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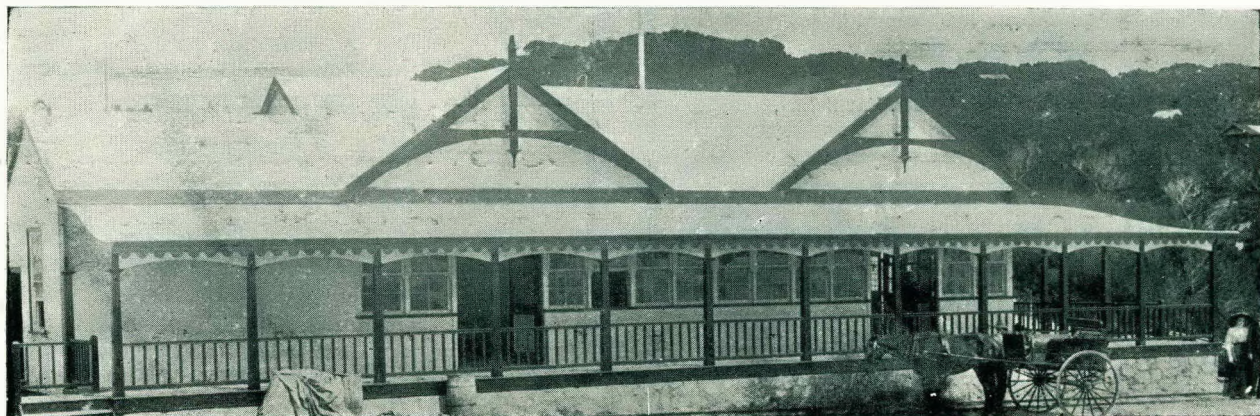
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VOLUME III.

No. 5



MARITZBURG TOWN HALL.

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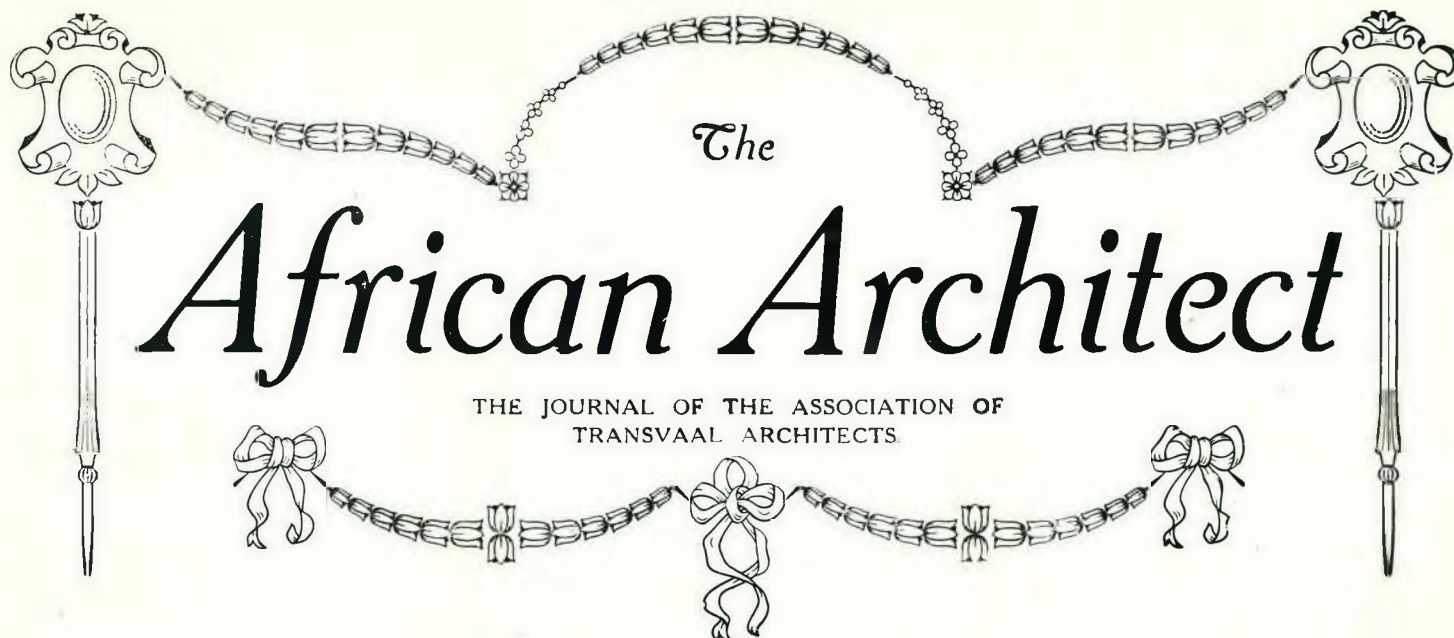
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EDITORIAL COMMENTS

Standard System of Measurement.

In connection with the Standard System of Measurements, which has just been published, the following circular letter, issued by the Public Works Department, is exceedingly interesting, and is a decidedly good send-off to the system:—

Architect's Office,
Quantity Surveyor's Branch.
System of Measuring

The Secretary has approved of the adoption of the standard system of measuring builders' work as issued by the Institute of Quantity Surveyors. The modifications and alterations of the present system used in the office are very slight, so that very little variation is required. The system must, however, be adopted in its entirety with no variations, and for this purpose copies of the issue of the Standard System of Measurements are available for office use. All officers must, therefore, arrange to work entirely on this system for all new work from this date. This will, of course, only apply to works which are at present not in hand.

(Sgd.) H. A. ADAMS,
For Architect, P.W.D.

26th August, 1913.

A Committee of Experts.

Apropos of recent litigation throughout South Africa where expert architectural evidence has had to be called, "The African Architect" is of opinion that steps should be taken to secure the formation and recognition of a Board of Arbitrators, consisting conjointly of architects and surveyors, to whom a Judge of the Supreme Court could apply where advice or guidance on technical details is necessary. We have recently passed through long-drawn-out cases raising points which might have been simplified and expenses

reduced if such a Board of Experts had been in existence. We hope the Institute of Architects and that of the South African Surveyors will go into the matter immediately. In our opinion it is a case of urgent necessity.

Specialists' Journals.

One has to admit that a sign of the times is specialising all professional and trade journals. South Africa in this respect is well to the front, and the works of Mr. Robert McDonald, editor of the "Daily Chronicle" and president of the Institute of Journalists, form interesting and instructive reading. "The African Architect" furnishes conclusive proof of the necessity of a journal in the interests entirely of the architectural profession in this country. Said Mr. McDonald at the Press Congress of British Journalists held recently in York:

Municipal Journals

"The chief competition to the national newspapers of the future will not be from other newspapers, but from other methods of disseminating news. At the people's recreation halls, with the cinematograph and the gramophone, or some more agreeable instrument of mechanical speech, all the news of the day will be given hot from its source. People may become too lazy to read, and news will be laid on to the house or office just as gas and water is now. The occupiers will listen to an account of the news of the day read to them by much improved phonographs while sitting in their garden, or a householder will have his daily newspaper printed in column form by a printing machine in his hall, just as we have tape machines in offices now.

"Judging from the trend of events, the next generation will see the activities of municipal and other public authorities very much extended. Their meetings, including Committee meetings, must, of course, be public. Newspapers will not be able to report their proceedings. Municipalities will have to issue official gazettes, daily or weekly as the case may be.

Government departments have already set an example within the last few years, and Parliament now reports itself and issues daily Parliamentary journals, which will, by-and-by, be published at a halfpenny and placed on the bookstalls. Newspapers are taking much less notice of speeches in Parliament; and no one can know what the London County Council is doing from the reports in the press. The one-sided way in which some papers already treat public authorities is another reason for the coming official gazettes. Clearly, every public body must have its own organ. The newspapers will act as watchdogs and critics of their proceedings and as a check to bureaucracy.

"It may be thought that I am overdrawing the possibility of invention and progress, but no bounds can be put to progress, and the future is full of great possibilities. Everyone hopes that the next generation will see the millions now wasted on wars and armaments let loose, and part of these colossal sums devoted to the promotion of science, the endowment of research, the spread of education, and the increase of social amenities."

The Baker Scholarship.

We are informed that the drawings submitted for the Herbert Baker Scholarship are now on view in the Board-room, Winchester House. Architects and others should take this opportunity of seeing the work submitted for this competition. The work should be seen at once, as it is open for inspection for only a few days.

Mistaken Identity

I have been watching the newspapers for some refutation of that story of the mistaken architectural identity with which the M.P. for Canterbury recently enlivened a Parliamentary Committee, but nothing has appeared so far. I cannot turn back to any personal knowledge of the Admiralty building competition, because at that time my thoughts were not directed to the subject of architecture, but I have always been under the impression that the selected architects owed their success to the very wonderful set of drawings which they submitted. Yet this is Mr. Bennett-Goldney's story: The competition designs were shown to a certain number of privileged persons of repute, including a high royal personage and the then President of the Royal Academy. One of the chief representatives of the Office of Works at that time was anxious to explain to the visitors the merits of what was considered the best design, and accordingly he asked one of his subordinates which set of drawings had been most highly approved. The subordinate, by inadvertence or ignorance, pointed to the wrong set of drawings, and the gentleman representing the Office of Works thereupon took pride in pointing out the merits of the scheme, the visitors agreeing with his eulogistic remarks. Afterwards, when it was found that the wrong set of drawings had been shown, the chief of the department decided that there was no going back on what had received such glowing commendation from such distinguished sources. So the design in question, more or less modified, was carried out.

This is certainly a very good story, but I have a lurking sense that it is wrong somewhere; albeit the "Observer" hastens to provide us with a companion instance of official inadvertence in the case of the barracks for the King's Guard at Ballater, near Balmoral, which were built from designs intended for cantonments for troops in India. But will not someone come forward to give us greater confidence in an official competition?—"Architect and Builder's Journal."

ANSWERS TO ENQUIRIES

So many enquiries are made personally at this office concerning many matters connected with the profession, that we now find it expedient and only possible to answer these through the medium of this journal. In future, therefore, members are requested to send their enquiries direct to the Editor of "The African Architect," P.O. Box 4651, Johannesburg.

"B.W.G."—Doubtful if you can obtain No. 16 W.G. corrugated iron locally. No. 18 gauge is sometimes sold as 16, but this usually only gauges 17; the extra point is accounted for by the heavy galvanizing.

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"ENQUIRY" (Durban).—Will obtain the information for you in time for our next issue.

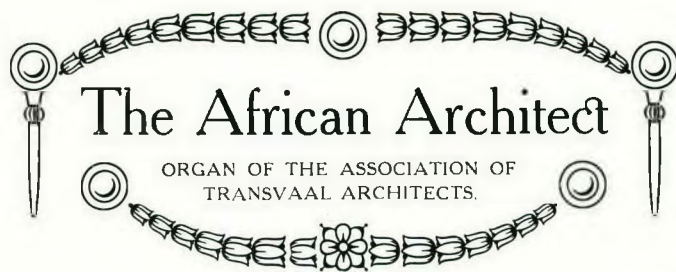
"J. AND B."—We understand that glass tiles are used for lighting attics, etc. The glass tiles should be the same thickness as the tiles or slates with which they have to course. These tiles can be obtained with ribs if desired.

"IMPROVER."—The matter was dealt with in the June issue of this journal.

ANOTHER OPPORTUNITY FOR EMPIRE ARCHITECTS.

Ottawa, Canada.

Sketch designs are invited from architects practising in the British Empire in a preliminary competition for the erection of Departmental and Court Buildings at Ottawa. From the designs submitted in this preliminary competition six will be chosen by the assessors (Messrs. T. E. Colclutt, past president R.I.B.A., J. H. G. Russell, and J. O. Marchand) to submit more matured designs in a final competition. The designs of the architect placed first by the assessors in this final test will be entrusted with the work, which the Government intends carrying out at once, and the five unsuccessful competitors will each receive an honorarium of 3,000 dollars. The designs in the first competition must be delivered in Ottawa, Ontario, carriage paid, not later than noon, January 2, 1914, addressed to Mr. R. C. Desrochers, Secretary, Department of Public Works. Conditions for both competitions may be had on application to Mr. Desrochers, and also at the London office of the High Commissioner for Canada, 17, Victoria Street, S.W.



OCTOBER 1st, 1913.

"THE AFRICAN ARCHITECT"

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SPECIAL ARTICLES on general subjects of interest to the architectural profession, and photographs, are cordially invited from our readers. Where payment is expected this should be distinctly stated. Special care will be taken of MS., but the Editor will in no case guarantee its return.

LETTERS TO THE EDITOR.—The columns of "The African Architect" are open at all times for expression of the opinions of our readers, but the Editor disclaims responsibility for the views of correspondents. All letters must be signed with the name of the correspondent, not necessarily for publication, but in evidence of *bona fide*, and addressed "EDITOR, 'The African Architect,' Box 4651, Johannesburg."

BUSINESS ANNOUNCEMENTS.—All communications on business matters should be addressed to "THE BUSINESS MANAGER, 'The African Architect,' Rooms 17 and 18, Provident Buildings, Fox Street, Johannesburg."

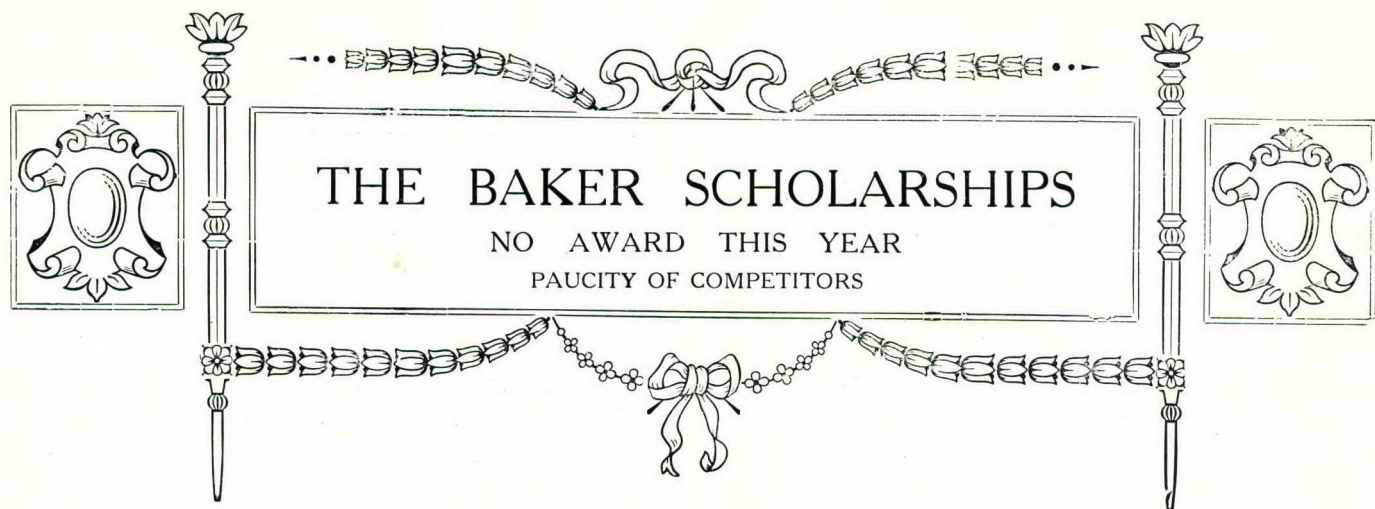
"The African Architect" is on sale at Chicken's News Agency, Pritchard Street, Johannesburg.

THE BAKER SCHOLARSHIP!

THE Trustees of the Herbert Baker Scholarship have issued their report, and, as is already known, have decided to withhold the award for the present year. In our opinion this is most regrettable, but we do not blame the trustees one iota, but rather commend their sound judgment and commonsense. The paucity of competitors for such a magnificent opportunity to continue their studies towards the goal of perfection is inconceivable, and we must look for the cause. Is there a dearth of candidates qualified to compete, or is it lack of ambition amongst architectural students in South Africa? From enquiries we have made, and from reliable information, we gather that there are at least a dozen young men in Johannesburg and Capetown alone to whose interest it would have been to have tried for the scholarship, and we very much deplore that these young men have not come forward. The second query—Is it the lack of ambition?—we

believe to be very near the mark, and to our mind the situation is on all-fours with circumstances attached generally to the learning of trades and professions by the youth of South Africa.

The question is often asked why the Home-born is chosen in various walks of life in preference to the Colonial youth, and the reason is not far to seek. A self-imposed duty of parents in the Old Country is to give their sons good educations to suit them for the battle of life. So soon as a boy is placed in an office or in a workshop he recognises that, apart from making his way in life or to fame, he has to apply himself religiously to his duties so as to enable him, when he is free from parental control and from living at their expense, by his brain and his hands to earn a livelihood. Competition is keen in every direction, and the boy recognises that the diligent apprentice of to-day is to be the successful craftsman of to-morrow, the man who is to be sought after. What is the position in South Africa to-day? We have educational facilities very little, if anything, behind those afforded to the students in the Old Country. Do the youths of this country take advantage of these opportunities? Candidly, we do not think so. Do they generally apply themselves the same as the Home-born youth to perfecting themselves at their profession or their trade? Again, we must confess that we do not think so. It has to be remembered that all architects in Great Britain are not working on gigantic structures, but nevertheless that circumstance does not prevent architectural apprentices there from being inspired with ambitious hopes that one day their opportunity will come to design some structure worthy of more than passing notice. During recent years almost every one of the principal towns in South Africa has been nearly rebuilt, and the shabby structures of the early days have been, and are still, gradually being replaced by stately buildings. Has the young architect in South Africa to-day no ambition that one day he may be called on to design one of these buildings? Can he not recognise that by diligent study and application, by being inspired with the thought that he is a worthy candidate for the Baker Scholarship, that he is to perfect his mind and his work, and, even if unsuccessful, that his efforts are to lead to good results. We confess that we are miserably disappointed. If the young architects of South Africa are to continue in this state of uninspired lethargy, then we must just go on importing. All honour and praise to the two competitors who did try! We heartily wish them success in the future.



HERBERT BAKER ARCHITECTURAL SCHOLARSHIPS

To the Editor, "The African Architect."

Dear Sir,—I have been asked by my co-trustees to hand you for publication the accompanying report of the trustees for the Herbert Baker Scholarship, in connection with the competition held in July last.

I have also been asked to hand you the enclosed copy of a letter addressed to the Secretary of the Royal Institute of British Architects by Mr. Gordon Leith, who, it will be remembered, was the successful candidate in the first competition for the Scholarship.

The trustees have been much gratified by the reports which have been received from the Royal Institute of British Architects with regard to the progress of Mr. Gordon Leith's studies in Rome and Athens.

The thesis on the Flavian Palace which has been written by Mr. Gordon Leith has been approved by the sub-committee of the Royal Institute of British Architects in London, and we understand that it is the intention of Mr. Gordon Leith to publish this thesis, with a collection of drawings made by him in connection therewith.

My co-trustees feel sure that the appreciation shown by Mr. Gordon Leith of the opportunities which the holding of this Scholarship have afforded him will do much to encourage other young members of the profession to make every endeavour to secure similar advantages.—Yours faithfully,

WALTER WEBBER.

Johannesburg, September 22nd, 1913.

The trustees having considered the report of the assessors on the work sent in by the two competitors, and having examined the work, have decided not to award the scholarship for the present year. The scholarship will be offered again next year, and due notice will be given of the work which will be required of candidates. The trustees regret that the offer of the scholarship has not met with a better response, both as regards the number of candidates and the standard of work sent in.

The scholarship was intended to benefit the young architect who has passed the elementary stage of his profession, and is by his own experience learning to understand the difficulty of scholarly design and to feel the need and desire of direct study of the great masterpieces of art. The subject and the conditions prescribed were set with the object of testing the candidates not merely in regard to their technical capacity and power of expression, but also whether they have reached that stage in their architectural education at which a period of study in Italy and Greece would be of benefit to them as architects, and not merely as students of art or archaeology.

The work of the two candidates who competed this year comes short of the required standard in both respects, while it contains elements of promise which encourage the hope that they will come forward again. It is to be hoped also that other young architects, who are ambitious of taking a high place in their profession in the future, may seek to profit by the opportunity which this scholarship gives of enlarging their artistic education, even if it may involve some present sacrifice of professional work here.

The trustees express their thanks to the assessors, Messrs. H. Baker, Stucke, and Eagle, for their assistance in examining and reporting on the work sent in.

J. C. SMUTS.
LIONEL PHILLIPS.
WALTER WEBBER.
PATRICK DUNCAN.

Ian MacAlister, Esq.,
Secretary, R.I.B.A.,
9, Conduit Street, London, W.

Dear Mr. MacAlister,—Before leaving Rome, I sent off a number of the principal drawings and sketches prepared during my stay at the British School of Rome, which I hope you received.

Mr. Baker saw my work in January and advised me to finish my reconstruction of the Flavian Palace and leave for Greece. This I have done as far as my financial resources would allow. Unfortunately, I have not been able to thoroughly complete my recon-

struction, but am satisfied for the present at having collected all the information that in any way relates to the palace, and at having definitely decided on the design and proportion of the various apartments.

I have written a paper, which you will receive in two or three days' time, which deals with the history, construction, and design of the palace, and in which I give the reasons in support of my reconstruction.

I spent the months of August, September, October, and November in Northern Italy. In Modena I made a measured drawing of a bay of the Cathedral, and measured part of the interior and a tomb. I also visited Parma to see the basalt statues from the Flavian Palace, and made notes on vaulting.

I found a great deal to do in Bologna. I made measured drawings of the Palaces Bevilacqua and Fava, and spent some time in the Museum, which is filled with the relics of the earlier Roman city.

I visited Mantua, Vicenza, and Padua, and in the latter place measured the pedestal of the equestrian statue of Gentile da Foligno.

I spent six weeks in Verona measuring and plotting all the lesser known works of Sanmicheli I could find—the Palaces Murari, Vignola, Lebrecht, and Pompei. I also made notes on the Roman theatre, and wrote a paper on the architecture of Rome, at the request of Mr. Baker, for the "African Architect."

I visited Garda, S. Virgilio, the Villa Catullus, and Riva. In Venice I chiefly sketched, and in Florence spent most of my time in the Uffizi Gallery and the Archaeological Museum, owing greatly to the cold weather. At the Uffizi I studied the Niobids, examined each statue carefully, made notes, and finally made a drawing on the lines of Cockerell, showing the figures filled to a pediment. This took a great deal of time, but was not a fruitless study, as they will appear in my paper on "Sculpture in Relation to Architecture."

On my way back to Rome, I visited Ferrara, Siena, and Orvieto. Throughout my stay in Italy I have made notes on sculpture and vaulting, and in every possible case have taken measurements of whatever I hope to use in the future.

On my return to South Africa I hope to work among the young students of architecture. I mean to give them my surveys to work out, so that they may become thoroughly acquainted with the "grammar" of architecture before commencing to design.

Eventually I hope to publish my reconstruction of the Flavian Palace, and to illustrate the text with the various drawings and photographs which I have made for that purpose.

I expect to be in Greece until the end of June or July, and to return to London to complete whatever work the Baker Scholarship Committee may wish me to do before I leave for South Africa.

It is due to the courtesy of Commendatore Boni that I have been able to study the Flavian Palace while the excavations were in progress. Following on his advice, I made full-sized drawings of the various mouldings and enrichments brought to the surface during the excavations. I also searched for and identified as many of the scattered fragments as I could find, and, in a way, added the first paragraph to a general work, which Boni called the "grammar" of moulding.

Commendatore Boni has done all he could to help me with my studies, and devoted many moments of his valuable time to my instruction.

In Greece I will write on sculpture in relation to architecture, and, if possible, pull together my notes on vaulting.—I have the honour to be, yours very truly,

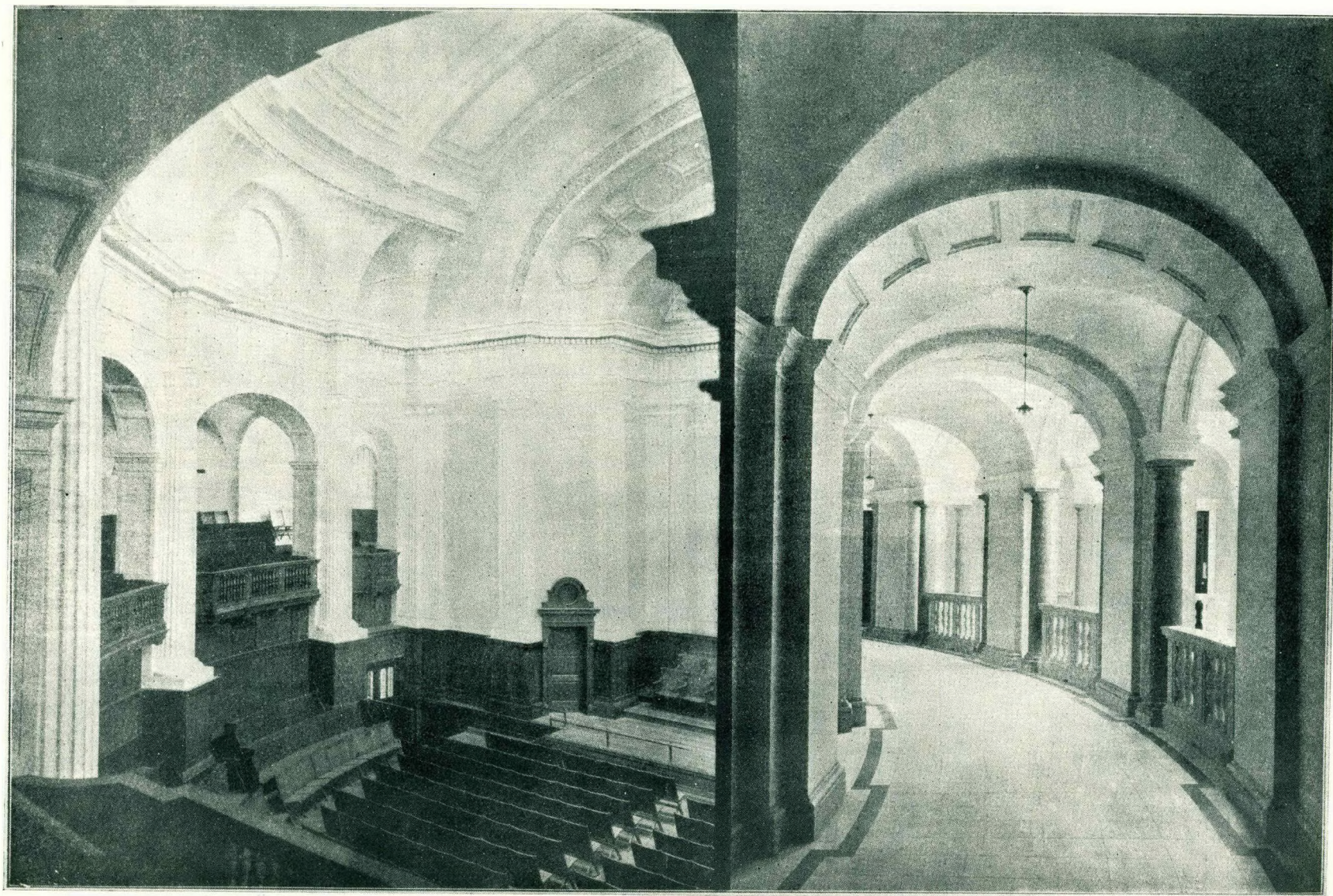
(Sgd.) G. GORDON LEITH.

The British School, Athens, 1913.

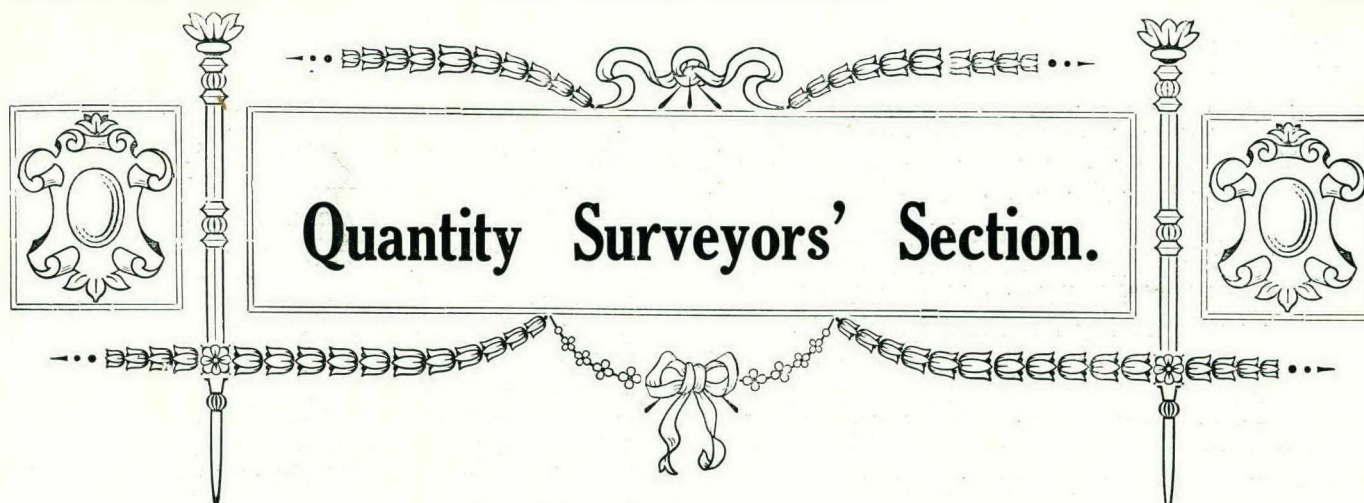
REVIEW

"Indian Architecture: its Psychology, Structure, and History from the First Muhammadan Invasion to the Present Day." By E. B. Havell, author of "Indian Sculpture and Painting," "The Ideals of Indian Art," etc. London: John Murray, Albemarle St., W.

Those who are acquainted with Mr. Havell's earlier works, particularly his gorgeously illustrated work on Indian Sculpture and Painting, will be prepared for the present volume, to which those lead up in natural sequence. The whole series, in fact, form one continuous, well considered argument, based on most complete research conducted with acumen of rare quality and intense perseverance, in the face of stubborn opposition, in favour of permitting—nay, encouraging—the development of native Indian art in the native manner, untrammelled by officialism and by Westernising influences. Incidentally, and of necessity, one important result of his most painstaking labour has been the complete reversal of the theory, put forward on the great authority of Ferguson and generally accepted since his day, that Indian Art was largely borrowed from the West, and that it is now dying, if not dead. In place of this, Mr. Havell shows, to absolute demonstration, that throughout all its numerous phases it has been purely Indian in its characteristics, rarely borrowing from external sources, but giving lavishly, particularly to the Saracenic of Western Asia, North Africa, and even Spain. At the present time it is running serious risk of extinguishment (and architecture is suffering most in this respect of all the arts), through what is little less than crass stupidity on the part of us English rulers, all the worse that it is founded on the supercilious attitude of a belief that what is English must necessarily be superior to what is native. Fortunately, India had, in Lord Curzon, a ruler who saw things differently; but his influence seems likely to be overborne as things are now. The book culminates with a strong appeal in favour of the new Capital at Delhi being given over to the native master builder to design, even if the main lines, at any rate as to the plans of Government buildings intended for the use of Europeans, have necessarily to be laid down by Englishmen; and the appeal is so well made, and is supported by such overwhelming evidence of the capacity of the Indian master craftsman to do the work in a pure and living style, beautiful almost beyond comparison, that it must assuredly prevail—unless the greed of great commissions be too strong, and over-ride the sense of responsibility and the true traditions of their art with the English architects who have the ultimate say in the decision.



THE UNIVERSITY HALL AND STUDENTS' GALLERY, UNIVERSITY BUILDINGS, QUEEN VICTORIA STREET, CAPE TOWN.
Messrs. W. HAWKE, F.R.I.B.A., and W. N. MCKINLAY, Architects.



NEED FOR ORGANIZATION OF LEGAL AID SOCIETY AS MEASURE OF PROFESSIONAL DEFENCE

A series of important cases recently decided in the Law Courts of England, have, according to "The Builder," aroused a keen interest in the architectural profession concerning the position of its members in the eyes of the law. In the opinion of this publication, what have been clumsily termed "the newer responsibilities of architects," are, in fact, those liabilities which are now becoming annually more serious and more harassing, and which every judgment rendered in Court tends to define more clearly. For the above reasons, it is considered that "the wayward, comic-opera architect, with long hair and Bohemian habits, is out of date in this strenuous age of earnest competition, and that his successor must be capable of looking after himself in cross examination as well as in the atelier."

In a timely and somewhat extended article, it is pointed out that architects have probably given less attention to matters of professional defence than have the members of the other so-called "learned" callings. The truth of the situation as set forth will probably be generally conceded, and but little reflection will be required to arrive at the conclusion that the subject deserves attention in America as well as in England. Architects are continually imposed upon in various ways, and under present conditions are practically without redress, due to the fact that the individual effort of one member of the profession could have little effect, even if the time and expense involved in an action to enforce justice could be afforded. If an organisation existed in the profession, or a department were established in existing organisations, supported by membership dues, for the purpose of correcting abuses practised on architects or obtaining redress, where in the opinion of the department an injustice had been done, it is quite apparent that there would soon be less occasion than exists at present for making complaint.

Instances where architects have entered competitions or devoted their time and energies in good faith, simply, as had subsequently developed, to gratify the curiosity or further the interests of some unscrupulous board or individual owner, are of almost weekly occur-

rence. Others involving non-payment of fees withheld on some pretext or another, are even more common. Then there is the more serious case of the architect upon whom attempts have been made to place responsibility for failures of various kinds due to causes beyond his control; and to all these may be added those instances wherein, either through ignorance or a wilful desire to mislead the profession, or some proportion of it, is done incalculable injury by articles and expressions that appear from time to time in the public press.

Architects who have had occasion to take a grievance to Court have almost invariably been astonished at the ignorance of the average attorney and judge concerning the architect, his functions and his relation to owner, contractor, and the public. If a legal protective society or department in existing organisations of architects could be established, in charge of a corps of legal experts, trained in matters pertaining to architectural practice, there seems little doubt but that the interests of the profession would be furthered in no small degree. The matter is one deserving most careful investigation and study.—
"American Architect."

SURVEYORS IN THE STATES

That South Africa can teach the States in some things is evident from the following article culled from the "American Architect." Why shouldn't Mr. Cowley send them over a copy of our "Standard System of Measuring":—

A NEW PLAN FOR SECURING BUILDING ESTIMATES

To anyone who has given the subject much thought, it is perfectly apparent that the method of estimating employed at present in this country by contractors invited to submit tenders on building construction work is grossly inefficient and wasteful. For example, it is probable that the average undertaking involving an expenditure of £25,000 or more, for construction, will be estimated upon by not less than half a dozen contractors. That is, there are made up individually at least six estimates, each one of which may cost, let us say, £100 to prepare. If the law of average obtains, and the contractor secures one contract out of six estimated, he must obviously add to the amount of his tender a matter of £600 to

cover the cost of estimating. If a list of quantities could have been furnished to contractors, the cost of making up five of these estimates would practically have been eliminated, and thus an economic saving effected, to say nothing of the advantage of securing actual competition in ability to perform work and shrewdness in purchasing materials, rather than a competition involving a gamble on the amount of materials which the building will contain when the quantities are in reality fixed and immutable.

It is a realisation of the foregoing situation, and the existence of a plan to correct it, that has occasioned the organisation of the Association of United States Quantity Surveyors, with offices at 101, Park Avenue, New York City. This Association proposes to establish in place of the present inefficient and wasteful methods, a system of estimating on bills of quantities: that is, the architect or engineer will, in accordance with this plan, issue with his drawings and specifications a survey or bill of the quantities of the various classes and kinds of work and materials entering into the proposed construction. The contractor will then simply set his prices against the various quantities in the survey. His estimate will be a statement of the fixed amounts of money for which he will work fixed quantities of materials in accordance with the requirements of the plans and specifications. If the ultimate quantities of materials entering into the construction vary from the quantities set forth in the bill or survey which constitutes the basis of the work, the money amount of the contract will also vary accordingly.

Of course, the owner must assume responsibility for the bills of quantities published with the drawings and specifications; otherwise the ends sought will be defeated.

It is plain that the architect and engineer will find it necessary eventually to organise their offices to prepare accurate bills of quantities, the owner to pay the cost. He does so indirectly now, but under present conditions he pays for the making of a half-dozen estimates instead of simply the cost of estimating his own work.

The plan proposed has, of course, been in operation in countries of the Old World for some years, but its adoption in this country would require not only a reorganisation of both architects' and contractors' forces, but, to a considerable extent, a re-education of the building public. It is probably possible to accomplish this educational work, and the ends seem sufficiently desirable to justify the effort. However, the tendency of owners to demand a fixed contract price, with the smallest possibility of variation, is very strong, even though that price is to some extent a gamble with the chances; more than even that, it is greater than it would be if the work were undertaken on a cost, plus percentage of profit, basis. Since it would appear that this tendency must be overcome before the quantity system of estimating proposed by the Association can be generally realised, some years will doubtless be required for the transition.

CORRESPONDENCE

Letters for this section should be written on one side of the paper only. The writer may adopt an assumed name for purposes of publication, but he must in all cases furnish his real name and address to the Editor.

The Editor cannot be held responsible for any views expressed by his correspondents.

ARCHITECTS AND LITIGATION

To the Editor, "The African Architect."

Dear Sir,—May I correct a statement appearing in your leading article under the heading of "Architects and Litigation," in the September issue.

First, I assume that I am the professional witness referred to, as the description does not apply to Mr. Francis Black, the other quantity surveyor who gave evidence in the case. I did not state that "quantity surveyors charged architects one and a quarter per cent. commission for preparing quantities and specifications." Such an arrangement is not my own practice, and whether it is the custom of other quantity surveyors I could not possibly say. My evidence was that in this particular case I had agreed to do the work for one and a quarter per cent., and that my claim against the estate of the late A. W. Hoskings was for this amount.—Yours faithfully,

JOHN QUAIL.

Johannesburg, September 4th, 1913.

[We shall be sorry if our comment on the "Hoskings case" has conveyed any misinterpretation of Mr. Quail's evidence, and therefore publish his letter without reserve. Our sole concern was that the evidence in the case influenced His Lordship adversely to the customary scale of fees, and that the professional view on the subject of these fees was not adequately adduced—a point somewhat borne out by Mr. Quail's letter—hence the need for some watching organisation in the interests of the profession generally.—Editor, "A.A."]

BILLS OF QUANTITIES

To the Editor, "South African Architect."

Sir,—I have just received a very handsome-looking volume entitled "Standard System of Measuring Builders' Work in South Africa." By a general look over the book—not yet having had time to peruse it as carefully as its evident importance entitles it to—I cannot but be impressed that it is at once apparently the result of strenuous and honest endeavours on the part of the compilers to cope with, to simplify, to make plain and easy of solution the many complex problems which confront the builder when endeavouring to price out the cost of a building on such a reasonable basis as will enable him to give good value in good work for the total sum arrived at, and at the same time doing justice to himself by obtaining a reasonably fair profit as the result of his labours.

I think the foregoing, if somewhat brief, furnishes at least some idea of the object of preparing carefully and accurately compiled bills of quantities.

I note in the preface of the book that the South African Institute of Quantity Surveyors agreed on the 15th of March last to take the necessary steps to put the system into operation. The building fraternity at

their ninth annual Congress, held on the 25th of the same month, also agreed to accept the "Standard System."

The Public Works Department of the Union of South Africa have, I understand, adopted the "Standard System" "in toto"; but, strange to say, there is no notification of the "Standard System" having been adopted by either of the Institutes of Architects. One would have thought that they, of all men, would have been the first to fall over themselves, so to speak, to take up a system which undoubtedly simplifies and places beyond controversy many of those difficult, contentious points which are always cropping up between architects and builders. No doubt many of our leading architects are above reproach in regard to their methods of preparing bills of quantities. The gentlemen in the profession have always endeavoured to make as plain as a pikestaff their particular requirements in every trade, realising that the plainer a matter can be put, the less that is left to chance or speculation on the part of the builder, the more exact or near to value of the particular work required will be the price he obtains for his client.

It appears, however, from the very varied and incongruous bills being issued daily by some architects who prepare their own bills of quantities, evidently only with one end in view—viz., that of mulcting the proprietor in $2\frac{1}{2}$ per cent. on the cost of his building—without in any way helping the builder to arrive at a fair idea of what is really aimed at, unless—and I say it advisedly—it be to confuse and belittle the quantity of work to be done, so that some poor devil may be inveigled into giving a price very much less than the work is really worth.

The dishonesty of intention is surely plainly apparent when it is sometimes stated in the first clause of such a bill "that the contract shall be for a lump sum, the quantities forming no part of the contract," the builder being required to satisfy himself as to the correctness thereof. In plain English, if the builder does so satisfy himself he requires to do the same amount of work for nothing as the architect claims to be entitled to $2\frac{1}{2}$ per cent. for doing. It is to be hoped that some day a builder will come to the front strong enough to take up the position with such an architect as to say, "I have signed a 'lump-sum contract' of which the quantities made out by you 'form no part,' therefore there is no $2\frac{1}{2}$ per cent. for you"; or, "seeing I had to do the same work as you did in verifying your bills, $1\frac{1}{4}$ per cent. belongs to me!"

I have before me whilst writing bills of so-called quantities which for ways that are dark and things obscure would beat the "Heathen Chinee to a frazzle." For instance: "Excavations—Basement to be dug out." Nature of ground not given; no provision for soft soil, shale or rock. "All-the-same-to-Sammy" sort of business! Cost $2\frac{1}{2}$ per cent. for not saying it, and will probably cost proprietor a good bit more for the same reason if the contractor is wise enough to protect himself.

A most peculiar item shown me the other day from one of such "bills of quantities" (?) was asking the contractors to provide a number of barrels of coal tar, to use as follows:—Certain sections of the work were to stand ten days, then be coated three times

with the tar, which is being used as vertical damp course. Another portion of the quantity was to be used to coat flat concrete roofing, thus making it impervious(?); the balance to be "used as directed." By the way, the tar is to be put on walls hot with a brush; on flat roof "behind the jet of a blow-lamp"—whatever that means—the method of disposing of the balance not stated! Now, for sheer simplicity of application I do not think this could be surpassed. The contractor has only to guess how many yards he may have to coat three times; also how many yards he may have to put down "behind the blow-lamp." Finally, he can easily guess how much he will have over to "use as directed." Simple, isn't it, and all for a meagre $2\frac{1}{2}$ per cent.? This kind of bill ought to be named the Problem Bill or the "Guessing Competition Bill." Another instance: Cube yards of concrete are given, "including boxing mostly three sides" in soffets, pediments, sloping floors, lintels, beams, etc., etc. Now, a cube yard if divided into 6in. square beams or lintels will require 162ft. super. of boxing; if into 9in. square ditto, 108ft. super.; if into 12in. square ditto, 81ft. super.; or any other number of feet running between the three numbers given. Now, taking this boxing to be worth, say, 6d. per foot super., one is faced with the problem, 81s., 54s., or 40s. 6d. per yard cube for boxing, the meanest price being much more than the cost of the concrete; yet it is not considered necessary to give the exact dimensions of boxing!

Again, in the plasterer's bill all flat surfaces of mouldings, narrow widths, etc., are given at per yard super. Thus a cornice of 21in. projection and at least 18in. depth is given as a 12in. girth moulding—making another beautiful guessing competition as to the real value of the whole. In fact, the whole bill bristles with similar anomalies.

In face of the above I think it time the Institutes of Architects took the matter of bills of quantities in hand, and insisted on their members issuing only bills in harmony with the "Standard System." If an architect is not competent, or unwilling, to make out bills according to the "Standard System," he ought to be compelled to hand the work over to a competent surveyor, in the best interests of the profession.—Yours, etc.,

MASTER BUILDER.

"AERIAL" ARCHITECTURE

To the Editor "*The African Architect*."

Sir,—You were good enough to print a criticism which I made some time ago in regard to designs for heavy buildings, which, to all appearance, have no other support than huge sheets of plate glass. My opinion as to design, *per se*, is immaterial; but I did venture to think that all architects must naturally, however, feel that the omission of a sub-structure or apparent satisfactory support was a solecism in art and science. Whatever the ultra-commercialism of Regent Street shopkeepers might be, I failed to see the need in Johannesburg of having so much plate glass for a shop that proper piers could not be provided. Evidently I was in error, for I see in your

recent issue another view of commercial premises which, judging by the print, are on just the same lines. I wonder whether the insistence of owners in regard to displaying nearly all their stock in the window is so marked that no architect can get a commission without pandering to the desire. Even in New York, where space is as valuable as in any city in the world, ample pier support is to be seen in the finest stores, even where there is a steel skeleton behind, and the eye is satisfied.—Yours, etc.,

E. W. HUDSON, A.R.I.B.A.

New York, U.S., August 22.

NATAL ARCHITECT'S WEDDING

On the 27th August last there was celebrated in Durban the marriage of Mr. Arthur Cross, architect, son of the late Mr. and Mrs. J. G. Cross, and Miss L. D. Oglesby, daughter of the late Mr. and Mrs. Oglesby, Manning Road, Durban, and sister of the late Lieutenant Oglesby, who was killed during the Boer war. The ceremony took place in the West Street Wesleyan Church, the Rev. Mr. Nuttall being the officiating clergyman. The reception was held at Mr. Waysey's residence, "Ayott," Congella.

ON DIT

That it would be interesting to learn the reason why the Architects' Council have decided to keep the reading-room locked, and

* * * *

If a recent stocktaking by the Registrar gave him a shock.

* * * *

That it is a long time since the Council of the Association looked into any cases of alleged unprofessional conduct, and

* * * *

That possibly recent inquiries have been made regarding a member of the Association.

* * * *

That we don't seem to get much "forrarder" with the new Railway Station for Johannesburg.

* * * *

That we were not far wrong in foreshadowing trouble for the owners of a thousand or so yards of foundations, and

* * * *

That the Town Engineer evidently did not think that mineral water bottles constituted a reasonable reinforcement in the afore-mentioned foundations.

* * * *

That Messrs. Aburrow and Treeby are architects for both the new Trades Hall and the new building for the "Star." Extremes!

DETAILS

The National Bank of South Africa, Ltd., is about to erect new business premises at the corner of Main Road and Crown Road, Fordsburg. The building will consist of a large banking hall on the ground floor, with the usual bank offices, and a portion of the building will extend to the first floor as bedrooms. The architects are Messrs. Stucke and Harrison.

* * * *

The utility of concrete in building construction at the present date is much in evidence in the Medical Research building now in course of erection on Hospital Hill. Mr. Herbert Baker has had columns cast of this material in addition to cornices, strings, etc. The results shown in the cast columns are particularly interesting, and the rapidity and thoroughness of the construction of the cornices must be more economical than the brick, corbel, and plaster method.

* * * *

An interesting test was recently made on brick-work reinforced with wire mesh at the new Medical Research buildings by Messrs. Baker and Fleming. A 4½ in. wall was built in Pretoria cement (3 to 1) with an opening 6 feet in width. Three feet of brick-work was built over the opening, having the lower six courses reinforced with wire mesh in lieu of the usual arch or beam.

* * * *

After a setting of 25 days a load of 4,070 lbs. was placed on top, and the work failed to show any sign of fracture. The load was placed on the top of the wall directly over the centre of the opening and measured about 5 feet in length, i.e., one foot less than the opening.

* * * *

A test as to the utility of Hy-rib as a re-inforcement to concrete has been carried out under the auspices of the Town Engineer's Department with almost surprising results. Two slabs of concrete, each 6 ft. x 2 ft. 6 in. x 3½ in., were made up on the 7th of August last, of 4 of metal, 2 of drift sand, and one of Pretoria cement. A sheet of Hy-rib was placed at the bottom of one frame and the concrete well tamped over it, so that a portion of the mixture was forced through the mesh. The other slab had no reinforcement in it. On the 10th of September the slabs were tested, with the result that the one containing no reinforcement broke completely in two places on a load of 954 lbs. being placed on it. The slab containing the Hy-rib failed to show a fracture until loaded up to 15,900 lbs.

* * * *

The tests were carried out in the presence of Mr. E. H. Waugh, Municipal Building Surveyor, Mr. C. Alder, Assistant Building Surveyor, Mr. J. A. Moffat, Architect, and Mr. L. Edwards, representing the Hy-rib agents, viz., the General Fire Appliances, Limited.

A CONTEMPORARY CRITICISM.

(From the Journal of the Society of Architects, London)

"The African Architect" states that the subject of the greatest import to architects in South Africa at the present moment is that of registration. The Bill has finally been drafted, and will come forward in due course, while, in the meantime, under the old Act, unqualified men will not be allowed to practice, but be prosecuted. The new proposed Act is drastic, no doubt, but its formula is imperative—maintaining, as it must, the high status of the most ancient profession in the world. It is understood that the measure is receiving the general approval of the profession, and that it will give architects the supreme power to appoint examiners and issue certificates, which even the present law does; but it will, also, allow them to extend their powers in South Africa in the way of empowering them to use their funds more freely in the interests of the profession. In New York State (where there has been much architectural revival), after many years of agitation, a Bill for Registration of Architects has been decided upon. It is stated that the proposed Board of Examiners will consist of five architects who have been in active practice in New York for a period of at least ten years. The qualifications which a candidate must possess, in order to be in a position to secure a certificate entitling him to practice architecture, are indicated as follows:—A diploma issued by any recognised architectural school, together with proof of three years' practical experience, after graduation, in the office of a reputable architect, will be considered sufficient evidence of fitness; or the Board at its discretion may accept a certificate of registration as an architect in another State where standards of requirements are equal to those prescribed in the proposed law. Heavy penalties are imposed for violation of the provisions of the statute by persons practising as architects without a certificate. It will thus be seen that South Africa is not far back in its demands for legal rights as far as upholding the profession of architects is concerned.

In a further note "The African Architect" says that during the last month action has been taken to enforce the statute for the registration of architects in South Africa. This must always tend to improve the status of the profession. The new Registration Act which is being promulgated will make it impossible for unqualified men to denote or advertise themselves as architects. We are of opinion that the tests that architects are compelled to submit to are not too severe, and the Association is only exercising its legal and legitimate right when it takes the action it has recently done. In view of that circumstance we fail absolutely to grasp why anyone competent to pass the test laid down should deliberately ignore this Statute. If the Registration Act is to count at all, then it must be strictly enforced and adhered to.

From the published reports of two cases taken into Court, it appears that both the accused were found guilty and sentenced to the mitigated penalty of a fine of £2 or seven days.

IN OTHER LANDS**REGISTRATION IN ILLINOIS****The Operation of the Act.**

The Eighth Biennial Report of the Board of Examiners of Architects in the State of Illinois shows that in fourteen years the total number of licences issued is 1,259, of which 413 have been revoked, there being now 846 licences in force, of which about half were issued for the first year without examination. The tabulated statement is interesting to all concerned with the operation of architects' licence laws, inasmuch as it shows a steady decrease of licences in force without examination, and a corresponding increase in those granted after examination.

Revocation of Licences

Revocations of licences so far has been for non-payment of renewal fees and not "for cause," and it is found that if the law did not require the renewal fee, it would be impossible to keep an accurate record of licences in force.

Further, the tabulated statement clearly sets out the evolution of the architectural profession in the State of Illinois towards a condition which must prevail when all the architects will be qualified practitioners.

For the first nine years the number of architects was practically stationary, but during the last five years it has rapidly increased, and there are now 846 licensed architects, of whom nearly one-half hold examination certificates, the proportion fifteen years ago being about six per cent.

Prosecutions Under the Act.

The Board go on the principle that prevention is better than cure, and many more corrections are made by advice than by prosecution, particularly in cases where the violation of the law is due to a misunderstanding which, while it is not a legal excuse, entitles the offender to clemency. There have been only four convictions for practising without a licence in two years.

It is interesting to note that an organisation which had advertised that it would "furnish plans," found it desirable to amend the advertisement at the direction of the Board.

Although no licences have been revoked "for cause," it by no means follows that all offenders have been found blameless.

The Board realises that the power to revoke licences is so drastic as to be exercised only in extreme cases, and they have felt justified so far in suspending sentence pending good behaviour, while retaining the power to revoke.

The Right of Draughtsmen to Make Plans

In view of questions which have been raised at home regarding the position of assistants under a Registration Act, it may be noted that the opinion of the Attorney to the State Board of Examiners in Illinois was, that under that Act draughtsmen have no right to make plans for other than licensed architects, unless such other persons do such a part of the work as to make the plans and specifications essentially and practically their own. It is stated that the law will be strictly enforced against all

draughtsmen acting illegally in making plans of buildings.

Persons who are to be Regarded as Architects.

Section 9 of the Illionis Act states that: "Any person who shall be engaged in the planning or supervision of the erection, enlargement, or alteration of buildings for others and to be constructed by other persons than himself shall be regarded as an architect within the provisions of this Act, and shall be held to comply with the same; but nothing contained in this Act shall prevent draughtsmen, students, clerks of works or superintendents, and other employees of those lawfully practising as architects, under license as herein provided for, from acting under the instruction, control, or supervision of their employers; or shall prevent the employment of superintendents of buildings paid by the owners from acting if under the control and direction of a licensed architect who has prepared the drawings and specifications for the building. The term building in this Act shall be understood to be a structure consisting of foundations, walls, and roof with or without the other parts; but nothing contained in this Act shall be construed to prevent any person, mechanic, or builder from making plans and specifications for, or supervising the erection, enlargement, or alteration of any building that is to be constructed by himself or employees, nor shall a civil engineer be considered as an architect unless he plans, designs, or supervises the erection of buildings, in which case he shall be subject to all the provisions of this Act and be considered as an architect."

REGISTRATION IN AMERICA

The New York Chapter of the American Institute of Architects report that the Bill for the Registration of Architects failed to pass, not from opposition, but owing to the exigencies of State business in the Senate at the close of the Session.

REGISTRATION IN GREAT BRITAIN

Speaking on behalf of the profession at the dinner of the London Master Builders' Association, Mr. Percy B. Tubbs, F.R.I.B.A., P.S.A., said many of them had no doubt noticed the wide publicity given recently in the lay press to the question of registration of architects. He believed this publicity had done a lot of good, and he thought the vast majority of the profession were looking forward to seeing the Bill become an Act in the near future. It was very important, as without registration we were unable to enforce better education, and thus raise the standard of architects.

REGISTRATION IN NEW ZEALAND

Mr. C. McArthur Butler, secretary of the Society of Architects, 28, Bedford Square, London, W.C., in a letter to the "Building News," dated September 1, says:—"I have received a letter from the New Zealand Institute of Architects informing me that a Bill to provide for the statutory qualification and registration of architects practising in New Zealand has passed the second reading, and has been referred to a Special Committee of the House. The promoters have every reason to hope that the measure will be passed this session."

THE SOCIETY OF ARCHITECTS AND REGISTRATION

The August number of the "Journal" of The Society of Architects is largely given up to the collected extracts from various papers dealing with the question of registration. Commenting on the Secretary's enunciation of the wide field which the modern architect has to cover, the "Illustrated Carpenter and Builder" says: "But surely no Registration Bill is going to require a man to be all these things before he comes on the Register? The standard will have to be kept comparatively low. Admirable Crichtons are never a numerous company." The "Irish Builder and Engineer" quotes Mr. McArthur Butler to the effect:—"Cabdrivers, doctors, and lawyers must before practising their callings have proved their qualification and obtained a licence; but

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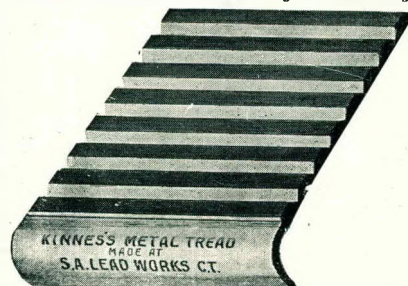
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neither of these is needed by the man or woman who desires to claim the title of architect and practise as such." Another of our contemporaries states that it is "unwise to trouble Parliament any further before a Bill representing the solidarity rather than emphasising the division of architectural organisations can be presented, and that 'to have any chance of success a Bill requires the utmost united support of the full effective force of the architectural profession.'" We think there are few cases in which it is necessary to eliminate sentiment so completely as it is in the case of what may be called professional politics. Occupying, as we do, an infinitely smaller place in the world's regard than we are apt to allot to ourselves, it is necessary constantly to bear in mind that the community as a whole cares little about the injustice and hardships felt by those who form a small class in that community, and the first necessity to successful action is that we should convince the community that their interests are being damaged. Much as we hope that effective and concerted action may be taken with real result, we are bound to admit that we consider no more damaging result in the cause of Registration has happened than the failure to bring about the amalgamation of the Society with the R.I.B.A.—"The Builder."

ARCHITECTURE AS IT AFFECTS THE PUBLIC.

Mr. G. Sydney Jones, A.R.I.B.A., the President of the Institute of Architects of New South Wales, in his inaugural address, refers chiefly to two important matters; he urges the establishment of a School of Architecture, and enquires what architects are doing to improve the taste of the public for beautiful works of architecture.

As the years go by, he says, the public looks to the work of architects with an increasing interest, and it also depends upon architects for advice on matters of importance, on new ideas and construction, and on the trend of architectural thought as it affects the welfare and enlightenment of the people of Australia. I think, therefore, it is well that at

least once in the year the public should be made aware of the architectural questions which vitally concern them; and I propose to refer to several such questions.

Firstly, as to the Federal Capital City. I had the privilege, as your representative, of attending the function lately held at Canberra, when the three foundation stones of the Commencement Column were laid. It was my first visit to the site of the future City, and I confess to having been charmed by it. An opportunity is there, which all loyal Australians hope will not be lost, to build up a City worthy of Australia's destiny.

Should Architects Advertise?

Another subject in which the public are sometimes interested is the practice of putting up notice boards on which is written, in large letters, the names of the architect and the builder, as well as other matter concerning the structure and the owner's intention regarding it. Although it has become a common practice amongst us, I personally have never been in favour of what, to my mind, is a rather cheap form of advertisement; but I can also see that it has its advantages by helping to hold the interest of the public in our work, and this, in itself, is a good thing, because the more the public know about our work the more likely are they to get to know the difference between good design and bad design, and the sooner they know that the better for architects and for architecture.

I had, however, far rather that the City Council would make it compulsory that the names of the architect and the builder should in the public interest be recorded permanently by being cut in the stone at the base of the building, thereby intimating to all who wish to know it who is responsible for the design and the erection of the structure. It is done in other parts of the world, much to the public advantage, and I think it would be well to make it the practice in Australia.

A Minister of Fine Arts

Lord Chelmsford, lately Governor of this State, echoed the opinion of all of us when, on opening, about twelve months ago, a Town Hall erected in



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one of our country towns, he said: "A fine building is the property of everyone, and every man in the street can enjoy it—when people spend large sums of money on beautiful public buildings they are not acting as dilettante artists, but as shrewd business men."

Following up the subject, one of Sydney's daily papers published a leader, in which it was rightly stated that "The architecture of a city is the city, and it is the duty of the authorities, civic or governmental, to see that the City is not degraded by a low standard in either public or private buildings." There is some hope for the architecture of our country when those in high positions of State and when the Press give forth opinions such as these.

Now, there are only two means by which the architecture of a country can be satisfactorily controlled and directed. The first is by the establishment by the Government of a Department of Fine Arts. The second is by the appointment by the Municipal Councils of a Board to control civic art. The establishment of a Department of Fine Arts, such as has been in existence for many years in France, even though its officialism may produce, as it has done in France, a too prominent uniformity in architectural design, is possibly the better means of the two, but the utilitarianism of nearly all, but fortunately not quite all, of the members of every Government which comes into power in this State, gives one faint hope from that quarter. This being so, the appointment by the City Council of Sydney, as a start, of a board to control Civic Art is, in my opinion, within the bounds of reasonable possibility, and I hope the Lord Mayor will see the advantage which would be gained to the citizens by the work of such a Board, which would, I suggest, be independent of, but responsible to the City Council. No harm could come from such a Board, properly appointed and constituted, and the gain to the City as a whole would soon be apparent to the citizens. I could at this moment name at least six men in the City of Sydney whose knowledge of Civic Art would entitle them to consideration as members of such a Board—and there are others.

A Registration Act Wanted

The act to regulate the height of buildings in the metropolitan district—known generally as the "Sky Scraper Act"—is now in force, for better or for worse, so far as architecture is concerned. I do not know what are the opinions of individual members as to the value of the measure, nor that of the Institute as a whole, because no resolution has been passed concerning it; but I think it can at least be recorded that it is satisfactory to the Institute, as a body of Architects, that some interest is being taken by the present Government in matters architectural which affect the public, and one dares to hope that this measure is a foretaste of further interest to be exhibited in the near future, especially in regard to the long looked for Amended Building Act, and the Act for the Registration of Architects.

ARCHITECTS' FEES

Although architects' fees in Great Britain are on the whole lower than in other countries, it may be inferred from what the "Builder" writes on the subject that there is no great disposition at the present time to alter them. There are two points, however, about this general fee of five per cent. on cost that will bear some examination. The first is, does not this rate in the case of a simple class of buildings when on a large scale, and therefore expensive, deprive architects of much of their legitimate work? There are constant complaints in the technical press that surveyors and builders are encroaching on the domain of the architect by preparing designs of houses for clients and building them as well; and this they can only do when the design is of a simple character. Now, if for such a building an architect charged only three per cent. instead of five, is it not likely that a client would go to him for the design instead of to the builder? This fact seems to have been recognised in Germany, where rates are somewhat elaborately graduated for grades of buildings, the lowest rate being 2 per cent., applied to large plain buildings, and the highest 11 per cent. for highly decorative work. Rates for each class vary likewise with total cost, being of course high

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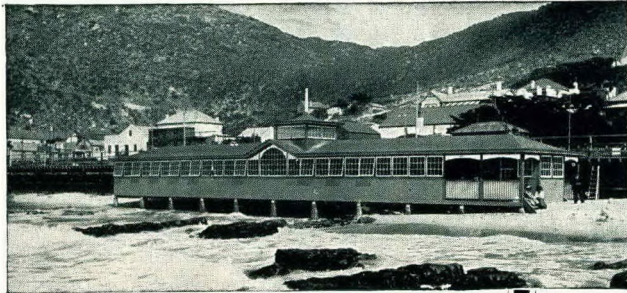
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above that prevailing in an unprotected country like Great Britain, where, if any attempt were made at the present time to raise fees, the first effect would be to throw more work into the hands of the interloper. Hence we can understand the feeling against a change till such time as a strict registration system is secured for the profession. The second point is that it makes a natural division of work for distribution among men of varying experience and varying standing in their profession. When a uniform charge is paid for all classes of work the tendency is for the client to go to an architect of the best standing for the simplest work, and likewise for the architect to accept it. When there is a graduated charge the tendency must obviously be for an architect as he rises in his profession to secure the more remunerative work, and leave the less for his junior; the client will also be less disposed to take unimportant work to a man who from his standing may be assumed to be engaged upon the more remunerative types of design. The profession will thus be automatically divided up into sections more or less representative of the cadre of a graded service, and fewer will be left out in the cold than at present. It will be seen that the German scale postulates both a lower and a higher rate of charges than the uniform British rate, so that it just meets the requirements of juniors and seniors in an equitable way; and it needs only the natural working of a strict ethical code in the profession to bring about a fair division of work. But this in its turn postulates the elimination from its ranks of all who are not architects; and when this is done the difficulty will disappear of having a scale of charges suitable to the varying grades. As it now stands the scale is too high for juniors and too low for seniors.—"Indian Engineering."

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SHOP WINDOW LIGHTING

(From an article by E. P. Austin in "Electrical Engineering")

In general, the best example of illumination to follow is stage work, where the light is diffused upon the stage, and the sources are hidden from the view of the audience. The main principles are that the source of light should be hidden or fixed well above the line of vision, and the light directed on to the goods. Light sources should not be fixed in too close proximity to the objects displayed, or a patchy effect will be obtained, and light units of markedly different colours should not be used in conjunction. The application of these principles resolves the question itself into the correct choice of reflectors, in conjunction with the best positions of the lamps, and the correct types chosen by reference to their distribution curves. Brightly polished reflector surfaces are not always the best; sometimes a dull aluminium surface gives better distribution.

For a provision window dressed flat, or nearly so, the prismatic glass reflector offers the best solution, and should be of the intensive type, the spacing and heights of such windows rarely lend themselves to the use of the extensive type of reflector. The colour of light units is an important point. To aim at daylight effects is somewhat misleading and not always desirable. A light that is rich in red rays has much to recommend it, particularly in the illumination of foodstuffs. Contrast, for instance, a butcher's shop using incandescent gas and one with

the old-fashioned fish-tail gas burner, and notice the more attractive appearance of the meat in the latter case.

Windows which depend essentially on good lighting are those displaying fancy and white goods, hats, dress materials, and tailors' and furniture shops. In determining the quantity of light required in individual cases, the reflective properties of different shades must be considered. A window that may alternate between white and dark goods must have a capacity for illumination suitable for the latter, with ample switching arrangements to prevent waste when showing light goods.

The nature and texture of fabrics affects their reflective values, which is largely a function of their transparency. Jewellery, pictures, and china ware all require their own treatment, influenced by the arrangement and proportions of the window. Such windows are usually shallow, dressed from top to bottom, very full, and close to the glass. Outside lighting with a "trough" type of reflector is very effective, and the light should be concentrated rather than diffused, since jewellery looks best when illuminated from a point. Millinery is best lighted from above with a well-distributed light. Tungsten lamps give the best colour effect in this case. Indirect, semi-indirect, or prismatic-bowl lighting are all eminently suitable for this class of work.

Tailors and furriers demand high candle power, since the dark materials have a high factor of absorption. Lamps should be kept well away from dark

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materials and suitably spaced intensive reflectors used entirely. Outside lighting by white flame arcs with reflectors to throw the light into the window gives good effects; but glare results from too much concentrated light, and the patterns of fabrics become indistinct and blurred under such conditions. The furniture window lends itself more to calculation than the previous examples. As a rule there is ample floor space, and the ideal space factor can be used, with prismatic reflectors. Again, absence of glare is most important. Furniture should show up in bold relief from its surroundings, yet light should not be unduly focussed to over-emphasise detail. Tungsten lamps give the most desirable effects, and indirect lighting with white ceilings is pleasing in result. By the ideal space factor is meant the relation between the height above the working plane and distance between centres of lighting units that gives even illumination with a given reflector. For instance, the space factor for holophane intensive reflectors with 50-60-watt tungsten lamp is $\frac{3}{4}$, and 4 points in a window 10 ft. by 15 ft., suspended at a height of 7 ft., give a luminar intensity on the floor of seven foot candles, approximately, allowing for a light ceiling. Semi-indirect lighting offers special advantages for furniture display. When a window is dressed in representation of a room, daylight effect is desirable, and can be very closely approximated by having the top reflector of the semi-indirect lighting fitting of a delicate china-blue tint. Metal covers of this colour fitted over silvered reflectors also give a near approximation of daylight, and have been used with considerable success. The scheme is also useful in drapery departments, where colour matching is important.

Outside shop lighting fulfils a two-fold purpose.

Its primary object is advertisement, and illumination of the windows is its secondary object. Metal lamps are largely displacing arc lamps for this purpose. Outside and inside lighting should be carefully balanced, particularly when dark materials are displayed, or the window has a dark background.

Jewellery windows with fitted showcases divided into small compartments present considerable difficulties. The bulkiness of a lamp and reflector make it difficult to conceal them in a small case, so that one naturally turns again to outside lighting. Arc lamps with angle reflector fittings give good results, but the white flame should be used, as the yellow light is unsuitable for the display of precious stones. Pictures require essentially a "soft" diffused light. A refinement is to use special trough reflectors, which give excellent results when fitted to the top of large pictures. In conclusion, it is well to remember that shop window lighting is not to show off electrical fittings, but to give effective lighting.

AN OPPORTUNITY FOR SOUTH AFRICAN ARCHITECTS

New Board of Trade Offices

Preliminary sketch designs in competition for the new offices of the Board of Trade to be erected on a site in Whitehall Gardens, are invited by H.M. Office of Works. The whole of the houses in Whitehall Gardens have been acquired up to the grounds of Montagu House, the residence of the Duke of Buccleuch, and this area and the site of the present premises will be occupied by the new offices. The new buildings will have a frontage to the Embankment of 350 feet, another to the Horse Guards Parade of 300 feet, and one to Montagu House of 208 feet. A space will be left between the new building and

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Montagu House for a much-needed roadway between Whitehall and the Embankment. The building line will be a continuation of Whitehall Court, and this will leave a vacant space of about 150 feet deep, which will probably be laid out as gardens. The whole of the vacant land in front of the houses in Whitehall Gardens is to be built upon, and nearly one-third of the square in front of the present offices will also be occupied. The new offices will not have any frontage to Whitehall, as it is not intended to interfere either with Gwydyr House or the Royal United Services Institution. It is proposed first to demolish the houses which have been acquired for the extension of the offices, and to build on the site offices for departments already in occupation of the adjoining premises. The assessors are Mr. Reginald Blomfield, A.R.A., P.R.I.B.A., Mr. John Belcher, R.A., and Sir Aston Webb, C.B., C.V.O., R.A. The competition is open to all British architects, and from sketch designs to be submitted the authors of not more than ten designs will be selected to submit designs in a final competition, and will each be paid an honorarium of £300.

A GREAT OPPORTUNITY MISSED BY JEALOUSY

Says "Building News": "The Dublin Corporation has once more discussed the question of the site for the Municipal Art Gallery to house the Lane Collection of pictures, and, we fear, finally gave a quietus to the scheme. The Lord Mayor moved the adoption of the report of the special committee, which recommended the selection of the Metal Bridge site, and of the design of Mr. E. L. Lutyens, A.R.A., as requested by Sir Hugh Lane, who had himself guaranteed to pay whatever the bridge would cost over £45,000. Various memorials for and against the bridge site were referred to. Alderman Ireland proposed as an amendment that the Corporation be free to select its own site, but this, in view especially of Sir Hugh Lane's threat to take away the collection if the requirements were not met, was defeated. Mr. Cosgrave next proposed that Irish architects be at liberty to submit designs for the new gallery. When put, the amendment was declared carried, but when put as a substantive resolution it was defeated. The Lord Mayor, who has throughout supported the Metal Bridge site, and Sir Hugh's nomination of Mr. Lutyens, bluntly told the members that the voting did not reflect any credit on the Corporation, as they had not yet come to any decision. The Lord Mayor has since expressed his determination to convene no further meetings to discuss the matter, and it seems that nothing remains for Sir Hugh Lane but to withdraw his generous proposals. It is to be regretted that jealousy of an English architect has led to this fiasco and deprived Dublin of art treasures which would have attracted visitors and have been a magnet to draw to the gallery many like gifts of pictures in the future." Mr. Lutyens is the designer of Johannesburg's new Art Gallery now under construction.

KINNES'S PATENT METAL STAIR TREAD

A few days ago we received a visit from Mr. M. H. Schonstadt, who has been appointed resident representative in Johannesburg for the South African Lead Works, Ltd., Capetown, manufacturers of Kinnes's patent metal stair treads, lead and compo pipes, solder, etc.

This industry, which is the only one of its kind in South Africa, has steadily forged ahead, and may now be ranked amongst the foremost of successful enterprises in this country.

For the greater part of a year, so Mr. Schonstadt informed us, he has travelled all over the Union, and he adds: "There are now very few towns unacquainted with Kinnes's stair treads."

Their "non-slipping" feature has been proved beyond question right in our midst, an instance by their having been fixed on the granite steps of all entrances to the General Post Office, Johannesburg, as well as on several staircases in that building; and when it is remembered that some millions of people have walked over the same treads since they were laid on, no more severe test could be given, with results which speak most highly for their durability.

It is therefore not in the least surprising that the sterling merits of Kinnes's stair treads have appealed to a large number of our prominent South African architects, and to find them specified for many of the large and important structures now in course of erection in all parts of the Union.

Mr. Schonstadt's postal address is Box 4428, Johannesburg, where communications regarding Kinnes's stair treads may be sent to him, and will receive his prompt attention.

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OPENING OF TENDERS

"The Building News" of August 22nd contains the following caustic comments with reference to the opening of tenders. Fortunately in South Africa we have not much to grumble at in this respect, and we hear from reliable sources that the Railway Administration of South Africa (now the only body of any importance which does not publicly announce the prices) is likely, in the near future, to also read out publicly the list of tenderers with their prices. The criticism of "The Building News" is, however, interesting, and we publish with pleasure not only the paragraph, but the letter of Mr. William Woodward, F.R.I.B.A., concerning the same subject:—

"We are informed by the Port of London Authority that the tender of Messrs. John Mowlem and Co., Ltd., has been accepted for the construction of the foundations of the new offices on the Trinity Square site of the Authority's new building. The amount is between forty and fifty thousand pounds. On application to the Authority for the usual list of tenders, we are informed that it is 'not its custom' to publish such. We think it ought to be. Builders invited to tender have, in our opinion, the right to the information, and we are surprised the Port of London Authority withholds it. Secret tendering, at its best, is a mistake; and we hope the R.I.B.A. will, in response to the recent communication addressed to it by the National Federation of Building Trades Employers, take an early occasion to rebuke the growing practice. We should further add that the announcement of acceptance should have appeared in our last

issue. The communication of the Port of London Authority is dated August 14, and on that date, just as we were going to press, knowing the matter was on the point of decision, we telephoned through to enquire, and were told the result was not yet known. The news is thus a week stale, through no fault of ours. Prompter information is another obligation due by public authorities to those who respond to their invitations to tender."

"Sir,—I am obliged by your reference, under 'Corrente Calamo,' in the last issue of 'The Building News' to my letter to 'The Times' respecting competitive tendering; but I am sorry to hear that the system I described is not adopted more than it apparently is.

"I had not noticed the paragraph in 'The Building News' of the 1st inst., setting forth the resolution of the National Federation of Building Trades Employers, which was to be sent to the Royal Institute of British Architects, with reference to the practice in regard to opening tenders. When the matter comes officially before the Council I hope to be able to refer to this subject, which is, I think, a very important one.

"At the present moment I see no reason whatever why it should not be considered proper professional practice to invite all the tenderers to attend at the opening of the tenders, so that the respective amounts may be announced and noted by those present.—I am, etc.,

WM. WOODWARD, F.R.I.B.A., F.S.I.
"13, Southampton Street, Strand, August 20."

UNIVERSITY HALL AND STUDENTS' GALLERY, UNIVERSITY BUILDINGS, CAPE TOWN

Lord Gladstone opened this fine Hall in the early part of the present year. The Duke of Connaught laid its foundation-stone in 1909. The building was started in 1905. Delays took place, owing to lack of funds, and this large central hall, which forms the great feature of this University building, was unbuilt till, through the generosity of the late Sir Donald Currie, sufficient money was forthcoming to enable the University Council to complete the undertaking. The cost has amounted to £100,000. Messrs. Martyn, of Cheltenham, carried out the stone carvings. The dome is covered with copper, and the internal ceiling is decorated in modelled plaster. The panelling is in oak. Black and white marble paving covers the floors where they are not laid with hardwood. The columns in the internal corridor are of Corsehill stone. A big organ will be placed in this hall when the money allows, and this instrument is to occupy the central space in the rear wall of the proscenium. The ground floor of the building, besides including the Examination Hall, is devoted to administration offices. The Registrar's offices are on the main-floor level, with the library, committee-rooms, and council chamber. Mr. William Hawke's design was chosen in the competition, and has been executed with minor modifications. There were sixty-two designs submitted, and Sir Aston Webb acted as the assessor. Messrs. W. Hawke, F.R.I.B.A., and W. N. McKinlay, who are the architects of the new Town Hall, Johannesburg (illustrated in a previous issue), have carried out the work as shown by the accompanying photographs.

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