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AND THE CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS.

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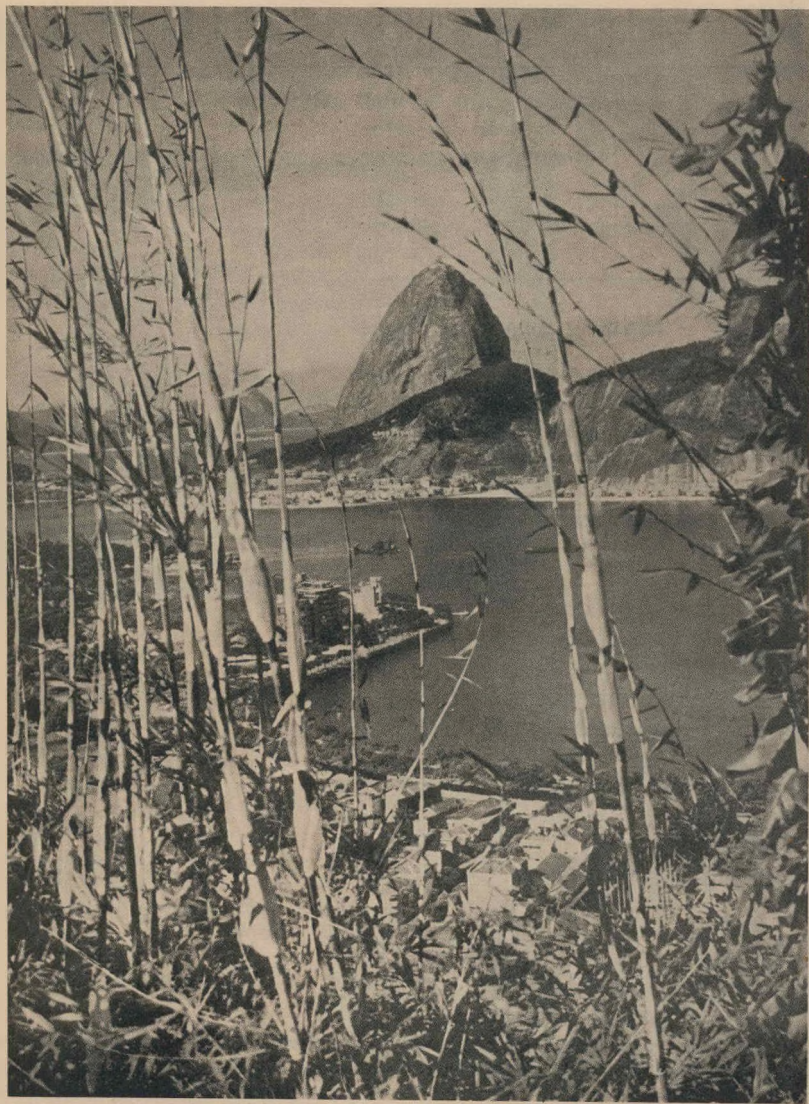
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R I O D E J A N E I R O , T H E S U G A R L O A F

THE INSTITUTE OF SOUTH AFRICAN ARCHITECTS

THE CENTRAL COUNCIL

Extracts from the Minutes of 1943 Annual Meeting of the Council held at Johannesburg on Tuesday and Wednesday, April 13th and 14th, 1943.

THE PUBLIC SESSION.

The opening session was held, in public, in the hall at New Kelvin House, Johannesburg. There were 52 people present; also representatives of the "Star" and "Rand Daily Mail." Apologies for inability to attend, because of the Parliamentary Session, were read, from Mr. J. H. Hofmeyr, Senator C. F. Clarkson, Major P. van der Byl, Mr. T. Rhodes, Secretary of Public Works, Mr. D. F. Hugo, Secretary for Education, and Dr. H. J. Van Eck.

After the President-in-chief had extended a special welcome to those present, Dr. Bernard Price, on behalf of the Associated Scientific and Technical Societies, conveyed their good wishes to the Institute and Chapter for a successful and useful conference.

The President-in-chief read his Address to the meeting.

Mr. Haddon read to the meeting a paper on the "Cost-plus-profit" Inquiry.

Mr. José Cortez, representative of the Brazilian Institute of Architects, conveyed the greetings of his Institute and presented to the President-in-chief a Diploma enrolling him a Corresponding Member of the Brazilian Institute of Architects; also a replica of the Brazilian insignia.

ADDRESS OF THE RETIRING PRESIDENT-IN-CHIEF MR. B. V. BARTHOLOMEW

The President-in-chief extended a cordial welcome to Dr. Bernard Price, representing the Associated Scientific and Technical Societies; to Mr. C. L. F. Borckenhagen, Controller of Building Materials; to Mr. J. C. Bitcon and Mr. H. C. Roberts, representing the National Federation of Building Trade Employers in South Africa; and to Professors A. L. Meiring (Pretoria), G. E. Pearce (Witwatersrand), and L. W. Thornton White (Cape Town). In giving an especial welcome to Mr. José Cortez, representing the Brazilian Institute of Architects, the President-in-chief said:

I trust that the visit may be a means of strengthening the bonds between us, for architecture is a common language. It is history written in stone for generations to read. May it be read with something akin to pleasure and inspiration. We are reminded of Sir Christopher Wren's epitaph in St. Paul's Cathedral, London, which we are thankful to say still stands as a monument to his glory and all that is good in our national history: "For my monument, look around." May future generations express their pleasure as they look upon the monuments we are now erecting.

It is usual for the President-in-chief to review the past year's work, and in doing so I shall only touch upon items which may be of general public interest, leaving a more detailed report until we retire into private session.

In the past our Profession has suffered from being too modest, and I feel it is important and essential that the public should be cognisant of an architect's work. In order to enlighten the public I would like to say a few words about the training of an architect.

One can understand that with the complexity of our modern life, an architect must be thoroughly trained in order to give expression to that complex life and its demands.

What the Nation expects from architects is architecture, and in order to train an architect to produce architecture of which the Nation may well be proud, it is necessary that he should be thoroughly and scientifically trained.

Forty years ago there were scarcely any facilities outside an architect's office to help the architectural student. If he wished to qualify for a degree he had to proceed overseas. All that is now changed. We have splendid Schools of Architecture in the country where the student is thoroughly trained in a five years' course. The University Degree, and Diploma courses are fully recognised by the Royal Institute of British Architects, and our qualified students are eligible to practise in Great Britain.

The R.I.B.A. founded over 100 years ago (1834) is recognised as the most highly organised body of architects in the world, and to reach their high standard our University training must be very thorough and comprehensive.

An architect has to do with ideas and ideals. A client's ideas may be nebulous, but the architect divines his requirements and with imagination and training translates them into practical issues, whether it be a house, factory or sky-scraper.

An architect is the great co-ordinator, and in a large building co-ordination presents a difficult problem. It may be of interest to know that for a £100,000 building as many as 250-300 separate drawings may be made in order to co-ordinate the different services and to see that the architect's idea and the requirements of the client are carried out. Probably the client sees not more than a dozen of these drawings.

When the public more fully realises the thorough training architects now receive I feel confident there will be a greater demand for the qualified man of experience.

The work of the quantity surveyor is also not fully understood or appreciated by the general public. He also is a thoroughly qualified man, as fully trained as the architect, in his particular sphere, and with his special knowledge of Construction, Measuring, Costing and Finalising of Accounts, is of immense assistance to both architect and client with whom he is closely in touch.

At the outbreak of war this Institute freely offered its services to the Government and placed before it a scheme whereby our special training could be utilised in the war effort, and in helping forward the large Defence Building Programme which immediately followed. Several interviews took place between this Institute, Government and Military Officials. This only resulted in the appointment of a Liaison Officer as between Defence and this Institute. Mr. Furner's investigations resulted in an excellent and detailed report and we are greatly indebted to him for his services. This report was duly forwarded to the Government.

In spite of the excellent suggestions made to increase efficiency, nothing of much practical value has been achieved and the net result has been a feeling of frustration. It is only after most of the Defence Building Programme has been completed that a more sympathetic attitude has been extended to this Institute, and we would like to thank the Minister of Public Works, Senator C. F. Clarkson, for his helpfulness in this direction.

Most of the architect's and quantity surveyor's work came to a standstill, labour and material being absorbed by the Defence Programme, and in the meantime a large number of members joined the forces. Approximately 250 of our members and students are now on full-time active service, many of them in the Works Directorate, the Public Works Department and Engineers Corps, doing splendid work in the war effort.

Unfortunately a large number of our members in the Forces although used in a professional capacity, are not receiving pay commensurate with their professional training and status.

The principle of professional pay had been accepted in the Army in as much as medicals were in receipt of approximately

£1 1s. 0d. a day over and above established Army rates. This has now been merged into an "all in" rate approximating to this amount. Further, medicals are automatically commissioned on joining the Army and therefore enjoy monetary advantages at the outset. This has been denied to our members.

Strong representations were recently made to the Parliamentary Select Committee on Army pay.

I need hardly remind you of the extreme difficulties and dissatisfaction of old established firms of architects and quantity surveyors who, in many cases, are contributing towards the pay of members with the Forces, and who are endeavouring to keep open their practices, in spite of the hardships of the necessary control of materials and labour, who have not been allowed to share in any Defence work although eminently capable of dealing with it.

An indication of how our professions could have been utilised in National Defence is indicated by an example of its services to the Coastal Defence in Durban. When a huge Defence programme had to be commenced immediately and the Garrison Engineer was unable to prepare the large number of necessary designs and working drawings required, an appeal was made to the Natal Provincial Institute of Architects for assistance.

We immediately mobilized our forces in Durban and for patriotic rather than financial reasons helped them out of the bottle-neck. This method I feel sure could have been extended to other centres when the members of our Institute could have made its contribution in the National effort, as it was eager to do.

A deputation from the Institute met Senator Clarkson, the Minister for Public Works, who assured us of his real sympathy and of his immediate concern to try and find ways and means of assisting our professions.

It will be of public interest to know that this Institute tendered evidence before the Cost-plus Enquiry Commission. The Chairman, Mr. Leslie Blackwell, K.C.—or should I now say Mr. Justice Blackwell—referring to our memorandum, said: "It is the best prepared and most businesslike memorandum I have seen handed to this Committee and I think we are indebted to you for the trouble you have taken in preparing it."

In spite of the Majority Report most architects know, and it is fairly common knowledge amongst artisans and builders, and, to some extent, the general public, that when private incentive is removed and the Cost-plus methods adopted, human nature, being what it is, usually takes advantage of the position.

We are indebted to Mr. Haddon, Leader of the Deputation, who will make an official statement by this Institute at the close of my address.

We are all thinking of the future and post-war planning. In England the R.I.B.A. are holding a Reconstruction Exhibition on Rebuilding Britain. Its purpose is to tell the public what

are the principles which underlie reconstruction in the sphere of physical planning and architecture. The first part will indicate an historical excursion through Britain's landscape and architectural past; the conversion of a rural into an industrial community, and all that happens to the face of Britain in the process. The story will be that only long-term positive planning could remedy the ills that have been allowed to grow, or make good the ravages of war. Finally the Exhibition tells the public all this is their problem and that it is up to them to demand whatever the architects and planners can give, and to see that they get it.

Our problem in South Africa is not so acute, but long-term planning is necessary if we wish to avoid the errors of others.

As Dean Hudnut, Head of the Harvard Architectural School stated: "Whatever beauty he, the architect may achieve, will be beauty wholly in agreement with those intellectual satisfactions which derive from the command of technique and from consciousness of social usefulness."

It is of interest to note that Circular No. 1, issued by the Administrator of Works to local authorities in Great Britain has this inscription: "It is necessary in all planning schemes to consider not only the health and convenience but the future appearance of town or village. Architectural advice is therefore essential. The value of architectural advice taken at an early stage will amply prove itself when rebuilding takes place."

It may be of interest at this stage to note that our students at the Universities have a thorough training in Town-planning.

Dr. C. E. A. Winslow, of the American Public Health Association, set forth some thirty principles of healthy housing, including physiological and psychological, as well as construction against disease and accident. The doctor says: "The design or building of every house is an act of social importance—it influences the trend of family life by force of internal environment—it presses family life into one shape or another."

When the building public once realises the important transforming force which architects can exert on a community, I feel sure they will demand that the opportunities of the future will be grasped by insisting that their services be utilised as the planning and designing head of the big building industry which is one of our largest national assets.

As a result of an interview with the Minister of Public Works, Senator C. F. Clarkson, my Institute undertook to investigate the proportion of plans prepared by qualified architects. Although these investigations are not yet complete, they point to the fact that approximately 75 per cent. of all plans of buildings costing £2,000 and under, and approximately 30 per cent. of plans of buildings costing £2,000 to £5,000, are prepared by other than qualified practising architects. We are indebted to Mr. Clarkson for supporting this investigation and trust as a result that in the public interest not only will the name "architect" but also his "practice" be protected as is the medical profession. My Institute has high hopes that something can be done under the leadership and inspiration of the Hon. J. H. Hofmeyr, Minister of Education, from whom we have already received so much sympathetic treatment.

It is to be observed that the National Planning Council, under the able chairmanship of Dr. Van Eck, is fully aware and has taken advantage of this Institute's offer of help. Its advice and experience have been sought, and a National Planning Sub-Committee on "Materials" has been set up by this Institute and is already functioning.

Our relationship with the building industry through the National Federation of Master Builders, is of the happiest, and your President-in-chief conveyed our best wishes to its President (an old friend) at its recent Annual Conference in East London. Problems arising out of the war situation have been discussed and faced together sympathetically. I trust that it may be possible for the building industry to be registered, as is happening in Great Britain, in order to cope with the future large building programme—Nationally, Provincially and Municipally.

To meet post-war reconstruction we shall be largely thrown back upon our own resources and at the instigation of the Building Controller this Institute was instrumental in helping to frame the conditions of competition for roofing buildings with substitutes for timber. I regret this step was not taken two years ago.

When it is considered that one standard of timber (165 c. ft.) now in such short supply occupies as much shipping space as enough petrol to send a bomber to the Ruhr and back, it will be seen that we must develop our own resources.

In Great Britain, Lord Portal, the Minister of Works and Planning, addressing the Council of the R.I.B.A., referred to Architects as "The Designers of the Building Trade." He stated that he wanted one body that might speak with a united voice to him, and to that end had set up a Council for the purpose of advising him in all building and civil engineering questions. On that Council are represented building contractors, civil engineering contractors, architects, quantity surveyors and civil engineers. This Council will study post-war reconstruction as it affects building, and his desire is that his Council should be able to go to the Government and speak for the industry as a whole.

I would therefore urge forward the development of the Joint National Council of the building industry which was urged by this Institute some time ago and agreed to at the Builders Congress in November, 1941. This central organisation should guide the relationship between the following groups represented upon this Council, viz.:—

1. Professional, including the architect, the engineer and the surveyor.
2. Employing, including building contractors, civil engineering contractors and "specialists" in their several employing capacities.
3. Operating, including Trade Unions and similar representative bodies of artisans.
4. Manufacturing and distributing, including manufacturing firms, merchants, transport, etc.

This body would work in close touch with scientific and technical education in order to keep step with technical development and I feel sure it would be of immense value to this country in the future.

In closing allow me to say that I trust that all members of this Institute will so serve the building public with all their

skill and powers, putting service always before self, for the future holds high hopes and opportunities for really good team work in which our profession can nobly play its part for architecture is a national asset. Let us, therefore, with sympathy and perseverance, and in the wisdom of Almighty God, put our hands to the plough and not look back.

THE "COST-PLUS-PROFIT" ENQUIRY - A CRITICAL REVIEW

by D. S. HADDON

The recent stir in Parliament concerning Defence building contracts necessitates still further consideration by the Architectural and Quantity Surveying professions; hence this endeavour briefly to outline the part the Institute and Chapter took in the investigation.

Not only in war-time but in peace-time has "cost-plus" been a bone of contention. The specious claims made in favour of this system of building—for it is building that concerns us chiefly—are as enticing to building owners in peace-time as to Governments in war-time.

"Time is money" is the motto of the protagonists of the system in civil life, and acceptance of this to all clear-thinking men puts "honest" work at a very high premium. In military circles "Time means everything," and this axiomatic principle must be respected.

"Time" therefore was the only foundation on which argument could be based in favour of the cost-plus system, and, with perhaps the exception of the builders themselves, argument in fact was so confined.

A brief history of the steps taken by the representatives of the professions in their relations with the Department of Defence is a necessary preliminary to this review.

A few months before the outbreak of war, it was felt by the Institute and Chapter that considerable and beneficial use could be made in any War Effort of the professional side of the building industry. A deputation from the Institute sought and was granted an interview with the late Brigadier-General Collyer, who had apparently been entrusted with the task of cataloguing man-power under the then contemplated National Service Register.

This interview was a dismal failure, General Collyer holding the view, to put it mildly, that, as architects and quantity surveyors were not specifically classified in his Register, they could be of no special use in this country's war machine—except, perhaps, "as assistants to 'engineers.'"

After the outbreak of war, the views of Defence were perforce changed. The Directorate of Works, and later the Directorate of Fortifications, were established, in which members of our professions who had joined the Army were given very minor roles to fill.

Renewed attempts were made to assist, but without any serious notice being taken of them, until the Chief of Staff called a meeting in August, 1941, for the Institute and Chapter to discuss a detailed memorandum prepared by Mr. Dudley S. Mann, showing how the whole building industry could be utilised to expedite and carry out the Defence building programme, which at that stage had fallen far behind the country's requirements.

"Cost-plus profit" had been introduced both by the Public Works Department, for Inland Defence work, and by Fortifications for coastal work, in an attempt to make up the time lag.

The thought-provoking sequel to this was the Auditor-General's report to Parliament, first in 1940 and again in 1941, wherein he criticised the cost-plus system. The Select Committee on Public Accounts in 1941 considered the matter and recommended that the P.W.D. form of contract, which was considered more stringent than that of Fortifications, should be adopted in all future Defence works. But in 1942 the Select Committee gave more detailed consideration to the matter, taking evidence from official sources, and finally recommended that a Commission or Committee be appointed to enquire into this and other cognate matters.

The Cost-plus Contracts Committee thus came into being.

On April 25th, 1942, the Institute wrote to the Minister of Finance suggesting the inclusion in the personnel of the Commission or Committee to be appointed, of a practising Quantity Surveyor or Architect; and stressed, "It is submitted that such a member will be of invaluable assistance to the Commission or Committee because of his intimate knowledge of building contracts and because of his impartiality in such an inquiry."

On April 30th, 1942, the Minister of Finance replied, "A decision has already been come to in regard to the composition of the Committee which is to investigate the cost-plus profit system, and it is not proposed to extend its membership."

On May 20th, 1942, the Institute again wrote to the Minister of Finance:

"The Executive Committee, having been advised of the personnel of the Committee of Inquiry, is seriously perturbed. While appreciating their personal and professional integrity, it is submitted that Mr. Osborne and Mr. Prentice are vitally interested in the cost-plus-profit issue and that their views should only be given in the capacity of witnesses. In other words, information and opinions of the greatest importance to the State and to the building public would, in the opinion of my Executive Committee, be more effectively obtained if these gentlemen were subject to examination, as specialist witnesses; the more so if the personnel of the Committee of Inquiry included one or more members, qualified professionally and technically, whose impartiality could never be questioned.

"It is submitted, again, that the repercussions on the nationally important building industry, of the extensive use by Government Departments of the cost-plus-profit system, are so serious that unbiased professional and technical representation is of the greatest importance. The very important question of post-war reconstruction, with which the Institute is equally concerned, may be vitally affected by the report and recommendations of the present Committee of Inquiry.

"For these reasons I am directed respectfully to urge that you reconsider the Institute's application for direct representation on the Committee of Inquiry.

"If, after reconsideration, you nevertheless feel unable to alter the personnel of the Committee of Inquiry, then the Institute respectfully asks you to empower it to be officially represented at all sittings of the Committee whereat evidence is tendered; to cross-examine witnesses, where considered necessary; and to address the Committee generally and on the evidence tendered."

On May 22nd, 1942, the Minister replied that the points raised had been carefully considered, but it was regretted that the question of the composition of the Committee could not be reopened, but that steps would be taken to bring the Institute's final request to the notice of the Committee.

On May 22nd, 1942, Government Notice No. 937 was published, to the effect that Messrs. Blackwell, Kentridge, Werth, Osborne and Prentice, had been appointed to the Cost-plus Inquiry Committee.

On July 10th, 1942 [i.e. ten weeks after the Institute's first request for representation on the Committee of Inquiry]—Government Notice No. 1327 was published, adding Mr. A. M. Merkel to the personnel of the Committee.

On July 24th, 1942, Government Notice No. 1495 was published, adding Col. P. I. Hoogenhout to the personnel of the Committee, and substituting Mr. H. S. Boyder for Mr. A. M. Merkel.

The Institute and Chapter were not permitted to be represented at the Inquiry, nor to cross-examine witnesses.

Despite these continuous setbacks, the Institute and Chapter decided to implement their various offers of assistance, and accordingly submitted a comprehensive memorandum to the

Committee of Inquiry. The following is a synopsis of that memorandum, viz., Introductory; Considered Opinion of Architects and Quantity Surveyors; The Urgency Factor IF Quantity Surveyors are Unobtainable; The Urgency Factor; Disadvantages to Building Owner; Further Disadvantages to Building Owner; Representative Opinion of Architects and Quantity Surveyors; Efforts of Institute and Chapter to Assist the Authorities; Hon. Liaison Officer between Institute and Department of Defence; Evidence of Individual Quantity Surveyors; "The Standard Schedule of Prices"; Its War-time Use in Great Britain; Important Evidence from Southern Rhodesia; A Recognised Authority's Considered Opinions; Conclusions; Recommendation.

The "Conclusions" submitted in the memorandum, were:

"(i) That, if General Smuts' plea for a pooling of the country's resources had been given effect to, in utilising, with the P.W.D. organisation, the professional skill and experience available to the country outside that Department, the National War Effort would have benefitted considerably thereby;

"(ii) That helpful work, on these lines, can even at this late stage still be performed."

The "Recommendation" submitted in the memorandum, was:

"We recommend that the Committee give especial consideration to the 'Schedule of Rates' system [vide the underlined section of paragraph 13 hereof], bearing in mind that the many years' continuous, Union-wide experience acquired by the P.W.D. should have enabled that Department, either at the outbreak of war or at any time since, to prepare schedules of rates applicable to all parts of the Union."

[Note: The "underlined section of paragraph 13," reads:

"Schedules in the same form as the last, but with the rates inserted by the surveyor preparing the document, the tenderers quoting on a percentage basis, i.e., offering to do the work either at the schedule rates net, or with a percentage on or off.")]

In due course the Institute and Chapter were asked to give oral evidence before the Inquiry Committee. This was done by a deputation of two architects and one quantity surveyor (two were appointed, but due to illness one was unable to attend), with the Registrar. The proceedings were opened by the Chairman, Mr. Leslie Blackwell, who said, "We have your memorandum, and I will say this, that it is the best prepared and most business-like memorandum I have seen handed to this Committee, and I think we are indebted to you for the trouble you have taken in preparing it."

So far, so good, but this satisfactory start was soon followed by disillusionment. The Institute's argument was mainly confined to the following points:

(a) That nothing but considerations of the utmost urgency could justify cost-plus;

(b) That the professions should have been used to their utmost capacity to assist in preparing Defence building work

for tender, when possible, and to operate a schedule of rates in urgent work ;

(c) That the time factor to be considered was not only the actual building time, but the period of preparation antecedent to it ; that the disadvantages of the cost-plus system heavily outweigh its advantages in time, even if they do not cancel out the time factor ; and that the time lost in preparing proper documents is saved in the building time ;

(d) That a schedule of rates largely adopted elsewhere, at that time, should and could be used in South Africa ;

(e) That standardisation of plans, building methods, etc., should have been effected.

Defensive arguments were advanced by members of the Committee against all these points, but the laymen on the Committee did not have the necessary technical knowledge to notice how specious the defence was. With regard to the technical members, it is sufficient to quote Mr. Werth (Hansard, page 1546) :

"The Committee consisted of six members. Three of them were members of Parliament, and three were persons from outside. Of the three persons from outside, two were deeply compromised. I do not want to reflect on the honesty or impartiality of those members, but throughout they were in a difficult position. When building contracts were investigated, Mr. Prentice, of the Department of Public Works, the Chief Quantity Surveyor of the Department of Public works, was perpetually on the defence ; and when we were investigating engineers' contracts, Mr. Osborne was in the position that he is one of the chief suppliers of war materials to the Department of Defence. The Government put those persons in an unenviable position."

In due course the Cost-plus Committee produced its reports, the first dealing with building contracts, etc., together with a Minority Report from Mr. Werth. The Majority Report recommended :

"125. The Committee recommends that at an early date the Quartermaster-General call into being a conference between representatives of Works, Fortifications and P.W.D., on the one hand, and the architectural and quantity surveying professions and representatives of the master builders, on the other, with the view, in the first instance, of ascertaining whether and how far it is possible to introduce the schedule of rates system, even if only experimentally for one particular area, and, secondly, to work out a plan for the closer utilisation of outside professional co-operation by Works, Fortifications and P.W.D."

Certain other quotations from the Report and the Minutes of Evidence may be of interest to members of the professions. For instance, Paragraph 123 of the Majority Report :

"... Against this, the Committee was informed by the representatives of the architectural and quantity surveying professions that no substantial difficulty should be encountered

in the adoption in future of the English schedule of rates system, although it must be added that these gentlemen had to admit that they themselves had had no practical experience of working under a schedule of rates system."

Paragraph 124 of the Majority Report, reads :

"It is difficult for the Committee, composed as it is mostly of laymen, to make up its mind finally on this highly technical question. The Committee was impressed with the statement made on behalf of the architectural and quantity surveying professions that not sufficient use had been made of the services of private architects and quantity surveyors and that their efforts to co-operate and advise had been largely ignored."

Mr. Werth, in his Minority Report, says :

"56. I also agree with the recommendation in paragraph 125, that a conference should be called . . . to ascertain in how far it is possible to introduce the schedule of rates system, and to what extent the services of architects and quantity surveyors in private practice may be utilised for Defence building. There has been a deplorable lack of co-operation between Defence and these two professions during the past three years, and the State has been the loser."

"57. . . . Defence received a similar offer from the architectural and quantity surveying professions. If that offer had been accepted and their services utilised, much public money would have been saved and many abuses avoided."

The following are relevant quotations from the Proceedings when the Institute and Chapter gave evidence :

"Mr. Blackwell : These are the actual facts that I am putting to you, that at the beginning of 1941 extensive advertisements were inserted in the press calling for quantity surveyors which produced virtually no result, and the beginning of 1942 the same advertisement was inserted and again it produced entirely no result. I assume that those are facts. Mr. Rhodes would not tell us that if it were not so. If that is so does it not support his statement that he could not get quantity surveyors ? Well, on the face of it I cannot refute it."

"But then you come forward with a statement challenging his statement?—[Mr. Haddon] : May I explain? The advertisement, on the evidence given by Mr. Rhodes, is for temporary quantity surveying assistants. The first advertisement in 1941, I suggest, did not attract any of the 67 practising quantity surveyors in South Africa because they had either committed themselves to private clients and could not abandon that position or some of them had joined up. Others were practising and paying their assistants a subsidy. I know that for a fact and I can quote those facts. I can therefore say quite frankly that an advertisement asking for quantity surveying assistants is not likely in 1941 to have received any response from the 67 practising quantity surveyors or from the 26 practising architects and quantity surveyors. Of the 58 assistants, 26 of them are permanent P.W.D. assistants already and 9 are in local authorities. That leaves you with

23 and of that 23 some of them have joined up and others are assistants, as in Mr. Roos' case, to practising quantity surveyors. Now you have an advertisement which is marked a "temporary post." It is offered in Pretoria. Now the only people who could really answer that advertisement are the people in Pretoria and on the Witwatersrand, because if the others have got very many private commitments they are not going to come from the coast to Pretoria, unless they are absolutely starving.

"I think, if I may suggest it, you are missing the point. The point is this, that Mr. Rhodes has said he could not get quantity surveyors whereas you people come along and say that is nonsense?—Yes.

"Mr. Rhodes in support of his statement that he cannot get quantity surveyors produces these advertisements and the failure of result from them?—(Mr. Haddon): But the advertisements were for quantity surveying assistants. (Mr. Prentice): That is merely a term used in the Government. Any man who practises under me is a quantity surveying assistant. (Mr. Haddon): In 1941 the Institute had already submitted to the Government its proposals for dealing with this question of the employment of architects and quantity surveyors in their own areas, and if that proposal had been given a bit more careful consideration this question of their advertising for quantity surveyors to work in Pretoria might never have arisen. That is the point.

"Mr. Rhodes has said that all attempts to get extra quantity surveying assistants in his office have failed. It may be that there was an alternative way of tackling the question by decentralising and passing some of the work out to private practitioners. I am not concerned with that at the moment but it does seem to me that the evidence that is adduced establishes the point that his attempt to get these assistants has failed for work in Pretoria?—(Mr. Haddon): I grant you that.

"And if his office is so organised or if the P.W.D. work is so organised that the work must be centralised in Pretoria then his point is a good one?—To a layman it appears so but in actual fact it is not a good one.

"Tell me why it is not?—Because quantity surveying need not be done under the direct supervision of a senior Government official. Quantity surveying is work to a standard system of measurement. The plans can be sent to any part of South Africa and the quantities can be produced from those plans without anyone appearing in Pretoria at all."

A further quotation from the Proceedings :

"Mr. Prentice: We have used a great deal of private practitioners and I know something about it.—(Mr. Haddon): The ordinary private client is vitally concerned in peace-time with speed and therefore private practice by pure experience and force of circumstances is in my opinion very much speedier than the Government practice.

"I almost agree with you, your point at the moment being that the Defence organisation was entirely wrong in not making use of the private practitioner?—That is one of the points, yes."

A further quotation :

"Mr. Blackwell: You mean a qualified architect or a qualified quantity surveyor would be given comparatively junior rank—N.C.O. rank?—(Mr. Haddon): Sappers. (Mr. Prentice): I may just explain that they were dissatisfied, and rightly so, at the comparison with the engineers. (Mr. Haddon): The point which weighed with the clear thinking members of the profession is not the point that they did not get their rank when they first joined the army but that their services were not made the fullest use of. You cannot act in the responsible manner which you have acted in in civil life in regard to building if you are the smallest cog in the machine. We submit the Government was not making the best use of their talents.

"Mr. Werth: Mr. Rhodes' whole case was built on the allegation that there were no quantity surveyors available. Mr. Blackwell: Not enough?—(Mr. Haddon): On that point I must make this point that if a schedule of rates was adopted, architects could have operated that schedule of rates with a little practice, and as reasonably as quantity surveyors."

And again :

"Mr. Blackwell: The impression your evidence conveys to me is this, that you are utterly unable to project yourself into the place of Col. Hill or Mr. Prentice's office when these frantic demands on the part of the Air Force and the Imperial authorities were made; that you come after the event and theorise as to what they might have been able to do without any relation to the actual facts and the problems they had to face at the time?—(Mr. Haddon): I do not want to enter into a technical discussion on the point but Mr. Prentice must bear me out that the only thing that governs the preparation of a schedule of rates is your knowledge of what materials you are going to use. I admit in the first few cases you probably were in trouble but then you knew what an aerodrome was going to be constructed of. The hangars were going to be constructed of certain types of trusses and framing covered with certain things. Now Great Britain, a country which was actually, you might say, in the front line, with the same troubles and with the same civilian system of building, threw it overboard. (Mr. Prentice): Eventually."

Finally, the following three quotations from Mr. Werth's Reply to the Memorandum of the Main Committee on his Minority Report :

"3. The same can, unfortunately, not be said of the Public Works Department and Fortifications. At the outbreak of war they had ready to their hand an old and well-established building industry, that had served the country well and had shown itself capable of meeting all demands even in the biggest boom periods. But it has been debauched by three years of cost-plus-percentage. I do not blame the builders; it was the system that tainted and demoralised. A system that could induce a senior official of a State Department to sign 'cooked' wage-sheets and could tempt builders of repute to resort to every form of subterfuge and device merely to swell

profit, stands hopelessly condemned. It is a public menace. It should be exposed; and because the Majority Report failed to do so, the unpleasant duty fell to me.

"4. The Majority Memorandum argues that, after all, it would be strange if, under the abnormal conditions of war, instances of laxity and waste did not occur. That is an attitude of mind with which the heavily burdened taxpayer of to-day will hardly agree. The wise spending of public money is at all times an important consideration, but when war is on and public expenditure soars and the opportunities for waste and fraud multiply, then it becomes a supreme duty. Where there is waste, there is also inefficiency. No success has ever been achieved by inefficient methods. Cost-plus-percentage invites waste and rewards inefficiency. That is why it has been discarded by every country of which we have knowledge, and we would be doing South Africa a great wrong if we alone were to cling to it and allow its insidious and corrupting influence to continue.

"... The Majority Report recommends that the method and time of the switch-over from cost-plus-percentage to something better should be left to the discretion of Defence. With that I cannot agree, and the difference is fundamental. Right from the outset of war, Defence adopted a non-possimus attitude. They regarded cost-plus-percentage as the only possible system and a departure from it as impossible. That is why every effort, even by the Authorities Committee, to effect a change came to nothing. 'Impossible!' that reflects the attitude of Defence. To leave the decision therefore to them is to commit South Africa indefinitely to cost-plus-percentage."

Arising from their selection of the recommendations of the Majority Report, the Authorities convened a conference at Defence Headquarters, which was held on January 27th, 1943. It is important to note that this conference was held before the Government released the Cost-plus Committee's reports and recommendations; and that the discussion at the Conference was confined to the "Summary of Conclusions (j)," instead of being based on the specific and wider recommendation, i.e., paragraph 125.

For comparative purposes the complete recommendation of the Committee of Inquiry, viz., Paragraph 125, is here set out together with the "Summary of Conclusions," Paragraph 138 (j):

Paragraph 125: The Committee recommends that at an early date the Quartermaster-General call into being a conference between representatives of Works, Fortifications and P.W.D., on the one hand, and the architectural and quantity surveying professions and representatives of the master builders, on the other, with a view, in the first instance, of ascertaining whether and how far it is possible to introduce the schedule of rates system, even if only experimentally for

one particular area, and secondly, to work out a plan for the closer utilisation of outside professional co-ordination by Works, Fortifications and P.W.D.

Paragraph 138 (j): A conference should be called by the Quartermaster-General at an early date between Works, including the P.W.D. and Fortifications on the one hand, and the representatives of the architectural and quantity surveying professions and representatives of the master builders on the other, with a view to determining, firstly, how far it is possible for the professions to be of increased assistance to Defence in the planning and execution of its building programme; and secondly, to examine how far it is possible to introduce the schedule of rates system into this country on the lines now followed so largely in Great Britain.

This conference therefore was not afforded the opportunity of knowing or of considering the following two matters set out in the recommendation in Paragraph 125, viz.:

(a) To ascertain whether and how far it is possible to introduce the schedule of rates system, even if only experimentally for one particular area; and the equally specific recommendation,

(b) To work out a plan for the closer utilisation of outside professional co-operation by Works, Fortifications and P.W.D.

Why were the Conference's terms of reference so circumscribed? Why was the complete recommendation of the Cost-plus Inquiry Committee not acted upon? Why were the Institute's representatives, not "in the know," invited to what was seemingly a very important Conference, and thus seriously handicapped? And, again, would it have helped or hindered the country if the Conference had set-to, as recommended, "to work out a plan" to further the Defence Building Programme?

In pursuance of what we now know to be its circumscribed terms of reference, the conference unanimously adopted the following resolution:

"That, after a full and general discussion, this meeting is of the opinion that the only way to enable a decision to be arrived at as to the possibility or otherwise of introducing the schedule of rates system into this country, on the lines now followed so largely in Great Britain, is to appoint a Committee representative of Architects, Quantity Surveyors, Master Builders and the Government, to investigate and report.

Under date of March 8th, 1943, the Quartermaster-General advised the Institute that the conference resolution was, by Government decision, not now to be implemented.

Despite the recommendations of the Cost-plus Inquiry Committee, and despite the resolution of the conference above quoted, the Government has decided, after a meeting with the National Federation of Master Builders, as follows: "All work to go to tender in the usual manner with the exception of very urgent works which are to be done at cost-plus a fixed fee, the fee to be arranged by Government personnel." The

change thus made by the Government is one of name, but not of policy.

Although this is essentially an objective review, I cannot but deplore the way in which the Institute's endeavours with

the Government have proved abortive. However ironically, I wish finally to quote Ruskin, "Government and co-operation are in all things the laws of life." The Institute and Chapter are still willing to respect those laws!

ADDRESS OF MR. JOSÉ CORTEZ

REPRESENTATIVE OF THE INSTITUTE OF ARCHITECTS OF BRAZIL

Mr. President-in-chief, fellow architects:

I am very glad to have the opportunity of addressing you to-day, at this annual meeting of yours, to bring to you the greetings and the assurance of the solidarity of the Brazilian Architects who stand with their hearts, full of good hope, firmly at your side in this war.

You are our natural neighbours this side of the Atlantic; we live like you under the Southern Cross and like you, we owe our country to the discoveries of the great Portuguese Navigators. Bartholomew Dias came here first, and twelve years later was in Cabral's Armada, that in sailing for India, touched for the first time the Brazilian Coast and so discovered us. That was the first contact between South Africa and Brazil

four centuries ago!

Therefore, you can easily understand my feelings when I arrived in this beautiful land of yours, pregnant with glorious memories and the emotion I felt when I saw the Dias Cross, "Praça de São Gregário" in the Witwatersrand University.

Now, I have great pleasure in handing to you this message with which our President, Mr. Nestor de Figueiredo, entrusted me, and I have also the honour to present to you, Mr. President, the diploma which enrolls you as a member of our Institute of Brazilian Architects.

I am sure that you will accept these documents as testimonies of our great admiration for the wonderful achievements of our South African Colleagues.

INSTITUTO DE ARQUITETOS DO BRASIL.

Fundado em 20 de Janeiro de 1921.

Rio de Janeiro, October 31st, 1942.

The President of the

Institute of South African Architects.

At this time when the armed forces of Brazil are united with those of the Union of South Africa as integral parts of the great group of United Nations, at war with the enemies of liberty, the Architects of Brazil represented by the Institute of Architects of Brazil, salute their colleagues of South Africa confirming their absolute faith in the final victory of those who defend the Historical and Sentimental Patrimony of contemporary civilisation, with the conviction that in the world of to-morrow, the architects will find an opportunity to plan more favourable living conditions for those who have shed their blood for human liberty.

[Signed] Nestor E. de Figueiredo.

President.

(Signed) Herminio de Andrade e Silva,

1^o Secretary.

INSTITUTO DE ARQUITETOS DO BRASIL.
Fundado em 20 de Janeiro de 1921.

Rio de Janeiro, October 31st, 1942.

The President of the
Institute of South African Architects.

Dear Sir,

We have the pleasure of informing you that the Board of this Institute has unanimously resolved to confer upon you the title of Corresponding Member of the Institute of Architects of Brazil.

On this occasion we wish to assure you that the decision of our Board has the object to express our admiration of your professional merits, at the same time trying to fortify the strong bonds of intimate collaboration and mutual cultural understanding between the architects of our countries.

We are, Dear Sir,

Yours very faithfully,

(Signed) Nestor E. de Figueiredo.
President.

THE CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS

BOARD REPORT FOR 1942-1943.

To the Members of the Chapter.

Your Board has pleasure in submitting its Annual Report. The Board for the year [i.e., from March 15th, 1942, to March 15th, 1943] consisted of:

MEMBERS PRACTISING SOLELY AS QUANTITY SURVEYORS: Professor Bell-John, Messrs. Axel A. Bjorkman, C. L. F. Borckenhagen, Dudley S. Mann, W. A. McKechnie, T. Moore, G. P. Quail and P. M. Roos.

"**DUAL MEMBER**": Mr. R. Howden.

SALARIED MEMBERS: Mr. Leo C. Austin, Dr. E. J. Hamlin, and Mr. R. J. C. Prentice.

The Officers elected for the year were: President, Mr. P. M. Roos; Senior Vice-President, Mr. W. A. McKechnie; Junior Vice-President, Mr. T. Moore.

BOARD MEETINGS. During the year [up to and including March 8th, 1943] there were 15 meetings of the Board, in respect of which the following is the attendance record: P. M. Roos, 15; T. Moore, 15; G. P. Quail, 15; W. A. McKechnie, 13; Dudley S. Mann, 13; Axel A. Bjorkman, 11; Leo C. Austin, 10; R. Howden, 9; Dr. E. J. Hamlin, 7; Professor Bell-John, 6; C. L. F. Borckenhagen, 5; R. J. C. Prentice, 1.

[Note: The attendance of Mr. Prentice and Dr. Hamlin was affected by the pressure of their official duties, because of the War.]

THE CENTRAL COUNCIL. The following members represented the Chapter on the Central Council of the Institute, during the year: T. Moore (alternate: Dudley S. Mann); C. L. F. Borckenhagen (alternate: P. M. Roos).

Mr. R. J. C. Prentice, in his capacity as Union Government Quantity Surveyor Nominee, has a permanent seat on the Central Council (alternate: C. H. Deighton).

Mr. Borckenhagen was elected Vice-President-in-chief of the Institute and Chapter, and re-elected Chairman of the Executive Committee of the Central Council, for the Session 1942-1943.

THE BOARD OF EDUCATION. The Chapter's representatives on the Institute's Board of Education (formerly the "Standing Committee on Education and Examinations" are):

For 3-year term of office: Dr. E. J. Hamlin (alternate: Mr. G. P. Quail).

For 2-year term of office: Mr. Leo C. Austin (alternate: Mr. Dudley S. Mann).

For 1-year term of office: Mr. W. A. McKechnie (alternate: Mr. Axel A. Bjorkman).

FINANCE COMMITTEE. The Finance Committee during the year consisted of Messrs. P. M. Roos (Chairman), Leo C. Austin, Axel A. Bjorkman and G. P. Quail.

"STANDARD SYSTEM" SUB-COMMITTEE. The Board's Sub-Committee on the Revision of the "Standard System" consists of Mr. Leo C. Austin, Mr. Dudley S. Mann, Mr. T. Moore and Mr. R. J. C. Prentice.

CHAPTER'S MEMBERSHIP. The total membership of the Chapter, compiled as at March 8th, 1943, is 190, classified as follows:

Practising Solely as Quantity Surveyors	64
"Dual" Practising Members	22
Salaried Members	68
Retired Members	28
Absentee Practising Members	4
Honorary Members	4

(Included in the total figure of 190 are nine members whose names do not appear in the Year Book, in terms of Regulation 74.)

OBITUARY. The Board has to record, with deep regret, the passing* during the year of Professor Bell-John, who will be affectionately remembered as the father of Quantity Surveying Education in South Africa; Mr. N. T. Cowin, one of the pioneer Quantity Surveyors of South Africa; Mr. W. M. Warne, a retired P.W.D. Quantity Surveyor; Mr. D. Watson, formerly of the P.W.D., and recently in private practice; and Mr. A. E. du Toit, who was Rector of the University of Pretoria when Quantity Surveying Courses were first established.

ROLL OF HONOUR. With equal regret, the Board has to record the following casualties, during the year: Killed on Active Service: F. J. Ball, G. H. Hetherington, D. C. Michie, and B. F. Vink (all Quantity Surveying Students). Wounded: H. F. E. Banks. Prisoners of War: D. J. Beveridge, E. T. Dobson, H. Muller, W. L. Paul, P. J. Culligan and R. B. Jackson (Students).

ROLL OF SERVICE. The following (from the information furnished to the Board) is a list of members and students on Active Service. Members: Adams, L. W. A.; Aitchison, R. H.; Banks, H. F. E.; Bannerman, T. A.; Beveridge, D. J.; Bell, R. F.; Blandy, R. H. F.; Bock, H. A.; Caplan, D.; Castleton, J. W. S.; Clark, J. W. M.; Clark, T. J. H.; Cohen, J. H.; Cornelius, M. E.; Cosser, S. F. J.; de la Cour, L. D.; Dobson, E. T.; Duncan, D.; Dunlop, A. D.; Durrant, G. R.; Ellis, W. R.; Falconer, A. T.; Francis, G. A.; Golder, M. J.; Gregor, A. G.; Harrison, Roger; Hodge, J. Seaton; Hope, R. W.; Hope-Jones, I. E.; Jones, A. T.; Law, N. R.; Martin, L.; Middleton, W. E.; Morse, H. M. R.; Muller, H.; Norton, J. L.; Nottingham, H. W.; Paul, W. L.; Quail, J. O.; Roos, J. D.; Rose-Price, T. R. F.; Simmons, G. E.; Sinclair, D. M. (Jnr.); Somers-Vine, S. C. F.; Stewart, R. I. M.; Sutherland, J. B.; Turner, G. E.; Usher, W. A.; Ward, O. L.; Welsford, W. T.; Wickens, W. A.; Willcox, A. R.; Wood, B. F. D.; Yates, F. G. Students: *Ball, F. J.; Culligan, P. G.; du Toit, R. H.; Foley, P. B.; Gamley, C.; *Hetherington, G. M.; Jackson, R. B.; Lewis, G. R.; *Michie, D. C.; Platt, T. J.; Puntis, H. A.; Sheppard, H. C.; *Vink, B. F.; Winstanley, W. E.; Wright, V. E.

* (Died on Active Service.)

NEW ENROLMENTS. During the year there were seven new enrolments, viz.: (As Salaried Members), Miss W. J.

Munks, Johannesburg; J. H. Cohen, Germiston; L. J. Millard, Johannesburg; S. D. van der Merwe, Johannesburg; V. C. N. Grant, Johannesburg; C. H. D. Crosthwaite, Pretoria; and as a Practising Member, R. F. Bell, Pretoria.

QUANTITY SURVEYING EDUCATION. The Board, on behalf of the Profession, extends its congratulations to Professor A. L. Meiring, A.R.I.B.A., M.I.A. (formerly of Cape Town), on his appointment as Professor of Architecture and Quantity Surveying at the University of Pretoria. The Board looks forward to the same close and helpful collaboration between the University and the Profession as characterised the regime under the late Professor Bell-John.

The University of the Witwatersrand (now that the "gentleman's agreement" between the two Universities has been terminated) will continue with its own Degree and Diploma Courses in Quantity Surveying.

QUANTITY SURVEYING STUDENTS. The following figures indicate the numbers of Quantity Surveying Students who attended the Universities of Pretoria and the Witwatersrand, and Cape Town, during 1942:

	University of Pretoria.	University of Witwatersrand.	University of Cape Town.
Degree Course	7	5	1
Diploma Course	15	16	—
	22	21	1

There are, in addition, Quantity Surveying Students in other parts of South Africa, in the offices of governmental authorities and/or practitioners, studying for the examinations of the Chartered Surveyors' Institution.

During the year the following Students completed the requirements of the University of Pretoria:

Degree Course: R. F. Bell (Dist.), and J. T. B. Viljoen.
Diploma Course: R. W. S. Close, J. A. R. Gaisford, L. V. Vivian.

THE WAR. The problems affecting the Profession, created by the War, have increased the administrative work required of your Board. There were, for instance, 15 meetings of the Board (apart from two Joint Meetings with the Executive Committee of the Central Council) during the year under review, as compared with 10 meetings during each of the two preceding years.

"COST-PLUS-PROFIT" INQUIRY. In view of the detailed attention given to the "Cost-plus" Inquiry, in Parliament and in the Press, your Board only wishes to state: (i) that a detailed memorandum was submitted to the Committee of Inquiry on behalf of the Architectural and Quantity Surveying Professions; (ii) that this memorandum was very favourably commented upon by the Inquiry Committee; (iii) that oral evidence in support of the memorandum was also tendered—a copy of the official record of which has been made available to members of the Chapter; (iv) that the main recommendation

put forward in the memorandum has received attention to the extent that the Quartermaster-General, on the instructions of the Prime Minister, convened a Conference of the Professions, Master Builders and Government Departments, in regard to the compilation of a Schedule of Rates for Defence Work in South Africa; and (v) that this Conference was held on January 27th, 1943, when it was unanimously agreed to appoint a Committee of Experts (of Architects, Quantity Surveyors, Master Builders and the Government), to investigate and report on the possibility or otherwise of introducing the Schedule of Rates system into South Africa, on the lines followed in Great Britain.

DEPUTATIONS RE GOVERNMENT WORK. As the result of representations made to the Minister of Public Works (the Building Controller), and to the Secretary for Public Works, for the giving out of Quantity Surveying work to the Profession, the Board has agreed to a War-time Scale of Fees (which is fully set out in the Board's Minutes, Vol. XII, pages 29-30).

The Board has reason to believe that a certain amount of Government work will in the near future be given out to practitioners.

QUANTITY SURVEYORS IN CONTROLLERS' OFFICES. During the year two members of the Board and one other member transferred their professional activities from private practice to assist in the Control of Building and Building Materials. Moreover, quantity surveyors in various parts of South Africa have performed a great deal of honorary work on the Local Advisory Committees set up by the Controller of Man-power. The Board knows that this work is much appreciated, and feels that the authorities are fortunate in having skilled professional services so readily available.

HON. LIAISON OFFICER. Mr. A. Stanley Furner, F.R.I.B.A., M.I.A., of Johannesburg, who for several months acted as Hon. Liaison Officer between the Department of Defence and the Institute, and Chapter, submitted a comprehensive and valuable report as the result of his investigations, to the Secretary for Defence. The thanks of the Quantity Surveying Profession are due to Mr. Furner for his efforts on its behalf.

After his appointment to the staff of the Building Controller, Mr. Furner relinquished his position as Hon. Liaison Officer, which post is now held by Mr. Douglas M. Cowin, A.R.I.B.A., M.I.A., of Johannesburg. An application by your Board for the appointment of a separate, independent Quantity Surveying Liaison Officer, is under consideration by the Secretary for Defence.

CHAPTER'S FINANCES. As will be seen from the audited Statements of Account, circulated to members, there has been a deficit of £11 10s. Od. for the year 1942, and the figure in respect of Unpaid Subscriptions at December 31st, 1942, is £160 6s. Od.

The Board is indeed grateful to those members who systematically and regularly pay their subscriptions and thus enable the Chapter to continue to function; also to those members who have generously sent donations to the Chapter's General Funds and to the Benevolent Fund. The Board can only express the hope that the many members who are in a position to pay their subscriptions, will realise their duty to their professional organisation.

VOTING BY PROXY. Members who, because of national or military duties, have been unable to vote directly, have been permitted to vote by proxy.

MISCELLANEOUS. Various other matters dealt with by the Board during the year—not specifically referred to in this Report—are set out in the Board's Minutes, copies of which are forwarded to every member of the Chapter.

APPRECIATION. The Board has pleasure in recording its appreciation of the care and attention devoted to the Chapter's welfare by your President, Mr. Roos, often at considerable self-sacrifice; and its appreciation of the assistance rendered to him by the Senior Vice-President, Mr. McKechnie, despite the latter's illness. And, once again, the Board records its cordial thanks to Mr. Moore for making his office available for its Pretoria meetings.

The Board once again records its appreciation of the willing and valuable services rendered by our Secretary, Mr. J. S. Lewis, and of the keen interest he displays in the many activities of our members.

REPORT OF THE PRESIDENT MR. P. M. ROOS, FOR THE YEAR 1942-3

It is not my intention to give you a resume of the Chapter's activities during my year of office, as the Board's work is fully reflected in its Report now before you, and in greater detail in the minutes which the Board has continued to circulate to all members. But one or two main issues stand out very clearly in my mind as affecting the profession of Quantity Surveying in particular.

During the past three years, we have seen a marked decline of private work, and a sharp rise in Defence Works. I can only express deep regret that the practising side of the profession was not made greater use of, as it is my considered opinion that our practising members constitute the backbone of the profession. I fully realise that it may be said that efforts were made to supplement the Government Staffs; but the emoluments offered were hardly commensurate with the sacrifices that would have had to be made by the private practitioner, or his staff. We are told that the response was disappointing; apparently many quantity surveyors preferred to answer their Country's call to arms.

I do not propose to dwell on the evils of the "Cost-plus" system, feeling that the position is adequately summed up in the Minority Report of the Commission, which reads as follows:

" This particular form of Contract has created an avalanche of abuse and it is daily gathering momentum and volume. It is a thoroughly bad system, bad for the State and public purse, bad for the building industry and equally bad for the economic structure and social equilibrium of the Country."

Again :

" The Director-General of War Supplies introduced from the outset an excellent system of cost investigation for all war supplies by utilising the services of cost accountants in private practice. Defence received a similar offer from the Architectural and Quantity Surveying Professions. If that offer had been accepted and their services utilised, much public money would have been saved and many abuses avoided."

However, as a result of the Commission's findings, representatives of various bodies, including your Chapter, were asked to attend a conference in Pretoria, convened by the Q.M.G. on the instructions of the Prime Minister, to discuss one of the recommendations put forward by the Commission, which in fact is the recommendation put forward by your representatives at the original inquiry. I refer to the " Schedule of Rates " system.

We came away from that Conference with the hope that at long last our professional organisation was being utilised in the National War Effort. But, once again, we were wrong. Despite the unanimous resolution of the Conference, to appoint a Committee of Experts to investigate the possibility of introducing the " Schedule of Rates " system into South Africa, on the lines so largely followed in Great Britain, we are now belatedly advised by the Q.M.G., that the appointment of this " Schedule of Rates " Committee has been abandoned. On this point, you will remember the Press report of the reply of the Prime Minister, a week or so ago, to the question put by Mr. Leslie Blackwell, to the effect that the cost-plus-fixed-fee system is to apply to urgent Defence works.

Not only has the civilian section of our Profession been so unfortunately treated, but it has now apparently been ruled that no quantity surveying-officer with the S.A.E.C. in field companies will, in future, receive professional allowance ; and, further, that no quantity surveyor in a field company is to be considered for commissioned rank. According to my information, these suggestions—(I hope they are only suggestions, and not yet ruling)—compare very strangely with the recognition accorded to quantity surveyors in the Royal Engineers in Great Britain, and the extensive use there made of quantity surveyors' professional services.

Apparently the Committee which was permitted to sit in judgment on quantity surveyors was composed of engineers. It is difficult to understand how members of one professional body should so seriously criticise the status of another body to which professional status has, for 16 years, been granted by the law of the land, which professional status has been consistently recognised by the Government, by the Public Service Commission, by our Courts, and by our Universities.

I feel that this undignified and unwarranted attack on the

profession of quantity surveying must be fought with all the resources at the Chapter's disposal, and it is essential that members of the Chapter should be accorded the same professional recognition in the military sphere that they enjoy in official and civilian life.

I wish to thank Mr. Douglas Cowin, the Liaison Officer between the Institute and Chapter and the Department of Defence for bringing this unfortunate matter direct to the Chapter. I also wish to thank him for the interest he has taken in the welfare of the Chapter as a professional body, and especially in its members on Active Service.

This complete disregard of our profession is all the more perplexing, when one realises that the Government and Defence Authorities, by virtue of the manner in which contracts costing millions of pounds are placed, in all probability rely on the advice of a quantity surveyor. And again, when Control of Building was introduced, it was a quantity surveyor who was chosen to administer the Control of Building Materials.

I look forward to a discussion at this Annual General Meeting on these very serious issues.

I, personally, feel that, as a result of the War in Africa and in view of our fortunate geographical position, we should perhaps now concentrate our efforts on post-war schemes and conditions as envisaged by many reports that have appeared in the Press of late, at the same time never to lose sight of the main issue, that is, to bring the War to a victorious conclusion. If it appears selfish, to consider post-war schemes at this juncture, I would say that, in any event, no harm can be done in paving the way for the re-absorption into the profession of our members and students on Active Service when they return.

At the beginning of the year your Board made history, in that it adopted a method, put forward by Mr. Bjorkman, of ensuring a complete and democratic vote for every officer of the Board. This leads me to express the opinion that, while the practice known as "plumping" is allowed in voting for the Board itself, your Board is not elected in accordance with true democratic principles. This matter has been discussed with me by members, and I feel that a ballot paper which contains less than 12 votes should, by regulation, be declared invalid. I shall welcome the views of this General Meeting on this matter.

In conclusion, I would like to express my appreciation of the assistance that members of the Board have given me during my year of office, also for the excellent work that several have done ; this work in some cases may appear to have been abortive, but I feel that our disappointments will spur the endeavour to achieve greater recognition for our profession. And finally, I would be found wanting if I did not mention your Secretary, Mr. Lewis, his work behind the scenes can only be appreciated by those who are in continual touch with him ; his unstinting efforts, advice, and guidance during my year of office will indeed be a pleasant memory.



ALBERT KAHN - A TRIBUTE

News of the death of Albert Kahn, on December 8th, 1942, was first announced to this country in the Journal of the Royal Institute of British Architects of that month.

We wish to take this opportunity of paying tribute to this great man, who has been an outstanding figure in the sphere of contemporary industrial architecture. At the time of his death, he, the head of one of the largest architectural planning organisations the world has yet seen, was in the midst of the greatest industrial programme ever entrusted to a private architect.

Albert Kahn was a member of a large family which went to America to seek a better fortune. His childhood was marked by the struggle of the family against poverty, he received no formal schooling after the age of eleven, when, to assist in providing for the needs of the family, he had to work, doing one job by day and another by night.

His early architectural career was marked, too, by hard experience and a rigorous training. As an office boy he was sacked because he showed no artistic promise. When he received the flattering offer of a job with Louis Sullivan in Frank Lloyd Wright's place he refused as he felt he could not do justice to the position and a large family was dependent upon his earnings. There is, too, the story of his winning a travelling scholarship which took him to Europe "where he was so bewildered by the profusion of masterpieces that he did not know what to do until Henry Bacon took him in hand."¹ It is perhaps this early struggle that developed in Albert Kahn the vigorous and strongly ambitious personality that won him his ultimate success, and which equipped him with his characteristically "functional" and realistic approach to the problems with which he was to be faced. When first he was commissioned to design a factory there were no "artistic" scruples to stand in his way. As he himself remarked of that notable occasion, "When I began, the real architects would design only museums, cathedrals, capitols, monuments. The

office boy was considered good enough to do factory buildings. I'm still that office boy designing factories, I have no dignity to be impaired."²

It is interesting to note the significance of that remark to-day. Then architecture was suffering from the meaningless confusion of invariably arbitrary ornamentation, when, "style followed style with such senseless rapidity that the architect's only salvation was a well-stocked library," and when "the architect himself lost his significance as a master builder and became a fashionable exterior decorator, finally sinking to a point where he could design for no better tool than the jig-saw."³

To-day Kahn's organisation is one of the few that have been able to meet the demands of industrial expansion, not only in America, but at points all over the world, with equal facility. To-day this organisation has been instrumental in contributing magnificently to the American war effort, by reason of the fact that the extraordinary efficiency they have displayed in the creation of large industrial plants has resulted in their being entrusted with the present enormous programme. And that is not all, for there are hundreds of Kahn's factories serving a like purpose in South America, Australia, Canada and more particularly in the Soviet Union.

Kahn's radical approach to the problems of industrial design is well illustrated by his first factory, the Packard building. He departed from the accepted standards of construction of the period and designed the building with a reinforced concrete frame and used large steel windows specially imported from England. This was indeed a pioneering effort when it is recalled how little was known of reinforced concrete design in 1903. It was the first factory in America in which this construction had been used, and it was the first in which there was adequate fenestration and where the layout of the building permitted the efficient co-ordination of the production departments. This building established a new set of standards

for structural and factory design and there soon followed a greatly increased development in the use of concrete and steel in building.

At this time an interesting parallel development was taking place in Europe, and in Germany in particular, where industrialisation—long delayed—was undergoing a violent development. Here Peter Behrens emerged as a leading figure. Sigfried Giedion says of him, "He rapidly became famous as a result of approaching the industrial plant as an architectonic problem, Behrens consequently transformed the factory into a dignified place of work."⁴ He saw the vital significance of and "the expressive forces concealed in such new materials as steel and glass, as his Berlin turbine factory of 1909 shows."⁵ Shortly after this Gropius, who had been working in Behrens' atelier, opened his own offices. His first commission was from the Fagus works. "The shoe-last factory which he built for them at Alfeld a.d. Leine in 1911, was a sudden and unexpected statement of a new architectural language."⁶ Here, unlike the contemporary American work there was no suggestion of the lingering trappings of an earlier classicism and no hint of stylistic detail. Like Kahn's early industrial architecture, this new statement sheared through the transition, in spite of the fact that the approach of these two men lay along different paths—that of Gropius resulting from the radical standpoint of a researcher and philosopher in architecture, that of Kahn from his concentration on the economics and technique of factory design.

Following the war of 1914-1918, American production methods, particularly those of the automobile industry, underwent a drastic change with the introduction of mass-production technique. As the old methods were scrapped and the new systems were introduced the factory designer was faced with a whole set of new problems—problems without precedent. The small bays of the old factory with their insistent and repetitive column spacing were a serious handicap. Mass-production required large uninterrupted floor areas. Large spans were imperative and as a result structural systems underwent a pronounced change; reinforced concrete gave way to steel, and structures like the recent Assembly building of the Glen L. Martin Co. were achieved.

Kahn lived in Detroit, the home of the automobile industry, and as his clients included such imposing names as Ford and Packard, and as the mass-production technique developed by the automobile industry rapidly influenced other industrialists, he was soon to gain the reputation of an outstanding designer of the new type of building. His fame spread, he became the architect for a large number of General Motors' buildings, for Republican Steel and for Chrysler at that firm's inception; his other commissions included plants for such a diversified range of products as food, cosmetics, clothes, textiles, business machines, cement and chemicals.

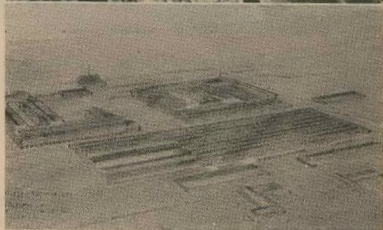
He, perhaps sooner than others, saw the implications of this revolution in factory design. No longer was it feasible to erect the factory on a convenient transport system whether it be a dock or railway siding; future development had to be



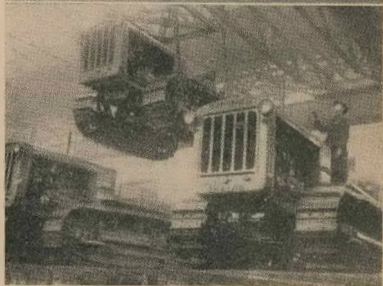
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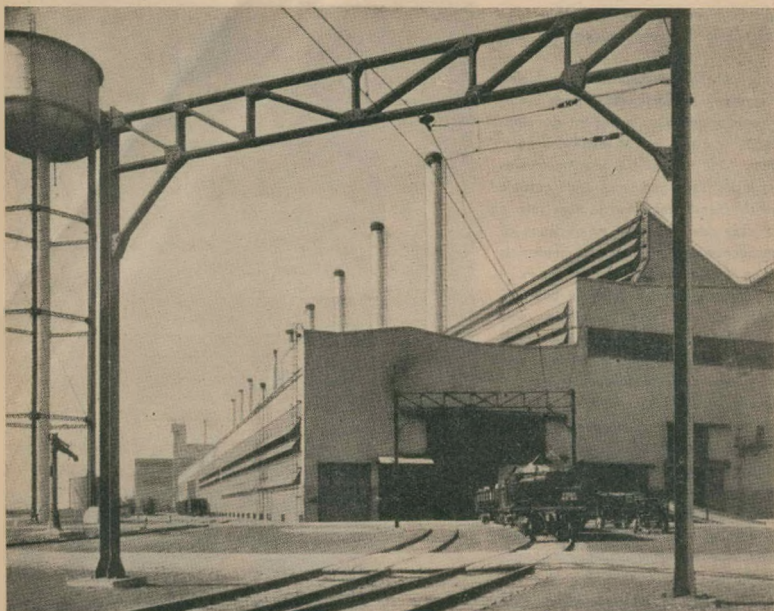


3



4

- (1) A factory building of 1908.
- (2) A well-lit interior of 1912.
- (3) Stalingrad U.S.S.R. (Photo: Jeffery White).
- (4) Cheliabinsk, U.S.S.R. (Photo: Sovfoto).



The great River Rouge plant for the Ford Motor Company at Dearborn, Michigan, is an impressive example of Kahn's earlier industrial work. This illustration of the open hearth steel mills shows only a part of the enormous factory area in which is concentrated all the production departments and operations necessary for the manufacture of the famous motor car.

taken into account. Not only was there a more careful use of the site but there arose the new policy of organising the whole plant under one roof, "a building which could be indefinitely extended without interrupting production. This idea, one of the most important of the Kahn organisation, is radically different from the old scheme which provided a separate building for every process, and as much as any single feature it gave the modern factory its distinctive character."⁷

Albert Kahn had been consistently building up the organisation of his great planning group known to-day as Albert Kahn Inc., which from the point of view of the numbers employed, the co-ordination of the executive and technical departments, and its amazing planning and design potential is without precedent and is, almost without exception, unique. It is a most significant indication of the manner in which future architectural planning in large-scale national and industrial developments is bound to have to function. In respect of national undertakings we have the American example of the Tennessee Valley Authority which functions with such pronounced success as a result of the highly co-ordinated and interrelated planning, technical and administrative departments, and in which archi-

tects have played an important rôle. For an example of a different character in which the same co-ordination of technical efficiency was brought to bear, there is the significant creation of the "Greenbelt Towns" in the United States.⁸

Albert Kahn as a private practitioner has proved these methods in practise. Not only is this organisation the acknowledged leader in the field of industrial design, they have also attained the rank of specialists in hospital design; and their versatility has enabled them to include in their accomplishments the design of schools, banks, theatres, clubs, hotels and office buildings.

It was in 1928 that the firm was faced with its most severe test of speed, flexibility and competence. A group of Soviet engineers came to Kahn's office unannounced "with an order for a \$40,000,000 tractor plant, and an outline program for an additional two billion dollars worth of buildings."⁹ A number of factories were designed in Detroit but the great majority were carried out in a special office in Moscow with a staff of 1,500 draughtsmen, many of whom had to be trained by the firm's representatives. That was not all, for "not only did the plants have to be designed, but machinery had to be selected

and ordered, process layouts had to be prepared and the very tools evolved here (America) and shipped over."¹⁰

During the course of construction of these factories the firm had to contend with the difficulties of a labour force which consisted chiefly of raw peasants, with inaccessible building sites, with building sites located in virgin forest and with an inadequate transport system. In recent times, too, with the enormous expansion of war industries in America, Kahn and his associates were again faced with a colossal building programme. Last year the firm designed and supervised the construction of more than sixty new plants, amounting to 20 million square feet in total area.

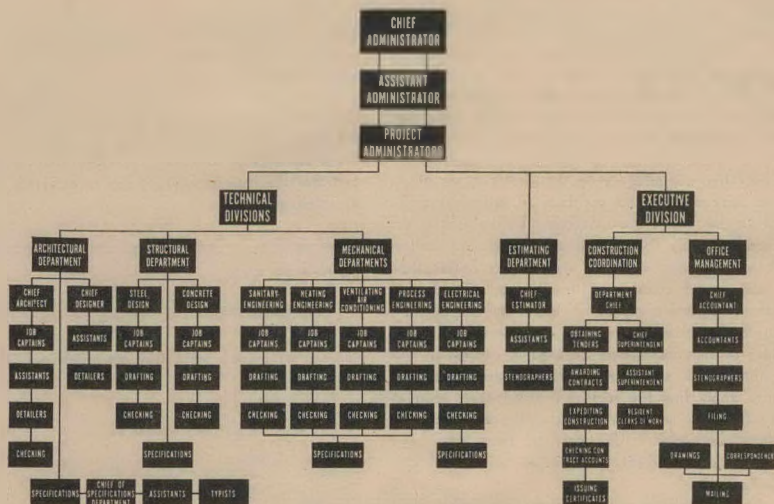
Normally the firm employs about 400 men and women—secretaries, stenographers, typists, accountants, mechanical and electrical engineers, field superintendents, specification writers, estimators, and 175 architectural designers and draughtsmen. Last year the numbers had increased to over 600 and the organisation was still expanding.

The manner in which the firm conducts its practise is well illustrated in the story of the planning of the Glen L. Martin building as published in the "Architectural Record," under the title of "Producer of Production Lines."

"It was on Tuesday, February 5, 1939, that Albert Kahn received a telephone call from the Glen L. Martin Company, Baltimore. 'Can you furnish plans quick enough for us to put up a 440,000 square feet building by May 1?'"

That was quite an order; a mammoth aircraft factory building to be ready for use in 84 days. But Kahn was prepared to answer, "Yes." . . . After receiving the long-distance call from Baltimore, Kahn and members of his organisation left Detroit immediately for the East. They arrived at the Martin plant Friday morning, February 6th, and set to work immediately, aided by a general plan and details that had been worked out by Martin engineers. The structural steel contract was negotiated at two o'clock Saturday afternoon. Later the same afternoon, the excavation contract was let to a company that agreed to move 83,000 cubic yards of wet clay from the site of the building within an eight-day period. Within the next few days still other important contracts were awarded. And on February 16th, the concrete footings for the new building were poured.

"On April 23, only 77 days after word had been given to go ahead with the building, the manufacturing area was under roof and well enclosed, and machines were being set in place. Actual manufacturing was started April 27, just 81 days after February 5. So was set, not only a building record, but a production record as well, for a million dollars worth of tools had to be ordered and installed as construction work proceeded. . . . In telling how it was all done, Mr. Kahn stresses three elements—organisation, teamwork and business management. It is the hard-hitting teamwork of real specialists."¹¹





Typical of the recent work of the Kahn organisation is this great plant for the mass production of aircraft. It consists of a huge manufacturing building, an engineering building and an administrative building, all linked together for the maximum co-ordination of operation.

Albert Kahn has played a vital rôle, he has shown how the merging of architecture and engineering has produced an entirely new type of building and, what is more, he has established the architect as an important factor in industrial building. It is he, perhaps more than any other single individual, who has been instrumental in the creation of this new industrial architecture.

It is an interesting commentary on the man who has shown so radical an approach to the problems of industrial architecture, that in the firm's non-industrial practice there has been a marked tendency to revert to a contradictory policy, based on Kahn's statement that "evolution is better than revolution" and to fall back upon the "re-use of well-tried forms." This retrogressive policy, if one may call it that, is evident in the eclecticism displayed in much of this work. There is a lack of the fine quality of organic expression and inevitability that marks so much of his industrial work. It would seem to imply that the factory is still looked upon as something apart from "normal" architectural practice by this firm—a strange concession to the past by those who have shown themselves so remarkably progressive, skilful and versatile in other respects.

However, the degrees from universities, the decorations from governments, and more recently, the high honour bestowed upon Albert Kahn by the American Institute of Architects at their annual convention held in Detroit in June last year,

when, on the presentation of a special medal, he was named "United Nation's No. 1 War Plant Designer" have been richly deserved.

Albert Kahn's epitaph, both as an individual and as the head of this great organisation, might well be drawn from the words of the "Architectural Forum":

He saw that architecture is bigger than an individual in it, and that the true measure of any professional is his usefulness as a citizen.

W.D.H.

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1. George Nelson. *Industrial Architecture of Albert Kahn, Inc.*; Architectural Book Publishing Company, Inc. (New York, 1939); p. 16.
2. *Ibid.*, p. 17.
3. *Ibid.*, p. 8.
4. Sigfried Giedion, *Space, Time and Architecture*; Harvard University Press (Cambridge, Mass., 1942); p. 386.
5. *Ibid.*, p. 386.
6. *Ibid.*, p. 390.
7. George Nelson, *op. cit.*, p. 11.
8. Cf. *South African Architectural Record*, Vol. 27, No. 12, December, 1942. M. L. Bryer, "The Tennessee Valley Authority—An Experiment in Regional Planning" p. 369 et. seq. And, R. Kantorowich, "A Report on the Greenbelt Towns in the United States of America," p. 385 et. seq.
9. George Nelson, *op. cit.*, p. 18.
10. *Ibid.*, p. 18.
11. *Architectural Record*, Vol. 91, No. 6, June, 1942, "Producer of Production Lines," p. 39 et. seq.
12. *Architectural Forum*, Vol. 78, No. 1, January, 1943, "Albert Kahn, 1869-1942," p. 36.

CAPE PROVINCIAL INSTITUTE OF ARCHITECTS.

A summary of the Report of the Committee for 1942 of the Cape Provincial Institute of Architects is included here as it arrived too late for publication in the April issue.

MEMBERSHIP. The membership at the close of the year consisted of 112 Practising, 51 Salaried, 14 Retired, 3 Absentee and 1 Life Member, a total of 181 members.

The death is recorded with deep regret of Mr. S. W. Whitmore.

MEETINGS. At the first meeting of the Committee, Mr. Hubert L. Roberts and Mr. Fred. M. Glennie were re-elected as President and Vice-President respectively for the year under review.

The following is a record of members' attendances at Provincial Committee meetings of a possible 13: Martin Adams, 5; K. V. Commin, 13; R. E. de Smidt, 13; L. Marriott Earle, 12; Fred. M. Glennie, 9; E. G. Hart, 8; A. L. Meiring, 10; Hubert L. Roberts, 13; L. W. Thornton White, 9.

CENTRAL COUNCIL. Messrs. Hubert L. Roberts, Fred. M. Glennie and E. H. Stevenson represented the Cape Provincial Institute and the Committee wishes to express its thanks for their services.

THE PORT ELIZABETH LOCAL COMMITTEE OF ARCHITECTS. Mr. E. H. Stevenson, L.R.I.B.A., remains Chairman of the Local Committee with Mr. H. J. Tanton, A.R.I.B.A., Vice-Chairman, and Mr. F. Owen Eaton, F.R.I.B.A., Honorary Secretary and Treasurer.

THE SCHOOL OF ARCHITECTURE. The number of students attending the Architectural and Quantity Surveying classes at the University during 1942 was 83. Of the Architectural Students, 24 were first year, 15 were second year, 17 were third year, 7 were fourth year and 19 were fifth year students. There was 1 third year Quantity Surveying student. During the year 4 students passed the final examinations.

MEMBERS EMPLOYED IN TEMPORARY WAR INDUSTRIES.

All members of the Transvaal Provincial Institute who are employed in temporary war industries are asked to notify the Acting Secretary at their earliest convenience.

SCIENTIFIC NEWS LETTERS.

The following is a copy of a letter from the Secretary of the Associated Scientific and Technical Societies of South Africa, addressed to the Transvaal Provincial Institute.

"The United State Government Office of War Information is kindly furnishing us with two copies of each issue of their Scientific News Letters, which copies are available to members in the Club Reading Room. The news letters contain information on physics, psychology, biology, farming and genetics.

"I shall be glad if you will advise your members that should they wish to borrow copies of these news letters, they may be procured on application to the Secretary, or in the event of any member wishing to receive copies of the News Letters regularly, I shall be pleased to advise the United States Government Office of War Information to this effect.

Yours faithfully,

(Signed) E. ADAMS,

Secretary.

ARCHITECTURAL DRAUGHTSMEN.

A firm of architects in Johannesburg requires two competent architectural draughtsmen. Applications, stating experience and qualifications, should be addressed to the Secretary.

ACKNOWLEDGMENTS.

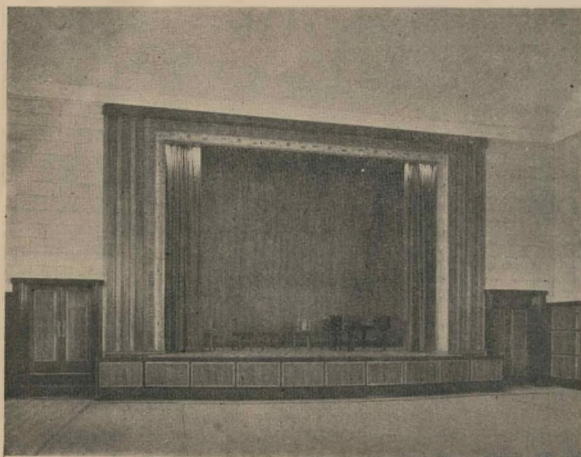
Frontispiece: Rio de Janeiro, The Sugar Loaf, from "Brazil," by Peter Fuss, Atlantis-Verlag (Berlin, 1937); Illustrations on pages 104, 105 and 106, from "The Industrial Architecture of Albert Kahn Inc.," The Architectural Book Publishing Co., Inc. (New York, 1939); Illustrated on page 108, from "The Architectural Forum" (New York), June, 1942.

THE SELBORNE HALL, JOHANNESBURG

ANOTHER EXAMPLE OF THE CRAFTSMEN'S INTERPRETATION
OF THE ARCHITECT'S DESIGN

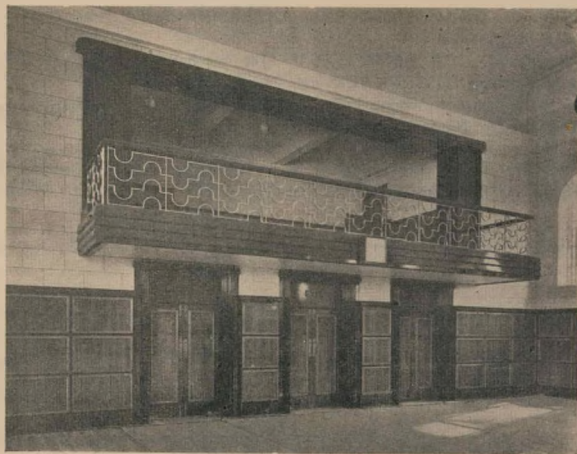
BY

SAGE



Proscenium formed with fluted polished Walnut pylons, Teak capping member, Zebrano architrave with the illuminated section of same faced with a polished Bronze Metal grille. The curved background is of Walnut with an eggshell finish.

The general wall panelling is of Teak and Walnut relieved with ebonised Mahogany and Yellow Wood mouldings. All exits are flanked with fluted ebonised Mahogany pylons and a moulded capping member of the same material. Doors are in Walnut relieved with Yellow Wood bolection moulds and Bronze door furniture. Balcony grille is of polished Bronze.



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