

# THE ARCHITECTS' JOURNAL & *Architectural Engineer*

*With which is incorporated "The Builders' Journal."*



FROM AN ARCHITECT'S NOTEBOOK.

"Brickwork I found thee, and marble I left thee,"  
their emperor vaunted;  
"Marble I thought thee, and brickwork I find thee!"  
the tourist may answer.

CLOUGH.

9 Queen Anne's Gate. Westminster.



## Orvieto

*(From a Water-Colour Drawing by Kenneth Hobson.)*

THE  
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## Waterloo Bridge—The Next Step

THE London County Council, on December 15, decided by 82 votes to 32 that instructions should be given to the Improvements Committee "to take steps forthwith for the rebuilding of Waterloo Bridge with not more than five arches over the river, and of a width sufficient to take six lines of vehicular traffic." What efforts have already been made to save Waterloo Bridge, and what can still be done to save it? In order to answer these questions, let us first give a brief review of the controversy from the time when THE ARCHITECTS' JOURNAL, in its issue of October 16, 1923, first called public attention to the alarming settlements which had taken place in several of the piers of the bridge. Soon after this the Improvements Committee instructed the Council's chief engineer, Mr. G. W. Humphreys, to report as to the subsidence of the bridge and the need for rebuilding. Two other engineers, Mr. Basil Mott and Sir Maurice Fitzmaurice, were employed as consultants. The result of their deliberations, embodied in a report published in July, 1924, was to the effect that the type, weight, and conditions of the bridge, and the restricted waterways, rendered inadvisable any attempt to underpin the piers, and that the cheapest way to reconstruct the foundations would be to take the bridge down and to re-erect it. It was further claimed that the task, although a formidable one, would be made less formidable if a widening were decided upon, because the foundations of the widened portion on the up-stream side could be put in first, and the greater part of the superstructure of the old bridge placed upon the new piers. The new erection, except for the increased width, was to be a veritable reproduction of the old. It is important to notice that in the first place the widening of the bridge was suggested, not for reasons of traffic, but for a greater convenience of construction. Meanwhile, before the publication of the report, rumours of the Council's intentions were bruited abroad, and protests were raised, notably in a circular letter to "The Times" of April 1, 1924, against the suggestion that it was possible to preserve the elegance of Waterloo Bridge while doubling its width. The present proportion of width of bridge to width and height of arch was claimed to be an essential factor in the beauty of Rennie's design.

From the engineering side the policy of the Council was attacked by the Society for the Protection of Ancient Buildings, which submitted detailed proposals by Mr. Dalrymple-Hay for the underpinning of the bridge. These, however, were rejected by the Council as impracticable. Yet the Special Committee on Thames Bridges, realizing the gravity of the step it was recommending, included in its report the following observations: "In ordinary circumstances we should have had no hesitation in recommending the Council to act upon its chief engineer's advice forthwith. But the circumstances are not ordinary. Waterloo

Bridge is regarded by those well qualified to form an opinion as a monument of national importance, and indeed as 'the finest work of its kind that exists,'" and proceeded to suggest that the London County Council should seek advice from the Council of the Institution of Civil Engineers. Only an acute psychologist could estimate how far this particular recommendation arose from a desire to obtain an impartial judgment on a technical matter, how far it was the expression of pure guile, or how far it was due to a charming simplicity of mind not often to be found in public officials. A very slight acquaintance with professional etiquette would have sufficed to satisfy the Bridges Committee that the Council of the Institution of Civil Engineers was not in a position to gainsay the expressed opinions of three prominent members of the engineering profession, one of whom had only recently held office as its president. The Council, as was to be expected, evaded the question as far as possible, saying that it was "not within its province to give a technical opinion on such a matter," but was obliged by its own most sacred conventions to add that "the London County Council would be well advised to act on the considered individual opinions of its consultants." Armed with this certificate of approval for its policy, the London County Council promptly declared for the complete demolition of Waterloo Bridge, and it was furthermore suggested that the new structure "should carry at least a double line of tramways from the south side to the head of the Strand." Thus, when the engineers had proved the impossibility of preserving Waterloo Bridge, the tramway service was to benefit by the resultant situation.

It would be unjust to the London County Council to minimize the extreme seriousness of the financial problem arising out of the failure of its tramway service to be remunerative. The total debt incurred through expenditure on tramways in March, 1924, stood at £16,225,814, only about half of which had been repaid, while the revenue estimates for the year 1924-25 showed a deficiency of £316,276. Can anybody be surprised, therefore, if a really conscientious member of the London County Council Finance Committee would be prepared to support even the most drastic architectural measures if these would improve the appearance of such a balance sheet? And it is significant that the members of the Finance Committee have been the most active in working for the demolition of Waterloo Bridge.

Those who wish to preserve Rennie's masterpiece have proved themselves to be just as much concerned to find a solution of London's traffic problem as are any of the county councillors. As early as January of last year an important deputation of professional societies, including the Royal Institute of British Architects, the Town Planning Institute, the London Society, the Architecture Club,

and the Society for the Protection of Ancient Buildings, put before the Bridges Committee well-considered proposals, the adoption of which, while obviating the necessity of widening Waterloo Bridge, would have substantially relieved traffic congestion. And at a later date these same societies showed their further appreciation of the practical aspects of the problem by collecting evidence that the underpinning of Waterloo Bridge was an operation which the most accomplished modern engineers are well able to perform.

The London County Council have little confidence in the ability of their own professional advisers to refute this latter contention, or else they would have accepted the resolution recently put forward by the chairman of their own Bridges Committee: "That the First Commissioner of H.M. Works be asked to set up an independent technical inquiry to determine whether the Council could with safety undertake the underpinning of Waterloo Bridge so as to preserve it in perpetuity in a condition fit to take the traffic which may be expected to make use of it."

Having rejected this opportunity of receiving Government advice, it now appears possible that the London County Council may find that its activities will be subject to Government intervention. Legal opinion was given in 1871 to the effect that part of the land adjacent to Somerset House vests in the hands of the Treasury. Thus, before utilizing the Embankment facing Somerset House for bridge-building purposes, the London County Council would need to obtain the consent of the department concerned in trust for the Crown. If this consent be refused a respite could be obtained, while the Government, at its leisure, could set up a Commission to inquire into the whole problem of the London bridges. Meanwhile, it is for architects and the public by every means in their power to encourage the Government to take such steps as will ensure the preservation of the existing structure of Waterloo Bridge. And as this monument can truly claim to be not merely a metropolitan, but a national and even an Imperial possession, the London County Council should not be asked to bear the whole cost of its maintenance, but should receive for this purpose an annual subvention from the public purse.

[We are glad to adopt the suggestion of a correspondent to place on record the names of the councillors who voted against the resolution to destroy the bridge. They will be found on a later page.]

### The Death Sentence

Whilst evidence was being given against the bridge, who was there with any regard for the feelings of the prisoner at the bar, whose old body lay across the river just outside the Court? It was high tide when the case for the prosecution opened, but on the turn the river ran out rapidly, during the whole of the three hours' debate. A cold grey mist hid everything so completely that not even from Hungerford Bridge could Waterloo be seen. The old bridge might almost have gone already, for any indication she gave of her presence there. One thought how well it would be that, if indeed she must disappear, she could go mysteriously and silently, without suffering the outrage of erected scaffold and executioner. For it is not only the loss which would be so bitter; every day for many weeks those beautiful arches would be destroyed and broken before our eyes.

### Sir Reginald's Working Day

The "Evening News" has hit upon yet another ingenious means to attract a batch of cheap and interesting copy. Viscount Cave having said that, being nearly seventy years old, he now finds it expedient to confine himself to ten or twelve hours' work a day, our enterprising contemporary has seized on the occasion to invite the views of men distinguished in their various vocations. Among the score or so who complied with the request, the name of Sir Reginald Blomfield has of course a special attraction

for architects, and we take leave to reproduce his brief reply to our contemporary's question: "In my view seven to eight hours a day of hard concentrated brainwork is enough for a man over sixty, apart from meditation in trains, on tops of buses, and anywhere else. I don't work after dinner, and want at least nine hours' sleep, and as much more as I can get." Sir Reginald comes from a race of "hard concentrated" brainworkers. His grandsire, the Right Reverend Charles James Blomfield, was famous for the hard work he put in at Cambridge, both as student and Fellow; nor did he spare himself as rector of St. Botolph's, Bishopsgate; while when he was archdeacon of Chichester, next Bishop of Chester, and finally Bishop of London, his energy was phenomenal. It is on the records that "under his episcopacy more churches were built in London than under any bishop since the Reformation"; so scholarship and a bent for architecture and building run in the family. Sir A. W. Blomfield, who, like Sir Reginald, achieved eminence in architecture, was the bishop's fourth son.

### Roadside Trees

Several newspaper letters advocate roadside tree and shrub planting. They nearly all come from optimists who favour the idea. Some of their suggestions are a little fantastic. One of the letters is courageously headed "Road Orchards," as if the human boy could resist so alluring a temptation to help himself to fruit and nuts. It is a lady who, possibly in ignorance of boyish leanings to depravity in the matter of ungathered greengrocery, suggests the wholesale planting by the roadside of walnut, chestnut, apple, pear, cherry, plum, damson, and other luscious dainties. Most charming! England would forthwith become a paradise; but has the lady forgotten the cynical proverb which declares that "stolen fruits are sweet"? Yet who does not envy the Japanese the poetic inspiration of their cherry-blossoms?

### The A.A. Pantomime: "The Touchstone at the R.I.B.A."

Pantomime with the A.A. is only six years old. Wherefore, coming from the West End theatres with grave faces, at the A.A. annual show even the most blasés critics had to laugh. For here they had passed from the weary, worn-out humour of extreme old age to the ingenuous humour of youth. All amateurs have the advantage of this freshness over the professional stage, but are mostly found lacking in art. Perhaps it is by virtue of their calling that the men and girls of the A.A. excel. With the nice sense of proportion and fitness and the right use of decoration that belong to good architects, perhaps architects are, by their training, better fitted than most for the stage, and it has always seemed to us a fact remarkable that, while the other professions have contributed their quota, we have never read that any actor was "primarily intended for architecture." The majority of the players at the R.I.B.A. last week, though professedly architects, might quite possibly have been "primarily intended for the stage." There was a finish about their performance, and an ease in the speaking of their lines and the taking of their parts, which led one's mind smoothly away from the troubles and trials of our every-day life. The greatest achievement, however, was the designing of the costumes and scenes. Talent there was in the acting, but there was genius in the handling of colour and form.

### AN ARCHITECTURAL MAGAZINE ROOM.

["The Architects' Journal" and "The Architectural Review" have always made it their business to provide their readers with examples of the best contemporary architecture of foreign countries. It is impossible, however, to do more than make a small selection among the most distinguished; and the proprietors of these papers will be delighted if readers who are interested will spend a few minutes now and then at the magazine room at 9 Queen Anne's Gate. The most important Continental and American periodicals may there be read in quiet and restful surroundings.]



# Practical Architectural Modelling—VI

By EDWARD W. HOBBS

**T**HIS article, which concludes the series, is chiefly devoted to examples of commercial work, and to the modelling of gardens. The foregoing articles in the series have been mainly devoted to an explanation of some of the practical methods which should be adopted by the practising architect in the construction of architectural models. One point especially has been stressed, and that is the necessity of accuracy and scale dimensions, and this point cannot be too greatly emphasized.

There are, however, other aspects of practical architectural modelling where extreme accuracy is not so important as characterization. An example of this class was a model of the Old Curiosity Shop, built by the author. An attempt was made to catch something of the old feeling and atmosphere of this famous little building, so intimately connected with Dickens's story. The model was constructed throughout of thin card, on the built-up system. The windows were not glazed, but the separate bars were formed by cutting out a sheet of card; and behind it was another card, representing the back part of the window, and this was decorated with souvenirs, miniature pictures, and the like.

Most of the effects were obtained by brushwork and colour, in the manner that has been already described in preceding articles.

Another example of characterization as against extreme accuracy is given in Fig. 1. This shows a stage in the construction of a model of a large building intended to exhibit a scheme of housing in a working-class area. The ground floor is occupied by shops, the first floor by offices, and the upper stories by residential flats and workmen's dwellings. All the domestic accommodation is reached by independent staircases having access from the courtyard within the building itself, access to this courtyard being provided by an archway entrance at the front and also at



FIGURE 2. MODELLING A TREE.

the back part of the building. The figure shows the front of the building being set in its place on the baseboard, in a combination of built-up and folded work; the finishing touch being imparted with a brush and colour. At that stage the roof had not been completed, but was subsequently added in the ordinary way. A simple model of this character is quickly made, and serves very well to convey an impression of a particular style of building which may possibly be developed as a contribution towards the solution of the housing problem in industrial and restricted areas.

One of the most difficult aspects of architectural modelling is the representation of trees, shrubs, and similar country surroundings. Trees are particularly difficult to model if they are to look at all like the real thing. An early stage in the construction of a model tree is shown in Fig. 2, which illustrates one method by which the desired result may be obtained. The first step is to select a twig conforming as nearly as possible to the natural characteristics of the trunk and main branches of the particular tree to be modelled. The twig is then trimmed to the desired shape and size, and forms a skeleton. Suitable twigs for the purpose are shown on the bare site in Fig. 4.

Having prepared the twig, the next step is to obtain some soft, fine sponge, such as an eye-sponge, and also a fine loofah, sometimes known as fibre sponge. The ordinary sponge is first pulled with a pair of tweezers to break up and soften the fibres, and is then dyed with a batik or other suitable green dye, and allowed to dry. The loofah is similarly treated, but can more conveniently be cut with small scissors to the desired shape. It is then dyed, and after it is dry can be further teased and worked with the fingers to represent the particular kind of tree. Small



FIGURE 1. ERECTING THE FRONT SECTION.

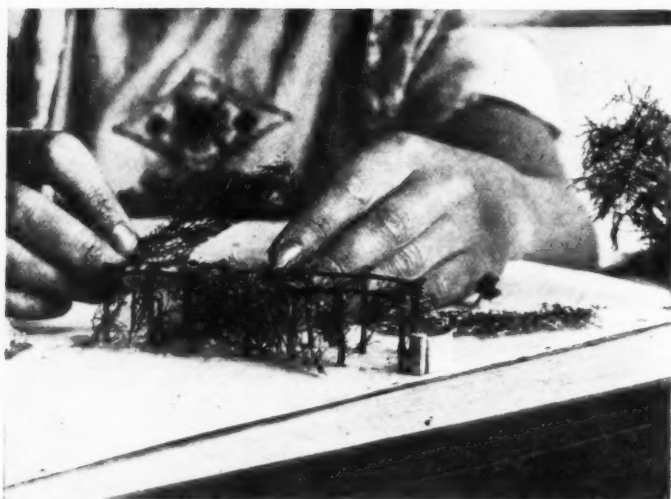


FIGURE 3. USING LOOFAH TO REPRESENT THE RAMBLER ROSES ON THE PERGOLA.

pieces of the sponge or loofah are then taken with the tweezers and built up on the twigs as shown in Fig. 2, using a little trace of seccotine, or other adhesive, here and there to keep the parts in their place. By proceeding carefully in this way and especially by keeping a photograph of a typical tree on hand to compare with the model, some tolerably good results can be obtained.

The high degree of perfection to which tree-modelling has attained in the hands of the professional worker is well shown in some of the illustrations.

Little garden features, such as the pergola shown in Fig. 3, are made up on somewhat similar lines. First, the timber framework of the pergola is built up with prepared strips or with straight twigs. This is then set up in its place on the model and the rambler roses represented by teased pieces of fibre sponge suitably dyed and coloured here and there with masses of bright reds and yellows to represent the flowers.

Very often it is necessary to represent undulating ground in a garden model. This can be done by the methods dealt with in the first article in the series, and also by the method shown in Fig. 6,

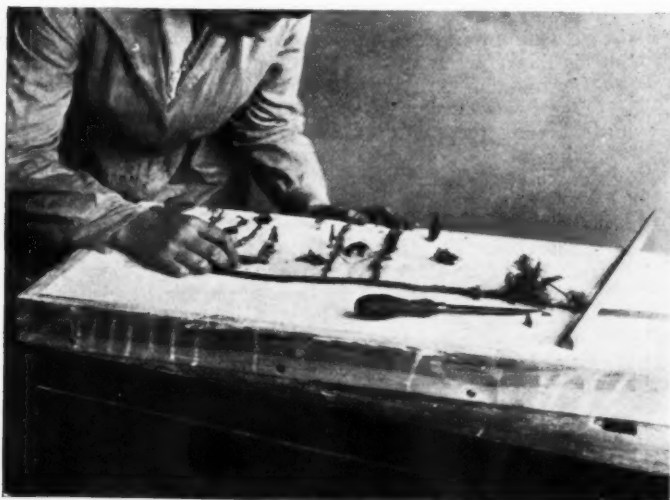


FIGURE 5. ESTATES MODEL IN COURSE OF CONSTRUCTION.

representing a clipped yew hedge forming an archway giving access to a crazy paving path through a rock garden. The principle here is that of making up small sections of the garden independently, and assembling them in their places on the baseboard, a method which often saves a great deal of awkward work in reaching over a large model. The section in this case is made up at an inclination, and the clipped yew hedge, made from fibre sponge, is stuck to the top of the inclination, and fixed to another section of the model. The grass is represented with flock paper, and the rock garden built up with small pieces of stone applied with tweezers and secured in place with adhesive. Fig. 7 is a very much enlarged view of this same section in an advanced stage of construction.

Another method of building up a garden is shown in Fig. 4. In this case the base of the model measures about 2 ft. square, and the different contours were fashioned upon it with moulded card. The illustration shows some twigs in place, destined subsequently to become models of trees. The baseboard has been marked out for various features, while the house, built up independently, is being tried in its place to see that everything is correct. By making the house independently in



FIGURE 4. HOW THE BASE IS BUILT UP FOR A GARDEN MODEL.

this way, the whole of the garden work can be carried out, and the house, after it has been painted and finished, placed in position and secured with adhesive.

A particularly interesting piece of architectural modelling, the work of Bassett Lowke, Ltd., of Northampton, represents a residence with grounds and the like. In the grounds has been installed a miniature railway. A little island in the lake is decorated with a Japanese building, approached by a typical bridge, while a well-modelled sundial and garden seat are very decorative features. The treatment of the water of the lake is particularly good, and is carried out by setting a sheet of glass above a depression, the bottom of which is covered with sand, shells, greenery, and the like, thus giving the effect of depth and transparency while retaining the reflective powers of the glass which so well simulates the surface of still water.

An estate-development model is often distinctly beneficial as a means of demonstrating to intending purchasers the desirability of the site for residential purposes. In the first stage in the construction of such a model a stout wooden base in the form of

a trough filled with plaster-of-Paris, the upper surface modelled to correspond with the contours of the site. Such a model is conveniently modelled to a scale of 32 ft. to the inch.

The next stage in the series of operations is to construct one or two very small model houses, which can be made up from a length of wood of suitable section, as shown in Fig. 5. The strip of wood is planed up to represent the walls and roof of buildings, and may then be cut to length with a small brass-backed saw, also shown in Fig. 5. The wood should be painted with one or two coats of flat white colour, and then decorated with poster or oil colours, as may be most convenient.

The different plots on the site can be indicated by black lines on the surface of the model, or by properly constructed miniature hedges or fences. Trees and other details are constructed along the lines already indicated in an earlier article in this series.

A fine example of architectural modelling is shown in Fig. 8, the work of Mr. John B. Thorpe,

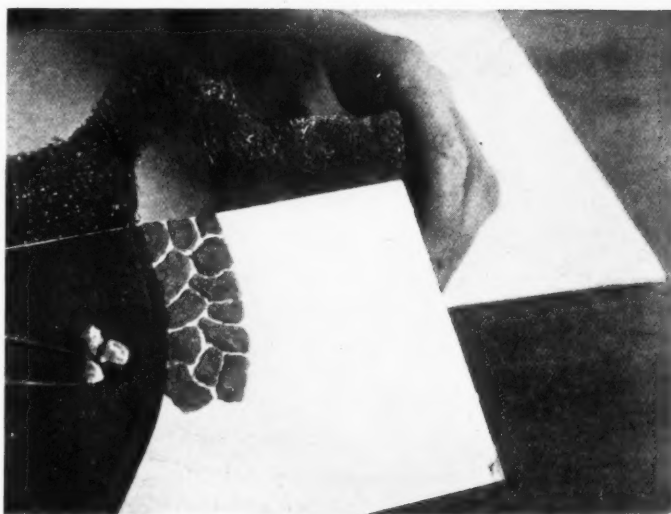


FIGURE 7. MAKING-UP OF A SECTION OF A GARDEN MODEL.

emphasize the fact that the photograph is of a model. The bulk of this work was carried out in wood, and very carefully painted to represent marble. The result is handsome and attractive, and gives the owner a splendid idea of what the finished staircase will look like.

A very complete model, showing the works and athletic ground of the Chloride Electrical Storage Company's work at Clifton Junction, Manchester, is built to a scale of 32 ft. to the inch. This has been executed with exemplary and characteristic faithfulness by the well-known firm of Twining Models, Ltd., Northampton. Mr. Twining has been responsible for very many fine models, especially large pieces. The character of the factory is admirably rendered in the model. A miniature train on the embankment is realistic in the extreme, while perhaps the most praiseworthy feature is the extraordinary realism of the trees and foliage, which are made up on principles known only to Mr. Twining himself.

These examples of commercial work are given here as a tribute to the very high standard to which British firms have attained, and it is gratifying to note that British work is second to none in this department.



FIGURE 6—"CLOSE-UP" OF A GARDEN MODEL.

of London. It is a  $\frac{1}{4}$  in. to the foot scale model of the front elevation of premises built for Messrs. Lilley and Skinner, of Oxford Street. The architectural detail is particularly well shown, and the model as a whole is notable for accuracy and character. One feature that has been very well modelled is the glazed show-cases containing the display of boots and shoes. The cases are constructed of metal frames and specially prepared very thin glass. The boots and shoes are made of a metallic alloy cast in special moulds. They are obviously extremely small, and there are several different patterns of shoes visible in the illustration, all of which have been finished in natural colours to represent the well-known products of the firm.

A fine interior, also the work of Mr. John B. Thorpe, represents a marble staircase and entrance-hall. A figure in the foreground is purposely made somewhat in the nature of a caricature, to



FIGURE 8. MESSRS. LILLEY AND SKINNER'S NEW PREMISES IN OXFORD STREET FROM A MODEL BY MR. JOHN B. THORPE.



# The Newcastle-upon-Tyne Fire and Police Station Competition

## A Criticism of the Designs

**T**HE following awards were made by the assessor, Dr. Percy S. Worthington, F.R.I.B.A., in this competition—first premium, Messrs. Ivor Jones and Percy Thomas, Cardiff; second premium, Mr. E. Vincent Harris, London; and third premium, Messrs. Cackett and Burns-Dick, Newcastle-upon-Tyne.

### The Conditions

The site for the proposed new station is an island triangular site with important thoroughfares on all three sides. The type of building desired was indicated in the conditions of the competition, and it was specified that the buildings should be arranged around a large central court, which should be common for both fire-brigade and police-station purposes. The engine-house for eight engines had to open on to Westmorland Road, and the police station had to face Scotswood Road, and be entered from it. The fire station and police station were to be entirely separate and self-contained, but an uninterrupted building around the site, if possible, was desired. Two entrances were to be provided to the court for fire engines, one from Marlborough Crescent at the Scotswood Road end, and the other in Scotswood Road. The Westmorland Road frontage is fairly level, but the site falls rapidly from this street to the junction of Marlborough Crescent and Scotswood Road. The accommodation required was specified in considerable detail. In addition to the engine-house the fire station had to contain repair shops, watch-room and offices, gymnasium and recreation rooms, hose tower, superintendent's house, quarters for thirty-six married men, houses for three officers, quarters for ten single men, mess-room, etc. The police station comprised a number of offices, charge-room, parade-room, eight cells, ambulance house, coach-house and stables, quarters for eighteen single men, quarters for two married men, and houses for the police superintendent and cab inspector. It was suggested that as far as possible the building should be constructed of materials other than brick, and the entire cost of the building and its equipment, exclusive of furniture, was not to exceed £100,000.

### The Winning Design

The winners have undoubtedly produced the outstanding design of the competition, and well merit the award. In the general placing of the engine-house, police station, and other departments they closely follow the requirements and suggestions in the conditions, and their design displays an intimate knowledge of the practical requirements of both police and fire stations. The engine-house is on the Westmorland Road frontage, with the repair shops on the Marlborough Crescent side of the courtyard. The police-station is well planned on the Scotswood Road side, with central entrance from Scotswood Road, and the ambulance house, stables, and coach-house are placed at the junction of Marlborough Crescent and Scotswood Road. The mezzanine floor between the ground and first floors accommodates the quarters for single firemen and single police, the messroom and superintendents' houses. On the first and second floors, which extend right round the courtyard, are the married quarters and the remaining officers' houses. The third floor extends over the Westmorland Road front only, and comprises the gymnasium, recreation, reading, and billiard-rooms. The elevations are simple, well proportioned

and grouped, and very suitable for carrying out in a terracotta material. The drawings are very well presented in pencil, with the outlines of the plans inked in. On minor points one could criticize the design for the subway to the ambulance house and the placing of the cells below the charge-room, thus entailing extra supervision, but such points are very small when compared with the all-round excellence of the design.

### The Second-Premiated Design

In the second-premiated design the general planning is not as excellent as that of the first, but the accommodation is very compactly and cleverly arranged in such a manner that the building is one floor less in height than the majority of the other designs. The question of providing the accommodation on the minimum of floors was a very important point, particularly so as the upper stories were to be allocated for the married quarters. The engine-house, entrances, and repair shops are generally placed in similar positions to those in the first-premiated design, as is the police-station, which is, however, of two floors with the cells in the basement. The mezzanine, first and second floors accommodate the various quarters, with the gymnasium on the second floor. The elevations are charming in a very pleasing Renaissance treatment, and are accompanied by a beautifully rendered half-inch detail.

### The Third-Premiated Design

The design placed third is a very meritorious one, and well deserves its position. In its planning it follows generally the same lines as the first-premiated design, but a bold and successful departure has been made from the general solution in placing the gymnasium over the Scotswood Road front. Another very excellent feature in this plan is the ready access the single firemen have to the engine-house from their sleeping quarters, an arrangement which is probably better than that in any other scheme submitted. The elevations are upon sound and economical lines, exceedingly pleasing and well suited to their purpose.

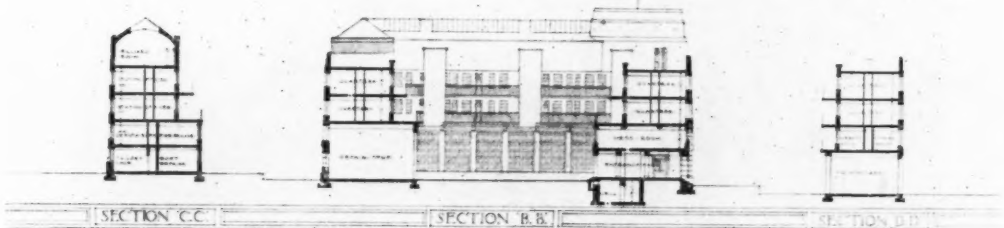
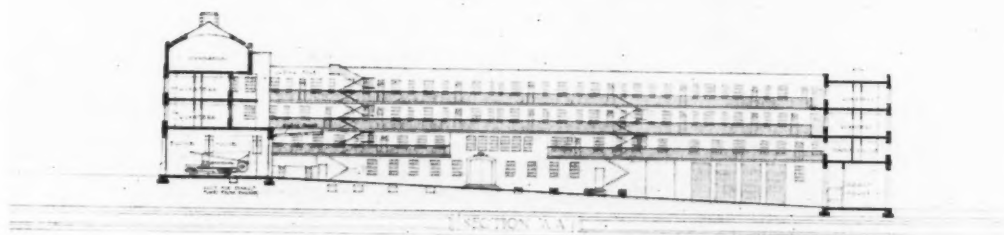
### Some Notes on the other Designs

Forty-seven designs in all were submitted, and the majority of them bear a general resemblance to the winning type. This is no doubt due to the positions of the engine-house, police station, courtyard, and other details of the building required being so clearly set out in the conditions. Among many other excellent designs we noted particularly No. 44, which provides an entrance to the police station from the junction of Scotswood Road and Marlborough Crescent, and a courtyard entrance in the centre of the Scotswood Road frontage. No. 22 is also a good scheme, in which, architecturally, a feature is made of the hose tower. Nos. 10 and 1 are also very good, straightforward, and satisfactory schemes. Nos. 38 and 41 do not build on the whole of the site, but produce a symmetrically laid out building about an axis on the centre of the Scotswood Road frontage. This treatment does not produce any advantage, and materially reduces the size of the courtyard.

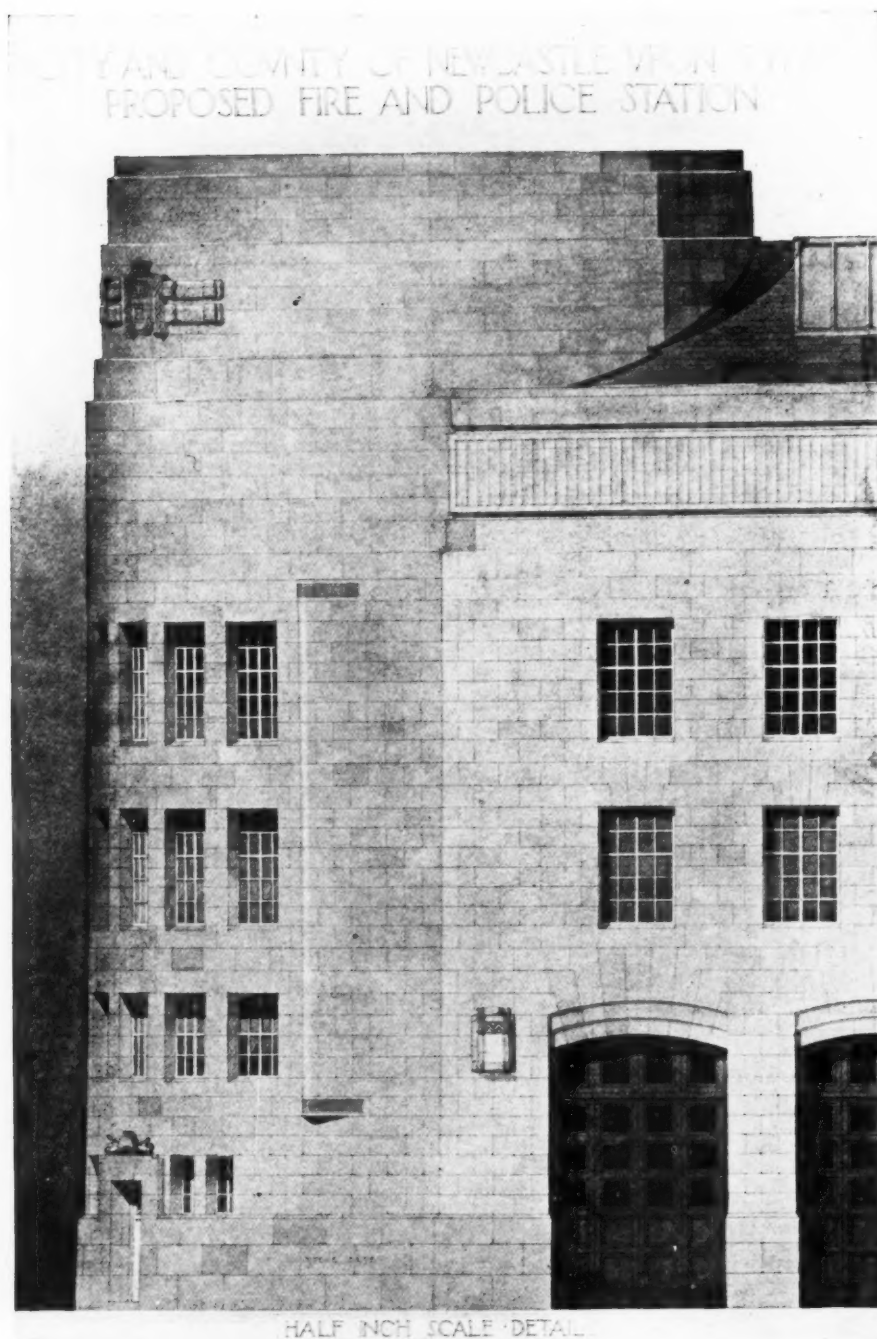
Generally speaking, the profession has responded well to this competition, and both the assessor and the promoters are to be congratulated upon obtaining such an excellent result.

W. MILBURN, A.R.I.B.A.

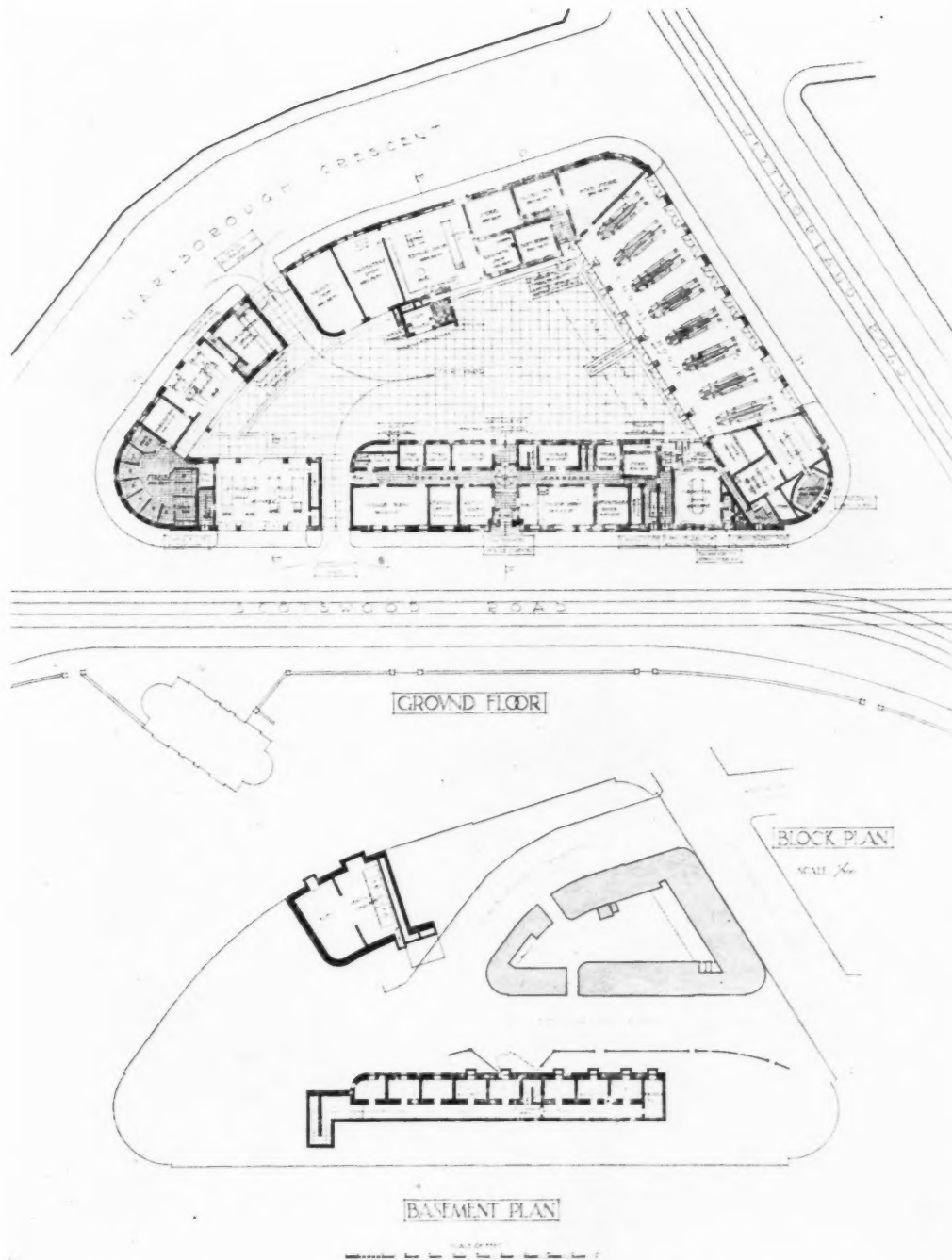




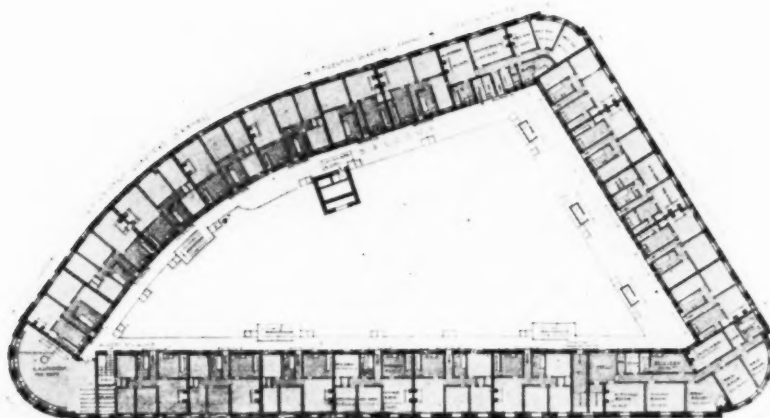
NEWCASTLE-UPON-TYNE FIRE AND POLICE STATION COMPETITION: WINNING DESIGN.  
IVOR JONES AND PERCY THOMAS, A. AND F.R.I.B.A., ARCHITECTS.



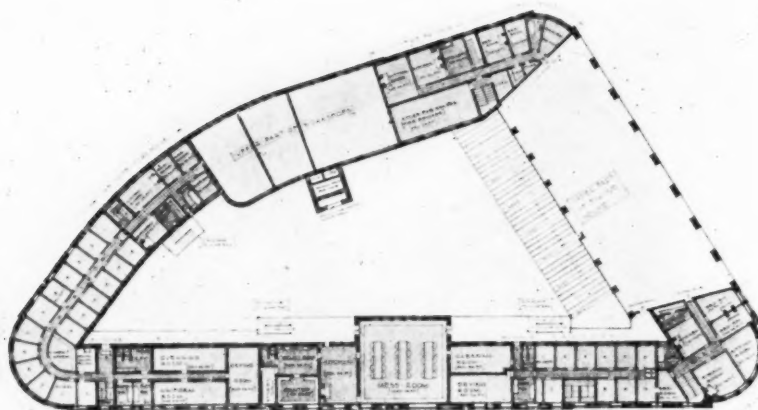
NEWCASTLE-UPON-TYNE FIRE AND POLICE STATION COMPETITION: WINNING DESIGN.  
IVOR JONES AND PERCY THOMAS, A. AND F.R.I.B.A., ARCHITECTS



NEWCASTLE-UPON-TYNE FIRE AND POLICE STATION COMPETITION: WINNING DESIGN.  
IVOR JONES AND PERCY THOMAS, A. AND F.R.I.B.A., ARCHITECTS



FIRST FLOOR

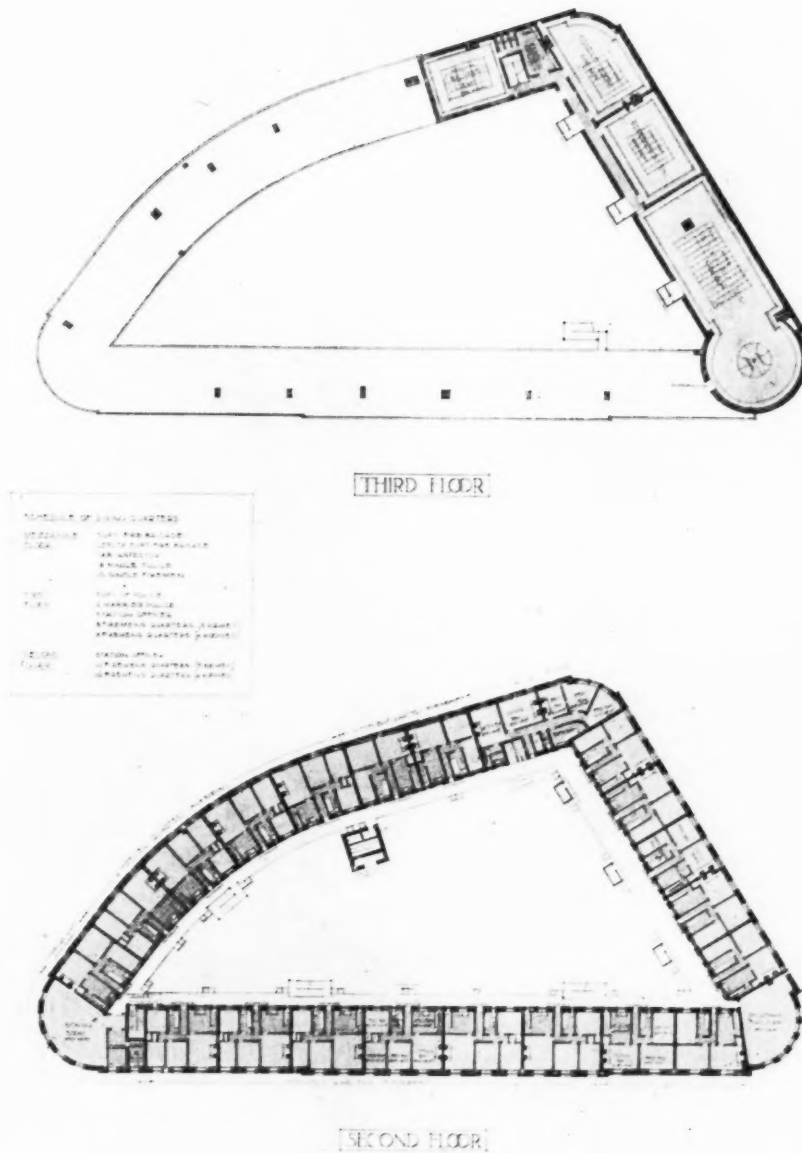


MEZZANINE FLOOR

Scale 1/4" = 1'-0"

NEWCASTLE-UPON-TYNE FIRE AND POLICE STATION COMPETITION: WINNING DESIGN.  
IVOR JONES AND PERCY THOMAS, A. AND F.R.I.B.A., ARCHITECTS.

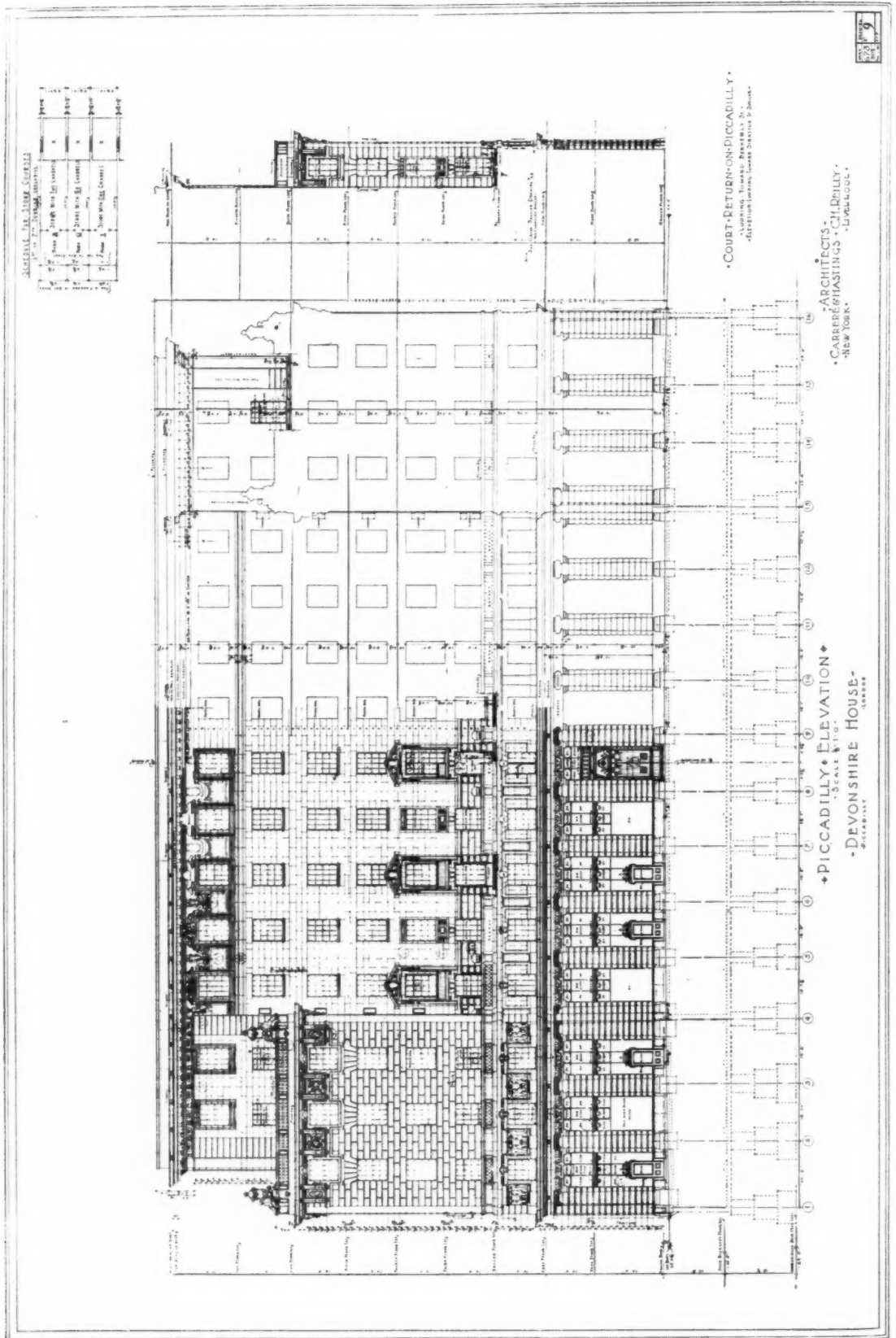




## SECOND FLOOR

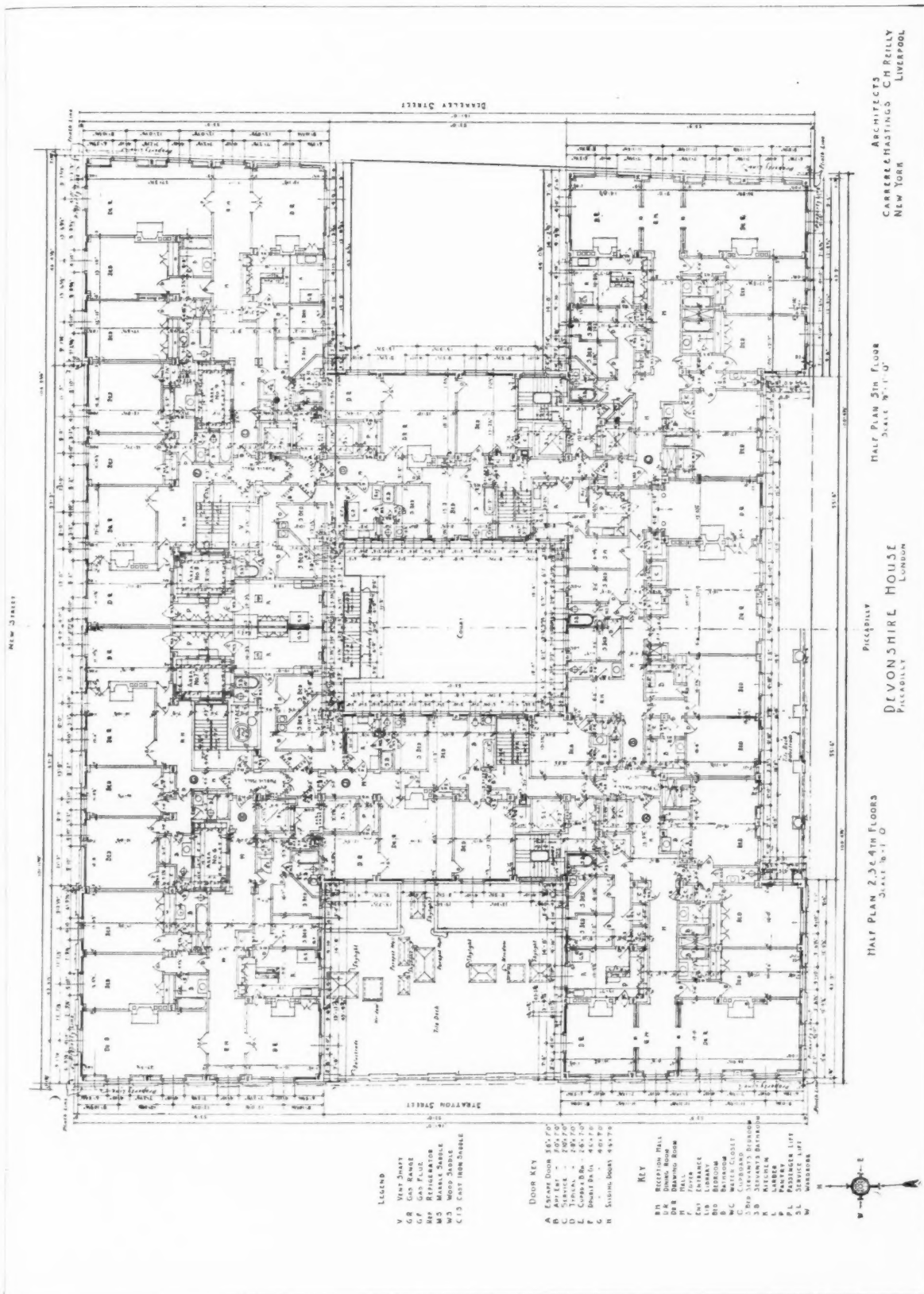
NEWCASTLE-UPON-TYNE FIRE AND POLICE STATION COMPETITION: WINNING DESIGN.  
IVOR JONES AND PERCY THOMAS, A. AND F.R.I.B.A., ARCHITECTS.

# Devonshire House, Piccadilly Carrère and Hastings, and C. H. Reilly, Architects

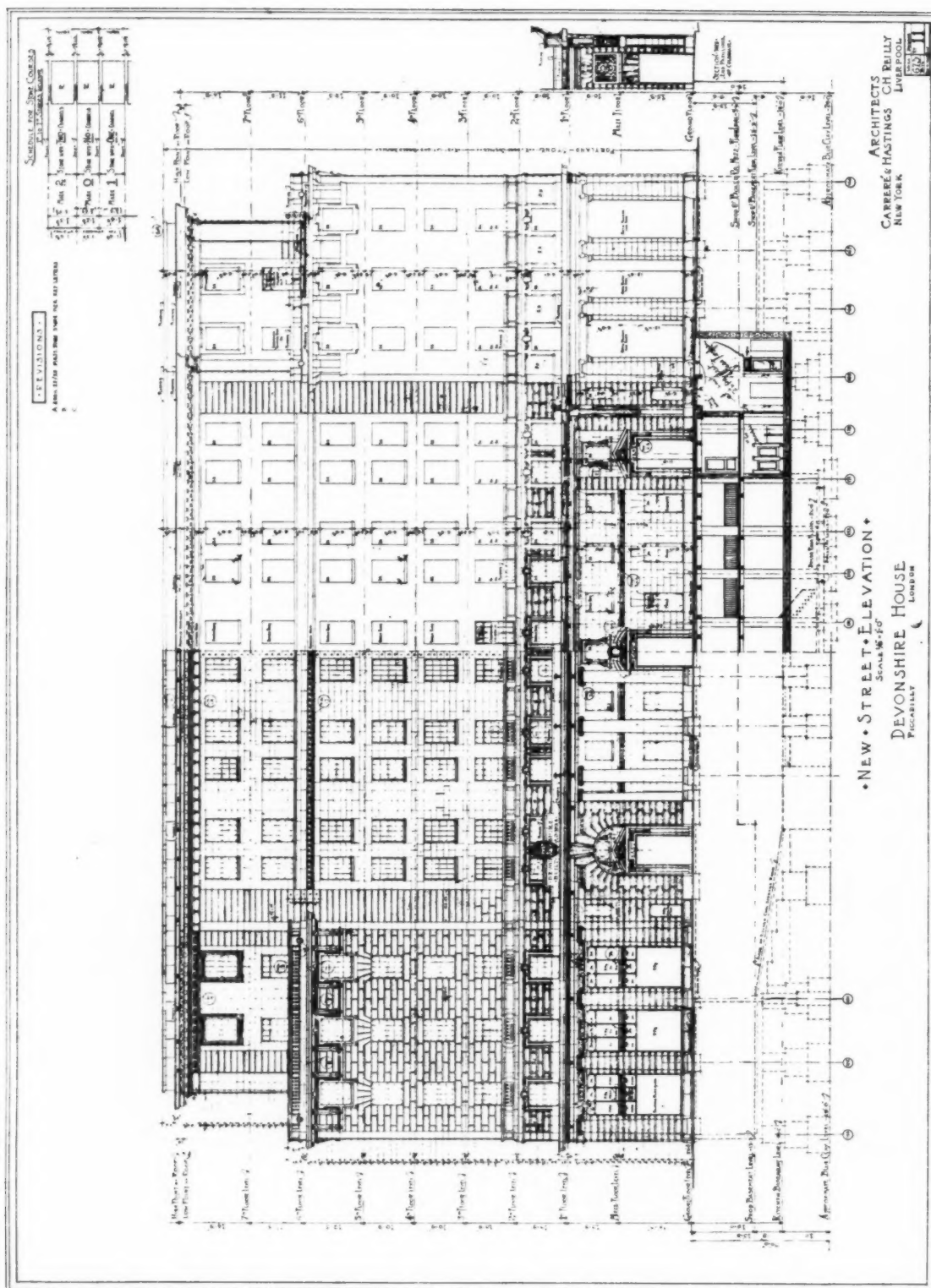


THE ELEVATION TO PICCADILLY.

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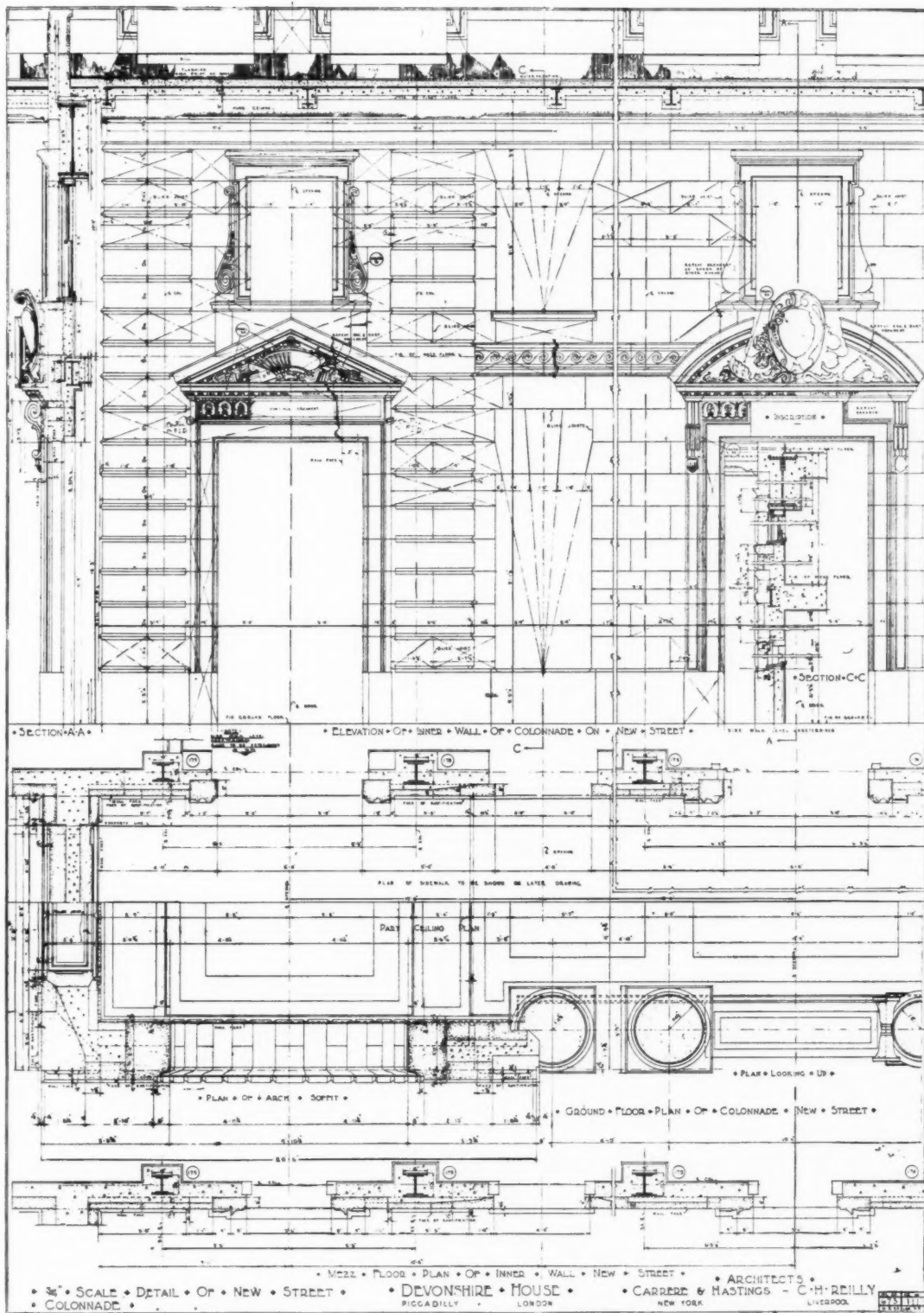


DEVONSHIRE HOUSE, PICCADILLY: PLANS OF SECOND, THIRD, FOURTH, AND FIFTH FLOORS  
CARRERE AND HASTINGS, AND C. H. REILLY, ARCHITECTS

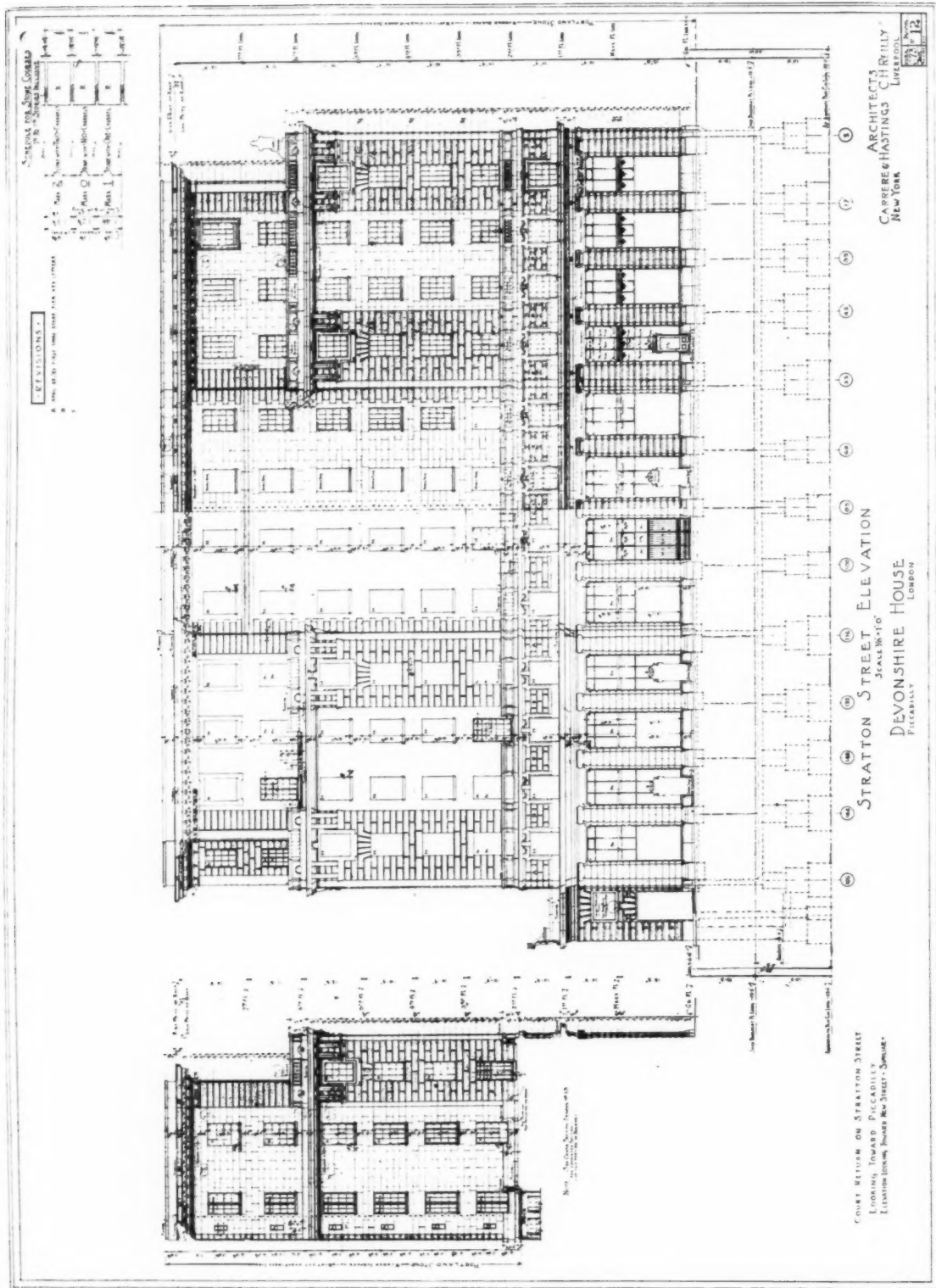


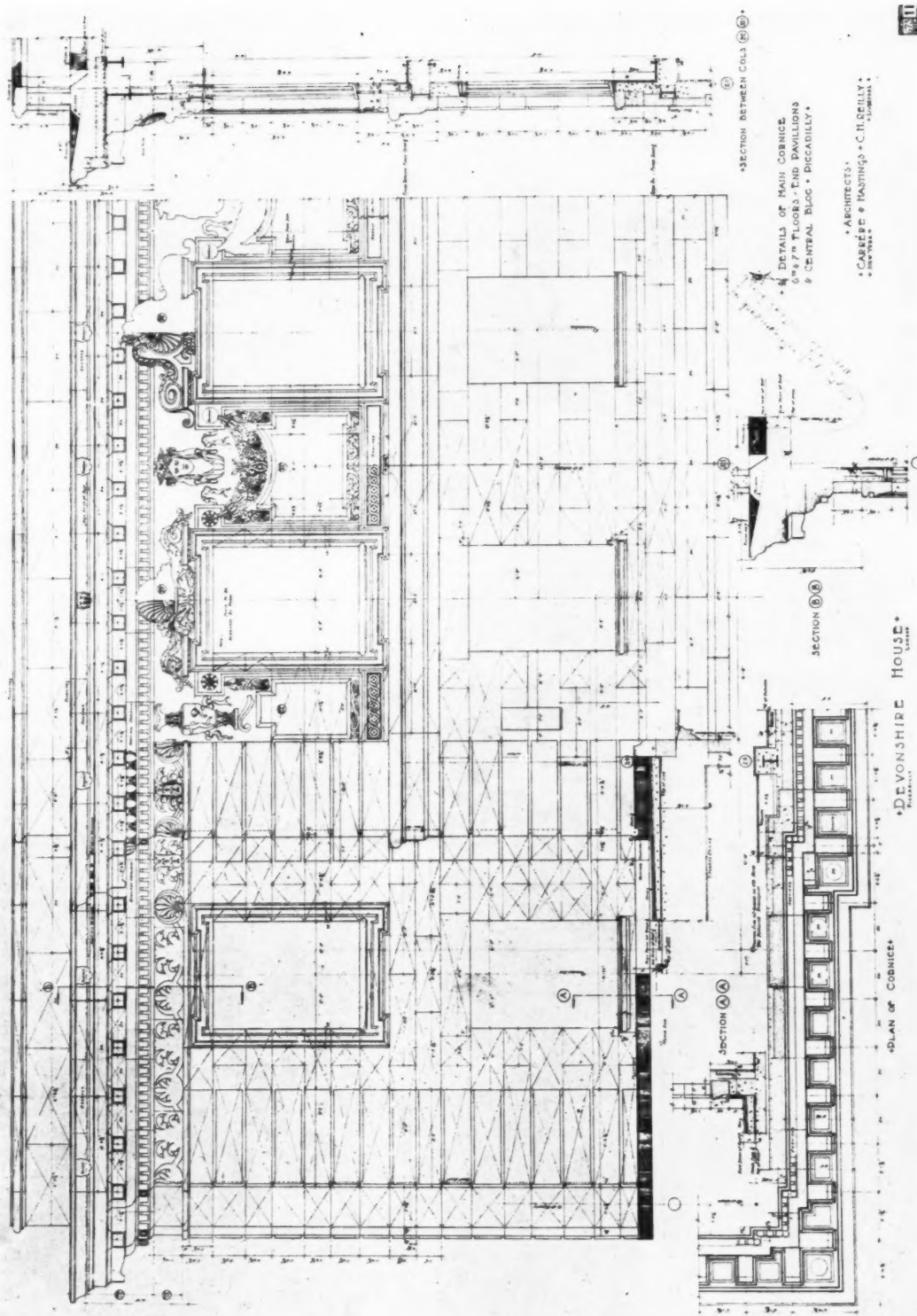
DEVONSHIRE HOUSE, PICCADILLY; THE ELEVATION TO THE NEW STREET.  
 CARRÈRE AND HASTINGS, AND C. H. REILLY, ARCHITECTS.





DEVONSHIRE HOUSE, PICCADILLY: DETAIL OF THE NEW STREET COLONNADE.  
CARRÈRE AND HASTINGS, AND C. H. REILLY, ARCHITECTS.





DEVONSHIRE HOUSE, PICCADILLY: DETAILS OF MAIN CORNICE TO THE SIXTH AND SEVENTH FLOORS, END PAVILIONS, AND CENTRE BLOCK, PICCADILLY CARRÈRE AND HASTINGS, AND C. H. REILLY, ARCHITECTS



DEVONSHIRE HOUSE, PICCADILLY: A DETAIL OF A WINDOW-HEAD IN THE PICCADILLY FRONT

## The Directors' Room at Findlater House, Wigmore Street

Designed by F. CORNELIUS WHEELER, in Consultation with DARCY BRADDELL, F.R.I.B.A.

**T**HIS apartment is an interesting example of a present-day room lined with wainscoting of large panelling of the architectural character made famous by Sir Christopher Wren during the William and Mary period. It has been carried out and furnished with the greatest attention to accuracy of detail, in order to render it as perfect as possible in regard to character and style. The walls are panelled to the height of 9 ft., with specially selected oak of the choicest grain or "figure." The panels, framed in carefully detailed bolection mouldings, have chamfered "fields." The surface moulding is kept low so as to accentuate the height and dignity of the large panels, which have been cut out of 3-in. oak planks, thus ensuring equal distribution of the grain of the wood. Each tall panel is surmounted by a landscape panel, and the whole is finished by a boldly projecting cornice. A special study has been made of the windows so as to bring them into keeping with the style of the period; their architraves have been boxed to form curtain recesses, and the low window-seats, concealing radiators, are shaped, and fitted in front with rows of turned spindles.

The mantelpiece is treated as a separate unit of design. The raised panel of the overmantel is surrounded by a bolection moulding richly carved with acanthus foliage. It is headed by a broken pediment, in the centre of which is a shield and mantling bearing the coat-of-arms of the Vintners' Company of London, carved in oak and painted in its proper heraldic colours, while from the shield hang rich swags of fruit and flowers. Carved drops of similar character, in the manner of the period, are suspended from the pilasters on either side of the mantelpiece. The fireplace is lined with veined statuary marble bordered with yellow sienna and edged with white, while the curb is of moulded Sienna marble.

The oblong panel above the doorway is filled with carving, and is flanked by carved trusses. The carving

throughout is the work of Mr. Esmond Burton, and is similar in character to the other woodwork by him at the hall of the Vintners' Company.

The barrel ceiling of the room, which is partly glazed, is enriched with plaster mouldings, and the main cornice is a reproduction of a plaster cornice by Wren at the Hampton Court Palace.

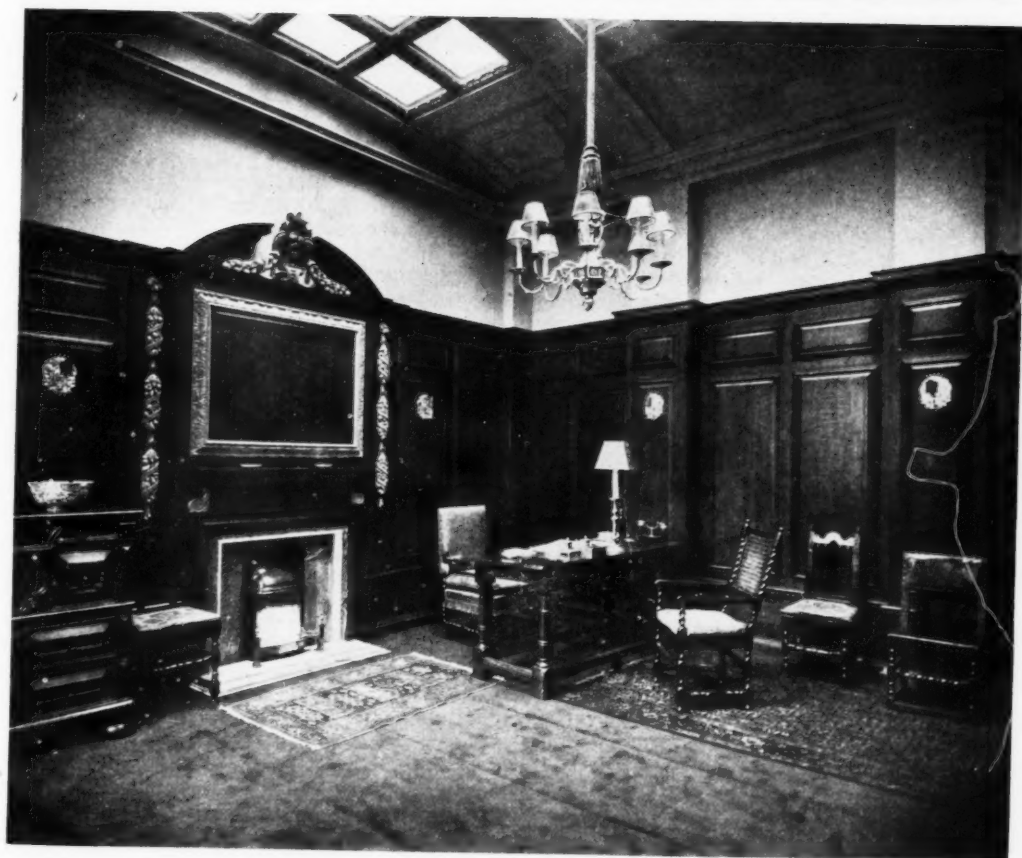
The decorative work of the room has been designed by Mr. F. Cornelius Wheeler, in consultation with Mr. Darcy Braddell, F.R.I.B.A., and was executed by the Nautilus Company.

For electric-light fittings interesting models have been chosen. The table lamps consist of a pair of original Queen Anne brass candlesticks of unusual size and distinction, on handsome baluster stems. The four wall lights are reproductions of the original silver sconces in the possession of Lord Sackville at Knole Park, Kent; while the magnificent chandelier in the centre of the room is a reproduction of one of the famous silver chandeliers also at Knole, made for the Earl of Dorset in the time of Charles II. The chain by which it is suspended is covered with rose-coloured silk terminating in a large silk tassel.

An object of special interest in the room, associated as it is with the subject of wine, is the rare Delft punch-bowl. It is signed with the initials of a famous Delft potter, Lowys Fictoor (Lewis Victor), of the year 1689. It is of a type known as a "Monteith," so called from a gentleman of fashion who was remarkable for wearing a scalloped coat. Round the rim is a row of escallops, in which the glasses were placed with the feet outwards, for the purpose of bringing them into the room without breaking.

The apartment is warmed by means of an attractive gas fire, supplied by the Davis Gas Stove Company, and is of a design eminently suitable for a room of the period, and connected to a cast concrete Nautilus flue built into the face of the wall, to remove the products of combustion.





FINDLATER HOUSE, WIGMORE STREET, LONDON: THE DIRECTORS' ROOM.  
DESIGNED BY F. CORNELIUS WHEELER, IN CONSULTATION WITH F. DARCY BRADDELL, F.R.I.B.A.

# The New Waterloo Bridge

## How the Proposal was Adopted

THE decision of the London County Council to rebuild Waterloo Bridge—commented upon in an earlier part of this issue—was arrived at by eighty-two votes to thirty-two after a discussion lasting three hours on the report of the Improvements Committee. The committee recommended "that steps be taken to secure, by underpinning, the permanent maintenance for traffic of Waterloo Bridge, provided that the claim of the Conference of Societies as to the practicability, safety, and economy of such a method can be established, and that the First Commissioner of H.M. Works, etc., be asked whether H.M. Government would be prepared to set up a technical commission of inquiry to determine: (1) Whether the Council could safely undertake the underpinning of Waterloo Bridge so as to preserve it in perpetuity in a condition fit to take the traffic which may be expected to make use of it, and if the answer to that question is affirmative; then (2) what methods of underpinning should be adopted; and (3) what would be the probable cost." To these an amendment was moved by Mr. Gatti, and seconded by Lord Falmouth, that the Improvements Committee should be instructed "to take steps forthwith for the reconstruction of Waterloo Bridge with not more than five arches over the river, and of a width sufficient to take six lines of vehicular traffic." The recommendations of the committee were rejected, and the amendment of Mr. Gatti was carried by a majority of fifty.

Mr. Gatti, in moving his amendment, said, according to the "Times," that when it was suddenly discovered that Waterloo Bridge was falling down the Council was advised by its own engineer. That advice was supported by two eminent engineering specialists. They agreed that the bridge could not be saved, and would have to come down. The Council appointed a special committee to deal with Thames bridges generally. The report of that committee brought out very strongly the facts that Waterloo Bridge was congested; that the approaches were capable of dealing with a bigger traffic than the bridge was itself; and that the bridge was a serious obstruction to navigation. It became clear either that the bridge had to be widened, or that a new bridge must be erected close by, and the cheapest would cost about £3,500,000. They had now revealed the true position of Waterloo Bridge—the most beautiful, and the most inefficient. The proposal to widen the structure was shown to be impossible.

What was the position to-day? Between the drafting and the presentation of that report the Council received a further deputation from a committee representing various societies. It was pointed out to the deputation that the Council had already taken every step possible to settle the controversy. The problem was referred to the Institute of Civil Engineers, which told the Council to follow the advice given by their consultants. Was it too much to believe that the members of that body were incapable of expressing their advice in plain words?

Turning to the question of traffic, Mr. Gatti said that the Special Committee's report remained unchallenged. The Town Planning Institute had brought forward certain figures. That Institute was either profoundly ignorant, or was more concerned in bolstering up a preconceived opinion than in helping the Council to solve a difficult problem. They feared that a new Waterloo Bridge would be such an effective solution that certain wonderful and expensive schemes would no longer be considered.

It has been said that the bridge was beautiful. He had some doubt whether all the heroics were justified. He

had looked up certain architectural books on the subject. In one recognized text-book two lines were devoted to the bridge, which was attributed to "Sir" John Rennie. Let them all recognize the value of that side of the matter, but not exaggerate it.

As to underpinning, Mr. Gatti referred to the uncertainty which surrounded the estimates given by those who favoured the scheme. The cost was put at figures as far apart as £400,000 and £600,000. It seemed a question of the depth of the foundations. The experts were not agreed on that subject. The result was that the Council would have to go to the greatest depth suggested, with a correspondingly heavy cost.

The proposal of the committee was to ask the First Commissioner of Works to appoint another body to deal with the matter. He did not think such a course would be desirable if it were possible. The Council had to take the responsibility for the decision, and they had behind them enough technical opinion to justify them.

Lord Falmouth seconded the amendment. He said that, though three arches only had sunk, the whole of the piers would have to be underpinned if that method were adopted. If traffic was to be maintained there would have to be an additional bridge between Westminster and Blackfriars. Charing Cross had to be turned down by the committee for two reasons. There was the cost, the approaches coming out at the enormous figure of £5,000,000, and in addition they were up against the problem of the railway. The alternative scheme, known as the Blomfield Bridge, which was practically alongside Charing Cross Bridge, would be very costly indeed. The approaches on the southern side of the river were not satisfactory, the river authorities would be up against it because of the danger to navigation, and he was sure Parliament would not permit it.

They were eventually brought back to a three-way bridge at Waterloo, which meant a new bridge. That was where the committee parted company. Some thought the Council was in a position to decide whether the old bridge should be maintained or a new bridge built. Others were in favour of getting further advice. He maintained that they had now before them enough information and definite opinion to reach a decision.

Mr. Norman, Chairman of the Bridges Committee, said he sympathized with both speakers, for he had been through the whole process of thought, and was thoroughly familiar with it. Both had emphasized the necessity for a decision, and pointed out that the Council must accept responsibility. The matter was not quite so simple. For a large number of its decisions the Council relied on technical advice. The Council was a perfectly absurd tribunal to decide highly controversial matters of technical engineering. The Council must decide policy first, and the recommendation asked the Council to decide policy. The First Commissioner of Works was the greatest authority they could find on the subject, and they could all confidently accept the advice that would be given. If the decision was in favour of underpinning, the Council could then decide the question of policy as to cost. Should the moment come when all the facts were in favour of building a new bridge, action would have to be taken. In the long run underpinning would save cost.

He contended that the committee had been consistent. A new factor had arisen which had to be explored. Originally the committee were advised that the bridge must be rebuilt. Now, however, out of nine engineers five were in favour of underpinning, and four were against. If they

arrived at the position that the bridge must come down, it should be replaced by the best bridge that could be built. But if the bridge could be retained—and that question was the new fact—the Council must retain it. The unanimity on the question of Waterloo Bridge as a great national monument was most striking. He was surprised that so little attention had been paid to the aspect of the bridge as a war memorial. The Council ought not lightly to destroy the memorial of the great Napoleonic wars.

Mr. H. Morrison said that the traffic aspect of the matter was of enormous importance, and ought to weigh with the Council.

Mr. J. D. Gilbert urged the Council not to give away its rightful position. They were the local authority for London, and the responsibility was theirs, and theirs only. They should come to a decision on the facts.

Captain G. S. C. Swinton said that in the ambulatory outside of that chamber members were constantly shown pictures of Old London. It was the custom to say: "What a pity; I wonder whether it was necessary to have destroyed so beautiful a building." On them that day depended whether Waterloo Bridge was destroyed. Let them remember that people who gazed on a picture of Waterloo Bridge in the future would say: "What a pity; I wonder whether it was necessary to destroy it."

## Royal Academy Schools Prize Distribution

Mr. H. E. Furse wins the Gold Medal

**T**HE Royal Academy Schools held their annual prize distribution at the Royal Academy Galleries, Burlington House, on Thursday, December 10, in the presence of a large number of academicians, students, and friends. Sir Frank Dicksee, P.R.A., presided, and presented the prizes in the usual academy manner, the president announcing the subject of the competition, the keeper calling out the number of the winning work, and the secretary the winner's name.

After presenting the prizes for painting and sculpture, Sir Frank announced that Mr. Hubert Edwin Furse was the winner of the R.A. gold medal in architecture, which carries with it also the Edward Stott Travelling Scholarship of £200. The subject of this competition was a "Design for a County Hall for an Agricultural County," the conditions requiring a simple and dignified treatment in brick and stone, which Mr. Furse accomplished in a modern style. He is twenty-six years of age, at present engaged in the office of Sir Henry Tanner, and has studied at the Royal Academy Schools under Mr. C. de Gruchy for about three years. Prior to this he was a member of Mr. J. R. Leathart's Design Club. Mr. Furse hopes to go to Spain and Italy with his Travelling Scholarship.

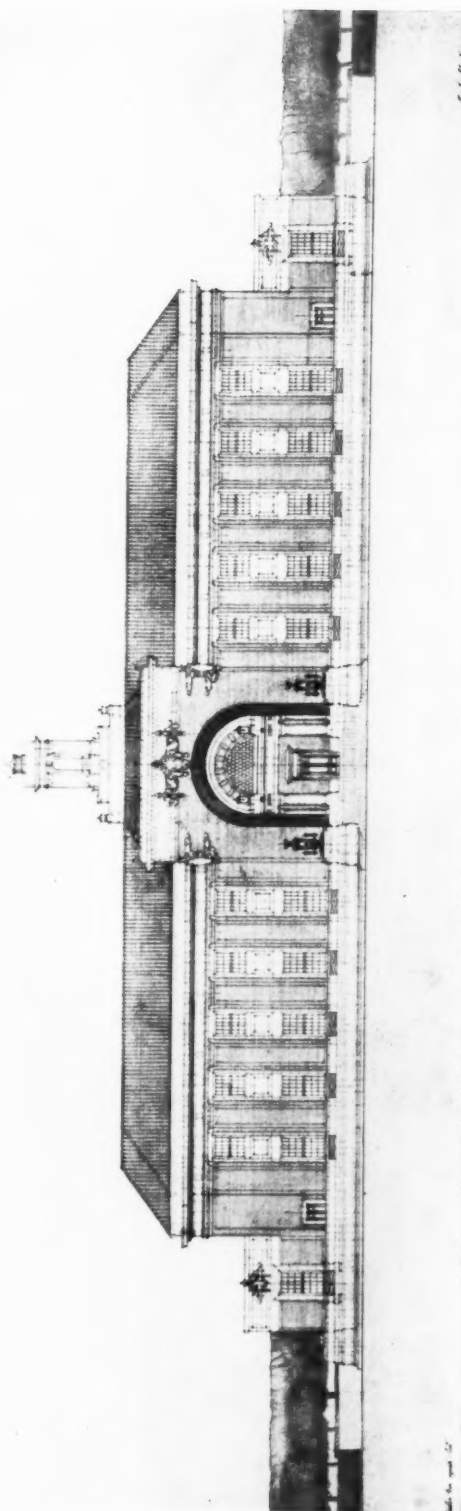
The next prizewinner was Mr. Douglas James Fyffe, who won the Landseer prize of a silver medal and £20, for a design executed in the school during the past year, with an ambitious scheme for a "Monumental Tower and Bridge in a Public Park."

For the silver medal and £10 prize, Mr. Harold John Coates submitted the winning set of drawings, a design for a "Parish Hall;" the second premium of a bronze medal and £5 going to Mr. Sidney Norman Allen.

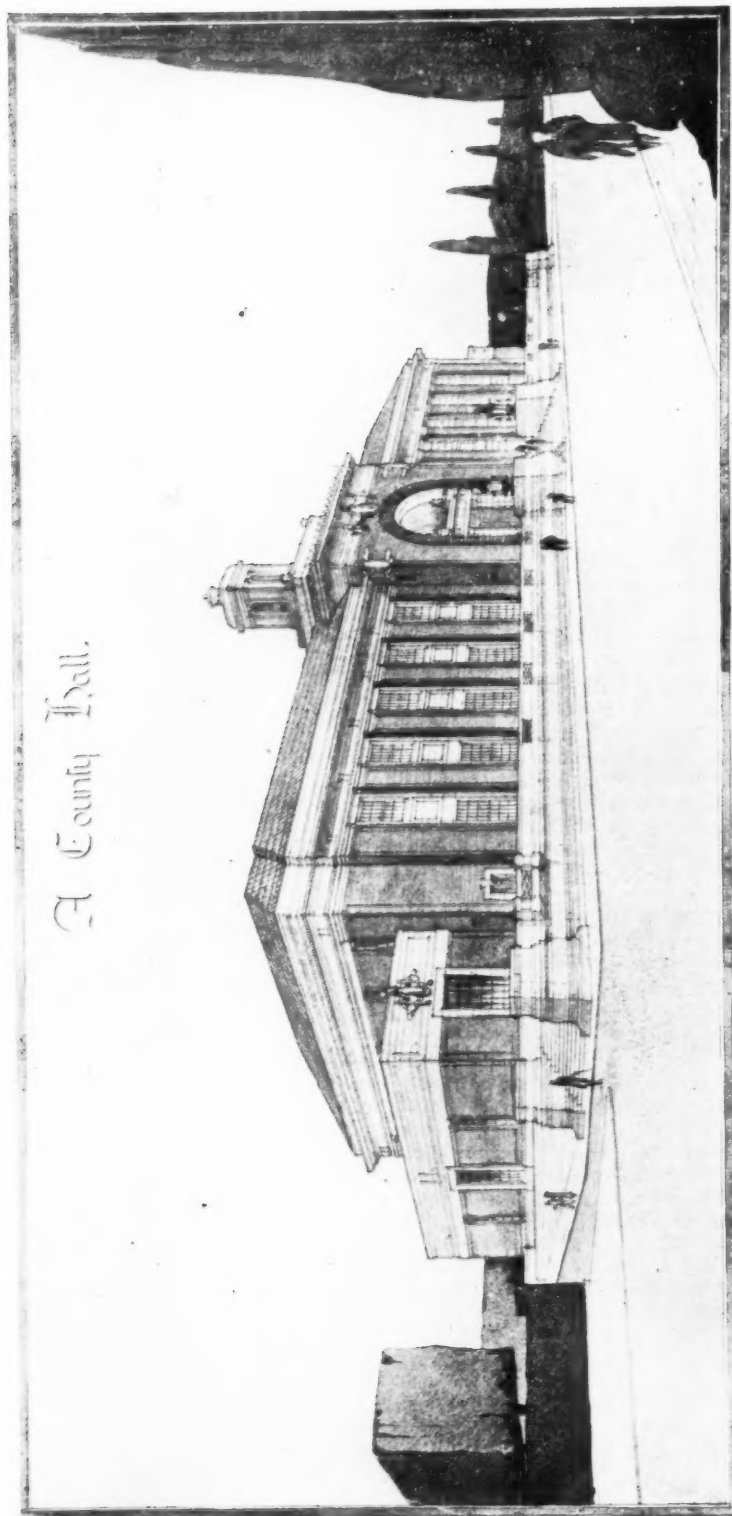
For the measured drawings of the Church of All Hallows, London Wall, Mr. Hugh Baldwinne Lyle Horner received a silver medal, and Mr. James Frederick Howes a bronze medal.

Sir Frank Dicksee, in his discourse to the students, following the prize distribution, emphasized the importance of the careful study of the work of the Old Masters, and commented on the excellent facilities for doing this without extensive travelling, and under congenial conditions.

J. MASON.



A DESIGN FOR A COUNTY HALL BY H. E. FURSE AWARDED THE ROYAL ACADEMY GOLD MEDAL.

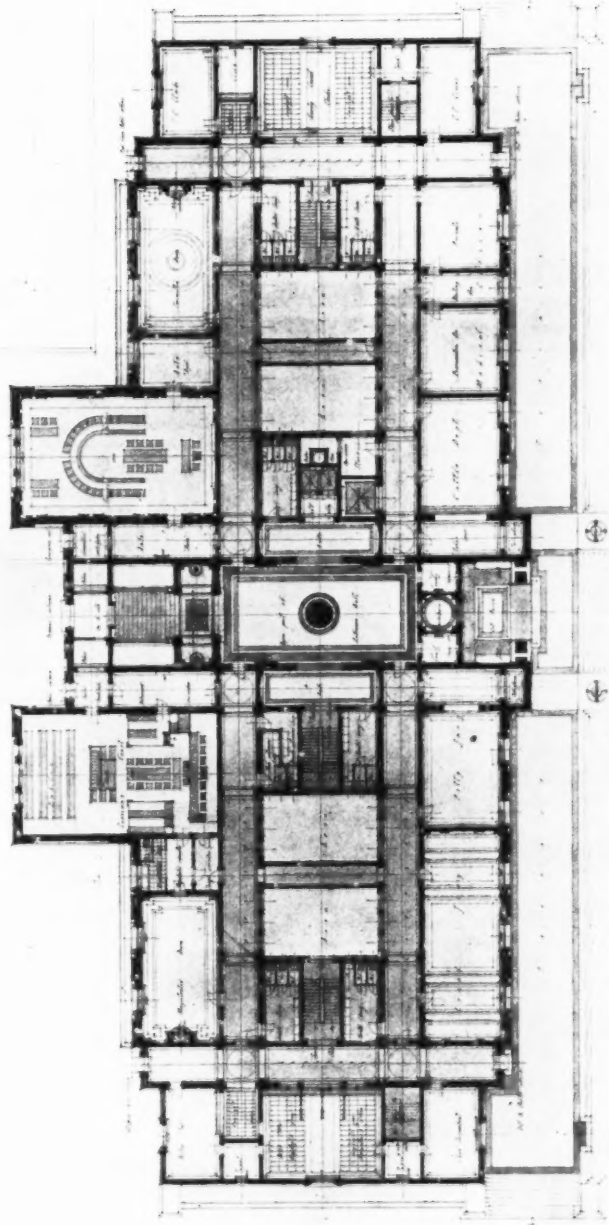


A County Hall.

A DESIGN FOR A COUNTY HALL BY H. E. FURSE. AWARDED THE ROYAL ACADEMY GOLD MEDAL.



A County Hall.



A DESIGN FOR A COUNTY HALL BY H. E. FURSE. AWARDED THE ROYAL ACADEMY GOLD MEDAL.



# New Methods of Using Set Squares—II

By R., Author of R.'s Methods

**D**ESCRIBING Regular Polygons—First method (Fig. 19).—Draw a vertical line AB, crossed by a horizontal line CD, and with crossing point as centre describe a circle. Draw a 60° slope through A, cutting the circle at E; draw a horizontal line through E; join AD, DE, EB. Draw a 45° slope through C to G; join AG; now, AE is side of equilateral triangle; AD is side of square; BE is side of hexagon; EF equals side of heptagon; AG is side of octagon; ED is side of duodecagon. Continue AE to H (Fig. 20), and draw horizontal through B. Draw

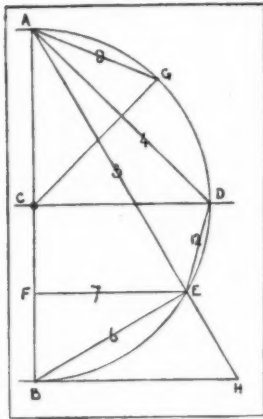


FIGURE 19.

a 30° slope through H to K. Draw horizontal through K to L; through K and L draw 30° slopes crossing at M. Draw a line through A and M cutting BH at N, with A as centre and AM as radius cut AE at P. From B and N draw 30° lines, and draw horizontal through their crossing point. Now, AM equals side of pentagon; BN side of nonagon; QR side of decagon; and EP side of unodecagon. In drawing such figures as regular polygons a great deal of time is saved by first getting good points to hard pencils and seeing that the compasses are in good working order, and then putting in the most careful work, from a properly lighted position. I feel strongly on these points, because I have so constantly worked in offices where such matters have had not the least consideration. I advocate not only working with every aid to accuracy, but also to use another method: rapid freehand drawing with a soft pencil on newspaper. I make such drawings time after time, and find the "Times," the "Daily Telegraph," or "Morning Post" excellent drawing paper for such purposes. These papers are free from the broken-up advertising effects that the other papers show. A newspaper—doubled into quarter-page size—is nearly always at hand, and is stiff enough to draw on without a board. I have constantly so sketched in museums and out of doors, and find the method very apt.

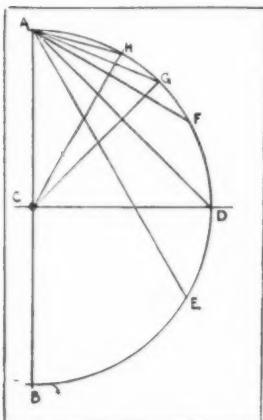


FIGURE 21

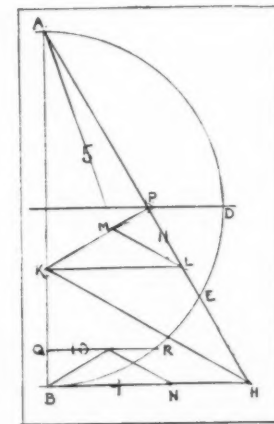


FIGURE 20.

Second method (Fig. 21).—Draw a vertical line AB, crossed by a horizontal line

CD, and with crossing point as centre describe a circle. Draw a 60° slope through A, cutting circle at E. Draw a 30° slope through A, cutting circle at F. Draw a 45° slope through centre to circle at G, join AG and AD. Draw a 60° slope from centre, cutting circle at H; join AH. Now AE is side of equilateral triangle; AD side of square; AF side of hexagon; AG side of octagon; AH side of duodecagon.

From A draw line at 45° (Fig. 22), and from centre a line at 60; from their crossing draw a horizontal line cutting circle at H and vertical at K. From K draw 60° slope, and at point where it crosses 60° from centre draw a horizontal cutting circle at M. Join AH and AM. AH is side of heptagon, and AM is side of pentagon. Draw 60° through A, cutting circle at E. Through M and D draw lines at 30° meeting at P. Divide PD into three equal parts, join E to PQR; then EP equals side of nonagon; EQ equals side of decagon; ER equals side of unodecagon; ED is side of duodecagon.

My object here is to show what can be done with the ordinary set-squares, but with the extended range of set-squares I use for another purpose much greater simplification can be used. For instance, I have discovered about fifty different ways of drawing a regular pentagon. In a German edition of Scamozzi, dated 1678, there is given a method of drawing polygons that is interesting, but only approximate. I show these results in column five, and in column six I show a simple series of corrections I have discovered that make the results much more accurate, and therefore much more useful.

TABLE OF REGULAR POLYGONS.

	Angle.	Side.	From Scamozzi, dated 1678.	R's corrections.
3	Trigon .. 60°	1.732	—	—
4	Tetragon .. 90°	1.414	—	—
5	Pentagon .. 108°	1.176	of 1.000	= 1.200 - 25
6	Hexagon .. 120°	1.000	"	= 1.000
7	Heptagon .. 128 1/2°	.867	"	= 858 + 7 + 3 1/2
8	Octagon .. 135°	.765	"	= 750 + 8 + 4
9	Nonagon .. 140°	.684	"	= 666 + 9 + 4 1/2
10	Decagon .. 144°	.618	"	= 600 + 10 + 5
11	Undecagon 147 1/2°	.563	"	= 546 + 11 + 5 1/2
12	Duodecagon 150°	.518	"	= 500 + 12 + 6
24 sides	165°			

Useful Ways of Getting Particular Points are shown Hereunder.

Forty-five deg. from A (Fig. 23), crossing 45° from 1/8 gives point through which horizontal line cuts circle at 1/8. 30° from A and 60° from 1/8 gives point through which horizontal cuts circle at 1/8; 45° from A and vertical from 1/8 gives point through which 60° slope cuts circle at 1/8.

A horizontal through 1/8 as shown, then 30° slope at one end, and a 45° slope at other cross at point through

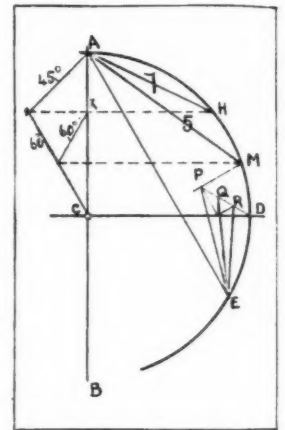


FIGURE 22.

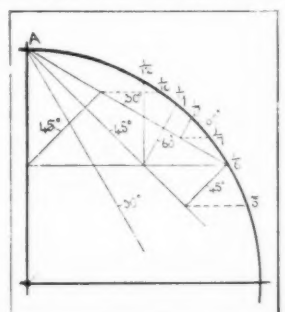


FIGURE 23.

which horizontal cuts circle at  $\frac{1}{10}$ .

Having  $\frac{1}{2}$  ticked round the circle the vertical to bottom divisions give  $\frac{1}{10}$ . The difference between  $\frac{1}{2}$  and  $\frac{1}{10}$  gives  $\frac{1}{10}$ . A third method is shown here (Fig. 24), and this is the most apt and accurate way of showing the sides of regular polygons from three to twelve-sided that I have been able so far to discover, using only the common set-squares; the construction can be clearly followed without detailed description.

(Concluded.)

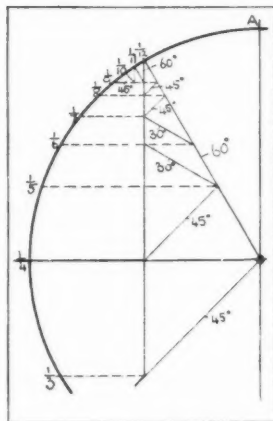


FIGURE 24.

## Correspondence

### Waterloo Bridge

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—While you are reviving, as you will quite rightly do, the "storm of indignation" at the deplorable result of the debate on Tuesday, I think it is only fair that you should record the names of the thirty-two "righteous members" who fought, spoke, or voted for saving the bridge. No doubt the destroyers will be "black-listed" and held up to the execration of posterity; let it be noted, therefore, what names are entitled to be absent from the list.

The question was not in any sense a "party" matter, and it was only the Labour Party which at the last moment insisted on its members voting *en bloc* (of whom two refused to obey, Mr. Culpin voting with us and Mr. Blake abstaining). But the division was really decided by the fifty-seven members who voted for destruction.

May I also point out that the Progressive Party, to which I belong, was the only one which showed a majority for preservation, five voting for that course against three voting for Mr. Gatti's amendment.

The thirty-two names are as follows:

**Municipal Reformers.**—Sir F. Anderton, Miss Cazalet, Sir Cyril Cobb, M.P., Capt. C. E. Cobb, E. M. Dence, Mrs. Emmet, Lady Eve, T. C. Goff, H. C. Gooch, W. W. Grant-ham, K.C., H. J. Greenwood, M. Hays, Miss Hill, Mrs. Hopkins, Sir G. Hume, M.P., Col. Levita, T. Littlejohns, W. F. Marchant, E. L. Meinertzhagen, R. C. Norman, Sir L. Pounds, Dr. Adeline Roberts, H. V. Rowe Capt. Swinton, Admiral Taylor, Mrs. Worsthorne.

**Progressives.**—H. A. Baker, Percy Harris, M.P., W. C. Johnson, R. P. Jones, Rev. J. Scott Lidgett, D.D.

**Labour.**—E. G. Culpin.

RONALD P. JONES.

### "Wake Up, England!"

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—I have read with interest "Wake up, England!" in the current issue of THE ARCHITECTS' JOURNAL. Unfortunately, I have not read the interview with Mr. Morley Horder in the "Observer," but from your article I am able to gather the pith of the interview.

This disfigurement of the countryside with "unbeautiful" houses is, and has been for many years, a sore point with all lovers of the beauty of both our "Rural England" and of architecture in general; in my opinion the sooner a check is put on this vandalism the better.

The demand for small houses continues to be great, and, in most cases, with those people who need homes money is

scarce, consequently the builder or contractor who "puts up" the house with the desired accommodation for the least money does most of the building.

These builders, who often purchase large plots of building land, have, in most cases, no sense of, or care for, beauty, provided that the houses will sell, and so this appalling disfigurement continues. I do not suggest that it is always done intentionally, but the fact remains—it is done.

It appears that ignorance of the demands of beauty is in most cases the cause of the trouble, and, in my opinion, if the general public were "educated" to the ideals and essentials of æsthetic design and planning more beautiful buildings would result.

For example, a series of lectures might be given in the cities, towns, and villages throughout the country, preferably illustrated by lantern slides, and under the auspices of the R.I.B.A.; pamphlets could be issued at a small cost, sufficient only to cover the cost of printing, etc., putting forth in simple language the same ideals; and I am sure that the R.I.B.A. would give every assistance to intending home builders to add to the beauty of their homes if this were known to them.

SUBORO.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The purport of your current leading article is that the R.I.B.A. should take up the task of "Waking up England," and that the work of Press propaganda, etc., should be undertaken by the secretary and the honorary secretary of the Institute.

In my opinion neither the secretary nor the honorary secretary of any important professional institution can specialize in any department of its work. They are the executive officers of the council, whose chief duties are to administer the affairs of the body which they represent, and control and supervise the various separate departments of its work, each department being in charge of a responsible official, all being under the control of the secretary.

The R.I.B.A. recognized this principle long ago, in placing the library in charge of a librarian, and more recently has extended this principle by appointing a secretary for education and a secretary for registration, which latter work is carried on at the premises of the late Society of Architects in Bedford Square, which have been acquired by the Institute under the amalgamation agreement, together with the income and invested funds of the late Society.

The time would therefore seem to be opportune and propitious for the formation of another department of the Institute, to deal with propaganda and publicity work, and the person placed in charge of this department would, if he realized its possibilities, not be content with communications to the Press, but would by personal visits to the allied societies enlist their sympathy and co-operation in its efforts, particularly in dealing with matters of public interest in any given locality, for it is a well-known fact that local public bodies and individuals are frequently more amenable to persuasion or pressure from organizations within their own constituencies than they are to communications from an institution in London, which has not always first-hand knowledge of local circumstances, conditions, and difficulties. Such an official would in fact act, when the occasion arose, as a *liaison* officer between the Institute and its allied societies, and in this and other ways assist the executive officers of the Institute in co-ordinating the work of the Institute throughout the country.

The foregoing is merely the outline of a proposal which has, in my opinion, great possibilities for furthering the interests of architecture, by enabling the Institute, without in any way interfering with its present organization and work at Conduit Street, to pursue with greater facility and success the work for which it was established, viz. the advancement of architecture and its allied arts and sciences.

CHARTERED ARCHITECT.

## Architectural Theory: A Suggestion

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—In these days of critical analysis, when most new buildings of importance in London and elsewhere are subjected to the fire of criticism, commendatory or otherwise, in the professional Press, and even more so in the lay Press, it would seem a pity that students are not required to pass some test in the theory of architecture pure and simple.

It is a moot point whether those students who are passing through the principal schools are conversant with what might be termed shortly "the reason why or the reason why not" certain things are done or not done in academic design. It is true that the student of these schools at the completion of his course may be expected to keep within the canons of good taste and design, having emerged from an environment which aims ostensibly at these ideals, and subjected to a subconscious influence he could not very well avoid. On the other hand, his output of work may be the result of a parrot-like repetition of exercises and fulfilment of what is expected of him or any other student, but it is doubtful whether, if he were questioned on the subject of fundamental architectural analysis, which after all is the very quintessence of the art, he would not be found wanting.

If it could be suggested to the Board of Architectural Education, would it not be preferable to delete from the syllabus of the intermediate examination the specialized paper on history, and to substitute a paper on the Theory of Architecture, and increase the standard of the general history paper, in order to make up for the loss of the specialized history? Furthermore, in the final examination, if an extra paper on Theory were inserted, the result would be rather astonishing. I am not likely to be thanked for prolonging the agony at either of these examinations, of which, together with any sort of examination, I have a profound terror—though reluctantly at the same time realizing the necessity for them. Still, after all, the examiners would be able to obtain a very clear insight into what must constitute a very important part of the make-up of the future architect.

Unfortunately, the literature dealing directly with the subject is not very profuse, but, what with Mr. Howard Robertson's excellent book, and Cortlandt van Curtis, to say nothing of Guadet's "Eléments et Théorie d'Architecture," Mr. Trystan Edwards's "Architectural Style," Van Pelt's "Essentials of Composition," etc., there is sufficient material to throw a very different complexion on the subject from the point of view of the student.

N. MARTIN-KAYE, A.R.I.B.A.

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## Professor Reilly on Liverpool Cathedral

Professor C. H. Reilly, in a lecture—the second of a series given under the aegis of the North Staffordshire Architectural Association—at Hanley, on "Liverpool Cathedral," said he was honoured in coming to that early meeting of their session to tell them about the monument Liverpool was erecting, which he thought distinguished Liverpool architecturally among all the cities of the world. Liverpool had made a great effort, and she had appealed to the imagination of her citizens, with the effect that the cathedral was going on growing and money was pouring in from people belonging to all creeds. Everybody was appealed to by the idea of building this great monument. There were a million inhabitants in the great Merseyside city, and it was a new problem to build a cathedral for so many people. St. Peter's at Rome was built for a town of about 50,000 people, and St. Paul's for a little larger number, but no architect before had had the problem of building a cathedral which would sum up the aspirations of a town of the size of Liverpool. Sir Giles Gilbert Scott, R.A., seemed to have opened new vistas for them, and he had approached the problem in a new way.

The Government cottage did more than merely solve its problem efficiently and earn the subsidy, if the architect put some of his personality into it. Applying that to the cathedral, they would see at once that the spiritual side of the problem in a cathedral was vastly the larger side. In fact, it was almost the whole problem. The material side would be to provide a large church for the Anglican rites, containing large spaces for vast congregations. The spiritual side of the programme was something very much more difficult. To sum up in a mercantile modern town the aspirations of people numbering nearly a million, a cathedral must be a place where they could escape from the world. It must be that, not only for the individual worshipper, but for a vast congregation of people who used it on all occasions. It must also stand out and dominate the town as a symbol. It must help the town; it must be something which helped the imagination of the town, and filled the picture as a contrast to the activities of the town; and it was in these latter things that he thought Scott had been so successful.

Sir Gilbert Scott told the speaker that his main object

was to build a house of prayer, and that he would have nothing in the building that seemed to take away from its solemnity. He would try to make the building seem to have been constructed out of solid rock. The whole structure should seem organic. Scott had been greatly helped by the site.

The cathedral stood on a low ridge parallel to the river, about a mile from the commercial centre of the town. Fortunately, in between there was a dip in the ground, so that in building on this mount the cathedral was isolated. Liverpool looked across the Atlantic for its inspirations a good deal, and was rather an American type of city, and they would probably have great blocks of offices and warehouses along the river front which might dwarf the cathedral if it were not isolated by the hollow in the ground. But, not only was the building isolated; it was made extraordinarily romantic. On the land side there was an old quarry, perhaps 80 ft. deep, and this was used in the early part of the nineteenth century, and buried in the bottom of the quarry were most of Liverpool's great men. The quarry had a rock face, covered with verdure, trees, and bushes, which contrasted with the red sandstone of the cathedral. At one end stood a perfect Greek temple, built by Foster, who also designed the Customs House. The cathedral ran north and south, so that ships coming in from the Mersey would see first of all the north (or pseudo-west) entrance, and the whole length of the monument would be revealed as they went down the Mersey.

The building was going to have a symmetrical outline, and that was how he thought it would dominate in Liverpool. Scott had been careful to make the whole building strong, solid, and towering, making a strong silhouette against the sky. It was not ordinary Gothic; to the Classical he had added the energy and power of the Gothic. That wonderful expansion of ideas which that young man had been able by his genius to imagine and create had opened out new vistas before them. This was a new and modern building—not a reproduction of an old one. It was solving a modern problem of making a spiritual thing in that commercial town. There, he felt, they had a great building comparable, openly and freely, to the great buildings of the past. He thought Scott had produced a masterpiece.



## More Tall Buildings in Manchester

Mr. Guy Dawber, President of the R.I.B.A., speaking at the annual dinner of the Manchester Society of Architects, appealed to members of his profession to aid the movement to preserve the amenities and old-world charms of our towns and villages. Since the war, he said, many of the changes that had taken place were lamentable. Many villages seemed to be copying the worst features of our large towns. It was terrible to see the charm of our villages spoiled by ugly motor garages, with great blank sheets of glass, and their trade signs and symbols. The motor-car, of course, was responsible for this, but really the motor-car seemed to be the Moloch to which we were sacrificing the charm of our old towns and villages—a charm which was typically English.

Again, the whole countryside was being littered with architectural horrors in the shape of small houses built of inferior materials. They did not want State control, but it seemed to him that the time had come when some authority should be constituted in each district to prevent that kind of thing happening. It was largely due to work being put into the hands of ill-trained architects and of local officials who had not had the proper training and who had no local sympathies. Yet, with a little care and judgment, and with some civic body to act as a guide, the thing could be done well and with no more expense.

The Lord Mayor of Manchester (Councillor M. E. Mitchell) said large buildings, eight, nine, and ten stories high, were going up in the centre of the city, thus causing a greater congestion of people in the central area, and adding difficulty to the Tramway Committee's problem. If this tendency, for which architects were partly responsible, were to increase, the Corporation would have to face the question of widening the streets to accommodate the growing traffic.

The city surveyor's department had been authorized to prepare a kind of civic plan of the centre of the city in order that the Corporation should know what was happen-

ing and where present-day tendencies were leading. If the architects of Manchester would give special consideration to the town-planning side of their work he was sure they could help the administration of the city very greatly.

The chairman (Mr. Arthur Hope) said he regarded it as a most hopeful sign that the Press was now taking much greater interest in architecture.

## The Repair of the House of Commons

"Obviously the Houses of Parliament must be made safe," remarks the "Daily Telegraph" anent the necessary repairs. "When we hear of a stone portcullis coming away at a touch, of a heavy stone flower, weighing 56 lb., in the centre of an archway being split in two, or of a lion's head, weighing 70 lb., on the North Tower waiting for momentary dissolution from its body, there can be no argument about the need of prompt action."

"Yet it will be seen with dismay that the costs of repairs are estimated 'approximately' at a million sterling. Sir Frank Baines, did not put it so bluntly as that. He spoke of '8 per cent. of the estimated cost of the Houses of Parliament to-day, which was about £12,000,000, and that, if spread over 15 years, would mean about one-half per cent."

"Most people have noted marked differences in the workmanship of those who wrought in stone or wood for the old abbeys and cathedrals. Some carved the unseen places of the stone as conscientiously as the seen, the backs as minutely as the fronts. But at present rates of cost there will be no disposition to spend lavishly on stonework that will not be seen, especially as it will not add appreciably to the comfort of the pigeons and the sparrows which nest in these niches. We would not suggest anything savouring of scamped workmanship in connection with the Houses of Parliament; but in these days we need not despair of a neo-Gothic style of statuary which shall dispense with the ingenious minutiae of the old, and still be held good Gothic."



THE "DRINKING-SONG" SCENE IN THE A.A. PANTOMIME.



# The Condition of the Building Industry

Mr. Herbert A. Welch at the R.I.B.A.

**M**R. HERBERT A. WELCH, F.R.I.B.A., read a paper on "The Condition of the Building Industry, with Especial Regard to the Shortage of Skilled Labour and the Increased Cost of Building Work," at the last meeting of the R.I.B.A. In the course of his paper he said: Resulting from my investigations, I have formed the opinion that the chronic troubles from which the industry has suffered during recent years are not so much due to particular incidents or disputes, to special points of difference between the parties regarding what might at such times appear to be the cause for such disputes, as to the fact that there is underlying these disputes a deeply rooted feeling (frequently shared by both masters and men) that hardships and grievances are permitted to continue because no sufficient attempt has been made in the past to tackle fundamental conditions. On this account many of the so-called settlements of past disputes have in effect been merely a postponement of the matter until such time as one side or the other considered the occasion most favourable to its cause. The result has been that for a long time "feeling"—active or latent—has manifested itself within the industry. In such cases delay has not healed the wound, but, on the contrary, caused it to fester, with a tendency to become poisonous.

The existing agreements between the employers and employees expire in February of next year. It would seem, therefore, that now is the opportune time to give calm, quiet, and deliberate thought to our subject. For some time past there has been an expressed desire for "a new spirit in industry" generally. Can we continue to view with complacent satisfaction this growing desire without ourselves making a serious attempt to encourage this new spirit within the industry with which we are connected?

It has become the custom for representatives of the employers and employees alone to deal with matters concerning the more practical and material side of the industry, probably because they represent the parties most directly concerned. So long as the machinery thereby set up has functioned for the general well-being of the industry, it might be reasoned that he was a meddling busybody who would venture to introduce changes from the outside. It is a generally accepted axiom that onlookers see most of the game. Were we architects but mere onlookers I venture to think that from that standpoint alone a good and sufficient reason could be stated for our venturing an expression of view as to how best the game might be played. We are, however, not mere onlookers, but active participants in all the good and ill which befalls the industry. Yet how little we know about the causes and effects of certain fundamental conditions, the reasons why disputes arise, tending to acute feeling, and sometimes ending in strikes; which, in turn, are settled upon terms of which we know not until at breakfast or in the train we scan our morning newspaper!

To give and to receive the fullest measure of benefit the industry as a whole should be happy and contented, the crafts sound and skilful; production should be smooth, steady, and economic.

Can we architects play any useful part in creating such conditions?

Mr. Robert D. Kohn, chairman of the Committee on Industrial Relations, American Institute of Architects, in the course of a letter to the "Architectural Association Journal" under date June 19, 1925, regarding a report of the Architectural Association's general meeting on April 27 this year, writes as follows: "The report of your meeting and the discussion thereon by members of your Association seem to indicate that the situation in England with regard to the relations between architect, building labour, and the builder do not vary greatly from those that pertain in the United States. . . . In the last few years we have

made a beginning towards a change in this procedure. Reference is made in your report to the appearance of Mr. Malcolm Sparks on one occasion before your organization. We are glad to acknowledge our indebtedness to Mr. Sparks for the plan of co-operation between the various elements of the building industry upon which we have embarked in the United States was primarily inspired by his efforts to organize the Parliament of the Building Industry in England during the war. As far as I can discover, his war-time effort has left no permanent organization of similar character in England. It inspired a movement, however, in this country which is carrying on with great success.

"I refer by this to the 'Congress of the Building Industry,' which was started in 1920 in a preliminary way in this country, and which in the last three years has developed into a group of local organizations in half a dozen of our more populous communities: New York, Boston, Philadelphia, Portland (Oregon), Seattle, and the State of New Jersey. Each of these organizations includes within its membership what we call the technique of the industry (the architects and the engineers), the labour of all the crafts of the industry, the builders (here called general contractors), the sub-contractors, the building material manufacturers or producers, the building material distributors, and finally the representatives of finance principally interested in building loans.

"We are, therefore, gradually developing here through these local organizations a medium of co-operation between the various elements that jointly render a certain service to the public, and this co-operation enables each different function within the building process better to understand all the other functions within the process. Already each of these local groups has developed a system of apprenticeship training in the building crafts. . . . Just as an illustration of the results attained in three brief years of work I may cite that in New York City alone the number of apprentices being trained in various crafts has increased from a few hundred to two or three thousand. . . . Nor have we yet, even with our large increase above recorded, reached the maximum permitted by the unions. . . . Apprenticeship training is only one of the many educational efforts undertaken by the Congress groups, educational in the sense that they educate the participants in the efforts rather more than those ostensibly to be benefited. Seasonal unemployment; unfair practices on the part of builders or of labour; inadequate performance on the part of the architects; industry codes of ethics; surveys of likely shortages of materials or labour are all topics that engage various Congress committees in the different cities.

"It must not be supposed that what we have done here has been all plain sailing or that we have solved the problem of industrial relations in the building industry in the United States. We have hardly scratched the surface of the problem. But we are certain we have started in the right direction. . . . I cannot help feeling that if possessed of 'the will to win,' a similar body set up in this country could, and would, do much excellent work. I further feel that unless some such body is created, and *can be made to work in the right spirit*, we must be prepared to face in the future continued trouble and controversy.

From the examination of much data I have formed the opinion that hitherto the system of apprenticeship has not been developed to nearly its full extent. The fullest possible development of the apprenticeship system, together with that of training in technical schools, is both urgent and vital if the existing shortage is to be supplemented by bringing into the industry the right type of young man.

In order to increase the number of apprentices with a view to overtaking the existing shortage of labour, it would,

I think, be well to consider—at least for a stated period of, say, five years—(a) the advisability of amending the existing rules in order that individual firms might take an unlimited number of apprentices, provided the agreed ratio of apprentices to journeymen (one to seven) was not thereby exceeded; (b) That the Employers' Federation should bring to the notice of its members in particular and to the industry in general the vital necessity of encouraging the apprenticeship system by urging master builders to train a greater number of young men in the various crafts, in particular those crafts in which from time to time the shortage of skilled workers is most marked; (c) That the notice of the elementary school authorities be drawn to the prospects in the industry for young lads when nearing the age for leaving school. In this direction stimulus might be provided if suitable propaganda work were undertaken in important centres of population; (d) That greater encouragement be given to apprentices to supplement the knowledge gained in the workshops and on the jobs by attendance at technical schools at least on certain evenings each week, and if possible one whole day a week during, say, the three or four years of their apprenticeship. It is generally acknowledged that operatives who have received technical school training in addition to working in the shops and on the job become far better fitted ultimately to occupy the positions of foremen, clerks of works, and master builders. To this end added encouragement would be given if the federations of employers and employees could see their way to grant a suitable sum for prizes and scholarships to students at recognized schools. I would add that in the event of the federations adopting some such scheme perhaps the Council of the R.I.B.A. might consider the desirability of associating itself with such an educational project. In cases where an apprentice showed marked ability and progress as a result of supplementing workshop training with technical school study, his period of apprenticeship might be accordingly reduced; (e) That wages paid to apprentices should not bear unfavourable comparison with those obtainable by lads in unskilled trades.

Over-age apprenticeship had, I believe, had some measure of consideration as a temporary means of providing additional craftsmen. By this method the prospective craftsman would be bound under a form of indenture providing for a minimum period of three years' training. Of this period it appears to be advisable that one year at least should be spent in a trade school, where a curriculum suited to this special section should be applied. Owing to the comparatively high age—say, 19–25 years—for the commencement of such indentures, some system of payment by grant would be necessary, and this might involve a difficulty not easy to overcome, especially in view of the comparatively small numbers of craftsmen likely to be produced by such an arrangement.

Promotion from Labourers and Dilution.—This is a scheme for increasing the number of craftsmen in the industry by introducing into the ranks of the skilled craftsmen a number of semi-skilled men, thereby creating additional numbers of so-called skilled workers, many of whom are not necessarily capable of executing a high standard of work. Its advocates hold that there are many operations in building works which can successfully be carried through after comparatively short training. Its opponents state that to employ upon building works men who are not well skilled in their job tends seriously to reduce not only the level of output, but also the general quality of the work. If such a scheme were adopted on anything approaching a big scale I fear that the dilutees would fail to get general employment on account (a) of the established tradition for a high standard of workmanship in the industry; (b) the disinclination of architects to produce a specification of works on a lower standard than that to which they are accustomed; and (c) the comparative failure of the scheme of dilution for ex-service men put into operation a few years ago.

One or two suggestions occur to me as being perhaps worthy of consideration:

(a) Could not a building-trade employment bureau be set up in all large centres of population whereby employers seeking men and operatives seeking employment could obtain mutual advantages? Surely it would be more economically sound if employers or their foremen on the one hand were able to notify such an establishment of their labour wants, say, two or three days ahead, with a view to avoiding delay and to secure the more satisfactory dovetailing together of the work of the various trades? On the other hand, the operatives should welcome the opportunity thereby offered in being enabled to discover at a central bureau—especially managed by the industry for the industry—the employers who at that time are wanting men, and so save time and avoid the disappointment so often now in store when walking from job to job in search of work. I gather that the headquarters of the men's unions have attempted some such arrangement, but owing to various causes the fullest use is not made of such arrangements as exist, nor do the existing arrangements appear to be capable of development along lines which are likely to be used to the full by the parties concerned. Existing labour bureaux are not popular with either masters or men, and owing to their general nature could never impress the industry with the same degree of confidence as its own show.

(b) It has become a custom with the public to view with favour the early spring for carrying out all kinds of decorations and jobbing work. These seasonal operations need adjustment in the interests alike of the public and the industry. How often do we find householders and others delaying until the spring such operations as external painting and similar work, when a glance at the condition of the woodwork, etc., clearly indicates that the materials will badly deteriorate as the result of such delay? Two coats of paint applied to bare woodwork in the autumn is as good as four coats in the spring after the winter rains, snow, and frost have done their worst. Help and advice to the public regarding seasonal operations is capable of considerable development. Timely propaganda each year would bring appropriate matters to the public notice, who would be grateful for the advice and the industry for their patronage. Organization and outlook could do much to reduce casual employment.

## The Regent Street Polytechnic School of Architecture

The annual prize-giving of the Regent Street Polytechnic School of Architecture took place on Thursday, December 17. Mr. Frederick Chatterton, F.R.I.B.A., occupied the chair. The chairman and the visitors were introduced by Mr. G. A. Mitchell, F.R.I.B.A., head of the architectural school, who afterwards spoke at some length on the work of the past session, and expressed his satisfaction with the progress of the school generally. The school, he said, had had gratifying success with work submitted in open competition. Mr. Septimus Warwick, F.R.I.B.A., then presented the prizes, the premier award being that of the "Bosom" gold medal for architectural design, which was won by Mr. J. R. Moore. The following awards were also carried off by pupils of the Polytechnic Architectural School: The "Bovis" studentship, the "Chatterton" prize, the "Stitson White" prizes, Mr. Sprague's book prizes, the Institute of Builders' silver and bronze medals, the "Plumber" silver medal, the silver medals for vacation work (day department), silver and bronze medals of the Polytechnic School of Architecture, the diplomas of the evening department, and the day-school diplomas for the three years' course. Votes of thanks to Mr. Septimus Warwick and the chairman were proposed, seconded, and carried unanimously. Mr. Warwick and Mr. Chatterton, both of whom were pupils of the school in its early days, acknowledged the votes of thanks. Mr. Chatterton said that he would have been thankful as a student for the opportunities which such an institution as the Polytechnic afforded to-day for acquiring a thorough insight into the profession of architecture from start to finish. He thought that the architectural schools had practically killed the article pupil system, thereby enabling a pupil to forge ahead unimpeded by side issues.

# Regional Planning as Applied to London and its Environs\*

By G. L. PEPLER, F.S.I., Past President of the Town-Planning Institute

**R**EGIONAL planning is now well established in the country; thirty-two joint town-planning committees have been constituted, embracing, altogether, some 500 local authorities, and covering a total area of over 5,000,000 acres, or about 8,000 square miles. The largest region that is being planned as a unit is that for the Manchester district, which comprises ninety-six local authorities, and covers an area of over 1,000 square miles. This may be compared with the area dealt with by the Greater London Arterial Road Conferences, which covered 1,083 square miles, including Greater London, which has an area of 693 square miles (103 town-planning authorities), and in 1923 had a population of nearly 7,500,000, and total assessable value £67,235,000.

The Manchester region is contained in the basin of the Rivers Mersey and Irwell, but the region of the capital city of the Empire can hardly be said to be defined by any definite physical boundaries, unless it be taken to reach the sea, on the south.

The London and Home Counties Traffic Advisory Committee covers about 2,000 square miles. This compares with 5,500 square miles, the area now being dealt with in the regional plan that is being prepared for the City of New York and its environs.

Special reference must be made to the Arterial Road Conferences, summoned by the Rt. Hon. John Burns as president of the Local Government Board in 1913, because, although their attention was confined to roads, this voluntary combination of local authorities, Government departments, and representative societies and associations (including the London Society) did do a notable piece of regional planning in producing their great scheme of arterial roads, based largely on the proposals of Colonel Hellard, for an area of approximately 1,000 square miles. Most of these roads and others are in being or are in course of construction. Subsequently the London Society produced a plan that included not only these arterial roads, but also a far-sighted scheme of regional open spaces.

On the Unhealthy Areas Committee, 1919-21, with the best wish to stick strictly to our subject, we found that it could not be isolated, and could not be dealt with effectively unless as part of a general development plan dealing with housing, transport, reconstruction, distribution, decentralization into self-contained garden cities or satellite towns, open spaces, etc.; such plan to be based on an accurate survey of existing facts. We recommended (in 1921) "that some competent person or persons should be at once authorized to prepare a plan for the reconstruction of London and the surrounding country, including the Home Counties as well as the Metropolitan and City Police Districts."

There seems a general consensus of informed opinion that a comprehensive plan is required for the London region, but there is difference of opinion as to the extent of that region. We should, however, probably all be agreed that, at any rate, a useful start could be made with the region proposed by the Royal Commission on London Government for the operations of a London and Home Counties Advisory Committee. This roughly extends to a radius of 25 miles from the centre.

The Royal Commission recommended that such an advisory committee should advise the appropriate ministers upon the following matters, with a view to co-ordination within their region:

1. Transport.
2. Town planning, in relation to transport.
3. Housing, as part of town planning, in relation to an equitable distribution of population.
4. Main drainage, new facilities, and combination between authorities.

Since the Royal Commission reported, a London and Home Counties Traffic Advisory Committee has been constituted, and has as its distinguished chairman Sir Henry Maybury, than whom no one speaks with greater authority on the subject of roads. Its powers are, however, not so wide as was recommended by the Commission, and are practically limited to matters relating to traffic.

Although no comprehensive general plan of development is yet under way for the whole region, considerable and encouraging progress has been made in planning large sections of it, by Joint Town-Planning Committees, whose constitution was made possible by the Town-Planning Act of 1919.

The work in hand and accomplished by these Joint Town-Planning Committees is encouraging, and in no way prejudicial to the preparation of a composite plan for the whole, for, as the Arterial Road Conferences proved, and as has been found in the Manchester and Midland regions, in practice the whole would have to be divided into sections of workable size.

It is a little disappointing to find that Greater London, having been first with a regional plan for arterial roads, should be outstripped by New York in respect to a complete general plan; although we can feel some satisfaction that Mr. Thomas Adams (from whom I took over the Arterial Road Conferences in their early stages) is now General Director of Plans and Surveys for the New York Regional Plan, covering 5,500 square miles.

There is still time for us to catch up again, because our region is all in one State—not in three, as is the New York region—also we possess accurate maps, and we have the advantage of investigations already carried out by several commissions, committees, conferences, and societies, such as our own; there is a Traffic Advisory Committee already in existence; we have the statistics of daily movements of population extracted from the last census, preliminary investigations in hand by the London County Council and other bodies; and last but not least, the work done by the Joint Town-Planning Committees.

Fine as the sectional regional planning round the centre has been, it is clear that the needs of the whole region of London cannot be envisaged nor a plan prepared that shall meet those needs until the whole, including the centre and the outer fringes, is treated as one unit for the purpose of study and planning.

One thing that to me seems to stand out with absolute distinctness is that we can no longer afford the immense and continuous waste that is involved in the haphazard use of land. We cannot afford to do without an orderly general programme of development. Next year, Sir Henry Maybury expects that there will be an additional 500,000 motors on the roads of this country. The prospect is indeed appalling, and it would seem that a cumulating catastrophe can only be averted by local authorities, Government departments, business interests, landowners, and all progressive agencies and persons getting together immediately to prepare a programme of development and reconstruction that by a process of decentralization and redistribution will re-sort things into their proper place, that

\* Extracts from a paper read before the London Society.



will provide for some elbow-room and amenity in the centre, will preserve us some countryside, and will provide for the best conditions for work, for homes, and for recreation.

The discussion was opened by H. Swann, chairman of the Town-Planning Committee of the London County Council, who moved a resolution to the effect that in the opinion of the meeting it was desirable that the local authorities in the London region should combine together and prepare a general plan of development. This was supported by Mr. Jackson, chairman of the Barnet Urban District Council Town-Planning Committee, and chairman of the Thames Valley Joint Town-Planning Committee, also by Major Lovelock, clerk to the Carshalton U.D.C., and by representatives of other local authorities in the region, and after a lively discussion was carried unanimously.

## Law Reports

### Infringing Trade Name

*Bratt Colbran & Co. and the Heaped Fire Co., Ltd. v. Paston-Tudor and Courtney Pollock.*

Chancery Division. Before Mr. Justice Lawrence.

This was an action by Bratt Colbran & Co. and the Heaped Fire Co., Ltd., of Mortimer Street, W., against Paston-Tudor (a firm) and Courtney Pollock, of Marsham Street, Westminster, to restrain the defendants from selling fireplaces or grates under the name of "Heaped" or "Heap Fire," and an inquiry as to damages. According to counsel, the plaintiffs' case was that the names in question indicated to the trade that the goods were of their manufacture. Defendants by their defence denied this, and pleaded that the words were descriptive, and were, in fact, the only correct description for open grates without bars which burned coal or other fuel piled in a heap.

Defendants applied for leave to amend their pleadings by adding another defence, and the hearing was adjourned to enable them to do so.

His lordship suggested that in the meantime the parties might settle the case.

Mr. Moritz, K.C., for the plaintiffs, said that if defendants would submit to an injunction his clients would waive the inquiry as to damages and not insist on costs.

His lordship said defendants had quite a nice name—Paston-Tudor—and why they wanted to call these things "Heaped" fire he did not know. He was not deciding anything as to the merits of the case.

Mr. Danes, for the defendants, said consideration would be given to his lordship's suggestion, and the hearing was adjourned.

## Acquisition of Sites—Commission Claim

*Phillips v. Wheeler.*

King's Bench Division. Before Mr. Justice Finlay.

This was an action by Mr. R. M. Phillips, of Conduit Street, W., against Mr. H. Wheeler, a builder and contractor, of Leicester Place, W.C., to recover commission alleged to be due to him in respect of obtaining for defendant a building site in Lower Regent Street, near Piccadilly Circus.

Mr. Neilson, K.C., in opening the plaintiff's case, said his client had successfully specialized in securing sites and negotiating their sale, and it was in pursuit of his profession that he came into contact with the defendant in 1917 in connection with the rebuilding of Piccadilly Circus and the north end of Lower Regent Street. The defendant gave plaintiff a letter which said: "In the event of my deciding to make a definite offer for this site or being interested in the same I agree, should such offer be accepted, to pay you £500 upon the signing of the building agreement and a further sum of 20 per cent. of any profit I should make should I dispose of the site without buildings." As a matter of fact the defendant did become interested in a building site, with the result that he secured from the Crown one of the sites. Defendant paid plaintiff the £500, and the plaintiff's case now was that the defendant was liable to pay him a further sum of 20 per cent. upon the profit he had made, as he had disposed of the site without building upon it himself. He negotiated with the Criterion Restaurants, Ltd., and sold his interests for a consideration composed, as plaintiff said, of two heads: first, a cash payment of £15,000; and, secondly, he had given to him by the Criterion Restaurants, Ltd., a building contract.

Plaintiff now claimed that he was not only entitled to the 20 per cent. upon the actual cash sum which Mr. Wheeler received for his rights in this land, but inasmuch as the building contract was of great advantage to him he must be taken to have accepted a less sum in cash than he would have obtained if he had not got the building agreement, and plaintiff asked for an account to be taken on the basis of the receipt by the defendant on the cost of the building of 7½ per cent.

Plaintiff gave evidence in support of his counsel's opening.

Mr. W. Blake Odgers, for the defendant, said he was unable to call his client owing to illness. He submitted that it was clear from the correspondence that the defendant did not consider the letter he gave plaintiff represented the terms verbally agreed to, and offered plaintiff a concise agreement, which was refused. He submitted that the letter was ambiguous. Defendant did not dispute plaintiff's claim to 20 per cent. on the £15,000, but what he complained of was that the plaintiff was trying to go beyond the agreement and get a further commission. The £15,000 had not yet been paid by the Criterion Restaurants, Ltd., and therefore action was premature. The builders had received £73,000 for the building. There was a small balance still owing, as the architect's final certificate had not yet been given.

Evidence was given for the defendant.

His lordship found in favour of the plaintiff, and made a declaration that the profit on which plaintiff was entitled to have 20 per cent. was not only the £15,000, but also the 7½ per cent., and failing an agreement between the parties, an account would be taken. Plaintiff would have the costs of the action. His lordship, in his judgment, regretted the defendant's absence. He saw no reason to doubt that the verbal agreement between the parties was not sufficiently embodied in defendant's letter to the plaintiff of May, 1917. The agreement, in his opinion, was quite explicit that plaintiff was entitled to these things if the defendant made an offer for the site and it was accepted. That was conceded, because plaintiff had already been paid £500, and it was agreed he was entitled to the commission of 20 per cent. on £15,000 not yet paid. The only question here was whether the 7½ per cent. expressed to be the remuneration to the contractor, the defendant, was or was not part of the profit, which the contractor was making for disposing of the site without building. That the defendant disposed of the site without building seemed to admit of no doubt whatever. He did so because as part of the contract he and no other builder was to erect the buildings for the Criterion Restaurants, Ltd. Plaintiff was entitled to 20 per cent. upon the profit which the defendant should make, and looking at the contract it was impossible to avoid the conclusion that the 7½ per cent. was part of the profit. That meant the consideration was to be £15,000 and the contractor's remuneration of 7½ per cent. as had been stated.

## Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Mr. N. Chamberlain informed Mr. Day that on November 1 the position under the Housing Act, 1924, was as follows:

Number of houses completed	..	..	15,122
" " " under construction	..	..	30,956
" " " definitely arranged for, but not started	..	..	24,046
Number of houses authorized, but not definitely arranged for	..	..	20,202
Total authorized	..	..	90,326

Mr. Chamberlain informed Mr. C. Edwards that 184 rural districts had so far received approval of housing schemes under the 1924 Act.

Mr. Chamberlain informed Mr. Erskine that he hoped to introduce a Smoke Abatement Bill next session.

Captain King, the Financial Secretary to the War Office, in reply to Sir C. Kinlock-Cooke, said that a great number of different interests had had to be consulted with regard to the best form of memorial to the men of the mercantile marine who lost their lives in the war, but he was glad to be able to say that agreement had now been obtained, and he hoped that arrangements would shortly be completed which would enable the Secretary for War to make an announcement on the subject.

Captain Crookshank asked the Under Secretary of State for the Home Department, as representing the First Commissioner of Works, whether he would arrange that before any war



memorial statue, etc., was erected in the London area, full-sized models should have to be put up, as was done in the case of the Cenotaph, in order that the views of the general public might be expressed?

Captain Hacking replied that the First Commissioner regretted that he was unable to give an unqualified undertaking to this effect.

Captain Crookshank asked whether the designs of the Brigade of Guards' war memorial, now being erected on the Horse Guards' Parade, were submitted to, and approved by, the Fine Arts Commission; and, if not, whether the First Commissioner is prepared to have them submitted to the Commission for their approval before the monument was actually erected?

Captain Hacking said that the design of this memorial was selected by two assessors appointed by the Royal Academy, and accepted by the First Commissioner of the day before the Royal Fine Arts Commission was appointed. The First Commissioner regretted that at this late stage he was unable to reopen the subject.

Mr. Macpherson asked the Under Secretary if he would announce the decision of the law officers of the Crown regarding the jurisdiction over the Crypt Chapel; and if he would state to whom application should be made for permission to use the chapel?

Captain Hacking said that the law officers decided that no ecclesiastical jurisdiction existed in respect of the Crypt Chapel. It was therefore under the sole jurisdiction of the Lord Great Chamberlain, to whom application should be made for permission to use the chapel for baptisms, weddings, etc. Arrangements in connection with the preparation of the chapel for such ceremonies would be made by the Superintendent of Works.

Mr. Betterton, Under Secretary to the Ministry of Labour, informed Mr. Day that the number of unemployed in the building trade on October 26 were: Carpenters, 2,864; bricklayers, 911; masons, 781; slaters, 193; plasterers, 202; painters, 18,230; plumbers, 1,521; labourers, 24,377; other workers, 20,313; total, 69,392.

## The Institution of Heating and Ventilating Engineers Prize Competition

The Council of the Institution of Heating and Ventilating Engineers are enabled to offer the following prizes for original papers on subjects connected with heating and ventilating during 1926: Lumby Premium, £10 10s.; Sirocco Premium, £10 10s.; London Premium, £5 5s. The winning of an award may carry with it a medal of the Institution. The prizes will be awarded as follows: The Lumby premium for the best paper submitted dealing with, or any subject connected with heating or hot-water supplies; the Sirocco premium for the best paper submitted dealing with ventilation, and the general application of fans; air washing, air conditioning, dust and fume removal, mechanical draught, etc; the London premium for the next best paper on any subject included in the above. Papers submitted must be the sole composition of the competitor. The qualification being that such competitor is either a student attending a technical institute or an assistant actively connected with the business or profession of heating and ventilating in Great Britain and Ireland, and is not a principal or an employer. Any subject may be chosen, and "The List of Subjects for Papers," prepared by the Institution of Heating and Ventilating Engineers, a copy of which may be obtained on application to the secretary, 38 Victoria Street, London, S.W., is suggested as a guide. The paper to be posted to Competition Committee, c/o the secretary of the Institution of Heating and Ventilating Engineers, not later than May 1, 1926.

## Edinburgh Architectural Association

The Associate Section of the Edinburgh Architectural Association held their annual supper and smoking concert in St. Vincent House, Great King Street, when an excellent programme was enjoyed by a large number of members and friends. Among the guests were Mr. J. Inch Morrison, R.I.B.A., president of the Association; Mr. Allan Sutherland, Edinburgh College of Art; members from the Associate Section of the Glasgow Institute of Architects, and members of the Eastern District Students' Society of the Faculty of Surveyors. Mr. J. C. Cunningham, chairman of the Associate Section, presided.

## Competition News

### Manchester Town Hall Extension.

The President of the R.I.B.A. has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a jury of assessors in connection with this competition. The scheme, if carried out, will take in the whole site bounded by Lloyd Street, Mount Street, and St. Peter's Square, and the demolition of one of the largest blocks of business premises in the city area. It is expected, however, that the scheme will be proceeded with in parts.

### Proposed New Parish Church, Newbridge, Monmouthshire.

The following notice has been issued by the R.I.B.A.: "The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members are advised to take no part in the competition."

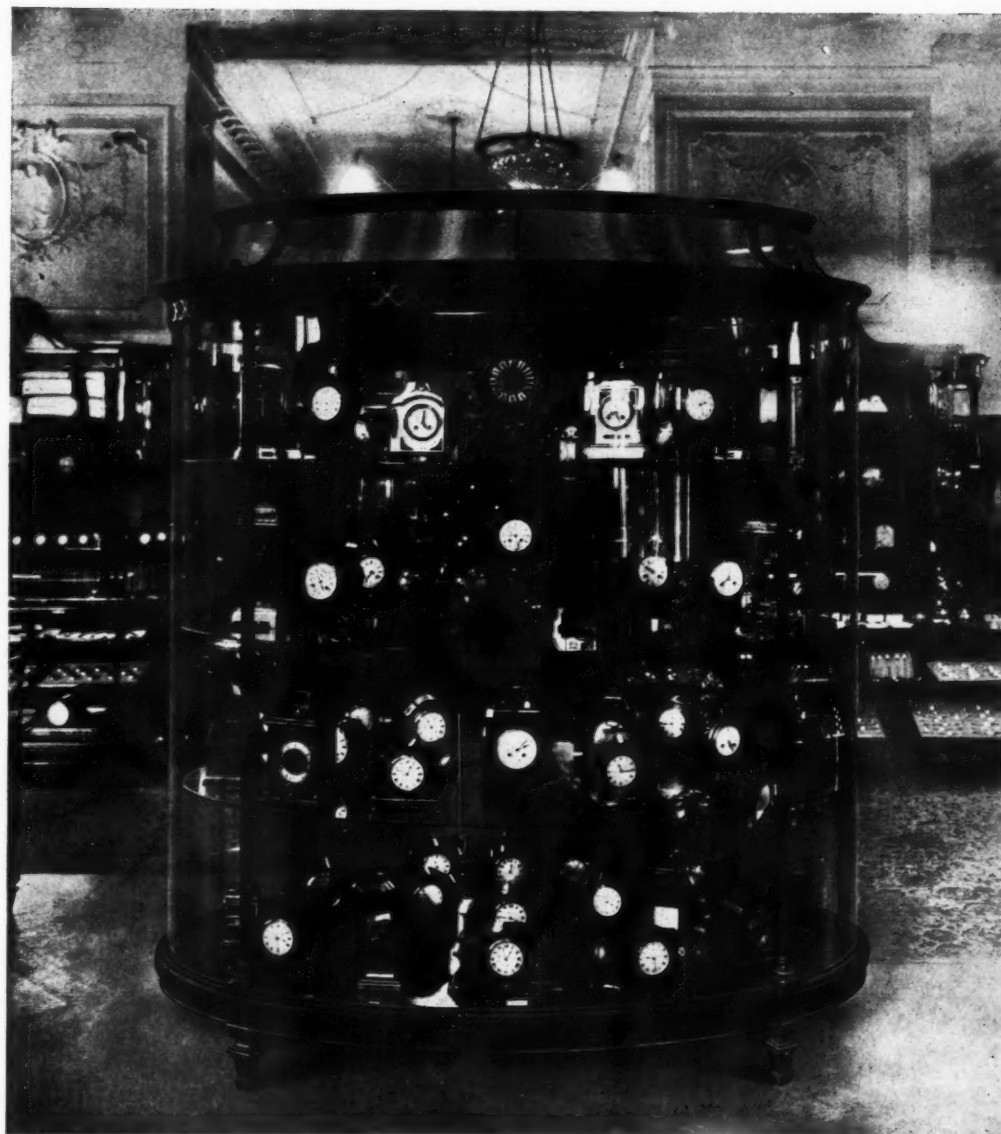
## List of Competitions Open

Date of Delivery.	COMPETITION.
Dec. 31	The Argentine Government offer prizes of 10,000, 5,000, 4,000, 3,000, and 2,000 Argentine gold pesos for the best architectural designs for a National Institute for the Blind. Apply Enquiry Room, Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1.
1926 Jan. 1	New buildings for Liverpool College on a site at Mossley Hill. Assessor, Sir Giles Gilbert Scott, R.A. Premiums, £500, £300, and £200. Conditions and plan of site can be obtained from Mr. J. H. Lintern, secretary, Liverpool College, Sefton Park Road, Liverpool, on payment of a deposit of £2 2s.
Jan. 14	By the generosity of Mr. Willard Reed Messenger, of New York, engineer, an International competition is to be inaugurated to promote and facilitate the construction of houses for the smaller middle classes and intellectual workers. Mr. Messenger is offering a first prize of 500 dollars, a second prize of 300 dollars, and a third prize of 200 dollars. The competition is to be held under the auspices of the International Federation of Building and Public Works (whose headquarters are in Paris), and which has recently held its International Congress, when forty-two countries were represented. Certain rules regulating the competition have been formulated, and the jury will be composed of eleven members, representing various nationalities. Competitors will be required to send in sketches, descriptive particulars of any new processes of construction proposed, and of schemes intended to reduce costs. Apply Director-General of the International Federation, 17 Avenue Carnot, Paris.
Jan. 16	Branch library at Gabalfa, for the Cardiff City Council. Limited to qualified architects within the City of Cardiff. Premiums £75, £50, and £30. Mr. Sidney K. Greenslade, F.R.I.B.A., assessor. Apply Librarian, Central Library, Cardiff. Deposit £2 2s.
Jan. 30	Erection of a new art gallery and museum within the borough of Birkenhead. Competitors must have been resident or have had an office within twenty miles of the Birkenhead Town Hall during the whole period subsequent to January 1, 1923. Premiums £250, £175, and £100. Assessor, Sir Robert Lorimer, A.R.A., R.S.A., F.R.I.B.A. Conditions of competition, together with a copy of the site plan, particulars of the subsoil, etc., of the site, and photographs, can be obtained on application to Mr. E. W. Tame, Town Clerk, with deposit of £2 2s.
Feb. 13	Clock tower with drinking fountains to be erected, for the Blackpool Corporation, in the new park as a suitable memorial to the late Dr. William Henry Cocker, J.P., first Mayor and Honorary Freeman of the Borough. Assessor, Mr. E. Bertram Kirby, O.B.E., F.R.I.B.A., president of the Liverpool Architectural Society. Apply Mr. D. L. Harbottle, Town Clerk. Deposit £1 1s.
March 31	Australian War Memorial, Canberra. Open to Architects of Australian birth. Apply High Commissioner, Australia House, Strand, London.
July 12	The following architectural competitions have been organized in connection with the Royal National Eisteddfod of Wales, to be held at Swansea next year: Design for a National Parliament House for Wales, prize £100 (no age limit). Design for a street façade to a large stores; prize £25, given by the South Wales Institute of Architects, Western Branch (competitors not to be over 21 years of age on January 1, 1926). Set of Measured Drawings of Architecture; prize £25, given by Mr. Ernest E. Morgan, A.R.I.B.A., Borough Architect, Swansea (no age limit). Entry forms can be obtained from Mr. W. Talog Williams, the general secretary, 24 Goat Street, Swansea, to whom they are to be sent between May 1 and 10, 1926. Drawings to Mr. Ernest E. Morgan, A.R.I.B.A., 3 Prospect Place, Swansea, not earlier than July 5, 1926, and not later than 5 p.m. on July 12, 1926. Mr. Arthur Keen, F.R.I.B.A., is the assessor.
No date.	Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans. Apply R.I.B.A., 9 Conduit Street.

## Obituary

### Mr. Laurence A. McDonnell.

We regret to record the death of Mr. Laurence A. McDonnell, F.R.I.A.I., who was for some years in partnership with Mr. Dixon at 20 Ely Place, Dublin. He was closely identified with the R.H.A. Many buildings in Dublin City and county were erected on his plans. Among his more important works are the Iveagh Buildings and other buildings for the Guinness family. He was also engaged by the Dublin Corporation in connection with their principal housing schemes.



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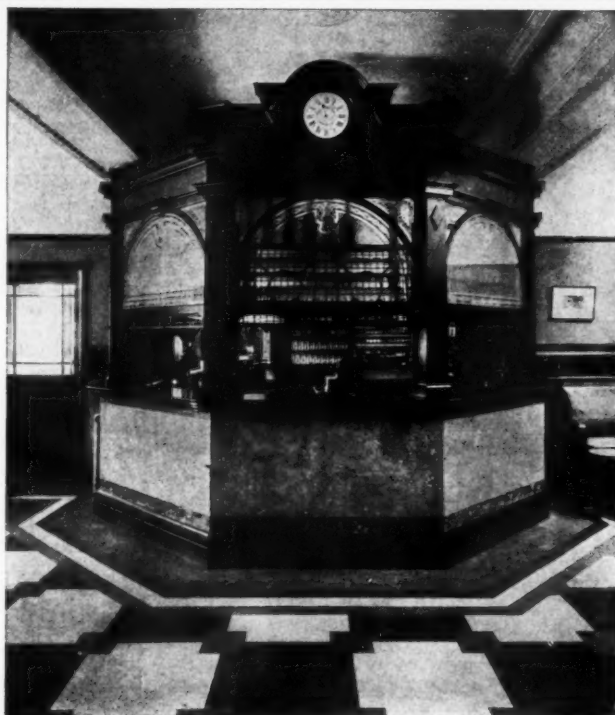
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