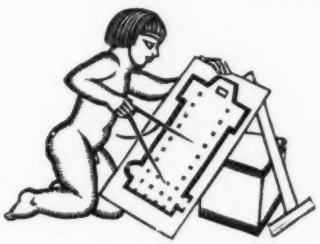
THE

ARCHITECTS'



JOURNAL

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The International Labour Bureau, which was in 1922 the subject of a competition won by Monsieur George Epitaux, will be illustrated next week. The conditions for an international competition for a League of Nations building also to be erected at Geneva have recently been received in London.

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PRINCIPAL CONTENTS

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CHRISTIAN BARMAN, *Editor*

The Editor will be glad to receive MS. articles, and also illustrations of current architecture in this country and abroad, with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

RENDERINGS OF ARCHITECTURE

Selected and annotated by Dr. Tancred Borenius.

xxviii. Gian Paolo Pannini (1695-1768).
The Opening of the Holy Door in 1750.

The great majority of Pannini's works is formed by his well-known imaginary compositions of Roman ruins ; but in quite a number of pictures he has depicted scenes from contemporary life in Rome, producing in these something of the effect of a Roman Canaletto or Guardi. A fine example is the painting here reproduced, which derives additional interest from its subject at the present moment when the Jubilee year of 1925 is but recently over ; for the picture represents the opening of the Holy Door of St. Peter's, in connection with the Jubilee of 1750. The scene is laid in Carlo Maderna's spacious portico, hung with magnificent tapestries and filled with a crowd of high dignitaries of the Church, the Roman aristocracy, pilgrims, etc. In the distance, the Pope Benedict XIV is seen performing the ceremony of opening the Holy Door by striking it three times with a gold hammer.—[Private Collection.]

THE ARCHITECTS' JOURNAL

Wednesday, July 28th, 1926

THE DANGER TO THE CITY CHURCHES

The Bishop of London and the majority of the Church Assembly have obtained the approval of the House of Lords for their latest scheme to demolish some nineteen City churches. The arguments in favour of scheduling for destruction these particular monuments have been repeated *ad nauseam*, and the advocates of this measure of destruction could probably retort that they are exceedingly tired of hearing the contentions brought forward by their opponents. For the sake of raising money for the erection of new places of worship in the outskirts of London, where, it is said, they are more urgently required, should the ecclesiastical authorities be empowered to dispose of ancient church buildings of very great renown! One may ask, Where is this process going to end? St. Paul's Cathedral is not always full of visitors. It occupies an exceedingly valuable site, and a commission of ecclesiastical economists could make out a very strong case for its destruction. It might be urged with considerable force that the venerable Westminster Abbey is quite sufficiently commodious to be the seat of the most solemn national ceremonial, and there is really no adequate reason why at great cost we should maintain two such shrines each claiming to be in a sense national. If necessary some of the tombs at the Abbey could be removed to make room for the bones of the illustrious men now housed in St. Paul's crypt, but there is no need to follow this train of thought any farther. To financiers such arguments would carry great weight.

It is a peculiar circumstance that in the present controversy what may be described as the spiritual aspect of the matter at issue has been more clearly recognized by the secular bodies which have taken part in the dispute, whereas the representatives of the Church appear to have paid special attention to problems of finance for which, indeed, they have displayed a considerable aptitude. After making a careful examination of the sites of the churches which have come under the ecclesiastical ban it would be difficult to discover any set policy in the choice of the particular examples named, except one which would have resulted from a consideration of land values. Not the churches which are obviously less beautiful than the rest, nor the churches possessed of the least degree of historical interest, nor yet those in which the number of attendants is especially small are singled out for demolition, but those particular churches which happen to be on the most valuable sites, and whose sacrifice would yield the greatest reward in pounds, shillings, and pence. In the Earl of Crawford's brilliant speech in the House of Lords he made a valiant attempt to explain to the Bishop of London and his supporters "the value of these buildings as buildings." His action was supported by the Sheriffs of the City of London, who in the exercise of their ancient rights attended in State at the bar in the House of Commons and presented the petition against the measure. "Leave to us in the City of London our monuments," said the Lord Marshal, who was not prepared to accept the charge that the old churches are now redundant. He maintained, in fact, that the City parish church is still highly useful and active in the purposes for which it is established.

In the report of the City of London Churches Commission of 1919, which is the basis of the present measure, it was suggested that a certain number of City benefices should be left as sinecures, so as to provide "posts for learned clergy who may study and teach free from parochial and pastoral cares." This could be a happy solution of the problem of the City churches, for if these clergymen were really learned they would presumably be as learned in architecture as in other matters, and their influence would be paramount in all questions which concern the preservation of the City churches. They would certainly not allow to pass without contradiction the Commissioners' public statement that the particular nineteen churches now doomed to destruction by the Bishop of London's measure "have no great architectural merit."

Of course, the psychological explanation of the whole matter is simple enough. It is but human to wish to take the line of least resistance. To obtain the necessary money by the sale of the sites of the City churches is so delightfully easy; to obtain it by any other means would entail arduous labours prolonged over a period of several years. But there is one consideration which should carry great weight with the learned and distinguished men who direct the policies of the Church of England. This Church claims to be national, and its historic church buildings it holds in trust for the nation. And whatever may be the narrow legal position as to the rights of disposal of church buildings, the fact remains that millions of Englishmen who are not communicants of the Anglican Church regard the cathedrals and churches with a sense of pride and personal possession, and this particular feeling is very strongly contained in the City churches of Wren. There is nothing in the least sectarian about them, they express a benign catholic spirit, and belong essentially to a Church which has entered the heritage of ancient learning. And common religious instinct must be offended at the prospect of the demolition of exquisite monuments which are a continual protest against the supremacy of the commercial ideal. The Church of England in destroying these monuments will injure also herself.

NEWS AND TOPICS

IT is now exactly eight weeks since THE ARCHITECTS' JOURNAL, in a leading article, expressed its unqualified regret at the nomination by the Royal Institute of British Architects of two representatives to assess designs for a new Waterloo Bridge. I was one of those who rejoiced to see Sir Reginald Blomfield's withdrawal announced in the papers on the following day. Sir Reginald's reasons for this withdrawal were admirably stated and he was supported in his attitude by his colleague, Sir Giles Gilbert Scott. I understand that the London County Council has again approached the president of the Institute, who is, of course, as anxious as his two nominees to preserve Rennie's structure intact. Mr. Dawber, I learn, pointed out that the idea of a premature competition is always distasteful to the profession as a whole, and that even if he consented to make nominations he might find it difficult or even impossible to induce architects to act. Great pains were taken, I understand, to demonstrate to the Council the importunity of its request, but it steadfastly refused to alter its plans.

* * *

To-day the position has, I feel, been radically changed by the appointment of the Royal Commission on London Bridges. The County Council maintains that it is necessary for it to be prepared with competition machinery complete in every detail, so that it may take action immediately the findings of the Commission are promulgated. Before the appointment of the Commission the existence of such machinery was rightly considered to be of vast tactical importance to the enemies of Waterloo Bridge. I do not think it can any longer be so regarded. Now that the Government has taken the matter in hand, the Council could do no great harm even if it were to appoint a hundred assessors. Mr. Arthur J. Davis and Mr. Henry V. Ashley, the latter fresh from his Masonic Memorial triumph, have now been nominated by Mr. Dawber. Their appointment is bound to follow after a short interval. Every right-thinking architect, including Mr. Davis and Mr. Ashley themselves, must hope that their services will not need to be called upon after all, but the choice is one which all will applaud, And having applauded, we may let the Council get on with its preparations in silence.

* * *

Several influential men lay claim to the honour of having pulled the wires to get a Royal Commission appointed, and lovers of St. Paul's Cathedral and of Waterloo Bridge doubtless owe a debt of gratitude to some energetic person for the exertion of that final resolute action which turns a general aspiration into an established fact. All who have shown public spirit in protesting against a policy of destruction, or the still more insidious policy of leaving things to be naturally destroyed, may congratulate themselves on a step of progress gained, since the conservator's point of view has been at last thought worthy of consideration by the Government in connection with the modern needs of our great city. While this is a matter of satisfaction to those who have made the preservation of ancient buildings the principal interest of their lives at the risk of being considered unpractical, and associated by their brother architects with "the bats, the owls, and the archæologists," too much must not be hoped for from the mere appointment of a commission. Appointment is one thing and the final decision another, and, in the meantime, the really up-to-date scientific and technical processes by which insecure buildings may be rendered secure are still mysteries only fully understood by the few architects who have specialized in this fascinating, but exacting, branch of study, and their names are conspicuous by their absence from the list of commissioners. Supposing that it may be accepted as best in the interests of fair play that the commission should be composed of men chosen for good sense and all-round ability rather than for their long experience in salving defective structures by inconspicuous measures of repair, it is still a puzzle to know how they are going to do justice to their task without a very considerable share of this special knowledge. It would certainly appear necessary that a competent advisor to the commission should be appointed to deal with this aspect of the problem. That the men who know how to preserve old buildings are naturally also advocates for their preservation need not unduly trouble the commissioners.

* * *

Natural circumstances have already loaded the dice against the two famous buildings which are entitled to the most skilful defence. Forces of gravitation, wind, and weather, and underscour by water are busily at work undoing both monuments, and the preliminary analytical surveys have hardly yet been put in hand. Besides these legitimate, but relentless, enemies, the idea of conservation has to combat the contented ignorance of many professional men who have not been trained to take any interest in the means employed in safeguarding old work. Nothing, or next to nothing, is done by those responsible for the education of the architect and the structural engineer to spread this vitally necessary information, and the result is that leading men in both professions have arrived at eminence without knowing or caring very much about the subject. The Commissioners may still fail to save Waterloo Bridge and St. Paul's Cathedral for the reason that they will not find themselves surrounded by an atmosphere of general professional competence, since only a few individuals possess knowledge which should be shared by all who are charged with the care of the ancient buildings in which England is still rich, despite the extent of wanton destruction in the name of Progress. If the commission should decide adversely to the preservation of the monuments it will at least provide a much needed awakening of professional feeling as to the desirability of more definite training in the science of conservation, though the loss of St. Paul's, or even of Waterloo Bridge, would be a preposterously heavy price.

* * *

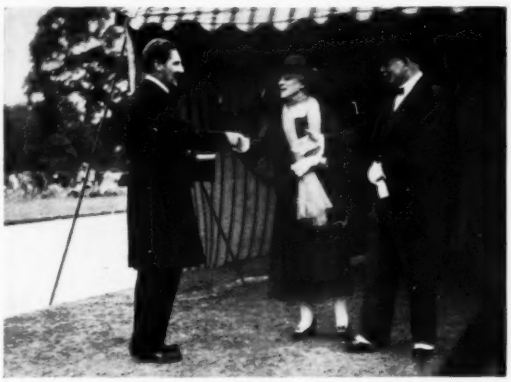
Possibly the only good result of the assent of the House of Lords last week to the pulling down of the City churches was the appearance the next day at the bar of the House of Commons of the Sheriffs of the City of London (Mr. Alderman Batho and Mr. Francis Agar), with the City Remembrancer (Col. Stuart Sankey), to present a petition from the City Corporation "praying that the Union of Benefices and Disposal of Churches (Metropolis) Measure, 1926, be not presented to His Majesty for the Royal Assent." The petition truly pointed out that "the churches within the City are for the most part national memorials of great historical and architectural interest and value. Of the fifty-two churches left in the City, nine were erected before the Great Fire of 1666, thirty-two were built by Sir Christopher Wren, and eleven have been built since his death.

Several of these churches stand on sites devoted since prehistoric times to religious purposes, and the majority are resting-places of the human remains of bygone generations of citizens." The right of presenting petitions personally to the Commons may probably now be regarded as the privilege only of the Corporation of the City of London; all other petitions can be presented only through a member. Last week's ceremony was accompanied with all the customary pageantry. The three petitioners, in their robes, drove to Westminster and appeared at the bar of the Commons after prayers and before questions began. For the first time within the memory of many of those in the Chamber the brass rod which forms the bar of the House was actually in place. The old-time procedure was followed to the most minute detail, and, at the request of Mr. Grenfell, the senior member for the City, the salient parts of the petition were read to the House. The petitioners then withdrew, and, in the evening, in accordance with custom, gave a dinner at the House, and a bottle of wine was presented to the doorkeeper. It is twenty-two years since the City Corporation last availed itself of the privilege of presenting a petition—on June 14, 1904. It was expected that the debate on the measure in the House of Commons would take place late on Thursday night, but at the last moment it was decided to postpone it until Monday, July 26.

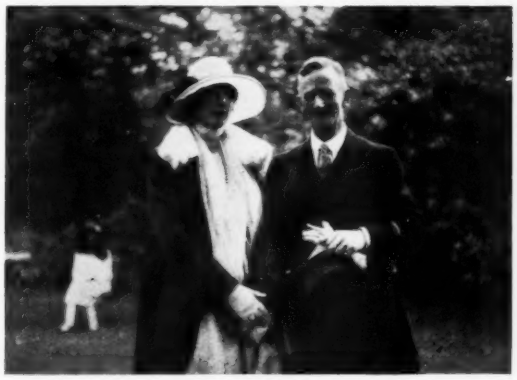
* * *

The architects' garden party at the Royal Botanic Society's gardens last Thursday was not as bright as, say, the theatrical garden party, but architects, like doctors and the clergy, must perforce move through life with a touch of gloom. Here were the men upon whose shoulders had descended the burden of modern London—and their shoulders were a little weary. They were human keystones in an arch which was responsible for the huge superstructures of the globe. Over a thousand guests were present, but I am afraid I have room for pictures of only a very few. As the firm voice of the M.C. announced great name after great name—Sir Herbert Baker, Sir Joseph Duveen, Sir Frank and Lady Newnes, Sir Philip Sassoon, Sir Sidney Low, Lady Low, Sir Banister Fletcher, Lady Fletcher, Mr. M. H. Spielmann, Mr. and Mrs. John Hassall, the Earl of Crawford and Balcarres, the Lord Mayor and Lady Mayoress, Lord and Lady Riddell, Viscount Cecil, Sir Edmund and Lady Gosse, Sir Walker Smith, Mr. J. St. Loe Strachey, Mr. and Mrs. Harley Granville-Barker, Miss Lena Ashwell—I became a little appalled at there being so many names whose personalities I was able now for the first time to attach. I supposed Mr. Guy Dawber knew all these people, and all knew one another. By careful observation, however, during the afternoon I found that this was not so, and I grew more cheerful. Moreover, they could not grumble at being so unknown. There were so many of them, and—although the party was in the Botanic Gardens, who among them there could have told me anything about, say, Hoffmeister?

ASTRAGAL



Mr. and Mrs. E. Guy Dawber receiving Lord Crawford.



Mr. and Mrs. E. Stanley Hall.

Mr. Arthur J. Davis (left) and Professor Reilly.

Mr. Donald Cameron (left) and Mr. and Mrs. Alister MacDonald.

SOME AMERICAN COLONIAL HOUSES

[BY LIONEL PEARSON]

COLONIAL buildings in America may be divided roughly into three classes: (1) The timber-framed houses of the New England States; (2) the brick buildings of Maryland and Virginia; (3) the so-called Dutch colonial farmhouses of the New Jersey State. Of course these are not strictly confined to their respective districts, but may be taken as typical. The eastern States of America were densely wooded, sawmills were erected in the very early days and there was no lack of timber, so that the wooden houses are the natural product of the country. This is, no doubt, the reason why they fit in so well with the untidy beauty of the American countryside, and seem especially suited to the free and easy inhabitants who never appear to be too permanently attached to the soil. The typical framed building is covered with "clap-boards" laid horizontally, painted white or light grey, the roof is shingled and dark brown in colour, and the shutters are green. This gives a colour-scheme which in summer looks most attractive in a green frame of grass and trees, in winter equally effective in the setting of snow, and the glorious American sunshine enhances the picture in both cases.

There are quite a number of seventeenth-century houses still existing in the eastern States of America, and the type was evidently derived from the farmhouse of the eastern counties of the old country. It is significant that many of these early examples occur in Essex County, Massachusetts. One of the best known is the Turner House at Salem, Mass., which dates from 1680, and is now known as the "House with the Seven Gables," immortalized by Hawthorne. The overhang of the upper floor is characteristic of this period, and the roof is, as usual, covered with shingles (these are said to vary from 14 in. to 3 ft. in length in New England examples). The interior in this case is panelled in a Georgian style, though many of the early examples are finished internally with boarding, and there are interesting specimens of these in the American wing of the Metropolitan Museum at New York, where a number of old interiors have been collected from houses now demolished.

The eighteenth century saw a development towards an architectural style based on European models, and it is interesting to see the translation into wood of the Georgian style, which is essentially brick and stone in England. There is a decided quaintness and charm in this change, and such an example as the house of Mrs. Jumel (it was built by Roger Morris, but the name of the notorious Mrs. Jumel, who lived there later, is associated with the place) on Manhattan Island, which dates from 1765, is in a way more characteristically American in style than the brick mansions of Maryland and Virginia. The Jumel house has the first known two-storied portico, which was later to become such a feature of American architecture, and standing, as it does, on rising ground above the Haarlem River, bears out the opinion of Copley the painter, who wrote to

Mount Vernon, Virginia, the house of George Washington. Above, the entrance front. Below, the river front.

his friend Pelham in 1771: "These Peazas are so cool in summer and in winter break off the storms so much I should not be able to like a house without."

Another fine example is the portico of Mount Vernon, the house of George Washington in Virginia. This house is beautifully located with fine views over the Potomac River, and was mainly constructed by George Washington himself between the years 1778-1786; the pavement of the portico, which measures 95 ft. 6 in. by 14 ft. 6 in., was laid by Washington with stones brought from England. The construction of the building is oak framework, with sheathing of Virginia pine, cut, painted, and sanded to resemble stone; the roof is of Cyprus shingles. The kitchen wing and office wing flank the entrance front, and are connected to the main building by colonnades. The house is now a national shrine, and visited by thousands of sightseers, as Washington is, of course, the national hero.

The Dyckman farmhouse, on Manhattan Island, stands on what was the Albany Turnpike, and is an interesting example of what is called "the Dutch colonial style." In this case the end walls are built of stone, and there is a veranda back and front on a level with the principal rooms, while below are storerooms, offices, etc. The Mansard form of roof (called in America the "Gambrel,") is characteristic of this type of house, which has been more or less copied of recent years in thousands of small wooden houses throughout the State, and is particularly suitable where the long, low type of house is wanted.

At Salem, which is a town in Massachusetts to the north of Boston, there is quite a collection of famous old houses, mostly the work of Samuel McIntire, the craftsman-architect, who flourished here at the end of the eighteenth century. One of his finest works is considered to be the Pierce Nichols House, where Georgian and Adam influences predominate. The pilasters at the corners running up to three stories' height, the architraves to the windows, and the cornice and balustrade make this a very handsome exterior. The interior is fine, too, and has some beautiful chimneypieces after the Adam style. Not so architectural as the Salem houses, but most delightful in a quiet way, are the wooden houses at Concord, Mass., the home of Thoreau, Emerson, and other famous writers, and probably the most perfect example of a small New England town, where the roads are lined with elm trees and everything shines like a new pin.

Turning, finally, to the brick buildings of Maryland and Virginia, it is interesting to find that Jefferson, in his notes on Virginia in 1784, wrote of "the unhappy prejudice that houses of brick and stone are less healthy than those of wood." There is a tradition that the bricks of which these houses are built were brought from England,

Above, the Barn, Homewood, Baltimore. Below, left, the Turner House, Salem, Massachusetts, the house with the seven gables (1680). Right, Jumel Mansion, New York. By Roger Morris. The portico.

but this has lately been disproved, though there are records of many thousands of bricks being shipped from Holland to the New Netherlands. Lime was undoubtedly very scarce in the early days, and had often to be manufactured from ground-up shells.

A very perfect example of brick mansion is to be found at Homewood, Baltimore, built in 1809, by Charles Carroll (the richest man of his day in America) for his son. The building consists of a central portion containing the principal rooms and having porticos both to the north and south fronts, and east and west wings containing the state-room and kitchen respectively. The details are most charming and refined, and the building is placed on the top of a slope in delightful surroundings which are now the grounds of the John Hopkins University. The "Barn," originally coachhouse and stable quarters, is now a students' restaurant. Annapolis has several fine brick houses dating from Georgian days, such as the Brice House and the Chase House, and these are almost indistinguishable from the Georgian houses of an English town such as Salisbury or Farnham. Williamsburgh is another delightful Virginian town, quite a fine example of town planning, with a quaint court-house standing on a green, and a main street terminating in the William and Mary College, which is planned round three sides of a square.

Boston has some fine examples of old brickwork, especially in the eighteenth-century buildings at Harvard, which are strongly reminiscent of the buildings in the Temple and Lincoln's Inn, London. After 1805 brick houses became quite the usual thing in Boston, but the brickwork was frequently coloured grey in those days, as they had evidently got the habit of regarding brick as rather improper. As to the colour of the typical frame house, a famous New York architect tells of his father (a retired naval officer) building a house in Washington, and deciding to have a bright colour for once. When the time arrived for the painting to be done he had to be away, but left definite instructions about it. On returning he was annoyed and astonished to find that the house had been painted the usual white, and on reproving the workmen received the reply that "White was the colour houses always were painted." This must be acknowledged to be a sound instinct as nothing else looks half so well; in fact, it has been the salvation of America architecturally.

Pierce - Nichols House, Salem, Massachusetts. By Samuel McIntire (1782).

The number of books published in America on colonial architecture is considerable. The Salem porches and many other details have been measured, and a beautiful series of drawings, published by Donald Millar and others. The R.I.B.A. library contains some of these, and in the loan collection are two excellent books on the subject, Professor Fiske Kimball's *American Domestic Architecture* which is full of information and good illustrations, and an interesting volume of a more general character Aymar Embury's *Dutch Colonial Architecture*, with illustrations of the old houses and the modern versions of this charming farmhouse type.

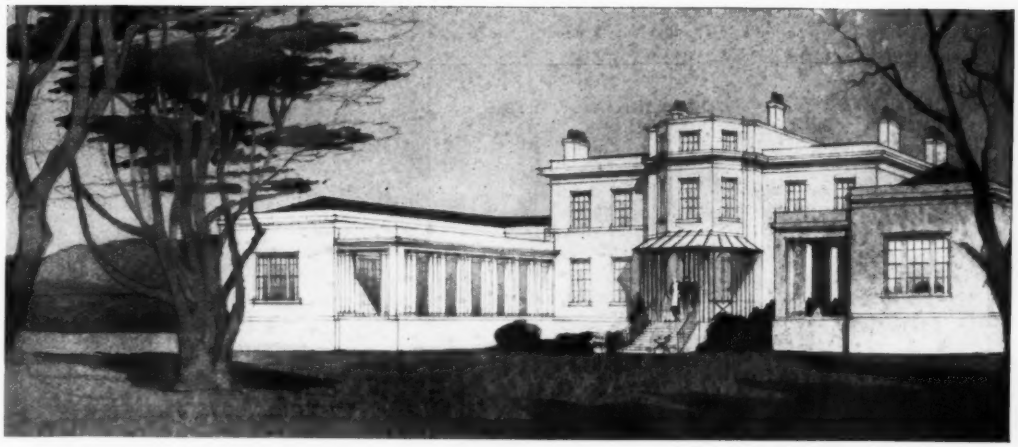
The day when nothing but an imitation of a French château or some equally unsuitable European model would satisfy the wealthy client are now happily passed, and a style is being developed which is more suitable to the climate and habits of the people.

Wood continues to be the most usual material for the ordinary house in America and many of the features of the colonial "home" period. The portico is a national institution whether it is the two-storied variety much in vogue in the homes of the wealthy or the veranda on which "Ma" sits in her rocking-chair watching the world go by. The sun-parlour is only an elaborated version of the portico, and is useful in winter when the glazing admits the sunshine even when the temperature is below zero. The size of the cupboards, too, is a characteristic feature—they are of a size only to be found in old-fashioned farmhouses in the Old Country, and it is probably the farmhouse tradition still lingering on into the twentieth century in this way.

In general arrangements, too, there is a simplicity in the planning of the modern American home which must be derived from the old colonial days, the rooms opening out of one another with folding-doors between, the combination bathroom and w.c., kitchen and scullery, etc., all help to make the simple oblong plan possible, with the sash-windows placed symmetrically.

The result is that the "Colonial" style has developed into the "American" style of the present day, and the outskirts of the big Eastern cities provide many interesting and charming examples which would hold their own with the domestic architecture of any European country.

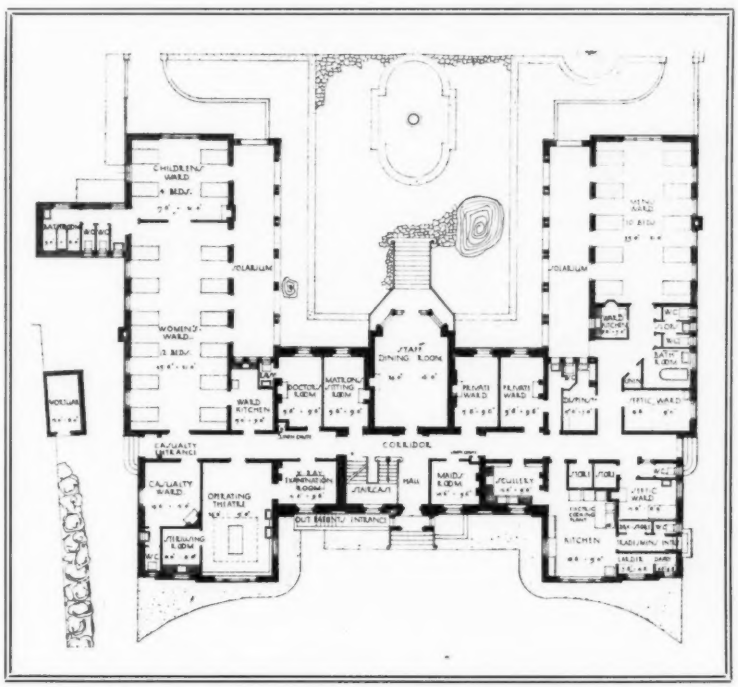
CURRENT
ARCHITECTURE
SECTION



MR. EVELYN SIMMONS

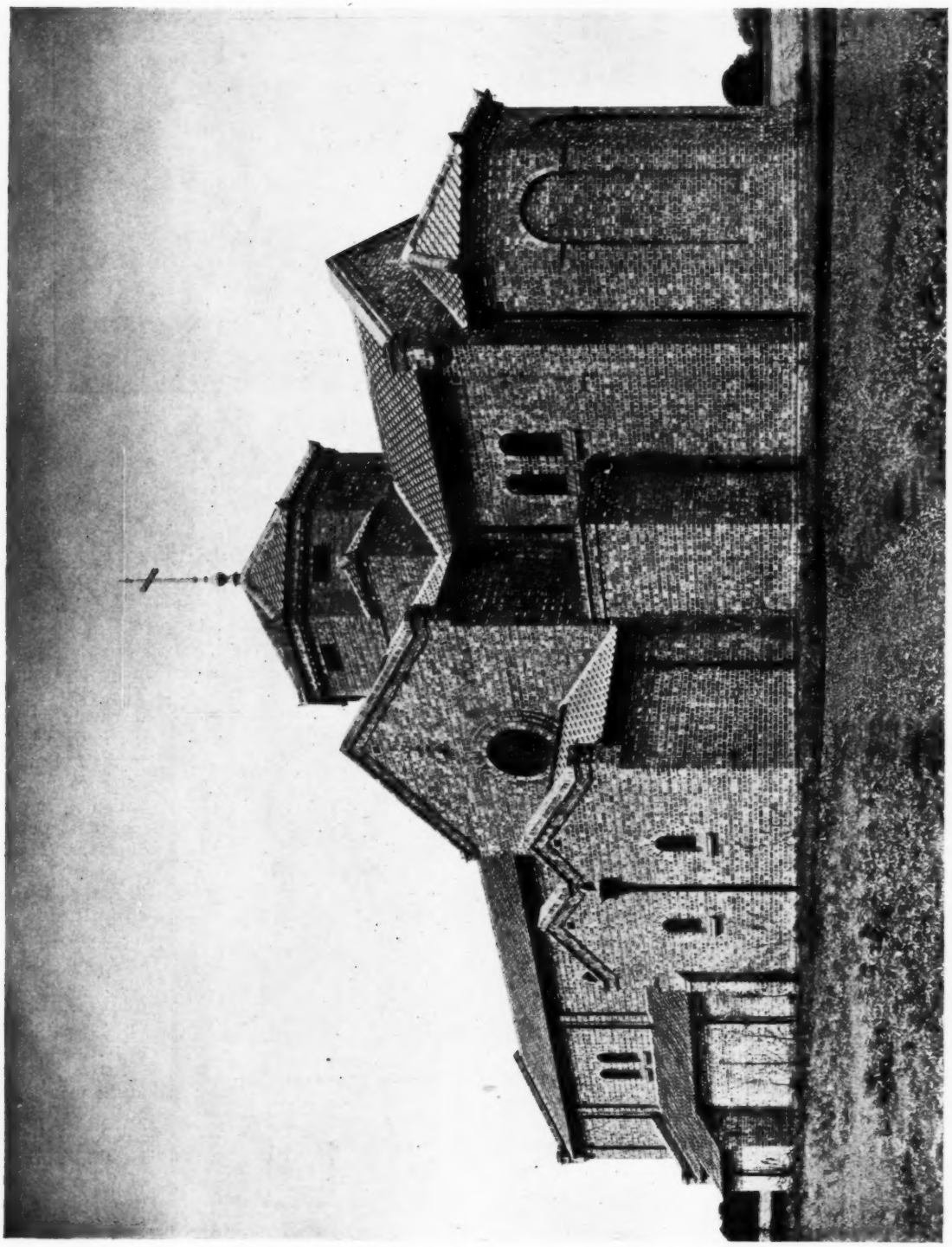
[BY A. TRYSTAN EDWARDS]

THE work of Mr. Evelyn Simmons, although it was well known and admired in the districts where examples of it were to be seen, did not attain the esteem which it now enjoys until his Gretna Church was shown publicly at the exhibition held by the Architecture Club at Grosvenor House in 1924. As a result of this publicity Gretna Church was immediately proclaimed as one of the most distinguished buildings of recent years. His work may be divided into three sections—the ecclesiastical section, the hospital section, and the domestic section. Mr. Simmons has made a notable contribution in each. A representative selection of his work is here published, which will enable us to estimate both the range and quality of his achievement. I may begin with the consideration of some private houses designed by him; their chief characteristic is their obvious urbanity. Yet following the Georgian tradition, Mr. Simmons has been able to achieve a remarkable variety in the elevations of his houses, while the plans combine elegance with economy. This latter quality may, perhaps, be due to his long practice in designing type plans for the housing department of the Ministry of Health, where every foot of waste space had to be eliminated on the score of cost. The result is that there are very few architects who give to their clients such value in accommodation for their money as does Mr. Simmons. This is an important consideration, for it is this compliance with the severest practical tests which makes the formal quality of his plans so much the more meritorious.

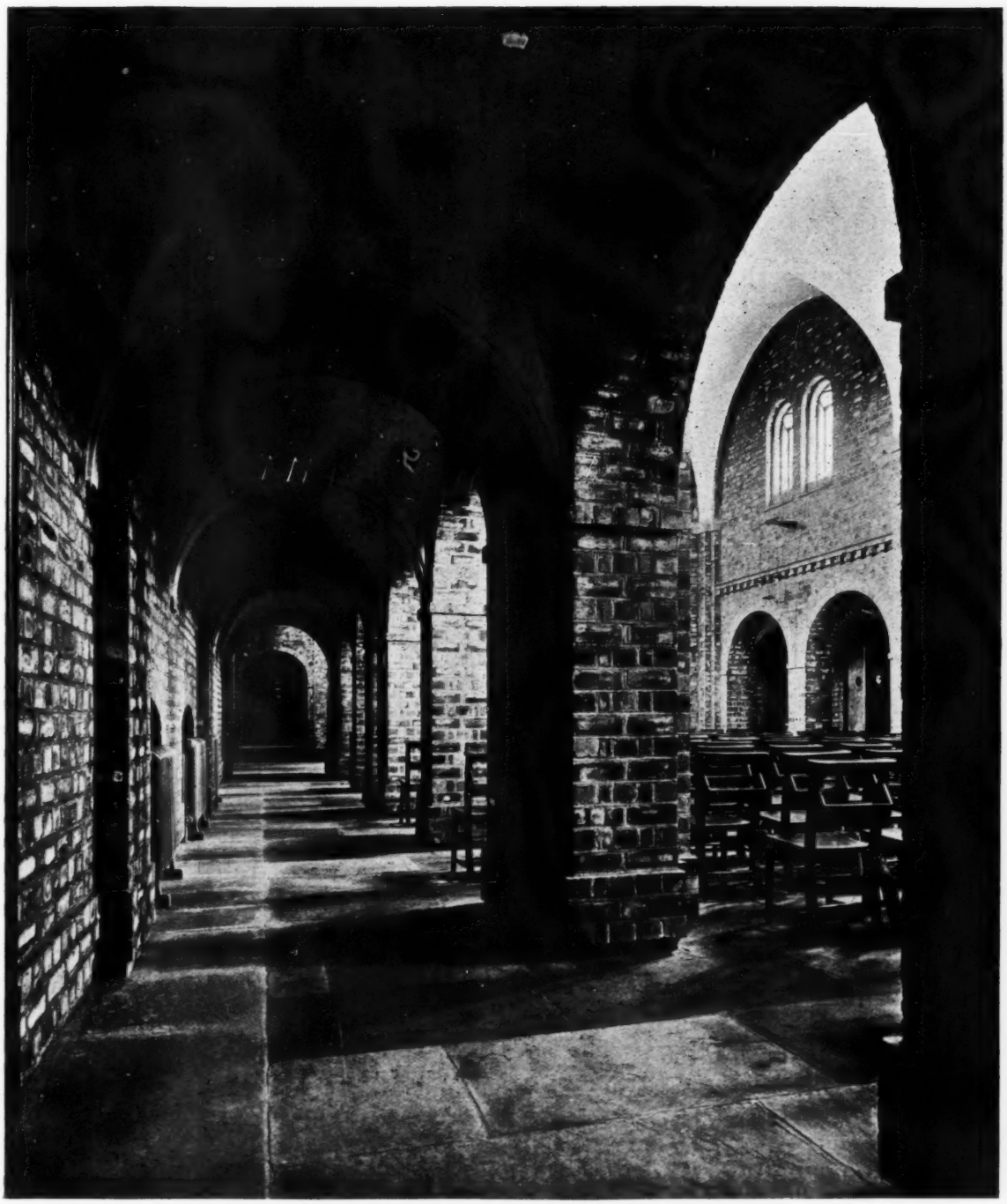


The Victoria Cottage Hospital, Barnet. By C. Evelyn Simmons. Above, the garden side. Below, the ground-floor plan.

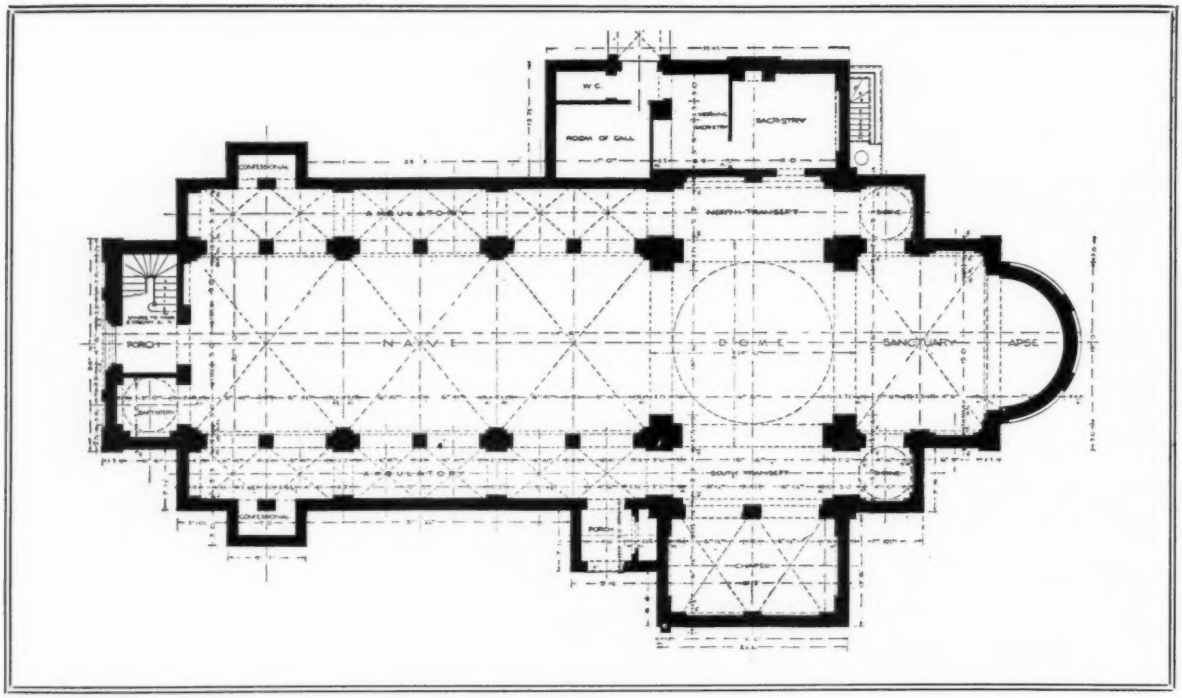
Let us first glance at the plan of Court House, Wildwood Road, Hampstead Heath. This is one of the most attractive plans which could possibly be devised for a house of this size. All its parts seem to be harmoniously interrelated, while the



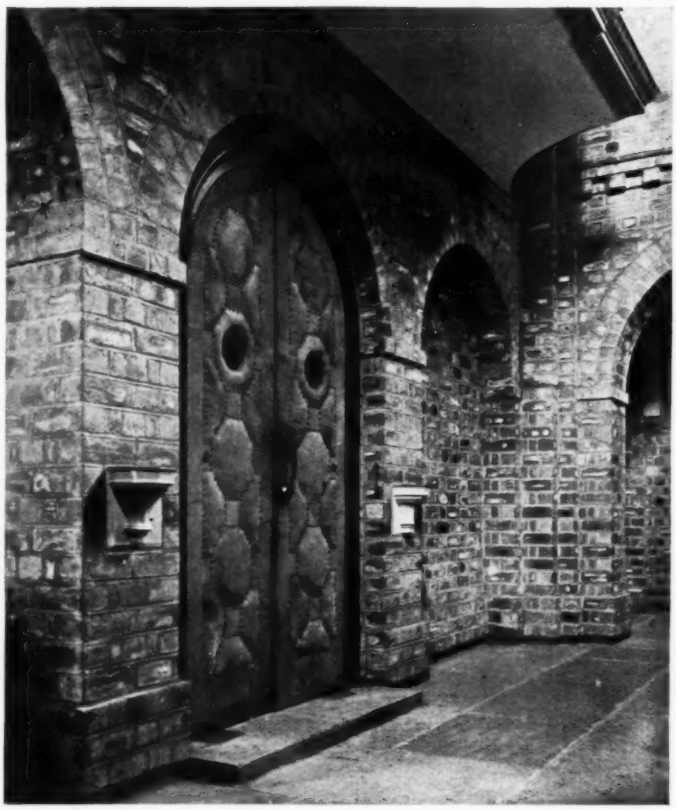
The Church of St. Ninian, Gretna. By C. Evelyn Simmons.



The Church of St. Ninian, Gretna. By C. Evelyn Simmons. A view down one of the side aisles.

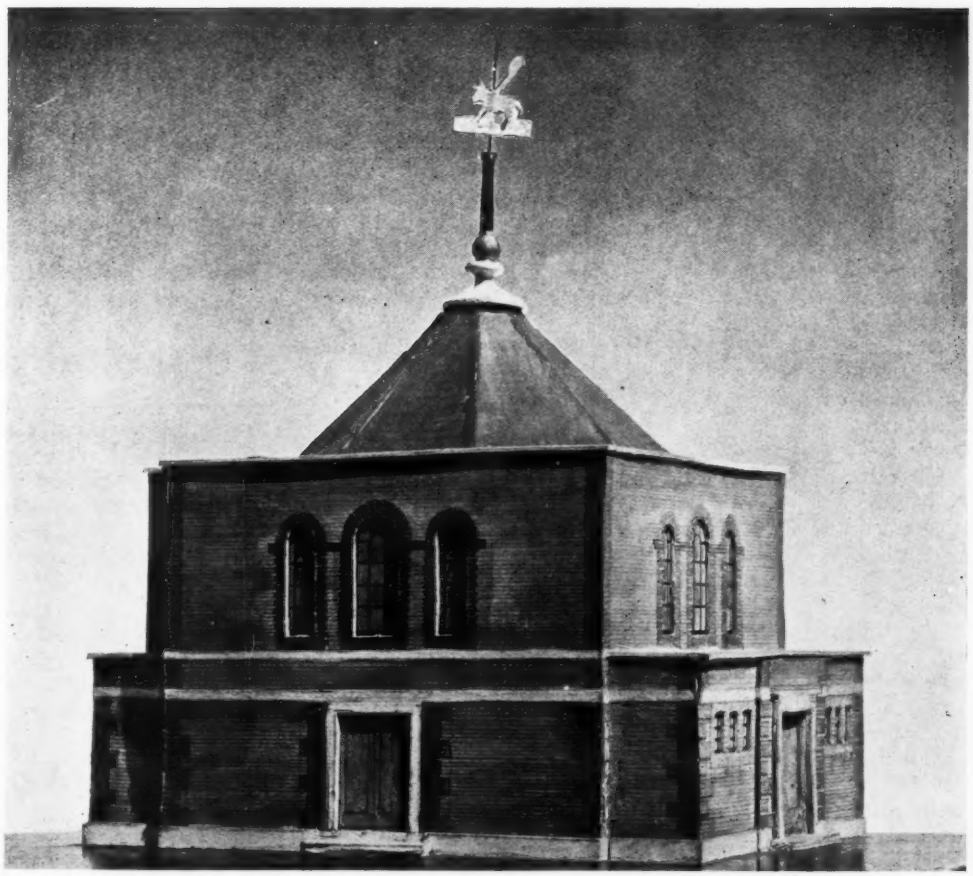


elements making up the required accommodation are conveniently disposed. On entering one finds oneself in a six-sided hall symmetrically shaped, having on its left a recess leading to the stairs, immediately in front a door giving access to an octagonal dining-room, and on the right another recess giving access to the study and large music-room. The garage has been incorporated into the main fabric of the house, and thus Mr. Simmons obtains the maximum architectural effect from the cubical volume of building which he was permitted to dispose of in this instance. It is noteworthy that externally the kitchen offices are expressed by an orderly row of six windows and, in fact, one may say that from whatever point of view the house is envisaged it presents a distinguished appearance. On the first floor, which is approached by an elegant staircase, of which the plan is partly comprised in a semi-circle, is a broad landing well lit from which access is obtained to seven bedrooms. The elevations, owing to the shape of the plan, are unusually interesting. Originally, when the design was first completed, the roof was flat-topped above the level of the dormers, the carrying of the hips to a ridge being the result of a veto of the original roof design on the part of the official architect to the Hampstead Garden Suburb.



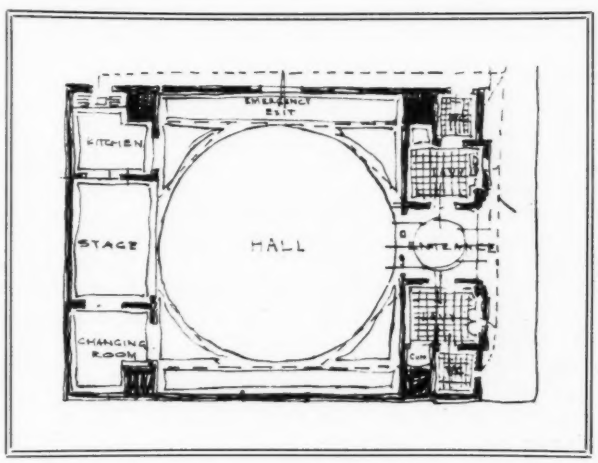
The Church of St. Ninian, Gretna. By C. Evelyn Simmons. Above, the plan. Below, a doorway.

Another delightful house, slightly more urban in style, is situated at Kingston Hill. The main façade, with its delicately detailed portico at the centre of the group of five shuttered windows, is surmounted by a low-pitched gable, and on either side of it has wings united to itself by large ramps. The effect of this treatment is to increase and render greatly more interesting the façade, and I can recommend the reader in imagination to construct the architectural effect which would be produced if for these ramps there had been substituted a horizontal



coping-stone immediately above the wall of the low wings on either side of the house.

The next example is a sketch for a block of flats at Earlsfield. Plans of first and ground floors are given here, and also a preliminary sketch which is of especial interest, because it shows the type of draughtsmanship which Mr. Simmons employs for this purpose. The perspective is admirably designed to explain to the client the pictorial effect of his new building. Most of these sketches have, unfortunately, been destroyed by Mr. Simmons, but I have been successful in rescuing one from the waste-paper basket, and can only lament that many others as precisely and delicately rendered cannot now be illustrated. The building itself comprises two flats and one maisonette. It seems a highly satisfactory arrangement that three separate families should share in a building which, in appearance, is far more attractive than the single habitations of this particular size could possibly be if arranged in detached formation. It is somewhat surprising that this method of approaching the middle-class housing problem has not been adopted more frequently.



A proposed hall for St. Ambrose Church, Earlsfield. By C. Evelyn Simmons. Above, a model of the hall. Below, sketch plan.

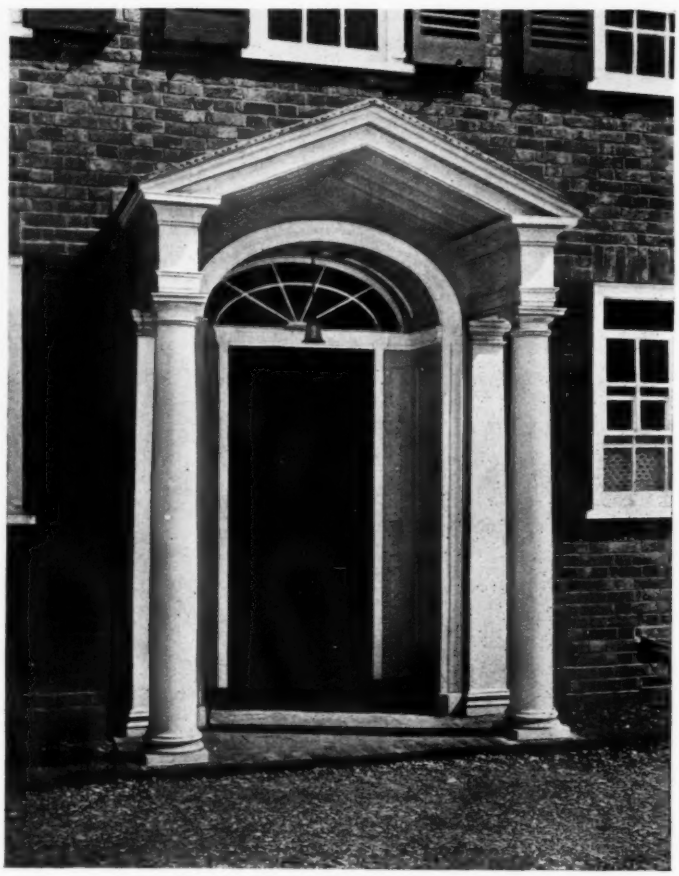
The group of three houses at Sandy Lodge is a successful experiment in repetitive design. The houses are alined on a curve of large radius, and the sweep of the three ridges of the roofs is very effective, the gable ends being properly subdued to the general scheme. These houses have the proper suburban character, and illustrate how well Mr. Simmons achieves in his architecture the distinctions of character which should mark the buildings belonging to different localities.

Let us next make a brief examination of Gretna Church. It is noteworthy that Mr. Simmons has relied on the forms of the bricks themselves to obtain such variety of decoration as was necessary to give interest and emphasis to special parts of the design. Not a single moulded brick has been used in the building, yet it is surprising what effects of richness and elaboration he has achieved

with limited means. At the upper extremities of the external wall surfaces he has contrived to suggest a dentil cornice, while at the gable ends the edges of tile are made to form a projecting fillet beneath the coping-stone. Ordinary tiles are also employed in the interesting design of the splayed sills to the windows. Two courses of brickwork brought forward a fraction of an inch constitute a low plinth or punctuating member at the bottom of the walls. Bricks of the same quality are used both inside and outside. These are ordinary pressed bricks of a North-country type, of rather large size, brownish in hue, which do not look promising individually, but are of sufficient variety to provide an interesting texture when seen in the mass. The roofing is of old-fashioned pantiles, golden red, which are in lively contrast to the brickwork. The interior of the church is distinguished by a note of restraint. The bare bricks are exposed, slight decorative relief being obtained by a dentil string course above the arcade of the ambulatories and the pilasters which support the groined vaulting. The latter is of timber framing covered with expanded metal and then plaster. The pale cream of the vaulting, the brown bricks, the slightly bluish-grey of the self-faced limestone flags of the floor, and the natural yellow of the beechwood chairs form a subdued, but pleasing, colour harmony. There is seating accommodation for about 300, and some idea of the economy of the scheme and of its architect's severe practicality of outlook may be derived from the fact that the total cost of the building was only £5,500. Gretna Church has been praised, not only because it provides an example of the economical and artistic employment of a few well-known materials, but because it is a most valuable contribution to modern ecclesiastical architecture. This building, although in a certain sense it belongs to the Byzantine tradition, is really modern. Its directness and simplicity are in accord with the post-war mood. The general composition of the building has the requisite formality, for the plan is symmetrical about the central axis, bisecting the nave, dome, sanctuary, and apse, while the chapel on the south side balances the sacristy on the north.

Externally the effect is one of great diversity, but the several features of the composition are so harmoniously associated that we feel the presence of a central idea which makes the church one whole. The transition between the octagonal tower and the square marked by the intersections of nave and transepts is cleverly effected by the four small hipped roofs of which the apices rest comfortably upon the octagon, while the horizontal sides are alined with the square, and, furthermore, are alined with the ridge lines of the main roofs.

Another building ecclesiastical in character is the hall associated with St. Ambrose Church, Earlsfield, of which a model and sketch plan are reproduced. Here again we see a design in which a form of great interest is produced by simple and economical means.



House at Kingston Hill. By C. Evelyn Simmons. A detail of the entrance.

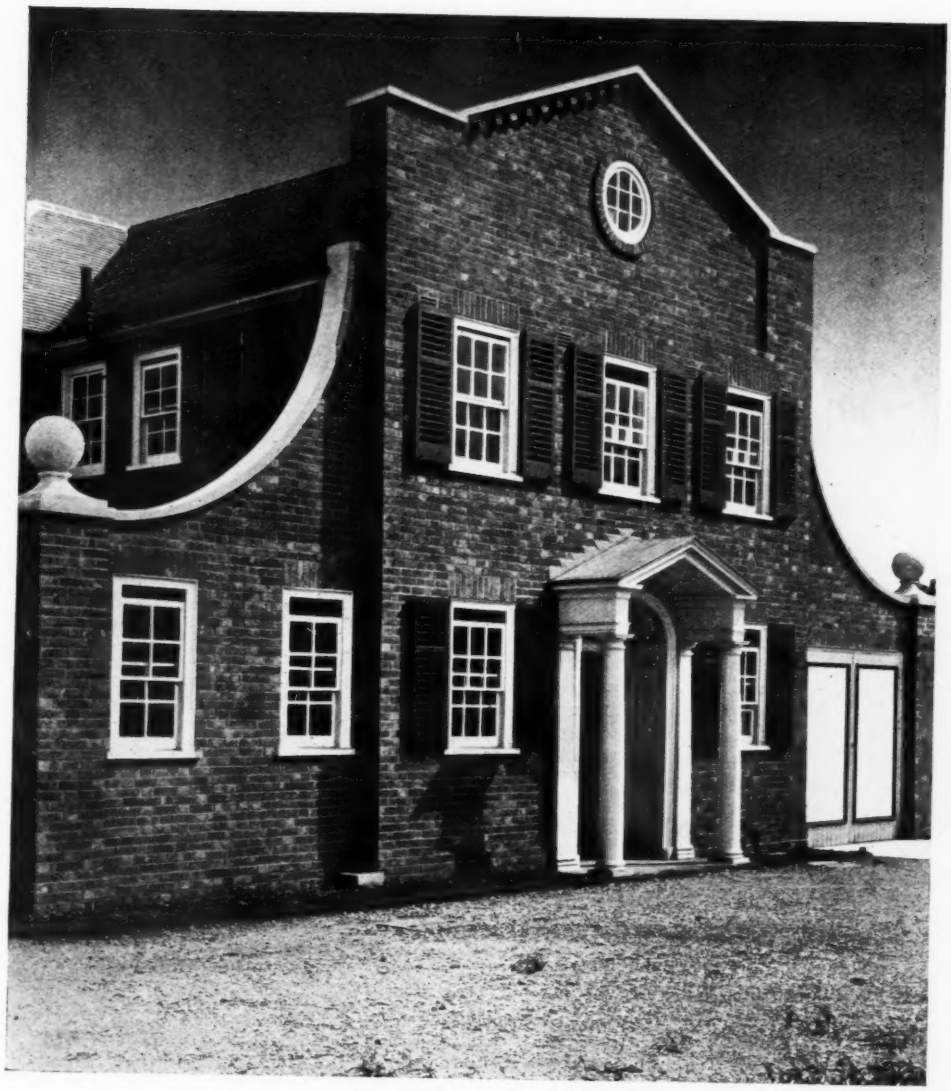
The Victoria Cottage Hospital, Barnet, provides an example of the clever adaptation of a beautiful eighteenth-century house to usages which were not contemplated by its original designers. In this instance Mr. Simmons has added two wings forming a courtyard at the back. He has been able, however, to make the new part of the building harmonize most perfectly with the old, and, indeed, the structure as it now stands is actually a more complete composition than was the original building. In the latter most of the large rooms have been preserved intact, but a corridor has been driven through from end to end. What is most remarkable is that although the planning is in accordance with the most modern standards, and although bathrooms and sinks and other sanitary conveniences have been provided in generous measure, the façades express the urbanity of an eighteenth-century mansion, which shows that the extreme hideousness of so many of our modern hospitals is quite unnecessary.

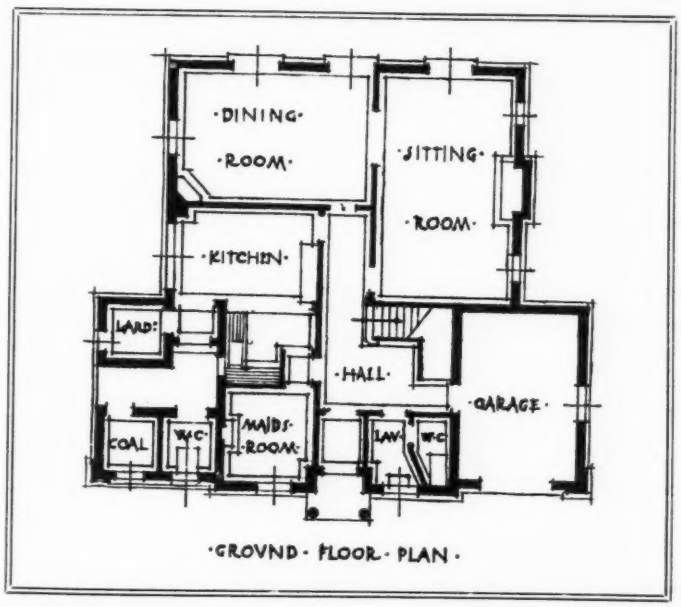
An examination of Mr. Evelyn Simmons' architectural designs does not fail to reveal very skilful and economical planning combined with elevational treatments distinguished for elegance and restraint.

Following are the names of the contractors and some of the sub-contractors for the buildings illustrated :

The Church of St. Ninian, Gretna. General contractors, Messrs. Laing & Co. (now no longer in existence). Contract price, £5,550.

Houses at Sandy Lodge Road, Moor Park. General contractor, The Riley Construction Co. The bricks were obtained from an old wall at Ashton Rowant, and the roof is covered with





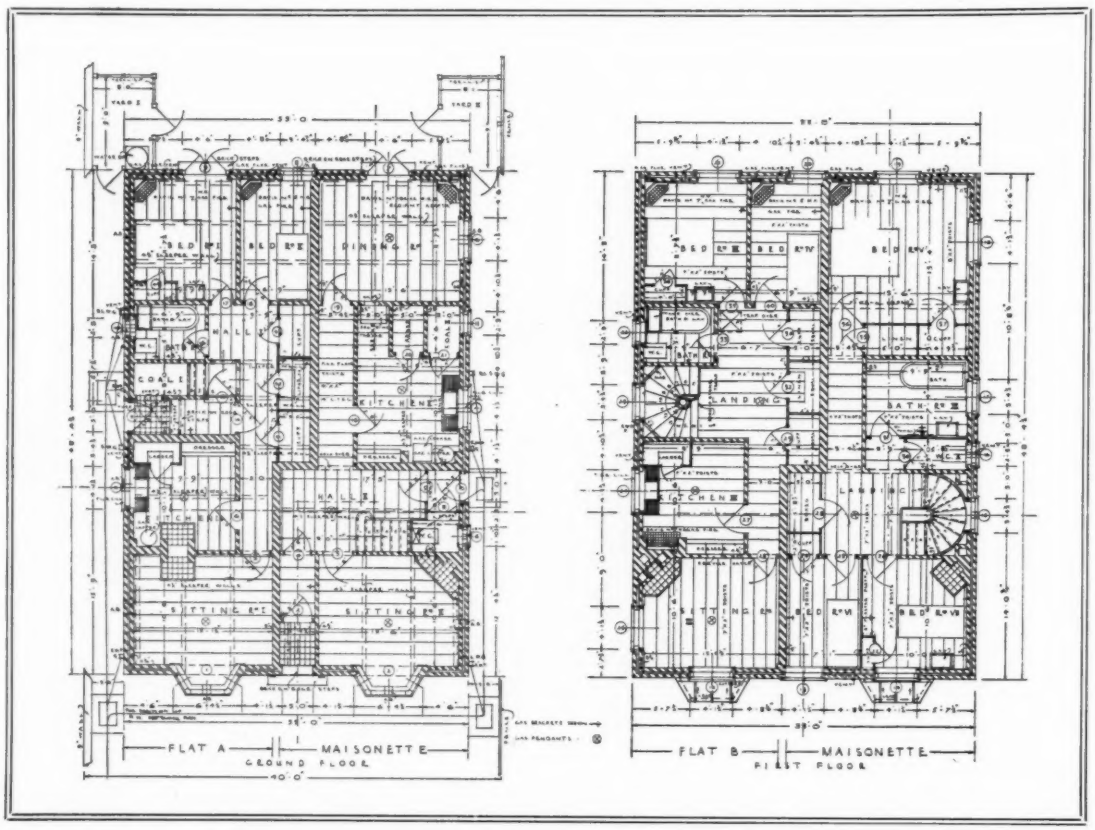
House at Kingston Hill. By C. Evelyn Simmons. Above, the entrance front. Below, the ground-floor plan.

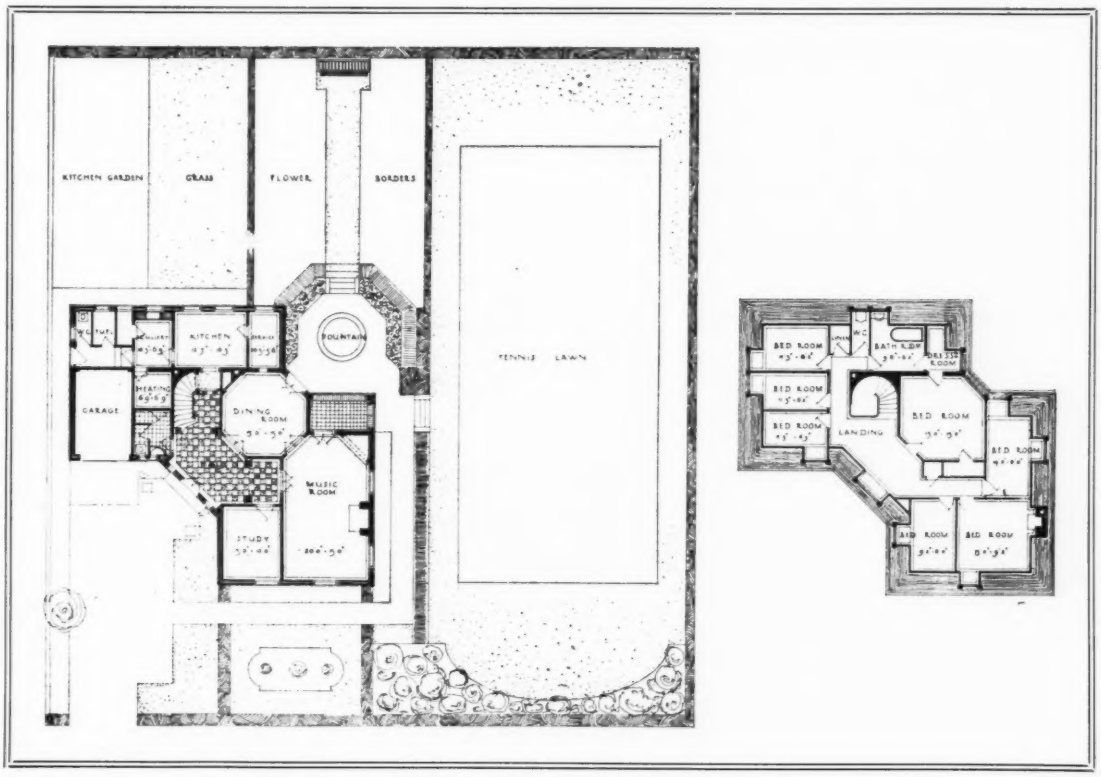
Block of Flats at Earlsfield. By C. Evelyn Simmons. Above, a perspective sketch. Below, the ground and first-floor plans.

Marseilles tiles. An "Ideal" cooker and heater boilers are installed; Bratt Colbran & Co. supplied the stoves and mantels, and Sanderson and Son the wallpapers.

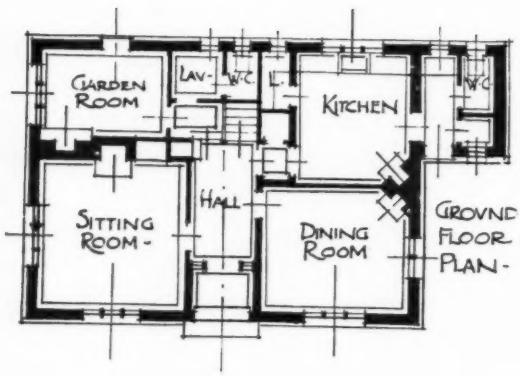
Victoria Cottage Hospital, Barnet. General contractor, Messrs. Pearson and Son, High Barnet. General foreman, Mr. William Pearson. Contract price, £13,785. Sub-contractors: London Brick Co. and Forders, Ltd., bricks; F. Bradford & Co., artificial stone; Young & Co., structural steel; Roberts, Adlard & Co., slates; Mellowes & Co., patent glazing; Rosser and Russell, central heating; Bratt Colbran & Co., stoves and mantels; Davis, Bennett & Co., sanitary fittings; W. Macfarlane & Co., cast-iron work; Carter & Co., tiling; Sanderson and Son, wallpapers.

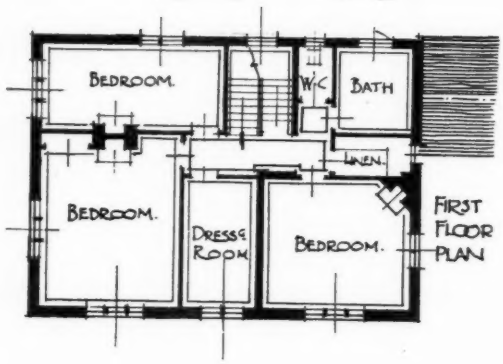
Court House, Wildwood Road, Hampstead. General contractors, R. Ginn and Son, Hertford. Contract price, £2,780. Sub-contractors: London Brick Co. and Forders, Ltd., bricks; F. Bradford & Co., artificial stone; Lamb & Co., tiles; Maple & Co., patent flooring; Bratt Colbran & Co., grates and mantels; "Ideal," boilers; Ian E. Donald, electric wiring and bells; F. Bradford & Co., stairtreads; Crittall & Co., casements; G. Jackson & Co., decorative plaster; General Iron Co., metalwork; Sanderson and Son, wallpapers.

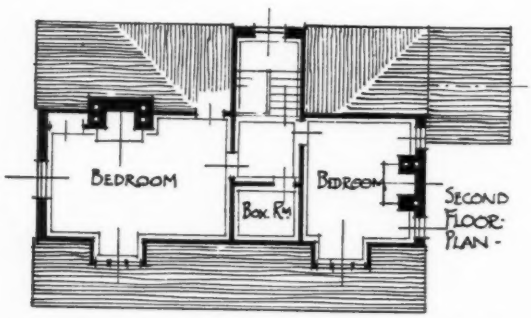




The Court House, Wildwood Road, Hampstead Heath. By C. Evelyn Simmons. Above, a general view. Below, the ground and first-floor plans.







A group of cottages at Sandy Lodge Road, Moor Park. By C. Evelyn Simmons. Above, a general view. Below, the ground, first, and second-floor plans of a typical cottage.

TRIBULATIONS OF EARLY PRACTICE

[BY KARSHISH]

iv: SETTING UP

THE beginnings of an architect differ from beginnings in most other professions. A doctor, unless he buys the patients of another doctor, puts up a plate on the door of a polite-looking house and secretes himself within—taking care not to stare from the front window—till an accident in the road outside, or an emergency near at hand, or a mistake as to his identity brings him into action. Sir Arthur Conan Doyle has told us all about his experiences in this field. Solicitors usually sprout by grafting themselves on to another solicitor. Barristers usually attach themselves to the law—setting-up in chambers and being frequently seen in Court—with the same kind of faith with which a barnacle roots itself to a ship's bottom. In these and most other professions, the man first adopts the status of practitioner and then hopes for the best. The architect, on the other hand, does not usually set up in practice until he has obtained commissions of sufficient importance to justify his native optimism in taking that step. This we will suppose to be the case with our own particular architect. He is not, however, to be imagined to have private means, but to be entirely dependent upon his earnings. Except that it is easier to earn money when you are not in need of it than when you are—people being always willing to pay a rich man fees which they may grudge to a poor one, and more eager to get the services of a man who has no time to give them than to employ one who is entirely at their disposal—it is no disadvantage for an architect to have to depend upon his own exertions from the start. On the contrary, the man who has the grit, the personableness and ability to get his head out, so to speak, and establish himself in practice, has better justification for confidence in the future, and assurance that he has not mistaken his vocation, than one whose capacities have not been put to so sharp a test. He who can afford to wait often waits a long time, and, perhaps, waits in vain; and he who waits is likely never to know the concentrated, purposeful, high-strung energy to which necessity and apprehensions of failure is a spur, and which produces great workers and the best work.

To set up an office obviously calls for a certain amount of courage in a man dependent upon his own exertions, and for a certain amount of capital; but in point of fact it does not require a great deal of either. It is better, in any case, for a man to make a push for independence, and prove his salt—or lack of salt—and the initial capital need be only small. Many a successful architect once slept under his drawing-table, and looks back to those days as among the happiest in his life. Circumstances which call for a solid bank balance, such as an initial commission for important works, gained, perhaps, in competition, resolve their own difficulties by providing security for a credit. The more adventurous and difficult case, and the most usual, is when a man has few commissions, and those small ones, and launches himself in practice without knowing from what direction further work is to come—though in this he is in the same boat with many men he would consider well established, some of whom, throughout their careers, rarely order a fresh roll of tracing cloth without speculating whether they will ever have occasion to use the whole of it.

It sometimes happens that two men who have been friends as fellow-students or assistants pool their resources and their commissions and set up in partnership. This is not at all a bad arrangement. The pair will be able to keep the office open without the services of a clerk, and thus save prospective clients the poignant repulse of finding a well-used notice, "Back soon," pinned to the outer door, suggesting that the professional aid he seeks has been claimed by a public-house, a golf course, or a street accident the week before. That scrap of paper on the outer door is an error of judgment. If you have got to leave your office, leave it. A client will be likely to respect an independence which solicits nothing. The bit of paper will impress him as a frantic apology for a necessitous and precarious practice. Partners are able to earn for themselves what each would otherwise pay to an assistant. The arrangement gives a cheerful companionship to inevitable, and wholly glorious, night-sittings; and the firm benefits in a coalition of brains by which the forethought of each partner is multiplied, his judgment stiffened, and his exuberances schooled, while the margin of error is reduced to the limits of the ignorance in which both share. Partnership is also conducive to confidence, and optimism, and mental liveliness; and a good pair will get through much more work in double harness and with far less anxiety and strain than if each were pulling his own particular cart.

Yet another advantage of the early partnership arrangement is that it will not last long. The reason for this is to be found in the lines of a minor poet of my acquaintance, although applied by him in a totally different connection:

"Life is the dear old life,
That it has ever been."

It might, perhaps, be supposed that two young men embarking on such a joint adventure would, after years, establish the kind of understanding friendship that would make each almost necessary to the other. This, however, is what never happens. There are a few, a very few, cases where the arrangement continues through thick and thin; it does honour to the generosity and mutual esteem of both parties, but the partnership continues rather by habitude than by choice. Each partner secretly chafes at the tie, and the dissatisfaction of each with the other is usually known to their friends. It may be thought that difficulties, or misfortunes, or failure would be the chief cause of rupture between architects in partnership. This is no doubt sometimes the case, but the usual and overwhelming cause of antagonism and of final separation is not failure, but *success*—particularly success sublimed by wives. If it does not speedily occur to each of the successful married partners that the firm's prosperity is substantially due to his own abilities, or energy, or personality, and that his colleague is finding glory in plumes pulled from his tail, or is not bearing a fair share of the common burden, it will speedily be made clear to them at their "ain firesides," for no really devoted and affectionate wife will have any other views of the matter.

The best hope for a continuance of the benefits of partnership exist when the arrangement is confined to share of profits and of office organization, and when the work of each partner remains personal to himself. The designs of an architect must, rightly speaking, be as individual as the work of the artist in any other calling. Directly one partner becomes aware of a capacity to express in a building the abstract conceptions of his own brain, he becomes like a tiger who has tasted human blood. He can find no satisfaction except in gratifying this passion for expressing himself. The personality of his partner, accordingly, becomes distasteful to him; it obstructs his own: he grows to know the trend of that partner's ideas; the operations of his mind become stale and repellant to him; his prejudices and his limitations become a frustration and a vexation, till at last all associations of the poor man irritate and exasperate him—the look of his thin (or fat) back; his way of filling his pipe; his manner of putting on his coat, and so forth, all become provocative of a dislike which even esteem cannot prevail against, and unless the partnership is attenuated to little more than a common share in general organization, its continuation is unbearable. Having regard to the way civilization has been built up of man's social proclivities, the intolerance of one individuality for another is remarkable. It is, however, well known; it can be confirmed in the experience of each of us; it increases with years; the greatest men—the strongest natures—are the most lonely. It was this that Captain Robert Scott, the antarctic explorer, particularly dreaded as likely to undermine the discipline of his crew, and it is the steadfast self-control and good fellowship of his men under trying circumstances which he first holds up to the admiration of his readers. I once told a retired sea captain of an ambition to voyage in a sailing ship. "You will find it very irksome," said he; and he then went on to tell me that the ship's officers do not speak sometimes for weeks together. "Once when I was second mate," he told me, "as a practical

joke, and to see what would happen, I said 'Good Morning' to the skipper as he came on deck. He replied, 'Good Morning. Go to Hell.'" That is the kind of reply which one partner in an architectural practice of ten years' standing would characteristically wish to make to the daily salutation of the other. The foregoing remarks, however, do not apply to partnerships arranged between established architects and juniors, which are different in kind and in footing. Such partnerships are outside our present field of inquiry.

In the matter of housing himself our adventurer is helped by a tradition which associates architects with offices of an obscure makeshift, and even ramshackle kind. Not for him are the marbled walls and staircases, the figured walnut doors and panelling, the gilded lift enclosure, the well-shaved commissionaire with highly-burnished medals, which help the agent for collar-studs or paper-fasteners, mouse-traps or fly-papers to galvanize the confidence of a distrustful public; not for him the three small rooms on a sixth floor in Kingsway at a rental of £400 a year. The fact that architects can confidently set up in practice in a place that suggests an expropriated coiners' den, speaks well for their reputation, for no doctor or dentist, nor even an auctioneer or house agent could hope to make good in such a professionally enervated environment. In years gone by Staple Inn, being the most dejected-looking, dilapidated, and forlorn building with a decent reputation to be found in central London, was specially favoured as an appropriate birthplace for architectural practices of an aspiring kind. To possess offices in that building conferred a kind of professional aristocracy upon the lucky tenant, who was envied by his contemporaries. The client in search of his professional adviser found him in a low, badly-lit attic, with sagging floor and bulging ceiling, and reached him up a kind of funnel by way of a dark, break-neck, winding stair. Whether architects now practise in the attics of Staple Inn I do not know, but the old tradition holds good. The earnings of architects will not bear the burdens which the profits of trade readily support, and as architects must, perforce, accommodate themselves in old and out of the way buildings, it is natural for them to seek out those that somewhat reflect the beauty, quaintness, or charm of past fashions of right building. Those who feel drawn to surroundings of this kind will do well to take some trouble to satisfy their desire. The exhilaration, contentment of spirit, sense of completeness and awareness of the perfection of life and of work, and consciousness of being near to oneself, which this kind of environment awakens, is a source of happiness which never stales for the man who has the kind of sensibilities characteristic of the lover of architecture.

[*To be continued*]

PRESENT-DAY BUILDING CONSTRUCTION: iii

[BY WILLIAM HARVEY]

JOINERY: iii: WOODWORK AT GLEDSTONE HALL

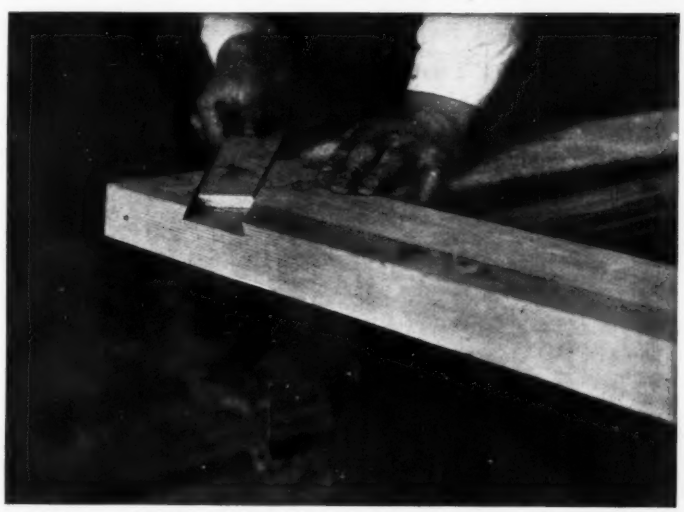
HIGH-CLASS joinery in the mansion differs very considerably from the joinery of the small villa or the subsidy cottage, first because there is actually more wood used and also because it is used in larger pieces and in more elaborate forms. Certain principles apply to all joinery, however simple and cheap or however complex and dear it may be in special cases. Shrinkage and casting have to be allowed for in the palace as well as in the cottage, and probably the greatest difference between joinery in the great house and joinery in the small house is that more attention is demanded if the larger pieces of material used are to be persuaded to keep still in the positions in which they are fixed. The special precautions include care in the selection of material, which becomes more difficult and burdensome as the sizes of individual pieces of wood increase. In most timbers used in modern joinery in England the heart wood and the sap wood of the tree differ from one another in hardness, toughness, durability, and colour as well as in the rates at which they shrink and the degree of curvature they will assume in casting, so that to draw out a design which can only be carried out with large pieces of wood is to imply that the joiner must obtain material from specially large trees. And, since large well-grown timber is scarce, it is imperative that the architect should keep his requirements within bounds and make sure that he is not about to sacrifice quality to size just where quality is of paramount importance.

An inquiry addressed to the timber merchant or to a joiner of experience before the design has progressed too far to be easily altered will generally save much expense both in the cost of the work and in the architect's time. It is far less expensive to get matters set upon the right lines at the commencement than to have unsuitable material worked up to a certain stage and then to be forced to recognize its unsuitability.

The difficulty of keeping the joinery of the great house in keeping with its style and in proportion with its scale has been carefully met and overcome at Gledstone Hall, now being built to the designs of Sir Edwin Lutyens and Richard Jaques, associated architects. The curtain-board shown in figure one presents something of a problem, in that shrinkage and casting have to be avoided, although the width of the material is no less than 2 ft. 1 in.

Figure one. Paring the edge of a curtain-board with the trying-plane preparatory to fixing. The board, of which only part of the width is seen, is over 2 ft. wide, and has been provided with oak clamps at the back to resist distortion. African mahogany has been used in order to minimize shrinkage and movement.

A definitely classic type of design in the grand manner afforded no opportunity for the reduction of the dimensions of each individual piece of joinery, so special precautions had to be taken in the selection of the material and in the method of its preparation. African mahogany, which can be obtained from trees of very great girth was selected for the purpose, since a piece of this wood over 2 ft. in width would not be in any way excessive or likely to encroach upon the outer fibres of the tree or the wavy edges of the plank. Careful storage and complete seasoning have also been insisted upon, but as experience shows that these precautions are not by themselves sufficient to guarantee freedom from movement in the finished work, the back of the curtain-board has been grooved out in three places for the insertion of dovetailed oak clamps to prevent twisting and curling of the surface. The clamps are spaced 20 in. apart, centre to centre, so that they are nearer to one another than the width of the board. The efficacy of this treatment depends partly upon the opposition of the oak to the possible bending and twisting action of the mahogany, and partly upon the fact that cutting the fibres of the board in making the grooves reduces to some extent their power of movement. Shrinkage of a pronounced character is not anticipated with the special timber employed, and the oak clamps are rigidly fixed in their grooves by being driven in tightly between their dovetailed sides after being coated with glue. They are then screwed from the back into the substance of the mahogany. The rebated edge of the curtain-board permits of some slight adjustment of the edge of any adjoining timber taking place unperceived, for the projecting edge of the board will cover the movement going on in the shadow of the rebate. As the photograph was taken the exposed edge was being smoothed with a trying plane after the board had been offered up in position and found to require a little trimming. The trying plane is used in place of the smoothing plane for this purpose in that a long straight-edge is more likely to be obtained by its use. An equally wide board might be built up in soft wood by gluing together well-seasoned narrow battens, but it is doubtful whether shrinkage would be altogether avoided. In drawing-boards made on this principle, shrinkage is actually provided for by means of slots and screws in the cross battens on the under surface.



Top, figure two. Truing up the surface of the mitre of an architrave moulding with a metal block-plane on the mitre-template. The object of this operation is the production of a plane surface at right-angles to the back and at 45 deg. to the edge of the architrave. Bottom, figure three. Trying a dovetailed clamp in position in a diminished dovetail groove to keep the two sides of the mitre in contact. The good work done with the mitre-template shows in the close fit of the mitre.

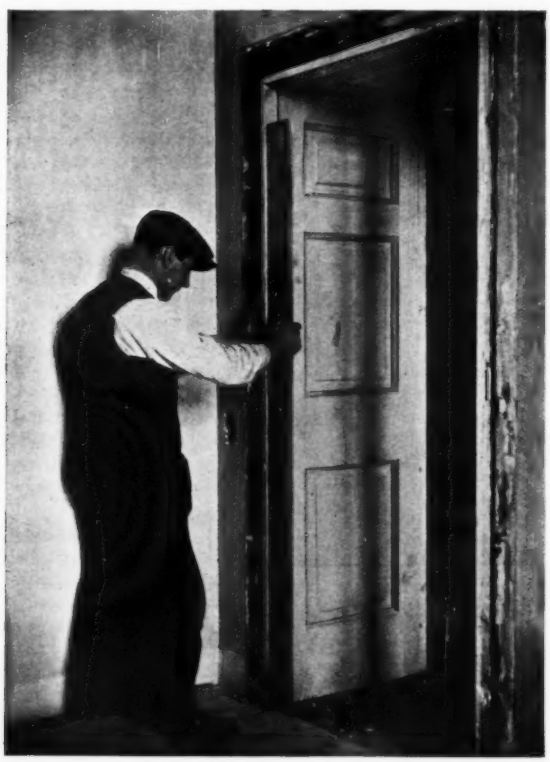
An architrave moulding to be fixed in Gledstone Hall is shown in course of preparation in figure two. The mitre has been cut with a saw in such a manner as to leave the piece of Quebec pine moulding just a fraction of an inch too long. This allowance for the action of the plane having been determined upon, the moulding has been fixed in the mitre-template to be trued up to form a fine joint. The operation of truing is being performed with a metal block-plane, which is set dead fine, and is used with the utmost care to avoid cutting into the surfaces of the wooden blocks of the template. This instrument consists of two blocks, whose principal faces are set at an angle of 45 deg. with the plane of the base-plate. One block is fixed and the other is made to slide along the grooves of the base-plate, and is pressed into position to grip the moulding by means of a long wood screw. This screw obtains its purchase by being threaded through a hole in a third wooden block fixed in the base-plate and is twisted by a hand-grip on the cylindrical handle at its free end. The object of truing the mitre in the mitre-template is to obtain a surface which is not only absolutely flat and accurately inclined at 45 deg. to the edge of the moulding, but also absolutely perpendicular to the flat back of it. Unless a right-angle is maintained between the surface of the mitre-cut and the back of the moulding only one part of the joint will "fit" (where it touches), and every other part will gape, because the several different recessed planes of the moulding will meet the imperfectly formed mitre at different places all more or less distant from the ideal true mitre-plane. The mitre-template is an instrument seldom used in cheap work, where small flat fillets are used as architraves. In such cases the plane of the mitre is often cut with a saw purposely held out of the vertical to make an obtuse angle with the back of the fillet, and so obtain enough clearance to ensure that the face of the mitre will come close up and form what appears to be a fine joint on the face. The object, of course, is to avoid trouble in cutting and fitting. Such cheaply-made mitres gape at the back, but the open joint is more or less hidden against the linings and the plaster. They also gape on the edges of the fillet, but the shadow often obscures the bad fitting unless one stands in the open doorway and glances up along the line of the mitre. The hollowness of the joint then betrays itself by revealing a distant glimpse of white ceiling framed in the triangular space between the scamped edges of the two badly-mitred fillets.

How truly and successfully the mitre-joint can be made by the

use of the mitre-template is seen in figure three, which shows the back of the same moulding shown in figure two, temporarily nailed in position against the return length of moulding which forms the other half of the mitre. There is no sign of a gaping joint back or front. To preserve this excellent contact a groove has been cut across the back of the mitre, and a dovetailed clamp is being tried in position in the groove. The dovetail groove is cut to a wedge shape in the direction of its length, as well as in its section, and the clamp is planed to a tapering form to fit the groove. The clamp is made rather too long in order that it may be driven freely into position and fit tightly in the groove, where it will be glued and screwed to both pieces of the architrave moulding. Any excess of length is trimmed off later when the glue is set. Even with these precautions the wood may shrink in time, and tear free from the glue, and the screws are, therefore, placed as near as practicable to the joint of the mitre so that shrinkage may take place towards them and towards it to some extent, though the natural tendency is for all shrinkage in a mitred-joint to take place from the inside to the outside of the frame and to leave a gaping joint most open on the inside. Selection of thoroughly seasoned stuff is important if this is to be avoided, since even the use of the dovetail clamp is no infallible safeguard.

Figure four. Screwing and gluing the architrave into the plinth block. A bare-faced tenon has been formed on the architrave moulding, and a corresponding groove in the plinth block.

The desire to cover a joint and make it inconspicuous by masking it with a shadow lies at the origin of the bead which forms the final member of the thin inside edge of the architrave moulding. A joint which must be expected to open somewhat with shrinkage is unavoidable between the architrave and the lining to which it will be fixed, and the shadow under the rounded bead will help to keep the effects of movement out of sight. Such rounded edges are to be found upon the ancient Greek and Etruscan terra-cotta tile hangings and eaves courses



Left, figure five. Testing the panelled jamb lining for verticality. African mahogany has been used for the joinery, though the grain of the wood is hidden under the priming coat of paint. The tenons of the surrounding framed grounds are seen on the right. Right, figure six. Lighting and ventilating areas contrived in the roof of Gledstone Hall to serve the attic floor without intruding dormers in the outer roof slopes. Uniform close joints around the casements indicate the care exercised in their fitting.

which, some twenty-six centuries ago, provided the inspiration for so many later architectural mouldings and established a tradition which is still in force.

Figure four shows the plinth-block being fixed to the end of the architrave. The architrave moulding has been cut to form a shoulder and bare-faced tenon, and the plinth-block has been ploughed to receive the tenon, which is glued into the ploughed groove. As the glue might come unstuck in time, four stout screws are being inserted to make doubly sure of a good connection. The pressure applied by the screws while the glue is still hot and fluid serves to keep the parts together, and allows the glue to dry as a thin film in contact both with the tenon on the architrave and with the groove in the plinth-block. Unless screws were used the two pieces of wood might require temporary aid from a press or joiner's iron clamp to hold them together while the glue was drying. Shrinkage is not often troublesome where pieces of wood are joined to one another in the direction of their grain, and once put together carefully there is small likelihood of the joint between the moulding and the plinth-block opening again.

African mahogany was used to form the panelled jamb lining and door-head shown in figure five. The white appearance of the joinery in the photograph is caused by a coat of priming paint applied before erection to back and front of the wood to prevent absorption of moisture from the new house. The linings are only temporarily placed in position and are held up by bricks, pieces of wood, and iron spikes while they are tested for correct alignment. The photograph shows the face of the door lining in process of being tried with a long plumb-rule, which has just been placed with its foot at rest and the plumb line lying inactive on the face of the rule. The next operation will be to bring the top of the rule gently forward until the plummet just swings clear and carries the line out of the groove in the rule. If, on reference to the plummet, the lining is found to be out of perpendicular, its position will be adjusted by packing it up or lowering it down and driving it either forwards or back upon its temporary supports. Once in position, it is fixed to the outer frame of dark-looking wood, which has already been fixed to act as a ground for the jamb linings and as a screed for the plastering. The dark cavity in the wall by the door indicates the position of an electric switch-box, where its exposed fittings can be made to line in height with the central lock rail of the door linings.

The hidden areas which light and ventilate the attics of Gledstone Hall appear in figure six. This part of the joinery was necessarily completed as early as possible in order that the roof might be constructed above it. The joiner is seen putting in the last fixings for the fascia boards just before the plumber arrived to fix gutters and lead flashings. The fascias are cut to the exact length to fit the size of the area, and are offered up in position and held at the correct level and nailed to the feet of the rafters in the usual manner. The quality of the joinery is shown by the straight lines of the level window-bars, and the uniform close joints around the casements tell how accurately they have been fitted. As they are exposed to the weather bronze hinges have been used, one and a-half pair going to each opening casement.

CORRESPONDENCE

THE MENACE OF THE MOTOR

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It may be worth while to record the following comment on your leader with the above title in your issue for July 14, with reference especially to your warning of the danger that threatens the community in the possibility of the giving over of public squares, etc., to the use of motorists for parking their cars, without proper regard to the remainder of the population.

A glaring instance of this evil is, or was, this time last year in existence at Bury St. Edmunds, where the fine open space opposite the Abbey entrance gate, known as Angel Hill, was, and I suppose still is, given over on market days for the parking of cars. The result to the private and hotel inhabitants whose windows overlook this space can be imagined. At certain hours, or at any hour, and often very late, cars are started up with the usual fizzing, banging, and backfiring, etc., besides the extra amount of coming and going that such a parking place involves as compared with a mere street or road. It struck me then—a visitor—as nothing short of iniquitous that any ratepayers owning or occupying houses or hotels, or offices or shops, on such an open space should be subjected willy nilly to the results of such an ordinance of the urban authority. If no amicable removal of this gross injustice and forcible depreciation of property value and deprivation of amenity and comfort can be effected, it is time an Act were passed to give legal redress and protection.

I have seen a lovely Queen Anne house in Devizes in a wide side street half hidden behind rows of motor-cars and tilted wagons, etc., on a market day, left there for hours at a time, so that you could not drive up to the door. This is another instance of the abuse of the public way, which ought not to be used for such purposes at all. A field should be hired by the Town Council for the purpose.

W. B. HOPKINS

FLUE REQUIREMENTS IN HOUSING SCHEMES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your valuable article in your issue for June 30 has, I am sure, created great interest, and I hope that steps have already been taken by the architectural societies to appoint committees to place suggestions before the Ministry of Health on the vital question of adequate ventilation in all living-rooms. A ventilating shaft where no chimney exists is undoubtedly essential, but it would probably be almost as cheap to construct the recognized coal fire chimney even if that chimney were to be utilized to carry off the products of combustion from a gas cooker or heater. Why should we legislate in favour of gas, which is admittedly not the cheapest fuel? Think of the poor unfortunate house-dwellers who cannot afford to use gas and yet have in their houses no chimneys to which a coal or wood fire could be connected. Think of the position of the owners of such houses if in the future gas works become things of the past. We have known of strikes that have affected gas works. Are we certain that strikes at gas works are never going to take place in the future? We can store wood and coal but we cannot store gas. I think we all agree that for the benefit of future generations it is well to continue the use of proper chimneys to every living-room, and if the occupants are in favour of gas these chimneys would present no difficulties,

A SUFFERER FROM GAS FUMES

ANNOUNCEMENTS

Mr. Theodore E. Legg, A.R.I.B.A., has moved to Raymond House, 32, 34 Theobald's Road, London, W.C.1. 'Phone: Holborn, 6358.

The distinction of being the first woman in England to obtain the degree of Bachelor of Architecture has fallen to Miss Norah Dunphy, of Liverpool University. Twenty-two years of age, Miss Dunphy has completed a five-year course under Professor Reilly, and she has also obtained, under Professor Abercrombie, a first-class certificate in civic design.

Mr. Hartley Sutcliffe, the borough architect, who is to retire after forty years' service with the Huddersfield Corporation, was presented with a gold watch at a meeting of the Housing and Town Planning Committee in recognition of his services to the Corporation. The watch was the gift of the members of the committee.

The Secretary of State for India in Council has appointed Mr. H. M. Edwards to be surveyor and clerk of the works, India Office.

THE COMPETITORS' CLUB

ALPHA AND OMEGA

A VERY successful American architect once stated that his practice was to make a few studies for every important competition. If in the course of these he hit on an idea that appealed to him as original and of striking merit, this was followed up and completed as a design. If he only found what he thought to be an obvious and ordinary solution he dropped the work forthwith. It would not be a bad idea if more of our competitors worked on these lines; but naturally it requires considerable ability and experience to recognize the difference between the outstanding type of design and the merely conventional solution. In any case the hint may be taken that almost every competition should be approached by making an analytical study of the various types of solution and selecting that which promises best from the different points of view involved. This suggests that if architects cultivated the close alliances in vogue among many second-hand dealers, they might arrange a " knock-out " between the sketch designs and leave to only a selected few the labour of working out their schemes. This proposition cannot, however, be regarded seriously, as the freedom from personal bias that it postulates is not such as could normally be reached. We must, therefore, limit ourselves to considering how far each individual can carry out for himself such a process of elimination.

Too often the scheme and type of design is adopted because it seems to come out reasonably well without adequate exploration of possible alternatives. The really important thing is to find a system which can be applied to the problem set forth, by which the right general lines for the solution can be determined before the details of the scheme have to be taken account of. Now it is not practicable to formulate any system that will be generally applicable. Competitions may be classed under a number of types, but these will be too numerous to deal with specially. All that can be done is to point out a few of them.

Many of the larger competitions, such as those for hospitals and schools, involve a number of blocks suitably grouped, and probably the principal factor is the arrangement of these in relation to the others, giving each its suitable aspect and position, having regard to the scheme as a whole. In such a case it will be as well to obtain from the schedule in the conditions a rough idea of the dimensions of each block, and it may be convenient to cut out cards of these dimensions to the scale of the site plan and try various arrangements, having due regard to aspect, levels, and intercommunication. When doing this, perhaps the distribution that looks most promising does not suit the shape of the blocks, and some of them may be roughly replanned and substituted to improve the pattern. The heights and grouping will next demand attention, and this can be tested either by sketches or by cutting up a few chunks of soap or chalk. Only after these operations need the detailed planning of each of the component buildings be considered.

In another type of competition the problem will be the arrangement of a number of halls and rooms on a limited area. Here the first stage will be the grouping of these rooms, both practically and architecturally, the relation of the site area to the accommodation demanded, and the consequent number of floors. Much of this work can be done by means of calculation from the schedule, which will be quicker than preliminary testing by means of plans, and leaving these latter in a more flexible state so that they can still be dominated by architectural and other considerations.

Sometimes it is the exceptional plan or conformation of the site that will need the first attention. The site may be so irregular that the main consideration will be the placing of the building in some way that will give a sense of order and system, and, without undue wastefulness in the planning, will extenuate the irregularities. It may be that pronounced differences in level will influence the way the buildings are massed. In both cases, after arriving at a general idea of the cubic contents of the required structure, it will be best to test various forms of massing and grouping prior to preparing plans in detail.

A different form of problem is that where there are possible alternatives in the placing of the main front, and this will usually involve the decision as to the principal axis. That this decision is frequently a crucial one, the study of many important competitions will establish; but at the same time it is easy to be wise after the event, while it is not so easy to sit before a blank sheet of paper and strike a balance between the relative advantages of two or more positions.

On somewhat similar lines, and often inter-related to this last, is the influence of the surroundings on the character and scale of a building. This is really of importance, but it is unfortunately most unwise for a competitor to pay much attention to this point of view as it is one almost uniformly disregarded in the adjudication of competitions. Probably the assessor feels that he has quite enough on his hands with the decision as to which is the best design *per se* without complicating his decision by elements belonging to the realm of the town planner.

In any event it is clear that much should be done before the stage of detailed planning, and that this involves systematic methods by which the issues are kept in their broadest form till a general conception of the scheme is reached. Power to visualize is a great aid at these stages, but this can be assisted by diagrams, calculations, and other procedure employed in such proportions as the nature of the problem and the temperament of the designer dictate. Neither of these elements is invariable, and, therefore, no system is uniformly applicable; each problem will demand its own, and each individual finds he can work more effectively along one line than another, but subject to these provisos it will be found that the more abstract the visualizing of the problem can be kept in its early stages the better will be the final result.

It would be interesting to hear from those who are in the habit of taking part in competitions as to how they deal with these at the opening stages, and how they arrived at the first idea of their more successful designs. Perhaps they will think that this would be giving too much away; but after all no amount of preliminary work, however meticulously and logically done, will be of avail without the final imaginative flash that brings a design into expressive form. It is this flash that our American friend awaited, and if it failed to come, then into the waste-paper basket went all his sketch schemes; perhaps it would be to the advantage of our profession if his example were more generally followed.

SENESCHAL

COMPETITION CALENDAR

The following competition is announced with the full approval of the R.I.B.A.

Saturday, July 31. Australian National War Memorial, Villers Bretonneux, France. Open to Australians. Particulars from the High Commissioner's Office, Australia House, Strand. Deposit £2 2s.

The conditions of the following competition have been received by the R.I.B.A.

September 30. Cenotaph for Liverpool. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. Premiums, first, £200; second, £150, provided he is an ex-Service man; third, £100; fourth, £50. The author of the selected design will be paid a commission of 500 guineas, which will include the premium of £200 above-mentioned, and, in addition to preparing all the necessary working drawings and superintending the erection of the work, he will be required to superintend the erection of a full-size wood and plaster model of his design on the site. Particulars from the Town Clerk.

The conditions of the following competitions have not as yet been brought to the notice of the R.I.B.A.

No date. Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans. Sir John Burnet, R.A., British representative on jury of assessors.

No date. Manchester Town Hall Extension. Assessors, 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.

THE A.A. PRIZE-GIVING

That enterprising institution, the Architectural Association, held its annual prize-giving last week, and Mr. Guy Dawber was the principal guest of the occasion. He bore witness to the extraordinary success which the Architectural Association School has won for itself during the twenty-one years which have elapsed since he himself held the position as president of that body. The Architectural Association or the A.A., as it is affectionately called by those who belong to it, has the unique position among architectural schools, inasmuch as it receives its main support from practising architects in London, and is not in academic leading strings. It derives a certain advantage from this freedom, for as Mr. Howard Robertson, principal of the school, pointed out in his speech, the curriculum, with the consent of the council, can be modified as occasion warrants without setting in motion the somewhat cumbrous machinery of an academic institution of exalted rank such as a university.

Mr. Guy Dawber, in his address to the students, emphasized the desirability of their having respect for tradition, which term, however, he interpreted in such a manner as to include original design provided that this was based upon a knowledge of past achievements in our art. And he pointed out that buildings which have been endowed with novelty for its own sake are apt to become out-of-date in a very short time, and it becomes a matter for astonishment that they could ever have been admired. Mr. Guy Dawber had a few words to say about the craze for modern Swedish architecture, and he gently hinted that while giving it its due mead of recognition, we ought not to lose our heads about it. But what pleased most in his address was that he did not tell the poor students to sketch, and go on sketching and sketch again, but gave them the far more useful advice to look at buildings, analyse them, and attempt to give precise reasons why they liked, or disliked, their various qualities.

Following is a list of the scholarships and prizes awarded:

Public School Entrance Scholarship, value £75 12s., Cecil M. Lock (Berkhamsted School).

Open Entrance Scholarship, value £75 12s., Miss Carmen Dillon (N. London Collegiate School).

First-Year Course.—"Howard Colls" Travelling Studentship, value £15 15s., W. J. Carpenter Turner; 2nd prize, books value £5 5s., R. D. Scott; scholarship tenable for one year in second-year course, value £75 12s., R. D. Scott.

Second-Year Course.—Second-Year Travelling Studentship, value £26 5s., E. Carter; 2nd prize, books value £10 10s., J. C. Rose; scholarship tenable for one year in third-year course, value £75 12s., D. R. Burles; honourable mention, A. Girard.

Third-Year Course.—Holloway Scholarship, tenable for two years, value £300, A. B. Grayson; Third-Year Travelling Studentship, value £31 10s., E. B. O'Rorke; 2nd prize, books value £10 10s., K. J. Peacock.

Fourth-Year Course.—R.I.B.A. "Henry Jarvis" Scholarship, value £50, R. P. Cummings; scholarship tenable for one year in fifth-year course, value £50 8s., C. W. Sully; commended for high standard of work in fourth year, W. R. Brinton and J. Breakwell.

Fifth-Year Course.—"Henry Florence" Travelling Studentship, value £50, Mrs. B. S. H. Fisher; Fifth-Year Travelling Studentship, value £50, Tha Tun; "Alec Stanhope Forbes" prize for the best colour work during the year, books value £5, E. C. P. Allen; commended for high standard of work in fifth year, E. M. K. Ellerton.

Measured Drawings Prize, value £20, Miss M. Wilkinson and Mr. G. L. Jenkins.

The Architectural Association Diploma, on satisfactory completion of five years' school course, and a period of six months' office experience, E. C. P. Allen, A. Brodie, F. Halliburton Smith, A. H. Ley, E. Rugg. The following students have qualified for the Diploma subject to completion of six months' office experience: D. Beaty-Pownall, F. J. Buckland, W. R. H. Curtis, Miss A. Dicker, R. Erith, Mrs. B. S. H. Fisher, W. R. F. Fisher, J. Monson, F. Napolitano, Miss R. Tinker, Tha Tun, G. Warburton.

Medal presented annually by the Société des Architectes Diplômes par le Gouvernement, Paris, to the best Diploma student of the year, D. Beaty-Pownall.

Royal West of England Academy School of Architecture (affiliated with the Architectural Association).—Prize in design, value £5 5s., awarded to Mr. R. S. Redwood.

THE LIVERPOOL SCHOOL EXHIBITION OF DRAWINGS

[BY ERNEST GEE]

The increasing interest taken in the exhibition of students' work recently held in the Walker Art Gallery, Liverpool, confirms the soundness of the policy dictated by Professor Reilly and the staff of the school. Given this sympathetic audience and a policy entirely refreshing in its conception the architects of the future can safely be left in good hands. At the instigation of Professor Reilly and with the co-operation of the Liverpool Architectural Society a panel of practising architects was recently inaugurated, individual members of which visit the school at frequent intervals and criticize the designs submitted by the senior students. The student and architect are consequently brought into close alliance and learn to appreciate each other's problems. Not the least interesting part of this system is for the critic to see the many and varied solutions evolved.

The drawings in this year's exhibition show a very high standard in design, measured work, and working drawings. Entertainingly interesting is it to trace the development of a student's work from the early stages when he gropes in the dark to reach the light of day to the knowledge and discipline displayed in the more advanced years. The skill displayed in rendering is more restrained and of an even higher standard than that attained in the past. Light and shade are carefully studied, and emphasis given to the dominant feature.

Gone are the days when a student learnt freehand by drawing from the dull and deadly plaster cast; command of the pencil is now acquired by the more interesting and instructive six-hours sketches. The popularity and success of this subject were noted in the exceptional skill and merit displayed. Signor Mussolini could not hesitate to remove from the Chigi and take up residence in the new palace provided in so short a space of time. In order to equip the young architect with the faculty for solving the many and varied problems which will fall to his lot when he takes up office work on his own account, the subjects set in the designs are numerous and varied in character, ranging from cinema theatres to cemetery chapels. The style chosen by Mr. O. G. Lewis for this latter and by Miss Dunphy for the shooting-box, if somewhat unfashionable, indicates a sound and definite knowledge.

Of the larger problems in design Mr. Docking's solution for a public hall in a park is of special merit, being well planned and with good elevations. Entrances and exits are skilfully disposed. The country inn afforded a subject of no little difficulty and one requiring a special technical knowledge of the requirements of a licensed house. Too little attention was given to the disposition of the vaults and the services from bar and kitchen, the plan submitted by Mr. A. Owen being the best in this respect. Mr. Bramhill has a set of beautifully rendered drawings for the same subject. Not often does it fall to the lot of an architect to choose the right kind of tenant for the building-owner, and one is tempted to ask what would happen if, say, a furniture and not a book vendor wished to display his goods in the shop under Mr. Ellis's delightful interpretation of an architects' club.

Mr. Thearle's drawings for the Rome and Jarvis prizes well maintain the standard of past competitors. The Honan Scholarship awarded annually by the Liverpool Architectural Society to students under thirty years of age was won by Mr. H. Bramhill, whose design for a motor-bus terminal station and

garage showed evidence of a complete mastery of the plan, combined with a knowledge of modernist principles in the elevation.

Mr. Heal gained the White Star Prize with a design for the interior of a ship saloon which showed a finished knowledge of this subject, whilst the design submitted by Mr. Maxwell for this problem was also of special merit.

Following are the results of the prizes and scholarships won by the students during the past session, and of the examinations held at the school during June last :—

PRIZES AND SCHOLARSHIPS

The Commonwealth Fellowship to America (£600 for two years).—F. N. Astbury.
The Duveen Scholarship for Rome Scholars to America (£300).—Stephen Welsh.
The R.I.B.A. (Henry Jarvis) Rome Scholarship (£250 for two years).—Herbert Thearle.
The R.I.B.A. Tite Prize (£150).—A. C. Cotton.
The Liverpool Architectural Society's Honan Travelling Scholarship (£50).—H. Bramhill.

The above are all open scholarships not confined to members of the Liverpool School.

The Holt Travelling Scholarship (£50).—H. Bramhill.
The Rankin Prizes for sketch designs (£12 each).—Fifth year : A. C. Todd; Fourth year : J. B. Maxwell.
The White Star Prize for ship decoration (£10).—R. G. Heal.
The Holland and Hannen and Cubitt Prizes for working drawings.—First prize, £15 : A. C. Todd; Second prize, £10 : G. A. V. Hall.
THE ARCHITECTS' JOURNAL Essay Prize (£5).—W. A. Eden.

FACULTY OF ARTS.
DEGREE OF B.ARCH.
Fifth Examination.
Honours in Architectural Design.
Class I—
Spencely, H. G. C.
Class II—
Dunphy, Norah.

Fourth Examination.
Aspland, A.
Hall, G. A. V.
Ridge, G. A.
el Tawil, M. Z.
Vaughan, Olwen.

Third Examination.
Docking, S. J.
Ellis, H. G.
Hough, G. C.
Neumann, M. C.
Powell, H. H.

Second Examination.
Bodhiprasad, N.
Freeman, P. G.
Wilkinson, H. H.
Williams, R. A.
Wright, L.

First Examination.
Archer, Hilary.
Bolsover, G.
Fairclough, A. B. R.
Harper, D. R.
Haywood, Nancie B.
Holford, G.
Marks, Joyce.
Meldon, A. P.
Nelson, J. O.
Stephenson, G.

FACULTY OF ARTS.
DIPLOMA IN ARCHITECTURE.
Fifth Examination.
Distinction in Architectural Design.
Class I—
Todd, A. C.
Ordinary.
Cowley, A. D. R.

Fourth Examination.
Hall, D.
Isherwood, J. H. I.
Lewis, O. G.
Metcalfe, J. G.
Moore, C. E.
Sumner, B. A.

Third Examination.
Bramhill, H.
Davidson, A. J.
Doran, P. J.
Garrett, S. G.
Hughes, J. L.
Owen, A.
Parry, H. T.
Solomon, D. B.

Second Examination.
Ashworth, A. T.
Brown, C. S.
Burrows, A. C.
Cowin, J. N.
Hearnden, E. G.
Kelly, S. W.
Lightfoot, B. St. C.
Murray, E.
Norman, F.
Poulton, D.
Segar, Owen, G. J. S.

First Examination.
Archibald, R. M.
Furbur, E. R.
Inglis, J. B.
Kenyon, G.
Morter, P. S. P.
O'Flynn, E.
Owen, H.
Woods, H. J.
Wright, J. H.

THE BARTLETT SCHOOL OF ARCHITECTURE, LONDON UNIVERSITY

The following awards have been made in the Bartlett School of Architecture at University College : Bartlett Entrance Exhibitions —H. H. Ford, Eastbourne Municipal Secondary School; E. F. Starling, Whitgift Middle School, Croydon. Donaldson Silver Medal—H. T. Dyer. Prize for Design in Ferro-Concrete (£25)—Jessie M. Greig. Ronald Jones Prizes—W. F. B. Lovett (Medieval Architecture); W. G. D. Anderson (Renaissance Architecture). ARCHITECTS' JOURNAL Prize for Design—J. B. Cochrane. Herbert Batsford Prize—Edna M. L. Mills. Certificates in Architecture—C. P. F. Fleetwood-Hesketh, P. A. Wailes. Sub-department of Town Planning : Certificates—A. J. Hill, H. A. Johnson, T. Ritchie.

IN PARLIAMENT

[BY OUR PARLIAMENTARY CORRESPONDENT]

The House of Lords and the City Churches

Interesting debates have taken place recently in the House of Lords on the Union of Benefices and Disposal of Churches (Metropolis) Measure, 1926, which has been described as a measure "for the pulling down of the City Churches."

In the House of Lords the Bishop of London, in moving that the measure be presented for the Royal assent, denied that he was iconoclastic. He loved the City churches, and the idea that the Bill would involve the wholesale pulling down of them was entirely wrong. Before any Bishop of London could start pulling down any churches, he had to consult the Fine Arts Commission and a grand jury of no fewer than thirty-five people. About four or six out of the forty-six churches had been removed with advantage in the past. They had no architectural beauty. The Bill was really a measure for putting together the parishes of the City and so enabling the Church to deal with surplus income and surplus man-power.

Lord Marshall moved that the measure be not presented for the Royal assent, and put forward the views of the Corporation of the City of London against the Bill. He said : "Leave to us in the City of London our monuments; let them be monuments of our faith."

The Earl of Crawford, in a telling speech, declared that the measure was essentially one to destroy City churches. The Phillimore Committee had scheduled nineteen churches for removal, and, in a "thoughtful way" had marked them with black spots on a map. Those churches included All Hallows, Lombard Street, built by Wren, and there were twelve more churches built by Wren in the "black spot" list. St. Mary Woolnoth was in the condemned list, but that church showed how great a man Nicholas Hawksmoor, the architect, was. The full list of the condemned churches was as follows : All Hallows, Lombard Street; All Hallows, London Wall; St. Botolph, Aldgate; St. Katherine, Coleman Street; St. Clement, Eastcheap; St. Dunstan in the East; St. Magnus the Martyr; St. Mary-at-Hill; St. Mary Woolnoth; St. Michael, Cornhill; St. Alban, Wood Street; St. Anne and St. Agnes; St. Botolph, Aldersgate; St. Dunstan in the West; St. Mary, Aldermanbury; St. Michael Royal; St. Nicholas Cole Abbey; St. Stephen, Coleman Street; and St. Vedast, except the tower. The worst of this list was that it was only an indication of what might occur, and was by no means all that was contemplated by the committee. The report of the committee showed an almost ferocious eagerness for further destruction. Under the Act of 1860 no fewer than twenty City churches—one every third year—had been destroyed. These churches were mementoes of our second Renaissance, and this measure, which contemplated the destruction of historic churches in the City of London, should not be passed.

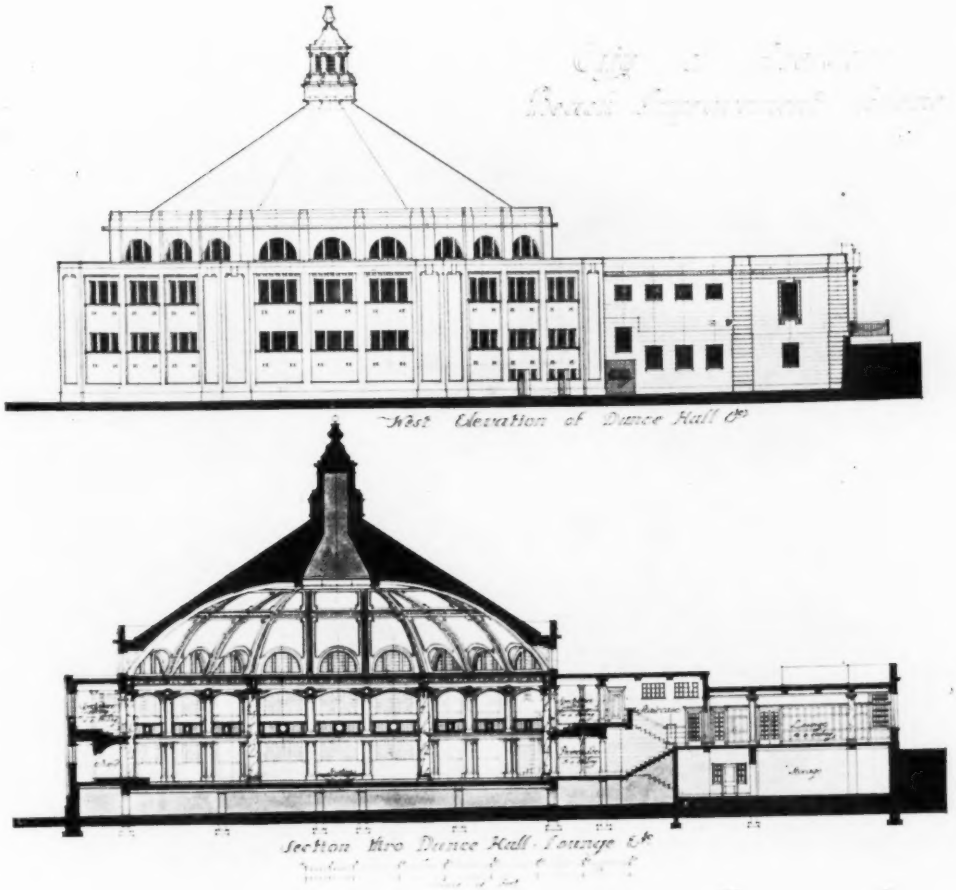
In spite, however, of the fact that during a protracted debate the whole weight of argument was against the measure, the House decided, by seventy-one votes to fifty-four, to direct that the measure should be presented for the Royal assent.

The measure was further debated in the House of Commons on Monday.

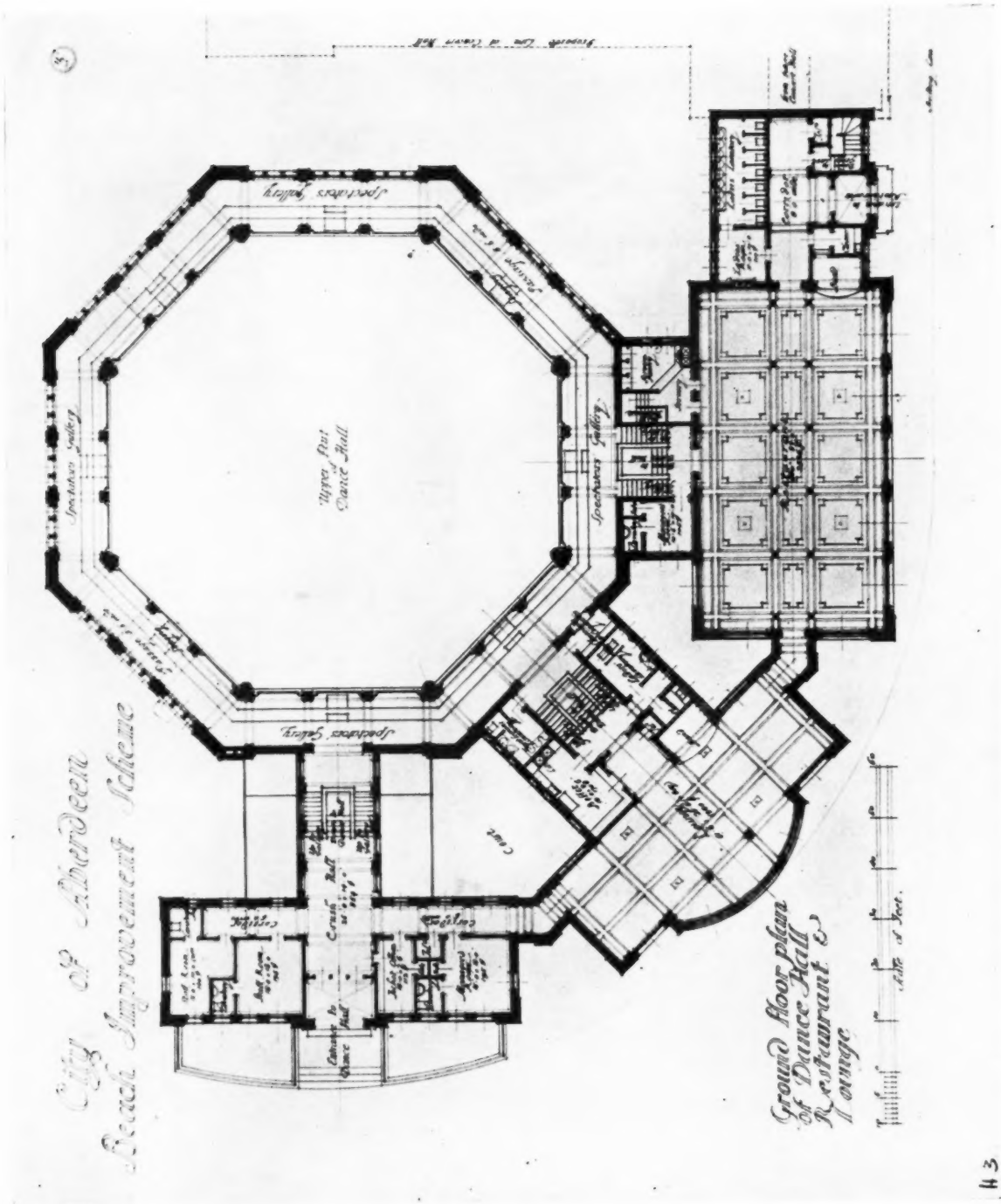
The Thames Bridges Commission

At question time the Prime Minister informed Sir Wm. Davison that he was glad to say that the Commission on the Thames Bridges was now complete, and the following gentlemen had been appointed members : Lord Lee of Fareham (chairman), Sir Willoughby Dickinson, Lord Hambleden, Professor Charles Inglis, Sir William Plender, Sir Lawrence Weaver. The terms of reference were as follows :

"To survey the whole problem of cross-river traffic in London; to report what provision should be made to meet future requirements, and, in particular, to consider the proposals made in connection with Waterloo and St. Paul's Bridges. Having regard to the urgency of the question, the report should be completed at the earliest possible date."

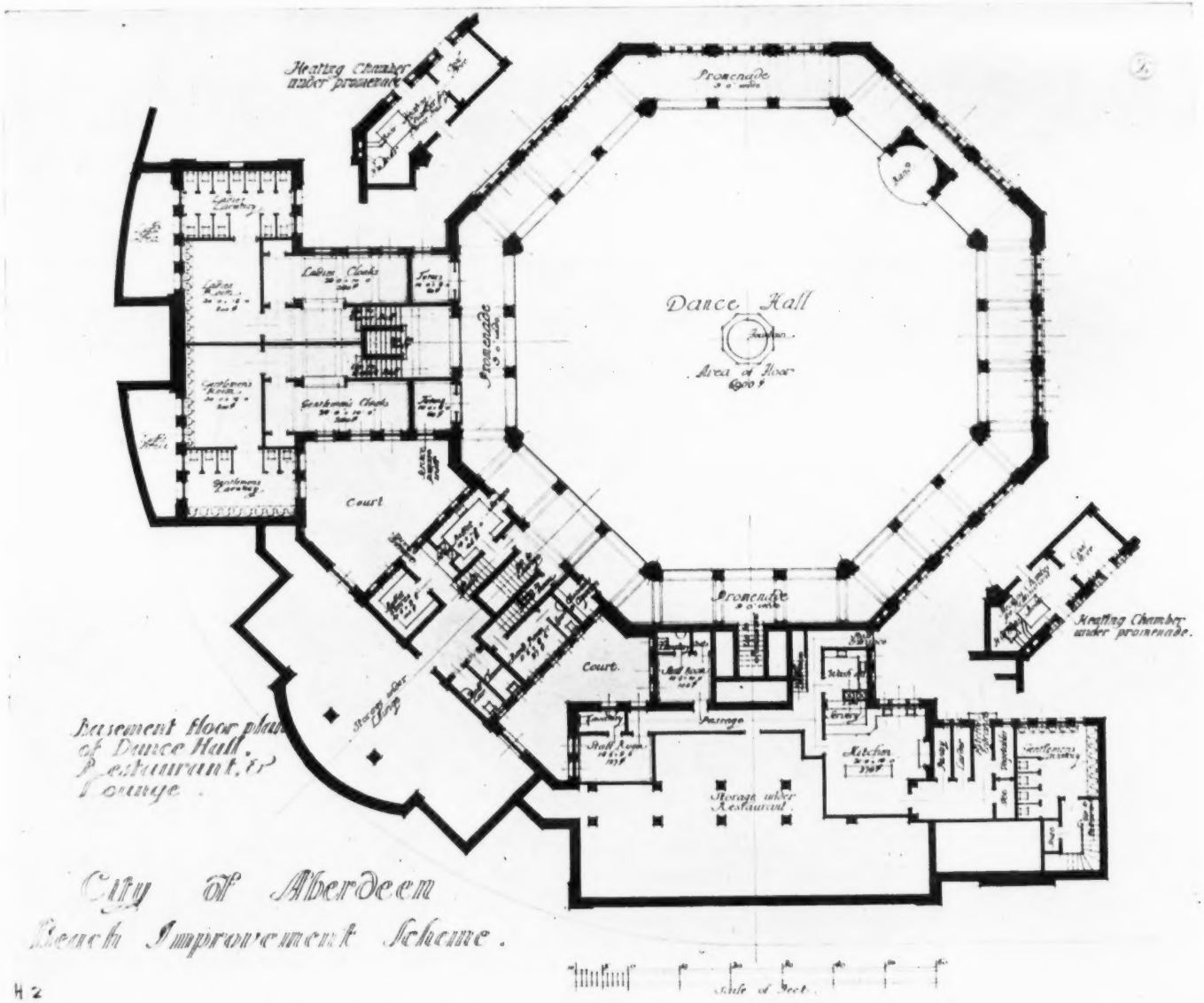


City of Aberdeen Beach Improvement Scheme. John Keppie, assessor. The first premiated design, by Thomas Roberts and Hume. The dance hall, restaurant, and lounge. Above, the west elevation. Centre, the section. Below the lay-out plan.

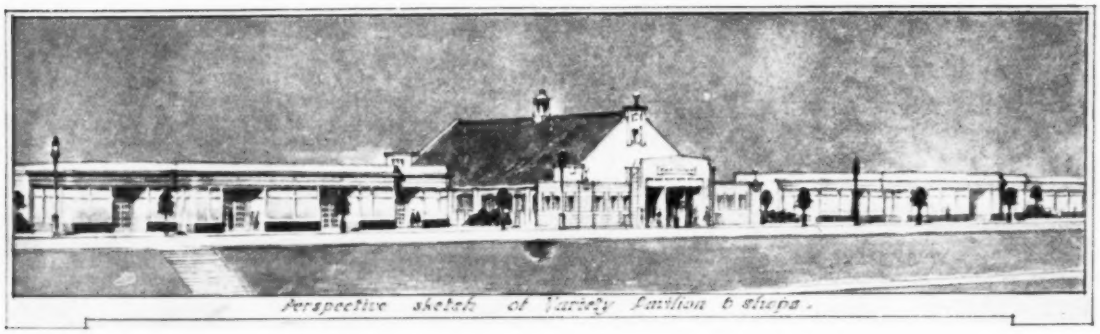


City of Aberdeen Beach Improvement Scheme. John Kelpie, assessor. The first premiated design, by Thomas Roberts and Hume. Ground-floor plan of the dance hall, restaurant, and lounge.

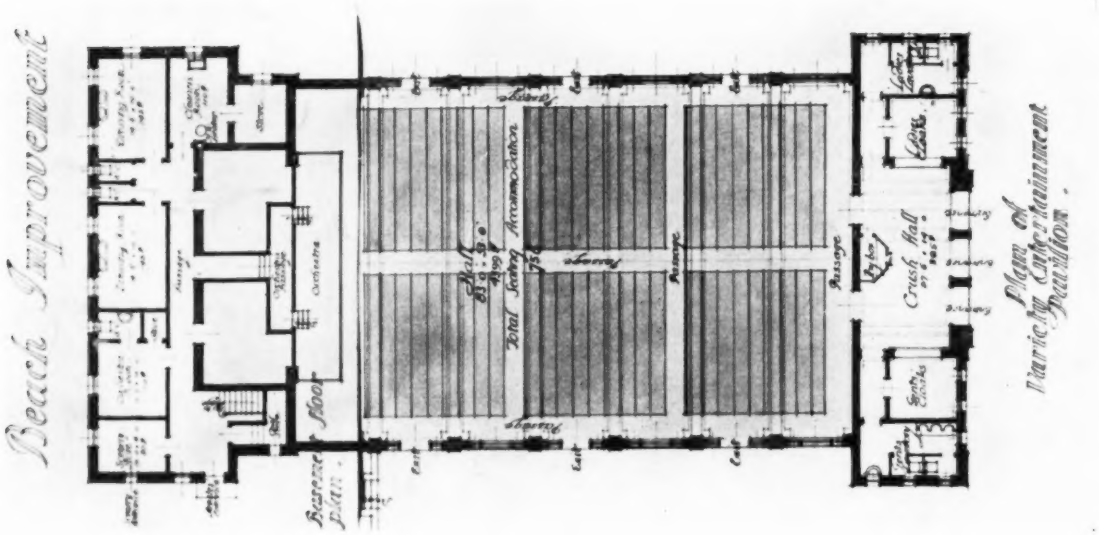
assessor. The first premiated design, by Thomas Roberts and Hume. Ground-floor plan of the dance hall, restaurant, and lounge.

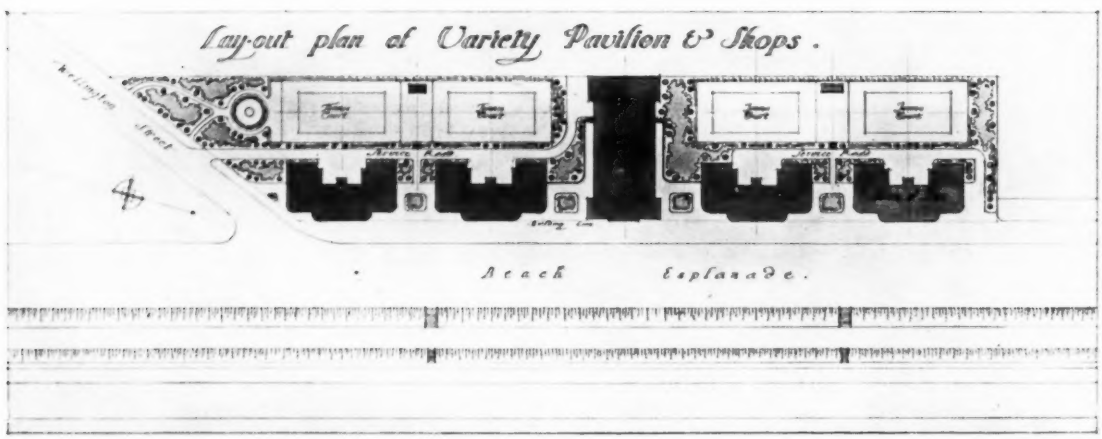


City of Aberdeen Beach Improvement Scheme. John Keppie, assessor. The first premiated design, by Thomas Roberts and Hume. Basement floor plan of the dance hall, restaurant, and lounge.



Perspective sketch of Variety Pavilion & shops.





City of Aberdeen Beach Improvement Scheme. John Keppie, assessor. The first premiated design, by Thomas Roberts and Hume. The variety entertainment pavilion, with shops. Above, perspective view. Centre, plan of the pavilion. Below, lay-out plan.

READERS' QUERIES

ALTERATIONS TO A SCHOOL

S. H. S. writes: "The accompanying plans and sections are of a school. Over the room C on the ground floor are two classrooms A and B, separated by the wall D. It is proposed to take out this wall, thus making the two rooms A and B into one large room. In room C is a cast-iron column supporting a girder carrying: a, the end wall of the two rooms; b, half the load from wall D and the floors of rooms A and B; c, some degree of load from wall E and the floor of room F (on second floor) transmitted down the end wall of the school. 1. Since the wall D acts to some extent as a tie or buttress between the end wall of the school and the outside wall, will its removal deprive the end wall of the school of necessary stiffening, or render the wall in any degree unsafe? 2. Will the removal of the weight of wall D from the column be likely to cause in the latter any eccentric stress; and if so, would such stress affect the safety of the column?"

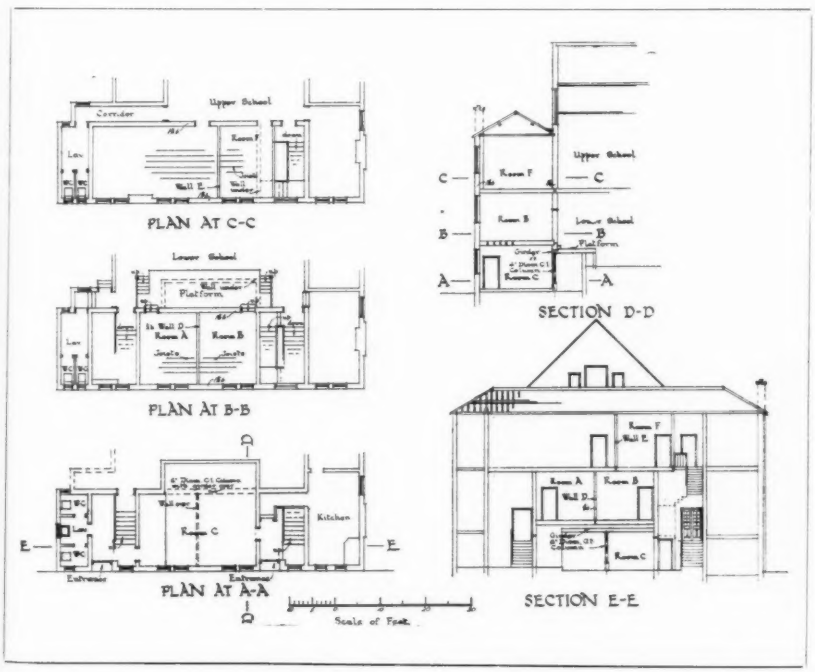
1. The removal of the wall D will certainly deprive the end wall of the school of some degree of stiffness and lateral support. The end wall is not very thick considering its width and height, and a strong frame composed of a beam or girder, two story posts or stanchions and substantial brackets across the angles between the beam and its supporting posts might be inserted to perform some part of the stiffening function at present exercised by the wall. This would certainly be advisable if either the end wall of the school or the external wall of the lower building in front of it are composed of feeble mateirals, or are out of the perpendicular, or are in the least decayed. The story posts should be securely fixed with ample base plates to the top flange of the existing girder which carries the floors of rooms A and B. 2. The amount of load which the stanchion receives from the floors and roof of the main building cannot be determined from the particulars given on the drawing, so that it is impossible to say whether the balance of stresses in the existing cast-iron column will be improved or otherwise by the removal of the partition wall D. The amount of weight to be removed is not very great. It is 8 ft. by 10 ft. by 6 in. by 1 cwt. or two tons, supposing the total thickness of the wall with its plastered faces amounts to 6 in. The weights which remain are much greater and amount to about fifty tons more or less equally poised about the cap of the column. As this is rather in excess of the safe-load which a 6 in. cast-iron column is now calculated to bear, the opportunity should be taken of seeing whether any signs of damage have made their appearance. A 6 in. cast-iron column of 1 in. thickness of metal and 10 ft. long is credited by various authorities with bearing safely from 28 to 46 English tons if provided with fixed ends.

W. H.

CRACKS IN CEMENT PLINTH

Ewell writes: "I have had trouble with an iron railing that is carried on a cement curb, the standards being run in with sulphur. The cement plinth is being blown off in large portions at many of the points where the standards are let in. What is the best method of dealing with the trouble so as to prevent it occurring where the curb is still undamaged? The railing and curb have been fixed for about twenty-five years."

It is probable that the cement curb is fractured as the result of bursting pressure applied by the iron feet of the standards. Pressure might possibly be purely mechanical as the result of persons shaking or leaning upon the railing, and if movements occur from this cause adequate staying of the railing might ward off further trouble. Minor movements due to reasonable wear and tear and continued expansion and contraction through changes of temperature during a quarter of a century may, however, have opened minute cracks between the sulphur and the iron and allowed moisture to attack the metal. Whether the sulphur itself increases the risk of corrosion is still a debated point, though experiments have demonstrated that concrete made with materials such as cinders and clinkers which contain sulphur compounds, and which are also porous enough to admit moisture, are recognizably liable to do so. In any case, the joints should be made good, and as Portland cement is now known to be far stronger than sulphur for such purposes, the sulphur should be cut out, the iron and the concrete thoroughly cleaned, and the joints filled in either with neat cement, or with cement to which half its volume of clean-washed sharp pit-sand has been added. The cement must be well tamped home, and the upper surface should be formed into a little mound about the foot of the standard to throw off water or other liquids which may fall upon it. Well-matured, slow-setting cement which will not shrink or crack is required for such purposes, and, although a neat cement or rich cement mortar is practically waterproof, it may be as well to make assurance doubly sure by the addition of a specific waterproofing compound. As drawn, the curb does not seem to have been given any scope or camber on its upper surface, so, perhaps, the repairs might include the provision of a saddle-back to dispose of water as speedily as possible.



Alterations to a school. [*See enquiry by* S. H. S.]

DESTROYING WORMS IN WOOD

J. W. writes: "Can you tell me what to use to destroy worms in oak?"

The Hope Death Watch Beetle Destroyer and Wood Hardener, manufactured by Hope Products, 104 High Holborn, London, W.C.1, is prepared according to the formula approved by the late Professor Maxwell Lefroy in July 1925. The old-fashioned method of scalding the grubs by dashing boiling water over the wood is also effective where it can be adequately employed. Small pieces of wood can be treated by steeping them in boiling water, or by baking them in an oven. Paints and polishes applied all over the wooden articles, to back and front, top and bottom alike, protect them from reinfection to a very great extent, since the female beetle requires a crack of some sort in which to deposit her eggs within the timber.

THE WEEK'S BUILDING NEWS

More Houses for Yarmouth

Contracts for 116 houses have been accepted at a total cost of £46,684.

New Elementary School at Leeds

A new elementary school is to be built on the Hawksworth housing estate, Leeds.

Montreal Building Contracts

Building contracts valued at more than £2,000,000 were placed in Montreal during the first five months of this year.

Church Tower Restoration

Nearly £1,600 is to be spent on West Drayton Church tower, the bells having been silent for thirty years.

Yeovil Municipal Buildings Scheme

The foundation stone of Yeovil's new municipal buildings, library, and museum was laid last week.

Built Brooklyn Bridge

Mr. Washington A. Roebling, the builder of Brooklyn and other suspension bridges, has died at Trenton, New Jersey, at the age of eighty-nine.

Whitechapel Hay Market

A proposal to purchase and abolish the hay market in Whitechapel High Street and adjacent streets is to be recommended to the L.C.C.

Woolwich Welfare Centre

Woolwich Council proposes to build a maternity and child welfare centre in Plumstead High Street, with accommodation for the dental treatment of children.

Norwood Grove Preservation

Norwood Grove, an area of 32 acres, is to be conveyed to the Croydon Corporation for permanent preservation at or before Michaelmas.

Building Trade Agreement

The National Federation of Building Trades' Employers has endorsed the new wages agreement already approved by the unions.

Admiralty and Dangerous Structure Notice

Dover Town Council last week decided to serve a dangerous structure notice on the Admiralty as owners of the promenade pier and also upon their tenant.

Alfreton Memorial Site

The Alfreton Town War Memorial Committee has asked for the Urban Council's permission to place the war memorial, which is to cost £2,500, in the market-place.

Brickworks to Close

The Bolton-on-Dearne Urban District Council has decided to close their brickworks as soon as the present low stock of coal runs out.

New Bridge Across Rhine

It has been decided to build a new bridge across the Rhine at Cologne-Mülheim. The present pontoon bridge, which was built in 1888, will be demolished and a permanent bridge erected in its place.

Swansea House Builders

A Swansea and District House Builders' Association is to be formed in conjunction with the National Federation of House Builders. Mr. Charles E. Prince, Glanmor Road, is acting-secretary *pro tem.*

The London Brick Company

The London Brick Company and Forders announces a second interim dividend on the ordinary shares of 5 per cent., making 10 per cent. for the year to date. (Corresponding payments last year were the same.)

The L.C.C. Downham Estate

The London County Council is to proceed with the development of a further section of the Downham estate by the erection of 750 houses and flats of various types, the cost being estimated at £689,000.

Historic London Church

The demolition of St. Olaf's Church, Tooley Street, London Bridge. is in hand. St. Olaf's was erected in 1734 on the site of a church built at the period of the Norman Conquest.

Variation in Tenders

Tenders received for the erection of an anæsthetic room at the St. Pancras Guardians' Highgate Hospital varied from £465 to £1,213 10s., and for the erection of balconies from £825 to £1,881 15s.

Built Before the Traffic Came

Heavy traffic all day long is believed to have endangered St. Martin's-in-the-Fields, the 200-year-old church, just off Trafalgar Square. It has now the scaffolding up for repairs.

Downland Preservation

Brighton Council has not yet ratified the purchase of the 700 acres of Downland comprised in the Saddlescombe estate, but is expected to do so as a measure of waterworks protection.

Rebuilding Church Schools at Datchet

Datchet has succeeded in raising the sum of £4,600 for rebuilding the Church of England Schools, in order to comply with the regulations of the Bucks Education Committee and the Board of Education.

New Church at Nunthorpe

The new Parish Church of St. Mary's, Nunthorpe, built of stone quarried near Great Ayton, was consecrated last week. The architect is Mr. Leslie T. Moore, F.R.I.B.A.

No Local Tenders

Although a number of painters and decorators living in Southwark are on outrelief, not one local firm has tendered for a £5,000 painting contract to be placed by the Southwark Guardians.

Plans for Seventy-five New Bradford Buildings Approved

The Street Improvement and Buildings Committee of the Bradford Corporation last week passed seventy-five plans for new buildings in the city. Included in that number were plans for nearly fifty new houses.

New Bridge for the Avon

The Stratford Town Council has approved a scheme for a new bridge over the Avon at a point now occupied by a disused tramway bridge. The estimated cost is £41,000, and the scheme will leave the old Clopton Bridge intact.

Housing Tenders at Goole

The Goole Urban Council has accepted a tender of Messrs. Platt and Featherstone, of Goole, for the erection of fifty-eight houses at a cost of £25,315 1s. The price per house is nearly £60 less than the Council had previously paid.

The Death-watch Beetle

The ravages of the death-watch beetle will, it is feared, necessitate the expenditure of at least £2,500 by the people of Huyton to make good the damage caused to their ancient parish church. The chief damage has been done to the roof.

£150,000 Bournemouth Scheme

The Beach Committee of the Bournemouth County Borough Council has under consideration a £150,000 scheme for a raised ferro-concrete motor roadway to relieve the congestion on the present Undercliff Drive between Bournemouth and Boscombe piers.

New Stretford School

Stretford Education Committee is to erect a £1,200 school to accommodate 400 at King's Road, Stretford, where a new housing estate is being developed. A small sub-committee is to prepare a scheme. The site fronts King's Road, and is bounded on one side by the L.M.S. Railway.

Housing at Rotherham

At a meeting of the Rotherham Rural District Council, the Ministry of Health were reported to have forwarded formal sanction to the borrowing by the Council of the following sums for the erection of houses: Thrybergh, £23,724; Ravenfield, £23,420; Dalton, £18,760; Catcliffe, £4,575; Brampton Bierlow, £23,424; Bramley, £18,856; Wickersley, £9,240; Thurcroft, £22,233.

THE WEEK'S BUILDING NEWS—*continued.*

New Cinema at Caterham

Plans for a new cinema to seat 700 have been prepared by the architect, Mr. G. A. Fortescue, A.R.I.B.A.

Hounslow Cinema

The Electric Empire, owned by T. C. Dorling, is to be rebuilt, and the seating capacity greatly enlarged. The architect is Mr. R. A. C. Churchward, 92 Victoria Street, London, S.W.1.

Big Torquay Scheme

Torquay Town Council has adopted in principle a scheme for the reconstruction of Vaughan Parade when the existing leases on the Council's property there expire towards the end of 1928.

Stockton-on-Tees Cinema

The plans for the new cinema at Stockton-on-Tees, which is to seat 1,500, have been prepared by Messrs. Percy Browne and Son, F.R.I.B.A., and the building contract has been placed with W. Pearson and Sons, Burn Road, West Hartlepool.

Mr. Hicks Re-elected

Every three years the Amalgamated Union of Building Trade Workers elects its officials by ballot vote of the membership. Mr. George Hicks has been re-elected to the post of general secretary by an overwhelming majority, receiving more than 6,000 votes over all the other candidates for the position put together.

Carlisle Council's Widening Scheme

Carlisle City Council has agreed to a scheme costing £60,000 for widening the centre of the city through which an immense volume of main road traffic passes into Scotland. The improvement will clear part of the site of the prison, now closed, and involves the demolition of business property, including one of the State inns and the removal to another place of the statue to a former Earl of Lonsdale.

Site for New Offices

The English Sewing Cotton Company has acquired an island site on one side of St. Mary's Parsonage Gardens, Manchester, for new offices, and has commissioned Mr. Harry S. Fairhurst, the Manchester architect, to submit proposals and plans. It is intended to erect a large block of modern office buildings, to be completed when the lease on the present offices expires.

Mme. Tussaud's

Madame Tussaud's, the world-famous waxworks exhibition of Marylebone Road, N.W., which was burnt out in March last year, is to be rebuilt, and a new company, Madame Tussaud's (1926), Ltd., has been registered for the purpose, with a capital of £157,000. Plans for the new building on the old site are now before the London County Council, and as soon as they have been approved building will start.

Newcastle Cinema

The new cinema and variety theatre in the Condercum Road, to be built by John Grantham and Sons, will have a capacity for 1,500, and a stage 60 ft. wide and 35 ft. deep. The contract has been let to James Lunn and Son, Newcastle.

New Cinema at Rhyl

Plans for the new cinema to be erected at Rhyl, North Wales, on the site of the Royal Hotel, have been prepared by Mr. S. Colwyn Foulkes, A.R.I.B.A., Colwyn Bay, for the Rhyl Entertainments, Ltd., of Queen's Hotel, Rhyl. There will be a capacity for 1,600 patrons, and also a buffet bar and restaurant.

Danger to Cologne Cathedral

It is stated that the time has come when it must be decided whether the cathedral is to be allowed to go to ruin or is to be preserved. The chief source of danger is not, as at St. Paul's, the vibration set up by modern transport. The necessity for repairs is due almost entirely to the ravages of time and weather. For the adequate preservation of the cathedral a permanent staff has to be kept constantly at work.

New Synagogue at Westcliff

At a meeting of the Westcliff and Leigh Hebrew Congregation tenders for the rebuilding of the synagogue were discussed. The plans of Mr. Chas. Cooke, the architect, having been passed, for the new synagogue, the tender of Mr. F. W. Taylor, of Westcliff, was accepted, and the architect was requested to instruct the builder to proceed immediately with the work, with the proviso that no work was to be done on Saturdays or Jewish festivals.

New Apartment Hotel in Canada

An eleven-story, 600-roomed fireproof apartment hotel has been planned for immediate erection on the site of "Benvenuto," the palatial Toronto home of the late Sir William Mackenzie, at an estimated cost of 1,500,000 dollars. The architects are Messrs. Chapman and Oxley, of the Northern Ontario Building, Bay Street, Toronto, with whom British firms interested in the supply of fittings, furniture, etc., should communicate direct.

Whitehall's New Palace

Plans are being prepared by the Office of Works for a gigantic block of new buildings in Whitehall. When complete, the new block will stretch from Montague House to Richmond Terrace, and from Whitehall to the Embankment, and will accommodate a staff of 5,000 or 6,000. The idea of the new block has been incubating for some time, and had its genesis in the urgent plea of the Air Ministry that it should be removed from its habitat in Kingsway to a spot in closer proximity to the other fighting Service departments. It is estimated that the aggregate cost will be in the neighbourhood of £5,000,000.

Councillors as Honorary Architects

The Housing Committee of Slough U.D.C. has accepted the offer of Councillors Bowyer and Royce to act as honorary architects in connection with any further houses erected by the Council, provided they have the services of a competent clerk of works.

Tilbury's New Hotel

The contract for the construction of the fully-licensed hotel at one corner of Civic Square, Tilbury, has been signed by Charrington, Ltd., the brewers. One portion of the hotel will consist of a recreation hall. The architect is Major H. Oliver, L.R.I.B.A.

Gold of St. Paul's

Londoners are very much interested in operations that have been going on during the last few days on the dome of St. Paul's. Workmen have been engaged 400 ft. above the street level in cleaning the large orb upon which the cross stands. It is a remarkable fact that this orb was covered by Wren with gold leaf, which is now being exposed to view after being covered for many years by the dirt of London. The surface is said to be as fresh as when it was laid 200 years ago, and in these bright summer days it now glitters in the sun.

Fire Station Plans for Sheffield

The preparatory plans for the extension of the Sheffield Fire Brigade premises in Rockingham Street were submitted and accepted at a meeting of the Watch Committee and the City Architect (Mr. W. G. Davies) was instructed to prepare additional plans in order that the work may proceed. The total area of the new fire station will be 2,673 sq. yds., the area of the extension being 1,158 sq. yds. Almost all the shop premises facing Division Street have been vacated to prepare for the clearing of the site. There will be a central engine-house for ten engines and equipment immediately facing Division Street, and the vehicles will return by way of the courtyard at the rear.

Objection to Swan and Edgar's Plan

The Building Acts Committee of the L.C.C. has banned one of Messrs. Swan and Edgar's rebuilding plans for their premises in Piccadilly Circus. Last year the firm obtained approval for an additional cubical extension of their premises. They proposed to form openings between the premises and the stores in the subway of the reconstructed Piccadilly Circus station, and also between the stores and the showcases in the subway. The committee, however, has come to the conclusion that such openings would in effect unite the premises and the subway, and should not be allowed in view of the possibility of fire and panic caused by smoke. The committee, therefore, recommend that consent be refused. The Westminster City Council, it is stated, has no objection to the proposal.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A₁	Abergavenny	Do.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W.Counties	1 8	1 3½
A₃	Addlestone	S. Counties	1 6½	1 2
A	Adlington ..	N.W.Counties	1 8	1 3½
A	Airdrie ..	Scotland	*1 8	1 3½
C₂	Aldeburgh	E. Counties	1 4	1 0½
A	Altrincham	N.W.Counties	1 8	1 3½
B₃	Appleby ..	N.W. Counties	1 4½	1 0½
A	Ashton-under-Lyne	N.W Counties	1 8	1 3½
A₃	Atherstone	Mid. Counties	1 6½	1 2
B₃	Aylesbury ..	S. Counties	1 4½	1 0½
B	BATH ..	S.W.Counties	1 6	1 1½
B₃	Banbury ..	S. Counties	1 4½	1 0½
B₂	Bangor ..	N.W. Counties	1 5	1 1
A	BarnardCastle	N.E. Coast	1 8	1 3½
A	Barnsley ..	Yorkshire	1 8	1 3½
B₁	Barnstaple	S.W. Counties	1 5½	1 1½
A	Barrow ..	N.W.Counties	1 8	1 3½
A	Barry ..	S. Wales & M.	1 8	1 3½
B₃	Basingstoke	S.W. Counties	1 4½	1 0½
A	Batley ..	Yorkshire	1 8	1 3½
B	Bedford ..	E. Counties	1 6	1 1½
A₂	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A₃	Bewdley ..	Mid.Counties	1 6½	1 2
B₃	Bicester ..	Mid. Counties	1 4½	1 0½
A	Birkenhead ..	N.W.Counties	†1 9	1 3½
A	Birmingham	Mid. Counties	1 8	1 3½
A	Bishop Auckland	N.E. Coast	1 8	1 3½
A	Blackburn	N.W.Counties	1 8	1 3½
A	Blackpool	N.W.Counties	1 8	1 3½
A	Blyth ..	N E. Coast	1 8	1 3½
B₃	Bognor ..	S. Counties	1 4½	1 0½
A	Bolton ..	N.W.Counties	1 8	1 3½
A₃	Boston ..	Mid. Counties	1 6½	1 2
B₁	Bournemouth	S. Counties	1 6	1 1½
A	Bradford ..	Yorkshire	1 8	1 3½
A₃	Brentwood ..	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 8	1 3½
B₂	Bridgwater	S.W. Counties	1 5	1 1
A₁	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse ..	Yorkshire	1 8	1 3½
B₁	Brighton ..	S. Counties	1 6	1 1½
A	Bristol ..	S.W. Counties	1 8	1 3½
B₃	Brixham ..	S.W. Counties	1 4½	1 0½
A₃	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 4	1 0½
A	Burnley ..	N.W.Counties	1 8	1 3½
A	Burslem ..	Mid. Counties	1 8	1 3½
A₂	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W.Counties	1 8	1 3½
A₃	Buxton ..	N.W.Counties	1 6½	1 2
B	CAMBRIDGE	E. Counties	1 6	1 1½
B₃	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 8	1 3½
A	Carlisle ..	N.W.Counties	1 8	1 3½
B	Carmarthen	S. Wales & M.	1 6	1 1½
B₂	Carnarvon ..	N.W.Counties	1 5	1 1
A₁	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford ..	Yorkshire	1 8	1 3½
B₁	Chatham ..	S. Counties	1 5½	1 1½
B₁	Chelmsford	E. Counties	1 5½	1 1½
B	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W.Counties	1 8	1 3½
A	Chesterfield	Mid. Counties	‡1 8	1 3½
B₃	Chichester ..	S. Counties	1 4½	1 0½
A	Chorley ..	N.W.Counties	1 8	1 3½
B₂	Cirencester	S. Counties	1 5	1 1
A	Clitheroe ..	N.W.Counties	1 8	1 3½
A	Clydebank	Scotland	1 8	1 3½
A	Coalville ..	Mid. Counties	1 8	1 3½
B₁	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W.Counties	1 8	1 3½
B₁	Colwyn Bay	N.W.Counties	1 5½	1 1½
A	Consett ..	N.E. Coast	1 8	1 3½
B₁	Conway ..	N.W. Counties	1 5½	1 1½
A	Coventry ..	Mid. Counties	1 8	1 3½
A₃	Crewe ..	N.W.Counties	1 6½	1 2
A₃	Cumberland	.....	1 6½	1 2
A	DARLINGTON	N.E. Coast	1 8	1 3½
A	Darwen ..	N.W.Counties	1 8	1 3½
B₃	Deal ..	S. Counties	1 4½	1 0½
B₁	Denbigh ..	N.W.Counties	1 5½	1 1½
A	Derby ..	Mid. Counties	1 8	1 3½
A	Dewsbury ..	Yorkshire	1 8	1 3½
B	Didcot ..	S. Counties	1 6	1 1½
A	Doncaster ..	Yorkshire	1 8	1 3½
C₁	Dorchester	S.W.Counties	1 4	1 0½
A₃	Driffield ..	Yorks	1 6½	1 2
A₃	Droitwich ..	Mid Counties	1 6½	1 2
A₃	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 8	1 3½
A	Durham ..	N.E. Coast	1 8	1 3½
B₁	EASTBOURNE	S. Counties	1 6	1 1½
A	Ebbw Vale	S. Wales & M.	1 8	1 3½
A	Edinburgh	Scotland	1 8	1 3½
A	E Glamorganshire & Monmouthshire	S. Wales & M.	1 8	1 3½
B	Exeter ..	S.W. Counties	§1 7	1 2½
B₂	Exmouth ..	S.W. Counties	1 5	1 1
B	FELIXSTOWE	E. Counties	1 6	1 1½
A₃	Filey ..	Yorks	1 6½	1 2
A	Fleetwood ..	N.W.Counties	1 8	1 3½
B₂	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W.Counties	1 8	1 3½
B₂	Frome ..	S.W.Counties	1 4½	1 0½
A	GATESHEAD	N.E. Coast	1 8	1 3½
B₁	Gillingham	S. Counties	1 5½	1 1½
B	Gloucester ..	S.W.Counties	1 6	1 1½
A₂	Goole ..	Yorkshire	1 7	1 2½
B₁	Gosport ..	S. Counties	1 5½	1 1½
A₃	Grantham ..	Mid. Counties	1 6½	1 2
A₂	Gravesend ..	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 8	1 3½
A	Grimsby ..	Yorkshire	1 8	1 3½
B₁	Guildford ..	S. Counties	1 5½	1 1½
A	HALIFAX ..	Yorkshire	1 8	1 3½
A₁	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate ..	Yorkshire	1 8	1 3½
A	Hartlepools	N.E. Coast	1 8	1 3½
B₂	Harwich ..	E. Counties	1 5	1 1
B₃	Hastings ..	S. Counties	1 4½	1 0½
B₁	Hatfield ..	S. Counties	1 5½	1 1½
B	Hereford ..	S.W.Counties	1 6	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A₁	Heysham ..	N.W.Counties	1 7½	1 2½
A	Howden ..	N.E. Coast	1 8	1 3½
A	Huddersfield	Yorkshire	1 8	1 3½
A	Hull ..	Yorkshire	1 8	1 3½
A	ILKLEY ..	Yorkshire	1 8	1 3½
A	Immingham	Mid. Counties	1 8	1 3½
B	Ipswich ..	E. Counties	1 6	1 1½
C₁	Isle of Wight	S. Counties	1 4	1 0½
A	JARROW ..	N.E. Coast	1 8	1 3½
A	KEIGHLEY	Yorkshire	1 8	1 3½
B₂	Kendal ..	N.W. Counties	1 5	1 1
B₂	Keswick ..	N.W.Counties	1 5	1 1
B	Kettering ..	Mid. Counties	1 6	1 1½
A₃	Kidderminster	Mid. Counties	1 6½	1 2
B₂	King's Lynn	E. Counties	1 5	1 1
A₁	LANCASTER	N.W.Counties	1 7½	1 2
A₃	Leamington	Mid. Counties	1 6½	1 2½
A	Leeds ..	Yorkshire	1 8	1 3½
A	Leek ..	Mid. Counties	1 8	1 3½
A	Leicester ..	Mid. Counties	1 8	1 3½
A	Leigh ..	N.W. Counties	1 8	1 3½
B₃	Lewes ..	S. Counties	1 4½	1 0½
A₃	Lichfield ..	Mid. Counties	1 6½	1 2
A	Lincoln ..	Mid. Counties	1 8	1 3½
A	Liverpool ..	N.W.Counties	‖1 9	1 3½
B	Llandudno	N.W.Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 8	1 3½
	London (12 miles radius)		1 9½	1 4½
	Do. (12–15 miles radius)		1 9	1 4
A	Long Eaton	Mid. Counties	1 8	1 3½
A	Loughborough	Mid. Counties	1 8	1 3½
B	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 8	1 3½
A₁	MACCLESFIELD	N.W.Counties	1 7½	1 2½
B	Maidstone ..	S. Counties	1 5½	1 1½
A₃	Malvern ..	Mid. Counties	1 6½	1 2
A	Manchester	N.W.Counties	1 8	1 3½
A	Mansfield ..	Mid. Counties	1 8	1 3½
B₃	Margate ..	S. Counties	1 4½	1 0½
A₃	Matlock ..	Mid. Counties	1 6½	1 2
A	Merthyr ..	S. Wales & M.	1 8	1 3½
A	Middlesbrough	N.E. Coast	1 8	1 3½
A₃	Middlewich	N.W. Counties	1 6½	1 2
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 8	1 3½
A₁	Morecambe	N.W. Counties	1 7½	1 2½
A₃	NANTWICH	N.W.Counties	1 6½	1 2
A	Neath ..	S. Wales & M.	1 8	1 3½
A	Nelson ..	N.W. Counties	1 8	1 3½
A	Newcastle ..	N.E.Coast	1 8	1 3½
A	Newport ..	S. Wales & M.	1 8	1 3½
A	Normanton	Yorkshire	1 8	1 3½
A₂	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 8	1 3½
A	North Shields	N.E. Coast	1 8	1 3½
B	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 8	1 3½
A	Nuneaton ..	Mid Counties	1 8	1 3½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W.Counties	1 8	1 3½
A₃	Oswestry ..	Mid. Counties	1 6½	1 2
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 8	1 3½
C	Pembroke ..	S. Wales & M.	1 4½	1 0½
A	Perth ..	Scotland	*1 8	1 3
A₃	Peterborough	Mid. Counties	1 6½	1 2
A	Plymouth	S.W. Counties	¶1 8	1 3½
A	Pontefract ..	Yorkshire	1 8	1 3½
A	Pontypridd	S. Wales & M.	1 8	1 3½
B	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W.Counties	1 8	1 3½
A	QUEENSFERRY	N.W.Counties	1 8	1 3½
B	READING ..	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A₃	Retford ..	Mid. Counties	1 6½	1 2
A	Rhondda Valley	S. Wales & M.	1 8	1 3½
A₃	Ripon ..	Yorkshire	1 6½	1 2
A	Rochdale ..	N.W.Counties	1 8	1 3½
B	Rochester ..	S. Counties	1 5½	1 1½
A₁	Ruabon ..	N.W.Counties	1 7½	1 2½
A₂	Rugby ..	Mid. Counties	1 8	1 3½
A₃	Rugeley ..	Mid. Counties	1 6½	1 2
A	Runcorn ..	N.W. Counties	1 8	1 3½
A₃	ST. ALBANS	E. Counties	1 6½	1 2
A	St. Helens ..	N.W.Counties	1 8	1 3½
A₁	Scarborough	Yorkshire	1 7½	1 2½
A	Scunthorpe	Mid. Counties	1 8	1 3½
A	Sheffield ..	Yorkshire	1 8	1 3½
A	Shipley ..	Yorkshire	1 8	1 3½
A₃	Shrewsbury	Mid. Counties	1 6½	1 2
A₂	Skipton ..	Yorkshire	1 7	1 2½
B	Slough ..	S. Counties	1 5½	1 1½
A₂	Solihull ..	Mid. Counties	1 7	1 2½
B	South'pton	S. Counties	1 6	1 1½
B₁	Southend-on-Sea	E. Counties	1 5½	1 1½
A	Southport ..	N.W.Counties	1 8	1 3½
A	S. Shields ..	N.E. Coast	1 8	1 3½
A₂	Stafford ..	Mid. Counties	1 7	1 2½
A	Stockport	N.W.Counties	1 8	1 3½
A	Stockton-on Tees	N.E. Coast	1 8	1 3½
A	Stoke-on-Trent	Mid. Counties	1 8	1 3½
B	Stroud ..	S.W.Counties	1 5½	1 1½
A	Sunderland	N.E. Coast	1 8	1 3½
A	Swansea ..	S. Wales & M.	1 8	1 3½
B	Swindon ..	S.W. Counties	1 6	1 1½
A₁	TAMWORTH	N.W.Counties	1 7½	1 2½
B₁	Taunton ..	S.W. Counties	1 5½	1 1½
A	Teeside Dist.	N.E. Counties	1 8	1 3½
A	Todmorden	Yorkshire	1 8	1 3½
A₂	Torquay ..	S.W.Counties	1 7	1 2½
B₁	Tunbridge Wells	S. Counties	1 5½	1 1½
A	Tunstall ..	Mid. Counties	1 8	1 3½
A	Tyne District	N.E. Coast	1 8	1 3½
A	WAKEFIELD	Yorkshire	1 8	1 3½
A₂	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W.Counties	1 8	1 3½
A₃	Warwick ..	Mid. Counties	1 6½	1 2
B	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 8	1 3½
B	Weston-s-Mare	S.W. Counties	1 6	1 1½
A₃	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W.Counties	1 8	1 3½
A	Wigan ..	N.W.Counties	1 8	1 3½
B₂	Winchester	S. Counties	1 5	1 1
B	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 8	1 3½
A₃	Worcester ..	Mid. Counties	1 6½	1 2
A	Worksop ..	Yorkshire	1 8	1 3½
A₁	Wrexham ..	N.W. Counties	1 7½	1 2½
B	Wycombe ..	S. Counties	1 6	1 1½
B₁	YARMOUTH	E. Counties	1 5½	1 1½
B₂	Yeovil ..	S.W. Counties	1 5	1 1
A	York ..	Yorkshire	1 8	1 3½

The initial letter opposite each entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains, is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

* Plasterers, 1s. 9d.

† Carpenters and Painters, 1s. 8½d.

‡ Plumbers, 1s. 9d.

§ Painters, 1s. 6d.

‖ Carpenters and Plasterers, 1s. 8½d.

¶ Painters, 1s. 7d.

PRICES CURRENT

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4½d. *per hour*; LABOURER, 1s. 4½d. *per hour*; NAVVY, 1s. 4½d. *per hour*; TIMBERMAN, 1s. 6d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	13	0
Pit gravel, per yd.	0	18	0
Pit sand, per yd.	0	14	6
Washed sand	0	15	6

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	19	0
Lias lime, per ton	2	10	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0

Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	2	4
SPREAD and level, including wheeling, per yd.	0	2	4
PLANKING, per ft. sup.	0	0	5

DO. over 10 ft. deep, add for each 5 ft. depth 30 per cent.

HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	£0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube.	1	18	0

DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintols, etc., per ft. cube	0	1	6

DRAINER

LABOURER, 1s. 4½d. *per hour*; TIMBERMAN, 1s. 6d. *per hour*; BRICKLAYER, 1s. 9½d. *per hour*; PLUMBER, 1s. 9½d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per yd.	£0	1	3
DO. *6 in., per yd.*	0	2	8
DO. *9 in., per yd.*	0	3	6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	6	9
DO. *6 in., per yd.*	0	9	2
Portland cement and sand, see "Excavator" above.			
Lead for caulking, per cwt.	£2	5	6
Gaskin, per lb.	0	0	5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	9	0
DO. 6 in., per ft.	0	11	0

Note.—These prices include digging and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9½d. *per hour*; LABOURER, 1s. 4½d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour.*

London stocks, per M.	£4	15	0
Flettons, per M.	2	18	0
Staffordshire blue, per M.	9	10	0
Firebricks, 2½ in., per M.	11	3	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	21	0	0
Colours, extra, per M.	£5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	12	0
Mixed lime mortar, per yd.	1	6	0
Damp course, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6

BRICKWORK in stone lime mortar, Flettons or equal, per rod	33	0	0
DO. in cement do., per rod	36	0	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.

FACINGS, FAIR, per ft. sup. extra	£0	0	2
DO. Red Rubbers, gauged and set in putty, per ft. extra	0	4	6
DO. salt, white or ivory glazed, per ft. sup. extra	0	5	6
TUCK POINTING, per ft. sup. extra	0	0	10
WEATHER POINTING, per ft. sup. extra	0	0	3
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6

THE wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

MASON

MASON, 1s. 9½d. *per hour*; DO. *fixer*, 1s. 10½d. *per hour*; LABOURER, 1s. 4½d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour.*

Portland Stone:			
Whibed, per ft. cube	£0	4	7
Basebed. per ft. cube	0	4	8
Bath stone, per ft. cube	0	3	9

Usual trade extras for large blocks.

York paving, av. 2½ in., per yd. super.	0	6	6
York templates sawn, per ft. cube	0	6	9
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft., add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do. per ft. run	0	1	4
HALF SAWING, per ft. sup.	£0	1	0

Add to the foregoing prices if in York stone 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	9	0
YORK SILLS, W. & T., ft. cub. fixed.	1	13	0

SLATER AND TILER

SLATER, 1s. 9½d. *per hour*; TILER, 1s. 9½d. *per hour*; SCAFFOLDER, 1s. 5½d. *per hour*; LABOURER 1s. 4½d. *per hour.*

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per M:			
Portmadoc Ladies	£14	0	0
Countess	27	0	0
Duchess	32	0	0
Clips, lead, per lb.	0	0	4
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	1	10
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. gauge, compo nails, Portmadoc or equal:			
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	5	6	0
DO., machine-made DO., per square	4	17	0

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

CARPENTER, 1s. 9½d. *per hour*; JOINER, 1s. 9½d. *per hour*; LABOURER, 1s. 4½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7×3, per std.	£21	0	0
11×4, per std.	31	0	0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1-in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed Boards, 1 in.×11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	2	0
Mahogany, per ft. sup. of 1 in.	0	2	0
DO. *Cuba, per ft. sup. of 1 in.*	0	3	0
Teak, per ft. sup. of 1 in.	0	3	0
DO., *ft. cube*	0	15	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	5	9
DO. framed in floors, roofs, etc., per ft. cube	0	6	3
DO., framed in trusses, etc., including ironwork, per ft. cube	0	7	3
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	3	10	0
SLATE BATTENING, per sq.	0	18	6

PRICES CURRENT; *continued.*

CARPENTER AND JOINER; *continued.*

DEAL GUTTER BOARD, 1 in., on firring, per sq.	£3	5	0
MOULDED CASEMENTS, 1¼ in., in 4 sqs., glazing beads and hung, per ft. sup.	0	3	0
DO., DO., 2 in., per ft. sup.	0	3	3
DEAL cased frames, oak sills, 2 in. d.h. sashes, brass-faced pulleys, etc., per ft. sup.	0	4	0
DOORS, 4 pan. sq. b.s., 2 in., per ft. sup.	0	3	6
DO., DO., DO., 1¼ in., per ft. sup.	0	3	0
DO., DO., moulded b.s., 2 in., per ft. sup.	0	3	9
DO., DO., DO., 1¼ in., per ft. sup.	0	3	3
If in oak multiply 3 times.			
If in mahogany multiply 3 times.			
If in teak multiply 3 times.			
WOOD BLOCK FLOORING, standard blocks, laid in mastic herringbone :			
Deal, 1 in., per yd. sup., average	0	10	0
DO., 1¼ in., per yd., sup., average	0	12	0
DO., DO., 1¼ in. maple blocks	0	15	0
STAIRCASE WORK, DEAL :			
1 in. riser, 1¼ in. tread, fixed, per ft. sup.	0	3	6
2 in. deal strings, fixed, per ft. sup.	0	3	9

PLUMBER

PLUMBER, 1*s.* 3½*d. per hour;* MATE OR LABOURER 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£2	3	0
DO. *drawn pipes, per cwt.*	2	4	6
DO. *soil pipe, per cwt.*	2	6	6
DO. *scrap, per cwt.*	1	9	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	2
DO. *fine, per lb.*	0	1	5
Cast-iron pipes, etc. :			
L.C.C. soil, 3 in., per yd.	0	4	1
DO. *4 in. per yd.*	0	5	0
R.W.P., 2½ in., per yd.	0	2	0
DO. *3 in., per yd.*	0	2	5
DO. *4 in., per yd.*	0	3	3
Gutter, 4 in. H.R., per yd.	0	1	5
DO. *4 in. O.G., per yd.*	0	1	9
MILLED LEAD and labour in gutters, flashings, etc.	3	10	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	1
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	3
DO. 1¼ in., per ft.	0	4	6
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	0
DO. 3 in., per ft.	0	7	0
DO. 4 in., per ft.	0	9	9
CAST-IRON R.W. PIPE, at 24 lb. per length, jointed in red lead, 2½ in., per ft.	0	2	5
DO. 3 in., per ft.	0	2	10
DO. 4 in., per ft.	0	3	3
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	2	7
DO. O.G. 4 in., per ft.	0	2	10
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	7	0
DO 3 in., per ft.	0	6	0
Fixing only :			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS only, with all joints	1	18	0
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour (plus allowances in London only);* LABOURER, 1*s.* 4½*d. per hour.*

Chalk lime, per ton	£2	11	0
Hair, per cwt.	0	18	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	8
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	9
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Thistle plaster, per ton	£3	9	0
Lath nails per lb.	0	0	4
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	7
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	9
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	5
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8½*d. per hour.*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	6
DO. 26 oz.	0	0	7½
Cathedral white, per ft.	0	0	6½
Polished plate, British ¼ in., up to 2 ft. sup.	0	2	0
DO. *3ft. sup.*	0	2	6
DO. *7 ft. sup.*	0	3	6
DO. *25 ft. sup.*	0	4	0
DO. *100 ft. sup.*	0	4	6
Rough plate, ⅛ in.	0	0	6
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	16	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	0	1	1
DO. 26 oz., per ft.	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	6
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

DECORATOR

PAINTER, 1*s.* 8½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8½*d. per hour.*

Genuine white lead, per cwt.	£3	11	0
Linseed oil, raw, per gall.	0	3	7
DO., *boiled, per gall.*	0	3	10
Turpentine, per gall.	0	6	2
Liquid driers, per gall.	0	9	6
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	0	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4
Single gold leaf (transferable), per book	0	1	11
Varnish copal, per gall. and up	0	18	0
DO., *flat, per gall.*	1	2	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	19	0
Ready mixed paints, per gall. and up	0	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	10
DO., subsequent coats, per yd. sup.	0	0	9
DO., enamel coat, per yd. sup.	0	1	2½
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	£0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
STRIPPING old paper and preparing, per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SMITH

SMITH *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild steel in British standard sections, per ton	£12	10	0
Sheet steel :			
Flat sheets, black, per ton	19	0	0
Do., Galvd., per ton	23	0	0
Corrugated sheets, galvd., per ton	23	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts, per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	10	0
DO., in small sections as reinforcement, per ton	16	10	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	20	0	0
WROT. IRON in chimney bars etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster board, per yd. sup. from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	17	0	0
DO., *red*	19	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.			
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			
Plywood			
3 m/m alder, per ft. sup.	0	0	2
4½ m/m amer. white, per ft. sup.	0	0	3½
4 m/m figured ash, per ft. sup.	0	0	5
4½ m/m 3rd quality, composite birch, per ft. sup.	0	0	1½