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SOUTH AFRICAN ARCHITECTURAL RECORD

THE JOURNAL OF THE CAPE, NATAL, ORANGE FREE STATE AND TRANSVAAL PROVINCIAL INSTITUTES OF SOUTH AFRICAN ARCHITECTS AND THE CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS.

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CZECHOSLOVAK ARCHITECTURE, 1500-1800

1. RENAISSANCE.

By Dr. L. B. Kreitner.

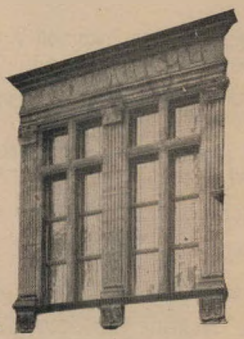
Late Professor of History of Fine Art, Masaryk People's University, Lecturer at Victoria College, Prague

Prague, the 1,000-year-old capital of Czechoslovakia, which has been in Nazi hands since 1939, lies in the very heart of Europe. Its history bears the marks of the revolutions and stirring events enacted throughout all Europe. All the currents of thought, all the nations of Europe, have met at one time or another at this cross-road of Western and Eastern ideas. It was there that the first great Reformation struggles in the fifteenth century flamed forth, and it was from there, too, that the glories of the equally passionate restoration of Catholicism issued.

By its geographical position and in respect of intellectual and historical happenings, it would seem to be Prague's particular mission to act as a medium between Slavonic and Germanic culture, a mission which, as no other, has given a peculiar outward stamp to the city, but at the same time has caused the Czechoslovak capital in many things, and more especially in art, to go its own way. The impact of the two worlds—the Slav and the Germanic—and sometimes the almost imperceptible fusion of the two, has produced in the various departments of art, especially in architecture, effects which are remote from the ordinary. It has created that peculiar atmosphere which, though indefinable, nevertheless exists, or has at least existed, and which one has to take into account if one attempts to explain the typical art of Prague.

In this atmosphere, however, there exist still elements other than the Slavonic and the Germanic. A strong Latin element, early introduced into the sphere of Prague art from outside, brings, as it were, the whole mass into fermentation. Sometimes it even appears as if it were precisely this Latin addition which determines the degree of speciality in Prague art, as if it were this element which brings to maturity and full development all that issued from the strange union of the Slavonic with the Germanic.

It was not so much the Romanesque architecture which gave to Prague at the end of the Middle Ages the charac-

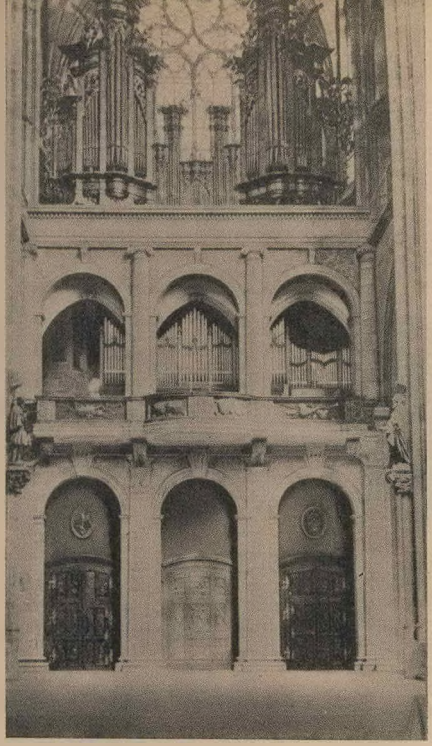


1 Window of the Wladislaw Hall (1493)



2 Wladislaw Hall. Interior (1492-1512)

Photo: Centropress



3

Organ Gallery in St. Vitus (1557-1561)

teristic appearance, as the Gothic period. The eclecticisms of the beginnings had given place to a Gothic architecture which had found in Peter Parler and his school its own expression and which had spread its forms far beyond the borders of Central Europe. At the end of the Fifteenth Century, when the style degenerated into decoration once more, Czechoslovak Gothic had its own ways and forms, the "Bohemian Special Gothic," as it is called. But inventiveness was exhausted; the country was ripe to accept and to assimilate the new ideas and forms of the Italian Renaissance.

It is an outstanding fact, so far not sufficiently appraised by historians of architecture, that in Central and Western Europe Prague shows the first signs of Italian Renaissance. The earliest vestiges of these forms were to be found already in 1943, when an unknown artist decorated the windows (1) of the Wladislaw Hall of the Prague Castle with Renaissance pilasters and architraves.[1]

[1] Hitherto Augsburg, in Southern Germany, was supposed to have exhibited the first Renaissance forms of Central Europe, dated 1496. But in view of the undoubtedly authentic inscription "1493" on the Prague windows, that city can rightly claim to be the first place north of the Alps to show Renaissance forms on a building.

How did Italian Renaissance penetrate into Bohemia? So far there seems to be no satisfactory answer to the question. The fact that at the end of the Fifteenth Century we are facing Renaissance forms both in Prague and elsewhere in Bohemian towns does not mean that these forms came by a direct route—that they were brought by an Italian architect. Even if these Renaissance elements are organically connected with the building, for instance, the Wladislaw Hall (2), they remain strange within the architecture which at that time was intrinsically Gothic. Probably these forms were brought by a North Italian stonemason employed on that building. His name is, and probably will remain, unknown. So far as I was able to ascertain in the Prague Archives, there are two Italian names of men connected with the building trade: in 1484 a certain "Andreas Murator," thus a mason, and in 1494 "Anthoninus Mutinensis de Capellis Italicus" were given the freedom of the city. But this does not solve the question at all, because there are still two other possibilities. The forms could be simply copied from Italian wood cuts (as, in fact, they were at the portal of the St. George's Basilica, about 1500), or they were designed by an unknown stonemason in the service of King Wladislaw II. I am inclined to assume this latter possibility, as the forms of the windows of the Wawel Castle at Cracow, a later construction of the same King, show the very same characteristic marks.

It was, however, only the forms of the Italian architecture, not the spirit, which conquered the Czech architecture. Gothic was so deeply rooted in the country that "secret" Gothic outlived Renaissance, and only the march of Baroque architecture was able to stamp out this "Gothic feeling" of Czech builders who, in spite of having acquired the Italian forms, remained faithful to mediaeval Gothic solutions. Yet, to tell the truth, this "Gothic feeling" was not restricted to the national architects only. Boniface Wohlmuth, a South German architect whom King Ferdinand had called to Prague in the middle of the Sixteenth Century, was only in his superstructure a Renaissance architect, whereas the essential proportions of his architecture remained Gothic. The vaulting of his Organ Gallery in the St. Vitus Cathedral (3) in Prague (1557-61) is as Gothic as the proportions are. The dualism of the forms, the protracted openings of the ground floor, and the somewhat squeezed arcades above, can be easily explained by the architect's careful studies of the books of Serlio and Vitruvius.

Yet Wohlmuth came to Prague to finish the delightful summer residence of Queen Anne, the "Belvedere" Pavilion (4), which in 1530 Giovanni Spatio, with the help of a few Italians and the skilful sculptor, Paolo della Stella, had begun and left unfinished. Its form is reminiscent of both the Certosa of Pavia and the Palazzo Civico of Padua. But the final solution of the double storey pavilion, with its fine arcade in the basement, suggests that the Italians have planned it entirely in the modern "Italian Style," whereas Wohlmuth kept to the Venetian prototype, adding to it Serlio details and the curved roof, a reminiscence either of Padua or Pavia. Another



4



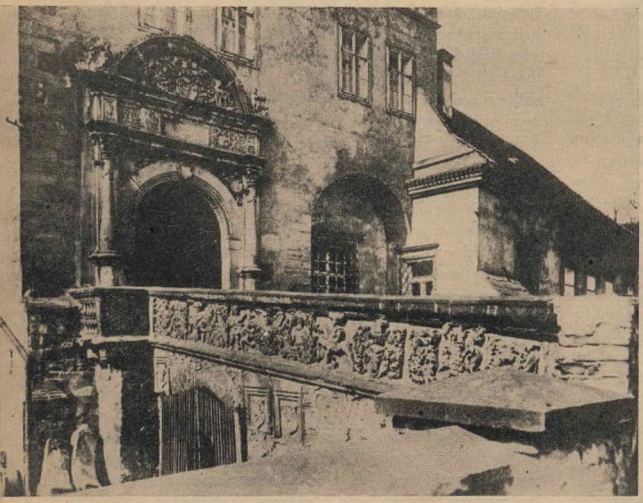
5

4 "Belvedere" Pavilion.
(Ground Floor 1530. First floor and roof 1543-1556.)

5 Schwarzenberg Palace (1545-1563).

6 Entrance to the Pernstejn Palace in Pardubice (1564).

6



7





7 Courtyard of the Town Hall in Bratislava (1520).

8 St. Rochus Church (cir. 1565-70). Entrance 1742.

8

building, the King's hunting seat, "Star"—the name is taken from its ground plan in star form—is an entirely Gothic idea, but its decoration shows pure Italian ornaments in stucco which are probably the work of the two Italian stonemasons Giovanni Lucchese and Juan de Pambio.

The building activities of King Ferdinand and his successor, Maximilian, had their reflex in the city itself. The erection of churches was begun, and the nobility imitated the King by using Italian architects for their mansions. Agostino —only the architect's Christian name is known—enriched Prague by the huge Schwarzenberg Palace (1545-63) (5). Characteristically the building already shows a sort of "Court d'honneur" enclosed by arcades of simple but effective design. The facade served as an example for a series of buildings in Prague and in the country. It is covered with a rustica in sgrafitto, a cheap but very efficient substitute for stone. The overhanging cornice, with its intrados, points to the architect's North Italian origin, probably from Piacenza.

A real building fever seized the country: aristocracy and rich citizens rebuilt their residences, party copying the Italian forms, partly calling into the country Italian architects. The new imperial and aristocratic châteaux competed with the ambitious city houses throughout the country, so that in a short period of time the wealthier cities, such as Pardubice, Chrudím, Litomysl, changed their whole appearance. Whereas the aristocracy preferred, corresponding to its immense wealth, rich sculptured decoration—a characteristic example is the entrance to the Pernstejn Palace (6) in Pardubice (1564) —the cities, in their town halls, showed broad sense for simplicity. The court yard (1520) of the Town Hall of Bratislava (7) is a striking example of such buildings. The irregularity of the rhythm, both in arcades and semi-circular gablets, adds a mediaeval note to the picturesque aspect. Ecclesiastic monuments of the same period show only in their facades the signs of the new style. Structurally, churches built during the first half of the Sixteenth Century remained Gothic. A characteristic example is the St. Rochus Church (8), with its simple Renaissance forms erected over a Gothic ground plan.

The climax of the busy architectural life was reached during the last quarter of the century, during the reign of King Rudolph II. This grandson of the Hapsburg Charles V brought to Prague the real spirit of the Renaissance and made the city temporarily the centre of Europe. The King, a reserved and melancholic figure, sought distraction from the business of ruling a kingdom in occupation with art and science. Thus he created in Prague an artistic centre and surrounded himself with artists and skilled artisans who, conforming with the customs of the age, took positions as chamberlains and servants at court.

The Castle of Prague, which Rudolph had chosen as his residence, did not provide for the requirements of the court and the King in its existing architectural form. By order of the King the Italian architect Giovanni Gargiolli erected,



9 Decoration of the Spanish Hall, Prague Castle (cir. 1570).

therefore, a new annex which contained in the basement huge mews and in the first floor two big halls, the so-called Gallery and the Spanish Hall. These halls were destined for Rudolph's collections of "Art and Science," the "Chamber of Art and Wonders."[2]

Gargiolli, an eclectic, who took his patterns from Rome and Northern Italy alike, solved the task of providing the King with suitable rooms for his collection of fine art, rarities and scientific instruments by connecting the two parallelograms without being bothered with an architectural programme. Thus the decoration, especially that of the "Spanish Hall" (9), a work of Adriaan de Vries and J. B. Quadri, seems more important than the building itself. Still, the noble proportions of both halls, which were constructed about 1570, show Gargiolli worthy of his title as the King's superintendent of buildings.

[2] Rudolph's collections contained i.a. paintings of Raphael, Durer, and Titian; moreover, there were antiques such as the Ilioneus and Roman portrait busts. Beside these there were many paintings of the King's contemporaries.



10 Copy of Bramante's Sta Casa di Loreto (1592).

Again the aristocracy took advantage of the presence of "modern" Italian architects by entrusting some of them with the constructions of châteaux. Vaccami, an assistant of Gargiolli, planned and erected the Lobkowicz château at Roudnice. An unknown French architect is responsible for the château of Nelahozeves for the same Prince Lobkowicz. The Princesse Lobkowicz had Bramante's Santa Casa di Loreto copied in Prague (10) by two architects whose names are not known. In its proportions this copy, built in 1592, already shows the approaching Baroque style.

By the end of the Sixteenth Century, Renaissance had firmly established itself in Czechoslovakia, and native builders and stonemasons were fully conversant with Italian forms. The city houses, erected throughout the country, showed Renaissance facades somewhat modified by national elements. It had become quite a fashion to modernise Gothic facades by covering them with Renaissance forms, and hence the strange conglomerates resulted, which are to be seen in many a smaller town in Czechoslovakia, for instance, the Town Hall in Krumlov.

The stirring political events of the beginning of the Seventeenth Century and the consequent Thirty Years War mark the end of the Renaissance in Czechoslovakia and pave the way for the new Baroque Style.

Dr. Kreitner's historical review of Czechoslovak Architecture from 1500 to 1800 will be published in four consecutive parts.

THE CITY HALL

ARCHITECTURAL RESEARCH AND PROGRAMME FOR DESIGN

By K. Hall Gardner

THIS IS THE CONCLUDING PART OF VOLUME TWO OF AN ARCHITECTURAL THESIS, "A CITY HALL FOR CAPE TOWN."

CHAPTER IV.

THE CITY HALL: EXISTING EXAMPLES.

A really exhaustive treatise on city hall design would have to cover a wide period from well before the Christian era, up to the latest phantasies of Le Corbusier—and would be of little practical use. Four instructive examples from our present century have therefore been selected. Cape Town has been chosen for the what-not-to-do lessons it teaches (see for example the planning of the Council floor). Wembley is a sound example of the recent trend in England, a healthy trend. Stockholm and Hilversum have been chosen because they are the finest civic buildings that the writer has had the good fortune to visit, and actually see in use.



CITY HALL, CAPE TOWN.
REID & GREEN, ARCHITECTS.

CAPETOWN.

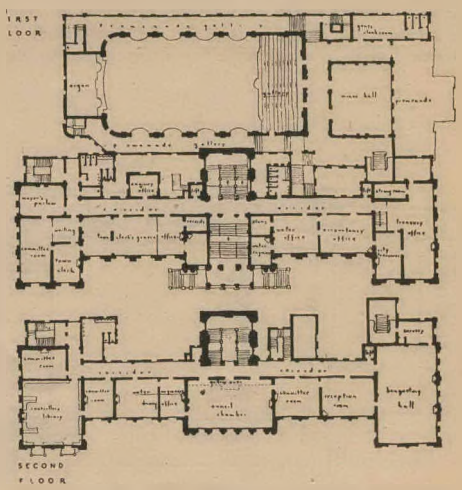
The practical and aesthetic merits of this building have been discussed elsewhere in this thesis; the following remarks on the subject, however, have a certain academic interest, and are therefore recorded here without comment.

"The inauguration of the City Hall Buildings is, perhaps, the most important event of the year, and I am gratified to know that the Council have accommodation in these buildings which will suffice for the administration of the work of the City for many years to come. The concentration of the various departments will tend to increased efficiency and economy."—Sir William Thorne, Deputy Mayor, 1904.

"Viewed from any vantage point, the classic lines of the City Hall Buildings are ornate and beautiful. Citizens of Cape Town are proud of their Guildhall, and pardonably so; civic patriotism would indeed be at a low ebb were it otherwise. In and around it cluster the manifold activities of the body politic which make for the general uplift, and from the point of view of municipal administration it is the hub of the Peninsula. The buildings are in the style of the Italian Renaissance, with classical facades, and a noble campanile towers high over the centre, its pinnacle about 200 feet above the causeway. The exterior of the structure is of Bath stone, on a massive granite base."—"Current" (1942) Handbook of the City of Cape Town.[1]

"Almighty God, we gratefully acknowledge that Thou hast filled the architects and builders with Thy spirit of wisdom, in understanding, in knowledge, and in all manner of workmanship."—The Rev. A. P. Bender, at the inauguration ceremony, Tuesday, 25th July, 1905.

"The building, from whatever point the same is viewed, forms a prominent feature of the City."—Non-committal comment of H. Liberman, Mayor, in 1905.



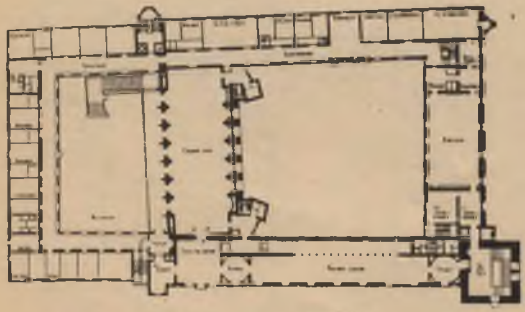
FIRST AND SECOND FLOOR PLANS

STOCKHOLM AND HILVERSUM

(Population 502,000 and 57,000 respectively).

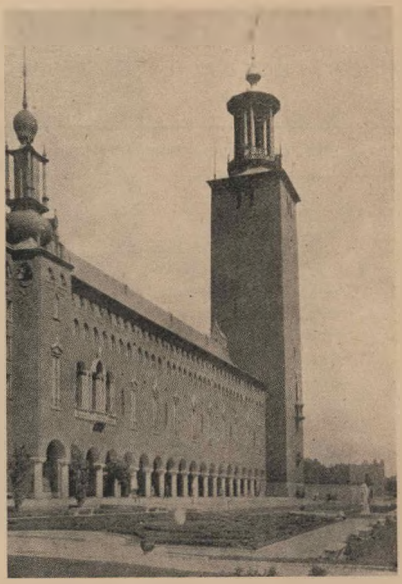
Scandinavia and Holland, or more specifically the work of Dudok, have in recent years exercised a profound influence on the architectural style and finish of civic buildings in England, and, although to a much lesser extent, in South Africa. In a few isolated cases, good buildings have resulted, but nine times out of ten it is merely the clichés that have been copied or taken over, without any understanding of the aesthetic and philosophic principles out of which the two styles have sprung in their respective lands of origin. The significance of the popularity which these two styles have found outside their lands of origin lies in the fact that, while they differ from each other in almost every other respect, both are essentially romantic in conception.

The town halls of Stockholm and Hilversum, to take specific examples, have an equal claim to be regarded as truly great architecture, yet it is difficult to imagine two buildings more different—Stockholm conjures up memories of the days of the merchant-guilds, of the colour and barbarism of peasant life, of fine craftsmanship; it is the embodiment of the historical romantic spirit, honouring the city's noble past; Hilversum is a romantic structure in the contemporary idiom, expressing the city's pride in its present and confidence in its future. Stockholm and Hilversum typify the two main methods of construction—the solid weight-bearing, and the frame with non-structural partitions; and also the two fundamental approaches to planning—the traditional (not in the derogatory sense, implying forced academic subordination of plan to elevations), and the free, or organic. In Stockholm the emphasis is on the ceremonial functions of the city hall, with the administrative definitely kept in the background; in Hilversum, which is incidentally a fine piece of planning, the



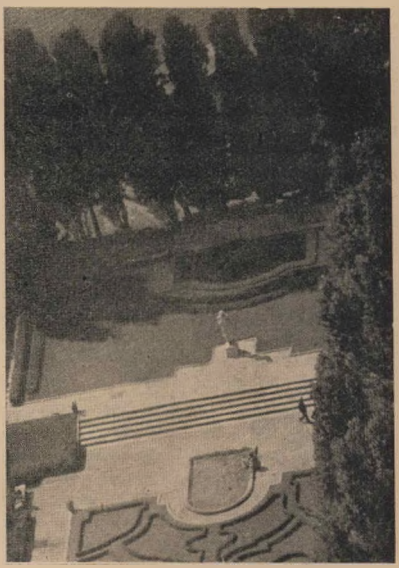
STOCKHOLM CITY HALL, MAIN PLAN.

RAGNER OSTBERG, ARCHITECT.



STOCKHOLM CITY HALL, SWEDEN

LAKE FRONT AND PEOPLE'S COURT.



VIEW LOOKING DOWN INTO PEOPLE'S COURT

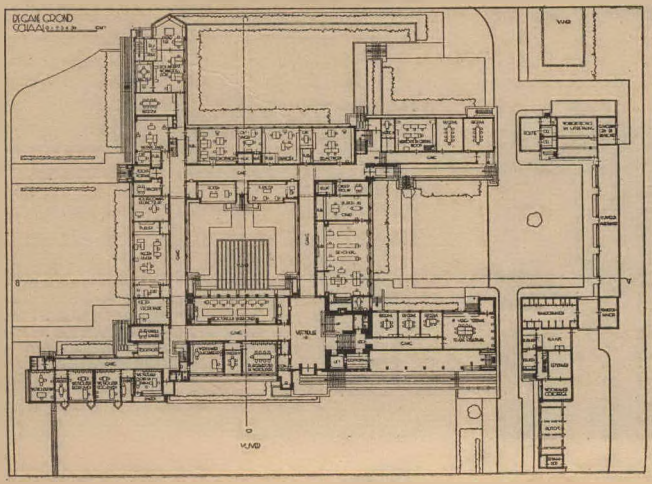
emphasis on ceremony and on administration is more evenly divided, which is as it should be.

It is regrettable that in neither case has provision been made for possible future expansion of the administrative departments or for changes in the nature of the civic organisation, which the buildings house. Additions to the perfectly conceived and carried-out unit which is the Stockholm City Hall are unthinkable—the composition is one of perfect massing which, despite its asymmetry, would be aesthetically ruined if anything were added or taken away. This does not apply quite so definitely to the more rambling massing of Hilversum, and in any case the latter, having been built in a mood of exaggerated far-sightedness at a cost considerably beyond the reasonable means of the city (the modern Hollander evinces a civic pride which is almost pathologically intense), is not likely to become inadequate from the point of view of accommodation until the city's population has at least trebled itself; in other words, the future expansion has been provided for not on paper, or in the architect's mind, but in concrete.

To sum up the comparison, one might say that Stockholm is perfect aesthetically, but is rigid and inflexible as regards planning and possible future extension. While Hilversum is more satisfactory in these practical aspects, it is less good aesthetically—for one thing it is more likely to be "dated" fifty years hence—not (let there be no misunderstanding) because it lacks a flavour of history and tradition, but because, if one wishes to be hypercritical, it may definitely be said to tend towards virtuosity of the its-wonderful-what-we-can-do-with-cantilevers-these-days kind.



HILVERSUM CITY HALL, HOLLAND
VIEW FROM THE MAIN APPROACH



GROUND FLOOR PLAN. W. M. DUDOK, ARCHITECT

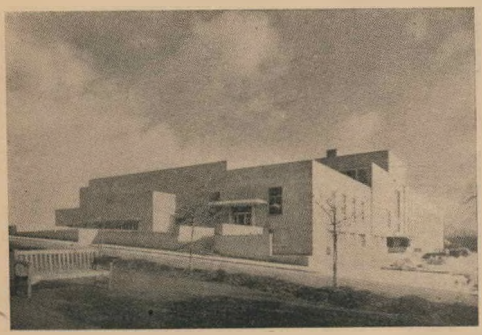
WEMBLEY

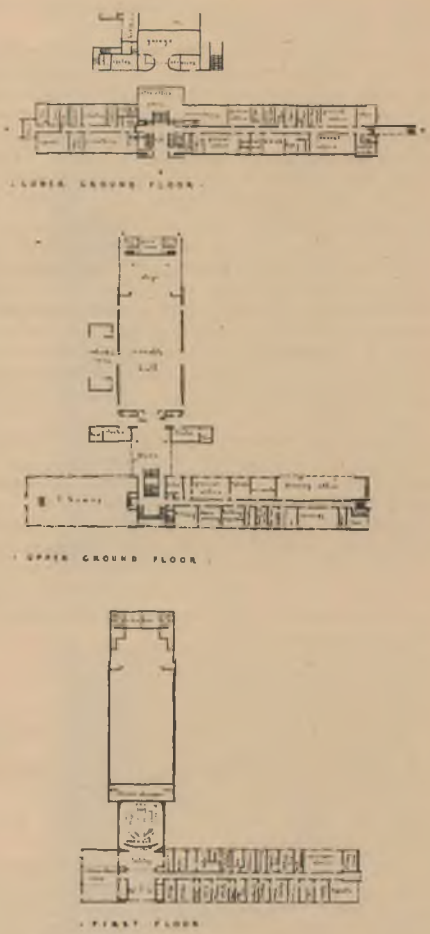
(Population 115,000).

Wembley is one of the very few examples of English civic building where alien influence and the traditions of planning count for nothing—compare it, for example, with Swansea's purified Renaissance (or bleak Roman, according to one's point of view) or Norwich's fancy Scandinavian treatment, or with Beckenham's staid planning. Glance at Wembley's organic plan, intrinsically beautiful even on paper, and at the amorphous mass which is the plan of Cape Town's City Hall—it seems incredible that they belong to the same century. The designers of the latter obviously started with the boundaries of their site, and worked inwards; the designer of Wembley started with his units of accommodation and worked outwards —the compared results are significant.

Both in broad outline and in detail, the planning of Wembley repays close study—note its adaptation to a sloping site; how the Assembly Hall and Administrative Offices form two clearly defined units; how each floor of the latter is devoted to a particular type of activity (thus the lower ground floor is primarily concerned with money; the upper ground floor with building; the first floor with council activities; and the top floor with staff and caretaker); how the floors are graded upwards from major public circulation to purely staff circulation; how units such as foyer, lobbies and staircases are not closed off, but flow naturally into each other, creating a pleasant impression of openness throughout the building; in short, how every part is functionally designed to fulfil its original purpose and, at the same time, to contribute to a harmonious whole.

The success of the interior is due to the care with which details of finish and fittings have been considered, as well as to the planning and the proportions. On the whole, the external treatment is disappointing, having a hard quality due to the material, and to careless arrangement of solid and voids.





FIRST FLOOR PLAN
WEMBLEY TOWN HALL. CLIFFORD STRANGE, ARCHITECT

NOTE ON CHAPTER 4.

[1] The following gem from the same source, while not strictly relevant, is, in the writer's opinion, worthy of preservation for posterity :—

"The marine attractions of any watering-place are incomplete without the provision of at least one of those solid highways which push out into the sea, affording the visitor the incomparable pleasure of being surrounded by water though safely ensconced on 'terra firma.' The Promenade Pier at Cape Town, whilst graceful in design, is thoroughly practical in the many functions it was intended to fulfil, and its prospect never fails to delight the visitor, provided the windows of his soul are not entirely closed."

CHAPTER 5.

AESTHETIC CONSIDERATIONS.

"Harrow the house of the dead: look shining at new styles of architecture, a change of heart."
—W. H. Auden.

THE ACADEMIC (OR NEO-CLASSIC) TRADITION.

There are countless examples in the cities of Europe of clumsy over-ornate civic buildings which misguidedly try, by the use of the outworn architectural trappings of former epochs and civilisations (usually the Classical), to impart the dignity of tradition to the squalor of the industrial scene. The citizens, while aware of the spirit of leisured grace which their city possessed in the past, are blind to the romance and precision of the mechanised present: "dignified" academic civic architecture is one of the manifestations of their nostalgia for the "good old days."

In South Africa, with a mere two or three centuries of tradition (and a neopolitan tradition, at that) we have not even the justification of nostalgia. Neo-Classic buildings in our cities are as ridiculous as a cap and gown on a schoolboy. Why are we ashamed of the youth of our civilisation—should not our civic buildings sincerely express that fresh youthfulness, rather than the false dignity of a stale and alien tradition? Gaudeamus igitur, juvenes quod sumus!

THE TRADITION OF SYMMETRY

Inextricably interwoven in the network of academic fallacies is the Baroque tradition that a building should have its parts duplicated about an axis and a dominant, like the parts of the human body about the spine and the head. The fallacy is obvious: rarely do the functions of two wings, say, of a building coincide as closely as the functions of each of two hands; more frequently the functions are entirely dissimilar, and while it is possible to make a library and a group of lavatories resemble each other from the outside, such treatment is ludicrously illogical, and must inevitably entail waste and inefficiency. It is not necessary to give examples of the absurdities which can result from forced design of this nature —every Neo-Classic building bristles with them.

Assuming, then, that asymmetrical treatment is (except in very special cases) the only course consistent with moral integrity, we come to the question: by what criteria can the asymmetrical building be aesthetically judged? There is only one criterion: whether or not the massing and composition are pleasing to the eye. Extremists will shout that if it fulfils its function it cannot but be, ipso facto, pleasing to the eye. Be that as it may, the abolition of symmetry should not imply the abolition of discretion and careful design—asymmetrical design is no less subject to rules than academic design: the fact that the rules are empiric should not be taken to mean that they are unimportant or even non-existent. Balance is essential to any asymmetrical composition—for instance, in the case of a city hall where allowance has to be made for extensions or additions, any pivot or dominant element (e.g., a clock-tower) would have to be introduced with great care, possibly even as a separate unit altogether, if unconsidered additions are not to wreck the balance of the original composition.

THE DESIRE FOR PERMANENCE

Another tradition which must be fought if reason is to prevail, is the universal desire for the quality of permanence in the design of all types of civic buildings. It is the writer's opinion, on the contrary, that an administrative building should express transcience; it is designed to last fifty years, and it should show it. Our civilisation is depressingly transitory! Let our civic buildings, at least, bear mute witness to posterity of our greatness at this climax of human evolution which is the Twentieth Century, in this most progressive of democracies which is South Africa! To-day we laugh at the sanitary arrangements of mighty Rome, and damn the Pont-du-Gard with patronising praise: posterity will laugh to scorn the fossilised shell of a 20th Century municipal machine. On the other hand we worship, as man always has and always will, the simple and sincere architectural expression of the cultural arete of a former epoch. We do not laugh at the Theatre of Epidaurus: we revere the spirit, the ethos that clings to the mould that the form has left. The mould of timeless architecture is the last resting place of the spirit of a past culture on this earth; without it the spirit must vanish into the eternity of the Universe: we do not laugh at the Parthenon.

Granted that man's primordial fear of death results in a justifiable desire for the permanent expression in architecture of the ethos of his generation, nevertheless the place for such expression is not in pretentious houses, the monuments of personal financial success; or in slick commercial buildings, the monuments of success of a group of financiers; and certainly not in administrative buildings, which are but a means to an end: but in those civic buildings which have a cultural function—they are the true guide for posterity as to the moral success or failure of a community. The successful design of buildings of this nature as a true interpretion of a city's national, civic and individual spirit is a task for genius—Ragner Ostberg has done it in Sweden, Frank Lloyd Wright could do it in America, and one day an architectural Messiah may arise in South Africa. Not being a genius, the writer has confined himself to an attempt at the sane planning of accommodation of the city's administration in a building designed for a life of, say, 50 years, with the consolation of the reflection that efficient administration is the good ground on which the seeds of the city's material and intellectual well-being can best prosper.

THE QUESTION OF A NATIONAL STYLE.

The following arguments are often put forward in favour of a distinct national style or "flavour" in architecture:—"Civic buildings, above all others, should express the national spirit or genius in their design. In early days, interchange of ideas was impeded by poor communications, and builders of each country unconsciously developed a style of their own; even the international Renaissance style was locally modified into distinct national styles. A building which slavishly copies a traditional style belies its period—we must extract from the traditional forms the qualities (adaptation to climate, local materials, building methods, etc.) which are expressive of the country in which the tradition arose."—H. L. Curtiss, 1934 (condensed). The above is a relatively mild and convincing statement of the case for eclectic traditionalism, but is unfortunately inapplicable to South Africa. We have one of the finest local domestic traditional styles in the world; that of the Cape Dutch farm-house—the best examples of these old houses, with their approach along an avenue of noble oaks, their sturdy proportions, their gleaming white walls dappled with shade and capped with boldly curving mouldings, their richly black thatched roofs, their quaint stoeps with rusbank at one end, their tall windows with delicate glazing-bars and mellow glass, their cool interiors smelling of well-oiled teak and shining with the cheerful cleanliness of polished red-tile floors and burnished brass and copper accessories, and their all-pervading air of the tranquil but full life: such houses are unsurpassed as country architecture: they are the perfect expression of a culture, and of a people.

Unlike the countries of Europe, we have no tradition of communal building on a medium or large scale: the Cape Dutch domestic style is our architectural tradition, and none but fools would insult that noble heritage by "extracting the qualities of its traditional forms" and applying them to multi-storey buildings in the city. As a matter of fact, some have made the attempt, and here and there in Cape Town one finds buildings with old curly teak fanlights (usually in concrete) over the doors, with hanging brass (plated) lanterns housing 500-watt electric globes, with concrete ceiling-beams cased in teak plywood with lots of fat dowel-pin heads stuck on to add to the effect, curved parapets with subtle mouldings topping the umpteenth floor, and so on ad nauseam. If a South African "flavour" is to be successfully introduced at all, it will have to be done extremely carefully. It will have to be indirect, subtle: more a matter of mood than of detail.

Probably the best thing we can do with this question of a national style, is to forget all about it; and concentrate on trying to produce efficient and aesthetically harmonious buildings. We have a South African climate, which expresses itself in our buildings whether we like it or not: if there is such a thing as a South African national character, it is bound to express itself eventually. A style will evolve.

THE IDEAL.

The ideal at which civic design should aim is flexibility and absolutely functional planning, together with an external treatment and massing in which the lessons of twenty centuries of architectural experience are not entirely swept aside or forgotten. The buildings of Le Corbusier testify to colossal conceit on the part of their designer: they imply that the graph of man's progress and spiritual evolution, which has been creeping up at an infinitesimal angle for thousands of years, has suddenly become almost vertical in the last decade. This is not the case. A certain amount of humility (if not eclecticism) in architecture, is good for the soul.

CHAPTER 6.

PLANNING CONSIDERATIONS.

This chapter is a condensation of the data given in "Town Halls" by Cotton and in "Planning" by E. &. O.E., to which latter volume the reader is referred for detail diagrams of equipment, etc. The Chapter has been made as brief as possible; in fact, it has been included only because it is a traditional part of thesis-research.

Truly organic planning can arise only from a thorough study of the working of the various organisations and units accommodated, such as is given in Chapter 3.

GENERAL:

Site.—Should be central; is visited by almost every member of the community at more or less regular intervals, for purposes of business or pleasure. Crowds, traffic, etc., make it advisable to have as much open space around building as possible; forecourts in front of main entrances are indispensable. Parking is probably most suitably provided in the basement of Assembly Hall.

Business and Ceremony.—Entrances and circulation should be kept separate, but possibly Town Clerk's and ceremonial portions of the building may be combined.

Mayor's Apartments.—Less important to-day than in the past, when public hospitality and ceremony were more lavish. Must have good access to both ceremonial apartments and to Town Clerk's Department; access to Council and committee rooms is less important.

Assembly Hall.—Used in the past only for civic functions; to-day, as it is frequently hired out for private purposes, care must be taken that private functions do not disturb the working of the apartments of the Mayor and of the Council.

Committee Rooms.—May be either separate, with a committee room in the offices of each administrative department

(an arrangement most convenient for the various departmental heads); or grouped togather and planned en suite near to the Council apartments (an arrangement which favours the convenience of the councillors).

Council Chamber.—May be planned as part of the Mayor's suite, or as a kind of board-room to the administrative departments; in the case of a large scheme such as the one in question, the former is more suitable. Should be well away from main public circulation; could even be on a top floor (an arrangement which would allow top-lighting or clerestory). Must have easy access to Town's Clerk's department. Councillors' apartments, lobby, etc., should be likewise semi-private, and off the main public circulation. A usual arrangement is to have the committee rooms over the main entrance front, with the Council Chamber facing the courtyard at the back; both on the first floor.

ADMINISTRATIVE DEPARTMENTS :

Planning.—Should allow for changes in sizes of the departments in relation to one another; one may expand, another shrink. Hence plan must be flexible, with light partitions and concentrated point loads; care must be taken in this connection with the placing of immovables such as lavatories, lifts, staircases, etc.

Depth of Offices.—Not more than 20 ft. from any window-wall.

Steel Frame.—Most suitable spacing is approximately 16 ft., as this allows two windows per bay, and economical slabs.

Window-cills.—2 ft. 6 in. above floor in general offices; more in drawing offices. Windows should be carried up near ceiling for good ventilation at back of offices. Metal casements with hoppers are probably the most suitable.

Central Corridors.—6 ft. to 10 ft. wide, and 8 ft. 6 in. to 9 ft. high, with duct-space over. Any borrowed lights should be double-glazed for sound-proofing.

Height of Offices.—10 ft. to 14 ft., average 12 ft.

Staircases.—One staircase to 50 persons on each floor is minimum, population of building being reckoned at 50 sq. ft. per person. No office should be more than 100 ft. from a staircase. Secondary staircases (min. width 4 ft.) must be continuous from basement to top floor, and of fireproof construction with cut-off doors at landings.

Lavatories.—Reckoning population of building at 50 sq. ft. per person, of which one third are women, allow (in addition to separate lavatories of department heads, etc.) :—

4 W.C.'s and 4 urinals per 100 men.
5 W.H.B.'s per first 100 men, 4 for every further 100.
6 W.C.'s per first 100 women, 5 for every further 100.
10 W.H.B.'s per first 100 women, 5 for every further 100.

Partitions.—Should be neat and sound-proof; preferably of the insulated cavity type.

Floors.—Allow for services (light, telephone, etc.) either in 2½ in. space above slab under wood floor, or in space under slab and beams above false ceiling.

Entrances.—Each department should have a separate ground floor entrance if possible, to avoid confusion of the public, lengthy corridors, etc.

Rates Office.—Should be very easy to find by public; usually planned like a banking-hall, with counters 3 ft. wide and 3 ft. 4 in. high, well clear of the office desks behind. Strong-room should be accessible both to general office and to accountancy staff.

Strong-rooms.—12 in. concrete or 18 in. brick walls, with concrete floors and ceilings. Doors (min. width, 3ft., for trolleys, etc.) should consist of outward-opening door and inward-opening grille.

Clinics in M.O. of H.'s Department.—Should be carefully separated (e.g., Welfare Clinic from T.B. Clinic), and have direct entrances from street. Perambulator store-rooms are advisable.

Engineer's Department.—Should be planned primarily for the convenience of staff, not of public. Should have fire-proof stores in basement, in addition to current-plans storage in drawing offices.

Caretaker's Flat.—Preferably on an upper floor, near to a vertical circulation of lift and staircase.

Departments Generally.—All enquiry-counters and general offices must be readily accessible to public; but the heads of Departments should be off the main public circulation. Waiting and secretary's rooms should be planned en suite with the office concerned. Departmental heads may prefer one large office, or a small private office and large interviewing office.

MAYOR AND COUNCIL :

Council Chamber.—Semi-circular or horse-shoe seating probably most satisfactory. Corridor around room is a good arrangement as it allows members to enter near their seats without causing disturbance, and also acts as a sound-baffle. Lighting should be high (top- or clerestory-lighting); if in walls, windows must be arranged so as not to dazzle either Mayors or Councillors. Artificial lighting pendant (points or indirect) should be dimmer-switch controlled as daylight passes. Seats should be fixed (not more than 5 seats without a 2 ft. 3 in. gangway) and minimum 2 ft. 3in. c/c, and 4 ft. back-to-back. Desks should be 2 ft. 4 in. high, sloped, and equipped with inkwells.

Press Gallery.—Should have easy access to Members' Lobby.

Public Gallery.—Facing Mayor's dais if possible. 10 ft. is minimum height, (a) between Chamber floor and Gallery, and (b) between Gallery floor and Chamber ceiling. Gallery must be served by a separate stair (probably from courtyard). Seating in form of fixed stepped-down benches (2 ft. 9 in. back-to-back; 1 ft. 6in. run per person), with 5 ft. between

back bench and wall (for supervision), and not more than 10 seats between gangways (2 ft. 6in. wide).

Robing Rooms.—Allow one locker for each member (size 2 ft. x 2 ft. x 6 ft. 3 in.). Allow one W.C., urinal, and W.H.B. per 20 members; 2 W.C.'s for women.

Committee Rooms.—Smaller rooms should be en suite, with movable sound-proof partition. Chairman should have his back to the light. Tables (2 ft. 6in. run per person) in sections for re-arrangement.

Mayor's Suite.—On a circulation dead-end if possible, for complete privacy if desired.

Grand Staircase.—Width from 6 ft. to 12 ft.

Banqueting Hall.—Area required is calculated on basis of 13 sq. ft. per seat. Kitchen and service require about 50% of dining area.

Seats.—Movable steel nesting-chairs; average 2 ft. 8 in. back-to-back, 1 ft. 8in. cc. No seat to be more than 7 seats from a gangway (min. 4 ft. wide). Side-to-side gangways min. width 5 ft.

Entrances/Exits.—10 ft. width of exit for first 500; 5 ft. per further 250 persons. Where several exits or stairs debouch into a foyer, the latter must have 33% wider exits than their total. Street-foyer entrances should have two pairs of doors (for draught-exclusion), the inner swinging both ways, and the outer swinging outwards (or of the panic-collapsible revolving type).

Staircases.—Must be full width of corridors, with no winders. Sixteen is maximum number of steps per flight, 3 is minimum. Treads must be not less than 11 in., risers not more than 6 in. Continuous handrail is required on both sides, chased into newel walls at landings.

Ramps.—Gradient must not exceed 1 in 10.

Gallery.—Incline of between 20 and 35 degrees, with a minimum clear height of 10 ft. above and below gallery.

Corridor around Hall.—(Minimum width 6 ft.) allows freer circulation of audience, and also acts as sound and draught baffle.

Chair and Carpet Store.—Forty tubular steel chairs will form a stack 6 ft. x 2 ft. 8 in. x 4 ft. high.

Floor.—Allow 15 sq. ft. per couple dancing. Floor should be sprung, leaving 8 ft. solid around walls for tables.

Windows.—Should be high (preferably clerestory), should not allow direct rays of sunlight to enter hall.

Level Platform.—At least 15 ft. deep, with acoustic splaying, but no proscenium. Waiting rooms, lavatories, etc., for speakers should adjoin.

Cloakrooms.—Best shape is long and narrow, with separate "in" and "out" doors. If ground-floor space is scarce, cloakrooms may be extended to basement. Men's cloaks require 15 ft. cube hat-and-coat shelving; women's require hook-rack; at least 6 ft. is required between counter and shelving. Assuming equal numbers of men and women, allow :

Men : 3 W.C.'s per 1,000; 1 urinal per 100.

Women : 3 W.C.'s per 500, plus 1 for every further 400.

SERVICES :

Generally.—All plumbing, sanitary and electric services should be in ducts where possible, with easy maintenance-access. Economy should be observed in lavatory-grouping, eliminating long runs of pipes, etc.

Air-conditioning.—Must be provided (approx. 4 air-changes per hour) to all rooms of very large volume, and wherever fixed double-glazing is used as an anti-noise measure. The ideal is a supply of clean air, of the correct humidity, warm in winter and cool in summer. Assembly Hall, for instance, could have inlets 10 to 15 feet above floor at platform and with warming and cooling chambers, and extraction outlets in ceiling at back of hall (propeller-type fans would be adequate if the outlet duct is short and direct).

Heating.—No open fireplaces or central heating required; individual electric radiators in all offices, etc., that are not air-conditioned.

Hot-water Supply.—Individual cylinders where required in kitchens, laboratories, bathrooms, etc.

ACOUSTICS :

Planning.—In the placing of all elements their horizontal and vertical relation to other elements must be considered from the noise aspects; namely the grouping of quiet and of noisy elements, sandwiching of noisy elements between "neutral" elements such as store-room and lavatories, and so on.

Materials.—Anti-impact-noise floors to corridors, etc. Absorbent floors and ceilings to noisy typists' or machine rooms. Insulated cavity partitions. Machinery (e.g., ventilator fans) to be high-powered and low-revving for greater quiet where possible. Silent hardware (automatic closing-springs to doors which are in constant use, etc.). Lining of noisy ducts. Suppression of noise at the source generally.

Summary of Principles.—Echo results when the path of a reflected sound is more than 70 ft. (or a fifteenth of a second) longer than the path of the direct sound. Reverberation time (i.e., the time taken for a sound to die away to inaudibility after the source has stopped) increases in proportion to the volume of the room and the reflective power of its bounding surfaces. The desirable reverberation time increases in proportion of the volume of the source, but varies with its nature (speech, music, etc.). Hence if one is given the volume (v) of a room, and the desirable reverberation time for the purpose for which it is to be chiefly used (t); then one may find the required degree of absorption of its surfaces from Sabine's formula, which states that $A = (.05 \times v) \div t$.[1]

Council Chamber.—Quiet (as opposed to stage or platform oratory) speech being the only source of sound, a short reverberation time is required. The fact that speech from any point on the floor must be heard at all points dictates the arrangement of reflecting and absorbent surfaces. Direct hearing (and view) is helped by a curved arrangement of seating. Unnecessary volume (excessive height, side-space, etc.) should

be avoided. The Chamber should not be of long narrow proportions—a fan-shape, or square with splayed angles (to reduce volume and throw sound to the centre) is probably the most satisfactory. The entire floor should be carpeted, and seats upholstered (to ensure a constant absorption, whether the Chamber is full or only partly full). The ceiling should be about 25 ft. (absolute maximum 35 ft.) in height and treated as a reflector (e.g., hard plaster, with lights sunk flush); the portion of a flat ceiling which is near the walls cannot act as a reflector, and should be either treated as an absorbent, or splayed so that it can reflect sound towards the centre of the Chamber. An excessive ceiling height results in excessive volume (and hence reverberation time), loss of sound energy, overlapping of syllables of speech, and (if over 35 ft.) a perceptible echo. Walls should be treated as reflectors (wood-panelling, etc.) up to a height of 7 ft., but if the Chamber is more than 35 ft. in any direction on plan echo must be avoided by tilting such reflectors or curving them towards the floor. The upper part of the walls should be absorbent (fibrous board, fabric or leather stretched over absorbent boards, etc.) and left natural or merely distempered (not made glossy by paint or varnish). The galleries should have a carpeted floor, fixed seats, absorbent walls, and a reflecting ceiling.

Committee Rooms.—Requirements are almost identical to those of the Council Chamber. Floor should be carpeted on a felt under-mat; walls reflecting up to 7 ft.; absorbent over. Ceiling should act as a reflector; if curved, it must have a radius more than twice the height of the room, or unpleasant distortions and concentration of sound may result at certain points.

Assembly Hall.—Speech (both quiet and oratory) and music (piano, dance-band, etc., only) being the only sources of sound, a fairly short reverberation time is required. A reflecting back and splayed reflecting sides are desirable to the platform, which is the only position for the sources of sound. The central portion of the ceiling should act as a reflector, and should not be over 35 ft. high. The end wall, opposite the platform, and the upper part of the side walls should be absorbent. The ideal air volume per person is 180 cub. ft. for an audience of 1,000; 200 cub. ft. for 2,000. Care should be taken that by cutting down the reverberation time, sound is not rendered dead or toneless; certain surfaces (platform, wall-dado, etc.) should be resonant to give sparkle to speech and music; any panelling should be of varying thicknesses to cover a greater range of frequencies. It should be noted that movable seating has an impermanent and negligible value as an absorbent.

RELEVANT BUILDING REGULATIONS (Cape Town; Public Buildings):

Fire Precautions.—Facilities and appliances for prevention and extinction of fire must be approved by the Corporation. All staircases and floors of lobbies, corridors, passages, landings, etc., to be of fire-resisting materials. Escape stairs to all buildings exceeding 60 ft. in height.

Doors to Halls, etc.—All street or outer doors to swing outwards; to be fitted with automatic fasteners to secure them when open; to be recessed where possible. Inner doors to swing both ways. Escape doors to be fitted with panic-type fastenings, opened by pressure; to be marked "EXIT" in 7 in. letters. Doors not being exits to be marked "NO EXIT." No door when open shall obstruct any passage, landing, or staircase. Doors to fire-proof staircases to be of fire-resisting material, opening outwards.

Corridors.—All aisles, corridors, vestibules, etc., to be free from any obstruction; arranged for easiest possible egress in case of fire or panic. No corridor to have a dead-end. No passage leading to any entrance or exit to be less than 5 ft. in width. Width of any main vestibule or foyer to be at least one-third greater than total widths of all doorways and passages leading thereto; street doors therefrom to be at least of same width. All means of egress to be lighted to approval of Corporation.

Aisles.—Aisles to be at least 3 ft. 6 in. wide, plus 1½ in. for every 5 ft. of their length.

Exits.—To be as widely and evenly distributed as possible, to afford ready egress from all parts of the building, and to lead directly on to a street or open space. Buildings accommodating over 500 persons to have at least three exits, each of a width of at least 5 ft. plus 20 in. for every 100 persons accommodated.

Floor Space.—Minimum 400 ft. super (excluding gangways) for every 100 persons accommodated in any hall.

Stairs to Galleries.—All stairs to galleries, platforms or stages to be of fire-proof material. Four feet wide for up to 50 persons, plus 6 in. for every additional 50 persons. Two stairs at 5 ft. each for up to 250 persons. Three stairs at 5 ft. each for up to 600 persons.

Stairs Generally.—Stairs over 8 ft. in width to have continuous centre handrail (2 in. diam. metal, 3 ft. above centre of treads, on metal supports spaced between 4 ft. and 6 ft. apart). All stairs to be independent, with direct exits, and as far apart as possible. Passages communicating with stairs to be the full width of the stairs. Internal staircases to be enclosed with fire-resisting material walls on at least two sides. No staircase to have winders. Flights to be not more than 16, or less than 3 treads (each riser being not more than 6½ in. high; tread x riser approximating 66). All stairs, passages and corridors to have continuous handrails on both sides where possible. No door to open directly on a flight of steps. Stairs returning directly on themselves must have a landing the full width of both flights without steps. No two quarter-space landings may have less than three steps between them. Ramps shall not exceed a gradient of 1 in 8.

Seats.—No seat to have more than 8 seats between it and an aisle or gangway.

Fire Call Bell (or telephone) to be provided near platform, but out of sight of audience, in any assembly hall.

Note : The remaining building regulations which are applicable to the type of building in question are not worth listing here, being mostly self-evident, of minor importance, or designed purely to keep a check on the speculative jerry-builder who is not concerned with the safety or welfare of the occupants of his buildings.

TOWN-PLANNING REGULATIONS :

Coverage.—Coverage of a building exceeding 60 ft. in height on a site having over 25 ft. of frontage on more than three streets, may not exceed 97½% of the site. The minimum unoccupied area of the site must be 100 square feet.

Bulk.—The ground floor area, plus total area of all floors above the ground floor (i.e., basements are not included) is termed the bulk of the building; and this bulk may not exceed the permitted coverage area multiplied by the bulk-factor, the latter figure being determined by the Corporation according to the width of the adjacent streets. It is usually permitted to take as referring to the whole building the bulk-factor for the widest of the intersecting streets on which the building abuts.

Height.—The height of a building over the line of its street-frontage may not exceed 1½ times the width of the street (i.e., a light-angle of approximately 56 degrees). Three feet of height may be added for every 1 ft. set back from the frontage line, but the total height may not exceed 2½ times the width of the street, or 120 ft. If the ground floor area of the building is more than 7,000 Cape square feet, then a superstructure may be permitted, provided it has a base not more than one third of the ground floor area, and a height not more than 200 ft. The height of the highest frontage may be carried round at the same level for a distance of 40 ft. only along a narrower adjacent side street. In all cases the height of the building shall be measured from the mean level of the surrounding ground to the top of the parapet, or half-way up the pitched roof, whichever is the higher.

Corners.—An isosceles triangle, with its base tangential to a circle (minimum radius 20 ft.), whose centre is not less than 20 ft. within the edge of the site, is to be left free for a height of 12 ft. at all street intersections, at the corners of the site.

Note (re Town-Planning Regulations): The above extracts are from the regulations of the City of Cape Town Provisional Town-Planning Scheme, Central City Area. It is probable, however, that the development of the foreshore area,[3] which is at present owned by the South African Railways & Harbours Department of the Union Government, will be controlled by specially promulgated town-planning regulations; for instance, the Report of the Town-Planning Advisers on the Cape Town Foreshore Scheme (1940) suggests that a definite percentage of each site should be reserved for the dual purpose of parking and light-wells, and that the maximum permitted sheer height for buildings fronting on the extension of Plein Street (and, presumably, Adderley Street) should be increased from 120 to 200 feet, provided only that in no case the approved light-angle of 1½ : 1 is exceeded. It is probable, also, that any design for civic buildings in the foreshore area (especially the City Hall, on an isolated site) would be considered purely on its individual merits, and that the town-planning authorities would give a free interpretation to any regulations they may have issued, in the case of such a building.

NOTES ON CHAPTER 6.

[1] For acoustic calculations for Council Chamber, see later Report.

[2] The writer has had the unfortunate experience of acting in the present City Hall, to a half-filled auditorium. The reverberation time is not short. The audience (and for that matter the speaker) hears only a dull rumble for the duration of each sentence, followed after a short interval by a distinct repetition of the concluding phrase.

[3] See Part I of this Thesis, Page 19.

Bibliography.—In addition to the books listed in Part I, the following were consulted for this portion of the Thesis :

A. Calverley Cotton : " Town Halls."
R.I.B.A. Periodicals Abstracts : Various articles.
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Ludwig Hilbesheimer : " Groszstadt Architektur."
J. M. Luthmann : " W. M. Dudok."
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W. B. Munro : " Municipal Administration (U.S.A.)."
E. & O.E. : " Planning, 1939."
Burnet, Tait & Lorne : Information Book.
National Council of Social Service : " Community Centres and Associations."
Moderne Bouwkunst in Nederland : " Administratiegebouwen."

In addition to those mentioned in Part I, the writer wishes to thank the following for their advice and information in connection with this thesis : His Worship the Mayor, Mr. W. James; Mr. Breek, of the City Hall Library; Mr. Holmes, of the Amenities Committee; Professor E. Batson, of the Social Science Department of the U.C.T.

ACKNOWLEDGEMENTS FOR ILLUSTRATIONS.

Plan and upper photograph on page 90 from " Moderne Bouten in Europa," Zurich, By F. R. Yerbury. Plan and photograph on page 91 from " Weldingen—Dudok, Raadhuis, Hilversum," 11 and 12. Photograph on page 92 from "The Architectural Review," January, 1940. Other plans and photographs by the author.

THE EXPERIMENTAL HOUSE - PIETERMARITZBURG

REPORT

There were three primary factors involved in the preparation of the design, namely :

(1) Speed of erection.
(2) Elimination as far as possible of materials in short supply.
(3) Low cost.

In tackling the first problem it soon became obvious that although prefabriation, in the American sense of the word, was not possible, the way to achieve speed would be to increase the size of the various components and decrease the number of small parts—such as bricks and timber. The second factor was responsible for the most unorthodox part of the whole design—the roof. The third factor, that of cost, was found to be largely bound up with speed of erection. In eliminating as much highly skilled labour as possible by utilising large components, the labour time cost was greatly reduced.

THE CONSTRUCTION OF THE HOUSE IS AS FOLLOWS :

Footings of cinder concrete mixed 6 to 1, size 18" x 9", laid on ground under main bearing walls only, i.e., outside walls and two continuous inner walls parallel with front and back. Broken brick filling under cinder concrete floor slab cast over whole area within course of bricks laid on outer footings. Sheet asphalte dampcourse under all walls. All brickwork to internal and external walls 4½" thick. Reinforced pre-cast concrete window unit surrounds built in as work proceeds and eliminating lintols. Top of walls finished with reinforced pre-cast inverted U section concrete slabs to give extra seating for roofing and on external walls to act further as hold for top of asbestos sheeting. Roof composed of twelve foot sheets of same heavy corrugated asbestos spanning across main bearing walls, acting both as permanent shuttering and ceilings and carry cinder concrete 5 : 1 mix reinforced with strand of heavy galvanised barbed wire at 7" centres in each corrugation. Concrete graded to falls of from 5" along centre of roof to 3" at front and back of house—finished with 5 : 1 cement rendering, bituminous membrane and painted one coat aluminium paint as heat reflector.

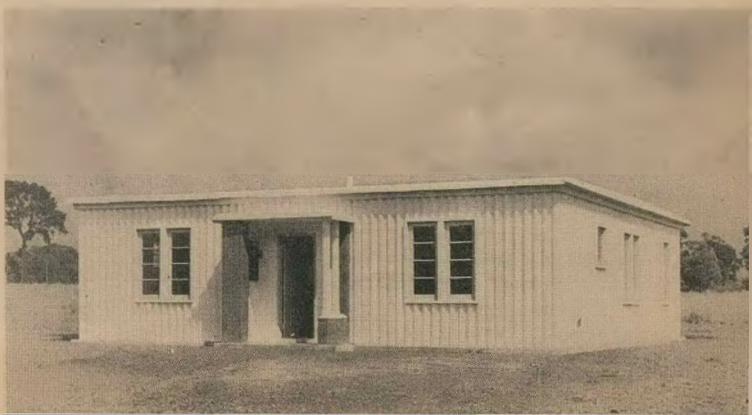
Floors finished ½" grano., coat of P84 to eliminate dampness and covered with sheet asphalte. Walls bagged and distempered. Batten doors, 1½" x 4½" frames and casement windows all of South African pine and painted. External walls and concrete surrounds to windows painted two coats oil bound distemper. Exposed surfaces of footings rendered 5 : 1 cement and graded to throw water off top surface.

Cost £700 complete with electrical work, fittings, coal stove, hot water and sewerage connected to Municipal main. Area of house : 1,060 square feet. Contractor's profit : 10% on cost. Possible future improvements as follow :—

Wood block or strip flooring.
Change batten doors to flush panel.
Put doors to cupboards.
Electric instead of coal stove.
Add verandahs, gutters and down pipes.

Having given the bold outline of this experiment as complete so far, we make the following general comments.

The cost is a good deal above what it would have been had weather during construction been kinder. Apart from continuous days of heavy rain, a record windstorm removed and smashed beyond further use, half the asbestos sheets laid as permanent shuttering to roof during the night before concrete was to have been laid.



FRONT ELEVATION

FOR PLAN AND DETAILS
SEE FOLLOWING PAGE

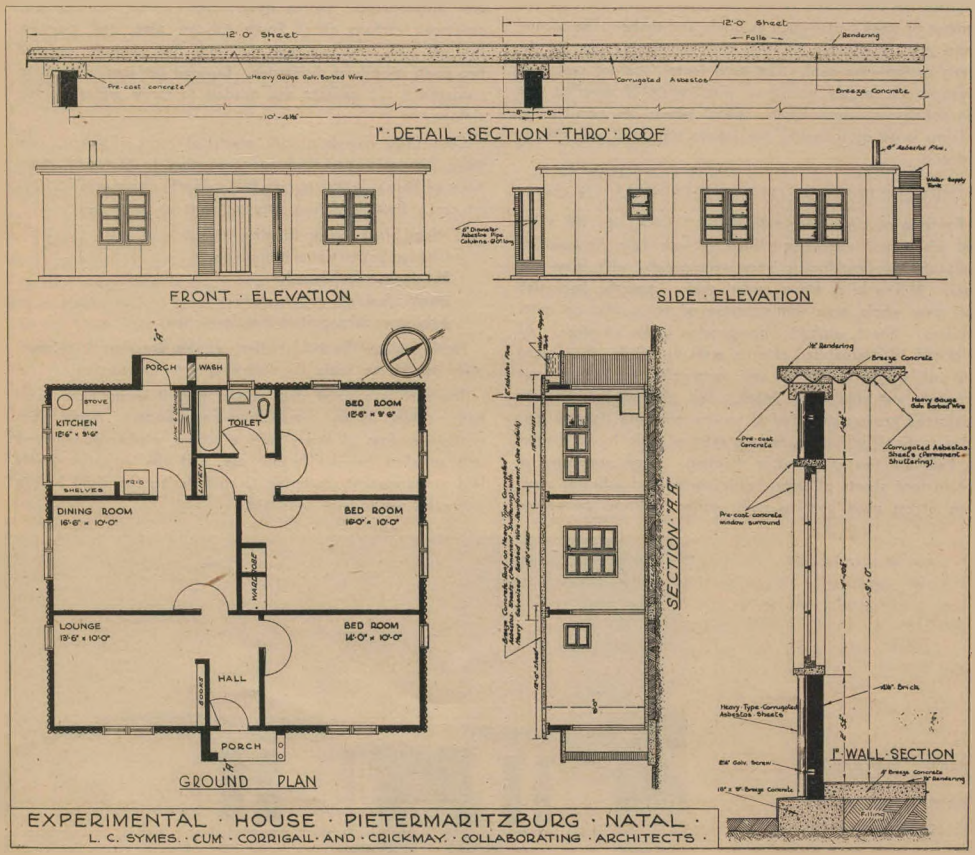
We are of the opinion that pre-cast reinforced concrete blocks to heads of walls could have been eliminated in favour of a brick on edge course 9" wide to outside walls and the two internal bearings walls. Asbestos eaves filler pieces to front and back edges of roof could also be omitted. Various methods were tried for firmly fixing vertical asbestos wall sheets, and the only satisfactory scheme was that of screwing into hardwood plugs at point where corrugation contacts brickwork. Generally two 2¼" galvanised screws and lead washers per sheet and used at top and bottom placed two corrugations from the side overlap.

The roof construction was the result of observation on certain tests made by the Natal Provincial Works Department and our research into the effect of cinder concrete on galvanised barbed wire reinforcement over a period of 25 years. (We suggest that anyone interested in the study of materials should visit certain cinder concrete buildings erected on the South Coast of Natal several years ago by Mr. Woods, Senr., of Woods' Garage, Isipingo. Mr. Woods' methods and results are worthy of full investigation.)

Our experimental structure is comparatively light. The roof gives only a vertical thrust, thus obviating heavy walls and foundations. It can be built, complete except for painting, in four weeks. The house has proved cool during the hottest part of a Maritzburg summer, due to hollows formed by the corrugated asbestos outer walls skin and the roofing materials.

In conclusion, tribute must be paid to the City Council of Pietermaritzburg for its sanction in sponsoring the experiment.

LEONARD C. SYMES,
CORRIGALL & CRICKMAY,
Collaborating Architects.



TRANSVAAL PROVINCIAL INSTITUTE OF SOUTH AFRICAN ARCHITECTS

COMMITTEE'S ANNUAL REPORT FOR 1943-1944

TO THE MEMBERS OF THE TRANSVAAL PROVINCIAL INSTITUTE:

Your Committee has pleasure in submitting this, the Seventeenth Annual Report for the year ended 31st December, 1943.

The Provincial Committee wishes to draw the attention of members to the fact, that owing to the necessity of conserving paper supplies, the Annual Accounts have again not been sent to all members this year. These accounts, however, will be tabled at the Annual General Meeting, and may also be inspected at the Institute's Offices.

MEMBERSHIP: The Membership at the close of the year consisted of 186 members Practising, 139 Salaried, 7 Absentee, 36 Retired; total of 368 members.

During the year under review 14 new members were enrolled, 9 members died, 1 was transferred from the Natal Provincial Institute, the total increase in membership being 6 as compared with the previous year. One hundred and two members of the Institute were known to be on active service during 1943.

The new members enrolled during 1943 were:—R. Kantorowich, P. S. A. Hahn, H. U. Arndt, E. Londt, Miss N. Dalton, P. H. Connel, P. R. Nel, E. M. Pincus, W. J. Parker, R. W. Barlow, O. Hurwitz, Sgt. E. Meyersohn, F. J. Durr, H. P. Mathew.

OBITUARY: It is with deep regret that your Committee has to record the following deaths:—Sir E. Lutyens, Messrs. J. B. Ferguson, A. Forrest, W. Paynter, F. Drysdale, J. C. Kerr, A. C. Fraser, T. S. Fitzsimons, A. E. Till.

It is also with deep regret that your Committee has to record the death of the Acting Secretary, Miss B. Murray.

COMMITTEES AND MEETINGS: Following the election of the Committee at the Annual Meeting in March, 1943, Mr. N. L. Hanson was elected President, Mr. D. M. Cowin, Senior Vice-President, and Mr. S. C. Dowsett Junior Vice-President for the ensuing year.

During the year 12 ordinary and 6 special meetings of the Committee have been held, and the following is a record of members' attendance thereat:—

N. L. Hanson (President)	18
D. M. Cowin (Senior Vice-President)	16
S. C. Dowsett (Junior Vice-President)	8
D. S. Haddon	16
N. M. Eaton	8
W. G. McIntosh	11
C. W. Brown	17
W. A. MacDonald	12
W. D. Howie	16
J. Fassler	13
R. A. Bruce	4
Prof. A. L. Meiring (Co-opted)	5
Prof. G. E. Pearse (Resigned)	1

LEAVE OF ABSENCE: The following members were granted leave of absence for various periods during the year:—S. C. Dowsett, W. D. Howie, J. Fassler, D. S. Haddon, Prof. A. L. Meiring, N. M. Eaton.

The Committee reluctantly accepted the resignation during the year of Professor G. E. Pearse. The thanks of all members are due to Professor Pearse for many years of unstinting work within and on behalf of the Institute.

Your Committee wishes to record its appreciation of the assistance given by members of the sub-committees on Finance and Journal, Practice, Small House Bureau and the S.A. Academy, and to Professor Pearse and Mr. D. S. Haddon for acting as the Institute's representatives on the Executive Committee of the Associated Scientific and Technical Societies.

Messrs. A. C. Fair and H. G. Porter were appointed as additional Institute representatives on the Advisory Committee to the Controller of Man-Power. The heavy volume of work which Mr. F. L. H. Fleming had undertaken previously was taken over by Mr. Fair; members will be appreciative of the time and energy which he has devoted to this work.

CENTRAL COUNCIL: The 1943-44 Central Council met in Johannesburg on 13th and 14th April, 1943. At this meeting Mr. D. S. Haddon was elected President-in-Chief and chairman of the Executive Committee; Professor L. W. Thornton White was elected Vice-President-in-Chief.

Your Institute's representatives on the Central Council for the year were Messrs. N. L. Hanson, D. S. Haddon, D. M. Cowin, N. M. Eaton, and S. C. Dowsett.

The congratulations of this Institute are extended to Mr. Haddon on his well-merited election for a second term in the highest office of the profession.

Among the various matters dealt with by the Central Council and its Executive were the following:—

Welfare of members on Active Service; re-organisation and strengthening of the Institute; planning education; building control; provincial representation on the Executive; nomination of competitors for the Railway Hotel Competition; nomination of architects for the Ministry of Transport building, Pretoria; handling and distribution of a public works programme.

On the resignation of Mr. A. S. Furner, Mr. D. M. Cowin was appointed Hon. Liaison Officer. His hard work on behalf of members in the Forces has had most beneficial effects.

FINANCE: Copies of the audited Balance Sheets and Revenue and Expenditure Accounts as at 31st December, 1943, will be available to members at the Annual General Meeting and at the Institute's Offices.

Institute Account: At the present maximum revenue on this account, some loss over the year is inevitable. This is attributable mainly to the waiving of fees due by members on active service. The year's loss was £120 1s. 4d. With the anticipated increase in membership and the gradual return of members from active service, an improvement in financial position may be confidently expected.

"S.A. Architectural Record": The revenue of the "Record" has been maintained, and an increase is now possible. The Editors are to be congratulated on their success in keeping costs within the available funds, while producing a journal of the present standard. A small loss of £25 15s. was shown over the year.

"S.A. Architectural Record": The thanks of the Committee and all members are due to Professor Pearse and Mr. W. D. Howie, the Honorary Joint Editors of the Journal. In spite of war-time difficulties, the standard of the publication has been fully maintained, and a wide range of subjects covered during the year. Subject matter, illustration and typography have followed and broadened the tradition established by the late Dr. Rex Martienssen, and the "Record" continues to rank as a leading architectural journal.

The advertising manager, Mr. G. J. McHarry, has built up and consolidated the revenue of the "Record," and to him and his staff the Institute's appreciation is due.

Catalogue Service Bureau: The Bureau has temporarily suspended activities, and its assets have been transferred to the Institute Account.

BENEVOLENT FUND: During the past year the following members have made donations to this fund, for which the Institute is most grateful:—E. H. Waugh, F. A. O. Jaffray, S. B. Cunningham, J. E. Harrison, J. E. T. Day, Lieut.-Col. E. White.

The munificent gift from Mr. E. H. Waugh, which has substantially increased the resources of the fund, merits special notice from your Committee.

S.A. ACADEMY: The 24th Annual Exhibition, under the joint auspices of the Institute and the Transvaal Art Society, was held in the Duncan Hall from the 3rd to 14th August, 1943, inclusive, and was, in all respects, one of the most successful yet held. The thanks of the Committee are expressed to the Transvaal Art Society, the Judges, the Hanging Committee, Messrs. H. E. Perring, B. Valkenburg, Mr. King, Miss Price, Miss McDonagh, the Acting Secretary, and all others who helped to make the Exhibition a success.

From the profits derived from the Exhibition, the Academy Committee was pleased to donate £100 to the Navy War Fund, £25 and £15 to the Benevolent Funds of the Transvaal Art Society and Institute respectively.

SMALL HOUSE BUREAU: Following a request for assistance in the planning of houses for ex-soldiers (from the B.E.S.L., Johannesburg), your Committee decided to revive the Small House Bureau, inaugurated just before the outbreak of war. To this end, a sub-committee has been appointed, and is at present actively engaged in preliminary work. It is hoped that members will support the Bureau, particularly as it is now directly associated with the building of houses for returned soldiers.

GENERAL:

A. "REBUILDING SOUTH AFRICA." The Institute, in association with the Architectural Students' Society of the University of the Witwatersrand, held a symposium and exhibition at the University, on the subject "Rebuilding South Africa." Widespread public interest was aroused in both sections, and the undertaking which, in addition, brought together the professional and academic spheres, proved highly successful. The proceedings and drawings have been published in the journal; the exhibition is at present being shown at various other centres of the Union.

B. MINISTRY OF TRANSPORT BUILDING, PRETORIA: The Central Council received a request from the Railway Administration that the Institute nominate three architects or firms of architects for the Ministry of Transport Building, Pretoria. Accordingly a referendum was conducted amongst all Transvaal members, the results of which have been published. The Administration have subsequently appointed one of the nominees, the group consisting of Messrs. Eaton, Fair and Naude, Professor Meiring and Lieut. Cole-Bowen, as architects to the new building. The congratulations of the Committee are extended to these members.

C. COMPETITION FOR NON-EUROPEAN HOUSES, ORLANDO: The City Council of Johannesburg proposes to hold a Union-wide architectural competition for the design of houses for non-Europeans at Orlando. The Institute has been formally approached and is at present engaged in finalising the conditions of competition. Details will be made known to members as soon as possible. The action of the City Council in holding such a competition will no doubt be warmly approved.

C. THE PROFESSION AND PROVINCIAL WORK: The Committee is unable to report favourable progress in the Institute's negotiations with the Provincial Administration regarding work handled by private practitioners. No satisfactory response has been received to the Institute's request for the setting up of a Liaison Committee, an essential preliminary step in the view of your Committee.*

D. ARCHITECTURAL EDUCATION: During the year 1943 there were 85 students taking Architecture at the Witwatersrand University, and 27 students at the Pretoria University. Your Committee donated £15 15s. towards prizes for Architecture at the Witwatersrand University in 1943, and hopes to extend its grant to the Pretoria University in the near future.

An event of great significance to the country as a whole and to architects in particular is the setting up of a post-graduate town-planning course at the University of the Witwatersrand. This course has been started this year, and merits the full support of the architectural profession.

OFFICE ADMINISTRATION: During the illness of Miss Murray, and since her death, Miss D. McDonagh has acted as Secretary of the Institute. The Committee thanks her for the efficient manner in which she has handled the affairs of the Institute under difficult circumstances.

By Order of the Committee.

D. McDONAGH,
Acting Secretary.

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*Since this Report was prepared, the Provincial Administration has responded to the Institute's request for the setting up of a Liaison Committee.

ADDRESS OF THE PRESIDENT MR. N. L. HANSON

Gentlemen,

The administration of this Institute during four and half years of war has been a particularly difficult and onerous task. The successive committees to which this task has fallen have performed a service to the architectural profession. In maintaining a necessary administrative machinery, despite unfortunate set-backs, and in advancing the collective status of architects, a contribution of permanent value has been made. Not least, the Committee over which I had the honour to preside fulfilled its allotted task. In the many matters requiring consideration, I have enjoyed the active support of my Committee. My thanks are due to its members; and I would enlarge my tribute to include all those of members of the Institute who, in the darker days of the war, carried out the obligations that membership entails.

The Committee's Report, which you have already heard, gives a factual account of the year's activities. In particular, three aspects have appeared worthy of close attention at the present juncture. Firstly, the place and purpose of architecture in our national life; secondly, the equipment of architects to meet the new and multiple demands of a changing society; and, thirdly, the position of our soldier members and of those who have returned from active service, which must be a matter of the deepest concern to the Institute. In the latter respect, the Central Council has constantly been conscious of its duties, and has not failed, when occasion offered, to act primarily in the interests of those at present in uniform. The first two aspects, function and education, actually determine the rôle and scope of the architect's work in the coming periods of reconstruction and development, and thus inevitably colour the future of returning soldiers as well. It is clear that education and practice are intimately and equally bound up with all aspects of the architectural future.

For this reason the Committee supported the suggestion of a joint undertaking with the Architectural Students' Society of the Witwatersrand University. With the collaboration of the members of the University staff, the Symposium and Exhibition on "Rebuilding South Africa" was organised; its purpose was to give a clear picture of an important phase of architectural development possible within an evolving social and economic framework. In the process, the function of the architect inevitably came up for consideration, and it was this aspect, too, which raised the educational issue.

It is true that there is little agreement in this matter of the architect's function in society. Under modern conditions, it is sometimes difficult to define the limits of that function or even to indicate likely tendencies. But I am certain that the architect should not lightly abandon his historical rôle of planner in a broad sense—the co-ordinator of divergent requirements and specialist needs, whether it be in the single building, in the more extensive field of housing, or in city planning itself. At the same time, there is no justification for assuming that the architect is automatically and exclusively qualified, on the grounds of his basic training alone, to undertake work other than the strictly architectural. Additional and specialised training is necessary. I would remind members that Herbert Baker, in 1911, pointed to the then recent foundation of chairs of Civic Design at London and Liverpool. He then expressed the hope that the example would be followed "some day" in Cape Town and Pretoria. Well, thirty-three years after, the first South African course in town planning has been instituted at the Witwatersrand University, an event, in my view, of the utmost significance. No doubt our other Universities will follow in the near future. As I have already indicated, town planning cannot, in any case, be considered the exclusive field of the architect.

APR

Professor Pearse, who is mainly responsible for initiating the course, has, therefore, widely extended its scope to include the civil engineering and land surveying professions. In doing so, he has prepared the ground for future collaboration and a degree of mutual understanding between closely related professions not so far attainable either here or in our own architectural planning. There is every indication that the main objectives of the course will be achieved, with beneficial results to the technicians concerned, and to South Africa as a whole in its critical period of post-war development.

The growth of our towns is a matter of vital concern to architects. Far too little attention in latter years has been paid by our profession to the process of urbanisation, so apparent as a national trend. The initial spade-work was done by older members in the days of the Transvaal Town Planning Association, but after the passing of the Town Planning Ordinance in 1931, the Association itself withered away, and no active body of interested and informed opinion was left to keep a vigilant eye on the expansion of urban centres under rapidly changing circumstances. Under the Ordinance, several schemes were prepared in the Transvaal for the larger centres; the scheme for the Witwatersrand, in particular, was notable for its competent survey of existing physical conditions and the comprehensive zoning restrictions which followed. But deficiencies in the direction of social statistics and positive planning have revealed themselves unmistakably under the stress of war conditions. We have thus reached the present state of affairs, when a large-scale construction programme is being advocated (and partly fulfilled), while pre-determined lines of balance and co-ordinated development are entirely absent. Constructive criticism is not likely to come from any other organisation but this one, and I wish to suggest that some positive disinterested work should be collectively undertaken while modification and amendment are still possible. It is to be hoped that Johannesburg City Council will support such an undertaking, or, better still, sponsor it. I may cite the magnificent example of the London County Council in producing, in spite of over-riding war considerations, its bold and comprehensive plan for the reconstruction of the metropolis. The trouble here is that, while the problem is lesser, obstruction to progressive change is infinitely greater.

I have dwelt for some moments on the town planning issues not merely because they are the concern of a professionally conscientious body, but more especially because they help to clarify the position of the architect and his work both now and in the unpredictable future. What, in fact, is the present situation? Members are, of course, quite aware of the radical transformation in the building scene which has taken place in the past year. From the doldrums into which the profession was plunged during the central years of the war, we have now, still during the most bitter war in history, emerged into a veritable and, may I venture to suggest, somewhat spurious boom in building activity. I say spurious because, although building is in many respects an essential requirement, I do not feel that we are directing our resources to proper, or, at least, intelligently anticipated ends. There is not that clarity of economic and social problems which should precede physical reconstruction; nor, in our own sphere, a defined policy concerning the building industry, its present tasks and its future adjustments. On the contrary, the threat to the very constitution of the industry, historically inevitable in a war of international dimensions, is not being faced on a basis of firm knowledge and experienced understanding. What is essential is scientific investigation covering ascertainable facts, likely programmes of building and necessary reorganisation to meet such programmes. It would be idle for the architect to imagine that these matters are no concern of his. Indeed, only the architect has the training and background to direct an inquiry of the nature suggested. The Institute, which has already made representations on this subject to the Social and Economic Council, must continue to press the Government to undertake the required survey of the building industry, a survey informed in approach and national in range. Only thus may our most pressing problems —such as low-cost housing, urban reconstruction and rural rehabilitation—be confidently attacked. Without a guiding policy, founded on incontrovertible facts, booms are likely to be followed, quite unexpectedly and inexplicably, by sudden depression, with disastrous results on the stability and efficiency of the building industry as a whole, and the architectural profession in particular.

The current "boom" represents a continuation in method and basis, of pre-war building. The one new element, control, is not directed towards a planned building programme, but acts rather as a brake of somewhat uneven and erratic operation. This situation may be immediately favourable to the private practitioner, but surely the long view is that the country's real needs—the building equivalent of social and economic betterment—are the first priority, and will, in any case, force their way to the front if only by the pressure of sheer necessity.

Whatever the merits of these latter observations, one thing is tolerably certain—the growth and spreading influence of public works as an integral part of post-war stabilisation and recovery. All levels of government, Central, Provincial and Local, are equally involved. The architectural profession's relationship with these authorities is a matter of vital importance, affecting as it does training, employment and practice. The place of the architect in public service and administration must be progressively strengthened through the support of the profession as a whole. In their education students must be equipped for the important public duties which will offer one of the main outlets for the exercise of architectural talent. If the conditions of service are reasonable, and this again is a matter of concern to the whole profession, many young architects will no doubt prefer to take this latter course.

As far as practising architects are concerned, the instability of private practice, most marked, of course, in times of economic crisis, can be largely offset by the judicious letting-out to architects of public works for which the various authorities are responsible. This procedure, with its difficulties in application, has been debated over many years. So far, the main experience, within this Institute, has centred round Provincial work, with not altogether happy results. The retiring Committee, as well as previous committees, repeatedly asked for fundamental changes in the relationship between Administration and practitioners. It has been contended that only by creating machinery, representative of both Administration and profession, through which commissions at all stages could pass, would real improvement materialise. Although, as I have already stated, no progress has been made provincially, it is gratifying to report greater success in negotiations with the Public Works Department. The Central Council, together with the Secretary of Public Works and his technical assistants, have set up a Liaison Committee, to arrange for the handling of such Government buildings as can be allocated to the practising architect. It is not out of place to say here that, in my view, this progressive step was possible largely because members of the Institute are responsible officers in the Public Works Department; to them the profession's tribute is due.

Local authorities tend to build up self-contained technical departments. Nevertheless, here as elsewhere, it is probable that the outside architect has, by tackling problems from a slightly different angle—less conventional, more experimental and personal—a distinctive contribution to make to civic development. Johannesburg's City Council has shown some awareness of this fact, but I suggest further consultation and co-operation are not only possible but would prove highly productive. The architect as citizen should actively interest himself and participate in civics, as it is local government which determines in a large measure the nature and quality of our urban environment.

I have deliberately stressed the relationship between architects who are public servants and those who are in private practice, because significant advances in architectural thought and endeavour is most likely in our present and in the emergent post-war society if real understanding and a sense of collective responsibility are established within our own ranks. But there is an important section of the profession which has not yet been mentioned. Salaried members outside public service are of equal importance in any re-adjustments either in attitude or organisation which may take place. There is a motion on the Agenda dealing with the position of salaried architects, and I do not wish to prejudice the discussion. This much, however, I will say. I believe there is to-day no difference at all in status between the one class and the other. The sooner even the word "class" disappears, the better chance there will be to establish a monolithic membership, in fact as well as in name. No reference is intended to administrational procedures, as these in some cases operate in favour of a unified approach and sometimes against. We have not yet reached the stage when differences are merely nominal—a fact which must be borne in mind—but the strengthening of sectional interests is the negation of collective advancement.

It can be stated, however, that the salaried member in private employment has, generally speaking, been in the least fortunate position of all our members. We insist on equal qualifications for all who may register under the Act, and therefore logically grant equal professional status. This has not always been readily accepted. If architects consider, as some apparently do, that the present system of education eliminates a distinctive and necessary "draughtsman" class, then training outside the Universities must be instituted and lesser qualifications sought and accepted. Although the present building situation has immeasurably improved the economic position of the salaried member, a more lasting settlement of a perennial problem is needed in order to secure for him a proper place in the post-war world.

We are in a period of social transition. It is not to be expected that the instruments of professional organisation, as they are at present designed, will cope with the changes that will take place in the first instance outside the profession. But we cannot be unaware of the changing structure of society, the new social basis which strives for recognition against the older system of economic domination. The struggle is reflected in the architectural world. I ask for a re-orientation in architectural thought towards the social basis. We have an historical background which is well worth detailed study. Building tradition goes back to the first great days of European settlement, three centuries ago. There is much to learn and profit by in the study of the architectural achievement of this era. The sharp break in building caused by the war has created the opportunity to revaluate the past, including the very recent past, and to extract from that revaluation guiding precepts for future development. If we treat our own problems with the clarity of thought, vision and purpose inherent in South African building tradition; if we inform our architecture with the rising social consciousness, architects, too, will contribute to the rehabilitation of man, the most vital task of our time.

NATAL PROVINCIAL INSTITUTE OF SOUTH AFRICAN ARCHITECTS

ANNUAL REPORT, 1943-1944.

Your Committee has pleasure in submitting this, the Seventeenth Annual Report of the Natal Provincial Institute of Architects.

MEMBERSHIP: The membership at the close of the year consisted of 50 Practising, 21 Salaried, 1 Absentee and 6 Retired, a total of 78 members.

Five new members have been enrolled during the year; one member has transferred his membership to the Transvaal Provincial Institute of Architects.

COMMITTEE: At the last Annual General Meeting the following members were elected to the Provincial Committee: Messrs. B. V. Bartholomew, F. W. Powers, Col. G. T. Hurst, C. S. M. Taylor, D. C. McDonald, W. Hirst, W. S. Payne, S. N. Tomkin, and C. R. Fridjhon.

At the first meeting of the newly-elected Committee, Mr. F. W. Powers, the retiring President, was re-elected President, and Mr. B. V. Bartholomew, the retiring Vice-President, was re-elected Vice-President, for the ensuing year.

One Annual General Meeting and 18 ordinary and special Committee meetings, besides several Sub-Committee meetings, were held during the year. The following is a record of attendances at the Committe meetings:—

	No. of Meetings.	Leave Granted.	Attendances.
B. V. Bartholomew	18	2	16
C. R. Fridjhon	18	1	15
W. Hirst	18	4	9
Col. G. T. Hurst	18	7	8
D. C. McDonald	18	2	16
W. S. Payne	18	4	14
F. W. Powers	18	1	17
C. S. M. Taylor	18	2	12
S. N. Tomkin	18	3	13

Note: Col. G. T. Hurst was away on military duty.

REPRESENTATIVES—1942-1943: On Central Council: B. V. Bartholomew, A.R.I.B.A.; Alternate, D. Calvert McDonald, A.R.I.B.A. On Board of Education: B. V. Bartholomew, A.R.I.B.A.; Alternate, Robert Howden, F.R.I.B.A. (T.P.I.). On Natal Technical College Council: Col. G. T. Hurst, F.R.I.B.A. On the Greater Durban Development Committee: D. Calvert McDonald, A.R.I.B.A. Mr. B. V. Bartholomew is the Architect representative, and Mr. W. G. Thompson the Quantity Surveyor representative on the Local Advisory Committee of the Government Control of Building Industry.

LOCAL EDUCATION COMMITTEE: W. S. Payne, A.R.I.B.A. (Chairman); B. V. Bartholomew, A.R.I.B.A.; D. Calvert McDonald, A.R.I.B.A.; and F. W. Powers, A.R.I.B.A.

Members are reminded of the facilities afforded in courses of Architectural Education at the Natal University College. Full particulars of these courses may be obtained on application to the Secretary of the University, Commerce Building, Warwick Avenue, Durban.

The past session has been a strenuous one, as will be seen by the number of Committee meetings held.

Many matters of importance to the profession have engaged the attention of your Committee. Its advice has been sought by various bodies, and every endeavour has been exercised to justify this confidence, either by co-operation, assistance or advice, and in appointing one or more of its members to act on committees.

A deputation waited on the City Council, when the following matters were sympathetically discussed: Post-war planning policy; Appointment of Liaison Officer to collaborate with the City Engineer's Department in the prosecution of post-war development works; Plans submitted by non-Europeans; Corporation Housing Schemes; and the principle of major architectural work to be made the subject of competition by private practising architects.

It was recorded at this meeting that in the prosecution of post-war works due regard by the City Council would be paid to the claims of the architectural profession.

NATAL PROVINCIAL POST-WAR WORKS AND RECONSTRUCTION COMMITTEE: A comprehensive memorandum of this Provincial Committee's considered opinion on post-war planning and reconstruction works, covering the five points of the Commission's Terms of Reference, was submitted to the Commission.

Mr. F. W. Powers (President), Mr. B. V. Bartholomew (Vice-President) and Mr. S. N. Tomkin gave evidence before the Commission when it met in Durban.

Candidates for the Provincial Council elections and City Council elections were circularised with a view to focussing their attention upon the increasing growth of Government and Municipal Architectural Departments, respectively, to the detriment of the private practitioner; and with a view to establishing the principle of handing out work to the private practitioner.

PROSECUTION: During the year there was one prosecution under Section 3 of the Act, viz.: non-registered person holding himself out as an architect.

FINANCIAL : From the audited Statement of Accounts for the year under review, it will be seen that the Revenue and Expenditure Account shows a deficit of £57 1s. 11d. as compared with £141 6s. 5d. shown for the previous year.

This deficit is mainly due to the waiving of subscriptions of members on active service, waiving of the R.I.B.A. Moieties, and the heavy levy payable to the Central Council. Only essential expenditure has been incurred during the year, and economies effected wherever possible.

As foreshadowed in the Minutes of the last Annual Meeting, it has been found necessary to draw on the Investment Account to the extent of £100. The Investment Account now stands at £229 11s. 5d.

CENTRAL COUNCIL : The 1943 session of the Central Council took place at Johannesburg, in April last; Mr. Bartholomew (retiring President-in-Chief) occupied the Chair.

Mr. Jose Cortez, representative of the Brazilian Institute of Architects, conveyed the greetings of his Institute and presented to the President-in-Chief a diploma enrolling him a Corresponding Member of the Brazilian Institute of Architects, also a replica of the Brazilian insignia.

Many subjects of interest and importance were dealt with, among them being Control of Building in relation to the profession; Position of Members of the Institute in the Army; National Planning, etc., etc.

Mr. D. S. Haddon was elected President-in-Chief and Chairman of the Executive Committee; and Professor Thornton-White, Vice-President-in-Chief, for the ensuing year.

The Central Council of the Institute was invited by the Railway Administration to submit ten names of practising architects to compete for the design of new Railway hotels at Pretoria and Cape Town. It is unfortunate that the competition was limited to the ten architects, thus depriving a large number of architects from competing.

The Central Council resolved : "That the remission of annual subscriptions be granted only to such members as were on full-time active service and applied for such remission."

Your Committee places on record its deep appreciation of the excellent work done by the members of the Central Council; and thanks are also due to those members of the various sub-committees for giving much of their valuable time to the various matters concerned during the year under review.

Your Committee desire to take this opportunity of wishing all those members serving with the Forces every success in their military undertakings and a safe return.

EXHIBITION OF PHOTOGRAPHS AND DRAWINGS : The Transvaal Provincial Institute, together with the Students' Architectural Society of the Witwatersrand University, have recently held an Exhibition and Symposium on "Rebuilding South Africa."

Your Committee has arranged with the T.P.I. to have the exhibits forwarded to Durban. The exhibition will be staged under the auspices of the Natal Provincial Institute of Architects, and a sub-committee has been appointed to make the necessary arrangements.

LIBRARY : Thanks are extended to the "S.A. Architectural Record" for its journal, which has been circulated to members during the year.

O.F.S. PROVINCIAL INSTITUTE OF ARCHITECTS

SECRETARY'S REPORT, for the year ending 31st December, 1943.

Gentlemen,

Owing to the lamented death of our President, Mr. W. W. Tonkin, F.R.I.B.A., M.I.A., and the fact that our Vice-President, Mr. C. Timlin, was at first on Active Service, and is now in hospital owing to an unfortunate accident, I have, in the absence of a President's Address, the honour to present to you the Secretary's Report.

Death has been busy in our Institute in recent months, we having lost two members last year and another in this new year :

Mr. W. W. Tonkin, F.R.I.B.A., M.I.A., our President, who, after working in England came to South Africa in 1898. He was in the Government Department of Public Works from 1902 to 1933, and since then has had his own private practice. He possessed the respect of all with whom he came in contact; he was always pleased to work for the good of his professional fellows. He was for some years our member of Central Council and President-in-Chief for the term 1941-42.

Mr. W. M. Timlin, L.R.I.B.A., M.I.A., who with his brother were the partners of the firm Greatbach and Timlin, of Kimberley, where much of their work is to be seen, was our Provincial President, 1937-38. He constantly travelled 200 miles to be present at our Annual and General Meetings, and we shall be very conscious of his loss. With his name is always associated his widespread travels and the pictorial work in colour, ink and pencil which placed him in the forefront of South African artists.

Mr. J. P. Runham, M.I.A., had many years' service with the Government Department of Public Works, and on leaving the Department practised for a time with Mr. J. Willoughby-Williams in Bloemfontein; later he was in Kimberley, where he did a considerable amount of hospital and schools work. He was always a source of quiet strength to our Provincial Institute.

In another way we have to record transfer to the Cape Institute of Mr. H. C. Tully.

Mr. J. Willoughby-Williams now resides in Western Province, Cape, but I am glad to say he still continues membership with his original Institute.

You will, I know, on the credit side of our membership, welcome Mr. B. W. Frank, A.R.I.B.A., M.I.A., South African born and educated. He studied Architecture at the famous School in Liverpool, England, and qualified into the Royal Institute; back again in his homeland he has had various positions, and is now Chief Architectural Assistant in the Bloemfontein Municipality.

COMMITTEE WORK: This has been uneventful in the last twelve months, chiefly owing to our President's ill-health, the Vice-President's absence, the sickness of a third Committee member, and the transference of another to the coast: however, I think I may say that local conditions up to December, 1943, have had no serious matters calling for special attention, and all Central Council matters were immediately placed before the President.

FINANCE: The Revenue and Expenditure Account and Balance Sheet are before you, and, I trust, will be found satisfactory. It has been the careful work of years on the part of the Hon. Treasurer to present a credit balance, even if small, on every occasion. Our books are kept on the membership and sums accrued bookkeeping system; our account with Central Council is on a cash basis.

WAR SERVICE.—Three of the members are on Active Service and one in the N.V.B.

HON. SECRETARY AND TREASURER: There is a considerable amount of work annually in connection with Central Council, and this officer has to be intimately acquainted with all Central Council Minutes and Circulars, and there is the usual bookkeeping, accounts, and gathering in of fees. Some of this work requires attention when a Practising Architect may be experiencing an unexpected office rush. If a new Hon. Secretary can be obtained the present holder will be prepared to give such all necessary assistance.

WAR AND POST-WAR EMPLOYMENT: There is a widespread feeling that our profession might have received a large share of the designing and building under war construction, and we can thank our Central Council for the efforts it made in presenting this point to the authorities, even if the success was small. In regard to national post-war reconstruction it may be accepted that Central Council is fully awake.

GOVERNMENT CONTROL OF BUILDING MATERIALS: Messrs. Fredk. W. Masey and W. Rhodes-Harrison are on the local Advisory Board.

CENTRAL COUNCIL: This Provincial Institute desires to record its appreciation of the work Central Council as a body, and its Executive Committee, throughout the year, are carrying out in the interests of the two professions, some of the items being:—

Control of Building Policy.
" Cost-Plus " Enquiry.
Cape Town and Port Elizabeth Railway Stations.
Government Work to be handed out to the Professions.
Housing Schemes.
S.A.R. Hotels.
Civil Re-employment.
Town Planning Education in South Africa.

HON. SECRETARY AND TREASURER.

THE CHAPTER OF SOUTH AFRICAN QUANTITY SURVEYORS

BOARD'S REPORT FOR 1943-1944

TO THE MEMBERS OF THE CHAPTER:

Your Board submits hereunder its Report covering the session 1943-1944, during which your Board consisted of: Members practicing solely as Quantity Surveyors: Messrs. S. H. Bowyer, Dudley S. Mann, W. A. McKechnie, T. Moore, G. P. Quail, Lieut.-Col. W. E. Puntis, P. M. Roos, A. W. Springthorpe; Dual Member: R. Howden; Salaried Members: Leo C. Austin, Dr. E. J. Hamlin, R. J. C. Prentice.

The officers elected for the year were: President, P. M. Roos; Senior Vice-President, W. A. McKechnie; Junior Vice-President, G. P. Quail.

BOARD MEETINGS: During the year (up to and including March 7th, 1944) there were nine meetings of the Board, in respect of which the following is the attendance record: P. M. Roos, 9; T. Moore, 9; L. C. Austin, 8; G. P. Quail, 8; A. W. Springthorpe, 8; S. H. Bowyer, 6; R. Howden, 6; W. A. McKechnie, 6; R. J. C. Prentice, 6; W. E. Puntis, 6; Dudley S. Mann, 3; Dr. Hamlin, 1.

THE CENTRAL COUNCIL: The following members represented the Chapter on the Central Council of the Institute-and-Chapter during the year: P. M. Roos (Alternate, W. A. McKechnie); T. Moore (Alternate, A. W. Springthorpe).

Mr. Prentice, in his capacity as Union Government Quantity Surveyor Nominee, has a permanent seat on the Central Council. His Alternate for many years was Mr. C. H. Deighton; on the latter's retirement, he has been succeeded by Mr. Austin.

Your Board has pleasure in recording that Mr. Roos was appointed Vice-Chairman of the Executive Committee of the Central Council for the session 1943-1944.

THE BOARD OF EDUCATION: The Chapter has three representatives on the Institute's Board of Education, viz.: Dr. Hamlin (Alternate, Mr. G. P. Quail); Mr. Austin (Alternate, Mr. Dudley Mann); Mr. McKechnie (Alternate, Mr. Bowyer).

THE FINANCE COMMITTEE: The Finance Committee during the year consisted of Messrs. Roos, G. P. Quail, Austin and Bowyer. Your Board may be pardoned for suggesting that the Finance Committee appreciate, more than ever, Mr. Hofmeyr's task in raising revenue; but they envy him his wider powers.

"STANDARD SYSTEM" SUB-COMMITTEE: One of the Chapter's major post-war schemes is the revision of the Standard System, the sub-committee responsible for which is Messrs. Austin, Mann, Moore and Prentice.

CHAPTER'S MEMBERSHIP: The total membership of the Chapter, compiled as at March 7th, 1944, is 193, classified as follows:

Practising solely as Quantity Surveyors	65
Dual Practising Members	20
Salaried Members	69
Retired Members	29
Absentee Members	6
Honorary Members	4

OBITUARY: The Board regrets to record the death during the year of Mr. F. B. Holt, for many years with the P.W.D., and of one of the Chapter's younger members, Mr. H. W. Nottingham, on active service.

NEW MEMBERS: During the year there were 12 new enrolments, viz.: as Salaried Members, Messrs. P. B. Foley, Johannesburg; J. M. Walker, Pretoria; A. Sacks, Johannesburg; G. R. Lewis, Johannesburg; A. R. Swain, Lusaka; W. R. Hemson, Durban; R. C. Sims, Cape Town; H. W. Reid, Pretoria; J. T. B. Viljoen, Pretoria; E. Allen, Johannesburg; and as Practising Members: R. L. Lefeaux, Johannesburg; G. Davids, Johannesburg.

MEMBERS AND STUDENTS ON ACTIVE SERVICE: A list of Quantity Surveyors and Students on active service (as complete as the information furnished to the Chapter permitted) was published in the Board's last Annual Report. The Board's best wishes are once again extended to them.

The Board will welcome any additional information, in this important regard, that members can furnish.

OFFICIAL REQUESTS FOR Q.S. SERVICES: On pages 34-35 of Vol. XIII of the Board's Minutes (circulated to all members of the Chapter) is set out a request from the Union Quartermaster-General for the services of Quantity Surveyors. In this regard it is of interest to note that intimations in somewhat similar strain have been received from the Transvaal Provincial Administration, the Northern Rhodesian Government, and the Mauritius, East Indies and Cape Town Branches of the Admiralty.

HOUSING SCHEMES: In view of the increasing importance of housing schemes, and the growing tendency to engage Quantity Surveyors thereon, the Board has under consideration the general question of fees applicable to all housing schemes.

ADMINISTRATIVE PROBLEMS: Not unnaturally, in the fifth year of the most devastating war in history, the Board has been confronted with many difficult problems. Under this heading the Board has during the year, after careful consideration, decided:

(a) in regard to the practice known as "Plumping" at elections, not to recommend any amendment to the present Regulations, feeling that the electorate (i.e., the Chapter's membership) should be permitted the democratic right, in the wise exercise of its discretion, to vote for 12 candidates —the number required to form the Board—or a lesser number;

(b) in regard to the suggestion made at the last Annual General Meeting—to reduce the subscriptions of Salaried Members—NOT to adopt this suggestion.

Other administrative problems which have engaged the attention of the Board during the year have not yet been brought to finality.

QUANTITY SURVEYING EDUCATION: The following figures indicate the numbers of Quantity Surveying students who attended the Universities of Pretoria, the Witwatersrand, and Cape Town, during 1943:

	Pretoria.	Witwaters-rand.	Cape Town.
Degree Course	4	3	1
Diploma Course	16	12	—

The Board has given its support to the endeavour to establish a part-time course in Quantity Surveying at the Natal University College, Durban, under the aegis of the University of the Witwatersrand.

There has been a noticeable decrease in the number of South African students entering for the Professional Examinations of the Chartered Surveyors' Institution.

During the year the following students completed the requirements of the University of Pretoria for its Diploma in Quantity Surveying, viz.: A. R. Hunt (with distinction) and I. I. Dean; and Witwatersrand University, Diploma Course in Quantity Surveying, J. P. Lowe.

BELL-JOHN PRIZE FUND: The Board gratefully acknowledges the following contributions to the Bell-John Prize Fund during the year: T. Moore, £4/4/-; N. N. Moore, £1/1/-; W. A. McKechnie, £2/12/6; D. M. Sinclair, Senr., £10/10/-; J. W. Cowling, £10/10/-; J. A. Cowling, £2/2/-; Roos & Roos, £4/4/-; E. B. Farrow, £5/5/-; A. W. Springthorpe, £10/10/-; Farrow, Laing & McKechnie, £5/5/-; Borckenhagen & Louw, £5/5/-; Selkirk & Lane, £5/5/-.

Those members of the Chapter who have not yet subscribed to this fund are invited to do so.

GOVERNMENT WORK: The Board has pleasure in recording that an appreciable volume of governmental quantity surveying work has during the year been allocated to practitioners.

HON. LIAISON OFFICER: Mr. P. M. Roos, as Hon. Quantity Surveying Liaison Officer, has had the onerous task of continuously interviewing the Defence authorities in the endeavour to improve the status of Quantity Surveyors in the Forces; and latterly in the endeavour to secure the release of personnel not engaged in combatant units.

CHAPTER'S FINANCES: Members have been furnished with a copy of the Chapter's audited Statements of Account for the calendar year 1943, which show a surplus of £3/11/-. This surplus has been made possible by the careful husbanding of the Chapter's administrative expenses and by the generous donations of individual members, totalling £20/19/-.

It will be observed from the accounts that the item "Remission of Subscriptions of Members on Active Service" accounts for the considerable sum of £129/3/-. "Subscriptions Unpaid," as at December 31st, 1943, amounted to £154/7/6. Fortunately a special campaign embarked upon by the Finance Committee—without recourse to legal process—has appreciably reduced this amount.

DONATIONS TO BENEVOLENT FUND: The capital of the Benevolent Fund has now reached the total of £530/16/5. The Board's appreciation is recorded to the following members for their contributions during the year: J. E. Harrison, £3/3/-; E. B. Farrow, £10/10/-; Thompson & Martin, £10/10/-; and refunds of meeting expenses by Board members, £2/2/-.

APPRECIATION: The Board is indebted to Mr. Roos for his untiring efforts both as President and as Hon. Liaison Officer: he has indeed given of his best to serve his profession; and to Mr. Moore for his kindness in placing his office at the disposal of the Board for its Pretoria meetings.

Once again the Board has pleasure in placing on record its appreciation of the invaluable services rendered during the year by your very able Secretary, Mr. J. S. Lewis.

ADDRESS OF THE PRESIDENT MR. P. M. ROOS

Once again it is my pleasure and privilege to address you. As your President, I do not lose sight of the fact that the war is the major issue, and my views constantly vacillate between these two important considerations: firstly, have we as a profession pulled our weight in contributing to the war effort? Collectively, I think the Chapter's record is no mean one. Secondly, have those of us who have not been able to serve the country in the Military Forces pulled our weight in looking after the interests of the profession we have striven for so many years to build up? Again, I think our collective effort has been no mean one.

This past year has been one of many difficulties. South Africa's fortunate geographical position, together with the turn that the war has taken, has brought about a "boom" in certain parts of our fair country that is comparable with some of the best pre-war years. This is all to the good, when one realises that the profession had to pass through a difficult time during 1941 and 1942. Nevertheless, I feel that we may be living in a "fool's paradise" and that we should stop, consider for a moment, and then perhaps ask ourselves one or two questions. How long can it last? How soon will the available imported materials be in "short supply," and will shipping space be made available for the importation of essential imported materials not necessarily required for the furtherance of the war effort?

In answer to the first question, the boom will last whilst materials are available and whilst buildings of not really an essential nature are allowed to be built. The replies to the second and third questions must be in the hands of the competent governmental authorities, who should know what the position actually is, and who, I, personally, feel should be more definite and precise when making statements to the Press. We have heard many veiled remarks as to the amount of controlled materials that are available: these are not very encouraging, particularly as a number of our younger members have just commenced private practice. Their apparently secure position may later prove to be very insecure.

Nevertheless, it is very gratifying that the P.W.D. and Provincial authorities are proceeding with postponed and new building programmes and that the profession is being called upon to assist in this work.

We have heard much of late of a suggested method of "Group working." The Chartered Surveyors' Institution in Britain investigated a grouping of various professional and technical men into one firm. One of their findings was that,

in the interests of all parties, the Quantity Surveyor should remain independent. The Institute of S.A. Architects, for the purpose of a competition, have recently sanctioned a system of "Group working," but we have as yet not been able to judge whether it is a success or otherwise. Architects and surveyors, and architects and engineers, have repeatedly been associated successfully. We now come to a system which most of us in our practices observe, that is, an association with a firm or firms of architects for whom we, to the practical exclusion of any other quantity surveying firm, do the work. This understanding may not be classified a "Group," but it is very much the same. Social codes and professional ethics have a great bearing in preserving this system.

We now must ask ourselves, what is basically wrong with the "Group working"? Is a Quantity Surveyor likely to be influenced more in this system or in any of the others detailed above? My feeling is that if the profession of Quantity Surveying means anything at all, our members will always place the interests of their profession ahead of personal gain. This leads me to believe that a closer co-operation between all the interests associated with the design and completion of building must be to the benefit of all concerned.

I am entirely with those who urge a more businesslike scientific rationalisation of the whole of the great Building Industry. To this end I offer it as my considered opinion, even at the risk of incurring displeasure, that we should welcome as members of our Chapter those Quantity Surveyors, fully trained professionally, who have entered the Building Industry on the operative side. ("Hear, hear.")

You will no doubt remember that last year the Annual General Meeting expressed very strong views about the injustice meted out to our Quantity Surveying Officer-personnel in the S.A.E.C. I had hoped to be able to tell this meeting that this position had been altered. All I can say is that unofficially I have been informed that this injustice will be removed and that the recommendation has already been placed before the competent authorities. I would like to place on record my appreciation of the assistance that Col. Catton, O.C. of the S.A.E.C., has given me, as Hon. Liaison Officer. Whenever it has been possible to grant professional pay to Officer-Quantity Surveyors, who are doing professional work, it has been done. My next step will be to try and get all Q.S. personnel who were seconded to the S.A.E.C. to do professional work transferred into the S.A.E.C. Only then will they be able to claim professional pay.

In conclusion, I once again wish to express my appreciation of the valued assistance that members of the Board have given me during my second year of office; and finally to your Secretary, Mr. Lewis, who, during the past year, despite his ever-increasing burden of professional cares and staff difficulties, still managed to keep a firm guiding hand on all matters of importance. His help and advice will always be a happy recollection.

PROFESSIONAL NOTES AND NEWS

N. M. Eaton, A.R.I.B.A., M.I.A.
Lt. R. E. Cole-Bowen, M.C., M.I.A.
Prof. A. L. Meiring, A.R.I.B.A., M.I.A.
A. C. Fair, M.I.A.
Hugo Naudé, A.R.I.B.A., M.I.A.

Valrahuis,
Bureau Lane,
Pretoria.
And at Johannesburg.
Telephone 2-0213.

The Editors,

April 3rd, 1944.

We would like our colleagues of the Transvaal Provincial Institute to know that we feel it an honour to have been placed by them, through referendum, among the three groups to be considered by the Government as architects for the new Ministry of Transport Building in Pretoria.

It is now our good fortune to have been selected by the Government to carry out the work, and we are therefore doubly conscious of the trust placed in us by our fellow architects.

Yours faithfully,

NORMAN EATON,

Norman Eaton & Partners.

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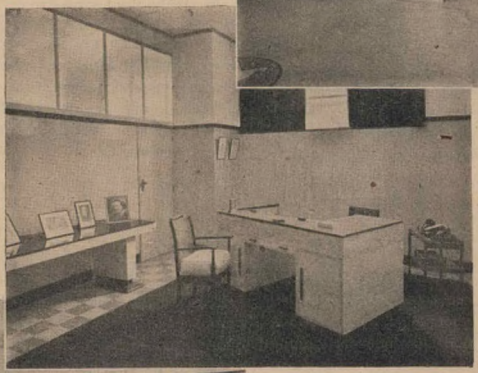
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