

# THE ARCHITECTS' JOURNAL & *Architectural Engineer*

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



*FROM AN ARCHITECT'S NOTEBOOK.*

*To build cities and live in them properly is the great business of large associations of men. The outward and the inward must always be exact pictures of the mind of the makers. Not only is this so at any given stage, but it is so all the more in a going concern, for the outward is always reacting again on the inward, so that the concrete becomes a mould for the spiritual. Man builds towns so that the towns shall build his sons.*

W. R. LETHABY.

*9 Queen Anne's Gate. Westminster.*

## Architectural Details. 51.—Wrought Iron Gate in Aarhus Cathedral



This wrought iron gate dates from 1639. The Cathedral is the largest church in Denmark. An article on Denmark, by Mr. L. Marnus, begins on page 842.

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## The Proposed Restoration of the Parthenon

THE question of the restoration of the buildings on the Athenian Acropolis has for some time occupied the attention of architects and archaeologists, both Greek and foreign. The work has already been carried out by the Greek authorities in the case of the Erechtheum and the Propylæa. It is generally agreed that this work has been done with great care, with scientific accuracy, and with commendable moderation. No attempt has been made to restore the buildings to their original state; but fallen blocks and columns have been replaced in position, with the insertion of only so much new marble as was necessary for structural purposes. There is no doubt that the imagination is thus assisted to realize better than before the general effect and proportions of the buildings.

In the case of the Parthenon the problems to be faced are more difficult and more complicated. The disastrous explosion in 1687 shattered the walls of the cella and threw down the middle columns of the north and south sides in a manner that left a certain symmetry in the surviving portions. Visitors to Athens who see the rows of drums lying apparently in the order in which they had fallen do not realize the difficulties that are inherent in any attempt to re-erect them and to reconstitute the columns as they were before they fell. These drums have lain scattered on the Acropolis since 1687, and in Turkish times the Parthenon was surrounded by small houses and gardens, as may be seen in the views published by Stuart and other travellers. These houses were removed in the early days of Greek independence, and the drums and blocks surviving from the Parthenon have often since been shifted, and were placed in regular rows, as they are now, during the excavations of 1885 and the following years. The rows of drums from the columns were then arranged in apparent order, as they may now be seen; but no exact care was taken to assign each drum to its proper column and to its proper place in the column. The meaning of this can only be appreciated by those who realize the delicate adjustments necessary to the construction of a Doric column. Few, if any, of the drums are exactly identical; and it has been calculated by experts that three years' work on the part of a trained architect are necessary for the detailed measurements which are required before every drum can be assigned to its original position in the building.

The columns in the middle portion of the north colonnade, which were re-erected about the middle of the last century, were set up without any such careful preliminary study; and consequently they produced an inharmonious effect—which was not improved by their being patched with bricks when the original marble failed. The first thing to be done in any reconstruction was to pull down these columns and

rearrange their drums in the proper order. A strong scaffolding has been erected around them, and these columns—or some of them—appear to have been reconstituted, and architrave and frieze blocks replaced over them.

But this is all that had been done so far, and apparently all that is contemplated for the present. The drums lying on the ground have, however, been numbered, and their original position apparently ascertained. But there are still difficulties in the way of the re-erection of the rest of the columns. No ancient Greek architect ever thought of building up a column out of ready-fluted drums. It would be difficult, if not impossible, to set them above one another without chipping the fine corners of the flutes, or to set the flutes in such a manner as to give the perfect continuity of line which is essential to the effect of a Doric building. Accordingly, the drums were set in position when only roughly rounded, and with the flutes begun at top and bottom of the column; and then a line could be stretched from top to bottom, and the line of the flutes made perfectly even. It follows that a column once fallen cannot be re-erected so as to be as perfect in form and symmetry as when it was first set up. This does not imply that such columns should never be re-erected; but is a consideration which must be allowed its due weight in any discussion as to restoration.

Another difficulty lies in the fact that some of the drums are either lost or so badly damaged that it is impossible to replace them in position. The best plan in this case, it has been suggested, is to use cores of stone slightly smaller than the drums, and to make up to the surface with stucco, which would easily take the flutes, and might be toned so as not to be conspicuous. In this way it would be possible to reconstruct the northern colonnade; but the Greek authorities do not seem disposed to do this; and they have invited opinions from foreign architects and archaeologists upon the matter.

The next question is whether the architrave, frieze, and cornice should be placed in position above the restored columns; this could be done, though probably a good many new blocks of marble would have to be provided. Without such additions, a mere row of columns would not have their due effect. Then beyond that there is the question of rebuilding the cella walls, the pediments, and the roof. It is quite clear that nobody at present intends to go so far as this. Unless the Parthenon were to be completely reconstructed, no question would arise as to the sculpture which once decorated it; and, therefore, any discussion as to sending the Elgin marbles back to Athens is altogether premature. But in this connection it is to be noted that it would be indefensible to place these inimitable works of sculpture in a position where they would be sure to perish

rapidly from the effect of weathering. Indeed, if they were sent back to Greece, it is most probable that they would be placed in a museum, not set up again on the temple. For this purpose it is fairly certain, even if the temple were rebuilt, that casts of the sculptures would be used, as has been done, for instance, in the case of the French reconstruction of the Treasury of the Athenians at Delphi.

These last speculations have, however, for the present at least, no relation to any practicable project of reconstruction. More or less may be done in this direction, and opinions probably vary very considerably as to how much it is possible or desirable to attempt in the way of restoration. The Greek authorities themselves are evidently proceeding with caution, and awaiting the verdict of experts upon what they have already done; they regard themselves as trustees to the whole civilized world for the artistic treasures bequeathed to them by their predecessors, and are not at all likely to betray their trust.

ERNEST A. GARDNER.

### The Change of Editorship

It would seem advisable that the new conductor of this JOURNAL, whose appointment was recently announced, should at the present point make some sort of statement concerning his intentions for the future. These intentions are easily described, and such visible effect as is to be anticipated from them may be summed up in two words. For the immediate future, nothing; for the ultimate future, everything; this, in brief, is his programme. The first of these declarations is demanded by the fact that many letters have reached him expressing some the hope, some the fear, that notable changes were impending. The second is prompted by the conductor's ineradicable belief that THE ARCHITECTS' JOURNAL has yet a greater part to play than has hitherto been played by any architectural paper in this country. It will be his endeavour to render it worthy of the honourable position that appears to him to be awaiting it, but he is anxious to discourage any expectations that the wonted path will be at once abandoned, or customary practices checked with any suddenness. THE ARCHITECTS' JOURNAL is already a production unique in its kind. Its merits are recognized, its utterances regarded, wherever the English language is spoken. If any improvements can be made it is the conductor's intention to try to make them, but not until he has had an opportunity of watching the progress of the paper with the utmost care, of gauging the true value of each improvement, and of satisfying himself that its value is greater than that of the thing it displaces. He would be glad, therefore, to hear from readers who have any suggestions to make, and where a suggestion offered to him appears to hold out a promise of general approbation he hopes to discuss it fully with his correspondent, and ultimately to put it to a practical test. The moment for this test has been chosen, and though it must not be divulged, it may be stated that it will not occur for some months yet. Finally, the conductor would like to subscribe to the sentiments expressed by the proprietors elsewhere on this page.

### More about Mr. Epstein

Just as the public controversy aroused by the Hudson Memorial in Hyde Park has reached its height there comes the announcement that its author has been nominated for Associateship of the Royal Academy. Whatever may be the opinion of laymen, architects, and readers of Hudson (whose number has probably been doubled during the last fortnight), the judgment of his fellow-artists is clearly reflected in this piece of news. There is nothing hideous, Asiatic, or even inhuman about the paintings of Sir John Lavery, R.A., who has taken the initiative in this matter, nor in the work of Mr. Henry Poole, A.R.A., or Mr. Charles Shannon, R.A., who have seconded the nomination. Whatever we may think of Epstein, we now know what these gentlemen think of him, and we also know what he

thinks of them, for he has signified his approval of the step taken by them. The whole business is extremely interesting, for it is not often that a large section of the public exhibits such a deep concern in the æsthetic merits or demerits (they, and they alone, have formed the subject of the present dispute) of a work of art, and especially a work belonging to a category which is looked upon as the stronghold of the dull-witted and jejune. At their best, public monuments are not things about which people are apt to become excited. The Hudson Memorial, however, has had this effect. We propose to revert to it again in another issue; meanwhile we merely point to its illuminating reception by men of recognized and innoxious eminence in the world of art.

### Education and the Film

The National Council of Public Morals have lately conducted a psychological investigation of the possibilities of the cinema in education, and in their report, which has just been issued, they observe that a very exhaustive enquiry has established the view that the cinema may be of very real use in the sphere indicated. History, geography, and industry were the test subjects chosen. To compare the film lesson with other types of lesson it was judged most satisfactory to make use of lantern slides in the latter case, and these were practically replicas of the films. Thus, the only difference between the two forms of lesson was, in effect, that of movement. After each lesson essays were written by the students on what had been seen, and it was by judging these that the final results of the comparison were obtained. We have urged repeatedly that architecture, which is material history as well as the mother of the arts, is entitled to an important place in the educational programme, but so far as we are aware little has been done to teach the subject—at least in the elementary and secondary schools, though films have been used with complete success to demonstrate practical building processes in technical institutions and elsewhere. Architecture lends itself more readily than any other subject to the medium of the film, and it is a mystery to us that its wonderful educational possibilities have gone so long unrecognized.

### The Cinema and Architecture

While on the subject of architecture and the films, we should like to record the fact, so often disputed, that the public is really interested in architecture. From our own observations we are convinced that few films appeal more to the popular imagination than travel films, especially those which show something of the fine cities of the world. The interest is not, perhaps, essentially in the architecture, but in the people and the street scenes to which architecture is the background and setting. But the interest is there, nevertheless. Architecture, in the view of the man in the street, may mean no more to life than the scenery of a stage play means to the actors who fret and strut before it, but it indubitably exists, creates an atmosphere, and exerts an influence, little as the player may be conscious of it. It is, we believe, only in its human aspect that architecture exists at all for the ordinary man; he cares nothing for technicalities. The cinema, by approaching the ordinary man on the human side, can do invaluable work in spreading a knowledge and creating a popular appreciation of architecture.

As announced in a previous issue, the editorial conduct of this JOURNAL is, from the present date, under the control of Mr. Christian Barman. The outgoing Editor, Mr. G. J. Howling, who has been associated with The Architectural Press in various capacities for over seventeen years, and who has been Editor of THE ARCHITECTS' JOURNAL for the last five years, has joined the staff of "The Builder." The good wishes of many readers of THE ARCHITECTS' JOURNAL who know Mr. Howling personally, as well as those of the proprietors, will be with him in his new work.



## Pastiche!

*Being the account of an imaginary interview with a purely fictitious person.*

**F**ORTUITOUSLY enough, I first really met the word in Italy, when I was visiting Florence in the early months of last year. Of course, I knew it by acquaintance, much as one would know an individual whom one has seen from time to time, but evasively—when there has, so to speak, been no proper introduction. Previously I had rather liked it; there was a faint but pleasant eighteenth-century odour about it—Pastourelle, Pastel, Pastiche—an atmosphere of china shepherds and shepherdesses, delicately coloured drawings of dainty white periwigged ladies—a flavour of Latinity tempered with a Gallic mildness. But that was before I had met Holkeye, with his sinister and unpleasing adumbrations, his emphasis on the “pasticcio” significance of the Italian!

We met in the interior of the Pazzi, and I was meditating gratefully on the delicate lines and wonderful rhythm of these beautiful Brunelleschi arches, when a strident voice sounded in my ears: “An extraordinary pastiche of decadent Roman motifs—Eh, what?” and there was Holkeye—more Holkeye-ish than ever!

His trousers seemed wider, and his round tortoiseshell-rimmed glasses more obtrusive than was credible!

Holkeye combines a patronizing manner with a peculiarly rasping voice and a general attitude of *MOI!—et vous autres*. His conversation is a series of final pronouncements from which there is no appeal. In spite of his undoubted ability, for which no one has a more profound admiration than I, there are moments when Holkeye is inclined to be a little overpowering.

“Pastiche!” I murmured, after we had made our formal signals of recognition—“Pastiche!” thinking meanwhile that Holkeye, with his sailor trousers, mandarin-like spectacles, and hair à la Pompadour, slightly rough where it abutted against the neck, was rather “Pastiche” himself—using the word with what seemed to be his peculiar significance. Besides, my temper, perhaps, was slightly ruffled, for I have been in the habit of offering up a little incense at the shrine of Brunelleschi—“Do you consider this,” I said, waving my hand towards the Pazzi, for by this time we were in the open air—“more *pastiche* than the rest of the work of the Italian Renaissance?” “Certainly not more so—perhaps rather less so than a good deal of it—but all the same—distinctly *pastiche*,” he blared, as if to brazen out the word with horrid trumpeting.

Poor Walter Pater and his “Churches of Brunelleschi”—I had almost quoted him, but I discerned that Pater would, to Holkeye, be more *pastiche* than Brunelleschi.

“Possibly,” went on my tormentor gratingly, “the most *pastiche* period of the so-called Renaissance was the Baroque, but then they mixed the pastry more vigorously—the Baroque builders were saved by a certain uncouthness!” “And the French Renaissance?” I murmured. “Boudoir when not brutal,” retorted the round-eyed one. “And what of Wren and the English?” though as I put the question I quaked at my temerity. “Wren!” snarled my mentor, “a mere pastry-cook—a cut-and-come-again man—a bad edition of Louis XIV with imported Dutch trimmings.” Holkeye can be very drastic! “Then what of the Romans themselves,” said I, thinking it safer to move backwards—the name of Robert Adam had crossed my mind, but Holkeye was really looking apoplectic—I thought perhaps an earlier period might have a calming effect. Of course, I was careful not to use the word “period.” “The Romans,” sneered he of the wide trousers—“pooh! clumsy imitators of the Greeks—a pastiche of Hellenic motifs with Oriental accretions. Oh, *pastiche*! Decidedly *pastiche*!”

“What of the Greeks, then?” I countered, moving the hands of the clock back furiously and becoming interested in the game—“what of the Greeks?” For one moment Holkeye hesitated. I really thought I had him down and

out; but bracing himself up to the full height of his six feet odd inches, with a magnificent gesture—he delivered himself of the following oration:

“Though I am perhaps scarcely justified in calling Greek architecture ‘pastiche,’ I cannot regard it as altogether free from suspicion—there were certain rock-cut tombs at Beni-Hasan; and then could anything be more illogical than to repeat the details of a wooden construction in stone and marble?” Here he set his teeth and decided to go the whole hog, continuing: “If this isn’t *pastiche*, then I don’t know the meaning of the word ‘Pasticcio.’” I moaned, though *sotto voce*. Then, with one last wild, desperate effort, I sternly demanded: “And how would you describe the work of the mediæval builders? Is that —?” I couldn’t bring myself to use what was now to me the so-hated word; I raised my eyebrows interrogatively. “The Goths!” roared Holkeye in a hurricane voice (I wished I had said “the Egyptians”—he keeps calmer when the clock recedes—I also wished his trousers wouldn’t billow so—I felt slightly seasick); “mere sentimentalists, people who were so illogical that they made stone ceilings—*pastiche*! my dear sir, *pastiche*!”

In a subdued and chastened mood I put the proposition that perhaps all architecture was some form of “*pastiche*” (though I am afraid I rather slurred the word), but Holkeye would have none of it. “Are you so ignorant, my dear fellow” (he is rather fond of the words “my dear fellow”) “of the advanced modernist movement in Sweden, Germany, France, England, and Russia—particularly Russia—as to ask such a question? Don’t you know,” he continued—the implication was, of course, that I did not know—“that all revolutionary modernist work is the very negation of *pastiche*?” “Disembodied intellectuality,” I suggested, but this did not please Holkeye—he is, as a fact, rather difficult to please: I gathered from his answer, which was slightly less coherent than usual—that the best modernist work had all the force of tradition behind it, without in any sense being traditional, and he did not seem to approve of there being too much insistence on the intellectual. This was a little confusing, but I let it go for the moment.

“*Pastiche* work,” continued Holkeye didactically, “does not function.” I pricked up my ears. I seemed to recognize a *cliché* I had heard before. “I see,” I replied, “a bank, for instance, would not be so good a bank, would not function as a building so well, if it had by chance some Doric columns on its façade; such columns might, as it were, confuse the bank clerks so that they would give the wrong change?”

I gathered from his reply, which was more forceful than polite, that he was of the opinion that it was my brain that did not function. Then we parted.

On my return to England some few weeks later I found it awaiting me. It being a photograph of what Holkeye was pleased to describe as a modern house. Truly it was a surprising spectacle—the front railing was like a series of snakes rampant, the entrance porch looked like the skeleton of some prehistoric monster, the windows were filled in with queer contorted glazing bars—and yet withal it had something that was curiously reminiscent about it. I gazed at it long and meditatively; it was certainly wildly different from the Pazzi chapel, or a Wren house; then, in a flash, I saw the solution of my puzzle. I searched feverishly for some old magazines containing examples of *l’art nouveau* work of the year 1900, and there were the cousins-german of Holkeye’s railings, porch, and windows! I hastily marked the appropriate items, and making them up into a package, dispatched them to Holkeye, together with the photograph of his masterpiece which he had so considerably sent me. Underneath this photograph I had written Holkeye’s favourite word!

S. C. R.

# Architectural Travel

Edited by F. R. Yerbury, Hon. A.R.I.B.A., Secretary of the Architectural Association

## Denmark

By L. MARNUS, Architect, Copenhagen

(Concluded.)

København (Copenhagen).

**T**HE visitor should make Copenhagen his headquarters whence to make trips.

The best architecture to be seen in Copenhagen is mainly of Baroque and Rococo character. In comparison with many of the provincial towns, the capital contains but little old work. Of buildings of earlier date than the seventeenth century, there are only two or three that to some extent retain much of their original appearance. The best sixteenth-century examples in Copenhagen are perhaps the Rosenborg Castle and Holmens' church, which both owe their origin to King Christian IV, who was brother to the English Queen Anne. An architect named Stenvinkel is mentioned in connection with some of the king's undertakings.

The great Danish Masters of the Baroque and Rococo periods were Eigtved, Thurah, and Jardin; the latter's work, however, showing more and more tendency to the style of Louis XVI or the New Classicism of which the Empire style was a later development. A pupil of Jardin was the highly esteemed Harsdorf, whose works are quite numerous from the latter part of the eighteenth century. But an even greater contemporary was C. F. Hansen, who lived till about 1840. His incomparable work is *sui generis*. It has been said that his work was much influenced by that of Palladio. Of other Danish architects of the last century I shall mention no one particularly. Here in Denmark, as elsewhere, it seems as though the nineteenth century architect had learned too much, and that his work was overloaded with the knowledge. Yet the last few years have witnessed decided improvements.

A description of the sights of Copenhagen may conveniently begin with the royal palaces, of which the Amalienborg Slot (palace) is the King's Copenhagen home. This was built about 1750, from Eigtved's plans, and comprises four pavilions, with side buildings built around an octagonal *place*, in the centre of which is an equestrian statue of King Frederick V. The connecting colonnade at Amaliegade was built by Harsdorf about 1800.

Christianborg palace was built between 1733 and 1742 by Eigtved and Thurah. The main building, burnt 1794, was rebuilt by C. F. Hansen in 1828; burnt again 1884, it was in ruins for about twenty-five years, and has just been completed by Th. Jorgensen. The palace now houses Parliament, the Supreme Court, and other Government institutions. Of intense interest are the remains of the old Copenhagen Castle, which was built about 1165 by Bishop Absalon, the founder of Copenhagen. The castle was torn down to make room for the palace. Rosenborg Castle, built by Christian IV, is now used as a museum, and contains some very costly and rare collections. The interior decorations of the large halls are fine examples of their time. Prinsens' Palais, built between 1743 and 1757 by Eigtved and Thurah, is now the National Museum. Charlottenborg Palace, of 1680, is now the Royal Academy. Frederiksborg Palace, built about 1700 by Frederik IV, is in the prettiest garden of Copenhagen, Frederiksborg Have. The palace is used as a staff college for officers.

In the close vicinity of Copenhagen are three more royal palaces: Charlottenlund Slot, built by Thurah, is situated in the beautiful forest of Charlottenlund (take tram 14). Bernstorff Slot, built 1760-65 by Jardin, lies in a large park (take tram 15, and alight at Femvejen).

Sorgenfri Slot, built 1742 by Thurah (take train to Lyngby). Of a number of private palaces within the capital, it must suffice to mention the few that follow: Thott's Palais, built 1685 for Admiral Niels Juel, Denmark's Nelson, is now the residence of the French ambassador, Erichsen's Palais, built 1797 by Harsdorf, is now the property of the Bank of Commerce.

Churches in Copenhagen are numerous, but only a few can be mentioned here. The Cathedral, Vor Frue Kirke (church), was originally in the Gothic style of the thirteenth century, but it was brought to ruins during the bombardment of Copenhagen in 1807, whereupon it was rebuilt by C. F. Hansen and finished 1829. The gigantic sculptures of the twelve Apostles, and the altar and the magnificent font, are all by Thorvaldsen. Christiansborg palace-church was also rebuilt by C. F. Hansen. Holmens' church and Trinitatis church were both built by Christian IV about 1640. The latter is remarkable for its round tower, within which a spiral road leads to the summit. Nicholai church is of the twelfth century. The tower was rebuilt in 1590, but the church, as well as the spire on the tower, are of recent date, and were designed by Amberg. Helligaand's fifteenth-century church has been rebuilt and restored several times, Storck being its latest architect (1880). Vor Frelser's church (seventeenth century) is notable for its spiral stairway outside the spire, on the top of which is a golden ball large enough to hold twelve men inside. This spire was built by Thurah 1750. Reformert church is a Rococo jewel. Citadel's church is part of a fine old lay-out of a fort, and is one of the most interesting buildings in Copenhagen. Frederik's church, called Marmorkirken, was begun about 1750 by Jardin; but the work was stopped in 1770, and not taken up again until a century later, when the church was completed by Meldahl. Notable among a great number of buildings of recent years is the English church of St. Alban, which was built in 1887 by Sir A. W. Blomfield. St. Andreas' church, built 1900 by Martin Borch, and Elias' church, built 1908 by Martin Nyrop. In the course of erection is Grundtvig's church, Denmark's Pantheon to be. Jensen-Klint is the architect.

Hospitals in Copenhagen are many, and the latest of them are in all respect highly modern. The oldest one, Frederik's Hospital, shows some of the best architecture in the capital. It was built by Eigtved and Thurah about 1750. It is not now used as a hospital, but houses the Industrimuseum. Kommunchospitalet (the Municipal Hospital) was built in 1860 by an architect named Chr. Hansen. The two enormous hospitals, Rigshospitalet by Martin Borch, and Bispebjerg Hospital by Martin Nyrop, are both of the present century.

Museums.—Besides the museums already mentioned, Copenhagen has two large fine art museums: The Kunstmuseum, built 1895 by Dahlerup, and the Glyptotek, built by Dahlerup 1892-97, and Hack Kampmann, 1903-06. Hirsprung's Museum, built 1908-11 by Storck, houses the works of a great number of Denmark's best painters. Thorvaldsen's Museum was built 1840-48 by Bindebøl. The Dansk Folkemuseum should be of great interest to every architect, and Copenhagen's "Tower" is Tøjhuset, which was built by Christian IV.

A list of public and other buildings would include: Raadhuset (the town hall), built 1892-1905 by Martin Nyrop; Domhuset (the court of justice) and the Metro-politanskolen, both by C. F. Hansen. Politigaarden



A VIEW FROM THE WATER.



THE TOWN HALL SQUARE.  
COPENHAGEN



(main police-station) is by Hack Kampmann, and has not long been completed. Universitetet (the University) was built in 1836 by Malling. The Ministerial buildings, next to Christiansborg Palace, date from 1720. Opposite to them is Börsen (the Stock Exchange), built 1620-40 by Christian IV. Vartow, a home for old people, dates from 1750, and Regensen, a home for students, dates back to 1628. (Do not omit to see the courts of these latter two buildings.) Crematoriet, Bispebjerg, is of later date, and is by Holger Jacobsen.

From a great number of old houses I may mention Konsistoriebygningen, of the fifteenth century, the oldest existing building in Copenhagen. Gamle Bryghas, Slots-holmen, built by Christian IV 1618.

The following streets and squares have old houses in quantity: Frederiksholms Kanal, Nybrogade, Gammel Strand, Ved Stranden, Stormgade, Raadhus Stræde, Vandkunsten, Nytorv, and Gammeltorv, Nørregade Store, Kannike Stræde, Graabrødre Torv, Aabenraa, Kronprinsessegade, Bredgade, Fredericiagade, Amaliegade, Nyhavn, Holmens Kanal, and the districts of Christianshavn and Nyboder.

Modern architecture is mostly to be seen in the housing schemes, which are growing fast around the city, especially north and south. The south district is beyond Christianshavn, on the island of Amager. Garden-cities are in great numbers, of which may be mentioned: Grøndalsvænge, Brønshøj, and Studiebyen. Of residential districts are Ryvangen and Fuglebakken, of latest date.

#### Public Gardens and Parks.

The old city fortifications were years ago turned into gardens, to which the ramparts and moats have given a beautiful effect. To this kind belong: Orstedspark, Botanisk Have, and Østre Anlæg. Other gardens and parks are: Rosenborg Have, Fælledpark, with the Stadion, Frederiksborg Have, and Søndermarken. The latter two are of considerable architectural interest. In connection with the pretty garden lay-out around the citadel is the fashionable promenade Langelinie. Delightful it is from here to watch the boats coming and going to and from the city. Outside Copenhagen is the forest of Charlottenlund, and the enormous forest of Dyrehaven, where thousands of deer are grazing. Here is also the Eremitage, a small palace or royal hunting-lodge of Rococo character, situated high on a vast plain, from which may be obtained a grand view over the Sound to Sweden.

Theatres in Copenhagen are closed during the summer, as the Copenhageners are sport-loving people, who prefer to take their recreation in the open. An exception is the Scala, which usually plays a "revü," a kind of melodramatic spectacular play. And the Circus is open all the summer, as well as the Copenhageners' favourite Tivoli, which is an amusements-garden of a rather peculiar kind, as there is a display of the very best art as well as many lighter forms of amusement. There are evenings when more than 50,000 people pass through the stiles.

#### Groups of Sights.

The visitor can find his way about more easily if I give a short synoptical description of the capital:

Hovedbanegaarden (the chief railway station) is close to Tivoli, Dansk Folkemuseum, Grand Restaurant Wivel, Scala, Circus, and the Palads Theater. In the immediate neighbourhood is Raadhuspladsen (the Town Hall Square), which is a great city centre, where most of the tramway lines pass. Around the sides of the square are Vartow, a number of large hotels of which the Palads, by Rosen, is a notable modern building; the Dagmar Theater, and the large Industri Bygning, in which exhibitions are held. Glyptoteket is reached by following Vestre Boulevard, and Politigaarden is behind the museum.

The great shopping thoroughfare of Copenhagen is "Strøget," a popular name for a continuation of narrow streets and squares between Raadhuspladsen and Kongens Nytorv.

"Strøget" is the Copenhageners' favourite promenade, especially on Sunday afternoons, when a continuous throng moves towards Langelinie.

Rosenborg Have, with the castle, is bounded by Kronprinsessegade and Sølvgade with Kassernen. Sølvgade passes between the two gardens, Botanisk Have and Østre Anlæg; within the latter are the two museums, the Kunstmuseum, and Hirschsprung's Museum. On the south side of Østre Anlæg, beyond the underground tracks, are the old houses of Nyboder, built by Christian IV. He also built the town of Christianshavn, which is still surrounded by the old ramparts and moats. Places here that I have already mentioned are: Vor Frelsers Kirke, Herrings Gaard, and Sökvæsthuset.

#### Towns around Copenhagen.

No visitor should omit to see the Roskilde Domkirke where, for more than 900 years, Denmark's royalty have been buried. The present church was built in the twelfth century, except the more or less ungainly chapels that have been added right up to the present time. The interior somewhat resembles the cathedral at Tournai, France—which is recalled, for instance, by the colonnade and gallery around the chancel. The buildings next to the cathedral were designed by Thurah.

While at Roskilde, the trip should be extended to the town of Kjöge, where the church and the town hall are mediæval, but about 1800 the latter was covered with an Empire cloak. Of a number of other old houses are the Museum, Spindegaarden, in Nørregade, Smedegaarden in Kirkestræde; and the Apothek in Brogade is Renaissance. About three miles from Kjöge is Vallø Slot and Cloister, an enormous complex of buildings of different periods beginning with the fifteenth century—part of more recent work being by Thurah. Many of the buildings were destroyed by fire at the end of the nineteenth century, and unfortunately the rebuilding was not always quite satisfactory.

#### Fredensborg and Frederiksborg Palaces.

A day should be spent in visiting the places to which there is direct train service from Copenhagen. If, however, the day be fine, I should recommend a different route, offering a better opportunity to see the beautiful country north of the capital. Take an early coast train, or, better still, the tram and motor-bus, as far as Rungsted, and walk a mile to Hørsholm, where there are a few remains of an old palace, and a pretty little church by C. F. Hansen. Then go by omnibus or auto to Fredensborg. Its palace is surrounded by one of the prettiest gardens in the country, and a wonderful park borders a large lake. Take omnibus from Fredensborg to the town of Hillerød, of which the Frederiksborg Slot is the dominant figure. The palace was named after Frederik II, who bought it from a nobleman, and had it considerably enlarged. His son Christian IV pulled it down and built the present place, of which the main building was burnt in 1859, and was not rebuilt until many years after, when the necessary funds were raised by national subscription. The rebuilding was completed in 1895. The palace contains historical and art collections. It is the largest museum in Denmark.

#### Helsingør (Elsinore).

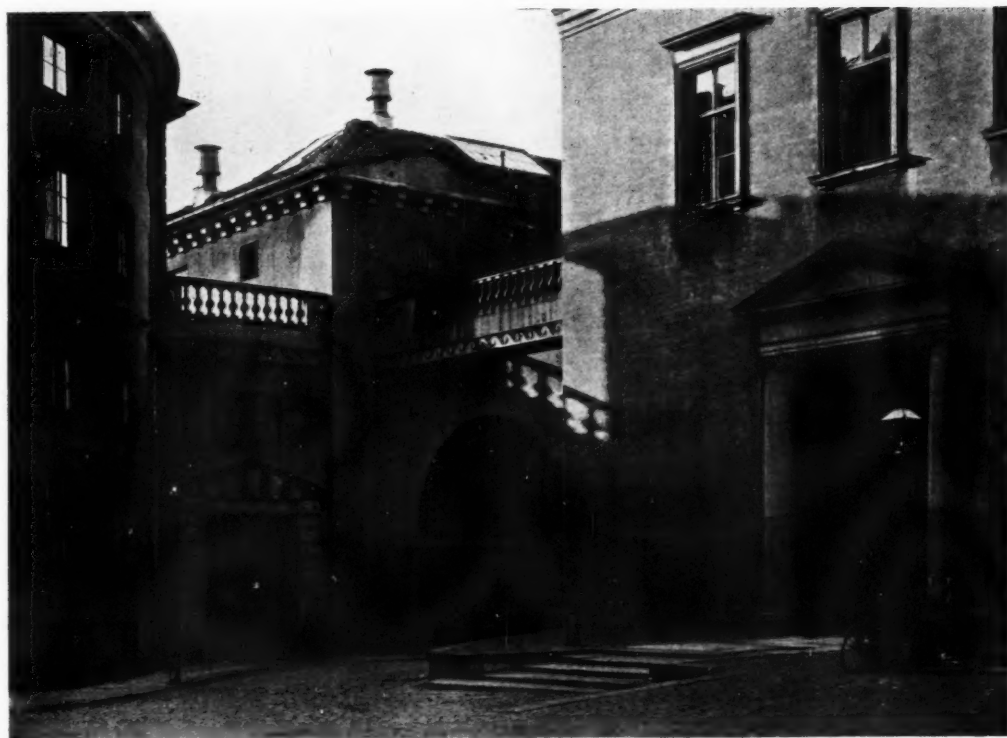
This town should not be missed. Not only is it architecturally one of Denmark's best provincial towns, but it contains Kronborg Castle, immortalized in "Hamlet." The coast from Copenhagen to Elsinore is known as the Danish "Riviera," and it offers a wonderful sight when seen from a boat on a beautiful summer's day. A boat service runs regularly between the two towns, but an early start will be necessary, as a long day is wanted for the trip. Kronborg Castle was built in the sixteenth century by Frederik II, and it is the best Renaissance building in Denmark. A part of it is now used as barracks, and part of it houses the Commercial and Naval Museum. The castle church is a fine example of its period.

Elsinore contains several mediæval buildings, such as





A DETAIL OF THE ENTRANCE FRONT.



ANOTHER VIEW OF THE COURTS.

COPENHAGEN: THE OLD POLICE COURTS.

C. F. HANSEN, ARCHITECT.

St. Olai Church, St. Mariæ Church and cloister, and Karmeliterhuset. These were all restored by Storck during the years 1898-1908. Half-timber houses of the sixteenth and seventeenth centuries are numerous, as well as houses of the New Classicism and Empire style. To these belong the Marienlyst Palace, built in 1761 by Jardin.

The environs of Elsinore are very pretty, and a ride should be taken through the villa districts as far as Hornbæk. It is recommended to finish the day at Marienlyst Badehotel, which is the largest seaside resort in the country, where tourists of all nationalities gather during the summer. Within the great establishment is a casino, and entertainments and dances are given at the main hotel.

The most convenient route from Copenhagen to Aarhus is by the boat that leaves the capital in the evening and is in Aarhus in the early morning. Another route is via Kallundborg, which is an old and rather interesting little town, with one of Denmark's most remarkable churches, dating from the twelfth century. Visitors for the shorter trip should return to Esbjerg direct from Copenhagen.

Aarhus is Denmark's second largest town, the cathedral being its predominant feature. This is the country's largest church. Originally Romanesque, it has undergone so many changes that it has now a Gothic rather than a Romanesque character. It was originally a basilica, with large projecting transepts, but to this has been added a number of chapels that have given it a peculiarly happy appearance. The interior is very attractive. The chapels, the many memorial tablets, the wonderful wrought-iron work, and the beautiful fresco paintings, all contribute to the church's dignified solemnity.

Vor Frue Kirke is also a thirteenth-century church of considerable interest, while the adjoining Aarhus Hospital and Cloister are of 1540. Many good old houses can be seen in Meilgade, Mindegade, Skalegade, and Vestergade. A fine example of a half-timber house of 1593 is No. 2 Badstuegade.

Like Copenhagen, Aarhus is a fast-growing town, with a great deal of modern architecture, of which the Library, the new Custom House, and the Theatre are by Hack Kampmann.

Randers is, like Ribe, Kjøge, and Elsinore, among the best architectural towns in Denmark. The oldest building in Randers is Helligaandshuset, of the fifteenth century. St. Mortens' Church is of the sixteenth century, and the Town Hall dates from 1656. In Randers as well as in other towns do not omit to see the lovely court interiors of the old houses.

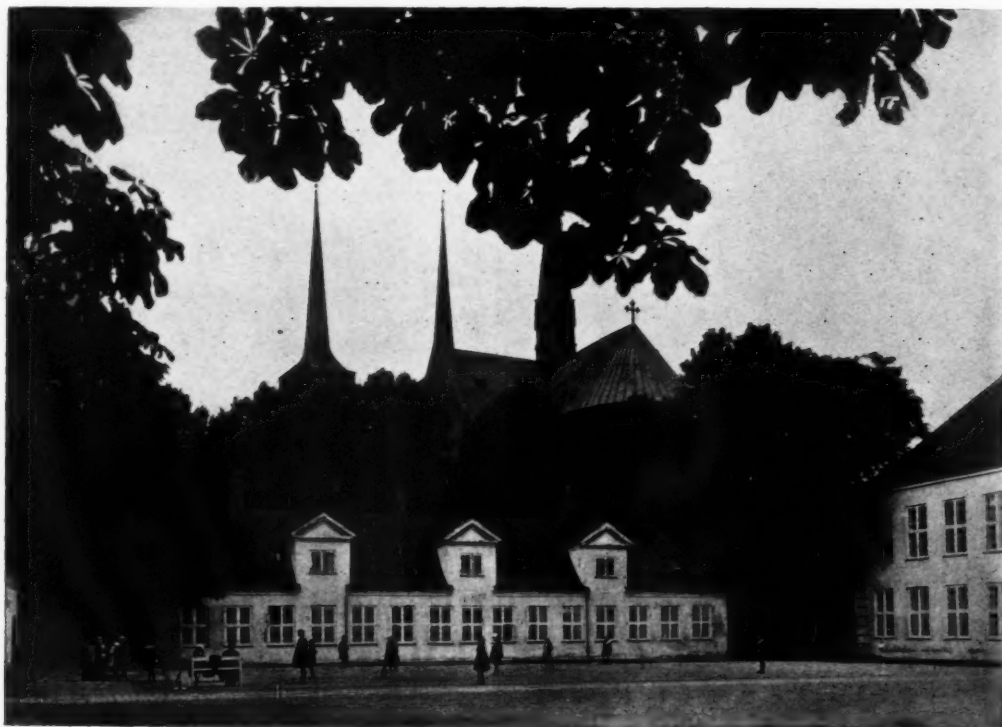
A day should be devoted to a trip to Støvring Cloister (Romanesque); Gammel Estrup, one of the country's stateliest and best-kept sixteenth-century halls, with magnificent interiors; Skafføgaard, of 1580, containing a rare art collection; and Clausholm, one of Denmark's oldest historical castles.

Viborg was at one time the most important town in Denmark. Its large granite cathedral was built contemporaneously with that of Ribe; unfortunately it was restored and changed, but in 1869-76 a general rebuilding by Nebelong, Tholle, and Storck, brought it back as nearly as possible to its original state. The magnificent fresco paintings are by the celebrated painter Skovgaard. Another mediæval building is Stiftprovstegaarden. The old Town Hall and Stiftamtshuset are of the eighteenth century. Old houses are to be seen in Mogensgade, Mathiasgade, and Rosengade. Hack Kampmann has built Provinsarkivet and Toldkammeret (the Custom House).

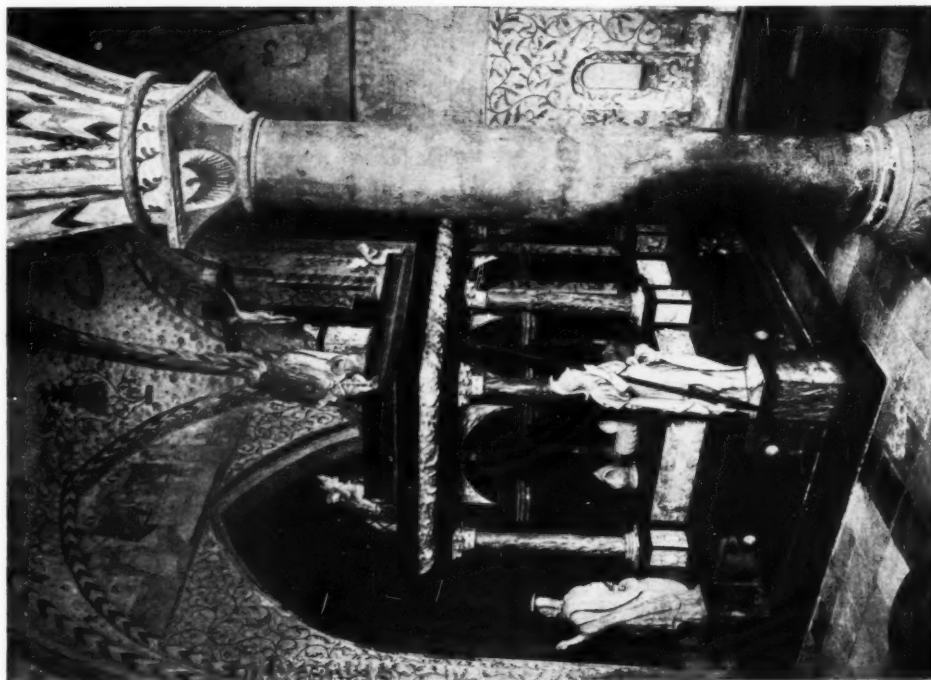
The way from Viborg to Silkeborg should be chosen over Jutland's far-stretching heaths, the Ahlhede and Græthe Hede. For miles and miles the vast heather-clad territory extends towards the west, offering a unique sight, stern hills and deep silence producing a mighty, impressive effect. Every visitor should take the opportunity of enjoying this remarkable experience.

Having come to Silkeborg, take the boat to Himmelbjerget, Denmark's highest hill, which is surrounded by a chain of lakes bordered by woods, while beyond these there are yet more lakes and more woods reaching far beyond ken. A view from the top of the gigantic hill impresses one with a sense of grandeur and magnificence.

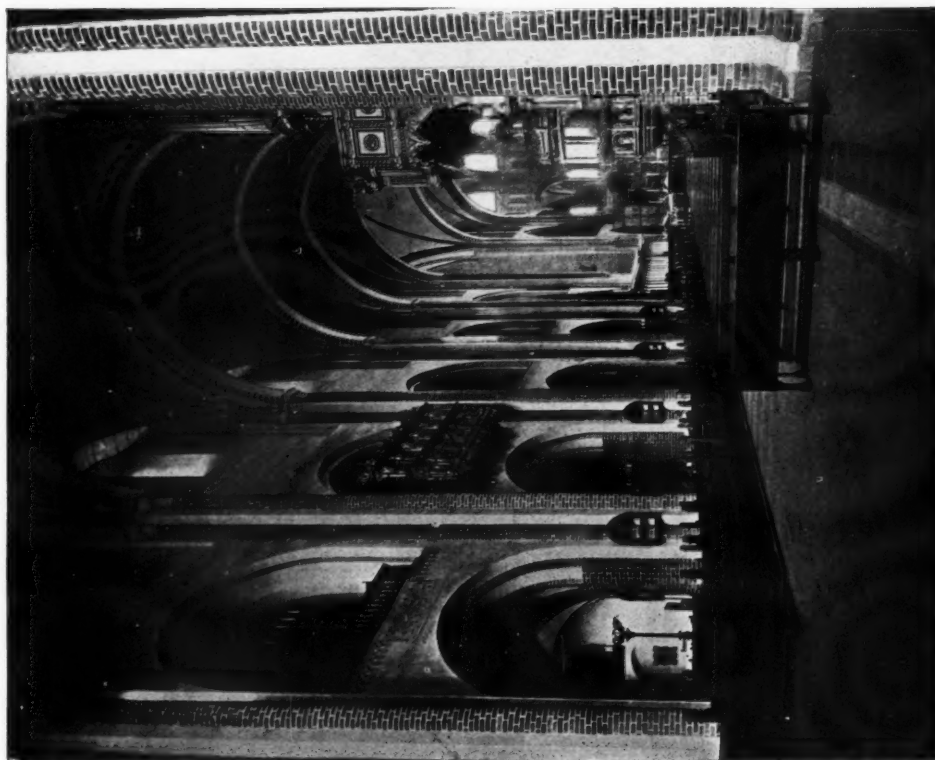
In strong contrast to the stern and severe country in the centre of Jutland stands the smiling landscape at Vejle Fjord, where the town of Vejle, like Svendborg, is one of the largest tourist resorts in Denmark. At Jelling two



ROSILDE



MONUMENT OF CHRISTIAN III.



LOOKING EAST.

INTERIOR VIEWS OF ROSKILDE CATHEDRAL.

enormous mounds contain the remains of King Gorm and Queen Thyra, who lived more than 1,000 years ago. At the pretty little church between the mounds stand two runestones, which formerly were placed by the mounds.

On the way to Esbjerg, we must stop at Kolding, in order to visit Koldinghus Palace, which may be counted among the stateliest and finest ruins anywhere to be seen. The oldest buildings are of early mediæval origin, but large extensions were added right up to about 1600. For example,

the great Renaissance tower was built by Christian IV in 1808. An awful fire laid the magnificent palace in ruins, to the profound regret of the nation, as so many historical memories clung to the place. The ruins, however, are well preserved, and still tower high towards the sky. A large museum has been arranged within some part of the ruins. Kolding has a number of good old houses, of which Borch's Gaard, of 1595, is the finest and most richly decorated half-timber house in Denmark.

## A House at Esher, Surrey

LANCHESTER, LUCAS, and LODGE, Architects

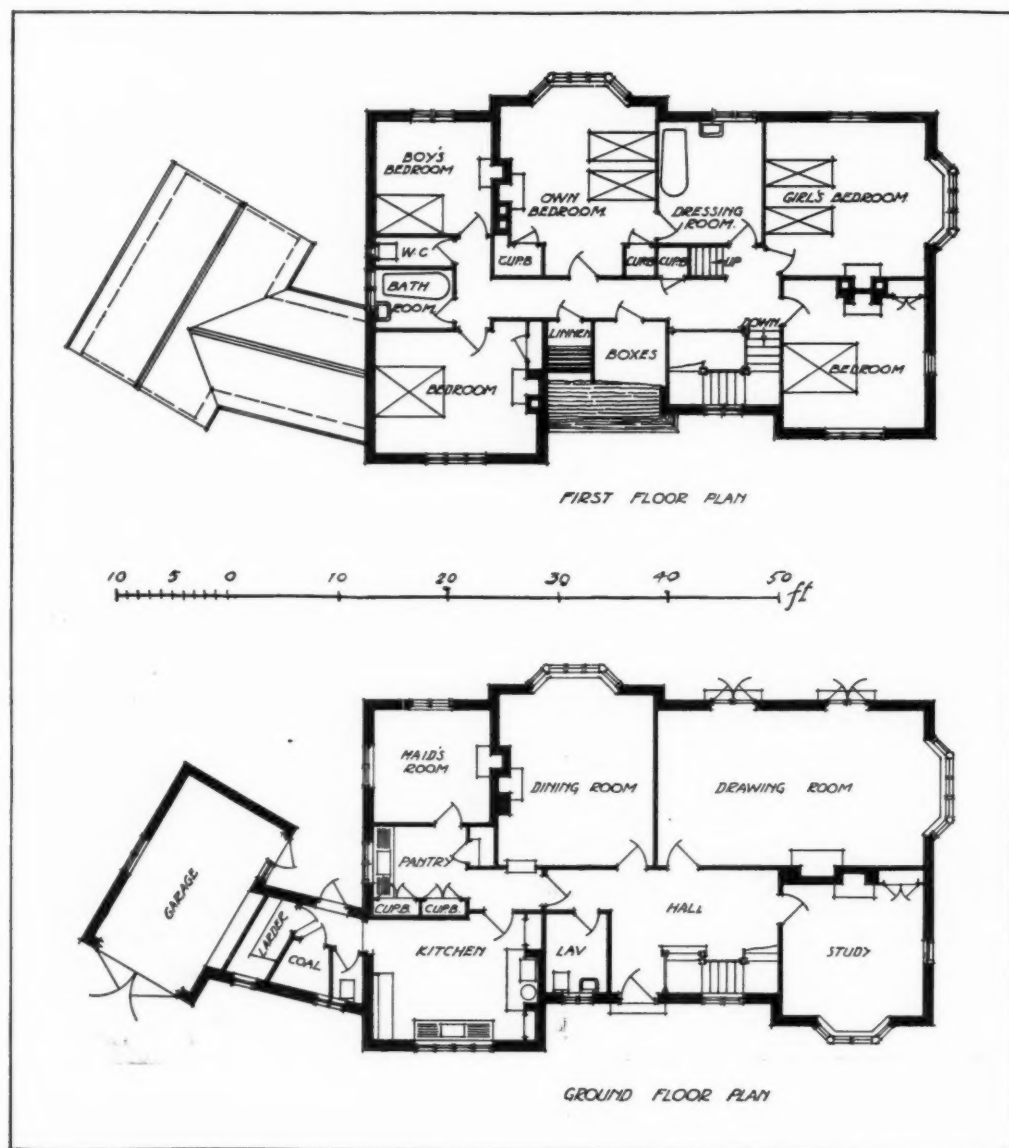
**T**HE walls of this house are of brick from the Claygate brickfields, and the roof is tiled.

The internal treatment of the house is kept simple. The drawing-room is panelled, whilst the remainder of the rooms are treated in a buff colour,

with black paint throughout, giving a very pleasing effect. The house has metal windows with leaded lights.

The floors of the hall and the drawing-room are in oak.

The house was built by Messrs. John Laing and Son, Ltd., of London and Carlisle.



GROUND AND FIRST-FLOOR PLANS.



Modern Domestic Architecture. 119.—House at Esher, Surrey : The Entrance Front  
Lanchester, Lucas, and Lodge, Architects



The walls are of Claygate brick and the roof is tiled. The windows are metal, with leaded lights.



Modern Domestic Architecture. 120.—House at Esher, Surrey: The Garden Side  
Lanchester, Lucas, and Lodge, Architects



Two French windows in the drawing-room open on the garden side, and the dining-room and best bedroom are placed on this side of the house.

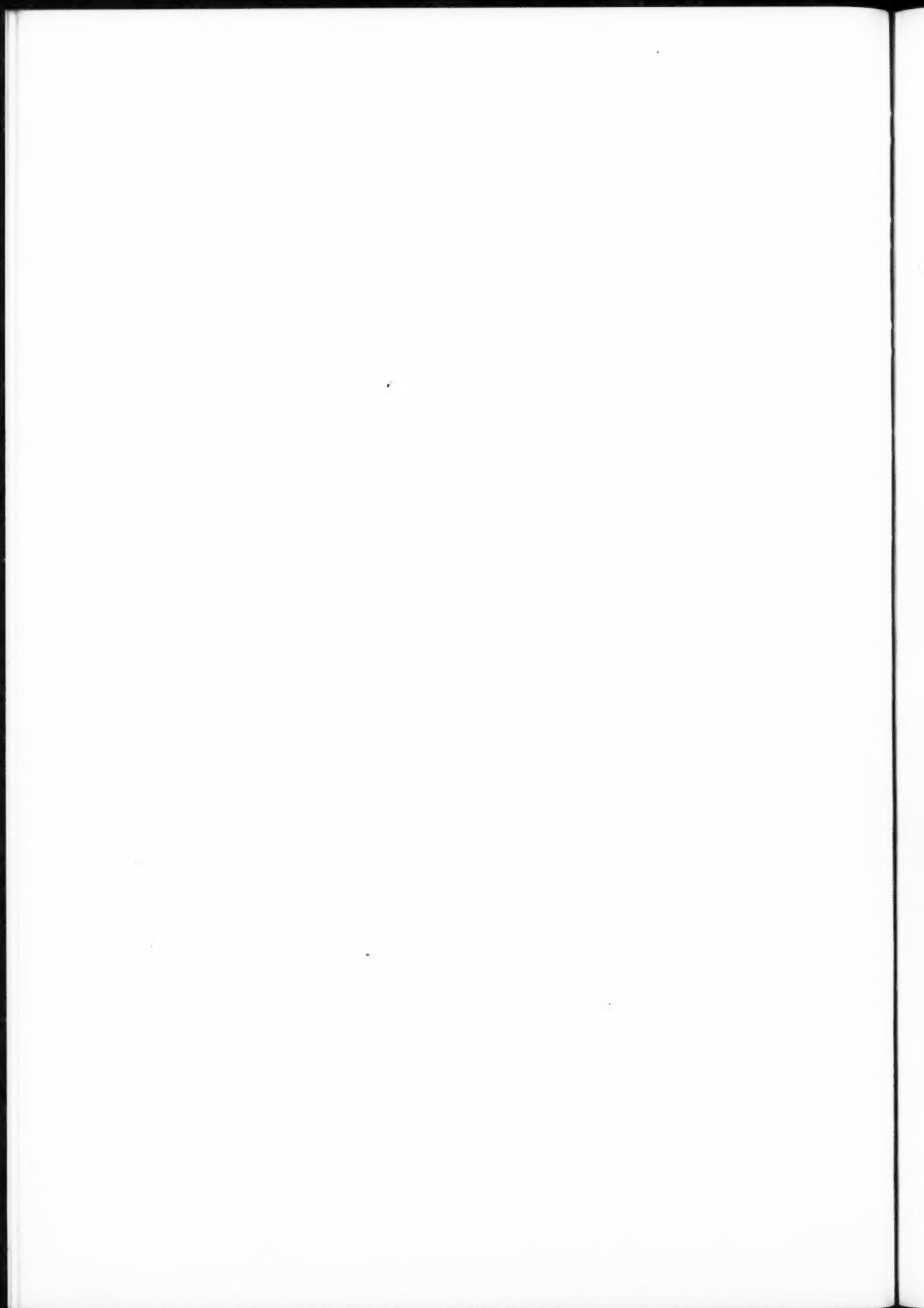




Modern Domestic Architecture. 121.—House at Esher, Surrey : The Drawing Room  
 Lanchester, Lucas and Lodge, Architects



The internal treatment of the house has been purposely kept simple. The drawing-room is panelled, whilst the remainder of the rooms are treated in a buff colour, with black paint.





FIREPLACE IN STUDY.

HOUSE AT ESHER, SURREY. LANCHESTER, LUCAS, AND LODGE, ARCHITECTS.



ENTRANCE HALL.

## Architectural Models at the Alpine Club

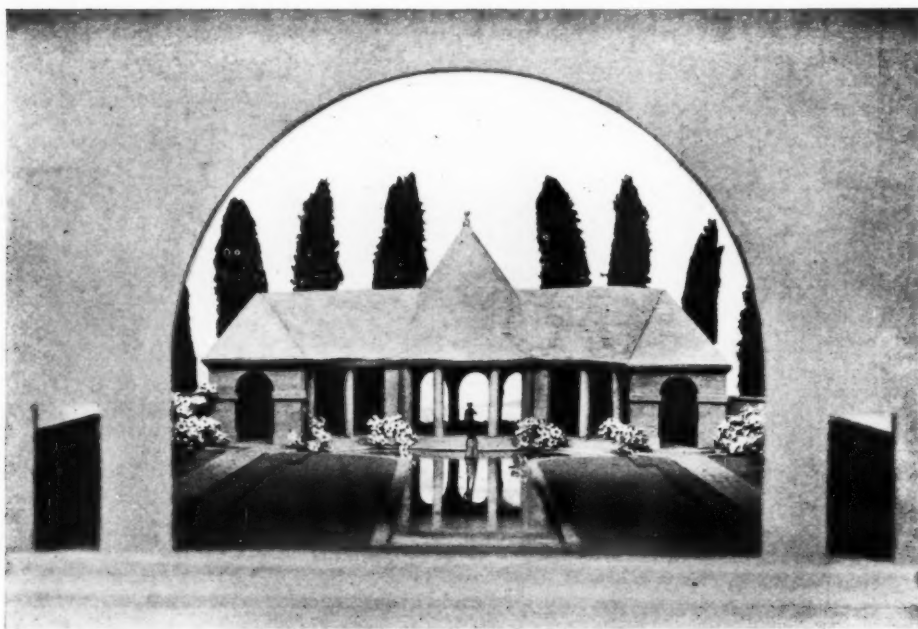
Designed by MAURICE CHESTERTON, F.R.I.B.A.

**B**ESIDES a number of notable landscapes in water-colour—a medium which he handles with delightful suavity—Mr. Maurice Chesterton, F.R.I.B.A., is showing at the Alpine Gallery half-a-dozen architectural models designed and made by himself. The two which we illustrate are probably the most interesting of the collection. The semi-circular dairy farm for forty cows is a feature that is both unusual and attractive, and the junction of the wings with the central

building is admirably managed. The water garden is a more sophisticated piece of work, but full of merits which the model brings out very skilfully. The other models are equally good; Mr. Chesterton shows very great ingenuity in the use of materials which will convey the desired impression of colour and texture. This, after all, is the chief problem of model-making, for unless the surfaces are represented with a certain amount of truth the model remains only a working drawing in three dimensions.

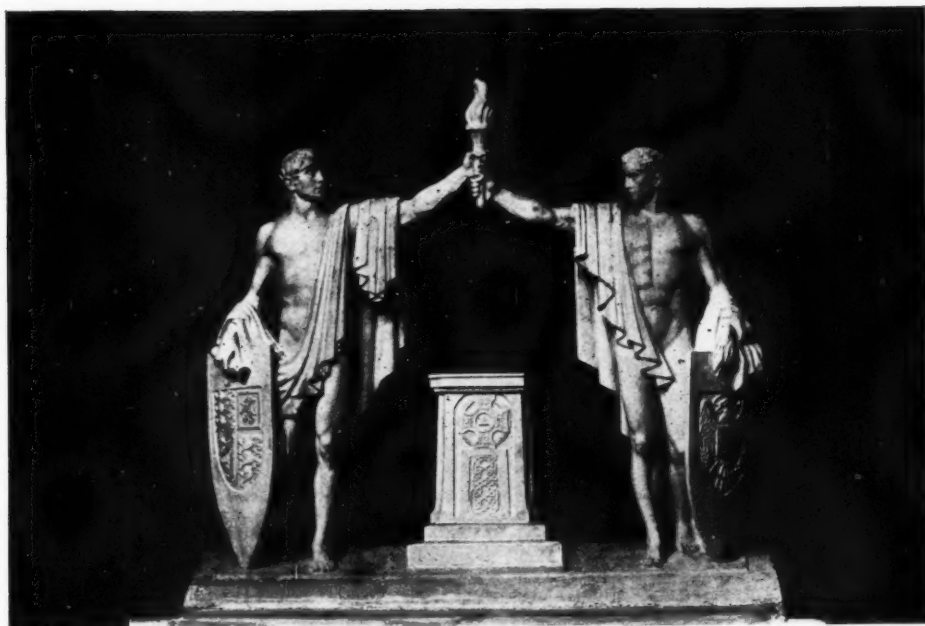


A DAIRY FARM FOR FORTY COWS, NOW IN COURSE OF CONSTRUCTION FOR  
SIR WALTER PRESTON



A SHELTERED WATER GARDEN FOR A WINDY SITE.





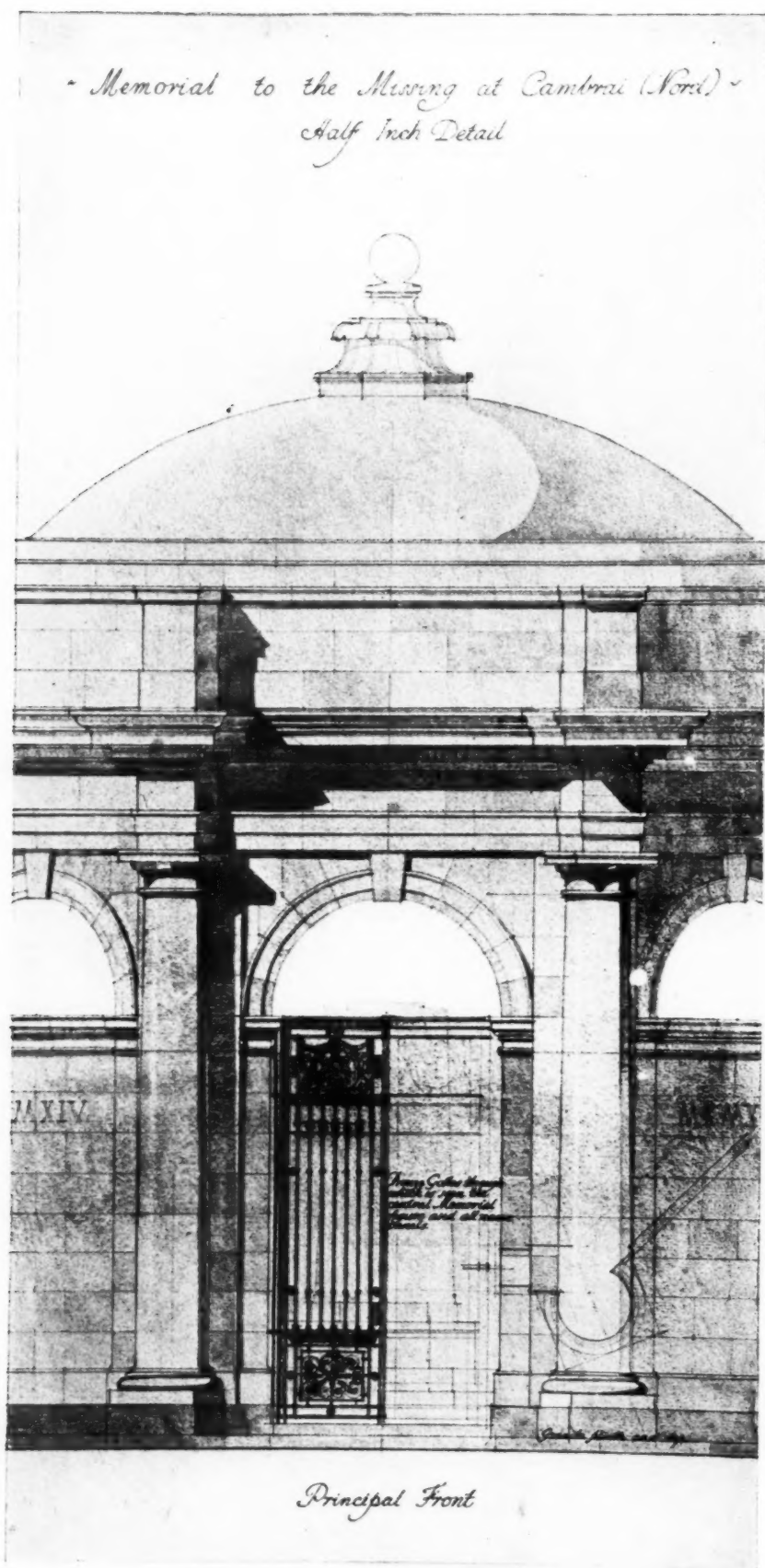
A COMPLETE VIEW OF THE GROUP.



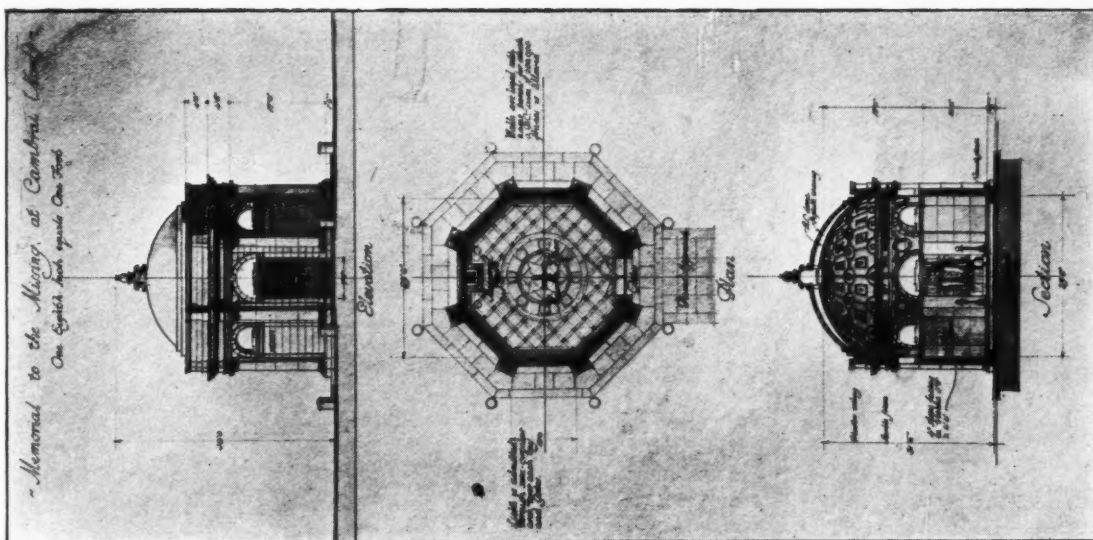
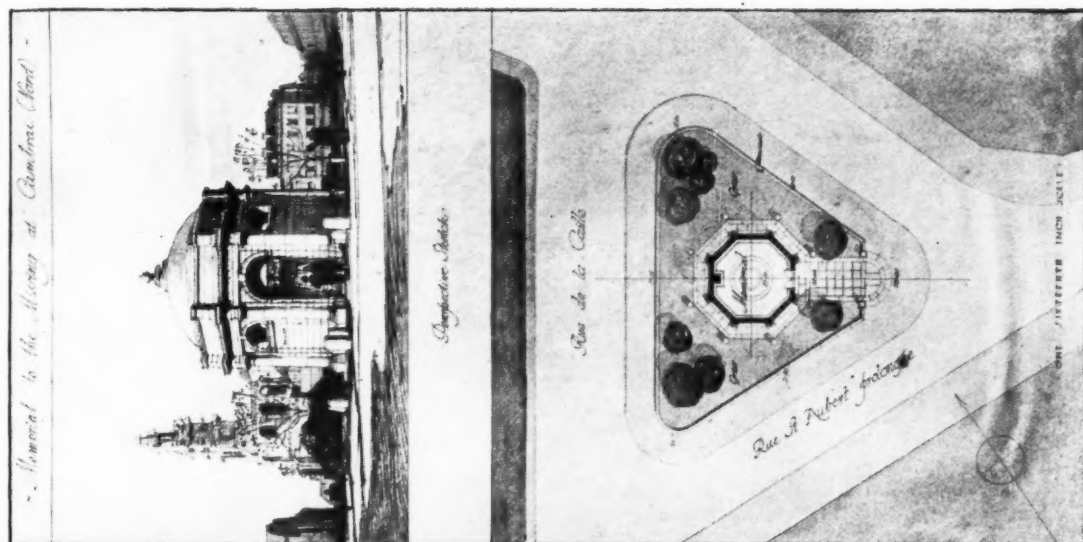
A DETAIL OF THE LOWER PORTION.

GROUP SYMBOLIZING ANGLO-AMERICAN FRIENDSHIP, BUSH HOUSE, LONDON  
MALVINA HOFFMANN, SCULPTOR.

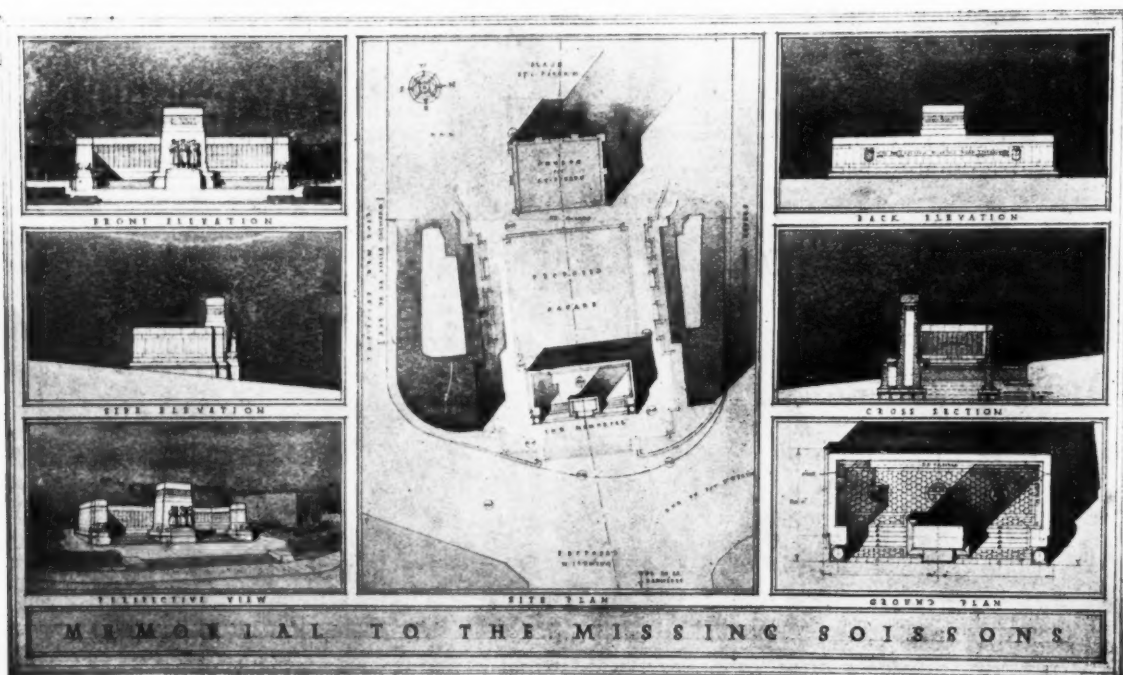
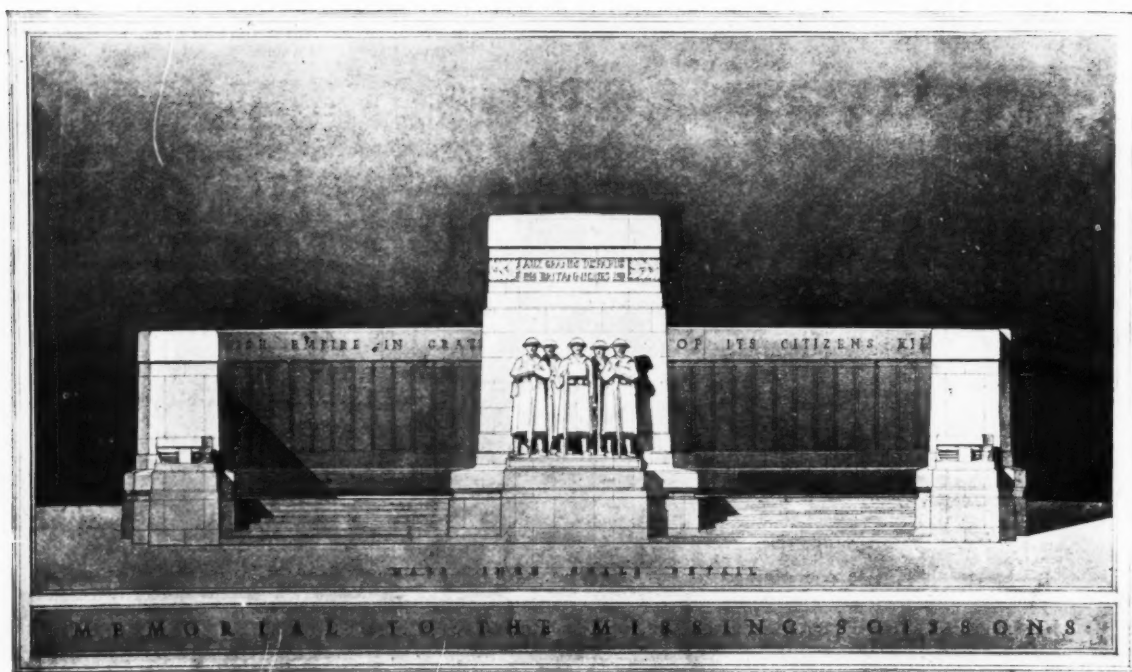
This sculpture group will be unveiled by Lord Balfour on July 4 in the domed arch of Bush House. The two figures symbolize England and America holding aloft the torch of civilization over a Celtic altar. From left to right (lower illustration) are Mr. Baillie, Mrs. Bush, Miss Hoffmann, and Mr. Irving Bush.



MEMORIAL TO THE MISSING AT CAMBRAI: DETAIL OF WINNING DESIGN.  
H. CHALTON BRADSHAW, A.R.I.B.A., ARCHITECT.



MEMORIAL TO THE MISSING AT CAMBRAI: WINNING DESIGN. H. CHALTON BRADSHAW, A.R.I.B.A., ARCHITECT



MEMORIAL TO THE MISSING AT SOISSONS: WINNING DESIGN. HOLT AND REES, A.R.I.B.A. ARCHITECTS



## New Possibilities in Decorative Woods

WOODS from British Columbia are now available in ample supply for decorative as well as for constructional service, and some notable instances of their adoption by leading architects for the decorative treatment of interiors are illustrated in this article. A remarkable process renders these timbers capable of decorative services hitherto only obtainable with expensive hardwoods.

That British Columbia timbers are rapidly increasing in popularity in the United Kingdom is shown by the import statistics for 1923 and 1924. In the former year, about 8,000 standards were imported, whereas during last year the imports amounted to more than 21,000 standards. The imports for 1924 constituted, in fact, a record which has only been surpassed twice—by two war years, when large Government orders were placed in British Columbia. It is certain that this trade is in its infancy. Decreasing timber supplies in Eastern Canada and the United States make it apparent that increased demands for timber will be made on British Columbia, whose supplies meet specifications of kinds and sizes which are not obtainable in Europe; as, for example, "timber free from all defects," and large timbers for construction works.

It is estimated that the present rate of timber-cutting in British Columbia can be multiplied several times without impairing the forest capital—that is, that the rate of growth of standing timber much exceeds that of the present rate of cutting.

Recent developments in the science of colouring such timbers as, for instance, Western Hemlock, Douglas Fir, Silver Spruce, Red Cedar, have placed them in the front rank of decorative woods. Many oil stains give very indifferent results due to poor colours, different depth of colouring, and a negative result due to the light portion of the annual ring absorbing most of the colour and becoming very dark while the hard summer wood is scarcely affected. With the discovery of the Drytone process, however, this outstanding difficulty has been completely overcome. The colours, produced by special and quite inexpensive chemical treatments, range from the

most delicate silvery greys to the richest of purple blacks, with a beautiful series of warm browns and grey browns between. In every case the hard grain takes its full share of the colour, the results are quiet, restful, and natural in appearance, and of great depth and transparency.

As the results depend on the chemical nature of the wood under treatment, it is not surprising that the same process should yield different colours on different timbers. This feature greatly widens the possible range of decorative service. Western Hemlock, for instance, inlaid or interspaced with bands of oak, will give a result in grey and black with perfect ease and certainty; while the substitution of Red Cedar for oak will give a beautiful sepia with a hint of olive colour in it, in place of the black.

Architects have been quick to recognize that this important technical advance has opened up, for them, a new range of decorative possibilities. It is now possible for them to get, with woods such as those mentioned above, work of the highest grade, at a cost that is far below that of the hardwoods that were formerly considered indispensable.

Whilst this new process has hitherto been used mainly for the treatment of doors, staircases, panelling, and joinery and shop-fitting work generally, a beginning has already been made with furniture in Western Hemlock and British Columbia Pine. At the recent "Ideal Home Exhibition," at Olympia, there was an attractive model boudoir designed by Palmer Jones, and furnished throughout with Western Hemlock finished with the new silver-grey colour, and enriched with bands of black.

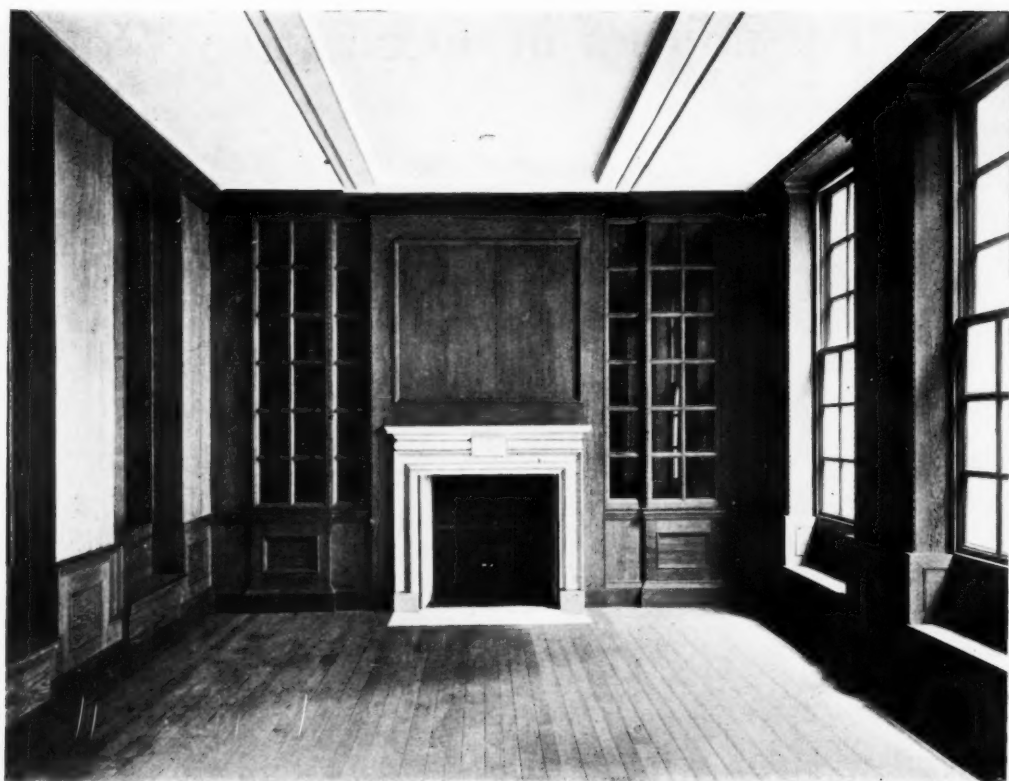
Examples of interior joinery are afforded by the recently completed Clare College at Cambridge University,\* designed by Sir Giles Gilbert Scott, R.A.; the Bishop Jacob Memorial Church at Ilford, designed by Mr. Herbert Baker, A.R.A.; the Church of the English Martyrs at Birmingham,\* designed by Messrs. Sandy and Norris, and other works included in the general list given below.

*Rift-sawn parquet flooring*, which is demonstrably becoming



CLARE COLLEGE, CAMBRIDGE UNIVERSITY: A STUDY. SIR GILES GILBERT SCOTT, R.A., ARCHITECT

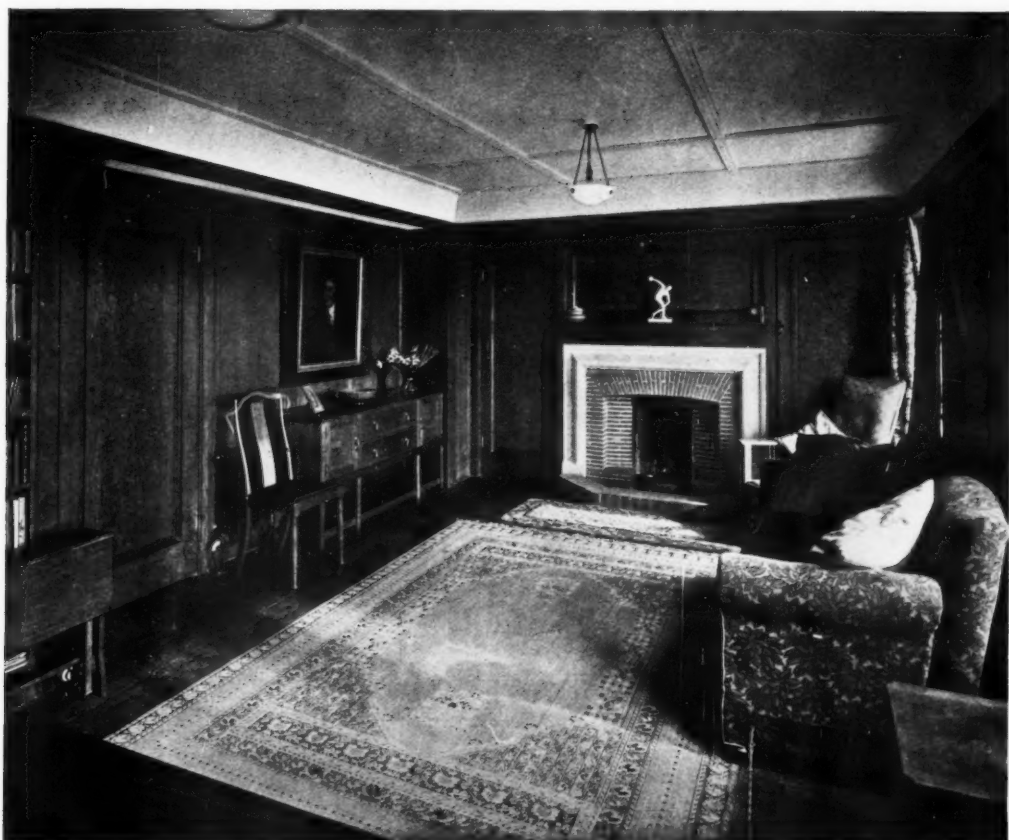




BARING BROS' BANK, BISHOPSGATE: THE BOARD ROOM. SIR EDWIN LUTYENS, R.A., ARCHITECT.



THE 1925 ROOM, PALACE OF ARTS, WEMBLEY.  
SIMPSON AND AYRTON, P.P. AND F.R.I.B.A., ARCHITECTS.



A ROOM IN A HOUSE AT HAMPSTEAD GARDEN SUBURB. PAUL BADCOCK, A.R.I.B.A., ARCHITECT.



INTERIOR OF THE CHURCH OF THE ENGLISH MARTYRS, BIRMINGHAM.  
SANDY AND NORRIS, F AND A.R.I.B.A., ARCHITECTS.



HART HOUSE, TORONTO UNIVERSITY: THE MUSIC ROOM  
SPROATT AND ROLPH, ARCHITECTS.



THURLOE LODGE, LONDON: MR. NIGEL PLAYFAIR'S HOUSE. THE STUDY.  
DARCY BRADDELL AND HUMPHRY DEANE, ARCHITECTS

very popular, is stocked in London, Liverpool, and Hull. A recent example of its use is to be seen in St. John's Institute, Notting Hill, designed by Sir Aston Webb and Son.

Several hundred thousand Douglas Fir doors were imported into the United Kingdom last year. These were largely used in housing schemes. The London County Council has specified these in a number of instances. The stiles and rails of these doors are rift-sawn, and the panels of rotary-cut plywood, manufactured with waterproof glue. Excellent results are obtained by toning them, which brings out the distinctive grain effects.

For door panels and wall panelling, *Plywood*, of British Columbia woods, is rapidly increasing in popularity. A recent contract in Nottingham called for 5,000 ft. of this material.

*Western Hemlock*, scarcely known in this market a year ago, has gained many friends, which is best indicated, perhaps, by the following instances in which it has been specified recently: School at Appleforth Abbey, Yorks, designed by Sir Giles Gilbert Scott, R.A.; a parish hall for West Kirby, Cheshire, by Stanley G. Hewitt, F.R.I.B.A. Other instances of the use of this wood are given in the general list below.

Western Hemlock is the wood best suited to replace the Canadian yellow pine. It is easy to work, and possesses a very quiet and pleasing grain when toned. It presents an excellent surface for painting or enamelling.

*Silver Spruce* is widely used for interior woodwork. It takes colouring nicely, and presents an excellent surface for paint or enamel. An excellent example of the use of this timber is to be found in the study of the town house of Nigel Playfair, Esq., Thurloe Lodge, London,\* designed by Messrs. Darcy Braddell and Humphry Deane.

*Red Cedar* is used in the form of shingles or tiles for roofing and wall-sheathing. It is known to be one of the world's most durable timbers.

Recent research by the Building Research Board, as contained in their special report No. 7, showed that with regard to heat transmission—"of the walls tested by Dr. Griffiths

the best proved to be the framed timber wall." The 6 in. timber wall tested proved to be better construction than even an 11 in. cavity brick wall. This type of wall construction has been adopted by Henry Boot and Sons (London), Ltd., for the model pair of houses to be erected by that firm in the Housing Exhibition at Wembley. A number of houses having British Columbia Red Cedar shingle roofs have recently been constructed at Wytham, near Oxford.

This timber is especially suitable for beamed and decorative ceilings. It is of pleasing appearance, and rapidly mellowes down with age to a restful effect of refinement and taste. This wood has been used with excellent effect by a prominent firm of Canadian architects, Sproatt and Rolph, of Toronto, for the decorative ceiling in the music room of Hart House, Toronto University,\* and again for the ceiling of the Memorial Chapel at Ridley College, St. Catherine's, Ontario.

Other important buildings in which one or another of these timbers, for structural or decorative purposes, have been adopted by the architects whose names are given in parentheses include the following: St. George's Church, Kidderminster, seating and choir stalls (Sir Giles Gilbert Scott, R.A.); Baring Bros.' Bank, Bishopsgate, E.C.,\* panelling in Board-room (Sir Edwin L. Lutyens, R.A.); 1925 Room, Palace of Arts, Wembley Exhibition\* (Simpson and Ayrton, PP. and F.R.I.B.A.); University College Hospital Nurses' Home, panelling and doors (Mr. Michael Waterhouse, F.R.I.B.A.); house at Hatch End, door and chimney piece in (Mr. Harold Goslett, F.R.I.B.A.); house at Hampstead Garden Suburb, panelling in\* (Mr. Paul Badcock, A.R.I.B.A.); New Office Building, London, wall-panelling in; and new headquarters for the Society of Friends, Euston Road, N., panelling, etc., to meeting-house (Mr. Hubert Lidbetter, A.R.I.B.A.); Watford Union Infirmary Nurses' Home, doors (Messrs. Saxon Snell and Phillips); Nottingham Palais de Danse, panelling and doors to ballroom, balcony, supper-room, etc. (Messrs. Thraves and Dawson). The asterisks indicate that the works to which they are appended are illustrated herewith. Further instances are given under the paragraphs above relating to the respective timbers.

## Law Reports

### Street Improvement—Acquisition of Land—Arbitrators' Powers

*Stretford U.D.C. v. Syer.*

King's Bench Division. Before the Lord Chief Justice and Justices Shearman and Seltzer.

This matter came before the Court in the form of a special case stated by an arbitrator, who desired the opinion of the Court on legal questions arising out of a dispute between the Council and Mr. Arthur Syer, a Manchester solicitor, who is the assignee of the lease of premises known as 575 Chester Road, Stretford, Manchester, a dwelling-house with a garden in front enclosed by a wall. On August 12, 1924, the Urban District Council served a notice on Mr. Syer stating, in their opinion, Chester Road was narrow and inconvenient and had no regular line of frontage, and they proposed to alter the line of frontage according to a plan exhibited. That plan showed that the line cut through the garden of Mr. Syer's house. The Council decided to purchase a strip of that garden, and served on Mr. Syer a notice to treat for its sale. Mr. Syer did not give the Council any particulars of any claim he had in respect of the strip, and Mr. J. D. Wallis was appointed as arbitrator under the Acquisition of Land Act, 1919, to deal with the matter and the amount of compensation to be paid to Mr. Syer. At the arbitration, points were raised that the Council had no power under Section 57 of the Stretford Urban District Council Act of 1904 compulsorily to acquire land, and alternatively that the powers of the Council compulsorily to acquire land under their Act expired in August, 1907, by reason of Section 123 of the Lands Clauses Consolidation Act, 1845, and consequently the matter in dispute was not one to which the Acquisition of Land Act, 1919, applied. In the result it was contended that the arbitrator had no power to assess compensation. Evidence was heard, but the arbitrator withheld his award until the following questions had been answered by the High Court: (1) Whether under the circumstances Section 57 of the local Act authorized the Council to acquire, compulsorily, the land; and (2) if the Council had such powers originally, whether they were precluded from

exercising them after the expiration of three years from the passing of the Act.

Mr. E. Wooll appeared for the Council, and Mr. Macmorran, K.C., for Mr. Syer.

Mr. Wooll said the dispute involved the meaning of two words, "may purchase," in Section 57 of the Council's Act, and whether those words conferred any compulsory powers of acquisition of land. Another question was whether there was a time limit to the exercise of any compulsory powers contained in those two words and under the Land Clauses Act which was incorporated in the private Act. The land, 21 sq. yds., abutted on a highway of considerable local importance. His contention was that the two words in question had been applied indifferently either to compulsory or voluntary acquisition, and the Lands Clauses Act provided the necessary machinery for compulsory acquisition.

The Lord Chief Justice said the Section said: "The Council may, and if required by the owner so to do, shall purchase." Where did counsel get the ingredient of compulsory purchase from?

Mr. Wooll replied that the construction was notoriously applied by every local body in the country to similar words in the Public Health Act.

The Lord Chief Justice agreed that it would seem grotesque if a Council that had power to make a building line had not the power to bring every frontager into line; but when the words of the Act were looked at—the local Act—it was clearly contemplated that in some cases the local Council might hold its hand and had to be spurred on by the owner to purchase.

Mr. Macmorran denied that the words "may purchase" under the Public Health Act meant "could compulsorily acquire."

The Court answered the question in the negative, and sent the matter back to the arbitrator.

The Lord Chief Justice, in the course of his judgment, said although two questions had been put before the Court, the second did not arise in view of the decision of the Court on the first. The chief question was whether the words "may purchase" that appeared in the local and other Acts gave the Council powers compulsorily to acquire land, and sections



of the Public Health Act, 1875, had been quoted; the suggestion being put forward that the words should not be read alone but conjointly with those of other sections that dealt with the same matter. It was fallacious to say that the introduction of the Land Clauses Consolidation Act imported compulsory powers of acquisition to the local Act of the Council. It would be an odd extension of powers if in the local Act the safeguards and conditions precedent were swept away and power of compulsory acquisition greatly extended, and it seemed strong argument to say that the plain words of the Act "the Council may purchase" meant that the Council could compulsorily acquire. In the circumstances the answer to the question was in the negative, and the matter would go back to the arbitrator with that opinion of the Court.

Justices Shearman and Salter agreed.

## Cinema Co.'s Unsuccessful Claim against Architect

*Rhodes Pictures, Ltd., v. T. Cook (M.S.A.) and Sons.*

May 21. Manchester Assizes. Before Mr. Justice Finlay.

In this action Rhodes Pictures, Ltd., sought to recover from Messrs. T. Cook (M.S.A.) and Sons, architects and surveyors, of Manchester, damages for negligence in the preparation of plans.

Mr. J. C. Jackson, K.C., and Mr. N. J. Laski appeared for the plaintiffs, and the defendants were represented by Mr. C. Atkinson, K.C., and Mr. H. Derbyshire.

From Mr. Jackson's opening statement it appeared that the plaintiffs are the proprietors of a number of picture-houses, one of which is La Scala, in Oxford Road, Manchester. This was built in 1914 according to plans prepared by Mr. T. Cook, on the instructions of Mr. Bernard Rhodes, the owner. In 1919 Mr. Rhodes gave instructions to Mr. Cook to prepare plans for alterations. The work was delayed by the restrictions on building, but eventually permission to proceed was given in December, 1922, at which time the place had been taken over by the plaintiff company, in which Mr. Rhodes and his wife were the principal shareholders. Mr. Cook held some shares and for a time was a director. After the work had been done complaints were made that the occupants of the balcony were not able to see the screen where the pictures were shown, and the reason was that the rise from one row of seats to the next was insufficient, being only 5 in. The case for the plaintiffs was that the trouble would not have arisen if the plans had been properly prepared.

Mr. Rhodes, in his evidence, stated that he did not understand plans, and he left the arrangements entirely to Mr. Cook. When the building was first erected the owner of adjoining property complained of interference with rights of light, and began proceedings in the Chancery Court, but the action was settled by an agreement not to exceed a certain height and to pay £500. After the seating had been put into the balcony in 1923 it was found that something was wrong, and an attempt was made to put it right by "staggering," which meant that instead of the rows of seats being exactly behind one another, they were so arranged that the occupants of one row looked between the occupants of the preceding row. That answered for the first two rows, but the people behind were no better off. In other Manchester cinemas the balcony was the best part of the house, and the highest prices were charged, but at La Scala the prices had to be reduced.

In cross-examination the witness admitted that Mr. Cook had previously sued him for fees in connection with a picture-house at Longsight, Manchester, and he put in the same defence as in the present action, that the plans were carelessly drawn, and not in accordance with the agreement, and that the balcony was improperly designed, in that the view of spectators would be seriously restricted. In that case he submitted to judgment with costs. The reason was that he could not stay in this country to fight the case, his medical attendant having ordered him abroad.

Mr. William Allan Dew, architect, of Manchester, said to make the balcony an ideal one the outside height of the building would have to be increased. Assuming that could not be done it was possible to raise the ceiling inside so as to increase the height by 2 ft. 3 in. at the back portion of the balcony. The number of seats would be reduced, and the rises would be 8 in. The work could be done in four or five weeks, or possibly a little longer, and would cost about £2,500.

Mr. Atkinson suggested that with the balcony as it was, if the rows of seats were halved in number, the rises would be increased from 5 in. to 10 in. The witness replied that the rows would be too far apart, and it would not be a success.

Mr. Charles Dickinson and Mr. George Dobson confirmed the evidence given by Mr. Dew.

Several witnesses stated that they had sat in various parts of the balcony and found they could not get a proper view of the screen.

Mr. T. Cook said he first became acquainted with Mr. Rhodes in 1912, and prepared for him the plans for a picture theatre in Ashton Old Road, Manchester. He got instructions for the La Scala building in June, 1913. After its erection Mr. Rhodes considered several schemes for enlargement, and finally decided upon an extension, one feature of which was that they were to endeavour to get a seating capacity of 3,000. At the time numbers of people could not get into places of entertainment in Manchester, and Mr. Rhodes's words were: "We will make it big enough so that people can say, 'We will go up to La Scala; we shall get in there.'" The plans were shown to Mr. Rhodes and explained fully to him. In the first instance it was intended to have a seating bench 2 ft. 4 in. in width, with a 5 in. rise. When Mr. Rhodes wanted to have tub-seats put in it was pointed out to him that the bench would be 2 ft. 7 in. in width. He replied that they would "stagger" the seats, which would give 10 in. rise. He was constantly on the site, interfered with the builders, and was a big nuisance. He was very anxious that the performances should not be discontinued during the process of reconstruction. It would have been impossible to get permission to raise the outside height of the structure.

Asked about Mr. Dew's scheme for raising the height inside, the witness said he thought it would be dangerous; expansion might take place and burst out the wall on each side.

Mr. Jackson: What is your defence to this case? Either the balcony is right, or it is wrong?—My defence is that if there is anything wrong it is due to the interference of Mr. Rhodes. The balcony is right, but the screen was erected wrongly.

Is the screen right now?—It is right now after they have raised it three times.

So there can be no reason for grumbling on anybody's part?—That is so.

The 5 in. rises were according to the plan which you originally made?—Exactly.

Do you know another cinema anywhere in Manchester which has 5 in. rises?—I do not.

Mr. Jackson put it to Mr. Cook that according to a textbook by Messrs. W. E. Coates and W. B. Copeland, the rise should be at least 10½ in. The witness replied that he did not know the book. To some extent the rise would depend on the length of the building. The shorter the building the steeper the rise should be. If a similar case arose he would put in 5 in. rises if the client wished it to be done in order to save money, but he would not tell him to have it done. In this instance he was bound down by the conditions under which the work had to be carried out, and he could not have done anything better than what he actually did.

George Westcott, architect, said, having regard to the necessity of avoiding questions of rights of light, and that 750 people had to be accommodated, he did not think the balcony could have been better designed. The occupants got a reasonable view. He thought Mr. Dew's scheme was an impracticable one. In order to get the increased height inside which was required it would be necessary to increase the outside height.

Mr. T. A. Fitton, architect, stated that he acted for the adjoining owner in the action regarding the rights of light, and the height then agreed was the utmost which would be conceded by the owner. Before he could express a definite opinion against Mr. Dew's scheme he wanted to know details which had not yet been gone into, but personally he would not like to be responsible for such a scheme.

This witness and several others gave evidence regarding visits to the place when they were able to see the screen from various parts of the balcony.

In giving judgment, Mr. Justice Finlay said the case was a rather embarrassing one to deal with, because to some extent it involved questions of architecture which it was not easy for a layman to appreciate. But he had not to ascertain whether the plans were the best possible that could have been made, or whether they could not have been amended with some advantage. He had to consider whether the plans showed that reasonable degree of competence and skill which an architect, like any other professional man, was bound to show; it was not necessary to show amazing ingenuity in meeting the difficulties which arose. The whole point here was, had the plaintiffs established that in these plans the defendants failed to show the reasonable measure of skill which they were entitled to insist upon. There was a strong desire—a per-

fectly natural one—on the part of Mr. Rhodes, to secure the largest amount of seating accommodation which could be got, and Mr. Cook was proceeding under restrictions which made it impossible for him to attain his objects by raising the roof. He could have got a steeper rise by raising the seats more steeply, but that meant the number of seats would be much fewer. Under those circumstances he secured a very large number of seats by making the rise less than it would have been in an ideal balcony, and it might be the better course in such a place to have, say, a thousand seats which were not first-rate rather than 500 seats which were all first-rate. It was impossible to hold that in doing so Mr. Cook fell below the standard of reasonable competence and skill which was expected of an architect. The plaintiffs had failed to make out their case of negligence, and the action would be dismissed with costs.

## Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Sir Kingsley Wood, the Parliamentary Secretary to the Ministry of Health, informed Major Birchall that the following statement showed the position of housing schemes under the Housing, etc., Act, 1923, and the Housing (Financial Provisions) Act, 1924, on the undermentioned dates:

|   | Act of 1923. | Act of 1924. |
|---|--------------|--------------|
| I. Houses authorized by the Minister of Health up to May 6, 1925 (including those in II and III below).                                       |              |              |
| To be erected by local authorities .. ..  | 54,163       | 51,576       |
| To be erected by private enterprise .. ..   | 147,240      | 1,346        |
| Total .. ..   | 201,403      | 52,922       |
| II. Houses included in definite arrangements on or before May 1, 1925 (including those in III below).   |              |              |
| Schemes of local authorities:   |              |              |
| Number of houses included in contracts or in approved direct labour schemes .. ..   | 42,090       | 32,689       |
| Private enterprise:   |              |              |
| Number of houses included in certificates given by local authorities .. ..  | 102,382      | 311          |
| Number of houses approved by the Minister under section 3 of the Act of 1923 and section 2 of the Act of 1924 and included in contracts .. .. | 6,177        | 10           |
| Total .. ..   | 150,649      | 33,010       |
| III. Building progress at May 1, 1925.  |              |              |
| Number of houses under construction:  |              |              |
| Schemes of local authorities .. ..  | 12,727       | 13,045       |
| Private enterprise .. ..  | 30,305       | 125          |
| Total .. ..   | 43,032       | 13,170       |
| Number of houses completed:   |              |              |
| Schemes of local authorities .. ..  | 20,998       | 3,248        |
| Private enterprise .. ..  | 55,811       | 11           |
| Total .. ..   | 76,809       | 3,259        |

Mr. N. Chamberlain informed Sir F. Meyer that there were four types of houses to be erected under the scheme of demonstration houses, namely, the Weir, Braithwaite, Atholl, and Wild. These types were recommended for that purpose by the Committee on New Methods of House Construction. According to the latest information the work of construction on the demonstration houses had been started in the case of ten local authorities, and four houses had been completed.

Sir B. Chadwick informed Sir F. Wise that the quantities of bricks, of brick-earth or clay imported into Great Britain and Northern Ireland registered as consigned from foreign countries, during the first four months of 1925, were:

| Month.         | Quantity.<br>Thousands. |
|----------------|-------------------------|
| January .. ..  | 6,824                   |
| February .. .. | 6,754                   |
| March .. ..    | 9,373                   |
| April .. ..    | 12,148                  |
| Total .. ..    | 35,099                  |

Mr. N. Chamberlain informed Mr. G. Harvey that the councils of thirty-three county boroughs and non-county boroughs had schemes for the erection of houses under the Housing Acts of 1923 and 1924 by direct labour. The number of houses included in these schemes was 3,583.

Col. Ashley, the Minister of Transport, mentioned in a recent debate that he was endeavouring to make the roads as beautiful as possible. One of the most pleasing features of the country was the beautiful old bridges. What he was trying to do when it was necessary to condemn an old bridge because it was obviously unfit to carry the modern traffic, was either to rebuild, as far as possible, with the old stone, on the old lines on a wider scale, or to allow it to remain *in situ*, and a new

bridge then rebuilt so that the old bridge should remain as a beautiful relic of the past centuries.

Mr. Cadogan asked the Under Secretary of State for the Home Department, as representing the First Commissioner of Works, who was responsible for the selection of the stone panel recently erected in Hyde Park to the memory of the late W. H. Hudson?

Mr. Locker-Lampson said that a sketch design was submitted by the Hudson Memorial Committee, and was accepted by the First Commissioner of the day after consultation with a committee of experts dealing with such questions at that time.

Lieutenant-Colonel Dalrymple White asked the Under Secretary if he was aware that the memorial gave offence not only to a large section of the public, but also to many subscribers to the Hudson Memorial Fund; and whether he could have this disfigurement to Hyde Park removed?

Mr. Locker-Lampson said he was aware that Mr. Epstein's design had raised considerable controversy, but in matters of art this was not unusual. As regarded the second part of the question, there was no evidence to show that there was a general desire for its removal.

Captain Waterhouse asked the Minister of Health how many houses of the types known as the Telford, Atholl, and Weir had been sanctioned for subsidy; and the average price at which contracts had been made for each type?

Sir Kingsley Wood said that apart from the demonstration houses for which special arrangements had been made, approval had been given to the erection of 164 Telford houses and 12 Atholl houses as eligible for subsidy under the Housing Acts. The average price per house, including foundations, paths, fences, etc., at which contracts had been made was £490 for the Telford houses, and £630 for the Atholl houses. As regarded the Weir houses, the contracts for these had all been let in Scotland.

Mr. A. M. Samuel, Parliamentary Secretary to the Overseas Trade Department, informed Sir H. Brittain that H.M. Government had accepted an invitation from the Government of New Zealand to participate in an exhibition of the world's arts, products, and manufactures, entitled "The New Zealand and South Seas International Exhibition," which would be held in Dunedin from November to April next. A building covering an area of 56,000 square feet had been set aside by the British exhibition authorities for British exhibits. One half of this area would be occupied by commercial exhibitors, whose participation was being organized directly by the exhibition authorities in conjunction with the Federation of British Industries, and the other half by the Government exhibit, which was being organized by his department. It was also hoped to arrange for a British section in the art gallery.

## Correspondence

### Lead Paint (Protection Against Poisoning) Bill

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The introduction of this Bill in its present form is to be welcomed, because it represents the greatest common measure of agreement upon this contentious subject, upon which, as is well known, the various interests concerned, master painters, master builders, operative painters, and white-lead makers, have adopted different principles, and, indeed, different angles of view of the same principle. Latterly the subject has also been embarrassed by differing opinions as to the authority of the draft Convention of the International Labour Conference: the recently announced decision of the Government not to ratify the draft Convention has removed this cause of perplexity, and it is now possible to settle the question upon its merits.

Members of the Master Painters' Federation will no doubt have a sense of satisfaction that, after many years of controversy, the policy which was put forward with so much force by their late general secretary, the lamented Mr. W. G. Sutherland, should in substance now be adopted.

It remains to see that the form of the Bill is such as to ensure regulations of the maximum efficiency, and, thereafter that the resolute observance of them secures that which, after all, is the common object of all concerned, the protection of the health of the house-painter.

JOHN HUGH SMITH.

Chairman of the White Lead Makers Section of the London Chamber of Commerce.

## Enquiries Answered

*Enquiries from readers on points of architectural, constructional, and legal interest, etc., are cordially invited. They will be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answers will be sent direct through the post. In no case is any charge made for this service. Whenever diagrams accompany an enquiry, they should be clearly drawn and lettered and inked in.*

### A SMOKY CHIMNEY.

"G." writes: "I built a house recently of stone and stone slates, etc. Until this last winter all the fires burnt well, with good draught. But since Christmas, during the gales from the north-west, the grates of stack A have smoked badly—with a most persistent downdraught. The chimney stacks are 7 ft. above the ridge of the house, and there are no trees round the house. The flues are well bent, and the grates are "Devon fires." Stack A only is at fault, and only with north-west winds. There is no fault with other two. Specially designed curative pots have been tried. I am anxious to avoid unsightly pots. At present the flue linings project 6 in. above the chimney caps. The chimneys have been swept."

—As an experiment has already been made, without success, in the use of a special pot, and as unsightly pots are not welcome, attention may be turned to the other end of the flue.

To begin at the grate. "Devon" fires are specially designed for slow and complete combustion of fuel, and are most suited to avoid excessive expenditure of fuel where the updraught is known to be vigorous. A fire lit in such a grate is not calculated to start into bright flame or revive quickly when restoked without careful attention. It is important to start and to maintain a continuous column of hot gas rising in the chimney, particularly under adverse weather conditions, and for this purpose a blower would be useful. This may be made as a temporary and movable sheet of metal to cover the whole fireplace opening, and in this case it must be provided with inlet holes for ventilation at the bottom only (sketch No. 1). Or a fixed canopy, A, may be provided and fitted at the upper part of the opening (sketch No. 2). One of the most usual sources of trouble with open grates of all sorts is the height of the fire-opening, which permits of the entry of cold air to the chimney above the level of the burning fuel. Reducing the height by means of a canopy is almost certain to effect an improvement.

It is also vitally important to see that there is nothing to

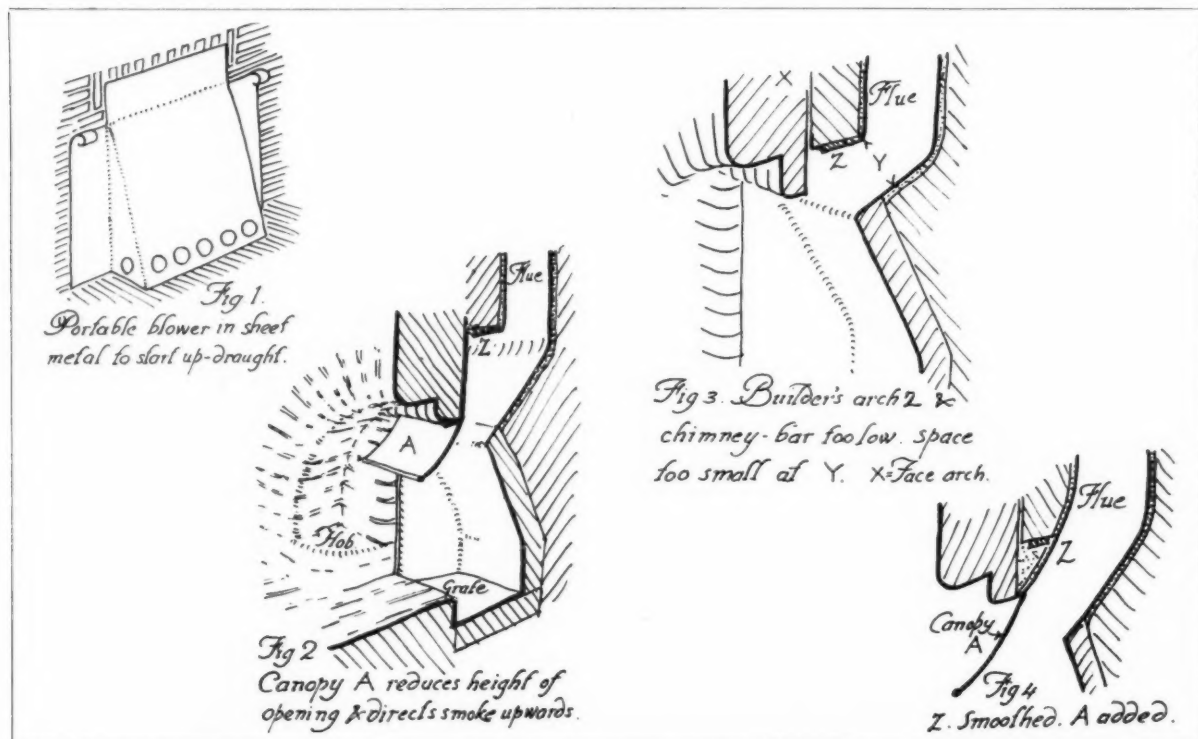
baffle and interrupt the flow of hot gas in the flue at its junction with the fireplace opening. The intake of the flue above the fire must be made smooth and regular, without ledges or pockets that will produce eddies. Changes of form and direction in the flue should be gradual, and the area of the flue must not be unduly restricted. These points are not always observed in building. It is usual for a contractor to build a large fireplace opening in brick with a face-arch and chimney-bar, Z, and then to insert the special grate in the opening. The connection between the two elements is the weak point. The trouble may be very largely due to the smoke from the "Devon" fire hitting the flat underside of the builder's arch and chimney-bar, which would naturally baffle it and direct it out of its course and into the room, particularly when strong winds are filling the chimney and offering resistance to its upward course. (See sketch No. 3.)

If this should prove to be the case the throat of the chimney may need to be enlarged, but as this will be a troublesome business, the experiment might first be made of having the part dubbed out and made smooth in cement, so that it presents no direct impediment to the free flow of the upward current. (See Fig. 4.)

W. H.

### A DANCING FLOOR.

"T. Y." writes: "It is proposed to convert into a dance hall an existing temporary building. Part of the floor has a granolithic finish, and the other part has not yet been made. I want the existing floor to remain. The most feasible treatment appears to be: (a) To cover the existing floor with wood blocks laid on mastic; (b) to lay 3-in. by 2-in. creosoted joists on the existing floor and cover it with boards of narrow width. The 3-in. by 2-in. joists would be laid flat, so as not to raise the floor level more than absolutely essential, and would be secured to the concrete near each end. Please give details of the method which is considered the most satisfactory, and which can be also executed over the part of the floor not yet made. An expensive floor is out of the question."



A SMOKY CHIMNEY: SEE ANSWER TO "G."



—The proviso "An expensive floor is out of the question" makes any reply to "T. Y.'s" question provisional, for good dancing floors are naturally somewhat costly, especially when provided with spring supports. Wood blocks of cheap character are not suitable for laying direct upon a granolithic surface, even when set in mastic, for a certain amount of moisture penetrates to the underside of the blocks and subjects them to alternate expansion and contraction, which tears them free from their bed. Even when the whole floor does not shake free and rattle, certain blocks here and there absorb more moisture than others and swell upwards above the level of the rest. They have to be planed and sandpapered down to a smooth surface and repolished if the floor is to be kept smooth and slightly.

Possibly the best method of making a smooth floor will be to attach small creosoted sleeper joists to the granolithic floor and to provide the unfinished portion of the floor with joists placed at similar distances apart, centre to centre, and supported upon wall-plates upon honeycomb sleeper walls.

To equalize all parts a false floor should be first laid on the creosoted sleepers and joists with a thin upper floor of hardwood on top. To obtain the maximum of strength and wear from a minimum of material, as well as to make a thoroughly united floor, the boards should be laid diagonally so that the upper floor crosses the lower, and both cross the lines of joists at angles of 60 deg. By making a laminated construction in this way the difference in the amount of support afforded by the old and new portions of the floor will be minimized, for the floor-boards will contribute something to the strength and elasticity of the whole. The wood must be dry and thoroughly well-seasoned when laid, and ample ventilation must be provided between the joists and sleepers to carry away any moisture that may arise from the concrete covering the site.

To ensure that the upper floor will lie perfectly level the nails fixing the false floor must be punched in, and the surface planed smooth.

The upper layer is composed of floor-boards in narrow widths, prepared with groove and tongue joints, adapted to some method of secret nailing so that nail or screwheads will not appear in the finished work.

In view of the trouble that is occasioned by any irregularity in the surface of a dancing floor it is well to select hardwood boards cut radially from the heartwood of the log. A wood of pleasant natural colour that does not require staining, and which polishes in use, is preferable to one that needs to be tinted artificially and shows every scratch. The extra cost of selected material soon pays for itself in saving in the repair bill.

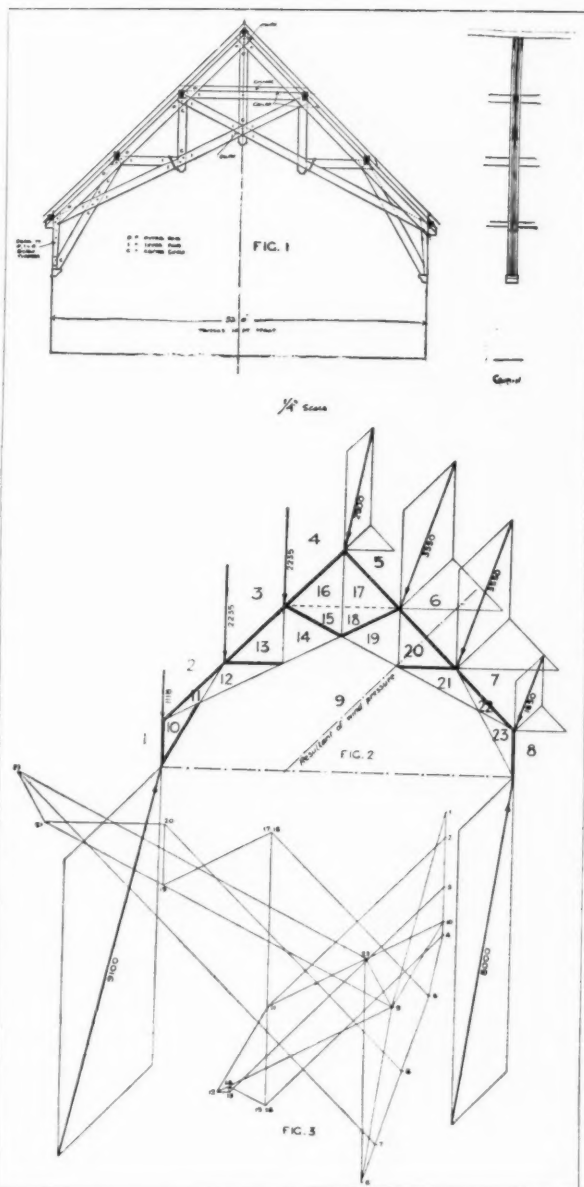
W. H.

## ROOF TRUSS OF DEALS.

"T. L." writes: "Please give me your opinion on the suggested roof shown on enclosed drawing (reproduced). I have figured no scantlings, as it is upon this, the bolting and general stability and economy, that I would like an independent opinion. The building would be permanent, and the roof tiled and plastered under the rafters and at collar level."

—Fig. 1 is the roof truss submitted. Draw the frame diagram Fig. 2, add the load lines allowing 30 lb. sq. ft. horizontal for wind-pressure, 28 lb. sq. ft. vertical for dead weight of ceiling, rafters, purlins, and plaster, and, say, 672 lb. for truss, giving 2,235 lb. in each bay for vertical loading, and 1,608 lb. in each bay for wind normal to roof plane. Then the reactions for dead load will be each 6,705 lb., and the resultant of wind-pressure, 4,824 lb., cutting the springing line in the proportion of 11.5 and 20.5, making the inclined reactions  $\frac{11.5}{32} \times 4,824 = 1,733$ , and  $\frac{20.5}{32} \times 4,824 = 3,091$ . These being put down to scale and the resultants drawn, the stress diagram may be proceeded with. Number all the external spaces in order clockwise, beginning on the left, then the internal spaces. Complete the stress diagram as Fig. 3. Note the direction of the stresses at each joint, and mark compression members by thick lines, tension by thin lines, and no stress by dotted lines. Scale off the amount of stress and draw up table as shown. Allowing 1,000 lb. sq. in. on net section in tension, and 500 lb. sq. in. on gross section in compression, the outer pair of timbers will be each  $9 \times 2\frac{1}{2}$ , the inner pair each  $9 \times 1\frac{1}{2}$ , the centre single  $9 \times 1\frac{1}{2}$ , the posts  $2-6 \times 2\frac{1}{2}$  and  $3-6 \times 1\frac{1}{2}$ , the half collars  $2-9 \times 1\frac{1}{2}$ , the collars  $2-9 \times 1\frac{1}{2}$ . All bolts  $\frac{3}{4}$  in. diameter. A  $\frac{3}{4}$  in. bolt will resist 625 lb. tension or compression in a member per inch in thickness. There is no direct stress in the upper collar, but it is a desirable addition.

HENRY ADAMS.



ROOF TRUSS OF DEALS. SEE ANSWER TO "T. L."

| Member. | Actual Stress lbs. | Stress Provided For. | Required Minimum Sect. sq. in. | Gross Section Provided.           | No. of bolts. |
|---------|--------------------|----------------------|--------------------------------|-----------------------------------|---------------|
| 1-10    | + 5,000            | + 10,200             | 20'4                           | 6 × $2\frac{1}{2}$<br>1<br>1<br>1 | 6             |
| 8-23    | + 10,200           |                      |                                |                                   |               |
| 2-11    | + 11,160           |                      |                                |                                   |               |
| 3-13    | + 13,500           | + 23,500             | 47                             | 9 × $2\frac{1}{2}$<br>2           | 8             |
| 4-16    | + 11,160           |                      |                                |                                   |               |
| 5-17    | + 10,300           |                      |                                |                                   |               |
| 6-20    | + 15,600           | + 5,400              | 17'9                           | 9 × $1\frac{1}{2}$<br>1           | 10            |
| 7-22    | + 23,500           |                      |                                |                                   |               |
| 10-9    | + 4,500            |                      |                                |                                   |               |
| 11-12   | + 4,500            | + 5,400              | 9                              | 9 × $1\frac{1}{2}$                | 5             |
| 23-9    | + 2,600            |                      |                                |                                   |               |
| 21-22   | + 2,600            |                      |                                |                                   |               |
| 10-11   | + 8,800            | + 5,400              | 10'8                           | 9 × $1\frac{1}{2}$<br>1           | 3             |
| 12-9    | + 8,200            |                      |                                |                                   |               |
| 14-9    | + 8,200            |                      |                                |                                   |               |
| 18-19   | + 5,400            | - 2,780              | 2'8                            | 9 × $1\frac{1}{2}$<br>1           | 3             |
| 22-23   | + 17,900           |                      |                                |                                   |               |
| 21-9    | + 17,900           |                      |                                |                                   |               |
| 19-9    | + 11,800           | - 12,400             | 12'4                           | 9 × $1\frac{1}{2}$<br>1           | 7             |
| 14-15   | + 1,850            |                      |                                |                                   |               |
| 12-13   | + 560              |                      |                                |                                   |               |
| 20-21   | + 5,400            | —                    |                                | 9 × $1\frac{1}{2}$<br>1           |               |
| 13-14   | + 280              |                      |                                |                                   |               |
| 19-20   | + 2,780            |                      |                                |                                   |               |
| 15-18   | + 12,400           | —                    |                                | 9 × $1\frac{1}{2}$<br>1           |               |
| 16-17   | + 12,400           |                      |                                |                                   |               |
| 15-16   | 0                  |                      |                                |                                   |               |
| 17-18   | 0                  |                      |                                |                                   |               |



# The Week's News

## Housing at Windsor.

The Windsor Corporation have decided to erect fifty-six more houses.

## More Houses for Streatham and Clapham.

About 200 more houses are to be built in Streatham and Clapham Park.

## Forty Houses for Wellingborough.

Forty houses are to be erected by the Wellingborough Urban District Council.

## Doncaster's New Water Scheme.

The Ministry of Health have approved a water scheme for Doncaster to cost £120,000.

## More Houses for Barnes.

The Barnes Urban District Council have decided to build an additional thirty-two houses in Lower Richmond Road.

## The Proposed Road Across Oxshott Heath.

The Esher Urban District Council are opposing a proposal to make a 50-ft. road across Oxshott Heath, a famous beauty-spot.

## A New Bridge for Northamptonshire.

The Northamptonshire County Council have decided to spend £50,000 on a bridge over the railway and river at Irthlingborough.

## Aberdeen's Housing Needs.

According to the latest official "census" Aberdeen requires fully 1,500 houses in order to relieve the overcrowding, largely due to sub-letting.

## Doncaster Housing.

The Doncaster Rural District Council have decided to borrow £1,300 for the purchase of a site and £22,723 for building houses at Edlington.

## A New Club for Shipley.

Messrs. Moore and Crabtree, of Queensgate, Bradford, architects, have prepared plans for a new club for the Motormen and Electrical Trades Association, Ltd., at Shipley.

## More Houses for Ebbw Vale.

The Housing Committee of the Ebbw Vale Urban District Council have decided, subject to sanction of the Ministry of Health, to erect 100 houses under the Wheatley subsidy scheme.

## Hemsworth Rural Housing.

The Hemsworth Rural District Council have decided to apply to the Ministry of Health for sanction to a loan of £53,684 to defray the cost of the erection of 102 houses at Grimethorpe.

## Thirty Houses for Coalville.

The Coalville Urban District Council have received the sanction of the Ministry of Health to build thirty houses on the Coalville site, bringing the total council houses erected in the urban area to 135.

## A Lighthouse for Hartlepool.

It is proposed to build a new lighthouse on land now occupied by the Balaclava gun at Hartlepool. The old lighthouse was pulled down during the war, and a temporary structure was placed on the Town Moor.

## Bolton's War Memorial.

A monument in Victoria Square and a Hall of Memory in the portico of the Town Hall have been decided upon as a war memorial for the town of Bolton. The architects are Messrs. Bradshaw, Grass, and Hope.

## Melton Workhouse to be Extended.

The Melton Board of Guardians propose to make structural alterations to the workhouse to meet the requirements of the Ministry of Health. They include the provision of another dining hall and extension of the casual wards.

## Housing at Goole.

In connection with a scheme for the erection of 200 houses, the Goole Urban District Council have made arrangements for the purchase of three plots of land in Westfield Avenue and Dunhill Road, and eight acres in Marcus Street.

## Twelve Hundred New Houses for Liverpool.

A provisional contract for 1,250 additional brick houses has been sanctioned by the Liverpool Housing Committee. The houses will be of the parlour and the non-parlour types, and will be erected on land in the West Derby, Walton, Clubmoor, and Prescot Road districts.

## Amiens Cathedral in Danger.

Fears are expressed as to the safety of the front of Amiens Cathedral, following a subsidence of the ground in front of the building. A hole 24 ft. deep and 60 ft. in diameter appeared and was filled up by torrential rains. Precautions have been taken to deal with the difficulty.

## £200,000 for New Churches.

The Bishop of Southwark, taking the chair at the annual meeting of the Southwark Diocesan and South London Church Fund, said one of the problems of South London was the provision of churches for rapidly growing districts. No fewer than twelve new churches must be built in the next few years, and in addition six churches must be rebuilt; and for those purposes they would need £200,000.

## The Proposed Bridge over the Ouse.

The proposal to construct a new bridge over the Ouse at Boothferry is before the House of Lords Committee. When completed, the bridge will form an important link between the East and West Ridings. It has the support of the Ministry of Transport, which is contributing half the cost. As designed by Mr. Basil Mott, it will have a swing span of 125 ft. The total cost is estimated at £112,000.

## The Preservation of St. Paul's.

Now that the area under the dome has been cut off by the temporary screen erected in the nave, the work necessary for the preservation of St. Paul's Cathedral is well under way. The organ is being removed, and great care is being taken to protect the old carved timber of the organ and the stalls from injury. Photographs of every portion are taken before removal, to ensure accurate re-erection.

## Repairs at Windsor Castle.

In connection with the repairs to the lead roofs at Windsor Castle, which are now in progress, a series of tests have been carried out with the vibrograph to ascertain whether the painted ceilings in some of the rooms would be adversely affected by the vibration set up in the course of the work. The results of the tests show that no more vibration will be caused by the proposed operations than is ordinarily caused by a gale of wind.

## The Threatened City Churches.

A petition against the proposed demolition of City churches was presented in the House of Lords by the Earl of Crawford, signed by a representative of the Royal Academy of Art, the R.I.B.A., the Society for the Protection of Ancient Buildings, and the Society of Antiquaries. He asked the House to take the petition into consideration in view of the fact that a Bill raising the issue of the destruction of the churches was now before a joint committee of the two Houses of Parliament.

## Building Plans Approved.

According to "The Labour Gazette" returns from local authorities in 141 of the principal urban areas in Great Britain (except the London County Council area), with a total population of 15,216,000, show that in April, 1925, plans were passed for buildings of an estimated cost of £5,372,600, as compared with £5,495,300 in March, 1925, and £4,698,000 in April, 1924. Of the total for April, 1925, dwelling-houses accounted for £3,473,300; factories and workshops for £332,800; shops, offices, warehouses, and other business premises for £337,500; and other buildings, and additions and alterations to existing buildings, for £1,229,000.

## List of Competitions Open

## Societies and Institutions

| Date of Delivery. | COMPETITION.   |
|-------------------|--|
| June 4            | Branch Library to be erected for the Belfast Corporation. The Competition is limited to architects in practice in Northern Ireland or their assistants. Assessor, Mr. James Cumming Wynnes, M.B.E., F.R.I.B.A. Apply, with deposit of £1 is., to the Secretary.  |
| June 11           | National Commemorative War Monument, to cost one hundred thousand dollars, for the Government of Canada. Apply Office of the Secretary, Department of Public Works, Hunter Buildings, Ottawa. A few copies of the conditions, together with declaration forms, can be obtained from the R.I.B.A.   |
| *June 30          | Lay-out of open spaces and fortifications between Valletta and Floriana and those encircling Floriana. Premiums £1,000 and £500. An indemnity of £100 will be awarded to three other designs showing conspicuous merit. Assessors, Mr. E. P. Warren, F.S.A., and Professor Patrick Abercrombie, A.R.I.B.A.   |
| July 1            | An extension building adjacent to the Shirehouse, Norwich, for the Norfolk County Council. Premiums £150, £100, and £50. Assessor, Mr. Godfrey Pinkerton, F.R.I.B.A., on the whole of the designs submitted, and to make the award. Apply Mr. H. C. Davies, Clerk of the Council, The Shirehouse, Norwich.   |
| Sept. 1           | High bridge over Copenhagen Harbour. Three prizes to the value of Kroner 35,000. Apply City Engineer's Office, Town Hall, Copenhagen. Deposit of Kroner 100 (returnable).  |
| Oct. 1            | The Municipality of Drammen, in Norway, invites Norwegian and foreign architects and engineers to compete for the construction of a new bridge across the river of Drammen (Drammenselven) between the two neighbourhoods Bragernes and Strømsø. Judging Committee: Professor Otto Linton, Stockholm, appointed by the Norwegian Engineers' Association; Mr. Arne Eide, architect, Oslo, appointed by the Norwegian Architects' Association; Mr. M. E. N. Saxegaard, district-chief, appointed by the Norwegian State Railways; Mr. Olaf Stang, engineer-in-chief, Oslo; Mr. U. Lied, chief physician, chairman, appointed by the Municipality of Drammen; Mr. Otto K. Römcke, wholesale merchant, Drammen; and Mr. A. Heitmann Arntsen, secretary, Drammen. Mr. Lied and Mr. Saxegaard are respectively president and vice-president of the committee. The following prizes are offered for the best designs: First prize, 10,000 Norwegian crowns; second prize, 8,000 Norwegian crowns; third prize, 6,000 Norwegian crowns. Apply Bureau of the Government Engineer (Statsingeniørkontoret) at Drammen. Deposit 40 Norwegian crowns. |
| Dec. 31           | The Argentine Government offer prizes of 10,000, 5,000, 4,000, 3,000, and 2,000 Argentine gold pesos for the best architectural designs for a National Institute for the Blind. Apply Enquiry Room, Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1.   |
| No date           | Rebuilding of Bethel Baptist Church, Pontlottyn. Premium £5. Apply Mr. J. R. Mathias, Rose Villa, Pontlottyn.  |
| No date           | Proposed new out-patient and casualty department for the Board of Management of the Wolverhampton and Staffordshire Hospital. Assessor, Mr. T. R. Milburn, F.R.I.B.A. Premiums, £200, £150, and £100. Apply, with deposit of £1 is., to Mr. W. H. Harper, House Governor and Secretary, Wolverhampton and Staffordshire Hospital.  |

\* Date of application passed.

## Competition News

## Uganda Railway, New Offices, Nairobi.

Following are the results of the Uganda Railway, New Offices, Nairobi competition:

First Premium (£200).—F. Gordon McIntosh, architect, 222 St. Audries Street, Pretoria, South Africa.

Second Premium (£100).—C. A. Thomas and Herbert Jones, architects, Salisbury Chambers, Wind Street, Swansea, South Wales.

## Gower Rural District Housing Competition.

The following notice has been issued by the R.I.B.A.: "Members of the R.I.B.A. must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions."

## Coming Events

## Wednesday, June 3.

L.C.C. Central School of Arts and Crafts, Southampton Row, W.C.—Exhibition of Students' Work. 10 a.m. to 8 p.m. Closing June 27.

## Monday, June 8.

R.I.B.A., 9 Conduit Street, W.—Special General Meeting. 8 p.m.

## St. Joseph's Memorial Church, Leyton

The whole of the expanded metal lathing in the St. Joseph's Memorial Church, Leyton, London (illustrated in our issue for May 20), was manufactured and erected by the Expanded Metal Company, Limited, of York Mansion, Petty France, Westminster, S.W.1. Mr. E. Bower Norris, A.R.I.B.A., of Messrs. Sandy and Norris, F. and A.R.I.B.A., of Stafford, was the architect.

## The City Churches.

An exhibition of drawings, water-colours, and photographs of London City churches will be held in the R.I.B.A. Galleries from Friday, June 5, to Saturday, June 13, inclusive. The exhibition will be opened at 3.30 p.m. on Friday, June 5, by Mr. J. C. Squire, President of the Architecture Club.

## The R.I.B.A. New Class of Subscribers.

In the Supplemental Charter recently granted to the R.I.B.A. provision is made for the formation of a non-corporate class of subscribers. The Council have the power to elect to this new class any persons who, not being professional architects, are interested in the activities of the Royal Institute and in architectural matters generally. "Subscribers" will be entitled to use the loan and reference library, to attend all general meetings (except private business meetings), and to receive a copy of the annual report. They will not, however, be entitled to use in connection with their name or business any words or initials indicating that they are members or connected with the Royal Institute. The annual contribution payable by a "Subscriber" will be £1 is. The first payment will become due within two months of election, and subsequent payments on the first of January each year. Subject to the additional payment of 12s. per annum, subscribers will also receive post free the R.I.B.A. Journal, which is published fortnightly during the session (November to June), and monthly during the recess. The Council cordially invite applications from ladies or gentlemen who desire to be thus associated with the work of the Royal Institute, and the necessary nomination form can be obtained on application to Mr. Ian MacAlister, the secretary, R.I.B.A.

## The Northern A.A. (Teesside Branch).

The annual spring meeting of the Teesside branch of the Northern Architectural Association was held at Stockton. A visit was paid to St. Luke's Church, Thornaby, by the courtesy of the Vicar, and Mr. G. E. Charlewood was present to explain both the work executed and future intentions for the completion of the church. The final portion of the programme was held at the Vane Arms Hotel, Stockton, when those attending were the guests of the chairman of the branch (Mr. T. W. T. Richardson). Later a general discussion took place on "Architectural Education." Messrs. J. Clayton (Darlington), R. R. Kitching (Middlesbrough), and C. F. Burton (West Hartlepool) being the chief speakers.

## The Surveyors' Institution.

The annual meeting of the Surveyors' Institution was held at 12 Great George Street, Westminster, under the chairmanship of the President, Sir Edwin Savill. Prizes were presented to the candidates who had successfully passed the examinations of the Institution. The annual election of office-bearers has resulted as follows: President, Mr. J. W. Wallis; vice-Presidents, Mr. Dendy Watney, Mr. H. N. Cobb, Mr. E. S. Cox, and Mr. E. A. Rawlence.

The fifty-seventh annual report pointed out that while the professional membership remained steady, the total of those connected with the institution was 6,343, an increase of 162 on last year's figures, owing to the large number of examinees enrolled as probationers. It is from these, the report adds, that the classes of professional members will be recruited in future.

The number of candidates who sat for the preliminary examinations this year was 118, of whom 72 passed. For the professional examinations there were 768 candidates, and 458 passed. It has been decided to include agricultural and tenant-right valuations among the subjects for which special diplomas may be obtained. The names of nine candidates have been sent in, and the first examination in this subject will be held at the beginning of July. The next triennial examinations in each of the subjects for which diplomas may be obtained—land surveying, forestry, sanitary science, rating, and agricultural valuations—will be held next year.

Several new exhibits have been added to the forestry museum of the Institution, of which the chief are a set of large panels in veneer made from home-grown timber, and a large collection of various articles made from home-grown timber which formed part of last year's timber exhibit at Wembley.

# Rates of Wages in the Building Trades<sup>†</sup>

The following table shows the revised rate of wages for craftsmen (bricklayers, masons, carpenters and joiners, woodcutting machinists, slaters, plumbers, plasterers and painters) and labourers in the building trade. The labour rates for London are given in the Table of Current Prices published on pages XXVII, XXVIII.

| Grade.     | Craftsmen. | Labourers. | Grade.     | Craftsmen. | Labourers. | Grade.     | Craftsmen. | Labourers. |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| A .. .. .  | s. d.      | s. d.      | B .. .. .  | s. d.      | s. d.      | C .. .. .  | s. d.      | s. d.      |
| A1 .. .. . | 1 8        | 1 2½       | B1 .. .. . | 1 6        | 1 3½       | C1 .. .. . | 1 4½       | 1 0½       |
| A2 .. .. . | 1 7½       | 1 2½       | B2 .. .. . | 1 5½       | 1 3½       | C2 .. .. . | 1 4        | 1 0½       |
| A3 .. .. . | 1 7        | 1 2½       | B3 .. .. . | 1 5        | 1 3        |            |            |            |
|            | 1 6½       | 1 2        |            | 1 4½       | 1 2½       |            |            |            |

The towns in which the above Grade rates have been reported to apply are shown below, divided into their main Area Groups. The principal exceptions are indicated, in the notes appended to each group. In towns marked\* the rate for painters is 1d. less than that paid to other craftsmen, and in those marked † it is 3d. less than the craftsmen's rate.

## NORTH EAST COAST:—

**Grade A.**—Abwick, Anfield Plain, Barnard Castle, Bishop Auckland, Blackhill, Blyth, Chester-le-Street, Censett, Crook, Darlington, Durham, Gateshead, Hartlepool, Hebburn, Hexham, Jarrow, Middlesbrough, Morpeth, Newcastle, North and South Shields, Staham Hartour, Shildon, Stanley, Stockton-on-Tees, Sunderland, Thornaby, Wallsend, Whitburn, Whitley Bay, Willington and Wooler. **Grade A2.**—Berwick-on-Tweed.

## YORKSHIRE:—

**Grade A.**—Barnsley, Batley, Beverley, Bingley, Birstall, Bradford, Brighouse, Castleford, Cleethorpes, Colne Valley, Crosshills, Dewsbury, Doncaster, Grimsby, Guiseley, Halifax, Harrogate, Hebden Bridge, Holmfirth, Horbury, Huddersfield, Hull, Ilkley, Immingham, Keighley, Leeds, Mexborough, Mirfield, Morley, Normanston, Ossett, Pontefract, Pudsey, Rawdon, Rotherham, Scunthorpe, Selby, Sheffield, Shipley, Sowerby Bridge, Spen Valley, Wakefield, Wombwell, Yeadon, and York. **Grade A1.**—Bridlington and Scarborough. **Grade A3.**—Barnoldswick, Driffield, Filey, Goole, Skipton, Whitley, and Worksop. **Grade B3.**—Kirby Moorside, Malton, Northallerton, and Pickering.

[NOTE.—Malton was up-graded on 1st July from B3 to A3 by the Yorkshire Joint Regional Wages Committee, but pending the result of an appeal against the regrading, B3 rates are being paid. Barnoldswick, Goole, Skipton, and Whitley, craftsmen, 1s. 7d.; labourers, 1s. 2½d.]

## NORTH WESTERN COUNTIES:—

**Grade A.**—Accrington, Adlington, Alderley Edge, Altrincham, Ashton-in-Makerfield, Ashton-under-Lyne, Atherton, Bacup, Barrow, Birkdale, Bispham, Blackburn, Blackpool, Blackrod, Bolton, Broughton (Flints.), Burnley, Bury, Carlisle, Chester, Chorley, Clayton-le-Moors, Cleveleys, Clitheroe, Colne, Connaught Quay, Dalton-in-Furness, Darwen, Denton, Droylesden, Dukinfield, Eccles, Farnworth, Fleetwood, Frodsham, Glossop, Great Harwood, Haslingden, Hawarden, Helsby, Heywood, Higher Kinnerton, Horwich, Hyde, Kirkham, Leigh, Leyland, Littleborough, Longridge, Lymm, Lytham, Manchester, Middleton, Mossley, Nelson, Oldham, Ormskirk, Oswaldtwistle, Padilham, Pendlebury, Poulton, Preston, Prestwich, Queensferry, Radcliffe, Ramsbottom, Rawtenstall, Rishton, Rochdale, Run-corn, St. Anne-on-Sea, St. Helens, Saddleworth, Sale, Salford, Shaw, Shotton, Southport, Stalybridge, Stockport, Swinton, Thornton, Todmorden, Tyldesley, Walkden, Warrington, Westhoughton, Whalley, Whitefield, Widnes, Wigan, and Wilmslow. **Grade A1.**—Lancaster, Macclesfield, Morecambe, and Wrexham. **Grade A3.**—Ascam, Broughton-in-Furness, Buxton, Chapel-en-le-Frith, Cleator Moor, Congleton, Coniston, Crewe, Distington, Egremont, Grange-over-Sands, Harrington, Hayfield, Knutsford, Macclesfield, Maryport, Middlewich, Nantwich, New Mills, Northwich, Sandbach, Tarporley, Ulverston, Whitehaven, Winsford, and Workington. **Grade B1.**—Colwyn Bay, Conway, Holywell, Llandudno, Llandudno Junction, Mostyn, Prestatyn, Rhos and Rhyl. **Grade B2.**—Ambleside, Bowness-on-Windermere, Cockermouth, Grasmere, Kendal, Keswick, Langdale, Penrith, and Windermere. **Grade B3.**—Bangor, Carnarvon, Holyhead, and Llanfairfechan.

[NOTE.—In the Liverpool and Birkenhead districts the rates are 1s. 8½d. for carpenters and joiners, woodcutting machinists, and painters, 1s. 9d. for other craftsmen, and 1s. 3½d. for labourers. The rate for plumbers at Warrington is reported as 1s. 9d.; New Mills and Whaley Bridge, craftsmen, 1s. 7d.; labourers, 1s. 2½d.]

## MIDLAND COUNTIES:—

**Grade A.**—Alfreton, Belper, Bilston, Birmingham, Blackheath, Chesterfield, Coalville, Coventry, Derby, Heanor, Hinckley, Ilkeston, Kenilworth, Langley Mill, Leek, Leicester, Lincoln, Long Eaton, Loughborough, Mansfield, North Staffordshire (Stoke-on-Trent, Burslem, Hanley, and Newcastle-under-Lyme), Nottingham, Nuneaton, Oldbury, Ripley, Sutton Coldfield, Sutton-in-Ashfield, Swanwick, West Bromwich, Willenhall, and Wolverhampton. **Grade A2.**—Brierley Hill, Burton-on-Trent, Coaley, Cradley Heath, Darlaston, Dudley, Gornal, Halesowen, Knowle, Melton Mowbray, Northampton, Old Hill, Rugby, Sedgely, Solihull, Stafford, Stourbridge, Swadlincote, Walsall, and Wednesbury. **Grade A3.**—Atherstone, Bewdley, Boston, Bromsgrove, Cannock, Droitwich, Gainsborough, Grantham, Hednesford, Kidderminster, Leamington, Lichfield, Louth, Malvern, Matlock, Newark, Oakengates, Peterborough, Redditch, Retford, Rugeley, Shifnal, Shrewsbury, Skegness, Sleaford, Southwell, Stourport, Stratford-on-Avon, Tamworth, Warwick, Wellington, and Worcester. **Grade B1.**—Oakham, Oundle, Raunds, Rushden, Thrapston, and Uxeter. **Grade B2.**—Bridgnorth, Church Stretton, Horncastle, Ludlow, Newport, Spalding, and Wirksworth.

[NOTE.—The rate for plumbers at Chesterfield is reported as 1s. 9d. and at Stafford as 1s. 8d., and for labourers at Ludlow, 1s. 3½d.]

## EASTERN COUNTIES:—

**Grade A3.**—Brentwood, St. Albans, and Welwyn Garden City. **Grade B.**—Bedford, Cambridge, Felixstowe, Ipswich, Luton, and Norwich. **Grade B1.**—Baldock, Biggleswade, Brantree, Chelmsford, Clacton, Colchester, Frinton, Halstead, Harpenden, Hatfield, Hertford, Hoddesdon, Ingateside, Letchworth, Lowestoft, Southend-on-Sea, Stevenage, Stotfold, Walton-on-the-Naze, and Yarmouth. **Grade B2.**—Dovercourt, Gorleston, Harwich, King's Lynn, Newmarket. **Grade B3.**—Amphill, Attleborough, Aylsham, Bishop's Stortford, Braughing, Cromer, Dunstable, Ely, Fakenham, Leighton Buzzard, March, Mick Hadham, Puckeridge, Southold, Standon, Stowmarket, Tring, and Woodbridge. **Grade C1.**—Aldeburgh, Halesworth, Leiston, Saxmundham, Wickham Market, and Wymondham. **Grade C2.**—Coltishall and Saffron Walden.

## SOUTHERN COUNTIES:—

**Grade A2.**—Gravesend and Northfleet. **Grade A3.**—Addlestone, Ashford (Middlesex), Ashted,† Colham, and Leatherhead.† **Grade B.**—Aldington, Ascot, Didcot, Henley, Maidenhead, Oxford, Portsmouth, and Reading. **Grade B1.**—Amersham, Bournemouth, Bracknell, Brighton, Byfleet, Chatham, Chalfonts, Chesham, Christchurch, Dorking, Eastbourne, Eastleigh, Egham, Eton, Gerrard's Cross, Gillingham, Gosport, Guildford, Hove, Maidstone, Marlow, Poole, Redhill, Reigate, Rochester, Sevenoaks, Slough, Southampton, Staines, Sunningdale, Sunninghill, Tilehurst, Tonbridge, Tunbridge Wells, Windsor, Woking, Wokingham, and Wycombe. **Grade B2.**—Bexhill, Bramley, Cranleigh, Fareham, Godalming, Haslemere, Horsham, Littlehampton, New Forest (Brookhurst, Lymington, Lyndhurst, Milford, New Milton and Ringwood), Oxted, Winchester, Witley and Worthing. **Grade B3.**—Arundel, Ashford (Kent), Aylesbury, Bagshot, Banbury, Basingstoke, Bicester, Bletchley, Bognor, Bosham, Broadstairs, Buckingham, Burgess Hill, Camberley, Canterbury, Chichester, Crawley, Deal, Dover, East Grinstead, Farnham, Faversham, Fenny Stratford, Folkestone, Hastings, Havant, Heme Bay, Hythe, Liphig, Margate, Midhurst, Milton Regis, Newbury, Newport Pagnell, Pangbourne, Petworth, Romsey, Sandgate, Sittingbourne, Southsea, Sturminster Newton, Swanage, Walmley, Wendover, Westgate, Whitstable, Witney, Wolverton, and Woodstock. **Grade C.**—Andover. **Grade C1.**—Hayward's Heath, Isle of Wight, and Tidworth. **Grade C2.**—Alton,\* Hartley Wintney,\* Hawkhurst, Petersfield, Rye, and Staplehurst.

[NOTE.—Amersham, Bournemouth, Brighton, Chalfonts, Christchurch, Eastbourne, Eastleigh, Egham, Englefield Green, Eton, Gerrard's Cross, Gosport, Hove, Poole, Slough, Southampton, Staines, Windsor, Wokingham, and Wycombe, craftsmen, 1s. 6d.; labourers, 1s. 1½d.]

## SOUTH WESTERN COUNTIES:—

**Grade A.**—Bristol. **Grade A1.**—Devonport\* and Plymouth.\* **Grade A2.**—Newton Abbot, Paignton, and Torquay. **Grade B.**—Bath, Cheltenham, Exeter,\* Gloucester,\* Hereford,\* Swindon,\* and Ross-on-Wye.\* **Grade B1.**—Barnstaple, Princetown, Stroud, Taunton, and Weston-super-Mare. **Grade B2.**—Bridgwater, Burnham-on-Sea, Cirencester,\* Coleford,\* Exmouth, Ledbury,\* Lydney,\* Totnes,\* Weymouth,\* and Yeovil.\* **Grade B3.**—Bovey Tracey, Bex,\* Bradford-on-Avon,\* Brightham, Cheddar Valley,\* Corsham,\* Melksham,\* Midsomer Norton, Radstock, Trowbridge,\* Wellington,\* and Westbury.\* **Grade C1.**—Cerne,\* Chippenham,\* Crediton,\* Culmpton,\* Dawlish, Dorchester,\* Frome,\* Glastonbury, Minchade,\* Shepton Mallet, and Street.

[NOTE.—Exeter, painters, 1s. 6d.; other craftsmen, 1s. 7d.; labourers, 1s. 2½d.† Plymouth, Devonport and district, painters, 1s. 7d.; other craftsmen, 1s. 8d.; labourers, 1s. 3½d. Weston-super-Mare, craftsmen, 1s. 6d.; labourers, 1s. 1½d.]

## SOUTH WALES AND MONMOUTHSHIRE:—

**Grade A.**—Aberdare, Ammanford, Barry, Bridgend, Butry Port, Cardiff, Ebbw Vale, East Glamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Neath, Newport, Ogmore Vale, Pontardawe, Pontypridd, Portcawl, Port Talbot, Rhonda and Rhymer Valleys, Sirhowy Valley, Swansea and Swansea Valley. **Grade A1.**—Aberavenny. **Grade A2.**—Chepstow. **Grade B.**—Brecon, Builth, Carmarthen, Llandilo, Llandrindod Wells, and Milford Haven. **Grade B2.**—Monmouth. **Grade C.**—Pembroke and Pembroke Dock.

[NOTE.—The rate for labourers at Milford Haven is reported as 1s. 1½d.]

## SCOTLAND:—

**Grade A.**—Airdrie, Alloa, Alva, Ayr, Barrhead, Bellshill, Bridge of Weir, Burntisland, Clydebank, Coatbridge, Dumbarton, Dundee, Dunfermline, Dunoon, Edinburgh, Falkirk, Glasgow, Gourock, Grangemouth, Greenock, Haddington, Hamilton, Helensburgh, Irvine, Johnstone, Kilmarnock, Kilmarnock, Kirkcaldy, Lanark, Larbert, Largs, Leith, Leslie, Markinch, Motherwell, Musselburgh, Neilston, North Berwick, Paisley, Pencaitland, Perth, Port Glasgow, Renfrew, Rothsay, Stirling, and Wishaw. **Grade A2.**—Aberdeen, Brechin, Montrose, and Peebles. **Grade B.**—Dumfries, Galashiels, Hawick, Maxwelltown, and Selkirk.

[NOTE.—The rates quoted do not apply to plasterers and painters in Scotland, who are not affiliated to the National Wages and Conditions Council. The rate for labourers at Perth and Irvine is reported as 1s. 3d. and at Aberdeen, Brechin, and Montrose, 1s. 1½d. In the case of plasterers a rate of 1s. 9d. per hour after the increase of 4d. in August is payable at the following towns:—Airdrie, Alloa, Alva, Ayr, Clydebank, Coatbridge, Dumbarton, Dundee, Dunfermline, Edinburgh, Falkirk, Glasgow, Greenock, Hamilton, Irvine, Kilmarnock, Kirkcaldy, Leith, Motherwell, Paisley, Perth, and Stirling. **Grade A.**—Airdrie, Alexandria, Alloa, Alva, Ardrossan, Ayr, Barrhead, Bellshill, Beith, Bridge of Allan, Broxburn, Broughty Ferry, Buckhaven, Burntisland, Carnoustie, Clydebank, Coatbridge, Cowdenbeath, Dumbarton, Dundee, Dunfermline, Dunoon, Edinburgh, Falkirk, Glasgow, Gourock, Grangemouth, Greenock, Gullane, Haddington, Hamilton, Helensburgh, Irvine, Johnstone, Kennoway, Kilmarnock, Kirkcaldy, Larbert, Largs, Larkhall, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, North Berwick, Paisley, Perth, Port Glasgow, Renfrew, Rothsay, Saltcoats, Stenhousemuir, Stirling, Uddingston, Vale of Leven, Wemyss, and Windygates, painters, 1s. 8d. **Grade B.**—Aberdeen, Arbroath, Biggar, Callander, Carluke, Cupar, Galashiels, Girvan, Hawick, Kelso, Kirkcudbright, Lanark, Peebles, Selkirk, and St. Andrews, 1s. 7d. **Grade C.**—Petershead, 1s. 6d. Brechin, Forfar, and Montrose, painters, 1s. 5½d.; Dumfries and Maxwelltown, craftsmen, 1s. 7d.; labourers, 1s. 2½d. Galashiels, Hawick, Jedburgh, Kelso, and Selkirk, craftsmen, 1s. 7d.; labourers, 1s. 2½d. Inverness, joiners, 1s. 5d.]

† From "The Labour Gazette."



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