

The South African ARCHITECTURAL RECORD

*The Journal of the Association of Transvaal Architects, the Natal Institute of Architects
and the South African Institute of Quantity Surveyors.*

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EDITORIAL NOTE.

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JOHANNESBURG BUILDING BY-LAWS.

With regard to the recent new Building By-laws the application of these in certain cases are given for the information of Architects and others.

(1) Fire walls where necessary :—

A building shown on boundaries of stand adjoining stands in same ownership and occupation.

The ruling re firewalls is that new By-laws refer to site not stand.

(2) Allotment of open space applicable to two stands taken together as one curtilage.

Two stands, back to back (same ownership), with buildings distributed thereon, one building being partly on one stand and partly on the other stand.

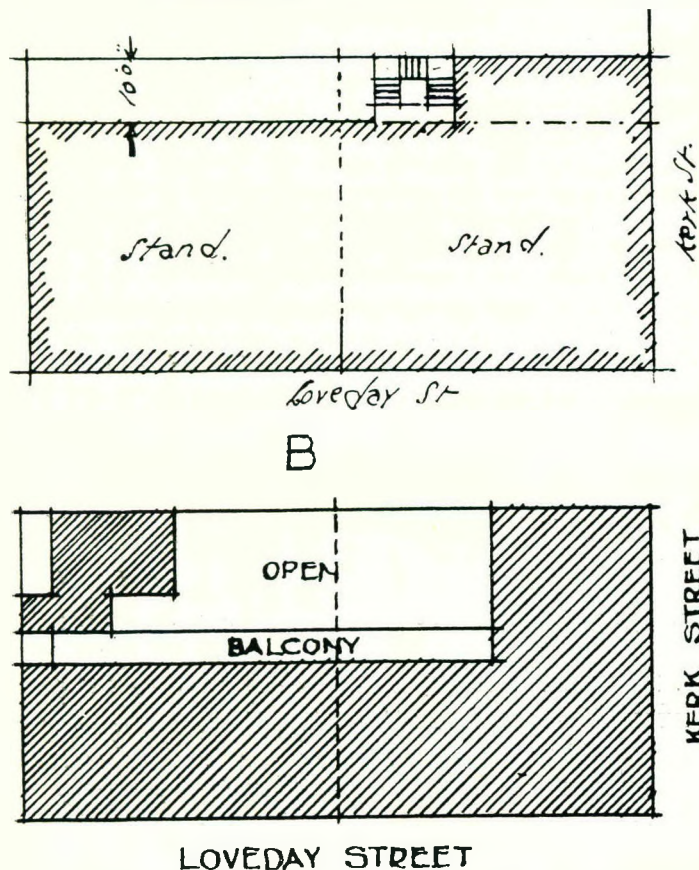
Ruling desired as to 60 per cent. area allowed for building and incidentally of 40 per cent of open space on these two stands, which are 50 ft. x 50 ft. each.

The ruling in this case is that the two stands should be regarded as one site as

buildings engage each stand together and form one curtilage

- (3) Allotment of rear 10 ft. space on corner site with attached inside stand.

The attached sketch illustrates this query. If 10 ft. rear space applied to inner stand somewhat as suggested in the sketch naturally the rear space would not be carried right through as shewn in dots as Kerk Street is entitled to be also called a "front." There is no objection to an air space being mainly on "inner" half of site as shewn. This also applies to a 50 ft. x 100 ft. corner site. The air space may also be as on "B" as the open space on a corner building whether on one or two stands is not required to extend across entire rear of buildings.



- (4) Fire walls on return near boundaries.

The new By-laws require buildings to be set back from stand boundaries or fire-walls provided.

The ruling in this case is that such fire-walls are required on boundaries only and need not be returned or extended if buildings on adjoining stands do not call for such return or extension.

- (5) Windows over 10 ft. from ground.

Windows over 10 ft. from ground must be capable of being cleaned and repaired from within the building.

This By-law precludes fixed lights, ordinary casements with ordinary hinges or ordinary sash windows.

To comply with the By-law Parliament hinges with the casement pivot hung either horizontally or vertically will be required so as to enable the hand to be put through when the window is open and the back of the window cleaned from inside. In sliding sashes this must be of the turn-over type so that the glass can be reversed when cleaning.

Standard sashes with a Parliament hinged casement can be permitted or any sash of such design that makes it practicable to clean the window from within the building.

Fixed lights such as are often put in warehouses are now prohibited. The By-law will be read to mean windows over 10 ft. from ground at sill level. This By-law implies that all two storied buildings and over must have the windows arranged as stated. Most of the one storied buildings will escape unless the foundations are very high.

- (5) Roofed Stoeps or verandahs are no longer allowed over 12 ft. in width.

The By-laws are now in the Printers' hands and an index has to be prepared Architects will be notified as soon as they are ready.

MUNICIPALITY OF PRETORIA.

COMPETITIVE DESIGNS, NEW TOWN HALL.

With reference to Municipal Notice No. 65 of 1925, notice is hereby given (a) That considerable alterations have been made to the Conditions of Competitions; (b) That three premiums, viz.:—£250, £150 and £100 are being offered for the designs placed first, second and third respectively and (c) That the time for delivery of designs has been extended to 12 o'clock noon on Monday, 30th November, 1925.

M. G. NICOLSON,

Town Clerk.

Notice No. 88 of 1925; 20/7/25.

PROSPECT HALL COMPETITION.

The following is the Assessors' Report upon the designs submitted:—

We have the honour to present our report on the designs submitted in competition for the proposed lay-out of Prospect Hall Suburb

In response to your invitation 19 designs were submitted and we have studied these carefully with the conditions which were issued to Competitors, and have no hesitation in awarding Design No. 9 the premium.

The Author has produced a Lay-out which would provide a high class residential suburb and the suggestions of the Promotor have been finely developed.

A Civic and Shopping centre linked with the Grand Boulevarde by means of a Central Broadway terminated by an Amphitheatre, Band Stand and Pavilion, etc., have been finely conceived and a noteworthy feature is the provision of valuable Hotel sites overlooking the Boulevarde and Indian Ocean.

The Road System has been well thought out, contours generally have been fully utilised, traffic routes diverted from the Civic centre, and connection has been made with roads through Greenwood Park and Red Hill Suburbs. With a slight modification the Main arterial road could be continued through to serve the properties on the Northern boundary of the Suburb. The Grand Boulevarde has been left free of driven traffic, this being diverted through a 100 ft. road at the rear of the Hotel sites which face the Boulevarde, and parking spaces have been provided.

Most of the residential plots are on the generous side and might be reduced. This will necessitate alterations in detail.

The Author has suggested a Lay-out for the ground between the Bridge and the Southern Boundary of the Suburb and has linked up the 100 ft. road along the fore-shore with the main arterial road at the bridge head, probably under the impression that this property might be acquired. We suggest that this road be diverted up the Southern Boundary of the Suburb.

Some of the designs have many good features, but we consider the premiated design to be outstanding.

INIGO JONES.

Inigo Jones was a Londoner, born in 1572, not far from St. Paul's Cathedral, in Smithfield. While quite a young man he travelled in Italy. At the age of twenty-nine he returned to England, having served for a time in the Court of King Christian IV. of Denmark. Four years later he was at Oxford, where he prepared a masque for the University. Soon after this he and Ben Johnson were associated in the production of scenical displays. Able as a water colourist, he painted the scenery embellishing the learned masques presented in Whitehall. This brought him to the notice of James I., and, in 1610, he was appointed Surveyor of the Works to Henry, Prince of Wales. It is thought that he designed Bramshill and Carlton House, but there is no signed design of his earlier than 1616 in existence. After the death of his patron, he again visited Italy, making there a comprehensive study of architectural remains at Rome, Vicenza and Venice. On his return he was appointed Surveyor of His Majesty's Works by James I., in the room of Simon Basil.

His first actual Architectural work was the preparation of the design for the Queen's House at Greenwich. The chapel at Lincoln's Inn is the only authentic evidence of his ideas of mediaeval work which the wits nicknamed "King James' Gothic." He was appointed one of the commissioners to lay out Lincoln's Inn Fields, and in 1619, when the old Banqueting House in Whitehall was burnt down, he prepared designs for a new one. Owing to the poverty of the Exchequer, nothing but the Banqueting Hall was ever completed. The rest of his work, during James I. reign, seems to be mainly repairs and alterations at Somerset House and elsewhere.

In his book, "Stonehenge Restored," Jones declared that Stonehenge was originally a Tuscan temple raised by the Romans some time between Agricola and Constantine.

When Charles I. came to the throne, undoubtedly Inigo Jones hoped that the King would have taken a close personal interest in his architect's work. For a time this was so. His work was inaugurated by the York Water Gate, Embankment Gardens, Charing Cross. He erected the Church of St. Paul's in Covent Garden, and was also ordered to report on the necessary repairs to old St. Paul's Cathedral.

Before this he had spent several busy years planning a scheme for rebuilding Somerset House, repairing the Tower of London, and building mansions, both in the city and country. He also sat as a Justice of the Peace. In 1643, as a Roman Catholic and a Royalist, he was deprived of his office and forced to pay £545 as a "malignant." In order to forget his troubles he went out into the country and was responsible, at this time, for much of the domestic architecture with which his name is connected. Including Ashburnham House, Gunnersbury, demolished in 1802; Lindsay House; Furnival's Inn; Northumberland House; Castle Ashley; and most important of all, Wilton House, where a part of his work still remains, including the famous "Double Cue Room." Other authentic works are Raynsham Park, seat of the Townsends; West wing of Cranborne Manor; Hinton St. George garden front; the facade of Bryampton; Chilham Castle, near Canterbury; Temple Bar; the Queen's House, Greenwich; Heriot's Hospital, Edinburgh (one of his most beautiful designs); Drumsaurig House, Nithsdale; Cobham, Kent; and the design for the College of Physicians, Surgeon's Hall is one of his best works.

His last days were full of sorrows. He died, grieving, at Somerset House, at the age of eighty, and was buried in the Church of St. Bennet's, Paul's Wharf, in the year 1653.

The Town Planning Association (Transvaal.)

The Minutes of the Sixth Annual General Meeting of Members, held in the Associated Scientific and Technical Societies Club, 100, Fox Street Johannesburg, on Thursday, the 30th July, 1925, at 5 p.m.

Present.—The President, Mr. B. W. Brayshaw, in the Chair, Professor G. E. Pearse, Dr. Charles Porter, Messrs. Harold Porter, C. P. Tompkins, F. K. Webber, A. Stanley Furner, H. Sharp, W. H. Nott, J. Wertheim, D. M. Burton, D. M. Sinclair, T. S. Fitzsimons, one other member, and the Secretary, M. K. Carpenter.

The Secretary read the notice convening the meeting, and the President, in welcoming members, regretted the paucity of attendance.

1. *Minutes.*—The Minutes of the Fifth Annual General Meeting held on the 8th November, 1924, and published in the December issue of the South

African Architectural Journal a copy of which had been sent to each member of the Association, were taken as read and confirmed.

2. *Annual Report.*—The Sixth Annual Report of the Association's proceedings for the past year, presented by the retiring Council, was read by the Secretary, prior to which a copy had been issued to each member present:—

"Your Council submits this, the Sixth Annual Report of the Association's proceedings for the past year together with the Annual Accounts which latter have been duly audited.

Council Personnel and Meetings.

At the first meeting of Council following the last Annual General Meeting, in conformity with the Constitution, Mr. H. G. Veale, Architect, Johannesburg, was elected President and Mr. B. W. Brayshaw, Government Land Surveyor, Vice-President. Owing to ill health Mr. H. G. Veale was unable to occupy the Presidents' Chair and it is with extreme regret we have to record his demise which took place on the 16th December, 1924. Mr. H. G. Veale had done much for the Town Planning movement, he was one of the original members of a Town Planning Sub-Committee of the Association of Transvaal Architects which was in operation for some years prior to the establishment of the Town Planning Association. Immediately this Association was proposed the late Mr. H. G. Veale gave it his whole hearted support and following its establishment became a member of the Council up to the time of his death, which was a severe set back to the Association. To the bereaved family the Council, on your behalf, extended their deepest sympathy.

To fill the vacancy caused by the death of Mr. H. G. Veale, the Council unanimously elected Mr. B. W. Brayshaw, President, and Professor G. E. Pearse, Vice-President, for the year 1924-1925.

Owing to unforeseen circumstances the last Annual General Meeting was delayed, therefore the period under review does not constitute a complete working year.

During the period under consideration your Council held seven meetings and the record of attendances thereat are given at the end of this Report.

Election of Members to Council.

In terms of the Constitution nominations for members of the Council for the coming year have

been invited and a ballot form was issued to members on the 23rd July, 1925 containing the names of twelve persons who have been duly nominated. From this number nine persons are to be elected to Council. In addition the Institutional Members have in the exercise of their right so to do made the following nominations to Council:—

Brayshaw, B. W., Land Surveyor, Institute of Land Surveyors; Burton, D. M., Architect, Association of Transvaal Architects; Moffat, J. A., Architect, Association of Transvaal Architects; Porter, Dr. Charles M.O.H., British Medical Association; Webber, F. K., Land Surveyor, Institute of Land Surveyors, also Mr. Harold Porter the immediate Past President, is Ex-officio a member of Council for the forthcoming year.

Town Planning Regulations.

Arising out of the minutes of the last Annual General Meeting, representations were made to the Minister of Public Health regarding the pressing necessity for organised and effective Government control of Town Planning on modern lines, but so far there has been no indication from Government that they intend to proceed with the establishment of a body to effectively control Town Planning within the Union. It will be recollected that some two years back the Council drafted a Code of Model Town Planning Regulations sufficiently elastic to permit of easy adaptation to Local Conditions within the Union, these, if adopted, would form an acceptable basis for the promulgation of Town Planning Legislation. This matter of legislation will require further to be considered by members at the meeting.

Johannesburg Public Buildings.

Arising out of the minutes of last Annual General Meeting, your Council made overtures to representative public bodies in Johannesburg for the purpose of holding a Joint Meeting to discuss Johannesburg's requirements for (1) new Post Office; (2) new Railway Station; (3) new Magistrates' Courts. The outcome was the appointment of special Sub-Committees to deal with each of the three requirements; each Committee dealt with their appointed task in a thoroughly efficient manner and submitted reports dealing exhaustively with the situations as found. These reports which are given below offered the necessary incentive for the Town Council of Johannesburg to take the matters up and despatch a deputation to Cape Town to interview the respective Ministers on the subjects. It is unfortunate that on their return

the members of these deputations did not frame reports of their interviews. We may here state that to date the objects the deputations had in view have not even been provided for on the Government Estimates so that at least a further twelve months must elapse before the subjects can receive any recognition from Government.

Each of the foregoing requirements are urgent necessities which may be readily overlooked unless continued pressure is brought to bear upon the Authorities, we must, therefore, stimulate public interest until such time as these requirements have been provided for. So far this Association has not been consulted on these matters although we are essentially a body counting among members, experts, well qualified and willing to give the Authorities considered advice on these matters and the Executive feel that in matters of this nature this Association should be consulted. The Executive understands that plans have been prepared for the lay-out and new buildings for Johannesburg Railway Station and we hope to have the opportunity to view them before they are finally decided upon.

New Post Office for Johannesburg.

Your Sub-Committee, consisting of Councillors H. J. Crocker, W. Fearnhead, Messrs. W. F. T. Harvey and J. Frank Brown (Convenor), has considered the various schemes which have been advocated through the Press and otherwise for remedying the unquestionably inadequate, and in many other respects unsatisfactory, accommodation, provided in the existing Post Office Building.

The three more or less practical schemes which have been suggested are:—

(1) *To build a new Post Office on a portion of Government Square, the remainder of the site to be reserved for the erection of a new Magistrates' Court.*

(2) *To build a new Post Office on the gardens to the West of the Town Hall, on which it is also proposed to erect buildings for a new Public Library and Museum.*

These buildings would absorb practically the whole of this open space.

In the event of either of these schemes being adopted it has been suggested that the present Post Office building should be demolished in order to provide an open space in front of the Town Hall. This suggestion is one that no sane Government is likely to agree to.

(3) *To retain the Post Office on its present position, reconstruct and extend the building by the acquisition of the Standard block, or such portion as might be necessary, to the East of the present building.*

After careful consideration your Committee begs to report as follows:—

Scheme 1.—The principal objections to this are:

(a) The site is not so central or convenient for the public generally, and the Commercial community is particular, as the site of the present Post Office, around which, and in consequence of which, important vested interests have grown up.

(b) If as suggested, only a portion of Government Square—say half—were allocated to the Post Office, the ground floor accommodation required for the present staff and present volume of business would probably exceed the space available leaving no room for future extension.

To erect a new Post Office building without ample provision for future ground floor extension would be merely repeating the mistake made when the present building was erected nearly 30 years ago, and should be avoided at all costs.

Nothing less than the whole square would suffice for a new Post Office and future requirements.

Scheme 2.—It can, perhaps, be held that the position would be slightly preferable to that of Scheme 1, but objection (a) would otherwise apply with equal force. Moreover there is a strong public opinion against this site being built upon. It is a refreshing Oasis in a dusty desert, and the only open space left in the centre of the town. A new Post Office, Library and Museum would occupy practically the whole site, and it is doubtful if adequate space would be left for future extension of the Post Office.

Your Committee deprecates the use of this site for any buildings, and expresses a hope that it will be retained as an open space.

Scheme 3.—Present Post Office.

The present position of the Post Office is undoubtedly satisfactory to all sections of the community and probably could not be improved upon. The principal business centre of the town has grown up around it; the Town Hall was built near it—too near unfortunately—all the main tram and bus routes terminate in its vicinity; all Municipal traffic measurements and tariffs have been calculated from it. Unquestionably it is the heart of the City.

Vested interests must receive very serious consideration before removing the Post Office from the business "centre of gravity" and such a drastic course should not be taken unless it is found impossible on the present site and adjacent to it to provide adequately for present requirements and future needs.

The present building was erected nearly 30 years ago when the white population of Johannesburg did not exceed 40,000; to-day it is approximately 160,000 and is still increasing. This takes no account of the very large increase in the Native and coloured population, for which provision may have to be made.

In the interim two storeys have been added and a comparatively small but useful extension made by the acquisition of a building in the Standard block in President Street.

The principal defects of the present building are:—

(a) Inadequate space for Mail work. Letter Mails are dealt with on the ground floor, Newspaper Mails on the first floor, and the Postmens' room is on the second floor. These unsatisfactory arrangements cause undue labour in haulage and handling and expense in supervision. In up to date Offices, all Mail work should be done on the ground floor. It is obviously undesirable that Postmen should have to ascend and descend two storeys. About 200 uniformed men are employed.

(b) There is no yard space into and from which Mail Vehicles can drive; consequently loading into and unloading from Mail Vans has to be done in the public streets. These Vans, together with the Postmens' collection cars, bicycles, etc., seriously impede vehicular and pedestrian traffic in President and Rissik Streets, and cause inconvenience to the public using the Post Office.

(c) Owing to lack of space a Parcel Delivery Office has had to be provided in Mackay's Building, a quarter of a mile or so from the main office. This separation of Parcel Delivery work from the other business of the Post Office is distinctly inconvenient to the public, but is unavoidable under present conditions. Running a separate public office naturally entails additional expense.

Incoming and outgoing Parcel Mails are dealt with in a wood and iron building at the Railway Station.

(d) The Telegraph Instrument Room is very congested. To give necessary relief for present requirements half as much again space is required.

(e) The Telegraph messengers are housed in the basement. The sole redeeming feature of this room is that it is dry; as regards light and air space it is most unsuitable.

There are numerous minor defects which need not be particularised. Makeshift arrangements have had to be resorted to owing to proper accommodation not being available.

To remedy these defects and provide adequately for all branches of business, the public, and staff, your Committee considers that the following proposals would be effective, and would be more satisfactory to the public than any other scheme yet suggested.

The proposals your Committee recommends are:—

(a) That the whole of the Standard block of buildings, including the Standard Theatre, should be acquired, the present Post Office building extended as far as necessary to meet the requirements for the next 15 years or so, holding the remainder of the acquired property in reserve for future needs. The reserved part would naturally continue to be let and therefore be revenue producing till required for Post Office purposes.

(b) That in the construction of a new Railway Station provision should be made for a large Mail sorting Office in which all incoming and outgoing Mails—Letters, Parcel, Newspaper—would be dealt with. A postman's room on the first floor of the building would admit of the delivery and collection men working to and from the Station instead of the central office. Private boxes would, of course, remain at the central office, but could be more conveniently arranged with the increased space available. Parcel delivery to the public would also take place at the central office, the rented office in Mackay's buildings vacated.

If adopted, your Committee believes that these proposals would enable the internal arrangements of the central office to be completely re-organised; satisfactory accommodation for the public, staff, and work, provided; and such ample provision made for future needs that probably the question of removing the Post Office from its established site would never again arise however much Johannesburg may develop in future.

Committee's Report on Park Station.

I have to report that almost immediately after the special meeting, in December, Sir William Hoy left for Hermanus. I did not wish to disturb him

while on holiday, but early in the new year I wrote to him and asked him if he would be good enough to reply on his return to Cape Town.

He was kind enough to wire me, suggesting that I should see the Assistant General Manager at Johannesburg, Mr. Gettliffe, and I have since received a letter from him from Cape Town on the subject.

You will remember that at the special meeting to which I have referred, I stated very clearly that I would be willing to accept the Chairmanship of the Park Station Committee on the distinct understanding that it was with a view to co-operating with Sir William Hoy and the Administration, as I felt that in its essentials the whole question was highly technical.

In his letter to me of the 19th January, Sir Wm. Hoy refers to this, and says that, while he is anxious to see a start made on the new station at Johannesburg, the site is an exceedingly difficult one, and he is perfectly convinced that a terminal station at Johannesburg is impracticable. This is confirmed by Mr. Gettliffe, Mr. Watermeyer and Mr. McCubbin, whom I interviewed last week on the subject.

I feel, therefore, that the sooner we realise that such a project is out of the question, the more likely are we to get on with, and adopt, some constructive scheme that will bring about what we all want—a new station at Park that will be adequate for the needs of Johannesburg for many years to come.

I feel that our desire, as a Committee, is that of Sir Wm. Hoy and his colleagues, namely, to serve the public and I am certain that this ideal can only be achieved by friendly co-operation all round, and by allowing due importance to the opinions of the Technical Engineers of the Railways and Harbours Administration.

On Sir Wm. Hoy's suggestion, I went to see Mr. Gettliffe, and was very courteously received. He introduced me to Mr. Watermeyer and to Mr. McCubbin, and together we examined the plans upon which the department is at present working.

I am not able to describe these plans to you technically, but I have no doubt that Mr. Gettliffe will have no objection to representatives of your Association seeing them.

Personally, I am bound to admit, as a layman, that I consider the general scheme an excellent one if it can be carried through.

Mr. Gettliffe informed me that at the present time a special Committee of the Johannesburg Town Council was co-operating with his department, and he felt that the Council would now do everything in its power to meet the wishes of the department in their joint desire to get to work with as little delay as possible on a practical scheme.

As the Town Council and the Railways and Harbours Administration are at present co-operating along these lines, I cannot see that our special committee can be of much practical assistance at this stage, but I feel that it will be a good thing to keep it in being, so as to keep in touch with the progress of the negotiations and plans, and so that, if at any time there be a hitch, our Committee might be useful in working up public opinion and in doing everything possible to prevent anything that may come between the realisation of a practical scheme for a new station.

In the meantime, Sir Wm. Hoy informs me that he is trying to get an amount placed on the estimates for the next financial year to make a beginning, and I think that if the Council adopts a definite scheme in conjunction with the departmental officers, your Association may do useful work in educating public opinion in the right direction.

In conclusion, I cannot see that the special Committee will serve any useful purpose in taking any immediate action, but, as suggested, it may be well to leave it in being.

New Magistrates' Courts for Johannesburg.

It has become increasingly evident for a long time past that the accommodation at the Resident Magistrates' Courts is hopelessly inadequate for present needs.

Not only are there insufficient Courts to cope with the volume of work to be dealt with, but an equally unsatisfactory feature from the public point of view is the utter lack of waiting rooms and the resultant intermingling of black and white, respectable people and criminals.

There are at the present time six Criminal Courts in constant session, one of which is housed in a corrugated iron shanty. In addition there are three Civil Courts, one Insolvency Court and one Inquest Court. In almost every instance the accommodation is insufficient, resulting in overcrowded Court rooms and an unhealthy atmosphere.

We understand that no less than seventy persons, who are employed on the Magistrates' Staff, are housed in the present building and it is a matter for considerable wonder how it is possible to find room for all these persons. It is certainly clear that it would be impossible to increase the present staff however necessary such a course might be found, inasmuch as there is nowhere to put them.

In addition to the above feature there are, firstly the lack of a Court for the use of the Chief Magistrate, who, when he wishes to relieve congestion, has nowhere to sit when, as frequently happens, all the other Courts are occupied; secondly, the very unsuitable conditions under which the accountant has to carry out his onerous duties and thirdly the unsavoury awaiting-trial prisoners' yard, in which white and coloured persons, males and females are herded together, while the W.C.s in the yard are in full sight of all and sundry and are used by white and black alike. Public sanitary conveniences are conspicuous by their absence, there are none for public use in the whole building.

Another matter to which attention may be drawn, is the disturbance caused in some of the Courts by passing traffic, a matter which should certainly receive attention if and when new buildings are erected.

We are informed that in order adequately to cope with the work at least 14 Court rooms should be supplied, at present there are only eleven available, one of which as stated above, is housed in an iron shanty.

The present Government Square which is 470 by 150 feet in extent is large enough to provide space for a building which would contain all the necessary Court rooms, offices, waiting rooms, lavatories and awaiting-trial prisoners' yards, the latter of which should, in our opinion, be divided into four parts for white men, white women, coloured men and coloured women respectively.

It is urged that at the earliest possible date, an amount be placed on the estimates of Parliament to make provision for such new Resident Magistrates' Courts.

Government Roads Scheme.

For several years past regular representations have been made to the proper authorities for the provision for main arterial roads throughout the Union to link up the larger centres. The Council

also saw fit to support the movement of the Transvaal Roads' League which had for its object the provision of good roads. We now have to record that in his Budget Speech the Minister for Finance provided from funds obtained through the Custodian of enemy property, a sum of £500,000 for road purposes. This amount is to be allocated £150,000 each to the Cape and Transvaal Provinces, and £100,000 each to Natal and O.F.S. for the construction of definite stretches of arterial roads. This allocation is to relieve un-employment and will be a sound expenditure and although infinitesimal cannot be lightly passed over: further representations should be made for larger apportionments each successive year.

New Townships.

During the period under review the Transvaal Townships Board have regularly submitted for criticism and consideration, proposals received for the lay-outs of seven new Townships in the Transvaal and the information given thereon has been welcomed by the Administration.

Members.

The Council desire to direct particular attention to the Membership of this Association. During the past few months numerous resignations have been received which unfortunately have not been counterbalanced by any influx of new members. The Council are of the opinion that members and the public generally do not take sufficient interest in the doings of the Association. While every endeavour is made to give members information respecting Town Planning by providing them with a quarterly copy of the South African Architectural Record, no response has been received either in the form of articles for publication or by correspondence to the Council, on any Town Planning matter. It is felt that Members should assist the Council by healthy criticisms on all matters pertaining to Town Planning and a general invitation is made to each member to submit, to the Secretary, for consideration by Council, any treatise or article on Town Planning matters and principles which will provide discussion, criticism and consideration and thus enable the principles of Town Planning to become more widely known.

As a result of the falling off of membership the finances of the Association are dwindling and it will be necessary for the incoming Council seriously to consider the matter of increasing the

membership of the Association and to provide funds to enable the Association effectively to function. In the meantime an earnest appeal is made to members to interest Institutions and private individuals in the Association with a view to their becoming members. Forms of application for membership may be obtained at any time from the Secretary.

Library Site.

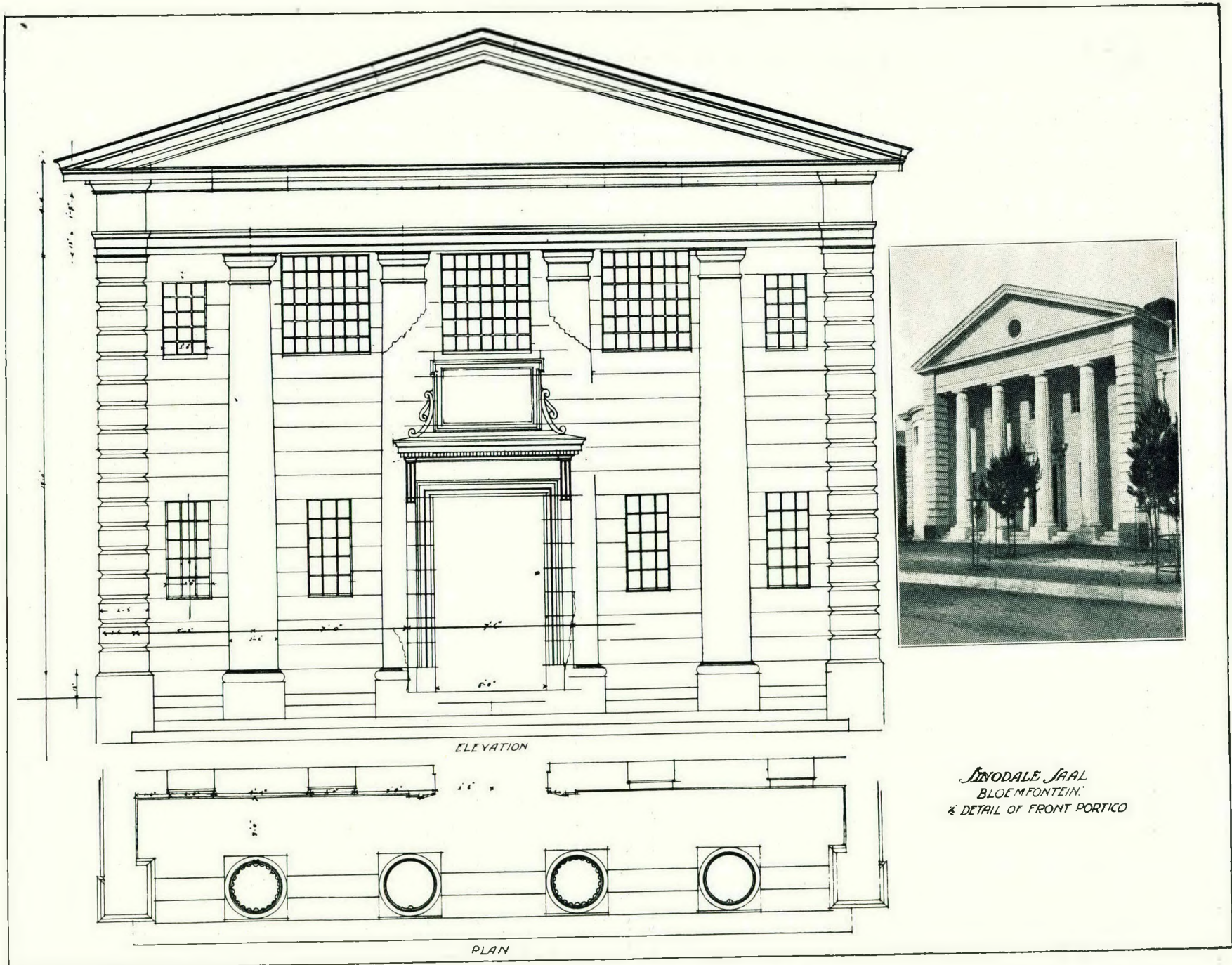
At the present time public opinion in Johannesburg is being directed towards the provision of a site for the Public Library. As is well known the present Library Site is centrally situated and easy of access and while being so placed is away from the turmoil associated with the City area. In connection with the site at the Western end of the Town Hall where it is proposed to build a combined Library and Museum this Association has always felt that the site in question should be retained for the original purpose for which it was donated, namely, an open space or garden. There is a further aspect of the case which requires careful consideration and that is, is it necessary to combine a Museum with the Public Library. Would it not be better to erect a Museum on the Milner Park site adjacent to the new University buildings, since the University Authorities would be the better able to control the Museum and might be asked to take a hand in its formation and supervision, it is quite possible that if this proposal were adopted the University Authorities would be in a position to hand over to a Museum under their charge all the specimens they now possess. The Library site and the Museum proposal will form a matter for discussion at the Annual General Meeting.

Wemmer Pan.

Some considerable time back your Council suggested to the Municipal Authorities that application be made to Government and the Mining Companies concerned for the surface rights of a large tract of ground adjacent to the Wemmer Pan. The object was to provide a General sports ground for the inhabitants of the Southern Suburbs. We have now been advised by the Municipal Council of Johannesburg that the proposal cannot be entertained by the Mining Companies.

Propaganda.

During the period under review propaganda has been carried on, particularly by Professor G. E. Pearse, in talks on Town Planning which have been



SINODALE HALL, BLOEMFONTEIN.
GERALD MOERDIJK, A.R.C.B.A., ARCHITECT, PRETORIA.

THE SOCIETY OF ARCHITECTS (London).
SOUTH AFRICAN BRANCH.
PAST PRESIDENTS.



Standing :—A. Forrest (Hon. Auditor), Allen Wilson (1921-22), D. Macdonald Sinclair (1917-18), S. C. Dowsett (1915-16), E. H. Waugh (1911-12), Robert Howden (1908-10).
Sitting :—J. S. Donaldson (1920-21), G. S. Burt Andrews (1910-11), J. A. Moffat (1923-25), D. M. Burton (1916-17), M. J. Harris (1912-13).
Inset :—J. F. Beardwood (1907-9), deceased. Inset :—G. W. Nicolay (1913-14). Inset :—F. J. Ing (1920-23). Inset :—W. J. McWilliams (1919-20).
Also :—H. G. Veale (1918-19), deceased, and William Leck, (1906-7), deceased.

Broadcasted: also by Mr. Harold Porter, who has lectured on the principles of Town Planning before the members of several local Societies. At several of these meetings the dangerous locality known as Twist Street circus has been commented upon and members will be asked at the Annual General Meeting to frame a resolution to be sent to the proper authorities for the reconstruction of this particular zone with a view to making it safe for traffic.

There have been seven meetings of Council during the period under review and the following are the attendances made by Council Members:—

Brayshaw, B. W.	.. 4	Sharp, H.	.. 7
Burton, D. M.	.. 4	Tompkins, C. P.	.. 5
Fitzsimons, T. S.	.. 3	Watermeyer, G. A.	.. 5
Hartog, G.	.. 1	Webber, F. K.	.. 4
Harries, W. M.	.. 2	Wertheim, J.	.. 3
Pearse, G. E.	.. 6	Mayor of Witbank	.. 0
Porter, Dr. Charles	.. 2	Mayor of Vereeniging	0
Porter, H.	.. 6		

Dr. Charles Porter in moving the acceptance and adoption of this Report referred to the following items:—

(a) *Town Planning Regulations.*—That during the past Session of the Union Parliament an Act called the "Provincial Subsidies and Taxation Powers (amendment) Act" was passed and would be promulgated shortly which gives each Provincial Administration ample powers to deal with proposed new lay-outs of ground and, further, to deal with any proposal respecting land which the Provincial Council has reason to believe is to be subdivided into building plots. The section referred to is as follows (No. 17):—

"17. The second Schedule to the principal Act is hereby amended by the addition at the end thereof of the following new paragraph:

"(15) Town Planning, including:—

- (a) the sub-division and lay-out of areas or groups of areas for building purposes or urban settlement, or deemed by the Executive Committee of the Province concerned to be destined for such purposes or settlement;
- (b) the regulation and limitation of building upon sites;
- (c) the variation, subject to compensation in cases of prejudice, of any existing sub-division or lay-out of land used for building purposes or urban settlement, or deemed by the Executive Committee of the Province concerned to be destined for such

purposes or settlement, and the authorisation of the consequential amendment of any general plan or any diagram of any sub-division or lay-out so varied and of the consequential alteration or endorsement of any document or title or any entry in a deeds registry;

- (d) the reservation of land for local government or other public purposes in any approved or varied scheme of town planning; and
- (e) the prohibition of the transfer of land included in any approved or varied scheme of town planning where any lawful requirement has not been fulfilled."

(b) *The Johannesburg Museum.*—Dr. Charles Porter expressed his opinion upon the suggestion to house the Museum on the University site at Milner Park as being an unsuitable one owing to the distance from the centre of town. In his opinion the Museum if erected at Milner Park would prove a white elephant as far as the Johannesburg inhabitants were concerned because they would not trouble to undertake the journey. He felt that the distance of the Art Gallery from the centre of the City was one of the drawbacks, and that it would be visited more frequently if in a more central position to enable the inhabitants to visit same during the luncheon hour.

(c) *The Union Ground.*—Dr. Charles Porter, on mentioning the report made some years ago to obtain the removal of the trees on the north side directly in front of the Main facade of the Art Gallery referred to the present position, namely, that all the old trees have been removed and that new ones were being planted. He suggested the advisability of approaching the Chairman of the Parks and Estates Committee with a view to prevent the planting of any trees on the north side of the Union Ground and further to ask the Municipal Authorities to approach the Railway Administration with a view to the removal of that portion of the rock garden on the Railway embankments directly in front of the Art Gallery so that an unobscured view of the Art Gallery might be obtained from a distance.

Mr. J. Wertheim, in seconding the adoption of Council's report, referred to the necessity for public agitation in order that the new building requirements mentioned therein be undertaken by the Government.

He particularly stressed the urgent need for new Magistrates' Courts definitely stating that this requirement was more urgent than either a Post Office or Railway Station.

In respect of the Museum he was not able to support the remarks put forward by Dr. Charles Porter.

Respecting the Twist Street circus, which he considered to be the most dangerous spot in Johannesburg, he felt that a resolution should be forwarded from this meeting to the responsible authorities asking for an immediate re-construction of the site in order to make it safe for traffic. Council's report was thereafter adopted.

3. *Appointment of Scrutineers.*—Messrs. D. M. Burton and F. K. Webber, were unanimously appointed Scrutineers to conduct the Ballot for the election of members to Council and subsequently submitted the following results of votes cast by members for the new Council, and the President formally declared the following nine members duly elected as Councillors for the current year:—Messrs. T. S. Fitzsimons, A. Stanley Furner, W. M. Harries, G. Hartog, Professor G. E. Pearse, Messrs. H. Sharp, C. P. Tompkins, Professor G. A. Watermeyer and Mr. J. Wertheim

4. *Annual Accounts.*—Members present were provided with a copy of the Annual Accounts and Balance Sheet for the year ended the 31st March, 1925. The President referred to the necessity of members taking an interest in obtaining new ordinary and Institutional members for the Association in order that the aims and objects we have in view might be continued. The balance Sheet was agreed to.

5. *Retiring President's Address.*—The President, Mr. B. W. Brayshaw, said:—

"Before proceeding with the remarks I have to make, I would like to express my personal regret that our late President, who took so keen an interest in this Association, was not spared to address you this evening. To those of us who were privileged to act on this Council with him, there is, in addition to the feeling of personal loss, a feeling that a vacancy has occurred which it will be hard to fill. His quiet enthusiasm and well considered advice at once commanded attention and was always highly valued by your Council.

"The subject of Town Planning is one which is exercising the minds of most Statesmen and

Economists to-day, on account of the influence which it exerts on the physical and intellectual growth of individual citizens.

"This awakening has been largely brought about by the growth of the larger cities in Europe and the consequent accentuation of such faults as existed in the original lay-out and want of control of the subsequent growth of towns. Most of the literature on Town Planning published in recent years is confined largely to the control of the subsequent development of a town rather than the principles governing the lay-out.

"To the want of control as much as the design may be attributed the sordid condition of overcrowding and dismal outlook on life which exists in most large industrial communities.

"It was to combat this condition of affairs that the Garden City movement started an attempt to provide an environment of freedom, bright hopeful and healthy and a pride to the community occupying it.

"The first steps towards the creation of such an ideal, would naturally be the adoption of a well considered plan, the foundation on which to build the future town. The best of plans may be ruined if left to the whims and fancies of individuals without some guiding force in the interest of the community as a whole.

"The outstanding example of the control of the development of a Town is the much quoted Garden City of Letchworth, conceived by an idealist in Mr. Howard and carried into effect by his friends.

"This was to be a community of limited size, self contained in every respect, and surrounded by a rural area which could not be alienated. The distinctive features of the scheme being single ownership limited profits and the appropriation of the unearned increments on the site value of the Estate, for the benefit of the future Community. I need not make more than a passing allusion to the success which has attended these efforts. The conditions under which this experiment was initiated were most favourable, favourable in the sense that it was carried out in a country with a large population, overcrowded cities, wanting elbow room and fresh air, with all the material for the experiment at hand, so to speak.

"In South Africa, with our sparse population, nothing so ambitious has been attempted, and, beyond a few 'Garden Suburbs' under what may be termed 'controlled development,' Town Planning has in most instances been confined to the designing of 'lay-outs' promoted by private individuals or corporations; to develop on any lines beyond a few conditions stipulated in the terms of sale.

"The controlling purpose of these towns is profit, a perfectly natural purpose to any business man or company, which cannot necessarily be criticised, but a point that should not be lost sight of when criticising some of our towns and more especially Johannesburg, and Towns along the Witwatersrand.

"These were started as mining camps, for a temporary residence. The most sanguine did not believe the Rand would last longer than a decade. Under these circumstances we are fortunate that conditions are not worse.

"In Johannesburg we have a Town which has its history reflected in its patch work plan. A Town built in haste, its individual parts bearing no relationship to the main body, ignoring all obstacles to reach an objective—profit—its development absolutely uncontrolled.

"The aftermath we have with us to-day in difficulties of slums, transport, drainage and want of open spaces, etc., problems which could not recur to-day with the awakened interest in the Town Planning movement.

"The principles governing the lay-out of towns or villages are precisely the same, we have the same problems of drainage, grades, civic centres, the provision of open spaces and arterial roads, differing in degree according to the provision of the designer as to the ultimate size of the community.

"Here he is faced with the most difficult of his problems, the provision of a sufficiently elastic plan for the future expansion and possible widening of thoroughfares without excessive cost to the future inhabitants. The interest in the Town Planning Movement in South Africa has naturally brought about innovations in the designs of 'lay-outs' of Townships.

"The much criticised rectangular system has been rigidly avoided and the other extreme of curves and circles adopted. This phase has to some extent passed. It cannot be denied that, to the individual holder, the rectangular lot is best suited from any point of view.

"Recognising that the haphazard growth of towns and its resulting evils could not be allowed to continue, the Government created a Department in the Transvaal, the "Townships Board," which has for a number of years had a say in the designs of, and necessity for, townships, and to some extent guarded the interest of their future population by stipulating endowments to be provided by the owners of those townships. There its functions end.

"Matters have been carried a step further by the drafting of Model Regulations for Town Planning by this Association which have been in the hands of the Government for consideration for the past two years. It is on this phase of Town Planning that the immediate work of this Association should be concentrated. Regulations of this nature must at many points infringe on the rights of the individual in the 'community interest.'

"South Africa is proverbially conservative, especially in regard to rights of property owners and it will take much effort and propaganda to create that weight of public opinion strong enough to force our Legislature to provide Legal public control of the lay-out of Townships and their subsequent development.

"Powers are from time to time granted to our Municipalities as occasion necessitates and differ considerably in the various Provinces of the Union. The powers are invariably sought to remedy some already existing difficulty. The best of all laws, however, will not entirely remedy our troubles, good laws if badly administered are useless and it is only by the support of an alert public opinion that a good administration will be obtained.

"We have in the Transvaal Roads League an excellent example of what constant and energetic propaganda can do. Their task is an easier one than ours, in that bad roads are an ever-present trouble to the travelling public, but the success which has already attended their efforts by the Government setting aside funds for arterial roads would not have occurred so soon, but for the focussing of public opinion on this crying necessity.

"Few Towns have the rapid growth of Johannesburg and some of our Reef Towns. For most it is a slow process and evils grow through general lassitude.

"There is only one remedy for this, a general understanding of the principles of Town Planning in their widest sense, a civic pride and to some extent a subjection of the interest of the individual to the common welfare."

6. *Twist Street Circus*.—Mr. J. Wertheim moved that the Town Councillors' attention be drawn to the dangers the traffic occasion by the present lay-out of the Twist Street Circus and that it be requested to make immediate adequate provision for a more satisfactory lay-out.

This was seconded by Mr. Harold Porter.

In support thereof, Dr. Porter and Mr. D. M. Burton suggested that the Council be advised to adopt the gyratory system for traffic. The resolution was unanimously agreed to and it was decided to incorporate the foregoing suggestion.

7. *The Museum*.—Professor G. E. Pearse moved that the Johannesburg Town Council be asked to receive a deputation from this Association with a view to discussing the choice of a suitable site for the Museum. This was seconded by Mr. Harold Porter.

Mr. D. M. Sinclair said that in view of the matter not being fully discussed by Council he would move that the question of the site for the Museum be referred to the incoming Council for consideration, thereafter to approach the Johannesburg Town Council with a view to that body receiving a deputation from this Association to discuss the question. This was seconded by Mr. F. K. Webber ably supported by Mr. J. Wertheim and unanimously agreed to. The original motion by Professor G. E. Pearse being withdrawn in its favour.

8. *Johannesburg Public Library*.—Mr. D. M. Burton moved that the opinion expressed by this Association in the past relative to the Johannesburg Public Library be reiterated to the Town Council, viz., that the site of the present Library is suitable in every way and with the much needed re-construction and extension of the present buildings is well able to house a suitable library. That although a new site has been promised by the Town Council at the western end of the Town Hall we should endeavour to focus the opinion of the general public of the present site and its possibilities if the required re-construction and extension are carried out and thereby enable the Town Council to obtain a mandate from Ratepayers to

retain the present Library site and make the necessary structural alterations and additions to the present library an up-to-date building.

Professor G. E. Pearse suggested that a deputation from this Association should meet the Library Committee of the Town Council and put forward these views since he had reason to suppose the majority of the members of that Committee were in favour of the Library remaining on its present site, Agreed.

9. *Dr. Charles Porter*.—Mr. D. M. Burton referred to the immediate departure for Europe of Dr. Charles Porter and proposed that this meeting express to Dr. Porter our thanks for the excellent services rendered to the Town Planning movements by Dr. Charles Porter as President and member of Council of this Association since its inception. This was seconded by Professor G. E. Pearse and authorised to be conveyed to Dr. Porter by letter.

A hearty vote of thanks was accorded to the President, Mr. B. W. Brayshaw, for his address and for his services as President during the past year.

The meeting then terminated.

RECENT PRACTICE IN COLD STORAGE CONSTRUCTION.

PART V.

BY E. H. WAUGH, A.R.C.S.

In working out the sizes of the air ducts it will be found that the duct will be gradually reduced in size as the run or length increases. The duct work must not be tucked away into any old corner, or altered in direction, except so far as the plan demands. Neither must the area be constricted at any point and then widened again to get past an obstruction. The duct should be as straight as possible and any changes of area or direction should be curved or splayed (preferably the former) as much as practicable. Square corners or angles cause a resistance equal to a lengthening of the duct by 100 per cent. A 90 degrees bend of a radius equal to a $\frac{1}{4}$ dia. of duct is equivalent to a lengthening of duct 65 per cent. A $\frac{1}{2}$ dia. radius bend only means 30 per cent. A full dia. radius means only 10 per cent. and a 2 dias. radius bend—fullest efficiency—means only

an equivalent in resistance to lengthening the duct 4.3 per cent. Thus an increase in the bend radius eases the fan enormously.

In working out the size of the ducts and the dimensions required, the method attributed to Thompson (Architect) has been found to give reasonable results. There is a good deal of figuring, but the results required warrant the work involved.

The method is as follows.

- (1) Make main duct at fan mouth not less than size of fan-mouth a greater size of duct will slow the air and a lesser will greatly increase resistance and work on fan.
- (2) Refer to Table I. (below). Observe how many 1-inch by 1-inch pipes are given as being equal to capacity of this main duct (every duct is regarded as having equivalent of so many inch square pipes).
- (3) Divide this number of 1-inch pipes by fan capacity in cub. ft. per min. This gives a fraction "equivalent" to the portion of 1-inch pipe to be allowed for each cubic foot of air.
- (4) Multiply amount of air to be delivered to each outlet or opening along the duct by the "equivalent" distance of the said opening from the fan. (Equivalent distance means total length of duct after all additions for bends, contractions, etc., have been added).
- (5) Divide the total of these products by the fan output in cubic feet—minutes. This gives the average distance of all openings from the fan.
- (6) Multiply the amount of air to each opening by the fraction obtained in operation 3, i.e., the number of 1-inch pipes in the main duct at fan mouth. This will give the number of 1-inch pipes to be allowed for each opening or outlet.
- (7) Corrections.—(a) For each 1 foot by which the "equivalent" distance (4) exceeds the average distance obtained in operation 5, one third of 1 per cent. is to be added to the number of 1-inch pipes previously allowed for each opening or outlet.
(b) If the "equivalent" distance is less than the average distance, the connection is to be deducted instead of added.
- (8) Refer again to table (below) and find the size of square pipe, equivalent to the connected number of 1-inch pipes for each flue. This is

the size of the branch pipe at the base of the flue or point of friction off the main duct. Add all the branches back to the fan, or table, and if the figuring is correct it will add up the size of main trunk started with.

Table I.—Equalisation Table of Ducts.

A. Diameter or side of square pipe in question (in inches).

B. Number of 1-inch square equivalent to ditto.

Table I. Equalisation Table of Ducts.

A. Diameter or side of square pipe in question (in inches).

B. Number of 1—inch square equivalent to ditto.

A	B	A	B	A	B
1	1	20	1 788	39	9,498
2	5	21	2,020	40	10,119
3	15	22	2 270	42	11,432
4	32	23	2,537	44	12,482
5	60	24	2,821	46	14,351
6	88	25	3,125	48	15,963
7	129	26	3,446	50	17,678
8	181	27	3,788	52	19,499
9	243	28	4,148	54	21,428
10	316	29	4,528		
11	401	30	4,929		
12	498	31	5,351		
13	609	32	5,793		
14	733	33	6,256		
15	871	34	6,741		
16	1,024	35	7,247		
17	1,191	36	7,776		
18	1,374	37	8,327		
19	1,573	38	8,901		

Following the operations in order as per numbers given in the foregoing method:—

Example.

Operation No. (1). 54" x 54" size of fan outlet feeding 4 outlets.

" " (2). 21,000

" " (3). 21,000

28,000 = 0.75.

(4) ∴—as follows

Outlet No. (a)	Equivalent Discharge (b)	Cubic feet per minute. (c)	Equivalent Distance x cubic feet per minute. (d)	No. of 1-inch pipes operation No. 6 (e)
1.	50	6,000	300,000	4,500
2.	50	2,000	100,000	1,500
3.	60	10,000	600,000	7,500
4.	110	10,000	1,100,000	7,500
			2,100,000	

Operation No. 5. $\frac{2,100,000}{28,000} = 75$ feet average distance

Operation No. 6. given in table column (e) viz:—

Outlet No. 1 cubic feet per min. is $6,000 \times 75 = 4,500$

Operation No. 7:—

Outlet No. (a)	Distance to be corrected (b)	Amount of correction (c)	Corrected No. of 1-inch pipe (d)	Size of branches (inches) (e).
1	—25	—375	4 125	28 x 28
2	—25	—125	1:375	18 x 18
3	—15	—375	7 125	35 x 35
4	+35	+875	8 375	37 x 37
			21:000	

Operation No. 8 is given in (e) of the last table.

This completes the whole calculation.

The main trunk feeding the branches to 3 and 4 would be $8,375 + 7,125 = 15,500$ —viz., about 47 x 48 inches. See table I. above. The total under (d) is 21,000, same as starting in operation (1), which proves the calculation. The ducts or flues are in cold storage work, conveniently made of

square than of circular section, as they have to be placed on walls of rooms. A true square or circular section would project too far into the room and take up cold storage space, consequently a rectangular section of oblong shape is adopted in which height is greater than width. If height is more than 3 to 1 of the width, the area of ducts must be increased as follows:—4 to 1—10 per cent. increase; 6 to 1—20 per cent. increase; 10 to 1—30 per cent. increase. It is, therefore, not desirable to make ducts too narrow, as the resistance increases. Probably 18" wide will suit most case. Thus the above 47in. by 48in. would be made about 8ft. by 2ft. size.

The outlets should have no grids on them, but a sliding door or flap can be fixed to each so as to allow of regulation

Outlets should be distributed evenly throughout the duct and each about 1 foot square and about 3 feet apart or even less. The object sought is equal distribution.

(To be continued.)



WHITE HALL COURT, KILLARNEY, JOHANNESBURG.

J. A. MOFFAT, F.S.A.R.C. ARCHITECT IS STANDING AT THE TOP AT CENTRE OF PIER.

BOOK REVIEWS.

"Roof Coverings."—Their manufacture and application by Ernest G. Blake, M.R.S.I., A.B.I.C.C., published by Messrs. Chapman and Hall. Price, 10/6 net.

The author in his preface justifies this publication on the grounds that the roof covering is of primary importance from every point of view, and while building by-laws are stringent in their demands for adequate foundations and thicknesses of walls and the stability of the building generally, they are presumably deficient in their insistence on the right selection of the roof covering. He points out that a bad roof covering will soon be reflected in the admission of rain to the timbers below and will result in the decay of the structure and the ruination of the health of those whose unfortunate lot it is to dwell therein.

All descriptions of roof coverings are dealt with in an exhaustive manner under the following headings:—Thatch, Organic Roof Coverings, Metallic Coverings, Mineral Coverings, Asbestos Cement, Bituminous Felts, Asphalte, Glass and Cement Concrete.

Thatch is little used in this country and in its more elaborate forms is unknown. Although it has much to recommend it for its picturesque appearance in the country districts, its disadvantages here are serious considerations and the liability to fire from lightning during the violent thunderstorms that occur here, destruction by birds and ants, difficulty in obtaining skilled thatchers and suitable material, restrictions under local building by-laws all militate against its use, and as a roof covering, it may be said to be dying out in this country, and any one recommending it incurs a great responsibility.

Shingles as a roofing material is fully treated, although it is admitted that they have nearly gone out of use, except in wood-producing countries. It is surprising to learn that many of the houses in Rome were protected in this manner more than 200 years before the Christian Era.

Shingles are an expensive form of roof covering and unless they are well looked after will not stand the climatic conditions here, and we know of too many instances of these roofs being replaced by some more durable covering to wish to recommend them.

Under Metallic Coverings we pick out our old and tried friend, corrugated iron, which is pre-eminent in this country and easily ousts all other forms such as copper and zinc for general use. Its supremacy is being challenged, however, to-day by various forms of mineral coverings, such as asbestos cement and tiles.

Corrugated asbestos sheets are greatly in use, but a serious defect is their tendency to crack down the centre. We believe it is claimed that this fault is overcome by a new pattern of sheets with wide corrugations.

Every variety of clay tiles is described and well illustrated and useful notes and diagrams are given of the methods of fixing, number per square, weight per square, etc. We would like to point out the necessity for a hail-proof tile for use in this country with special reference to the enormous amount of damage done by hail stones as large as hens eggs and tennis balls at Pretoria not long ago. Many property owners failing such a safeguard have reluctantly fallen back on corrugated iron.

The various types of asphalte and sheet asphalte coverings are dealt with in detail, also all forms of glass roofing and lastly there is a chapter on cement concrete as a roofing material. It is conceded that one of the most difficult problems that is encountered in the construction of a flat concrete roof is the production of a sufficiently stable foundation that will not be liable to crack owing to the expansion and contraction of the material. We do not agree with the author that this difficulty has been entirely overcome and that it is now possible to lay a concrete flat that will not crack or absorb water in the least degree.

This book is an excellent addition to the technical series already issued by the publishers and invaluable as a guide to Architects and a text book for students.

N.T.C.

St. Paul's Cathedral.

This church was completed in 35 years in the year 1710 A.D., at a then cost of £745,954, nine-tenths of which was raised by a tax on coal imported into London. It is becoming gravely dangerous and Mr. William Harvey has just issued a book on the preservation of this wonderful

fabric. His claim to a hearing is based on a twenty years' research into arched and vaulted construction in existing buildings, such as can fall to the lot of no busy designer.

The work comprises 148 pages in which is included the report of the Commission of Experts on the present state of the Cathedral, which was addressed to the Dean and Chapter on February 14th, 1925.

Mr. Harvey entitles his work "The Preservation of St. Paul's Cathedral and other Famous Buildings," and he claims for it that it is a "text book on the new science of conservation including an analysis of movements in historical structures prior to their fall."

Having read the work carefully, the reviewer is of opinion that this analysis of the position is entitled to the greatest respect and that the proposed method of arresting the dangerous movements in this truly unique church is based on a due and scientific appreciation of the lines of pressure.

It is not possible in the space of a brief review to entirely traverse the lines of the arguments adduced. The outlines may, however, be given with a recommendation to closely study the book which is enriched by photographs and sketches of either the subject itself or of other fabrics exhibiting similar weaknesses.

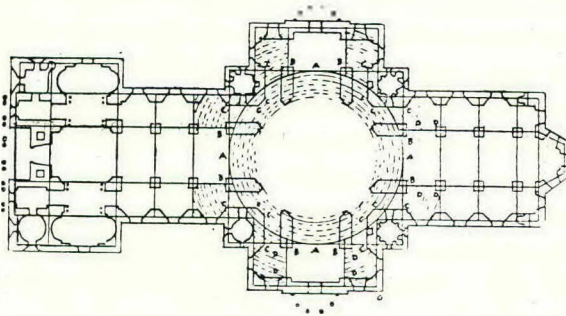


Figure 41. St. Paul's Cathedral. Suggested main lines of reinforcement to be buried in concrete beams in the wall tops; and plan of reinforced concrete truncated cone to underpin the outer and inner drums and spread their weight over the surrounding masses of masonry. None of these measures will interfere with either the external or internal appearance of the building.

Mr. Harvey has carefully studied St. Paul's for some years and his reported and reasoned survey is more explicit than that of the Commission. In outline it amounts to this, that the movements are due to a want of static equilibrium and not to the mere lack of support against simple downward pressures, or of foundation failure as suspected 20 years ago. The central or dome portion has sunk more than surrounding parts, due partly to compression of the ground and to tight-

ening of the stone work joints. The slanting movements, however, in the centre or crossing have communicated themselves lengthwise right along the Cathedral mainly towards the south-west, as in old St. Paul's, and the south-western tower is leaning, due to pressure proceeding from the dome itself. The great dome is composed, as every student knows, of three domes the outer shell, the middle or thimble shaped dome, into which near its base is built the inner or hemispherical dome. The eye of the dome is only a hand's breadth out of the perpendicular. The circumference of the lower rings of the two masonry inner domes is distorted and the diameter is no longer true by over six inches, not as the Commission urges by temperature movements solely, but improper arrangements of the strutting section of the piers and bastions around it. The outer edge of the dome is surrounded by 32 great masonry counterforts or radial cross walls, all of which have been split vertically. Strangely enough, the author points out the Commission is unimpressed as to this very serious feature except to argue that they do not play an important part in transmitting weight to the bastions below, nor is it desirable that they should, and appear to miss their true functional duty of spreading the pressures.

This idea is derived from the "absence of relative displacement at their base," to use the Commission's words. Mr. Harvey, against this, places a reasoned diagnosis that the great designer intended these to discharge the spread pressure along the bastions. In this he is entirely opposed to the Commission's idea that a "state of equilibrium has been reached."

St. Peter's possesses, he contends, great L shaped piers (as against the St. Paul's long and slender plan), which close the aisles, which in St. Paul's are open. It is to these colossal features, that St. Peter's dome owes its present security, as the dome itself is bound by a number of metal rings on the drum and cupola, which have prevented spreading. These were inserted at different times after its erection. He is of opinion that St. Paul's has a well designed dome, and insufficient lateral and base supports and at St. Peter's the opposite holds, for the dome is the weaker and the supports the more strongly designed, thanks to Michael Angelo having strengthened them.

The fine columnar peristyle around St. Paul's dome over the 32 counterforts has been seriously affected, the inner portions attached to the dome

have gone downwards and the outer part is now at a relatively different level from it. The inner sides or corners of the eight great piers receiving the discharge of the four great arches under the inner domes have definitely parted company from the parts behind them. The cores of these piers are filled with rubble, only the faces being ashlar. These cores and the faces are severely split and the Commission proposes to grout them by the cementation process to which Mr. Harvey raises the apparently unanswerable argument that filling the interspace of the rubble with strong mortar will not prevent the continuance of shearing of this mortar from the face of the weaker stones adjoining it. He contends that the cores should be replaced by reinforced concrete and the pressures at the base of the two inner domes should be taken up by an external cone of reinforced material which should continue the sectional lines of the inner dome and carry or help to carry the raking pressures to the ground on a much wider spread than is at present done. This cone could be supported on to vaults of a thimble section passing over the present nave, chancel and transeptal semicircular arches and vaults, but carried on to the piers below them. He also suggests that near the top of and along the great outer walls should be run great reinforced concrete wall beams or binders which will tie the whole great church together and tend to prevent the longitudinal discharging of thrusts from vault to vault and arch to arch right along the length of the body of the building till they find the weakest spots at the ends which get thrust outwards like the western towers. In regard to setting in order the 32 counterforts, Mr. Harvey says, "the absence of any mention of these weight distributors from the Commission's report is an astonishing omission since the *diffusion of pressure* is the crux of the whole problem (Note—the italics are the reviewer's).

The dome is pressing the upper parts of the great piers outwards, the lines of arches and vaults of nave and chancel and transepts are pressing them inwards at a lower level, causing distortion and he illustrates simply similar movements under the crossing at Westminster Abbey, at Tintern and at Jedburgh Abbeys.

"The final plunge may, indeed, be instantaneous," the weary building strained and racked by distortion and unequally opposed pressures may in a moment descend headlong into a heap of dreadful ruins, the flash of its descent only recorded by

a possible plucky photographer. For two centuries the masses have been manoeuvring into position.

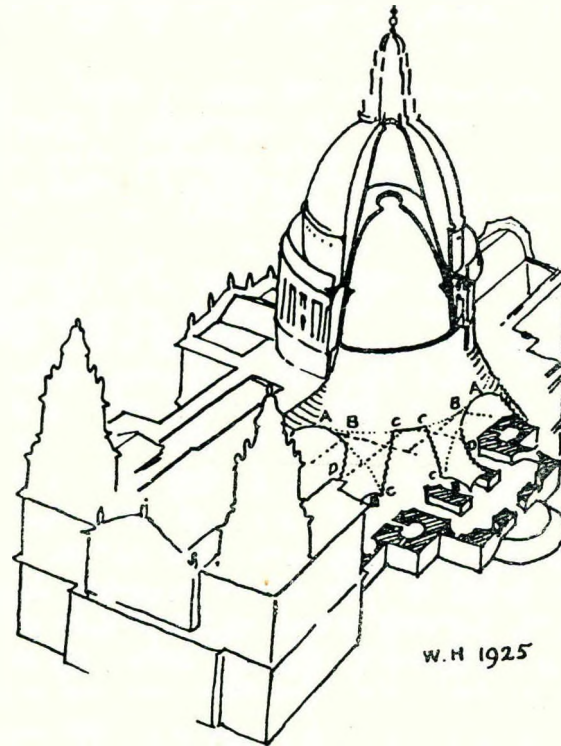


Figure 46. Principal lines of reinforcement around reinforced concrete cone. Letters A.B.C. etc., as on Fig. 41.

Such sudden falls have happened several times in the lifetime of many men still alive, e.g., the Charing Cross Station; the Campanile, at Venice, of which one unheeded architect gave ample warning; the tower at Chichester Cathedral, which in 1861 telescoped downwards during the quiet mid-day within its own piers; or St. Patrick's, Dublin, in the eighties. The danger about old fabrics is more, Mr. Harvey shows, from undue optimism than from the building itself. As the total weight of the central dome position and substructure of St. Paul's is 67,270 tons and the height to the cross top of the beautiful lantern is 404 feet, the problem is immense, but he contends, fairly enough, it is solvable by preparing large models at the National Physical Laboratory, which, by removable parts, would, by degrees, give up the real secret of the exact lines of the pressures at present somewhat complex and yield a true indication for the construction of calculations. This claim is for a reasoned structural policy as against the Commission's patchwork and the City Building Surveyor's claim for a demolition and reconstruction, in other words, to truly preserve the fabric, as against a timorous and uncertain putting off the evil day till next generation, which no one can feel confident a grouting proposal will

really do or on the other hand a complete reconstruction of immense cost and time.

St. Paul's is of its kind unique in the civilized world and is the centre point of the thoughts of the great English speaking peoples and can plead its own eloquent cause for any expenditure necessary to assure it a stability it has not really possessed since it was built.

E.H.W.

THE ORIENT.

SKETCH No. 6.

G. W. NICOLAY, F.R.A.R.C.

Great antiquity seldom fails to awaken the spirit of inquiry, even if interest more lasting and fruitful is not arrested by it; but when it is, the examination of work such as that to which Tudril had with difficulty gained the privilege of seeing, yields results proportionate to the zeal and experience displayed by the student. Here was a piece of antiquity which had a double interest. The place, regarded as one of those which have for many ages been devoted to religious rites, had an undeniable interest for the visitor; but in addition, the sculpture which covered every part of what was at first visible, was of various dates and served the discovery of the original form of the place and the subsequent additions and enrichments from time to time. Consequently the visitor was able to enlighten his guides as to many things of interest about the making of the place; much to their astonishment. So when they became aware that of his knowledge about such matters, they speedily made arrangements which allowed him to make his visits at his leisure and remain as long as he pleased in the outer and principal part of the temple, and said that when he wished to go to the inner parts, other facilities would be necessary. As the inner part was not only the most ancient, but the key to the meaning of much of the sculpture, these necessities soon required attention and he was on the following day, though privately, initiated a member of the order of "brothers of the priesthood," of which the ruler of the country was head, and immediately raised to the rank which allowed his admission to the "place of the mysteries."

Afterwards, when he visited the temple to examine the inner part, one of those who first attended him was always present, and when he went to the outer part, he found (very much to his

annoyance) an attendant who was dressed very like the others, but sitting crosslegged on the floor exactly in the centre, his head inclined forward, a hand placed prone upon each knee, his eyes closed—motionless, speechless.

This ancient place provided absorbing interest for all Tudril's spare time, and he seems to have used every moment of it. His description proceeds from the inmost part outwards taking the exterior last, but here the more usual method is adopted.

Modern criticism would probably regard with indifference if not with hostility the tradition which placed the "Temple of the Rock" in the realm of high antiquity, but in the days of Tudril and Wi-Hi, men were not troubled with thinking about things or creatures whose existence is now placed with no lack of confidence in the rear of millions instead of thousands of years, and the custodians were content to say, "it is the most ancient temple known." To them, that was a clear indication of the times lost even to thought.

In those distant times a man whose name was the name of the sun, came to this place, and judging it was certainly that where he was destined to establish a perpetual memory of fair living and good conduct, by uses unknown and without any other man's assistance, wrought a sacred house within the rock and placed there the life fire which had never since gone out.

This little history made a great impression. Eyesight evidence seemed to him not at all to support it; and he bent his mind upon the discovery of the reason.

The general arrangement of the interior appeared reminiscent of things familiar as to their form, though vastly at variance as to both detail and finish, and his work took from the thought a definite aim as well as an added interest.

The plan which was quite regular gave three aisles of equal length—just forty nine and a half feet. This length, divided into five by piers with bases three feet square provided open spaces between the central and the side aisles six feet wide. The central aisle measured fourteen and a half feet, that to the right nine feet and a half and that to the left eight feet and three quarters. The plan of the inner part was regular, but quite different; designed in forms composed of curves only. The chamber of the sun, although not visibly so, was a continuation of the central aisle, and at the wall was twenty one and a half feet wide. At the

floor, the outline of this chamber was that of an oval shorn of the larger part subtending the minor axis. On either side, their lines concentric with the oval, a passage connected outer part with the innermost chamber which was circular and had direct access to the chamber of the fire.

Such was the general scheme and those who had not seen the inner part could not have conceived what the original was probably like, either in design or appearance.

Tudrils interest was first aroused by the entrance, and increased by the truly magnificent appearance of the outer part, and then maintained by what he saw in the inner part; until he found himself involved in an archaeological study so engrossing, that he felt pleased, rather than annoyed, because his proper business delayed him for the best part of another month.

Tudril wished to get sight of the inner part of the temple from the moment the story of the founder was finished in his hearing. He thought it impossible that all traces of such a work should have been allowed to perish, but when he was taken to the inner part, the archaic simplicity of all about him left no reason for doubting that he stood within that ancient work of religious fervour.

He soon discovered the clue to the unravelling of the tangle that had interrupted his study of the building. Noticing the unusual outline of the floor in the chamber of the sun,—that nearest the outer part of the temple; he connected it instantly with the general form of the chief feature of the entrance, and as he thought of that, by the intuition which comes of unconscious seeing, he thought of another resemblance and looking up was assured that the walls rose beside him, and met over him in the same form.

Now he could, in mental vision, picture that venerable enthusiast, his titanic task completed, sitting cross legged in his cave teaching any who would listen, what he believed and lived by: being then, not only old, but withered and worn out, by his self imposed labour.

On the sketch the chamber of the sun and the central aisle of the outer part of the temple is shown as the original work.

The entrance seems to have been one of those designs of which success is consequent upon the difficulties by the necessity for combination with work already carried so far towards completion

that it cannot be altered as to general form. In this case, the form was that truncated oval which enclosed the floor space of the chamber of the sun, and the line of the cross section of the same.

Imagine this imposing opening in the face of the rock, the bounding line of it truly one of grace and beauty. The sides rising from their base with a gentle inward curve until reaching about two thirds of the required height they became concentric and met in the centre. About seven feet of this end of the cave exposed outside and cut off from the inside by a Screen, consisting of a ponderous lintel three feet on vertical face and two feet on horizontal soffit and under each end of it a carved bracket. Above and set in a grove a stone frame, rather less in width than the lintel had been built, projecting half a foot from the cave face, and set in the centre of it a stone screen only four inches thick reticulated all over and finished with the chisel to resemble basket work with piercings about nine inches square. For the first six feet of height the front face of the rock was left in the natural manner, and the recessed faces brought successfully to match it, the angle being to a quadrant at a centre of about two feet. This quadrant continued round the opening, but was dressed to an even, though rough face, behind this a band nine inches wide was polished and a similar band placed a foot and a half from the screen-frame, and between these bands, leaving half a foot plain against each, the surface was reticulated like the screen except that instead of perforations the face was but slightly sunk and polished. Under the lintel, the opening was closed at pleasure by solid bronze gates hung double folding so that the centre leaves or all could be opened.

In front of this work stood four richly sculptured columns upon low drum-like bases. They were placed on the line of an arc which crossed the line of the rock face seven feet from the entrance opening on either side and reached out to eight feet from the rock face. So triangular responds with the salient angle liberally worked off, were set to carry the ends of the lintels which were worked accurately to the arc. The lintel carried nine feet above the floor, added another two feet to the height of this purely ornamental feature, was quite plain but had a polished band nearer the soffit than the head.

The interior attracted attention and became interesting because of the manner in which it had

been contrived; doubtless on account of the simple cave securing the interest of the wealthy, which in this instance resulted in profuse expenditure.

The upper part of the central aisle of the outer part remained in form as it was first hewn out of the rock, but in order to give opportunity for architectural display, other two aisles were added as described when noticing the plan. Quite in the ordinary course, nothing is recorded of the method adopted for the execution of the work, but there is a note stating that the columns were inserted. They were the same height as the jambs of the entrance doors, and carried brackets of the same vertical dimensions but the lintel was represented by a vertical face worked upon the face of the rock, and on the side towards the aisle was only nine inches high. With a slight projection this was carried along the walls of the aisles across from wall to column throughout, but with a broad soffit like those already described. The ceiling spaces between would, in the west, have been left flat; a treatment not much favoured in the east. Here the largest square obtainable was marked out in the centre, and surrounded with a bold round moulding, and cut the spaces left at the ends of each oblong, inwards into the rock with a curve of no great depth.

Along the outer sides of the aisles in each division the rock was hollowed out, so as to show on plan a semi-ellipse, and brought forward in the same shape at the top, but modified at what may be called the wall line, to the oval form of the ceiling to the central aisle and the ends of the aisles were similarly treated.

A base like that outside surrounded the interior, and the bases of the columns were of the same height, all this being wrought very carefully after the manner of the natural surface of the exposed rock.

We now finish all floors dead level, and for good and sufficient reasons, which would not apply to the floor of this temple; on which no furniture was to be placed, and upon which no one ever trod, but a privileged and exclusive set of persons, who had full control of the work. By their choice the floor was finished, not level. Such level only as might be suggested by a stretch of sand or an open heath. The floor was the natural rock carefully dressed smooth.

Such was the rough hewing of the temple of the rock, famed afar, and in the passing times, sought by many millions of pilgrims.

The inner part was nearly as originally built. In section all parts exhibited the oval form. The chamber of the fire was simply a cone of that shape, with plain openings into the chamber of the sun and the passages, and over that to the chamber of the sun there was a large round opening. The floor through this part was original and roughly dressed.

Between the chamber of the sun and the outer part, a wall had been built which was about a foot and a half thick. Towards the outer part a vertical plane face; towards the chamber of the sun conforming to the oval form of the rest of the work.

This wall was also pierced by a large circular void, and the two were aligned so that the fire could be seen through them by standing in front of the entrance. Another use for this piercing discovered the object which two of the window-like openings in the external face of the rock were made to serve. Shafts led from these to the chamber of the sun, and the rays of the rising and setting sun were cast upon reflectors, and so passed to the sight of the people in the same line as those of the fire. Several other openings appeared on the outside, but nothing more is noted of them. Old and new were separated by this screen wall, and it represented both. To the inner part it was the same rugged nature as the remainder; to the outer part, sumptuously finished like all about it. In this part the work might be billed under the heading of "excavator," to be followed by "carver," and "stainer.

(To be continued.)

Former Society of Architects (London) South African Branch.

Under the Amalgamation Agreement between the R.I.B.A., and the Society of Architects, former members of the Society are permitted to qualify for Associateship of the R.I.B.A., by taking a Special Examination in Design. This Examination is really the Design portion of the R.I.B.A. Final Examination.

Members of the Association of Transvaal Architects who were members of the Society of Architects may take this Special Examination in South Africa and may apply in regard thereto either to the Secretary of the Cape Institute of Architects, St. George's House, St. George's Street, Cape Town, or the Registrar of the Association of Transvaal Architects, P.O. Box 2266, Johannesburg.

R.I.B.A.

In connection with the Relegated Candidates of the Intermediate, Final and Special Examinations, the Council of the Royal Institute of British Architects state that from now onwards the existing rule by which Candidates relegated in the Intermediate, Final and Special Examinations of the R.I.B.A. are required to pay the full examination fee (of five or six guineas as the case may be) for their third and subsequent attempts to pass these examinations will be discontinued.

In future Candidates relegated in the Intermediate, Final and Special Examinations will be required, at their second and subsequent attempts, to pay a fee of ten shillings and sixpence for each subject in which they have been relegated on each occasion upon which they present themselves for examination.

It is anticipated that a considerable financial saving will accrue to relegated candidates as a result of the new rule.

CONCRETING.

Architects and others committed.

The following provision is made in the amended Building By-Laws of the Johannesburg Municipality:

"All reinforced concrete construction shall be performed under the personal and constant supervision of either a fully qualified engineer or architect or competent superintendent. The execution of reinforced concrete work shall be entrusted to workmen accustomed to this class of construction, who shall be under the control of a competent foreman, and under no conditions shall the engineer, architect, or superintendent in charge of the work act or be permitted to act in the dual capacity of inspector and foreman."

During recent years reinforced concrete construction has made considerable progress in Johannesburg. Whereas a few years ago its use was almost entirely confined to floor slabs and foundations, to-day many of our largest buildings have their entire framework of reinforced concrete, with brick panels merely acting as screens.

The design of a structure of this nature with its varying stresses and strains is a complicated and highly scientific business, and hardly less important is the exact carrying out of the designer's

intentions in regard to the mixing and depositing of the concrete, and the placing and fixing of the reinforcement.

Hence the above quoted By-Law, which aims at ensuring proper design and execution.

The importance of such a provision is illustrated by the recent case of a large reinforced concrete building in Melbourne, belonging to the British-Australian Tobacco Co., a considerable portion of which collapsed during the building operations. Five of the workmen employed on the building lost their lives, and at the inquest the Crown undertook to prove:

(1) That the sand was not suitable on account of its fineness, and that it contained loam, vegetable and organic matter—probably oxide of iron.

(2) That the levers operating the sand and metal bins became crossed, and that sand and metal went into the hoppers at the same time.

(3) That the water was measured by allowing the tap to run while a man counted 20. The Crown contended that by this method 12 per cent. weight of water went into each batch of concrete instead of the usual $5\frac{1}{4}$ per cent.

(4) The steel reinforcements were satisfactory, but were badly placed in some of the columns, being out of alignment and not bearing full weight in the centre. There were no stretchers to keep the rods apart.

(5) The placing of the concrete was unsatisfactory and from its appearance little ramming had been done.

The Town Hall analysis of the concrete showed that the cement was in the proportion of 1 to 9.08 and 1 to 10.94 parts.

The Coroner decided to commit the Architect, the Clerk of Works and the Builder for manslaughter.

Comment would appear to be superfluous!

S.A. Institute of Quantity Surveyors.

Minutes of the Third Council Meeting, 1925. Session held at the Institute's Offices, 26/7 Connaught Buildings, Pretoria, on Friday, 3rd July, 1925, at 4.30 p.m.

Present. Messrs. F. D. Hickman (President), E. B. Farrow, G. E. Howgrave-Graham, D. J. Laing, T. Moore, A. W. Springthorpe, S. Waters and A. Loots (Secretary).

Apologies for absence were received from Lieut.-Col. W. E. Puntis and Mr. H. Rowe Rowe.

Minutes of Previous Council Meeting.—Proposed by Mr. Farrow and seconded by Mr. Moore, that these be taken as read and confirmed. Agreed.

Application for Membership.—Mr. W. Selkirk, P.W.D., Pretoria, was elected to membership.

Proposed Scale of Professional Charges.—A copy of the proposed scale of fees drawn up by the sub-Committee had previously been circularised among all Council Members. Mr. Moore was of opinion that the words "and Specifications" be inserted after "drawings" in Section 1 (a) and 1 (e) and this was agreed to.

Mr. Laing wanted to know whether the fees laid down here were in accord with those specified in the Quantity Surveyors Chapter of the Draft Bill. Decided to defer this matter to next meeting to enable members to make the comparison. Mr. Laing kindly offered to have copies of the fees laid down in the Draft Bill typed and circularised.

Revision of Standard System.—Mr. Hickman said he had had a consultation with Mr. Cowling and the latter had promised to convene a meeting of the Sub-Committee as soon as time permitted.

Mr. Moore drew the Council's attention to a letter appearing in the Minutes of a Meeting of the Union Architectural Practice Committee held on Thursday, 18th June, 1925. He attended that meeting and it was the general feeling among the Architects present that a representative of the Architects should be on any sub-committee appointed to revise the "Standard System." Mr. Moore was of opinion that this should be allowed, and said he had suggested to the Committee that a copy of that letter be forwarded to the Institute. The question was debated at length, but as no official notification had been received from the Architects it was decided to defer the matter until such was received.

A letter dated 27/5/25, had been received from the Secretary of the National Federation of Building Trade Employers giving a resolution passed at the recent Congress held at Port Elizabeth, that the Congress instruct the incoming Executive to consider the advisability of insisting on the Standard System being used on all quantity jobs. The President and Secretary were instructed to reply.

Conditions of Contract.—Mr. T. Moore's letter to the Secretary, dated 8th June, enclosing amendments to the above was read. He (Mr. Moore) explained at length what was decided at the Congress of Constituent bodies under the Union Archi-

tectural Practice Committee and National Federation of Building Trade Employers held in Johannesburg, on 19th March last, and stated that all clauses in the new Conditions of Contract with the exception of those still to be referred to Counsel for opinion, had been approved of.

Proposed Article on Quantity Surveying for Newspapers.—Messrs. Hickman and Farrow submitted a provisional draft of the article on "Quantity Surveying."

This was read and approved, and will be circularised to Council Members for perusal.

General.—

- (a) Mr. Hickman stated he (as President of South African Institute of Quantity Surveyors) had received an invitation from the Johannesburg Town Council to the Ball in honour of H.R.H. The Prince of Wales. Mr. Moore said that had the Institute been purely a Transvaal body, an invitation to the Administrator's dinner would also have been received.
- (b) A wire and letter from Mr. McWilliams, Port Elizabeth to the Secretary, re fees for Government work were read. Also Secretary's reply.
- (c) A vote of thanks to Mr. A. T. Babbs for a donation of £3 3s. was passed.
- (d) Ditto to Mr. Priestly for defraying the cost of the Institute's wreath to the funeral of the late Mr. J. H. Elliott.
- (e) Col. White's letter was read, and the Secretary instructed to get certificate suitably endorsed.
- (f) A letter from Mr. M. K. Carpenter covering letters from Attorney Chivers, and Messrs. Syfret, Godlonton and Low, re Architects Act were read.

Government Architectural Work.

Last year a strong deputation from the Council of the Association of Transvaal Architects interviewed the Minister of Public Works (the Right Hon. Mr. T. Boydell), with a request that Government work of a public nature be given out for competition among Architects practising in the Union.

The Minister promised to give the matter his attention but he was of opinion that owing to the standardization of designs, the P.W.D. were and

would be able to carry out the work more economically than Architects in private practice, and he did not hold out any hope of the request being considered or granted.

A small deputation met the Administrator with a request that Government work be given out to Architects practising in the Union in a similar manner as done in the Cape Province, with the result that the Council of the A.T.A. were informed the Administration were prepared to give out a school job as an experiment, but they were not prepared to submit it for competition, and asked the Council of the A.T.A. to nominate an Architect, and they recommended Mr. Allen Wilson, who was then President.

The Administration accepted the nomination and directed Mr. Wilson to submit sketch plans with Estimates for a High School at Klerksdorp, for accommodation of 240 scholars.

After the scheme had been submitted, the drawings were formally approved and Mr. Wilson was instructed on the 20th August, 1925, to proceed with the preparation of final drawings with Specification, etc., for final consideration.

Notes and News.

Mr. J. R. Hobson, M.C., Chief Architect, Public Works Department, of the Government of Southern Rhodesia, has been elected a Fellow of the Royal Institute of British Architects.

Mr. D. P. Howells, Town Engineer of Benoni, a Past President of the Town Planning Association (Transvaal), has been appointed Town Engineer of Port Elizabeth. Mr. Kermack, formerly Assistant Town Engineer, has been promoted Town Engineer, Benoni.

Mr. J. R. Burg, of Pretoria, has opened a branch office at Grosvenor Chambers, Loveday St., Johannesburg.

Mr. Harold Porter has been elected a member of the Council of the Association of Transvaal Architects, vice Mr. Ernest M. Powers, resigned.

Mr. A. Stanley Furner, A.R.I.B.A., has been elected a member of the Association and registered as an Architect in the Transvaal.

Mr. Caskie, City Engineer, Bloemfontein, has resigned.

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Mr. Vincent E. Harris, F.R.I.B.A., of 27, St. James Square, London, has been nominated by the President, R.I.B.A., to assess the designs for the Pretoria Town Hall competition.

Owing to the removal of Mr. E. M. Powers, to Durban, he has had to resign as Editor of this Journal a post he has held since 1918. Mr. E. H. Waugh is acting as Editor pending fresh arrangements by the Council.

Mr. Oakley Coltman, who left for Singapore in June, on arrival at Colombo, was retained at that port for the time being by his firm, Messrs. Booty and Edwards.

At the recent Annual African Congress of the Institution of Municipal and County Engineers, held at Durban in July, Mr. G. F. Carter, President of the Institution came out specially from London to be present. He is City Engineer of Croydon.

Mr. Carpenter has left for England on a well earned vacation for four months. Miss Murdoch, of his office, is acting in his absence.

Mr. and Mrs. Robert Howden have left for England on a four months tour. Mr. Howden is on a health trip which we hope will be very beneficial.

Mr. R. Smith Murdoch was in Johannesburg from New Zealand lately.

Mr. F. Hutchinson, formerly of the Architectural staff, T.E. Department, Johannesburg, has resigned and joined Mr. McKinlay, Architect of Durban, taking up the Pietermaritzburg part of the firms business.

Dr. Hamblin, Town Engineer, Stellenbosch, C.P., is the new President of the African Section of the Institution of Municipal and County Engineers. Mr. T. W. Stainthorpe, Hon. Sec., of the African Section for 27 years has resigned and Mr. H. M. Laddell, of Wynberg, has been appointed African Hon. Sec.

Mr. Bertram R. Avery, who is a New Zealander and one of our best known and oldest members, has been honoured by the New Zealand Government with the appointment of Government Representative in South Africa for that Dominion. It is a very great many years since either the Australian or New Zealand peoples, had anyone possessing an authorized status and, at times, the lack of such lay officials has been a great inconvenience as there has been no authorized channel of communication for the public here with the Governments in that country. Australia is still unrepresented here.

We heartily congratulate Mr. Avery on this semi-consular appointment.

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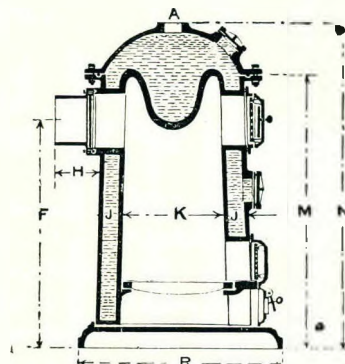
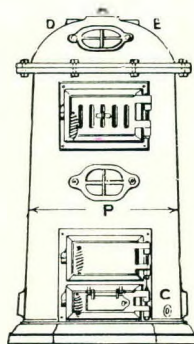
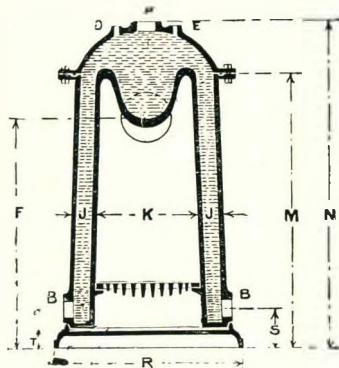
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