Progress with the new Government Building at Edinburgh

Architect : Thos. S. Tait, F.R.I.B.A., of Sir John Burnet Tait & Lorne.
Contractors : Messrs. Jackson, Brown & Co., Glasgow.

'PHORPRES' CELLULAR BRICKS

are being used to reduce dead-load with consequent economy in steelwork and foundations —to improve insulation, and to secure light but stable partitions.

PHORPRES

LONDON BRICK COMPANY LIMITED

HEAD OFFICE: AFRICA HOUSE, KINGSWAY, W.C.2. TELEPHONE: HOLBORN 8282
BIRMINGHAM DISTRICT OFFICE: PRUDENTIAL BLDGS., ST. PHILIP'S PLACE, B'GHAM, 3. TEL.: COLMORE 4142

THE ARCHITECTS' JOURNAL

THE ARCHITECTS' JOURNAL WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER, IS PUBLISHED EVERY THURSDAY BY THE ARCHITECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) FROM 9 QUEEN ANNE'S GATE, WESTMINSTER, S.W.1

*

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS :
BY POST IN THE UNITED KINGDOM £1 3 10
BY POST TO CANADA £1 3 10
BY POST ELSEWHERE ABROAD £1 8 6
SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING BOTH THE ARCHITECTURAL REVIEW AND THE ARCHITECTS' JOURNAL : INLAND £2 6s. ; ABROAD £2 10s.
SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

*

SINGLE COPIES, SIXPENCE ; POST FREE, EIGHTPENCE. SPECIAL NUMBERS ARE INCLUDED IN SUBSCRIPTION ; SINGLE COPIES, ONE SHILLING ; POST FREE, 1S. 3D. BACK NUMBERS MORE THAN TWELVE MONTHS OLD (WHEN AVAILABLE), DOUBLE PRICE.

*

SUBSCRIBERS CAN HAVE THEIR VOLUMES BOUND COMPLETE WITH INDEX, IN CLOTH CASES, AT A COST OF 10S. EACH. CARRIAGE 1S. EXTRA

*

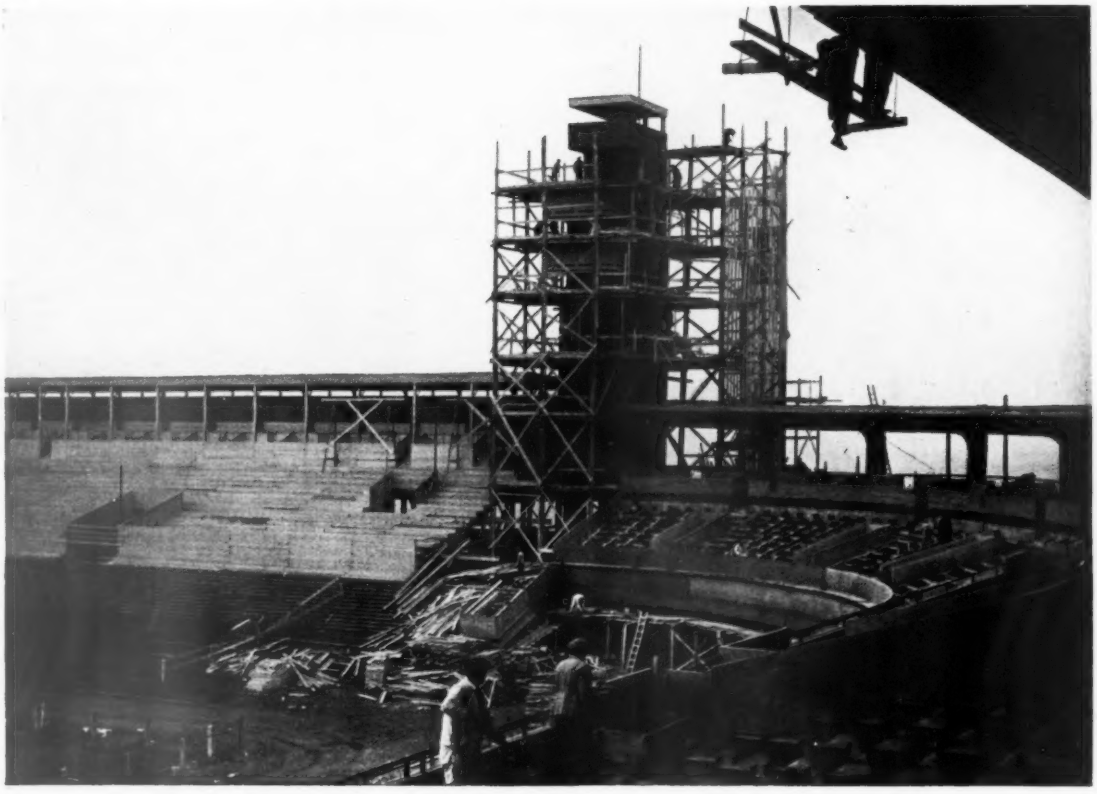
9-11 *Queen Anne's Gate, Westminster, London, S.W.1.*
TELEPHONE: WHITEHALL 9212-7 (OWN EXCHANGE)
TELEGRAPHIC ADDRESS: BUILDABLE, PARL., LONDON

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

THURSDAY, JUNE 9, 1938 NUMBER 2264 : VOLUME 87

PRINCIPAL CONTENTS

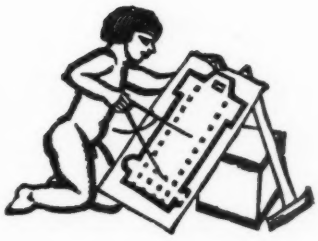
NEARING COMPLETION : MASARYK STADIUM



PROGRESS photograph of the Masaryk Stadium in Prague, which is being built for the tenth Sokol Congress.

ENGELBERG

The Benedictine Abbey at Engelberg, Switzerland, founded in 1120 and rebuilt in its present form in 1729.



THE CASE FOR A PLANNING SCHOOL

THE public are beginning to resent profiteering in land; re-housing in twelve-to-the-acre congestion; and roads on which 6,540 were killed and 230,000 injured last year. They may not know the right solutions for these things, but they are beginning to favour attempts at large-scale solutions.

A profession's activities are divided into internal administration and expression of policy on national questions. In the second part architects have made poor showing since the war. On housing, slums, roads and trading estates architects collectively have done nothing save pass resolutions of goodwill.

The reason for this state of affairs has been the concentration of professional policy for thirty years on professional consolidation. This has been extremely necessary, but its result has been that the public never imagines that architects have, or could have, any interest in things like housing, industrial location and transport.

This has been very damaging to architects and will be more so. As the country becomes more democratic the architect as planner becomes far more socially significant than as individual artist in the decorative sense. To the average man architects seem far too narrowly bound up with preservation societies, art societies and other restrictive agencies. The best kind of professional propaganda would be for architects to show that they can undertake constructive study of the national questions in which planning plays a great part.

Architects may be conscious of the truth of this as a generalization, but will yet ask: "Where is the organization and finance to be found for such studies?"

The three best-known schools of town planning could provide, in co-operation with architects, all the means necessary. This co-operation, properly sustained, can make certain that the profession will be able to play its proper part in solving the problems of territorial planning.

WHERE does the individual architect stand in all this? Bewildered and bored by the repetition of tabloid phrases about territorial planning, land utilization and the like, he may well have become mystified about the alternatives before him.

His position seems to the JOURNAL to be this:

A considerable body of opinion now considers that attempts should be made to decide upon the use to which each portion of large areas of land ought to be put in order to achieve the greatest benefit for everyone; and that, when such best uses have been finally decided, steps should be taken to see that the land to which each applies is so used. From this comparatively simple idea arises all the confusion of political manœuvre and legislation covered by phrases like town planning, land utilization, ribbon restriction, public ownership of land and so *ad nauseam*.

And from this again come the alternatives now before the architect.

Some architects, including some representatives of other architects on societies' councils and committees, consider that such planning of land use has nothing to do with architects, that architects design buildings, buildings will always be needed—in short, that a policy of non-intervention in something between an economists' wrangle and Communist agitation will leave the architects sitting pretty. This policy is, of course, the easiest.

Another section of opinion has very different views. This section considers that the most important contribution of the architect to contemporary living is his ability to *plan*; that for architects to refuse to co-operate in this greatest of *planning* questions is to admit that the profession can design the slickest of balusters but has neither ability nor ambition to cope with the house. To maintain this attitude, it is felt, in times when everything from trunk roads to pig-marketing is being co-ordinated on a national basis is the shortest road to professional suicide. If one profession cannot rise to a large view it will simply be pushed aside in favour of another which can. This second view is the view of the JOURNAL.

The individual architect may sympathize with the first—after all, his livelihood will continue to come from designing individual buildings—and yet feel that something ought to be done about the second.

It has already been suggested that the three best-known town-planning schools provide the means for architects to do that something with reasonable ease. Here the possibilities of only one of them will be considered, because it is the one which happens to be in jeopardy; this is the A.A. School of Planning.

The idea of this School was to create a centre where men already graduates of various professions could study in co-operation the problems which arise in attempts to pre-determine land use from the point of view of the best advantage to the community. Those attending at this centre were helped to place the problems encountered in correct order of importance by having put before them the views and criticisms of experts in particular ways of using land—of transport experts, agriculturists and so on. The point of view of the School was thus something new and significant: it was not one of vistas and massing, nor one of teaching the two and ninety ways of bettering the next man in handling existing town-planning legislation. It aimed at the co-operative study of the problems of providing and safeguarding a reasonably safe and healthy life for the inhabitants of a given area, large or small, urban or rural. But it studied them so far as possible with the individual human being, not existing legislation and land ownership, as the starting point.

If the opinion of architects collectively upon territorial planning problems is ever to carry weight it must be based upon studies starting from the same point. And since a School which would enable them to carry out these studies and obtain this understanding is already in existence it would seem calamitous folly to let it disappear.

A Planning School, attended by men of all the professions which territorial planning concerns, would enable architects to assemble and order the information needed as a basis for large-scale planning; it would enable them to formulate tentative policies and to check them by application to particular areas; in time it would enable them to prepare a general policy—the policy of the profession for territorial planning. It would, in time, enable them to know what they are talking about in matters of territorial planning.

Next week the Bressey Report will be considered as an example of how essential it now is for architects collectively to know what they are talking about in territorial planning.

The Architects' Journal
Westminster, S.W.1
Telephones: Whitehall
9212-7
Telegrams
Buildable
Parl
London

NOTES & TOPICS

A.R.P.

NEXT Monday's conference at the R.I.B.A. and last week's debate in the Commons make it necessary for architects to think seriously and calmly about their part in Air Raid Precautions.

*

The Home Secretary appeared to indicate that architectural co-operation was to be chiefly of value by ensuring the incorporation of reasonable protection in new buildings ; and, secondarily, in existing buildings.

*

The verbatim report of the debate, however, does not leave one with the impression that the profession's most valuable help would lie in persuading clients to carry out such precautions.

*

The Home Secretary candidly admitted that his department had not made final decisions concerning evacuation. But it was obvious that the methods of passive defence likely to be adopted were three : the evacuation of up to 3½ million children and adults ; protective measures in all suitable buildings ; a network of trenches and lighter shelters in all open spaces.

*

Evacuation, however fully the system of billeting in suitable houses in the Home Counties is used, must presumably necessitate a considerable number of camps. And such camps would represent very intricate planning problems. Similarly the trenches and shelters in open spaces, if executed on any considerable scale, must be planned as camps for shorter periods.

*

In both problems the help of architects would presumably be needed more largely than in the matter of protecting new or existing buildings.

GENERAL MEETING SHOWS ITS MIND

There was a dramatic interlude at the A.A. General Meeting last week. Sir Raymond Unwin took us " over to America right away " and showed us some impressive examples of large-scale planning in America. Suddenly, he checked his flow of slides and made an eloquent appeal on behalf of the A.A. Planning School, stressing the importance of recognizing a much broader field of vision in the training of architects.

*

Sir Raymond, when he gets going, is like several glasses of wine, and the meeting was soon intoxicated. After what seemed like a full five minutes of rollicking applause, he calmly took us back to America, showing examples of the famous Tennessee Valley territorial planning scheme which covers an area the size of England—the most imaginative co-operative enterprise the United States has ever launched.

*

In his interlude, Sir Raymond mentioned the National Planning School at Harvard and the Columbia University (New York) architecture-national-planning course which he has helped to rebuild. In this the five-year architectural course is designed from the start to culminate in a one-year post-graduate course in National Planning—strangely like the idea once current at the A.A.

*

It seems obvious, thank heaven, that the A.A. School, almost to a man, is in favour of the big idea, and if, as Sir Raymond indicated, the Planning School eventually becomes associated with London University, there will still be the same opportunity for architects to use it and to join it.

STUDENT VOTE

I am told I gave the wrong impression last week when I drew attention to the effectiveness of the student vote. Effective it is, but I did not intend to give the impression that student votes outnumbered non-student votes. These figures should make the situation clear : In this last election, 624 votes were recorded. Of these, 180 were student votes. Lowest number of votes for an elected member was 305.

WIRED FOR SHAVING

You remember, perhaps, my note some months ago on electric razors ? A friend of mine arrived in his office rather early one morning last week, and heard a faint vacuum-cleanerish buzz coming from the reception room.

*

Investigation revealed a salesman who blandly explained that his previous night's hotel wasn't the right voltage, and he didn't like to feel unkempt when calling on customers.

MANIFESTO

The large manifesto with the red border that has just been circulated about the forthcoming Woman's Fair and Exhibition at Olympia raises the question : what is an Executive Committee ?

*

The manifesto is signed by twelve people, seven of whom are the chairman of council, members of the council and the organising secretary of the D.I.A. The others are people of similar status, such as the chairman of the British Institute of Adult Education.

*

Its opening paragraph states that " we, the undersigned . . . desire to express in this manifesto the reasons which have moved us to accept this invitation to form ourselves into an Executive Committee," the invitation apparently coming from " the organizers."

*

It seems to me that either this is an executive committee (that is, the D.I.A., etc., are the *organizers*) or else it is the

usual advisory committee, in which case who are the responsible organizers? Perhaps the organizers—and/or executive committee—will tell me.

*

Anyway, "the colour scheme of the Exhibition is to be planned as a unity, and the assistance of the *British Colour Council* will be given to create a *Cavalcade of Colour*, which is to be the feature of the Grand Hall at Olympia."

B.M.A.

Undeterred by the revelations of "The Citadel," the British Medical Association has announced that its building in Tavistock Square is to be extended.

*

The architect chosen is Mr. Douglas Wood; not, as might be expected, Sir Edwin Lutyens, the designer of the existing building. The extensions, however, will be in Georgian style, "adapted to modern ideas," and the present building will probably be crowned with a flèche.

*

Care is being taken not to encroach upon the oval lily pond.

HOUSING AWARD

The illustrations on this page show a portion of the Stirlingshire's County Council's new housing scheme at Westquarter, designed by Mr. J. A. W. Grant, and the plaque which commemorates that the scheme has been selected by the Saltire Society for its housing commendation this year.

*

The intention, the very excellent intention, of these commendations is to encourage a high architectural standard in new housing schemes. In persuading the Secretary for Scotland to unveil the plaque, the Saltire Society has gone one better than the R.I.B.A.'s Allied Societies. For there can be no question that the news value, and therefore potential influence, of an award endorsed by a Secretary of State greatly exceeds an award by architects to an architect.

*

A gingering up of the present system of architectural medals and their presentation by Lords-Lieutenant and Lord Mayors is a way of improving standards to which Allied Societies do not seem to have paid enough attention.

*

I may add that Mr. Grant's scheme appears a particularly fine one.

SURVEYORS' NEW PRESIDENT

Sir Charles Bressey, author of the recently published replanning scheme for London, has been elected President of the Chartered Surveyors Institution for the coming year.

*

Sir Charles, who is the son of an architect, is the first civil servant to occupy this chair, and his election is a well-deserved reward for his four-year task.

WATER PARTY

Tonight's dance at Whistler's house, Cheyne Walk, arranged by the A.A. Sailing Club, is likely to be particularly lively. Launches are to be available, a full moon is guaranteed (although last night it looked as though it might have to hurry), and it is rumoured that the President R.I.B.A. may arrive in a gondola.

*

Tickets are said to be sold out, and I can therefore extend a slightly up-stage sympathy to those who did not apply early enough. I hope (w.p.) to enjoy myself immensely.

ANOTHER AMENITIES CASE

One is so accustomed to hearing about architects not being allowed to have a flat roof that it is a relief to see that amenities can be invoked against mock Tudor.

*

Lynford Estates wanted to build some Elizabethan houses in Winchester, but the City Council objected to "leaded glazing, half-timbered fronts, herring-bone brick-work, Gothic hinges to the front doors, brick quoins, and tiled eyebrows to the tops of some windows." On appeal to the Ministry of Health the builders were told, in so many words, that as they had already built six houses they could leave them as they were, but that they must agree to co-operate with the corporation over the elevations of the rest.

*

As there are to be 84 more it looks as though the Ministry may for once have invoked the name of amenity in a good cause. Though I have no doubt that the Elizabethan ones will sell like hot cakes.

ENTER LADY MACBETH WITH TAPIR

The Tudor style Elephant House at Regent's Park is shortly, I hear, to be demolished.

*

The baby elephants are to be housed in the tapir house, but the big riding elephants are not so easy to deal with while their new abode is being built.

*

I understand that one keeper's suggestion—"to get as much into a shed as possible and cover the rest with a tarpaulin"—is not being adopted.

*

The India rhino is also to have a new house. He is so violent, however, that he cannot be moved, and his den will be demolished and rebuilt around him. I hope they have a big contingency sum.

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

ARCHITECTURAL ASSOCIATION

Following is the result of the election for officers and Council of the Architectural Association for 1938-39: President: Mr. Verner O. Rees, F.R.I.B.A. Vice-President: Mr. J. Murray Easton, F.R.I.B.A. Vice-President: Mr. Joseph Hill, F.R.I.B.A. Hon. Secretary: Mr. S. E. Dykes Bower, F.R.I.B.A. Hon. Treasurer: Major V. H. Seymer, D.S.O., A.R.I.B.A. Hon. Editor *A.A. Journal*: Mr. A. W. Kenyon, F.R.I.B.A. Hon. Librarian: Mr. R. E. Enthoven, F.R.I.B.A. Past President: Mr. L. H. Bucknell, F.R.I.B.A.

Ordinary Members of Council.—Messrs. A. F. B. Anderson F.R.I.B.A., D. L. Bridgwater, A.R.I.B.A., W. R. Brinton, A.R.I.B.A., S. E. T. Cusdin, A.R.I.B.A., P. J. B. Harland, F.R.I.B.A., G. F. Rowe, M.C., A.R.I.B.A., Arnold Silcock, F.R.I.B.A., B. P. Westwood, A.R.I.B.A., Miss Jane B. Drew, A.R.I.B.A., and Mrs. Gillian Harrison, F.R.I.B.A.

INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTIONS) ACT 1938

Mr. Walter Elliot, Minister of Health, addressed a circular last week to all Housing Authorities calling attention to the chief provisions of the Increase of Rent and Mortgage Interest (Restrictions) Act, 1938, which received the Royal Assent on May 26, and the need for giving adequate publicity to them.

The new Act makes a considerable number of minor alterations in the rent restriction code, following in the main the recommendations of the Ridley Committee, but its principal provisions are to continue control for a further period in the case of the smaller houses, to decontrol from September 29 next about 400,000 of the larger houses (those with a rateable value in 1931 over £35 in London or £20 in the Provinces), and to put an end to the system by which a house is decontrolled when the landlord obtains possession.

Any landlord of a house with a rateable value in 1931 between £20 and £35 in London or £13 and £20 in the Provinces who claims that it is decontrolled must register his claim with the Local Authority before August 26, 1938.

The Minister endorses the view of the Ridley Committee that fuller use should be made by Local Authorities of their powers to publish information as to the rights and duties of landlords and tenants, and also of their powers to prosecute in suitable cases for offences against the Acts.

THE ARCHITECTS' DIARY

Thursday, June 9

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 113 *High Holborn, W.C. Discussion on the Architects' Registration Bill.*

Saturday, June 11

LONDON SOCIETY. *Visit to the new William Ellis School, Highgate Road, N.W. 2.30 p.m.*

Monday, June 13

R.I.B.A., 66 *Portland Place, W.1. Conference on Structural Air Raid Precautions. Until June 15. See page 984.*

Tuesday, June 14

BRITISH STANDARDS INSTITUTION. *At the Dorchester Hotel, Park Lane, W.1. Annual General Meeting.*

Wednesday, June 15

INSTITUTION OF CIVIL ENGINEERS, *Gt. George Street, S.W.1. Conversazione, 7.45 p.m.*

NEWS FROM SOUTHWARK

The Southwark Borough Council last week decided to ask the London County Council to convene a meeting of authorities and persons interested in a development scheme for the south bank of the Thames in the neighbourhood of London Bridge.

The Council has appointed Mr. P. J. Doran senior architectural assistant at a salary of £450.

ROYAL SOCIETY OF ULSTER ARCHITECTS

At the annual general meeting of the Royal Society of Ulster Architects the following office-bearers were elected: President, Mr. T. R. Eagar, F.R.I.B.A.; Vice-President, Mr. J. H. Stevenson, F.R.I.B.A.; Hon. Treasurer, J. S. Munce, B.E., L.R.I.B.A., M.INST.C.E.; Hon. Secretary, Mr. J. C. Stevenson, L.R.I.B.A. Council—Messrs. R. H. Gibson, F.R.I.B.A., M.I.STRUCT.E.; G. Hobart, T. Houston, F.R.I.B.A.; J. Seeds, F.R.I.B.A.; J. R. Young, F.R.I.B.A. Associate members of Council—Messrs. W. M. Gamble and W. B. Maxwell. Provincial representatives: Messrs. C. G. Dalzell, J. A. Davidson, F.R.I.B.A.; J. D. M'Cutcheon, and G. D. Taylor, L.R.I.B.A. Honorary auditors: Messrs. D. W. Boyd, M.R.I.A.I., and J. Scott, B.E.

THOMAS v. HAMMERSMITH BOROUGH COUNCIL

In the Court of Appeal on Thursday, June 2, Lords Justices Greer, Slesser and Mackinnon delivered their reserved judgment in the appeal by the Hammersmith Borough Council from a judgment of Mr. Justice Porter in favour of Sir Brumwel Thomas.

Mr. Justice Porter gave judgment for Sir Brumwell Thomas for £7,000, including £3,000 he had already been paid. The judgment was fully reported in the JOURNAL for December 30, 1937.

Lord Justice Greer, in giving judgment, after citing the facts of the case, said Sir Brumwell was engaged in the first place under seal to do the work on the scale fixed by the R.I.B.A. and was instructed to do the necessary drawings. After certain drawings had been made, there were certain alterations. Then Sir Brumwell went on with the work for the Brook Green site. Certain extensions were suggested and these Sir Brumwell carried out. Provision was made for payment equivalent to payment for abandoned work. He had received on account the sum of £3,000. Later the Council abandoned the work. The judge at the trial held that Sir Brumwell had done all the work under subparagraph (*b*), and he allowed an amendment, entitling him to damages for breach of contract, and in the amended claim gave judgment for Sir Brumwell for £7,000.

In the present case the architect contended that he had done most of the work. The scheme was abandoned before he had had an opportunity of completing the work, and further, that having regard to the practice among architects, if the scheme had not been abandoned a quantity surveyor could have taken out the quantities and would have called attention to matters which would have to be decided before the quantities were taken out. The Council took the view that the £3,000 covered all the architect was entitled to.

Proceeding, his lordship said the architect was entitled in his opinion to be paid for the services he had performed on the 4 per cent. scale and to damages. In his lordship's judgment, he saw no reason to differ from the conclusions come to by Mr. Justice Porter and therefore he thought the appeal should be dismissed with costs.

Lord Justice Slesser said in his view the instructions given by the Council suggested continuity of his work. He agreed with the judgment of Lord Justice Greer that the appeal should be dismissed with costs.

Lord Justice Mackinnon said it appeared that if the scheme had gone through the architect would have received £12,000. He thought the damages had been rightly assessed by Mr. Justice Porter.

The appeal was dismissed with costs.

The Court refused leave to appeal to the House of Lords in view of the fact that a new scale had or was about to come into force dealing with the question.

CIVIC HALLS, WOLVERHAMPTON

The name of Messrs. Bull Motors (Branch of E. R. and F. Turner, Ltd.) was omitted from the list of sub-contractors for the Civic Halls, Wolverhampton, published in our last issue. The firm supplied a number of motors in connection with the heating and ventilating equipment.

EXHIBITIONS

[*By D. COSENS*]

IT is generally said, and with truth, that Paul Nash interprets the English countryside with greater insight than does any other contemporary artist. Into his pale water-colours he translates the atmosphere of wind and rain and brief sunshine. But he is a painter whose work gained very greatly by his conversion to surrealism, for his gentle poetic landscapes have perhaps always needed a strong emotional stimulus for their complete success. Once they found this in the war, now more recently in surrealism. The great feeling for the personal qualities of inanimate things, trees and stones and structural forms, that has always been apparent in his painting has been intensified, and his earlier, more familiar work has developed into a type of surrealism that is, like all his painting, peculiarly English. Here strange objects may consort in limitless space with all the irrationality of a dream, but they entirely lack the menace and disquiet of their Latin cousins. In his "Nocturnal Landscape" for instance, with its huge bounding stones, the insistence on fearful possibilities that, given the elements of that painting most surrealists would find irresistible, are controlled to an exhilarating escapade. (This, incidentally, is one of his

most interesting paintings.) Perhaps it is largely because of his preference for architectural and impersonal forms that Paul Nash's pictures have a faint pleasant nostalgia, and the wistful impression of a fading dream rather than the terrifying irrationality of an immediate nightmare.

His present very successful exhibition of surreal paintings at the Leicester Galleries shows his usual direct vision, sure draughtsmanship and pale clear colours, but in addition to these accustomed qualities he has brought to his work an added intuition. In direct realism he always expressed more than the superficial characteristics of the countryside, now he looks again at the familiar trees and stones and finds, not perhaps the courageous disillusion of Tanguy or Ernst, but an increased understanding of their identity. The outstanding painting in this collection is "Winter Sea," with its powerful, simplified shapes and angular rhythm, and amongst the water-colours "The Three Rooms" and "London Landscape."

•

Sir William Nicholson is one of the most important painters of his generation. Starting at a very early age he has, at one time and another, designed posters and stage settings, and developed a special technique in woodcuts. But it is as a painter of portraits and still lives that he will always be best known. His work is notable for a balance of colour and careful placing of emphasis, and above all for its consistent integrity.

His exhibition at the Leicester Galleries contains many fine paintings. Perhaps the most interesting is a small still-life of two fish, "Gurnards" (21). This is brilliant in the exact use and control of a diagonal design for a definite purpose and remarkable in its feeling for texture. "End of Season, Sirocco" and "End of Season, 5 o'clock" are both *tours de force* in luminosity, but perhaps less permanently satisfying than the classic "Studio Window."

•

After an interval of ten years Augustus John is holding an exhibition of his latest work. Perhaps, if we were confronted with these paintings, without knowledge of their authorship, admiration and fair praise for such dramatic and masterly handling of paint would be certain, but with the full knowledge of the artist's real ability, regret defeats any attempt to be just to their superficial merits. Pictorially his work is as fine as ever, but its ease is its misfortune. Where a less gifted painter might have been forced to repeated experiment in attempting a personal interpretation, Mr. John has been content to remain at a point rather behind that at which he so brilliantly started. Even there he outshines many of his contemporaries, but he no longer adds anything valid to art.

Many of the landscapes in his exhibition are very charming, particularly "Landscape near St. Rémy" (25). But surely the unnumbered portrait of a woman in a red dress, painted some 20 years ago, deserves a more honoured place than in the upper gallery.

Recent Work by Paul Nash. Leicester Galleries.

Paintings by Sir William Nicholson. Leicester Galleries.

The Latest Paintings of Augustus John. Tooth's Galleries, 155 New Bond Street.

OFFICIAL DEPARTMENTS

II: H.M. OFFICE OF WORKS

[*By R. D. MANNING*]

THE author of the article printed below was the winner of the recent A.A.S.T.A. competition for an essay on the subject: "The Future of the Architectural Assistant." In this article, the second of a series of five, his subject is that of the present conditions and opportunities in a large official architect's department—particularly from the viewpoint of the younger architect.

The JOURNAL *believes the seriousness of this subject to be obvious. In the last nine months comparisons have been made between various aspects of official and private practice. The* JOURNAL *does not intend to enter into this controversy. It believes that, since architectural education is designed to turn out fully responsible men, the aim of the profession must be to discover a system which provides the fullest responsibility and opportunity for each member that can be made consistent with the scale of the work undertaken and differences in individual ability. This standard system—equipped with incomes as high and secure as economic conditions permit—should then be the criterion by which both private and public offices should be judged.*

To inform the profession of strong and weak points in representative official departments is the immediate intention of these articles. The formulation of a standard system based partly upon that information is the ultimate intention.

In suggesting that he should prepare these articles, the JOURNAL *considered the author's qualifications to be particularly suitable. Mr. Manning has had very wide experience in private practice, both as principal and assistant, and in public offices, and is a member of the R.I.B.A. Salaried Members' Committee.*

The articles are based upon practical data supplied by men working, or until recently working, in the departments concerned. With this reservation the facts stated and conclusions drawn are wholly the author's.

THE Office of Works can claim a very respectable, indeed an illustrious, ancestry, including such names as Inigo Jones, who acted as architect for James I and Charles I, and Sir Christopher Wren, who held the position of Surveyor of Royal Works for fifty years.

In 1832 public building works were for the first time placed under ministerial control, a department being formed to deal with such work, for which the Commissioners of Woods and Forests were made responsible. In 1851 this was reorganized and given more definite standing as the Office of Works and Public Buildings, its function being the custody of palaces, parks and public buildings not belonging to other departments. It has since become responsible for the design and erection of all Government buildings except those specifically required by the fighting services for their own use.

Organization

The same criticism applies to this office as to the L.C.C. Architect's Department with regard to the difficulty of obtaining definite information from assistants, owing to the practice of subdividing the department into watertight compartments, together with the lack of any provision for training assistants in organization and policy. The comments and descriptions given in this article are therefore subject to the same proviso, that they may display errors in detail. But information has been obtained from a number of men and incorporated in good faith.

The whole Department is under the control of the Chief Architect and is subdivided into the Surveyor's and Chief Engineer's Divisions and three Divisions under Senior Architects. The Surveyor's Division contains two sections, dealing with quantities and maintenance respectively, and the Engineer's Division contains four sections, responsible for structural, sanitary, electrical and heating work.

The architectural divisions contain from five to seven sections, each under an Architect. One division deals with public and diplomatic buildings, ancient monuments, and Customs and Excise buildings; another with employment exchanges, post offices and telephone exchanges; and the third with defence, which apparently includes mainly buildings connected with the supply of munitions, etc., to the fighting services.

Architects in charge of sections have Assistant Architects (Grades I and II) under them in mainly administrative capacities, while the drawing offices are staffed with Architectural Assistants (three grades) and varying numbers of temporary assistants.

The total architectural and technical staff employed is about 500.

Easy hours are worked, from 10 until 5, but I am told that the official hours are 10 until 6, though the rule is never

enforced, while, still more curiously, Saturday hours are apparently 10 until 1.30, but the staff is allowed to go out at 12.30—for lunch. Another version is that everyone goes at 1 o'clock. Possibly sections vary in their custom.

Holidays are good. Temporary assistants get 18 working days ; the permanent staff get a minimum of 21 working days, rising after 5 years' service to 24 days.

The rules regulating discipline and general staff routine are in the hands of, and appear to be formulated by, the clerical staff. The acquiescence of senior architects in official departments in the delegation of such matters to people whose methods and outlook differ fundamentally from those of architects is a marked feature of official offices, and a bad feature. It can only be explained, I think, by the conclusion that by the time an assistant reaches senior rank he has lost any interest he may have had in the organization of his work. This point, however, will arise again later.

How it Works

The organization of this Department displays certain features which indicate a desire to give subordinates some incentive for interest in their work, and to secure a leaven of young blood in senior posts, but in practice these efforts appear to be largely vitiated by timidity in carrying them to their logical conclusion, by unfairness in operation, and by other factors which intrude.

Some years ago, the then Chief Architect introduced the practice of allowing publication of the names of Architects in charge of sections under illustrations of work turned out by their sections. Whether or no this innovation is responsible, there has been a marked improvement in the standard of design since its introduction.

Examinations are held periodically for entry into the grade of Assistant Architect. Applicants must be under 30, and the aim is apparently to lower the average age of the senior officers. This arrangement has not been long enough in operation to gauge its effect, but it has the obvious disadvantage that, although older men are in theory equally eligible, on their merits, for senior posts, in fact attention is naturally focused on successful examinees, and I am informed that a sense of injustice does exist amongst men between 30 and 40, who feel little confidence that their possibly wider experience will receive recognition, just because they happen to be above the age for examination. I am further informed that there are cases of senior officers who find excuses for refusing to recommend men who would otherwise be eligible for promotion, because they find them too useful to themselves. A further criticism which might be levelled against this system is that it betrays, by its attempt to attract men into permanent service at an early age, the venerable official belief in " the longer the service, the better the servant," which, however true it may be for men engaged in routine work, is certainly fallacious in architectural work.

The position of temporary assistants in the Department appears to be unsatisfactory. One man tells me that there is a time limit, after which assistants must be placed on the permanent staff ; another says there is no such rule, and that temporary assistants can remain so indefinitely ; a third, whom I asked for confirmation one way or the other, said he had heard of such a rule but knew nothing definite about it, and thought it only applied to some of the temporary staff It is worth noting that the third man is himself a temporary assistant, a man of about 45 who has spent a considerable number of years with the Office of Works.

The division of responsibility in staff administration and the clerical source of the rules lead to the inevitable result. The attendance book is not resented as it is in the L.C.C. because it appears to be reasonably administered, instead of being used as an excuse for petty tyranny. But the obvious futility of such an institution appears in the fact that, while the great majority who would in any case be reasonably punctual are not affected by it, the minority who are congenitally unpunctual find means to circumvent it. I am told that, in some sections at least, access to the book is possible in the afternoon. The curious propensity of the clerical mind to make rules for rules' sake leads to administration being clogged by so many that the natural tendency is to disregard tacitly a large proportion. I stress this question of staff administration because it appears clear to me that the multiplication of clerical rules and regulations and the official love of " discipline " leads to a mingled feeling of irritation, boredom and contempt for authority which has its repercussions on the architectural work. I have already discussed its effect in the L.C.C., and I am informed that its result is the same, in lesser degree, in the Office of Works. I am told that, although some sections are pretty hard-driven (it depends evidently on the personality of the architect), the Department as a whole not only can be made a permanent home by the slacker, but can also far too easily be made an atelier for private work without detection.

As regards the architectural work itself, the material quality of the work done is, as with the L.C.C., very good. Indeed, here jobs are even more fully worked out and meticulously detailed, specifications carefully and concisely worded, and supervision strict. Nothing is skimped or left to chance. It will be noticed, however, that working drawings and specifications are those parts of an architect's work which most nearly approach to the mechanical, while the drawing-office staff is not allowed any part in supervision.

The " Achilles' heel " of the Department lies in the quality of architectural design produced by it.

Different sections, of course, vary in their methods, but the procedure generally appears to be that $\frac{1}{16}$-in. scale sketch plans are prepared, usually by Grade I assistants, for submission to the authority concerned ; these are followed by preliminary $\frac{1}{8}$-in. scale plans and elevations for the approval of the Chief Architect. Final working drawings and details are carried out by Grade II assistants and the temporary staff. A fair amount of latitude is apparently allowed in tackling each job on its merits, but the assistant doing sketch designs or working drawings is subject to criticism and alterations by men in every grade senior to himself.

The effect of this is just what one would expect. The assistant being controlled in matters of design for so long before he reaches a grade when he can exercise any personal discretion, tends to lose any desire he may once have felt to do so ; he falls back on precedent and becomes timidly repressive of any signs of initiative by his successors in the lower grades. The latter regulate their work accordingly, and approach each problem with the question, to quote one of my informants, " Will the chief like it ? " rather than " Is it good architecture ? " The hall-mark of the Office of Works has become a rather flat-footed Georgian idiom, of a heavy worthiness which expresses the current official idea of " safety first " in architecture, and which was found wanting in the light of modern requirements a generation ago by the more alert members of the profession. A few excellent exceptions no not disprove the rule.

Conclusions

It will be noticed that there is a lack of " high-lights " in the Office of Works. On the one hand, I have been given no glaring stories of stupidity or inefficiency ; on the other, there appears a dullness and lack of enthusiasm, a stodgy architecture and an atmosphere amongst the staff which is well expressed by quoting from various of my informants' remarks : " the O.W. is a place for the steady man who likes a safe job," " on the whole there are worse places," " converts one into a kind of living fossil," and lastly, " the hours leave one free to have other interests besides one's work."

The last is, of course, a good recommendation of any job, but rather a back-handed answer to an inquiry for virtues of the department as an architect's office.

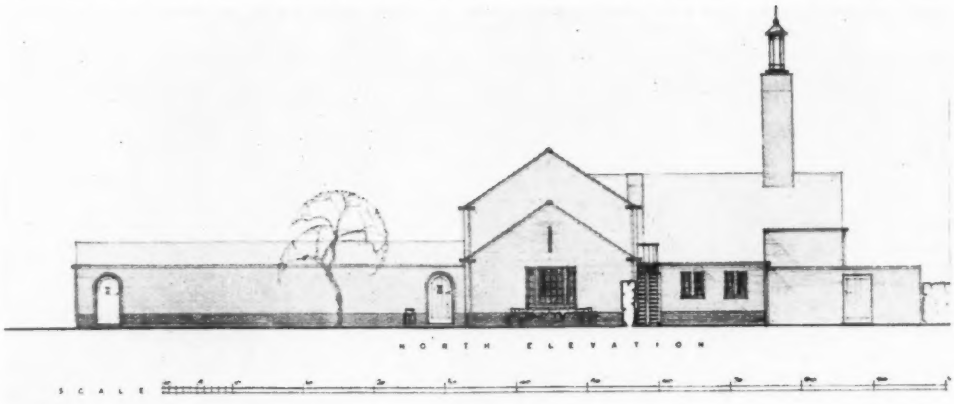
At the same time, it will be noticed that there is evidence of genuine efforts to organize the Department in a reasonable manner, and to give some incentive for interest in the work. These efforts

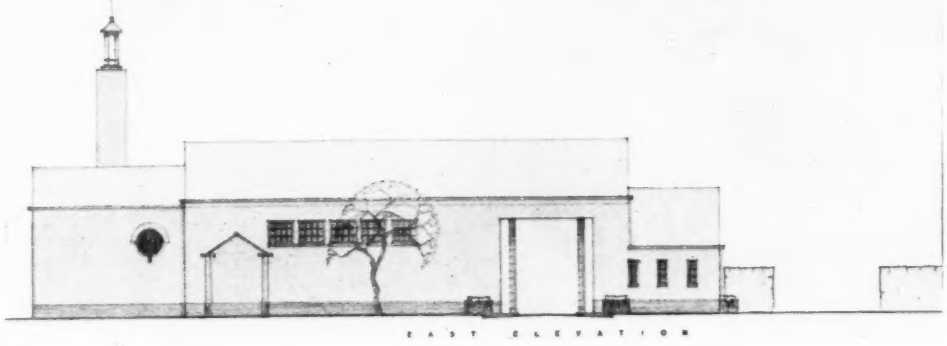
COMPETITION FOR A CREMATORIUM NEAR OXFORD

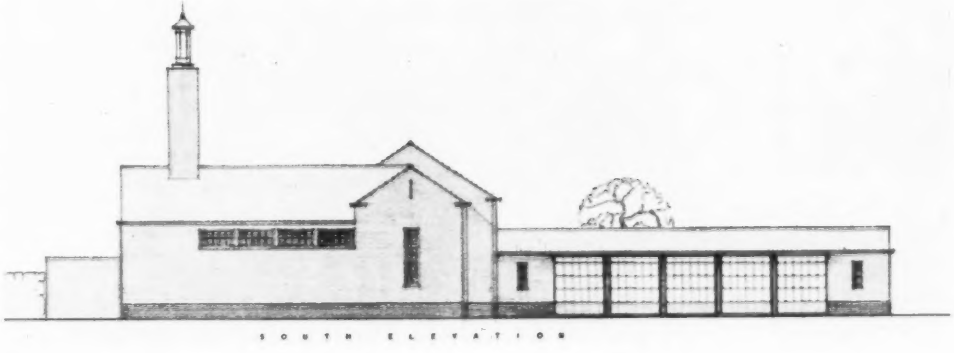
WINNING DESIGN: BY HAROLD W. R. ORR

On this and the page following we reproduce the winning design (premium £100), by Mr. Harold W. R. Orr, in the competition for a crematorium near Oxford for Oxford Crematoriums, Ltd. The second premium (of £60) was awarded to Messrs. Burgess, Holden and Watson; and the design placed third (premium £40) was submitted by Messrs. Crick and Townsend. The competition was limited to Oxon, Bucks and Berks architects, and the assessor was Mr. A. R. Fox; extracts from the assessor's report are printed below:

"The design placed first is, in my opinion, the most satisfactory solution of the problem. The competitor has submitted a well-thought-out scheme with the working parts well dispositioned in relation to one another in regard to their functions. The approach into a porte-cochère with the waiting-room and lavatories adjacent is excellent, but greater width will have to be given to the porte-cochère itself in actual practice. The elevations are simply treated and the buildings will form a pleasant group, regard having been given to their massing. The cubical contents of the main buildings appear to be under estimated, but with care the scheme could, in my opinion, be executed for a sum within the 10 per cent. limit named in the conditions. Here again, some of the schemes submitted would not have complied with the conditions."







do not, however, seem very effective—for fairly evident reasons.

Official departments apparently have a conviction that the only way to control a large staff is to increase rules and restrictions *pro rata*, and that no man under 50 can possibly be fit for responsibility. The result is that large departments tend to develop into amorphous masses of men under small numbers of middle-aged men who are expected to exercise a control which is impossible. The inevitable result is reliance on clerical administration, based *au fond* on fear. The situation in the Office of Works is aggravated by the restrictions placed on Government department staff associations since 1927, through which such associations are allowed no contact with external bodies. The consequent lack of any chance of national support means that Government staffs stand too much in awe of the authorities, and means corresponding difficulty in the initiation and securing of reforms.

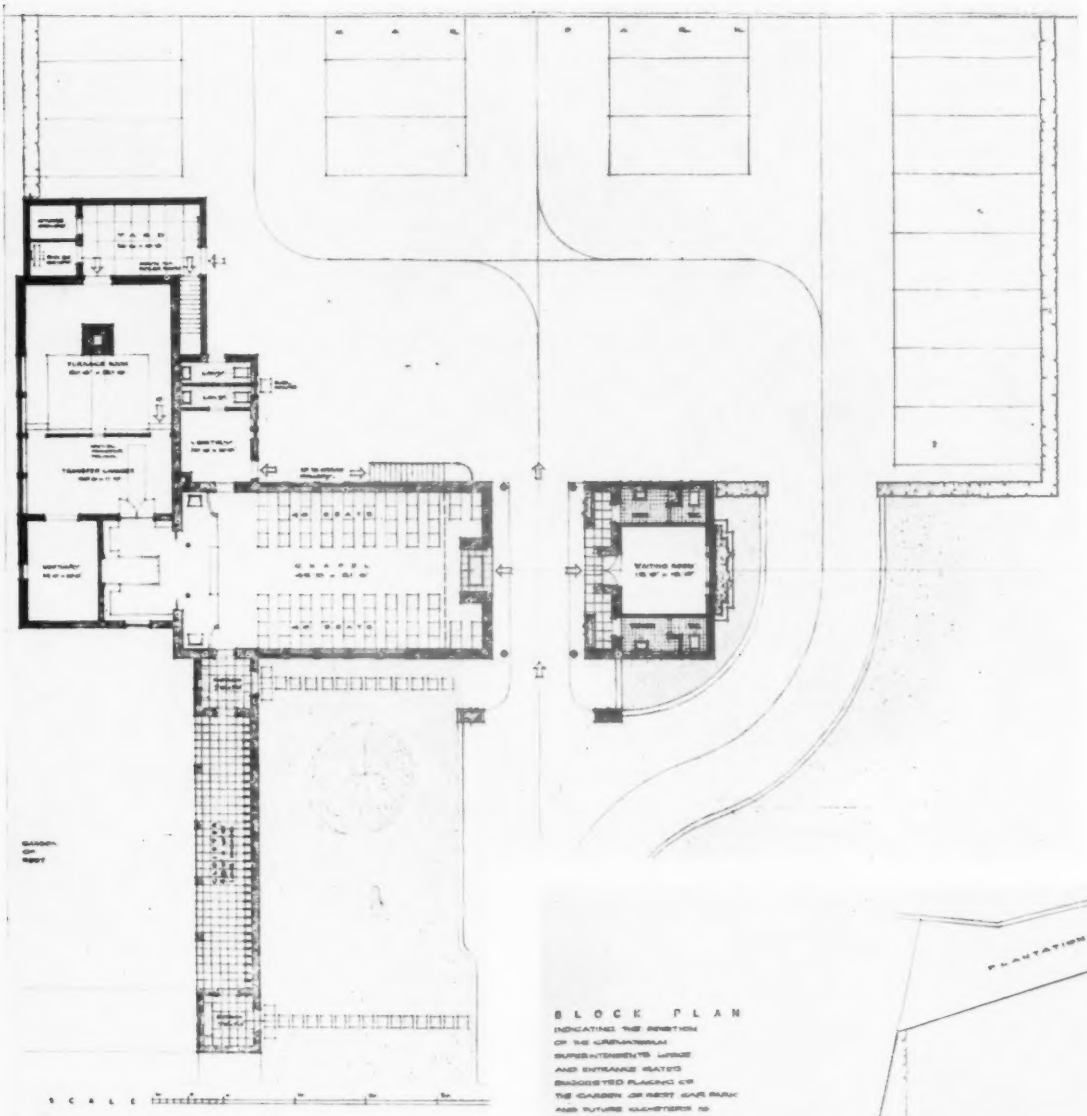
The same attitude accounts for the defects in the Department viewed strictly as an architect's office. Few private clients scruple to entrust their work to qualified architects of 28–30, and it is difficult to understand why men between 30 and 45 are treated as irresponsible subordinates in official offices.

The Office of Works made a step in the right direction when Architects were acknowledged as the authors of the work done by their sections. It would not surely be difficult to complete the reform by organizing the sections in definite small groups, each forming a complete architectural unit, which would be responsible for its jobs from sketch to accounts, including supervision, and should be free, within obvious limits of cost, to work out designs without domination by the personal foibles of administrative architects who cannot possibly have full grasp of individual problems.

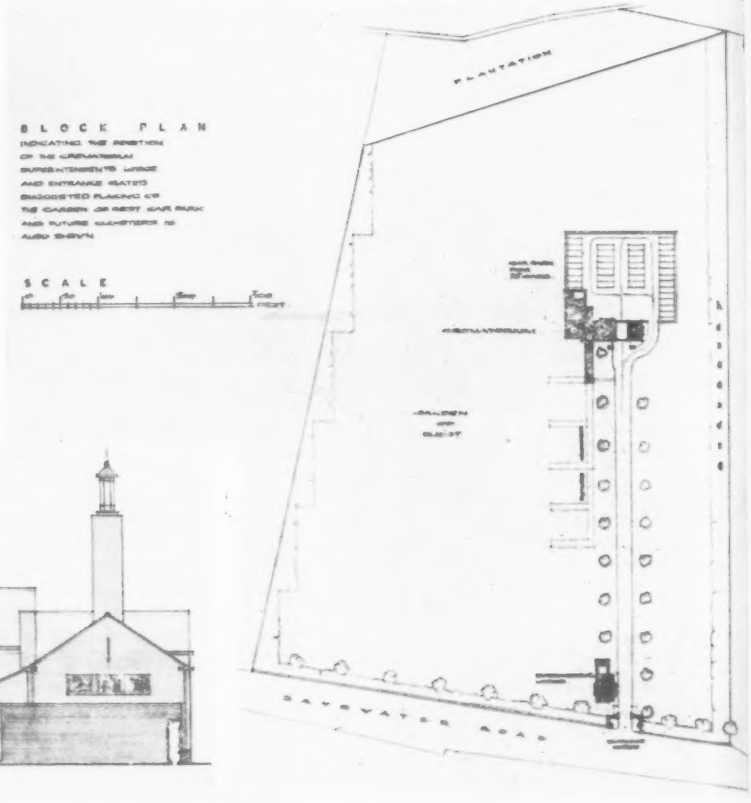
Such a system would ensure the greatest use of the talent at the disposal of the office; would offer a training ground for junior assistants and a reservoir of future senior officers, and would also solve the question of discipline. Men who are treated properly and who have reason for enthusiasm need few rules to keep them up to scratch.

Those who prove unsatisfactory can always be dealt with, inasmuch as the employer always has the last word in the power of discharge.

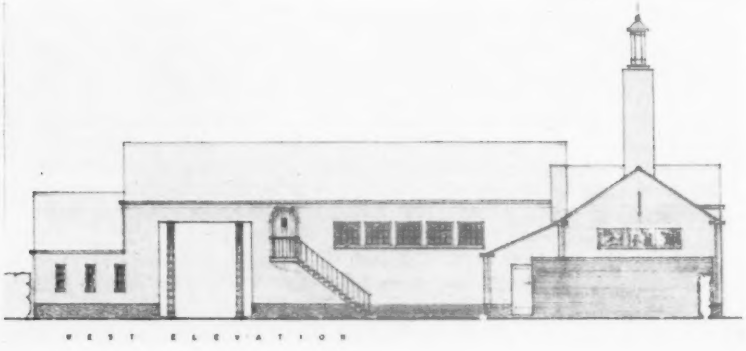
COMPETITION FOR A CREMATORIUM NEAR OXFORD



Left, ground floor plan; below, block plan and west elevation.



WINNING DESIGN: BY HAROLD R. W. ORR



RESIDENTIAL FLATS, EDINBURGH

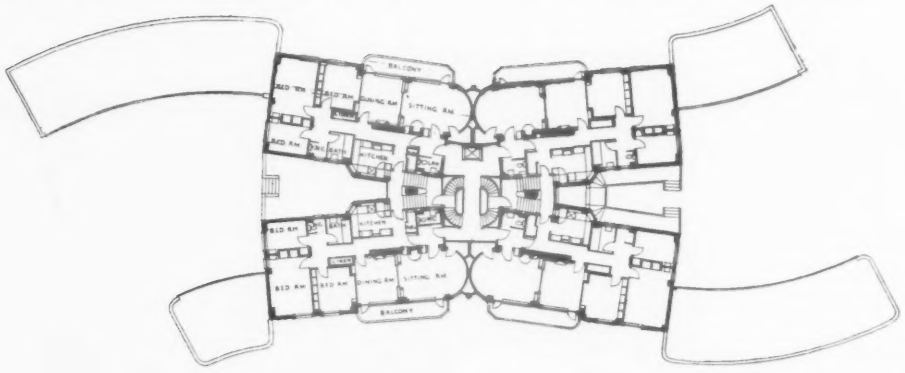
DESIGNED BY NEIL AND HURD

GENERAL PROBLEM—*Residential flats, partially service, for letting. Each flat has a garage.*

SITE—*West End of Edinburgh, with plenty of open space, and near golf courses and public parks. The height of the buildings was restricted to four storeys on the north part of site, and to three storeys on the south part, owing to the proximity of villa development along the south boundary. The butterfly type of plan was adopted with service courts on the north-south axis and front and back entrances on east-west axis. The service courts are enclosed by garage wings with direct access to the service roads. The reasons for adopting this type of plan were, first, to ensure for each flat adequate light and air on three sides, and thus reduce sound interference. Secondly, to make it economically possible to instal a passenger lift in a building restricted to four storeys. All flats have an uninterrupted view.*

Above are two general views, one showing the roof terraces.

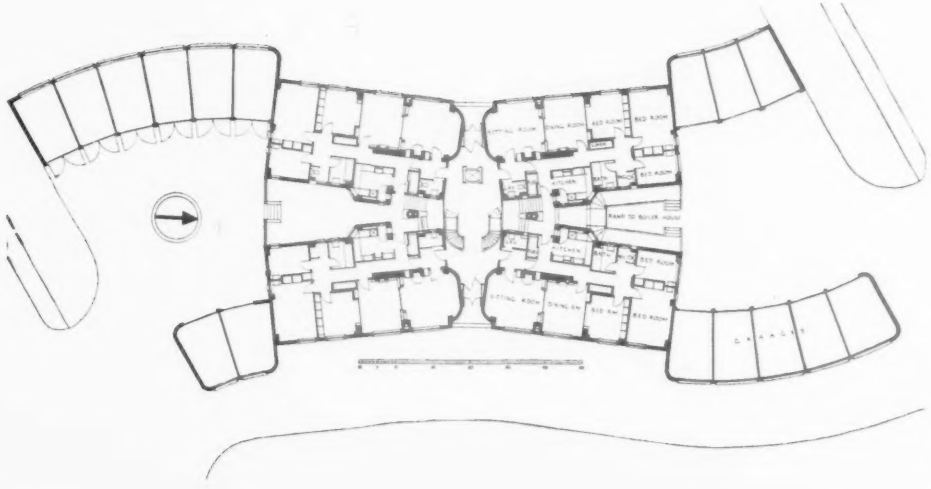
RESIDENTIAL FLATS, EDINBURGH:



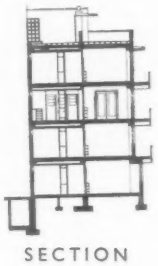
TYPICAL UPPER FLOOR PLAN

CONSTRUCTION AND EXTERNAL FINISH — *Brick walls, with continuous concrete beams supported on 18-in. piers at 10 to 12 ft. centres; panel walls, 9-in. brick. This method provides bearings for joists at all floor levels, and also keeps the superficial area of each flat constant. Balconies are cantilevered out from the continuous beams in reinforced concrete. Double joisting is employed throughout with an asbestos blanket woven between floor and ceiling joists. Copper ventilation tubes are inserted in the outer walls at 18 in. centres between the roof deck and top floor ceilings as a precaution against dry rot. Flat roofs are in wood with double joisting and threaded insulation as in floors; and the sections above the entrances are finished with paving for use as a roof garden, and canopies and garden seats are provided at each chimney stack. The remainder of the flat roofing is finished in 3-ply bitumen sheeting, with grit finish. External brickwork and concrete are rendered stipple finish, and internal walls are plastered. Floors are in red pine with American oak in public rooms: partitions are in 4½ in. brick and 2 in. concrete blocks. Windows are medium universal steel casements in wood surrounds; cills and copings to balconies are black slate; wallhead copings, precast stone.*

Left, one of the blocks, showing main and service entrances.



GROUND FLOOR PLAN



SECTION

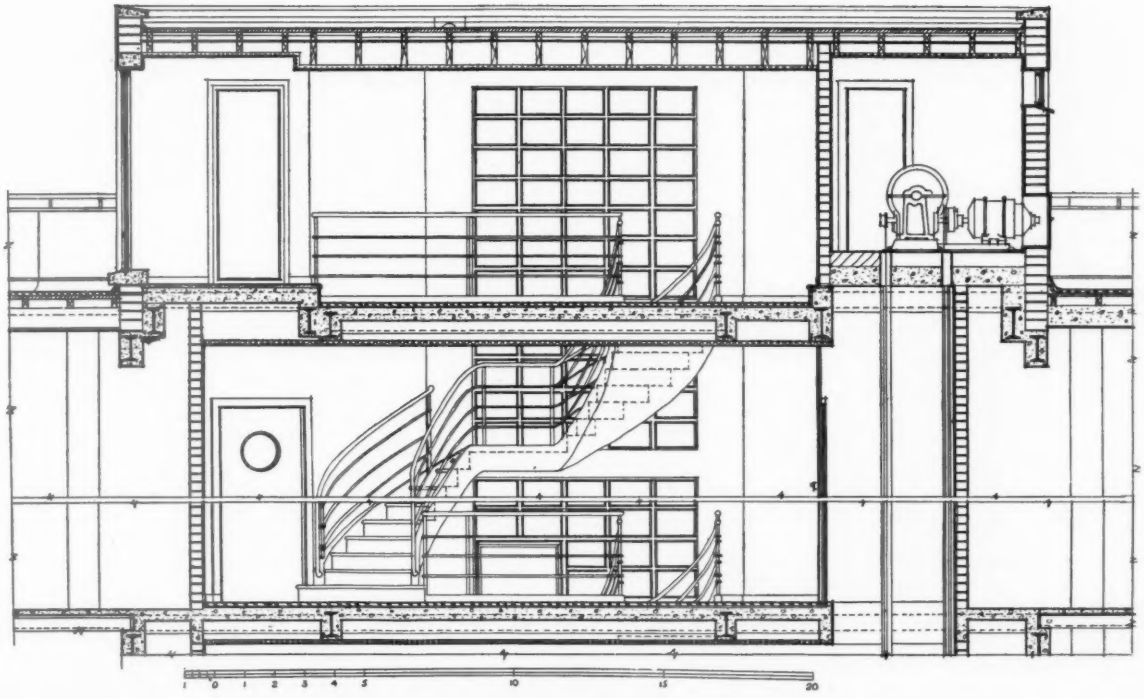
DESIGNED BY NEIL AND HURD

INTERNAL FINISH—*Walls of public rooms and corridors are finished with a rough texture cream paper, and paintwork and ceilings are in cream finish. The main circular staircase is finished in cream cement with orange-red painted treads and tube handrail with flat intermediate bars. The handrail is painted in black and silver. The sitting-room fireplace has compartments for storage, in addition to built-in coal box and telephone tray. Chinese hand-made tiles are used in the fireplace surrounds. Two built-in bookcases are provided in the sitting-rooms, and the dining-rooms are fitted with shelved storage cupboards and heated by panel type electric fires in chromium finish. The fireplace unit has a centre panel of cream fireclay tiles with book-shelving on either side.*

SERVICES—*The principal bedrooms have fitted wash-hand basins, and all bedrooms have built-in wardrobes. Each kitchen has a double service hatch, and is equipped with storage cupboards. Coal stove or gas fire are available for heating. The larder has provision for gas refrigerator, and is fitted with indicator panel delivery hatch. Sliding doors on fibre track are fitted to kitchens, w.c., cloakrooms and coal cellars. Coal fires are provided to the sitting-room and kitchen of each flat.*

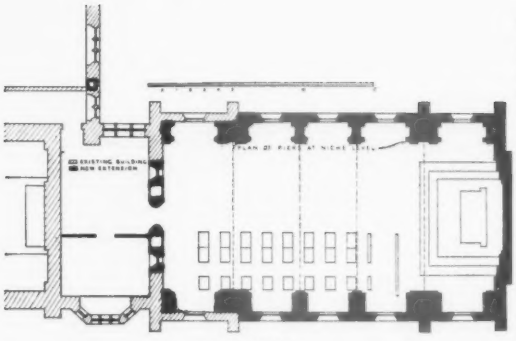
Right, looking through a service hatch into a kitchen.

For list of sub-contractors, see page 1000.

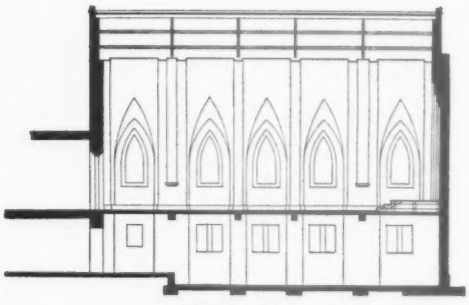


SECTION THROUGH THE MAIN STAIRCASE

LADY CHAPEL, ASCOT PRIORY:



PLAN



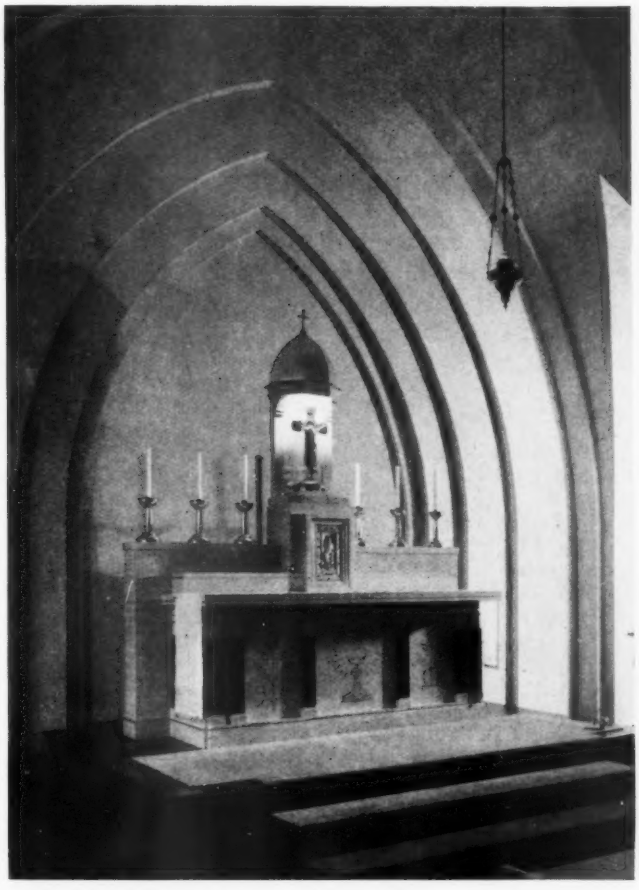
SECTION

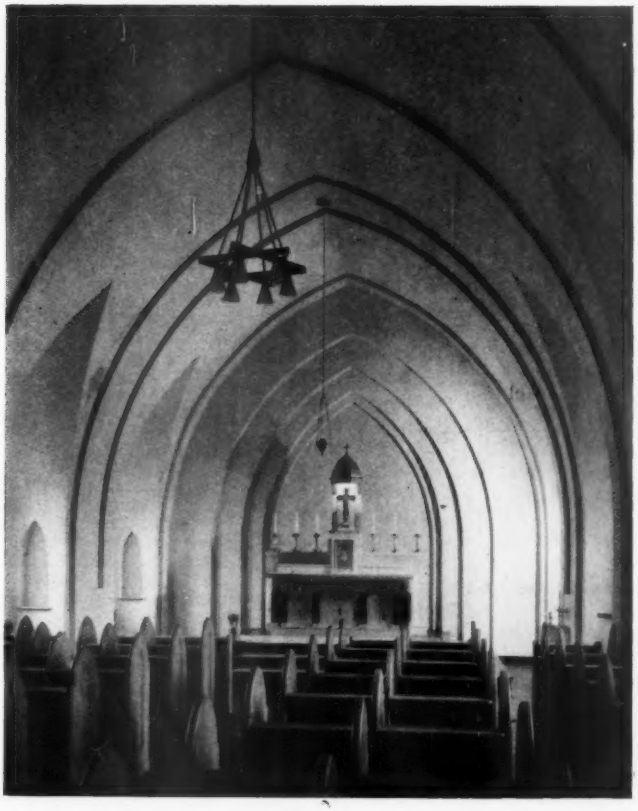
GENERAL PROBLEM—*One bay of the Lady Chapel was completed many years ago by the architects responsible for the original design of the Priory. To have continued with this design would have been extremely expensive, as the whole of the interior relied on carved stone detail, rich Gothic tracery windows, carved columns, etc. Of the outside walls of the original one bay has been kept, and the design simplified and extended to five bays. Externally, the main detail is the same as the original and is in keeping with the other buildings.*

INTERNAL FINISH—*Internally a system of cross vaulting is adopted. This is in plaster on metal lathing, finished rough. At the west end, each side of the main entrance doors from the ante-chapel—are two small windows, one from the ante-chapel and one from the priest's room. These give a glimpse of the chapel and altar. The glass here has a design etched on it. This design, and those on the altar front, were by Mr. H. Wooller. The latter are in green marble chippings let into the travertine and polished flush. Those on the glass were etched. The candlesticks and crucifix were designed by Mr. E. Spencer of the Artificers' Guild and executed by him. They are finished in a process giving gold leaf finish over wood. The floor of the chapel is polished dark cork tiles, with special coloured altar step carpets. Colour has also been used on the window frames and skirtings, etc., and on certain lines on the oak furniture. The light fittings were designed by the architects and are in cream, gold and grey-green. The chapel is on the main floor of the buildings proper and is used solely by the sisters of the Chapter. Owing to the fall in the ground there has been room for a lower ground floor under the Chapel and this contains studies and the Chapter Room.*

Above is a view of the entrance front.

BY MITCHELL AND BRIDGWATER





ASSISTANTS: E. G. MEMBERY AND L. W. AKED

Above, one of the etched windows; right, two views in the Lady Chapel, looking towards the altar.

The general contractors were Chapman, Lowry and Puttick. A list of the principal sub-contractors and suppliers is given on page 1000.

LETTERS FROM READERS

Professor Reilly Speaking

SIR,—Professor Reilly should speak with authority about the back door because, although he did not design it, he superintended its later enlargement.

The front door he last saw in 1902. This is the one used by architects, trained in the job, and practising it, who pass the proper Final in the open field.

Money and talk and diplomas and degrees are all alike of little help to competence, and I suspect that this fact is being brought home, rather late it is true, to the Professor himself. I think also that sales must be dropping off a little lately.

A. J. PRICE

R.I.B.A. Elections

SIR,—It has been virtually suggested to me, as an official and salaried architect, that I should vote for certain candidates who are now nominated for election to the Council for the R.I.B.A., and, within the last few days, I have been shown a typed list of these candidates who, needless to say, are official and salaried architects.

Whilst I am prepared from my own choice to vote for some of these candidates in order that the official and salaried architects may be properly represented, I deprecate the insidious manner of "canvassing" for a wholesale election of any particular section or branch of architects in the profession. At a time when the R.I.B.A. has found itself a new constitution, and after at least a decade has been spent in getting its house in order, it seems a pity that there should be such a movement to form factions within the "body politic." It may well lead, as it has in the past, to the formation of rival "official" bodies. It will surely be seen that private practising architects will feel it necessary to organize opposition to such "bloc" voting if it proves successful. The profession has difficulty enough in maintaining its proper sphere in society today, though the time is rapidly approaching when the architect will be recognized along with the scientist, the poet and the writer as being indispensable in the weaving of the cultural pattern. Such recognition can only be brought nearer by the individual exercising his conscience properly, not only in his work but in participation in the activities of his professional body.

There is ample opportunity for any individual within the profession to take part in the activities of the Institute,

A. J. PRICE

ASSOCIATE

H. G. GRIFFIN, Secretary, C.P.R.E.

and it depends entirely on the individual, as it should in any healthy democratic body.

ASSOCIATE

Guy Dawber Memorial Fund

SIR,—Lady Dawber has received so many kind and appreciative letters on the death of her husband that she asked the Council for the Preservation of Rural England to open a Guy Dawber Memorial Fund. This has been done. Our object is to perpetuate his name in connection with the work of the Council of which he was the founder. The proceeds of the fund will be used to promote that aspect of the work in which he was specially interested, namely, the improvement of rural housing.

We should be very grateful to you if you could make reference to this in the JOURNAL, and we are particularly anxious to emphasize that quite small sums will be welcomed, as we would like to have a large number of recorded sympathisers in our effort.

Contributions should be sent to the Hon. Treasurer, The C.P.R.E., 4 Hobart Place, S.W.1, and should be marked "Memorial Fund."

H. G. GRIFFIN,
Secretary, C.P.R.E.

COMPETITION NEWS

RURAL HOUSES, SCOTLAND

It is announced by the Department of Health for Scotland that the Jury of Assessors in the competition for designs for rural houses, which was open to all architects practising in Scotland, have made the awards. The competition was in five sections and the premiums have been awarded to the following entrants :—

Section 1 and Section 5 : Mr. J. A. Tweedie, 29 Lasswade Road, Edinburgh, and Mr. P. M. Thompson, of 66 Marchmont Road, Edinburgh.

Section 2 and Section 3 : Mr. Archie G. Paton, of Station Road, Barry, Angus.

Section 4 : Mr. Samuel McColl, of 7 Cross Road, Meikleriggs, Paisley.

The premium in each section is £75, the money being provided through the generosity of a private gentleman interested in the promotion of good housing in rural districts in Scotland. The object of the competition is to ensure as far as possible, that in the erection of rural houses good design and sound planning are not sacrificed through lack of application of architectural skill and knowledge. It is intended that full working drawings of the prize-winning designs will be printed and made available for purchase, at a reasonable cost, through H.M. Stationery Office.

NEW COMPETITION

Conditions are now obtainable of the competition for proposed municipal buildings, Brierley Hill, Staffs, for the Brierley U.D.C. The competition is open to architects of British nationality. Assessor : Mr. Verner O. Rees, F.R.I.B.A. Premiums : £250, £150 and £100. Last day for submitting designs : November 30. Last day for questions : June 30. Applications for conditions should be made to Mr. F. Oakes, Council Offices, Moor Street, Brierley Hill, (Deposit £2 2s.).

COMPETITION RESULT

Mr. Julian R. Leathart, F.R.I.B.A., the assessor of the competition for the Duncan of Jordanstone College of Art proposed to be built on a site in Perth Road, Dundee, has made his award as follows :

Design placed first (£500) : Mr. James Wallace, of Charlford Highfields, Llandaff.

Design placed second (£250) : Mr. Donald Harrison, of Park Road, Watford, Herts.

Design placed third (£150) : Messrs. W. A. Mellon and Hubert E. Furse, of Bedford Row, London, W.C.

COMPETITION FOR FIREPLACES AND SURROUNDS

Messrs. Dunbrik, Ltd., of 46-47 Chancery Lane, W.C.2, have issued conditions of a competition for the design of five fireplaces and surrounds, to be constructed with Dunbrik facing bricks and specials. The assessors are : Messrs. Howard Robertson, F.R.I.B.A., G. A. Jellicoe, F.R.I.B.A., and Brian O'Rorke, M.A., A.R.I.B.A. Premiums of £50, £25 and £10 are offered. The competition is open to any architect, architectural student, or interior decorator practising in Great Britain. Last day for submission of designs : July 31.

CREMATORIUM NEAR OXFORD

The design placed first in the above competition is reproduced on pages 977-978.

TOWN HALL, WOOD GREEN

102 designs have been submitted in the competition for a proposed town hall, Wood Green. We are informed that the result will probably be announced on June 23.

R.I.B.A.

NEWS BULLETIN

The A.R.P. Conference.—On Monday next, June 13, at 8 p.m., Sir Samuel Hoare, the Home Secretary, will open the Conference on Structural A.R.P. at the R.I.B.A. Two short papers will then be read by Mr. T. E. Scott, F.R.I.B.A., and Mr. E. L. Bird, A.R.I.B.A. This inaugural meeting will be open to all registered architects and members of the R.I.B.A. and allied and associated societies. The Instructional Course on the two following days is now fully booked up.

The Conference at Bristol.—There is still time for members to notify the Secretary that they wish to attend the British Architects' Conference. A very attractive programme has been prepared by the Wessex Society of Architects. The dates are Wednesday, June 22, to Saturday, June 25. The B.B.C. have arranged a broadcast in connection with the Conference on the Wednesday evening, from the Western Regional Station.

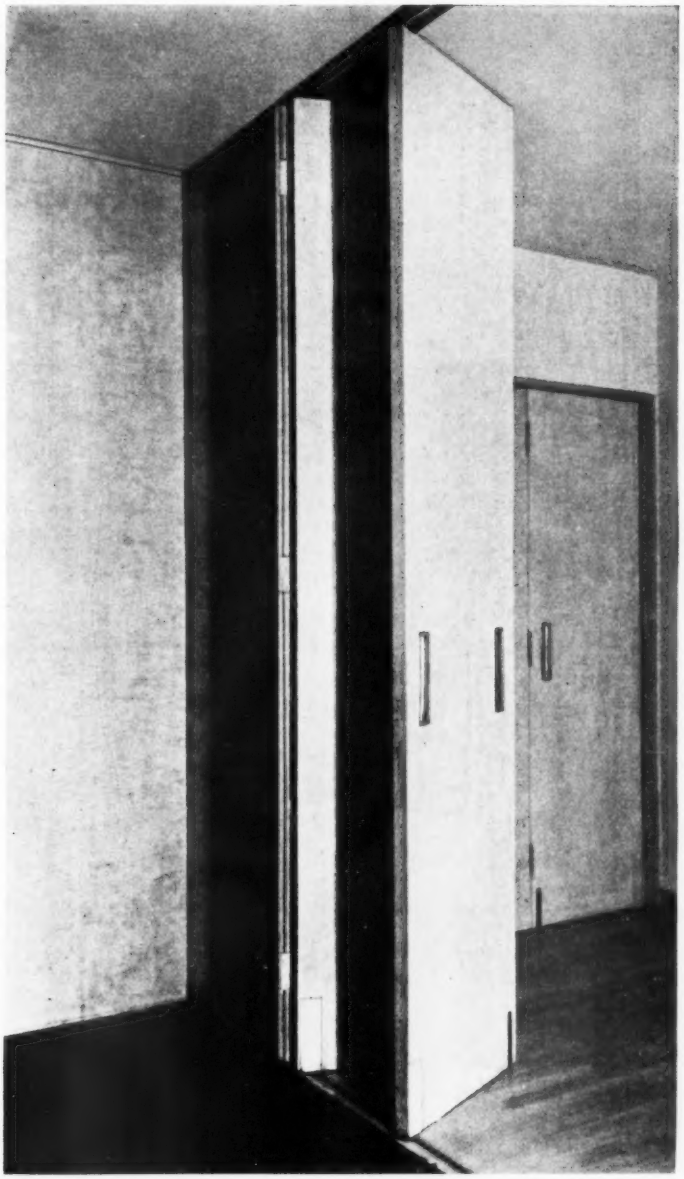
Final Examinations.—The last day for receiving applications for the Final Examination and Special Final Examination is Monday next, June 13.

Exhibitions.—The Exhibition of the Sydney Cathedral Competition designs closes on Wednesday next. "Modern Schools" closed at Bradford on June 11, and will re-open on June 22 at the Blackburn Public Library, Museum and Art Gallery.

FILING REFERENCE:

WORKING DETAILS : 659

SLIDING-FOLDING PARTITION & DINING TABLE • HOUSE IN CHELSEA, S.W. • MENDELSOHN & CHERMAYEFF

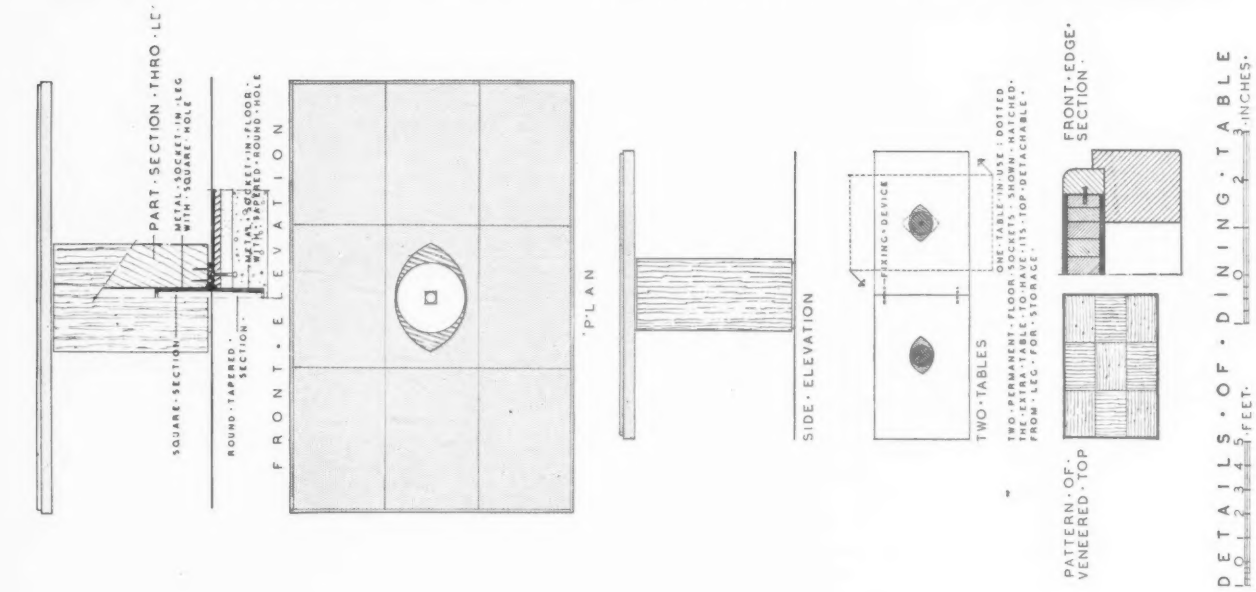


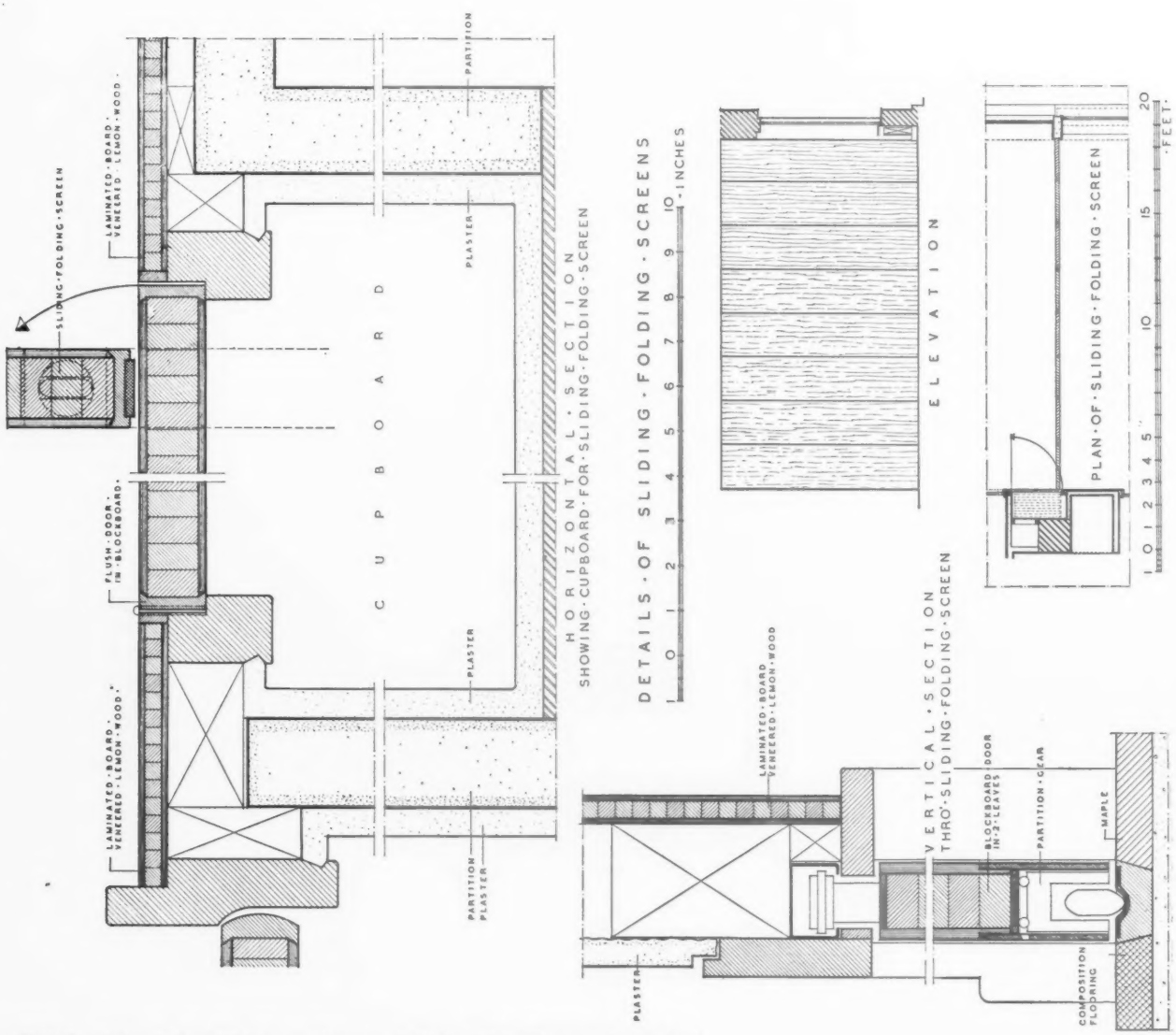
The sliding-folding partition illustrated separates the dining-room from the squash-court spectators' gallery. It consists of eight leaves and has a lemon wood veneered finish to match the dining-room wall panelling. The partition can be folded back into a small cupboard, the door of which finishes flush with the panelling.

The dining-table is a fixed one. As can be seen from the detail overleaf, there are two permanent floor sockets, so that the existing table can be swivelled round, and another similar sized table added to form one long table. The table is also finished in lemon wood veneer. Details are shown overleaf.

WORKING DETAILS : 660

SLIDING-FOLDING PARTITION & DINING TABLE • HOUSE IN CHELSEA, S.W. • MENDELSOHN & CHERMAYEFF





Details of the sliding-folding partition and dining-table illustrated overleaf.

The Architects' Journal Library of Planned Information

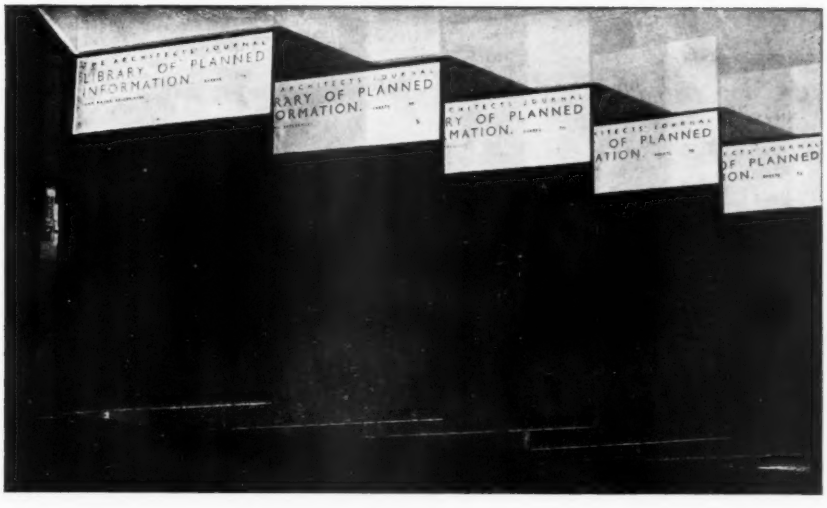
INFORMATION SHEET

SUPPLEMENT

SHEETS IN THIS ISSUE

633 Sanitary Equipment

634 Weatherings—4



In order that readers may preserve their Information Sheets, specially designed loose-leaf binders are available similar to those here illustrated. The covers are of stiff board bound in "Rexine" with patent binding clip. Price 2s. 6d. each post free.

Sheets issued since Index :

601 : Sanitary Equipment
602 : Enamel Paints
603 : Hot Water Boilers—III
604 : Gas Cookers
605 : Insulation and Protection of Buildings
606 : Heating Equipment
607 : The Equipment of Buildings
608 : Water Heating
609 : Fireplaces
610 : Weatherings—I
611 : Fire Protection and Insulation
612 : Glass Masonry
613 : Roofing
614 : Central Heating
615 : Heating : Open Fires
616 : External Renderings
617 : Kitchen Equipment
618 : Roof and Pavement Lights
619 : Glass Walls, Windows, Screens, and Partitions
620 : Weatherings—II
621 : Sanitary Equipment
622 : The Insulation of Boiler Bases
623 : Brickwork
624 : Metal Trim
625 : Kitchen Equipment
626 : Weatherings—III
627 : Sound Insulation
628 : Fireclay Sinks
629 : Plumbing
630 : Central Heating
631 : Kitchen Equipment
632 : Doors and Door Gear

755.

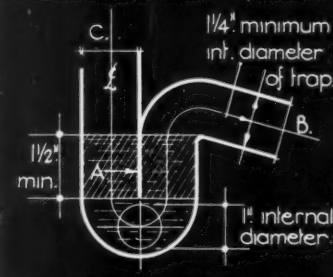
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DETAIL SECTIONS OF ·A.B.M.· STANDARD TRAPS AND WASTES

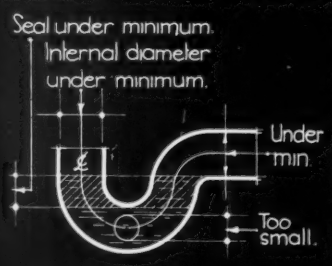
All traps are standard in bore and are provided with 1½" min. seal, or 3" seal for the ·One pipe system·.

COMPARATIVE DIAGRAMS OF TRAPS SHOWING GOOD AND BAD SEAL : ¼ F.S.

An effective seal is formed by the dip ·A and the water in the trap separates the air in the outlet ·B· from the air in the inlet ·C·.
The standard minimum seal is 1½".



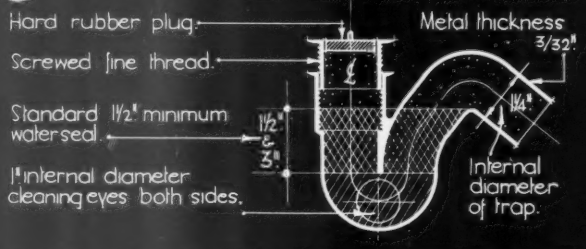
TRAP CONFORMING TO L.C.C. STANDARD



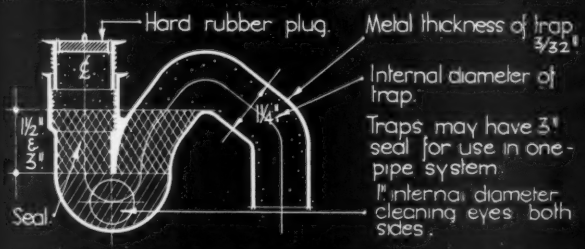
In this case the seal is too small and the pipe bore inadequate. This may increase risk of evaporation of water seal which would allow foul gases to enter the room.

TRAP NOT CONFORMING TO L.C.C. STANDARD.

(A) PARTICULARS OF BRASS TRAPS AND WASTES FOR BATHS : ¼ FULL SIZE

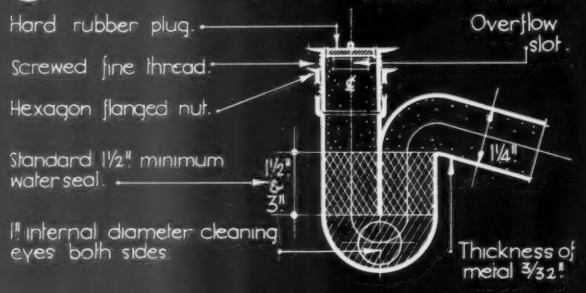


1½" STANDARD SEAL BRASS ·P· TRAP & WASTE.

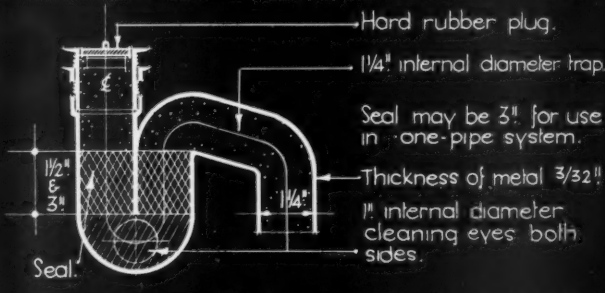


1½" STANDARD SEAL BRASS ·S· TRAP & WASTE.

(B) PARTICULARS OF BRASS TRAPS AND WASTES FOR LAVATORY BASINS : ¼ F.S.

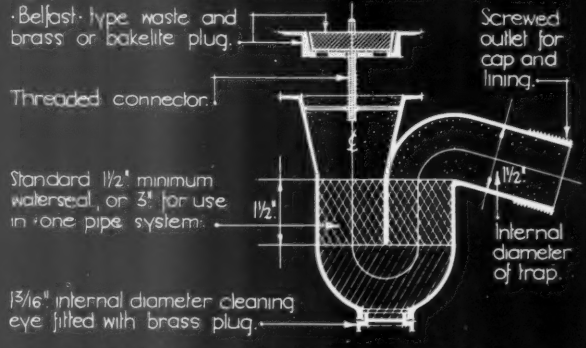


1½" STANDARD SEAL BRASS ·P· TRAP & WASTE.

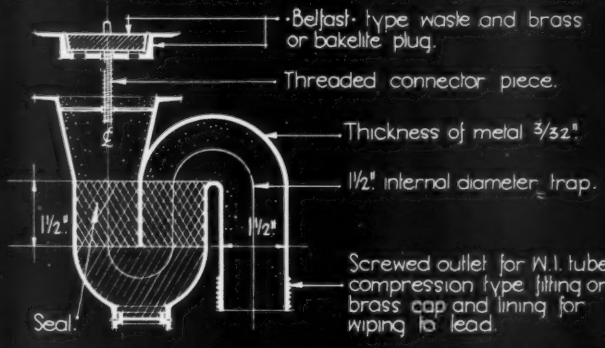


1½" STANDARD SEAL BRASS ·S· TRAP & WASTE.

(C) PARTICULARS OF GALVANIZED TRAPS AND BRASS WASTES FOR SINKS:



1½" STANDARD SEAL GALV. ·P· TRAP & BRASS WASTE.



1½" STANDARD SEAL GALV. ·S· TRAP & BRASS WASTE.

Information from Associated Builders' Merchants Ltd.

INFORMATION SHEET : STANDARD TRAPS & WASTES FOR BATHS, SINKS & BASINS.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Alan A. Bayne.

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 633 •

SANITARY EQUIPMENT

Product : A.B.M. Standard Traps and Wastes

Subject :

This Sheet deals with standard traps and wastes for baths, sinks and lavatory basins.

General :

Bye-laws of most sanitary authorities require every pipe conveying waste from a sanitary fitting to be provided with some form of trap.

Trap. The trap is a bend or dip in the pipe, the centre lines of which are contained in a vertical plane. It is formed by casting a pipe so that it retains water after each usage sufficient to form a $1\frac{1}{2}$ in. to 3 in. seal between the waste pipe and the fitting.

Seal. The function of the seal is to trap the air contents of the drain by confining it within certain limits or compelling movement to occur in a prescribed direction, and so prevent its exit at objectionable points, such as the waste outlet of the fitting.

Types. Traps may be of the "S" or "P" type, the shape of the trap depending upon the position of the fitment.

For Baths :

Brass "P" traps and wastes fitted with hard rubber plugs can be obtained with internal diameters of either $1\frac{1}{4}$ in. or $1\frac{1}{2}$ in. The seal is $1\frac{1}{2}$ in., the standard minimum required by the sanitary regulations. Two 1 in. internal diameter cleaning eyes, fitted with brass plugs are provided, one on each side of the trap below the seal, as shown.

The bath trap is produced in a form which enables it (with its full $1\frac{1}{2}$ in. seal) to be placed under the bath without cutting the floor and fouling the cleaning eye.

For Sinks :

Galvanized "P" and "S" traps, fitted with Belfast type wastes and brass or bakelite plugs, have bore dimension of $1\frac{1}{2}$ in.

A $1\frac{3}{16}$ in. internal diameter cleaning eye with brass plug is provided at the base of the trap.

There are two methods of fitting, the outlet of the trap having either :—

(*a*) A screwed outlet for use with galvanized gas tube and socket (no wiped joints), or cap and lining for lead pipe (one wiped joint only).

(*b*) Beaded spigot for caulking, for use with cast-iron soil pipe (no wiped joints).

For Lavatory Basins :

Brass "P" and "S" traps and wastes provided with a rubber plug are obtainable with an internal diameter of $1\frac{1}{4}$ in. and with a seal depth of $1\frac{1}{2}$ in. The waste has an overflow slot and two 1 in. internal diameter cleaning eyes are provided as for bath traps.

One-pipe System :

For the one-pipe system of plumbing, traps and wastes to fitments can be obtained with the regulation minimum bore of $1\frac{1}{4}$ in. and seal of 3 ins.

Cleaning Eyes :

Cleaning eyes provided on traps are of 1 in. and $1\frac{3}{16}$ in. internal diameter minimum, so as to afford very easy access for cleaning.

Wastes for Sinks :

Traps can be supplied with the brass Belfast type waste or with a chromium-plated waste.

Previous Sheets :

Sheets already published dealing with A.B.M. products are Nos. 540, 555, 558, 562, 566, 570, 574, 579, 591, 597, 601, 609, 615, 621 and 628.

Standardized Designs :

The Associated Builders' Merchants is a non-trading organization devoted to the standardization of the design of building materials and equipment. Materials and equipment made by a number of manufacturers are stamped with the following symbol indicating that they conform to the standard of design and quality laid down.

Issued by : The Associated Builders' Merchants, Limited

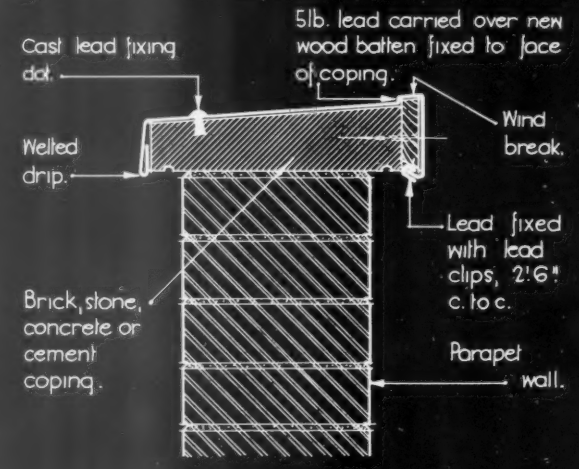
Address : Peters Hill, Upper Thames Street, E.C.4

800.

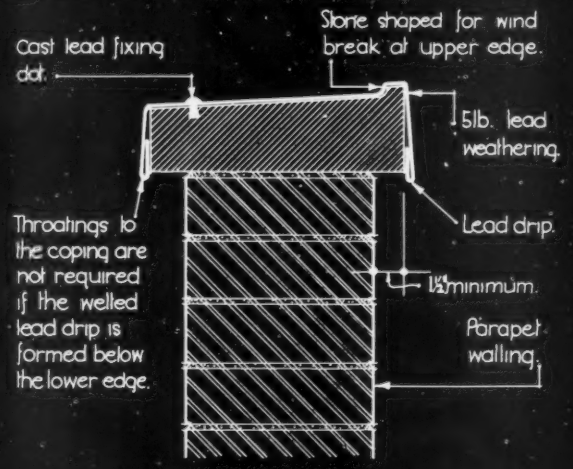
800. THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

THE PROTECTION OF VARIOUS TYPES OF PARAPET COPINGS WITH LEAD SHEET WEATHERINGS:

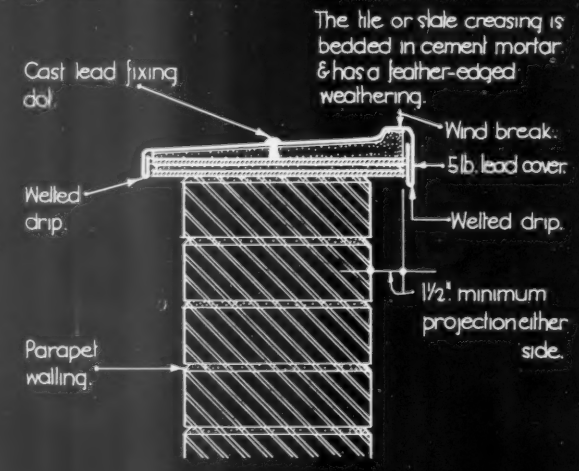
(A) LEAD COVERING TO AN EXISTING FEATHER-EDGED COPING:



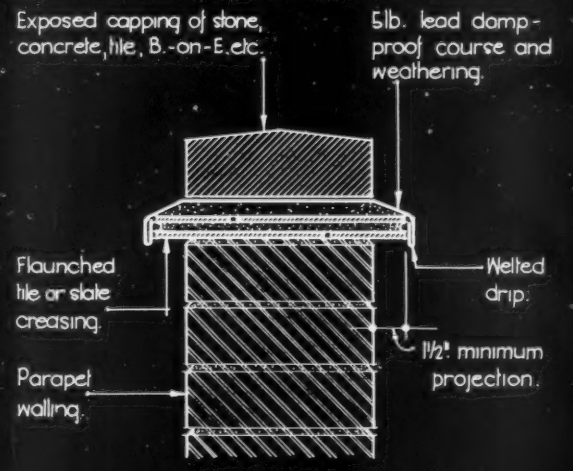
(B) LEAD COVERED FEATHER-EDGED COPING OF CEMENT OR STONE:



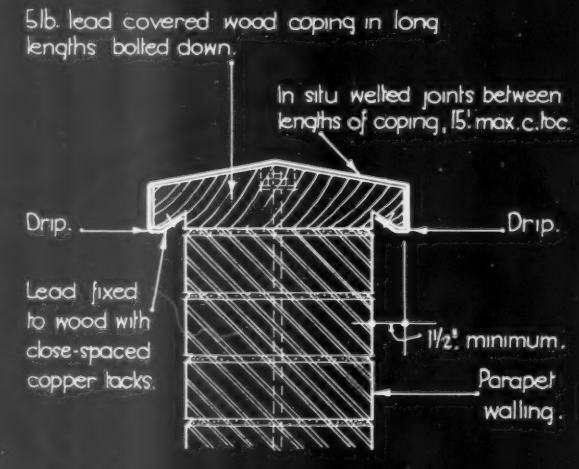
(C) LEAD COVERING TO A THINLY CAPPED PARAPET.



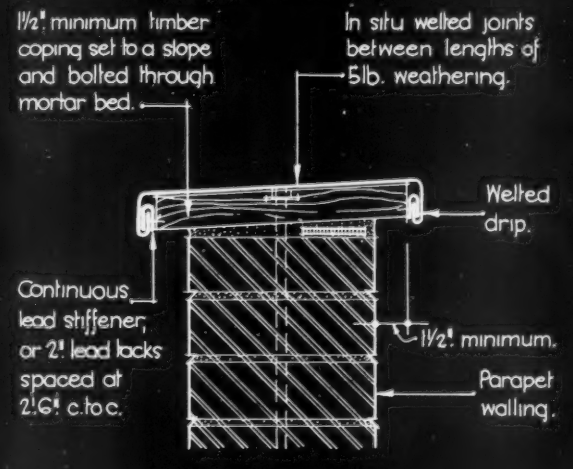
(D) COMBINED D.P.C. & WEATHERING IN LEAD.



(E) LEAD COVERING TO A WOOD SADDLE-BACK COPING:



(F) LEAD COVERED PLAIN WOOD COPING:



Information from Lead Industries Development Council.

INFORMATION SHEET: LEAD SHEET WEATHERINGS TO PARAPET COPINGS: No. 48

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 634 •

WEATHERINGS—4

Subject : Weatherings to Parapet Copings

General :

This is the fourth of a group of Sheets dealing with weather protection of exposed parts of buildings, and deals with parapets. Although it is common practice in England to cap a parapet wall with some more or less impervious material, very rarely are sufficient precautions taken either against disintegration of the coping or against the entry of water through the joints between adjacent lengths of coping.

Thermal contraction and expansion in copings can be taken up only in the joints, which therefore tend to open and close with changes in temperature. Capillary cracks form between the coping units and the jointing mortar, particularly when it is of a rich Portland cement mix. A lead covering is itself impervious and can be made continuous throughout its length, thus fully protecting the coping and the parapet below.

When a light coloured coping is desired for reasons of design, the sheathing may be carried underneath the capping as shown at D. If, however, the coping member is of permeable stone or other material liable to rapid decay, disintegration must occur, even though some protection is obtained for the wall below.

It is possible to increase the life of any exposed coping by providing narrow lead flashings over the joints, the edges of these lead strips being let into grooves cut in the stone at either side of the joint, and then lead wedged and caulked.

Laying :

The expansion and contraction of the lead can be provided for by ordinary watertight double welt joints, spaced at not more than 15 feet centre to centre. Movements in the lead can be further assisted by laying it on building paper or on a good quality thin bitumen roofing felt. This prevents damage to the lead from any roughnesses in the finish of the coping itself.

Drips :

To prevent the water running off the lead from wetting the wall beneath, it is desirable to give rather greater overhang than is the common practice, and to provide adequate drips so that the water may not run back on to the wall. All hanging lead drips should be welted as indicated.

In stone or other buildings having a white finish, it is possible to prevent dirt-staining by providing inward falling copings with an additional cross-wind check on the outer edge. This may be done by dressing the lead over a small hardwood stone or cement fillet, as shown on examples B and C.

Lead itself does not cause staining but if ordinary rainwater is allowed to run down the face stonework it will cause streaks and dirt-staining.

Fixing :

When laid over masonry copings, lead weatherings may be held in position by cast lead fixing dots spaced at two to four feet intervals, according to the width of the coping and the conditions of exposure. On wood copings, the lead coverings usually require no fixing other than the copper tacked edges. Wood copings may be lead covered on the bench, and the bolts at the ends of each length screwed home before the joining up of the lead. Should an intermediate bolt be necessary, a hole may be cut through the lead, the nut and washer sunk into the wood and covered over with a lead cap burned on.

Raking Copings :

Steeply raked copings need no protection, but where the pitch is 45 deg. or less, the joints should be made watertight by means of 5 lb. narrow sheet lead, cut and bent Z-shaped and inserted before the cement mortar joint is made.

Contacts :

Where lead is to be bedded directly into fresh Portland cement, mortar or concrete, the surface of the metal should be protected by a coat of bitumen, in order to prevent any corrosion arising from the free alkali invariably present in Portland cement during and shortly after the period of setting.

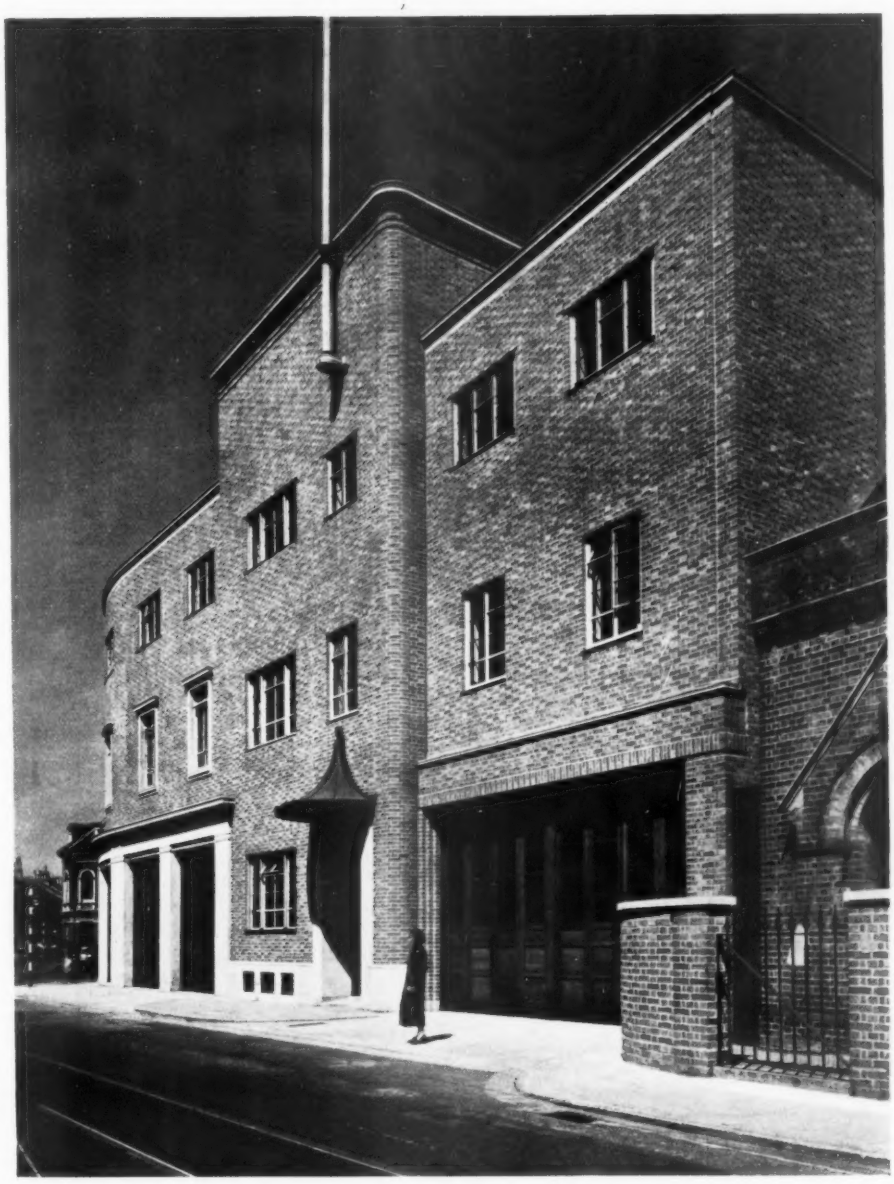
Previous Sheets :

The first three Sheets in this group were Nos. 610, 620 and 626.

Issued by : The Lead Industries Development Council
Address : Rex House, 38 King William Street, London, E.C.4
Telephone : Mansion House 2855

FIRE BRIGADE HEADQUARTERS, BRIGHTON

DESIGNED BY G. I. C. HIGHET



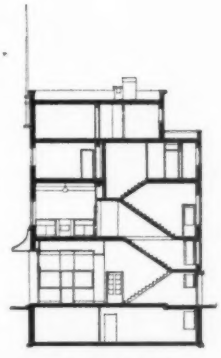
GENERAL PROBLEM AND SITE—*Fire brigade headquarters to serve the whole of the Brighton area, on the site, in Preston Circus, of an existing fire station and recreation rooms. The building was designed to be erected in two sections; and the first portion, containing all the essential units of the complete fire station, had to be handed over fully equipped before the old station could be demolished and the second portion built. The traffic lights in Preston Circus, a busy centre, can be turned to the stop position by a switch in the watch-room.*

CONSTRUCTION—*Steel frame for the main building up to second floor level ; elsewhere the loads of the beams and the floor slabs are received by the walls. Floors and roof slabs are hollow tile. External walls are 13½ in. brick ; basement walls, floors and ceilings reinforced concrete, tanked with asphalt; and internal partitions are slab.*

ELEVATIONAL TREATMENT—*Light medium Crowborough facings. Portland stone is used for the surrounds to the entrance doorways, the appliance room doors, the first floor windows over, and for the copings. On the rear of the building and on the workshop the dressings are in reconstructed stone.*

INTERNAL FINISH—*Floors are: hand mottled 6 in. by 6 in. tiles in the appliance room and workshop bays, entrance halls, uniform room, lavatories, men's bathrooms, messroom pantry, and the kitchens in the firemen's flats ; wood block in all the principal rooms and corridors of the station, and in the living-rooms, bedrooms and the corridors of the firemen's flats ; granolithic in the basements and sub-basements, except lavatory, and in workshop block and as finish to the concrete paving in the drill yard. The joinery in the chief officer's office is Australian walnut, elsewhere throughout the station it is Burma teak, finished with a natural white wax polish. There are built-in furniture and fittings in the watch-room, the station officer's office, the chief officer's office, and teak plywood dados in the watch-room, station officer's office, billiards room, and recreation room.*

Above is a photograph of the Viaduct Road front.



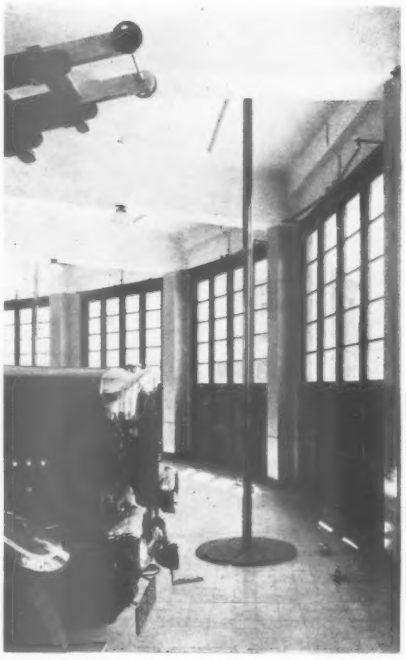
SECTION

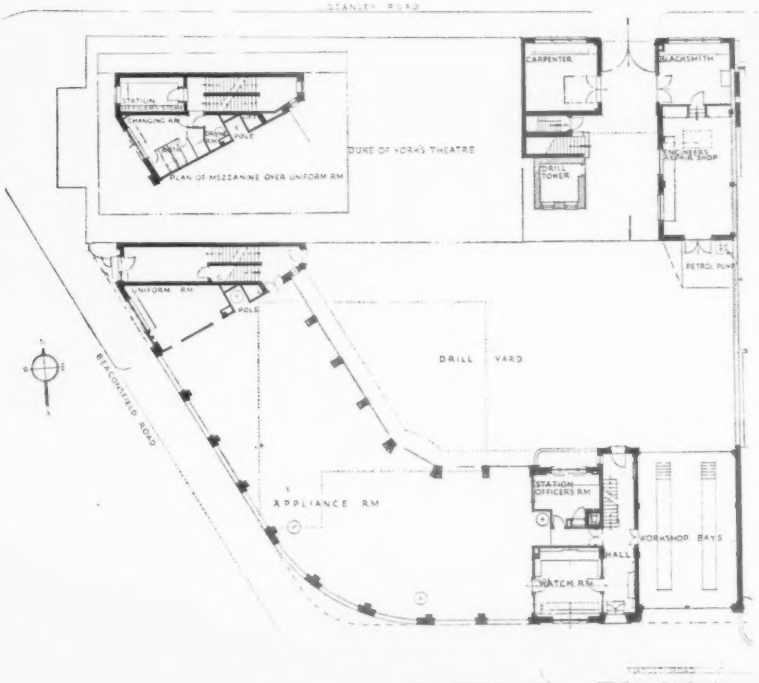
E

FIRE BRIGADE HEADQUARTERS, BRIGHTON:

SLIDING POLES—*Four sliding poles for the use of the firemen connect the first floor with the appliance room and workshop bays, and two poles connect the flats on the second floor with the first floor. The heads of the poles are arranged in lobbies with self-closing swing doors, fastened with overhead catches.*

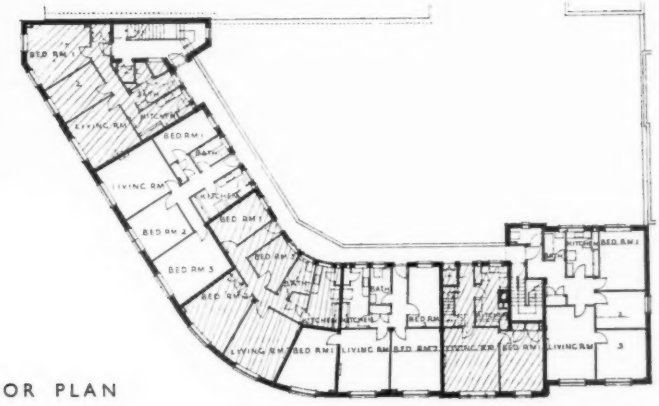
Above, the principal front, facing Preston Circus ; right, the main doors to the appliance room, and one of the sliding poles.





GROUND FLOOR PLAN

DESIGNED BY G. I. C. HIGHET



SECOND FLOOR PLAN

FIRST FLOOR PLAN

SERVICES—*The kitchens in the firemen's flats are equipped with electric cookers, fitted dressers and storage cupboards, sink and special dustbin container; and the pantry adjoining the messroom in the station is fitted with an electric hot cupboard and cooker. Heating is by an indirect hot water system from twin magazine type boilers in the sub-basement, distributed in the appliance room, watch-room, and repair bay by panel radiators fixed on the underside of the ceiling, and in the other principal rooms by recirculating type ray-rods. Hot water is supplied in each flat, in the men's bathroom and in the mezzanine and in the lavatory in the basement by indirect storage calorifiers.*

CONTRACT PRICE—*£40,671.*

Top, left, part of the rear elevation facing the drill yard, taken from the first floor balcony; right, the recreation room looking towards the billiard room.

The general contractors were the Ringmer Building Works, Ltd. A list of the names of the sub-contractors and suppliers appears on page 1000.

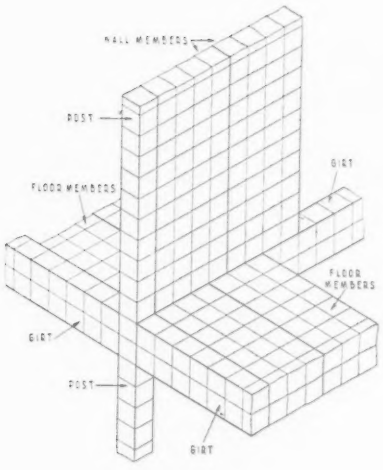


Figure 1

L I T E R A T U R E

RATIONAL DESIGN

[*By R. A. MANTHEI*]

The Evolving House: Rational Design. By Albert Farwell Bemis. Massachusetts: The Technology Press. (British Agent: Batsford.) Price $4.

THE present is an age of rationalization of industry. In other words manufacturers are striving to mass-produce as wide a range of articles as are desirable for our present civilized life—a life which is becoming more and more organized as the years pass by. We have our mass-produced cars, furniture, clothes, wireless sets and a host of other things which make it possible for a greatly increased number of people to possess at a comparatively low price.

"Rational Design" is an attempt to show why houses should be mass-produced for just as good a reason as the many other commodities of life are mass-produced, namely to give us an efficient article for a lower price and therefore bringing it within reach of a larger section of the community.

This book, written by the well-known American exponent on housing, Alfred Farwell Bemis, is the third of a set of volumes on a very complete study of the evolution of the house. The first volume reviewed the evolution of the home and the second analysed current housing conditions. From these two books the author shows how you should find out what is the matter with present housing and wherein it lags behind present civilization. He offers you in the third volume a solution to present problems in the form of rationalization of the housing industry, thus bringing it into line with all the other major needs that go to fill the home.

This theme, however, must not be allowed to mislead the reader. There is no need to conjure up visions of row after row of identical houses all produced from the same set of machines. On the contrary, the theory consists in manufacturing finished structural units in the shop and assembling on the site, with this difference, that by selecting different units with common jointing edges it would be possible to erect houses of completely different design.

This now is the important feature in Mr. Bemis's exposition. All such structural units are made up of imaginary cubes of a size to be agreed upon by manufacturers. That is to say, any unit can be said to be 20 cubes long by 7 cubes wide by 1 or more cubes thick, or any other size that would be suitable for the design of the house in hand.

The author suggests 4 ins. as a suitable cube size or module, as he calls it, but he is equally prepared to agree to 3 ins. as being satisfactory. Now note the usefulness of this. If we adopt the latter module as our standard we can say that our external walls are to be two or three modules thick, our internal partitions one module thick and our floors three modules thick, thereby simplifying all thicknesses. This applies equally with panel sizes and it is obviously more satisfactory for all manufacturers to adopt some simple standard as this, instead of the present chaotic sizes necessitating pre-knowledge of the various fitments that go to make a house before a detailed design can be undertaken.

The book starts off somewhat heavily on an abstract theory of cubical modular design, but one becomes used to the title after the underlying principle is grasped. The Utopian house is made up of cubes which are strong, good insulators, perfectly weather-resisting, have perfect finishes on all faces, and are capable of being easily welded together, and, I should add in case anybody does by any chance discover such a material, be cheap. Figure 1 indicates this conception.

Since we cannot foresee such an ideal material for the present, the author gradually leads us to more practical conceptions. The final conception consists in the various members of the house being made up of all the materials necessary to serve the various functions, the whole still conforming to a modular system.

Figure 2 indicates a typical group of members in house construction. Note

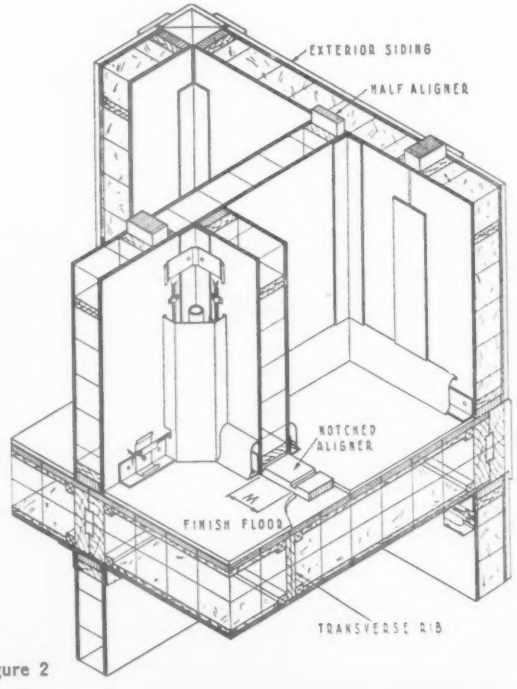


Figure 2

how all the members are divided into equal cubes. Perhaps architects won't agree to the treatment of the wall finishes as shown, but this illustration is the most advanced "integrated" type of construction. Architects can compromise by applying finishes afterwards, thereby forming what is described as one of the "differentiated" types of construction.

The framing suggested in this sketch is discussed in both timber and steel. Timber has the disadvantage of not remaining a constant size owing to swelling and shrinkage, but it is cheap and strong. Steel on the other hand is expensive, but is more flexible since it can be accurately made and remains constant in size for all practical purposes. Also, holes can be punched along the whole length, à la Meccano, so that any size of frame can be erected with a comparatively limited number of components.

If you look at Figure 3 you will see what is meant by the whole principle of modular design. It is quite an attractive house which can be divided equally everywhere into cubes of the same size and therefore provide facilities for standard parts.

For modular design in the office, it is suggested that squared paper be used, so that the designer can determine his sizes according to the module direct.

The author realizes the strong bias there exists for pitched roofs and he very kindly caters for the diehards and others by modifying his modular system for slopes. I think that he was anticipating that pitched roofs would die a natural death, for the modification does not appear to be very satisfactory. He shows that flat roofs cost less than pitched roofs, even taking into account the loss of storage space, so perhaps this factor will win the day in the long run.

I always thought concrete houses were expensive—I certainly know that concrete walls can cost two to three times as much as brick walls, using the usual relative thicknesses. But the author states that concrete is a relatively cheap material and that "advancing technique will make it obsolete." Since concrete houses have never really proved successful, taking cost into account, I don't mind passing these statements.

Modular steel forms for concrete are discussed at short length although this idea is not new in this and other countries. Our steel forms are of course limited in scope and are really only suitable for straightforward jobs.

One might have considered brick as taboo in such a system as is dealt with here. On the contrary no objection is raised to its use providing, of course, the fabrication does not take place on the site. I have in mind the patent imitation brick panels about 2 ft. square which were used to face Apsley House in the Finchley Road. But I am not sure that this method would satisfy the modular system as there is dove-tailing at the edges for jointing purposes.

The latter portion of the book is devoted to a list of types of house structure with a commentary on each one, and is edited by John Burchard, "the second," who is Alfred Bemis's engineering associate. The list is useful for showing the attempts that have been made to produce forms of standardized house structure, but is bewildering for its wide diversity of types.

Before concluding there are four phrases in the book which I think are well worth appending here and which succinctly sum up the modern sympathies required for this rational design. They are :—

"To-day designers use materials as they are and not to simulate others."

"The progressive architect recognizes that period architecture and false imitation of the antique are simply signs of artistic decadence."

"Progressive-minded architects are not gloomy as they face the new era of mass production for the house. They definitely desire precision of pattern that will harmonize with machine forms."

"Standardization does not mean drab monotony of exterior appearance or lack of intelligent planning."

To attain this mass production without producing obviously similar forms undoubtedly means a large number of parts of different sizes and make-up. This indicates the necessity for a very large manufacturing undertaking, and a consequently large capital, but there is seemingly no valid reason why a company could not be formed for mass-produced houses.

Like many American technical books, this book is "over-worded." Much of it could be said between smaller covers. Nevertheless, to students of housing the book should prove a very valuable addition to their library, since it is an exposition of a new idea for rationalizing house-building, an idea which the author has incidentally patented in most countries throughout the world.

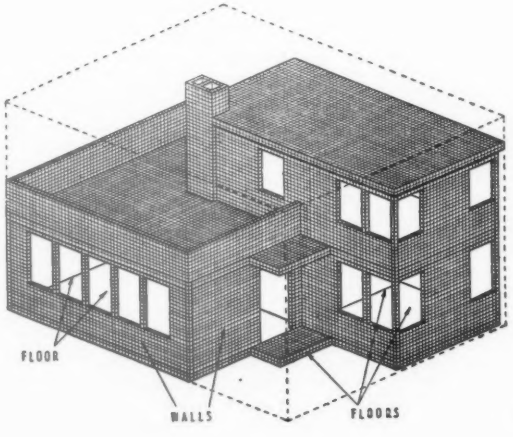


Figure 3

COMPETITION FOR SMALL HOUSES

Conditions Reviewed

Messrs. Wates, Ltd., of London Road, Norbury, S.W.16 (and of 32 other branch and estate offices in the London region), are inviting architects of British nationality to submit designs for 20 small houses in Malden Way, New Malden, Surrey.

Assessors.—Mr. Louis de Soissons, F.R.I.B.A., S.A.D.G., Mr. C. H. James, A.R.A., F.R.I.B.A., and one of the directors of Messrs. Wates, Ltd.

Premiums and Fees.—To the author of the design placed first by the assessors, £75; second, £50; and third, £25. The author of the selected design is to be employed to carry out the work subject to the usual conditions, and he will be paid in accordance with the R.I.B.A. scale for houses for speculative builders, but the premium will not merge into the fees, which will not exceed £65. If work has not proceeded within 12 months of the award, the winner is to receive the sum of £25 in addition to the premium.

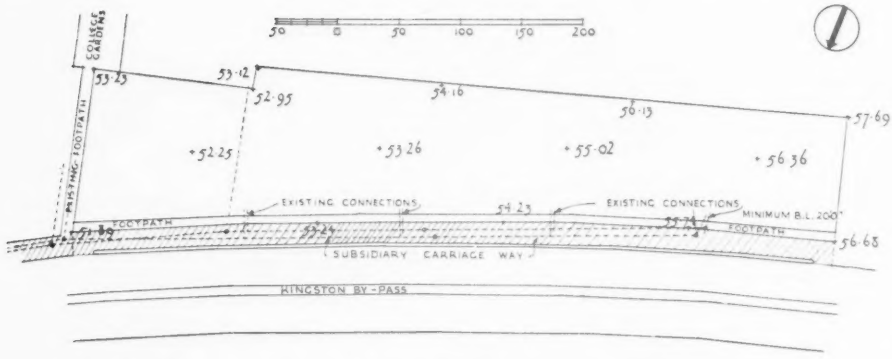
Sending-in Time.—12 noon on Monday, July 18, 1936. To Louis de Soissons, F.R.I.B.A., S.A.D.G., Blue Ball Yard, St. James's Street, London, S.W.1, the package being endorsed "Design for Small Houses."

The last day for questions was June 4.

General Conditions.—The usual general R.I.B.A. conditions apply. Competitors can send in more than one design if they wish, but each design must be completed and sent in quite separately.

Site.—A prominent strip of land on the Kingston By-Pass Road, from which it is separated by a subsidiary carriage-way and path. It is a comparatively level site, and has a frontage of 620 ft. approx. The depth varies from 124 ft. to 93 ft. approx. This appears to mean 13 houses to the acre, on an average frontage of 31 ft. per house.

Particulars of Houses.—The promoters are offering this opportunity to collaborate with the builders in making a pleasing contribution to domestic architecture. The houses



Competition for 20 small houses in Malden Way, New Malden, Surrey. Site plan.

are small, and are to be built primarily for sale, so that the designs must combine all factors necessary to make the scheme a financial success. Flat roofs are not desired, otherwise there are no stipulations as to treatment. The usual model byelaw requirements against overcrowding must be observed, but the houses are not to exceed 1,000 ft. super total floor area measured within the walls, excluding garages. Accommodation required: 1 or 2 living rooms, kitchen, larder, fuel; 3 or 4 bedrooms, bathroom, w.c. (separate w.c. desired but not essential). Garage or garage space to each house.

Drawings.—All to $\frac{1}{8}$-in. scale except block plan, which is to be 44 ft. to 1 in. All plans to be drawn with Malden Way (called Kingston By-Pass on site plan) at bottom of sheet. No perspectives or roof plans. Finish may be in ink or pencil. No colour except a grey wash over windows and doors. Conventional shadows in grey wash. Walls on plans and sections to be solid black or dark grey. Black on white photoprints allowed, but not tracing paper. The whole presentation to be simple and clear, with a drawn scale on each sheet. Drawings to be mounted on cards or boards which are to be of the same size as far as possible.

Report.—A concise typewritten description of the buildings explaining construction, finish, materials and any information not to be gleaned from the drawings, is required. It must also contain the cube of the buildings from the top of the concrete foundations to halfway up the roofs, with details of the measurements on which the cube is based.

LAW REPORT

ANCIENT LIGHTS CASE: THE MODERN FLAT

Leng v. *South Coast (Hastings and St. Leonards) Properties, Ltd.—King's Bench Division.—Before Mr. Justice Goddard.*

This was an action by Mr. James Elliott Leng, of East Ascent, St. Leonards, against the South Coast (Hastings and St. Leonards) Properties, Ltd., for a mandatory injunction and damages.

The plaintiff alleged that the defendants' building, a 14-storey block of flats, known as Marine Court, St. Leonards, had obstructed the ancient lights of plaintiff's house, No. 23 East Ascent, and which the plaintiff had converted into flats, one of which he occupied himself.

Plaintiff alleged that the obstruction of light to his premises by the defendants' building had prejudicially affected the letting of his flats.

The main defence set up by the defendants was that the plaintiff had disentitled himself to relief because he had failed to make his complaint at the time Marine Court was in course of construction.

Sir Herbert Cunliffe, K.C., and Mr. Robert Fortune appeared for the plaintiff, and Mr. Evershed, K.C., and Mr. G. O. Slade represented the defendants.

Sir Herbert Cunliffe said the defendants' building had caused considerable damage to the plaintiff's house, which had previously had a good view of the sea. The defendants' building had reduced the light of the premises to such an extent that there was not enough for the ordinary purposes of occupation.

As to the delay in making complaint, which the defendants had set up as a defence, Sir Herbert said that plaintiff had made it as soon as it became apparent that his light was going to be affected by the defendants' building.

Sir Herbert said it had been estimated that the plaintiff's house, by reason of the erection of defendants' building, had been damaged to the extent of £700.

Mr. Percy John Waldram, consulting engineer and daylight expert, gave evidence for the plaintiff.

Mr. Evershed admitted that the plaintiff had suffered a small amount of damage by reason of the slight diminution of his light and that damage had been estimated at £150. Counsel submitted that the plaintiff had made out no case for a mandatory order, which would cause the defendants a great amount of inconvenience and expense, out of all proportion to any benefit to the plaintiff.

The defendants' experts who gave evidence were Mr. Kenneth Dalglish, F.R.I.B.A., the architect of the defendants' building, Mr. A. S. Ackermann, consulting engineer, and Mr. John Bray and Mr. W. P. Ellen of St. Leonards.

JUDGMENT

His lordship, in giving judgment, said the plaintiff had abandoned his claim for a mandatory injunction for the demolition of the defendants' building. Plaintiff was well advised in taking that course as his lordship had seen the building and he was of opinion that any damages plaintiff had suffered could be adequately compensated by a money payment. There was no doubt that when the plaintiff acquired his property he had a very pleasant view out to sea. There was no doubt that the defendants' building was entirely out of character with St. Leonards, and whether the future generations would describe it as a thing of beauty was not a matter for him to decide. It was a formidable block and some people might describe it as a sky scraper. The architecture was foreign to St. Leonards and would be described as ultra-modern. It was, however, no part of his duty to criticise it nor to speak about the æsthetics of the building. Convenient as the building might be its back had a distinctly bleak appearance and it was the back view which was in front of the plaintiff's house. His lordship had considerable sympathy with the plaintiff in common with the other inhabitants of the street, in having this building put up in front of them, and which effectively blocked plaintiff's view of the sea. Instead of having a house in which he could sit and enjoy the view, he now looked out on a distinctly unattractive vista of modern flats, but as was well known, that was an injury for which the law provided no remedy, whereas if an occupier had his light obstructed he could bring an action.

His lordship, continuing said he had had a mass of evidence as to the loss of light. The experts for the plaintiff said there was a considerable loss of light and though those on the other side said there was none, one expert, Mr. Ackermann, admitted that there was some actionable obstruction of light on the ground floor and basement. Being anxious to come to a decision satisfactory to himself he went to St. Leonards to view the buildings.

The question he had to decide was whether the defendants' building caused such an obstruction of light as to amount to an interference with the ordinary use of plaintiff's house, and of course people living at St. Leonards would reasonably think that the amount of light for ordinary use there would be something more than would be required in London or an industrial town. When his lordship visited St. Leonards it was a day of dull skies and rather stormy. The rooms in the plaintiff's house were small, though they had good-sized windows. In the ground floor flat, in which the plaintiff lived, his lordship could find very little to complain of. In fact, if it had not been for the evidence of Mr. Ackermann, he would have had the greatest difficulty in finding there had been enough diminution of light to constitute a nuisance. There was no doubt that the room was not as light as it had been, but he had to consider not the amount of light taken away, but the amount left, and he did not think there was anything to complain of. He found no difficulty in reading a newspaper and could write quite easily. He did not try needlework so that he could not judge of any difficulty that Mrs. Leng might find.

The plaintiff had been deprived of his view of the sea and no doubt he honestly believed that he had been deprived of an unreasonable amount of light, but the evidence did not support that belief. The tenant of the first floor was never called and no doubt he was content, and his lordship having seen the top room could not take seriously the suggestion that there was any obstruction of light.

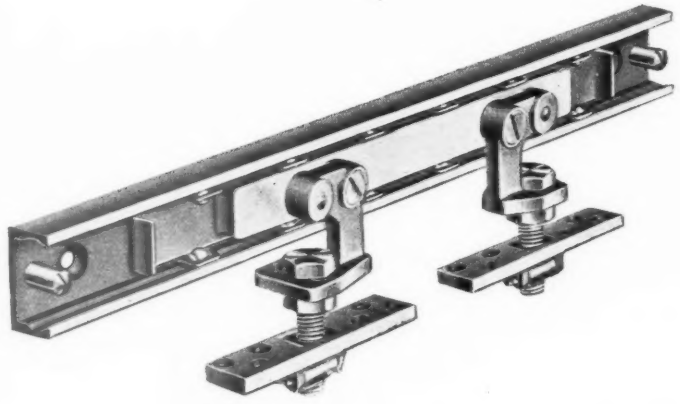
Now he came to the basement of plaintiff's house and that was another matter. It was dark, as basements usually were, and no doubt it had been made more dark by the defendants' building. As to the plaintiff's flat, the windows had heavy curtains and when his lordship drew them aside the difference that it made was apparent.

On these facts his lordship was of opinion that he was bound to find that there had been an appreciable interference with the light on the ground floor and much more in the basement, but he rejected the evidence of the plaintiff as to the first floor. The evidence as to the amount of damage to the plaintiff's premises varied from £700 to £150, the estimate of Mr. Ackermann. His lordship thought this latte figure much nearer the true figure.

His lordship put the depreciation in the selling value of plaintiff's house at £150 and the loss of other amenities such as sunshine at £50, and the inconvenience to plaintiff at £50, being a total of £250 damages.

It was stated that £250 was the exact amount which defendants had paid into court.

His lordship entered judgment for plaintiff for £250, the defendants to have the costs after the payment of that sum into court, his lordship remarking that the claim was exaggerated and therefore plaintiff would only have his costs down to the rate of the payment into court of the £250.



TRADE NOTES

[*By PHILIP SCHOLBERG*]

Sliding Gear for Doors

SLIDING gear for the heavier types of door used in garages or factories is generally easy enough to find, for there are several manufacturers who produce the necessary fittings, and the problem is simplified because a certain amount of noise is not objected to and someone can always be found to poke about with a screwdriver and keep the floor tracks clean. For the private house, however, the job is not so easy, for the upstanding floor track is a too obvious death trap and the recessed type is certain to get filled with floor sweepings and will jam before very long; there is, too, the question of appearance, for doors of this kind are frequently used to separate dining recesses from living rooms, and nobody wants a hard line across a nicely finished floor. A whole range of sliding fittings which get over this difficulty is marketed by Charles Moody. The most elaborate and expensive is the Perkeo type, which has been fairly well known in this country for several years. This consists of a channel member with a ball race cut in the top and bottom flanges, the sliding member fitting inside it and running on chrome steel balls carried in a cage. The illustration at the head of these notes shows the general arrangement of the fitting, with the hanger arms which carry the door. No floor track is necessary, the only other fitting, apart from buffers at the ends, being the floor guide, which is screwed to the floor at the jamb end of the door and is not visible at all, the foot of the door being grooved to receive it. Fittings with cranked hanger brackets are available for double doors which have to pass each other. These fittings are really silent and are made in ten different sizes to take doors up to 320 pounds in weight; finish is rustproof cadmium.

•

Much the same principle is applied to the Renova fitting, which is intended for lighter doors and is made in three sizes with carrying capacities ranging from 70 to 110 lb. Prices for this are considerably lower than for Perkeo. Cheaper still is the Dorma type, in which the hanger is supported and located by rollers and is not quite so silent. This firm also makes a Vulcan fibre track and slider for use with cupboard doors, as runners for drawers or for any other position where the presence of a bottom track does not matter. This fitting is very simple and quite cheap; the track is supplied in random lengths, but it can be easily cut on the job and with a little care efficient butt joints can be made, so that there need be no waste. —(*Charles P. Moody, 33 Finck Street, Upper Marsh, London, S.E.1.*)

Bicycle Storage

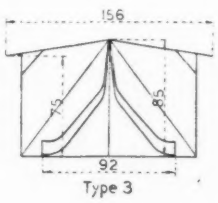
Now that every works of any size is more or less obliged, in its own interests, to provide storage space for workers' bicycles there are a number of manufacturers who make a speciality of these fittings and who are very clever at getting a maximum number of cycles into the minimum of space. The details of design vary a certain amount, but there are various points in favour of the type illustrated below, which is made by Alfred Odoni & Co. For safety's sake the troughs holding the cycles do not project beyond the ground frame and cannot therefore trap unwary ankles or tear clothes, and the cycles, except in the double tier stands, do not have to be lifted into position but can be pushed straight in from ground level. The type illustrated is intended for exposed positions, hence the fairly large roof projection, but it would seem that this amount of projection would do no harm even if the site were reasonably protected, for although cycle saddles have some sort of polish or dressing which makes them able to resist a certain amount of rain, they are apt to get sodden if they are exposed for the whole day, and it cannot be healthy for the workers to have to ride home on them. True, there was a saddle on the market just before the war which had a quick-acting clip at the front end and which was hinged at the back so that it could be turned upside down and thus kept dry, but nobody ever seemed to use it.

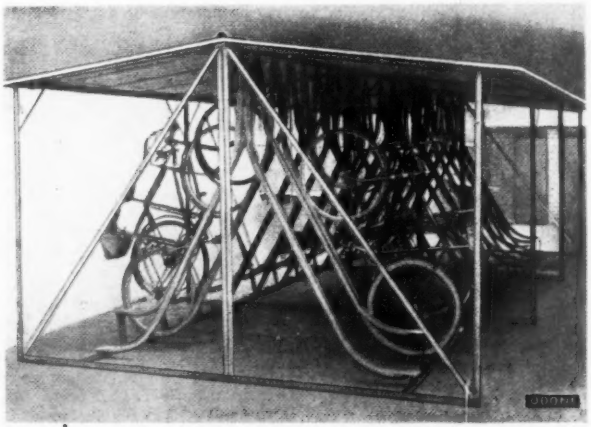
•

The space taken up by these stands varies according to the type used, the one illustrated, for instance, needing a length of approximately 41 ft. 6 ins. for 80 cycles. Possible extras include number plates, and each trough can have a clip welded on to take the lamp and a safety chain, so that neither lamp nor cycle can be stolen. Roofs are in galvanized sheet or asbestos cement, though, of course, each type can be supplied uncovered for use in existing sheds. For motor cycles this firm very reasonably argues that the trough fittings are not really necessary, as each machine has its own stand. They therefore suggest shelters only, though it is doubtful whether users would then park their machine as closely as they would if there were guides to fix the spacing. For a given number of machines, however, it seems unlikely that the possible extra space taken up would be more costly than the fittings necessary to save it.—(*Alfred A. Odoni & Co., Finsbury Court, Finsbury Pavement, London, E.C.2.*)

Marking Tennis Courts

While hard tennis courts in private grounds generally have a comparatively quiet life the public court is liable to extremely hard wear, and there is likely to be a certain amount of trouble with the marking out lines, particularly with the red court. Painted or concrete lines are unsatisfactory for different but obvious reasons and the most popular material seems to be some sort of tape. On account of its incorrodibility lead has often been used, but this is liable to get turned up at the edges after about six weeks use, added to which it rides up in front of the roller, loosening the nails and leaving loops which can be positively dangerous. To overcome this difficulty a new type of reinforced tape has recently been placed on the market, steel wires being embedded at the edges of the tape under hydraulic pressure thus keeping it straight and preventing it from





Photograph and section of a typical Odoni cycle stand. See note on this page.

curling. The manufacturers suggest that this type will last for at least two years, and, as it costs no more than unreinforced lead, its use would seem to be well worth while. The reinforcing wires are not likely to corrode, as they are completely encased in the tape.—(*Stratton's Reinforced Lead Marking Tape, Alliance (M/C) Ltd., Third Avenue, Trafford Park, Manchester.*)

Switches and Fuses

Sanders have just introduced a new range of combined switches and fuses with carrying capacities of from 15 to 60 amperes, mainly for industrial use, but obviously suitable as main switches for private houses or other small jobs where the total loading is not very high. In the 30 and 60 ampere sizes the Sandaspeed duplex fuse is standardized, this fuse being convertible at a moment's notice from ordinary to High Rupturing Capacity duty merely by inserting the appropriate carrier to take the H.R.C. cartridge. Not that this matters very much to the average householder, who does not have to deal with heavy fault currents, but from the suppliers' point of view it means that a large stock of switches can be kept and the different carriers mean that the available range is automatically doubled at the expense of very little storage space. The switches seem to be well finished, there is plenty of room inside for wiring, and the price is reasonable.—(*Wm. Sanders & Co. (Wednesbury), Ltd., Falcon Electrical Works, Wednesbury, Staffs.*)

Canteen Furniture

While there is every reason why canteen furniture should be well designed it is still more important that it should be strong enough to stand up to the heavy wear it will undoubtedly get. For these reasons the Evertaut range is well worth looking at, partly for the tables, of which there are two types, one with a tubular and one with an angle frame, both of which are very simple and look well; the chairs are also very ingenious, as they are pressed out of sheet steel and the sections are arranged to give a maximum of stiffness, while the backs are properly braced. The chief point about the design, however, is the ease with which these chairs may be stacked, a pile of fifteen or twenty fitting together into quite a rigid unit, so that handling is greatly simplified. The firm also makes a special trolley to take four piles of these chairs, and it is then possible for one man to move eighty chairs at once, a point of great value when the chairs are used in a village hall which may have to be converted for a lecture or cleared for a dance and then back into a restaurant, all in a limited time. The chairs have padded seats and backs and rubber feet, and are not only comfortable to sit upon, but are also quite quiet. And as nearly all people at lectures seem to have nasty coughs it is some slight comfort to know that anyway the chairs can't creak and make things worse. The cost of these chairs is 18s. 6d. each, with a reduction for quantities, and there is a range of six different standard colours stove enamelled.—(*Evertaut, Ltd., Walsall Road, Perry Bar, Birmingham, 22.*)

Kiln-Seasoned Teak

Recent research at Princes Risborough seems to show that there is no need to be suspicious about the value of kiln seasoning for teak. F.P.R. Record No. 23 (price 6d.) gives details of a series of six kiln-seasoning experiments which were conducted on strips of teak measuring 4 ins. by 1 in. It was found that the wearing qualities were not affected by kiln temperatures of 95 deg. C. and 45 deg. to 60 deg. C. (varying), and the colour, although it is somewhat patchy on removal from the kiln, quickly re-establishes itself after exposure to light and air.

THE BUILDINGS ILLUSTRATED

RAVELSTON GARDEN, EDINBURGH 4 (pages 979–981). Architects: Neil and Hurd. No general contractors. The sub-contractors and suppliers included: Robert Bruce and Son, Ltd., excavation, foundations and damp-courses; W. G. Walker and Sons, Ltd., asphalt, roofing felt (3-ply); Toffolo, Jackson & Co., concrete blocks and artificial stone; Robertson & Co., Ltd., reinforced concrete; United Collieries, Ltd., bricks (Etna); Redpath, Brown & Co., Ltd., structural steel; Slate Slab Products, Ltd., slates; Imperial Chemical Industries, partitions (Pioneer blocks); Cunningham, Dickson and Walker, glass; A. M. MacDougall and Son, woodblock flooring; Frazzi, Ltd., special roofing, patent flooring, and Paropa balconies; Underhill Heating Engineers, Ltd., central heating; Mirrlees, Watson Co., automatic stoker; Mitchell, Russell & Co., Ltd., stoves; Morrison, Ltd., gas fixtures, gasfitting and plumbing; Hartley and Sugden, boilers (White Rose); D. S. Munro, bells, electric wiring and electric light fixtures; Steele Bros., sanitary fittings; D. and J. Borthwick, stair-treads and plaster; Bell Donaldson & Co., door furniture; Williams and Williams, Ltd., casements and window furniture; Post Office, telephones; James Brown and Son, metalwork; Adam Currie and Sons, Ltd., joinery, mantels; Fraser Walker & Co., grates and hand-made china tiles; Donald Bros., textiles (show flat); Arthur Sanderson and Sons, Ltd., wallpapers; Andrew Muirhead and Son, painter work; George A. Fairweather, furniture (show flat); Etchells, Congdon and Muir, Ltd., lifts; Edinburgh Corporation, water supply.

ASCOT PRIORY LADY CHAPEL (pages 982–983). Architects: Mitchell and Bridgwater. The general contractors were Chapman, Lowry and Puttick, who were also responsible for the demolition, excavation, foundations, reinforced concrete, roofing tiles to match old buildings, partitions, central heating, plumbing and joinery. The sub-contractors and suppliers included: Constone, Ltd., artificial stone; Dawnays, Ltd., structural steel; Pilkington Bros., glass; Cork Insulation Co., cork tiles; Ideal Boilers and Radiators, radiators; B. Simms, electric wiring; Best and Lloyd, electric light fixtures; Wing and Webb, door furniture; Crittall Manufacturing Co., metal casements; Carbo Plaster, Ltd., plaster, Marb-L-Cote finish; R. Burnet & Co., Ltd., textiles; Heal and Sons, Ltd., carpets; Buss and Elston, pews and communion rails; Daymonds, Ltd., memorial tablets.

BRIGHTON FIRE STATION (pages 993-995). Architect: G. I. C. Highet. The general contractors were Ringmer Building Works, Ltd., and the sub-contractors and suppliers included: Aston Construction Co., Ltd., steelwork; Val de Travers Asphalte Paving Co., Ltd., asphalting and Valcotherm roofing; Kleine Co., Ltd., hollow tile floors; Higgins and Cattle, Ltd., electrical work; Walters Electrical Manufacturing Co., Ltd., fire alarm system and inter-communicating telephones; J. H. Nicholson & Co., Ltd., heating and hot water supply; J. A. King & Co., Ltd., pavement and roof lights; Dent and Hellyer, Ltd., plumbing and cold water supply; Bath and Portland Stone Firms, Ltd., Portland stone; Cooper Wettern & Co., Ltd., granite; Empire Stone Co., Ltd., reconstructed stone and staircases; C. E. Welstead, Ltd., steel windows; James Gibbons, Ltd., ironmongery; S. Dixon and Son, Ltd., stainless steel sliding poles; Carter & Co., Ltd., floor and wall tiling; Brookes, Ltd., granolithic paving; W. Saunders and Son, wrought ironwork; F. Braby & Co., Ltd., copper canopy and roof; J. B. Bennett & Co., quick release door gear; Hollis Bros. & Co., Ltd., wood block flooring; J. W. Gray and Son, Ltd., lightning conductors; Avery Hardoll, petrol pumps; George Johnson, Ltd., service lift; J. Cribb, stone carving; Crowborough Brick Co., Ltd., facing bricks; Molar Products, Ltd., Fosalsil flue bricks and partition blocks.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

CHELSEA. *Cinema.* The Chelsea B.C. has agreed to raise no objection to the scheme of the Associated British Cinemas, Ltd., for the erection of a cinema in King's Road.

CROYDON. *School.* The Croydon Education Committee is to prepare plans for a secondary school for boys in Shirley Road.

CROYDON. *Maisonettes, etc.* Plans passed by the Croydon Corporation: 20 maisonettes, 632 to 670, Brighton Road, Haling Down Estate, Ltd.; eight maisonettes, adjoining 287 Whitehorse Lane, South Norwood, Mr. J. Rosenfeld; 11 shops and maisonettes, Lodge Lane, Murrell and Pigott.

FOREST HILL. *School.* The L.C.C. is to erect a secondary school for boys at Forest Hill, at a cost of £58,275.

LEWISHAM. *Swimming Bath.* The governors of St. Dunstan's College, Lewisham, are to construct a swimming bath at an estimated cost of £6,000.

PROVINCES

BLACKHALL. *Houses.* Mr. P. Taylor is to erect 18 houses at Leaholme Terrace, Blackhall.

BOREATTON PARK. *Hospital Accommodation.* The Shropshire C.C. has prepared a scheme for the adaptation of the Mansion House for 90 patients and the erection of a villa for 60 patients, together with the necessary engineering services at an estimated cost of £34,196, at Boreatton Park.

BRIGHTON. *Pavilion.* The Brighton Corporation is to erect a pavilion at the Brapool Barn Sports Ground, at a cost of £6,550.

BRIGHTON. *Bungalows, etc.* Plans passed by the Brighton Corporation: 10 bungalows, 14–19 Block 1, Larkfield Way, Withdean Estate East, Patcham, Mr. E. J. Shepherd; six houses, 1–8 Warmdene Path, Patcham, Mr. George Swiney; eight bungalows, 5, 6 and 8–11 Woodland Way, Patcham, Mr. Stanley Owen; 15 flats, 18 Buckingham Place, Mr. Thomas Bunting; shop front and alterations, 7 and 8 York Place, S. Hilton and Sons, Ltd.; 14 houses, Withdean Estate West, Patcham, G. T. Crouch, Ltd.; 80 bungalows, Woodbourne Avenue, Westfield Close, Northfield Way, Withdean Estate East, Patcham, Drayco, Ltd.

BRIGHTON. *School Extensions.* The Brighton Education Committee has approved revised plans for the extension of the Patcham School, at a cost of £11,653.

BURWARTON. *School.* The Church of England authorities are to erect a senior school at Burwarton, at an estimated cost of £5,000.

CONDOVER. *School.* The Shropshire Education Committee has approved plans by the Ludlow Voluntary School Association for a new church senior school at Condover, at an estimated cost of £18,000.

DAWLEY. *School.* The Shropshire Education Committee is to erect a senior mixed school for about 320 children at Dawley.

DUDLEY. *School Remodelling.* The Northumberland Education Committee has obtained sanction to borrow £16,445 for remodelling Dudley School.

PRICES

On the following pages appear *(a)* Prices for Measured Work, Part II; *(b)* Prices for Approximate Estimates.

★ *ANSWERS TO QUESTIONS*

While the JOURNAL, *naturally, cannot presume to undertake the responsibilities of a quantity surveyor, it has arranged with the authors of this Supplement to answer readers' questions regarding any matter that arises over their use of the Prices Supplement in regard to their work, without any fee. Questions should be addressed to the Editor of the* JOURNAL, *and will be answered personally by Messrs. Davis and Belfield. As is the normal custom, publication in the* JOURNAL *will omit the name and address of the enquirer so that it is unnecessary to write under a pseudonym.*

The complete series of prices consists of four sections, one section being published each week in the following order :—

1. Current Market Prices of Materials, Part I.
2. Current Market Prices of Materials, Part II.
3. Current Prices for Measured Work, Part I.
4. A.—Current Prices for Measured Work, Part II.
   B.—Prices for Approximate Estimates.

● *Prices are for work executed complete and are for an average job in the London Area, all prices include for overhead charges and profit for the general contractor.*

PART 4

CURRENT PRICES FOR MEASURED WORK—II

BY DAVIS AND BELFIELD, P.A.S.I.

JOINER

Deal Flooring

		1″	1¼″
Plain edge flooring in batten widths	per square	39/2	48/–
Ditto tongued and grooved ditto ..	per square	42/10	52/1

Wood Block Flooring, laid herringbone, 100 yards and up

D.G. and T.G. kiln dried, 2 block border, laid in hot mastic composition on cement screed, including 2 feet run of straight cutting per yard super, and wax polishing at time of laying.

		1″ nominal	1¼″ nominal
Burma teak	per yard super	13/11	18/4½
Canadian Maple	per yard super	11/6	13/8
25–30 per cent. quart Austrian Oak	per yard super	12/10	16/–
Plain American Oak (no selection made for sap) ..	per yard super	11/8	—
Gurjun	per yard super	12/7	14/9
Pitch Pine (50% rift sawn)	per yard super	11/10	13/8
Ditto (100% ditto)	per yard super	13/1½	15/6
British Columbian Pine ..	per yard super	10/–	11/6
Kara Sea Deal, 100 per cent. rift sawn	per yard super	9/9	10/6
Jarrah	per yard super	13/2	15/9
Additional straight cutting	5½d. per foot run		

JOINER—(*continued*)

Secret Nailed Tongued and Grooved Strip Flooring, fully Desiccated, including Polishing

		1″ nominal £ s. d.	1¼″ nominal £ s. d.
Austrian Wainscot Oak ..	per square	8 18 6	10 12 7
Plain Japanese Oak ..	per square	7 10 8	9 2 2
Plain American Oak ..	per square	7 7 0	9 3 9
Pitch Pine	per square	7 0 6	8 15 7
British Columbian Pine ..	per square	4 14 6	5 7 7
Canadian Maple	per square	6 19 1	8 10 7
Mahoborn Teak	per square	6 19 1	8 10 7
English Oak	per square	10 4 9	12 15 11
Gurjun	per square	6 19 1	8 10 7
Jarrah	per square	6 13 10	8 6 5

Wall Linings

⅝″ Deal tongued and grooved V-jointed Matching in narrow widths	per square	33/4
¼″ (6 mm.) Birch (A) Plywood and fixing to walls	per square	46/6
5/16″ Asbestos cement sheets butt jointed	per foot super	–/3½
½″ Fibre board and fixing to walls ..	per yard super	2/11
Deal battens as ground plugged to brickwork	per foot super	–/1½
1½″ × ⅝″ wrot and chamfered fillets ..	per foot run	–/1½
2″ × ½″ wrot and moulded ditto	per foot run	–/1½

CURRENT PRICES

BY DAVIS AND BELFIELD, P.A.S.I.

JOINER, IRONMONGER AND STEEL AND IRONWORKER

JOINER—(*continued*)

Skirtings

		Deal	Austrian Oak
1″ chamfered or moulded 4″ high, fixed to and including grounds and backings planted on	per foot run	-/3½	-/7¾
Add for plugging to brickwork ..	per foot run	-/0½	-/0¾

Fitted ends on hardwood price as 4″ of skirtings, mitres as 6″.
Fitted ends, etc., on deal skirting included in price per foot run.

Casements and Fanlights

		1½″	2″
Deal moulded sashes divided into squares with glazing bars	per foot super	1/4½	1/5½
Add for hanging casements (butts measured separately)	each	1/9	2/-

Cased Frames and Sashes

Deal cased sashed frame, including 2″ double hung sashes, with 6″×3″ Oak cill and brass axle pulleys, sash line and weights, average 15 feet super ..	per foot super	3/9

Doors in Deal

		¾″	1″	1¼″
Matchboarded, ledged and braced door	per foot super	1/-	1/2	1/4
		1½″	1¾″	2″
Framed, ledged and braced door, filled in with matchboarding ..	per foot super	1/5	1/9	1/10
Ditto garage doors, ...	per foot super			1/7

		4-panel
1½″ square framed, both sides ..	per foot super	1/7
2″ ditto	per foot super	1/9
1½″ ditto bead butt panels one side, but square the other	per foot super	1/9
2″ ditto, ditto	per foot super	1/11
1½″ moulded both sides	per foot super	1/10
2″ ditto	per foot super	2/-
For fixing only p.c. doors allow ..	per foot super	-/2½

Hardwood doors two-and-a-half times as much as deal.

Deal glazing beads, mitred and bradded	per foot run	-/1½
Ditto and fixed with brass cups and screws	per foot run	-/3

Window and Door Linings

		1″	1¼″	1½″
Deal linings, 6″ wide, tongued at angles and planted on including backings	per foot run	-/6¼	-/7	-/8
Add for plugging to wall ..	per foot run	-/0½	-/0½	-/0½
Add for rebating	per foot run	-/0½	-/0½	-/0½
Add for ½″ × 2″ Deal stop planted on	per foot run	-/1½	-/1½	-/1½
Deal window board 9″ wide, with rounded nosing, tongued at back and on and including bearers plugged to brickwork..	per foot run	-/10	-/11	1/1
¾″ Deal scotia mould	per foot run		-/1½	
Oak linings 6″ wide tongued at angles and planted on including backings	per foot run	1/2½	1/4½	1/7½
Add for plugging to brickwork ..	per foot run	-/1	-/1	-/1
Add for rebating	per foot run	-/1	-/1	-/1
Add for ½″ × 2″ Oak stop planted on	per foot run	-/3½	-/3½	-/3½
Oak window board 9″ wide, with rounded nosing tongued at back and on and including bearers plugged to brickwork..	per foot run	1/10	2/1	
¾″ Oak scotia mould	per foot run		-/3½	

Window and Door Frames

		Deal	Austrian Oak
4″ × 3″ door frames	per foot run	-/10	2/0½
4″ × 3″ window frames	per foot run	1/-	2/4½
4″ × 3″ transomes and mullions ..	per foot run	1/3½	2/11½
6″ × 3″ door cill, sunk weathered twice throated and grooved for water bar (measured separately)	per foot run	—	3/9
6″ × 3″ window ditto	per foot run	—	3/1
Add or deduct for variation in sectional area per square inch	per foot run	-/0½	-/1½
Add for each labour, for chamfer, bead or rebate, etc.	per foot run	-/0½	-/1
Add for each moulding	per foot run	-/0¾	-/1½

Architraves

		Deal	Oak
1″×3″ chamfered or moulded architraves, including mitres on softwood, planted on	per foot run	-/3	-/7¼

Mitred angles on oak price as 6″ of architrave.

Add for plugging to brickwork ..	per foot run	-/0½	-/0¾
Add for narrow splayed grounds ..	per foot run	-/1½	-/1½

JOINER—(*continued*)

Shelving

		Deal	Oak
Slat shelving of 1″ × 2″ spaced ¾″ apart	per foot super	-/9	—
1″ shelving	per foot super	-/10	2/2
1½″ ditto	per foot super	-/11½	2/6
1″ cross-tongued shelving ..	per foot super	1/-	2/6
1½″ ditto	per foot super	1/1½	2/10
1″ × 2″ chamfered bearers planted on	per foot run	-/2¼	-/5¼
Add if bearers plugged to brickwork	per foot run	-/0½	-/0¾

Teak Draining Boards and Twice Oiling

1½″ Moulmein cross-tongued fluted draining board fixed to slight falls	per foot super	3/9
½″ × 2″ rounded rim bedded in white lead and screwed to edge of draining board	per foot run	-/5
½″ × 4″ rounded skirting fillet ditto.. ..	per foot run	-/9

Staircases

		Deal	Oak
1½″ treads and 1″ risers ..	per foot super	2/-	5/-
2″ strings, fixed	per foot run	1/10	4/7
Housing treads and risers to strings ..	each	-/9	1/6
3″ × 2½″ French polished moulded handrail	per foot run	—	2/6
1½″ × 1½″ square balusters 2′ 6″ long ..	each	-/10	2/-
4″ × 4″ Newels with chamfered edges and fixing	per foot run	1/4	3/4

IRONMONGER

Fixing only

4″ Butt hinges to softwood	per pair	1/-
4″ ditto to hardwood	per pair	1/4
16″ T. hinges to softwood	per pair	1/6
48″ Collinges patent gate hinges to softwood	per pair	7/6

		Softwood	Hardwood
6″ Cabin hooks	each	-/7½	-/10
Hat and coat hooks	each	-/3	-/4
Cupboard knobs	each	-/3	-/4
Night latches	each	1/6	2/-
Thumb latches	each	1/6	2/-
Letter plate and knocker, including perforation in door	each	2/6	3/4
Barrel or tower bolts	each	-/10	1/1
Flush bolts	each	1/6	2/-
Rim locks and furniture	each	2/-	2/8
Mortice ditto	each	3/-	4/-
Rebated ditto	each	3/6	4/8
Grip handles	each	-/6	-/8
Cupboard locks	each	1/-	1/4
Spring catches	each	-/10½	1/1½
Casement fastener	each	1/-	1/4
Ditto stays	each	-/10	1/1
Sash fastener	each	-/8	-/11

STEEL AND IRONWORKER

(For Rainwater Goods—*see* "Plumber.")

Steelwork

		£ s. d.
*Basis for plain rolled steel joists ..	per ton	17 7 6

Fabricated Steelwork

		£ s. d.
Joists cut and fitted	per ton	21 11 6
Stanchions, ordinary sections with riveted caps and bases	per ton	25 12 6
Stanchions, compound	per ton	27 3 0
Plate girders	per ton	31 12 6
Framed roof trusses, 25′ 0″ span ..	per ton	32 17 0
Ditto ditto 60′ 0″ span ..	per ton	30 7 0

The above prices are ex mills ordered well in advance of delivery.
Prices ex London stocks are considerably higher, and definite quotations should be obtained.

Wrot Iron Work

Simple balusters and handrail fixed (excluding mortices, etc.)	per cwt.	56/-
Bolts and nuts fitted	per cwt.	45/-

Galvanized Corrugated Sheeting

		20 B.G.	22 B.G.
Sheeting in 3″ corrugations and fixing on wood framing with screws and galvanized embossed curved washers including laps ..	per square	56/-	49/-
Ditto fixed to steel framing ..	per square	63/4	56/8

*** Items marked thus have fallen since May 12th.**

CURRENT PRICES

BY DAVIS AND BELFIELD, P.A.S.I.

PLASTERER, EXTERNAL AND INTERNAL PLUMBER

PLASTERER

Lime and Sirapite Plastering

	Per yard super	In narrow widths per foot super
Expanded metal lathing	1/8	–/3
1″ × 3/16″ sawn laths	–/9	–/1½
Render and set in lime and hair	1/8	–/3¼
Render, float and set in lime and hair	2/–	–/3¾
Plaster, float and set ditto on lathing (measured separately)	2/1½	–/4
Render and set with Sirapite	1/9½	–/3½
Plaster, float and set ditto on lathing (measured separately)	2/3	–/4
Skimming coat Sirapite	1/5½	
⅜″ thick plaster board fixed including covering joints with scrim cloth	2/–	

Keenes

	Per yard super	In narrow widths per foot super
Cement plain face on and including a backing of Portland cement and sand	2/6	–/5

Mouldings and Labours

		Lime and Sirapite	Keenes
Plain cornices and mouldings 6″ girth	per foot run	–/9½	–/11
Labour arris, quirk or throat	per foot run	–/1½	–/1½
Ditto rounded angle	per foot run	–/2	–/2
Ditto staff bead	per foot run	—	–/7½

Mitres price as 12″ of moulding, stopped ends as 6″, and rounded angles as 18″.

Portland Cement and Sand (1 : 3)

		½″	¾″
Screeds to floors for wood or tiles	per yard super	1/2½	1/4
Screeds for tiling, etc., on walls	per yard super	1/4	1/6
Renderings to walls—one coat float finish	per yard super	1/6	1/8
Plainface	per yard super	1/10	2/–

Coloured Cement Plainface

Cullamix No. 2 or 3 cream, on and including water repellent cement and sand backing	per yard super	3/10
Snowcrete mixture on and including ditto	per yard super	3/10
Snowcrete and white silica sand on and including ditto	per yard super	3/6

For raking out joints of brickwork, keyed bricks or hacking face of concrete, to form key for plastering, see "Bricklayer."

Wall Tiles, Commercial Quality

6″ × 6″ × ⅜″ ivory or white	per yard super	16/–
Extra for rounded edge tiles	per yard run	1/5
6″ × 6″ × ⅜″ coloured enamel bright glazed	per yard super	21/3
Extra for rounded edge tiles	per yard run	–/7¾
6″ × 6″ × ⅜″ eggshell gloss enamelled	per yard super	22/1
Extra for rounded edge tiles	per yard run	–/6¾

EXTERNAL PLUMBER

Lead

		Flats	Gutters, Flashings, etc.	Stepped Flashings	Soakers cut to size
Milled sheet lead and labour	per cwt.	39/6	40/7	41/8½	34/4
Bedding edges in white lead				per foot run	–/2
Lead wedgings to flashings				per foot run	–/1½
Ditto to stepped flashings				per foot run	–/2
Dressing 6-lb. lead over glass and glazing bars				per foot run	–/3½
Copper nailing				per foot run	–/1½
Close ditto				per foot run	–/2
Bossed ends to rolls				each	–/7½
Extra labour dressing through shoots and into rainwater heads				each	3/–
Ditto to cesspools, including extra solder				each	5/3

Cast Iron Rainwater Goods

Rainwater Pipes fixed to brickwork.

		3″	4″
Round pipes	per foot run	1/5½	1/9
Extra for bends	each	2/2	2/10
Ditto 6″ offset	each	2/4	2/10
Ditto single branches	each	2/7	3/1
Ditto shoes	each	1/7	2/2
		3½″ × 3½″	4″ × 3″
Square and rectangular pipes	per foot run	3/2	2/10
Extra for elbows	each	4/11	3/6
Ditto single branches	each	5/9	5/4
Ditto shoes	each	4/8	4/3

EXTERNAL PLUMBER—(*continued*)

Gutters fixed to fascia.

		4″	5″	6″
Half-round gutters	per foot run	1/–	1/2½	1/8½
Extra for angles	each	1/9	2/–	2/3
Ditto nozzles	each	1/7	1/10	2/5
Ditto stop ends	each	1/–	1/3	1/4½
O'Gee gutters	per foot run	1/1½	1/4	1/9½
Extra for angles	each	1/9½	2/3	2/4
Ditto nozzles	each	1/8	2/3	2/8
Ditto stop ends	each	1/1½	1/4½	1/7½

INTERNAL PLUMBER

Lead Pipes

Service.

		½″	¾″	1″	1¼″
Pipes laid in trenches	per foot run	–/10¾	1/2½	1/8¾	2/4½
Add if fixed on walls	per foot run	–/2	–/3	–/4	–/5
Ditto if in short lengths	per foot run	–/1	–/1	–/1½	–/2
		1½″	2″	2½″	3″
Pipes laid in trenches	per foot run	3/–	4/–	—	—
Add if fixed on walls	per foot run	–/6	–/8	—	—
Ditto if in short lengths	per foot run	–/3	–/4	—	—

Distributing.

		½″	¾″	1″	1¼″
Cold water pipes fixed to walls	per foot run	–/10¾	1/2¾	1/8½	2/3
Add if in short lengths	per foot run	–/1	–/1	–/1½	–/2
Cold water pipes fixed to walls	per foot run	1½″ 2/9½	2″ 3/7½	2½″ —	3″ —
Add if in short lengths	per foot run	–/3	–/4	—	—

Flushing and Warning.

		½″	¾″	1″	1¼″
Waste and overflow pipes fixed in short lengths	per foot run	–/8¾	–/11	1/2	1/5
Waste and overflow pipes fixed in short lengths	per foot run	1½″ 1/10	2″ 2/5½	2½″ —	3″ —

Soil and Ventilating.

		3½″	4″	4½″
Pipes fixed, including lead tacks	per foot run	5/3	5/10	6/8½

		1½″	2″	2½″	3″	3½″	4″	4½″
Bends	each	1/6	2/–	2/9	3/9	4/3	4/6	5/6
Soldered joints to fittings		½″	¾″	1″	1¼″	1½″		2″
	each	2/1½	2/4	2/7	2/9	3/–		3/5
Soldered branch joints (price as largest branch)	each	½″ 2/3½	¾″ 2/6	1″ 2/9	1¼″ 3/–	1½″		3/3
Soldered branch joints (price as largest branch)	each	2″ 3/8	2½″ 4/–	3″ 4/6	4″ 5/–	4½″		6/6
Wrap small pipes with hair felt					per foot run			–/6

Drawn Lead Traps

	1¼″	1¼″ 3″ deep seal	1½″	1½″ 3″ deep seal	2″	2″ 3″ deep seal
P. Traps 6 lb. with cleaning eye and two soldered joints each	7/1	7/7½	8/3	8/9½	9/8	10/2½
S. ditto each	7/6	8/0½	8/8	9/2½	10/4	10/10½

Brasswork (*Best Quality*)

	½″	¾″	1″
Brass screwdown stop cocks including two soldered joints each	7/6	9/9	13/1
Ditto, including two red lead joints for iron each	5/8	7/10	11/–
Ditto, including one soldered and one red lead joint each	6/1	8/1	11/2
High pressure Portsmouth pattern ball valve with flynut and union and one soldered joint each	8/5	11/7	17/2
Ditto, including red lead joint for iron each	6/5	9/2	16/8
		2″	4″
Brass thimble and soldered and cement joints each		5/–	9/5
Ditto, with solder and caulked lead joints each		6/–	11/2

Fixing Only (*Connections to Pipes measured separately*)

24″ × 18″ × 6″ sinks including taps, etc., and pair of brackets cut and pinned to brickwork each	6/–
24″ × 18″ lavatory basins ditto each	6/6
W.C. suite comprising pan and trap, seat, W.W.P. and brackets each	10/6
Baths, including taps, etc., and setting in position each	10/6

CURRENT PRICES

BY DAVIS AND BELFIELD, P.A.S.I.

INTERNAL PLUMBER, GLAZIER AND PAINTER

INTERNAL PLUMBER—(*continued*)

Screwed and Socketed Galvanized Steam Quality Steel Tubes and Fittings

Pipes up to and including 1½″ include short running lengths, sockets, connectors, elbows, bends, fire bends; Tees and Diminishing Pieces enumerated.

Distributing.

		½″	¾″	1″	1¼″	1½″	2″
Pipes fixed to walls	per foot run	–/10	1/–	1/4	1/10	2/4	3/–
Ditto in short lengths, fittings, etc., measured separately	per foot run	–/10	1/–	1/4	1/10	2/4	3/–
Extra for							
Firebends	each	–/4	–/6	–/9	1/3	1/6	2/–
Bends	each	1/2	1/5	1/9	2/6	3/1	4/9
Round elbows	each	1/5	1/8	2/–	2/4	2/10	4/4
Square ditto	each	1/5	1/8	1/11	2/3	2/8	4/1
Tees	each	1/6	1/10	2/1	2/9	3/1	4/8
Crosses	each	2/9	3/2	3/10	5/–	6/–	9/1
Diminishing pieces	each	–/10	–/11	1/2	1/6	1/11	2/8
Caps	each	–/7	–/8	–/10	1/–	1/5	1/9
Plugs	each	–/6	–/6	–/8	–/11	1/4	1/8

Cast Iron Waste, Soil and Vent Pipes

		2″	3″	4″	5″	6″
L.C.C. pipes in 6′ 0″ lengths fixed to brickwork	per foot run	1/10	2/–	2/5	4/5	5/4
Extra for bends	each	5/3	6/1	7/10	11/–	14/9
Ditto single branches	each	6/5	8/2	11/–	17/6	23/6
Ditto swannecks 6″ projection	each	6/1	8/9	11/1	16/1	22/–
Extra for access door or any fitting	each	6/9	6/9	7/3	8/6	8/6

Zincworker

		13 G.	14 G.	15 G.	16 G.
Rolled sheet zinc on flats	per foot super	–/7½	–/8	–/9	–/9½
Ditto in gutters, cover flashings, etc.	per foot super	–/8½	–/8½	–/9½	–/10½
Ditto in stepped flashings	per foot super	–/10½	–/11	1/–	1/0½
Labour and risk dressing over glass	per foot run	–/4½	–/4½	–/4½	–/4½
Capped ends to rolls	each	–/2¼	–/2¼	–/2¼	–/2¼
Extra labour to cesspools	each	2/7½	2/7½	3/2	3/2

Copperworker

Distributing.

		½″	¾″	1″	1¼″	1½″	2″
Solid drawn copper tube fixed to walls	per foot run	–/9	1/–	1/5½	1/10	2/3	3/3
Add if in short lengths	per foot run	–/0¾	–/0¾	–/1	–/1½	–/2	–/2¼

Fittings for copper tubes

Compression type							
Straight couplings	each	1/10	2/2	3/–	3/9	5/1	7/3
Obtuse elbows	„	2/8	3/2	4/5	5/6	8/10	12/7
Tees	„	3/1	3/6½	5/4	7/4½	11/3	15/7
Crosses	„	4/1½	4/8	5/8½	8/–	13/2	18/–
Reducing coupling	„	—	2/2	3/–	3/9	5/1	7/3
Bends	„	2/5	2/10½	3/1	5/–	8/3	11/11
Brass stopcocks	„	5/6	7/10	11/–	19/3	26/6	43/6
Capillary type							
Straight coupling	each	1/6	1/11	2/7	3/3	4/1	5/4½
45° Elbow	„	2/4	2/11½	3/10½	4/11	6/10	9/7
Tees	„	2/7	3/–	4/3	5/10	7/10	11/–
Crosses	„	3/1	3/6	5/1½	6/10	9/8	13/5
Reducing coupling	„	—	1/7	2/–	2/6	3/3	4/8
Bends	„	2/8	3/2	4/3	5/7	8/1	10/11
Pillar tap connections	„	1/11	2/6				

		24 G.	23 G.
Rolled sheet copper on flats	per foot super	1/6	1/8
Ditto in gutters, cover flashings, etc.	per foot super	1/7	1/9
Ditto in stepped flashings	per foot super	2/1½	2/4½
Labour and risk dressing over glass	per foot run	–/4½	–/4½
Capped ends to rolls	each	–/3½	–/3½
Extra labour to cesspools	each	3/8	3/8

GLAZIER

Sheet Glass (Ordinary Glazing Quality)

18 oz. clear sheet and glazing to wood, sprigged and with back and front putties, to all normal sizes not exceeding 60″ in length or 40″ wide	per foot super	–/6½
24 oz. ditto	per foot super	–/7¾
32 oz. ditto	per foot super	1/0½

GLAZIER—(*continued*)

Obscured ground sheet glass, net extra to above prices	per foot super	–/1¾
⅛″ figured rolled white glass and glazing to wood with beads (measured separately)	per foot super	–/10½
Ditto, normal tints, ditto	per foot super	1/2¾
Hammered double rolled cathedral white ditto	per foot super	–/10
Ditto, normal tints, ditto	per foot super	1/1¾
Add for glazing into metal frames (ordinary rebates)	per foot super	–/1½
Ditto, metal sashes with ferroput	per foot super	–/2½
Ditto, solid metal casements and screw beads	per foot super	–/2½
Wash leather strip or similar material and bedding edge of glass	per foot run	–/3½

Glazing only thick drawn sheet glass, polished plate or wire polished plate for all normal sizes. (For prices of glass see materials section and add profit, say 10 per cent.) per foot super 6½d.

PAINTER

Painting, Whitening and Distempering (on new Plastered Walls)

Twice distempering white	per yard super	–/5
Ditto, in common colours	per yard super	–/7
Add for stippling	per yard super	–/2
Preparing and painting three coats of paint	per yard super	1/9

Preparing and Painting Two Coats of Oil Colour on Ironwork after fixing

General surfaces	per yard super	1/1½
Perforated landings and staircases both sides (one side measured)	per yard super	2/6
Pipes, bars, balusters, etc., not exceeding 3″ girth	per yard run	–/1¾
Metal Window Frames	per yard run	–/2½
Eaves gutters	per yard run	–/7½
2″ Rainwater pipes	per yard run	–/3
4″ ditto	per yard run	–/6
Squares one side	per dozen	1/9
Large ditto	per dozen	2/3
Extra large ditto	per dozen	3/–
Edges of casements	each	–/3

Painting on New Woodwork

		Knot, prime, stop and paint three coats oil colour	Add or deduct for each coat more or less
General surfaces	per yard super	2/–	–/6
Fascias and soffites	per yard super	2/6	–/7½
Fillets, skirtings, etc., not exceeding 3″ girth	per yard run	–/3	–/0¾
Ditto, not exceeding 6″	„ „ „	–/5½	–/1½
Ditto, not exceeding 9″	„ „ „	–/7	–/1¾
Ditto, not exceeding 12″	„ „ „	–/9	–/2
Squares one side	per dozen	3/6	–/9
Large ditto	„ „	4/6	1/–
Extra large ditto	„ „	6/–	1/4
Edges of casements	each	–/6	–/1½

Sundries

Twice creosoting woodwork	per yard super	–/6
Twice limewhiting brickwork	per yard super	–/4

		Sizing	Staining	Once Varnish
General surfaces	per yard super	–/2	–/4½	–/6
Wax polishing	per foot super			–/4½
Body in and French polish on hardwood surfaces	per foot super			1/–

Writing

Plain letters or figures, two coats, 2″ to 12″ letters	per dozen inches in height	1/10½
Ditto, shaded	„ „ „ „ „	2/6
Plain gold, 2″ to 12″ letters	„ „ „ „ „	2/6
Ditto, 12″ to 24″	„ „ „ „ „	3/9

Gilding

		Single Gold	Double Gold
Preparing and gilding in best oil gold	per foot super	5/3	8/4
Ditto in matt or burnished gold	per foot super	7/4	11/6

Paperhanging

Pasting and hanging only.

		On walls	On ceilings
Preparing new plastered walls for papering	per piece (60 feet super)	1/4	1/5½
Plain lining paper	„ „ „ „	1/4	1/8
Common printed papers	„ „ „ „	2/–	2/6

APPROXIMATE ESTIMATES

ON this and the three following pages the JOURNAL's section of Approximate Estimates is published for the fifth time.

There is nothing revolutionary about the idea—its usefulness lies in its efficiency as a time-saver in calculating the approximate price of work to which the cubing system cannot be applied.

In brief, an Approximate Estimate in considering a roof, converts the several units of pricing involved into a common unit of price per square yard, and then adjusts the price to cover sundry labours. By this means several stages of calculation are saved by the estimator in a hurry.

• ***The following composite prices are for work executed complete and should be used for the preparation of Approximate Estimates only.***

FOUNDATIONS

		Thickness of walls 9″	11″ Hollow	13½″
• Excavation in clay soil for foundations 2′ 6″ deep to walls, including stock brickwork in second stocks cement mortar 1 : 3 up to 6″ above ground and horizontal double slate damp-proof course with external facings p.c. 100/– and pointing	*per yard run*	25/1	28/3	35/4
• Ditto, in ordinary soil ditto	*per yard run*	23/10	27/1	33/9

EXTERNAL WALLS

• External walls in Fletton brickwork in cement mortar 1 : 3 including three coat lime plaster and twice distempering one side and facings p.c. 100/– in Flemish bond, joints raked out and pointed with a neat struck weathered joint, the other	*per yard super*	19/4	19/3	24/9
• Ditto, including Keenes cement plain-face and three coats oil colour one side and ditto	*per yard super*	21/–	20/9	26/5
• Ditto, including internal fair face, flush jointed one side and ditto	*per yard super*	17/7½	17/4½	23/0½
• For variation of 10/– per m. in p.c. of facings in Flemish bond (stretcher in cavity work)	*per yard super*	–/9	–/6¾	–/9

APPROXIMATE ESTIMATES—(*continued*)

INTERNAL WALLS AND PARTITIONS

		2″	3″	4½″	9″
• Breeze partitions set in cement mortar or Fletton brick walls and including three coat lime plaster and twice distempering both sides	*...per yard super*	9/11	11/1	11/1	16/7
• Ditto, built fair and flush jointed both sides	*...per yard super*	—	—	7/8½	13/2
• Ditto, including Keenes cement plain-face and three coats oil colour both sides	*...per yard super*	13/3	14/5	14/6	19/11

GROUND FLOORS

• Solid ground floor construction including 9″ excavation, 4″ bed of hardcore, 6″ concrete 6 : 1 surface bed, finished with 1½″ granolithic paving trowelled smooth	*per yard super*	9/10
• Ditto, finished with ¾″ cement and sand 1 : 3 screed and wood block flooring or paving p.c. 10/– yard	*per yard super*	18/2
• Ditto, finished with 2″ × 2″ sawn floor fillets and floor clips and 1″ deal tongued and grooved flooring, batten widths	*per yard super*	12/11½
• Ditto, finished with floor fillets as before and 1″ (nominal) oak tongued and grooved narrow widths strip flooring polished at time of laying	*per yard super*	25/2½
• Sleeper wall ground floor construction, including 15″ excavation, 4″ bed of hardcore, 6″ concrete 6 : 1 surface bed, sleeper walls 12″ high, built honeycomb, 4½″ slate damp-proof course 4½″ × 3″ fir plate, and 4″ × 2″ sleeper joists and 1″ deal tongued and grooved flooring in batten widths	*per yard super*	15/3
• Ditto, with 1″ nominal oak tongued and grooved narrow widths strip flooring polished at time of laying	*per yard super*	27/6

UPPER FLOORS

		With 7″ Joists	With 9″ Joists	With 11″ Joists
• Wood construction including 2″ fir joists on 4″ × 3″ fir plates and herring-bone strutting with three coat lime plaster and twice distempering white to soffite and 1″ deal tongued and grooved flooring in batten widths	*per yard super*	12/–	13/2	14/3
• Ditto, with 1″ nominal oak tongued and grooved narrow widths strip flooring polished at time of laying	*per yard super*	24/3	25/5	26/6
• 5″ thick concrete 4 : 2 : 1 reinforced with fabric suitable at 13′ 0″ spans for carrying ¾ cwt. per ft. super, with two coat lime plaster and twice distempering white to soffite and 1″ Kara Sea deal 100 per cent. rift sawn block flooring wax polished at time of laying ...	*per yard super*			25/7
• Ditto, with 1″ nominal 25/30 per cent. quartered Austrian oak block flooring polished at time of laying	*per yard super*			28/8

APPROXIMATE ESTIMATES—(*continued*)

FLAT ROOFS

		Using 7″ Joists	Using 9″ Joists	Using 11″ Joists
● Wood construction including 2″ fir joists on 4″ × 3″ fir plates and herring-bone strutting with three coat lime plaster and twice distempering white to soffite and best natural rock asphalt roof finish ...	*per yard super*	18/5	19/5	20/6
● 5″ Thick concrete 4 : 2 : 1 reinforced with fabric (suitable at 13′ 0″ span for carrying 40 lbs. per ft. super) with two coat lime plaster and twice distempering white ditto	*per yard super*			22/7

PITCHED ROOFS

● Bangor Countess 20″ × 10″ slating, laid to 3″ lap fixed with zinc nails, including 2″ × 1″ battens, ¾″ roof boarding and 4″ × 2″ rafters (measured on slope)	*per yard super*	13/1
● Westmorland Random green slates No. 1 best 24″ to 12″ long proportionate widths ditto	*per yard super*	17/2
● Machine-made tiles 10½″ × 6½″ laid to a 4″ gauge, fourth course nailed with galvanized nails ditto	*per yard super*	11/6
● Hand-made sand faced tiles ditto ditto	*per yard super*	12/3
● Slate ridges, including cuttings and 1½″ × 9″ deal ridge	*per yard run*	9/10½
● Half-round ridge tile ditto	*per yard run*	7/7
● Slate hips, including cuttings, lead soakers, and 1½″ × 11″ deal hips	*per yard run*	12/5½
● Hip tiles, including cuttings and 1½″ × 11″ deal hips	*per run yard*	14/–
● Lead valley gutter to slated roof, including cuttings and 1½″ × 11″ deal hips	*per yard run*	18/5
● Purpose-made valley tiles, including cuttings and 1½″ × 11″ deal hips	*per yard run*	13/7

DOORS

		Partitions or Walls				
		2″	3″	4½″	9″	13½″
● 2″ flush door p.c. 29/– 2′ 6″ × 6′ 6″, including deal frames or linings, ironmongery p.c. 15/– and simple architraves both sides, all painted	each	100/–	101/5	96/3	100/10½	106/10½

WINDOWS

Prices are for normal size, including suitable ironmongery, glazing with clear sheet glass and painting.

● Standard metal casements with fixed lights	*per foot super*	2/5
● Ditto, with average proportion of opening lights	*per foot super*	3/10
● Standard metal casements in wood frames with fixed lights	*per foot super*	4/–
● Ditto, with average proportion of opening lights	*per foot super*	4/11
● Standard industrial type sashes with fixed lights	*per foot super*	2/2
● Ditto, with average proportion of opening lights	*per foot super*	3/6
● Solid deal frames and 2″ casements	*per foot super*	5/0½
● Deal cased frames and double hung sashes	*per foot super*	4/10½

NOTE.—Standard wood surrounds to metal windows can be obtained at a cheaper price than that given for wood frames above.

APPROXIMATE ESTIMATES—*(continued)*

STAIRCASES

• Deal 9′ 0″ high, including half space landing, newels, balusters and handrail	*each*	£23	10 0
• Austrian oak ditto	*each*	£44	5 0
• Precast concrete ditto	*each*	£32	15 0

DRAINS

		Ordinary Soil	*Clay Soil*
• Manhole, 2′ 3″ × 1′ 6″ × 2′ 0″ deep, including excavation, 6″ (6 : 1) concrete bottom, one brick sides 3rd stocks in cement mortar with brown glazed half-round straight main channel and one brown glazed branch channel, including benching, sides rendered in cement and sand (1 : 3) and a 24″ × 18″ black single seal cast iron manhole cover and frame, weight 0 cwts. 3 qrs. 0 lbs.	*each*	£3 12 6	£3 15 6
• Manhole 2′ 3″ × 3′ 9″ × 4′ 0″ deep ditto including six branches	*each*	£7 2 0	£7 6 6

		Clay Soil		*Ordinary Soil*	
		4″	*6″*	*4″*	*6″*
• British standard quality stoneware drain pipes laid on and including 6″ thick concrete bed flaunched up both sides of pipe and excavating average 2′ 6″ deep	*per foot run*	2 5	3 0½	2 3	2 10½
• Ditto, but excavating 4′ 0″ deep	*per foot run*	4 1½	4 9	3 7½	4 3
• Cast iron drain pipes in 9′ lengths and laying in trench including 6″ concrete bed and excavating average 2′ 6″ deep	*per foot run*	4 8	6 6½	4 6	6 4½
• Ditto, average 4′ 0″ deep	*per foot run*	6 4½	8 3	5 10½	7 9

PATHS AND DRIVES

• 2″ finished gravel paths, including 6″ excavation and 4″ bed of hard-core and edging boards	*per yard super*	5 3
• 7½″ finished gravel drive, including 6″ excavation, 6″ bed of hardcore and edging boards	*per yard super*	6 9
• 2½″ Tarmacadam drive including ditto	*per yard super*	7 10

FENCES

• Cleft chestnut pale fence 4′ 0″ high	*per foot run*	– 10
• Deal weather boards, including posts, arris rails and gravel boards creosoted, 5′ 0″ high	*per foot run*	2 9½
• Ditto, in English oak throughout	*per foot run*	3 10½

The four sections on PRICES published in the issues of May 19, 26, June 2 and this week, together complete the PRICES SUPPLEMENT. Next week the FIRST SECTION—PRICES OF MATERIALS, PART 1—will be repeated with items revised according to market quotations.