

SOUTH AFRICAN ARCHITECTURAL RECORD

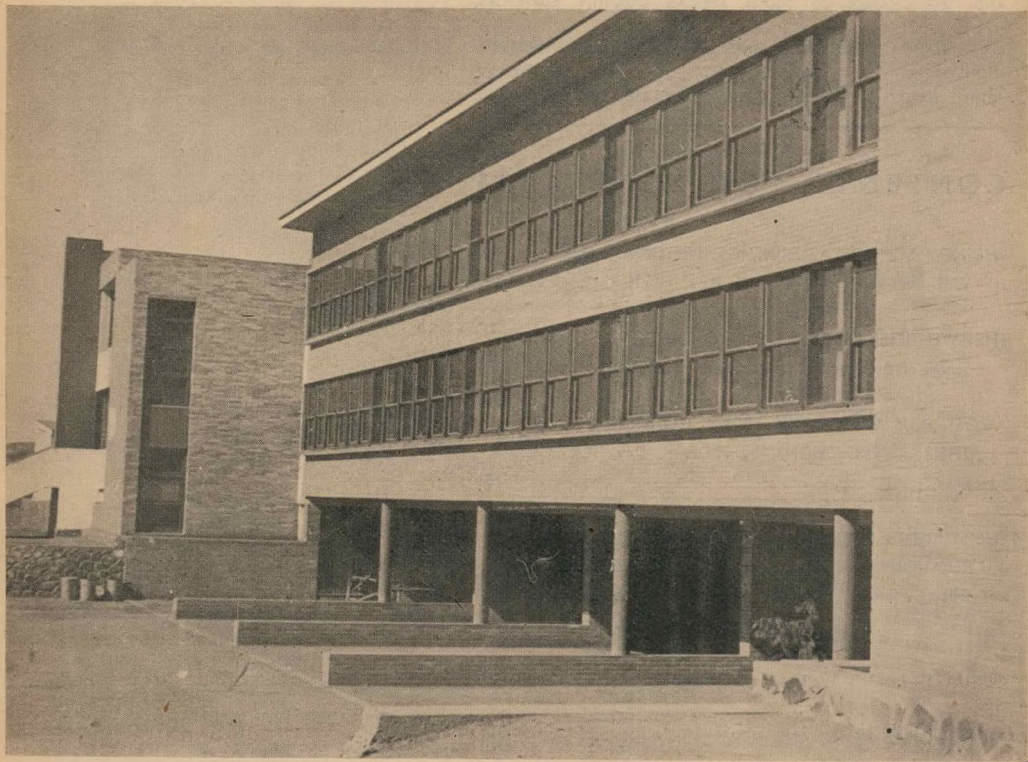
THE JOURNAL OF THE CAPE, NATAL, ORANGE FREE STATE AND
TRANSWAAL PROVINCIAL INSTITUTES OF SOUTH AFRICAN ARCHITECTS
AND THE CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS.

611, KELVIN HOUSE, 75, MARSHALL STREET, JOHANNESBURG.
PHONE 34-2921 VOLUME TWENTY NINE NUMBER SIX
JOINT EDITORS: PROFESSOR G. E. PEARSE, W. D. HOWIE

CONTENTS FOR JUNE 1944

THE NEW SCHOOL AT PRINSHOF, PRETORIA. Architect :	
V. S. Rees-Poole, F.R.I.B.A., M.I.A.	141
THE TWENTIETH ANNUAL EXHIBITION AND PRIZE-GIVING,	
School of Architecture, University of the Witwatersrand	145
"COST PLUS WASTE PLUS PROFIT CONTRACTS" AND THEIR REPERCUSSIONS, by R. F. R. Day, A.R.I.B.A., M.I.A.	154
THE STUDENTS' FORUM—AN HISTORICAL SURVEY OF THE RELATION OF SCULPTURE TO ARCHITECTURE, by Gilbert Herbert, B.Arch.III, University of the Witwaters- rand	156
OBITUARY—Lt.-Col. Walter Ernest Puntis ..	160
PROFESSIONAL NOTES AND NEWS	161

The Editors will be glad to consider any MSS., photographs or sketches submitted to them, but they should be accompanied by stamped addressed envelopes for return if unsuitable. In case of loss or injury they cannot hold themselves responsible for MSS., photographs or sketches, and publication in the Journal can alone be taken as evidence of acceptance. The name and address of the owner should be placed on the back of all pictures and MSS. The Institute does not hold itself responsible for the opinions expressed by contributors. Annual subscription £1 1s. direct from the Secretary.



THE NORTH FRONT, SHOWING THE COVERED PLAY SPACE, LOOKING TOWARDS THE EAST STAIR, THE ART ROOM AND KINDERGARTEN

NEW SCHOOL AT PRINSHOF, PRETORIA

V. S. REES-POOLE, F.R.I.B.A., M.I.A., ARCHITECT

The Prinshof School, recently erected, has been provided by the Department of Education to replace one of the earliest schools built in Pretoria, named the "Gymnasium School."

The stone for foundations and dressings was selected from a once-famous free stone quarry beyond Pretoria, and this particular stone was extensively used during President Kruger's régime in the Government and public buildings.

The old school building has now been converted into offices for the Provincial Administration.

The site selected for the new School is a portion of the farm "Prinshof," at one time considered distant from the centre of the town.

Development and growth of the city in recent years has encroached up to and beyond this farm area, but fortunately this open space, with an ample water supply, has been preserved as a school centre. The site is bounded on the west by Prinsloo Street—one of the highways leading over the hills to the north—and along the east and north boundaries by the Aapies River; the area allotted to the School has extensive playgrounds, with a wide view of the Union Buildings and General Hospital on the hills in the distance.

The two entrances to the School for the children are approached from a pleasant avenue on the south lined with tall plane trees, and is away from main traffic-ways.

PROGRAMME.

The School provides twelve classrooms, including an "Art" and "grades" room, cloak rooms, lavatory accommodation, offices and lavatories for the Principal and Staff—the assembly hall to seat 450 pupils will be erected later—and Native staff quarters with cooking facilities, etc.

Owing to the natural slope of the ground, it was found possible, when designing the building in relation to the playground, that with a small amount of excavation the playground could be brought in and under the classroom block to form a covered shelter.

This shelter is an architectural feature of the building, is well ventilated by a series of protected openings high up at the south wall arranged above the grassed terrace, and affords ample space—being the entire length of the central block—for the children during lunch intervals; gives protection from the hot summer sun and the frequent rain storms experienced in this part of the Transvaal. As this shelter is paved, less dust and mud is likely to be brought into the building.

The excavated earth has been used to form terraces and sloping ways at the entrances, which lead down to the large level lawn in front of the building.

A cycle park is placed against the southern retaining wall, between the two entrance gates.

THE PLAN

The various departments have been zoned and planned as distinct entities, so that the ten classrooms occupy the central position facing south, with a wide main corridor having the northern aspect.

The two end classrooms are flanked by circulation units, containing the entrances and cloak rooms, lavatories etc., with the boys' entrance on the south-east and the girls' entrance on the south-west.

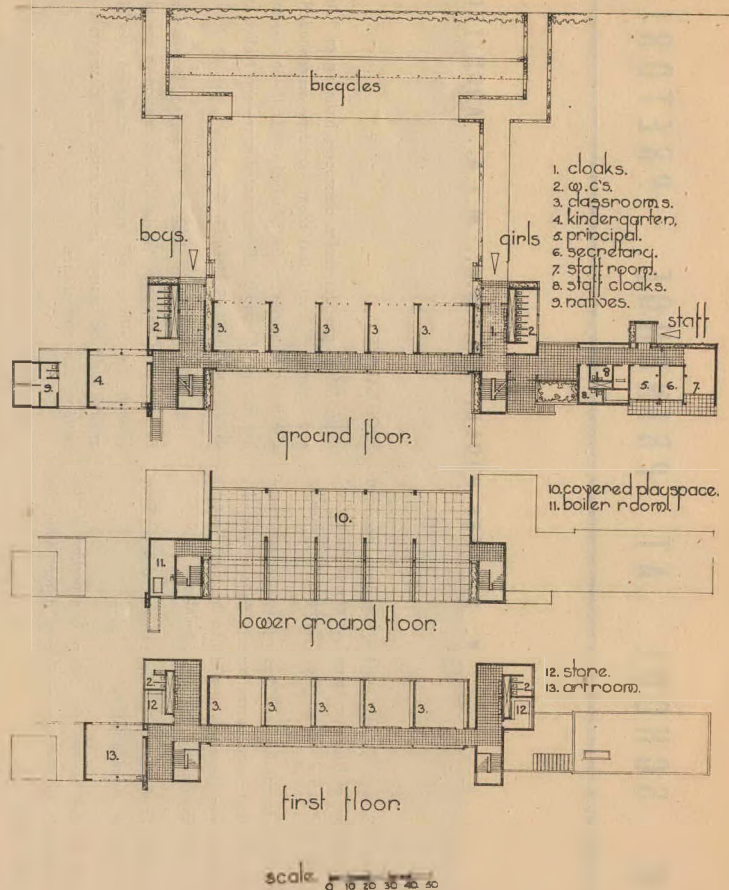
Opposite each entrance a staircase is placed for easy access down to the shelter and playgrounds, and up to the class rooms on the first floor.

The main corridors overlooking the playgrounds are closed with sliding sash windows of teak, as this particular area is low-lying, cold and fog-bound in the early mornings of winter.

On the ground floor the main corridor is widened and becomes a lobby, which links the Staffs' rooms to the class room block. The lobby has glazed screens on both sides, with a pergola garden immediately in front of the screen on the north side. The porch and these rooms are so placed to allow direct access for parents from the entrance in Prinsloo Street. From this lobby and porch contact will be made with the future assembly hall.

An overhanging balcony is carried the full length of the Staffs' rooms, from which the playgrounds are under observation. On the ground floor at the eastern end of the building is placed a "grades" room; next to this room is a small verandah with steps leading down to a playground reserved for the small children.

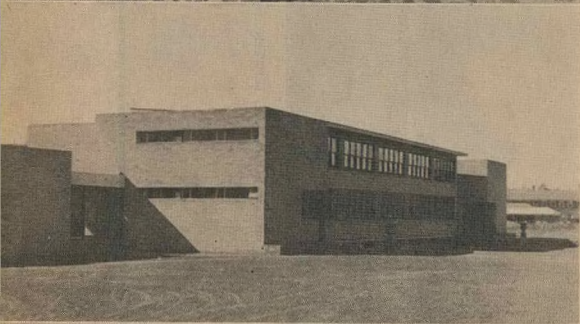
On the first floor the "Art" room occupies a similar position over the "grades" room.



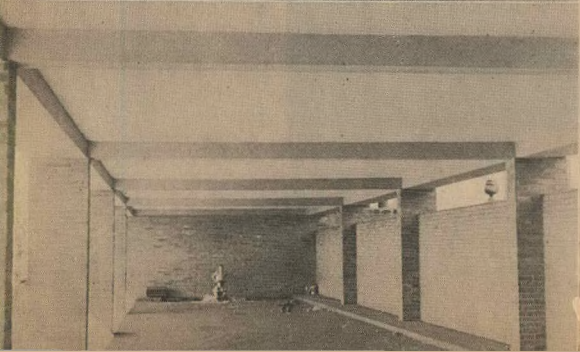


NEW SCHOOL AT PRINSHOF, PRETORIA

V. S. REES-POOLE, F.R.I.B.A., M.I.A., ARCHITECT



1. The Pergola Entrance from the Playgrounds on the North Front of the School.
2. General view of the South Front, showing the Children's Entrance and the Classroom Block.
3. The Playground Shelter, a feature of the plan, providing a valuable addition to the play space.
4. General view of the School and its setting, showing advantage taken of site and ground levels.



STRUCTURE

The building is a reinforced concrete frame structure, with concrete flat roofs over the lower and smaller units. The central classroom block and Natives' quarters have "pent" roofs, covered with corrugated iron. External walls are faced with special bricks 14 in. long, and are of a varying light buff colour. The dados to corridors are of similar bricks, and the staircases and shelter are lined with smaller bricks of a burnt sienna colour. The Staffs' rooms have plastered walls, tinted.

External windows are sliding sashes of teak and occupy the full length of the classrooms and corridors. All sills are finished in cement, untinted. Doors throughout the building are flush panel, fitted with chromium-plated furniture.

Floors to entrance porches, cloak rooms, lavatories, corridors and stairs are paved with cement tiles of a rich blue colour, set with a wide joint in plain cement; skirtings to tiled floors are of granolithic finished in cement, untinted. Floors of class rooms are laid with Rhodesian teak strip flooring, and and skirtings are of similar material. The Staff room floors are covered with brown "battleship" linoleum. All doors are enamelled dark grey, with frames painted a cream colour.

The writing boards in the classrooms are a dark green. Below the boards is a range of cupboards with flush sliding doors, painted dark green to match the writing boards. The boards and cupboards are in a frame of silver grey. On the walls opposite the writing boards is a pinning board, distempered cream, set in a frame of silver grey.

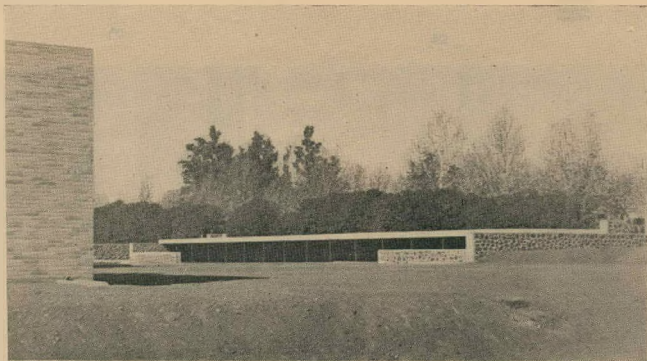
Window framing in the classrooms is painted a cream colour. The frieze above the fittings is distempered a pale green and the ceilings are finished white.

In main corridors the window framing opposite the class rooms is painted a light salmon pink, and the framing to the range of windows on the north side are of oiled teak. The circular columns are enamelled bright green.

The walls of cloak rooms and lavatories are enamelled white, with white hat and coat hooks to match, and the ceilings are distempered a pale green.

The classrooms are central-heated, and all pipes are in ducts.

When the planting scheme and the various recreation grounds have been completed, this undertaking will constitute an achievement which will contribute in full measure towards the provision of an attractive centre for the welfare of the young community of Pretoria.



THE CYCLE PARK ON THE SOUTH BOUNDARY BETWEEN THE CHILDREN'S ENTRANCE

THE TWENTIETH ANNUAL EXHIBITION AND PRIZE-GIVING

SCHOOL OF ARCHITECTURE, UNIVERSITY OF THE WITWATERSRAND

The Twentieth Annual Exhibition and Prize-giving took place at the University on Friday, May 19th, 1944.

Professor Pearse, after welcoming the guests, said: "We are particularly pleased to have with us this afternoon Mr. D. M. Cowin, President of the Transvaal Provincial Institute of Architects, who has kindly consented to present the prizes, and Mr. D. S. Haddon, President-in-Chief of the Institute of South African Architects. In spite of the war, the School has grown considerably and, as a result, we are hard pressed for accommodation, and have had to sacrifice our library to convert it into a studio.

This year there are 73 students in the first year, 18 in the second year, 21 in the third year, 15 in the fourth year and 11 in the fifth, making a total of 138. Of these, 110 are taking Architecture and 28 Quantity Surveying. In Fine Arts 70 are taking the ordinary B.A. course and 10 the Honours course. At the March graduation ceremony 6 Degrees (B.Arch.) were conferred, two with distinction, and 5 Diplomas were awarded.

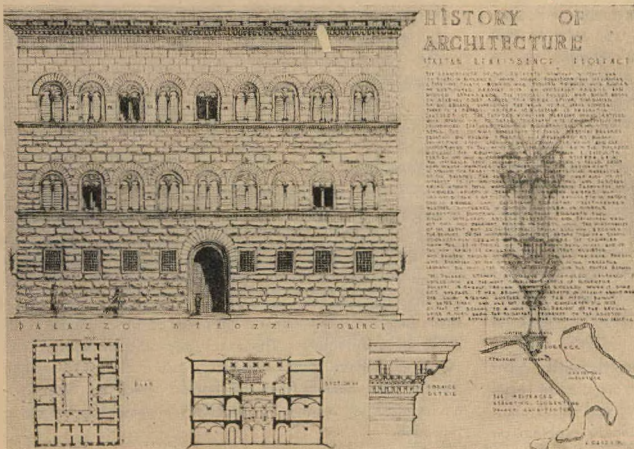
The following students were awarded the distinction of Scholars of the University for the past year: N. F. Duncan,

G. Herbert, R. Levinsohn, R. L. Niebuhr, G. W. Rhodes-Harrison, M. E. Sheridan, F. H. Vermeulen.

During the past year Mr. G. P. Quail assisted Mr. McKechnie during part of the year in the Quantity Surveying courses during the latter's illness. We are glad to have Mr. McKechnie back with us again. Miss Leonard, who was in charge of portions of the Fine Arts courses, has resigned, and I should like to record our appreciation of the work she has done for us in the past. Mr. P. A. Hendrikz, Curator of the Art Gallery, is assisting us in a part-time capacity during the absence of Mr. W. de S. Hendrikz, who is absent on leave.

We are glad to welcome Miss Betty Spence as a temporary junior lecturer in the Department of Architecture.

I have much pleasure in announcing that this year we have commenced a new course for a Diploma in Town Planning, and 32 students have registered for the course. In conclusion I should like to congratulate the Staff and students on the excellence of the work carried out during the past year, a selection of which is on an exhibition.



THE DRAWINGS ILLUSTRATED ON THIS AND THE FOLLOWING PAGES ARE A SELECTION FROM THE EXHIBITION OF WORK BY STUDENTS CARRIED OUT DURING THE PAST YEAR

STUDY OF RENAISSANCE ARCHITECTURE

By L. Chaffin, Third Year

The prizes this year have been presented by the Transvaal Provincial Institute of Architects, Mr. D. M. Burton and Mr. W. G. McIntosh. I shall now call upon Mr. Cowin to present the prizes and address you. Mr. Cowin is well known to most of you. He graduated in Architecture at Liverpool University, where he achieved distinction, and his work in Johannesburg is outstanding. He has taken a keen interest in the activities of our profession in the Transvaal and also in our School, and is now a member of the Central Council of the S.A. Institute of Architects.

The prizes were awarded as follows:—

First Year : 1, Mrs. M. E. Sheridan; 2, Miss R. Levinsohn.
Second Year : 1, G. W. Rhodes-Harrison; 2, G. Herbert.
Third Year : 1, F. H. Vermeulen; 2, C. Segal.
Fifth Year : 1, R. L. Niebuhr; 2, Miss B. Greenman.
D. M. Burton Prize : R. L. Niebuhr.
F. Gordon McIntosh Prize : R. L. Niebuhr.
L. R. F. Bustin Prize : G. W. Rhodes-Harrison.
Gordon Leith Prize : R. L. Niebuhr.

ADDRESS TO THE STUDENTS OF THE SCHOOL OF ARCHITECTURE UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG, ON 19TH MAY, 1944

By Mr. D. M. Cowin, President of the Transvaal Provincial Institute of Architects

In addressing you this evening, I must first express the thanks of the Transvaal Provincial Institute of Architects, for the honour you continue to bestow on them, in asking their President to attend this annual exhibition of work and present the prizes to the successful students. To this I would add my personal thanks, for I have watched the growth of your School of Architecture with particular interest during the past few years, and it gives me great pleasure to participate directly in one of your many activities.

Through attending your exhibitions, and by direct contact with students who have been employed by my firm, I have been able to trace the evolution of architectural conception through the Baker period, the Le Corbusier and Martienssen phase, up to the present where a very strong note of Realism appears to have become evident. While appreciating that the disciples of the Corbusier School were activated by a desire to break away completely from the Classical and Victorian tradition, I venture to express the opinion that their policy has not always best served the interests of the profession or architectural achievement. We are all agreed that architectural reform is urgently required in this country, and whether it is to be achieved by evolution or revolution is a sociological problem on which the Corbusier adherents, and those of what I shall call, for lack of a better definition, the School of Realism, appear to differ. From experience of the past few years, I suggest that the latter school has done and is doing more for the cause of architecture, and I gather from the type of work I see exhibited here to-night that I am not alone in this respect.

My opinion in this regard is that our "Functionalists" have been apt to lose sight of the fact that under our present social system architecture cannot be entirely divorced from commercialism. This brings me to another delicate problem on

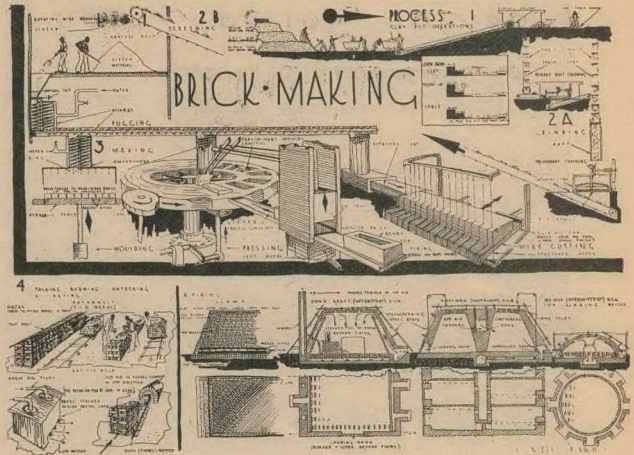
which I won't venture to express an opinion either way, but I simply put it forward to you as a problem which you must inevitably face when you start in practice on your own.

Briefly, the question you will be faced with is this—"is your function as an architect to interpret your clients' exact wishes in the best architectural manner possible, or is it your job to give him what you, as a trained architect, think he ought to have—in other words, if your client wishes his house built in the Tudor style, do you accept the fact and do as good a Tudor house as is possible, or do you refuse and insist on him accepting your idea of what a contemporary house should be?" I repeat that I make no attempt to answer this question, and only mention it as a very serious item for consideration in your architectural studies.

In referring to the activities of your Architectural Society, I wish particularly to congratulate those members who were instrumental in producing the symposium "Rebuilding South Africa." Apart from a very direct benefit to our profession, it is assisting materially in educating the lay public to the necessity not only of architectural and town planning, but social reform as well. It should be gratifying and stimulating to the authors that the demand for copies of the "Record," in which the symposium was published, has been so great, that it has been decided to make a reprint of the two issues of the "Record" in book form. The Central Council has underwritten any loss which may be incurred in this re-publication, and has gone further and voted a considerable sum out of their funds for the general purpose of propaganda in the cause of architecture. The exact ways and means have not yet been defined, but I can safely assure the present Chairman of your Society that the booklet which his Committee has in mind will receive the necessary financial support out of this fund.

A GRAPHICAL STUDY OF THE MANUFACTURE OF BRICKS

By D. E. Connell, First Year

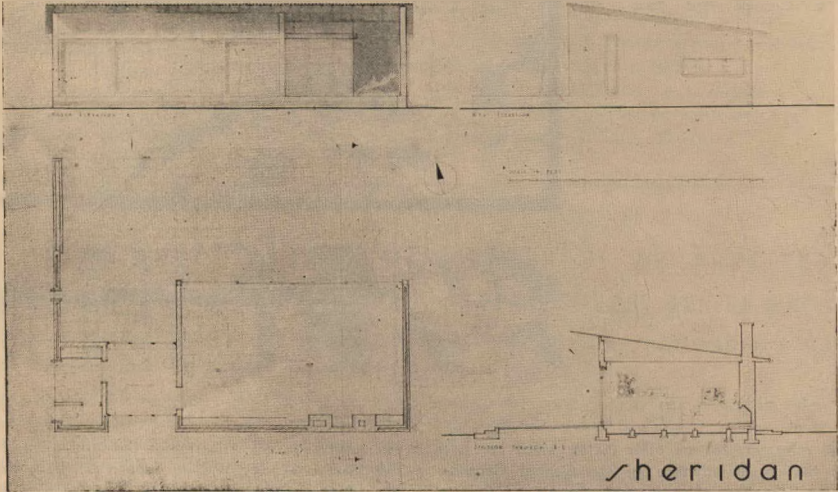


I would refer you to one other matter which has been receiving the urgent attention of the Central Council—namely, the inception of a National Town and Country Planning Association on the lines of the parallel body in Britain. You may remember that such an Association existed in the Transvaal, and was largely instrumental in having our present Town Planning Ordinance promulgated. Having achieved this, unfortunately they ceased to operate actively, though the kindred body in the Cape is to-day continuing its very good work of the past. Professor Pearse, one of the founders of the Transvaal Association has undertaken to resuscitate it, and it is proposed that it should form the nucleus of a Witwatersrand or Transvaal Regional Committee of the national body. It is anticipated that the formalities and constitution will be completed within two or three months, and, while the Government and Local Authorities have ostensibly committed themselves to certain schemes of concern to such an Association, it is felt that there is still time for it to play an active and vital part in the future development of South Africa. I mention this fact because I remember the feelings of frustration I felt as a student full of idealistic theories—the feeling of dismay I entertained that while our training fitted the architect to solve many of the social and planning problems confronting us, no concerted effort was made to take advantage of this technical proficiency. Under our present social system it may take years before any concrete results are achieved by this Association, but when

you qualify you will at least have the satisfaction of knowing that there is a body, and we hope it will be a very active one, which is endeavouring to see that the aims and ideals in which you have been instructed are attaining some measure of achievement.

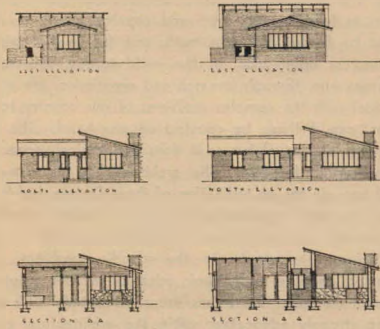
I have mentioned town planning, and in conclusion I wish to add a note of warning to you as students. I will not say it is universal, but there is a very large number of our profession who imagine that their architectural training qualifies them as fully-fledged town and country planners. Nothing could be further from the truth, and that is the point I wish to impress upon you. In the world to-day, the number of planners who, through research and experience, are competent to deal with the complex problems of our country towns and cities, can, I think, be counted on one hand. The problem is a vast one, involving as it does sociological, economic and demographic factors. The architect has his rôle—a very vital one—in the co-ordination of these factors, but he cannot hope to work independently of the social scientist, the economist, the statistician and even—should I say—the politician. The answer to the specific problem of town planning appears to be their adoption of the group system, wherein all these technicians are represented. This system is being strongly advocated within the architectural profession itself, and again my remarks are put forward as food for thought in your studies, which you realise no doubt, as well as I do, become more complex with each day that passes.

design for a study



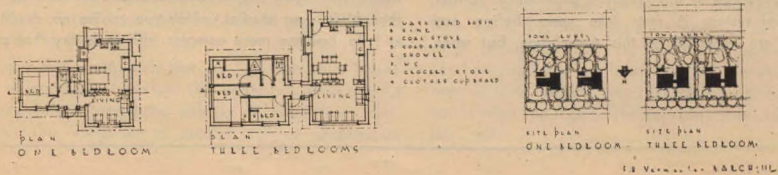
DESIGN FOR A STUDY IN A PRIVATE GARDEN.

By Mrs. M. E. Sheridan, First Year



A SKETCH DESIGN FOR ONE- AND THREE-BEDROOM COTTAGES FOR A NON-EUROPEAN HOUSING SCHEME

By F. H. Vermeulen, Third Year



PRIMARY SCHOOL



NORTH ELEVATION



SOUTH ELEVATION

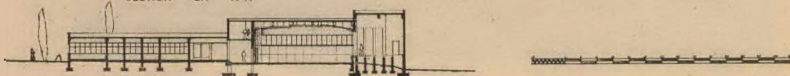


WEST ELEVATION

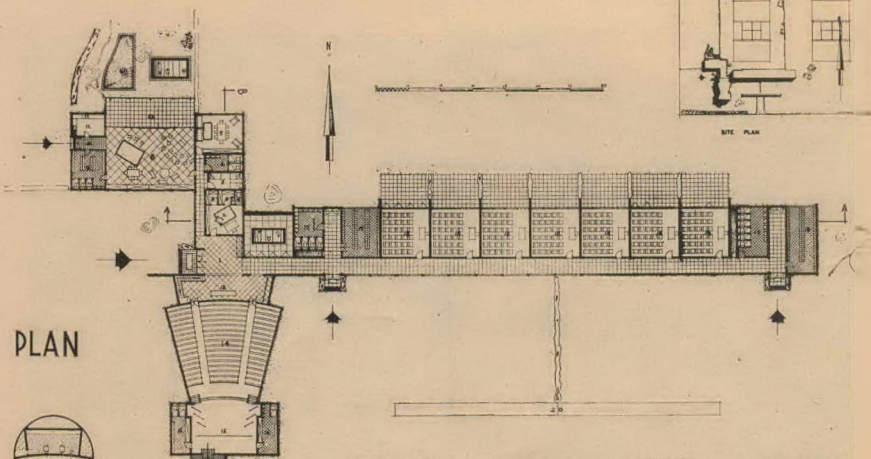
EAST ELEVATION



SECTION ON A-A



SECTION ON B-B



PLAN

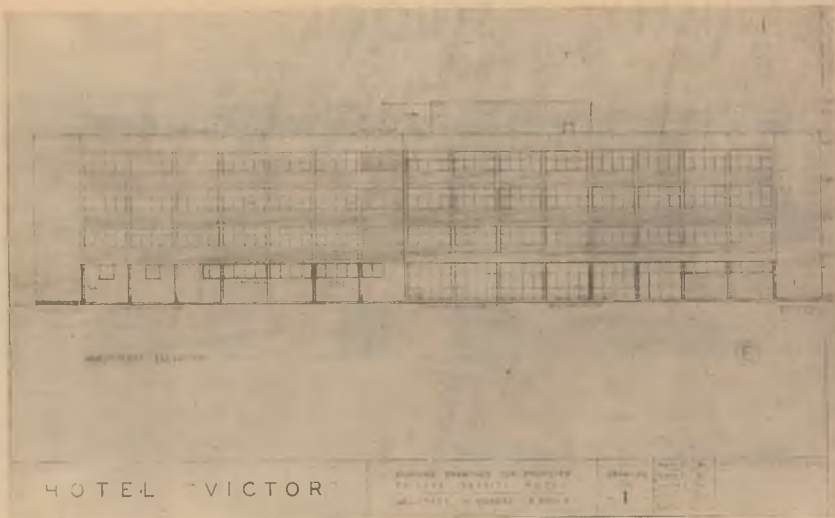


PLAN OF REJECTION ROOM

- | | | |
|-------------------------|-----------------------|----------------------|
| 1. MAIN ENTRANCE HALL | 6. SHIP CLOSES | 11. KITCHEN & OFFICE |
| 2. PRINCIPAL'S OFFICE | 7. STAFF ROOM | 12. COVERED TERRACE |
| 3. STOCK ROOMS | 8. NURSERY SCHOOL | 13. POWERS |
| 4. PRINCIPAL'S LAVATORY | 9. NURSERY CLOSETS | 14. ASSEMBLY HALL |
| 5. WORK ROOM | 10. INFANTS' ENTRANCE | 15. STAGE |
| | | 16. DRESSING ROOMS |
| | | 17. BOY'S CLOSETS |
| | | 18. CLASSROOMS |
| | | 19. GIRL'S CLOSETS |
| | | 20. BICYCLE SHEEDS |

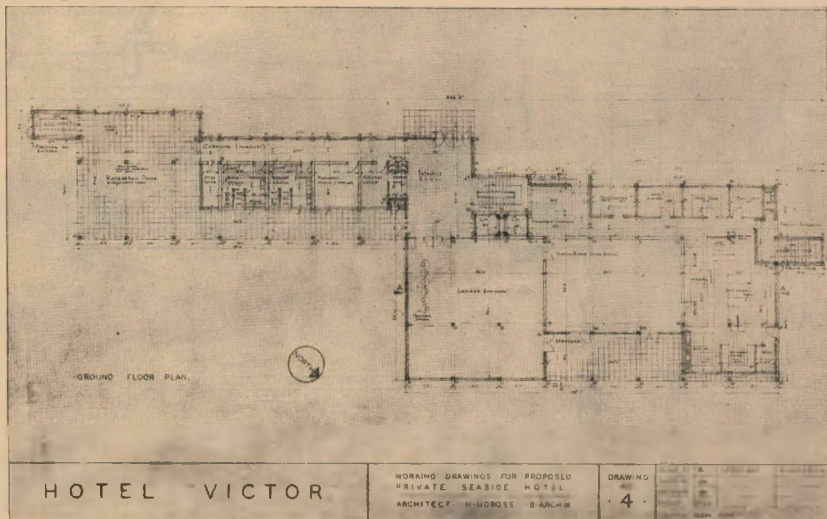
DESIGN FOR A NURSERY AND PRIMARY SCHOOL

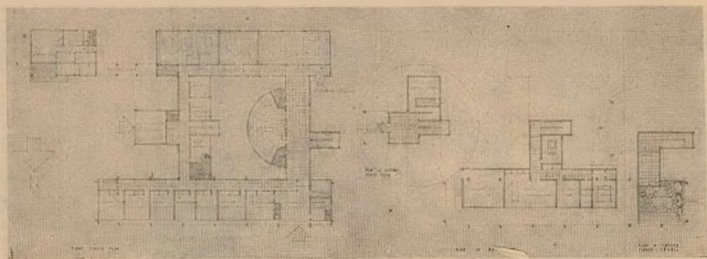
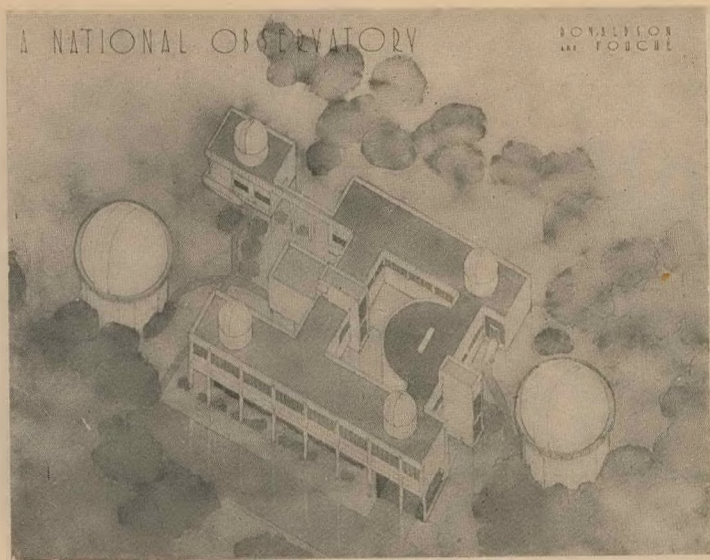
By G. W. Rhodes-Harrison, Second Year



DESIGN FOR A PRIVATE SEASIDE HOTEL

By H. Moross, Third Year



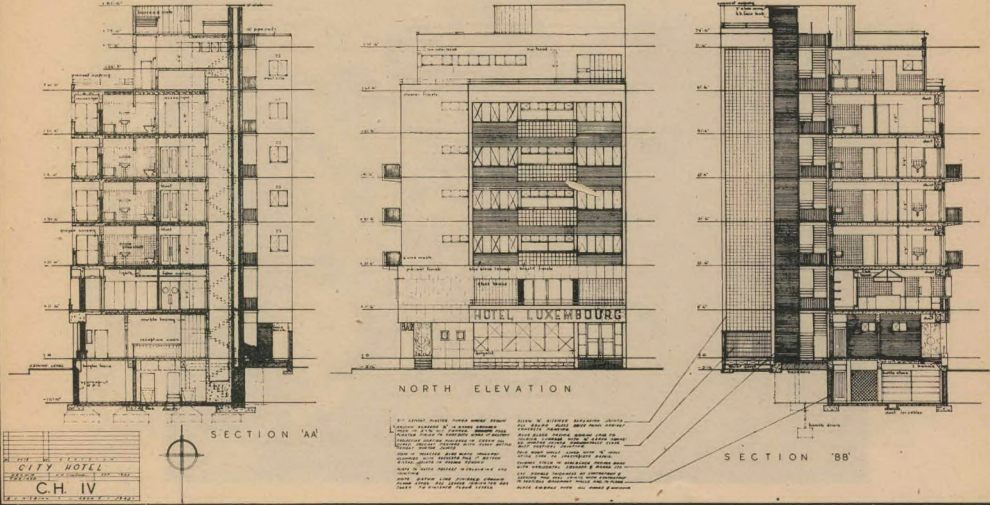


FIFTH YEAR GROUP STUDY SKETCH DESIGN FOR A NATIONAL OBSERVATORY

Presented by K. Donaldson and V. Fouche

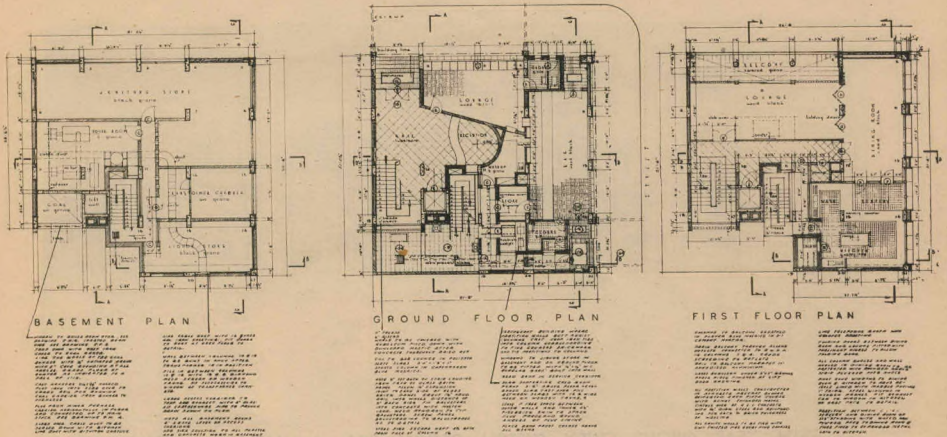
PROPOSED • CITY • HOTEL • ON • STAND • 10
JOHANNESBURG • FOR • MESSRS • QUILL • & • PINE.

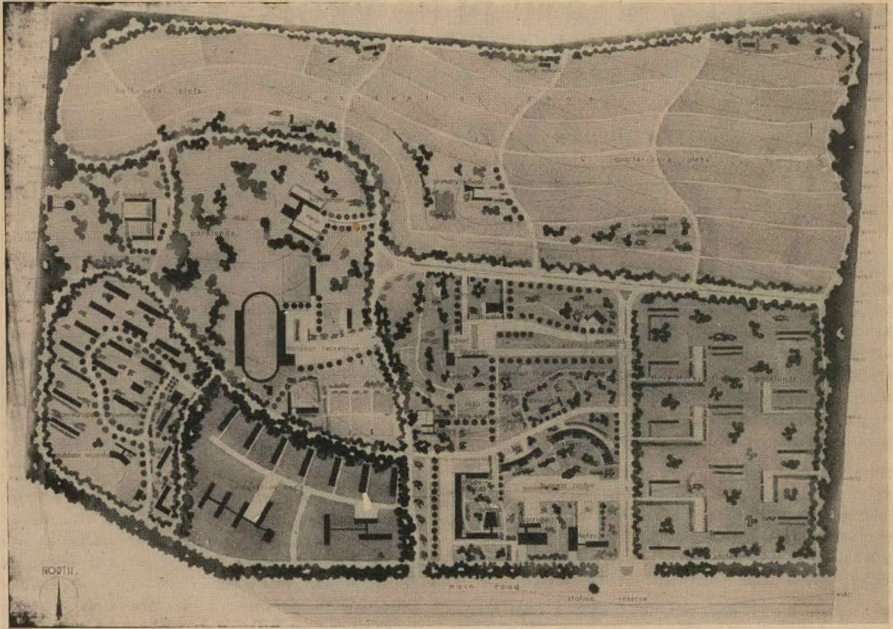
EIGHTH SCALE WORKING DRAWINGS



PROPOSED • CITY • HOTEL • ON • STAND • 10
JOHANNESBURG • FOR • MESSRS • QUILL • & • PINE

EIGHTH SCALE





A SMALL REEF TOWN, 1 : 800'

Study by M. Simon, Fifth Year

Opposite :

A DESIGN FOR A CITY HOTEL

Presented by R. L. Niebuhr, Fifth Year

"COST PLUS WASTE PLUS PROFIT CONTRACTS" AND THEIR REPERCUSSIONS

BY R. F. R. DAY, A.R.I.B.A., M.I.A.

Architects in the various centres are often asked why our Institute has done nothing to assist and guide the industry in these abnormal times, and we naturally find it difficult to reply. Only a few of us are aware of the many voluntary offers, negotiations and constructive reports made to responsible officials and their negative results, and that these efforts to assist the Government and our country's second largest industry commenced as early as May, 1939, when hostilities appeared imminent.

It has not been for the want of sufficient advice or the efforts of our Institute and its many qualified and technically experienced members (both in and out of the various responsible departments) that the authorities, military and otherwise, have indulged in this benevolent contractual gift to builders' merchants and a small percentage of contractors.

The Institute should, therefore, now publish a brief resumé of its repeated approaches, in particular to the Department of Defence, lest we, too, are blamed for the serious repercussions which have and may continue to develop, to the complete disruption of normal competitive methods of building. Our profession has always opposed this "contractual joke," and even refused to draft a contract to meet this loose method of building. A sight of the report of the Select Committee of Public Accounts on this subject would make humorous reading if the consequences were not so serious.

The steadily increasing cost of building was predicted by the profession, as were the political repercussions to the Cost Plus, but the time has arrived for a concerted drive if we are to prevent the small would-be-home-owner from being fleeced more heavily now, just because the rights and wrongs of a technicality were swamped in a political sea to protect a few officials responsible. Our primary interest is the building industry, not politics, and now that a large number of us are out of the Army and post-war construction seriously mooted, it is time that the Institute—an unbiased technical body—took its rightful place in all discussions affecting our country's building machinery.

To correct the inherent defects in the machinery and reduce the cost of building, requires the unbiased assistance of the Government and the Institute of Architects, to the complete

exclusion of vested and political interests, if we are to combat the demoralising influence of the "Cost Plus Waste Plus Profit Contracts" within the next few years.

When it is appreciated that the labour cost is the major proportion of the average building work, and that it has received every encouragement in this form of contract to "go slow" over the last few years, it should be obvious that every encouragement should be given for a reversion to conditions which will allow of firm competitive tendering.

Without elaborating in detail, brickwork measured on one Defence cost plus contract operating five days a week showed 1,180 bricks per man hour per 10¼ hour day; three months later the same class of work measured revealed an average of 290 in a 9¼ hour day in the same area: shuttering measured cost 70/6 per square in labour only—approximately double the peacetime competitive price for the same class of work, including the material.

Brickwork measured in the Cape recently showed an average of 540 in an 8-hour day—and unemployment exists in this Province! For this class of work 1,000 to 1,100 would have been obtained pre-war—a war-time increase of approximately 50% in labour costs, ignoring increased wages, cost of living and "allowances."

I overheard the dry remark of a sergeant time-keeper on a defence contract when a Native trotted by pushing a rubber-tired wheelbarrow: "Poor devil, he'll be fired to-night"—indicative of the general attitude.

This "Cost Plus standard of Labour Productivity" is one item which must be reorganised if post-war costs are to be reduced and a reversion to a piece-work basis of labour avoided. The competitive commercial world cannot afford to swamp their works with labour at these prices in order to avoid delayed contract completion dates.

The cost of material is the smaller proportion of the average building work (and now we enter a delicate sphere), but then prosperity is sufficiently obvious when one considers that the cost of materials to Government cost plus contracts have been, in the main, non-competitive prices and merely "controlled," and that their main grumble appears to be E.P.D. apart from the usual permit, shipping priority and control grumbles.

To reduce the cost of materials it is obvious that the competitive system of tendering must be encouraged to the full in this and every other phase of the industry.

To avoid competitive pricing, the merchants in pre-war conditions financed a very large percentage of contractors (directly and indirectly) and introduced a pernicious method of delayed credit—sixty and ninety days (not to mention discounts)—which further assisted the contractors to finance their contracts, but tied them to the particular merchant's house and at his price. This has resulted in the introduction of unqualified contractors into the industry (not that a contractor can qualify in this country—but less qualified than, say, the average member of the Master Builders' Federation).

These methods may be considered sound from a commercial standpoint, but the influence on the industry is unhealthy; too often the wrong type of amateur builder "takes off," only to negotiate an uncomfortable "one point landing" on the debit side of his runway; the merchant cuts his losses, if he is wise, and generously distributes this deficit among the innocent building public in increased costs of materials. Close investigation of the relevant files would provide interesting reading.

Under normal conditions some larger contracting firms import quantities of materials direct through their own shippers, which naturally assists them in reducing their competitive tenders and securing the contracts; but the small contractor (who is very often more of a craftsman) cannot. Is it not possible to form a co-operative master builders' organisation to assist direct import for their builder members, and obtain official preferential treatment in the granting of the necessary shipping and import permits? Pre-war, this Federation formed its own insurance company for similar reasons, with the most satisfactory results to date.

Healthy competition of this nature would reduce costs, and the merchants working on a smaller profit margin would not be so ready to introduce and finance "amateur contractors."

Admittedly there are difficulties. Large stocks are held throughout the country (despite statements by control "enthusiasts"), imported at high war-time costs, and nobody would advocate that these merchants should bear the whole of the loss; even this loss may be reduced if the controls of

materials were replaced by the control of the class of building. We have to ask ourselves if the control of materials (which is partly responsible for the stocks held) has not served its purpose: it has; the large Defence programme is, to all intents and purposes, complete. It is possible, too, that this control has now defeated some of its objects—leakages have kept the uncontrolled or "black markets" buoyant at prices 300% and 400% above peace-time levels. My wealthy clients can secure their fittings before applying for their permits, whilst my small home-owner-client experiences difficulty in obtaining them after he has received a permit.

At best, it is only partial control, which, after all, is worse than none at all; particularly when considered as another aggravating factor against competitive tendering, and because of this control we, and the many other executives in this large and important industry, find ourselves working very much harder and achieving very much less—a clear indication that this excessive effort with decreased results is another serious factor in the steadily increasing cost of building.

The main argument for the retention of the control of materials appears to be the prevention of the cornering of certain material markets—but this condition existed pre-war and does to-day. Price control and assisted import to a master builders' pool immediately shipping is available would undoubtedly discourage this practice and reduce prices and generate more healthy conditions in the industry.

Admittedly, the immediate abolition of "all" control affecting the industry would prove unsatisfactory, but in the substitution of the "control of buildings" for the control of building materials, I can see no more serious consequences than the chaotic conditions in the industry to-day. This suggested form of control would relieve the industry of many petty aggravations, reduce costs, absorb unemployment (which exists locally), and would prevent wasteful or luxury building.

With the approach of the building boom it is imperative that the defects inherent in the industry, and those developed in the last four years, be energetically dealt with by a responsible body of unbiased representatives, with emphasis on assistance in any direction likely to encourage competitive pricing and consequent reduction in costs, which, after all, is one of our main functions professionally.

THE STUDENTS' FORUM

AN HISTORICAL SURVEY OF THE RELATIONSHIP OF SCULPTURE TO ARCHITECTURE

By Gilbert Herbert, B.Arch. III, University of the Witwatersrand

Sculpture and architecture have played a dual, and often interdependent rôle in the development of cultures and civilisations throughout time. Their conjunction has often been stressed, often discussed, usually with a bias to weigh down one arm of the argumentative scale, a prejudice to countersink the others. Some say that sculpture exists for the sole reason of decorating and ornamenting architecture. Others say that architecture is merely the medium for great sculptors to express themselves. What is the true position? If sculpture and architecture are individual arts, can they be combined to the complete satisfaction of both? Are they mutually compatible? The answer to these questions lies buried in the history of bygone ages, and it is there that we must excavate for the facts, analyse them, and endeavour to find the answer we seek. Backed by this knowledge of the past, and our experience of the present, we can peer into the future, to try and foresee what paths sculpture and architecture are traversing, what relationship will exist between them.

Thirty thousand years ago, man, by present standard was a sorry spectacle. He had no clothes, he had no home. He dwelt in rough caverns as the beasts of the jungle do. He was governed by instinct, not thought, just as the fish and the fowl were. Man was an animal, crude and vicious, possessed only of that divine spark which separated him from the beasts surrounding him, which made him do things which, purely instinctive as they were then, showed an embryo mind and an embryo soul. For it was something deep down in man's soul which made him turn to art. The lion that prowled the plains knew nothing of the beauty of a soft, moulded form—but man did. The panther, poised in his precarious perch, knew nothing of the beauty of a quick incision line—but man did. Man knew beauty; he felt its compelling power. When man first carved a spear-handle, and separated a decorative motive from a utilitarian one, the spark of civilisation in him kindled into flame. And man, groping in the darkness, came by instinct upon sculpture as the outlet for his feelings. This, I feel, is deeply significant. Before man was clothed, before he was housed, that is, before architecture in the crudest form was begun, man was a sculptor.

This is a phenomenon common to all primitive people. One finds in Europe, during the Paleolithic Age, carvings of bison, mammoths, reindeer and all the animal life of that ancient era. These statues, it should be remembered, fine carvings as they were, were executed 10,000 to 20,000 years before even such a rudimentary structure as Stonehenge was conceived. In another land, and another time, we find a different race developing the same trait. The architecture of the negro of Central Africa is practically non-existent, but his sculpture is of an extremely high standard. His understanding of form, his conception of three dimensions in space, is remarkable. "Every part in a typical, fully-realised negro statue functions as an element in plastic design: an embodiment, a repetition in rhythmic, varied sequence, of some theme in mass, line or surface."¹ This, mark you, is a commentary on the sculpture, not of a Michelangelo or a Rodin, but of a people who, architecturally, had not advanced beyond the grass hut stage. The North American Indian, living in ramshackle, primitive wigwams, still had the aesthetic inspiration to produce beautifully carved totem poles, canoes and ceremonial masks.



FIGURE SUPPORTING TABLE
Congo. XVII C. Barnes Coll. Merion, P.A.
A sketch by the author from a photograph by Morgan, published in "ART THROUGH THE AGES," by Helen Gardner.

Journal of the SA Architectural Institute

PUBLISHER:

University of the Witwatersrand, Johannesburg

LEGAL NOTICE:

Disclaimer and Terms of Use: Provided that you maintain all copyright and other notices contained therein, you may download material (one machine readable copy and one print copy per page) for your personal and/or educational non-commercial use only.

The University of the Witwatersrand, Johannesburg, is not responsible for any errors or omissions and excludes any and all liability for any errors in or omissions from the information on the Library website.