



BUILDING.



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CHAIR OF ARCHITECTURE.

A Chair of Architecture at the Johannesburg University College will shortly be established. The inception of the movement is due to our immediate Past President, Mr. D. M. Burton, and has been brought to fruition by the energies of a special committee who have had the matter in hand for some time past.

The deputation which met the University authorities has now been advised that the Minister for Education intends making provision in his forthcoming estimates for the establishment of a Chair of Architecture providing the Architectural profession will guarantee approximately £1,000 over three years.

The necessity for this provision is on account of the Architectural classes not being self-supporting in their early stages, and additional funds are required to cover necessary expenses, apart from the professor's salary.

Since the funds of the Association may not be used for this purpose, it was decided to make a personal appeal to each member for a donation. This appeal has been made, and so far a very generous response has resulted, and the Council have every confidence that the amount required will be donated at an early date.

The Council feels that the education of young men who will enter the profession will appeal most strongly to every member of the Association, and that each one will desire to contribute in some measure to this fund.

This movement is the greatest advance yet made by the profession in the Union of South Africa, and the advantages for the future of Architecture in this country are too obvious to dilate upon.

In making this appeal to our members, it is pointed out that with the provision of the amount previously mentioned no further financial liability will devolve upon the profession, and members who have not yet communicated the amount they are prepared to donate are asked to do so within the next few days to enable the establishment to come into effect at the earliest possible moment.

All communications and donations should be sent direct to the Registrar.

DESIGNS OF TOWN HALLS AND OFFICES.

By F. H. WAUGH, A.R.I.B.A.

An experience of close on quarter of a century of association with various municipal buildings as a worker in them, and also the fact of having been connected with the promotion of several schemes for new buildings in various towns, leads the writer to offer a few observations which are frequently overlooked by the average planner and designer. Where municipal buildings are erected there is invariably a large assembly hall and offices, and it is on such schemes that the following remarks are offered. For the sake of pith they are epitomised.

1. Every such building should have a good-sized yard or court of good shape, and if practicable so that vehicles can drive through from one side and out at the other, or at any rate be able to turn round to go out by the entrance.

2. This yard should be surrounded by the buildings if on an island site (most of such buildings are on island sites). This preserves amenity of outward appearances. Nothing looks worse than an attached yard tacked on to the outside.

3. (a) The hall should be architecturally attached to the administrative block but be an independent unit in plan. This does not preclude a subsidiary door between offices and hall, but the main hall entrance should not be through the offices which should be capable of being shut up at night in such a way that the public cannot roam about them when work is over. This is most essential and damns buildings designed with the offices around the hall or approaches to hall between the offices.

(b) The main entrance to hall should be direct to front of hall from street without turns or long passages. Side entrances must only be supplementary. Vestibules in front of hall entered from the sides and not from the front are bad, making an audience turn at

right angles when leaving, causing confusion and blockage.

4. All corridors either for hall or offices should be as straight as practicable and without turns or elbows except at main corners of buildings, where they are unavoidable.

5. Entrances to administrative block should be as few as possible. If building is of moderate size only, one main entrance and a subsidiary back entrance from courtyard. The entrance the public are most likely to use every day should be the main entrance and should be suitably treated. This is to be gained as in 6.

6. The revenue office is the most public chamber. To it the great majority of the public go. It should therefore be placed near main entrance.

7. The town clerk's offices (if town clerk is also treasurer) should take next precedence. It is not essential that the town clerk be next a committee or council room. Committee meetings form the least part of his work. Most of his time is taken up with the administration, and his Staff should be around him. Prior to Town Clerk in precedence comes the Town Treasurer (if any), who should be near revenue hall.

8. The Mayor's room should be convenient for the public and near council and committee rooms.

9. Offices dealing with assizing, vehicles, etc., should be on ground and in the courtyard if practicable.

10. Pay office for paying men should be on ground near back entrance and have windows on to courtyard, as natives also have to be paid and should not be brought into buildings. In large municipalities many hundreds of men in working clothes at times crowd around the pay office, which should be arranged so that they will not block up corridors. Arrangements for natives are nearly always forgotten.

11. Council and committee rooms should be grouped together. In large towns where street noises are great they are therefore best placed in interior parts of the building. In such towns the public gallery in council chamber should not be approached through office block but independently from without, so that public cannot wander about the offices at night. If council chamber cannot be placed in the interior it should be at quiet end of corridor beyond offices.

12. Reading rooms, libraries and such-like accessories of a civic building, which are frequently included in buildings for smaller towns, should not be approached by public from office corridors but direct from outside.

13. Where earth or pail closets are used they should be open to interior courts, but so that they can be emptied from without in such a way that the buildings are not open to entry by thieves.

14. Accommodation for natives for cleaning and

sweeping should be provided. Even in small buildings this is desirable, as there should always be an attendant present in such buildings at all times. This is often overlooked.

15. Fire stations are best altogether separate from municipal offices.

16. Halls for scenery and theatricals should have a straight passage or doorway at side of stage for bringing in framed scenery. Such halls should properly have sloping floors and the stage floor may also slope forwards a little. Unless hall floor is sloped the actors may not be properly seen when back from the stage front. It is not very practicable to have a hall for theatricals and for dancing, the latter requiring a level floor.

17. It would be wise if town councils requiring designs stated the accommodation required, but state no money limit at first. The cost is hard to estimate before plan is drawn, and if stated is nearly always insufficient. If sketch plans accepted provisionally cost more than the council can spend it is an easy matter to reduce.

18. Open-sided corridors with rooms on one side only have their limitations. If entirely planned so, the building is much spread out and the cost is increased and the distance between offices more pronounced. While each case will differ, it is probably correct that a judicious use of both single-sided and double-sided corridors will lead to the most compact planning.

19. A symmetrical balanced elevation is the best, and a dignified classical architecture most proper. The municipality is of Roman origin and achieved its first greatness in that world. Buroque and extravagant design should be avoided.

20. The central hall condemned elsewhere has also the drawback of being lighted near top only. If corridors for the use of hall only are placed around—which may be done if money allows—then natural ventilation becomes difficult and mechanical means must be provided. If no side corridors used, then the two opposite sides should be as free as possible to ground to give natural ventilation across hall.

21. Exits from halls necessary to meet by-laws should not be taken between offices. The only purpose of doorway from offices to hall block, mentioned elsewhere, is for extra ceremonial occasion when for instance the Governor-General or a Minister of State is to be conducted from mayor's room to hall for a meeting. Hence this connection should be an approach to the platform if possible.

Many of these points may appear obvious when one is told of them, but it is suprising how frequently they escape attention.

STUDENTS' COMPETITIONS.

DESIGN.

A prize valued £5 5s., donated by the President, Mr. D. M. Sinclair, M.S.A., will be given to the student who submits the best design for a small house consisting of lounge, living room, three bedrooms, kitchen, panty and bath room, to be erected upon a fairly level site of $\frac{1}{4}$ acre with a 200 feet frontage facing south.

The design may be either single or double storey, and must be illustrated by the following drawings:— Plan of each floor, one section and four elevations, to a scale of one-eighth inch to a foot, and detail of portion of one front to half-inch scale.

Drawings should be on Imperial size white paper unmounted.

CONSTRUCTION.

A prize of £5 5s., donated by Mr. E. M. Powers, F.R.I.B.A. (Vice-President), will be given to the student who submits the best drawing of Gothic stone vaulting, Thirteenth or Fourteenth Century.

The type of vaulting selected should be illustrated by plan, section and elevation of one Bay drawn to a scale of 4 feet to an inch, showing ribs and filling, springing and intersection of ribs and jointing.

MEASURED DRAWING.

A prize of £5 5s., donated by Mr. D. M. Burton, M.S.A., M.R.San.L., will be given to the student who submits the best set of measured drawings of the West Doorway, St. Mary's Church Hall, Plein Street, Johannesburg, and for the convenience of Pretoria students the subject chosen is portion of Interior of Chancel, St. Alban's Cathedral, Pretoria, showing Reredos.

The drawings are to be drawn to a scale of 4 feet to an inch, and executed in black ink only (no colour). The drawings to consist of elevation, plan and section, with $\frac{1}{4}$ full size sections of mouldings. Portures in sectional plan and elevation may be blacked in solid.

Permission to measure the work should be obtained from the Vicar of St. Mary or the Dean of Pretoria respectively.

All work submitted must be the bona fide work of the student submitting same and must be accompanied by a declaration to this effect.

The awards will be made by Messrs. R. Howden, M.S.A., A.R.V.I.A., and H. G. Veale, M.S.A., whose decision will be final.

All designs must be delivered to the Registrar, 67, Exploration Buildings, Commissioner Street, Johannesburg, on or before February 20th, 1921.

Obituary.

J. M. SOLOMON.

The tragic passing of Mr. Solomon has caused a profound shock to his many friends and admirers. To all outward appearance he had the world at his feet professionally. He had gone to great trouble and expense to acquire the best training and had by his own efforts raised himself at an early age to an outstanding position. He had been selected to carry out the great University scheme at the Cape, and the work was moving to fruition. He was well known in Johannesburg, where many years was spent mostly in association with the firm of Messrs. Baker and Fleming, and latterly as partner with Mr. Marshall, when the call to the University work came, some four years ago, and took him overseas studying and inspecting other great schemes. After this preliminary work he settled at the Cape to design the new buildings.



He was the first editor of this journal and was proposed to the committee by the writer. He was also a member of the Council for over a year. His temperament opposed itself vigorously to much of the machinery and organisation of the Architects' Association, and he hit out straight against the system of registration and finally resigned both as editor and councillor in a protest against what he considered the

hollowness of the whole fabric built up under the Architects' Act. Like many destructive critics, he produced no clear plan to replace that which he would have thrown down. With such vigour of view as he possessed he roused much opposition, but he consistently throughout his life inveighed against competitions and registration, and never deviated from his course. He fully believed in his own view and had no doubts.

As an editor he wielded a trenchant pen more given to violent attack on systems than to building up any definite line of policy beyond generalising that the Architects should create an educational force. His limoclastic methods extended also to the styles of architecture and he had a curious antipathy to Gothic, and once said to me that as long as he was editor he would have no Gothic in his paper, and he never did. I always thought he did not understand the spirit which evolved Gothic. With this unqualified dislike for Gothic he revelled in the classical, and while the shortness of his career prevented many concrete illustrations of his creative work, that which he has left behind indicate clear and refined thinking. He was a deep student and richly enjoyed art in all its forms, and I have often had rare treats listening to his observations on great works of the past and present. By his wide reading and travel he made himself a most attractive centre to cultured men in all the professions, and acquired a social influence which make the termination of his career the more difficult to understand. His early death has removed a figure which had attracted attention both inside and outside the profession, and it is not fulsome to say that he was a rising man whose personality had done great things in focussing the attention of the public on the best both in architecture and the allied and supplementary arts. The terms of high praise in which the public dailies have referred to him are an ample tribute to his work as a public educator, while we trust his University will be erected as a memorial of his ability as a designer.

E. H. WAUGH.

JOHANNESBURG BUILDING BY-LAW.

Notification has been received to the effect that the Administrator has sanctioned the amendment to the Johannesburg Municipal By-Laws, whereby in future, all plans submitted for buildings to be erected within the Municipality of Johannesburg must be prepared by Registered Architects only.

Proposed New University Buildings, Johannesburg.

REPORT TO THE WITWATERSRAND UNIVERSITY COMMITTEE, JOHANNESBURG.

We have the honour to report on the plans submitted in the competition for the above as follows:—

We award the premiums in the following order:—

No. 1 to design marked "10."

No. 2 to design marked "3."

No. 3 to design marked "13."

We have carefully considered the conditions of the competition, and in making our awards have been guided by the stipulations contained and the general spirit as reflected in the first two columns on Page 1 of "Information for Competitors."

We realised that the competition has afforded exceptional opportunities to the competitors, not only in that the proposed building will occupy a magnificent site, and one particularly suited to the purpose, but that the competitors were not cramped unduly by the conditions or fettered by the necessity of keeping the cost within a fixed limit although reasonable economy had to be kept in view. As regards the last point, we may state that good planning is inseparable from economic planning.

We have been forced to the conclusion, after careful study of the various plans, that Number "10" complies with the above considerations better than any other design submitted.

The central block, both from the front and back view, will form a fitting centre and culmination to the group of buildings that will ultimately form the complete University, and with the well proportioned tower will dominate the scheme as a whole.

Although this tower with its sumounting dome is in itself an expensive item, still it is one that can be added at a later date when the cost of building is not so high. We think the elevated site calls for some such feature.

The large dome for the Assembly Hall in design No. "3" would not adequately serve this purpose.

Incorporated in this design "10," is a Reception Hall. This is a feature which was within the discretion of the competitors, and it would be a nucleus to the institution and provide a general meeting spot and disseminating centre that would visualise, as it were, the soul of the University.

The author of No. "10" has not worked out the details of his design to the extent that other competitors have done, or that a strict interpretation of the letter of the conditions would call for, and in several points he has sailed somewhat wide of the stipulated requirements. For instance, he has omitted the draught of the second floor plan, although there is ample room over those portions of the first

floor that he proposed to utilise for the second floor to provide all the accomodation which he has omitted on the ground and first floors.

He has placed his Common Rooms on different floors. They are required in the conditions to be near or adjacent to each other, but he has placed them one over the other, and, although this complies with the conditions in the letter, it scarcely does so in the spirit.

Some rooms, e.g. the Council Chamber and Lecture Rooms, are much larger than necessary, while others, e.g., for instance, the Library, is smaller.

We have considered the general lines of the design rather than such details which we know can be altered and adjusted without departing from those general lines and principles, which, in this design, have met with our approval.

In the event of the author of No. "10" being asked to carry out the work, we would make the following suggestions.

The length of the main building might be reduced. As drawn it is so long that even if the side blocks were placed right up to the Service Road in each case only twenty feet would be left between such side blocks and the main building and thus after adding the extra 110 feet allowed the competitors, the elevation of the main block would be improved rather than otherwise by such reduction.

To assist this reduction in frontage we would suggest that the centre of the semicircle, forming the periphery to the Assembly Hall, be advanced to the front of the platform, and that the diameter of the semicircle be reduced accordingly, so that while the hall would remain the same area, it would not extend so far in an easterly and westerly direction.

Few of the competitors appear to have dealt with the levels of the site as shewn on the contour plan, with which each competitor was supplied. The only competitor who showed these levels completely was the author of No. "5", though he has not made much use of them. The author of No. "3" has shewn the fall from back to front, which exists, more or less correctly, and has made good use of it, but he has not shewn the considerable fall which undoubtedly exists from west to east. It will be found in actual working that there will be ample height to have a lower floor below the ground floor at the North East corner, but there will not be the same opportunity at the North West corner. The author of No. 10 might well make use of this fact, with considerable advantage.

The administrative offices should be all collected in the front and one of the wings on one side only of the Main Entrance and not be distributed on both sides of the Main Entrance as shewn.

The South West and South East arcade recesses of the Central Hall might be enclosed to give proper lobbies to the platform.

There are eight staircases in the main block and this number could be reduced.

We favour the treatment of the side blocks as in "10", and also in other designs, namely, so that they present a rectangular appearance externally, with internal light areas, and with toilet services off such areas, rather than the wing treatment as shewn in No. "13" and in others, because the complete scheme will be formed by various units, and these units should themselves be simple in external shape; otherwise if these various units have wide extending wings, a confusing and scattered effect would be introduced into the whole scheme.

The external effect of the side blocks of No. "10" will be very impressive, but we consider the re-entering angles which have been introduced into the laboratories a very undesirable feature.

We have placed No. "3" second. We think this is a very carefully prepared design, with much to recommend it. It would give a workable building for a university. The Assembly Hall is well incorporated in the main building, but the dome would not sufficiently dominate the scheme as a whole. It would only be seen favourably from some distance, and would be largely hidden and commanded by the side wings.

The circular Assembly Hall has much to commend it, but the occupiers of the southern portions of the gallery would be unfavourably placed for seeing and hearing what was taking place on the platform.

The south elevation of the western side block building does not harmonise with the southern elevation of the eastern side block and in any case the former elevation does not appeal to us.

We have awarded to No. "13" the third premium. This design fulfils most completely all stipulated conditions, but there are no direct exits from the gallery as are demanded by the local bye-laws, and with this type of plan, where the Assembly Hall is situated in the middle of the structure, and separated by courts and corridors from the rooms, etc., with which it is surrounded, it is not easy to fulfil the conditions of such bye-laws.

There is no Ambulatory along the sides of the Hall, though we think that such Ambulatory would be advisable.

There are long lengths of corridor without direct light, and the total length of corridors is excessive,

though by this means good cross access at the rear of the building is obtained.

No cloak-rooms for the public have been shown.

The fall of the ground has not been considered as the buildings have been shown as if on a level site.

There is a lack of breadth and continuity of line in the north or principle elevation of the centre block. This centre block is fitted with two domes, one in the centre of the north elevation and the other in the centre of the south. These domes are nearly alike, but not quite, and though it is true they would not usually be seen at the same time, the idea of this approximate duplication does not appeal to us.

The planning of the side blocks is very practical, but at the same time, as before stated, we prefer the rectangular treatment to the wing treatment, and as regards the north or principal elevations of these side blocks, we find it difficult in regarding them to resist the impression that we are looking at the back of the building instead of the front.

There are several good points in many of the other designs, but we have no hesitation in placing the three selected designs in the order given, and we feel confident that if the author of design No. "10" were entrusted with the work, Johannesburg will have University Buildings worthy of the great purpose for which they will have been erected and of the magnificent site chosen for their habitat.

We recommend that:—

- (1) That this report be read in public.
- (2) That subsequently the sealed envelopes containing the competitors' names be opened also in public in the order given and the names read out.
- (3) That the competitive drawings be on view for a period of at least two weeks.

E. H. WAUGH,
W. H. STUCKE,
JAN. H. HOFMEYR.
Assessors.

VEREENIGING TOWN HALL COMPETITION.

The Assessor's award in this Competition has resulted in the first premium being awarded to Messrs. Hawke and McKinlay of Cape Town and the second award to Mr. A. J. Stewart of Johannesburg.

The Assessor's report also that of the technical advisers together with the reproduction of the winning design, will be published in this Journal in December.

The Essentialities and Necessities of Art.

It is one of the mysteries of the human mind why art has become a joke to the self-satisfied, a bogey to the simple-minded, and a reality only to the student. Art has been relegated by peoples and Governments from the highest place in the realm to the outhouse of luxury or uselessness in fact, from reverence to a sneer. To suggest that even the street lamp-post be made beautiful as well as useful, or that there might be an artistic censorship on public signs, is to shock the man in the street or his representative in authority into indignation that "good money" should be wasted on the one, or that there should be such unnecessary discrimination in the second. And yet, how history contradicts this attitude, and how strongly do the greatest achievements of art stand out of sordid times and circumstances like lamps in the gloom! What should we care to remember of ancient Greece with her civil wars, dishonesties and superstitious, if it were not for her marvellous achievements in sculpture, architecture and literature? What would remain to us that is good of Renaissance Italy, with her indescribable villians and immoralities, if it were not for the glorious works of her Artists and Craftsmen? Hugging our ignorance of the Arts that made these countries great, ours will be a barren page in the history if we do not wake up to the fact that we are absolutely ignoring and decrying art while we are worshipping science, when in reality the two are inseparably conjoined and together are the springs of human development. Science may be said to represent that which reflects the reason and logic of divine creation, while art is the more spontaneous and intuitive expression of the wonders and beauties of this creation, and only in proportion as they both tend towards good, towards the spirituality of human thought and action, it is the one truly science and the other really art.

In this age art has been degraded to the picture on the wall, which is the very least part of art, while science has been magnified to include every kind of slipshod and indemonstratable guesswork. The war is a good object lesson of this unbalanced condition. In a moment of national stress and economy, the cry is "Destroy Art," it is barely alive as it is, and the few thousands spent on it must be saved, it is of no use, come, let us kill it. So every Art-Gallery is shut up and art subsidies cut off without a thought of the morrow or even of the present value of art in turning the public mind, even for a moment, from the nightmare to the reality.

The eternity of art is shown in the fact you can't kill it: otherwise, it would have died a thousand deaths; but it is a curious commentary upon our re-

puted progress and universal education that art is now about as vital to the man in the street as science was in the times of Galileo. And so we paper our walls with flowers, and carpet our floors with fruit, and drive nails into the one, and tread upon the other with the sublimest indifference, and ignore the protest that both are inartistically indefensible as the vagary of the highbrow or the eccentricity of the crank.

What is the matter with us is our unwillingness to learn. We think there is nothing to learn. Because we can see and hear to some extent, although we can neither see as well as a bird nor hear as well as a dog—we think we are quite able to judge all art, while to the first scientist who comes along with a new discovery we give unbounded deference. The Artist may discover new beauties of colour and form to us, and all we say is, "I know what I like, and I don't like this"—meaning, really, that we are too ignorant to appreciate it—while the man who produces a new gas or a new germ, although both may be only harmful, we worship as a genius.

Art is not so well understood as science. Because of its greater spontaneity and freedom of utterance, it has been considered as of less moment—more accidental than science, with its more ordered and conventional ways, but art is a surely exact and demonstrable knowledge as is science, and we are simply robbing ourselves of half our blessings if we ignore one while worshipping the other, when both are necessary to express the kingdom of heaven within us. There is an old saw which says, "In the Kingdom of the blind the one-eyed are kings." In this Kingdom of ours, science may think itself a king but it is a one eyed one at best. Art and science are the two eyes of perfect sight.

THE USE AND LAWS OF ART.

There are three and only three different ways of using art, viz:—for purposes of prose, of poetry, and of decoration. Each of these has its own laws of "inner necessity," and it is the business of the modern artist to obey these laws rather than to follow schools of arbitrary aesthetics, such as Classicism, Primitivism, Cubism or any other Academic convention. The fault of the academic formula, whatever its particular complexion, is its rigidity, as we see clearly enough when we look at old fashioned pictures. The academic mind sees everything in the same light. It decrees that prose, poetry, and decoration should be painted in one and the same way. That is degrading art to the limits of a bugle, with which we can only create a certain number of sounds, and from which we can only get variety by transposition and "time." Art is a much finer, a more sensitive instrument, comparable

rather to the violin, with which much depends on the instrument, but more on the player. For all that, however, the violin has its laws, against which even the greatest master dare not offend.

Yet much of modern art we see in Johannesburg seems to owe its origin to the sort of confidence which inspired that American who was asked whether he could play a violin, and who replied, "I don't know, I'll try."

Impressionism and the whole school of visualisation that dispenses with contours is a great pitfall to the trio, who perceives how easily effects may be obtained, and imagines that spontaneity matters more than assiduity. He is apt to look upon "finish" as mere pedantry, with the result that he perpetrates or condones sheer incompetence; and is inclined to see intention where there is physical defect or absence of skill.

Atmosphere is like incense; it envelopes our mind and leads it away into distances of expectation or remembrance, and so induces always a passive quality of mind in the spectator.

Music and Art. But why should art be always poetry? The conception of art as a unity is as much mistaken as a similar conception of literature, or music for that matter. Art, Music, and Literature are means of communicating ideas. As the world of ideas is infinite, so also must their vehicles be infinite. Literature Art, and even Music may be used for all sorts of purposes. Even Music: A Bugle call is a mere communication: Back, is Architecture in excellis: Wagner a literal and literary illustrator. Indeed, music that were nothing but music, were sound without fury yet signifying nothing. So also is art for Art's sake.

Creative power. If we regard modern art as a reflection of modern life, we may be justified in comparing its method with the hypothetical procedure of "Creative Evolution." Modern art is feeling its way, it is looking for something, the nearness of which it apprehends but has not yet completely discovered. Its duty is clear; it is true to reflect or express life; its problem is always the same; to find the best means of doing so. The modern difficulty is the complexity of Life's problems, and the consequent complexity of Art. Religion on the ecclesiastic formula of old will no longer do; because it no longer embraces the whole of human life from the cradle to beyond the grave. The classic Renaissance formula is too limited, too aloof, too aristocratic; the scientific formula is too detached, too prosaic, too unemotional. The art force swings back in search of the emotional and the world is surprised by extraordinary apparitions such as Picasso's "Art," an art which discards imitative

representation altogether, seeking to substitute abstract forms and colour schemes, rather inciting the emotion directly through the eye in the manner of music, which incites emotion by direct appeal to the ear.

INVENTION.

The need of to-day is not so much the invention of new means of expression no more than it is our need to invent new means of existence; our Life and Art problems are how to make use of the means we already possess in the most efficient manner. They made chairs very much like our own ten thousand years ago in Egypt; their way of chair-making has not yet come to be regarded as out of date.

ARTISTIC SENSE.

It is well to remember that seeing, in the artistic sense, is mainly a question of such aids to vision. Without metaphysical spectacles the eye sees only what is in front of its nose, only what is likely to serve the immediate needs, fears or pleasures of its owner; it is for mental distances and higher aims that the aforesaid spectacles become indispensable.

SOCIAL ART AND SOCIAL WELFARE.

The world after the war will become more than ever conscious that the greatest question in the world for the whole of humanity is the question of economy; because we are only just beginning to realise that the "oikos" of humanity is the whole earth. The perfect adjustment of means and ends, which is and always has been, the great problem of all life and of all art, will be pursued with ever increasing conscious intelligence, to repeat William Morris's phrase once more, because it is to him and Ruskin principally that we owe the knowledge of the intimate connection between social art and social welfare.

Nothing could have brought home to us the interdependence of all things human like this war, and nothing could have helped so much as this tremendous universal sacrifice to confirm the majority in their claim to share in the good things of life. There will be a universal desire to improve the quality of life, and that cannot fail to bring about an improvement in the quality of art.

New scales are even now in the making, new weights will no doubt be found; and since the nineteenth century has enabled us to imitate nature more faithfully and less labouriously than any other earlier age, there is now no longer any excuse for mere representation, unless such is desired for a special purpose. An artist may be required to paint an interior or a certain view, that is pure prose. The artist cannot permit himself poetic licence without deviating from the truth, and therefore discrediting his record; but he can either treat it synthetically, laying emphasis on the variety of different objects before his eyes,

"according to order." But the majority of landscapes and interiors one comes across in exhibitions are manifestly a compromise between pure imitation and aestheticism; many pictures have nothing to recommend them but the skill with which the artist has rendered "Atmosphere." This is the aftermath of Impressionism. Monet was justified in painting one and the same haystack some eighty times because he was not so much an artist as the discoverer of a new method of visualisation, a mastery of the air. Looping-the-Loop is also evidence of perfect master of that element. But a master of the air does not therefore devote all his time to Looping-the-Loop for the benefit of the public, he has other objects in view.

PATTERN.

Pattern is essentially the here and now. One can recreate by pattern almost any state of the mind that is definite, because pattern itself is the essence of definition.

DECORATION.

If we look around to see where modern decoration finds its most vital expression, we discover indeed that it belongs to public-places frequented by near relations to Corlin; to the buildings that serve the workers, from the large "store" to the popular "Restaurant" from the banks and shipping offices to the theatres and cinemas, from the town-halls to the garden cities. The patronage of church and princes is fast disappearing; even the merchant-princes prefer to surround themselves with ready-made, second-hand glory.

Here, then, is the decorator's chance. In the days of "pomp and circumstance" the decorator was bound to express riches. His duties were limited to a service of gorgeousness, from the Byzantine Basilica to the palaces of France.

The modern decorator's conscious intelligence tends to make him consider the needs of the now, to concentrate on the inner necessity of the task immediately before him. A much subtler psychological interest is demanded of him than mere imitation or adaption of the past. He must not only have a subject in keeping with the purpose of the building, and these purposes are far more various in these days than they have ever been before; he must carry out his design, composition, and colour-scheme in Psychological harmony with the professed purpose of the building.

It is no longer a question of painting an easel-picture on a wall.

MURAL DECORATIONS.

These mean inventing a scheme in harmony with the architecture and its purpose. As yet we can only see the beginnings of such an awakening of conscious intelligence. In Braugwyn's work, for example, and in the theatre and restaurant architecture and decorations on the Continent.

THE SHADOW OF THE WOLF,

By G. W. NICOLAY, M.S.A.

The time of Pericles when the Parthenon was built is the first of those brilliant periods which from age to age mark the culmination of the successful pursuit of a definite manner of work.

The Egyptian work, though impressive and having much detail of great beauty and even refinement, was clumsy in general form and monotonous in arrangement and it is difficult to regard it as having the life of beauty in it unless the colour (which was constant within and without as in all the greatest work) redeemed it.

In after times there were other achievements which in their place and manner even surpassed the Parthenon, but the extraordinary range of the genius of the Roman soon made Architecture so complex as to make the perfection of the Parthenon a thing very unlikely to be wrought out again or even to be attempted.

They also followed new methods, had also master minds, and worked out their ambitions with such success that although they never attained the fine culture of the Greek in any Art, yet produced buildings which for wealth of ornament and majestic force and character, left the Greek work far behind.

But before proceeding to a general view of the work that laid the basis of modern architecture, it will be best to get a grasp of the influences under which it grew into being.

The History of Architecture as usually presented runs smoothly along a sort of prepared road, the various methods of work slipping easily from one to the other, forming a connected sequence of styles as we call them, each following the other with much appearance of necessity.

Mark then the general position of the then World Art industries and developments of Architecture.

At the time when the Greeks were moving so rapidly to their greatest works, Romans were also working out their schemes for improvement of their Architecture. About the year 600 B.C. they, too, were moving quickly towards success. And they were working, not in a world where the past ages were forgotten and in a position of isolation, toiling without support or encouragement, but in a world actively engaged in building from one end to the other. The Persians had not yet subdued the East and, so, presumably, Assyrian monuments were still extant,

even if none were being built. In Egypt building was active and continued active until the Romans themselves built Egyptian temples there. In Asia Minor, in the adjacent Archipelagos and in Sicily the Greeks were active.

The Phoenicians in their own country and their distant stations, for instance in Carthage and Cadiz, had their temples as well as houses, and to the north Etruria, from whence it has been suggested that even the Greeks drew inspiration, was the birth-place of the first Tarquin—King of Rome.

It is hardly conceivable that the Roman, ambitious of every adventure and achievement, with Greek Art in Sicily an easy journey southward even in those days, with only the necessity to, so to speak, step across the Adriatic to find more of it should have failed to make voyages of discovery over such short distances, for we should reasonably expect him to have explored much further afield.

The conviction follows from this that Roman Architecture was being developed on an Etruscan basis, a newer and cruder type, though in form similar to Greek work, until the time when their military genius had won for them wealth and empire and as they pushed the Greeks from one country after another absorbed not only their arts but their artists also.

But whether that is a fair inference or no, about the year 508 B.C. the first temple of Jupiter Capitolinus was complete and the Greek Archaic period came to an end at the same time.

It is clear then that a regular type of Architecture was progressing in Rome during that period, approximately between the years 600 B.C. and 400 B.C. when Greek Art, absorbing the chief attention of that people, ran its course steadily and in direct motion to perfect work, as perfect of its kind as that of nature, as shown in an annual plant; first the seed, then the growing plant, its flowers and fruit, its quick decay and the seed left for renewed life and vigour.

As has been stated the Greek Art, after the Periclean age declined rapidly and in a hundred years had entered its decadent stage. From that time political difficulties became more and more acute and about 150 years later in 146 B.C., Greece became a Roman province.

The acquisition of wealth in abundance is the first imperative condition for the production of fine art, and if anyone is inclined to object to the term—for the very mention of "fine art" has at present a trace of hypocrisy always hanging about it, because so many

now use the expression loosely and insincerely—let him remember that at the present in Architecture such work is scarcely ever desired, much less demanded, and if proof is required let him look about for a piece of work in, for instance, masonry, where the joints are so fine that mortar is replaced by a fine cement dowel, and the external face finished with a thin coat of finest putty which prevented the joints interfering with the delicate colour which was to finish the work. Such work requires skilled artificers working under artists worthy of their calling, as well as perfect material, and above all, proper time for the due execution of the work. Perhaps it is superfluous to add that it requires large expenditure of money or its equivalent.

It is not the purpose to follow the Roman progress in any direction. That will be done briefly later. The present object is to get as clear idea as may be of their position, opportunities and tendencies by a general survey, even if necessarily superficial of what may be called, perhaps, the ancient building world.

We are only misled, or likely to be misled, by taking the "Styles" one after another and trying to establish a smooth sequence from type to type and period to period; the world was then as now a great workshop in which all sorts and kinds of work continued with more or less vigour at all times. We have yet to get ourselves persuaded that though individually we may each be proud of his own work, have his own ideas of what work is, his own contempt for what his opposite calls work, we are all working. Truly some work is noble and some far otherwise. If it could be all noble we should have few troubles and many an industry which has produced some of the noblest aspirations and types, both personal and national, would disappear, others taking their place, but the work would go on because we cannot do without it and in a sense would not if we could!

What use should we have for the trained war makers who have been the fore-runners of every great advance in the Arts? What for the war workers? We cannot determine, but we see plainly that right into our own time the same routine has been maintained. Pastoral simplicity and peace tending to idleness both mental and physical, then comes the warrior (in his least aspect the worrier) who swiftly makes terms with such, such terms as will suit his boisterous humour, to found nations, build cities and surround humanity with what seems to that still imperfect nature most desirable and is briefly expressed by our word civilisation.

Student's Page.

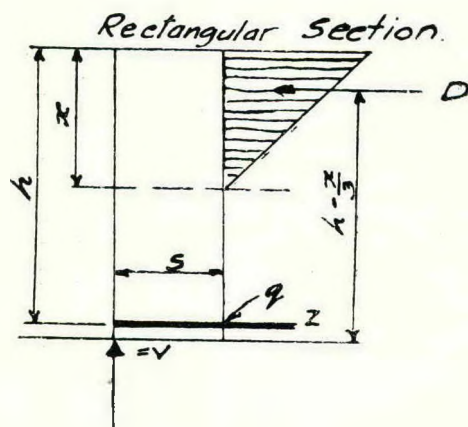
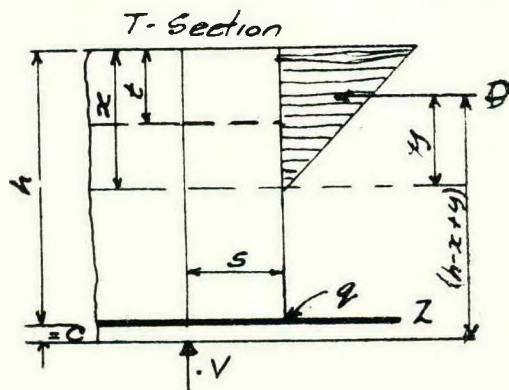
SHEAR IN CONCRETE BEAMS.

"Is there some simple and direct formula for determining amount and position of steel required to resist horizontal shear in a structural concrete beam?"

A formula for determining the amount and position of steel required to resist the horizontal shear in a concrete beam, the beam being rectangular or a T-section and reinforced on the tensile side only, the tensile strength of the concrete being neglected, is as follows:—

Let v . equal total shear at any section.

- k . ,, calculated unit shear in concrete.
- r . ,, safe unit shearing stress in concrete.
- s . ,, spacing of stirrups, centre to centre.
- b . ,, width of beam or stem of T-section.
- x . ,, depth of neutral axis below top of beam.



At every section of the beam the horizontal shear will be equal to the vertical shear.

From the well-known formula we have that

$$k = \frac{v}{\left(h - \frac{x}{3}\right) b} \quad \text{(i) for rectangular beams}$$

$$k = \frac{v}{(h - x + y) b} \quad \text{For T-beams}$$

In the figures, assuming that all the vertical forces in the lengths are carried by the stirrups, we have, taking moments about the point q

$$v x s = D \left(h - \frac{x}{3}\right)$$

$$\text{or } s = \frac{D \left(h - \frac{x}{3}\right)}{v} \quad \text{(iii)}$$

Substituting the value of v from (i) in (iii) we have

$$s = \frac{D}{kb}$$

If we assume that the concrete takes care of part of the shearing stresses, r , and D equals the value of the stress in the stirrup, we have

$$s = \frac{f x a}{(k - r) b}$$

in which f equals the stress in the steel, a equals cross-section of stirrup and r equals 70 lbs. per sq. inch.

As an example, assume V equals 30,000 lbs., beam is 12 inches wide and the effective depth 22 inches.

$$\text{Now } \left(h - \frac{x}{3}\right) = .86h$$

then k equals 133; f equals 16,000 lbs. per sq. inch, and using 3/8 round rods for U stirrups the spacing of the first stirrup

$$s = \frac{16000 \times 2 \times .1104}{(133 - 70) \times 12} = 4.7 \text{ inches.}$$

A PRETORIA JUDGMENT.

In this case Plaintiff sues Defendant for £163 5s. 9d. for professional services rendered. Plaintiff is an Architect and prepared plans and specifications and bills of quantities for a house to be built for Defendant, and the claim represents his fees for this work. The Defendant admits that the work was done for him, but says it was subject to a condition that the building was not to cost more than £2,000, that the lowest tender was for £2,855 and that Plaintiff's work was accordingly of no value or benefit to Defendant, and he is therefore not liable. He says that, in any event, the charges are excessive and that £50 is a fair and reasonable price for the work done and he tenders that sum.

There is some disagreement as to the facts and it will be necessary to settle this first before proceeding to the law on the subject. Plaintiff's story is that he submitted a certain plan to Defendant telling him such a house would probably cost £1,800. Defendant at first had wanted a house for £1,500 until Plaintiff told him it could not be built for that sum. Defendant suggested certain alterations to the plan, and Plaintiff then told him the house would cost probably £2,000. He says that Defendant then asked that some stabling and outbuildings should be added to the plan and he did this, estimating the extra cost at £600. He says Plaintiff told him he would raise the £2,000 by means of a loan from a Building Society, but would pay the £600 himself. Tenders were called for the house and outbuildings and the lowest was for the sum of £2,855. Defendant then declined to go on with the building of the house.

The Defendant denies the Plaintiff's evidence in several important respects. He says he originally asked for plans for a house to cost £1,500. When told he could not have one built for that he decided to increase the amount to £2,000, and told Plaintiff he was prepared to go up to that sum, "but not a penny more." He says the £2,000 included both house and outbuildings and that these were never discussed separately nor were any separate prices for them ever given. He is borne out in this by his wife. They are both emphatic that £2,000 was to cover the cost of all the buildings and that Plaintiff was told they would not go beyond this sum. In regarding the probabilities, in view of this conflict of evidence, one must remember that the conversations between the parties took place in June or July, 1918. I think there is much force in the contention of Mr. Ferris, for De-

fendant, that the question of building a house would be a matter of very considerable importance to Defendant and his wife and they would be more likely to remember clearly all the surrounding incidents of the transaction than a busy man like Mr. Macintosh, who is dealing continuously with people who wish to build houses and with their building plans. So that after this lapse of time it would probably be safer to rely on the memory of Defendant and his wife rather than on that of Plaintiff. One must admit that their story sounds reasonable enough. To begin with when a married couple set out to build a house it seems reasonable to assume that they would have a fairly clear idea of what they wanted before going to an Architect. Defendant must have known he wanted stables built, and it is most probable he would have mentioned them when he spoke of the house. And again it is not very likely that the idea of getting separate estimates of cost for the house and the outbuildings would occur to him.

A married couple embarking on a building venture, would know approximately how much money they had to spend on it, and it would be a lump sum to cover the total cost of the scheme. So it seems to me that all the probabilities are in favour of Defendant's evidence that he told Plaintiff that he wanted plans and specifications for a house, stables and outbuildings for a sum not exceeding £2,000, and I find as a fact that that is what occurred. He instructed Plaintiff to call for tenders, Plaintiff did so and the lowest tender was £2,855. As this was far in excess of the sum Defendant was prepared to spend he abandoned the idea of building. So much for the facts. The law on the subject, in so far as I have been able to gather it from the authorities seems reasonably clear.

Taking South African decisions first there is the case of "Lucke vs. van Coller" (10 C.T.R. 338), in which Acting Chief Justice Buchanan laid down the rule that in the case of an architect who offers his services such services must be of utility to the person to whom they are offered before he can claim payment for them. In that case Defendant required a house to be built at a cost of about £1,600. Plaintiff drew up plans and specifications which were submitted to Defendant who saw that the proposed building would cost far more than £1,600. Plaintiff, however, persuaded Defendant to call for tenders. He did so and the lowest tender was far in excess of £1,600. Mr. Justice Buchanan said, "It must be taken therefore that these plans were utterly valueless to the Defendant, and valueless through the Plaintiff's own conduct, as he was told he might prepare plans for a house which might cost £1,600 while he prepared plans for a house which would cost considerably over that amount. The

Plaintiff is therefore not entitled to recover from the Defendant anything in respect of these plans." In the case of "*De Witt vs. Cape Canning Co.*" (11 S.C. 116), Chief Justice de Villiers said, "Even if Plaintiff had been asked to design the building and frame the specifications he would not be entitled to remuneration as architect unless his designs were approved of. He claims to be remunerated for his services in the same way as a lawyer who has given advice to his client, or a physician who has attended his patient, but an architect stands on a different footing. Until the architect submits designs which can be approved of the employer obtains no benefit whatever."

The English cases are to the same effect. In the case of "*Nelson vs. Spooner*" (2 F. & F. 613) it was held that in an action by an architect whose plans, after having been accepted, are rejected on the ground that the work cannot be done for the amount of his estimate it seems that it is a question for the jury whether it is an express or implied condition of the contract that the estimates shall be reasonably near the actual cost. I will deal with this aspect of the matter later. In "*Duncan vs. Blundell*" (5 M. and P. 548) it was laid down that where a person undertakes and is employed in performing a work of skill and labour and fails therein, so that his employer derives no benefit from his work, the former is not entitled to recover payment, as his employer buys both his labour and his judgment, and he ought not to undertake the work if he does not know whether he can succeed or not. In "*Moneypernt vs. Hartland*" (1 C. and P. 352) it was said "If architects or surveyors make estimates which turn out to be incorrect to a considerable amount and of no use through their omitting to take ordinary precautions, they may not be entitled to recover anything for plans, specifications or estimates made for that work."

Addison in his work on Contracts (7th ed., page 678), in agreeing with the above proposition goes on to add, "If, however, the incorrectness of the estimate arises from inherent difficulties in the work itself, the employer will not be relieved from the obligation for payment." I will also deal with this point later.

The American cases are equally illuminating. I extract the following principles from a number of cases which are reported in the American Lawyers' Reports Annotated (vol. 42 pp. 125 and 126 New Series 1913). An architect like a lawyer, physician or other professional man is not a guarantor, nor is he liable for errors of judgment. Admittedly it is not possible to be certain in estimates where the work is of an unusual character or the circumstances are such as to make it

impossible to foresee the hazards and difficulties which may arise. So, too, an architect cannot be held responsible for fluctuations in the price of materials or labour. On the other hand there seems to be no reason why, like other professional men, he should not be liable for errors due to his negligence. Of course the definition of negligence as applied to the estimates of an architect depends upon the amount of care, skill and judgment which those who employ him have the right to expect.

Ordinarily an architect instructed to draw plans for a building limited to a certain cost cannot recover for such plans if the cost of the building substantially exceeds that specified, or as it was put in another case, he is not entitled to his fees unless the building can be erected at a cost reasonably approximate to that stated in his estimate.

To deal now with the two points previously mentioned. In Nelson's case it was held that it was a question for the jury to say whether it is an express or implied condition of the contract that the estimate shall be reasonably near the actual cost.

Sitting as a juror I should have no hesitation in answering that question in the affirmative. If I go to an architect and tell him to prepare plans and specifications for a house to cost £2,000 I am strongly of opinion that it is an implied condition of my contract with him that he will so use his skill and judgment as an architect, that he will prepare such plans and specifications, as will when submitted to building contractors, result in an estimate reasonably near the price I have fixed. I am entitled to rely on his skill and knowledge, that is why I employ him, and—and this brings in the second point as to inherent difficulties in the work itself—if he holds himself out as a qualified architect, I am entitled to assume that he has the requisite skill and knowledge to have my wishes carried out, provided I am not unreasonable.

In the present case there were no inherent difficulties. Plaintiff had to design a plan for an ordinary dwelling house with stables and outbuildings, for the comparatively small sum of £2,000, and prepare specifications, a task presenting no difficulty to a qualified architect. He is presumed, by virtue of his profession, to be acquainted with the prices of materials and labour, and to frame his calculations accordingly. It is true, as remarked in one of the American cases, he is not responsible for fluctuations in the prices of materials, but one presumes he ascertains what the prices are before he sets to work to make his plans, and there is no evidence before me that during the three weeks or so that Plaintiff was engaged on these plans

and specifications there were violent fluctuations in the prices of labour and materials which upset his calculations. Mr. Podlashue, for Plaintiff, was insistent on the fact that an architect cannot guarantee that a house will cost a particular figure. That is no doubt true, but it is beside the point. The Defendant has never contended that Plaintiff guaranteed anything. But the law, as I deduce it from the authorities I have quoted, lays down that an architect must—unless there are unforeseen circumstances which do not exist here—so frame his plans and specifications that on them the owner can have his house built at a price reasonably approximate to that originally fixed by him. What is a reasonably approximate price is a matter to be determined according to the circumstances of each individual case. But it cannot be said that a sum of £2,855 is reasonably approximate to £2,000. It is nearly half as much again, and under these circumstances the Defendant is entitled to say that the work Plaintiff did for him has been of no benefit to him and is entirely valueless so far as he is concerned. He is therefore not liable for payment. He has tendered the sum of £50 and there will accordingly be judgment for Plaintiff for that sum, but he must pay the costs of this action. Costs will be on the higher scale and Counsel's fees will be certified.

TO ARCHITECTS.

Proposed Children's Hospital.—Johannesburg.

Designs are invited from Architects residing in British South Africa for a proposed new hospital for children at Milner Park,

Particulars may be obtained from

E. G. IZOD, Esq.,
Children's Hospital Design Committee,
Corner House,
Johannesburg

on payment of a deposit of one guinea, which will be refunded on receipt of a bona fide design.

Designs to be delivered on or before the 30th November, 1920.

CORRESPONDENCE.

154, Exploration Building,
Johannesburg,
7th September, 1920.

The Registrar,
Association of Transvaal Architects,
Exploration Building,
Johannesburg.

Dear Sir,

We beg to inform you that Mr. D. M. Sinclair has drawn our attention to the fact that we have made use of his title as President of your Society without his knowledge and consent, and we must apologise for having done so. He certainly gave us no authority, and it was entirely on our own responsibility that we inadvertently inserted this in our Prospectus, a proof of which was unfortunately not submitted to Mr. Sinclair before same was printed.

Steps are being taken immediately to rectify this.

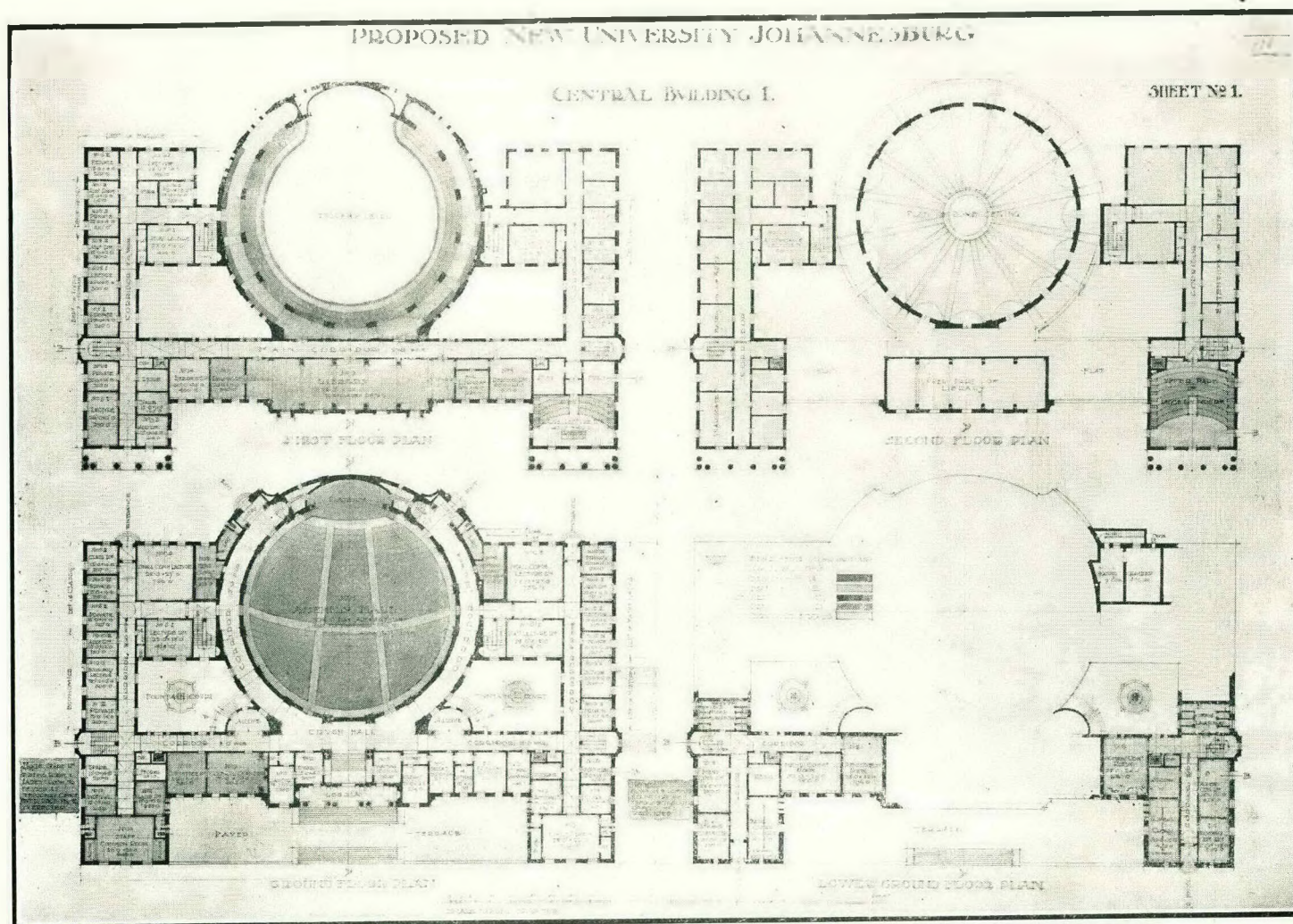
Yours faithfully,
Economic Patent Construction Blocks, Limited,
GEO. H. TRICKER,
Secretary.

JOINT HOUSING OF SOCIETIES.

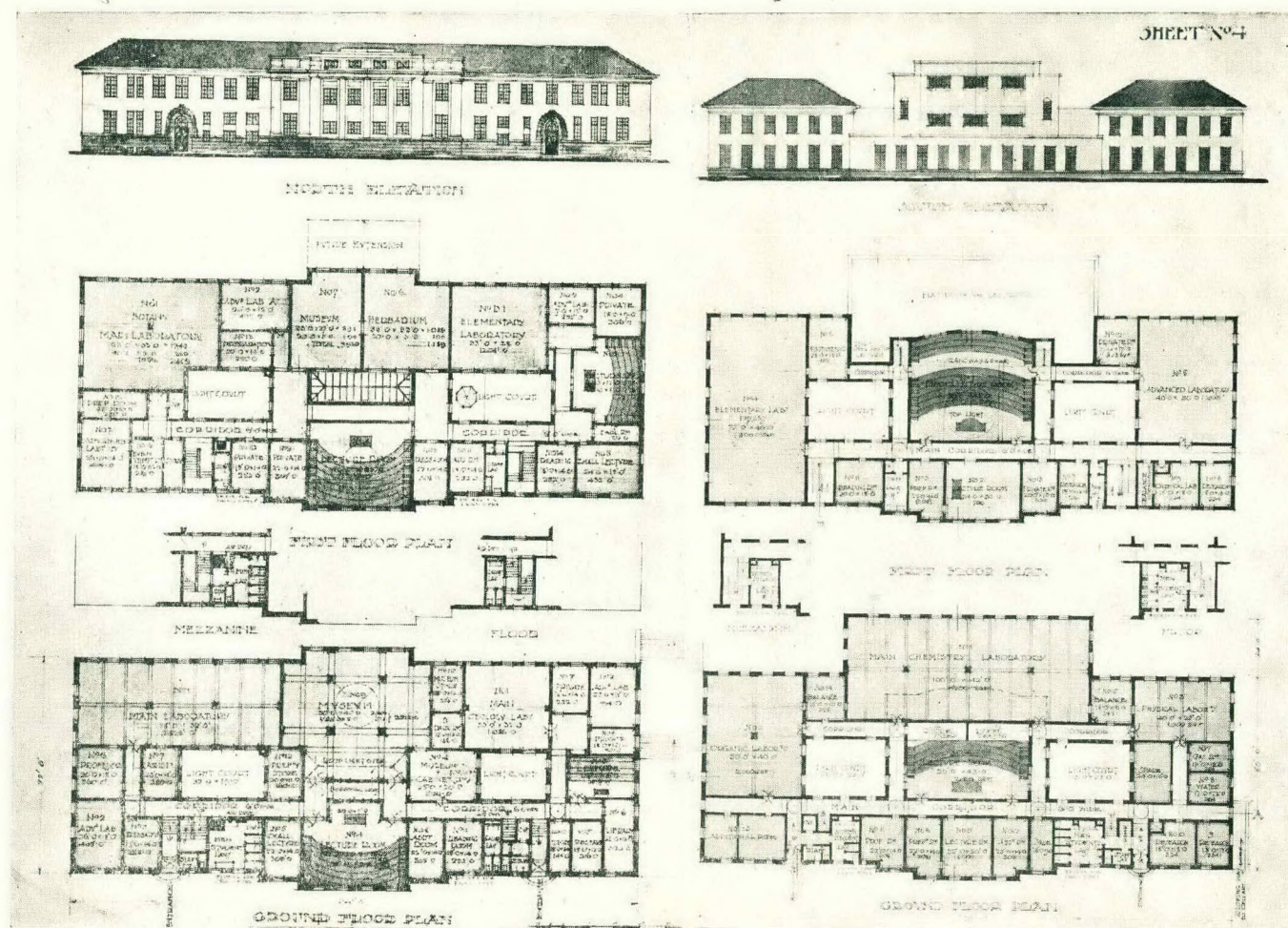
The attention of Members is drawn to the urgent need for personal subscriptions to the Building Fund of this scheme. It will be within the knowledge of all that the Inaugural Meeting was held in May last at the Joint Home, 100, Fox Street, when the whole scheme was fully explained.

There is no doubt in the minds of your Council the benefits to be derived by this Association by members and will be of such value as will fully repay any personal sacrifice that may need be made. To date a sum of approximately £2,5000 has been donated by the constitutional Societies, of which £120 comes from the Architects. Although we are a comparatively small body, it is desirable that we should be in the front rank and your Council therefore asks that members should give and give quickly his subscription to this all important scheme.

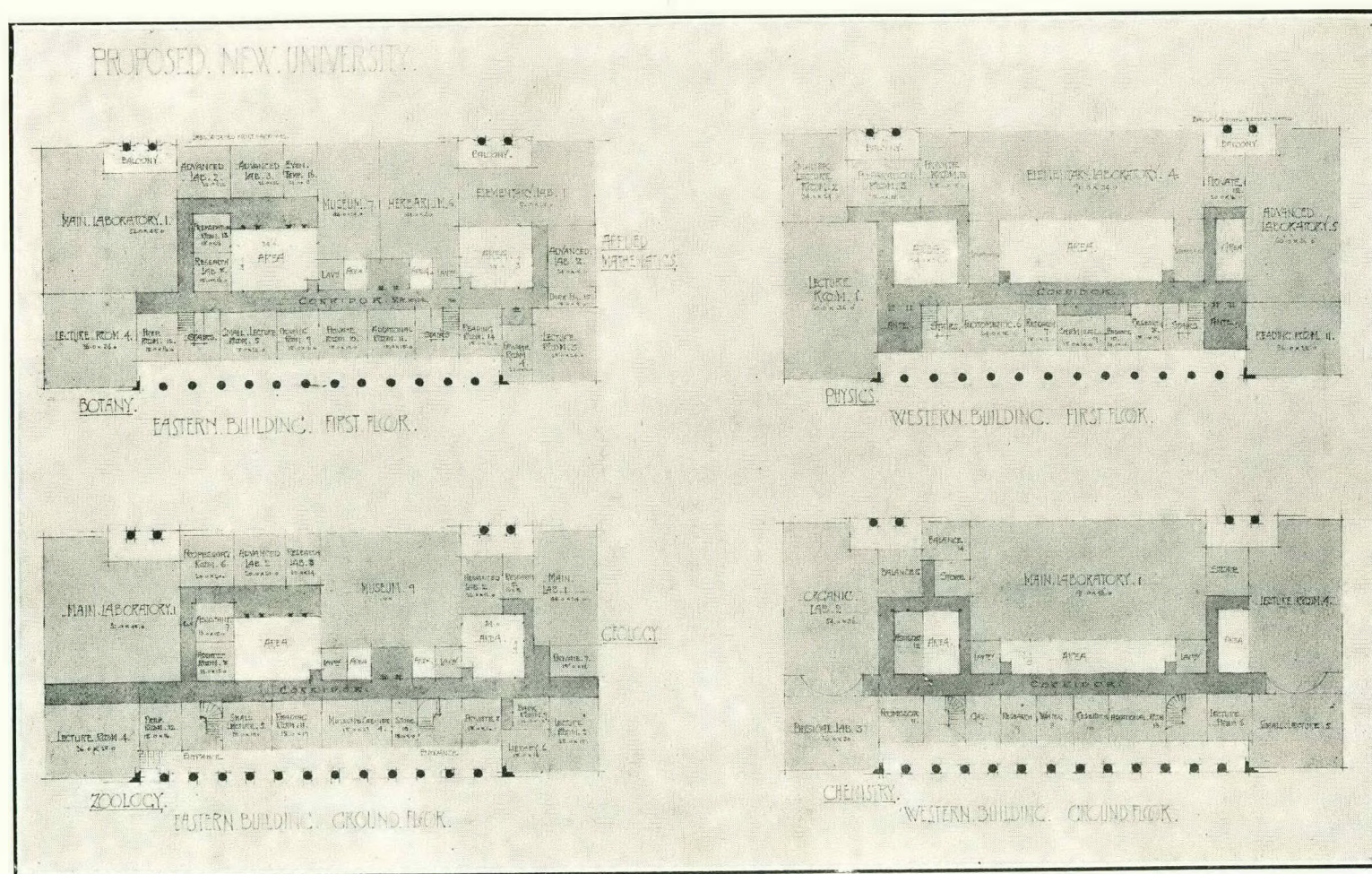
Cheques can be sent to your Registrar, who will forward them to the proper quarter.



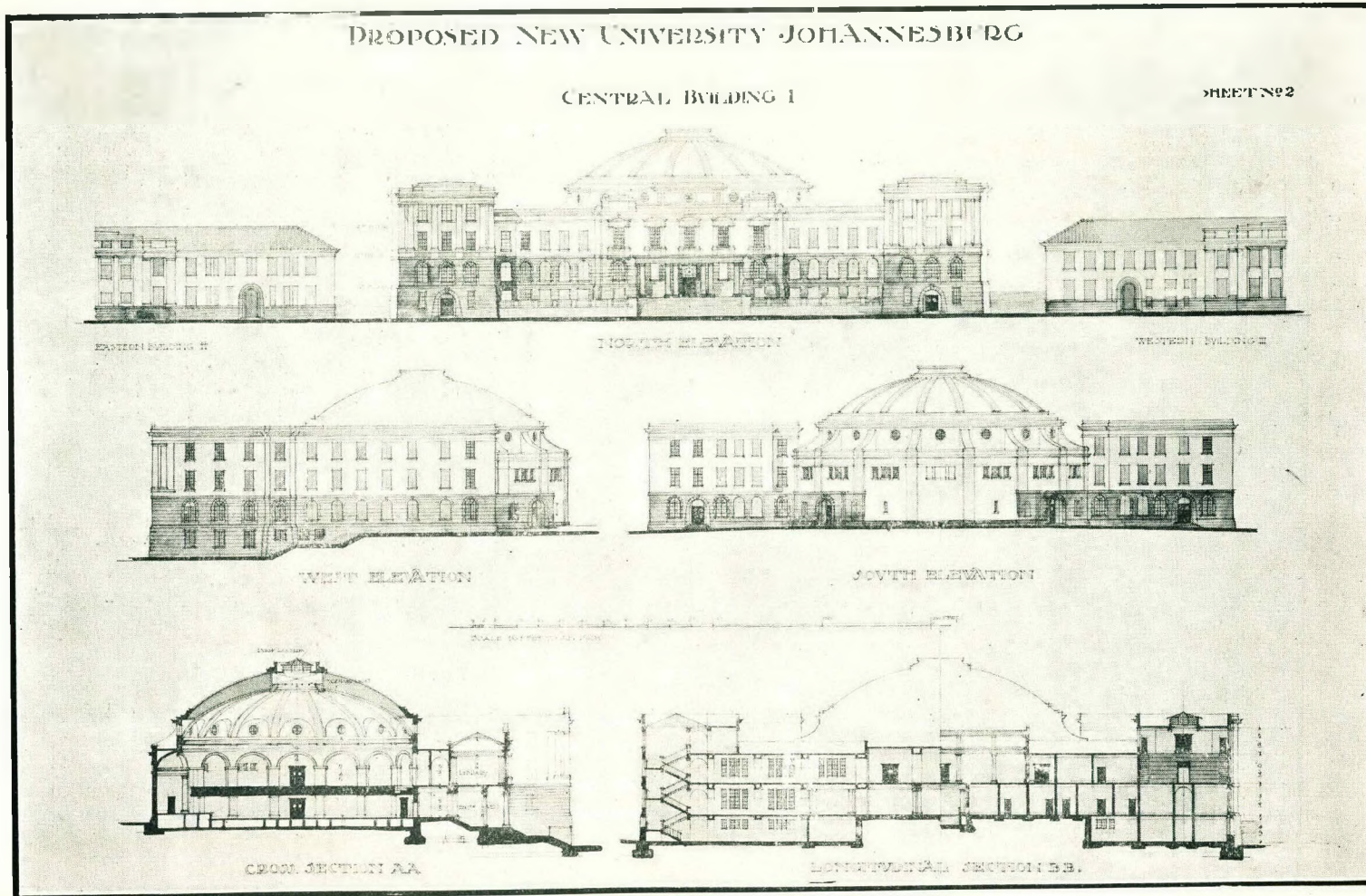
Second Premiated Design by Messrs. Cowin & Powers F.R.I.B.A.



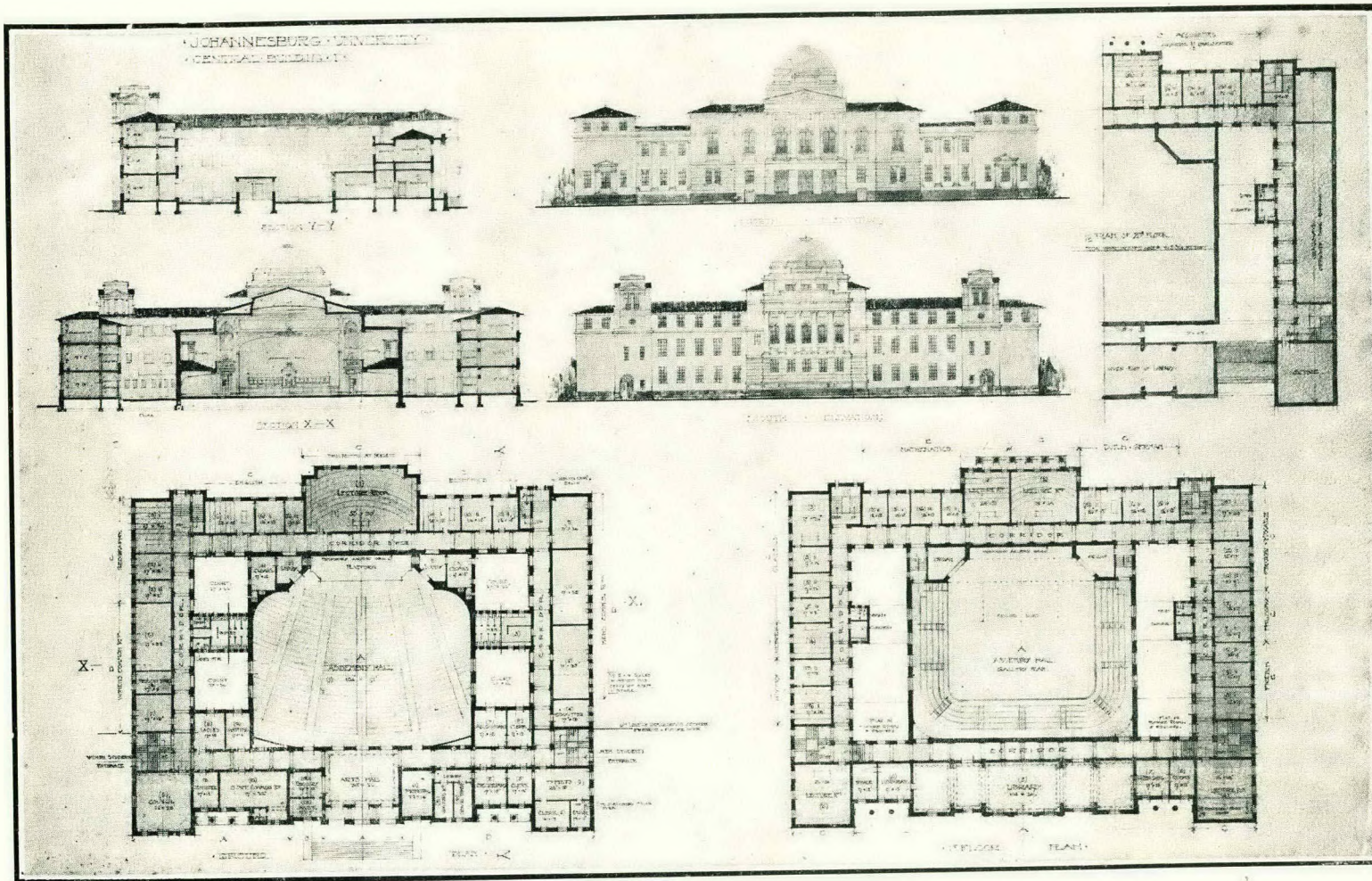
East and West Block, Second Premiated Design by Messrs. Cowin & Powers, F.R.I.B.A.



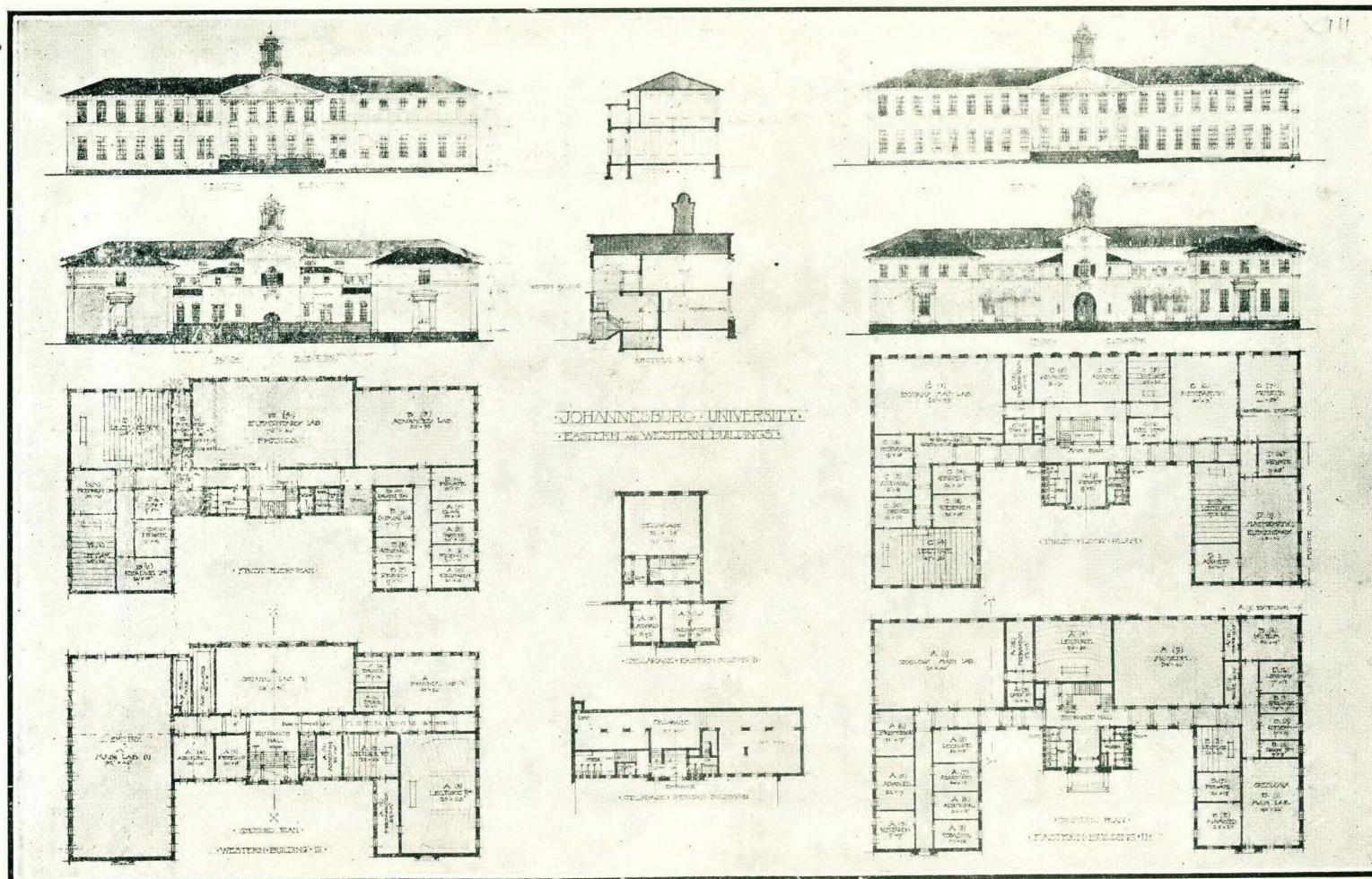
East and West Block. First Premiated Design.—Frank Emley, F.R.I.B.A.



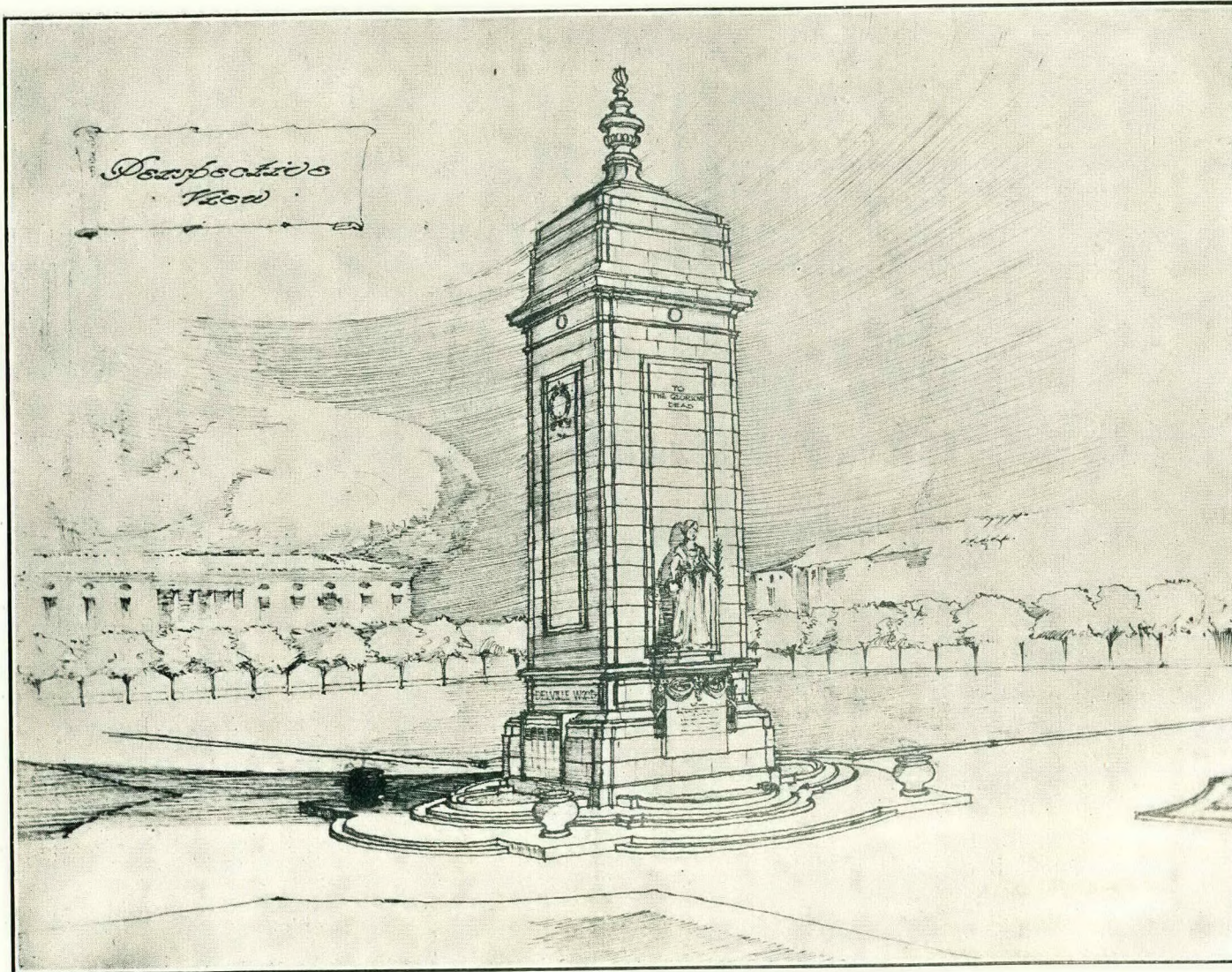
Second Premised Design by Messrs. Cowin & Powers, F.R.I.B.A.



Third Premiated Design by Messrs, Hawke & McKinley F.R.I.B.A.



Third Premiated Design by Messrs. Hawke & McKinley F.R.I.B.A.



First Premiated Design, Pretoria War Memorial, by Messrs. J. S. Cleland & C. C. Deuchar,

Some Lessons from the University Competition.

By an old A.A. Student.

Every competition has some lessons to teach for the system is of immense educational value, especially to the young architect for whom these lines are mainly penned. It is also the purpose to set forth "principles" rather than "opinions." To voice sound principles is not to dogmatise, otherwise the mathematician is the most dogmatic person on the face of the earth because he says things "are" and proves them, and not "I think" or "in my opinion."

For a competition to yield such educational value to the competitor he must take care to compare the winning designs with his own to see where he—or possibly the assessors—have failed.

To do that he must first of all acquire the principles of sound planning and design, and this will best be done by study in the first place, and practice in the second, for the two are inseparable. The man who simply reads books and looks at drawings will never become an architect. He must practice and work out problems for himself in order to fully appreciate the innumerable points to be considered in solving the problem.

The "award" in the recent University Competition has not given that general satisfaction that could be wished, as both the rules have been set aside and the principles of sound planning and design, to say nothing of municipal and other requirements which appear to have been disregarded. It will serve a useful purpose to examine the reasons.

No competition has so far yielded a perfect conception, one that would not require modification in the carrying out. Assessors have of course to place what in their "opinion" comes nearest the requirements and the principles before referred to. Assessors are only human and liable to err, and doubtless some of them realise that as much as the competitors, but the chance of erring would be reduced to a minimum were they (when architects and not laymen) to work out the problem they are going to judge—if only in skeleton form—they would more readily appreciate those points that go to make up the best solution of the problem in convenience, light, ventilation, an general architectural design.

The Conditions appeared to be definite and exacting, and by no stretch of the imagination could skeleton diagrams be considered a substitution for developed plans. Fifteen out of sixteen adhered to the rules governing the competition.

The sixteenth was placed first in the Award, the three assessors (one being a layman) stating that the "spirit" of the Conditions had not been materially infringed, even though the Basement and Top Floor plans were omitted. It was very nice of the assessors to have imagined these parts.

That the competitor in question had any desire to get the best of his fellows by unfair means is not suggested. But it is quite certain that had the other fifteen competitors known they would not be disqualified by adopting such unusual methods they would never have gone to the trouble they did. In future there must be nothing left to conjecture in Conditions.

The award was made chiefly on the "Central Block" and so these remarks mainly refer to that building.

Some years ago the Government at Home appointed a Commission of Experts to go into the question of the best system of planning, as some of the Government buildings were shockingly badly arranged for light and ventilation, making artificial lighting by day a necessity in some of the corridors and rooms. The conclusion arrived at was that in future the double lined corridor would not be allowed. A glance at the drawings of buildings both Government and Municipal of recent years will show that this system has been followed, viz., the single lined corridor. Who will dispute that such a system is the more essential in a hot climate where "through" ventilation is an absolute necessity, and which is rightly insisted upon by Municipal bodies, and yet the third placed design had some 208 feet of corridor (taking back and front together) without any direct lighting.

It is said this system takes up more space. There is of course a right and a wrong way of doing things. There were two designs of equal frontage in the competition, one was largely on the double lined system, the other single—the former was premiated.

For the Central Block there were three important points to be considered both by competitors and assessors:—

1. The University was to be for both sexes, the Common Rooms for each to be in separate parts of the building.
2. The Library was to be central to the Arts Departments (which were not to be too much scattered).
3. A large Assembly Hall was to be included, the size of which necessitated special consideration as regards acoustics.

1. As to the first point, most of the competitors placed their common rooms for the sexes, one east and the other west. But the very object of the authorities in keeping them apart was frustrated by some as a connecting corridor was placed between them at the back of the building, giving excellent opportunity for mixed gatherings away from the eyes of the officials between the lectures and classes. So far no University has opened a Matrimonial Department, but it is worth consideration in this country.

Apparently this was one of the reasons why the third design was placed, as such system of planning—a continuous corridor round the building or “double axial method” being considered by one of the assessors as very successful. So it is in Municipal or similar business buildings, but not in universities for two sexes where they have to be kept apart when off study.

2. **Library central to Arts Department.** The double axial system is again in the wrong where there is no cross corridor, because it means placing the Library on one of the four sides of the square, thus giving several departments some 200 feet of corridor to traverse to reach the Library as in the third design, which can in no sense be considered central to all Departments. Still it was another of the reasons why the third design was placed, further reasons will follow.

3. **Large Assembly Hall** with external entrance and exits for public, and internal for university.

With 2,500 people to clear from a hall, a sufficient number of “direct” exits have to be arranged to allow the hall or theatre to empty in three minutes, so say the Municipal regulations. The first and second designs were well planned in this respect, the third design has a square hall 91 feet by 104 feet with corridors, small areas and rooms around, thus shutting off “direct” exits. Excellent for quietness, but the building will be away from the town and the noise.

In a panic people make for the first door, and there are two in this third design facing the audience leading into a corridor some 8 or 10 feet wide and nearly 180 feet long, with an exit at each end. If one falls there will be numbers on top of him in a rush. The three entrance doors close together are naturally at the rear of the audience. Municipal requirements are certainly not met in this design.

In such a large hall acoustics play an important part, and although it cannot be called a science, precautions can be taken. The first and second designs had certainly considered this important factor, the first adopting a Greek theatre plan, and the second an extended form of same, bringing the seat-holders within 70 to 75 feet of the speaker, the range of the human voice according to some authorities. Most of the designs used the rectangular form, and some to such an extent that those at the back of the hall would be some 120 feet from the speaker. Had they placed their platform on the long side it would not have been so

bad. This, one of the competitors did, but the plan being rather of an unusual form, it did not apparently take the fancy of the assessors; they had seen half circles, oblongs, squares and so on, but not that shape. True there is the Coliseum, but that was erected for a wild beast show, and the Albert Hall for fancy fairs—much too frivolous for a University. The thoughtless competitor, too, had left out the corridor at back connecting the Common Rooms of the ladies and gentlemen where they could discuss “points of the lectures” undisturbed between the classes, or exchange calls and make appointments.

But to revert to acoustics, nothing can be guaranteed in this direction, but precautions can be taken as already mentioned, and the curved surface rather than the flat has proved to be conducive to the best results. Anything in the shape of a dome must have an eye or open crown to prevent echo—to allow the sound waves to escape.

To sum up, the first design certainly betrays much haste, but will no doubt develop into a fine conception with three clever heads and pairs of hands, without borrowing features that express other purposes.

The second design there is little to find fault with on the score of principles of planning and design. There are a few rooms on the double lined corridor system, and one would like to have seen some “loggias” on the north fronts, on each floor, a feature so common in Italian Renaissance which gives such fine contrast in a rarefied atmosphere such as enjoyed here, and which Mr. Perry has adopted in his hostels.

For the reasons already given it is difficult to discover why the third design was placed, the elevations are good and express the purpose as well as the style stipulated, as might be expected from a firm of architects who have done so much excellent work.

The architect of the first design in his “remarks” considered the situation demands “broad lines, big masses.” Are not the buildings big in themselves, and the object of the institution must not be lost sight of and should express its purpose without further enquiry. Education is the object and that should mean “refinement,” nothing ponderous or heavy, as in a warehouse or prison, etc., but attractive, not distracting, as would be the details of a theatre. To hit the happy medium between the two extremes is the work of the artist. Certainly some of the designs were very successful on this head.

One facetious gentleman evidently intended that the students should have no excuse for unpunctuality—he introduced a clock large enough to be seen “over the horizon.” A tenth of the height of its position is the general rule, though there are exceptions to all rules and perhaps this is one, possibly in anticipation of aeroplanes.

In view of the dissatisfaction, it is quite time that the oft-repeated suggestion be adopted, viz., that the competitors be left to make their own award by giving them votes corresponding to the number of premiums. The question of distance for some competitors could be overcome by "proxy."

If a better way should occur to the reader he should let it be known, as there is quite enough evidence that the majority of the members of the profession demand a more equitable system for deciding all future competitions. The importance of the matter recommends itself to the early and earnest attention of the Association of Transvaal Architects.

NOTES AND NEWS.

Mr. E. H. Waugh is proceeding to Australia on extended leave at an early date, and we take this opportunity of wishing him a pleasant trip.

Mr. Frank Emley, F.R.I.B.A., and Messrs. Cowin & Powers, F.R.I.B.A., have been appointed joint Architects for the Johannesburg University Buildings at Milner Park.

They are at present busy on the drawings, and the work is to be commenced as soon as possible.

Mr. Piercy Eagle, who for many years has been Chief Architect of the Union has resigned that position and intends taking up private practice in Pretoria.

Mr. Gordon Leith, M.C., A.R.I.B.A., has returned from Europe after being on active service since 1915, and has commenced practice at 45, Bureau Lane, Pretoria.

Mr. R. Bullock, of the Public Works Department, Johannesburg, has been elected a member of the Association and registered as an Architect in the Transvaal.

Mr. Chas. Small has removed his office to London House, Loveday Street, Johannesburg.

The sending in date for the Warmbaths lay-out Competition is the 30th September, 1920, to the Provincial Secretary, P.O. Box 383, Pretoria.

A Qualifying Examination for registration as an Architect in the Transvaal and membership of the Association will be held in November next; further particulars may be obtained on application to the Registrar, P.O. Box 2266, Johannesburg.

In another part of this issue is published particulars of three Competitions for Students; members are requested to bring these to the notice of their Juniors.

Members are requested to reply to the circular re Conditions of Contract.

Donations to the fund for the Establishment of a Chair of Architecture at the Johannesburg University should be posted to the Registrar without delay.

THE FOLLOWING BOOKS HAVE BEEN ADDED TO THE LIBRARY OF THE ASSOCIATION.

Hydraulic Tables, Co-efficients and Formulae: John Neville.

A Manual of the Steam Engine and other Prime Movers: William John Macquorn Rankine, LL.D., F.R.S.S., Lon. & Edin., F.R.S.S.A.

Seven Lamps of Architecture: John Ruskin.

Switches and Crossings: William Donaldson, M.A., A.I.C.E.

Text Book on the Steam Engine and on Gas Engines: T. M. Goodeve, M.A.

A DISTINGUISHED VISITOR.

Information has been received that Mr. Harry Tompkins, brother of Mr. Charles Tompkins, one of the fathers of local land surveying, is arriving early in October by the Aberdeen liner "Euripides." Mr. Harry Tompkins is one of the best-known architects in Australia, having practiced in Melbourne since 1894 with his brother Frank, both of whom originally went from South Africa in the early nineties. Mr. Harry Tompkins is an ex President of the Royal Victorian Institute of Architects, and has been travelling round the world across the Pacific and America to England. We understand he is accompanied by his wife.

We extend to our visitors a hearty welcome.

THE ASSOCIATION OF TRANSVAAL ARCHITECTS.

Telephone 5821. 67, Exploration Building,
Telegrams "ATA." Commissioner Street,
P.O. Box 2266. Johannesburg.

QUALIFYING EXAMINATION.

An Examination to qualify for Registration as an Architect in the Transvaal and Member of this Association will be held in Johannesburg on November 15th, 1920, and successive days.

All applications to sit for this Examination, accompanied by a remittance of Three Guineas, must be made to the undersigned, from whom further particulars may be obtained.

By Order of Council,
M. K. CARPENTER,
Registrar.

ASSESSORS' AWARD, PRETORIA WAR MEMORIAL.

The Town Clerk, Pretoria.

We have carefully examined the fourteen designs submitted in the second competition for the proposed War Memorial on Church Square and submit the following report:

Although a somewhat better response has been made than in the previous competition, we regret to

say that the result is not what could in any way have been desired for a subject so interesting, and for so important a site as the centre of the Administrative Capital.

Out of the fourteen designs submitted only five or six are worthy of any consideration, and we have reluctantly come to the conclusion that none of the designs submitted can be considered eminently suitable for the Memorial in the position proposed.

In awarding the premiums, we do so with the proviso that we recommend the committee to consider the advisability of endeavouring to obtain further and more suitable designs for the Memorial.

We have selected four of the designs for final consideration, and make the following comments thereon:

No. 6.—This is one of the designs submitted in original competition. Its merit lies in its simplicity but lacks character and dignity. The base or platform is too low and the figure is out of proportion to the Monument.

No. 10.—This design we do not think would harmonise with the general design and lay-out of the square.

No. 11.—This design which was also submitted in the original competition has now been simplified in certain details, but to be successfully carried out would still be too costly. It shows perhaps the most imaginative treatment of any of the designs submitted but, whilst in an isolated position it might present a fine effect, it is not suitable for the position proposed.

No. 13.—This design is simple and has certain character and dignity, and of those submitted would best harmonise with the treatment of the square. If carried out we suggest the following modifications:—

The whole monument should be raised on a higher base or platform, the number of steps increased and the planning of them simplified.

The plinth of the monument might be raised and thus give more space for the name plates. The urn on the top of the monument would be better omitted.

We therefore award the first premium to No. 13 and the second premium to No. 6.

To avoid further delay this report has not been submitted to Mr. Solomon for his signature but the designs have been discussed personally with him and he is substantially in agreement with these recommendations.

(Sgd.) H. G. VEALE,
P. EAGLE.

CONCRETE BUILDING BLOCKS.

The Hume Pipe Company (South Africa), Ltd., have been conducting experiments and investigations for months past to arrive at the most suitable concrete building block for houses, etc., and have adopted the "TEE" block as being the most suitable for this country.

These blocks, which have a surface of 24 ins. by 12 ins., equal to $10\frac{1}{2}$ bricks, give a very suitable type of form of construction and also give an absolute cavity wall with clear air space right through the cavity.

A special plant has been installed at the Company's works at Germiston for the manufacture of these blocks on a large scale, and it is anticipated that the factory output will be at least 2,000 blocks per day by the end of the current month.

Apart from these, the Company is manufacturing special blocks to receive window and door frames, and to form corners, and also blocks to form partition walls.

Many cheaper types of building blocks have been introduced into the market, but expert opinion is directly opposed to the use of a cheap type of concrete block and the Hume Pipe Company has very rightly adopted the very best materials for the manufacture of the "TEE" blocks.

It is pointed out that single blocks are useless, as excessive sweating is caused, being due to the difference in temperature between outside and inside air, besides, many forms of single blocks are not stable.

The Company will be pleased to supply further particulars respecting these "TEE" blocks and to furnish quotations. All communications should be addressed to the Managing Director of the Company, P.O. Box 6101, Johannesburg.

REINFORCED CONCRETE.

With our next issue in December will commence a series of six articles dealing with the design of Reinforced Concrete slabs and beams, contributed by one of the foremost reinforced concrete experts in South Africa.

These papers will deal with the calculations of the stresses in the steel and concrete, showing the method of deriving the same, and will be supplemented with oromographic or alignment charts for very easy calculation.

The first paper will deal with the "Bending Moments showing the Tensile Reinforcing."

Town Planning Association, Transvaal.

Valedictory Address to Members at the Annual General Meeting held 31st July, 1920.

Delivered by Mr. Colin Wade.

I have endeavoured in this address to get a little off the beaten track of so much that has been done at town planning meetings. It would perhaps be useless for a non-technical expert to enter upon a highly specialised subject and so it is perhaps as well to try and get a very general idea of our subject; and I find that I have tackled a very large proposition and that I had to put a whole page into a single line. In the event of there being any ideas that appear rather absurd, I trust that there may be an opportunity for me to answer any questions that arise, and I sincerely hope that a little interest will be shown in any discussion that may take place hereon.

To the planner, more than to anyone else, is needed imagination; and this is more necessary to-day than at any other epoch in the world's history. To the supreme ability of the technician must be added the qualities of poet and the dreamer and underlying these qualities must be a deep understanding of history and economics, of the achievements and possibilities of scientific invention and of the general direction of imminent social changes.

Town plan has had its place in every age, although the opportunity for its exercise has been most intermittent. Generally its expression has been most marked on the eve of dynastic downfall or large economic change, as for example the Hellenistic Period 4th to 3rd Centuries, B.C.; the latter days of the Roman Republic, the latter days of the Empire; and to a lesser extent in Western Europe in the middle of the 17th Century and again at the end of the 18th Century.

Apart from other factors there is one idea common to all the ancient and mediaeval plans; the finite idea. I mean that, whether in the grandiose lay-out of Antioch or Constantinople, or in the less ambitious schemes of say Priene and Florence, the Greek and Roman colonial towns in Africa, England and France, the Seigneurial towns of the Middle Ages, or even the ideal cities of Sir Thomas More and other writers, there is the general underlying idea of the city contained in fixed limits and boundaries.

We read of all kinds of expedients to maintain equilibrium between the size of the city and the number of its inhabitants. On the one hand wholesale depopulation to found a new city or colony, on the other

penalties for failure to build on the part of the site owner, or for allowing a house to fall or become unoccupied; or again of special inducements in the way of gifts of land and building material to those willing to remove to a new city.

Dictators, parliaments and laws however were all powerless when confronted with economic change. The steam engine destroyed all city boundaries; electricity, petroleum, flight and capitalism completed the destruction both of boundaries and beauty.

At various periods in history mankind has achieved a great degree of harmony with his surroundings, and at such stages in his development his towns have been good to look upon. The Basuto village, the Greek city, the town of Feudal England at the foot of the castle hill or clustered round a monastery; these all denoted periods of stability, each in turn disappearing at the beginning of a new economic era. Production for profit, which reached its zenith at the beginning of the present century, has for a century been rendering obsolete all the older elements of stability. It has destroyed both religion and the civic spirit; craftsmanship has disappeared; wealth and poverty have alike increased and our towns and cities have become amorphous agglomerations of aimless and ill-constructed factories, hotels and hovels with a sprinkling of palatial offices and emporia and charming suburbs where none but the rich can dwell.

All these evil elements have been intensified by the past failure to visualise the city not as a finite entity but as a growing organism.

Since 1859 when the "Origin of Species" appeared and the few years subsequent during which Spencer and Huxley in England had made the implication of this work apparent, there has been no excuse for the general failure to recognise the city as a growing organism.

It is only gradually that any conception of evolutionary principles has become evident either in ideal or practical town planning. Some of the more evident points were at once seized upon by the modern Utopians who, like Henry Bellamy, pictured the city of to-morrow as a mere replica on vaster lines of the worst features of the city of to-day, modified, it is true, in some degree, out of respect to the amenities of life and facility of communications.

The practical men too seem to see but a larger Paris, a greater London and a much magnified Chicago. They are all working on the single factor that as the populations of European countries have doubled in the last 60 years and the towns have increased at an even greater rate, therefore, this rate of progress must continue. Are they correct in this deduction? I submit they are not. I would like (without pressing too far an analogy from another science) to draw attention to the method of increase in size and qualities in animals and plants and their attributes. Definite and reliable figures are available as to the sugar-content of beet-root, the size and weight of maize, the speed of race-horses, all of which as the result of artificial selective treatment increased rapidly to a certain point beyond which there was a gradual decrease in the rate of growth until a maximum was reached. Again, a certain inefficiency and lack of survival power seems to attach to mere growth. *Diplodocus*, the mammoth and the dinosaurs are dead; the whale and the elephant precariously survive. Is it not reasonable to surmise that the future growth of cities is to be rather qualitative than quantitative?

Moreover, a clearer light is thrown on our problem by a more closely allied science; that of economics. What Darwin did for biology Karl Marx did for economics. "*Das Kapital*" was published in the same year as the "*Origin of Species*." The latter work produced the bitterest abuse and controversy; the former although less bitterly assailed at the time has had a longer struggle. Being a scientific analysis of society and economic conditions on evolutionary lines, its main theses have resisted all assailable and it is now (though still resisted) becoming generally recognised as a real clue to our social evolution. The most interesting theory it contains and the one that most closely concerns us is that of the inherent instability of capitalism, and the demonstration that the system of production for profit bears within itself the seeds of its own downfall. Though keenly resented for two generations, the truth of this theory is now becoming clear and it behoves town planners to keep it clearly in mind when planning for the future.

It is too early to see the details of the future society, or rather of its next succeeding phase, but it seems clear that the state is in the same revolutionary phase, the capitalist system of which it is a part. They are both becoming top heavy and with the fall of the one we can anticipate a fundamental change in the other. The general direction of that change both in production and politics must certainly be in the direction of a great measure of local autonomy, of decen-

tralisation both of Government and of production; a checking of the growth both of big business and of big cities; a general stimulus to local production and craftsmanship and a re-birth of the communal or civic spirit that has been all but eliminated from our present society.

Intimately connected with the coming political and economic changes will be the changes in machine production and the distribution of commodities. Few people seem to be aware of the extreme and increasing disparity between the numbers of those engaged in production and in distribution, and also of the big increase in the proportion of administrative heads to the workers engaged. The changed society will automatically remedy this to a large extent, but the big and interesting questions will be how to limit the power of the machine and to free the people from its mastery.

If these questions are not satisfactorily solved then the outlook for the future will indeed be dark. However, there seems to-day to be a growing recognition of this as a root problem, not only among socialists and revolutionaries but among artists and craftsmen and thinkers, which gives ground for hope of a satisfactory solution and one which will have the greatest effect on our social life and our city plans.

It will mean the rebirth of the craftsman, which in turn will mean that our chairs and tables will be made in our own town or village by our own citizens. We shall not send from Potchefstroom to America for our ploughs, to England for wall papers, to the Baltic for timber, nor to Pretoria and Tembuland for our policemen. I am not attempting to depict any ideal State nor to make South Africa the beautiful dream of that socialist poet and craftsman, William Morris. The machine will never be abolished unless that be the only way to free the soul of man but very soon now mankind will be seeking, and that not blindly, to escape from the slavery of the machine. How is it to be achieved? Not I think entirely along the lines suggested by those far-seeing members of the Architectural Profession, Professor Ashbee and Mr. Penty, who would go very far indeed in the direction of the total abolition of the machine; still less in the direction that seems dear to the Fabians and State Socialists, of a vast increase in the power and function of machine coupled with an idealised condition of labour and environment for the labourer.

Rather I think it will come to be recognised that machine work is one of those necessary evils of modern life, like scavenging, that must be performed but must not be allowed to warp and cramp the life of any citizen, and that every citizen must therefore take his

share in this obnoxious toil. And how is this to be achieved? Surely by the linking up of craftsmanship, agriculture and machine work. Until quite recently every Russian factory worker was an agriculturist and could and frequently did return to the land at certain periods of the year, or after a certain sum had been earned. The miners on this reef are largely in the same position.

I foresee a closer relationship between town and country life, the refusal of the countryman to be permanently isolated from the artistic, social and intellectual advantages of the town, and the desire of the townsman to spend some portion of his working life in the more healthy occupations of the countryside. This is an arrangement which could not fail to be of general advantage to all from the various points of view of quality and quantity of output and the physical and intellectual improvement of all citizens.

What effect will these changes have on the city of the future? I think they will cause a considerable increase in the number of towns and say from five to ten thousand inhabitants, a much lessened rate of increase and in many cases a sudden or gradual decrease in the population of large towns.

The rebirth of the arts and crafts, coupled with the restoration of a community spirit, will be the town planner's opportunity and delight.

Towns will then normally centre around the public buildings in which the citizens will have a sense of common ownership. The architect will have a glorious opportunity. He will cease to be called upon to design the vast office blocks and industrial monstrosities of to-day but will have instead the provision of civic centres; libraries, galleries, the construction of groups of individual dwellings and communal homes. I say communal homes advisedly, for even to-day, and in English-speaking countries which are the most individualised in domestic matters, the institution of the "home" is becoming greatly modified. Every year an increasing proportion of these populations are dwelling in hotels and flats with services provided. Also, there is a growing disinclination on the part of people in these countries to engage themselves in domestic service, which will reach a climax when the big change comes. Australia has almost reached the position that will then obtain when the family will be faced with the alternative of performing all their own domestic work or else living in some form of communal dwelling.

Now this will mean an entirely new grouping of houses and as gardeners will not be available for wages, we shall have a large proportion of the people housed around common gardens jointly or communally maintained; an arrangement which at once suggests many labour-saving devices, central heating schemes, etc.

Fordsburg and Parktown have both had their day. The new Johannesburg will find them both too expensive, the one in human life, the latter in human toil. It will aim at the amenities of Parktown it is true, but the accentuated individualism of that beautiful if abnormal suburb must disappear.

Although using South African examples, I do not suggest that the big change will have an immediate and direct bearing here. Our land system and the servile basis of our industries will probably render South Africa one of the last strongholds in which the capitalist system will survive; but the big changes in Europe are bound to have their repercussions even here.

Bertrand Russell foresees the probabilities of Italy, France and Germany following Russia's example within ten years and that example is most suggestive. We read how in Moscow "Bovril" and "Colman's Mustard" or their Russian equivalents have disappeared from walls and hoardings and their places become devoted to the work of the Futurist artist; how the statues of some monarchs have been pulled down, not because they were monarchs but because the sculpture was bad, and the statues of other equally loved or hated despots carefully preserved where the craftsmanship was good. Tsarskoe Selo (Czar's village) has been renamed the Children's village and the luxurious palace of the despot has become the country home of the neediest children. Ideas like this bear fruit. The house of to-morrow will be built to live in, not to let. Already the building-workers are taking steps to eliminate the contractor and the jerry builder; soon they will refuse to build aught but homes while homes are needed, and it is not beyond hope that they will soon have understanding enough to refuse to build ugly ones where beauty is possible—and that is everywhere.

Before concluding, let me again emphasize that I am picturing no Utopia but merely attempting to draw legitimate inferences as to the changes that will be consequent on the impending economic change.

Throughout history a change in the system of production has had the profoundest effect on all branches of social life and organisation. It is not a question of human nature, some of whose features remain fairly constant and others of which readily adapt themselves to a new environment. In the past all human institutions, and in the last resort human nature itself, have been directly dependent on the current methods of production and distribution of commodities, although the complete reaction and adaption thereto occupies a varied time and in some cases, as for instance during the capitalist period, fails entirely to achieve complete harmony.

In conclusion, let me suggest some of the essential features wherein the new city will differ from the cities of the past:

- (a) absence of large gardens and private pleasure grounds pertaining to individual houses;
- (b) increase of large dwellings and groups of dwellings occupied by several families;
- (c) a comparative absence of shops and private offices;
- (d) a comparative decrease in traffic accompanied by greater facilities therefor;
- (e) a general distribution of electric power coupled with an absence of smoke;
- (f) an air landing near the centre of the city, perhaps on the roof of public building;
- (g) large open space or spaces in centre of town;
- (h) great increase in size, number and beauty of public buildings (offices, libraries, galleries, schools, theatres, studios, museums, clubs) And open spaces;
- (i) creation of park zone between centre and suburbs of larger cities;
- (j) few houses will have conveniences and facilities that are not enjoyed by all;
- (k) a wider distribution of craft production throughout the city, only the largest, noisiest and dirtiest undertakings needing to be grouped and isolated;
- (l) absence of advertisement and a conscious endeavour to eliminate the ugly;
- (m) the absence of provision for class distinction in hotel, theatre, travel, etc;
- (n) the selection of site for a new city before construction;
- (o) the publication and common criticism of all plans for construction and development.

These are some of the main features of the new city which the town-planner has to bear in mind. We are at the dawn of a new era although we may go through troubled times before we reach it. Nevertheless the future is full of a sure hope. Our children's children will build "The City Beautiful." It is for us to make smooth the way and remove all obstacles from their path.

Owing to the unavoidable absence through sudden illness of the Acting Secretary, Mr. D. M. Burton made the following report:—

Mr. Chairman and Gentlemen, during the past year the Association confined itself to the work of doing all it could toward getting improvement as far as possible in existing towns and wherever possible in new lay-outs. Witbank was one of those places where we

had the opportunity of putting the views of the Executive of this Association before the proper authorities, and they resulted in what I think was a very satisfactory plan being drawn up for the Witbank Township. At first it was felt that the owners of the ground were considerably against interference of the Town Planning Association or anybody else, but having put the views of the Association before the owners they eventually decided to give us an opportunity of showing what was possible in the way of town planning. The plan was drawn up and, after careful thought was adopted. Mr. Rees Poole of Pretoria, a member of the Town Planning Association prepared the plan, showing a proposed lay-out of the ground, the result of which was that the owners of the ground were so pleased with the idea that they generously made a donation of 50 guineas towards the funds of the Town Planning Association. This then proved an example of the usefulness our Association would serve as a reference to the lay out of town plans. I think Mr. Leslie was one of the prime movers in the Witbank lay-out. Whilst progress was being made in connection with the lay-out of Witbank, Mr. Harold Porter a member who is interested in an outlying district, was called upon to make a plan of the proposed township of Stella. Some of you may know a good deal more about Vryburg district in which Stella is situated than I do, but I do feel, having seen the plan prepared by my friend, Mr. Porter, (whom I am glad to see here to-night), that if we adopt means of bringing owners of ground to see the advantages obtaining by the preparing of properly planned villages and lay-outs of ground, we will serve an excellent purpose as a Town Planning Association and confer lasting benefits on the community. Mr. Porter prepared this plan and it does not require an expert to see the advantages of such a lay-out, and we now hope it will be surveyed in strict accordance with Mr. Porter's plan. There is something more than just the lay-out of a town and it is thought that as the town progresses it should be under proper control. That the Executive of this Association realises, and proposes to do all it can to bring about a proper means of seeing that our towns and suburbs and individual lay-outs are not disfigured by ugly buildings. During the course of the year we found that one of the members of this Association was asked to prepare the plan of the Gedult Township—it was in a private capacity that the planner designed this and it was not placed before the Town Planning Association for approval or comment, and the Executive do not feel called upon to make any explanation in this connection. During the year, also, the Administrator, who is a valuable member of this Association, and, I am pleased to say is very keenly interested in its undertakings, has agreed to allow a competition to be made for the proposed plan

of the Warmbaths township. Warmbaths is I think known to all of you here to-night, some of you know it perhaps a good deal better than I do, but during the year certain members of the Executive visited Warmbaths at the request of the Administrator, who, to enable them to examine the site, placed facilities at their disposal, to enable them to make suggestions as to what would be the best means of laying out Warmbaths township, and after careful and lengthy consideration, it was suggested that competitive designs be called for for the lay-out, and this is on the tapis at the present time; plans have to be sent in some time in September. The result we fully expect will show the wisdom of the step taken. Warmbaths, we feel, has a wonderful future and can be either made or marred; we all hope for something really good from the action of the Administrator in this matter. We were consulted by members of the Germiston Town Council during the year in connection with certain improvements it was desired to make in the Municipality of that town. It appears that for a number of years the Germiston Municipality endeavoured to have removed certain buildings which were detrimental to the public interests of that town. Finally they asked the Town Planning Association to interest itself and see whether it could do anything to help in the matter. A deputation from the Executive went to Germiston with a view to inspecting the proposals Germiston had drawn up and the Executive made certain suggestions to the Germiston Municipality which we hope will be carried out. Germiston is in a similar position to that of Johannesburg to-day. I have felt for some considerable time past that our Town Engineer, whom I am pleased to see with us to-night, is very keenly interested in the improvement of Johannesburg's lay-out, and I am certain that if he had a free hand he would remove some of the blocks of buildings which to-day are seen to be pillars of obstruction to the progress of proper development, but which must perforce remain for the present, at any rate in their present position if for not other than financial reasons, but in the case I wish to refer to it will be noticed that an opportunity that should have been accepted with open arms was turned down by the very people who should have welcomed it, I refer to the erection of Police Barracks and Stabling at Germiston.

The members of your Executive, who visited Germiston, found that it was intended to erect a block of barracks and stabling for about 40 horses in a direct line with the Park situate in a most central area of the town, moreover the stables were to be erected right opposite a school accommodating about 1,300 children. Your Executive pointed out to the Government Authorities that it could not be considered in the best interests of the people to build such buildings in

the position proposed and respectfully asked for a reconsideration of the scheme, pointing out that a site many times larger in area had been held by the Municipality for some years as a site for the particular buildings referred to. One of the official replies was to say the least illuminating and I will read you an extract from the letter.

"There has always been a Police Stable on the premises from the time the place was utilised as a Police Barracks and the place has always been and is still in a clean condition and certainly much more so than many privately owned stables. There has been nothing to detract from the suitability of the place and when the new buildings are erected they will be kept as model buildings and will moreover be an acquisition to the town. Although the old Police Station is an eyesore, the new one will not offend the aesthetic tastes of any one concerned."

Now, if this is the attitude that Government Officials are going to take up, I think you will agree that the difficulties to be faced when suggestions are made with regard to securing better conditions and improvements are enormous especially when officials are able to give a decision without consideration as to what the Public desire.

The happiness of the people should be the first consideration and a frame of mind such as I have referred to is a great barrier to progressive planning for wherever any town is desirous of improving the surrounding conditions every encouragement should be given by those in authority.

Unfortunately the Germiston Municipality called our attention to this when the building contract had been let and only when their own efforts had failed, otherwise I feel the Town Planning Association would have taken more active steps than it was able to do.

If we are to attain to these things which we desire, we must be prepared to fight for them and seek to get the strongest help we can to meet such views as the one I have stated was given to our representations.

During the year your Executive have had under consideration the suggested new Post Office Building for Johannesburg. We hope, Gentlemen, to have an improvement effected in this connection, and we are of opinion that in view of the fact that the present Post Office site is inadequate and cannot be enlarged to satisfy the estimated requirements for a period extending over approximately the next ten years, we think that if the necessary arrangements can be made with our Town Council for the transfer of a more suitable site, that the Government will agree to a change of position of the Post Office and thus enable us to

effect a much needed improvement in the planning of the central area of Johannesburg.

With reference to the proposed new Railway Station for Johannesburg, it was suggested that the Railway Administration should consider building a new station on the site of the present Kazerne and remove the existing Goods Station on the south side of the town in the neighbourhood of the Jupiter Mine. Nothing, however, came of this suggestion which did not appear acceptable, but the Association has been promised that before anything is definitely decided upon, we will be given an opportunity to examine the plans of the new Station. Should these not be considered acceptable, the Executive will take the matter up with the proper authorities.

I regret to have to announce that Mr. van der Ster has resigned his membership of the Association, having accepted an appointment in connection with the triangulation survey of the Union.

The Executive wish to place on record the good services rendered by Mr. van der Ster who, when resigning, made a gift of books to the Association. Our

best thanks are due and I feel that all the members present desire to express their thanks for his generous gift.

The Town Planning Association were not asked to give any opinion in connection with a suggested Ordinance Survey of the Union such as obtains in England, but I think we must all agree that such a survey and maps would be of very great use to this Association and give valuable assistance to all engaged or interested in Town Planning and we must hope to see such survey maps prepared in South Africa.

During the year the question of a new home for technical and scientific societies were discussed and brought to a successful issue. Many of the gentlemen present are actively connected with Associations interested in that institution and I think the incoming Executive should ally itself to it as it will be the means of bringing together a good deal of thought on subjects of interest to the Town Planning Association and will prove useful in many ways.

The scheme has been formally adopted and the new home has been purchased and I believe the plans

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for the necessary alterations are well in hand, and the alterations when complete will be worthy of the reception of the various bodies connected with same. The Executive will be called upon to discuss this matter during the year.

There is a good deal of work before the incoming Executive and the Association will have ample scope afforded it to justify its existence.

It is hoped to approach the Government with a view to holding a conference on the lines of that held in Australasia as it is felt that Town Planning is a subject of vital interest to the State and should receive greater support from the Government than heretofore.

Valuable evidence was given during the year by members of the Executive before the Housing Commission in Pretoria and before the Town Planning Commission in Johannesburg. It cannot be said that these Commissions result in any lasting change or improvement as they invariably are brought about with a view of appeasing the Public indignation and very probably on that account result in but little good, yet this Association must avail itself of every opportunity

of bringing its views forward and making itself heard with no uncertain voice as its work is not for the benefit of any one section of the Community but for the whole, and has therefore no political views other than those of which no section of the people could take exception at any time.

I think, gentlemen, that I have nothing more to add except to say that I feel that the Executive, which was elected at the beginning of the year 1919, has tried to do its utmost in the best interests of Town Planning in the Transvaal and in South Africa generally.

We welcome the opportunity of giving advice to any Municipality; we do not want to be tied but to be in a position to help wherever we can.

We do not desire to make money out of our assistance in this respect, but it should be understood that members cannot travel long distances without cost and authorities, desirous of having the opinions of the members of the Association, should be prepared to pay at least the out of pocket expenses in connection therewith.

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