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Principal Contents

THE LONDON COUNTY HALL

It must be a matter of great regret to architects generally, and Londoners in particular, that Mr. Ralph Knott's great building on the Thames bank has remained so long unfinished, the absence of the bay at the northern end giving a somewhat lopsided appearance to the structure and robbing it of much of its fine sweep. The report of the Establishment Committee, considered at last Tuesday's meeting of the London County Council, recommending the further postponement of the completion of the building, prolongs the disappointment. It is not that the extra accommodation that would be afforded is not required; it is actually badly needed. Space is not only required for departments of the Council housed in sixteen other buildings, but also for extensions of other departments already accommodated in the existing structure. The capital commitments of the Council in respect of housing, bridges, street widenings, etc., are such, however, that the Committee have adjourned the consideration of the completion of the Hall until the financial obligations of the Council in other directions are more definitely known.

On the face of it, this cautious attitude seems wholly commendable; but one would like to be a little better assured that the Council's work does not suffer by having to be carried on in seventeen other buildings instead of one, and that it is really an economy to continue the present scattered arrangement.

The question is apparently still undecided whether the uncompleted portion is to have central corridors, with offices on both sides, or whether they are to be on one side only. In the completed portion of the building, the rooms are on one side. It was a condition of the competition for the building that they should be so, though critics were not wanting then who thought that, however ideal or desirable such an arrangement might be in theory, in practice the Council was hardly justified in embarking on a system of planning that was then deemed too extravagant by even the most progressive commercial office builders. The Council's Establishment Committee now favours central corridors with rooms on both sides, which would mean an addition of £55,000 to the estimated cost of £600,000 for carrying out the completion on the original lines.

Although the Council's Establishment Committee is of opinion that the time is not opportune to proceed with the completion work, we are by no means convinced that they will gain anything by waiting or that the future really holds out any promise of more propitious times from a financial point of view. And the Kingsway Improvement is a very striking illustration that the Council, even with the best intentions, can be penny wise and pound foolish. For over twenty-five years the disposal of the building sites on these new thoroughfares has dragged along, and there is still a considerable area to be taken up. Had the Council adhered to its original intention to undertake the building of shops and offices along these thoroughfares, it would have been in an immeasurably stronger position financially through the scheme, and it would have had finer streets. Even if, as has been contended, the Council has benefited through the delay by getting higher ground rents for the more recent lettings, as a result of the rise in values, they might have been getting increased rack rentals and over the whole period.

In the same way the Council's policy of letting I dare not wait upon, I would in regard to the County Hall completion does not, on the face of it, make for economy. Assuming that they have to borrow the £600,000, or £650,000, and that interest and sinking fund charges total £35,000 or £40,000 a year, we question whether the sixteen additional buildings required do not cost more, quite apart from considerable expense in telephones, extra messengers, etc., involved to keep the Council's scattered sections in touch with one another. No doubt some of these sixteen additional buildings also belong to the Council, but the fact that no rent is paid out for them does not justify the ignoring, in this calculation, of their freehold value or annual letting return.

From the æsthetic point of view, there is no question at issue. The building ought to be finished and finished speedily. It has not had the best of luck. Numerous alterations, not always for the better, were imposed upon the original conception; its erection was hung up during the War, and the finished portion had to be completed when building costs were at their highest peak. There have been sharp divisions of opinion upon the merits of the design, as there have been also about the great work of a distinguished architect which faces it across the river. Time has, however, removed the grievance of one critic who complained of the brilliant red of the tiles upon the roof; and, probably, most of the other criticisms are of like value. Since, however, delays are proverbially dangerous, we are all for completing the building forthwith, lest disappointment to-day becomes tragedy to-morrow.

Notes and Comments

A Mediaeval Wall Painting

Some alterations at the White Swan Hotel, Stratford-on-Avon, under the supervision of Mr. Sydney W. Davis, A.R.I.B.A., the architect for the owners, Trust Houses, Ltd., has brought to light an interesting mural painting. The removal of some panelling in a room about 20 ft. by 15 ft., intended to be converted from a bar into a coffee room, disclosed the painting, which is executed on a skin of fine plaster overlying a wall of half timber with a filling of rough plaster mixed with straw. The ground scheme is of foliage and flowers on a large scale, into which are introduced scenes illustrative of the story of Tobias, from the Apocrypha (as borne out by the inscriptions in Gothic script) framed in between painted columns. The whole is about 13 ft. long by 6 ft. deep. It is satisfactory to note that steps are being taken for the preservation of the painting, and that at the instance of the Society for the Protection of Ancient Buildings, Professor Tristram is being called upon to advise in the matter. Although not a work of the first class, it is bold and lively, and probably dates from the late sixteenth or early seventeenth century.

Service Subways

The upheaval of London's Piccadilly has raised more of a storm than can be confined in the proverbial tea-cup. One can sympathise with the shopkeepers whose customers will probably be kept away by the confusion, delay and inconvenience inseparable from the carrying out of road repairs on the grand scale. The practical closing of one of the busiest Metropolitan thoroughfares for a period of three or four months has, however, raised serious doubts in the minds of many road and traffic experts whether our present procedure in these matters is the best that can be devised, or is in consonance with modern necessities. That the repaving of the whole thoroughfare is being undertaken in one piece is largely dictated by the water, gas and other service authorities requiring to overhaul or relay their mains. And the number of such services carried under the streets of London is almost past belief. A good many years have passed since Mr. Ventris, then Road Surveyor of the Westminster City Council, prepared a plan showing the various services under the short length of the Strand between Duncannon Street and Trafalgar Square. They totalled fifty-three, and, presumably, they have not diminished in number with the passing of the years. That disclosure, and the simultaneous incidence of a troublesome repaving work in the West End, evoked serious proposals for putting subways under the busy thoroughfare of London to take all the service mains, so that they could be repaired or attended to without the constant disturbance of the road surface. The agitation probably induced the L.C.C. to install such subways under Kingsway and Aldwych, then being constructed. Cost, however, appears to have stopped their introduction under other thoroughfares, although the loss through delay and inconvenience arising from piecemeal excavations and replacements in subsequent repairs probably amounts now to many times the first cost of the proposed subways. The structure of our city streets really rests in the flat cambered concrete arch which carries the wearing resilient skin over which the traffic runs. When a service authority cuts a trench either across, or along its length, the severed edges invariably sink a little, the arch formation is destroyed and cannot be perfectly restored. From that moment the rapid deterioration of the road begins. Apart from this serious factor, however, the question of the most suitable wearing skin for busy streets, in view of the great change in the character of the traffic, demands enquiry; and the time seems to be ripe for the road, traffic and various service authorities to come together and seek a solution of this perennial and troublesome problem. The service authorities must expend considerable sums in delving down into our roads. They would probably not be averse from making some contribution towards the cost of subways in which they could attend to their mains with little expense and no delay.

COMPETITION RESULTS

The Shakespeare Memorial Theatre Preliminary Competition

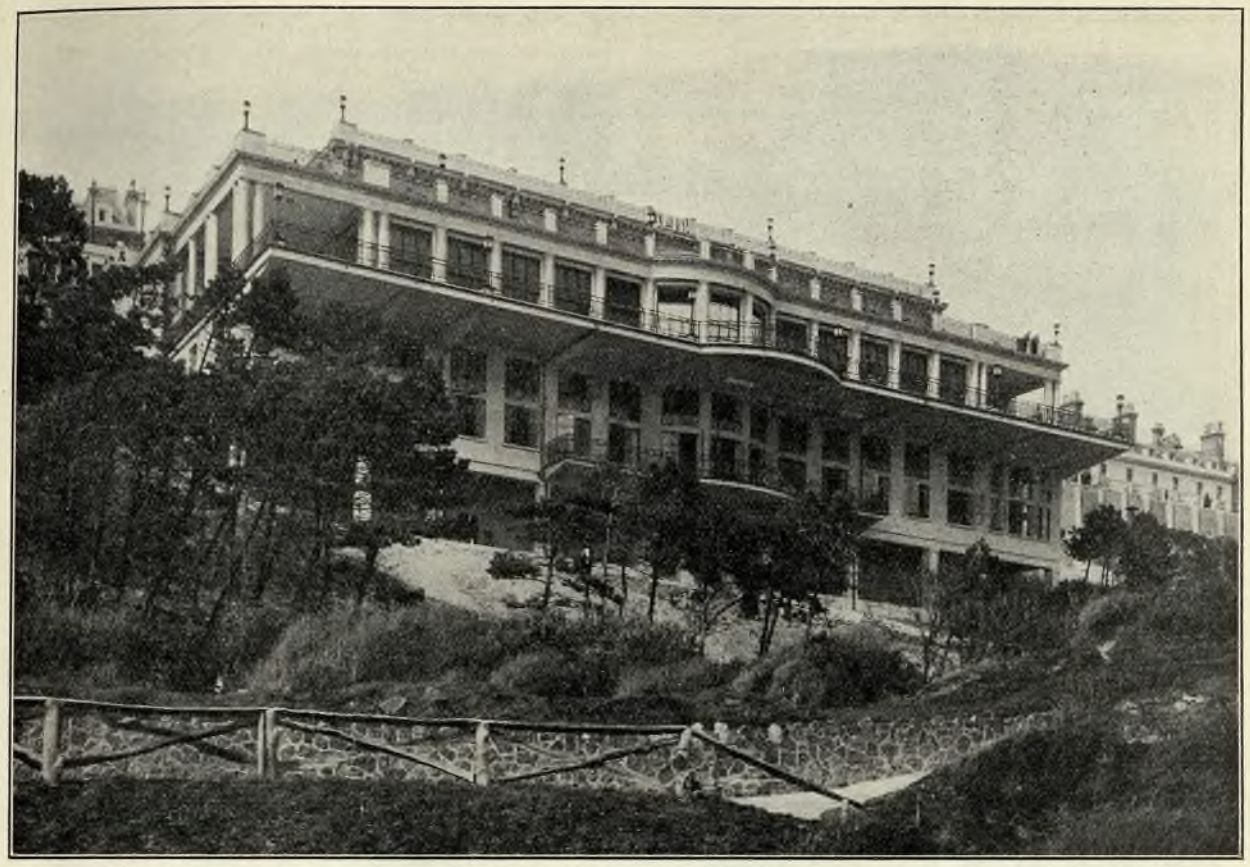
The result of the preliminary competition for designs for the rebuilding of Shakespeare Memorial Theatre, Stratford-on-Avon, was announced on Friday last. Seventy-four sets of designs were received from British, American and Canadian architects. From these the assessors, Mr. E. Guy Dawber, A.R.A., P.P.R.I.B.A., Mr. Cass Gilbert, President of the United States Academy of Design, and Mr. Robert Atkinson, M.Arch., F.R.I.B.A., selected six designs. The authors of these six schemes, who will submit their further considered designs for final adjudication November next, were found to be as follows:

Mr. R. Derrick, Michigan, U.S.A.
Mr. Donald Frank Martin-Smith, A.R.I.B.A., London.
Messrs. A. R. Mohr and Benjamin Moscowitz, New York City, U.S.A.
Mr. A. J. Rousseau, Ann Arber, Michigan, U.S.A.
Miss Elizabeth Scott, London.
Messrs. Percy Tubbs, Son and Duncan, F. and AA.R.I.B.A., with Mr. S. Rowland Pierce, London.

Beckenham Municipal Offices Preliminary Competition

Mr. Septimus Warwick, F.R.I.B.A., the Assessor, in his report on the sixty-seven designs for Municipal Offices, recommended that the authors of the following designs, viz., Nos. 1, 9, 27, 41, 56 and 60, should be invited to take part in the final competition. October 15 has been fixed as the last day for the receipt of the drawings.

Design No. 9: Mr. W. Naseby Adams, A.R.I.B.A.
Design No. 60: Mr. Harold G. Cherry, F.R.I.B.A.
Design No. 27: Messrs. Cecil E. M. Fillmore, A.R.I.B.A., and A. Malcolm McKewan, A.R.I.B.A.
Design No. 1: Messrs. H. V. Lanchester, F.R.I.B.A., Geoffrey Lucas, F.R.I.B.A., T. A. Lodge, O.B.E., A.R.I.B.A.
Design No. 56: Mr. T. R. Somerford, A.R.I.B.A.
Design No. 41: Messrs. E. Berry Webber, A.R.I.B.A., & J. G. Cheadle, A.R.I.B.A.



LEAS CLIFF HALL, FOLKESTONE. J. L. Seaton Dahl, F.R.I.B.A., Architect.

LEAS CLIFF HALL, FOLKESTONE

This new concert hall for Folkestone accords well with the eighteenth century architecture of the neighbourhood, and it is fortunate that this addition to the amenities of the sea-front should have been planned by an architect so much in sympathy with traditional style of the locality. The main floor is below the level with the promenade, and is marked by a wide-spreading balcony supported by ferro-concrete brackets. The hall extends to two floors, and at its upper level is surrounded by another balcony, while yet a third terrace for the use of visitors is provided on the flat roof. The general treatment is ornate, the main balcony being marked by a Corinthian Order surmounted by a cast-iron balustrade, which has piers or portions of stone parapet above the columns. The main entrance, which needs to be approached by an inclined road parallel to the promenade, is through a large door with iron grille enclosed in an architrave decorated with medallions and bracketted hood, the whole being contained in pilasters surmounted by a pediment. On the roof terrace the balustrade is supported by a dentil cornice marked by large brackets beneath the piers.

Where a design has the virtues which belong to character and composition, any blemishes in its detail may be the more readily forgiven. It may be suggested, however, that a slight lack of originality is displayed in repeating the same not highly distinguished design for a cast-iron railing right round the building on three levels. The squat little lamp-posts are poor, and might with advantage be replaced by others more decorative at a later date. The Order is fortunately of stock pattern, and has all the artistic merits which belong to its prototype.

The general character of the design, however, is entirely appropriate to its purpose, and the building well expresses its combined functions of being a concert hall and also a pleasant place of promenade from which excellent views of the sea can be obtained. The long, low shape is just what is required in its position, and the white tone of the building gives it a holiday air.

The general contractors were Messrs. D. Godden & Son, Ashford. The sub-contractors included: Messrs. G. N. Haden & Sons, Ltd. (heating); Messrs. Young & Co., Ltd. (steelwork); Messrs. Shaw's Glazed Brick Co., Ltd. (terra-cotta); Messrs. Crittall Manufacturing Co. (metal windows); Messrs. Siegwart Fireproof Floor Co., Ltd. (floors); Messrs. Marshall & Co. (fibrous plaster); Mr. Feather, Folkestone (electrical work); Messrs. Hollis Bros. (wood block floors); Messrs. Art Pavements and Decorations, Ltd. (terrazzo and rubber pavings); Messrs. Olby, Ltd. (railings and hand-rails); Messrs. Wilfley & Co., Ltd. (jointless flooring); Messrs. Lift and Engineering, Ltd. (hand lifts); Messrs. Candy & Co., Ltd. (tile paving); Messrs. Haywards, Ltd. (pavement lights); Messrs. Art Metal Construction Co. (lockers, etc.); Messrs. Comyn Ching & Co., Ltd. (cloakroom fittings); Messrs. Lumley & Co., Ltd. (bar fittings); Messrs. Faldo & Co., Ltd. (asphalte); Messrs. Colledge & Bridgen, Ltd., and Messrs. Olby, Ltd. (door furniture); Messrs. Merryweather & Sons, Ltd. (fire hydrants); Messrs. Gardiner, Sons & Co., Ltd. (iron doors); Messrs. Vulcanite, Ltd. (vulcanite); and Messrs. Considere Constructions, Ltd. (ferro-concrete).

Obituary

We deeply regret to announce the death of Mr. J. H. Kerner-Greenwood, managing director of the King's Lynn firm which bears his name. Mr. Kerner-Greenwood passed away very suddenly at Bath on July 17. He had a very keen appreciation for things artistic, and the many pictures which illustrated Pudlo at the building exhibitions bear evidence of this appreciation. He was essentially a lover of the simple life, and found great pleasure and joy in the company of sincere simple folk, irrespective of their social standing, and by many of such he will be greatly missed. Mr. Kerner-Greenwood was a very keen business man, but he accompanied all his dealings with a singular charm which made the most ordinary business interview a pleasure rather than an irksome task.

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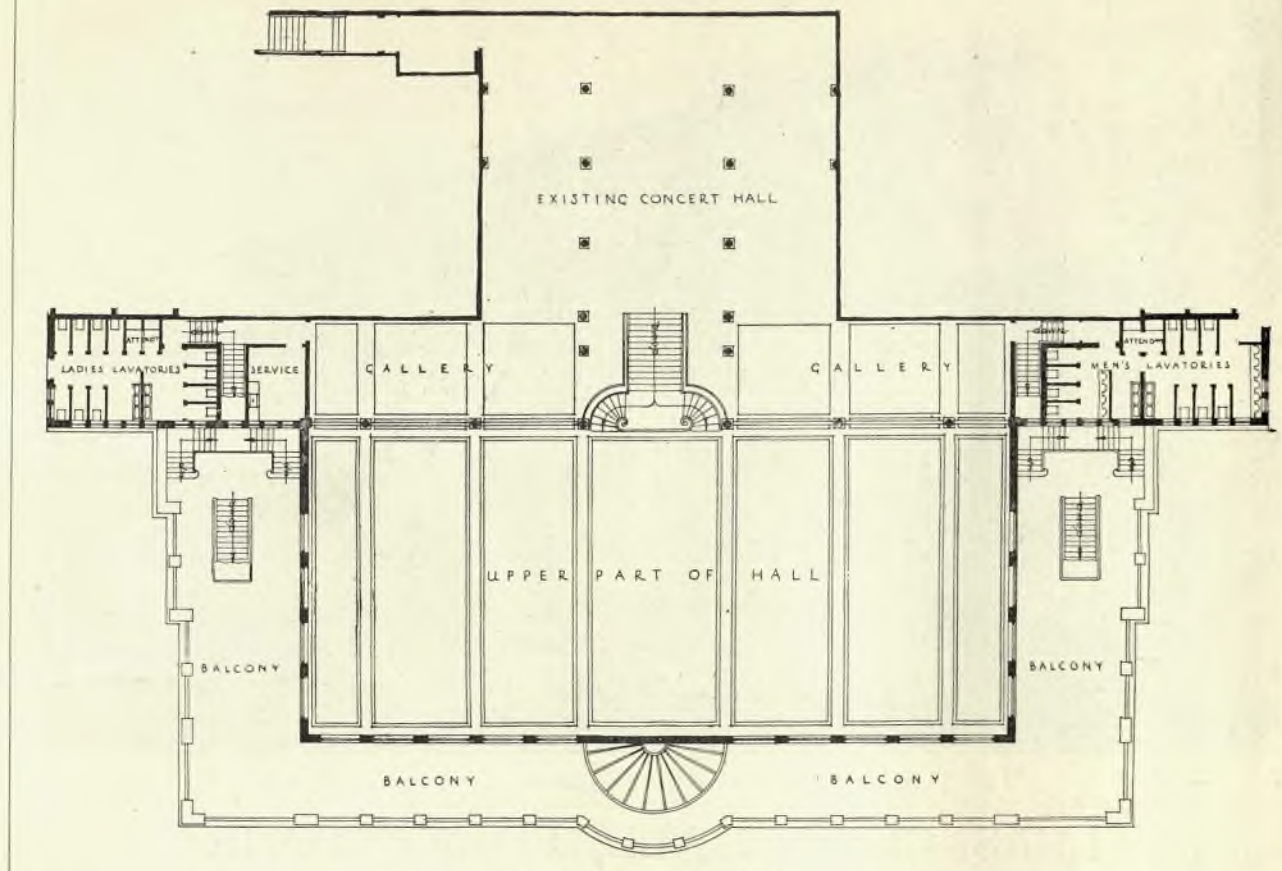
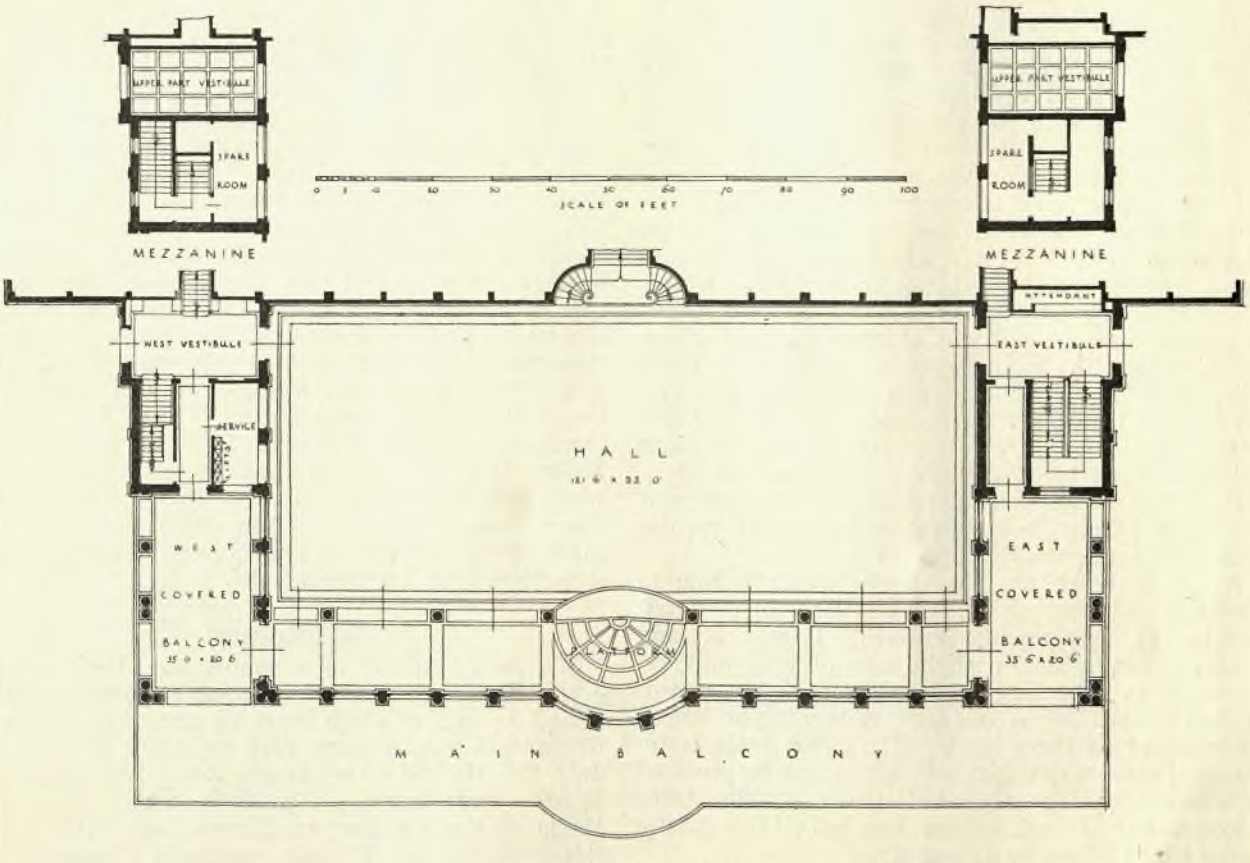
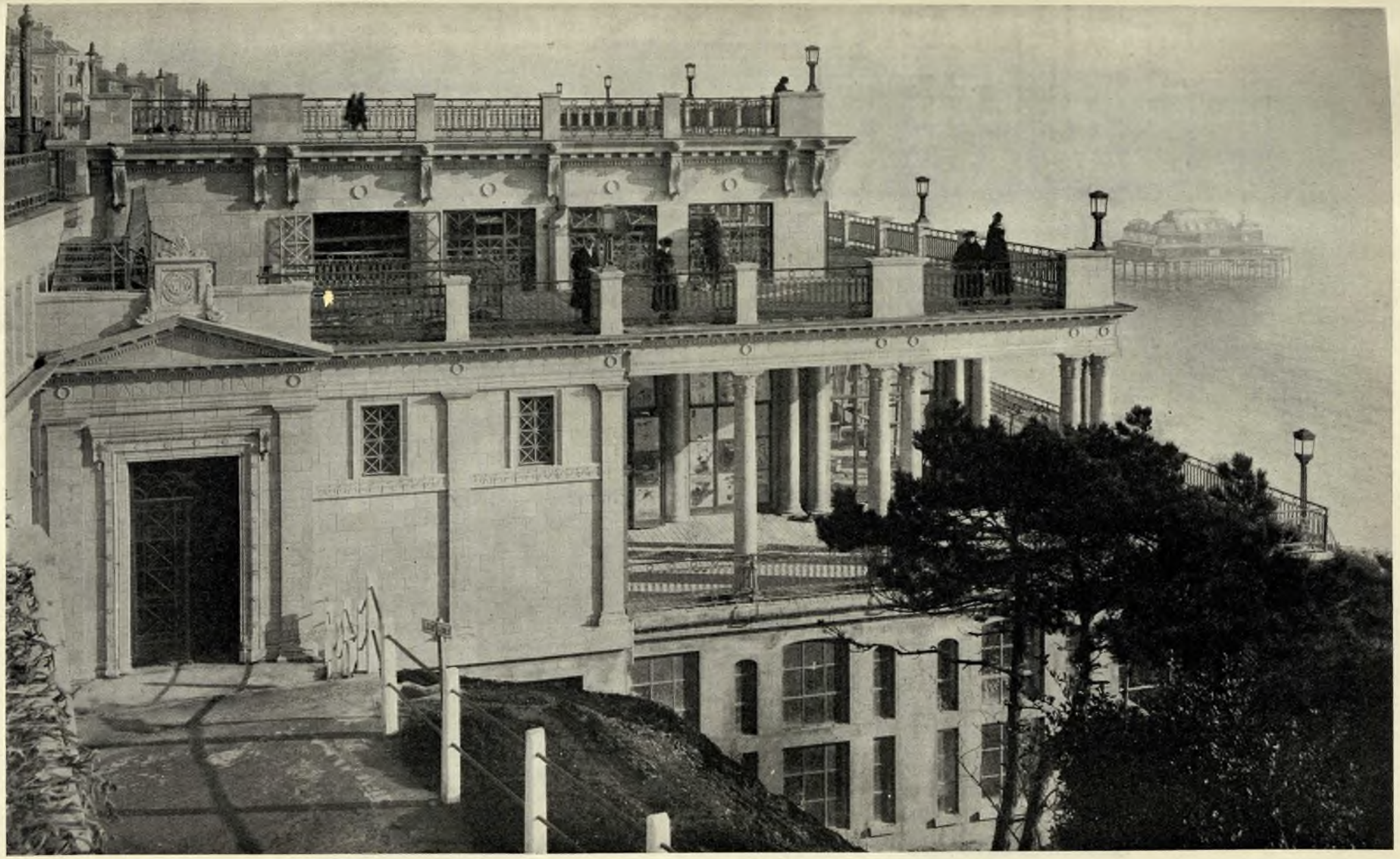


GALLERY FLOOR PLAN

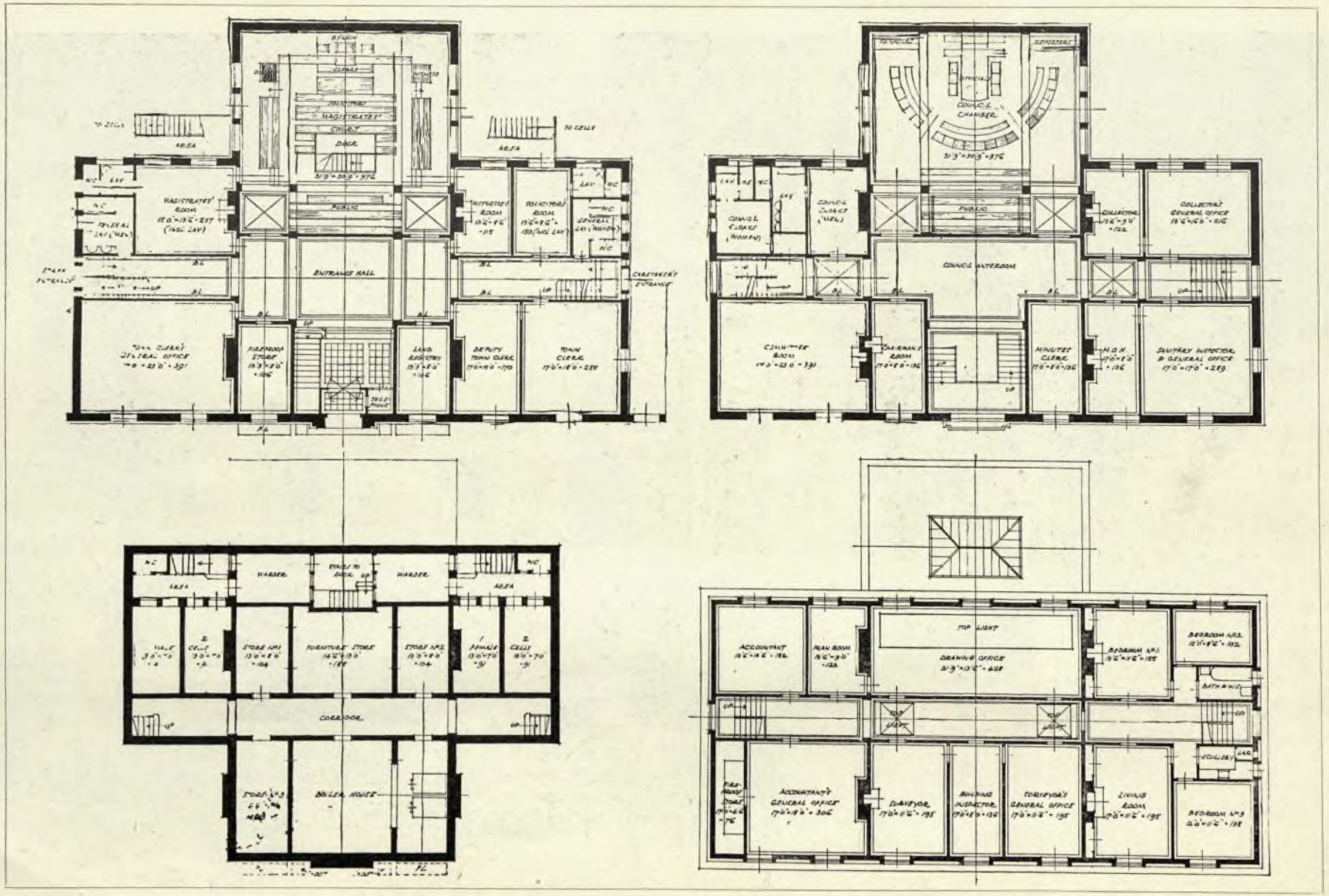


MAIN FLOOR PLAN

LEAS CLIFF HALL, FOLKESTONE: MAIN AND GALLERY PLANS.
MR. J. L. SEATON DAHL, F.R.I.B.A., Architect.

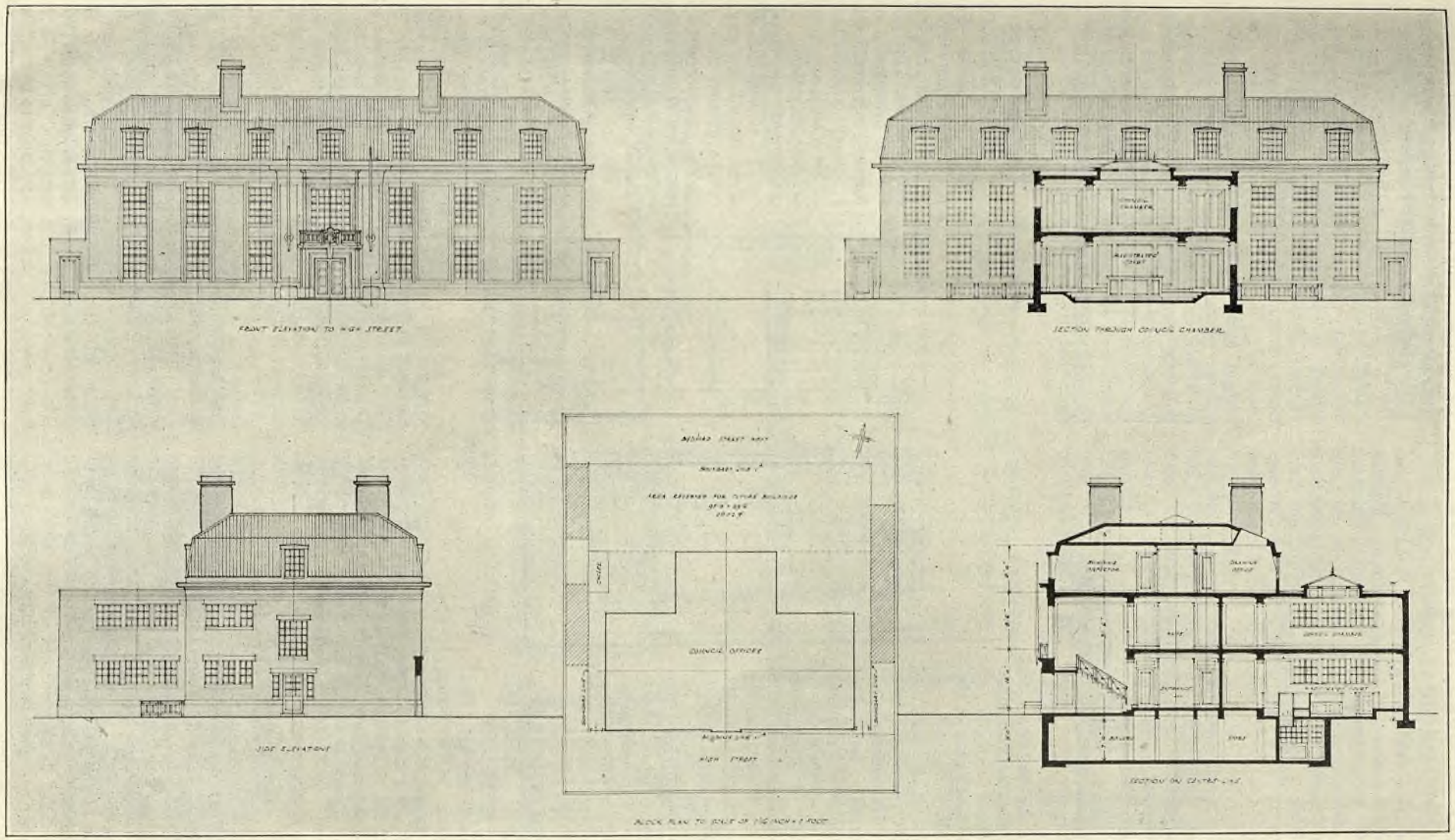


LEAS CLIFF HALL, FOLKESTONE. Mr. J. L. Seaton Dahl, F.R.I.B.A., Architect.



GROUND, BASEMENT, FIRST AND SECOND FLOOR PLANS.

BOGNOR COUNCIL OFFICES COMPETITION. FIRST PREMIATED DESIGN.
Mr. Charles Cowles-Voysey, A.R.I.B.A., Architect.



BOGNOR COUNCIL OFFICES COMPETITION. FIRST PREMIATED DESIGN.
Mr. Charles Cowles-Voysey, A.R.I.B.A., Architect.

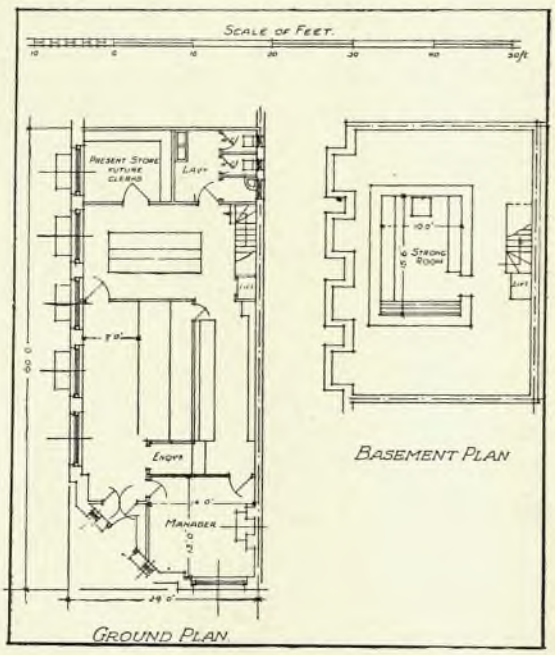
COMPETITION NEWS

PROPOSED COMPETITION FOR HERNE BAY MUNICIPAL OFFICES.

Professor A. E. Richardson, F.S.A., F.R.I.B.A., has been appointed assessor of this competition. Designs are invited for a composite building containing municipal offices, assembly hall for concerts, etc., and business premises, the whole to cost not more than £40,000, exclusive of furniture. The conditions have been drawn up with very great care, and the competition should attract a large number of candidates.

Some indication of the size of the proposed building is given by the areas of its different departments. The surveyor and his staff occupy 1,700 square feet of floor area, the Town Clerk and staff occupy 1,100 square feet, while the assembly hall is to accommodate 600 persons, with stage. In addition to private offices, for which room may be found in the first and second floors, the corner portion of the site is to be occupied by a bank. The building is to be so planned that it can be carried out by sections, the municipal offices and business premises being capable of erection independently of the assembly hall.

The assessor has wisely insisted upon absolute uniformity in the technique of draughtsmanship and pictorial conventions by means of which the schemes are to be presented. Plans, elevations and sections must be in pen and ink, without shading or colouring of any kind, the walls on plans and sections must be shown black. No perspective is required. The drawings must be on sheets of plain paper *without border*. The competitors will welcome this last prohibition with special gratitude!



MUNICIPAL OFFICES, HERNE BAY: BLOCK PLAN.

THE BRADFORD GRAMMAR SCHOOL COMPETITION

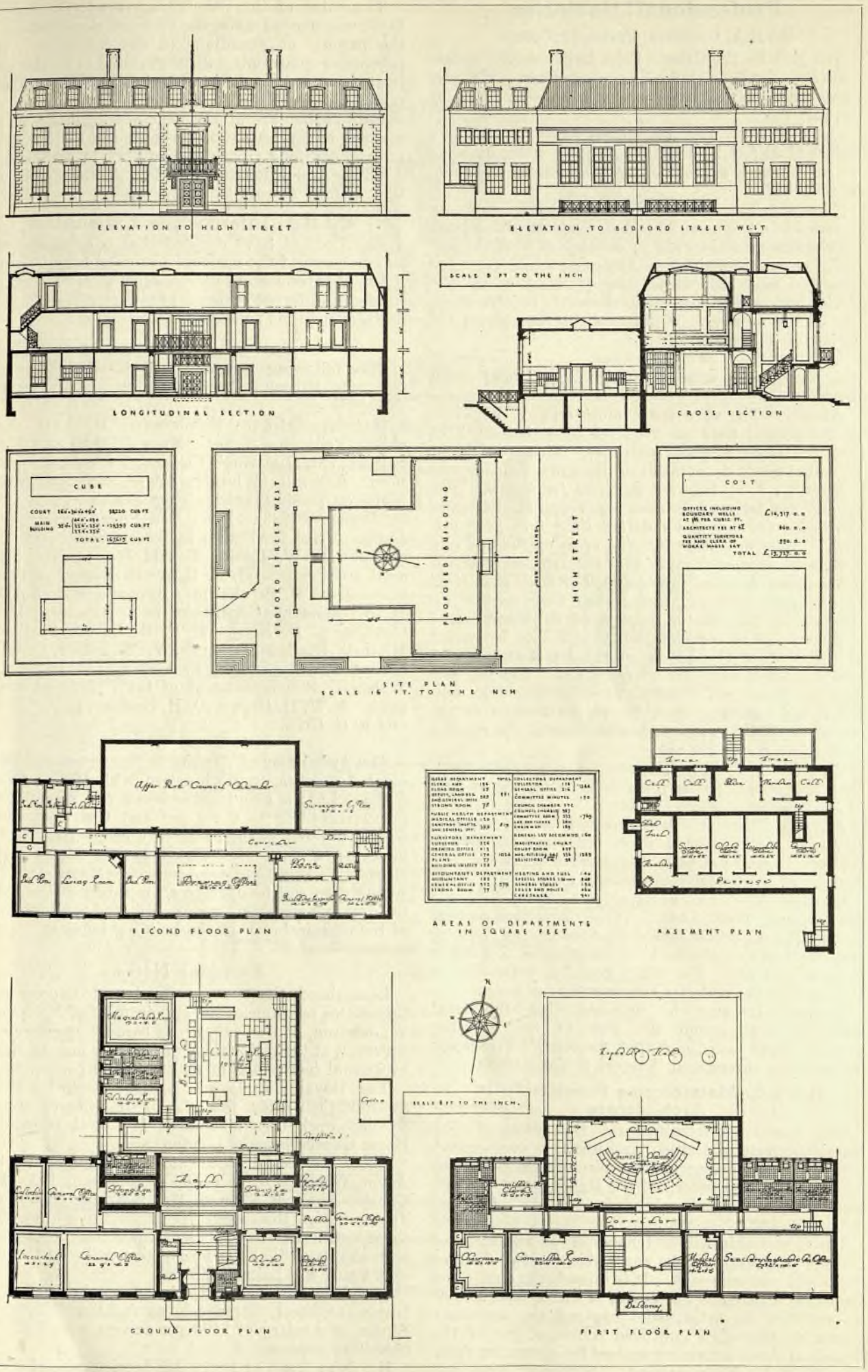
Mr. Arnold Mitchell had an easy task in choosing the winner among the condidates in this competition. Messrs. Petch & Fermaud's plan is of super-excellent quality and far surpasses that shown in the other premiated designs. They have utilised the slope of the ground to provide both a sub-ground floor and a semi-basement. In the latter are placed a gymnasium, with covered playground on each side (an ideal arrangement), while in immediate connection with each is the swimming-bath. The ground-floor plan shows a fine symmetrical arrangement, in which the assembly hall occupies a central position over the swimming-bath. This is approached directly from the main entrance hall, on either side of which are situated the administrative quarters. The assembly hall is lit from four internal courtyards, and has flanking corridors giving access to the class-rooms on the east side of the building and to the library and museum, especially quiet apartment set between the courtyards. The dining-room is on the north side, and is not only accessible from all parts of the building, but is in immediate communication with the kitchen offices on the same floor. The first-floor plan shows the upper part of the assembly hall, with gallery acting as communicating corridors through the building, and an orderly array of lecture- and class-rooms all lit and ventilated from external walls.

The second premiated design, by Messrs. Stratton Davis, Yates, Dolman & Rowland V. Taylor, shows a good ground-floor plan, with class-rooms well situated in relation to the assembly hall and dining-rooms. This scheme, however, does not provide nearly such a convenient disposition of swimming-bath, gymnasium, library and museum as does the winning design, while there is no covered playground. Messrs. Cecil A. L. Sutton and George A. Bryan, the authors of the scheme placed third, have eschewed the courtyard formation and have spread out the class-rooms along two long corridors on either side of the assembly hall This arrangement does not conduce to the easy supervision of the work of the school. In both the last-mentioned designs the assembly hall is given very great architectural prominence, with the result that it somewhat dwarfs the remainder of the buildings.

BOGNOR COUNCIL OFFICES COMPETITION

Mr. Septimus Warwick, F.R.I.B.A., has awarded first place in this competition to Mr. Charles Cowles-Voysey. He has presented a straightforward solution of the "programme," and the simplicity of his plan is accompanied by orderly elevations. The entrance hall and broad corridor, lit at each end, give easy access to all the apartments on the ground floor, while a similar arrangement is repeated on the next floor, the staircase leading direct to the Council chamber.

The second premiated design, by Messrs. Clayton & Black, has also a very good plan which, while inferior in some respects to that placed first, has the advantage of providing separate access to the Magistrates' Court on the ground floor, so that those engaged in legal business need not use the same entrance hall as the officials of the Council. The first floor plan somewhat resembles Mr. Cowles-Voysey's. The elevations of both these designs, however, appear to be far too domestic in character, the buildings in each case being, on their street frontages, quite indistinguishable from country houses. A long, plain roof, a pleasant row of dormers, and two chimney stacks do not provide the appropriate crowning feature to a block of municipal offices, which also includes a magistrates' court. Messrs. Adshead & Ramsey, authors of the third premiated design, have been far more successful in giving the right character to their building than have the authors of the first two schemes, inasmuch as they have placed a lantern on the roof, with clock underneath, and it is obvious at once that the building is in the tradition of the old English town hall. By this civic emblem the municipal offices assume an institutional air, and are no longer to be confused with a private dwelling-place. The plan of the municipal building itself, however, lacks the spaciousness and inevitability which marks the design of Mr. Cowles-Voysey.



BOGNOR COUNCIL OFFICES COMPETITION. SECOND PREMIATED DESIGN.
MESSRS. CLAYTON & BLACK, AA.R.I.B.A., Architects.

Professional Societies

R.I.B.A. Grissell Prize, 1927-1928.

The jury for the Grissell Prize have received certain questions from an intending competitor. We give these questions, together with the answers made by the jury:—

Question 1.—*"The four angles to be rounded to a radius of 20 feet." Must the frontage of the building be so rounded, or could any other angle treatment be adopted?*

Answer.—The angle of the building must be rounded to a radius of 20 feet to conform with certain regulations made in 1925 in connection with the lay-out of main thoroughfares. Any other angle treatment arranged must fall within the quadrant of 20 feet circle, but in this case must obviously involve sacrifice of site area, and would probably be against the wishes of a business client.

Question 2.—*"Shopping space . . . on ground floor over whole area of site." What about goods department?*

Answer.—The shop space must occupy the whole of the ground floor not required by staircases, lifts, despatch office or goods entrance. There should be no actual goods department on the ground floor.

Question 3.—*"Internal galleries for lighting purposes," and later, under drawings required, "Ground floor plan indicating by dotted lines first floor gallery." Does this mean lighting areas on the 2nd and 3rd floors, or does it mean that the 1st, 2nd, and 3rd floors should have an internal well or wells with light in the roof over, i.e., the ground floor carried up through the 1st floor or through all the other floors?*

Answer.—The complete building has to be roofed at the level of the ceiling of the top-most floor, at which point it will have glazed lights. The 1st, 2nd and 3rd floors will, therefore, be arranged as galleries, light passing from the glazed lantern at the top of the building through each floor to the ground floor which covers the site.

Question 4.—*"Shop windows to surround the site." Does this preclude solid piers, or must the upper part of the building "stand on glass?"* ... ...

Answer.—Piers may be introduced on the external elevation of the ground floor, but must be strictly limited in area, and must take serious account of the demand of the trader for extensive glass area.

Question 5.—*"The building is to be of fireproof construction throughout." Does this mean that merely the materials should be fire-resisting, and/or that the building should be planned so as to localise outbreaks of fire? The latter would be impossible in the event of the galleries running the full height.*

Answer.—It may be assumed that the local authority will accept fire risk of the building without party walls, and that the term "Fire-proof construction throughout" refers to the materials.

R.I.B.A. Maintenance Scholarship in Architecture

The Board of Architectural Education of The Royal Institute of British Architects, in conjunction with the Artists' General Benevolent Institution, offer for award in September, 1927, a Maintenance Scholarship of a maximum value of £100, tenable from October 1, 1927.

The Scholarship will be tenable in the first instance for one year and will be renewable for two further periods of one year each. It is intended to enable the orphan of an architect or artist, or son or daughter of an architect or artist, who has not the necessary means, to attend an approved course at one of the Schools of Architecture recognised for exemption from the R.I.B.A. Examinations. Students who are already taking such a course would not be eligible to apply for the Scholarship.

The value of the Scholarship, up to the limit of £100, will depend upon the financial circumstances of the parents or guardians of the candidate. The parents or guardians will be required to furnish particulars, on the proper form, of their financial position.

Full particulars of the Scholarship, including the method of application and selection of the candidate, may be obtained from the Secretary to the Board of Architectural Education, R.I.B.A., 9 Conduit Street, W.1, before August 20, 1927.

R.I.B.A. Intermediate Examination

The Council have decided that a candidate relegated in one of the optional historical subjects in the R.I.B.A. Intermediate Examination shall be permitted to offer a different optional historical subject, if he so desires, upon his subsequent examination.

University Intelligence

The following awards have been made in the Bartlett School of Architecture at University College:—

Bartlett Entrance Exhibitions: M. J. H. Goodchild (Tollington School, Muswell Hill), and C. P. Saurin (St. Ignatius' College, Tottenham), *equal;* F. E. Kerswill (Whitgift School, Croydon) (conditional on passing matriculation examination in Latin in January, 1928). Donaldson Silver Medal: A. C. Light. Prize for design in ferro-concrete: H. Kendall and B. W. Johns. Ronald Jones prizes: Mediæval architecture, H. F. Hoar; Renaissance architecture: J. K. M. Sanderson. Herbert Batsford prize: D. A. Stewart. Certificates in architecture: H. G. Coulter, L. E. King, W. F. B. Lovett, Phyllis E. Mitchell, D. E. Nightingale, V. M. Patker, C. W. J. Smeed, E. E. Somake, P. Soskin, and Patricia B. Webster. Sub-department of town planning certificates: A. W. H. Brown, D. H. Buckley, L. P. Ellicott, and R. G. Grice.

The Association of Architects, Surveyors and Technical Assistants, in conjunction with Messrs. Ewart & Sons, Ltd., is able to offer seven free places in the party travelling to the Loire and Chartres. These will be allotted as the result of a competition for the best essays, entitled "The Historic, Æsthetic and Economic use of Copper as a Roofing Material." The competition will be open to all members of the architectural and surveying professions, and to all members of the technical staff of the building industry.

Personal Notes

Birkenhead Corporation Road and Improvement Committee recommend the appointment of Mr. Robert W. Johnson, of Birkenhead, as borough engineer and surveyor, at the scale salary of £900 per annum, rising by annual increments of £50 to £1,150 per annum.

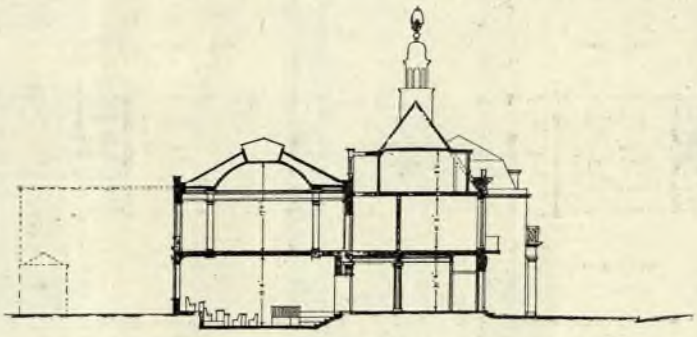
The Royal Society of British Sculptors have awarded their medal this year to Mr. Gilbert Ledward for his work on the Guards Memorial facing the Horse Guards Parade, London.

Four Trustees of the Tate Gallery, London—Sir Aston Webb, R.A., Sir D. Y. Cameron, R.A., Mr. Charles Sims, R.A., and Mr. Muirhead Bone—are due to retire this year. It is not known whether these gentlemen desire re-election, but hopes have been expressed that the progressive policy of the present board will be maintained.

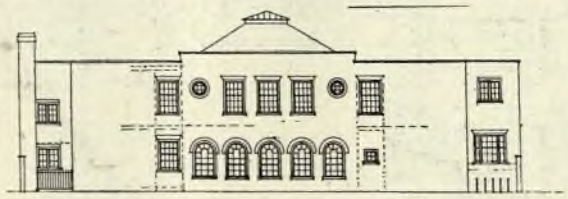
The Wigtownshire E.C. have appointed Mr. R. Logan, architect, Stranraer, as full-time Master of Works, at a salary of £400 per annum, with £120 for travelling expenses.

Mr. John Watt, of Perth, has been appointed architectural assistant on the staff of the West Riding Education Committee.

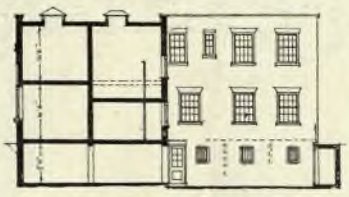
ELEVATION TO HIGH STREET



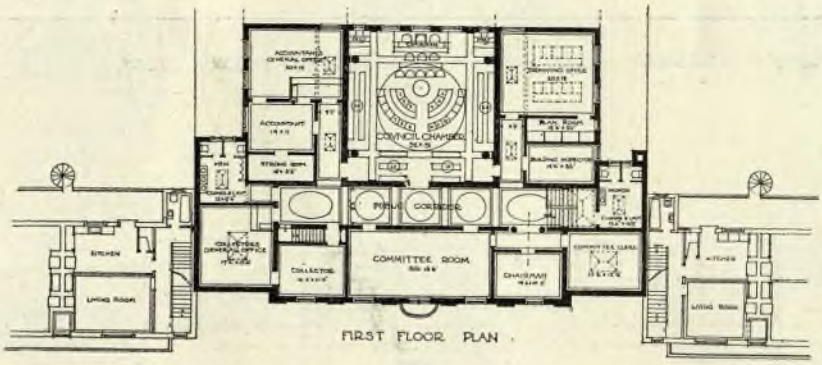
SECTION ON CENTRE LINE

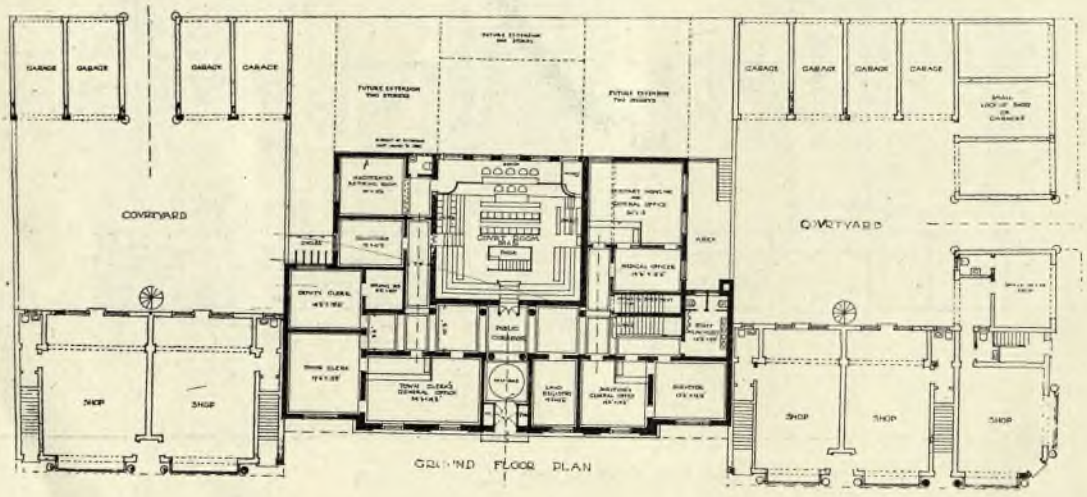


ELEVATION TO BEDFORD ST WEST

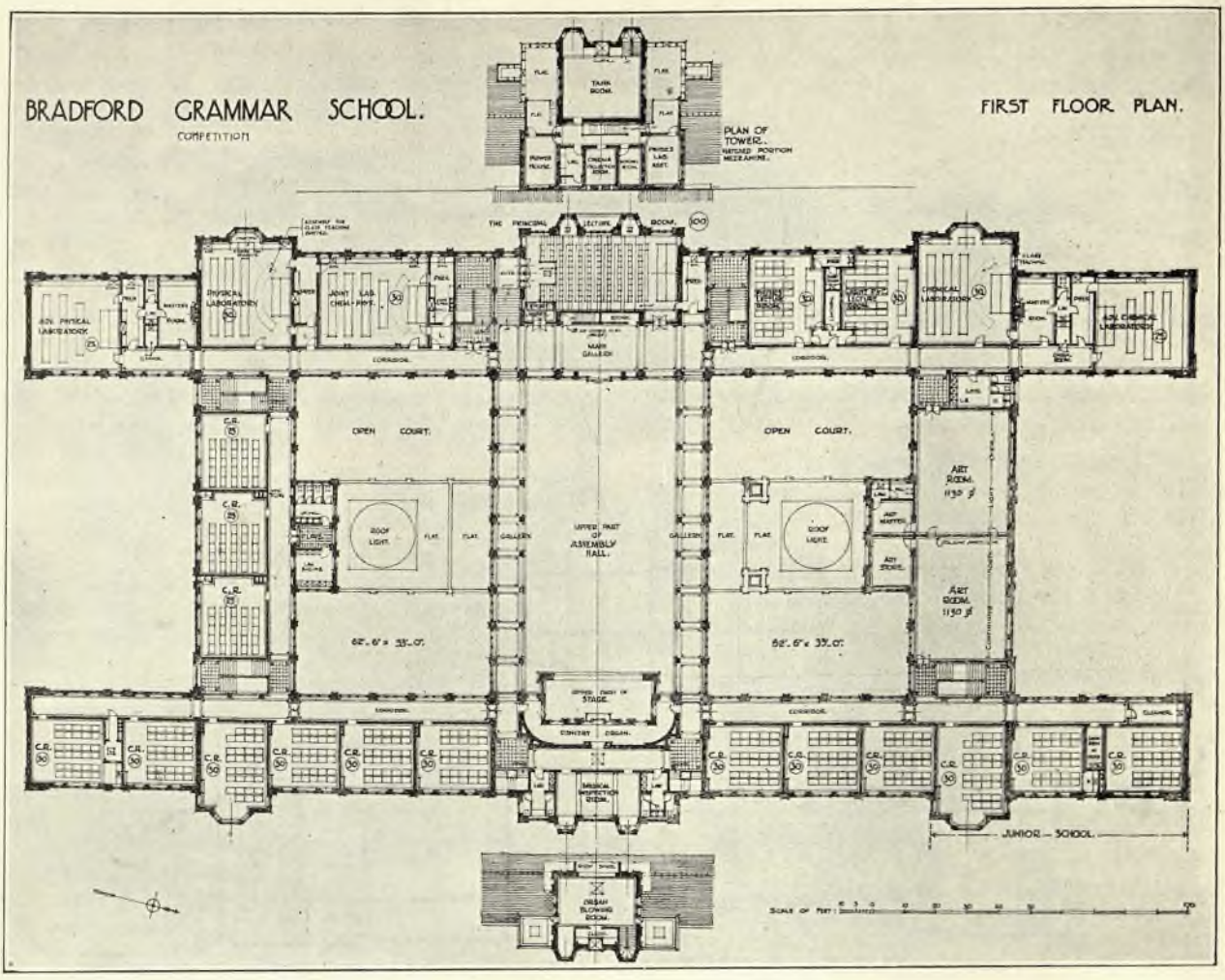


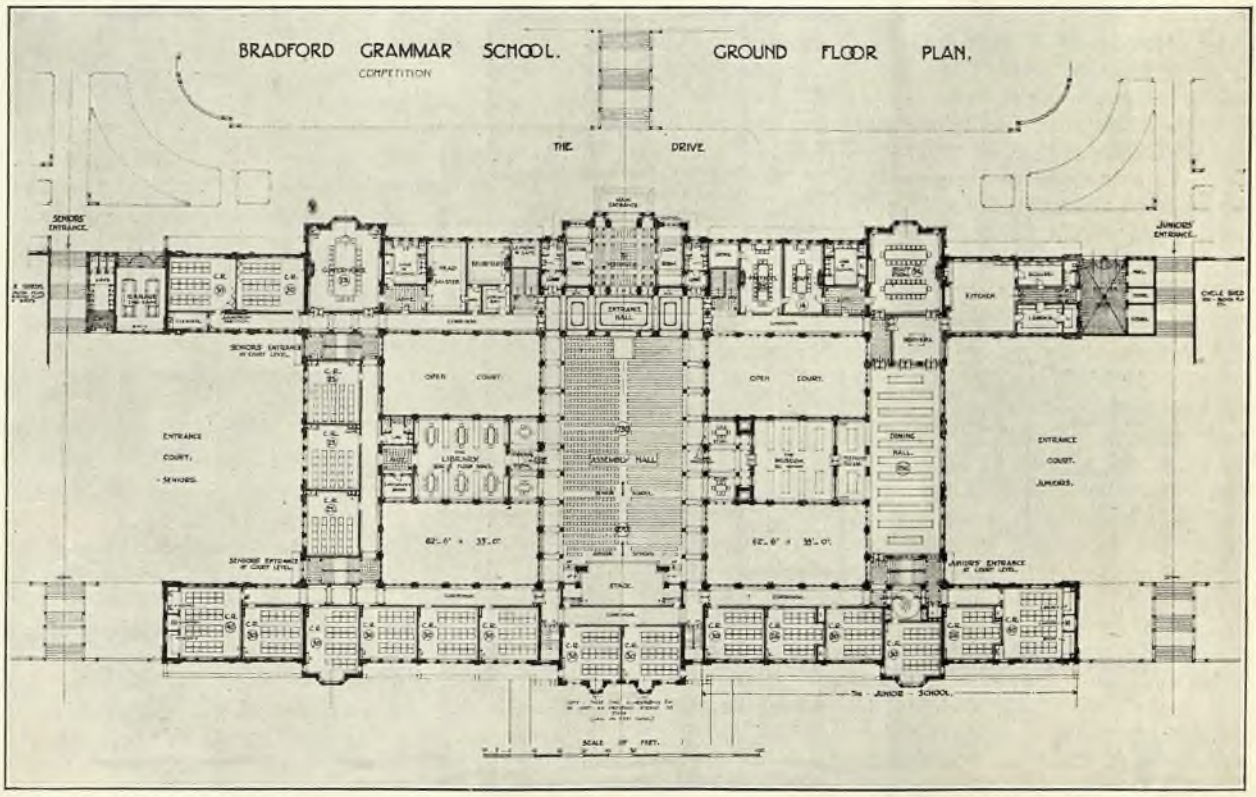
SECTION THRO' AREA AND SIDE ELEVATION





BOGNOR COUNCIL OFFICES COMPETITION. THIRD PREMIATED DESIGN.
MESSRS. ADSHEAD & RAMSEY, FF.R.I.B.A., Architects.

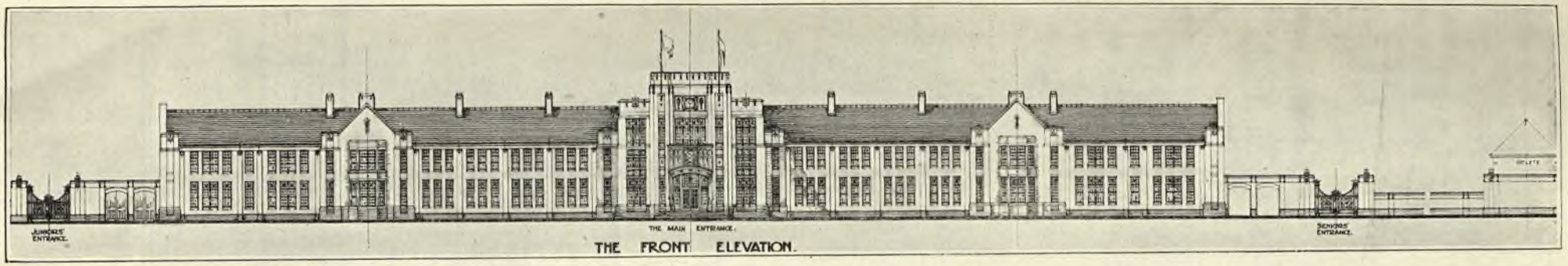




GROUND AND FIRST FLOOR PLANS.

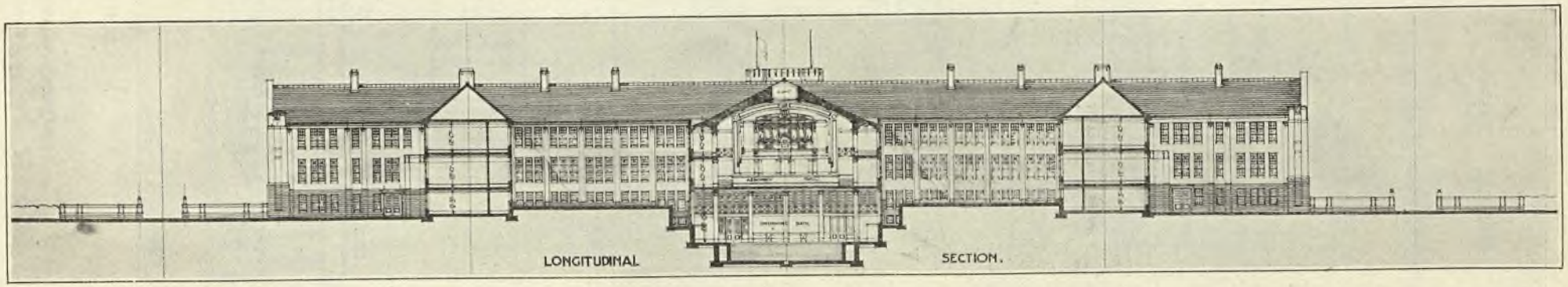
BRADFORD GRAMMAR SCHOOL COMPETITION. FIRST PREMIATED DESIGN.

MESSRS. PETCH & FERMAUD, L. & F.R.I.B.A., Architects.



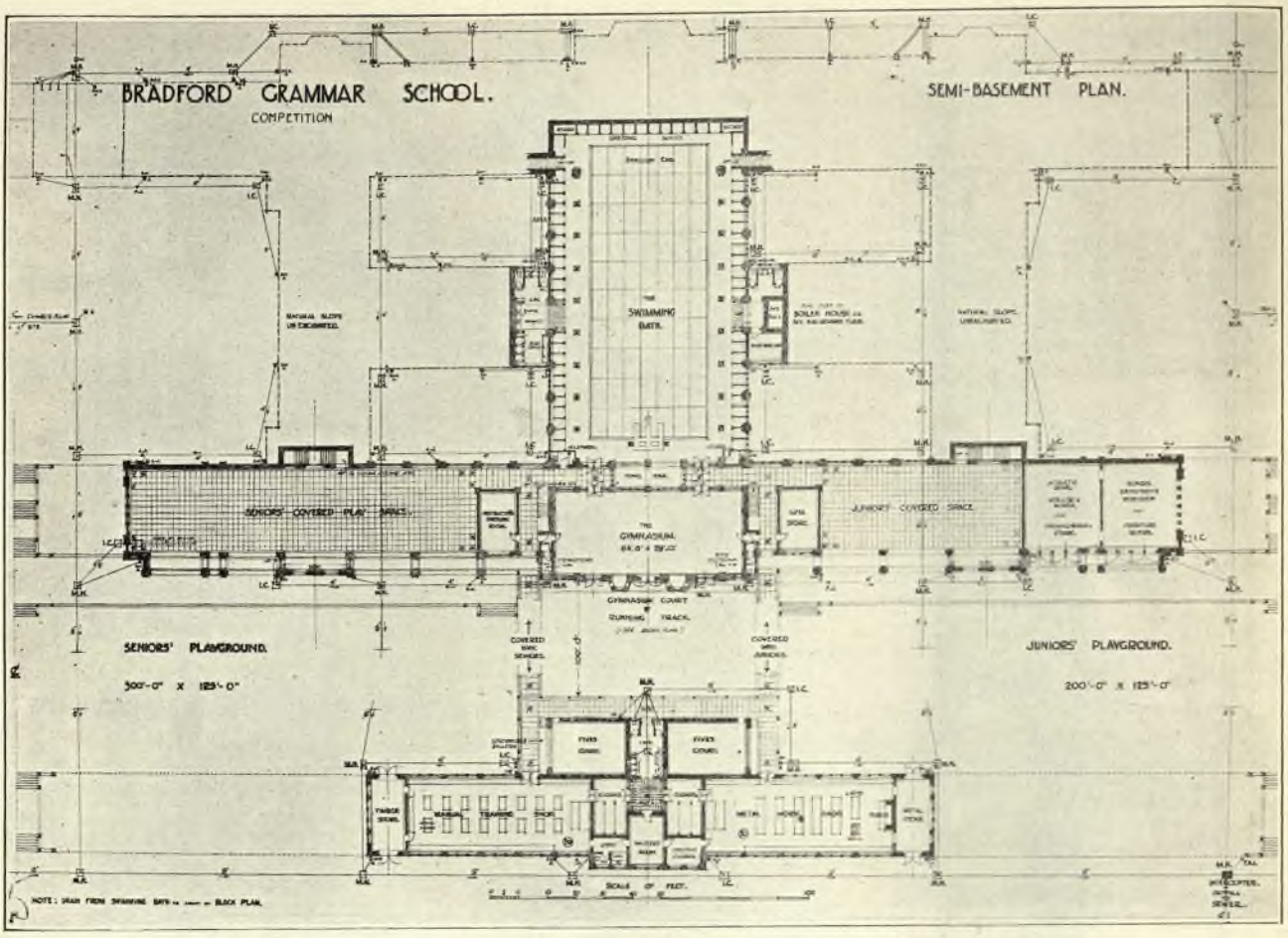
THE FRONT ELEVATION.

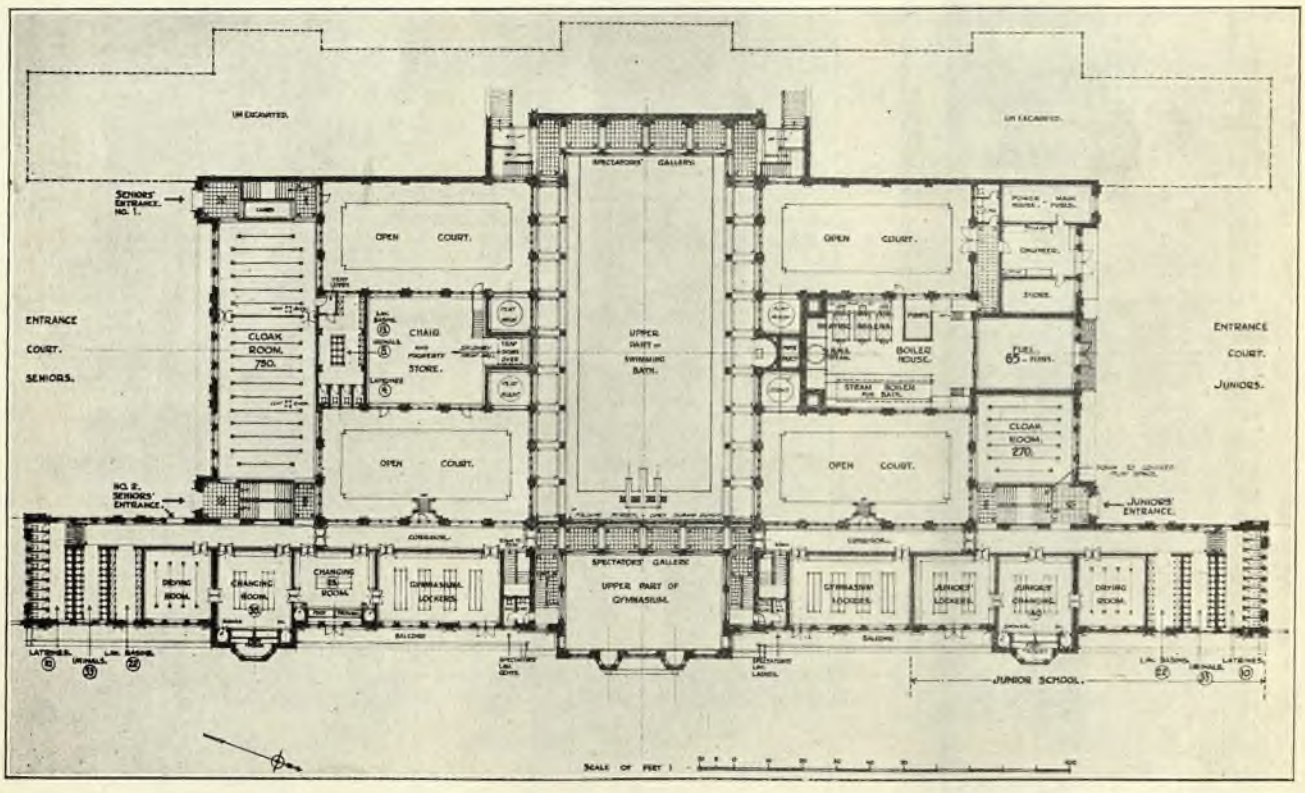
NORTH-EAST ELEVATION.



LONGITUDINAL SECTION.

BRADFORD GRAMMAR SCHOOL COMPETITION. FIRST PREMIATED DESIGN.
MESSRS. PETCH & FERMAUD, L. & F.R.I.B.A., Architects.

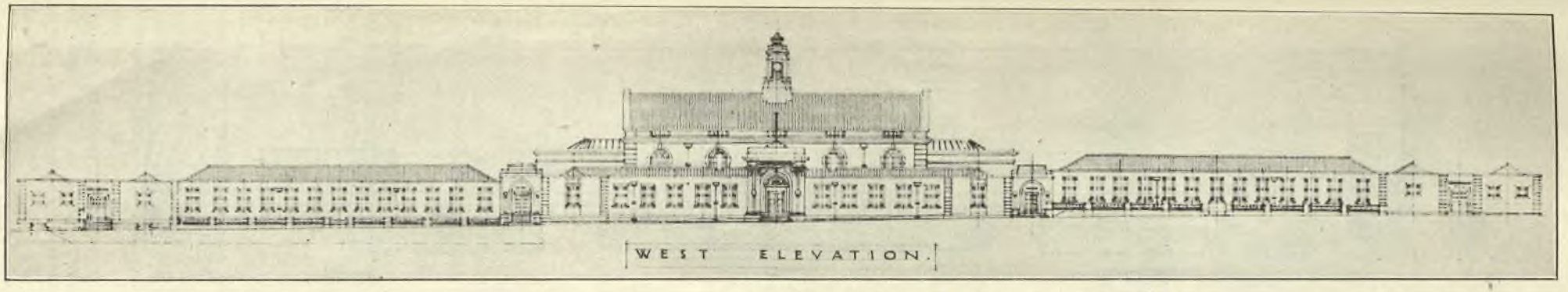


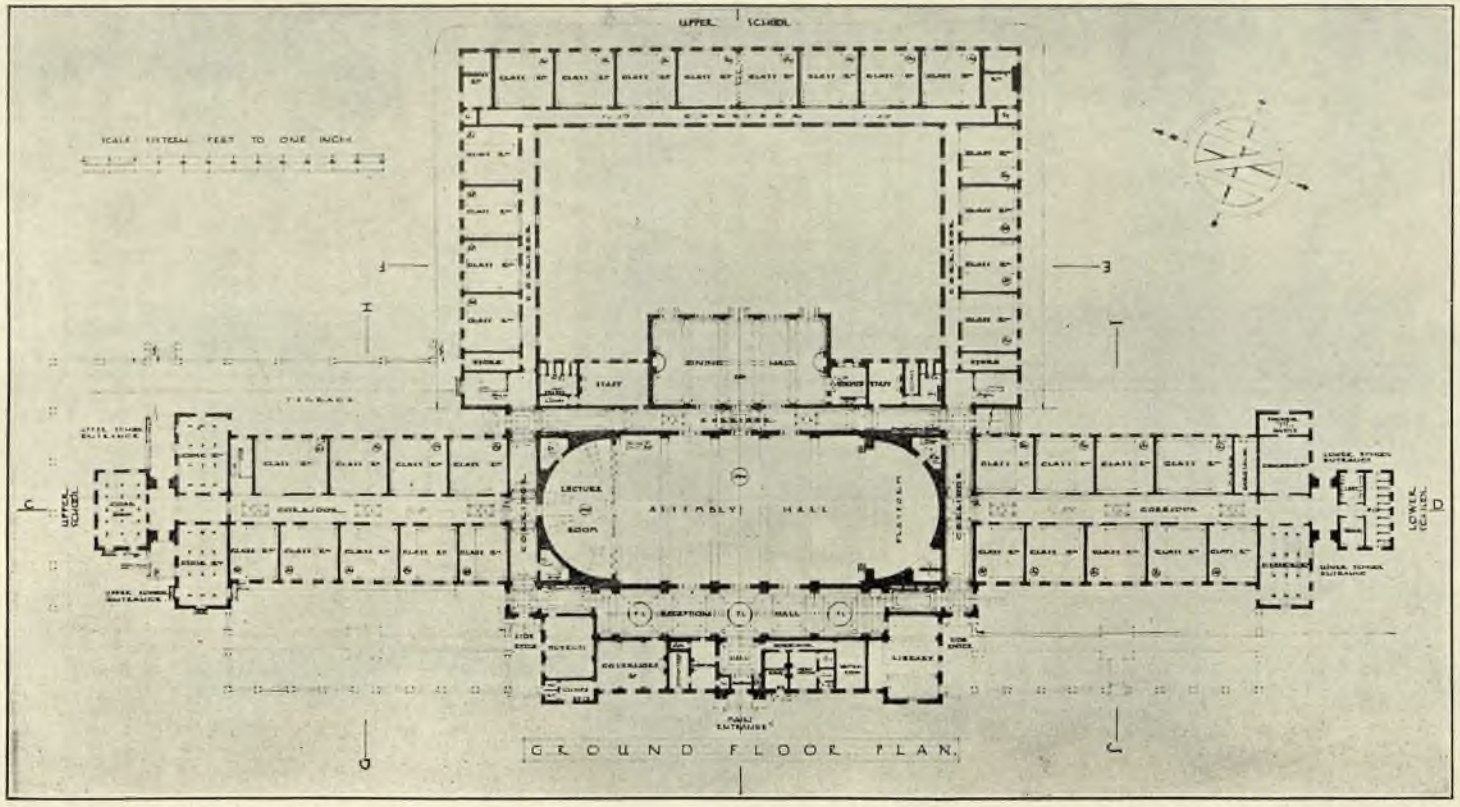


SEMI-BASEMENT AND SUB-GROUND FLOOR PLANS.

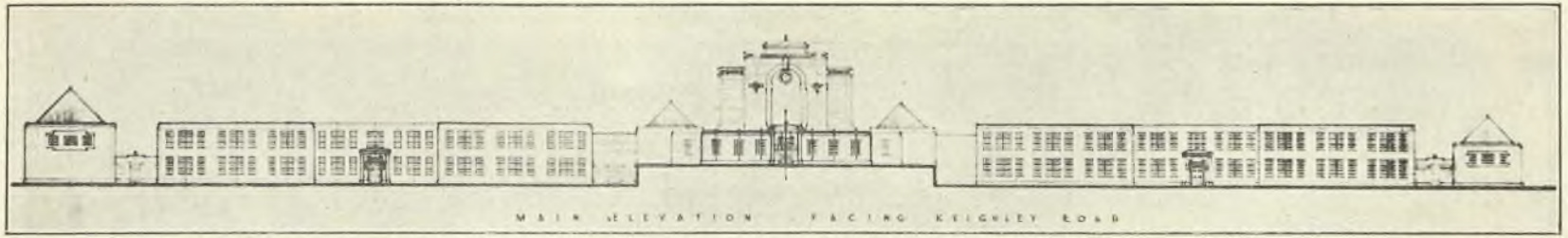
BRADFORD GRAMMAR SCHOOL COMPETITION. FIRST PREMIATED DESIGN.

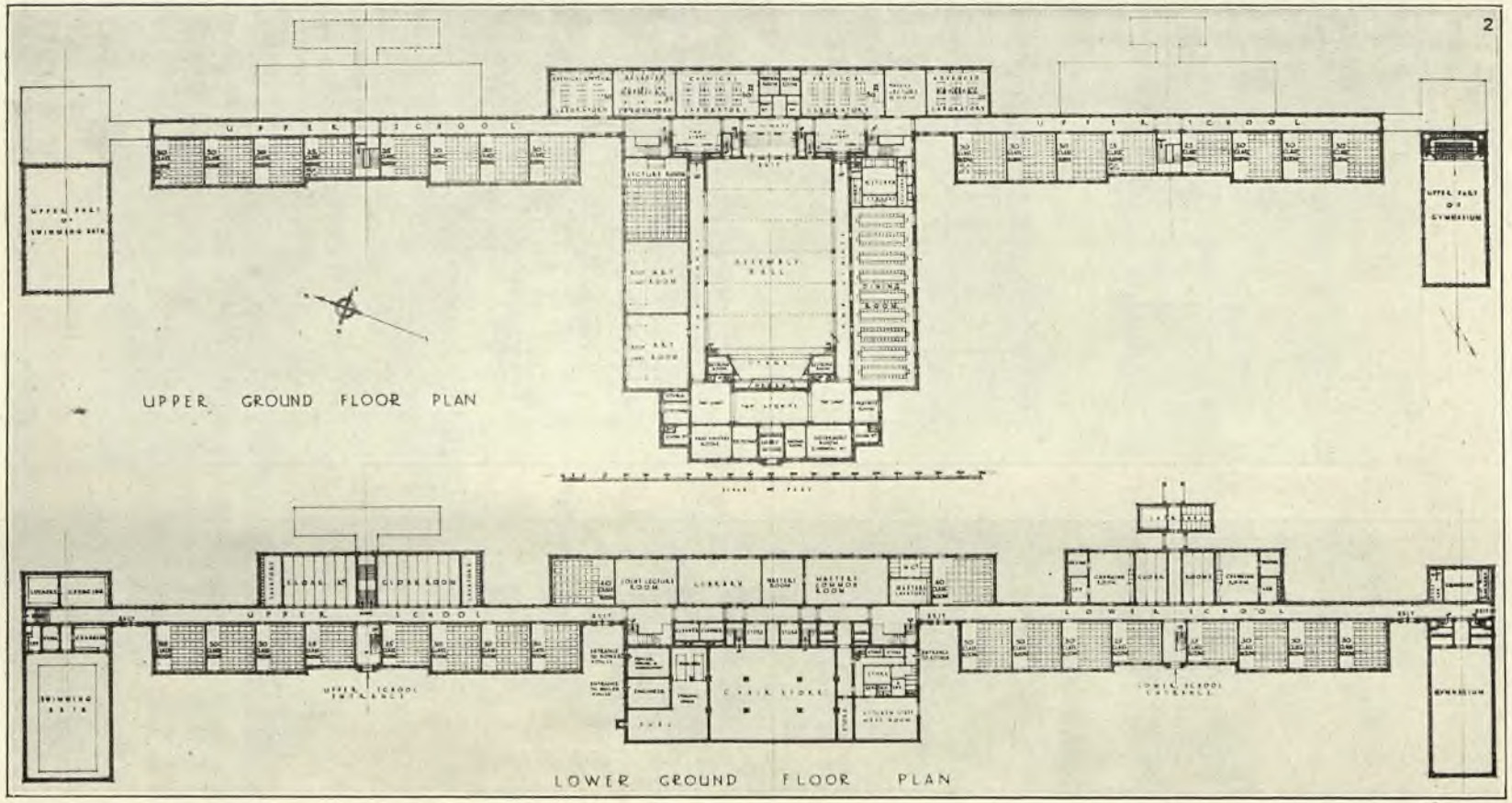
MESSRS. PETCH & FERMAUD, L. & F.R.I.B.A., Architects.



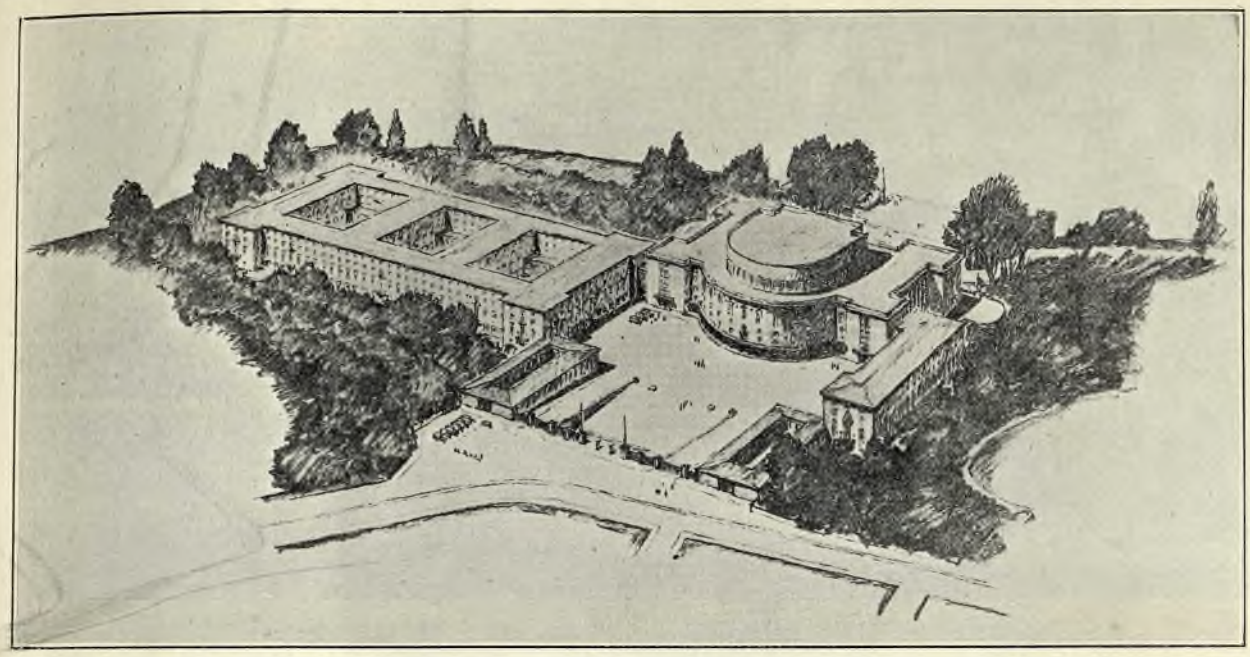


BRADFORD GRAMMAR SCHOOL COMPETITION. SECOND PREMIATED DESIGN.
MESSRS. STRATTON DAVIS, YATES, DOLMAN AND ROWLAND V. TAYLOR, Architects.





BRADFORD GRAMMAR SCHOOL COMPETITION. THIRD PREMIATED DESIGN.
MESSRS. CECIL A. L. SUTTON & GEORGE A. BRYAN, Architects.



LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 241.—Prof. Paul Bonatz and Mr. F. E. Scholer, Architects, Stuttgart.

THE GENEVA COMPETITION—II

In the last issue of this journal we published illustrations of the nine schemes whose authors were awarded prizes of 12,000 Swiss francs in the competition instituted by the League of Nations for designs of the Assembly Hall and Secretariat. Eighteen other competitors were singled out for commendation by the jury, and these were divided into two groups, each of nine; members of the first being awarded prizes of 3,800 francs, while those of the second received 2,500 francs apiece. The members of each group are placed in alphabetical sequence, so we have no indication of any order of merit except that the premiated designs are placed in three main groups. The report did not specify any reasons for relegating any particular design to one rather than another, so it remains for a critic to make an independent assessment of the artistic value which characterises the various schemes.

A "Super-National" Style.

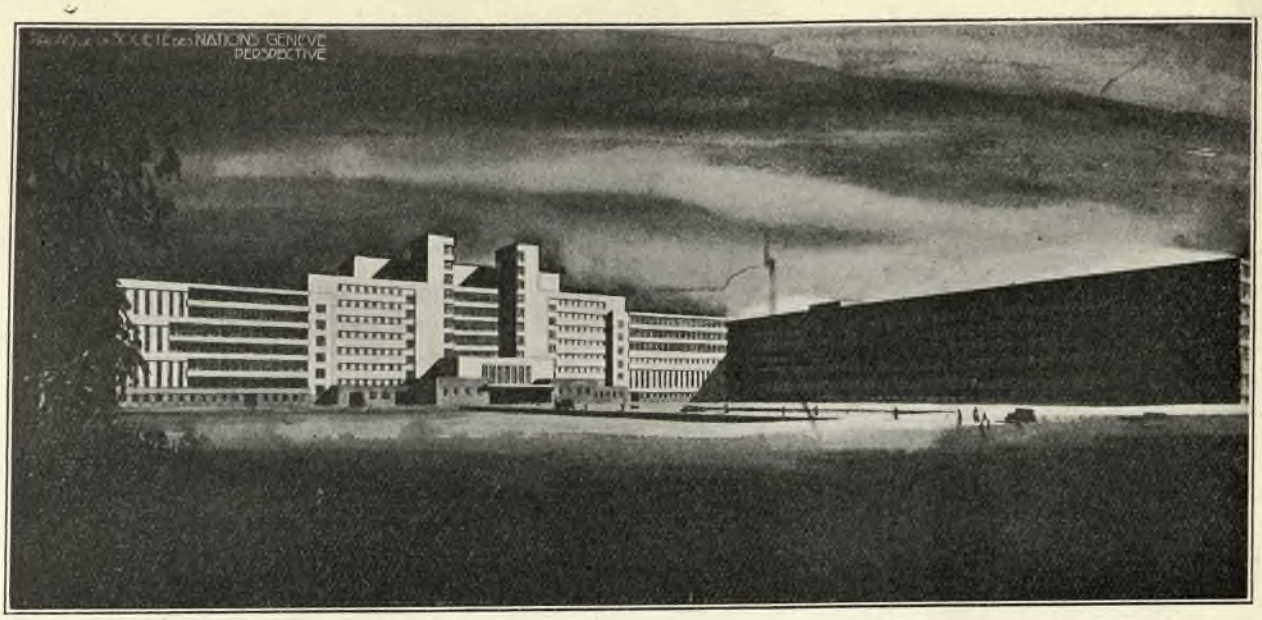
In a competition of this nature there are certain "spiritual" factors to be taken into account which do not present themselves for consideration when a building is designed for some ordinary civic purpose. In the first place, it must be noted that the League of Nations is a super-national affair, so it behoves the architect responsible for the design of the Assembly Hall and Secretariat of that body to contrive to give his building a "super-national" air. This requires a very great intellectual effort, and one cannot survey the twenty-seven schemes here premiated without experiencing a sense of disappointment that in no single instance has this particular intellectual effort been made. The "modernists" seem to have been no more successful than the traditionalists in suggesting a style such as would have a certain cosmopolitan quality, for a style of building cannot claim to be super-national or cosmopolitan if it is not a style at all. Whatever the desired quality may be, whether it be described as the lowest common multiple or the greatest common factor of the various historical styles of architecture, it certainly is not a negative, a mere symbol of revolt or mark of interrogation.

A Lingua Franca of Architecture.

What appears to be needed on this occasion is a Lingua Franca of Architecture, a style which will offer a suggestion of some of the historical belonging to both the West and the East. It might possibly be argued that the easiest way to achieve this is by starting with a clean slate by eliminating all the traditional features first, and then by degrees creating a synthesis of architectural features such as have not yet been assembled in the same building. It is true, of course, that the Classic style in some form or another claims allegiance from more than half the inhabitants of the earth, but this fact does not make it acceptable in the League of Nations building. Just as in the League of Nations Council the decisions must be unanimous, so also in this matter of style a bare majority vote must not be allowed to prevail. Is it not possible to imagine a building so constituted that not only Latins and Fentons, but even the inhabitants of China and Japan might feel that it expressed a respect for their historical traditions? Considering it is between East and West that future conflicts are most likely to arise, a special effort should have been made to effect a reconciliation here and to produce a building which would give corporeal expression to the ideal of harmony between East and West. It is quite certain that designs No. 128, 142, 181, 251 and 372 represent the bulk of the French and Italian contribution and are intensely and purely European. Whatever may be the virtues of the Beaux Arts School, it cannot be said that it fosters the creation of a style international in character. The League of Nations, however, is not a French institution nor yet an Italian institution. How could an Oriental have confidence in a League of Nations housed in a building obviously the exclusive product of the Beaux Arts system of teaching?

The Dutch author of design No. 102 has not only dispensed with columns, but he has done his best to obliterate the windows also, with the result that the façades of the building are entirely lacking in expression. A factory or gas works seems here to be indicated rather than an important public building. In design No. 411 the divisions between the storeys are obliterated. In the elevation towards the lake we see three rectangular shapes very loosely joined together. These also are *discrete*—that is to say, if we take one part away the remainder does not seem to suffer a deprivation.

The modern German design No. 338 has an inter-



LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 423.—Mr. E. van Linge, Architect, Gröningen.

esting plan, but no advantage has been taken of the existence of the Assembly Hall to give the structure an imposing scale, and the total effect is one of dullness, as if the building were a barracks, a reformatory or at best the home of thousands of petty officials. Yet although the Secretariat must necessarily contain numerous small apartments, it has a directing intelligence in the form of a Council and Assembly, the home of whose deliberations might suitably have found architectural expression.

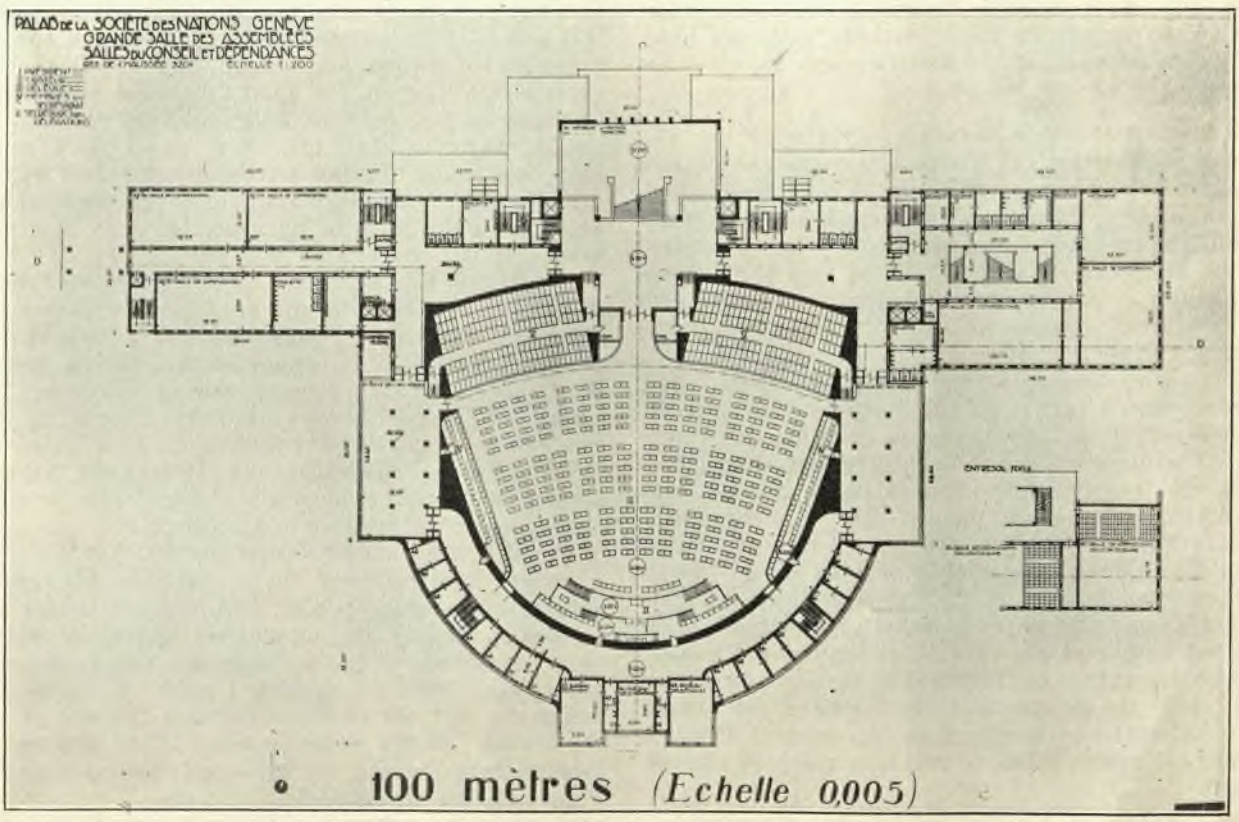
East and West.

Designs No. 241, 251, 308, 327, 380 and 423 all have elements of novelty which lift them up above the rank of merely "traditional" architecture, and yet even these are not cosmopolitan or "supernational." What kind of a design would be suitable for the occasion? Would it not be a row of columns, newly composed, symbolising the West, and a curved and tilted roof symbolising the East? Could these two features ever be combined into an harmonious whole? There is no space to attempt an answer to that question here. It would, however, have lent additional interest to this competition if but one of the candidates had addressed himself to this problem.

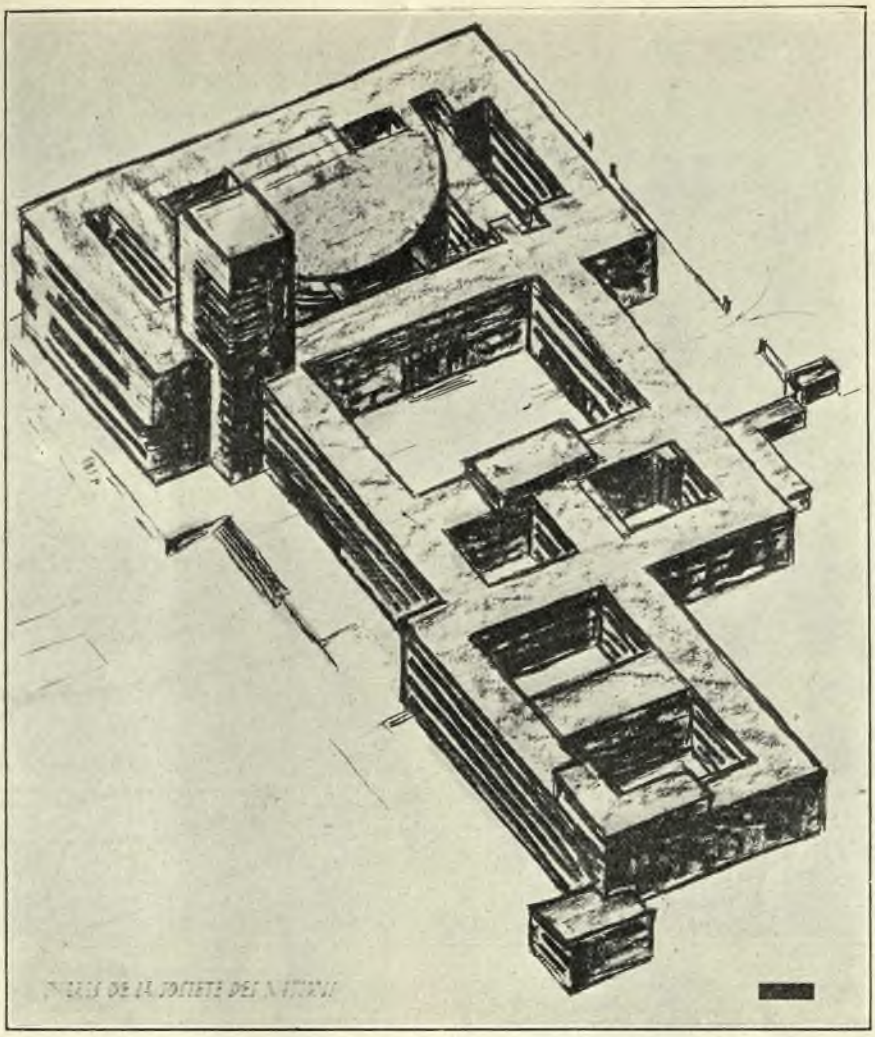
Points from the Designs.

A detailed examination, however, of the schemes in the second group revealed the fact that considerable accomplishment is displayed in dealing with established architectural *motifs*. For instance, design No. 128 is a well-composed building in the traditional grand manner. The architects have chosen to group the rooms of the Secretariat around the central portion, containing on its right the Assembly Hall. There

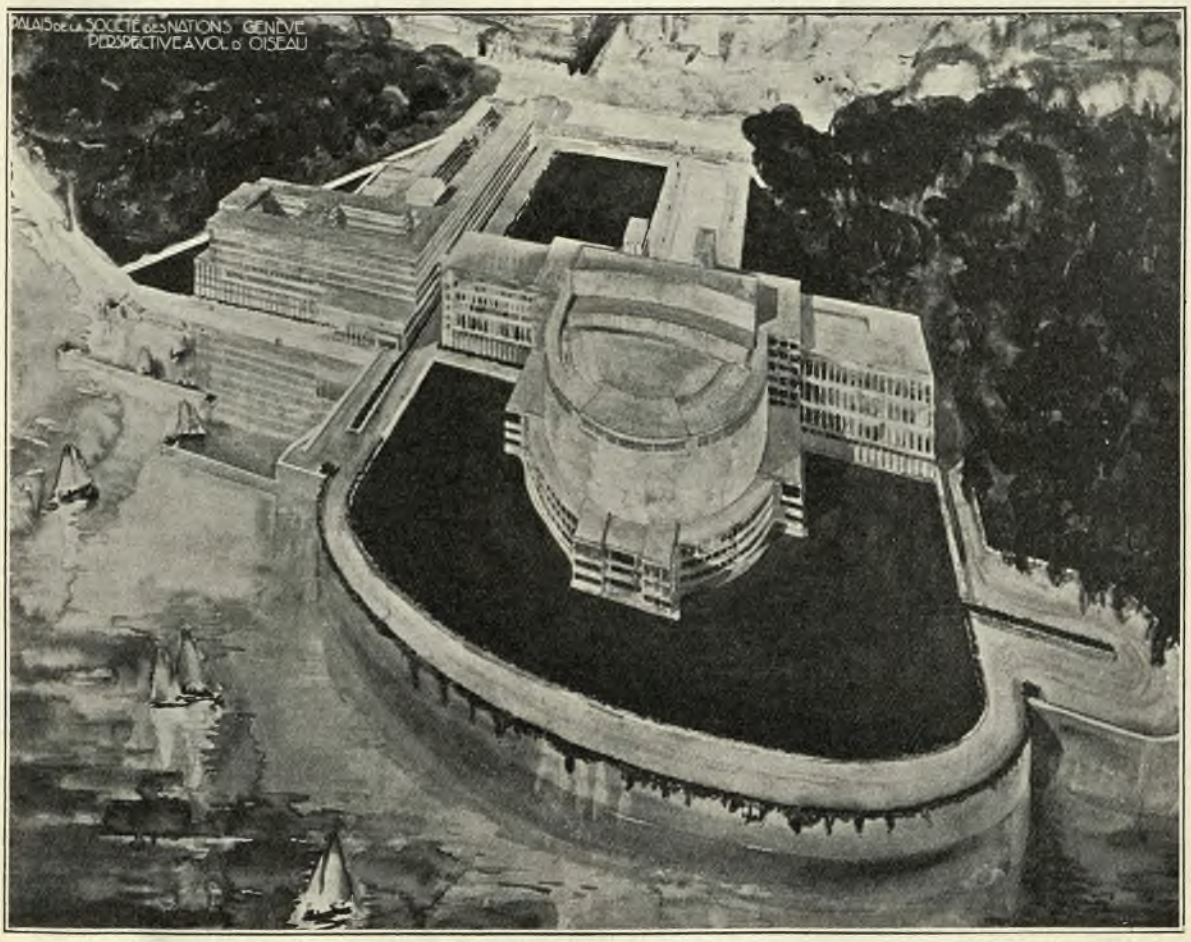
(*Continued on page* 200)



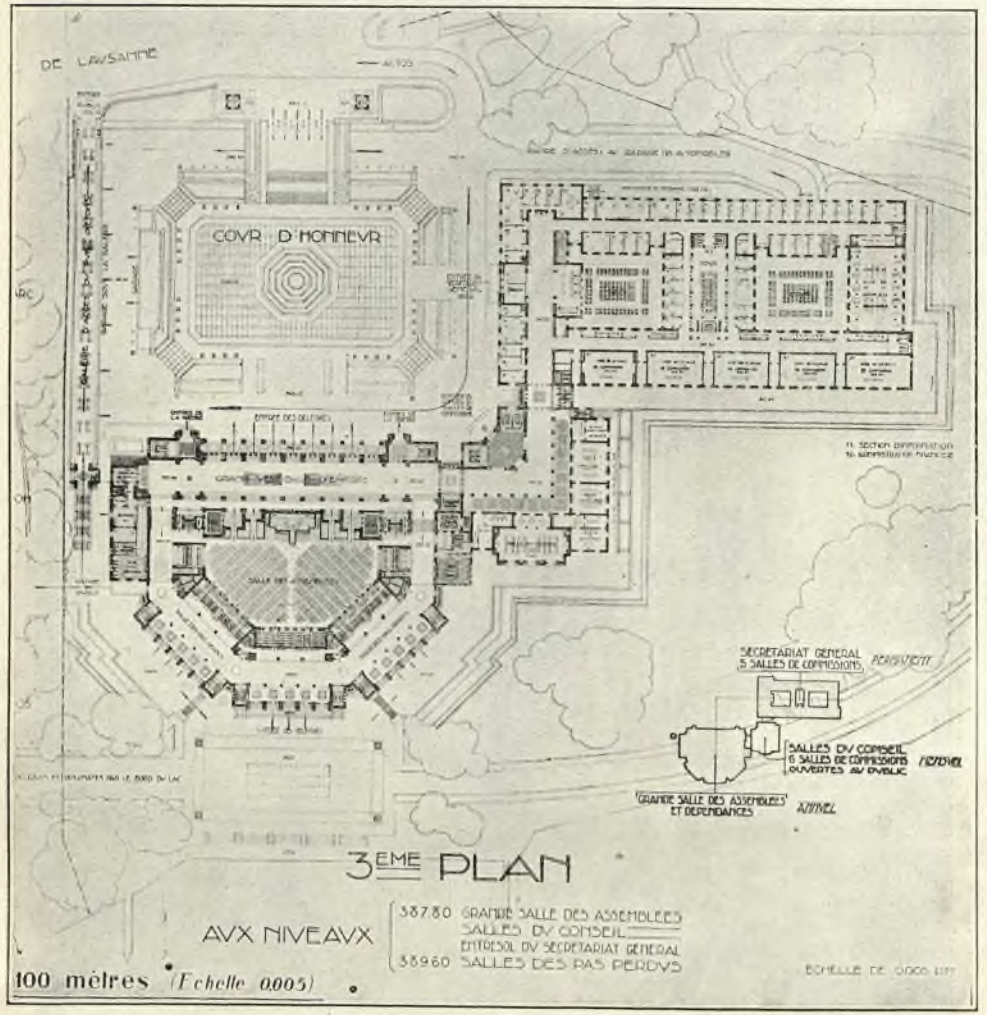
LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 423.—Mr. E. van Linge, Architect, Gröningen.



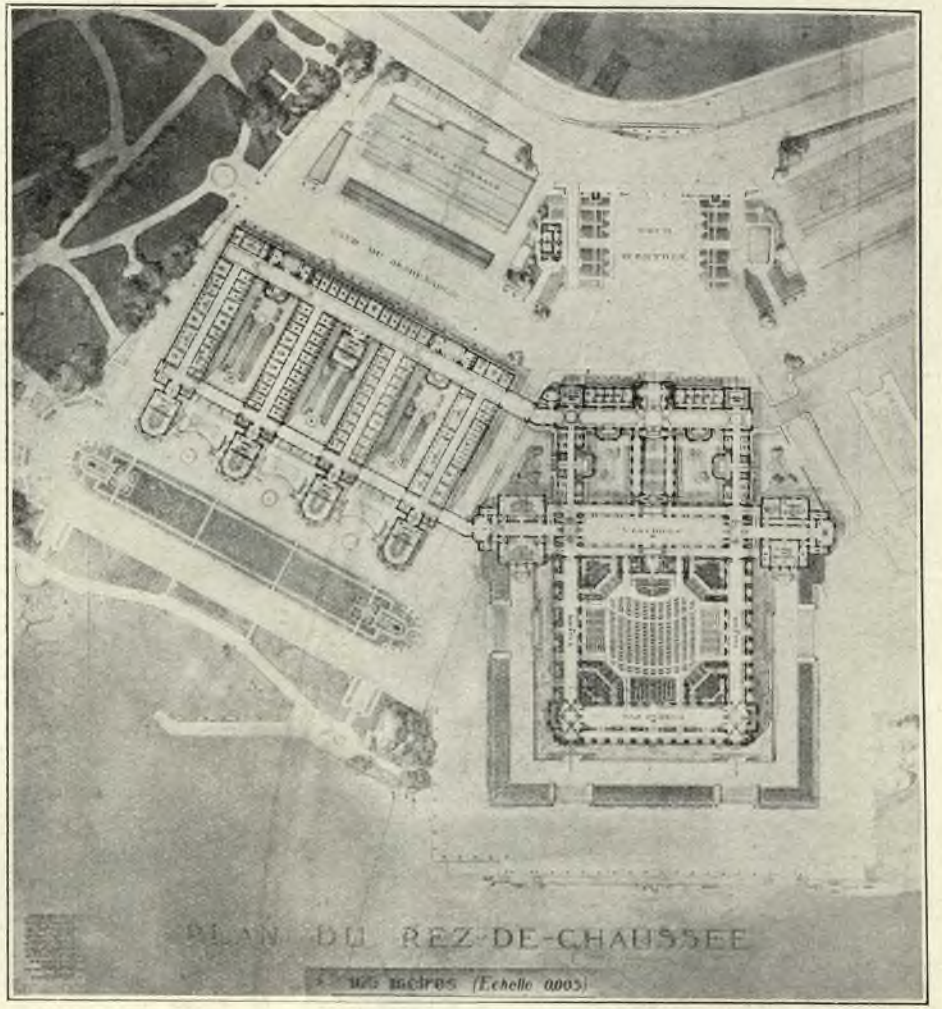
LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 338.—Prof. Alfred Fischer-Essen and Mr. Richard Speidel, Architects, Essen.



LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 423.—Mr. E. van Linge, Architect, Groningen.

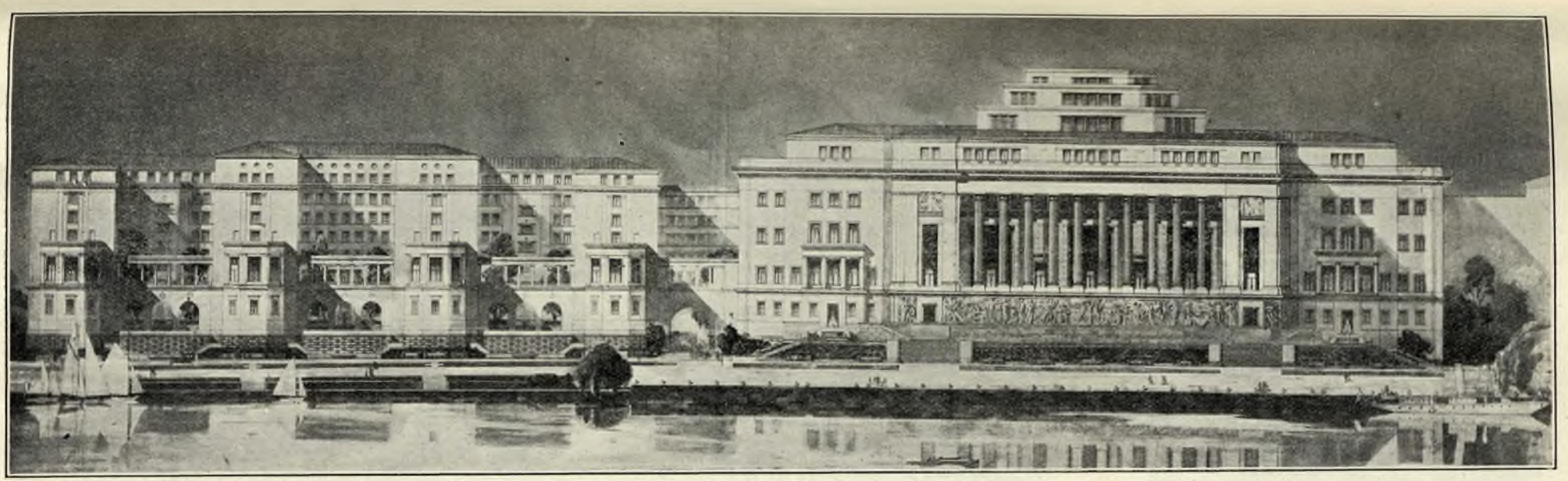


No. 327.—Messrs. Louis H. Boileau and P. Le Bourgeois, Architects, Paris.

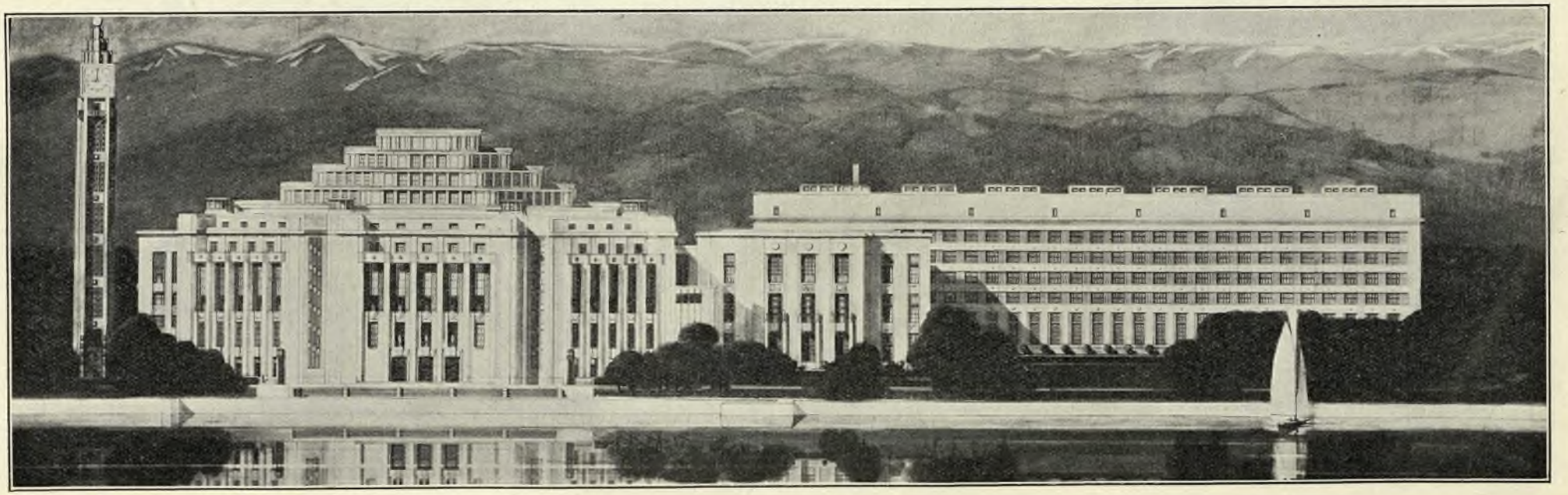


No. 251.—Messrs. Pierre & Louis Guidetti, Architects, Paris.

LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.

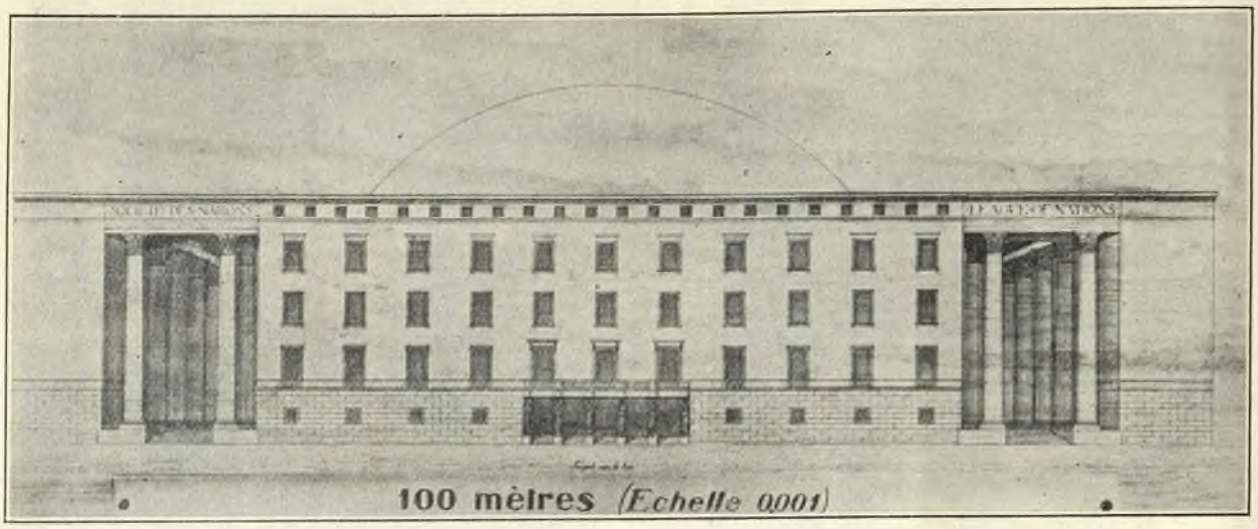


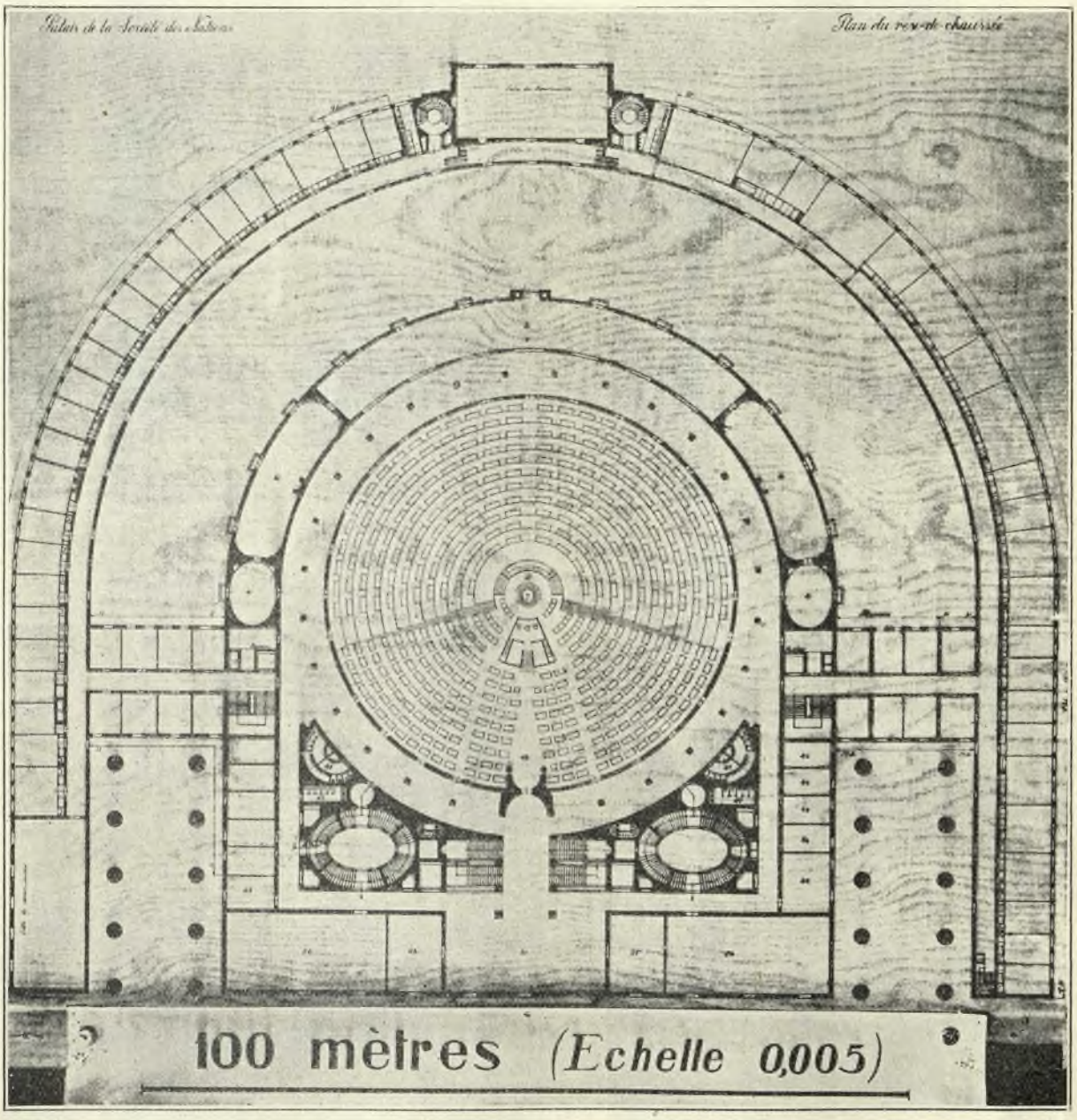
No. 251.—Messrs. Pierre & Louis Guidetti, Architects, Paris.



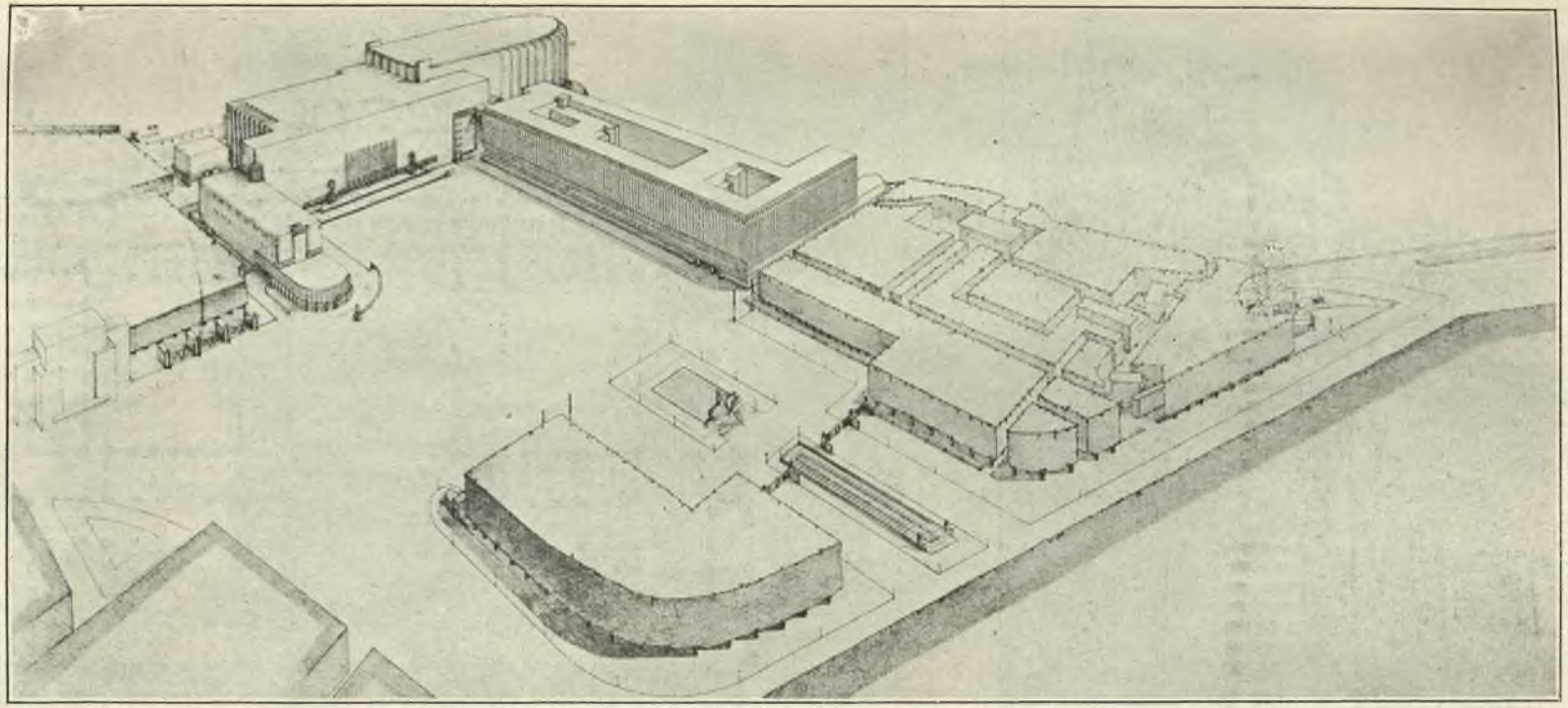
No. 327.—Messrs. Louis H. Boileau and P. Le Bourgeois, Architects, Paris.

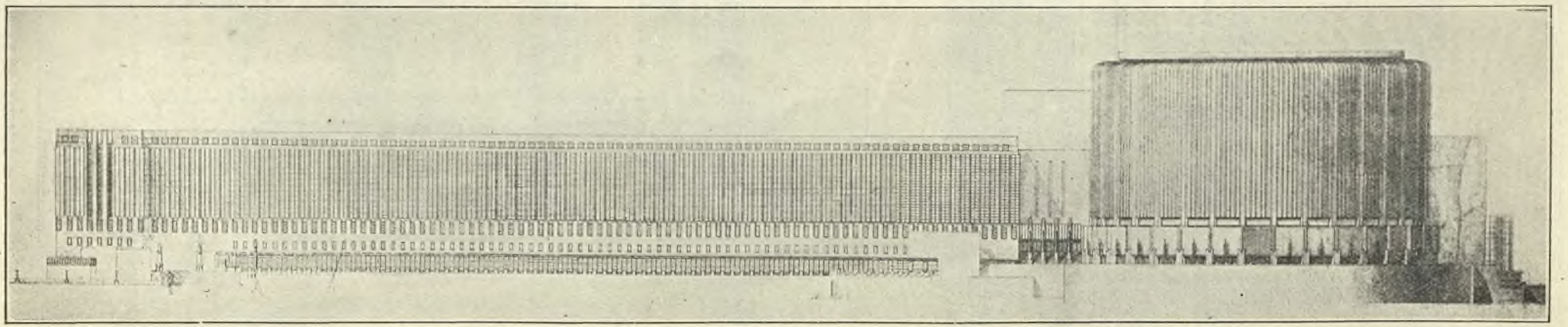
LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.



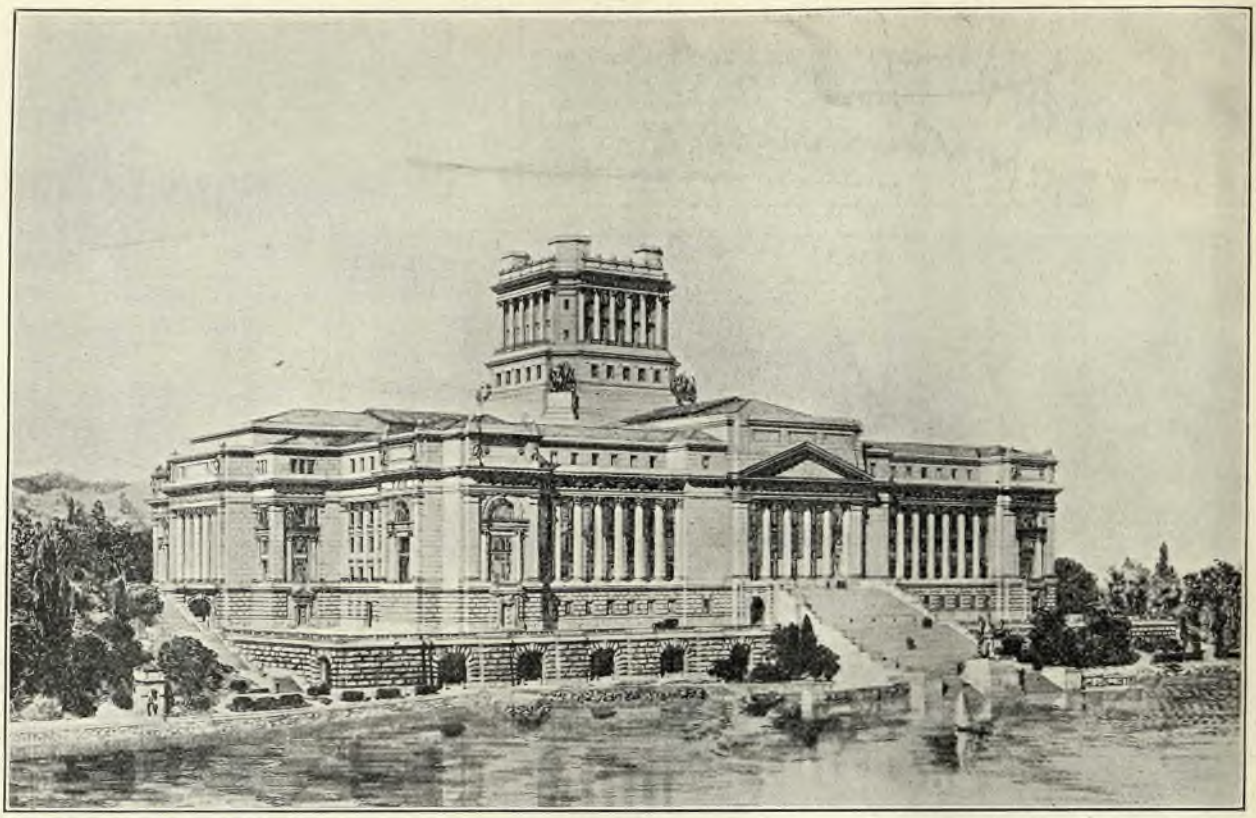


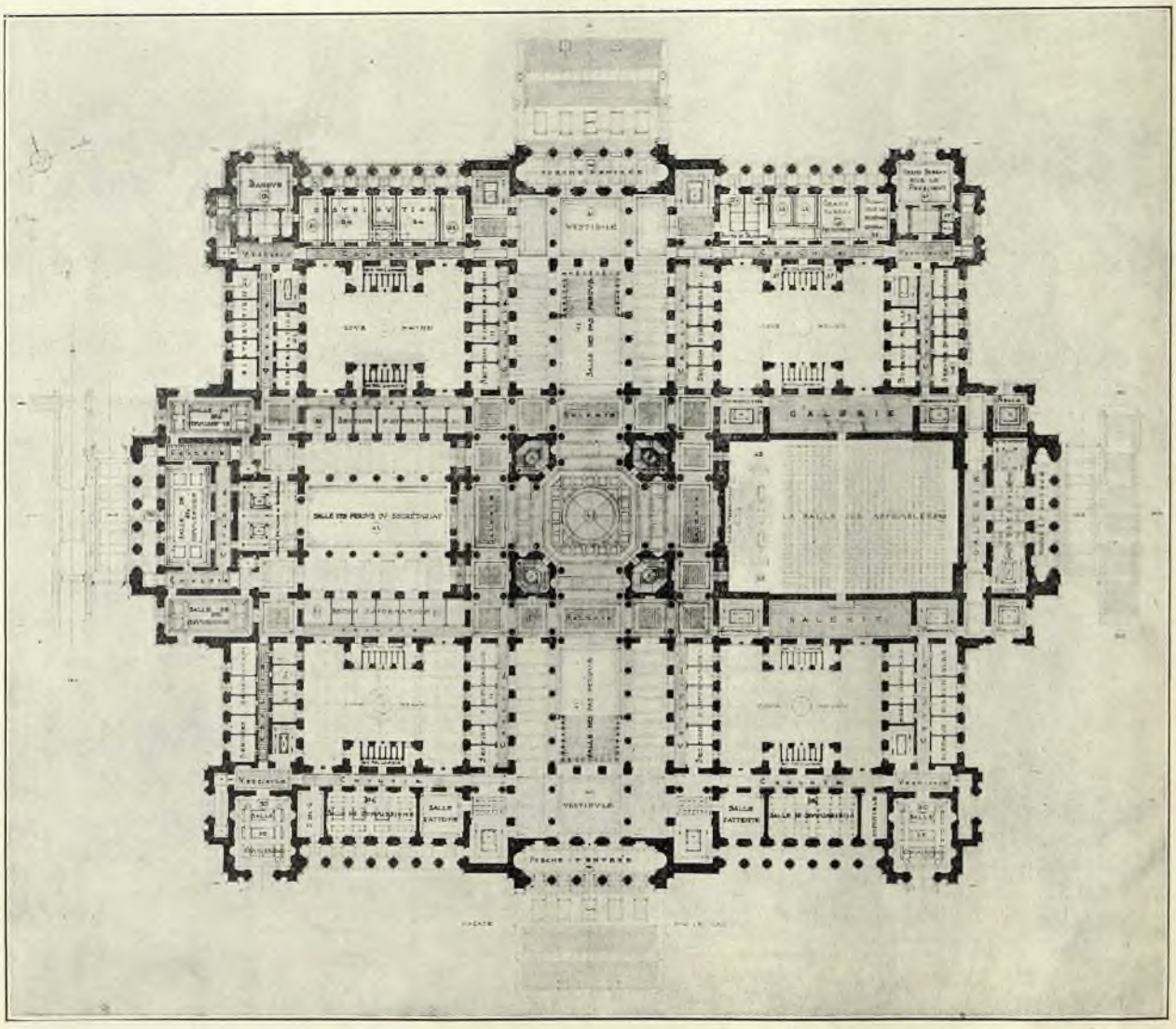
LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 372.—Mr. Carl Martin Tage William-Olsson, Architect, Stockholm.



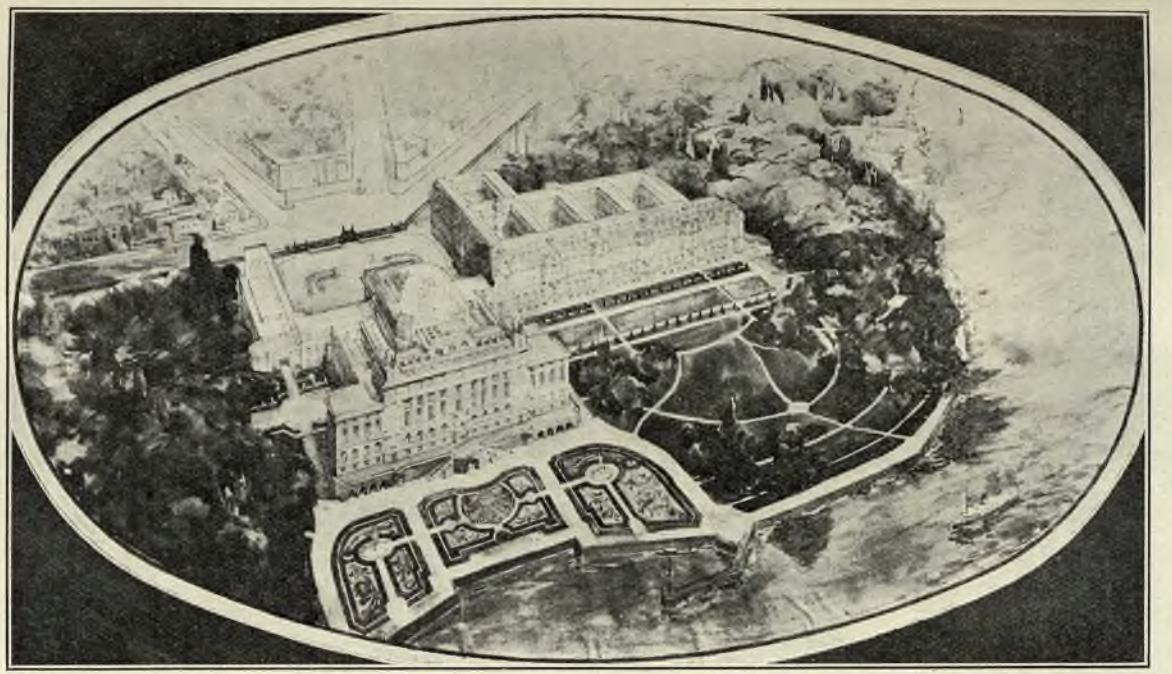


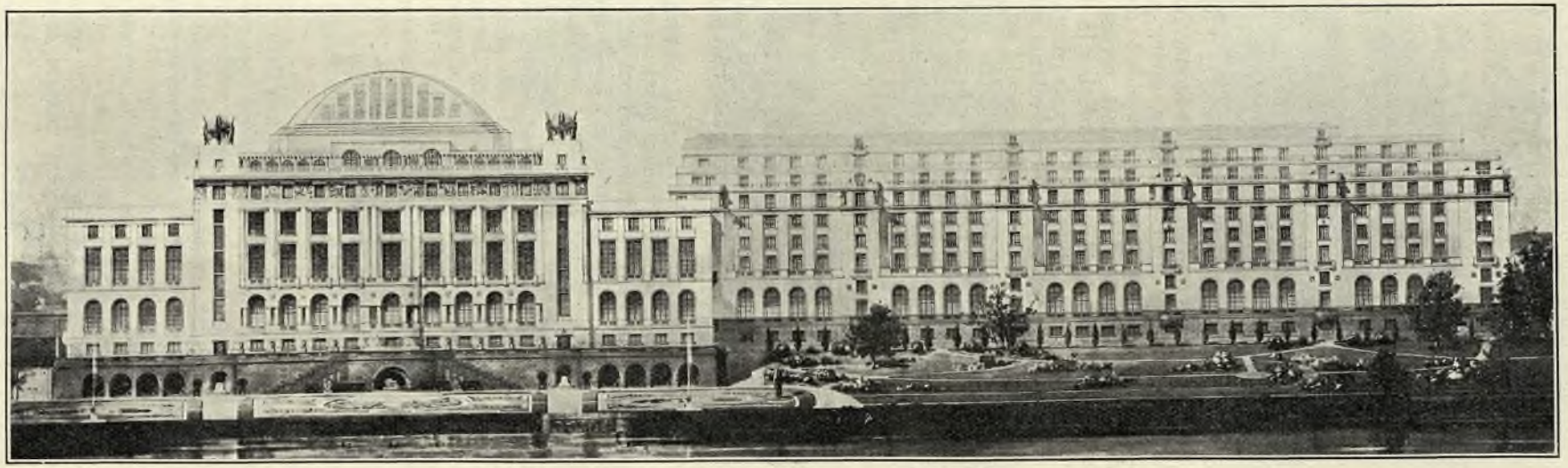
LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 102.—Mr. Hendrikus Theodorus Wijdeveld, Amsterdam.





LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 128.—PROFESSORS GIUSEPPE BONI & ADAMO BOARI, Architects, Rome.





LEAGUE OF NATIONS COMPETITION. HONOURABLE MENTION CLASS I.
No. 142.—Mr. Rene Patouillard Demoriane, Architect, Paris.

MEMORANDA

IV.—Aluminium Paint (*Continued*)

Although the efficiency of aluminium paint depends very largely upon the quality of the powder which is used, the selection of the vehicle is an also important matter. In this connexion it is advisable to ask the manufacturer of the aluminium powder what oil or varnish is recommended for use with the powder which is supplied, for a number of vehicles of the correct composition and consistency have been developed by paint and varnish manufacturers for use in making aluminium paint.

The Choice of Suitable Vehicle—Oil *v.* Varnish.

In general, varnish vehicles are preferable to oil vehicles. So far as these are concerned, the choice of a suitable vehicle lays between a " long oil " varnish and linseed oil which has been thickened or " bodied " to the consistency of a varnish. The former, however, dries more rapidly than the latter, giving a hard, durable film which is almost impermeable to moisture and which will stand up against severe atmospheric conditions. On account of this it is used for exterior work. Such a varnish should contain at least 50 per cent. of non-volatile oils and gums in the ratio of 3 to 1, and should set within 8 hours and dry to a tough, elastic film within 24 hours. The linseed oil, on the other hand, will show excellent durability under average atmospheric conditions, but since it is rather slow drying it cannot be used in places where the atmosphere is smoky or dusty, as the paint would be liable to accumulate a coat of dirt before drying. Where this type of vehicle is used, " kettle-bodied " linseed oil should be specified, for this oil has been bodied by heat alone and is far more durable than one which has been bodied by " blowing " with air. Raw linseed oil and boiled linseed oil, it may be added, are quite unsuitable for aluminium paint.

Aluminium paint should be mixed in the proportion of 2 to 2½ lb. of aluminium bronze powder per gallon of vehicle, the powder being weighed out into a suitable mixing container so that the measured volume of oil or varnish can be poured over it and thoroughly mixed by stirring with a paddle. Using these proportions, it will be found that the paint produced will have satisfactory spreading qualities and will neither run nor sag when applied to a vertical surface. Its covering power works out at 80-90 square yards of smooth surface per gallon when brushed, or about 110 square yards per gallon when sprayed. It is also interesting to note that this paint weighs about 9 lb. per gallon, and is therefore more easily handled than a material such as red-lead paint, which normally weighs 27 lb. per gallon.

The Need for Freshly Mixed Paint.

At this point it must be emphasised once more that only sufficient paint for one day's work should be mixed at one time, on account of the liability of the aluminium bronze powder to lose its leafing properties when it remains in contact with the vehicle. The tendency for the particles to rise to the surface should also be kept in mind when transferring the paint from the mixing container to the kettles, for unless it is properly stirred up a uniform mixture cannot be maintained.

Applied to iron or steel which is not subject to the action of corrosive gases, one coat of aluminium paint will suffice, provided that an undercoating already exists and that it has been properly cleaned down, all loose scale being removed and all bare spots being primed. Two-coat work is only necessary where corrosive conditions are severe and in the case of unpainted metal.

A good " leafing " aluminium paint will reflect 60 to 70 per cent. of the light, and a correspondingly higher percentage of the heat, which falls upon it. This high reflective power can be taken advantage of in the painting of warehouse and factory interiors, where white paints, which have a slightly higher reflectivity, cannot always be used on account of discoloration. In this connexion it is interesting to note that aluminium paint will readily withstand the corrosive action of sulphur fumes which are present in the atmosphere of industrial centres and which are mainly responsible for the discoloration of ordinary lead paints. The aluminium surface has also very little tendency to stain in the presence of soot and moisture, and any dust which settles upon it can be easily washed off, leaving the paint film quite uniform in colour and appearance. The interior of a factory can also be kept much cooler if the roof is painted with aluminium paint.

Application of Aluminium Paint to Heated Surfaces.

As a natural result of its high reflectivity for heat waves, the thermal radiating power is correspondingly low. Aluminium paint can therefore be used upon heated surfaces, such as steam pipes and furnaces, where it is desired to reduce the heat dissipation to a minimum, more especially as it shows satisfactory adherence to the heated surface even at temperatures as high as 700° Fah. The paint must, however, be applied to a clean rustless surface, which should not be too smooth, and should be allowed to become thoroughly dry before being subjected to temperature. Under these conditions, if the surface is hot enough to burn out the vehicle the aluminium powder will still adhere to the surface of the iron, provided it is not exposed to the weather. Rosin varnish will be found the most satisfactory vehicle for use in this connexion.

The exceptional hiding and covering power of aluminium paint is, however, one of its most useful features, for in terms of opacity one coat of a good paint which leafs freely is equal to several coats of white-lead paint. In view of this, aluminium paint can be used to prevent the bleeding of colours in undercoats, and in this connexion can be applied to wood as well as iron and steel. In the former case it is especially useful in the rôle of a foundation coat prior to the application of enamel upon wood which has been stained. Its utility, however, does not end there, for it is equally proof against the bleeding of bituminous paints and to a certain extent against wood preservatives. The addition of 5 per cent. of aluminium bronze powder to white lead, zinc oxide, lithopone or similar white paints will also materially increase the opacity of the latter for use as undercoatings and at the same time make them more durable in positions which are exposed to sunlight.

The profits derived from gambling saloons are rather strikingly exemplified by a proposal of a German syndicate to purchase the Achilleion at Corfu, formerly belonging to the ex-Emperor Wilheim, which they will preserve as a museum, to expend £400,000 on the erection near by of an hotel of 400 rooms, and a Casino, the construction of a new road from the Achilleion to Corfu, and the provision of electric light and power supply for that town at rates 20 per cent. less than those in Athens. All this for the privilege of running the Casino for a term of twenty-five years, after which the whole undertaking will revert to the Greek Government!

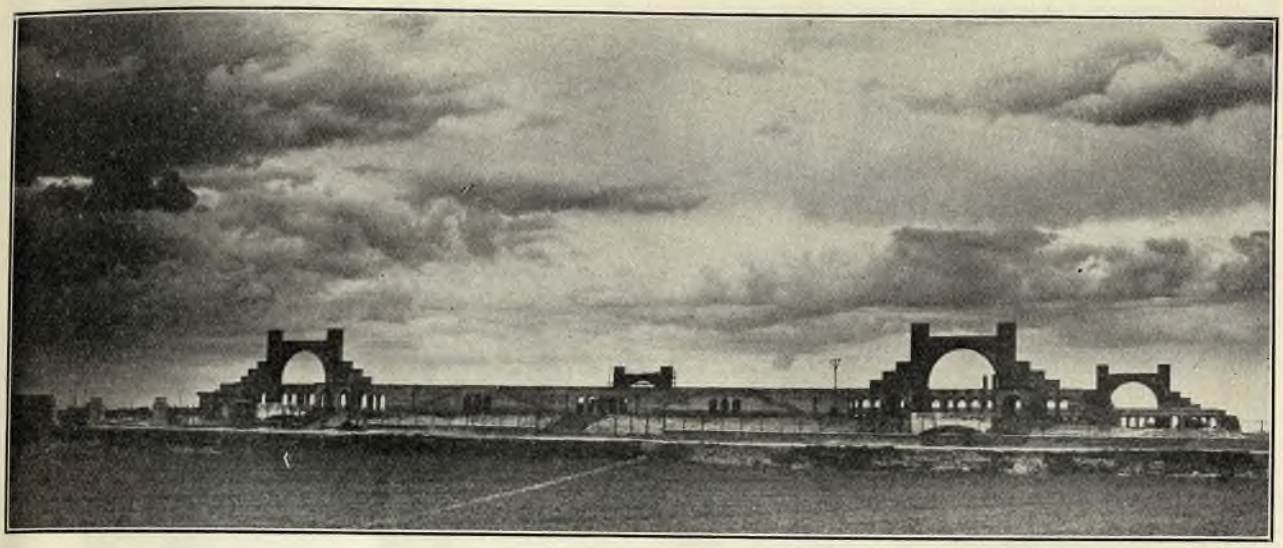


Fig. 1.—THE STADIUM, LYON: THE SKYLINE.
TONY GARNIER, Architect.

THE STADIUM AT LYON

By HOWARD ROBERTSON, F.R.I.B.A., S.A.D.G.

The interesting architectural problem which the design of the modern stadium presents is one which to-day is no longer of purely historical or academic interest, for in recent years there have been erected some very fine modern treatments of vast arenas which have been brought into being by that revived interest in athletic contests which no doubt owes its impetus to the international Olympic Games instituted prior to the war.

In an address given to the competitors in the 1922 Victory Scholarship Competition, promoted by the late Society of Architects, Mr. Robert Atkinson (who was the critic for this subject) has given a short but comprehensive study of the stadium in ancient and modern times, the full text of which was published in the society's paper, "Architecture," for November, 1922, the article containing not only illustrations of some of the admirable designs submitted, but also examples of ancient and modern solutions of the problem.

Mr. Atkinson's analysis makes it clear that the form of the arena and of the spectators' accommodation was dictated by the nature of the contests held, and that the Greek stadium was different in conception from the Roman type. The Greek plan followed much more closely the idea which governs the design

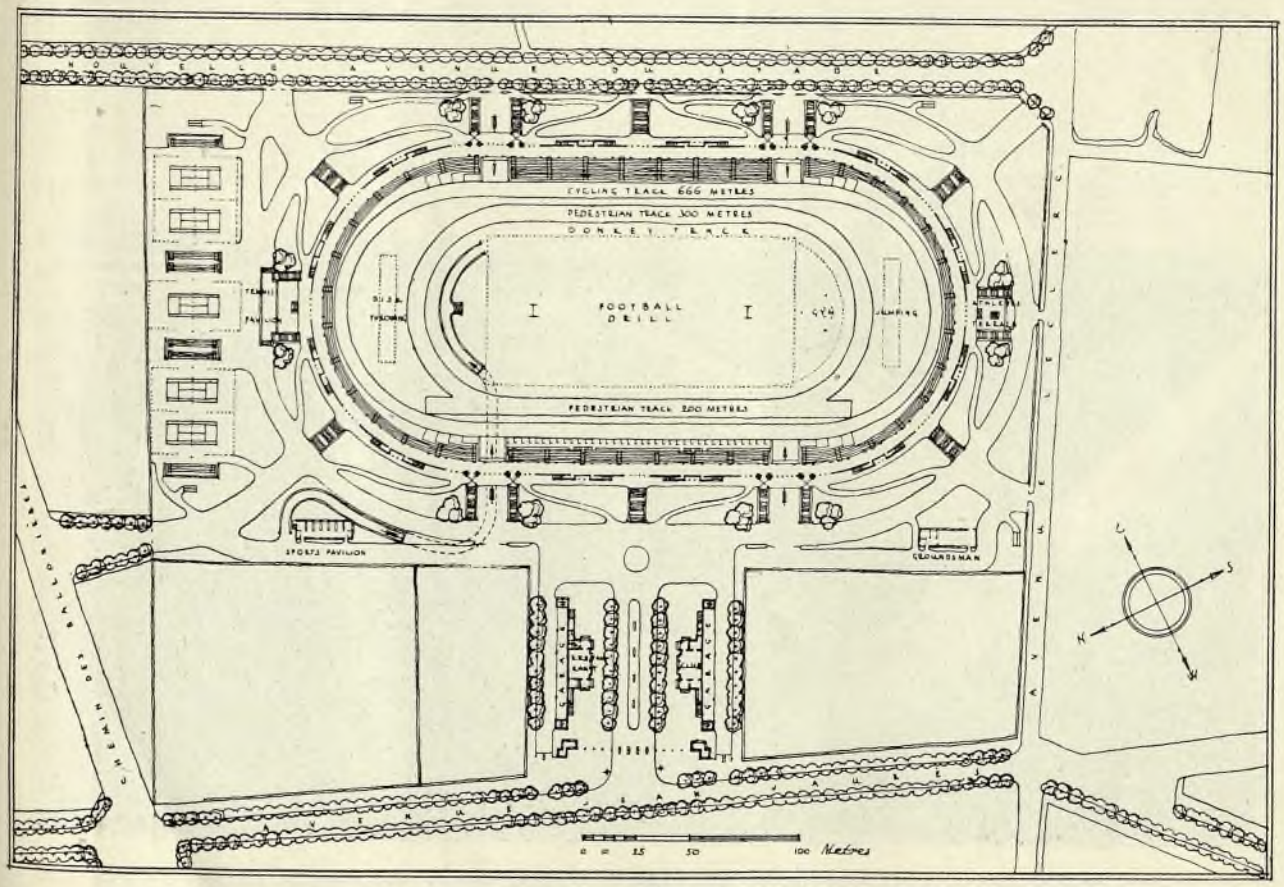


Fig. 2.—PLAN OF THE STADIUM, LYON.
TONY GARNIER, Architect.

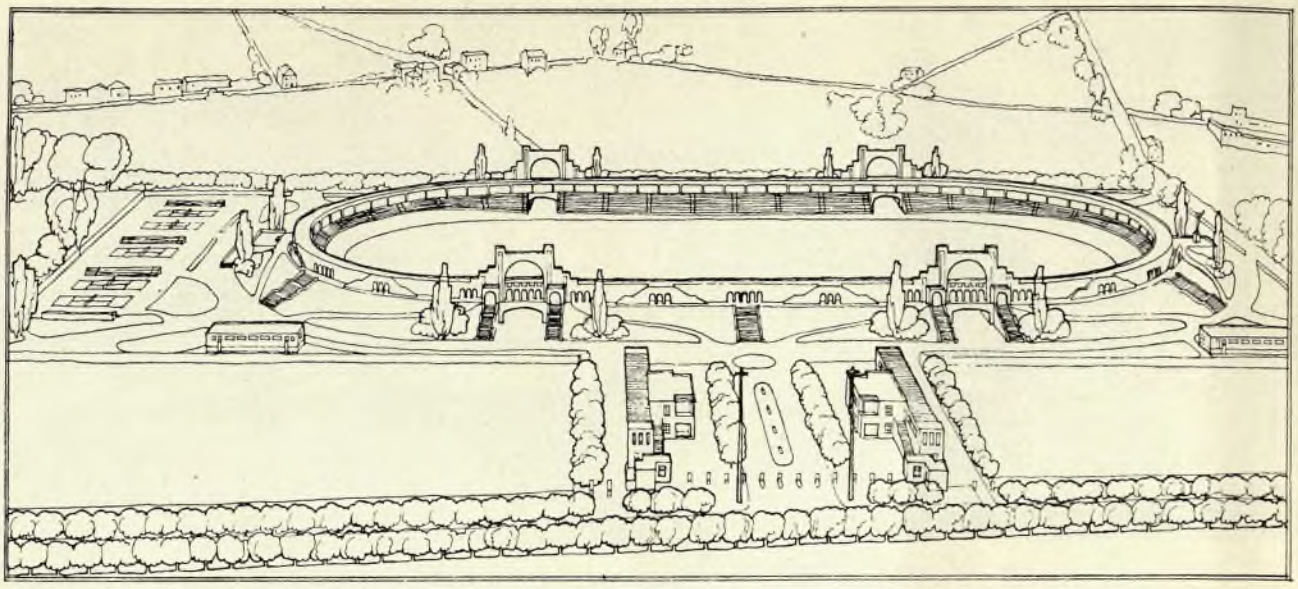


Fig. 3.—THE STADIUM, LYON: PERSPECTIVE VIEW, SHOWING THE APPROACH FLANKED BY CLUB AND RESTAURANT BUILDINGS, AT THE REAR OF WHICH ARE GARAGES.
TONY GARNIER, Architect.

of the open-air theatre, in which it is essential that details of the spectacle should be clearly visible. It was generally in the form of a semi-circular amphitheatre, with the seating concentrated in terraced stages around this portion, which was devoted to the more intimate contests such as wrestling, jumping and the throwing of the discus, and beyond this amphitheatre was a flat, straight section of arena where races and other games took place, and flanking which were spectators' enclosures in which no attempt was made to provide elaborate seats or viewing spaces. It is a lay-out which was the forerunner of the Roman circus, which combined accommodation for three different types of spectacle, the stadium for games, the hippodrome, and the amphitheatre, and in which were held all kinds of sports, including chariot races.

Buildings of this sort, such as the Circus of Maxentius, had in the centre of the arena the long "spina," a kind of narrow elongated island round which the chariots raced, the arrangement of which will be recalled by those who have seen the wonderful reconstruction of the hippodrome in the film of "Ben Hur." The nature of the races entailed a great

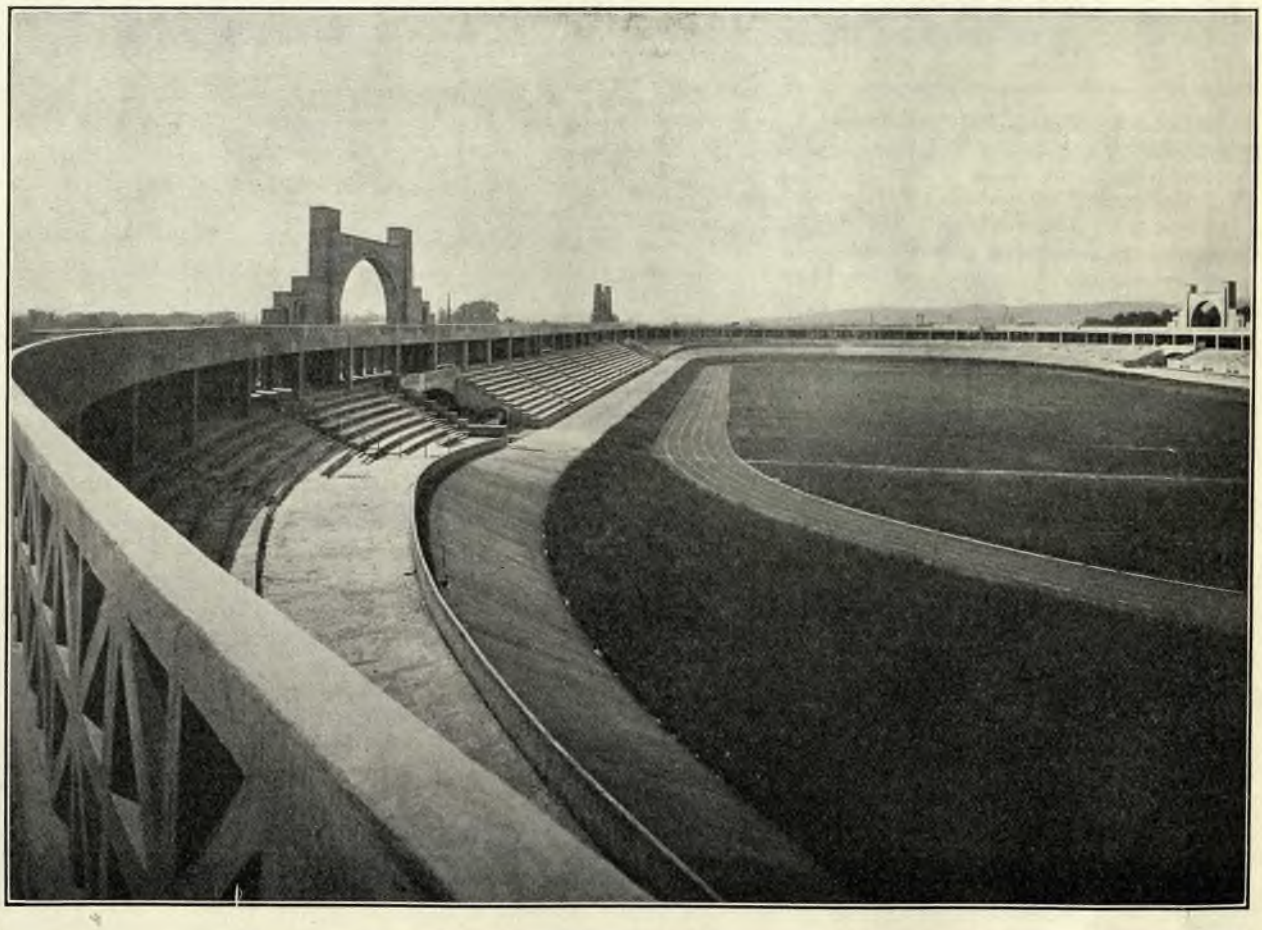


Fig. 4.—THE STADIUM, LYON: THE INTERIOR, SHOWING THE CYCLING AND CINDER TRACKS AND THE CENTRAL RUGBY AREA.
TONY GARNIER, Architect.

development of spectators' seating along the race-course, and though in modern stadia there is no longer any reason for the "spina," the general arrangement of the seating, and all the problems which it entails, remains essentially the same to-day. One of the difficulties is almost insuperable, that of the remoteness of certain blocks of spectators' seats from some of the more intimate games, and another is. provision of covered seats, which in nearly all climates are desirable. It is a fairly simple matter, of course, to arrange for the covering of the upper and outer seats, but these, being furthest from the arena, would normally be the cheapest, and, therefore, it is the expensive seats which remain exposed.

Some of the best of the recently erected stadia have been put up in the United States. Sometimes they are in the form of a vast bowl, such as the great arena at Yale University, but this is first and foremost a football ground, and the arena has space for the ground and nothing else. It is in the form of a complete ellipse, and has therefore the curved sides which ensure better vision than do the straight sides, which are usually more popular on account of their simplicity of construction. The new "million dollar" Venalle stadium at Baltimore is designed on original lines, for it is an elliptical horseshoe in shape, with one end open. The ellipse is rather round than flat, and there is as good a side angle view as it is possible to obtain; there is room also for racing and other sports in addition to the football field. Another fine stadium, holding about 75,000 spectators, is the Los Angeles Coliseum, which is an ellipse with very flat sides. The football ground here is not placed symmetrically about the short axis of the plan, a small ground for special contests being reserved at one end of the arena, this being marked architecturally by a covered loggia which rises to the rear of the spectators' seats at this point.

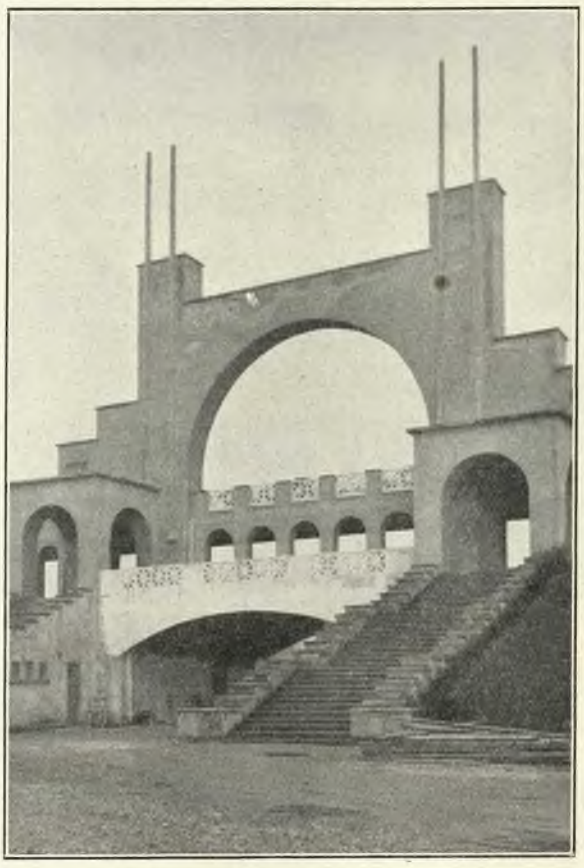


Fig. 5.—THE STADIUM, LYON: ONE OF THE SIX PRINCIPAL ENTRANCES.
TONY GARNIER, Architect.

Amongst recent stadia erected in Europe is the big arena at Cologne, the Pershing Stadium in Paris, and the 1912 Stockholm Stadium for the Olympic Games, while the Wembley Stadium is, of course, the most ambitious thing of its kind in England.

The Stockholm Stadium is of the elongated horseshoe type, with flat sides, while the Wembley Stadium has also flat sides but two segmental ends. The same general plan type has been adopted in the new Lyon Stadium for athletic sports by Tony Garnier, the design being practically complete except for a few of the accessory buildings which are part of the scheme, in particular the club and restaurant and garage groups, which are shown on either side of the main approach (*vide* the lay-out plan, Fig. 2).

The stadium is situated on the outskirts of Lyon on a flat site, and is remarkable for that clean simplicity of lay-out which is perhaps the outstanding characteristic of the work of Tony Garnier, a former Prix de Rome Laureate, who has put into practice in the executed projects those precepts of plan organisation which are the backbone of the Beaux-arts system of architectural training.

In addition to its merits as a symmetrical and carefully balanced plan, the Lyon Stadium has interesting qualities of elevational design, achieved almost entirely by the study of form executed in the simplest of materials, reinforced concrete. The exterior, which has no natural aids to dramatic effect through its setting in a flat and treeless terrain, yet manages to achieve a dramatic quality through the judicious accentuation of its principal elements, the long flat line of its walls and the great arch-connected pylons which mark its principal entrances (Fig. 5). The maximum advantage is taken of the external possibilities of vigorously built-up climaxes and the silhouetting of the sky-line (Fig. 1), while the interior (Fig. 4) maintains unbroken the continuous horizontal line of the covered promenade which accentuates its vast dimensions and stresses the values obtainable through a simple geometrical plan form.

The accommodation provided for the actual sports consists of an outer track for bicycle races, which is banked progressively at the curved ends, round which is a spectators' promenade which, by means of shallow steps, is made to follow the general rise and fall of the banking; in this way the lines of the stepped seating are maintained at a uniform level. This cycle track has a perimeter of 606 metres, and within it is a cinder track for foot races, divided into two sections, a straight course of 200 metres and a section comprising a straight length and two curves totalling 300 metres. Within this track lies the Rugby ground, a track for donkey races, and at one end a space for gymnastic displays, balanced at the other end by the staircase leading to the subterraneon passage which connects the arena with the dressing boxes, situated in a pavilion outside the enclosure, and with which corresponds a pavilion which is used by the caretaker or groundsman. The overall length of the stadium is 307.78 metres, and the width 153.88 metres. The whole of the construction work is carried out in reinforced concrete, the walls being rendered in cement.

There is no enrichment or purely ornamental detail in any part of the building; relief from severity being obtained purely by grace of form, the pattern of the balustrading, and the grace of the arcading to the main entrances. Where the design particularly succeeds, however, apart from the maintenance of its fine unbroken lines, is in the excellence of its scale. The building up of the entrances, with its long flights of steps, is especially impressive, and at the same time the dimensions are by no means vast.

(Note.—The author is indebted to Mr. Tony Garnier for the plans and views shown in Figs. 1—4. The photograph for Fig. 5 is by Mr. F. R. Yerbury.)

GENEVA COMPETITION—II (*continued from page* 188)

is much to be said for combining these two elements in a single architectural whole, for it enables the League of Nations building to achieve a simple effect of unity. In this instance the Assembly Hall has not been given prominent external expression, it being balanced by less important rooms on the opposite side of the central lobby, which has been raised to form an imposing tower. The plan is a fine conception with its regularly arranged axes and focal points. The communication between the various parts of the building is well managed. If it had represented a new Court of Justice or Parliament House in Rome, or some other capital city of the West, its design would have been entirely appropriate, but for reasons which have previously been given it has not that cosmopolitan quality we have a right to demand in the League of Nations building. Design No. 142 is also an attractive composition. Here the Assembly Hall is marked by a dome surmounting a fine, symmetrical façade, but this also does not appear to strike the requisite note of novelty. The Secretariat set back on the right-hand side of the main block is excellently planned, and shows a series of rooms well lit and ventilated. Design No. 241, a German example, shows a slightly similar general plan, the Secretariat being placed to the right of the Assembly Hall. In this case also the latter has a fine courtyard behind it, providing a dignified approach from the main roads. In plan this design appears to be one of the best submitted, while the building as a whole appears to be capable of economical construction, yet it is perhaps not sufficiently spectacular for its purpose, the flat roof of the Assembly Hall being scarcely a suitable dominant to the composition. Design No. 251 is a grandiose conception. The Assembly Hall is here given a grand columnated front, surmounted by a pyramidal roof, from the sides of which light is admitted into the interior. The Secretariat set back from the Assembly Hall, its axes forming an obtuse angle with it, has too pronounced a unity of its own to be properly subordinate to the main part of the building, but considered by itself is an interesting composition. Design No. 327, in which the Assembly Hall also has a pyramidal roof, is further adorned by a campanile. Here is a bold attempt to give to the building a modern expression, and the chief criticism which may be directed against it is that it is French modernity and not international modernity. Design No. 372, from Sweden, presents towards the lake a delightful façade in the traditional Classic manner. One is somewhat at a loss, however, to discover what it means. It has the appearance of a very sedate piece of street architecture, and bears no outward expression of its supremely important function. One wonders where the grand collonades lead to, and inspection of the plan reveals the fact that they lead nowhere. The Assembly Hall is given a circular shape, the rostrum being placed at the centre, while the rooms of the Secretariat are arranged in a grand six-storeyed façade which bends round in a semi-circle, parallel to the curve of the Assembly Hall. The design has the charm of simplicity, but it is perhaps questionable whether the means of inter-communication between the various rooms of the Secretariat are sufficiently direct. Design No. 425, from Holland, is a remarkable effort, in which the modernist movement has found expression. The Assembly Hall, with its adjacent wings, presents a symmetrical front towards the lake, while the Secretariat forms a very long and barrack-like addition behind it. The view from inshore is of a somewhat mysterious building, of which the central feature in particular excites curiosity. What do those two beckoning towers, with their corner windows, really mean? Does their author know himself?

Book Reviews

Modern Electrical Illumination. By Cyril Sylvester, A.M.I.E.E., A.M.I.Mech.E., and Thomas E. Ritchie, A.M.I.E. Longmans, Green & Co., Ltd. Price 42s. net.

This is the title given to an extremely well illustrated and compiled volume dealing with the modern application of Illuminating Engineering principles to every-day requirements. It is a book which should be of considerable practical value to the architect, consultant and contractor.

The authors preface their remarks with a technical description of the eye, and the important bearing correct and adequate illumination has on the ability of the eye to discern objects clearly.

This in turn is followed by very adequate outline of modern industrial lighting, also the latest applications of shop window and interior lighting.

The sections dealing with street lighting and exterior floodlighting are particularly complete, especially the latter, which contains much data previously unpublished.

There are other sections dealing with such phases as domestic lighting, public building and theatre lighting, also of considerable practical interest, and finally, the section devoted to the manufacture of the modern electric lamp contains not only photographs and processes of general interest, but much practical and helpful data relating to the life, output and dimensions of our modern types of lamps.

The Main Drainage of Towns. By F. Noel Taylor, M.I.Mun.E. Second edition; pp. ix. + 297; 387 illustrations. London: Charles Griffin & Co., Ltd. Price 21s.

That this very comprehensive work on an important branch of modern sanitation should have reached its second edition is hardly surprising; but the occasion has given the author an opportunity of generally revising the text in various particulars, more especially in the deletion of matter relating to systems and appliances no longer in use, and the rewriting and strengthening of information on the more modern methods of sewage treatment, sewer construction and pumping systems. The review of the progressive history of the treatment of sewage is thorough and comprehensive, although the full difficulties that confront the engineer in disposing of the enormous quantities of sewage daily accruing from large centres of population are hardly sufficiently emphasised. Thus bacteriological treatment which, in a well-arranged system, may be relied upon to deal effectively with the sewage of small towns and rural localities is quite useless to deal with the enormous volumes of sewage that arrive at the London outfalls, since it is not practicable to hold up such quantities for the normal bacteriological processes to be effected. Chemical precipitation seems, therefore, destined to play a considerable part in the treatment of the sewage of large towns. What seems to need determination is the approximate volume of discharge at which precipitation of the sludge is a more economic method than dealing with the crude sewage wholly on the bacteriological method. Another feature of this new edition is the attention paid to the use of concrete in sewer construction. The great number of clearly drawn and informative plans, sections and diagrams form a very valuable feature of the work.

Book Received

English Gothic Foliage Sculpture. By Samuel Gardner. (Cambridge University Press.) 7s. 6d. net.

LEGAL NOTES

Building Contract Dispute

Mr. Justice Salter, in the King's Bench Division, recently had before him a special case stated for the decision of the Court on a Ministry of Health building contract, to which the parties were Mr. John Watson, builder, of Princess Road, Ashton-in-Makerfield, and the Ashton-in-Makerfield Urban District Council. It concerned a scheme for the erection of eighty working-class dwellings, involving an expenditure of over £84,000.

Mr. Merriman, K.C. (with him Mr. Lincoln Reed), for Mr. Watson (the plaintiff), said the point was as to the proper rate of wages to be taken on the construction of the contract as the basic rate of wages for the purpose of calculating fluctuations in the contract prices. The point was whether there was any difference in the meaning of the words "Prices ruling at the date of the delivery of the tender," and "Prices ruling at the date of the tender." It was a Ministry of Health building contract, and the scheme was that the tender was being built up on calculations on the bills of quantities as to the wages which would fall to be paid, the prices of materials, and a sum added for profit. The scheme was that there should be a definite datum line both with regard to wages and materials, and that if, after a certain date, which was the subject of controversy, there should be fluctuations either in the rates of wages or the prices of materials, those fluctuations up or down should be given effect to. That was to say, that the contractor or the authority should be recouped as the case might be, but there should be no addition for profit in respect to any addition to the price of the contract for an increase in the rate of wages or material. The tender was made on November 8, 1919. It had, of course, been drawn up weeks before the calculation involved, and the prices ruling on the date of the delivery of the tender had been raised by twopence per hour with regard to wages between the date at which the tender was made out and the date at which it was delivered. Then there were subsequent fluctuations after the delivery of the tender. Whereas bricklayers' wages were at the time of the calculations made and embodied in the schedule of prices 1s. 8d. per hour, they had been increased by twopence before November 8 when the tender was delivered, and subsequently increased to as high as 2s. 4d. per hour. The question was whether the contractor was entitled to the twopence increase between the date when he made out his tender and the date of its delivery. There was also a subsidiary point, namely, whether Mr. Watson was entitled to £132 for certain increase in wages of the supervising staff necessitated by the changes in the wages of the workpeople. With regard to that, Mr. Justice Bailhache held in a previous case that it was a sum to which a contractor was entitled.

Counsel read the special case as stated for the Court, as well as the material clauses of the Ministry of Health tender form (D88). By the special case it was stated that the plaintiff contended by virtue of Clause 40 (b), (d) and (f) he was entitled to be paid for labour the amounts paid by him in excess of the prices set out in the schedule of his contract. The defendants contended that the increase of twopence per hour was not made between the date of the delivery of the tender and the date of the completion of the work within the meaning of Clause 40 (b) of the contract.

Mr. Chappell argued the case for the defendants, and contended plaintiff was not entitled to his claim.

Mr. Justice Salter, giving judgment, said the case concerned the construction of Clause 40 of the conditions of the contract. He quoted sub-section (b), relating to increases between the date of the delivery of the tender and the date of the completion of the work, and sub-section (d) which, he thought, was inserted to prevent the kind of dispute which arose in that case. Where a contractor was entitled to an increase, his lordship said it was necessary to obtain how much he was entitled to, and there had to be a document between the parties which should fix for that purpose the rates which were to rule at the date of the delivery of the tender. The contractor had to furnish a schedule of prices for the purpose of the adjustment of the contract prices according to whether there was a rise or fall, and in ascertaining the amount due to the contractor for the avoiding of disputes, it was to be taken that the rates which were in fact to rule at the date of the delivery of the tender were the rates in that list. The contractor was therefore entitled to the difference in the wages shown on the scheduled prices and the higher prices in fact paid.

His lordship also held in favour of the plaintiff on the subsidiary point. He said he would follow a decision of Mr. Justice Bailhache. He would allow the extra supervision expenses in so far as they were reasonably increased by the increase of wages under the contract.

Judgment was accordingly given for Mr. Watson, with costs.

Architect Sued by Council

In the King's Bench Division recently Mr. Justice Sankey gave his reserved judgment in an action which was begun at Cambridge Assizes in which the Wisbech Rural District Council sued Mr. F. Burdett Ward, who acted as their architect under a housing scheme in 1920, to recover £221 3s. as money they had overpaid to the builders.

Sir M. Macnaghten, K.C., Mr. G. Dodson and Sir Travers Humphreys appeared for the Council. Mr. Schiller, K.C., and Mr. G. Linton Thorpe represented the defendant.

His Lordship said the clause which regulated the method of payment by the Council read: "No certificate of the architect except for the final balance shall be considered conclusive evidence of any works or materials to which it relates nor to the value thereof, nor shall it relieve the contractor from his liability to make good any defects, nor shall it in any way prejudice the employers in the final settlement of the accounts in any case where the contractor has been overpaid during progress of the works." Unfortunately Mr. Ward gave some interim certificates under which the Council had to pay both the builders and the Disposals Board for some material, chiefly consisting of baths. Defendant in effect admitted he had made a mistake, and his Lordship found that owing to defendant's negligence plaintiffs had to pay £221 3s. twice over.

On behalf of the defendant four points were taken:

(1) That he was a quasi-arbitrator and therefore not liable.

(2) That the action was premature because there was power to rectify any final certificate and no final certificate had been issued. Should that final certificate be issued it would be found £221 11s. 8d. was due to the builders in respect of increased wages.

(3) If the matter could not be rectified, there had been a final certificate contained in a document known as "Summary 4" between the parties to find what the exact position was, and the defendant had issued a final certificate and could not be sued for negligence.

(*Continued on page* 212)

London Building Notes

Bow.—The foundation-stone of the new Kingsley Hall, designed by Mr. C. Cowles-Voysey, 14 Gray's Inn Square, W.C.1, has been laid.

Brompton Road.—New business premises, consisting of shops and offices, are to be erected upon the site of No. 183 Brompton Road, S.W. The builders are Messrs. Walter Lawrence & Son, Ltd., 19 Finsbury Square, E.C.2. Plans have been prepared by Messrs. Brown & Barrow, architects, Lennox House, Norfolk Street, Strand, W.C.2.

Buckingham Gate.—Arrangements are being made for the erection of a modern office building upon a large vacant site in Vandon Street, Westminster. Messrs. Ford & Walton, Ltd., High Road, Kilburn, N.W., will erect the premises to the design of Messrs. T. H. Mawson & Son, architects, 26 Victoria Street, Westminster, S.W.1.

Charing Cross.—Extensive alterations are in progress at Corner House, Northumberland Avenue, S.W.1. The contractors are Messrs. Perry & Co. (Bow), Ltd., 54 Victoria Street, S.W.1. Plans are by Mr. W. Curtis Green, A.R.A.

Camberwell.—The L.C.C. Housing Committee recommend the tender, £20,490, of Mr. A. T. Rowley, Tottenham, for the erection of tenements at Wyndham Road, Camberwell.

Canning Town.—Extensive alterations and additions, to cost about £50,000, are to be made to the buildings at the Thames Ironworks Wharf by Messrs. S. Instone & Co., Ltd. Plans have been prepared by Mr. C. J. Brown, chief engineer to the London & North Eastern Railway Co., King's Cross Station, N.W.1.

Croydon.—A site at South End has been selected for the erection of 4 shops, with two upper floors to be used as flats. The architects are Messrs. North, Robin and Wilsdon, 35-39 Maddox Street, W.1.

Epsom.—The L.C.C. are acquiring the Horton Lodge Estate of 23 acres to provide additional accommodation at West Park Mental Hospital.

Euston Road.—Part of the old Endsleigh Gardens site in Euston Road, N.W.1, has been acquired by Messrs. Nettlefold & Co., Ltd., 54 High Holborn, W.C.1, who propose to build a block of new showrooms and offices. The builders are Messrs. Allen Fairhead & Sons, Ltd., Enfield, Middlesex. Plans have been prepared by Mr. George Vernon, 19 Russell Square, W.C.1.

Farmfield.—The L.C.C. are to extend the accommodation at Farmfield Mental Hospital, at a cost of £7,190.

Finchley.—A new nurses' dormitory and day shelter is to be erected at the Wright-Kingsford Home, Granville Road, to plans prepared by Messrs. Crickmay & Sons, 13 Victoria Street, S.W.1.

Gracechurch Street.—Large banking premises are to be erected upon the site of Nos. 28-30 Gracechurch Street, E.C.3. The plans are by Messrs. Campbell Jones, Son & Smithers, 9 Dowgate Hill, Cannon Street, E.C.4. Messrs. Howell J. Williams, Ltd., 11 Bermondsey Street, S.E.1, have the contract.

Hackney.—Messrs. Lloyds Bank, Ltd., are to build a branch in Amhurst Road, Hackney, E. The builders are Messrs. E. A. Roome & Co., Ltd. The plans have been prepared by Mr. A. G. Johnson, surveyor to the bank.

Hammersmith.—The Trustees of the Dan Chapman Memorial Home Charity have purchased a site upon the Wormholt Estate at Hammersmith, W.6, where it is proposed to build a block of almshouses. Plans are being prepared by Mr. Matthew J. Dawson, 11 New Court, Lincoln's Inn, W.C.2.

Hayes.—The Minet Estate at Hayes is to be developed for residential purposes. About 20 shops will be built in Station Road, and plans have been prepared by Mr. A. J. Carpenter, architect, 54 Knatchill Road, Camberwell, S.E.

Ilford.—The Ilford Wesleyan Circuit proposes to build a new church, church hall and schools on a site in Gantshill Crescent, at a cost of about £20,000. Plans by Messrs. Smee & Houchin, architects, Fleet House, Fleet Street, E.C.4.

Mayfair.—Plans for the new block of flats to be built upon the remaining area of the old Devonshire House site in Stratton Street and Mayfair Place, W.1, are now in course of preparation. The cost is estimated at £350,000. The architect is Mr. Horace Gilbert, F.R.I.B.A., 43 Finsbury Square, E.C.2.

Mitcham.—A large new factory is to be erected in Locks Lane, Mitcham. The builder is Mr. Stanley Dale, London Road, Mitcham, whilst plans have been prepared by Mr. Ernest Bates, architect, 27 Queen Victoria Street, E.C.4.

Old Bond Street.—A considerable amount of work is to be carried out to the premises of the Embassy Club in New Bond Street, W.1. The work will be under the direction of Mr. J. A. Eshelby, architect, 6 New Burlington Street, W.1.

Oxford Street.—A large block of residential flats, with 4 shops on the ground floor, is to be erected upon a site in North Audley Street, W.1. Plans have been prepared by Mr. J. Stanley Beard, F.R.I.B.A., 101 Baker Street, W.1.

Paddington.—For additions to St. Mary's Hospital. Full particulars in our issue of March 18. The contract has been placed with Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth Road, S.W.

Seymour Place.—A group of 16 town houses is to be built upon a site in Seymour Place and Brown Street, W.1. The contract will be carried out by Messrs. J. H. St. John & Sons, 44 Seymour Place, W.1. Full particulars in our issue of July 8.

Shoreditch. — The "Old Basing House," Kingsland Road, is to be rebuilt. The contract has been placed with Messrs. Sims & Russell, Bloomsbury Street, Westminster, S.W.1. Plans by Mr. Newnham, surveyor to Messrs. Barclay, Perkins & Co.

Southall. — A large "super-cinema" is to be erected at Southall, to provide accommodation for 2,000 persons. The new theatre has been designed by Mr. Clifford Aish, 22 Bedford Street, W.C.2.

St. Martins-le-Grand.—A small triangular site in St. Martins-le-Grand, E.C.2, has been purchased by the Woolwich Equitable Building Society, Ltd., 113 Powis Street, Woolwich, S.E.18, who propose to build a block of offices. The plans for the building are being prepared by Messrs. Grace & Farmer, 3-4 Wardrobe Place, St. Pauls Churchyard, E.C.4.

Twickenham.—The contractors in connection with the Twickenham Estate developments are Messrs. Rawlings Bros., 95 Gloucester Road, S.W.7, and Mr. W. Burridge, Walpole Road, Twickenham. It is proposed to build 150 houses and lay-out 24 tennis courts. The architect is Sir Banister Fletcher, F.R.I.B.A., 1 King's Bench Walk, Temple, E.C.4.

Victoria Docks.—A large warehouse, costing about £60,000, is to be erected at the Victoria Docks, E., by the Port of London Authority, to the plans of its Chief Engineers' Department. The builders are Messrs. Wilson, Lovatt & Co., Ltd., Abbey House, Victoria Street, Westminster, S.W.1, and the steelwork will be supplied by Messrs. Walker Bros., Ltd., Walsall, Staffs.

Victoria Park.—The Victoria Park Hospital is to be extended. Plans by Messrs. William A. Pite, Son & Fairweather, 12 Carteret Street, Queen Anne's Gate, Westminster, S.W.1.

Wandsworth. — Work has commenced in connection with the belfry tower at the Thomas à Becket Church, West Hill. Mr. J. N. P. Conlan, L.R.I.B.A., is the architect.

Westminster. — A large site in Artillery Row, Westminster, S.W.1, has been selected for the erection of a big office block. The building has been designed by Messrs. Gordon Jeeves & Partners, 16 Hanover Square, W.1.

Wimbledon.—Surrey E.C. have instructed the architects, Messrs. Jarvis & Richards, 60 Tufton Street, S.W.1, to prepare revised plans for the extensions to the technical institute, together with estimate of cost.

Corrections

We regret that in the description of India House, Liverpool, published in our last issue, we omitted to state that Messrs. Bromsgrove Guild, Ltd., carried out a large amount of ornamental ironwork, as well as bronze work. They were also responsible for important work in connection with Messrs. Reece's new premises, Liverpool, described in the same issue.

With reference to the list of sub-contractors for Reece's New Café-Restaurant, Liverpool, illustrated in our last issue, we omitted to state that the 20-ft. high reinforced concrete retaining wall was constructed to the designs of Messrs. Trussed Concrete Steel Co., Ltd., whose Truscon floors were used throughout India House, Liverpool, also described in our last issue.

Building Contracts Open

*** *It is requested that information concerning Contracts Open, Tenders, etc., be forwarded to Rolls House, 2 Breams Buildings, London, E.C.4, not later than* 2 P.M. *on Tuesdays. The date given at the beginning of each paragraph is the latest date when the tender, or the names of those willing to tender, may be sent in; the name and address at the end is the person from whom quantities, forms of tender, etc., can be obtained.*

BANDON, CO. CORK.—August 9.—For the erection of six cottages. Particulars, Mr. R. E. Beckerson, 30 Lower Fitzwilliam Street, Dublin. Deposit £5 5s.

BELFAST.—August 12.—For piling and foundations for the new Law Courts and Government Offices. Particulars, Mr. S. G. Hunter, Quantity Surveyor, 2 Wellington Place, Belfast. Deposit £1 1s.

BROMLEY COMMON.—August 31.—For the erection of administration block at Isolation Hospital, Skym Corner. Particulars, Mr. F. H. Wood, F.A.S.I., Gloucester House, 19 Charing Cross Road, W.C. Deposit £3 3s.

CASTLEFORD.—For the erection and completion of new hotel, Pontefract Road. Names to be sent to Messrs. Garside & Pennington, F.R.I.B.A., architects and surveyors, Ropergate, Pontefract. Deposit £1 1s.

FEATHERSTONE. — August 9.—For the erection of two houses at Vicarage Lane. Particulars, Mr. S. Chesney, A.R.I.B.A., Council Offices. Deposit £2 2s.

GOLDTHORPE.—August 8. — For the renewal of eaves gutters with cast iron troughings to approximately 96 houses on Lockwood's Farm site. Particulars, Mr. W. H. Adams, A.R.I.B.A., Council Offices, Bolton-upon-Dearne.

HEYBRIDGE.—August 2.—For 12 houses, in pairs, on the Colchester Road. Particulars, Mr. W. Almond, 6 Market Hill, Maldon.

HUTTONS AMBO.—August 12.—For the erection of village institute. Particulars, Mr. J. Gant, the Post Office.

KIRKCUDBRIGHT. — August 3.—For eight blocks of two houses each. All trades. Particulars, Mr. John Gibson, Town Clerk. Plans may be seen at the architect's office, Mr. W. A. Mackinnell, Town Hall. Deposit £1 1s.

LLAMSAMLET, SWANSEA. — August 15.—For the erection of branch library. Particulars, Borough Architect, 3 Prospect Place, Swansea. Deposit £2 2s.

LOSSIEMOUTH.—August 6.—For four blocks of four houses of the flatted type at Dunbar Street. All trades. Particulars, Mr. A. G. D. Grant, Burgh Surveyor.

NEATH.—For the erection of bakery, School Road, Melyn, Neath. Builders desirous of tendering for the above are invited to submit their names to W. T. Springall, L.R.I.B.A., Architect's Department, Co-operative Wholesale Society, Ltd., St. Mary Street, Cardiff. Deposit £2 2s.

PRESCOT, LANCS.—August 10.—For the erection of a telephone exchange. Particulars, H.M.O.W., James Street, Liverpool. Deposit £1 1s.

QUAKERS' YARD.—August 5.—For the erection complete of a mining institute, together with all contingent works in connection therewith. Particulars, Office of the Borough Engineer, Town Hall, Merthyr Tydfil. Deposit £2 2s.

SOUTHPORT. — August 3. — For the extension and completion of the High School for Girls, Scarisbrick New Road. Particulars, Mr. A. E. Jackson, M.Inst.C.E., Borough Engineer, Town Hall, Southport. Deposit £1 1s.

SWINDON.—August 13.—For ten houses in Rodbourne Road. Particulars, Mr. J. B. L. Thompson, Borough Surveyor, 34 Regent Circus.

WHIMPLE.—For the erection of a block of four cottages. Names to be sent, with deposit of £2 2s., to Messrs. E. H. Harbottle & Harbottle, Architects, County Chambers, Exeter.

YSTALYFERA. — For excavation and construction of foundations for new mills, mill engines, cooling tower, electrical plant, and auxiliaries at the Phœnix Tinplate Company's Gilwen Works, Lower Cwmtwrch, Ystalyfera. Particulars from the consulting engineers, Messrs. W. Walter Hughes and Associates, 12 Cambrian Place, Swansea. Deposit £2 2s.

Building Tenders

ASHFORD (MIDDLESEX).—For additions to Woodthorpe Road School, for the Middlesex E.C., from plans prepared by Mr. H. G. Crothall, F.R.I.B.A., County Architect. Messrs. Norris & Co., Sunningdale, £3,081 (recommended).

ALTRINCHAM.—The Altrincham U.D.C. have accepted the tender of Messrs. J. Collier & Co., builders, Stockport Road, Timperley, for the erection of 40 type "A" houses on the Oldfield Brow Estate.

BARNSLEY. — The Corporation Housing Committee recommend the tender, £1,383 5s., of Mr. C. K. Taylor, for the erection of a house and two shops on the Kendray Housing Estate.

BELFAST.—The Corporation have accepted the tender of Messrs. H. & J. Martin for the erection of 99 houses at £35,975, and of eight houses at £2,872, on the Seaview site.

BIRMINGHAM.—The E.C. recommend the tender of Mr. J. Goodman, £8,200, for the conversion of the existing secondary school at King's Norton into a single school for boys.

BLACKBURN.—An estimate of £45,712 for 94 working-class houses at Roe Lee has been approved by the Corporation Finance Committee. The work has been divided between the following contractors: (1) Messrs. John Cronshaw & Sons, Ltd., Nab Lane; (2) Messrs. Woof Cronshaw, Ltd., Pump Street; and (3) Mr. Pius A. Baines, Preston.

BLACKPOOL.—The Building Plans Committee have approved plans for 130 new houses and a Parochial Hall, Park Road. The principal house plans were: Messrs. R. Fielding & Sons, six houses, Warley Road; Messrs. W. Townson & Sons, eight houses, Dutton Road and Wayman Road; Messrs. Abson Bros., 18 houses, Roselyn Avenue and Langfield Avenue; Mr. A. A. Holt, 15 houses, North Drive and Anchorsholme Lane East; Messrs. J. Gregson & Son, shops, bank and houses, St. Anne's Road and Waterloo Road; Mr. J. H. Armstrong, six houses, Berwick Road; Sir Lindsay Parkinson & Co., Ltd., eight houses, Park Drive; Messrs. Lancashire Construction Co., 18 houses, Tranmere Road and Marton Drive.

BOLTON. — The Dove Spinning Co., Ltd., Deane, are to considerably extend their mill premises. Plans by Messrs. Stott & Son, architects, 5 Cross Street, Manchester. The contractors are Messrs. W. Gornall & Sons, Ltd., Ellesmere Street. Steelwork is being supplied by Messrs. Robinson & Kershaw, Ltd., constructional engineers, Temple Iron Works, Manchester.

CITY OF LONDON.—The Schools Committee recommend the tender of Messrs. L. & W. Whitehead, Ltd., £4,053, for alterations at the top floors and decorations at the City of London Schools.

DUBLIN.—The tenders of Messrs. H. & J. Martin, for 269 houses at £117,979, and Messrs. G. & T. Crampton, for 266 houses at £113,050, in Drumcondra, are recommended.

HEMSWORTH.—A new palais de danse is to be erected. The contract has been placed with Messrs. W. Hanley & Sons, builders, 35 Barnsley Road. The architect is Mr. R. Goodworth, 5 Market Hill, Barnsley.

HYDE.—For extensions to the Hippodrome, the plans are by Messrs. Dew & Sons, architects, Hyde, Cheshire. The contract has been placed with Messrs. Fowden, Mottram & Smith, builders. Steelwork by Messrs. Robinson & Kershaw, Ltd., Manchester.

KIRKDALE. — The tender, £155,065, of Messrs. The Unit Construction Co., for the erection of blocks containing 260 dwellings in Melrose Road, has been recommended.

MANCHESTER. — The Parochial Church Council of St. Peter's Church, Barlow Road, Levenshulme, propose to extend the Sunday school. The plans are by Mr. F. Fenn, architect, 1 North Parade. Contractor, Mr. H. F. Freshney, Heaton Chapel.

SHEFFIELD.—Messrs. Moody & Redmiles, builders, Sheffield, are the contractors for a new working men's club at Woodseats. Plans were by Mr. Henry Webster, architect.

SOUTHPORT.—For extensions to the premises of Messrs. William Broadbent & Co., Ltd. The plans are by Messrs. Packer & Crampton, architects. The steelwork contract has been placed with Messrs. Redpath, Brown & Co., Ltd., Trafford Park.

WESTMINSTER. — The £300,000 building contract for the new headquarters of the Underground Railway group, over St. James' Park Station, has been placed with Messrs. The Foundation Co., Ltd., of Kingsway.

WIGAN.—Plans for a new cinema and two shops on the Main Road, Standish, have been prepared by Mr. Wm. Thornley, L.R.I.B.A., architect, Wigan. Mr. P. Moss, builder, Wigan Road, Standish, has secured the contract.

CURRENT MARKET PRICES (London)

CEMENT, LIME AND AGGREGATES.

Material.	Price.	Conditions.
Thames Ballast	9/-	Yard Cube delivered.
¾-in. ditto	10/3	Ditto
¾-in. Broken Brick	9/-	Ditto
¾in. ditto	10/6	Ditto
Pan Breeze	5/6	Ditto
Thames Sand	12/6	Ditto
Pit Sand	11/6	Ditto
Washed Sand	12/9	Ditto
Portland Cement	58/-	Per Ton.
Rapid Hardening ditto	68/-	Ditto
Granite chippings	29/-	Ditto
Grey Stone Lime	59/9	Ditto
Ground Blue Lias Lime	59/-	Ditto

BRICKS.

	Price	Conditions.
Flettons Bricks	54/3	Per 1,000 F.O.R. London
Slotted Flettons ditto	56/3	Ditto [Station
Bull Nosed Flettons ditto	69/3	Ditto
1st Hard Stock ditto	100/-	Delivered London Site.
2nd Hard Stock ditto	94/-	Ditto
Picked Stock facing ditto	120/-	Ditto
Blue wirecut bricks	145/-	Pe 1,000 F.O.R. London
Blue pressed ditto	185/-	Ditto [Station
Blue Pressed bull nosed ditto	195/-	Ditto
Red multi-coloured facings	140/-	Ditto
Red rubbers	244/-	Ditte
White Arisey bricks	110/-	Ditto
White glazed brickstretchers	460/-	Ditto
Ditto headers	450/-	Ditto
Ditto Bull nose or Quoins	590/-	Ditto
Ditto double stretchers	630/-	Ditto
Ditto double headers	570/-	Ditto
Ditto 1 Side and 2 Ends	650/-	Ditto
Add for Buff, Cream and bronze to the cost of similar white glazed bricks	40/-	Ditto
Add for other colours to the cost of similar white glazed bricks	110/-	Ditto
Stourbridge Firebricks	203/-	Ditto
Breese Fixing bricks	80/-	Ditto
Breese slab partitions 2in.	2/-	Per yard super delivered.
Ditto 3in.	2/10	Ditto

DRAINAGE GOODS.

	Prices.			Unit.	Conditions.
GLAZED—	4in.	6in.	9 n.		
Salt glazed sanitary pipes	10d.	1/3	2/3	per foot	In truck loads free on rail London —10%or+10% delivered on site. If tested pipes are required add 35% to the net prices.
Ditto bends	2/6	3/9	6/9	each	
Ditto sanitary junctions	3/4	5/-	9/-	each	
Gullies—	6in.	9in.	12in.		
Ordinary pattern	6/10½	11/3	20/-	each	
Add for Black Iron Grid	1/3	2/6	5/5	ditto	
do. for galvanized grid	2/1	4/4½	9/7	ditto	
do. for Horizontal Inlets	1/6	1/6	1/6	ditto	
do. for Vertical Inlets 4in.	2/3	2/3	2/3	ditto	
Interceptor	16/3	21/3	36/3	111/3	ditto
Ditto locking or screw stopper	3/4	5/-	10/-	—	ditto

IRON—	Prices. 4in.	6in.	Units.
Cast-iron coated drain pipe	6/-	8/4	per yard
Ditto bends	6/9	14/6	each
Ditto junction	9/3	19/-	each
Ditto gulley and grating	20/-	—	each
Add for Horizontal back inlet	3/6	—	each
Cast-iron coated interceptor with clearing arm, plate, bridge and screw	25/-	43/-	each

MANHOLE COVERS—	24×18 in.	24×24in.	30×24 in.	36×24 in.
Single Seal Manhole covers coated medium weight	14/-	20/-	27/-	34/-
Ditto but double seal ditto	21/6	28/-	31/6	45/-

ROOFING MATERIALS.

SLATES—	Unit.	Cost.	Unit.	Cost.
Bangor or Portmadoc slates F.O.R. London	24×14 in.	£37 7 11	18×9 in.	£16 9 2
	24×12 in.	32 18 4	16×12 in.	18 4 7
	22×12 in.	29 17 11	16×10 in.	15 12 6
	22×11 in.	27 14 2	16×9 in.	13 10 10
	20×12 in.	26 5 0	16×8 in.	12 3 9
	20×10 in.	22 10 0	14×12 in.	14 15 3
	18×12 in.	22 7 11	14×10 in.	12 3 9
	18×10 in.	18 12 11	14×8 in.	9 7 6

Westmoreland Random first green slates, F.O.R. London .. £16 6 0 .. Per ton

Old Delabole Slates—

Size	Grey	Green	
24×12 in.	£42 11 3	£45 1 0	Per 1,200 delivered
20×10 in.	31 4 3	33 0 6	Ditto
16×10 in.	20 18 0	22 4 9	Ditte
14×8 in.	12 1 0	12 16 2	Ditto
Green Randoms No. 2		8 3 9	Per ton delivered
Grey green ditto		7 3 9	Ditto
Green Peggies 12 in. to 8 in. long		6 3 9	Ditto

The above prices are subject to any impending increase in railway rates.

TILES—				
Plain Broseley hand-made, sand-faced tiles	£5 12 6			Per 1,000 F.O.R.
Hip and valley tiles	0 3 6			per doz. ditto
Red asbestos tiles	16 0 0			Per 1,000
Grey ditto	15 0 0			Ditto
Corrugated asbestos sheeting	0 2 11			Per yard super.
Corrugated iron sheeting	1 2 0			Per cwt.
Zinc sheeting	2 4 6			Ditto
Copper Sheeting	3 10 0			Ditto

BUILDING STONES.

Per foot cube, delivered at Mason's Yard, London—

Bath.	Portland.	Yorkshire.	Hopton Wood.	Ham Hill.	Weldon.
3/8	5/3	6/2	17/9	5/9	4/5

TIMBER.

Carcassing timber of good quality— Per standard delivered

4×11 in.	4×9 in.	4×7 in.	3×9 in.	3×7 in.	2×7 in.	2×4 in.
£31	£29	£26	£25	£22	£22	£21

Joinery of good and well seasoned quality—

4×11 in.	4×9 in.	4×7 in.	3×9 in.	3×7 n.	2×7 in.	2×4 in.
£55	£50	£49	£48	£47	£46	£45

BOARDINGS—per square	½in.	¾in.	1in.	1¼in.	1½in.
Plain edge flooring delivered	—	—	25/-	31/-	34/-
Tongued and grooved ditto ditto	—	—	25/-	31/-	34/-
Matchboarding ditto	16/6	19/-	24/-	—	—

SUNDRIES—	
Cut clasp nails	19/6 cwt.
Scotch glue	60/- cwt.

HARDWOODS—		
Oak, Austrian	17/-	Per foot cube in dry boards 1in. thick and upwards.
Ditto Japanese	15/-	
Ditto American	14/-	
Ditto English	12/-	
Mahogany, Honduras	17/-	
Ditto Cuban	26/-	
Teak Eng.	10/-	
Ditto Moulmein	14/-	

PLYWOOD—	Thicknesses			⅛in.			¼in.			⅜in.			½in.		
	Qualities			AA	A	B	AA	A	B	AA	A	B	AA	A	B
				d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch				4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder				3½	3	2	5	4	3	6½	5½	4½	8	7	6
Oregon Pine				5	4	–	5½	5	–	6½	6	–	–	–	–
Gaboon Mahogany				4	3	3	6½	5½	4	9½	7½	– 1/0½	10	–	–
Figured Oak (1 side)				8½	7	– 10	8	–	11½	–	–	1/6	–	–	
Plain Oak (1 side)				6½	6	– 7½	7	–	9½	–	–	1/–	–	–	

STEELWORK.

Rolled Steel joists	12/6
Compound girders	15/6
Stanchions	17/6
Angles and Tees	14/6
Bars	15/-
Mild Steel Rods	13/6
Bolts and Nuts	36/-

Per Cwt. delivered to job.

GAS WATER AND STEAM TUBES (from Standard List).

Internal diameter	¼in.	⅜in.	½in.	¾in.	1in.	1¼in.	1½in.	2in.
Tubes (per foot)	4d.	5½d.	6½d.	9½d.	1/1	1/4½	1/10	
Elbows square (each)	10d.	1/1	1/3	1/6	2/2	2/7	4/3	
Elbows round (each)	11d.	1/2	1/5	1/8	2/4	2/10	4/8	
Tees each)	1/-	1/3	1/7	1/10	2/6	3/1	5/1	
Crosses (each)	2/2	2/9	3/3	4/1	5/6	6/7	10/6	
Sockets diminished (each)	4d.	6d.	7d.	9d.	1/-	1/4	2/-	

Discounts off above—

	Tubes	Fittings	Galvanized Tubes.	Galvanized Fittings.
Gas	—45%	—42½%	—30%	—35%
Water	—40%	—37½%	—28½%	—30%
Steam	—35%	—32½%	—17½%	—25%

RAIN WATER GOODS (Painted or Coated).

	2in.	2½in.	3in.	3½in.	4in.	5in.
Round pipes with ears, per yard	1/6¾	1/9½	2/1½	2/6	2/10½	4/7½
2 ft., 3 ft., 4 ft., lengths per yard	1/8½	1/11½	2/3½	2/8	3/0½	4/10½
Shoes (each)	1/1	1/3½	1/5½	1/11½	2/2	3/11
Bends (each)	1/3½	1/5½	1/9½	2/2	2/7½	4/8½
Heads (each)	1/10½	2/1½	2/6	3/1	3/6½	6/1
Offsets, 4½in. projection (each)	1/8	2/-	2/3	2/7	3/3	5/8
Ditto 9 in. ditto. (each)	2/2	2/5	2/10	3/6	4/3	6/8
Single junction (each)	1/11	2/4	2/10	3/3	4/-	6/4
Cast-iron half-round gutters, per yard	—	—	1/0½	1/2	1/3	1/6½
Ditto 2 ft., 3 ft., and 4 ft., lengths per yard	—	—	1/2½	1/3½	1/4½	1/8½
Angles and nozzles each	—	—	10d.	11d.	1/0½	1/3
Stop ends do.	—	—	3d.	3d.	3d.	5d.
O.G. gutter per yard	—	—	1/5	1/5	1/6½	1/11½
Ditto 2 ft., 3 ft., and 4 ft., lengths per yard	—	—	1/6½	1/6½	1/8	2/1½
Angles and nozzles each	—	—	1/5	1/5	1/6	2/-
Stop ends do.	—	—	4d.	4d.	4d.	6d.

PLASTERING MATERIALS.

	Price	Unit
Wood sawn laths	2/9	Per bundle
Metal lathing	1/-	Per Yard
Sirapite, coarse	69/-	Per ton
Ditto finish	77/-	Ditto
Plaster, coarse, pink	60/-	Ditto
Ditto white	72/6	Ditto
Ditto finish	132/6	Ditto
Keene's cement, Pink	115/-	Per ton
Ditto White	120/-	Ditto
Plaster slabs	2/6	Per yard super
Chalk lime	59/9	Per ton
Hair	42/-	Per cwt.
6×6 in. white glazed tiles	from 8/6	Per yard super
White Portland cement	300/-	Per ton
Lath nails	31/-	Per cwt.

CURRENT MARKET PRICES (LONDON)—*Continued.*

PLUMBER'S GOODS.

		4 lbs. lead and upwards in sheets	Lead pipes in coils	Lead soil pipes
Lead delivered	.. ..	32/6	33/-	36/-
IRON SOIL AND WASTE—	Unit	2 in.	2½ in.	3 in.	3½ in.	4 in.
L.C.C. weight, coated with Dr. Angus Smith's solution	Per yard run	2/7	3/0½	3/2½	3/6	3/10½
2 ft., 3 ft., and 4 ft., lengths	Ditto	2/9	3/2½	3/4½	3/8	4/0½
Bends	each	1/9½	1/11½	2/1½	2/8½	3/0½
Swannecks, 4½ in. projection	Ditto	2/2	2/6	3/5	3/11½	4/6½
Ditto 9 in. ditto	Ditto	2/10½	3/2½	3/11½	4/6½	5/4½
Junctions	Ditto	2/9½	3/5	3/11½	4/6½	5/1½
Round access door, with three gunmetal screws	Ditto	5/8	5/8	5/8	6/-	6/-

GALVANIZED CISTERNS—	25 Galls.	50 Galls.	100 Galls.	150 Galls.	200 Galls.	250 Galls.
14 gauge	26/9	36/7	56/-	67/3	80/12	102/6
12 do.	30/-	43/6	62/6	76/-	97/-	115/-
¼ in. plate	33/6	47/-	70/6	90/-	107/-	123/6
Hot Water tanks—	20 Galls.	30 Galls.	40 Galls.	50 Galls.	60 Galls.	70 Galls.
¼ in. plate	40/-	47/6	55/6	62/-	71/-	80/-
Hot water cylinders, with manhole and ring—	25 Galls.	31 Galls.	40 Galls.	45 Galls.	52 Galls.	60 Galls.
¼ in. plate	57/6	61/-	68/6	74/-	80/-	86/6
	¼ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.
Screwed flanges, rivetted on extra over the usual number	1/9	2/-	2/3	2/9	3/6	5/-

PLUMBER'S BRASSWORK (first quality)—	Each ¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2 in.
Brass high pressure screw-down bibcocks	4/-	6/-	9/-	—	—	—
Ditto stop cocks	4/6	6/6	10/6	20/-	28/-	54/6
Brass ball valves	4/9	6/9	12/-	—	—	—
Plumbers unions	1/2	1/6	2/3	3/3	—	—
Boiler screws	8d.	11d.	1/7	3/-	—	—
	Each 1½ in.	1¾ in.	2 in.	3½ in.	4 in.	
Caps and screws	1/-	1/6	2/2	5/4	6/4	

PLUMBER'S SUNDRIES—	1½	1¾	2	3½	4
Lead P traps with cleansing eye (7 lb.)	2/5	3/-	4/2	8/6	11/-
Ditto 8 do. with do. (7 lb.)	2/9	3/8	5/4	9/6	12/6
Rubber cones	1/2	1/4	—	—	—
Brass sleeves	—	—	1/2	2/7	3/9
Ditto thimbles	—	—	1/-	2/3	3/6
Plumber's solder	..	..	..	1/3	Per lb.
Tinman's solder	..	..	..	1/6	Do.
Copper nails	..	..	..	2/-	Do.

GLASS.

Per foot super.	English sheet glass in crates, delivered 15 oz.	21 oz.	26 oz.	32 oz.	English sheet glass cut to sizes in quantities of 100 feet upwards 15 oz.	21 oz.	26 oz.	32 oz
Clear	3½d.	5d.	5½d.	8½d.	3½d.	5½d.	7d.	10½d
Ground	4½d.	6½d.	7½d.	10½d.	5½d.	7½d.	9½d.	1/1
Fluted	7½d.	10½d.	1/1½	1/5	8½d.	1/-	—	—
Enamelled	6d.	7½d.	9½d.	1/1	7d.	9d.	—	—

Figured rolled glass, including Muranese, Arctic, Flemish— Cut to sizes, per foot super.	White 7½d. ¼ in.	⅜ in.	½ in.	Tinted 10½d. ¼ in.	½ in.
Rolled plate glass	4½d.	6½d.	6½d.	9d.	
Rough cast glass	—	6½d.	6½d.	—	
Wired rolled	—	—	9½d.		
Wired cast	—	—	9½d.		

	Feet super 1	3	6	12	20	45	100
In plates not exceeding Ordinary substance Polished Plate Glass cut to sizes at per foot super.	1/3½	2/-2/11½		3/5	3/6	3/8	4/2½
Ditto silvered plates all as last				2/3½	3/3½	4/3	4 6½ 4/8½ — —
Embossing			Single Acid. 3/3		Two Acid. 4/6		French Shadde 6/9

PAINTS AND VARNISH.

	Price.	Unit.
Aluminium Paint	25/-	Gallon.
Dryers	36/-	Cwt.
Distemper washable	45/-	Cwt.
Enamel, best white	25/-	Gallon.
Gold leaf, English	2/9	Book.
Gold size	12/6	Gallon.
White Lead	53/-	Cwt.
Linseed oil, boiled	3/5	Gallon.
Ditto raw	3/2	Gallon.
Mixed Paint	71/-	Cwt.
Putty	16/-	Cwt.
Size	2/6	Firkin.
Tar	1/-	Gallon.
Terebine	9/-	Gallon.
Turpentine	5/6	Gallon.
Varnish, hard oak	15/-	Gallon.
Varnish, copal	17/-	Gallon.
Ditto flat	16/-	Gallon.
Whiting Gilders	3/-	Cwt.

Legal Notes—(*Continued*)

(4) If the defendant was negligent, so also were the Council in not keeping or checking their accounts.

As to the second point, in his Lordship's view there was no power to rectify by giving a final certificate, for the reason, among others, of delay in this matter which had been caused by defendant and because the builders were not entitled to any sum at all in respect of increased wages. As to point (3), in his Lordship's view "summary 4" was not a final certificate, nor was it intended to be one. Regarding the fourth point, his Lordship found that the Council were in no way negligent and there was no breach of any duty they owed to the defendant.

The important point in the case was this: Was the defendant a quasi-arbitrator and therefore not liable? In his Lordship's view an architect in a building contract might occupy two positions: (*a*) he might be merely agent of the building owner (*b*) he might be placed in the position of arbitrator or quasi-arbitrator. If he were merely acting as agent for the building owner, he might be liable for negligence. If he were acting as arbitrator or quasi-arbitrator, he had a duty to exercise an impartial judgment and would not be liable for mere negligence; he would only be liable if he were shown to be fraudulent, and in the present case there was no suggestion that the defendant had in any way been fraudulent. Although it was probably right to say that in giving a final certificate the architect acted in a quasi-judicial capacity, unless there was some express clause in the contract to contradict it, it would, his Lordship thought, be assented that in giving an interim certificate he was so acting. His Lordship should have thought the inference was just the other way, namely, that in giving an interim certificate he was merely acting as agent for the building owner unless there was anything in the contract to contradict that.

After all, the contract must be looked at to see whether or no in giving an interim certificate the architect was acting as arbitrator or quasi-arbitrator. Having regard to the course of business under this contract and the clause dealing with the method of payment, his Lordship came to the conclusion that in giving the interim certificates the architect was not acting as arbitrator or quasi-arbitrator. The interim certificates were made out with a view to regulating the advances and showing how much should be paid on account. Mr. Ward was deciding no dispute and he was settling no final balance. He was merely acting as agent for the Council and beyond all question he was negligent and liable to pay the amount claimed.

Judgment was therefore given for the plaintiffs for £221 3s. and costs, a stay of execution being granted.

The official figures of the Ministry of Health for non-parlour houses built under contracts, let by local authorities during May, reveal an average fall of £25 per house compared with the official figures for the preceding months.

* * *

The contract for the sale of the Grand Hotel, London, has been signed, and the building will be closed as an hotel in a few weeks' time, and converted for offices and other purposes.

* * *

Prince Arthur of Connaught laid the foundation-stone recently of the Institute of Bio-Chemistry, a new department of the Middlesex Hospital School, London, the cost of which is being defrayed by Mr. S. A. Courtauld. Mr. Alner W. Hall is the architect.

* * *

The Corporation of Nottingham has decided to remove the market from the historic Market Place of the city. It is intended, we understand, to lay out the Market Place as a civic centre.

CURRENT MEASURED RATES.

These Prices apply to a New Building, costing from £1,000 upwards, in the London Area They hold 10 per cent. in excess of the actual prime cost, without Establishment Charges.

PRELIMINARIES.

Allow for General Foreman, according to nature of contract, for duration of contract	From £5 10s. per week.
Allow for Workmen's Compensation and Public Health Acts over whole amount of general building contract	1%
Allow for insurance against fire, ditto	½%
Allow for water, ditto	¼%
Allow for District Surveyor's Fees	
For a new building 400 square feet in area and two storeys high	45/-
Add for every additional 100 feet in area	3/9
Add for every additional storey in height	7/6
Add for inspection of fire exits, &c., under Amendment Act, 1905—the greater of these alternatives	½th of the above fees or £1 1s.
Allow for supervision of plastering	7/6
Allow for filling in trenches within three feet of a building	7/6
Allow for licences in respect of hoardings, &c., within the City of London, as Regulations	*say* £10
Ditto, for licences from Borough Councils	*say* £1
Allow for mess and material sheds, offices, &c.	from £50

	Per Foot Run
Hoarding complete	4/-
Planked gangway with handrail complete	4/-
Proper gantry complete	40/-
Sleeper roadways	8/-

	Per Foot Cube
Needling, strutting or shoring, including all labours and use and waste in erection and removal	6/-

DEMOLITION	Per Ft. Super reduced: In small quantities	In considerable quantities
Pull down brickwork	6d.	2d.
Add, if in *very* small quantities not exceeding 21 ft.	3d.	
Add for filling baskets with *debris* and running same out to carts	1½d.	1½d.
Add if *debris* has to be raised or lowered to ground level	2d.	Usually dropped
Add for cartage when same costs 4/6 per 1½ yard load	2½d.	2½d.

Clean and stack old bricks	20/- per thousand
Hack off old plaster	1/- per sq. yd.

EXCAVATOR, CONCRETOR AND DRAINS.

	Per Yard Cube: 5 ft. deep	5 ft. to 10 ft. deep	Add if in trench
Excavate in common soil, wheel, fill carts and cart away	9/6	11/-	9d.
Planking and strutting	4d. per foot super.		
Planking, strutting and shoring	1/- „	„	

	1 to 6	1. 2. 4.	Hoisting
Portland cement and ballast Concrete in foundations	29/6	36/6	2/6
Add if in ground floors	2/-	2/10	2/6
Add if in beams or lintels	3/-	4/-	2/6

	Earthenware: 4 in.	6 in.	Iron: 4 in.	6 in.
Tested stoneware drains jointed in cement or standard iron drains jointed in lead, per foot run	1/11	2/10	3/-	4/6
Extra only for bends, each	2/6	3/6	11/6	20/-
Ditto, for junctions, each	3/-	4/3	19/-	35/-
Gullies, including concrete surround and iron grating, each	16/-	18/6	35/-	50/-

BRICKWORK (Exclusive of Pointing).

	Per Rod Reduced: Flettons	Stocks	Blues
Built in 1 to 3 lime mortar	620/-	830/-	1060/-
„ „ cement mortar	640/-	850/-	1080/-

Damp course	Per Foot Super: Horizontal	Vertical
Two courses of slates in cement	10d.	1/3
½-in. asphalte	9d.	1/-

Facings	Per Foot Super: Flemish bond	English bond
Allow for every 5s. additional cost of the facing bricks over the common brick basis	½d.	½d. plus 10%

Pointing (exclusive of scaffolding)	Per Ft. Super
Weather joint in cement	2½d.
Flat joint in cement (struck) and lime whiting	1½d.

ARCHES.

Extra over common brickwork	Per Ft. Super
In half-brick rings of bricks of same class as common brickwork	1/-
Add if of superior bricks for every 7/6 per thousand additional cost	1d.
In rubbed and gauged arches with fine joints	6/-

Quoins, angles, copings and sills of superior bricks	Per Ft. Run
Allow for every 5s. per thousand additional cost of bricks over the common basis price	½d. plus 10%
Double-tile creasing and cement fillets and pointing to 9-in. wall	1/2

PAVIOR.

	Per Yard Super: 1 in.	1½ in.	1½ in.	2 in.	3 in.
Cement and sand	3/-	3/5	3/10	4/8	—
Granolithic	4/2	4/9	5/3	6/4	—
Asphalte	7/-	—	—	—	—
Tarmac	—	—	—	4/3	6/6

MASON.

	Per Foot Cube: Templates	Thresholds	Sills
York stone and all labours and mortar in hoisting and fixing	12/6	16/6	22/6
	Stairs		
Artificial stone	9/-	3/-	11/-
			To Elevation generally
Portland stone and all labours of usual character			19/6
Bath stone ditto			10/6

SLATER AND TILER.

ROOFING.	Per Square: Countess	Ladies
Welsh slating laid to a 2½-in. lap with two composition nails to each slate	30/-	72/-
Add for every ½-in. additional lap	2/3	3/7
Add for copper nails	2/3	3/4

Best selected green Westmorland slates laid to a 3-in. lap, with copper nails	135/-
Asbestos slates laid to a 3-in. lap, with compo. nails	36/-
Asbestos corrugated roofing with galv. screws and limpet washers	55/-
Plain red roof tiling 4-in. gauge, each tile in every fourth course nailed with two galv. iron nails	70/-
Add for vertical work	2/6
Add for circular on face in elevation	25%
Add for circular on plan, according to radius	40%
Add for circular on face in elevation and also on plan according to radius	66⅔%

Old Delabole slates fixed complete—

Size	Medium Grey	Medium Green	
24 × 12 in.	90/-	93/-	Per square
20 × 10 in.	95/-	100/-	Ditto
16 × 10 in.	86/-	91/-	Ditto
14 × 8 in.	80/-	86/-	Ditto
Green Randoms No. 2	115/-		Ditto
Grey-Green Randoms	93/6		Ditto
Green Peggies 12 in. to 8 in. long	87/6		Ditto

	Per Foot Run
Cuttings—Eaves	Equal 1 foot super.
Edges and abutments	Equal ½ foot super.
Ridge tiling	1/10
Fixing soakers	9d. per dozen.

CARPENTER.

Flat boarded centering, per yard super	5/-
Centering to beams, per yard super	7/6
Centres to arches, per foot super	2/-

	Plates	Floor	Roofs	Trusses
Fir framed in carpenter's work per ft. cube	4/-	6/-	5/10	8/9

	At per square	¾ in.	1 in.	1¼ in.
Deal close boarding		31/-	38/-	48/-
Battening for slates		10/-	11/-	12/-
Roofing felt lapped and laid		12/- to 28/-		

Gutter boards and bearers per foot super	1/-

JOINER.

Per square	¾ in.	1 in.	1¼ in.
Deal plain-edged flooring	—	32/-	40/-	50/-
Deal tongued and grooved flooring	—	37/-	45/-	56/-
Deal matching	36/-	43/-	46/6	58/-

	1 in.	2 in.
Sashes, per foot super	1¼ in.	2 in.
Deal moulded sashes, divided in squares	1/10	2/-

Windows, per foot super	Very small	Small	Normal	Large
Deal cased frames, 1-in. linings, 1¼-in. pulley styles, 2-in. sashes in squares, oak sill, double hung with pulleys, lines and weights	11/-	5/-	2/6	2/-

	1¼ in.: 2 Panel	4 Panel	2 in.: 4 Panel	6 Panel
Doors, per foot super				
Square frame both sides doors	2/-	2/3	2/5	2/8
Add for each side moulded	2½d.	3½d.	4d.	4½d.
Add for each side bead butt	4d.	4d.	4½d.	5d.

Doors of hardwood such as oak or mahogany, will cost three times as much exclusive of polishing.

Staircase.	
1¼-in. Deal tread, 1-in. riser, fixed complete per foot super	2/6
2-in. Deal strings, per foot super	2/-
Housing steps to strings each	9d.

CURRENT MEASURED RATES—*Continued.*

JOINER—*Continued.*

	Per Foot Cube: Very Small	Small	Large
Mahogany French-polished handrail ..	87/-	69/-	53/-
Add if ramped	120/-	100/-	80/-
Add if wreathed	240/-	200/-	160/-

Deal balusters, housed, each end, each		1¼ in. 1/2	1½ in. 1/5
Deal newels, per foot run	3 by 3 1/2	3½ by 3½ 1/6	4 by 4 1/9
Deal Super, Sundries	1 in.	1¼ in.	1½ in
Deal shelves or divisions	1/-	1/2	1/4
Deal shelves cross-tongued	1/2	1/4	1/6

Shelves, in oak or mahogany—3 times value of deal, exclusive of polishing.

Deal skirtings, moulded and backings and grounds	1/4	1/6	1/8
Deal jamb linings, rebated and framed and backings	1/5	1/7	1/9

Skirtings and linings, in oak or mahogany—2½ times value of deal, exclusive of polishing.

Fillets, rails and frames. Per foot run	Section Area: 1 in.	2 in.	4 in.	6 in.	9 in.	12 in.	14 in.	16 in.
Deal, wrot and fixed ..	2d.	3d.	4½d.	5½d.	8d.	10½d.	11½d.	1/1½
Deal, wrot, fixed and moulded	2½d.	3½d.	5d.	6½d.	9d.	11½d.	1/0½	1/2½
Deal, wrot, moulded, rebated, framed and fixed ..		6½d.	8d.	10d.	1/0½	1/1½	1/3½	

Fillets, mouldings and frames in oak or mahogany will cost 3 times their value in deal, exclusive of polishing

CIRCULAR WORK: Add to the price of similar straight work one-third of every eighth of an inch rise on a foot chord line.

	Groove or Bead	Staff Bead or Nosing	Moulding per 1 in. Girth	Rounded Heel or Hollow or Plugging
	Per Foot Run			
Labour only to	½d.	1d.	½d.	2d.

Labour and Screws only Fixing: Casement Fasteners	Grip Handles	Spring Catches
1/-	1/-	1/-

Sash Fasteners	Locks and Furniture: Rim	Mortice	Cupboard	Casement Stays	Casement Fasteners	Grip Handles	Spring Catches
1/-	2/-	4/-	1/2	1/-	1/-	1/-	1/-

Barrel Bolts	Flush Bolts
1/-	2/-

SMITH AND FOUNDER.

	Per Cwt.: Up to 1st Floor	Above 1st Floor
Rolled steel joists	15/6	17/6
Compound girders	18/6	20/6
Stanchions	20/6	22/6
Cast-iron columns	16/6	18/6

	Light	Medium	Heavy
Steel roof trusses	22/6	30/-	27/-
Chimney bars	36/-	34/-	32/-
Tie rods and ring bolts	47/6	45/-	42/6
Bolts and nuts	45/-	40/-	35/-
Handrail and balusters	55/-	50/-	48/-
Steel reinforcing bars bent and fixed	22/-	21/6	21/-

Rain water Goods	Per Foot Run: 2 in.	3 in.	4 in.
Pipes fixed with pipe nails	11d.	1/2	1/7
Bends or shoes, each	1/3	1/7	2/2
Junctions, each	2/-	2/7	3/6
	4 in.	5 in.	6 in.
Gutters fixed with brackets	1/3	1/7	1/11
Outlets and angles	2/1	2/9	3/5
Stop ends	10d.	1/-	1/1

PLUMBER.

	Per Cwt.: Soakers	Flats	Flashings and Gutter
Milled lead and laying	44/6	53/6	56/6

Per Foot Run: Copper Nailing 4d.	Soldered Angles 2/-	Welted Joint 4d.	Each: Bossed Ends to Rolls 6d.	Cesspools 5/6	Soldered Dots 2/-

Per Foot Run	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	3 in.	4 in.
Lead service	1/4	1/9	2/3	2/10	3/2	4/-	—	—
Lead waste	1/-	1/4	1/8	1/11	2/2	2/9	—	—
Lead soil	—	—	—	—	—	—	5/-	5/6

Each								
Egg joints	2/9	3/-	3/7	4/3	4/10	5/9	8/2	9/-
Branch joints	3/-	3/3	3/11	4/7	5/2	6/2	8/8	9/6
Indiarubber joints ..	—	—	—	3/-	3/-	—	—	—
Stop ends	9d.	1/-	1/3	1/9	2/-	2/6	—	—
Bends	—	—	—	—	2/-	2/6	5/6	6/3
Beaded ends	—	—	—	10d.	10d.	1/-	—	—
Single tacks	—	—	11d.	1/-	1/1	1/5	2/-	2/3
Double tacks	—	—	1/2	1/3	1/4	1/5	2/7	3/1
Brass sleeves	—	—	—	—	7/3	8/6	13/2	14/6
Lead traps	—	—	—	8/9	9/10	12/6	22/6	26/1
Boiler screw	3/2	3/9	4/10	6/7	8/3	—	—	—
Bib cocks	7/-	9/6	13/6	—	—	—	—	—
Stop cocks	9/9	13/3	17/3	30/-	44/-	100/-	—	—
Ball cocks	8/-	10/-	16/6	30/-	42/-	98/6	—	—
Wire balloons ..	—	—	—	—	—	9d.	—	1/3

PLUMBER—*Continued.*

	Per Foot Run: 2 in.	4 in.
Iron (L.C.C.) pipes		
Soil, vent, waste and anti-syphon pipes, coated lead caulked joints	2/-	3/-
Extra for bends .. .. each	6/3	9/3
Extra for junctions .. .. each	7/6	11/6

GAS AND STEAM PIPES.

	Per Foot Run: Gas ½ in.	¾ in.	Steam Tubing ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Tubes and all fittings fixed with clips complete ..	1/1	1/1½	1/4	1/7	1/10	2/2	2/7	3/5

PLASTERER.

On Walls and Ceilings	Per Yard Super	Narrow Widths per Foot Super	Per Foot Run: Rounded Arris	Angle	Quirk	Flush or Staff Bead
Render, float and set in lime and hair	3/1	0/6	0/2	0/3	0/1½	0/3
Do. do. Sirapite ..	3/4	0/6½	0/2	0/3	0/1½	0/3
Do. do. Portland ..	4/-	0/8	0/2½	0/3½	0/2	0/3
Do do. Keene's ..	4/6	0/8½	0/2½	0/3½	0/2	0/3
Sawn lathing	1/5	0/3	—	—	—	—
Metal lathing	1/10	0/3½	—	—	—	—
Screeding in Portland	2/1	0/4½	—	—	—	—

	Per Foot Run	Per 1 in. Girth	Mitres	Stop Ends
Moulding in plaster ..		0/2	Equal to Value of 1 foot of moulding	Equal to ⅓rd of a foot of moulding
Do. do. Portland ..		0/3		
Do. do. fibrous ..		0/3		

Partitions	Per Yard Super: 2 in.	2½ in.	3 in.
Concrete slab partition fixed ready for plastering ..	5/-	5/6	6/-

GLAZING.

	Per Foot Super: Up to 10 ft.	From 25 to 50 ft.	From 50 to 100 ft.
Ordinary plate glass glazed	4/4	4/9	5/1

Sheet Glass, glazed complete, per foot super. Sheet Glass: 21oz.	15oz.	Figured Rolled	¼ in. Rolled	Cast Glass: ⅜ in.	½ in.	¾ in. Wired Cast Glass	Metal bar Patent Glazing
0/8½	0/7½	0/11½	0/9	0/10	0/10½	1/1½	2/-

PAINTER AND DECORATOR.

Washable Distemper	Per Yard Super: Wash and Stop	*Ones* Distemper	*Twices* Distemper	Stipple
In common colours	0/3½	0/5	0/9	0/2
In carmine or ivy green or similar	0/3½	0/5½	0/10	0/2
In scarlet, ivy green, or similar ..	0/3½	0/7	1/1	0/2

Add per Yard Super for the following: If on Moulded Work	If on Enriched Work	If in Party Colours on: Small Panels	Medium Panels	Large Panels	If on Narrow Widths
100%	300%	0/3	0/2	0/1	0/3

PAINTING.

	Knot, Stop and Prime	Paint Coats: 1	2	3	4	Stain	Size	Varnish	Enam.
Plain painting on surface in common colours, per yard super	0/3	0/3½	1/5	2/1	2/3	0/6	0/2	0/9	1/-
Do. on frames each ..	0/3	0/3	1/4	2/-	2/6	0/3	0/3	0/10	1/1
Do., on large do., each	0/10	0/10	1/3	2/6	3/2	0/10	0/4	1/1	1/5
Do., on squares, per doz.	0/3	1/-	2/-	2/3	3/4	1/-	0/4	1/3	1/3
Do., on large, do., do.	1/-	1/6	3/-	4/-	5/-	1/6	0/6	1/10	2/6
On small pipes or narrow bands, per foot run	0/0½	0/0½	0/1	0/1½	0/1½	0/0½	0/0½	0/0½	0/0½
On large pipes or do. do.	0/1	0/1	0/2	0/3	0/3½	0/0½	0/0½	0/1½	0/1½

Add to the above prices for the following per yard super:—

On Moulded Work 20 per cent. On Enriched Work 150 per cent. In Party Colours 2d. Stippled 6d.

	Per Foot Super: Wax	French
Polishing	6d.	1/2

PAPERHANGER.

Hanging only	Per Piece: Lining	Pattern
On walls	1/5	2/2
On stairs	1/10	2/9
On ceilings	1/7	2/5