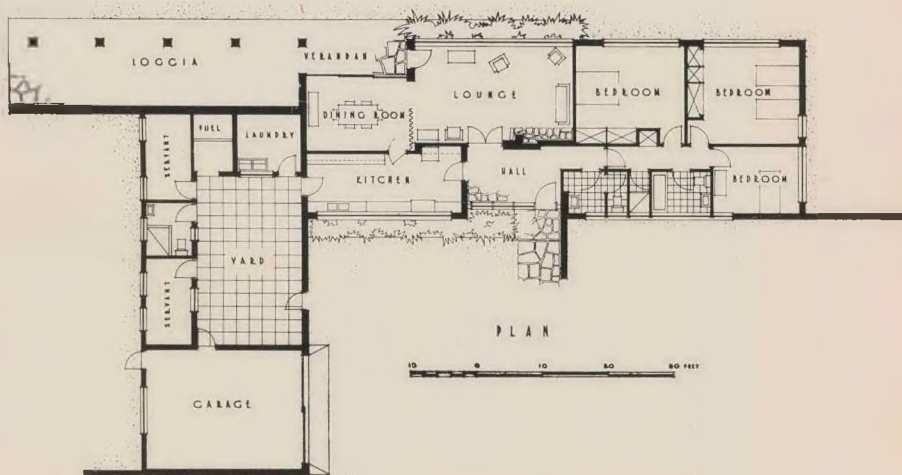
The kitchen floor is finished with asphalt tiles and the toilet rooms with encaustic tiles.



View of the lounge looking from the dining room showing the large view window overlooking the garden on the North.



View across the lounge towards the verandah and showing the stable door and generous garden views.







ABOVE: View from the lounge across. The dining room showing the plate glass sliding doors dividing the dining room from the verandah.

BELOW: A close-up of the verandah from the garden, with the lounge and dining room doors beyond.







View from the North-west.



SOUTH ELEVATION

# UNIVERSITY OF THE WITWATERSRAND SCHOOL OF ARCHITECTURE

## TWENTY-SIXTH ANNUAL EXHIBITION AND PRIZE-GIVING

ADDRESS OF THE DEAN OF THE FACULTY OF ARCHITECTURE, PROFESSOR J. FASSLER

Mr. Principal, Presidents of the Transvaal Provincial Institute of Architects and the Chapter of South African Quantity Surveyors: Ladies and Gentlemen — —

I would first of all like to welcome very warmly the parents of students who have come here this afternoon, and past students — now members of the professions of Architecture and Quantity Surveying — to this the 26th Annual Exhibition and Prize Giving of the Faculty of Architecture. I wish especially to welcome my predecessor, Professor G. E. Pearse, who established the Faculty and who, for many years, acted as Dean.

Ek moet ook Professor Meiring, hoof van die Departement van Argitektuur aan die Universiteit van Pretoria, verwelkom, ook Mnr. South en Mnr. van Zyl, asook sommige van sy studente wat hier heen gekom het, om te kyk wat ons in die afgelope jaar verrig het.

It is my duty on these occasions to present you with a short account of the activities of the Faculty during the past year, and as both Mr. Porter and Mr. Louw will speak as well, I shall endeavour to be as brief as possible.

This year, the number of students we have in the Faculty is as follows:

123 studying for the Degree of Bachelor of Architecture.

61 " " " " Diploma in Architecture.

29 " " " " Certificate in Architecture,

making a total of 213 students in Architecture. This figure is 59 less than the total in 1949.

24 students studying for the Degree of B.Sc. in Quantity Surveying.

38 " " " " " " Diploma in Quantity Surveying.

4 " " " " " " Certificate in Quantity Surveying.

making a total of 66, which is 17 less than the total in 1949.

The Degree of Bachelor of Architecture has been conferred upon 22 of our students this year, the Diploma in Architecture awarded to 8; the Degree of Bachelor of Science in Quantity Surveying conferred on 6; the Diploma in Quantity Surveying awarded to 21 and the Post-graduate Diploma in Town Planning awarded to 7. 15 Students in the Faculty qualified as scholars of the University.

As the Faculty of Architecture provides the Department of Fine Arts with the necessary facilities to carry on its work, it is appropriate to include details of student numbers here. There are 20 students studying for the Degree of Bach. of Arts in Fine Arts; 91 students in the Faculty of Arts studying the History of Art as a major subject, and 28 attend lectures on various aspects of the Fine Arts. Facilities are provided for teaching 38 architectural students Freehand Drawing.

As regards the Post-graduate Diploma in Town Planning, we have 13 students in the second year of the new three-year course which commenced last year. As there were not sufficient applications in 1950, no fresh first year course was commenced. From the enquiries that have reached me since March, it is clear that a new first-year will be possible in 1951.

In my opinion, the extended course is shaping well and all the facilities which we can provide, are being provided, to give our post-graduate students a thorough grounding in this intricate and developing subject. I would like to express my indebtedness to Mr. Gordon Summerley particularly, and the part-time lecturers who assist us to run the course. Without their co-operation it would not be possible to continue.

Proceeding next to review student activities: The Architectural Students Society which functioned with distinction under that title for many years, has now become "The Council of Architectural Students". The change has, I understand, been necessary in order to enable the Society to absorb and collaborate closely with students in the Department of Fine Arts. I welcome this coming together of Architectural and Fine Arts students, for I feel that both groups stand to gain materially from contact with each other. The new Council must now strive to build a reputation equal to that which the Architectural Students Society enjoyed in University circles for many years.

In July, 1950 our students organised a circulating exhibition of the work of South African schools of architecture. This exhibition is intended to be constantly replenished with fresh material as it proceeds from one centre to another. I need hardly add that the idea is a splendid one, and it will help to keep both staff and students informed about what is happening elsewhere.

During the second half of 1949, the Visiting Lecturers' Trust Fund financed a visit to this University of Mr. Anthony Chitty,

architect and town planner of London. I regret to say that the visit was not very successful. It was the first the Faculty has had to cope with. We have gained experience that will be useful on future similar occasions. Negotiations are now proceeding to bring out another visiting lecturer to this university. A difficulty, which may be transitory, is, that the really prominent architects and art historians that we would like to meet will not come to South Africa. Whilst on leave overseas, I approached Siegfried Gideon, Walter Gropius and Mies van der Rohe personally, but all were too busy to consider spending a few months in this country. Perseverance will be necessary to attract the right people.

With reference to staff matters, I would first of all like to thank Mr. Duncan Howie for acting as Dean of the Faculty so efficiently during my absence overseas on long leave: He enjoyed a spell of long leave himself on my return, and resumed his duties, much to my relief, in March this year.

In August 1949, Dr. Martienssen returned to the Department of Fine Arts after two years study leave at the Courtauld Institute, London, where she successfully completed the requirements for the Degree of Doctor of Philosophy of London University. Mr. Gilbert Herbert, who is in charge of the first year in architecture, proceeded overseas in January on a post-graduate scholarship for one year, to study architectural education in England and the United States of America.

This year, Dr. Martienssen arranged a special series of lectures to be given to second and third year students in Fine Arts on aspects of the History of Art, by Mr. John Paris — Director of the National Gallery, Cape Town, and Mr. Walter Batts of Pretoria. We hope that Mr. Anton Hendriks, Director of the Johannesburg Municipal Art Gallery, will be able to co-operate as well. By these means, the students concerned have been brought into touch with expert knowledge in the field of Art History in South Africa. The lectures given during the first term by Mr. Paris and Mr. Batts were a great success, and we look forward to the rest of the series. Whilst on the subject of the Department of Fine Arts, I would like to express my thanks to Mr. Argent, Miss Joyce Lennard, Mrs. Mitchell, Dr. Stein Lessing and Mr. Portway, all of whom have served as part-time lecturers in the Department during 1949 and the first term of 1950.

It is with regret that I have to refer to the death towards the end of 1949 of the late Mr. Donald Pilcher who was on our staff. The degree of Master of Architecture was conferred upon him posthumously this afternoon. His death was a severe loss to the department and the profession at large.

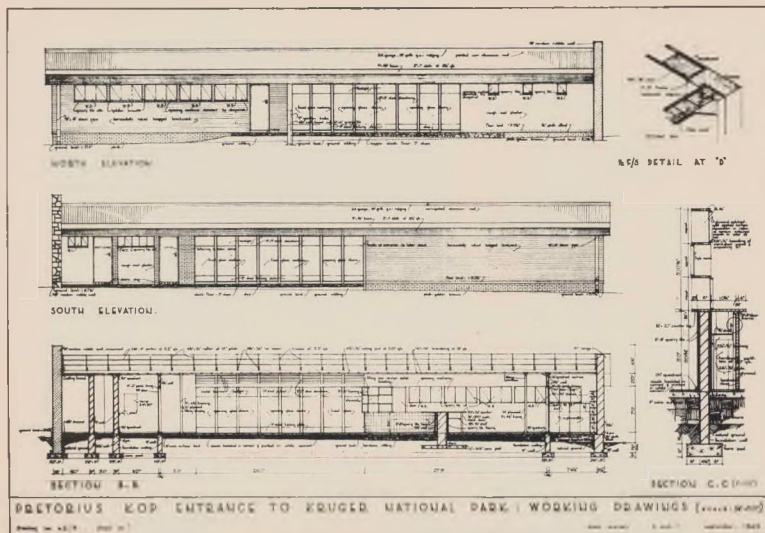
We have acquired approximately 2,000 feet of 16 m.m. colour film on various aspects of architecture, civic and landscape design, taken by myself whilst travelling in Europe



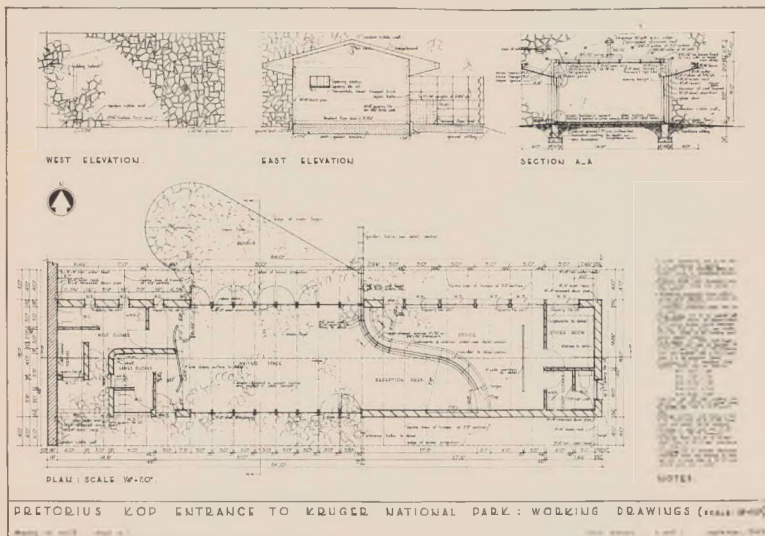
General view of the exhibition of students' work.

and America; also some 35 m.m. colour slides of contemporary architecture in the United States. We intend to make a collection of colour slides covering folk building, and traditional, and contemporary architecture, in South Africa. Work on this collection has commenced. A 35 m.m. slide projector has been granted the department to handle this new illustrative material. A grant has been allocated the Department of Fine Arts for the purchase of 35 m.m. colour slides illustrating contemporary and traditional schools of painting. These will be invaluable aids for lectures on the History of Painting. Our collection of 3½" black and white slides is steadily being extended. The importance of having a really first class body of illustrative material making use of the latest developments in photography cannot be over-emphasised. The reason is obvious. Students here are so far away from significant works of architecture, painting and sculpture which have shaped, and are still shaping, movements in the History of Art, that it is essential to be able to show pictures which will effectively convey something of the spirit of the originals. During the past year, we commenced to make a collection of original perspective renderings by prominent architectural draughtsmen here and overseas, that is — drawings which illustrate what buildings will look like before they are erected. In this connection I have to acknowledge the assistance afforded us by Mr. Chitty who has sent us six examples of the work of leading English perspective artists. These originals and others we shall obtain, will enable students to examine the techniques employed at first hand.

Then as regard books: Mrs. D. E. Pilcher presented her late husband's collection of books on Art and Architecture, to the University Library. Such bequests are always welcome, and help further to build up the very fine collection we have in the Fine Arts section of the main library



DESIGN FOR THE GATEWAY AND CONTROL AT THE PRETORIUS KOP ENTRANCE TO THE KRUGER NATIONAL PARK. THE CONTROL BUILDING, by Diana Evenary, B.Arch. J.





I shall now pass on to mention some projected and present developments in our courses of study in Architecture and Quantity Surveying. This term as an experiment, we included an exercise in practical building in the second year of study. The task set was the design and construction of a Tennis Shelter in the grounds of the University. I would like to express my appreciation of the co-operation of the Principal and Mr. Moore — the University Maintenance Architect — both of whom were prepared to risk a fair sum of money in the venture, for the purchase of tools and materials. The Tennis Shelter, which the students has been building for the past two weeks, is providing the second year with experience in the preliminary site work, setting out, digging foundation trenches, preparing foundation reinforcement, mixing and placing concrete, setting out and building brick work for foundation walls and the superstructure, designing and erecting shuttering for the reinforced concrete slab which is to form the roof, laying paving slabs, simple joinery and some painting. This comprises, I think, a very complete experience in building methods and site work for any young student. So far, the experiment has been very successful, and although everyone has had to work very hard, I think that both staff and students have enjoyed it. In the end, the University will gain an additional amenity for the cost of the materials. As many such minor buildings are needed, I hope it will be possible to continue the practical work we have started on a yearly basis.

\* \* \* \* \*

I have next to report that the length of Courses in Architecture and Quantity Surveying is under review by the Board of the Faculty, and it is possible that the Faculty will

recommend their extension next year. Such increases will not affect students already embarked on their studies, but will affect new registrations the year revised Regulations come into force.

You may know that for a long time examinations in Architecture and Quantity Surveying have been conducted on behalf of the Natal University College, by the Faculty of Architecture here. Last year, Professor Paul Connell, one of our graduates, was appointed to the newly established Chair of Architecture at Natal University College. In March, the Board of Education of the Institute of South African Architects agreed, under certain conditions, to permit that University to conduct its own examinations. This development will greatly relieve the strain of examining in November, which our Faculty has had to bear each year, and at the same time, permit Professor Connell to develop his department without being tied to the courses and syllabi of this University.

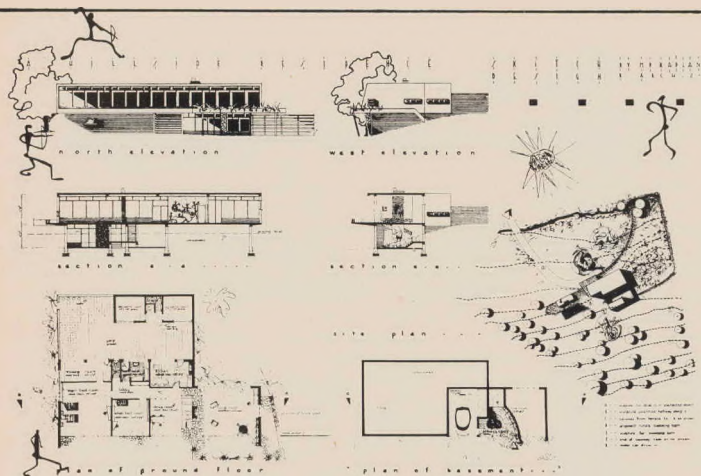
I have to report that as from the beginning of 1951, the Board of the Faculty has decided to withdraw Certificate courses in Architecture and Quantity Surveying. These were courses offered to students mostly domiciled in country towns away from University centres. The Board of Education intends to make special arrangements for such students itself, and these arrangements are now under discussion.

The course on "Interior Decoration and Furniture" which was offered in the University Calendar has also been withdrawn.

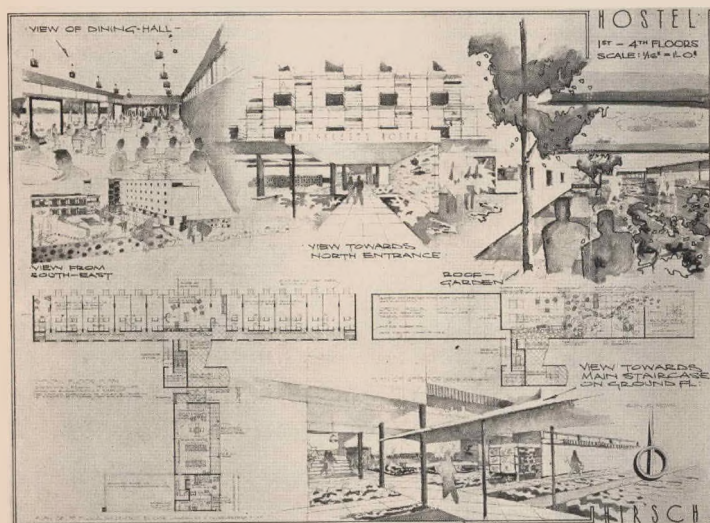
On the subject of prizes, I have to report that the Brick Research and Publicity Association has organised two competitions. The first — an Undergraduate prize for architectural

# UNIVERSITY OF THE WITWATERSRAND SCHOOL OF ARCHITECTURE

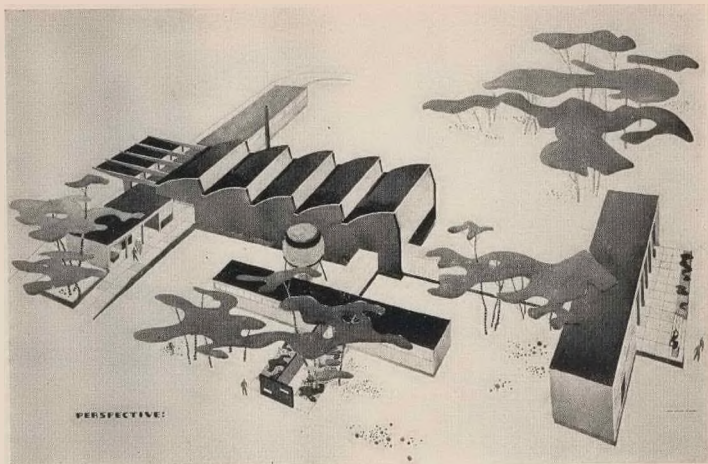
INCORPORATING THE DEPARTMENTS OF  
ARCHITECTURE, TOWN PLANNING  
QUANTITY SURVEYING AND FINE ARTS



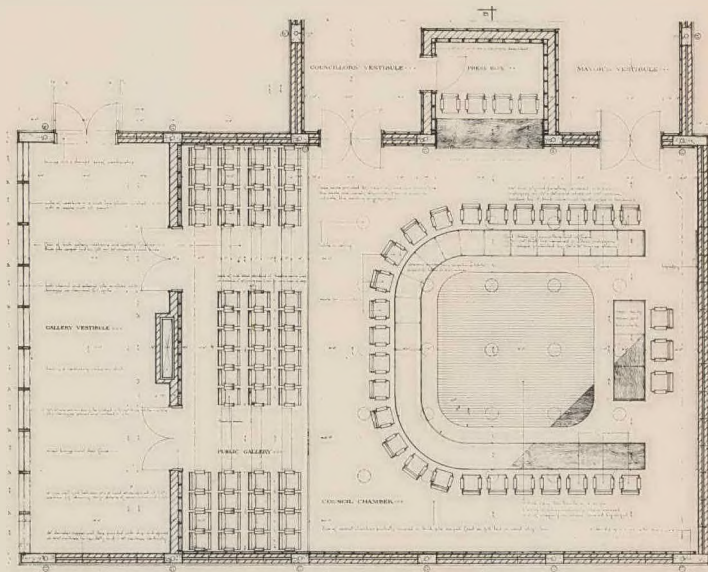
SKETCH DESIGN FOR A HILLSIDE RESIDENCE, by M. Kaplan, B.Arch.II.



SKETCH DESIGN FOR A STUDENTS' HOSTEL, by O. Hirsch, Dip.Arch.III.



PERSPECTIVE RENDERING OF A FURNITURE FACTORY, by W. A. Swan, B.Arch.V.



PROPOSED NEW TOWN HALL - BOKSBURG  
ON SITE NO. 1000 NEW KENILWORTH

ARCHITECTS  
WIM SWAN  
& PARTNERS

SCALE  
1/8" = 1'

DESIGNED BY  
CHECKED BY

CORRECTED  
NO. 10

PART OF THE HALF-INCH DETAIL WORKING DRAWING STUDY FOR THE COUNCIL CHAMBER OF A TOWN  
HALL BUILDING  
By W. A. Swan, B.Arch.V.



students valued at £50-0-0 which is to be competed for by the University of the Witwatersrand and the University of Pretoria. The second is a Graduate prize for Architects and Quantity Surveyors valued at £200-0-0. The first competitions are due to be held in the near future. The prizes offered are substantial, and I feel sure will be competed for very keenly. The Brick Research Publicity Association hopes to stimulate interest in Clay products hereby, and also hopes that the competitions will bring forward fresh ideas which will encourage the manufacture of new products and methods of construction.

Whilst Architecture and Quantity Surveying are reasonably well endowed with prizes, the Department of Fine Arts suffers a disadvantage at present. The late Denys Lefebvre recently endowed a medal which is to be awarded by the Departments of English and Fine Arts in alternate years. In the case of Fine Arts—for the best original picture in any medium submitted in competition. A competition is being arranged for the second term of 1950, and the medal will be presented to the successful student at the March graduation ceremony. I do feel, however, that some substantial book prizes are needed, and if anyone present is sufficiently interested to consider establishing such a prize, or knows someone else who might, I would be very glad to meet the person or persons concerned.

At long last I come to the Exhibition itself. The layout was designed by Mr. Middleton of the Third year, and, of course, carried out by the third year students themselves. I must admit that when I arrived this morning and saw a ruin in the studio amidst which could be dimly discerned chicken wire, timber, glue, paint and nails, I doubted whether it could possibly be ready in time. Well, it is — only just — and you shall judge its merit. I want to draw your attention particularly to the Fine Arts exhibit. I think it shows a maturity which indicates that the Department has grown up and is now travelling in top gear. Let me conclude by quoting from a recent letter Mr. John Paris, the Director of the National Gallery, Cape Town, wrote in which he commented on the Department of Fine Arts. I leave you to judge the validity of these remarks for yourselves:

"I love Wits now and feel rather that I belong there and have nothing but pride in the Department which is doing a quite magnificent job with a grace and integrity I have not found anywhere else here yet."

I now have pleasure in calling upon Mr. Porter, the President of the Transvaal Provincial Institute of Architects to distribute the prizes in Architecture and address you.

#### TRANSVAAL PROVINCIAL INSTITUTE PRIZES:

FIRST YEAR: 1, Miss D. Evenary and R. Scott Brown.

SECOND YEAR: 1, E. N. Finson and N. E. Blacher.

THIRD YEAR: 1, P. M. Moir; 2, G. C. Kahn.

FIFTH YEAR: 1, W. A. Swaan; 2, D. H. Robinson.

#### SPECIAL PRIZES:

Frank Gordon McIntosh Prize for best set of Working Drawings submitted in the final year, Mr. W. A. Swaan.

#### D. M. BURTON PRIZE:

Best all round student in any year of study, Mr. W. A. Swaan.

#### LOUIS BUSTIN MEMORIAL PRIZE:

For the best solution of a planning problem in any year of the Course, Mr. D. McD. Lennard, Mr. B. Macdonald, Mr. L. Roodt.

#### W. H. GREYSTY PRIZE:

A new prize which is being awarded for the first time, for best set of working drawings in the Third year of study, Mr. O. Hirsch.

I now have pleasure in calling upon Mr. Louw, President of the Chapter, to distribute the prizes in Quantity Surveying and to address you.

#### CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS PRIZES:

FIRST YEAR: Mr. R. H. C. Small.

SECOND YEAR: Mr. N. Murray.

THIRD YEAR: Mr. B. H. Zipp.

FINAL YEAR: Mr. G. R. Senior.

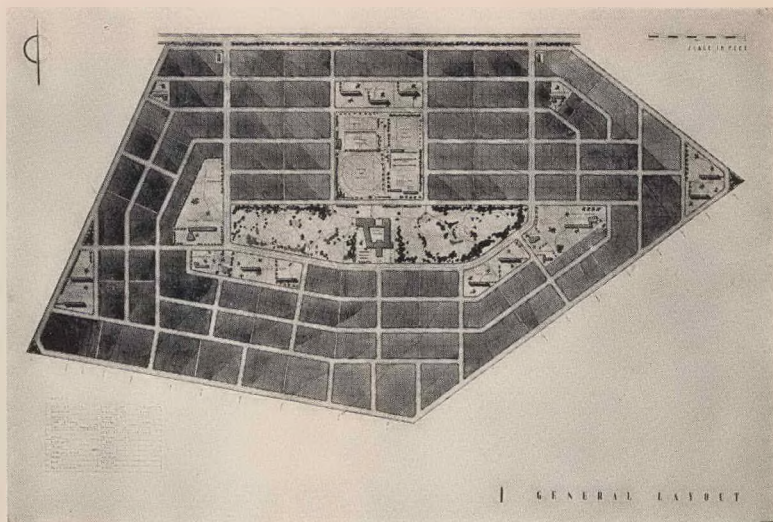
#### BELL JOHN PRIZE:

Best all-round student in Quantity Surveying: Mr. B. H. Zipp and Mr. G. R. Senior has been nominated for the Chapter's Gold Medal Award.

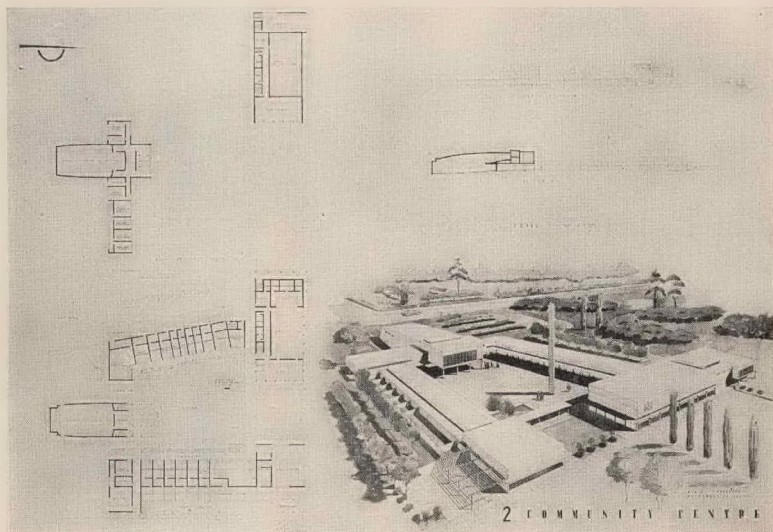


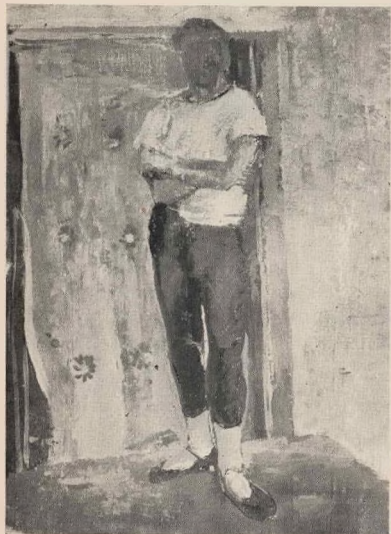
Photos: DERRICK A. BRIDGE  
General view of the exhibition of students' work.





A GROUP TOWN PLANNING STUDY FOR A RESIDENTIAL DEVELOPMENT, WITH LANDSCAPING AND DESIGN OF THE COMMUNITY CENTRE, by D. McD. Lennard, B. Macdonald and L. Roodt, BB.Arch.V.





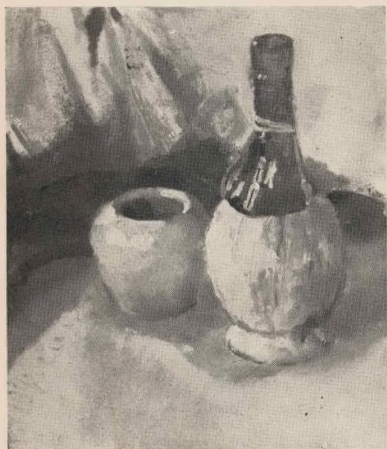
BALLET DANCER, Oil

C. Coetzee, Fourth year



PENCIL STUDY

Miss A. Varsler, Third year.



STILL LIFE, Oil,

Miss M. Celine, Second year.



DESIGN, in Postercolour

Miss H. David, First year.

# INCIDENTALLY . . .

A COLUMN BY GILBERT HERBERT.

## NEW YORK:

Bagdad-on-the-Subway, O. Henry called it, half in derision, half in admiration. He peopled it with Caliphs and Kings, and found in its concrete canyons sufficient material for a twentieth century thousand-and-one-nights. Damon Runyon wrote with intimate understanding of the guys and dames who gave its sidewalks colour and romance and humanity. A thousand writers have held the magnifying glass over it, and have enlarged upon one aspect or another of New York's life, its beauty or its ugliness, its cruelty or its great-heartedness, its sordid materialism or its fantasy and romance. But whether one finds much to admire in this biggest of the Big Cities, or whether one finds this epitome of the American way of life unpalatable, whatever one's attitude, one cannot find New York dull.

Coming over on the "Britannic", I listened attentively to all opinions about New York, but reacted a trifle warily to the bouts of intense enthusiasm in which some of my American shipmates had occasion to indulge. New York, to an American making the westward Atlantic crossing, is not only a city, but a symbol of the homeland, much as Table Mountain is for us, and in considering it as such emotion is bound to cloud the issue. I was prepared to reserve judgment, to wait and see. "You think we are excited now?" said the man leaning at the rail next to me, as we left the Irish coast behind us. "Well, just you wait until we see the Old Lady in New York Harbour". By jiminy, he was right! As the fog lifted from the Hudson, and the towers of Manhattan and the Statue of Liberty suddenly materialized (like the image on a photographic print in a developing tank) enthusiasm rose to a tremendous pitch. The well-developed Irish-American lady with the contralto voice that made up in power what it lacked in quality, switched from "Galway Bay", which had been our staple musical diet for the past eight days, to a heart-felt version of "God Bless America". Deep emotion was registered all round, except by cynics and architectural columnists.

## GOLLY, LOOK AT THAT:

This particular columnist's air of studied detachment came under severe pressure first thing this morning, when he stepped from his commuter's train into the foyer of Grand Central Station, at the start of his first real day in New York City. Impartial observers record that he exhibited more than casual interest, and indeed a certain amount of naïve pleasure in the contemplation of the three-dimensional moving advertisements which are to be found in that railroad station. The light bulb that popped out of its carton and lit up with satisfying regularity

caught his eye, and he had to be dragged away from the large mechanical hand that so gently squeezed a cushion of foam-rubber, just to show how soft it was.

It is also reliably reported that he was to be seen at various times throughout the day, on many of the sidewalks of New York, his head thrown back at an alarming angle and his eyes fixed apparently on heaven. Sounds of astonishment, identifiable as "oah", "gosh", and "goodness gracious me", were heard to issue from his mouth. In fact, there is much evidence to show that this blase columnist was in the process of being more than somewhat impressed.

My day (to revert from a rather strained third person to a more accustomed first) was deliberately casual, almost haphazard. I wanted merely to drift through the streets, seeing what sights should accidentally come my way, and to soak in and absorb the atmosphere of the place. There would be time enough later for planned activity. Today was to be what hikers in England call a "ramble", a pleasant stroll with destination uncertain. I was deposited by a New York friend at the corner of 34th St. and 5th Avenue at 11 a.m., with instructions to plunge alone into the maelstrom and to return to his office at 5.30. I regarded his retreating back much as an Arctic explorer who sees the smoke of the supply ship disappearing over the horizon, not to return till the ice melts in the summer. My friend said, casually, in parting: "Oh, by the way, that —", pointing to the left, "is the Empire State Building; and that —", swinging round to the right, "is the Rockefeller Centre." I looked left and up; right and up; I gasped. "So long," he said.

## BIGGER THE BETTER:

Most of the skyscrapers in New York are terribly impressive: few are good architecture. Now I have often had occasion in the past, in the course of argument, to refute the contention that a big building is necessarily more important, architecturally speaking, than a small one. One finds this peculiar architectural philosophy put forward with particular emphasis in Ayn Rand's novel "The Fountainhead", where it is manifested in the constant implication that the architect-hero is wasting his talent on small structures, when he should be designing large ones. It is logical enough, in terms of this philosophy, that the culmination of the book should be the design by the hero of the largest building in the world: logical perhaps, yet to me a more distasteful piece of megalomania than I could ever stomach.

However, after my day in Manhattan, although I am no nearer to agreeing with this point of view, I find it easier



to understand this attitude, this reverence for magnitude. The skyscrapers of New York, with perhaps one or two exceptions, are architecturally of the lowest quality. The Gothic treatment of some of the towers, for example, is an architectural joke, and a particularly unfunny joke at that. Yet, it must be admitted that, on looking at these structures, one receives a tremendous emotional impact. Great size, bulk, height impart to a structure an impressiveness which blankets to some considerable extent its lack of aesthetic appeal. If I speak enthusiastically of New York, then, it must not be taken as an unqualified approval of its architecture, or even as acceptance of the principle of the skyscraper as a desirable element in the town plan. Far from it. Enthusiasm in this instance is an emotional reaction, not an intellectual one, and springs from the overwhelming impression that this city makes by virtue of its physical size.

The marriage of size and architectural quality is rare. One does find it in the Rockefeller Centre, which has an aesthetic appeal which Giedion, for one has recognized, and has used, perhaps rather unconvincingly, as an example of its space-time theories. Generally, New Yorkers of discrimination recognize that there is a fundamental difference in quality between the Centre and the earlier towers. When they wish to boast, they may speak of the Empire State Building; but when they are discussing their city in terms, not of boasting, but of legitimate pride, then their example of achievement is the Rockefeller Centre.

#### A KIND WORD FOR THE GRID-IRON:

I walked in the sun down Lexington Avenue, passing massive hotels with fabulous names, and turned into East 42nd St. The avenues on Manhattan Island run from north to south in long straight lines, and they are crossed at right angles by the streets, forming a rigid gridiron pattern. Now I know all the demerits of a gridiron scheme, and they are legion, but the squared pattern does simplify the problem of navigation. In Greenhaven, the small community some twenty miles or so from New York, where I happen to be staying, the roads wind picturesquely in gentle curves, which gives the neighbourhood a very fine and pleasant prospect, but which makes getting about impossible without intimate local knowledge, a map and compass, or an extraordinarily well-developed sense of direction.

Anyhow, in New York City, I made the right-angle turn into East 42nd St., and headed for the East River. At the end of the street, where it runs into 1st Avenue alongside the river, I found, rather to my surprise — remember, I was just walking at random — the glorious tower of glass that is the United Nations Headquarters Building. I don't want to say much about the UNO Building at this stage, for it deserves much more than casual mention in this column, but I must say that in New York it is a beacon, a tower of lightness and elegance in startling contrast to the massive solidity which characterises most other buildings in this city. At the moment only the secretariat

building stands, while the assembly hall and other ancillaries are still in the process of construction. Until the whole complex is completed the larger pattern caused by the relationship of the various units remains to be realized. At the moment the U.N. Headquarters Building is a simple statement, and not an architectural complex: but while it is not a symphony, it is still as impressive as a great crashing chord.

#### LIFT UP THINE EYES!

The enormous rings of smoke puffed from the mouth of the twenty foot high face on the "Camel" advertisement drift and break over the chaos that is Times Square, where Broadway intersects West 42nd St. Broadway, the Great White Way, cuts its diagonal path across the rectangular grid of streets and avenues, and eventually reaches 5th Avenue just about at the spot where the King of Skyscrapers raises its goodness knows how many storeys to the sky. The Empire State is one of those buildings which, at a distance, do not look as tall as they really are, but are lost in a forest of competing towers, and so lose scale. Drift without purpose down Broadway, however, wander down a side street, and suddenly, unexpectedly find yourself on the pavement at its foot, and its sharply converging perspective of vertical lines tells its true, breathtaking story of immense height.

It is a fantastic creation in a fantastic city: the supreme gesture of an age where it was vitally important to be the biggest and the best. It stands today, not only as a tremendous feat of engineering skill, but as an enormous finger pointing at the folly to which over-inflation of land values can give rise. But twenty years ago, when the race to be biggest and best was at its peak, how exciting must have been those eight fabulous months which saw the structure rise on the site of the old Waldorf-Astoria and snatch the tallest-building crown from the Chrysler Building, rise from the ground and dominate the New York scene. James Thurber, who in May of 1929 had written nostalgically in the New Yorker of the last days of the old Waldorf (which "was so toughly constructed that it cost nine hundred thousand dollars to pull it down") wrote in November of the following year: "One minute we are comfortably reading the 'Idylls of the King' and the next thing we know we are climbing up scaffolding. Last week it was the Empire State Building to which we were lured from our Tennyson, out of a preposterous desire to climb to a point where we could kiss the Chrysler building goodbye and report the sensation to our earthbound readers".

Well, up to the moment of writing I've been earthbound too. My experience of skyscrapers has been limited to a worm's-eye view, and the sensation I have been trying to convey to those of you who are still with me is the sensation of looking up. I have tried to share with you some of the overwhelming impressions which one obtains while looking at these fantastic towers: I cannot, unfortunately, share the crack in my neck. That I must bear alone.



# O B I T U A R Y

## FRANK LEONARD HODGSON FLEMING

It was with great sorrow that we heard of the death of Mr. Fleming at Constantia Nek, Cape, on 7th February, 1950.

Mr. Fleming was a Fellow of the Royal Institute of British Architects and President of our Transvaal Institute in 1923. He served for many years on our local Council, also on the Central Council of the Institute of South African Architects; was a member of the South African Registration Committee, and his valuable counsel was very helpful in the presenting and passing through Parliament of our South African Act. We knew him as a special friend, and to us and many others, his advice and help was always there for the asking. His great concern was the education and future of the architectural students and profession.

Mr. Fleming was born in Hampshire, England, educated at Denstone College and came to South Africa in 1904, where he joined the practice of Sir Herbert Baker and became a partner in 1910. He shared in the work of the design of many of our notable buildings, the Union Buildings, Government House, Pretoria Railway Station, Pretoria Cathedral, Salisbury Cathedral and others. In 1913 he went to India in connection with the architectural work for the Secretariat Building in Delhi. In 1920 Sir Herbert Baker went to his London practice, the partnership was dissolved and Mr. Fleming carried on the practice under his own name until 1937, when he was

joined by his son under the name of Fleming and Partners and was later joined by Mr. B. S. Cooke and the practice is now Fleming and Cooke.

Some of the important works carried out by Mr. Fleming were Michaelhouse, St. John's College, Johannesburg Cathedral and Rodean School. In all his work he showed great skill and the true meaning of architecture. Personally he was quiet, unassuming and a true gentleman. In tribute to his memory Field Marshall Smuts wrote:—

'We shall never forget Fleming's association with Herbert Baker and his share in the Union Buildings and other public and private buildings which are among the glories of our country and time.'

For many years he was Chairman of the South African Academy and all those who served under his Chairmanship realised to the fullest extent that he held the principal of art for man's sake and not man for art's sake. His counsel was fundamentally based on integrity, and during the first world war he almost despaired of the future of youth because of the chaos he foresaw arising out of or from it. His fellowship and untiring goodwill was always an inspiration to those with whom he came in contact and the memory of that personality will last long with those who worked with him for the wellbeing of all and especially the profession of Architecture.

The funeral service was taken by the Archbishop of Cape Town and later there was a service in St. George's Cathedral, Cape Town and a memorial service in St. Mary's Cathedral, Johannesburg.

D. M. B. — D. M. S.



THE QUADRANGLE, ST. JOHN'S  
COLLEGE, JOHANNESBURG

# CONTEMPORARY JOURNALS

COMPILATION BY UGO TOMASELLI

*Architectural Review*—March, 1950, pp. 147—153.

Double profile: A Reconsideration of the Elizabethan style as seen at Wallington by N. Pevsner.

*Architectural Review*—March, 1950, pp. 165—181.

The Next Step? by J. M. Richards. In this illustrated article J. M. Richards points out the dangers of functionalism becoming a style, and discusses the three main routes adopted by contemporary architects to lead them out of their difficulties. These he defines as (1) the maximum exploitation of mechanization, (2) Conscious humanization, and (3) the social-realist approach.

*Architectural Review*—March, 1950, pp. 197—202.

Skyscrapers: The Return to Earth by Winston Weisman. Skyscrapers, instead of growing taller, appear to be settling down to 30—40 storeys. In this article the author explains why this should be so, and gives reasons why the skyscraper's age has, in fact, ended.

*Architectural Forum*—March, 1950, pp. 119—125.

Switzerland Builds — A preview of an important new book by C. E. Kidder Smith, which documents the influence of native architecture on contemporary design, and a portfolio of new Swiss buildings: apartments, schools, stadium, bath, house.

*Progressive Architecture*—January, 1950.

U.S. Architecture 1900—1950. This issue of *Progressive Architecture* is given over fully to a review of the course of architecture in the United States during the past 50 years.

## COMMERCIAL

*Architectural Review*—March, 1950, pp. 182—188.

Offices at Wallend on Tyne. Richard Sheppard and Partners, Architects.

*Architectural Review*—March, 1950, pp. 116—118.

Bank annex. Federal Reserve Bank in Detroit, designed by Smith, Hinchman & Grylls, Inc., uses marble for curtain walls, and harmonizes contemporary design with the existing neo-classic facade.

*Architectural Record*—March, 1950, pp. 94—96.

Simco Shoe chain store, Jamaica, N.Y., Gibbons & Heidtman, Architects.

*Architectural Record*—March, 1950, pp. 106—109.

Michigan Bell Telephone Building. Smith, Hinchman & Grylls, Inc., Architects.

*Progressive Architecture*—March, 1950, pp. 57—71.

Shoe Stores: A critique illustrating the following—

(1) An up-to-date premises designed within the framework of a 75 year old building in Morristown, New Jersey, D. Laitin, Architect.

(2) A quiet dignified shop in Oakland, Calif., M. Gaidano, Architect.

(3) Shoe Store within a 3-storey and basement in Washington, D.C., Morris Lapidus, Architect.

(4) Shoe Store in a mid-block building, 125 feet deep with steel frontages at both ends, Oakland, Calif., Gruen & Krummeck, associates, Architects.

(5) Shoe Store fixtures and furniture by Gruen & Krummeck, Architects.

*Architectural Forum*—May, 1950, pp. 116—129.

The following Commercial buildings are illustrated—

(1) General Store by Kelley & Peletz in Healdsburg, California.

(2) Contractors Office in Minneapolis. Long & Threshaw, Architects.

(3) Office Showrooms for Gas and Electric Company. Anshen & Allen, Architects.

(4) Architects' Office & Guesthouse. H. Armstrong, Architect.

## CONSTRUCTION

*Progressive Architecture*—February, 1950 pp. 87, 89, 91, 93.

Selected Details—

(1) Bank counter — Ramey, Himes & Buchner, Architects.

(2) Fixed Window with Ventilation panel below. Schweikher & Elting, Architects.

(3) Two-way Cantilever overhang. E. Stone, Architect.

(4) Controlled External Ventilation Blind. Gruen & Krummeck, Architects.

*Progressive Architecture*—March, 1950, pp. 97, 99, 101, 103.

Selected Details—

(1) Dual purpose Theatre ticket office. W. Rieeman & Associates, Architects.

(2) Canopy for an industrial building. Carroll, Gisdale & Van Allen, Architects.

(3) Glass Partition. Freedman, Alschuler & Sincere, Architects.

(4) Kitchen Hatch-way. Homby & Nelson, Architects.

## DOMESTIC

*Architectural Forum*—March, 1950, pp. 126—131.

(1) House in San Francisco uses glass imaginatively to merge interiors with landscape. I. Davidson, designer.

(2) Mill construction and simple L-plan are combined to produce a modest Seattle House. Young & Richardson, Architects.

(3) A small house in Princeton, designed by W. Wallander.

*Architectural Record*—March, 1950, pp. 97—105.

(1) House on an 8-acre hill-top site exploits the extensive view of the river valley and the new Hampshire mountains. E. & M. Hunter, Architects.

(2) Architects house spread out to catch view and to run parallel with the contours. Page, Southerland & Page, Architects.

*Architectural Forum*—April, 1950, pp. 117—183.

The Small House. This issue forms a special number on the small house covering the following articles and plans—

Articles—

(1) The house market.

(2) Quality houses through contemporary design.

(3) Planning for complete flexibility.

Projects—

(1) Tri-Level House. D. Runnels, Architect.

(2) Small Modern House in Sunnyvale, Calif., Anshen & Allen, Architects.

(3) Conservative, low priced homes. Chiarelli & Kirk and J. Ridley, Architects.

(4) Semi-Detached design. E. Mix, Architect.

(5) Spacious Small House. Sweeney, Heap & Ganger, Architects.

(6) Sketch frame and cut in patio make a modest house look big. Twitchell & Rudolph, Architects.

(7) House in Waterbury, Conn. J. Stein, Architect.

(8) New England house raised for distant view. E. & M. Hunter, Architects.

(9) Compact house on hillside lot. John Funk, Architect.

(10) House in Plainfield, Mass. Thos. Wright, Designer.

(11) Multi-level House. C. Kach & Associates, Architects.

*Architectural Record*—April, 1950, pp. 111—124.

(1) Summer Residence on Long Island Sound. Cordas Bartos & Mihnas, Architects.

(2) Two Seattle houses by Paul Thiry on narrow sites

*Progressive Architecture*—February, 1950, pp. 62—65.

A contemporary Low-cost House, San Diego, California. A. Quincy Jones Jr., Architect.

*Progressive Architecture*—March, 1950, pp. 53—56.

A two-bedroom house for a couple with one child providing privacy and outdoor living in Los Angeles. Richard Neutra, Architect.

## HOSPITALS

*Architectural Record*—April 1950, pp. 101—110.

300 Bed U.S. Naval Hospital, Beaufort, S. C. Harbeson, Hough, Livingston & Larson, and J. Pease & Co., Associated Architects-Engineers; P. Cret, Architect.

*L'Architecture D'Aujourd'hui*—December, 1949, pp. 52—55.

Hospital in Sao-Paulo. R. Levi and R. Cesar, Architects. This article is well illustrated with interesting photographs of models and plans and illustrates the latest in the design of operating theatres.

*Architectural Forum*—May, 1950, pp. 108—111.

Small rural Hospital comprising Administration, Diagnostic, Nursing, Surgical and Obstetrical units. Dent and Aydelott, Architects.

## HOTELS

*Arch Forum*—March, 1950, pp. 97—110.

- (1) The Caribe Hilton Hotel on San Juan, Puerto Rico. Architecture and structural design by Taro, Ferrer and Torregrosa. A lavish 300-room resort hotel with every room angled to the sea view. Two floors are entirely devoted to public rooms, and every guest room has a balcony and a sea view.

- (2) Palace Hotel, San Francisco, Re-modelled, Francis J. McCarthy, Architect.

*Architectural Record*—March, 1950, pp. 110—131.

### MOTELS

Building Types Study No. 159 prepared by F. A. Pawley under the joint Editorial direction of Hotel Management and the Architectural Record. In this study the authors discuss the following: Location, site, plot plan, general planning, main building, rentals, housekeeping, maintenance, materials, equipment, and construction.

*L'Architecture D'Aujourd'hui*—December, 1949, pp. 88—95.

- (1) Hotel at Bahia, Brazil. A magnificent scheme combining various contracting forms. P. Ribeiro and D. Rebouças, Architects.
- (2) Hotel Caden, Copenhagen. D. Buhl, M. Petersen, Architects.

*L'Architecture D'Aujourd'hui*—December, 1949, pp. 80—84.

Centre Balneario at Rimini. A new civic centre on the Coast of Rimini illustrating in detail the New Grand Hotel. M. Bego and G. Vaccaro, Architects.

## INDUSTRIAL

*Architectural Forum*—March, 1950, pp. 111—115.

New Factory for Lincoln Electric Co., Cleveland, using Curtain Wall Construction, and covering an area of 1427 ft. x 500 ft., virtually unobstructed.

*Progressive Architecture*—February, 1950, pp. 41—52.

Industrial Buildings: Critique. The following Industrial Buildings are discussed and illustrated—

- (1) A plant for the manufacture and assembly of Tubular Electrical Advertising signs, in Los Angeles, California. The Austin Company, Engineers and Builders.
- (2) Administrative offices, with secretarial and clerical space for an existing Ball-bearing Company. Carroll, Gristale and Van Allen, Architects.
- (3) A distributing warehouse for Drugs, Sundries and Liquors in Miami, Florida. R. Weed and Associates, Architects. The Warehouse section is designed to facilitate receipt, sorting, storage and re-packing of goods for shipment to retailers. Facilities for handling two types of merchandise—drugs and sundries (arrival by truck) and liquors (arrival by train) to be provided in separate but co-ordinated areas.
- (4) A new Assembly Unit for the Ford Motor Company, St. Louis, Missouri. Albert Kahn Associated Architects and Engineers, Inc.

## INTERNATIONAL BUILDINGS

*Architectural Forum*—May, 1950, pp. 96—102.

The United Nations' Assembly Building. The second in a series of Forum Articles on this famous building project.

## MATERIALS & METHODS

*Architectural Forum*—March, 1950, pp. 81—96.

Curtain Walls. The lightweight curtain wall is discussed in detail, including cost analysis of the various means of curtain wall construction, by R. Davison.

*Architectural Record*—March, 1950, pp. 132—140.

- (1) Potentialities of Plastics in Building, by A. Dietz.
- (2) Preventing Operating Room Explosions, by Roy Hudenburg.

*Architectural Record*—April, 1950, pp. 165—170.

- (1) Architectural Acoustics. Basic Planning Aspects by R. Bolt and R. Newman. Part I.
- (2) Planning Grade School Kitchens, by Engelhart, Engelhart and Loggett.

*Progressive Architecture*—February, 1950, pp. 57, 72—81.

- (1) Office Practice: To-day's Working Drawings: Part I. By Guy G. Rothstein.
- (2) Lighting a Factor in Office Economy, by R. L. Otting.  
[a] Correlation of lighting and surface finish.

- (b) Disposition and orientation of fluorescent luminaires.

- (c) Comfort and appearance with economy.

- (d) Drafting rooms, private offices, corridors, lobbies and conference rooms.

*Progressive Architecture*—March, 1950, pp. 72—81.

- (1) Office Practice: To-day's working drawings, Part II.

- (2) Water Filtration Plant, Chicago.

- (3) Water Sources and Treatment for Private Systems by W. Mc Guinness.

- (4) Cable and Wiring Facilities for Telephone Services.

## RELIGIOUS

*Progressive Architecture*—February, 1950, pp. 59—61.

A church to seat 300 parishioners, Stowe, Vermont. This rural Roman Catholic Church, designed by Wittier and Goodrich, was conceived as a simple wood structure to blend with the Vermont countryside.

## RESTAURANTS

*Architectural Forum*—May, 1950, pp. 122—123.

Open-air Restaurant exploits hilltop site overlooking the Pacific. Rowan Maiden, designer.

## SCHOOLS, COLLEGES, ETC.

*Architectural Review*—March, 1950, pp. 154—164.

Training College in Barbados. I. de Syllas, architects. The buildings illustrated are—

- (1) Erdston House—a reconstructed late 18th Century plantation house.
- (2) The Dormitory Block—Sited on the escarpment of the cliff to take advantage of the magnificent views over the town to the Caribbean.
- (3) The Principal's house.
- (4) The School Block—Designed by Ralph Crowe using solid coral masonry walls.
- (5) The Caretaker's Cottage.

*Architectural Record*—March, 1950, pp. 87—93.

School of Business Administration, University of Michigan. I. and K. Black, Architects, L. Fry, Architect.

*Architectural Record*—April, 1950, pp. 125—160.

Schools, Architectural Record's Building Type Study No. 1660 on Low Cost Schools, introducing the following—

- (1) A design study: School operating costs by A. Harriman.
- (2) Prototype School by A. Harriman.
- (3) Bi-lateral iit School, San Carlos, California. E. Kump, Architect.
- (4) Small School, Deerfield, Ill. Perkins and Will, Architects.
- (5) Buri-Buri Elementary School, San Francisco, Calif., with deep classroom. Bomberger and Reid, Architects.
- (6) Prototype for a quality school, Tarrington, N.Y., R. Green, Architect.
- (7) Low Cost School, St. Louis. Wischmeyer and Lorenz, Architects.
- (8) Parish School and Recreational Centre, St. Louis, J. D. Murphy, Architect.
- (9) Community School designed for Economy, Burlington, Conn., Moore and Salsbury, Architects.

*Architectural Forum*—May, 1950, pp.

Small suburban Public School using bi-lateral lighting. Perkins and Will, Architects.

## SPORTS STADIUMS

*Architectural Forum*—May, 1950, pp. 130—131.

Concrete Canopy for the Madrid Hippodrome. Designed by E. Torroja on the shell concrete principle, these cantilever seat out 42 ft. 0 in.

## THEATRES

*Progressive Architecture*—February, 1950, pp. 66-71.

Theatre Remodelling. Several of the theatres remodelled by the firm W. Riesenman, Associates, Architects, are discussed in this issue.

- (1) Conversion of a run-down "grind-house" into a Class A motion picture house in Boston.
- (2) Complete renovation of an obsolete 1917 theatre, Fall River, Massachusetts.
- (3) Complete remodelling of the Frant, Lobby and Concession Area of a typical movie theatre in Thompsonville, Conn.

# BOOK REVIEW

## METAL TIES FOR CAVITY WALLS

Wall ties are of the greatest importance in the erection of cavity walls. The stability of the walls largely depends upon the number of ties used and in those cases where cavity walls are constructed with a special purpose, the type and number of ties will determine whether it will be effective or not.

In view of the importance of these facts, the Standard's Council has recently published a specification for metal ties for cavity walls, and the Model Building Regulations, now being compiled by the South African Bureau of Standards, require that the metal ties used in the building of cavity walls shall conform to this standard.

Cavity walls are usually used in building to-day. They are cheap to erect, keep out the damp and are reasonably good insulators against heat and cold and sound, provided that the right type of metal tie is used.

To ensure that the wall is weather-resistant and corrosion-free, wall ties designed to trap and throw off any moisture present must be used. Ties of this type will prevent the passage of water from the outer to the inner portion of the wall.

If too many ties, or ties of a heavy nature, are used in the construction of a cavity wall which is to serve as a sound insulator, it will not be effective. For this purpose it is therefore better to use the standard wire ties than heavier vertical twist ties made from metal strip.

Manufacturers making metal ties according to the Council's specifications can, by arrangement with the Council, mark their product with the S.A.B.S. ellipse mark. This mark is evidence that the product has been made according to the specifications drawn up by the Standards Council and that the product is periodically tested and inspected in the laboratories of the South African Bureau of Standards.

Copies of the specification (S.A.B.S. 28-1950), priced at 5/- per copy, may be obtained post free from the South African Bureau of Standards, Private Bag 191, Pretoria.

## STANDARD SPECIFICATION FOR BURNT CLAY BUILDING BRICKS

The South African Standards Institution Specification S.A. 14-1938 for Building Bricks has now been replaced by the Standard Specification for Burnt Clay Building Bricks (S.A.S.S.

227-1950) which has just been published on behalf of the Institution by the Standards Council.

In drawing up this revised specification, which is designed to facilitate the ordering and supply of burnt clay building bricks, the Institution's committee received valuable assistance from the Transvaal Clay Manufacturers' Association and the Master Brickmakers' Association.

The specification covering five grades of building bricks is based on information obtained from publications of the British Standards Institution and from the results of experimental work carried out in South Africa. Bricks manufactured to the specification will therefore be in line with South African conditions as well as the most modern building practice.

The specification covers definitions, dimensions and tolerances, minimum crushing strength, classes, sampling methods and tests. Although no limits for water absorption are prescribed, a method of test for this property is given as is one for efflorescence, together with an interpretation chart for the latter property. The methods of test are included for the guidance of the purchaser should these two factors be pertinent to the particular use to which the bricks are to be put.

Recent research has shown that limits of water absorption should only be specified when bricks are expressly intended for exposure to the weather and that for general purposes a brick of high-water absorption may quite likely have great strength as well as other desirable properties. Efflorescence also is a factor of importance only if the brick is exposed to damp conditions.

The new method of laying out bricks for a dimensional check incorporated in this revised specification is based on the British method which was evolved after a very complete statistical analysis of several thousand measurements of the products of a large number of brickfields. The greater accuracy of this method of dimensional check for 24 bricks as well as for individual bricks will be of real assistance to architects and builders.

With regard to crushing strength values, although the committee responsible for drawing up the specification realized that bricks with a lower crushing strength than the minimum specified are sometimes used where this quality is not of importance, the minimum strength stipulated represents the lowest value considered by the committee to be suitable for incorporation in a South African standard.

Copies of the specification, priced at 5/- per copy post free, are obtainable from the South African Board of Standards, Private Bag 191, Pretoria.



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