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Acting Editor—
E. H. WAUGH, A.R.I.B.A., M.S.A.

Assistant Editor—
R. HOWDEN, A.R.V.I.A., F.S. ARCH.

Business Manager—
MURRAY K. CARPENTER,
67, EXPLORATION BUILDINGS,
COMMISSIONER STREET,
P.O. Box 2266. JOHANNESBURG.
'PHONE 5821.

EDITORIAL NOTE.

The Editor will be glad to consider any MSS., Photographs or Sketches submitted to him, but they should be accompanied by stamped addressed envelopes for return if unsuitable. In case of loss or injury he cannot hold himself 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 Association does not hold itself responsible for the opinions expressed by individual contributors.

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THE ARCHITECTS' ACT.

Forthcoming Conference.

With a view to obtaining first hand comment upon the provisions of the proposed Architects' Act for the statutory qualification and registration of Architects and Quantity Surveyors throughout the Union, the Registration Executive Committee, who have charge of this important proposal, have been engaged upon arrangements for holding a conference of members of both professions to discuss the measure in detail.

Practical unanimity of choice of venue for this conference decided upon Capetown, and the President and members of Council of the Cape Institute of Architects, on being approached, immediately welcomed the proposal, so that the conference will open in that city on the 10th January, 1923.

In the meantime all the architectural bodies throughout the Union are conducting meetings of their members, at which the Act is being formally discussed in detail, and any suggestions for amendment thereto will be submitted to the Registration Executive for consideration at the conference.

In the cases of unattached members of the profession or members living at a distance from any meeting place, desirous of submitting criticism or amendment to the document (which was posted on the 27th October to all known members of the profession), they should immediately communicate with the Secretary to the Executive, 67, Exploration Building, Johannesburg, so that any suggested alteration may be considered.

At the conference it is intended to further consider the new form of Conditions of Contract, and any suggestions respecting the provisions made in this document should be sent to the Registrar of the Association of Transvaal Architects, P.O. Box 2266, Johannesburg to ensure immediate attention.

The agenda for the conference is not yet ready, but members interested may obtain a copy, when ready, on application to the Registrar as above.

UNIVERSITY COURSE IN THE FINE ARTS.

It will be of interest to Architects to know that the University of the Witwatersrand has instituted a course in the History of the Fine Arts as a subject in the Arts course.

The course includes:—

Prehistoric Art and the first dwellings of man.
The Arts in Upper and Lower Egypt, Babylonia, Assyria, Persia.
Earliest Art in Crete and Greece: History and development of Greek achitecture, sculpture and painting, and its influence on later Art.
Etruscan and Roman Art.
Early Christian, Byzantine and Romanesque Art.
Gothic Art.
Renaissance Art, including the schools of painting and the gradual divorce between architecture and the other Arts.
Arab, Moorish and Oriental Art.

The course deals with the architecture, sculpture, painting, decorative Arts, armour and costume, tapestry, the crafts: wood work, metal work, furniture, etc., of each period, and the influences affecting their design.

Criticism and appreciation are also dealt with, and the subject should have a far-reaching effect in improving the standard of public taste, which must reflect itself in the Architecture and Art of this country.

Mr. E. H. Waugh, who sustained a fractured wrist through a fall which befel him during the execution of his official duties, has recovered and is now back at duty.

THE SOUTH AFRICAN INSTITUTE OF QUANTITY SURVEYORS.

Extracts from Minutes of the First Council meeting, 1922 Session, held at the Scientific and Technical Club, Johannesburg, on Saturday, 1st July, 1922.

PRESENT.—Messrs. T. Moore (President), G. E. Howgrave-Graham (Vice-President), N. T. Cowin, E. B. Farrow, F. Hickman, H. Rowe-Rowe, and A. Loots (Secretary).

The President welcomed Mr. Hickman, and expressed pleasure at seeing him again a member of the Council.

The President apologised for Mr. Puntis' absence, who was unable to attend owing to the illness of his child. The Council requested the Secretary to write Mr. Puntis tendering their regrets and sympathy.

MINUTES OF PREVIOUS COUNCIL MEETING.—On the motion of Mr. Hickman, seconded by Mr. Cowin, these were taken as read and confirmed.

BUSINESS ARISING OUT OF MINUTES OF PREVIOUS MEETING.—The President stated that the Secretary had sent a cheque for £5 4s. 9d. to the Associated Societies. This was more than the quarter's levy, but would be adjusted this term.

Letters were read from the Secretary of the Institute to the Registrar, A.T.A., and to Mr. James Brown, Capetown, with reference to the publication of S.A.I.Q.S. records. No replies had been received, but the minutes of previous meetings had duly appeared in the journals edited by these gentlemen.

Re Conditions of Contract: The President explained that this matter had now been agreed to, and printed copies were available and obtainable from Mr. M. K. Carpenter, P.O. Box 2266, Johannesburg, price 6d. each.

Re Balance Sheet: A letter was read from Mr. Cowin pointing out that the sum of £10 appearing in the minutes of the annual general meeting as allocated to education should be £20. The Secretary was instructed to make the necessary alteration.

The fixed deposit of £150 at the Standard Bank had matured and been withdrawn, and £100 redeposited.

Endorsement of Certificates: (1) Mr. Hooke's to be endorsed "resigned," and signed by President and Secretary, and returned to him. (2) Mr. Bevan's to be returned to him, and provision made in the by-laws for non-practising members. (3) Mr. Bell-John's to be endorsed "elected life member" and returned to him.

RESIGNATIONS.—A letter from Mr. Dakers, dated 24th April, 1922, was read resigning membership from the Institute owing to his departure for London. The Council expressed regret at this resignation, and instructed the Secretary to return Mr. Daker's diploma to him duly endorsed "resigned."

ELECTION OF COUNCIL MEMBER.—Mr. Hickman proposed, and Mr. Cowin seconded, that Mr. McCubbin be elected as successor to Mr. Dakers, which was unanimously agreed to, and the Secretary was instructed to write Mr. McCubbin giving the Council's resolution.

STATIONERY.—The Secretary was instructed to have further copies of the application forms printed, with the Institute's stamp appearing thereon.

MUNICIPAL SERVICES.—The President read a letter from Mr. Moore, Secretary to the Master Builders' Association, *re* complaints by the Plumbers' Section of his Association, that they are asked to allow for items in schedules for Municipal services, such as sewerage, water, gas, electric light and fire connections, and requested that a P.C. amount for these connections be set aside in future contracts.

The Secretary was instructed to reply to Mr. Moore that the Institute will endeavour to do as he requests as far as possible.

ARCHITECTS' ACT.—A letter was read from the Architects' Union Registration Committee asking that arrangements be made to ascertain whether all members are in favour of the Registration Act.

The Secretary was instructed to circularise this letter to all members and to obtain their views.

The Secretary to write to Mr. Carpenter that the Council as a whole are in favour of registration, and that individual members are being circularised for their opinions. Also that the Council is not aware of any Quantity Surveyor practising who is not a member of this Institute, except such architects taking off their own quantities, with whom he is dealing direct.

CORRESPONDENCE.—Mr. Thompson wrote that he had retired from the Railways and Harbours administration, and was entering into partnership with Mr. Priestly, at Durban. The Secretary was instructed to wish Mr. Thompson success, and to advise the Town Clerk of Durban of Mr. Thompson's practice in that city.

A letter from the A.T.A. *re* students' prizes was read. The Secretary was instructed to reply that the Council was in sympathy with the principle of giving prizes, and was prepared to co-operate with the architects in this connection, and to allocate a certain sum of money annually for this purpose, provided the money so allocated is devoted purely to Quantity Surveying, and that the examination papers be set and adjudicated by the Institute.

ASSOCIATED SOCIETIES.—Mr. Cowin proposed, and Mr. Rowe-Rowe seconded, that the present members of the Institute continue to represent the Institute as principal and alternate delegates on the Executive of the Associated Societies.

A letter was read from the Secretary of the A.S. and T.S., dated 26th June last, as follows—

> "It is proposed to hold a series of monthly dances under the *aegis* of the Scientific and Technical Club, commencing on August 4th, 1922. The dances will be open to members of the club and their friends. The committee hopes that the constituent societies will give their hearty support to this effort to further the social activities of the club."

Mr. Moore and Mr. Farrow were elected to represent the Institute on the dance committee.

The constitution of the A.S. and T.S. has now been printed, and is being forwarded to all members with those minutes.

The President read a letter addressed to him from Mr. Elsdon-Dew *re* essential services affecting the community at large, and stated that he had replied. The Secretary was instructed to write to Mr. Elsdon-Dew that the Institute was in sympathy with the proposition and gives its hearty support.

Further to write to the Associated Societies mentioning approval of the action of the Executive Committee *re* essential services during the recent strike.

GENERAL.—The Secretary was requested to record that Mr. Waters was Licentiate R.I.B.A., and further to request members to notify him of any change of title or any error or omission of any honours and degrees owing to the amalgamation of the Quantity Surveyors' Association and the Surveyors' Institute.

Further, that members be requested to add commission on cheques when making payments to the Institute.

Messrs. Kendall & Morris, of Capetown, have been successful in their action against the Port Elizabeth Municipality for the recovery of fees in connection with the erection of a hotel at Humewood, a suburb of that town.

PARTNERSHIP.

A practitioner established in Johannesburg is prepared to consider a Partnership with a member of the Association of Transvaal Architects.

All replies addressed to the Registrar, P.O. Box 2266, Johannesburg, and endorsed "Partnership," will be handed to the advertiser.

The Town Planning Association
(Transvaal.)

Minutes of the Annual General Meeting of Members, held in the Associated Scientific and Technical Societies' Club, 100, Fox Street, Johannesburg, on Saturday, 18th November, 1922, at 8 p.m.

PRESENT.—Dr. Charles Porter, vice-president, in the chair, Messrs. D. M. Burton, Harold Porter, H. G. Veale, G. E. Pearse, G. Hartog, D. M. Sinclair, Prof. G. A. Watermeyer (members of Council), and Messrs. D. Chrystal, T. S. Fitz-Simons, P. E. Easton, John Hawthorn, Fred Rowland, W. Mackenzie Smith, Chas. Hosking, E. Sharpe, Geo. S. Scott, C. J. Crothall, W. H. Nott, C. P. Tomkins, J. Poole, — Brooks, — Sherwin and the secretary, M. K. Carpenter.

The Secretary having read the notice convening the meeting, the chairman announced receipt of a telegram from the president, Mr. D. P. Howells, who had just returned from England, regretting his inability to be present, and wishing the members a successful meeting.

The minutes of the last Annual General Meeting, published in the June issue of the South African Architectural Journal *Building*, and circulated to members, were taken as read and confirmed.

The Chairman read the annual accounts and balance sheet, which had been audited by Messrs. Aiken & Carter. These were accepted and passed.

The Secretary then read the following report by Council, covering the work of the year:—

GENTLEMEN,

In submitting, for your information, an account of the work of the association during the twelve months ending 31st March, 1922, under the able and sympathetic presidency of Mr. D. P. Howells, M.I.C.E., we have to record that the following matters were dealt with:—

(1) The proposed new Station for Johannesburg.
(2) Alteration to the Tramway Routes.
(3) The proposed new Public Library.
(4) Advice to the Provincial Council with regard to proposed new Townships.
(5) Town Planning Lectures.
(6) Model Town Planning Regulations.

(1) *Proposed New Station.*—Carefully considered representations in regard hereto were made to the railway authorities by your Council. Owing, however, to the present financial stringency, the whole matter is, for the present, held up.

(2). *Alterations to Tramway Routes.*—A sub-committee of your Council prepared and personally handed to the Tramways Committee a carefully considered new route plan. In the opinion of your Council, their proposals would have largely obviated the congestion which, even at the present time, exists in the central city area, and it is, therefore, regretted that the suggestions in question were not accepted.

(3) *Proposed new Public Library.*—Your Council made strong, but unsuccessful, representations against the proposal to utilise the open space west of the Town Hall for this purpose and, at a later date, when these proposals assumed concrete form, futher representation as regards the undesirability of constructing shops on the new library ground-floor were addressed to the Provincial Secretary.

(4) *Lay-out of New Townships.*—During the year, your Council have advised the Provincial Secretary in regard to the lay-out of the following eleven proposed new townships. The advice and criticism tendered have invariably been well received, and in a number of instances, have been acted upon:—Turf Club, Witwatersrand, Daaspoort, Brits, Grobbersrust, Heathcote, Welgegund, Finboro, Coligny, Hendrik Schoeman, and Paardekop.

(5) *Lectures.*—Your Council is pleased to record that it was able to arrange for the delivery in May, 1921, of seven lectures on Town Planning, by Mr. Albert Thompson, F.R.I.B.A., now of Capetown, and formerly, for many years, chief assistant to Mr. Raymond Unwin, chief of the Town Planning Department of the English Ministry of Health. Mr. Thompson's very instructive and interesting lectures were profusely illustrated by appropriate lantern slides, including a number showing the lay-out and progress of the new Garden Suburb of Mowbray, designed and directed by Mr. Thompson on behalf of the Garden Cities Trust,

which has the honour of being the pioneer of the practical application of this movement in South Africa.

(6) *Regulations*.—During 1921, the Association was invited by the Ministry of Health to prepare Model Town Planning Regulations, but owing to various circumstances, including the industrial disturbances of last February and March, little could be effected before the expiration of the period under review.

Your Council record with great regret the death of two well-known members of the Association, namely, the late Mr. Colin Wade and the late Mr. John Ware.

Mr. Wade was the prime mover in the establishment of this Association and its first President. His earnest and enlightened desire for the application of town planning principles, both to existing townships and to new lay-outs, made him a most valuable member of the Association.

Mr. John Ware had interested himself in Town Planning during his visits to Australia, and secured for the Association interesting documentary and other information regarding work in this connection in that dominion.

In regard to the future, your Council would greatly welcome a more active interest by the general members of the Association in its proceedings, and especially in regard to making known and promoting the objects for which the Association exists. Proposals or suggestions from individual members, either verbally or addressed to the secretary, will be at all times welcomed and carefully considered.

On behalf of the Council,

CHARLES PORTER,
Vice-President.

In the discussion following the reading of this report, objection was raised to the action of the Provincial and Municipal Authorities in disposing of the only open space in the centre of Johannesburg for the purpose of building a new Public Library.

After discussion, Mr. H. G. Veale moved that the matter be referred back to the Council to ascertain the conditions under which the site was originally granted, and whether the proposal to build thereon is in keeping therewith.

Agreed.

Respecting the plans of proposed new township lay-outs, forwarded by the Provincial Secretary for our consideration, Mr. W. H. Nott moved that Council's report be amended by the addition of the names of the townships advised upon, together with a résumé of the report made upon each.

Mr. D. Chrystal, in seconding the motion, expressed his opinion that Surveyors would welcome such criticism. This was endorsed by Mr. Fred Rowland.

The chairman stated that certain difficulties arose in connection with this motion, it would be necessary to obtain sanction from the Provincial Secretary, and from each surveyor concerned before these criticisms could properly be made public.

On being put to the vote the motion was lost by 17 votes to 2.

Mr. W. H. Nott moved that it be an instruction to the Council to consider the advisability of issuing copies of the criticisms passed upon township lay-outs submitted to them for consideration.

This was seconded by Mr. Chrystal, and carried unanimously.

Mr. Harold Porter was of opinion that an advance should be made by quarterly publication in *Building*, and in the general press, of a résumé of work done by the Council. At present members were not kept informed in this respect. He submitted this proposal as a suggestion to the incoming Council.

The report was then adopted.

ALTERATIONS TO THE CONSTITUTION.

Members present unanimously agreed to the following alterations to the respective clauses of the Constitution of the Association, brought forward by the Council:—

Para. 2 (*f*).—

Line 3. Delete the word "over": also for the word "petition" substitute the word "approach."

Line 4. For the words "promote deputations" substitute the words "by petition or deputation."

Line 6. For the word "pronounce" substitute the word "promote."

Para. 2 (*g*).—

Line 1. Delete the word "of,"

Para. 4 (*a*).—

Delete the whole and substitute the following:—

"Ordinary members shall be persons duly elected by the Council after having been proposed and seconded by two members of the Association."

Para. 11.—

The words "Annual General Meetings" should read "The Annual General Meeting."

Para. 17.—

Delete the whole paragraph and substitute the following:—

"The management of the affairs and business of the Association shall be vested in the

Council which shall consist of 15 members, of whom not less than two shall be Architects to be elected by the Association of Transvaal Architects, not less than two Surveyors to be elected by the Institute of Land Surveyors, one Medical practitioner, legally qualified and experienced in Public Health, to be elected by the British Medical Association, and one Engineer, to be elected by the South African Society of Civil Engineers, immediately prior to the Annual General Meeting. The names of the foregoing so elected by the societies mentioned shall be announced before proceeding to the election of the remainder.

"The remaining nine members of Council shall be elected, by ballot, from among nominations received from members, such nominations to be sent to the secretary three weeks before the Annual General Meeting; such names shall then be issued (in alphabetical order) to all members entitled to vote, two weeks prior to the date of the Annual General Meeting, and shall be the balloting list for the annual election.

"All members of the Council shall hold office for one year, but shall be eligible for re-election, by ballot, at the Annual General Meeting."

Para. 18.—

Delete the fifth word "up."

Para. 20.—

Delete the whole paragraph and substitute the following:—"The quorum of the Council shall be five."

Para. 31.—

Line 3. After the word "Association" insert the words "and carried."

Line 4. For the word "the" substitute the word "such."

Mr. Chrystal moved that the president be nominated and elected at the Annual General Meeting.

The motion was not seconded. The president will, therefore, be elected by Council at their first meeting after the Annual General Meeting, as hithertofore.

ELECTION OF MEMBERS TO COUNCIL.

Messrs. Chas. Hosking and C. J. Crothall were appointed scrutineers.

Seventeen nominations were received for 15 seats on Council, and on the signed declartion of the scrutineers, the following were declared, by the president, to be duly elected to Council for the current year:—

Brayshaw, B. W., P.O. Box 2811, Johannesburg.
Burton, D. M., P.O. Box 3565, Johannesburg.
Fitz-Simons, T. S., Town Engineer, Boksburg.
Hartog, G., 41, Sauer's Buildings, Johannesburg.
Howells, D. P., Town Engineer, Benoni.
Leith, G., P.O. Box 3590, Johannesburg.
Mackenzie Smith, W., Post Office, Florida.
Nicholson, M. G., Town Clerk, Pretoria.
Pearse, Prof. G. E., P.O. Box 2527, Johannesburg.
Porter, Dr. Chas., P.O. Box 1049, Johannesburg.
Porter, H., P.O. Box 2527, Johannesburg.
Sinclair, D. M., P.O. Box 4492, Johannesburg.
Tompkins, C. P., Barkly Road, Parktown W., Johannesburg.
Veale, H. G., P.O. Box 5983, Johannesburg.
Watermeyer, Prof. G. A., Witwatersrand University, Eloff Street, Johannesburg.

THE SACHSENWALD.

Mr. Harold Porter raised the question of the Johannesburg Town Council acquiring this ground as an open space to be dedicated for use as a park or recreation ground, pointing out that some time ago the Transvaal Consolidated Lands, Ltd., offered the Town Council this ground on very advantageous terms, without result, since which time a large portion has been individually acquired, and if steps were not taken immediately the whole site would be gradually built upon.

After an interesting discussion in regard thereto, and to the alienation for building purposes, of open spaces originally dedicated to public use, Mr. H. Porter moved:—

That in view of the continued growth and extension of Johannesburg, and the alienation of the city's open spaces, this Association urges upon the Municipal Council to acquire from the Transvaal Consolidated Land & Exploration Co., Ltd., the land commonly known as the Sachsenwald, in extent approximately 390 acres, for the purpose of an open space, recreation and parklands: the entire area to be irrevocably dedicated in perpetuity to the exclusive use of the public: and no buildings, other than sports' club houses, pavilions and stands, refreshment rooms and kiosks, shelters, garden and summer houses, conservatories and green houses, caretakers' and groundsmen's quarters to be erected thereupon.

A copy of this resolution to be sent to the:—
Johannesburg Town Council.
Association of Transvaal Architects.
Institute of Land Surveyors.
S.A. Institute of Civil Engineers.
British Medical Association (Witwatersrand Branch).
Federation of Ratepayers.
The Press.

This was seconded by Prof. Pearse and unanimously agreed to.

Mr. G. Hartog raised the question of certain alterations which had been made to the Local Government Law which might admit of alienation of open spaces from their original purpose unless the object for which they were intended was definitely stated in the title deeds handed to the local authority in which the ownership of the ground was vested.

Mr. D. M. Burton moved that this very important matter be referred to the in-coming Council for consideration and report, if necessary, to a special general meeting of the Association.

This was agreed to.

Owing to the lateness of the hour, Mr. D. M. Burton moved that the meeting be adourned for three weeks, at that meeting the balance of the business be completed, and that Dr. Chas. Porter be asked to deliver his address on "Town Planning."

This was seconded by Mr. Veale and agreed to.

On the motion of Mr. H. Porter, a hearty vote of thanks was accorded to the retiring president, Mr. D. P. Howells, and the vice-president, Dr. Porter, for their able conduct of the Association's business during the year.

The meeting then adjourned until 9th December, 1922.

Minutes of meeting of Council held in the office, 67, Exploration Buildings, Johannesburg, on Saturday, 25th November, 1922, at 8 p.m.

PRESENT: The President, Mr. D. P. Howells, in the chair; Dr. Chas. Porter, Messrs. Harold Porter, T. S. Fitzsimons, C. P. Tompkins, D. M. Sinclair, B. W. Brayshaw, H. G. Veale and the Secretary, M. K. Carpenter.

Apologies for absence were received from Professor G. E. Pearse and Mr. G. Hartog.

ABSENT: Professor G. A. Watermeyer, Messrs. M. G. Nicolson, W. Mackenzie Smith, G. Leith and D. M. Burton.

MINUTES.—The minutes of meeting of Council held on 19th October, 1922, were read by the Secretary and confirmed.

In connection with the Sub-Committee appointed to prepare Council's report to members, Dr. Chas. Porter stated that the proposed meeting was not held owing to the appointed members failing to turn up; in view of this the Secretary promised to draft a minute of the year's doing, on which Dr. Porter undertook to write a report. The Secretary failed to forward his draft until the morning of the meeting, in respect of which delay Dr. Porter strongly protested.

Mr. D. M. Sinclair moved that in future annual reports the personnel of the Council be embodied, together with a return of the number of meetings held and the attendances of individual members.

This was agreed to.

ELECTION OF PRESIDENT.—The retiring President called for nominations for the office of President for the current year.

Mr. Harold Porter proposed the election of Dr. Chas. Porter. This was seconded by Mr. H. G. Veale and unanimously agreed to.

Dr. Porter, on taking the chair, stated he was greatly pleased and honoured to be elected to the chair, because the important subject of Town Planning attracted him immensely. His past association with members of Council had been one of his most congenial experiences, and he confidently looked forward to a very successful and pleasant year.

Dr. Porter then extended to Mr. Howells, the past President, a hearty welcome on his return, and expressed the appreciation by members of the work done by Mr. Howells during his period of office. He also specially welcomed, on behalf of other members of the Council, the presence of representatives of the Institute of Land Surveyors of the Transvaal.

DRAFT MINUTES OF ANNUAL GENERAL MEETING.—These were issued to members revised in certain particulars, and their circulation ordered.

Arising out of these minutes, the following items, referred by the annual general meeting, were dealt with:—

(A) TOWNSHIPS.—The Council instructed the Secretary to provide the following information respecting townships already reported upon and, in future, to record similar information of all proposed lay-outs received from the Provincial Secretary or other source:—

> Name of township, surveyor and promoters (where given), date of receipt, copy of criticism made on the proposal, and date of return to the Provincial Secretary.

Publication of Criticisms.—Respecting the resolution moved at the annual general meeting, that it be an instruction to the Council to consider the advisability of furnishing to members details of the suggestions made by the Council upon township lay-outs submitted by the Provincial Secretary for criticism, the Chairman stated that at the annual general meeting Mr. D. M. Burton had very wisely emphasized the necessity of the sanction of the Provincial Administration and that of the individual land surveyors responsible for these lay-outs, to this course of action.

The Secretary read a copy of a letter addressed to the Provincial Secretary on the matter. The individual surveyors would be similarly communicated with as soon as their names and addresses had been obtained from the office of the Administrator.

This procedure was approved and it was ordered that the matter stand over pending receipt of replies.

Effects of Criticisms.—Respecting the plans received for criticism, members inquired how far the Provincial Secretary or Townships Board acted upon the recommendations made. In the absence of definite information on this point, it was agreed to address a letter to the Provincial Secretary, embodying the following points for reply:—

1. The period he is prepared to allow the Association for criticism of each individual plan—the Council's suggestion being three weeks.
2. Whether he is prepared to hold over the confirmation of proposed lay-out of new township plans pending receipt of our recommendations thereon?
3. A request to be favoured with information to what extent the Council's advice and recommendations have been acted upon in each case.

Mr. Fitzsimons raised the question as to whether it was not advisable, in the first instance, to consult the local authority in whose area the lay-out is to be made.

The Chairman, in agreeing entirely with this, pointed out that such consultation would enable the local authority to co-ordinate any lay-out scheme with their own proposals, and suggested that local authorities be asked to favour this Association with particulars of all lay-out proposals within the area under their jurisdiction.

After discussion, it was resolved:—

1. That a circular letter be sent to every local authority in the Transvaal, emphasizing the importance of early criticism of all town-planning or town township proposals—at the latest on receipt of the surveyor's completed preliminary sketches—and intimating the Association's willingness to accord advice on the general principles involved.
2. That whenever an invitation to criticise has been received from the Provincial Secretary, a communication be addressed to the local authority concerned with a view to obtaining their views on the proposal, and
3. That in respect of town planning proposals of which no intimation has been received from the local authority, that body be immediately communicated with.

Mr. Brayshaw, in concurring with these proposals, stated that the Townships Board were now viewing lay-out proposals from a changed view point, which was evidently due to the activities of the Association.

Signature of Township Plans by Accredited Surveyors.—Arising out of inquiry by Mr. C. P. Tompkins, the Secretary was instructed to write the Provincial Secretary, emphasizing the desirability of every township plan being signed by a member of the Institute of Land Surveyors of the Transvaal, and inquiring

1. Whether this procedure were enforced by the Townships Board.
2. Whether insistence thereon would be *ultra vires?*

Draft Town Planning Regulations.—The Chairman reported that these regulations as finally amended had been forwarded to the Secretary for Public Health and to the Town Engineer, and the Secretary for Public Health had, in very appreciative terms, conveyed the thanks and appreciation of the Hon. the Minister.

It was directed that a copy of these regulations be sent to each new member of the Council.

(B) LIBRARY SITE.—The Secretary laid on the table a copy of the Crown grant covering the site given over for the new Public Library.

This was referred to a Sub-Committee, consisting of Messrs. G. Hartog, D. M. Burton, H. G. Veale and Harold Porter, for consideration and report at next meeting.

(C) Respecting the publication of information to members covering the work of the Association, it was decided to do this quarterly through the South African Architectural Journal, *Building*, and to supply information from time to time to the local newspapers.

ADJOURNED ANNUAL GENERAL MEETING.—It was decided that the adjourned annual general meeting be held in the Scientific Club, Johannesburg, on Saturday, December 9th, 1922, at which the President would deliver his address on Town Planning, and it was agreed to sanction the expenditure of

(*a*) Five pounds (£5) on preparation of lantern slides and

(*b*) Six pounds (£6) on advertising the meeting.

WEMMER PAN.—The Secretary read a communication from the La Rochelle Ratepayers' Association to the Chairman of the Parks and Estates Committee, advocating a lay-out competition for the pleasure grounds on the above site.

It was resolved to reply, approving of the suggestions, and strongly recommending that the Municipal Council be asked to secure the advice and co-operation of the Association of Transvaal Architects in drawing up the conditions governing such competition and in the appointment of the assessor.

WEST TURFFONTEIN LAY-OUT.—The report of the Medical Officer of Health, Johannesburg, to whom this lay-out had been referred, was received. Mr. Brayshaw outlined the difficulties he had had to contend with in the survey and lay-out to meet the owner's requirements. After discussion, it was decided to adopt the criticisms in question and to forward them at once to the Provincial Secretary.

JOHANNESBURG HOSPITAL LAY-OUT OF GROUNDS.—Regarding a communication from the Medical Superintendent of this Institution respecting the lay-out of the Hospital grounds, it was directed that a reply be sent to the effect that the Hospital Board would be well advised to consult a landscape architect and that, if they so wish, this Association will be pleased to nominate a suitable person.

SPRINGS MUNICIPALITY.—Letter from the Town Clerk was read, stating that this Municipality intended withdrawing from membership of the Association at the end of the current year.

Resolved: That a reply be sent accepting this resignation with much regret, and expressing the hope that before long the Municipality will reconsider its decision.

COUNCIL MEETINGS.—It was agreed that Council meetings be held on Fridays, commencing at 4.30 p.m.

LOCHVAAL TOWNSHIP.—Messrs. D. P. Howells, C. P. Tompkins, H. G. Veale and D. M. Burton were appointed a Sub-Committee to consider this proposed lay-out and report to Council next meeting.

The meeting then terminated.

THE SOUTH AFRICAN ACADEMY.

(Under the auspices of the Association of Transvaal Architects.)

Hon. President:

His Royal Highness The Governor-General Prince Arthur of Connaught, K.G., K.T., P.C., G.C.M.G., G.C.V.O., C.B., Etc.

Past President:

Viscount Buxton, P.C., K.C.M.G., Etc.

Patrons:

Her Royal Highness Princess Arthur of Connaught.
Sir Lionel and Lady Phillips.

INFORMATION TO EXHIBITORS.

1. The Fourth Annual Exhibition will be held in the Selborne Hall, Johannesburg, during May, 1923, and will be for works executed by South African Artists and Craftsmen.

2. Persons intending to exhibit are requested to communicate with the Hon. Secretary, 67, Exploration Building, Commissioner Street, Johannesburg, not later than the 31st March, 1923, giving the number and description of the proposed Exhibits. The submission fees will be based on the following scale:—

For each Exhibit in the Picture Classes	5s.
For a complete exhibit in the Crafts Section	10s.
Collective Exhibits from Schools ...	Free.

3. The Exhibition will be open for Paintings (all mediums), Tapestry, Embroidery, Stone and Wood Carvings, Metal Work, Enamels, Bookbinding, Modelling, Plaster Work, Leather Work, Art Furniture, Architectural Drawings and Designs, Ceramic Work, Miniatures, etc.

All pictures must be suitably framed.

Copies, of any kind, and works previously publicly exhibited, will not be accepted.

4. All works submitted will be subject to the approval of a competent "Jury of Admission," and the hanging will be done under the personal supervision of the Academy Hanging Committee, and their decision will be final.

All rejected works will be returned to the Authors prior to the opening of the Exhibition.

5. All works must be delivered, carriage prepaid at owner's risk, addressed to M. K. Carpenter, Hon. Secretary, South African Academy, Selborne Hall, Johannesburg, by a date to be given later.

Johannesburg local exhibits may be delivered to the Selborne Hall on a date to be decided upon.

6. All work submitted must be advised on a form (to be obtained from the Hon. Secretary), and all particulars asked for carefully given, in order to ensure the accuracy of the Catalogue. Copies of the form of Schedule can be obtained on application to the Hon Secretary, 67, Exploration Building, Johannesburg.

7. All Exhibits will be returned immediately after the close of the Exhibition (securely packed) at owners' expense and risk.

All further information may be obtained on application to the Hon. Secretary, M. K. Carpenter, 67, Exploration Building, Johannesburg.

Dr. Charles Porter, Medical Officer of Health for Johannesburg, has been elected President of the Town Planning Association (Transvaal).

Mr. R. W. Kelly, a prominent Johannesburg contractor, has been elected to the Municipal Council of Johannesburg, and to the Works Committee of that body.

OBITUARY.

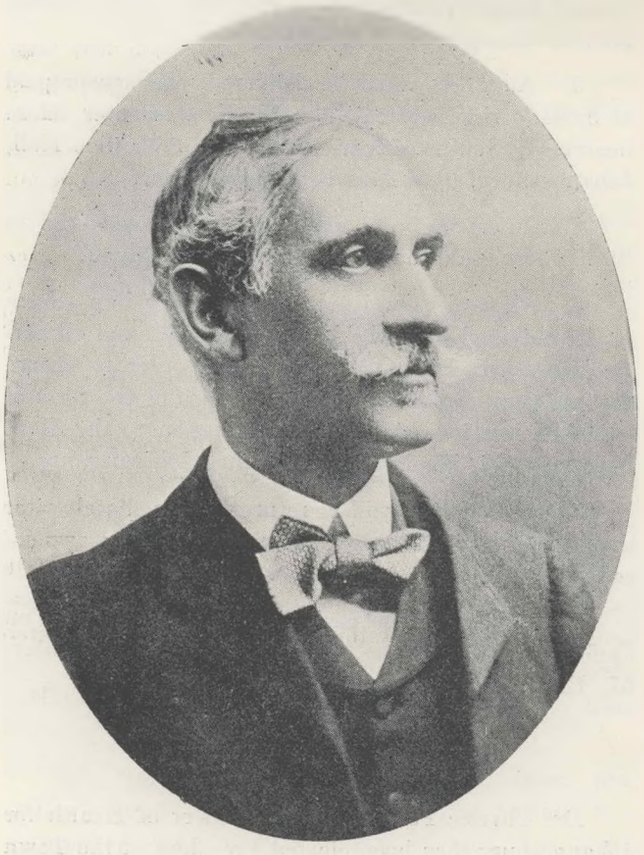
Arthur Henry Reid, F.R.I.B.A.

It is with extreme regret that we have to record the death of Arthur Henry Reid, which occurred at Capetown on the 18th October, 1922, following an operation.

The late Mr. Reid was born at Plymouth in 1856, and arrived in South Africa in 1877, and joined the city engineers' department in Capetown, becoming assistant town engineer under Mr. Tennant.

From Capetown, Mr. Reid proceeded to take over the position of city engineer at Grahamstown, and carried out most of the municipal works now in existence in that city, including the Grey Reservoir.

After a period of private practice in Port Elizabeth, during which time he carried out most of the work connected with the Dutch Reformed Church in the Cape Colony, Mr. Reid proceeded to Johannesburg and opened up private practice with his brother, Walter, in 1887, where he remained until 1896, subsequently returning to Capetown where he continued in private practice until his death.



The late Mr. Reid was a past president of the Cape Institute of Architects, and hon. secretary in South Africa of the Royal Institute of British Architects, of which Institute he had been a Fellow since 1889; he was also a past president of the South African Association of Engineers.

During the past ten years, Mr. Reid interested himself greatly in the education and training of architectural students and in matters concerning the profession generally. His amiable disposition and sound judgment of matters and men will be greatly missed by his colleagues, particularly in the Cape Peninsula.

To his bereaved family we offer our sincere sympathy.

William Black, F.R.I.B.A.

We regret to record the death of Mr. William Black, who was one of the best-known architects in the Cape Peninsula, where he had been in practice since 1892.

Mr. Black was born in Australia, where he received his early architectural training.

SANITARY JOTTINGS.

Pit Latrines.

At the recent Congress of the Royal Sanitary Institute, held at Bournemouth, England, Lt.-Col. Wesley Clemesha, C.I.E., M.D., D.P.H., F.R.San.I., read a very interesting paper on disposal of excreta in a small tropical village, such as may be found in Africa and the East. His remarks are applicable to many isolated country farms in this land. His paper was directed to villages of very poor inhabitants with no money, no staff, and often a meagre water supply, and as these conditions are often found in South Africa in country parts, these experiences of such a skilled man are valuable.

He frankly advises the "pit latrine" or "well privy," a form with which we are very familiar in country parts here, and upon which myself, and probably many others, have looked with a considerable amount of suspicion. A "pit latrine" is nothing but a deep hole in the ground, ten to twelve feet deep, with the closet house erected over it. They can be made permanent or temporary; in the latter case, the closet house is sometimes moved form one pit to a new one. If necessary, the sides of the pit can be shored up with sand-bags, brick or stone or wood. It is a latrine and a conservancy method in one. If the ground is not wet —it very seldom is in this country—the liquid matter is at once absorbed, and the solid excreta gradually inspissates into a dry, powdery mass. A further advantage is that there is no surface contamination. When new, these latrines breed a certain number of flies, unless prevented by a smoke box, in which leaves are burned and smoke caused to fill the hole. After a short time, however, the fermentative changes in the excreta cause marsh gas and carbon dioxide, which prevent flies getting access to the material.

These simple arrangements have been in existence for ages in Persia, Arabia and Mesopotamia, and have given rise to no nuisance and are in every way satisfactory.

But—and there are always "buts"—they should not be used where there is sub-soil water or conditions liable to allow water to lie in the pit, as this spoils the chemical action in the pit, make the pits fall in and cause contamination of sub-soil water supply if ground is fairly porous.

Shallow "surface" wells and "pit latrines" do not go well near together, and the latter should be distant from and below the former.

Lieut.-Col. Clemesha states that these "latrines are thoroughly to be recommended and undoubtedly should be more used than they are in hot countries," particularly where other methods are difficult to obtain.

"FRENCH DRAINS."

The large number of these now in use in this country, and the frequency with which they "go wrong," has caused the writer of this article to revise and analyse his own experiences and those gathered from fellow-workers. My own views—which are still maturing—are in a general way as follows. The remarks refer to kitchen waste only, and it is better to deal with it by a separate French drain to that for the baths:—

1. Enough care is not taken at the top of drain or foot of waste pipe to exclude grease, tea-leaves, particles of food, "Gresoff," "Clever Mary," "Vim" soap and other compounds. I greatly believe in a paraffin tin containing *frequently* changed grass. It catches and arrests particles, and cascades and cools the waste, allowing grease to solidify and get caught. I have found cinders in the paraffin tin a cause of putrifying food, and they are better left out.

2. After this, let the waste water through our well-known "Reliance" grease trap at least 22 in. deep, inlet submerged just under surface, and outlet exit right at bottom, then rising up.

3. After this, I believe, a sludge pit very necessary. This can be made of dry bricks and of a fair size, even for a small house, but well away from it and well covered with galvanised corrugated iron sheets or concrete slabs (removable), all covered with earth. I would 'drown" or submerge the entry below surface and have three baffle plates made of concrete about 1½ in. thick, viz., the first touching the bottom and allowing the waste to pass slowly over it, the second with top slightly above surface of water and bottom of slab about 4 in. from bottom of sludge pit, and the third just like the first; and, finally, the exit can be taken by a pipe from just below surface of water straight into the French drain. This is to check currents.

4. The object of this sludge pit is to allow precipitation of light solids, the gathering of flocculent soapy matter and to prevent the blocking up of the French drain lower down.

5. Careful personal inspection of several blocked-up French drains leads me to the belief that blocking up is caused by the slow accumulation of slimy sludge between the stones or broken bricks, and not, as is often thought, by the sides of the drain becoming greasy.

6. Mr. Watson, of the Johannesburg Health Department, who has great experience of these drains, has adopted an ingenious method of catching sludge and semi-fatty, soapy food sludge by placing bricks dry, so: —— the "V" being the bricks and the straight dash the lower end of the drain, and afterwards allowing the waste water to flow slowly over slightly tilted corrugated iron perforated into the French drain below. I have made a rough trial of this method and find a considerable quantity of sludge is caught by the bricks in the "V."

7. The sludge pit mentioned above could be made —for a house—say, about 4 ft. long by 18 in. deep, and 2 ft. wide. It should be cleared if found necessary every two months, when a quantity of flocculent matter and precipitated sludge should be found and buried.

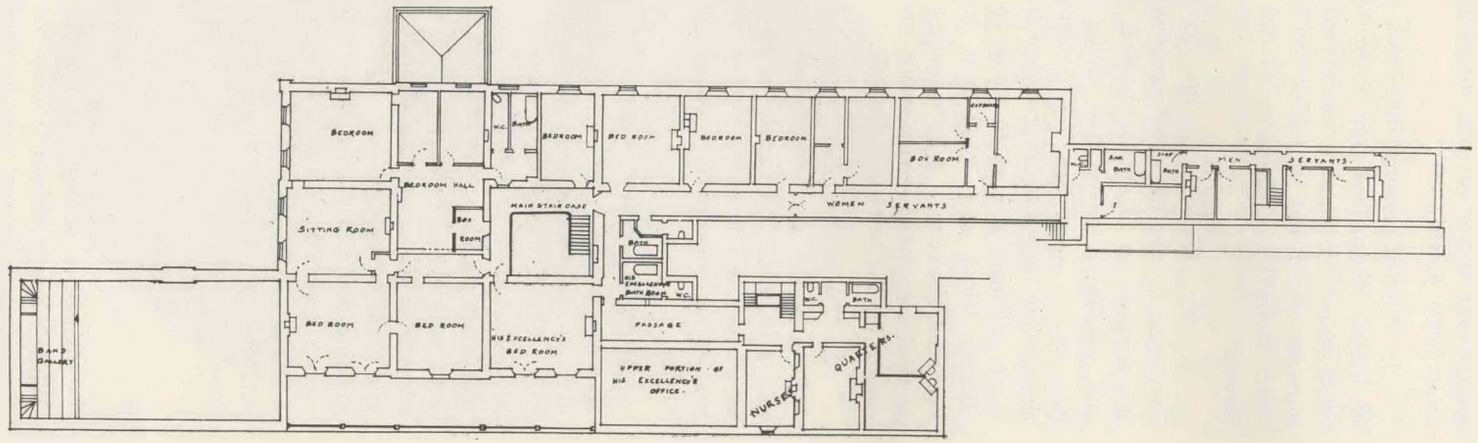
8. The ordinary way of letting the trench look after the sludge as well as the water is rather crude, and blocked drains happen much more quickly this way. The filling of trenches or pits with loose stones is cheap, but it leaves less room for the waste water and less room for accumulated sludge. A trench or pit with very open-jointed dry brick walls and continuous removable lid of corrugated iron, covered with earth, would save a lot of money in the working and allow the clearing out of a blocked French drain, after which it should again operate for a long period. This is really a similar proposal to the sludge pit mentioned above, and simply combines the sludge pit and French drain into one.

E. H. WAUGH.

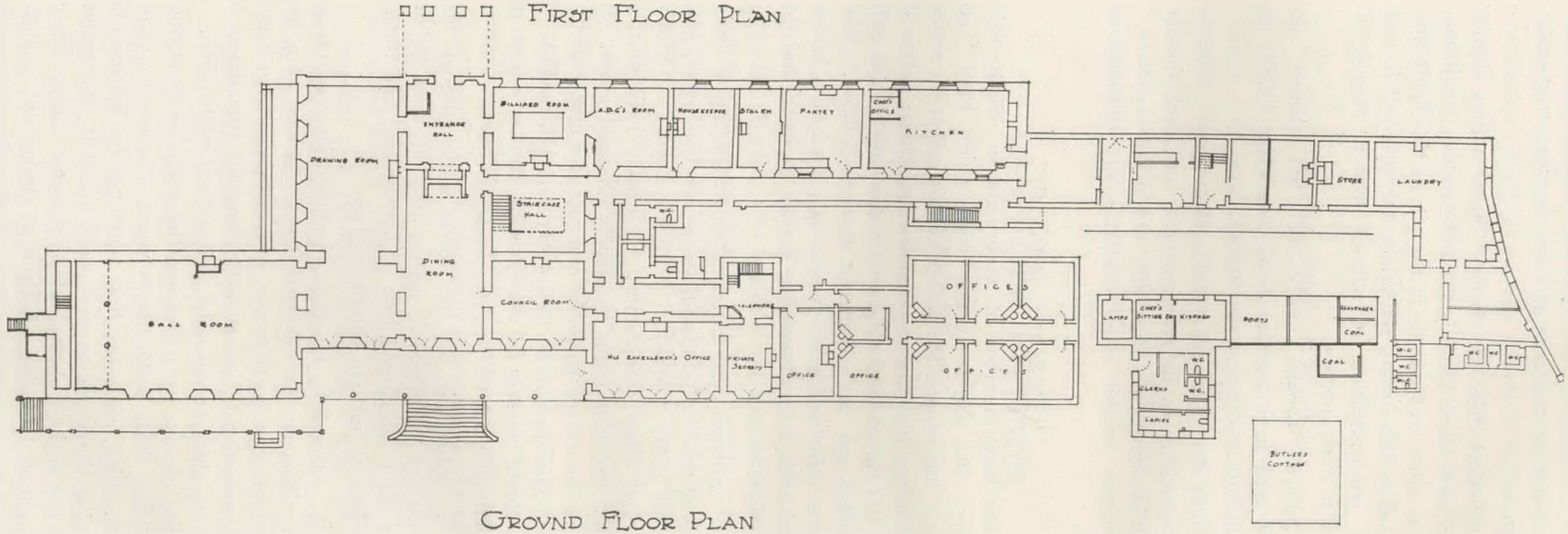
We have received an excellent booklet from the White's South African Cement Co., Ltd., setting forth the many and varied uses to which their cement may be put. Readers requiring a copy should apply to the Secretary of the Company, P.O. Box 2484, Johannesburg.

GOVERNMENT HOUSE . CAPE TOWN .

SCALE, 16 FEET TO 1 INCH.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

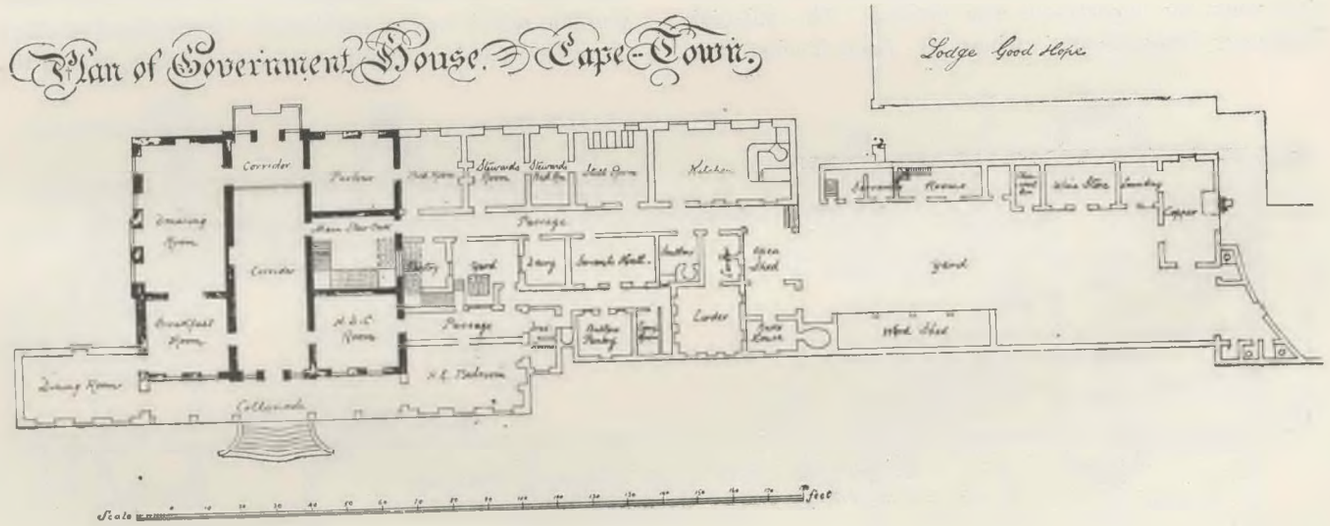
GOVERNMENT HOUSE, CAPETOWN,

CAPE COLONY, SOUTH AFRICA.

The history of any one of these is bound up in the history of each of the others. We speak of Government House, and we are face to face with all the events influencing the destinies of South Africa; we speak of Government House and we see the confines of the Cape Colony visible from its stoep; we see the distinguished visitors standing on its stoep and gazing towards the Castle, that building within whose precincts they were debarred from entering; we see the later Dutch Governors sharing its hospitality with that building which is now the Normal College, treating it as a summer residence to secure relaxation from the sombre walls of the official quarters at the Castle; we see the British Governors, first military and then civil, dwelling there permanently, before premises were secured at Wynberg as a summer residence; we see it the home of the High Commissioner, the over-rulers of the thrilling events culminating in the great war of 1899-1902, after which it ceased to be their home; we see it the home, for certain months in the year, of our Governor-General.

But all this is past history, and now the building stands as a witness of the growth and progress of this sub-continent; its days of glory are over; another building and, for most of the year, another clime claims the presence of the Governor-General of South Africa.

What other building in South Africa can show such a history?



PLAN A.

But it is not from an historical point of view that I wish to consider the structure; there is another aspect, an architectural-archæological one, and this is what I wish to give prominence to.

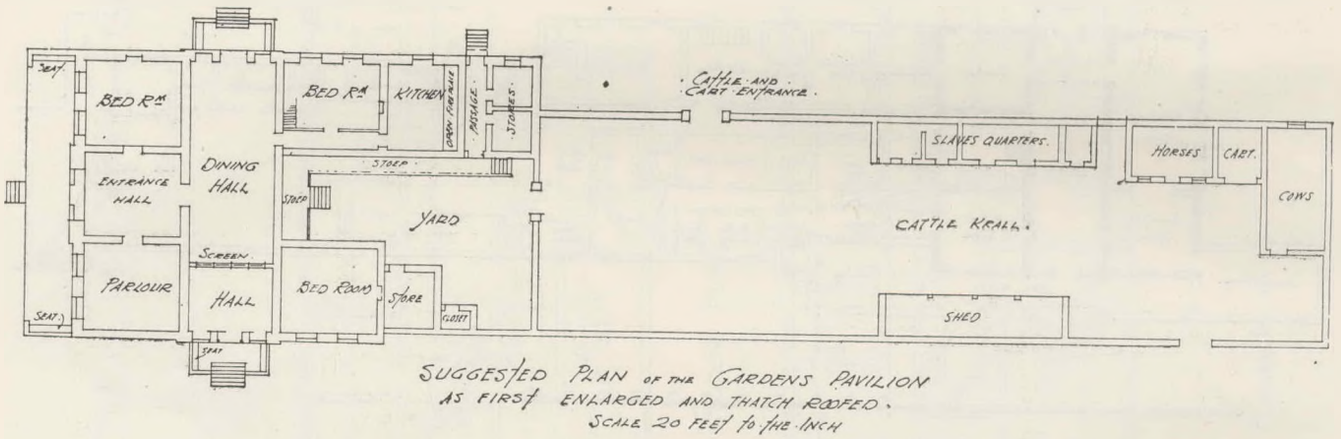
The building as originally erected, in 1682, was but a mere fraction of those which constitute the Government House of to-day, but those old, original walls still stand, and although we cannot see them, being, as

they are, covered with the plaster facings of a much later period, we can trace them on the plan.

It was with this object that I undertook an investigation into the present and past planning of the buildings, to ascertain if it were possible to unravel the problem, and to peel, as it were, from off the original core, all that is extraneous thereto.

My first quest was to secure a plan dating as far back as possible, and with this object I made a search among some old recorded drawings in the office of the Divisional Engineer of Public Works, at that date, 1910, located in Caledon Square.

When I arrived in Capetown, in 1876, I entered the office of the Public Works Department in Caledon Square, and one of my early duties was to bring the various plans out of a chaotic state into a condition of order. I noticed that many drawings dated from the time when the department was entitled "The Colonial Engineers Department," when Mr. Scott-Tucker was



PLAN B.2.

the Colonial Engineer; this was about the year 1860. At that time a great many of the country gaols and public offices were erected; many buildings in existence had then been surveyed, notably the Male and Female Asylums and Convict Station at Robben Island. These drawings were all similarly finished, quite in a military style, and among them was one of Government House (Plan A.). The greater part of these surveys had in 1910 disappeared, when or how I am, unable to say, but fortunately that of Government House still remained, although in a most dilapidated condition. It bore no date, but I remembered it as one among many others, and have no hesitation in assigning it to the year 1860. I take this survey as a basis of departure, when considering the original planning.

The first garden pavilion was erected by Simon van der Stel in 1682, when thatch-roofed buildings were in vogue, and before flat-roofed ones were substituted therefor. The site of the pavilion was, when compared with those in town, a suburban one, and so we should look for country conditions in any house put up there at that date. By country conditions is meant a single-storied building with thatched roof and very plain gables. The period of ornamental gables had not then dawned.

In 1685 Van Rheede granted Simon van der Stel 891 morgen of land on the slopes between Wynberg and the Pass leading to Hout Bay; here he built the homestead of Groote Constantia.

The pavilion does not appear to have been at first used as a dwelling place, but was utilised as such ultimately, when it was enlarged, by which time the house at Groote Constantia had been built, and was doubtless taken as a model. The outcome must have been similar to that shown upon Plan B.2.

Père Tachard, who was in Capetown during the year 1685, describes the pavilion; he calls it a "little pavilion which no one inhabited. It consisted of a hall or vestibule below, opening towards the fort, and to the garden, which had a reception room on each side. Above was a room opening on all sides, between two terraces paved by bricks and surrounded by balustrades."

It is thus evident that the first portion to be put up was that comprising the row of rooms facing the bay, now two in number but then three, one being an entrance hall, and the others reception rooms, one on each side of the hall. The walls of the hall were no doubt carried up and formed into a feature which became very common afterwards, namely, the dormer, and on each side of this the flat roofs of the reception rooms were tiled and surrounded by balustrading. (See Plan B.1.)

The company's gardens extended in a straight strip from N.E. to S.W., with an up-hill gradient to the latter, and it is but natural to assume that the builder would make the building face the town and bay. Other old residencies in Table Bay valley have similar

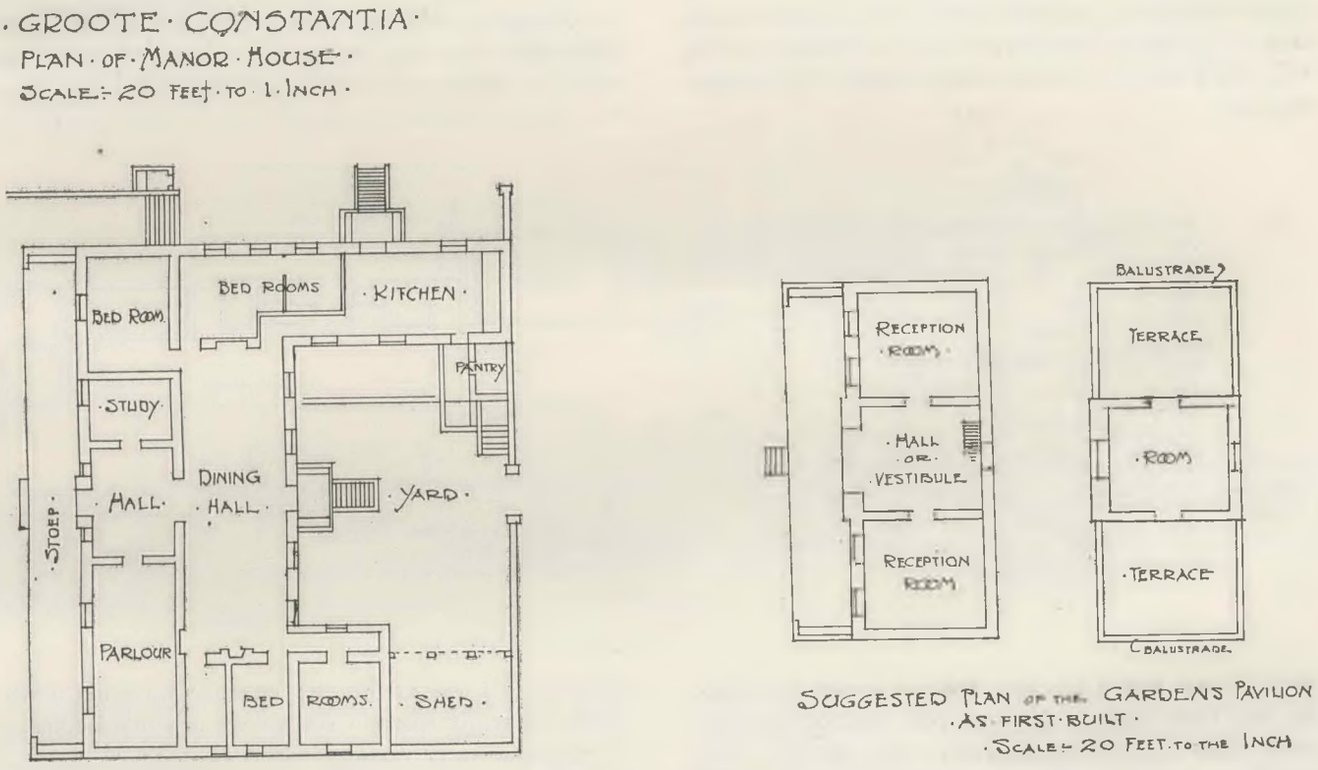
aspects, as, for instance, Oranjezicht, Nooidtgedacht, Rheezicht, etc.

If we examine the 1860 plan we shall see that the central portion, which is tinted red, shows every indication of being an original isolated house; this, I think, we must take for granted to be the original dwelling house, enlarged from the pavilion.

Examining the north-eastern wall, namely, that towards the town, we can see that it is thicker than the others, as is always the case when a heavy thatched roof thrusts down upon the whole length of a front; such thickening not being necessary elsewhere. Here is evidence that the front was towards the north-east.

A plan is given, marked B., of Groote Constantia, which we will now examine. First, the front is, as in all old Cape buildings, facing the Flats and with the mountain behind; the main entrance is central and leads into a hall, to the right of which is a parlour and to the left a private room, probably a study; behind these is the large dining hall, at each end of which are bedrooms. Wings run out at each end, that to the south being the kitchen, etc., and that to the north a bedroom.

Axially are three doors, the front entrance, the central door and the back exit. Steps lead from the stoep behind the latter to the yard, and (again axially placed) is the gateway from the yard. Here was the



PLAN B. AND B.1.

A single-storied building required but a small staircase to conduct one to the brandsolder, so that the handsome staircase, built afterwards, would not have been required, and I think we may safely say that its present position was then open to the sky.

Another argument that the building faced the town is the position of the yard and outbuildings; these are to the right of the garden front; but no original Cape building had these accessories in such a position; one always was able to enter by a front door and go out at a back one, axially placed, pass across a yard, through a gateway, and then reach the outbuildings and kraals. I see no reason to suppose that an exception was made in the case of the Gardens Pavilion.

plan the builder took as a model upon which to enlarge the pavilion and convert it into a dwelling house.

By referring to Plan B.2, showing the suggested arrangement of the pavilion when first enlarged and pitch-roofed, it will be seen that the building faced the bay, with the mountain behind it; the main entrance was central and led into a hall, to the right of which was a parlour, and to the left another room; behind these was a dining hall, but in this case the breadth of site was limited and the dining hall extended from boundary to boundary, so that exit doors were placed at each end. Wings extended from the north-west and south-east ends towards the south-west, and in these were bedrooms, while in the latter was also the kitchen, etc., as at Groote Constantia.

The three doors and the gate were axially placed, and through the latter the cattle kraal was reached, as also the slaves' quarters, cart shed and stable for horses and cows, while to the right was a shed as at Groote Constantia, no doubt used for a similar purpose, namely, for poultry.

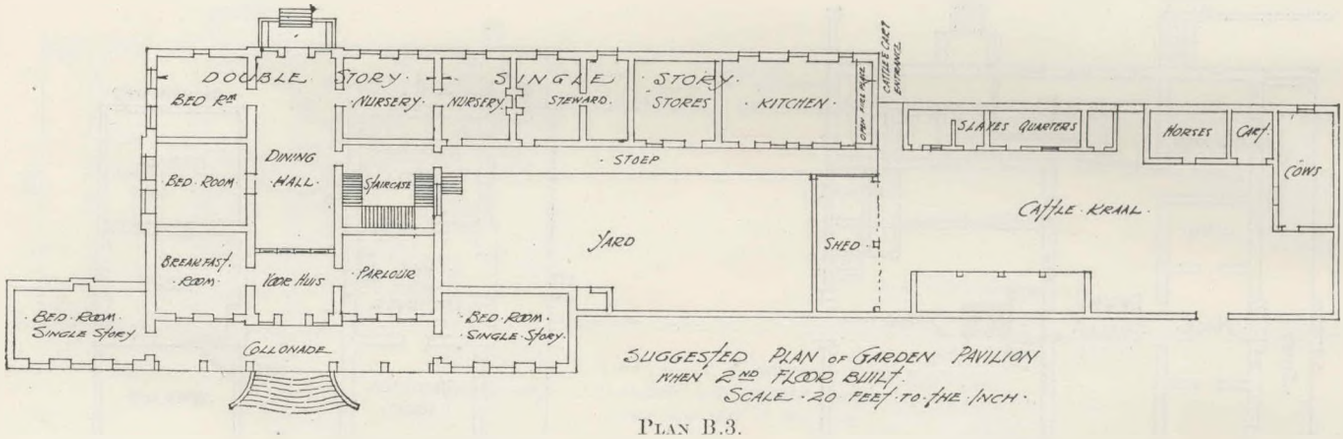
I have drawn very little upon the imagination to secure this result. The walls are as shown on the 1860 plan, even those of the slaves' quarters, cart shed, stables and fowl shed, nothing is disturbed to fit in with preconceived ideas, the only thing which has been done is to show a stoep where, no doubt, one existed, and to include another exit to the dining hall on the north-west side, similar to the one to the south-east.

I would specially draw attention to the exit shown on the 1860 plan, and ask that it be compared with those at Groote Constantia; making allowance for the increased number of steps at the latter, the two are identical.

There were several examples from this date extant in Capetown when I arrived here in 1876, notably facing Adderley Street, and there are still a few remaining, one being the minister's house adjoining the Lutheran Church, Strand Street, now a boarding house. It was also during this period that Anthon Anrijt came to Capetown, many of the buildings put up then attesting to his ability as a carver.

One typical feature of the buildings erected during this period was the absence of any blocking course or parapet, the main cornice completing the elevation skywards. A few examples showing this remain to the present day. For instance, the Lutheran minister's house, an old house in Bree Street, near Wale Street, and an old house in Keerom Street.

Parapets did not appear until much later, and before then blocking courses were, in many instances, added to existing structures. I do not think that there is a single example of an old Cape Dutch parapet in



PLAN B.3.

It is more than likely that architecturally the building was very plain; a pitched roof spanned the two rooms, and had gables at each end, possibly with straight parapets; a very plain gable formed the only decorative feature on the front, but this may have had curved parapets. The wings would be covered with pitched roofs, backing on to the main one and have gables. The stoep would possibly be paved with red tiles and the kerb and seats be of Dutch bricks. Here we have a word picture of the first dwelling house, converted from the pavilion, the nucleus of all that followed.

Flat roofs replaced thatched ones towards the end of the eighteenth century, and this was the period when the best examples of Cape Dutch architecture were erected. Richly moulded entablatures capped most of the buildings, consisting of cornice, frieze and architrave, so that if we find these features on a building of Cape Dutch origin we can safely assign it to that period.

Capetown, if we except the peculiar wave-like ones, which are really more in the nature of squat gables.

By the time (possibly 1770 to 1775) it became necessary to add another storey to the building it was seen, no doubt, that the south-east wind swept unmercifully along the front of the house, and, to afford protection therefrom, the stoep was abolished, the door converted into two windows, and the main entrance transferred to the north-west front. (See Plan B.3).

To secure further protection from the wind, two single rooms were built, each one storey in height, one at each end of the new colonnade. This feature of a room at each end of a colonnade is one peculiar to the time. I have seen several examples of it among old buildings in the country. Another reason for the change of front may have been that the road now known as the Main Avenue had been laid out, while trees blocked the view of the town, the north-west front thus became of more importance than the north-east one.

As for the colonnade, it may have consisted merely of a row of columns, with a grape vine trellis covering the stoep, as at Tokai and elsewhere.

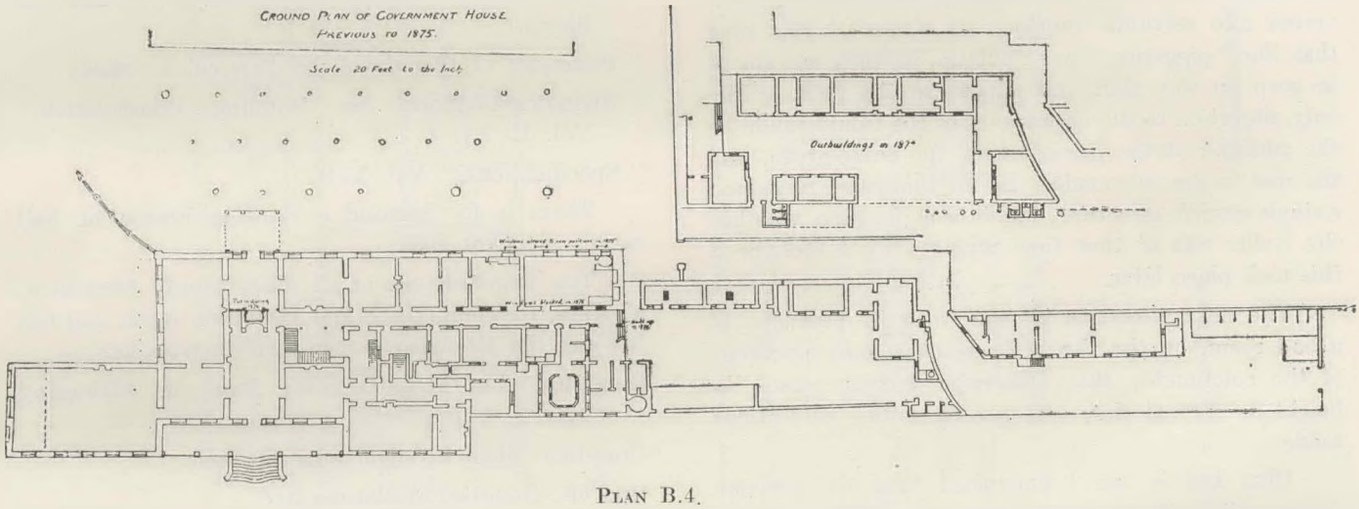
It was at this time that the slate paved stoep and the curved steps were put down. This material was procured from Robben Island and replaced the red tiles of former years, and is to be seen in most of the buildings put up during the latter portion of the eighteenth century or the early days of the nineteenth; as, for example, the Supreme Court, dated 1799.

One of the main points to decide was: where was the staircase to be? The most suitable position was easily to be seen, namely, in the yard space behind the dining hall.

It was doubtless at this time that the south-west wing was completed as far as the slave quarters, and the existing opening was possibly left as a cart and cattle entrance into the kraal.

secure storage space a half height floor would be inserted, with a square central opening to allow the hall to be lighted. This was done in some instances we know of; for example, take the old Public Works Department building in Caledon Square, the inner hall there was lighted in a similar manner by means of a square opening, the area round it forming a gallery. This opening is now filled in, and I have no doubt the same thing existed at the Garden Pavilion; when the pitched roof (to be mentioned later) was put on. This high portion interfered with the eaves and was removed, a cupola being formed over the well opening, and now the ceiling is at the height of the original gallery.

The fronts of the building would now look very much like the old building in Bree Street, near Wale Street, before mentioned, that is to say, a central break carried up plain and possibly capped by a pediment. Flanked on each side by plain faces, each



PLAN B.4.

Now we come to the question: what was the upper floor like? I should say, very much like that shown on the 1860 plan. As it was necessary to retain the large dining hall, the space above it would be divided by partitions, much as is to be seen on the 1860 plan. I do not, however, think that the bath room, etc., were there, but merely three rooms, the centre one being a hall, through which the various rooms were approached.

Now there is a strange peculiarity about this hall which is rather puzzling, for, while the rooms on each side are 14 feet from floor to ceiling, the hall is only 10 feet. What is the reason? I take it that the reason is to be found in the necessity for light and air. Those were not the days when roof cupolas would have been thought of in Capetown, so the only means of securing light would have been to raise the walls round the hall, the cross ones being supported by beams, and insert clerestory windows. The room thus secured would have been abnormally high, so as to obviate this and

containing two windows on each floor, the whole surmounted by a well-proportioned entablature complete with cornice, frieze and architrave. The ground floor windows would be the ones in the original structure and the first floor ones be made to match. These windows would be the usual Cape Dutch ones, flush with the outside wall, the ground floor ones having half shutters. The 1860 plan shows that at that date these windows were still in position.

The two external doors would be decorated to meet the taste of the time, that is to say, carved and panelled pilasters to the door and two side window openings, and cornices over. The two side rooms would be decorated by the usual wave parapets, and the colonnade support a vine trellis. I do not think that any alteration was made to the slave quarters, etc.

The next question to be answered is: when was the parapet, with its enriched panels, put up? In no

example prior to 1845 do we find a parapet; in fact, it was not until the influx of the purely English ideas (about the year 1860) that such finishings to elevations were popular. In my opinion the parapet dates from about 1849 or 1850; it is possible that to that date we can attribute the alterations which brought the buildings to their appearance as shown on the 1860 plan.

The premises were, without doubt, found to be somewhat cramped, and extensive additions were necessary; possibly such additions had been growing, so that it is impossible to say whether they were the result of growth or of a sudden enlargement, more than likely the former. At any rate the ultimate result was the 1860 plan. Several additional rooms are to be seen; a drawing room has been secured by removing the wall between two rooms, and the old screen, which was doubtless placed as shown on the previous plans, has been removed to the opposite end of the dining hall, which hall now bears the title of "corridor." The old slave quarters have been doubled in height, and, with the stables and cart shed, converted into servants' rooms. It was after this time that the "piggeries" were put up, as they are not to be seen on this plan, but appear on the next. The only alteration to the appearance of the fronts would be the addition of the parapet over the entablature, and the roof to the colonnade. So far this latter remained a single storied structure, and it is a question whether the trellis was at that time replaced by a roof, or if this took place later.

The next alteration effected was the provision of a ball room, on the site of one of the flanking rooms of the colonnade; this colonnade was increased in height to two stories, and several other alterations made.

Plan B.4 is one I unearthed from the Caledon Square office; its date must be subsequent to 1860, as the ball room is shown, and it must also be earlier than 1874, as upon it was indicated in pencil a proposal for a new roof, while a fly-leaf stuck on to it showed how the roof was proposed to be constructed. This roof was put on in 1874, so we have a period of fourteen years, that is from 1860 to 1874, in which to find the date of this survey. More than likely it was not far from the former date, as the outbuildings are shown very much the same as on the 1860 plan A., while in 1875, when further alterations were effected, they were as shown on Plan B.4. Alterations would not have been made, and the buildings realtered immediately thereafter.

One important alteration was effected in the large corridor, the old screen was removed and the corridor was converted into two rooms, one the present entrance hall, the main entrance being to the south-east; the other the ante-room. The dividing wall between these contained two doors with a niche towards the ante-room and a recess for the hall porter towards the hall.

This brings us to the year 1874, when a slate roof was put over a certain portion of the main building, and other alterations made; and to 1875, when the roof was extended to the wing and many alterations made there.

Thereafter, from time to time, other alterations have been effected, until at the present day it is difficult to trace any likeness to the original or subsequently altered structures.

BOOKS AND INSTRUMENTS FOR SALE.

In connection with the estate of a deceased Architect, the Registrar has for sale the following books on architecture, and will welcome enquiries in respect thereof:—

"Early Renaissance Architecture in England," by G. A. Gotch.

"Seven Periods of Church Architecture," by Edmund Sharp.

"Principals of Planning," by Percival L. Mark.

"Rivington's Notes on Building Construction," Vol. I.

"Specifications," Vol. VIII.

There is for disposal a Printing Frame of half double elephant size.

The Registrar can at all times supply Stretchers, all sizes, for competition and exhibition work, and has for sale the following second-hand instruments:—

One 24in. Gun Metal Parallel Rule, in Mahogany Case.

One 48in. Steel Straight Edge, in Case.

One 5ft. Boxwood Measuring Rod.

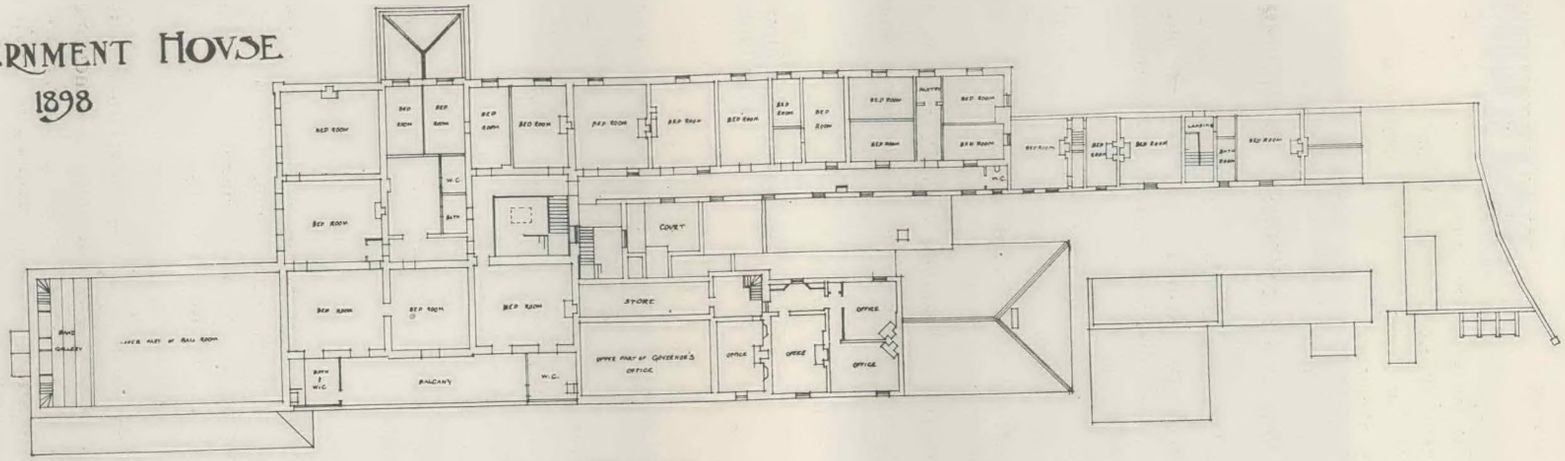
One 3ft. 9in. Mahogany T Square.

One 6ft. Artists' Folding Easel, in Mahogany, with Brass Fittings.

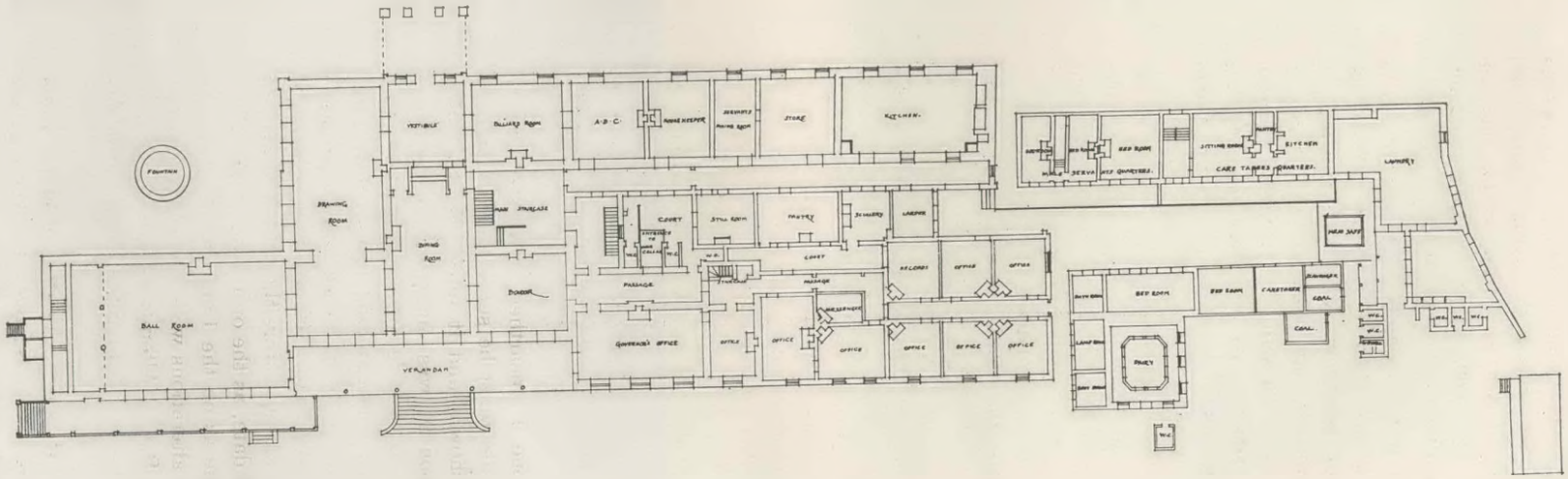
The personnel of the Works Committee of the Johannesburg Municipal Council is Mr. W. Bawden (Chairman), Messrs. M. J. Harris, C. D. Bennett, G. Milligan, R. W. Kelly, A. Immink, and the Hon. Hugh Wyndham.

A conference of all the architectural bodies in the Union is to be held in Capetown, commencing on 10th January. All members of the profession are cordially invited to attend. The conference will deal with the proposed Architects' Act for the Union; the new form of Conditions of Contract; and other matters of general interest to members of the profession. This conference will be held under the *ægis* of the Union Registration Executive Committee, who have charge of the proposed Act.

GOVERNMENT HOUSE
1898

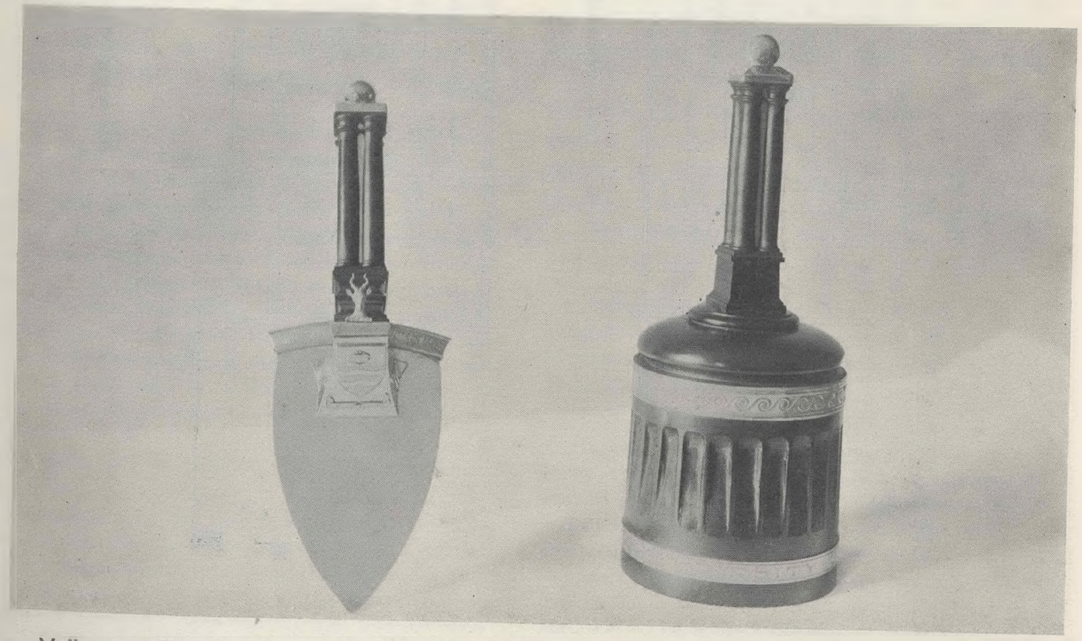


PLAN OF FIRST FLOOR



PLAN OF GROUND FLOOR

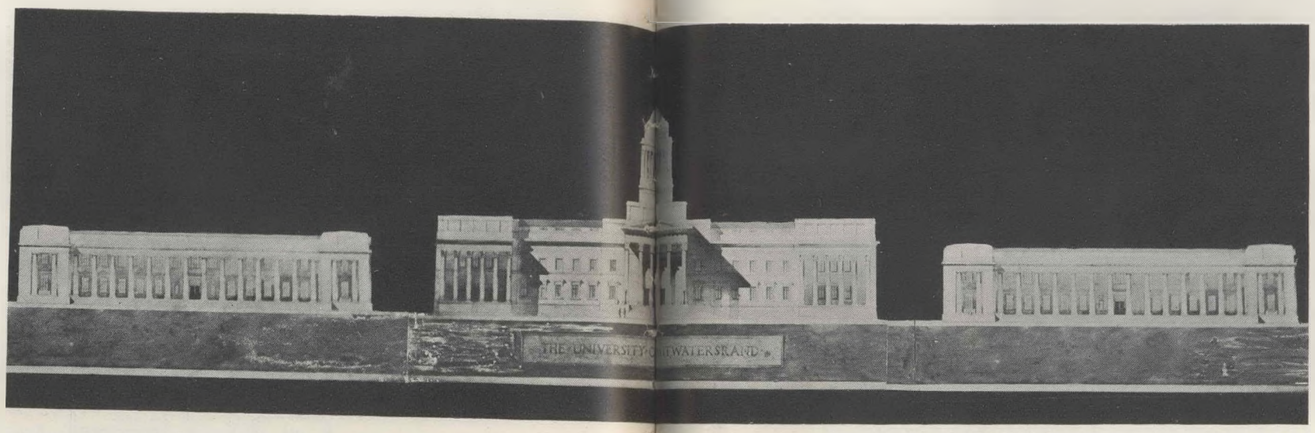
SCALE



Mallet and Trowel presented to H.R.H. The Governor-General, Prince Arthur of Connaught, on the occasion of laying the Foundation Stone of the Central Administration Block on the 4th October, 1922.

UNIVERSITY OF T WITWATERSRAND.

MAIN BUILDI ON CAMPUS.



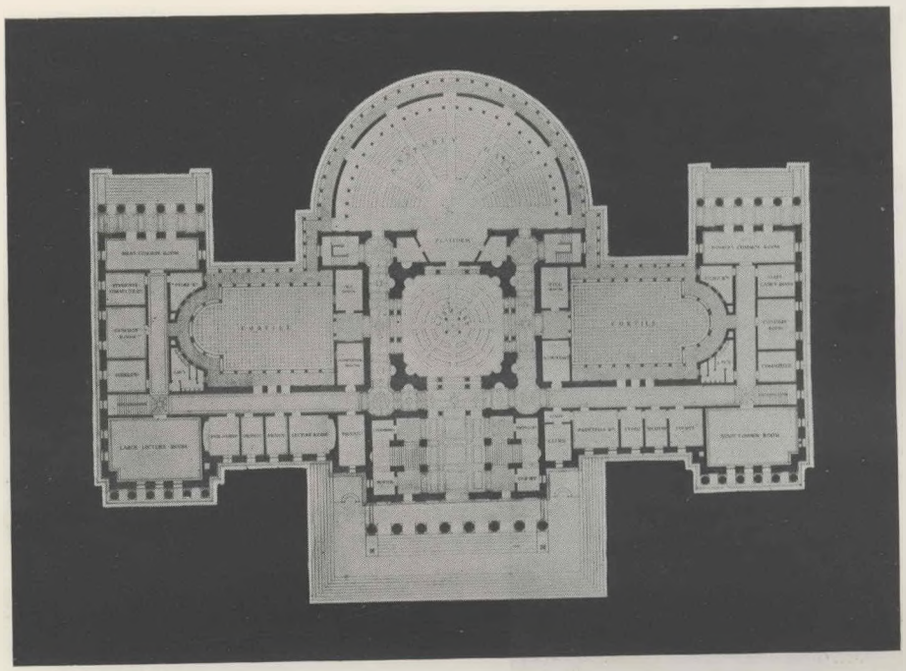
Frank Emley, Cowin & Powers, F.F.R.I.B.A., Associated Architects.

The Foundation Stone of this portion of the new U sity Buildings at Johannesburg was laid by H.R.H. The Governor-General, Prince Arthur Connaught, on the 4th October, 1922.



Laying the Foundation Stone of the Central Administration Block, on the 4th October, 1922.

UNIVERSITY OF THE WITWATERSRAND.



Frank Emley, Cowin & Powers, F.F.R.I.B.A., Associated Architects.

PLAN OF THE UNIVERSITY BUILDINGS.

BRONZE WAR MEMORIAL TABLET ERECTED IN THE POST OFFICE, DURBAN.



The above War Memorial Tablet was designed and modelled by Mr. A. R. Martin, a member of the staff of the Durban School of Art. In deference to the wishes of the Postal Authorities, the whole of the work was executed in South Africa. After several ineffectual attempts, the Engineering Department of the Durban Technical College took the work in hand, and by an electrical process, produced the above satisfactory result. The whole tablet was cast in bronze.

TOWN PLANNING, PAST AND PRESENT.

PRESIDENTIAL ADDRESS

by

CHARLES PORTER, M.D., D.P.H.,

Of Gray's Inn, Barrister-at-Law; Medical Officer of Health, Johannesburg; Member of Public Health Council of the Union.

[Delivered to the members of the Town Planning Association (Transvaal) at the Scientific and Technical Club, Johannesburg, on Saturday, 9th December, 1922.]

As a sequel to the honour of presidency which, with your approval, your Council has conferred on me, I have been asked to address you on the history and principles of town planning in its wide and varied aspects of health, aesthetic and social amenity, and convenience. And one's further excuse for so doing is not that one has sat (for all too short a time) at the feet of that modern master of this fascinating art, Mr. Raymond Unwin, nor because one rejoices in beautiful cities, but, perhaps specially, because town planning is the preventive medicine of urban development, with immensely important bearings on the health of the individual and the community, and on the provision of those reasonably pleasant home surroundings which help so much to make life worth living. Years ago, long and intimate official knowledge of the environment and outlook of the slum-dwellers of a large manufacturing town in the North of England, made one wonder repeatedly as to the use or object of these people being born at all into the world, to such a squalid existence. Amongst this English C3 population, tuberculosis, that "captain of the men of death," to borrow John Bunyan's phrase, was rampant: while its infant mortality rate was enormous, and even now varies between 110 and 130 deaths per 1,000 infants born, as compared with a rate of 30 in the well-planned busy modern town of Letchworth.

As regards the distant past, we know from the researches of Stübben of Cologne, Cammillo Sitte of Vienna, and others, that town planning received considerable attention in the ancient cities of the Egyptians, Greeks and Romans. Kahun, in Egypt, built about 3000 B.C. to house the workers on the pyramid of Illahun, affords the earliest known suggestion of a considered lay-out, including a gridiron system of streets and provision for the carrying off of surface and storm water. And we know that ancient Babylon covered an enormous square, each wall measuring 13 miles, within which were presumably included many detached villages with intervening grazing spaces. Here, again, the principal streets were laid out in rectangular fashion, and the royal castle and the great tower of Babel were placed upon high mounds, upon the slopes of which were the famous hanging gardens.

As regards the Greeks, the older mother-cities, such as Athens and Corinth, were in the early days a tortuous maze of narrow streets without plan: but, although their dwellings continued to be comparatively insignificant, in later years their public buildings and places were on a scale of astonishing magnificence. The pioneers of the Greek colonies, profiting by experience (like Washington, U.S.A., and Adelaide, Australia), substituted reasoned scientific conception and forethought for improvised and ill-considered methods of meeting the requirements of the moment with the minimum of effort. For their new homes, they created towns such as the imposing cities of Ephesus, and of Selinus (Selinonte, south-west Sicily 700-600 B.C.), the ruins of which one has seen, and which is laid out on the geometric principles of Hippodamus (a contemporary of Pericles), who planned Piraeus, the port of Athens. The great Mediterranean city of Alexandria (328 B.C.) was designed by Dinocrates, the foremost architect of the time, and consisted of a series of parallelograms, the streets at right angles to each other, with two main thoroughfares (one of which—Canobic Street—persists to this day), each over 100 feet broad, ornamented by colonnades in the whole of its length. A wonderful colonnaded street also existed in the Syrian city of Palmyra (500-600 B.C.), forming a magnificent approach to the temple of the Sun. It was two miles long, with curious bends treated by means of triumphal arches, each so placed as to afford a striking vista or street picture when looking along this splendid thoroughfare from either direction.

The Romans, in planning their cities, proved themselves eminently practical, shrewd and careful as regards considerations of defence, commerce, water supply and drainage. The advice given by Vitruvius for selecting a town site is suggestive:—"In setting out the walls of a city," he says, "the choice of a healthy situation is of the first importance; it should be on high ground, unduly subject neither to fogs nor rains; its aspects should be neither violently hot nor intensely cold, but temperate in both respects. A city A city on the seaside, exposed to the south or west, will be insalubrious; for in summer mornings a city thus placed would be hot, at noon it would be scorched. A city also with a western aspect would even at sunrise be warm, at noon hot, and in the evening of a burning temperature." And here one may say that in Johannesburg a frontage slightly east of north is probably the most agreeable. The actual ceremony of fixing the site of the Roman town was a very important one: the augurs were consulted as to the date, and, the omens being auspicious, animals fed on the spot where the city was to be built or where a stative encampment was intended, were sacrificed and their livers carefully inspected. If the livers were diseased, other animals were slaughtered, in order to ascertain whether accident or disease was the cause of the imperfection; but if the greater part of the experiments proved, by the sound and healthy appearance of the livers, that the water and food of the spot were wholesome, they selected it for the city or garrison. The city was then carefully orientated, the two principal streets being laid out at right angles, one due east to west, and the other due north to south.

As regards mediaeval towns, those of Roman origin formed a parallelogram with a gate in the centre of each side, the principal streets being carried through in straight lines, as in Pompeii. In another very numerous mediaeval class, the whole town clustered irregularly round a central castle, all within an encircling wall. Settlements outside the wall sprang up: as time progressed, new walls had to be built and the old walls demolished and replaced by boulevards or rings of park land—a process of development of which interesting evidence is furnished by Cologne, Antwerp, Vienna and Paris. A suggestion of modified revival of such ancient walls is, however, to be seen at the Hampstead Garden City, where, along an orderly line, is a boundary wall up to which, but no further, the town and country may each extend, the intention being to obviate an unsightly zone of derelict buildings and dust-heaps.

As the result, at a later and more prosperous date, of competitive civic spirit between many of these mediaeval continental towns, the public places were beautified and transformed by the reconstruction of churches, town halls, markets and guild halls, and, as Ruskin tells us in his "Stones of Venice," "streets were decorated with a magnificence varied only in style according to the material at hand and the temper of the people."

In the 13th Century, when the English occupied Guienne, in south-west France, and many towns were laid out by them, Edward I. wrote from Bordeaux to London for four competent persons "the most able and clever, and those who best know how to devise, order, and cunningly arrange a new town in the manner that will be most beneficial to Us and to the merchants." The most perfect of these towns is Montpazier, with a central market surrounded by arcades, and a rectangular street plan.

In the 16th Century, Rome especially and other continental cities were re-modelled: and if, in 1666, after the Great Fire of London, Sir Christopher Wren's plan for its re-building, which is in accord with the best principles of town planning to-day, had been carried out, it would have made London superb among the cities of the world.

During the Renaissance, town planning in its earliest phases was of two varieties. On the one hand, great roads cut through slums—as the Corso at Rome, and the magnificent modern avenues one sees in Rio and Buenos Ayres—and towns were laid out (like Leghorn) to meet the practical needs of a community. This was town planning as we understand it to-day, and developed from purely practical necessities. On the other hand, the Italian public gardens of the 16th Century were a resuscitation of the ancient monuments of Rome. It took both phases, however, in combination, to produce the great effects which later were seen in France. The Renaissance work carried out by Louis XIV. in beautifying Versailles is considered far superior to anything of the kind found in Italy. Perhaps of equal importance was the grandly picturesque exit from Paris—the Champs Elysées. Originally the palace of the Louvre was connected with a hunting lodge at St. Germain. The same thing happened in Berlin: the German princes residing there had their hunting box at Charlottenburg. In England, the king would depart from his palace at Whitehall and proceed to Richmond: and so we got the King's Road in London, the Champs Elysées in Paris, the Unter den Linden in Berlin, and similar royal exits from others of the principal cities of Europe. Thus, the huntsman's track became in process of time the main thoroughfare of great cities and, in some instances, a magnificent processional way.

In the 18th Century, the laying out of the London squares marked a notable advance in English conceptions of urban amenity.

Coming to comparatively recent times, the remodelling of Edinburgh, in the neighbourhood of Princes Street, George Street and Queen Street, dating from about 1770, affords a fine example of what

Unwin calls "the stateliness of orderly laying out on generous lines"; whilst L'Enfant's famous design for Washington in 1791 would, if followed, have provided for one of the grandest architectural and landscape effects which has ever been devised. The positions of buildings and parks were mapped out on broad and effective lines, and the original chessboard arrangement of streets was modified by imposing upon it great diagonal thoroughfares arranged with a view to effective street vistas and the adequate display of public buildings and monuments. But, unfortunately, this noble plan was, for various unworthy reasons, deviated from, with consistently disastrous results. Some 15 years ago, however, a Commission of Congress strongly urged return to the essentials of L'Enfant's scheme.

In recent times, the systematic study of town planning originated in Paris, in the far-reaching schemes (1855) of Baron Haussmann, conceived in the grand manner and characterised by ideas of symmetry and spaciousness, or order and convenience, which have led the cities of Europe in effectively transforming tangled mediaeval streets into broad, modern thoroughfares, and have made Paris probably the finest city in the world. His straight radial streets, in addition to their strategic value in the control of revolutionary mobs, were very cunningly disposed to show up all the public buildings to the best advantage and from the maximum number of points. The movement so started, gathered impetus from the remodelling of many of the more important cities of continental Europe, following the demolition of their fortifications.

But in British communities, up to the beginning of the present century, the art of town planning was practically unheeded, and Inigo Triggs, writing in 1909, says "from one end of England to another, there is hardly a single example of really good planning," except the "new town" of Edinburgh. Indeed, the majority of the manufacturing towns present a dead level of degrading ugliness.

The passing, since 1907, of the various English Housing and Town Planning Acts has, however, started a new order of things, and the Act of 1919 makes it compulsory for every urban district with a population exceeding 20,000 to prepare within four years a scheme for the development of its unbuilt-on area.

In South Africa, town planning is in its very early infancy, its existing chief towns having grown largely as chance and circumstance prompted, the street lay-out, except in Capetown, being usually of the rectangular type, as in the cities of the ancients and, very generally, in America and other new countries.

The advantages claimed for this rectangular street system are easiness of survey, minimum of waste ground, and economy of labour resulting from right-angled construction and facility in finding one's way about. Its undoubted drawbacks include the non-provision of convenient roads for traffic between the urban centre and the outskirt: that all traffic wishing to move diagonally must travel along two sides of a square to get from point to point: that the long, straight resulting streets, especially in South Africa, favour wind-carriage of dust: and that frequently the street-vistas are not closed.

Many consider that the so-called spider's web or radial system, which has been very generally followed in Europe, has proved in the past to be the better arrangement, and, in the case of towns placed upon a river bank, like London and Paris, it must be the most natural one, for the bridges form focal points which must govern the entire plan.

A third method of street arrangement which has much to commend it is a combination of the radial and rectangular systems, as exemplified in the modern alterations of Antwerp and in the plan of Dalny, the new eastern terminus of the Trans-Siberian railway.

The hexagonal street lay-out has also had its advocates, but no example of it is cited, and it is understood to be difficult to carry out in practice.

As regards our own city, previous to the laying out of the first township in 1886, a miners' camp was formed on the ground since known as Ferreirastown. In 1886, the township of Johannesburg proper, bounded on the north by Noord Street, on the east by End Street, on the south by Commissioner Street, and on the west by Diagonal Street, was designed in chessboard fashion, apparently (and at that time not unnaturally) with regard only to the financial advantage of the owners. (The ruling size of the blocks is 200 ft. x 200 ft.—or 40,000 super feet—sub-divided into four 100 ft. x 50 ft. stands and eight 50 ft. x 50 ft. stands.) Five squares or open spaces were left, namely, Market Square, Von Brandis Square, Union Ground, Plein Street Park, and End Street Park. The small size of the building blocks, the width and the number of the streets (*e.g.*, Frederick and Anderson Streets are only 50 ft. apart), give a street mileage and area altogether out of proportion to the area available for building. But at that time the principles of town planning were practically a sealed book, even in England, and the result, as Johannesburg developed, has been serious difficulty in regard to surface water disposal, enormously costly street upkeep, dangerous rectangular "collision" corners, disregard for effective street vistas, and, in certain districts, "sweating of the land" by crowding of dwellings on site, which is a sure embryo of future slums.

Article 1-5 of the Johannesburg Building By-laws, drafted in June, 1903, by Mr. E. H. Waugh, Building Surveyor, were, it is believed, the first attempt to regulate the laying out of our future townships. They provide for the submission of certified plans, showing

details of boundaries, streets (for which a chessboard lay-out was required), building blocks and stands, and regulated tree-planting.

The next step was the passage of the Transvaal Township Ordinance No. 19 of 1905, which required the promoters of every proposed township to furnish particulars of its extent and water supply, the plots offered for sale, and the open spaces to be devoted to public use: and a Township Board was formed to settle the terms and conditions upon which sanction should be accorded.

In practice, however, little attention has been paid by the Board to the essentials of modern town planning, and surveyors have, unfortunately, had no option but to comply with the demands of the land-owner.

About 1910, instances were noted of aggravated crowding of dwellings on site in Johannesburg, as many as five cottages being, in some cases, erected on a stand 100 ft. x 50 ft., without contravening modern by-laws. In 1912, therefore, on the advice of the speaker, a clause was inserted in the Local Government Ordinance giving power to regulate the size of plots on which buildings may be erected. But subsequent difficulty in framing a by-law for the purpose led to the speaker attending in 1914 the Summer School of Town Planning at University College, London, to learn that, in modern schemes, this problem was solved by specifying the proportion of a residential site which may be built upon, and which varies from one-third to one-half.

But South Africa's present town planning charter is section 132 (1) (*h*) of the Public Health Act of 1919, which enables the Minister to make regulations, confer powers and impose duties on local authorities as to the sub-division and general lay-out of land intended to be used as building sites, the width and number of streets, the limitation of the number of dwellings or other buildings to be erected on such land, the proportion of any site which may be built upon and the establishment of zones within which offensive trades or occupations are prohibited. It will be noted that it gives no power to alter the lay-out of existing towns.

In 1920, a Housing Board was constituted under the Housing Act No. 35 of 1920, with Colonel Sir Edward Thornton, K.B.E., an experienced health officer and administrator, as chairman, and at least two other members with some professional knowledge of town planning. Their duty is, generally, to examine and advise upon housing conditions and proposals; and it is hoped that, with the advent of lessened financial stringency, all town planning proposals will receive their careful scrutiny.

About the time that the Public Health Act came into force (1st January, 1920) this Association was formed, and has since endeavoured to arouse public interest in this subject, and to watch and (where necessary) make representations regarding Government and Municipal proposals. At the request of the Provincial Executive, it has critically reported on eleven new township proposals during the past twelve months: and, lastly, by desire of Government and in informal conference with the advisers of the Johannesburg Municipal Council, it has prepared and submitted a suggested code of model town planning regulations on up-to-date lines, the practical value of which has been acknowledged in generous terms on behalf of the Minister of Health. It is hoped that this code will prove sufficiently elastic to be applicable *mutatis mutandis* to the various classes of urban communities in the Union.

It is generally agreed that in the lay-out of a township regulations should be addressed to the following considerations:—

1. The object or purpose of the township, *e.g.*, whether it is to be a suburb or a self-contained community, and the probable aims and needs of its future population.
2. The careful preservation, so far as is reasonable, of features of natural attractiveness and amenity, including trees, which are so often, as in Forest Town, recklessly and ruthlessly cut down.
3. The delimitation of areas for civic centres, for residential, for commercial, for factory and workshop, and for offensive trade purposes, having regard to character and relative position of the various parts of the district, to existing and proposed means of transport and communication, prevailing winds, etc.
4. The dedication to public use in perpetuity, and not liable to alienation for other purposes, of a sufficiency of open spaces and recreation grounds. In this connection, it will be recognised that, within reasonable limits, it is desirable both to group building sites and to combine open spaces, so that areas built over may be surrounded by open spaces of useful and attractive size.
5. The correlation of the dimensions of building "plots" or "stands" with those of the blocks which they form.
6. The careful planning of roads and streets, having regard to through regional communication, including railway facilities: to present local requirements, convenience, and variety of traffic: to the probable direction of natural growth if the district be left to itself: to drainage necessities, contours and levels: to vistas or street pictures: to economy in construction

and upkeep, by the avoidance of unnecessary streets, and of unnecessary width in secondary streets: to the abandonment of the chessboard lay-out, in favour of the spider's web or of the combined gridiron and radial systems as circumstances may indicate.

The avoidance of dangerous street corners and junction places or circuses, such as that which exists at Twist Street terminus, by the provision of ample space and, if necessary, gyratory regulation of traffic, is most important.

Further, the number of houses to be allowed per nett acre (exclusive of streets and open spaces) in residential districts, may vary from 8 to 18, 12 being a useful number to afford gardens of sufficient size to be of commercial value to tenants. The actual proportion of any building plot which may be built upon will vary according to the nature of the districts: in Cologne and elsewhere this is regulated by "zoning." In the centre and business part 25 per cent. of all land must be left free: in the second and third zones the figure varies from 35 per cent. to 50 per cent., whilst in the fourth or villa-district there must be 50 ft. between each house, with a garden in front, and 50 per cent. of the site left free.

For the Transvaal, we have recommended that for commercial districts in new townships, the proportion of a site which may be built upon be fixed at not more than one-half, and in residential districts not more than one-third.

Finally, in future town planning in the Transvaal, the setting aside of areas suitable in nature and extent for the housing of natives and coloured persons is a matter of very great importance, for the experience of Johannesburg has taught us that neglect to do so means, in our midst, those crowded native and coloured slums, which are a menace and disgrace to South African communities.

The unfortunate manner in which the side elevations of our fine Town Hall are obscured by the closeness of neighbouring buildings, points to the moral of Sitte's advice that tall buildings, narrow in proportion to their height, seem to require "places" deep in the dimension at right-angles to their front: whilst wide buildings of lesser height seem to show best on "places" wide in the direction parallel to the front of the building, and shallow in the direction at right angles to it. We are told, too, that the length of so-called "squares" or places should not be greater than three times their width, and that monuments are more suitably placed near the corners than in the centre of such spaces.

Time will not permit reference to many other interesting matters such as "regional planning," satellite cities, railway stations, and that peculiar type of domestic "architecture" (or the want of it) indicated by the term "Queen Anne fronts with Mary Anne backs."

But since returning from Australia last April, one has been asked several times about town planning in those Dominions. Adelaide, laid out with extraordinary foresight and skill by Col. Light, R.E., eighty-five years ago, is almost ideal, except for its chessboard arrangement of streets. The view from the Post Office tower is most impressive, revealing beautifully kept open spaces and street-gardens and a complete wide zone of park land separating the city proper from the suburbs. Its railway station is particularly well arranged, the succession of splendid public buildings in North Terrace is most imposing, and one was struck by the pleasing and apparently very excellent statuary in the delightful Fine Art Gallery and, to a less extent, in the Public Gardens.

Melbourne is also laid out on the rectangular system, with broad main streets and many fine buildings, the Public Library being internally the best arranged one knows of. Melbourne has very beautiful Botanic Gardens and, in the St. Kilda Road and, to a lesser extent, Sidney Road, two of the finest "multiple-traffic" or "combination streets" in the world. Melbourne, it is understood, anticipates much added prosperity on the completion of immense power works at a great waterfall some distance from the city.

Sydney has no claims to modern planning, but boasts of very fine Botanic Gardens rising from the shores of its beautiful harbour. A Town Planning Asociation exists there, and in 1913, the Dacey Garden suburb, covering some 340 acres on a relatively unattractive site, was completed on the usual modern lines by its courteous president, Mr. John Sulman, F.R.I.B.A.

Apart from the beautiful harbour setting of both Auckland and Wellington, each built on a narrow foreshore and on hills rising rapidly therefrom, there is nothing particularly in New Zealand to interest the town-planner. But it is perhaps worth mentioning that in Wellington, which is rated on unimproved land values, dwellings are in consequence relatively crowded on area as compared with Auckland, which rates on annual value, less 20 per cent. The obvious lesson is that in order to prevent "sweating of the land" by the tendency to crowd dwellings on site where unimproved land values are the basis of rating, it is essential that town planning regulations defining and limiting the proportion of any building site which may be built upon, be strictly enforced.

In Tasmania and Perth, avenues of trees have been planted in memory of those who fell in the Great War, each tree bearing a bronze plate with the name, etc., of a fallen soldier. This appealed to one as a singularly appropriate and inexpensive method of

keeping green the memory of brave men and, at the same time, beautifying and benefiting the places that were their homes.

In Australasia one was struck by the comparative absence of any really attractive domestic architecture, the houses being small and relatively plain, possibly a consequence of the acute domestic servant problem.

Finally, one would offer the following suggestions as to the application of town planning principles and housing betterment to Johannesburg as it exists:—

1. That the Council definitely tackle the question of putting through its revised Building By-laws, which have been under consideration for some years, and which are needed very badly indeed for preventing the continued crowding of dwellings on site, which hampers the efforts of the Health Committee, because it is, as already stated, the certain embryo of future slums.
2. That in order that the Malay Location and the minor slums may be vigorously tackled, the Council continue its genuine efforts to provide accommodation for natives herding there.
3. That slums generally should not be dealt with by betterment schemes at great cost to ratepayers, but by closure and demolition orders against the owners.
4. That the Council be asked to invite the Minister of Public Health to gazette for Johannesburg as soon as possible suitable Town Planning regulations on the general lines of the suggested model code recently submitted by this Association, so that it may have an effective voice in regulating new townships within its area.
5. That effort be made to obtain legal powers—
   (*a*) To secure some measure of effective control of the ingress of natives other than those coming to mining or other definite employments or to approved employment agencies.
   (*b*) To secure land for all approved municipal purposes (including locations) at its fair market value, and, as recommended by a recent English Parliamentary Commission, without allowance for compulsory acquisition or for any increased value due only to the fact that it is required for public purposes.
   (*c*) To require promoters of all new townships to grade, level and "make" their roads and paths, and to sewer or acknowledge liability for future sewering of such roads, before they are taken over by the local authority. This would effectually cure the evil of unnecessary roads now constructed for the promoter's benefit at the public expense.
   (*d*) To enable any local authority to prepare a scheme for the improvement of any existing lay-out, more especially in regard to traffic requirements: to prepare general schemes and plans for future main roads: and to delimit zones for the special purpose of residence or business and commerce or factory and workshop or offensive trades, as the case may be: to require promoters of railways or tramways to notify local authorities of their proposals in regard to the construction of new lines or other works, and to provide for appeal to Government by local authorities who consider that their areas would be prejudiced by the execution of such proposals.
6. That dangerous junction places, such as that at Twist Street terminus, be dealt with, and that the collision risks at right-angled street corners be minimised by prohibiting, at such points, hedges or walls over 3 ft. 6 in. in height.
7. That, as recommended by this Association, every reasonable effort be made to secure the remains of the beautiful Sachsenwald, as a public pleasaunce.

In conclusion, ladies and gentlemen, I thank you for your forbearance, and ask you to pardon the shortcomings inseparable from any attempt to deal in one address with such a subject as town planning. One's earnest hope is that those who succeed us will see this great and favoured land of ours, with its wonderful climate, wide spaces and opportunities, in proud possession of many well-laid-out towns, prosperous and not too large, where an "A1" population may enjoy that "Health and Amenity of Residence" which are the watchwords of town planning.

REFERENCES.

"Town Planning in Practice" (1913, 2nd Edition). Raymond Unwin, F.R.I.B.A.
"American Architecture and Town Planning." Raymond Unwin, F.R.I.B.A.
"Town Planning." H. Inigo Triggs, A.R.I.B. (1909).
"Ruislip-Northwood Town Planning Scheme Regulations." 1914 (Ministry of Health).
"Dumferline Town Planning Scheme Regulations." 1920.
"Practical Town Planning." 1914. J. S. Nettlefold, etc., etc.

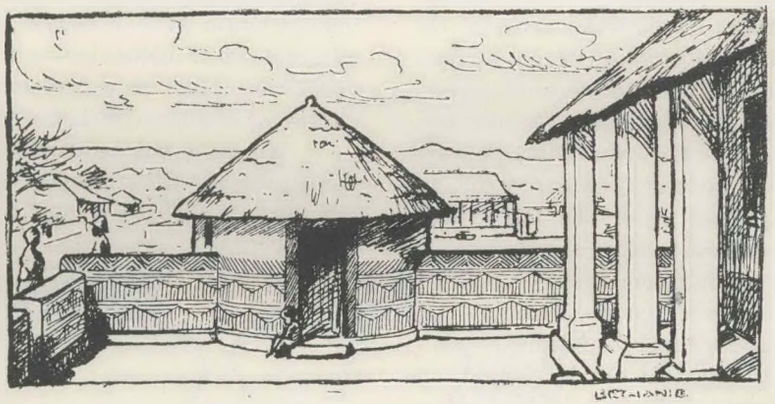
The Registrar of the Association will visit Capetown in connection with the forthcoming conference in his capacity of Secretary to the Executive, under which it is called, and also to the conference itself.

The Council of the Society of Architects (London) recently confirmed the election to "Fellowship" of Mr. E. J. Wellman, of 6, Grosvenor Chambers, Johannesburg, put forward by the South African branch of that Society.

WANTED: A DISTINCTLY SOUTH AFRICAN ART.

At the quarterly meeting of the Association held in the Scientific Club on 14th November, 1922, presided over by Mr. Allen Wilson, in the unavoidable absence of the President, the following lecture, illustrated by lantern slides, was delivered by Mr. Erich Mayer, the well-known South African artist:—

In all branches of Art in South Africa there is a movement afoot to create a style of our own. For though the appreciation of Art is international, the creation of all great Art has always been national, especially in its foundations. Great Art always reflects the spirit and soul of the races and nations that produced it. Think of Assyrian and Egyptian, Greek and Roman, Italian, Dutch or Spanish, Chinese or Japanese Art. Modern nations often lost their individual style of expression temporarily under the influence of stronger or more original nations, but when they were strong themselves, they soon went back to their own traditions and built on it a new, strong style.



South Africa will probably need much time to do that, because her population is not yet homogeneous; there exists no common tradition dear to all; the influence of stronger European nations, of immigrants and imported articles was too strong; and, before all, too little has been done to encourage original production. But the time is near when South Africans will have sufficient self-reliance to speak their own artistic language. A beginning is already there, and times are more favourable.

In music, for instance, first attempts were made by Bosman di Ravelli (now in England) and Ten Brink (now dead), but circumstances were against them. A fresh champion has arisen in Prof. Kirby, who recently drew attention to native music.

In sculpture, S.A. *motifs* have been successfully treated by Van Wouw, but the real originator of a strong S.A. plastic style will be M. Kottler, of Capetown, if the opportunities are given to him.

In painting, after many less successful attempts by other excellent artists, J. H. Pierneef, of Pretoria, when exhibiting some work at our latest Academy Exhibition in Selborne Hall, was justly pointed out as the first to create a distinctly S.A. language, and that exhibition was hailed as the birthday of a truly S.A. school in painting.

In architecture, of all arts, the greatest efforts have been made, with comparatively modest results, since the task of changing the surface of a country is too enormous to be achieved by one generation; and many artists will have to contribute their individual share before a great style will arise out of all. The many good beginnings and valuable contributions differ too widely.

Some architects fall back on the style of the old Cape Dutch homestead. It is Cecil Rhodes who has led the way. Recent investigations, notably by Gerald Moerdijk, have shown that this harmonious style also owes its origin to many influences, as, for instance, Dutch farmers and ship's carpenters, and wood sculptors, German architects, French Huguenot traditions and climatic conditions.

The same will be the case with our future style. Already the influence of modern social life, especially English home life, has modified that old Cape style, as in the case of Groote Schuur lounges, broad covered verandahs, etc., have been harmoniously added. Some artists advocate the imitation of that style all over South Africa. Others, like Pierneef, point out that in the Transvaal a different type of farm houses has developed which harmonises better with the wide-stretched plains and lonely kopjes.

Architect Gordon Leith (whose turn it would have been to lecture here to-night) would have laid stress upon the geographical and climatic conditions and the use of the materials locally provided by nature. (Indeed, all good architectural styles owe their main character to these essentials, except in our commercial age when the material as well as the forms of our buildings are imported from all parts of the world.) The climatic conditions of South Africa, mainly, the dry heat, favours the use of thatched roofs, small windows or broad covered verandahs, and the more frequent use of vaults in construction—a favourite idea of Gordon Leith. All these sound ideas are indispensable links in the development of our architecture.

My hobby, which I trust will not always remain a mere hobby, is the study and adaptation of native art traditions, of which by far too little use has been made. Only the thatched rondavel has of late been much in favour with our architects as well as the public. The rondavel cottage has found many good and some excellent solutions. But the single rondavel everywhere



stands too isolated, and even the rondavel house is seldom adapted to its architectural surroundings. The word architecture taken in the wider sense of the art of the shaping of space, the creating of landscapes, cities, or at least streets and public squares of perfect harmony. Here our modern city builders mostly fail, though in most cases not by their own fault. Yet the fact remains that there is no unity, no coherence, no collaboration, and no general style. To the artistic Japanese, for instance, all our modern streets and cities, and most of our interiors (not only here, but as well in Europe and America) look shockingly unharmonious and even barbarous.

And yet a partial solution is not by far as difficult and remote as it may seem to be. In the field of architecture, one solution at least lies in the more frequent use of connecting and enclosing walls, besides steps, stairs and stoeps, uncovered verandahs, or terrace walls. Especially the rondavel virtually cries for connecting walls of different height.

The African native races, like Arabs, Negroes, and Kafirs know this, as is shown by the illustration.

Also the older generations of our own race made fine use of this knowledge. Only modern man seems to have forgotten it. Our architects are seldom to blame. It is mostly the public that became too materialistic, and too saving, with regard to these seemingly useless or too expensive walls, which, when well applied, give so much satisfaction and comfort. Look at the long, fine, plain garden walls in many old Cape cities like Stellenbosch or Paarl, Malmesbury, Graaff-Reinet or Swellendam, with their interesting old plain gates. They are as necessary to the harmony of a place as the trees, shrubs and flower-beds we all love in their uselessness, and which look ten times more beautiful before or behind a setting of bright walls. Or think of the long white walls which surround and divide the large homes of the old Cape farms, adding life and beauty to the landscape. Think of the very similar long white walls of Florence, in Italy, which, even when covered by the dirt of centuries, lend the greatest poetic charm to this beautiful city. May these step-children of modern architecture soon find a home in our sunny South Africa again, sweeping away all the ugly imported machine-made fences!

We need not fear that all these white walls will ever become monotonous. They never are, if they are well proportioned, adapted to the surrounding landscape, and interrupted by graceful curves, stone benches, gates, and quiet, harmonious buildings.

And if we want to impart more life to them, why not decorate them by fine, unobtrusive ornaments. I do not mean any meaningless, conventional profiles and frieses, not badly conventionalised South African flowers, animals, etc., but simple decorations of character—a South African character if possible. How to use plain decorations, our natives again have shown us in many fine examples.

We need not be ashamed of learning from the lower races. Other modern nations have done so with success. In America modern decorative artists have



made use of the much scarcer *motifs* of the Red Indian. Holland has only got a distinctive decorative style of her own since her artists have introduced the decorative forms, lines and colours of the Malay races under her rule. Our country is especially rich in such artistic forms that may be developed into a higher

South African style. Let me show you a series of fine indigenous decorations which, though only a few out of a much richer store, will convince you of what treasures we possess.

There are, to begin with, the common kafir pots of the Pretoria and Rustenburg districts, made of red



burnt clay, with black decorations and white engraved outlines.

The second picture is designed after studies by Hendrik Pierneef, who has also devoted some time to the study of indigenous art *motifs*, and who has invented in their spirit some most beautiful designs for carpets and cushions, which I hope he will show at our next Academy exhibition.

There are the metallic black pots from the south coast of Natal, of even more graceful shapes, and decorated exclusively by ornaments engraved with some square-edged tool, much like the Assyrian writings.

There are the often very artistic poker work decorations on—kalabasses (the sculls of wild pumpkins). The second one being copied from a book of some missionary in the library of the Pretoria Museum, ascribed to the Merutse and Mabunda tribes.

Then there is the poker work decoration on wooden spoons, pots, etc.

Of quite a different nature, because wrought in a different material, but yet of the same S.A. spirit, are the tasteful ornaments on the baskets made by the Rhodesian and Congo kafirs in innumerable variations. These are not painted upon the surface, but composed by ingeniously interwoven white and coloured reeds.

I am not showing you the countless less artistic decorations which delight the ethnologist by their originality, and of which many may yet be used with merit by some gifted artist who would bring the better intention of the maker into full light.

And I regret not to be able to show you the very finest examples of this native art, because they are only to be found far from our civilisation, which soon influences and thereby spoils the natural artistic instinct of these races. I can only tell you what I heard from Pierneef about the most perfect beerpots of the kafirs near the northern border of Transvaal, who use the most original designs in the most beautiful colours made of rare green or blue stones (the genuine lapis lazuli?) ground to powder for the decoration of nearly unbreakable pots. And I can tell you from my own experience of the beautiful blankets I have seen the kafir women wear in the Alexandria district of the Eastern Cape Province, dyed by themselves in orange-coloured earth and decorated with a few black lines beautifully placed. There are also fine sticks carved by kafirs in much finer shapes than most of our fashionable walking sticks.

All these things will soon disappear if not systematically collected, just as should be done with the original native music, the disappearance of which or corruption by modern influences Prof. Kirby bewails. For the preservation of both expeditions should be sent out, in the case of music provided with the best gramophones.

Let me show only a few specimens of Bushman paintings, which are much better known, and of which Mr. Reenen van Reenen, of the Cape, has made a very thorough study from the artistic point of view, having collected hundreds of tracings after them.

Far less is known about the Bushman sculptures



on hard stones, of which a rich collection has been brought together by Dr. van Haegen for the Pretoria Museums.

In spite of the very hard material, round granite boulders, in which they are embossed, these animals are often more perfectly designed far better than

on the cave paintings, and often show a simply monumental hard stone. And in connection herewith behold a few sketches of round sculpture in soapstone to be seen in the Museum of Capetown, and which, as far as I can remember, have been found at Zimbabwe. A comparison with the indigenous works from Peru that are to be found in the same room, shows the immense difference between South African and South American style.

Even the comparatively small quantity of what we can easily collect shows so rich a variety and such characteristic shapes and colours, that a fine modern decorative art style may be built up on them. Just think of the fine pottery that even a slight improvement of the kafir pots might produce. I am firmly convinced that Sir Cullinan's pottery at Olifantsfontein would have proved a great success, had they but been able to employ an artist of taste and imagination, who out of different kafir pots, combined with Bushman art and other South African indigenous art elements, would have developed a distinctly S.A. style. For while the South African public which takes some interest in artistic pottery would have proved too small to keep such an industry alive, foreign countries would never order from South Africa mere imitations of ceramic works which they might get cheaper from the countries of their origin; but they might soon crave for the possession of some beautiful objects that bear the distinct mark of their South African birthplace.



The same would have been the case with the Government Weavery at Pretoria, which also closed down before the war, had they produced original good designs of a S.A. style. And so with all our other nobler industries that we should like to export. It is always the strongly national product that conquers the markets of the world, like Turkish carpets, Japanese lacquer work or wood cuts, Copenhagen porcelain, etc.

Now I do not advocate the exclusive use of Kafir or Bushman art *motifs* for the development of our own style. Only the earth-born S.A. feeling they impart should also pervade the works of our artists as much as possible. In connection with these forms and colours all our S.A. human, animal, plant and landscape *motifs* may be utilised. I can think of nothing more fascinating for our future decorative artists than the task to unite all these elements into a new synthetic whole. Also the many more or less interesting and characteristic examples of Peasant Art to be found amongst the Boers must not be forgotten The reimpies furniture of the bushveldt has already conquered even the most luxurious city residences. The beautiful fur work of the Namaqualand Boers is just becoming more widely known and appreciated. Even the home-designed needlework of the older Magaliesberg Boer women contains some fine suggestions. The grand simplicity of the Bushman drawings and sculptures shows how to use this thankful element of decoration—South African wild fauna.

Let me just show a few modest samples of how such elements might be connected, though I am far from thinking that these belong to the best possible solutions.

And as these lantern slides fail to render one of the most important aspects of all these works, namely, colour, let me just add a few words on this matter.

All the objects here reproduced show none or very little glaring colours. Besides the work made by the kafirs of imported coloured beads, there is scarcely anything highly coloured to be found. So I think that, in order to get a strikingly South African effect, we should prefer all the earth colours from white, grey and yellow over brown and nearly pure red, together with black, as the main feature of our products. But even as our brown and yellow landscape is enlivened by a brilliant spot here and there, like an ox-wagon or a kafir clad in a multicoloured, blanket, and even as the coloured beadwork of the natives gets its full beauty only on the background of their brown bodies, so will we get the greatest and noblest effects by using such brilliant contrasts sparingly in conjunction with our more earth-coloured decorative works.

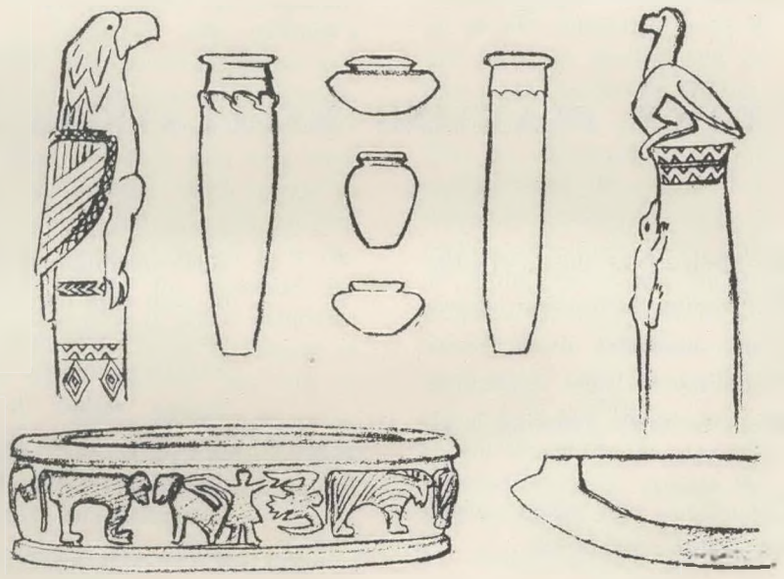
I think that of such a South African style, if it were developed, all our industries and art would benefit. It is not a fantastical idea, but a very practical one. All efforts should be made to get it realised, if possible in the near future. The talents are there and the material is there. But it would be impossible for a few artists, however enthusiastic, to perform this feat by themselves. Like all other countries that has an artistic style worth mentioning, we need public institutions to develop our talents, to foster arts and crafts, to utilise the rich resources our country offers.

The most important things urgently needed are proper art schools or, better, art and craft schools. Without them, all our talents will flee to other countries where they find better chances of development and a more congenial atmosphere. I cannot help repeating a word which Gwelo Goodman (one of our most brilliant painters, whose works hang in the

Art Gallery at Johannesburg) uttered about four years ago, and which Mr. Amschewitz, who did so much to encourage and help on our young talent, repeated two years ago: "It is rather a shame that a city like Johannesburg, which has the means to entertain three racecourses, should have no art school."

I do not mean a school where the students learn to paint pretty pictures and model nice figures, but one where they may learn to invest every article of our daily surroundings with a permanent beauty and harmony, characteristic of our country, that would win us the sympathy and respect of all the civilised nations.

There should be classes for ceramic art, for weavery, pottery, bookbinding, printing and illustration, and all the graphic arts for leatherwork and needlework, and before all there ought to be workshops where every pupil should thoroughly learn to master the technique or craft in which his colours are to be executed. So in all our arts and crafts the material is the principal element that shapes a genuine style. Without mastery of the craft, all our endeavours lead only to half successes.



In connection with this art and craft school we must get a museum of applied art, containing all the best specimens of native art, as kafir pots and calabasses, Bushman drawings and sculptures, and all the things described or shown to-day, either in the original or in the shape of an archive of drawings and photographic records of all that cannot be had in the original. Furthermore, a collection of South African Peasant Art, of the historical and present-day costumes, like the genuine bonnets or kappies of the Boer women, that are so often ridiculously misrepresented by superficial illustrators. There ought to be a whole library where all the descriptions and pictures of historical places, typical landscapes, or flora, fauna, and native life, etc., can be found and studied, including, perhaps, the art and culture of the Central and North African tribes, as well as of Egypt, Assyria and Babylon, which latter, though not on African soil, have much to learn from.

I think of a scheme like the famous Melbourne Public Library, founded in 1853, described in the June issue of your Society's quarterly, *Building*, a library with adjoining museums for ethnology (especially Australian ethnology), natural history, Australian geology, Australian fossils, rocks and minerals, etc.

Close at hand there should also be a botanical garden, containing all the most characteristic South African plants that will grow here: the Barberton daisy, the aloes, orchids, gladiolas, amaryllis, the mimosas, etc., that may furnish motifs for original designs. The neighbourhood of the Zoo would be a great asset.

The art school buildings should represent the different South African styles of building, or at least those of our province. Some genuine ox-wagons and a cattle kraal would be desirable, if not easily to be reached by the school motor cars destined for sketching and studying excursions.

A typical Boer family, that might also serve as models when required, might look after the house, and typical kafirs and, if possible, a genuine Hottentot and Bushman might be employed as drivers, servants and, at the same time, models.

We ought to have a permanent central institution for ethnological and cultural research, with at least one assistant for the artistic side of this matter. All the beautiful things that have been or are still being produced in South Africa, but will soon quite disappear, ought to be systematically collected and preserved in the museums of all our principal towns. There is no time to be lost.

For the instruction of the public in artistic matters, our periodicals and daily press should publish far more articles and illustrations. Lantern lectures on Art should be a frequent feature in all school centres and big towns.

All these things are not a luxury, but a necessity for every civilised country. Even from the practical point of view, all our industries would profit by such applied art schools, museums and archives.

Yes, our whole South African culture would thereby gain immensely, the aesthetic side of our life having been too much neglected so far. It is the beautiful side of all civilisation that deserves and gets first the esteem of the best all over the world. When nations fall and disappear, their art still lives, like that of ancient Babylon, Assur, Egypt or Greece.

All passes. Art alone
Enduring stays to us.
The bust outlasts the throne:
The coin, Tiberius.

Let me conclude. I am no radical. I do not expect that new South African art to push aside and supersede all imported and borrowed art within a few generations. I welcome every good artistic article that comes from other countries with older and riper traditions, all good and tasteful building that is erected in our country, for every piece of noble architecture, though not quite original or South African, will help us to develop the general taste which grows by degrees.

But I claim an equally fair chance for the young movement that points to a greater future, while it gives heart for inspiration to the first beginnings of a South African Art.

I want to arouse a greater interest for all these sound endeavours and plead for better facilities of artistic education in this country for our young creative talents, especially in the field of applied art.

If this lecture, to which you have listened with so much patience, should have awakened some more than platonic interest in some quarters that might be of assistance to this cause, I shall think this the best reward for my efforts.

TOWN PLANNING REGULATIONS.

At the request of the Minister for Public Health, the Council of the Town Planning Association (Transvaal) have prepared and submitted draft Model Regulations for Town Planning. These regulations have been submitted under the three following headings:—

A. General considerations and advice which cannot be embodied in regulations.

B. Draft regulations under Public Health Act, No. 36 of 1919, Section 132 (*h*).

C. Directions in which futher powers are necessary.

We have pleasure in quoting the general considerations and advice under Section A, and hope to be in a position to give the full text of the considerations under B and C in our next issue.

(A.) In the general "lay-out" of a township the following considerations should be specially borne in mind:—

1. The object of purpose of the township, *e.g.*, whether to be a suburb or a self-contained community.

2. The careful preservation and utilisation, so far as is reasonably practicable, of features of natural attractiveness and amenity.

3. Such delimitation, as in the circumstances of each case may be desirable, of areas for residential, for commercial, for factory and workshop, and for offensive trade purposes, having regard to character and relative position of the various parts of the district, existing and proposed means of transport and communication, prevailing winds, etc.

4. The dedication to public use of a sufficiency of open spaces and recreation grounds.

5. The careful lay-out and regulation of streets, with regard to through communication, to local requirements and variety of traffic, to convenience and safety, to the general slope of the land, to the avoidance of the chessboard and the cautious use of grid-iron arrangement, to economy of expenditure for construction and upkeep, to drainage necessities, and to vista effects and general amenity.

6. The careful correlation of the dimensions of *building plots* with the measurements of the *blocks* which they form.

7. The limitation of dwellings per acre and of the proportion of residential, commercial and factory sites which may be built upon.

RECOVERY OF FEES.

THE ASSOCIATION TARIFF OF CHARGES UPHELD BY THE SUPREME COURT.

In the Johannesburg Magistrate's Court, the Chief Magistrate, Mr. J. A. Ashburnham, gave the following reasons for his judgment in the case of H. H. V. Simonson, an Architect, against R. C. Power, for £108 13s. for preparing bills of quantities, plans and specifications for a proposed residence at Oaklands.

His Worship's reasons were, *inter alia*:—

"The first ground of appeal is that the judgment is against the weight of evidence. The plaintiff's claim is for preparing bills of quantities, plans and specifications for a proposed residence at Oaklands, for copies of these documents and of the drawings, and for survey of the site. The defendant paid into Court the amount claimed for the survey. With regard to the balance of the claim, he admitted having instructed the plaintiff to perform the services referred to in the summons, but repudiated liability for payment for those services, on the ground that it was a condition that the total cost of the proposed house in respect of which the services were to be rendered was not to exceed £1,500.

"The plaintiff denies that his services were engaged on this condition, and I accepted his version of the transaction.

"The defendant admittedly opened the negotiations by taking to the plaintiff a plan of what he wanted, and asking him for his estimate of the cost of such a building. The plaintiff gave a rough estimate of something over £3,000, which the defendant stated was beyond his means. Defendant then asked plaintiff to endeavour to effect a saving by reducing the size of the rooms, and eventually plaintiff submitted to defendant the plan of a house, for the erection of which the defendant asked plaintiff to call for tenders.

"It was clearly proved that in order to call for tenders it was necessary for plaintiff to do the work for which he has claimed payment in his summons. Defendant, therefore, having admittedly instructed plaintiff to call for tenders for the execution of this plan is, in my opinion, liable for payment for the work necessarily done by plaintiff in carrying out his instructions.

A Second Ground of Appeal.

"The second ground of appeal is that plaintiff failed to establish that the sum of £108 13s. was fair and reasonable remuneration. The evidence of plaintiff and his witnesses establishes the fact that the charges made are those usual in his profession and are those prescribed by the articles of the Architects' Association. There is also evidence on the record that the charges are fair and reasonable, and no evidence to the contrary.

"The third ground of appeal is that the fees claimed should have been based on £1,475, and not on £1,745, inasmuch as £1,475 was the lowest tender. The facts are that £1,745 was the lowest tender, and that no tender for £1,475 has ever been received. The contractor who submitted a tender for £1,745 stated that he discussed with plaintiff the possibility of making some alterations in the plan which would have the effect of reducing the cost, and that he suggested certain alterations which might have reduced the cost of building to £1,475, but the plaintiff stated that the proposed alterations were not such as he could have recommended defendant to accept, and the proposals were never even discussed with the defendant.

"It is not therefore possible, in my opinion, to regard this informal suggestion of the contractor as a definite tender to execute the plaintiff's plans for the sum of £1,475."

Following this judgment, Mr. Power noted an appeal, which was brought before the Supreme Court of South Africa, Transvaal Provincial Division, and the following judgment was delivered by the President, Sir A. Mason, to which is attached a concurring judgment delivered by the late the Hon. Judge J. Gregorowski, on the 30th October, 1922:—

"Plaintiff, an Architect, sued the defendant in the sum of £108 13s. as amount due on various items in connection with the plans, specifications and bills of quantities of a certain residence. The defendant had approached the plaintiff and given him a sketch of the kind of house he wanted. The plaintiff prepared some sort of plan and estimated the cost at £3,500, and thereupon the defendant told him that was far beyond his means. At this time undoubtedly the cost of building was very high. There were various other plans drawn, by which reductions were made in the cost—one, for instance, bringing it to £2,300, which the defendant also said was too high. Ultimately the plaintiff prepared bills of quantities on another plan for a house which it was estimated would cost between £1,700 and £1,800. He prepared plans and specifications

and called for tenders, and the lowest tender was £1,745. The defendant refused to accept that tender; he wanted it reduced. The Architect and the tenderer went into the matter and came to the conclusion that the amount might be reduced by some £240 by making alterations, none of which they themselves would approve. The arrangement was that the defendant should call at a specified time and see what had been the result of the consultation between the Architect and the tenderer. He never called; he did not come at all. He went as a matter of fact to another Architect. Thereupon the plaintiff sued.

"Now there is no doubt that a large amount of work was done in connection with the plans prior to the last plan upon which tenders were called. There is no doubt bills of quantities were prepared in the usual way and plans and specifications were drawn, and tenders were called for. There is also no doubt that the charges made by the plaintiff are in accordance with the tariff of Architects' fees. The defence is, one may say, threefold. First it is contended that the whole mandate of the Architect was to prepare plans and specifications and to call for tenders for a house to cost only £1,200, that the Architect undertook practically to work on that full understanding, with that full limitation, and that he was therefore not entitled to claim any fees unless he could secure tenders for that amount. It seems very unlikely indeed that an Architect would undertake work on such a basis. The evidence of the plaintiff is that it would be preposterous to imagine you could get a tender for £1,200 for the kind of house the defendant wanted. The evidence of another Architect and of a builder was exactly to the same effect. Therefore, so far as the volume of evidence is concerned—in fact, the only evidence on the point—no such tender could possibly be expected for the requirements of the plaintiff. It is therefore extremely unlikely on the face of it that the plaintiff ever agreed to such a limitation, either expressly or impliedly. The real origin of that idea is shown, I think, in the evidence relating to the defendant's state of mind. Plaintiff repeatedly told him he could not get his house under £1,700 or £1,800 or more. The defendant had—as one so often knows to occur—contractors in view prepared to build the house for a great deal less, and he had the idea that the house could be built for £1,000. He was told by the plaintiff that this was impossible; but that was really the reason for his continuing with his instructions to call for tenders for these plans. There is no doubt there is some force in Mr. Blakeway's criticism of the evidence of the plaintiff, namely, that the plaintiff never at any time asked the defendant whether he had any limit of cost in respect of this house. The magistrate has accepted the evidence of the plaintiff and has rejected that of the defendant. Of course, it does seem somewhat unlikely, but the Architect explains that the defendant said, 'That is the accommodation I want and which I must have,' and in that case of course one can understand the position—that the Architect would say, 'Then I will redraw the plan and reduce it as much as I can.' To my mind it does not make very much difference whether the Architect asked if there was a special limit or not at any prior stage of the proceedings. What is perfectly patent is that the Architect never bound himself to get a tender for £1,200 or charge no fees. That was never the intention of the parties. If the defendant thought anything of the kind, it was due to his own mistake. Therefore the main defence to this claim seems to me to fail upon the magistrate's finding that he accepted the evidence of the plaintiff and rejected that of the defendant.

"The next question is whether the plaintiff has established the amount of his claim. That claim, as I said, was framed in accordance with the tariff of the Architects. Cases have been cited to us, which undoubtedly represent good law so far as they go, that where private associations of people frame tariffs of fees for themselves, they are not binding in any way on the general public and are no evidence of the reasonableness of the tariff. That principal was applied in the case of *De Zwaan* v. *Nourse* (1903 T.S. 814), and applied again in the case of *Lubke* v. *Kegel* (1913 W.L.D. 91), but at the time of De Zwaan's case the Act incorporating the Transvaal Society of Architects had not been passed, and in the latter case it was apparently not referred to in any shape or form. That Act provides that the Council may, subject to the approval of the Association in general meeting, frame by-laws regulating, amongst other things, the fixing of the tariff prescribing the remuneration which Architects shall be entitled to charge for their services. Those by-laws have got to be submitted to the approval of the Governor-General in Council, and when they are approved they shall be published in the *Gazette*, whereby they shall have the force of law and shall be binding upon all members of the Association in so far as the same are not in conflict with the provisions of this Act. So that the law has given this Society power to frame a tariff. It is clear that this tariff is binding in law upon the members of the Association. I think under those circumstances, where an Architect charges fees according to such tariff, *prima facie* that is evidence of the reasonableness of the charges. I do not say that it is conclusive evidence. I think it is quite open for the members of the public who are affected to show that under all the circumstances the remuneration charged in a particular case is excessive, but I think it is some evidence of the reasonableness of the charges. Apart from that, in this particular case, so far as one can judge from the evidence given, the charges made are quite reasonable. There is evidence of the large amount of time occupied, and there is the

evidence of Mr. Veale, who is Chairman of the Committee of the Association of Transvaal Architects. He says that the charges are reasonable. He says he bases that opinion upon the tariff. That is quite natural; it is the tariff he, himself, has framed. But apart from that, having regard to the large amount of work done by the plaintiff, so far as I can judge, the charges themselves are reasonable.

"The last ground of appeal is that whereas the charges are based on the lowest tender nominally, the actual figure selected for the lowest tender is not correct—that the lowest tender should be some £240 less. That is based on the contention that after the lowest tender came in, and after the plaintiff was entitled—assuming the charges to be reasonable, as we have already found—to these charges, the charges were subject to reduction because the plaintiff carried out the instructions of the defendant to try to cut out portions of the work and so reduce the cost. I do not think that such a contention can be upheld. If the charge on the actual lowest tender received is reasonable, I do not think the Architect ought to be mulcted in his charges because he carries out the further instructions of his client. Nor, indeed, was a lower tender ever received. The builder and the Architect together said there were certain items which could be cut out. The client might not have accepted the position that the house should be built with these items cut out.

"Under any circumstances it appears to me that the charges made are not only according to tariff, but are reasonable. The appeal therefore must be dismissed with costs."

The late Mr. Justice J. Gregorowski said:—

"I am of the same opinion. I have looked through the evidence of the appellant in this case, and I must say I do not see anything in his evidence showing that there was an agreement that he should only be paid in the manner alleged in the plea. The defendant went to a professional man and got the benefit of professional services, and under such circumstances he should pay the usual and customary fees. It is not as if the special agreement is made by going to an Architect and saying, 'I shall not pay you unless you draw a plan and make the specification and bill of quantities and get a tender to build it for a certain sum; in that case I am only willing to pay if you get the house built for a certain sum.' Of course, if such an agreement is proved and the Architect agrees to it, it is binding on the parties. But I do not find anything in the evidence that shows such an agreement, and in the absence of such an agreement an Architect would be entitled to make the usual and customary charges.

"It is also pointed out in this case that the Association of Architects have the power under their Act of framing a tariff, and that tariff is approved by the Governor-General and is binding. These are charges which the Architect is entitled to make, and I suppose it is also a tariff which the public is entitled to pay; the Architect cannot charge more, and I suppose the public are not supposed to pay less. In any case it seems the charges are fair and reasonable, inasmuch as they are the charges which appear in this tariff."

QUANTITY SURVEYORS AND STANDARD OF MEASUREMENT.

By "EQUITY."

As the new "Act" provides for the "Statutory Qualification and Registration of Architects and Quantity Surveyors throughout the Union of South Africa," it may serve a useful purpose to touch on a few points affecting both.

A Quantity Surveyor's position in relation to the employer and contractor is precisely the same as the architect's—an impartial one. It is sometimes otherwise. A number of Quantity Surveyors have acquired their experience in builders' offices, first as clerks, then as estimators, and finally become Quantity Surveyors. It is but natural their sympathies should incline towards the contractor, forgetful of the fact that someone else has to pay. There are, of course, the regular Quantity Surveyors who have either studied in a regular office or at some institution for the purpose.

Builders are often importuned by the former to allow them to do their settling accounts, and the builders, through pressure of work or having disagreed with the architect or employer, allow this to be done, and it is again but natural that the surveyor should put his employer first. There are, of course, clients who are sometimes inclined to be grasping, just as there is a type of builder with similar propensities, and they need checking. The conditions of contract provides for this, the architect being the arbitrator.

Then there are some architects who either being too busy or have never troubled to acquire a knowledge of the subject of quantities, have to leave it to the surveyor. The architect should make the best Quantity Surveyor because he knows what he wants and no surveyor can presume to tell him. A knowledge of quantities should be a part of every architect's education. It sometimes happens that an architect without such knowledge leaves the specification to the Quantity Surveyor, the result being that when he comes to do his details (if he does any) he finds he is limited by the Quantity Surveyor's ideas of dimensions and many other things, and if there is any conflict then a little more work is provided for the Quantity Surveyor in the shape of remeasurement and preparing that lovely

document called a "bill of extras" and omissions (spelt with a small "o," when there are any).

So much for the surveyor. As regards the system of measurement, something will have to be done in the interests of the client who is sometimes forgotten.

A bill of quantities should bear some resemblance to the estimate a builder would prepare for himself were there no surveyor's bill, but no one will deny there is a difference, sometimes considerable, and the result is shown in the tender. It is the reason why some architects and employers are prejudiced against having quantities at all.

Here is a bill prepared by one of the leading firms of Quantity Surveyors in which little or no reference is made to a specification after mention at opening, as though it never existed, drawings and specification are spelt with small letters, whilst Quantities commence with a capital. The object of the authors would seem to have been to make the bills as long as possible, with little mercy towards those who have to pay. The only thing that seems missing is an "index" and a photograph of the surveyors. Every little twist and turn is noted and a separate item recorded that no builder in his senses would dream of noting in his own estimate. Builders who are really anxious for a job calmly ignore them.

No doubt life becomes more complex, and we may expect in the future, if the present tendency is not checked, to see, as an instance, a door taken to pieces, or panelling, tenons, mortices, mitres, mouldings, bars rebates, and so on, measured and counted. No doubt it is to the advantage of the Quantity Surveyor, especially those who weigh their bills avoirdupois, but he will have to be checked. One way would be to raise the price of paper.

What the present standard of measurement wants is the "knife," and a more general or inclusive system adopted. It is for the long experienced builders to say what it is they really want to produce: a fair estimate both to client and contractor: or, better still, what they themselves would prepare were they pricing without a bill. It is not every architect who has a millionaire client.

Only anything out of the custom should be noted and a general clause in the preamble as regards best methods of putting work together would cover all trades instead of repeating for every section of the work. So far the present writer has not come across any builder troubled with sleeping sickness, and they are generally well acquainted with ways and means, where there are two or three methods of doing a thing, if the best is described that ought to suffice.

Often is to be seen extracts of instructions from tradesmen's catalogues. In the end the builder is referred to such instructions; one line would have sufficed.

Here again we have a whole paragraph devoted to testing of drains, when one line would have been sufficient. Of course, if the Mayor is to be present it is just as well to mention it. Municipal officials have their own ways of testing drains.

Or there are so many hundredweights of ½in. plates taken for roof trusses, and holes are taken separately, thus making another item necessary. Had the size of the plates been given and the number of holes included, one item would have been sufficient. Gibes and cottas should be included in the weight. These are only a few instances to show how a bill may be reduced.

Now that architects and measurers are to be linked together as brothers, logically others ought to be, too, builders, draughtsmen, etc. Now is the time to prepare a new standard of measurement, though the present one has served a useful purpose as a stepping stone to a better one.

The question arises what is going to prevent a surveyor stating he is a member of the Institute of Architects if he sees a chance of acquiring a piece of work and cares to run the risk of escaping the eagle eye of the Registrar. The Act provides for dealing with those architects who indulge in illicit commissions. Why not this offence, should it occur? After all prevention is better than cure.

It is stated that the New Trades Hall for Pretoria has been abandoned.

Mr. W. B. T. Newham has returned from a two years' course of study at the Architectural Association, London.

Mr. Charles Hosking has removed his office to the African Banking Corporation Chambers, corner of Fox and Simmonds Streets.

Mr. M. J. Harris, a past President of this Association and a member of the Council for a number of years, has been elected Deputy-Mayor of Johannesburg.

An interesting judgment in a case for the recovery of Architects' fees appears in another part of this issue. It will be noted that the Court of Appeal upheld the tariff of the Association as being fair and reasonable.

On the 27th October last 393 copies of the proposed Act for the qualification and registration of Architects and Quantity Surveyors within the Union were mailed to members of the profession. A receipt slip was attached to a covering letter sent with the copy of the Act. So far, only 35 per cent. of these have been returned. Will those members who have not yet acknowledged receipt of the document, please do so by return?

NOTES AND NEWS.

Mr. W. H. Stucke, F.R.I.B.A., M.P.C., has returned from England and the Continent.

Mr. Ernest M. Powers, F.R.I.B.A., and editor of this journal, will return to South Africa about the end of January.

It is expected that Mr. W. J. McWilliams will attend the conference as delegate from the Port Elizabeth Society of Architects.

Mr. G. S. Burt Andrews has proceeded on leave, and Mr. Edward H. Waugh is acting Town Engineer of Johannesburg for the period.

Mr. Norman W. Gallagher has joined in partnership with Mr. Charles Small, and they are to be found at 50, Sauer's Building, Loveday Street, Johannesburg.

Mr. Percival M. Ware, A.R.I.B.A., of 218, Proes Street, Pretoria, has been elected a member of the Association and registered to practise as an Architect in the Transvaal.

The Town Planning Association (Transvaal) strongly recommend the proposal to purchase the Sachsenwald as an open space for the benefit of the inhabitants of Johannesburg.

Members desiring to submit any kind of criticism upon the new form of Conditions of Contract should do so immediately by letter to the Registrar, so that the matter may be dealt with at the forthcoming conference.

The Registrar has several applications from draughtsmen requiring positions, and will be pleased to submit them to prospective employers.

During the absence of Mr. E. M. Powers, the permanent Chairman, Mr. Robert Howden, of Johannesburg, has been acting in that capacity on the Union Registration Executive Committee. Owing to prior arrangements, it is doubtful whether Mr. Howden will attend the conference at Capetown. It is confidentially expected that Messrs. M. J. Harris, G. S. Burt Andrews, F. L. H. Fleming, Allen Wilson and several others will be in Capetown for the conference.

The Heidelberg Municipality contemplates the erection of new Municipal offices, etc.

Mr. Tom Moore, President of the South African Institute of Quantity Surveyors, will be in Capetown for the conference.

We heartily congratulate Mr. Herbert Baker, F.R.I.B.A., on his election to Associateship to the Royal Academy. Mr. Baker is in Delhi at the present time in connection with the new Indian Capitol buildings.

Col. G. T. Hurst, President of the Natal Institute of Architects, will represent that body at the Architectural Conference at Capetown in January. Col. Hurst will leave Durban by the mail boat on the 5th January.

It is proposed to hold the fourth Exhibition of objects of Art, under the *aegis* of the South African Academy, in the Selborne Hall, Johannesburg, early in May, 1923. All information relative thereto can be obtained from the Hon. Secretary, 67, Exploration Building, Johannesburg.

Messrs. Perry & Stocks, of Capetown, have prepared designs for a new Standard Bank in Bloemfontein, and Mr. James Thompson, of Johannesburg, was the successful tenderer for the work. We understand that an immediate start is to be made.

Owing to pressure of business, Mr. Duncan M. Burton, F.S.Arch., M.R.San.Inst., a past President of the Association, a past President of the Town Planning Association (Transvaal), and a member of the Council of the Association for many years, has resigned his seat thereon, and Mr. Franz Soff, of Pretoria, has been elected to the vacancy thus caused.

Members, more particularly those resident in Johannesburg, are reminded of the facilities provided for their comforts and requirements at the Scientific Club, 100, Fox Street. Morning and afternoon teas and lunches are specially catered for, and members are asked to support their own establishment, which is most centrally situated and most comfortably appointed.

A LUMINA AD NEBULA.

By G. W. NICOLAY, F.S.Arch.

The radical difference between the manner adopted by the ancients and mediaeval builders in treating the relationships between the wall surfaces and enrichments, referred to in the article "Ad Lucem," is perhaps the most noteworthy achievement of the mediaeval man. Among the advantages gained was the facility for deep cutting and undercutting which was so desirable in moderate light and most generally used in Middle and Northern Europe.

The other most noticeable feature is the general absence of the nude figure, which is only seen in special subjects, usually those which are unpleasant or even repellant.

The influence of the pointed arch has usually been most exaggerated, and the high pitched roof also. If the structure was built in the manner developed in the middle ages, the presence of the pointed arch seems not to be essential to the style, for in many cases the centres from which the curves were struck were so close together that the point of the arch rises scarcely anything above the place where the centre of a semi-circular arch of the same span would reach. This is well shown at Beverley Minster and elsewhere. The pitch of the roofs varied extremely all through the mediaeval times, becoming depressed under the influence of the new fashion as the admirers of the ancient work in Italy began to show that some of the spirit of the mediaeval work could be imparted to it.

There have been many examples of an opposite effort, an attempt to keep the mediaeval form and construction and to foist upon it the ancient manner of enrichment, as at S. Eustache, at Paris. The effect is remarkable but unpleasant, and it is quite apparent that the radical difference above stated is the probable cause of the bad result. It is important to remember that the mere outline of the work cannot alone make a definite style of work, because the filling in, if discordant, the proper relationship between the one and the other cannot be maintained.

For example, take a mediaeval vault and, instead of the panel with its gently curved plain face, substitute a panel like the face of the dome of the Pantheon or the vault af the baths of Carracalla. The result would be incongruous: the delicate contours of the mediaeval vaulting ribs would be scarcely observable among the coarse work they enclosed, and the thickness required for the large sinkings of the Roman work would equally overload them.

A similar comparison might be made in almost every part of a building with similar results. Ancient Rome was put entirely out of sight by the mediaeval builders, and her works with her, not because they were forgotten, but as unsuitable and, likely enough, because they were disliked as monuments of a world-wide tyranny.

The men of the day proceeded by their own methods to work out the new problems which continually presented themselves in their own way, and any predilection existing among the Romans, and perhaps some others, had not, and in those revolutionary times could not be expected to have, sufficient support to influence in any strength the direction in which the new ideas were trending. Everything Roman was discarded, both construction and design. Even the column, which at first was cylindrical, though without any entasis, was by the middle of the eleventh century associated alternately with those of octagonal section, and this arrangement was quickly followed by the small attached shafts, which became so marked a feature of mediaeval work, though more noticeable in the North.

In the South, where the constructional part of the work was not so distinctly in the new manner, and particularly in the districts were marble was abundant, the monolithic column with its entasis was used all through mediaeval times and the influence of the Byzantine work was always felt. This may be seen in many towns in the north of Italy—instances Venice, Verona and elsewhere—but in these the complete change had never been effected, and they may be considered as purely Byzantine developments, both in construction and decoration, not completely "Gothic" as opposed to "classic," two loose and rather misleading names, which are, however, convenient now and then, neither of which was in use until recent times.

Besides the difference in the general treatment, the whole system of enrichment was changed, both in manner and origin, though this must not be pressed too far, because the great mass of Greek and even Roman work has perished entirely, and there are here and there fragments of free carving with much more invention in them than is to be found in the ancient work generally. The persistent repetition of the Corinthian capital with but slight variation seems to indicate some limitation placed upon the carvers, for

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