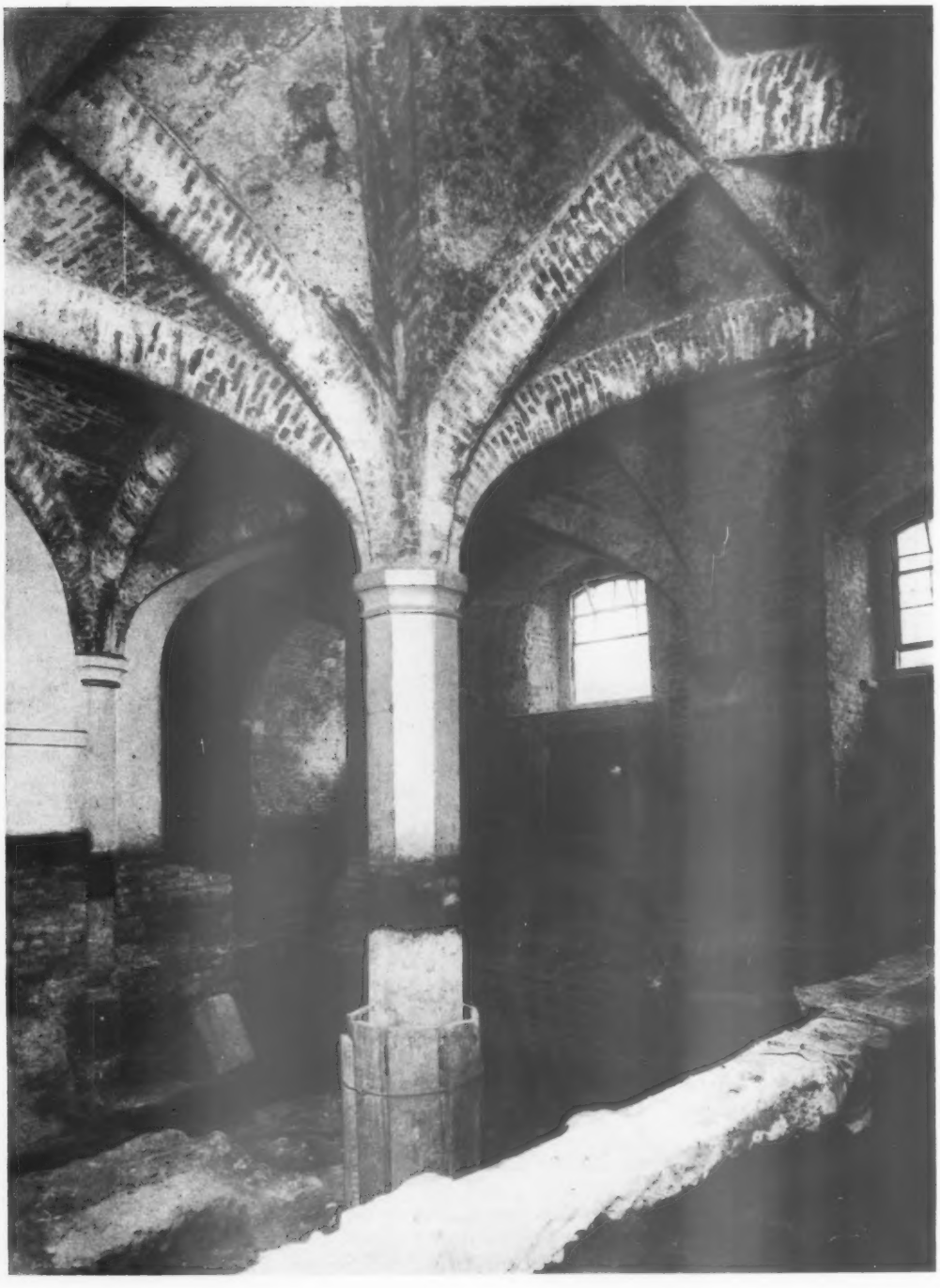
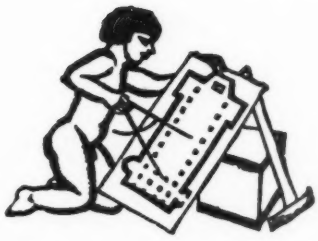
EXCAVATIONS IN WHITEHALL

Excavations are now being made on the site of Whitehall Palace to make way for the new Government offices, to be built from the designs of Mr. E. Vincent Harris. The house of Richard of Ely, Bishop of London, first stood on the site, and subsequently building was carried out by Wolsey, Henry VIII, James I, and William and Mary. Above, the staircase of the Queen's Garden from the south-east, built by Wren (1692-1696) for William III.



EXCAVATIONS IN WHITEHALL

The central bays in the King's Wine Cellar; the recent excavations being below the black markings on the piers. Part of the cellar was used until recently as a luncheon room for the staffs of the Ministries of Transport and Labour.



ALL QUIET AT PORTLAND PLACE

THE problems of A.R.P. have now reached a crucial stage. The public, which has accepted false comfort several times in the last few years, is too alert to be caught again. The Government's threefold solution of evacuation, shelters and rescue services is accepted—with reservations. People now want to know how evacuation is to work, how safe are the shelters, and how efficient is the organization of the services. What is more, outside opinion has been sought by the Press : and in the case of evacuation camps it has compelled a change in Government policy. In short, the public now want effective action and have learnt to know it when they see it.

Architects will be pleased with this democratic awakening, but they have no grounds for being pleased with themselves. For four years it has been plain that a large proportion of A.R.P. problems were those of layout, planning and construction. It has been clear that architects were better equipped for examining the whole of A.R.P. than any other body, and that by carrying out the widest and most unbiased examination of it they would do a national service of great consequence. It was equally plain that to carry proper weight this enquiry must be done by the most influential professional society.

The failure of the R.I.B.A. even to contemplate doing anything of the kind is a blunder which should make its members scrutinize themselves and their organization very hard.

The R.I.B.A. is a trade union—must be a trade union, must safeguard its members' interests and maintain relations on their behalf with official bodies of all kinds. But most members expect the Institute to do something more. They expect it to have a policy on matters of public urgency which are related to the practice of architecture. They expect it to collect the information necessary to make that policy as good as it can be made, both technically and in the public interest ; and, if necessary, to secure the fullest publicity for it.

If the Institute's Council and Executive Committee cannot do this, no " non-controversial " methods of acquiring prestige by exhibitions or regrets for vanishing rural England will prevent the R.I.B.A.'s influence declining to vanishing point. The public are realists ; they know what cuts ice and what doesn't and have not much respect for those who continually follow the band.

In the JOURNAL'S view the R.I.B.A. has shown over A.R.P. that it is incapable of any thought not provided for it by the Home Office. What is worse, it apparently intends to go on doing the same thing.

What has happened so far is plain enough. In 1935 the Home Office decided that it was likely to be attacked over A.R.P. and looked round for a shock-absorber. The R.I.B.A. has served it admirably in this capacity.

A committee of architects and engineers was set up in that year to prepare a handbook on structural precautions against bombs. The committee reported in 1937. No handbook has yet been published and no protest from the R.I.B.A. has appeared.

The next stage of architects and A.R.P. was the series of lectures throughout the country. Who narrowed the scope of architects and A.R.P. down to structural precautions is a mystery. But the lectures—useful though they were as advice on a small aspect of A.R.P.—did not supply a specially important need of architects or the public ; nor did they satisfy anyone, save perhaps the Home Office and those members of the R.I.B.A. Council who have never been troubled by a sense of responsibility towards the public.

In the last year, things have begun to happen quickly. The A.A.S.T.A. (a body with perhaps a twentieth of the resources of the R.I.B.A.) published the best technical survey of A.R.P. which has yet appeared in English. The preparation of the Finsbury scheme was begun, eventually the completed scheme was exhibited, and received huge publicity chiefly because of public relief at being shown at last the right way to approach A.R.P. Later still the Housing Centre announced an exhibition of evacuation camps, and the Building Centre a competition for their design.

These developments—all achieved by architects or semi-architectural societies—left the central organization of British architects unmoved and apparently uninterested—until last December.

The R.I.B.A. Council then decided to make a contribution. It set up an A.R.P. Committee, with these terms of reference :—

> To study the problem of structural A.R.P. in its technical relationship to architectural practice, to examine the results of British and foreign research, to supply information to members and others, and to issue technical reports for publication in the Institute Journal and elsewhere subject to the approval of the Council.

Members of the R.I.B.A. will notice that the terms are cautious ; they might cover new shelters, but hardly camps. In addition, a representative of the Home Office is on the committee to make certain that its work has Government blessing from the outset.

Still, this committee's proceedings will be worth watching. Between its formation in December and the end of the first week in March it held three meetings, and though its personnel are mostly busy men it may yet prove that the profession can give a constructive lead to the public in the gravest contemporary problem.

Should it fail to do so, those members of the Institute who are concerned about the profession's record in A.R.P. have other resources. The A.A.S.T.A. is following its report on Structural A.R.P. with another quite as good on Evacuation. And early in March there will be published a full description of the Finsbury scheme and the methods of approach and the solutions used by the architects and engineers who produced it. From these three works architects who are tired of being led in blinkers by the Home Office will be able to form their own opinion on A.R.P. and the contribution architects might make to it.

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

NOTES & TOPICS

THE HIRE-PURCHASE HOUSE

MR. BORDERS (husband of the redoubtable champion of tenant-purchasers, Mrs. Elsy Borders) has obtained £150 for being called "a bad egg" by a temporary clerk of the solicitors who acted for the builders of his house. His neighbour, Mr. Marriott, obtained, by agreement, £125 for being bracketed in this opprobious description, thus: "He and Marriott are friends of the same calibre."

*

Otherwise there has been a lull in expression of disagreements between some tenant-purchasers and their building societies. But it has been a lull in which one could almost hear swords being sharpened.

*

The present position is that building societies, relying on Mr. Justice Bennett's recent decision, say that no further rope will be given to tenants in arrears with instalments; the tenants appear to be sitting tight; the Government promise legislation at an early date; and Miss Wilkinson is going to introduce a Bill which makes building societies responsible for the reasonably sound construction of houses on which they make advances.

*

It is an awkward position for which frenzied competition among building societies and builders' and tenants' readiness to believe they can get a shillingsworth for sixpence, seem equally responsible.

*

The only solutions seem either to be on the lines of Miss Wilkinson's Bill or a public supervision of the construction of houses costing less than £1,000 of a very different kind to that which local surveyors are now supposed to exercise.

COMPETITIONS

In my view the JOURNAL's suggestions last week for reinvigorating open competitions seemed sensible and modest.* But, thinking I might be biased, I have canvassed a few opinions during the week.

*

Eliminating head-waggings and facetiousness, defence of present methods seems to rest on: the difficulty of getting any competitions promoted at all; the necessity for concessions to romantically-minded Councillors; the desirability of both winners and their suggested materials being thoroughly sound; the probability that present competitions obtain much better schemes than if the jobs had been allotted by private influence.

*

Now, I am a cautious man but all these seem to be defeatist. Consider Civic Centres. Grandeur of a kind is in place in the Hall and Council Suite; but the office accommodation has the same requirements as other office accommodation. If the assessor cannot persuade the promoters of this he should see that his award supports it; and his Report can make clear his reasons. The ratepayers are likely to understand him.

*

New materials I regard as a bogy. No reasonable man is going to suggest an all-glass or all stainless steel Law Courts. What is more, the competitions which have shown an advance in design—such as Bexhill, Hornsey and Luton—have done so almost entirely in planning and not in construction.

ROADS

"If this Exhibition," said a voice in my ear at the R.I.B.A. last week, "had been held exactly twenty years ago today, what a wonderful profession we would have belonged to."

*

It is easy to make remarks like that: but in planning future jobs for what is easily the best part of its public activities the R.I.B.A. should remember them.

*

The standard of display at these exhibitions is now all that could be wished. What is more, the Exhibitions Committee manages to have at its disposal an enthusiasm and capacity for hard work which leaves other Committees nowhere at all. If the next exhibition deals with a problem which can be solved without undoing twenty years' mistakes, it will have reached perfection.

*

As it is, "Roads" and its accompanying documentary film (four times daily) should not be missed. Open till March 30.

PRIDE OF EDINBURGH IS ARCHITECTURAL CHAOS

Edinburgh's claim that Princes Street is the finest street in the world has long been a joke with architects. The

* The JOURNAL suggested that it should be admitted that opinions differed over architecture; that Conservative and Liberal assessors should be appointed in rotation; and that every now and then a well-known non-competitive architect should be asked to assess a competition.

other week an Edinburgh architect, Robert Hurd, turned a professional chuckle into a public grimace. In debunking the Princes Street myth before the Edinburgh University of Fine Arts Society, he did a brave thing for architectural propaganda, but he must have made himself a heap of enemies.

*

The prospect *from* the street has blinded too many generations of Scots to the chaos of the street itself, on which any sensible man would naturally turn his back. The prospect *is* the street, and he who looks the other way is a brazen busy-body, that's all.

CREMATORIUM CORNER

The building illustrated above is the new privately-owned crematorium outside Northampton, which I visited last week.

*

It is a most interesting essay in the art of symmetry. The tall windows to the left of the dome light the chapel, and to the right the furnace room. They are all glazed with obscured glass, so which is chapel and which is furnace is a 50–50 chance. The turrets are also a thrill. The left-hand one ventilates the chapel ceiling ; the right-hand one conceals the main furnace flue, the brick lining being concealed behind the louvres, and supported internally on a steel framework between the rafters.

*

Unlike Cambridge, Northampton Corporation are not being deterred by private enterprise, and are intending to erect a second crematorium to be run under municipal direction not far off.

*

I am becoming very interested in crematoria.

BONNY BANKS OF COULSDON

Mr. Edward Banks has been in trouble again—only this time not with Mr. Falkner. He has appealed against what he considers to be an unjust rating by the local Council of his house at Coulsdon. When the house was first projected, the Council described it as a "disfigurement." Now they are trying to levy rates equivalent to 33⅓ per cent. more per square foot than other houses in the road because of its architectural "appeal."

*

Mr. Banks lost his case—the defence boiling down, so far as I could see, to the fact that the Council couldn't tell from the drawings what nice rooms there would be inside. Like Mr. Falkner, they discovered that Mr. Banks "could design a nice house if he wanted to."

VIGILANCE COMMITTEE

After this week my readers will have a short rest from this topic. The list of suggested names is now closed. It is printed in alphabetical order at the bottom of this page†. There are 63 in all, and the Editor has undertaken to write to each person (in most cases personage) on the list and invite him or her to name the half-dozen recent buildings in this country that come nearest to the ideal that modern architecture should aim at.

*

I will keep readers informed of the replies received. We already have Lord Derwent's list.

SPECIALIZATION

Speakers with views as spicily opposed as those of T. P. Bennett and E. A. A. Rowse should give the Junior Members' Informal Meeting a good start at the R.I.B.A. next Wednesday. The discussion will be on "The Effect of Specialization in Architectural Practice," and other opening speakers are Basil Ward and H. T. Cadbury-Brown (of British Railways competition fame). Time 6.30.

*

We are told once more that these meetings are informal and "no reporters are present." As if that makes any difference to our vigorously outspoken profession.

ASTRAGAL

---

† List of people suggested by Astragal and A.J. readers as qualified to sit on a Vigilance Committee which might be formed (according to Mr. Goodhart-Rendel's suggestion) to vet the designs for important buildings *before* they are put up. Architects were barred.

Appleyard, Colonel K. C.
Ashmole, Prof. Bernard
Balniel, Lord
Barry, Gerald
Barton, J. E.
Beaverbrook, Lord
Beddington, Jack
Bell, Clive
Bernal, Prof. J. D.
Berners, Lord
Bertram, Anthony
Betjeman, John
Bone, James
Clark, Sir Kenneth
Cranshaw, C. R.
Dalton, Mrs. Hugh
De La Warr, Lord
Dobrée, Bonamy
Dwelly, Dean
Esher, Lord
Elmhirst, Leonard K.
Fleetwood-Hesketh, Peter
Fleetwood-Hesketh, Roger
Flower, Sir Archie
Fry, Commander C. B.
Gibb, Sir Alexander
Greene, Sir Wilfrid
Grierson, John
Harewood, Lord
Harris, Henry
Haldane, Prof. J. B. S.
Herbert, John
Hetherington, Sir Hector
Hickey, William
Hinks, Roger
Horder, Lord
Huxley, Dr. Julian
James, Edward
John, Augustus
Kauffer, E. McKnight
Korda, Alexander
Keynes, J. M.
Lambert, Constant
Lancaster, Osbert
Laughton, Charles
Lees-Milne, James
Leverhulme, Lord
Lewis, Spedan
Low, David
Marriott, Charles
Moore, Henry
Morris, Henry
Morrison, Herbert
Mortimer, Raymond
Pick, Frank
Piper, John
Read, Herbert
Robeson, Paul
Strauss, Harry
Thorp, Joseph Peter
Vevers, Dr.
West, Rebecca
Wyndham, Richard

NEWS

POINTS FROM THIS ISSUE

ON THE AIR

The B.B.C. announces that two programmes dealing with social matters will be broadcast shortly.

In the first one, "Burbleton Discusses Women" will be heard in the North and Regional programmes on March 17. Burbleton is, of course, the North Region's now-famous imaginary town, and on this occasion the Borough will be greatly agitated over the question of the appointment of women officials. The argument which is exciting Burbletonians arises from the Housing Committee's proposal that a trained woman be appointed to manage the housing estate. Listeners to the broadcast will be able to "overhear" the Council discussing the matter. Other debates, less official but no less heated, will be heard also. T. Thompson, the Lancashire writer, is the author of the script.

The second programme commemorates "Fifty Years of County Councils and the Jubilee of the L.C.C." The County Councils of England and Wales met for the first time in 1889, having been established under the Local Government Act of the preceding year. This revolution in local government will be described by Dr. W. A. Robson, Reader in Administrative Law, University of London, who will tell listeners of the wide range of activities which now come under the administration of the sixty-two county councils. Mrs. Eveline M. Lowe, J.P., Chairman of the London County Council, which is this week celebrating the anniversary of its first meeting on March 21, 1889, will speak on "The Jubilee of the L.C.C." This programme will be heard on March 21 on the Regional wavelength.

The B.B.C. also announces a series of three broadcasts on "Getting a House." The first one will be given on March 10. Listeners will hear a husband and wife consulting with one of their friends, who is an estate agent, about choosing houses, about such problems as whether to buy or rent. Later, the pair settle down and have to face problems of the later stages in home-making. Mr. F. Leslie Halliday, has arranged the series. The second talk will be on March 21, and the third on March 27. All three talks are in the Northern programme.

CHARTERED SURVEYORS' INSTITUTION AND PARLIAMENT SQUARE

Speaking at the annual dinner of The Chartered Surveyors' Institution on March 7, the President, Sir Charles Bressey, C.B., made an important reference to the proposed improvement of Parliament Square. The Council of the Institution, he said, were, like himself, whole-heartedly in sympathy with the public-spirited efforts which were being made by the Middlesex County Council and others to preserve the Westminster House site as a permanent open space, with the object of enhancing the dignity and beauty of a site which inspires the deepest affection and pride in the heart of every member of the English-speaking race. The Council of the Institution had accordingly decided to offer a substantial sum, which might even reach five figures, as a contribution towards the fund required for effecting this indispensable improvement.

THE ARCHITECTS' DIARY

Thursday, March 9

R.I.B.A., 66 *Portland Place, W.1. Exhibition of Road Architecture.* "*The Need for a Plan.*" *Until March 30. 10 a.m to 8 p.m.*

INSTITUTION OF STRUCTURAL ENGINEERS, 11 *Upper Belgrave Street, S.W.1.* "*The Design and Construction of Modern Buildings.*" *By S. Bylander. 6.30 p.m.*

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. *Manchester and District Branch. At 224 Deansgate, Manchester.* "*Insulation.*" *By H. Palmer. 7 p.m.*

INSTITUTION OF ELECTRICAL ENGINEERS, *Savoy Place, W.C.2.* "*The Design and Operation of Hams Hall Power Station.*" *By F. W. Lawton. 6 p.m.*

Friday, March 10

TOWN PLANNING INSTITUTE. *At Caxton Hall, S.W.1.* "*The Location and Design of Trading Estates.*" *By Professor W. G. Holford. 6 p.m.*

INSTITUTE OF REGISTERED ARCHITECTS. *Annual Dinner. At St. Ermines Hotel, Westminster, S.W.1. 7 p.m.*

Saturday, March 11

A.A.S.T.A. *Visit to Ascot Gas Water Heaters Works, Neasden. 2.15p.m.*

LONDON SOCIETY. *Visit to the Hall of the Worshipful Company of Cutlers, Warwick Lane, E.C.4. 2.30 p.m.*

ECCLESIOLOGICAL SOCIETY. *Visits to St. Mary-at-Hill, Eastcheap (2.30 p.m.) and St. Dunstan-in-the-East.*

Monday, March 13

INSTITUTION OF STRUCTURAL ENGINEERS. *Midland Counties Branch: Junior Members' Section. At the James Watt Memorial Institute, Birmingham.* "*Some Recent Developments in Reinforced Concrete.*" *By C. M. Gilbin. 6.30 p.m.*

Tuesday, March 14

HOUSING CENTRE, 13 *Suffolk Street, S.W.1. Tuesday Luncheon.* "*Gardens and Social Amenities in Connection with Housing Estates.*" *By Ian B. Hamilton. 1 p.m.*

Wednesday, March 15

ECCLESIOLOGICAL SOCIETY, 6 *Queen Square, W.C.1.* "*Some Churches in Bedfordshire.*" *By J. J. Edmunds. 8 p.m.*

INSTITUTION OF STRUCTURAL ENGINEERS. *Scottish Branch. At 129 Bath Street, Glasgow.* "*Corrosion of Steel.*" *By R. Hunter. 7.15 p.m.*

R.I.B.A., 66 *Portland Place, W.1. Informal General Meeting. Discussion on* "*The Effect of Specialization in Architectural Practice.*" *Chairman: J. Murray Easton. Speakers: T. P. Bennett, E. A. A. Rowse, H. T. Cadbury-Brown and Basil R. Ward. 6.30 p.m.*

GENERAL POSITION OF THE BUILDING INDUSTRY

"The position of the building industry shows a further deterioration, the increase in unemployment in January being greater than that to be expected on account of seasonal influences," states the current issue of the Building Industries Survey, published by the Building Industries National Council. "The unemployment percentage has risen 23·9 against 19·5 a year ago.

"The figures of the value of buildings for which plans are approved show no recovery from the recent low level, a fall of 29·4 per cent. on the year following that of 30·6 per cent. in December. The fall is again due to housing plans, which showed a fall of £1,000,000 in Yorkshire and £750,000 in the North and West Midland Counties.

"These figures make disturbing reading, especially when the low level to which the plan figures have fallen is realized. Housing plans in the South of England for the fourth quarter of 1938, for example, rose only slightly above the 1931 level. Nevertheless, compensating factors may be expected to make an appearance. It is widely appreciated that business activity and employment were maintained during 1938 by the smallness of the decline in building. For this reason it is inconceivable that a major slump will be allowed to develop in an industry which exerts so predominant an influence on the national economic welfare."

THE N.A.S.A. CONGRESS, HULL

The Hull Congress of the N.A.S.A., held on March 2–4, has clearly shown the way in which, if only slowly, architectural education is moving. The chief inspiration of the Congress this year was given by the School, the centre which organised the meeting.

Under Dr. Martin, the School has been laying the foundations for what will undoubtedly be one of the leading educational centres in every architectural and allied field in the future.

The two most important events of the Congress were the symposium of modern architecture, Science, Economics, and Society, under the chairmanship of Dr. J. L. Martin, and the General Meeting. The former demonstrated with greater clarity than perhaps any meeting has had the fortune to hear, the relationship between the architectural, scientific and economic outlook of contemporary society. Mr. Serge Chermayeff showing the position of the architect today, Professor J. D. Bernal proving the necessity and method in which scientific research should be undertaken, and Professor E. Roll explaining the economic position contemporary society has to face, together gave convincing proof of where the real foundations for the further growth and advancement of architecture lay.

Mr. E. J. Carter, in summing up, contributed an argument for an active policy for the Association. He told the congress in a clear and pointed speech where the younger generation of architects stood, and where their activity should lead them. He absolutely disagreed with the common generalization that the breach between the young and the old in architecture was something which had always existed.

"Some of the leaders of the younger generation are old enough to be our grandfathers," he said. "It is within our powers to capture in a revolutionary sense every single stronghold in the profession. Don't try to convert the old, because this breach is something which is not subject to conversion. Don't have an inferiority complex about it, because the state of uneasiness in our elders is much greater than yours."

With this as inspiration, the General Meeting decided on a more active and immediate policy and programme. By a reorganization of the N.A.S.A. Journal and by publishing it more frequently, it was decided to push forward the whole question of education in the schools. It was also decided that a survey of existing conditions in every school should be undertaken for this purpose. To this work the Southern Schools should be invited to contribute and by this means it would be possible to establish permanent contact with them. It is hoped finally to arrange a national organization by this method of co-operation and contact.

Relations with the A.A.S.T.A. and M.A.R.S. were discussed, and a programme of co-operation on specific points arranged. A survey was to be undertaken of the conditions of apprenticeship system and with the help of the A.A.S.T.A. would be put forward when enough information had been gathered.

Delegates from the A.A.S.T.A., the A.A., and *Focus* were present to put forward the point of view of at least a number of students and younger architects in the South.

The meeting closed with an appreciation of the invaluable help and co-operation of Dr. and Mrs. Martin, to whom the success of the Congress was largely due.

NEWS IN BRIEF

● The Committee of the Slough Hospital invites architects to send in their names for a competition for a hospital at Slough. Those desirous of competing should state their experience and qualifications to the Assessors, Messrs. Adams, Holden and Pearson, FF.R.I.B.A., 26 Torrington Square, London, W.C.1. It is the intention of the Committee to select not

more than ten architects to compete, and a sum of £30 will be paid to each competitor. Names to be received by the assessors on or before Friday, March 10.

● Sir John Soane's House and Museum, 13 Lincoln's Inn Fields, W.C.2, will be open free to the public (10.30 a.m.–5 p.m.) on Tuesdays, Wednesdays, Thursdays and Fridays from March to August.

● A survey of the cattle market site with a view to its being used for municipal buildings is to be made by the Surveyor to the Kettering Town Council. In due course competitive designs will be invited for the erection of the buildings.

● L.C.C. has issued a revised statement for the guidance of applicants in the preparation of proposals for submission to the Council with regard to the provision of means of escape in case of fire.

● In honour of Sir Edwin Lutyens' election to the Presidency of the R.A. 63 past and present members of his staff had a reunion dinner at the Café Royal, London, on February 24. The members of the staff present at the dinner covered a period of over forty years.

● A.A.S.T.A. has issued details of its foreign tours for 1939. The Association has arranged a week-end tour in Belgium at Whitsun (May 26–30), three weeks' tour to the U.S.S.R. (August 19–September 10) and a fortnight in France (September 2–17). Details are obtainable from the Secretary of the Association, 113 High Holborn, W.C.1.

● A lecture entitled "The Setting of the Periclean Parthenon" is to be given by Mr. Gorham Phillips Stevens, former Director of the American Academy in Rome, at the R.I.B.A., on March 30, at 8.30 p.m.

● Applications are invited by the Macclesfield B.C. for the position of Borough architect and planning officer. Commencing salary £450 per annum, rising, subject to satisfactory service, to £550 per annum. Full details are given on page xlviii.

● A new hotel is to be built at Snow Hill Station, Birmingham, by the Great Western Railway. The hotel will be a six-floor steel-framed structure fronting on to Colmore Row and extending back some 100 feet down Snow Hill and Livery Street. It will be faced with Portland stone.

● The annual country meeting of the Town Planning Institute is to be held at Leeds from May 12 to 14. Details may be obtained from the Secretary, 11 Arundel Street, Strand, W.C.2.

● Under the auspices of the South Wales Institute of Architects and the Institute of Builders, Mr. H. Ingham Ashworth, M.A., F.R.I.B.A., gave a lecture, illustrated by lantern slides, entitled "Flats: their Design and Equipment," on Wednesday, March 1, at the Engineers' Institute, Park Place, Cardiff. Mr. Ashworth first dealt with the social problem involved and then considered the following points: Principles of planning, including reference to sites, aspect, prospect, etc., staircases, lifts, entrance halls, and service staircases; various types of individual flats; amenities in the flat; mechanical equipment, heating, refuse disposal, etc.; tenements and conversion schemes.

● The photograph showing the interior of the Foresters Arms in our issue for February 23 was supplied by Lenscrete, Ltd., who were responsible for all the glass and ferro-concrete walling, roof lights and hollow glass brick partitions and counters, etc.; Modern Surfaces, Ltd., were responsible for the facing of the upper portion of the building with their hammered granite.

THE HIRE-PURCHASE HOUSE

THE LEGAL ASPECT

(BY A SOLICITOR)

The bad materials and workmanship used in a proportion of the speculatively built houses erected in the last ten years have caused serious disputes between building societies and tenants. To remedy a situation which threatens the future of a very important branch of building, both a Government and a private Bill are shortly to be introduced. In the article below a solicitor who has made a close study of the present disputes summarizes the legal position as it now stands.

THE recently decided case of Bradford Third Equitable Benefit Building Society *v.* Borders has already earned for itself a place in the Law Reports. It raised issues of the greatest importance, and while the building societies themselves may claim that the judgment in that action has clarified certain legal issues, there are wider social and economic issues which still remain to be dealt with and which it is proposed to discuss in this article.

Building societies, as we know them today, originated in numbers of people associating to pay subscriptions into a common fund which could be utilized for the purpose of enabling individual members to buy their own houses instead of renting them. The member so buying his own house would execute a mortgage thereon in favour of the trustees of the fund and would covenant to repay the amount of the advance and interest by regular monthly or other payments.

The value of such associations in promoting house-building was soon realized, and in order to encourage their activities and at the same time to give protection to their members, legislation was passed. The effective statutes at present governing Building Societies are the Building Societies' Acts, 1874 to 1894. Building Societies which register under these Acts are given an independent legal existence, in much the same way as companies registered under the Companies Act, 1929, and their duties and powers are expressly set out in the Acts. They are obliged to register their Rules and any amendments of the Rules, and to file periodic returns and accounts, with the Registrar of Building Societies, who has power to order and conduct an enquiry into the affairs of any society, and to suspend or cancel the registry of any society if it is found to exist for any illegal purpose and on certain other specified grounds.

The relevant provision regulating the objects for which societies may be established is contained in Section 13 of the Building Societies Act, 1874, the effect of which is that a society may only lend money on the security of freehold or leasehold property. By Section 25 of the same Act and Section 17 of the Building Societies Act, 1894, a society is permitted to invest any surplus funds in freehold or leasehold property and trustee securities. By Section 13 (1) of the Act of 1894 a society is prohibited from lending money on any but first mortgages. Thus, a limit is set by law to what building societies may do; and a building society cannot by its rules or otherwise obtain power legally to do what it is not authorized to do by statute. Thus it has been decided by the Courts that a building society may not carry on a banking business, and that it may not lend money on the shares of a member in that society. With regard to membership, a member may be either a depositing (i.e. investing) member or an advanced (i.e. borrowing) member.

Since the passing of the Building Societies Act, building societies have grown enormously in numbers and influence, and they played a very large and valuable part in the post-war building boom. There can be no doubt that by far the great majority of privately-built dwelling-houses erected in this country since the war have been bought with the assistance of a building society advance. The practice of building societies up to about 1932, was to advance on the security of freehold or leasehold property not more than 80 per cent. of their surveyor's valuation or of the purchase price of the property, whichever was the lower. Thus if a society agreed to make an advance of £800 on a house, the borrower could be reasonably confident that the society considered that house to be worth at least £1,000. In certain cases, where the borrower wished to have a 90 per cent. advance and the society considered him financially able to pay the mortgage instalments, it would advance such a sum if the borrower took out with an approved insurance company a policy under which the insurance company guaranteed the repayment to the society of the extra 10 per cent. so advanced in the event of the borrower defaulting. In either case, the borrower would know, by the amount of the advance, the minimum value which the society put upon the house and would know whether or not the house was really worth the money he was paying for it.

Thus the building societies were enabling people who could find 20 per cent. (or in exceptional cases 10 per cent.) of the purchase price to buy their own houses. As, however, the demand of such people for houses became satisfied, it became necessary for the societies to find new fields of investment and for builders to find a means of reaching people who could not pay more than a 5 per cent. deposit on a house. The need for the societies to find fresh fields

for investment was made more urgent by the fact that, as general interest rates were so low in comparison with the 3½ per cent. (free of tax) which they offered, people with funds to invest tended to invest them more and more in building societies, and the societies accepted what came to them in this way.

Thus the ground was ready in 1932 for the development of what is now known as the "Builders' Collateral Pool" scheme. Under this scheme, building societies agree to lend as much as 95 per cent. (the writer knows indeed of cases in which societies have lent over 98·8 per cent.—i.e. all but £5) of the purchase price, subject to the builder depositing with the society certain security, known as the collateral security. Where the society advances 95 per cent. of the purchase price, the builder usually deposits with the society, for each house mortgaged, a sum equal to 5 per cent. of the purchase price, and this sum remains deposited with the society until the mortgage has been paid off.

To take a practical example. A builder erects 100 houses on an estate, for sale at £500 each. The building society agrees with the builder to lend 95 per cent., i.e. £475, on each house. The builder deposits with the society the sum of £25 (i.e. 5 per cent. of £500) for each house sold, so that when all the 100 houses are sold, the building society has a further security of £2,500 in cash in addition to the security of the actual houses mortgaged to them. Now, the society does not just accept any proposing purchaser as a borrower, but uses as a rough working guide the principle that an advance shall not be made to a prospective purchaser unless his weekly wage is at least equal to the monthly mortgage repayment which will be required of him. Thus the society has the security of the house, the collateral pool and the borrower's personal covenant. If a borrower defaults the society will proceed to obtain possession of the house, through the Courts if necessary, repay itself the balance of the mortgage debt and costs out of the pool, and convey the house back to the builders. Or no doubt it will in many cases prefer to sell the house itself at the best possible price and take only the net loss (if any) out of the pool.

If as many as 20 borrowers—that is, one-fifth of the total number—default when only an average of £25 has been paid off the principal of their respective advances, so that £450 is still owing on each, and the society when selling can only obtain £350 on each house in the open market, the pool will still be sufficient to cover the whole of the society's losses, including legal costs and agents' commission on the sales. Looked at in this way, it becomes clear that, relying on the collateral pool, and on the law of averages in relation to the number of defaulting borrowers, the building society can with reasonable safety lend money to house purchasers regardless of the fact that the house on the security of which, in law, the money should be lent, is in fact badly built and not worth the purchase price or even the amount of the advance.

The usual statement in the builder's brochure that "the fact that a leading building society is willing to lend 95 per cent. of the purchase price is evidence of the good value of the house" is thus quite untrue. In reality, the 95 per cent. advance is more likely to be evidence (if only the purchaser knew it) to precisely the opposite effect; it may be evidence that the building society is taking a collateral security from the builder and that the society can safely disregard the construction of the property.

Mention is not usually made in the brochure of the existence of the private arrangement between the builder and the society as to the collateral security which alone makes the 95 per cent. advance possible; nor does the society, although normally aware of the statements made in the brochure, always enlighten the purchaser as to the true state of affairs when he makes his formal application for an advance.

It may be thought that this system of collateral security is merely the *result* of jerrybuilding, in so far as the builder first erects the houses and then relies on the building society to help him dispose of them to the purchaser, using the bait of the low cash deposit. In fact, however, the collateral security scheme is more frequently the *cause* of jerrybuilding. The builder normally concludes his pooling agreement with the building society *before* beginning to build. The locking-up of 5 per cent. of the purchase price in the pool is a serious matter for him, since he normally needs every penny of his capital, and he therefore tends to make up for this either by adding the amount of the collateral deposit to the purchase price or by skimping the work and using inferior or defective materials and unskilled labour.

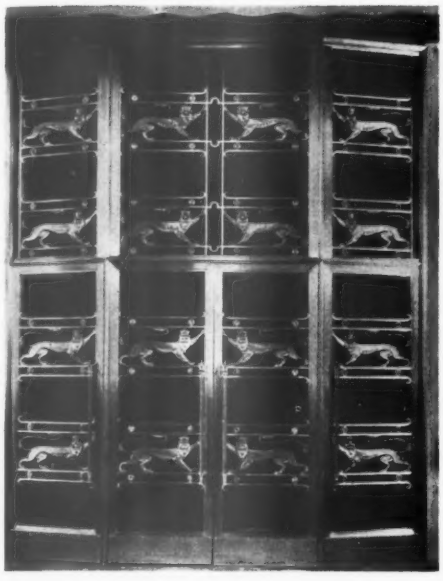
Moreover, the reliance normally placed by a borrower on the survey made by the building society surveyor (the fee for which is paid, directly or indirectly, by the borrower) is in these cases quite misplaced. The survey fee, purchaser's legal costs, etc., are usually paid by the builder (and of course allowed for in arriving at the purchase price). These items are kept as low as possible, and on a building estate of this type the surveyor employed by the society will commonly be paid a fee of no more than 30s. for each house, notwithstanding that he is supposed to inspect it at least three times during the course of construction. His inspection may therefore tend to be of the most superficial character. There is the further point that if the building society is too meticulous in its surveys and is too insistent on the work being done in a proper fashion, other societies will be only too anxious to give their services and obtain the business. The competition among building societies for the field of investment opened up by the speculative builder is intensely keen.

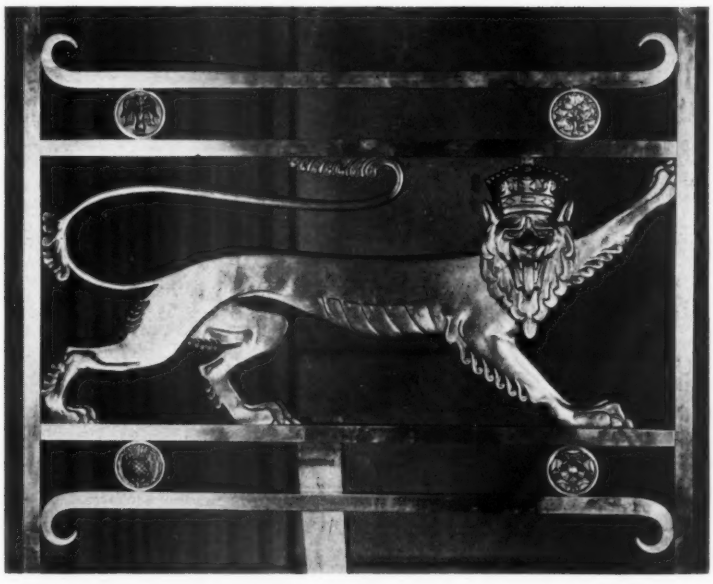
It is not until a builder has gone into liquidation or bankruptcy that the purchaser may discover the existence of the collateral pool, as it forms one of the assets of the insolvent estate.

There can be no doubt that the purchasers of this type of property have a genuine grievance, and that some responsibility for their predicament must lie with the building societies without whose help the property could not be sold. Miss Ellen Wilkinson has obtained leave to introduce into Parliament a Bill which proposes to legalize the taking of collateral security by building societies but goes on to provide that where such collateral security is taken, the building society shall itself be deemed to warrant that the house is built of good and substantial materials, in a workmanlike manner and in compliance with the local bylaws, and is at the date of the mortgage fit for human habitation. This provision does no more than justice for purchasers of small means and would be most salutary from the point of view of the standard of house-building in this country.

In the case of Bradford *v.* Borders referred to at the head of this article, Mrs. Borders, who had purchased a newly-erected house with the assistance of a building society mortgage, sought to prove that the mortgage deed was illegal as the society had lent more on the house than it would have lent had there been no collateral security given by the builder. The case was decided on another ground, namely, that the society failed to prove that the mortgage deed which they produced was signed by Mrs. Borders, and that the deed had never come into operation since it was signed by Mrs. Borders on the condition that certain works should be carried out to the property by the builders and those works had in fact never been done. The Judge in that case went on to express his view that the mortgage was in fact legal since the security of the house was not merely nominal; but this view, since it was not necessary for the purpose of deciding the case, has no binding force in law. The Judge, however, also went on to say that he expressed no view as to the validity of the collateral pool itself, as between the builder and the building society.

The Government has also promised legislation to deal with the matter, though it is feared that this may merely be for the purpose of legalizing all that has been done by building societies in connection with their collateral pooling agreements, and will do nothing either to help the unfortunate purchaser who finds himself saddled with a 95 per cent. mortgage and a more or less defective house which is constantly requiring repair and attention,





On Monday last the doors for the United Kingdom Pavilion at the New York World Fair, to be opened on April 30, were on view at Grosvenor House, Park Lane, W.1. On the left is a general view, and, on the right, detail photograph of one of the lions. The doors were designed by Messrs. Easton and Robertson, of Messrs. Stanley Hall and Easton and Robertson. Each set comprises four pivot-hung doors surmounted by a fixed head. The overall height of the doorway is fourteen feet, and the width twelve feet. The weight of each individual door is 3½ cwt., and the weight of each set 1½ tons. The doors are executed in Wiggin 20 per cent. nickel silver, enriched with cast bronze lions, which form the principal motif, repeated in each door and in the fixed head. The bronze lions are supported on nickel silver bars, the ends of which are forged into subdued scrolls. These bars are secured on rosettes cast in nickel silver and bearing simple representations of the national emblems of England, Scotland, Wales and Ireland. The door handles are surmounted by a gold crown and terminate at the bottom in a cast nickel silver tassel. The kicking plates are of nickel silver plate, machined with vertical lines. The doors are glazed with clear polished plate glass and secured in an architrave of nickel silver.

or to prevent the erection of more jerry-built property in the future.

It cannot be imagined that building societies will deny that the standard of house-building is any concern of theirs; and it will therefore be of interest to see whether they will oppose a measure which after all merely seeks to ensure that they lend money only on those houses which comply with a reasonable standard of construction.

LETTERS

RETIRED COMPETITOR
ANOTHER FELLOW
SMARTINGLEY 1939
SALARIED ARCHITECT
"MARTIN CHUZZLEWIT"
AMAZED
HAROLD DICKSEE, F.R.I.B.A.

Competitions

SIR,—You seem to have no reverence for tradition.

It has always been the custom in the R.I.B.A. to entrust assessorships to: (1) those who have won competitions and, preferably, have a sound record of service for the Institute; and (2) those who are eminent in Allied Societies and have been premiated in a local or open competition. And a very defensible custom it is.

Consider what will happen if your suggestion of occasional "semi-modern" and "non-competition" assessors is taken up. You will have this AWFUL MODERNISM BUSINESS rearing its head again. What is more, there will be columns in local papers about disgusting factories; there will be terrible headshakings among promoters.

It would be nice to have an occasional competition result which *leads* architectural design, to raise competitors from 50 to 300, to reward merit instead of cunning.

But are these trivial improvements worth disturbance in the happy, quiet system of well-understood rules that we have at present?

RETIRED COMPETITOR

Northwood.

SIR,—I had just returned from an inspection of the drawings submitted in the St. George's Hospital Competition, when my attention was called to a letter in the current issue of your paper by "Fellow." I think his suggestions are excellent, and should be considered by the Competitions Committee of the R.I.B.A. with a view to incorporating them in their advice to assessors.

The appalling amount of work required in the Hospital competition was out of all proportion to the amount of and number of premiums awarded. This was surely a competition in which it was only necessary for the competitors in the first stage to supply a ground plan and a typical ward plan, together with one elevation, which would have been sufficient to have indicated the merits of the design and would have taken a month instead of a year of the unsuccessful competitors' time. The promoters would have had the satisfaction of having double the number of schemes submitted (more than half of the competitors gave up after getting the Answers to Questions) and the Assessors would have been spared the task of looking through 12 plans, 4 sections and 4 elevations from each competitor.

It would not have been necessary for all the remaining 50 competitors to consult various experts on heating, ventilation, kitchen and electrical equipment, but only. say, six competitors selected for the final stage, who would have the premiums divided among them and had some recompense for their endeavours. The other 44 competitors could have spent the remaining eleven months of the year by doing preliminary designs for three or four other buildings to satisfy their sporting instincts.

The Newcastle Competition is another case in point. In order to gratify the Assessors' very definite idea of the solution of this problem it would have been only necessary for the competitors to mount the block plan on a card and paste the outline of their building over the site with or without conforming to the outline of the surrounding streets, and leave it to the final competitors to plan every little room on every floor; and the remaining competitors would have wasted only a few weeks instead of as many months on their unsuccessful designs.

ANOTHER FELLOW

London.

Stay North, Young Man

SIR,—

Age : 29.

Qualifications : A R.I.B.A., B.ARCH., and so on.

Salary : £300 in Government office.

Conditions : About 4 hours' work a day ; no point in doing more as revisions by seniors wipe it out.

Hobby : Private practice employing £4 a week assistant. Net profit about £200 a year. Chief drawback—final drawings and typing cannot be done during day.

Use your wits, young man.

SMARTINGLEY 1939

SIR,—Your correspondent "South," A.R.I.B.A., at a salary of £221 p.a., may be responsible for work estimated to cost £250,000, but he is also indirectly responsible for local government and other positions for qualified architects existing at the low salary of £200 to £230 p.a.

The value of the Associateship of the R.I.B.A. appears to be lowered by some members.

SALARIED ARCHITECT

London.

Engineers' Department

SIR,—Your correspondent Mr. Hooper appears to have hit the nail upon the head.

Should our enlightened public ever discover that they pay engineers salaries of £1,000 a year and upwards for work which is actually done by submerged architects, receiving in most cases £400 a year or less, they might (perhaps) insist that these architects be paid the higher salary instead of the engineers.

"MARTIN CHUZZLEWIT"

London.

Representation on the R.I.B.A. Council

SIR,—It was with more than surprise that I read the letter of "Disillusioned" in your JOURNAL last week.

If he believes that the endeavours of "their chiefs" to achieve proportional representation on the Council of the R.I.B.A. is a desirable step only in the interest of principals, surely he is very much mistaken. Every member on the Council in sympathy with official and staff architects is an additional safeguard for the interest of members in that category, whether principals or assistants.

If the assistant does not help in the election of a principal he is cutting off his nose to spite his face ; he stands to lose much more than the principal because he is more interested in the future. A principal has little or nothing to lose if proportional representation is not gained, and if he agrees to his nomination he does so in almost every case, I should imagine, not in his own interest, but in the interest of official and staff architects as a whole.

Has "Disillusioned" considered how many seats assistants would be likely to obtain on the Council if they merely supported members from their own ranks? Is not the Associate Member class the only avenue open to them? There cannot be many assistants who are Fellows, and they have not this class to themselves by any means. Practising architects can find and have found many notable names for nomination for this class.

"Disillusioned" criticizes the Official Architects' Honorary Editorial Committee. What support has he or the majority of official and staff architects given to the efforts of this Committee? None.

Let "Disillusioned" think again. His advice may adversely affect the future of his fellow assistants. A bird in the hand is worth two in the bush.

AMAZED

National Emergency

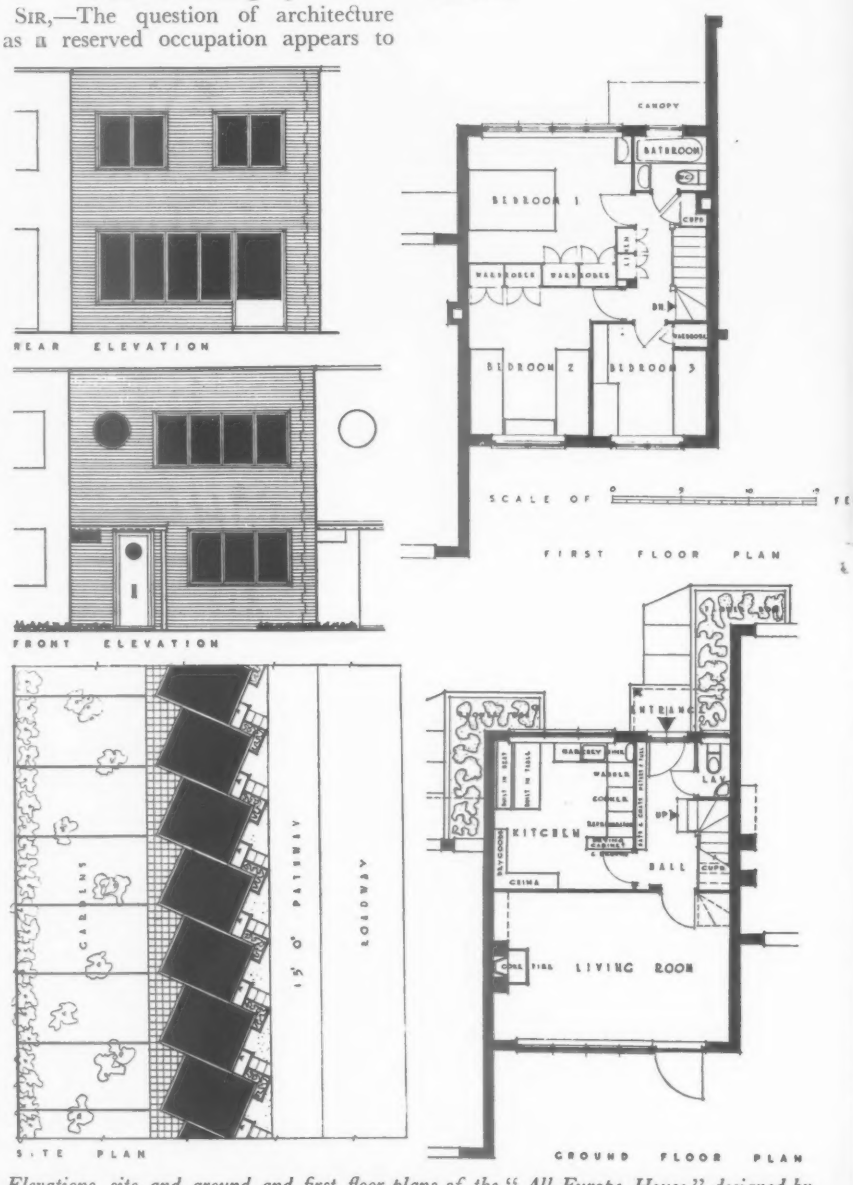
SIR,—The question of architecture as a reserved occupation appears to be being applied with no discrimination, in spite of the fact that the possibility of all architects being usefully employed as such on national service seems very remote.

In my own case I served in the ranks of the Artists Rifles from 1910 to 1934, with a break during the war, when I served for 2½ years as a Flying Officer in the R.F.C. and R.A.F. The Artists Rifles has for many years been an officer-producing unit, although only recently officially designated as such.

In spite of my previous service my application for enrolment in the R.A.F. Officers' Emergency Reserve has been refused because I am an architect. One would imagine that ex-officers with 24 years' service would be less easy to find in the event of war than architects would be, but apparently those in authority think otherwise.

HAROLD DICKSEE, F.R.I.B.A.

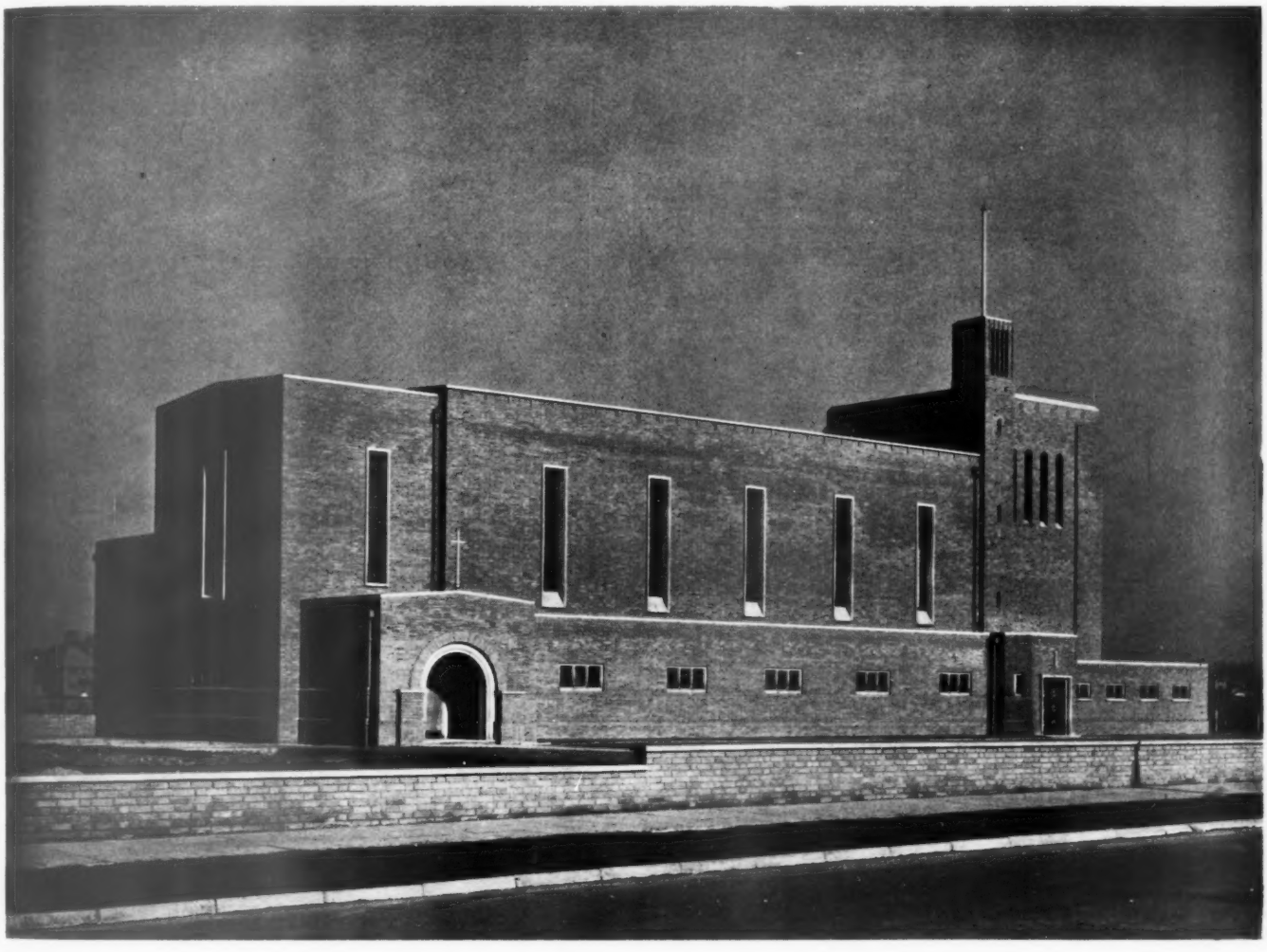
London.

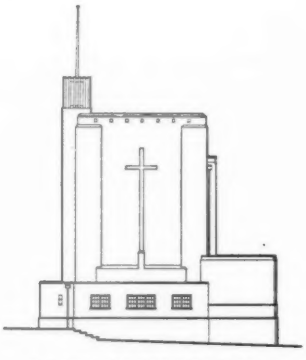


Elevations, site and ground and first floor plans of the "All-Europe House," designed by Elizabeth Denby for construction at the Ideal Home Exhibition to be held at Earl's Court from April 11 to May 6.

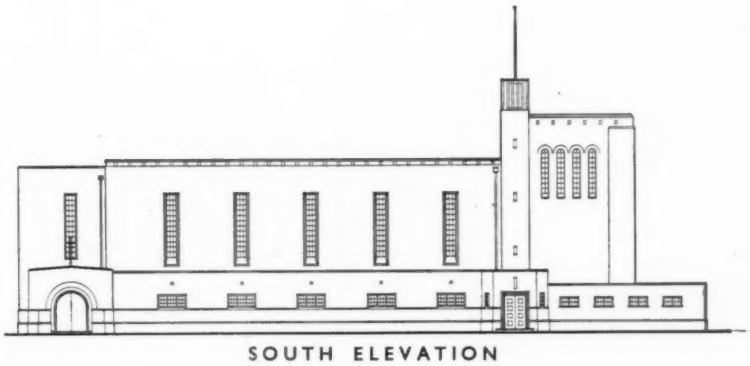
ST. GABRIEL'S CHURCH, WALSALL

DESIGNED BY LAVENDER AND TWENTYMAN





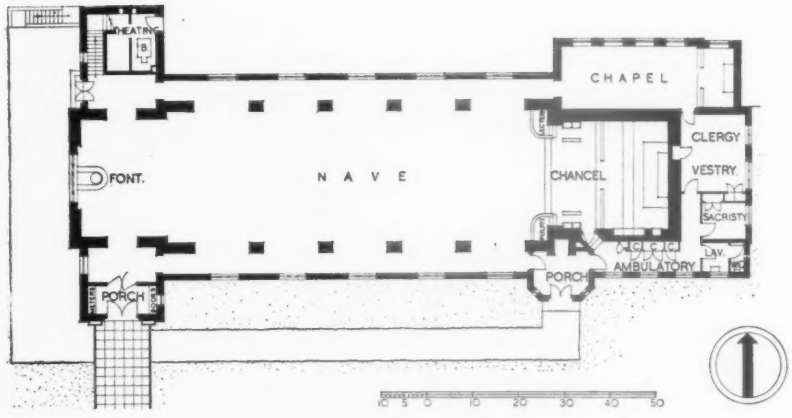
EAST ELEVATION



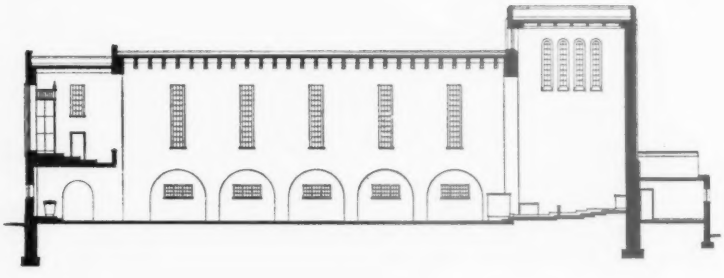
SOUTH ELEVATION

PROBLEM—*A church to seat 510, including chapel and choir.*

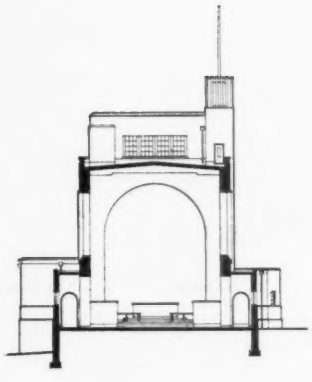
SITE—*A hall and vicarage will eventually be built on the west and east sides of the church, respectively. The site slopes away from the road and the finished level is about 4 ft. above the original ground level. Above, the south elevation.*



GROUND FLOOR PLAN



LONGITUDINAL SECTION



CROSS SECTION LOOKING TOWARDS THE ALTAR

PLAN—*The choir and organ gallery is situated in the west end with a choir vestry adjoining on the same level. The chapel was placed on the north side for sake of quietness.*

CONSTRUCTION—*Reinforced concrete foundations and solid brick walls. All reinforced concrete roofs are covered with 2 in. cork slabs and asphalt. The bell turret has a reinforced concrete frame to its upper portion, faced with brickwork, and the gallery consists of a hollow tile floor and a reinforced concrete balustrade.*

EXTERNAL FINISHES—*All copings, window and door surrounds, and mullions are Clipsham stone. The leaded lights are fixed direct into the stone, zinc-sprayed steel frames being used for the opening lights. All external doors are faced with galvanized iron and painted.*

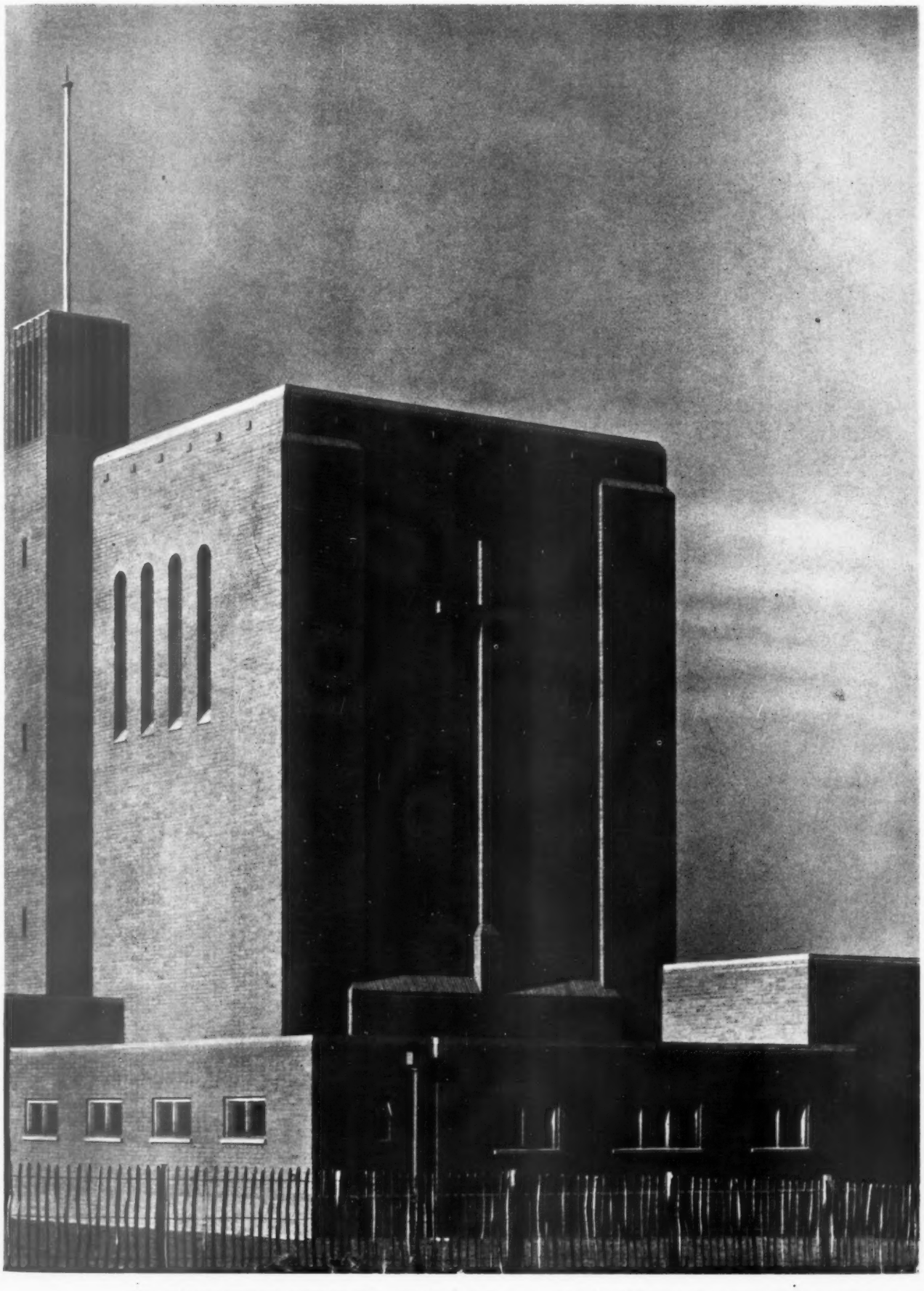
INTERNAL FINISHES—*The floors are finished with Roman stone in the sanctuary, Clipsham stone in the west porch, oak blocks in the gallery, and quarry tiles in the lavatories: elsewhere a patent flooring in brown and red squares. The walls are natural-coloured buff plastered, finished with a sponge. The flat portions of ceilings in the nave and sanctuary are sprayed with asbestos acoustic material, the beams are painted with a special paint direct on the concrete, blue in the nave, blue-green and silver in the sanctuary, the coffers being a dull red; other ceilings are colour-washed on plaster, that of the chapel being pale blue, green and silver. The riddel posts to altars are mahogany, black and gold in the main sanctuary, blue and gold in the chapel. All other joinery is of oak. All doors are solid laminated, veneered oak. The pulpit and lectern are of Clipsham stone and plaster on concrete. The cross above the altar is of black marble, and the Clipsham stone font has a wood cover ebonized and gilded.*

SERVICES—*The floors are heated by pipe coils embedded in concrete, and an electric tubular heating system in the chapel. A electric organ in the gallery has loudspeakers in two reverberation chambers, shaped inside to deflect sound horizontally into the church through grilles of painted tubes.*

Facing page; the east front.

COST—*10½d. per ft. cube. Contract price, £11,100.*

ST. GABRIEL'S CHURCH, WALSALL • BY LAVENDER AND TWENTYMAN



ST. GABRIEL'S CHURCH, WALSALL • BY LAVENDER AND TWENTYMAN

A general view of the nave, looking towards the chancel.

ST. GABRIEL'S CHURCH, WALSALL • BY LAVENDER AND TWENTYMAN

CHIMES—*The chimes are of an unusual type. A set of 21 tubular bells on a wooden frame are installed in a soundproof room underneath the church. They are played electrically from a keyboard attached to the organ, which itself is of the all-electric type. The sound is picked up by a microphone, largely amplified and radiated through loudspeakers in the belfry. Electric clocks are used to make the installation, when desired, entirely automatic. The cost of the whole equipment was about £200.*

Above, the font at the west end of the nave and the balcony; below, the side chapel.

The general contractors were Deacon and Boardman, Ltd.; for list of sub-contractors see page 425.

R.I.B.A.

Following are extracts from a paper entitled "Recent Architecture in the Provinces," read by Mr. William T. Benslyn at last Monday's meeting of the Institute.

INTRODUCTION

To review recent architecture in the provinces in the space of one short paper is a most difficult task. I have defined the word recent as being applicable to the period since the war.

Architecture in the mass is not only dependent on the architect, but on the general level of public intelligence and taste. There is an increasing realization that buildings must fulfil their social and hygienic requirements with the minimum of concessions to convention. Modern constructional methods give opportunity for flexibility of planning impossible in the past.

The influence of tradition is being modified not only by the logic of the direct expression of the needs of buildings unknown in previous periods, but also by the fashions prevalent at the moment.

Architects who have had the advantage of being trained in the schools since the war are more and more showing by their work the value of the training received. The habit of foreign travel acquired by many during the war has persisted. Visits to European countries are so easy and so attractive, that first one country and then another has influenced our taste.

More recently outside stylistic influence is less noticeable and the possibilities inherent in the problem itself are more often allowed to dominate the form of its solution.

Although a great number of our buildings still conform to the classical tradition, there is undoubtedly an increasingly realistic outlook on architectural matters among all classes of the community, and this is mirrored in many of the buildings recently erected in the provinces.

The examples I have selected are, I trust, representative of what is actually happening, my approach to this subject being to review, not to preach.

The work of all classes of architects is represented.

I am sorry that I cannot show you many examples of monumental architecture in the provinces. Although immediately after the war a great many war memorials were erected, few of these possess the right to be described as monumental. There are some good village crosses, but no cenotaphs comparable to the original one in Whitehall. There is at Leicester, however, a war memorial by Sir Edwin Lutyens which can, I feel, justly be described as monumental.

CIVIC BUILDINGS

My next examples are of civic buildings. Whatever criticisms may be levelled against the competition system, we must at least admit that competitions have been the means of discovering architectural ability which otherwise might not have been given an opportunity for expression.

Mr. Vincent Harris has never wavered in his adherence to the English classical tradition, and his knowledge of it, combined with an uncanny gift for economical and practical planning, has resulted in his being the architect for important buildings in many parts of the provinces. His work at Sheffield illustrates, I think, his willingness to accept for the artistic expression of buildings which by their nature must possess a considerable degree of symmetry and conventional dignity, those Renaissance forms which are part of the English classical tradition. There is little attempt to vary conventional ornament or detail, but there is an expression of the dignity appropriate to civic life.

The building at Leeds is not so monumental, but again shows his knowledge and use of the English Renaissance tradition.

The New Reference Library and Town Hall at Manchester, won in competition, serve to emphasize the difficulty of dealing with extensions in the centre of a developed city and furthermore, that unless the problem is primarily

viewed from the standpoint of town planning, an entirely satisfactory result is impossible. The problem here of providing a new library and at the same time extending the municipal offices which had been built by the late Alfred Waterhouse was solved by dividing the problem into two parts and treating the library as a circular building in the classical manner, and carrying out the extension of the Town Hall to as far as possible harmonise with the earlier Victorian Gothic work.

The competition for the new civic halls at Wolverhampton presented a problem not unlike the one at Sheffield; it was won by Messrs. Lyons and Israel, both young men, who had gained a great deal of their experience by working on competitive designs. The original competition design showed a more conventional use of the orders than the executed building. In its treatment of detail this building is frankly original with varying degrees of success.

The recently completed City Hall at Norwich, also won in competition by Messrs. C. H. James and S. Rowland Pierce, is one of our finest examples of civic architecture.

The Royal Hospital School, Holbrook, Suffolk, is another notable modern building obtained by competition. This school was housed at Greenwich until its removal to its present building in April, 1933. The architectural expression is traditional and possesses a sufficient element of the monumental to render it appropriate to its national importance.

The Art Gallery at Leamington Spa is a very charming small building designed by Mr. A. C. Bunch, in the traditional manner, and is very restrained in its simple classical dignity.

H.M. OFFICE OF WORKS

I believe I am right in saying that the oldest organization doing architectural work in this country is H.M. Office of Works. The high quality of the work being done by this office is, I think, generally admitted. Examples of the work of the Department can be found in every part of the country, and are usually expressive of the cultural tradition of the district in which they are erected. Naturally, the work of such a Department, serving as it does so many administrative sections of the Government, has built up a vast fund of experience and knowledge of their requirements. The buildings fulfil their purpose efficiently. They are well constructed, often with very considerable taste, and they have a definite air of governmental stability. It would be wrong to expect them to be ostentatious, experimental or dramatic. A large number of them carry on the eighteenth-century English tradition. Although in these buildings use is not sacrificed to the expression of the personality of the designer, they do express personality, but not in an abnormal manner.

CAMBRIDGE

A number of important new buildings have been erected at Cambridge since the war, the most important of which is the New University Library, which has been designed to group with the new Clare Buildings. Both the University Library and the Clare Buildings are the work of the same architect, Sir Giles Scott.

Messrs. Stanley Hall, Easton and Robertson's work at Cambridge is very successful and includes new buildings for Caius College, the Zoology buildings and the School of Anatomy.

DUDLEY

I know of no other town in the Black Country which possesses the individuality of Dudley; with its castle dominating the town it attracted the attention of Turner, who made a number of drawings in the district. In recent years two exceptionally interesting pieces of architecture have been added to its attractions. The New Town Hall by Messrs. Harvey and Wicks and the Dudley Zoo buildings by Messrs. Tecton both show considerable individuality. The New Town Hall was won in competition and has been carried out in two sections, first, the Town Hall and Courts, and secondly, the Council Suite and Offices. I know of no other building of its class in this country which has given more successful expression to the possibilities of craftsmanship applied to building.

The Dudley Castle Zoo, by Messrs. Tecton, has aroused great interest, especially among the younger members of the profession. The castle grounds, which are of considerable extent, provide good settings for these modern buildings; the colour of the reinforced concrete construction harmonizes admirably with the local limestone and shale.

BARBER INSTITUTE OF FINE ARTS, BIRMINGHAM UNIVERSITY

The bequest of Lady Barber to the University of Birmingham, which enabled this Institute to be erected and its Professor to be maintained, provides in addition an annual income for the purchase of objects of artistic merit, and it is not surprising that its director, Dr. Thomas Bodkin, late of Dublin, and its architect, Mr. Robert Atkinson, should not only have collaborated to produce a building so appropriate to its use, so modern, and yet at the same time so expressive in its plastic form of a culture enriched and refined by the study of the antique. The elevations have no definitely stylistic inspiration, but harmonise with the adjoining University buildings, which are in brick. The main entrance is both emphatic and original.

HOSPITALS

The Birmingham Hospitals Centre was won in competition by Messrs. Lanchester and Lodge, and has recently been opened, and is situated on a site adjoining the University at Edgbaston.

Some years ago the members of the Medical Faculty of the University became convinced of the necessity for the erection on the same site of a hospital, medical school and nurses' home, and after a great deal of investigation and preliminary study, initiated the competition for which the late Mr. Percy Adams was the assessor. There was no precedent in this country for a building of this class, but each aspect of the varied practical requirements has been meticulously studied. I think that without the enthusiasm of the Dean of the Faculty, Dr. Stanley Barnes, and other members of his profession, and the business ability of Sir Harry Vincent, and the wholehearted devotion they have given to this cause, the architects would not have had this great opportunity for the exercise of their skill, or the technical co-operation necessary to carry it out so successfully.

In contrast to this great undertaking, I would like to mention the extensions of the Wolverhampton and Midland Counties Eye Infirmary recently carried out by Messrs. Lavender and Twentyman. This building presents the type of problem many provincial architects are called upon to solve; firstly, it was an extension; secondly, it was complex, having to provide a new out-patients' department, enlarge the administrative department, provide new ward accommodation, and generally to reorganise the old building. To solve it wards had to be placed over the out-patients' departments; the necessity to keep to the floor levels of the old buildings gave a height of almost 20 ft. between ground and first floor, and made it possible to mezzanine a portion to provide flats for the porter and house surgeon.

HOUSING

The great responsibilities imposed on local authorities by housing and slum clearance legislation have been met largely by the development of new housing estates on the outskirts of large cities, and only in a minor degree by the erection of flats in central areas. Whether we agree that flats are the most desirable solution or not, we must, I feel, be prepared to grant that their erection does provide a solution free from some of the faults inherent in the twelve houses to the acre method of dealing with the problem. That they possess corresponding disadvantages must be admitted. Leeds and many other cities are now employing both solutions. The Quarry Hill flats scheme carried out by Mr. R. A. H. Livett is most boldly conceived not only in its planning, but in the structural methods employed for its execution.

CHURCHES

The majority of the churches recently erected in the provinces serve the needs of new housing estates; they are usually of brick and the necessity for economy has had great bearing on their design. The most successful have sacrificed elaboration of detail in preference to cramping their size.

Stylistic influence is less obvious than it was formerly. The Church of St. Gabriel at Blackburn by Mr. Verlade is one of the most impressive I have seen, both externally and internally. Its square tower is devoid of projections or mouldings, and attains its impression of virility by its simplicity of outline, the carefully restricted size of its door, and studied proportion of its window and tower light openings.

SCHOOLS

Recent school buildings express in their design the more comprehensive view now taken of the functions of education. The necessity for physical and craft education in addition to book learning is now part of our national educational policy, and in order to comply fully with the Board of Education's requirements, senior school buildings need an increase of approximately 45 per cent. on the floor area of similar buildings erected in 1914, so that quite apart from the fact that new schools have to be erected to serve new housing movements in all parts of the provinces, they have to provide more accommodation per head. Sites have to be bigger not only for the school itself, but to provide larger playgrounds and playing fields. The problem is therefore one in which economy of design and construction can never be disregarded. The Board of Education in its pamphlets provide inspiring guidance in addition to definite information, and far from discouraging experiment, welcome it. Good light and ventilation are of primary importance. Steel or concrete frame construction is being increasingly employed to facilitate the provision of large uninterrupted window surfaces for the lighting of classrooms.

Withal there is no necessity for mechanical dulness in modern schools, they provide great opportunities for interesting grouping and massing arising naturally from the differing functions and sizes of the component parts. The use of flat roofs is becoming increasingly prevalent, which in the case of single-storey buildings are often of timber construction.

ENTERTAINMENT

New entertainment buildings have been erected during recent years in all parts of the Provinces. It is scarcely possible to mention any which have not a new cinema. These are usually of steel frame construction with brick walls. Their main façades appear to be more and more merely backgrounds for the display of neon lighting, and this fact has been frankly recognized in many recent designs. The cinema at Sutton Coldfield by Mr. H. Weedon may be regarded as representative of this class of design.

The De La Warr Pavilion at Bexhill by Messrs. Mendelsohn and Chermayeff makes little concession to the commercial outlook, but is a notable contribution to the architecture of the seaside. Its cantilevers, glass-enclosed staircases, flat roofs and terraces, are all in accord with the modern spirit of design, and it contrasts in no uncertain way with the rest of Bexhill.

The Stratford Theatre by Miss Elizabeth Scott and Messrs. Shepherd and Chesterton is the only other building for entertainment which has attracted anything approaching the same public interest and attention.

FACTORIES

Boots' factory at Nottingham is an outstanding example of functional architecture. It was designed by Sir Owen Williams, the well-known engineer.

DOMESTIC WORK

The design of domestic buildings is one of the most pleasant, but at the same time one of the most exactingly onerous of an architect's duties. The following points should be borne in mind in judging the examples I have selected from recent work in the Provinces. The client, or at least his wife, has often very definite ideas on the subject, and it is not in my opinion the function of the architect to override these, but interpret them with technical skill. The results evidence great variety of outlook. In many parts of the country the only methods of building readily available are the craft building methods which the local workmen understand and which the architect often enables them to employ with great success. This is particularly the case in districts remote from large towns. But modern constructional methods with the possibilities they give are becoming increasingly popular as those trained in their use and clients wishing to use them increase in number.

WORKING DETAILS : 731

SLIDING WINDOWS • HOUSE NEAR HALLAND, SUSSEX • SERGE CHERMAYEFF

The garden front of the house, on which the sliding windows occur, is divided into six bays by the structural timber framework.

Of the six bays, five have sliding windows and one a fixed window section with two opening ventilation panes. The sliding sections can be arranged to leave a clear opening of 22 ft. in the living-room. All the windows are of wood, the use of teak for window-frames enabling the sections to be fined down to almost steel-frame dimensions. Each sliding section of window is 11 ft. by 9 ft., divided into two sheets of $\frac{1}{4}$-in. plate glass, cemented to the frame.

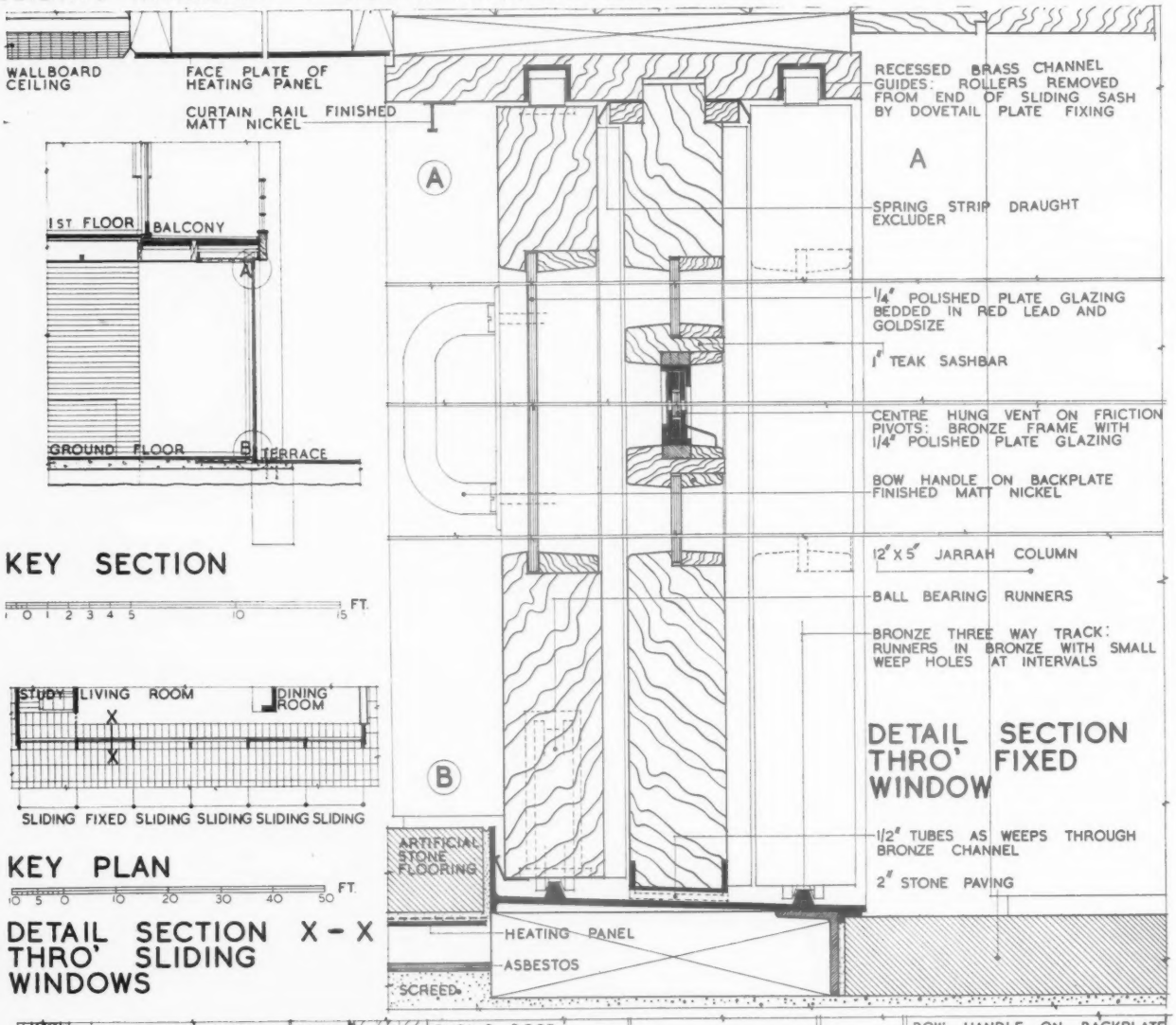
There are heating panels under the artificial stone extension of the terrace paving, and also in the ceiling immediately above.

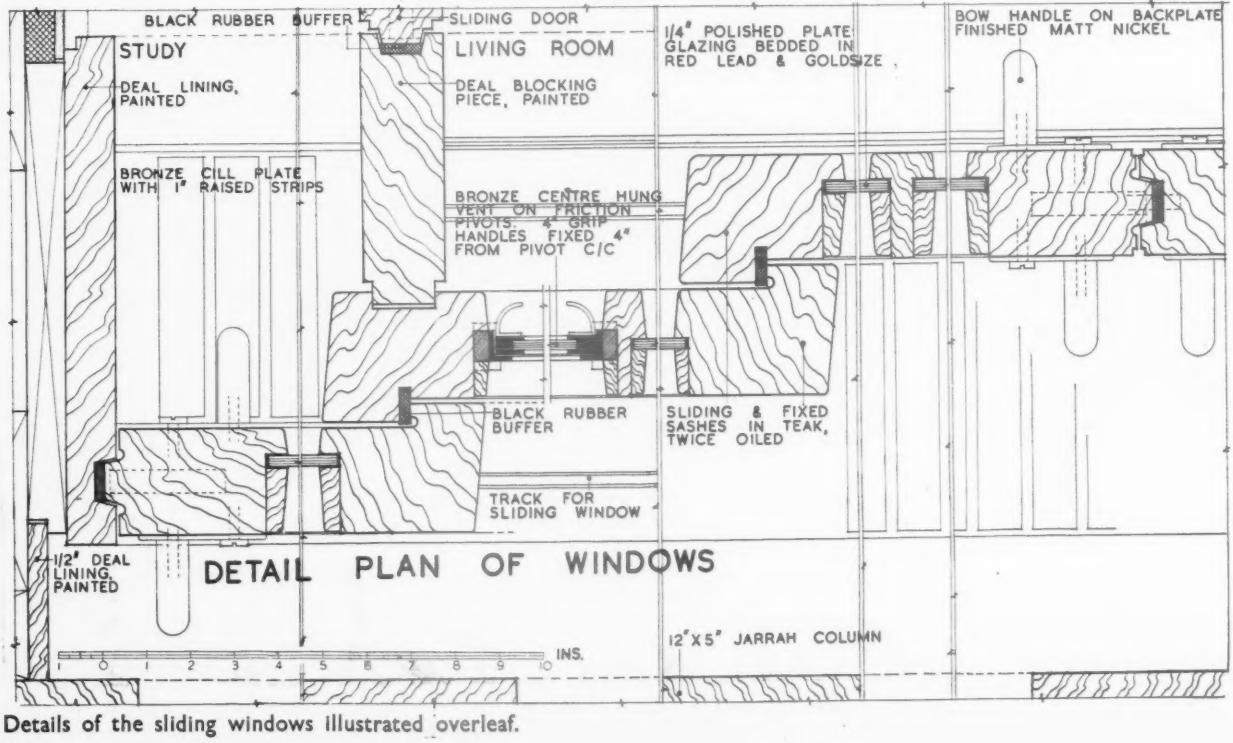
Details are shown overleaf.

FILING REFERENCE:

WORKING DETAILS : 732

SLIDING WINDOWS • HOUSE NEAR HALLAND, SUSSEX • SERGE CHERMAYEFF





Details of the sliding windows illustrated overleaf.

The Architects' Journal Library of Planned Information

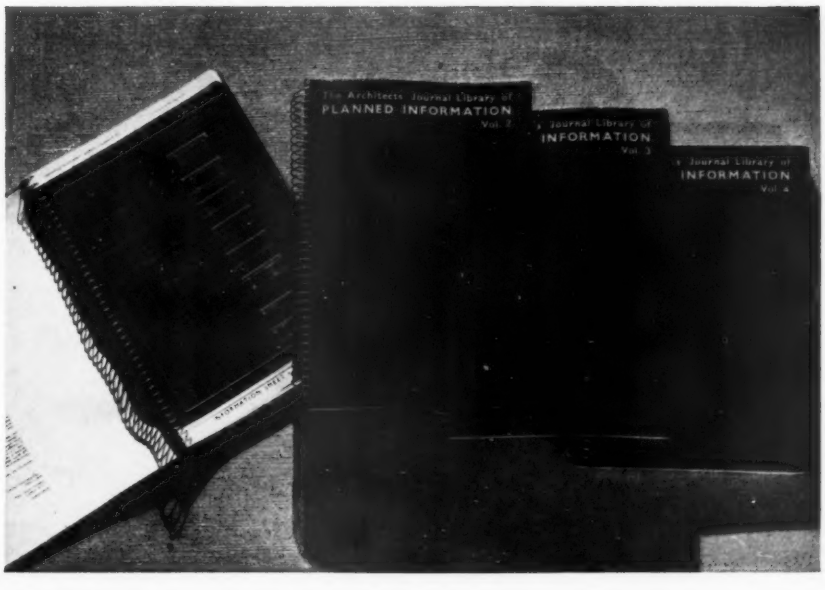
INFORMATION SHEET

SUPPLEMENT

SHEETS IN THIS ISSUE

711 Glass and Glazing

712 Quarry Tiles



All the Information Sheets published in The Architects' Journal Library of Planned Information since the inception of the series to the end of 1937 have been reprinted and are available in the four volumes illustrated here. Price 21s. each.

Sheets issued since index :

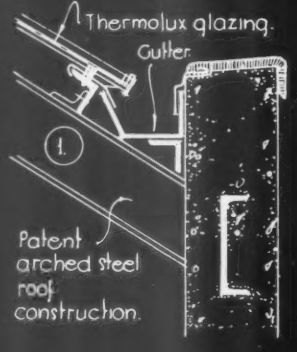
701 : Tile Hanging
702 (420 revised) : Fixing Insulating Board
703 : Sheet Metals
704 : Plan Elements
705 : Metal Work
706 : Plan Elements
707 : Furniture Layout
708 : Plan Elements
709 : Flue Construction
710 : Natural Lighting

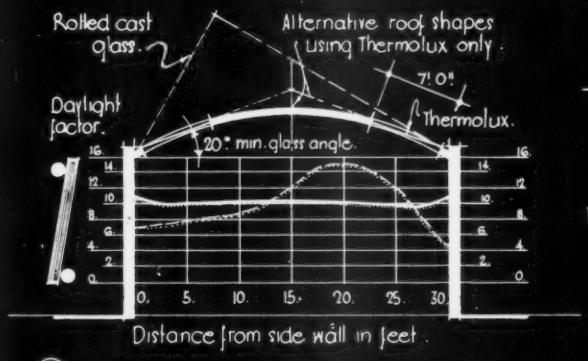
842.

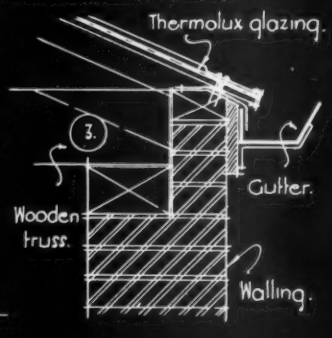
842. THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

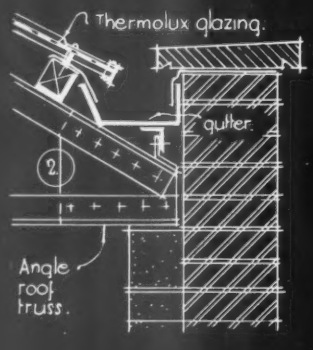
THERMOLUX LAMINATED HEAT-INSULATING & LIGHT-DIFFUSING GLASS IN SYMMETRICALLY LIGHTED FACTORY BUILDINGS.

Diagrams showing daylight distribution obtainable at working bench level. figures based on light intensities in the latitude of London.

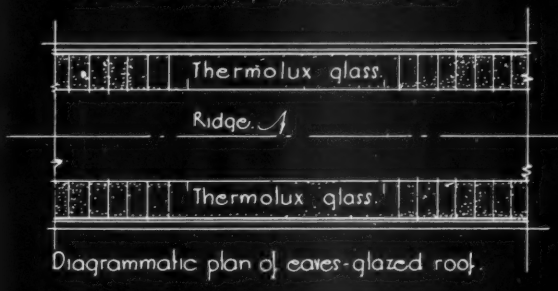




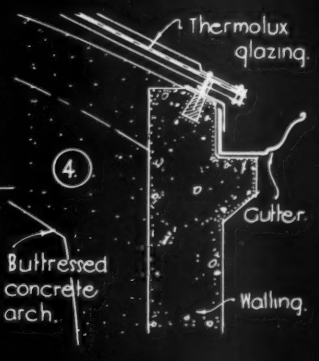


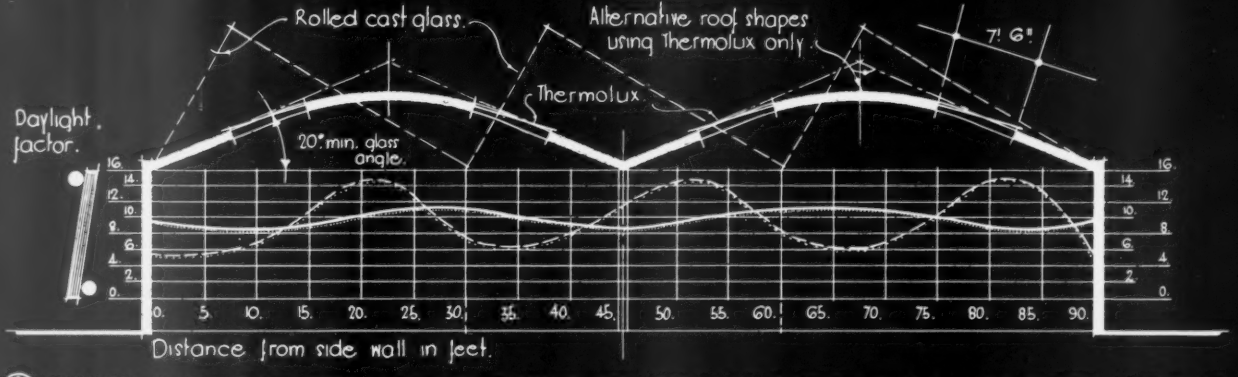


(A) SECTION OF BUILDING WITH EAVES GLAZING FOR SINGLE 30! BAYS NOT LESS THAN 45! LONG.

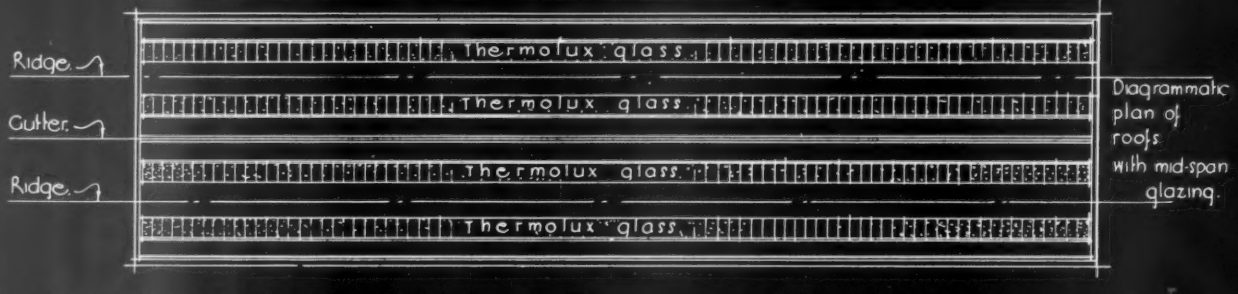


Diagrammatic plan of eaves-glazed roof.





(B) SECTION OF BUILDING WITH MID-SLOPE GLAZING FOR PARALLEL BAYS OR WHERE THERE IS SIDE LIGHTING.
INTENSITIES: those shown apply to bays 45! wide & not less than 45!0! long.
ROLLED CAST GLASS: The dotted distribution curve represents the best light obtainable with east & west orientated ridges.



LIGHT DISTRIBUTION: The distribution from Thermolux is constant for any direction of roof ridge.

Information from The Thermolux Glass Company Limited.

INFORMATION SHEET: DAYLIGHTING OF FACTORIES, No 2.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 711 •

GLASS AND GLAZING

Subject : Top-lighted industrial buildings

General :

The efficiency of the natural lighting of factories and workshops depends broadly upon :

(*a*) Natural light conditions.
(*b*) The glass used.
(*c*) The amount of glazing.
(*d*) The position of the glazing in relation to the area to be lighted.

The efficiency of the light at working level is measured by :

(*a*) The intensity of the light.
(*b*) The evenness of the illumination over the whole working area.
(*c*) The degree of variation in light intensity with variation in external conditions (overcast or sunny).

The light received by conventional north light glazing varies greatly in quantity, quality and colour and is as a rule unevenly distributed.

If, by using a suitable diffusing glass, the glazing can be fitted on both sides of a normal roof of low pitch, then the light from the whole sky will be received by the glazing and the quality and quantity of that light will be more closely related to outdoor light conditions in open spaces at the same hour and date.

The light intensity and distribution diagrams given on this Sheet compare the illumination obtained with "Thermolux" glazing in both slopes of a low-pitched roof with the illumination obtained from saw-tooth roof glazing with rolled cast glass. The "Thermolux" glazing faces any direction and the size and location of the glazing have in this instance been designed to produce an average light intensity at working level equal to about 10 per cent. of the light available out of doors on an unobstructed horizontal surface (i.e. a daylight factor of 0·1).

Diagram A :

Experience has shown that with roof slopes facing, preferably, east and west and single bays approximately 30 ft. wide and not provided with additional side lighting, the best light distribution is obtained if the "Thermolux" glazing is placed at the eaves as indicated. For the "Thermolux" light distribution curve, shown by a full line, the glazing runs are 7 ft. wide by any length over 45 ft. and the glass pitch 20 degrees. The roof structure may take any regular form, and there should, if possible, be no obstruction to the light, as might be caused by high parapet walls, adjacent buildings, etc.

The dotted curve represents the distribution of daylight when rolled cast glass is used in a 60-30 degrees traditional saw-tooth roof. Information Sheet 372, diagram "C," illustrates the extremes of light intensity obtained when clear glass is used in a normal pitched roof facing east and west. By contrast the "Thermolux" curve is practically a straight line which would not vary substantially with changes in weather or solar elevation.

Diagram B :

This diagram gives a similar comparison between the lighting from rolled cast glass in a saw-tooth roof and that obtained from "Thermolux" facing any direction.

The values given for "Thermolux" glazing are for parallel roof bays 45 ft. wide and of any length over 45 ft. : those for clear glass are for three parallel bays 30 ft. wide. This reduced span has been adopted for the saw-tooth truss because greater spans would be uneconomical in this form of construction and because the variation in light intensity would be even greater with larger spans.

It will be noticed that in parallel bays, 45 ft. wide, "Thermolux" glazing runs approximately 7 ft. 6 in. wide, placed centrally in each slope, give evenly distributed illumination which is close to the 10 per cent. daylight factor throughout.

Treatment at Eaves :

Details 1, 2, 3 and 4 indicate methods of terminating the glazing runs at the eaves without obstructing the natural light. Obstruction must be avoided if the utmost use is to be made of the glass employed.

Interlayers :

The thickness of the interlayer is variable to suit situation and requirements, and the overall thickness of the glass varies between $\frac{3}{16}$ in. and $\frac{7}{16}$ in. according to type and size of sheet.

The manufacturers will supply upon request the number and specification of the standard interlayer most suitable for interior or exterior, horizontal, inclined or vertical glazing in temperate, sub-tropical or tropical climates.

Prices :

(*a*) White "Thermolux" glass in rectangular sheets, cut to size, delivered within the United Kingdom :

Up to	$\frac{3}{8}$ ft. super	... 1/8 per piece
,,	5 ft. ,,	... 2/6 per sq. ft.
,,	10 ft. ,,	... 2/9 ,,
,,	15 ft. ,,	... 3/- ,,
,,	20 ft. ,,	... 3/3 ,,
,,	25 ft. ,,	... 3/6 ,,
,,	35 ft. ,,	... 3/9 ,,
,,	45 ft. ,,	... 4/- ,,
,,	50 ft. ,,	... 4/3 ,,
,,	60 ft. ,,	... 5/- ,,
,,	70 ft. ,,	... 6/- ,,
,,	75 ft. ,,	... 7/- ,,

Sheets 24 in. wide by any length up to 120 in. will be charged at a flat rate of 2s. 6d. per sq. ft. If the glass is to be fixed in standard skylights (lantern lights and hipped roofs) prices are quoted per set. There are reductions in price for quantities exceeding 5,000 sq. ft.

(*b*) Coloured "Thermolux" glass can be supplied in several shades each of amber, blue, pink, green, brown, and grey ; marbled effects can be obtained by mixing these colours in any way desired.

Amber costs approximately 5 per cent. more than white, the other colours approximately 10 per cent., and the marbled mixtures approximately 15 per cent.

Previous Sheet :

Sheet No. 710 deals with the daylight lighting of factories under various average lighting conditions throughout the year in the latitude of London.

Information from : The Thermolux Glass Company, Ltd.

Address : 1 Albemarle Street, Piccadilly, London, W.1

Telephone : Regent 8171

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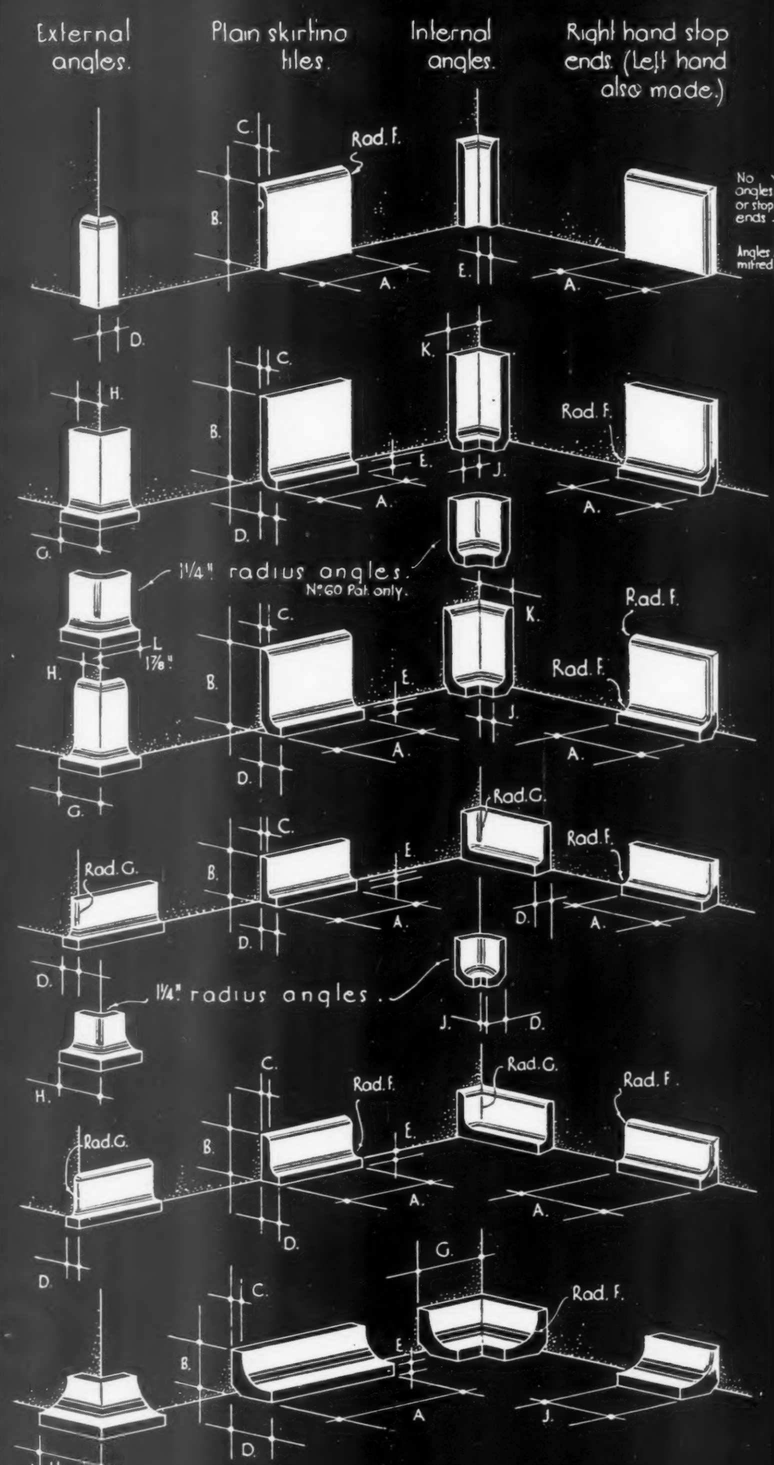
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

The fittings shown below are obtainable from stock in the sizes and colours given. For stock sizes of quarry tiles, etc., see the back of this Sheet.

BCM / TRITON QUARRY TILE STOCK FITTINGS, SIZES AND COLOURS :



ROUND NOSED QUARRY TILES.

Nº	A.	B.	C.	D.	E.	F.
56.	4"	4"	¾"	1½"	¾"	7/10"
57.	6"	6"	⅝"	1⅜"	⅞"	7/10"
50.	6"	6"	⅞"	1⅜"	½"	7/10"
59.	6"	7"	⅞"	•	•	7/10"
54.	8"	8"	1⅛"	4"	4"	1"
55.	9"	9"	1¼"	4½"	4½"	1"

COLOURS • brown 50, 54, 55, 56. blue 50.
red 50, 54, 55, 56, 57, 59.

SQUARE TOP COVE SKIRTINGS.

Nº	A.	B.	C.	D.	E.	F.	G.	H.	J.	K.
53.	6"	6"	⅝"	1¼"	⅞"	½"	2⅜"	1⅝"	1"	2⅛"
60.	6"	4"	⅝"	1¼"	⅞"	½"	2⅞"	1⅝"	1"	2⅛"

COLOURS • red and brown.

ROUND TOP COVE SKIRTINGS.

Nº	A.	B.	C.	D.	E.	F.	G.	H.	J.	K.
52.	6"	6"	⅞"	1¾"	⅞"	7/10"	3"	1¼"	⅞"	2½"

COLOURS • red, brown and blue.

SQUARE TOP COVE SKIRTINGS.

Nº	A.	B.	C.	D.	E.	F.	G.	H.	J.	•
51.	6"	3"	½"	1⅜"	⅞"	½"	½"	2"	½"	•

COLOURS • red and brown.

ROUND TOP COVE SKIRTINGS.

Nº	A.	B.	C.	D.	E.	F.	G.	•
58.	6"	3¼"	⅞"	1⅝"	⅞"	7/10"	¾"	•

COLOURS • red and brown.

SQUARE TOP COVE SKIRTINGS.

Nº	A.	B.	C.	D.	E.	F.	G.	H.	J.
61.	9"	3"	1"	3"	1"	2¼"	4¾"	4⅝"	4½"

COLOURS • red and brown.

SPECIAL TILES • Special angles, etc. can be made to order in from four to six weeks.

Information from Wheatly & Co. Ltd.

INFORMATION SHEET : BCM / TRITON FLOORING QUARRIES.

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 • Olive A. Bayne

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 712 (109 revised) •

QUARRY TILES

Product : BCM/Triton Quarries

Type Illustrated : General Fittings

Note.—This Sheet supersedes No. 109, published during 1934, which is now cancelled.

Stock Sizes and Colours.

	Number of Quarries per superficial yard
4″ × 4″ × ¾″ Red, Blue, Russet Brown, Light Tan and Buff ...	81
6″ × 6″ × ⅝″ Red only. No other colour made in this size... ...	36
6″ × 6″ × ⅞″ Red, Blue, Russet Brown, Light Tan and Buff ...	36
8″ × 8″ × 1⅛″ Red and Russet Brown ...	20¼
9″ × 9″ × 1¼″ Red, Blue, Russet Brown and Buff	16
12″ × 12″ × 1½″ Red	9
6″ × 1″ × ¾″ Red	216
6″ × 1½″ × ⅞″ Red	144
6″ × 2″ × ⅞″ Red	108
6″ × 3″ × ⅝″ Red only. No other colour made in this size... ...	72
6″ × 3″ × ⅞″ Red, Blue, Russet Brown, Light Tan and Buff ...	72
6″ × 4″ × ⅞″ Red	54
9″ × 4½″ × 1¼″ Red and Russet Brown ...	32

Diagonally cut Quarries are usually available from stock for working up to borders.

Special Sizes :

In addition to the sizes given, quarry tiles can be made in other colours and sizes to order.

Laying :

1. Level up or grade to falls with 1 to 3 cement and sand. When partially set lay Quarries on a ¼″ bed of cement and sand. Quarries should be soaked in clean water before laying and a wooden beater should be used to level up each Quarry. Joints should be grouted up with cement and sand slurry and cleaned off immediately with sand or sawdust.

2. Lay Quarries on a bed of ashes which has been screeded over with mortar, truing up each tile as it is laid. This is not recommended, as lime in the mortar tends to blow, the Quarries work loose and scum frequently occurs.

3. Laying for wide joints : Lay as in (1), but point the joints in laying and point up or rake out afterwards.

Finish and Maintenance :

1. Apply linseed oil shortly after laying while Quarries are clean. This brings up the colour, tends to keep the Quarries clean and requires only washing with soft soap and water for maintenance.

2. For a highly polished surface, treat Quarries with a mixture of beeswax and turpentine applied as a dressing with a soft cloth and well polished.

The polish may be as follows :

Boil ⅞ pint of rainwater ; when off the boil add a dessertspoonful of soap flakes. Add ½ lb. of melted beeswax and ¼ lb. of white wax, to which a pint of turpentine has been added; stir well and allow to cool.

Efflorescence :

The floor should be washed several times with plain rainwater, no soap or chemicals being used. If not sufficient, apply a weak solution of hydrochloric acid, or spirits of salts and water (say 1 in 10). A small section of the floor should be done at a time and immediately washed off with clean rainwater. When dry treat with paraffin and good clean engine oil.

Method of Manufacture :

All BCM/Triton Quarry Tiles are made either by the de-aired process or by hand and are therefore suitable both for inside and outside uses.

Tests :

The following are summaries of tests made by recognised authorities :—

Abrasion :

Red Quarries tested in accordance with B.S.S. No. 368-1929 for rate of wear, lost on the average only 60% of the allowable loss of weight (maximum 67.3%).

Absorption :

Red De-aired Quarries—specimens dried to constant weight and immersed in water at 15° C. (approx.). Average percentage increase in weight : after 24 hours' soaking 6.95 ; after 48 hours' soaking, 7.13.

Acid Corrosion :

Red Quarries soaked in 5% hydrochloric acid solution for one week — corrosion negligible.

Falling Weight Test :

Tiles tested—three 6″ × 6″ × ⅞″ Red Quarries. Each Quarry was embedded in a 1-1 sand-cement mortar ¾″ thick, backed with 5″ concrete, and both bedding and backing allowed to set thoroughly and harden before applying the test.

The Bohme Hammer Apparatus for compacting cement briquettes was used, in which a hinged hammer with a head of two kilos. (nearly 4½ lb.) weight falls a distance of 168 millimetres (6⅝″) ; each Quarry was given 240 blows with this hammer, the specimen under test being held firm so that the repeated blows of the hammer fell always on the same spot.

After this treatment none of the three specimens showed any signs of fracture, but the abrasion of the repeated blows of the slightly convex-shaped hammer head produced a shallow concave crater on specimens 2 and 3 about 15 mm. diameter and 2 mm. deep (.075″) ; the surface of No. 1 specimen was slightly marked by the hammer but was not abraded to any measurable extent.

Transverse or Strength Test :

6″ × 6″ × ⅝″ Red De-aired Quarries—specimens supported on knife edges 5″ apart, and the load applied along a line centrally between them. Fracture occurred at an average load of 692 lbs.

Manufacturers : Wheatly & Co., Ltd.

Address : Springfield Tileries, Trent Vale, Stoke-on-Trent

Telephone : 6251 and 6252 Newcastle, Staffs.

LAW REPORTS

BORDERS *v.* TROTTER, LEAF AND PITCAIRN

IN the King's Bench Division, High Court of Justice, on February 28, Mr. Justice Greaves-Lord and a special jury had before them an action by Mr. James Walter Borders, a taxi driver, of Kingsway, West Wickham, and the husband of Mrs. Elsy Borders, who recently conducted her own case in a building society action, claiming damages for alleged libel from Messrs. Trotter, Leaf and Pitcairn, solicitors, of Victoria Street, Westminster, contained in a letter.

Mr. Borders alleged that a letter was sent to the Bradford Third Equitable Benefit Building Society on or about January 22, 1935, bearing the name "Borders" at the top and reading: "In reply to your letter of the 21st inst. all the work required by this borrower has long since been completed. He is definitely a 'bad egg.' No rope whatever should be given. He and Marriott (Mr. Borders' neighbour) are friends of the same calibre.—Yours faithfully, Trotter, Leaf and Pitcairn."

The defendants admitted writing the letter and did not deny that it referred to the plaintiff. They denied, however, that the words complained of were capable of having any defamatory meaning and maintained that the letter was written in good faith and without malice. They further pleaded absolute, or alternatively, qualified privilege.

Mr. Dudley Collard appeared for the plaintiff and Mr. Norman Birkett, K.C., led for the defendants.

Mr. Collard said in 1934 Mr. and Mrs. Borders were anxious to move from Brixton Hill into the country. Unfortunately they got into the hands of speculative builders, who made glowing representations as to the materials and workmanship of their houses. The builders were Morrells (Builders), Ltd., and they were now in liquidation. The defendants were the solicitors to the builders and their address was the registered office of the builders. When the builders opened a branch at Bromley, the solicitors opened a branch there too. Counsel said it was only right to say, and he did not say it either, that either of the partners in the firm knew all that was going on. When they opened the branch at Bromley it was in sole charge of an unqualified clerk, Mr. Feldmar. He was the person who actually wrote the libel complained of, and one of the issues for the jury to try was what was Mr. Feldmar's motive in writing that letter. Did he write it honestly or was he actuated by some improper motive?

Eventually Mr. and Mrs. Borders decided to purchase a house at Kingsway, West Wickham, and paid a £1 deposit in February, 1934. A few days later they had their first interview with Mr. Feldmar at Bromley. He was very affable, and they signed an agreement for the sale to them of a plot of land and the house in course of erection upon it. In the March Mr. Borders paid another £33—the total deposit on a house costing £690. Soon after they moved in, and up to then no arrangement had been made with the building society. Then they discovered that the house was of shoddy construction. Mr. Borders wanted a garage for his taxi and that held up the mortgage for two or three months. In June or July the deed was finally prepared.

During this time Mr. and Mrs. Borders were making frequent complaints to the solicitors, and when they went to the office a young clerk assured them that the matters would be looked into; but they never were.

In the August Mr. Feldmar called on Mrs. Borders and asked her to sign the mortgage deed, but she refused to do so until the house was put into a proper state of repair. Later he called again, and counsel said was offensive to Mrs. Borders, accusing her of trying to live in the house rent-free and said they were not going to stand it much longer. He left the mortgage deed with her. Mr. Fe dmar called again later and saw both Mr. and Mrs. Borders, and they made complaints about the house, refusing to sign the mortgage deed. An arrangement was come to that they should sign the deed conditionally upon their house being put into a proper state of repair. Mr. Borders added at the bottom of the deed that it was not to come into operation until the house had been repaired, and extracted from Mr. Feldmar an undertaking that in consideration of its execution Morrells would hold the mortgage until the enumerated works had been executed. Later, Mr. and Mrs. Borders found that a mortgage deed had been sent the building society without their knowledge. Some small effort had been made to deal with two of the complaints made. The deed sent contained no footnote and was witnessed by a man named White, whom plaintiff and his wife had never seen. It was dated October 10, a date on which plaintiff and Mr. Feldmar never met. Coming to the libel, counsel commented that it was a mean and despicable libel, sent behind Mr. Borders' back to the building society. He never knew about it for some years and it was only recently that it came to light. Counsel then referred to the recent action against his wife. When the builders went into liquidation Mrs. Borders claimed £131 and she had received some small dividend in respect of that amount.

At no time, said counsel, had there been an attempt by the defendants to apologise for their conduct. He suggested the words meant that Mr. Borders was an unreliable and untrustworthy man and he asked the jury to award very heavy damages.

Mr. Borders in evidence said that the first time he learned of the existence of the letter in question was when it was read during the recent Chancery proceedings.

In cross-examination Mr. Borders detailed his complaints in regard to the house.

Mrs. Borders also gave evidence in support of her husband's case.

Cross-examined by Mr. Birkett, Mrs. Borders said she had heard herself called "The Tenants' K.C."

Mr. Birkett: You are a woman of very strong and independent mind?—I would prefer to leave that to the world to say.

You reckon to be a business woman?—No. I have always considered myself a housewife.

I suggest you were the dominating mind in all these transactions?—That is for the evidence to say.

You were always the source of worry and provocation to the builders?—I only made legitimate complaints. She added that her complaints were not trivial and groundless about the house. She denied that she was troublesome and that nothing would satisfy her.

Mr. Arthur Marriott, a neighbour of the Borders in Kingsway and a member of the Lambeth Borough Council was the next witness, and said he was also bringing proceedings in respect of the libel complained of. He said he was present when Mr. Borders signed the mortgage deed with the footnote. He was not surprised that the deed had not been seen since.

This concluded the plaintiff's case.

Mr. Birkett submitted that there was absolute privilege in the circumstances. The letter was one which it was never intended for human eyes to see other than the building society. The extravagant tone of the letter was founded on the persistent complaints and delay in signing the mortgage deed. Mr. Feldmar had no motive for being spiteful or malicious. He contended that the plaintiff had suffered no damage.

Mr. David Frank Feldmar, of The Drive, Wallington, now a builder and formerly clerk with the defendants at Bromley, gave evidence. He said the defendants represented the building society in connection with mortgages executed on the Coney Hall Estate. Mrs. Borders complained of the house and he gave her an undertaking and she signed the deed. He was not actuated by any malice or spite towards her or her husband.

The hearing was adjourned.

JUDGMENT FOR MR. BORDERS FOR £150.

On March 1 the hearing was resumed.

Mr. Feldmar stated that when he wrote the letter he believed it to be true. He thought that Mr. Borders' letter to the building society was "only another stunt" to enable them to avoid paying under the mortgage deed. He denied being offensive to Mrs. Borders.

Mr. Joseph Eaton, a solicitor practising at Market Street, Bradford, as J. Eaton & Co., said his firm in 1934 acted as solicitors for the building society. As there was a large volume of work in connection with the West Wickham Estate he employed the defendants as his agents to get the mortgages completed on behalf of the building society, and that continued until the end of February, 1935.

Cross-examined: It would be wrong to say that the defendants were ever retained as solicitors by the building society. His arrangement was to provide a convenient way of getting mortgages signed and that was the only work they did for them.

After other evidence, counsel addressed the jury and his lordship summed up.

The jury, after forty minutes' deliberation, returned a verdict for Mr. Borders and assessed the damages at £150. The jury added that they considered the defendants were not in the position of solicitors and clients with the Bradford firm of Eaton.

His lordship entered judgment for the plaintiff for £150 and costs.

Mr. Birkett mentioned that there was a claim by Mr. Marriott against the same defendants.

His lordship said that would heard on Thursday.

Mr. Birkett: Will it be the same jury?

The Court Associate: No. (Loud laughter.)

Mr. Birkett: I meant no disrespect to the jury.

In the King's Bench Division, on March 2, before Mr. Justice Greaves-Lord, a settlement was announced in the action by Mr. A. L. Marriott, next-door neighbour to the Borders at West Wickham, against Messrs. Trotter, Leaf and Pitcairn, solicitors, for damages for libel arising out of the letter sent by defendants' managing clerk, which was the cause of the action in the Borders case.

Mr. Norman Birkett, K.C., for the defendants, announced that the defendants had agreed to pay Mr. Marriott £125 damages and said that the defendants, who were solicitors of high standing, desired him to say that it was unfortunate that they had been brought into the matter at all. They expressed their regret to Mr. Borders and Mr. Marriott that the language contained in the letter was made use of at all. Mr. Trotter was very anxious that that should be stated publicly.

His lordship: Everybody agrees that the partners of the firm had no part in it. I am quite sure the letter was one for which the defendant firm would be heartily sorry.

The record was withdrawn on the terms stated.

ARCHITECT'S CLAIM FOR FEES

Parkinson v. *South Coast Bathing Pools, Ltd., and others.—King's Bench Division. Before Mr. Justice Hilbery*

THIS was an action by Mr. Edward Baldry Parkinson, an architect, of Newnham Road, Cambridge, to recover payment on a *quantum meruit* for professional services rendered in connection with a scheme for the construction of a swimming pool at Seaford, from the South Coast Bathing Pools, Ltd., and alternatively from the promoters of the company or both.

E.

Plaintiff's case was that on the instruction of Mr. Slocock, one of the promoters, he prepared plans for a bathing pool at Seaford. Later he prepared working drawings in order that a builder might give an estimate for the work. He also got into touch with specialists and made plans. Later the scheme was abandoned.

The defence was that defendants were always ready and willing to pay out-of-pocket expenses, that any instructions which were given was before the incorporation of the company, and that if there was any instruction to complete the scheme, which was denied by defendants, it was on certain conditions as to its cost.

Mr. Springman appeared for the plaintiff, and Mr. Granville Sharp for the defendants.

Mr. Parkinson gave evidence in support of his case and said he had built a bathing pool at Royston, and a much larger one at Newmarket. Mr. Slocock had told him that he had seen the Royston bathing pool and that he would like sketch plans of a much larger pool for Seaford. He accordingly submitted plans to a board meeting of the company, and later prepared working drawings. As the matter was urgent he also got in touch with specialists and made plans. The Royston pool cost some £10,000. A larger pool would cost anything between £16,000 and £25,000.

Mr. A. P. Belton, of Messrs. Braybon and Son, Ltd., building contractors, of Brighton, said he received plans from the plaintiff, and his estimation of the cost of the pool was £11,500. In his opinion, the plans he received were comprehensive and he was quite able to prepare approximate estimates from them.

Mr. Sharp said his case was that the plaintiff agreed to take a risk of the scheme not coming to fruition and would be content in that event to accept out-of-pocket expenses, which his clients were, and always had been, willing to pay.

Mr. Slocock gave evidence in support of counsel's statement. The site was to cost £2,500, and they would have considered a £12,000 project.

Mr. W. T. Barwell, a solicitor, of Seaford, said Mr. Slocock told the board of the defendant company that if the scheme fell through plaintiff would have his out-of-pocket expenses.

Replying to his lordship, Mr. Barwell said the secretary of the company gave plaintiff instructions for the detailed drawings on the understanding of no fees if the scheme fell through.

His lordship, in giving judgment, after stating the material facts and dealing with the evidence, said the plaintiff had in his opinion acted perfectly honestly throughout and had done everything he was instructed to do. His lordship found, as a fact, that the plaintiff did all the work in respect of which he claimed to be paid. As the defendant company was not incorporated on the date when the plaintiff received his instructions to proceed with the work the directors could not hold a board meeting on that day, and therefore it could not be substantiated that the company had authorized the plaintiff to do the work for which he claimed payment. He, however held that the promoters of the company, who had been made defendants to the action, were liable, and he accordingly gave the plaintiff judgment against them personally for breach of warranty of authority. He entered judgment for the plaintiff against the defendant promoters for £150, with costs, and for the defendant company against the plaintiff, but without costs.

VICARAGE, SURREY

DESIGNED BY H. EDMUND MATHEWS AND E. B. JEFFERISS MATHEWS. ASSISTANT, A. G. NISBET

PROBLEM—*The design was based on the consideration that a vicarage differs from the usual domestic house in that many families of various sizes and requirements occupy it for short periods only. The study and waiting-rooms, planned as a separate entity, are embodied in the ground floor plan. A pitched roof was also required.*

SITE—*Built on the site of an old rectory in a well-established garden. The vicarage was placed with due regard to a possible future church hall.*

CONSTRUCTION—*External walls 11 in. cavity brickwork, internal partitions 4½ in. brick and 2 in blocks. The waterproofed reinforced concrete ground floor slab is covered generally with boarding, grano. and tiling elsewhere.*

EXTERNAL FINISHES—*All walls are faced with 2 in. rustic flettons with slightly recessed joints set in buff-coloured hydrated lime mortar. The pitched roof is covered with brown sandfaced tiles ; window frames are painted ivory.*

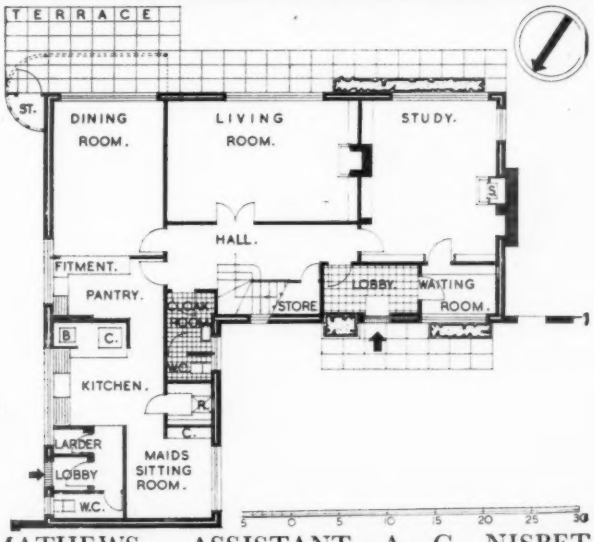
SERVICES—*Central heating by means of a coke boiler in the kitchen, open coal fires are provided in the living-room and two bedrooms.*

COST—*1s. 4½d. per ft. cube. Contract price £2,632.*

The general contractors were H. & G. Jackson, Ltd.; for sub-contractors see page 425. Below, two views of the south, garden front.

Above, south, garden front from the west.

FIRST FLOOR PLAN

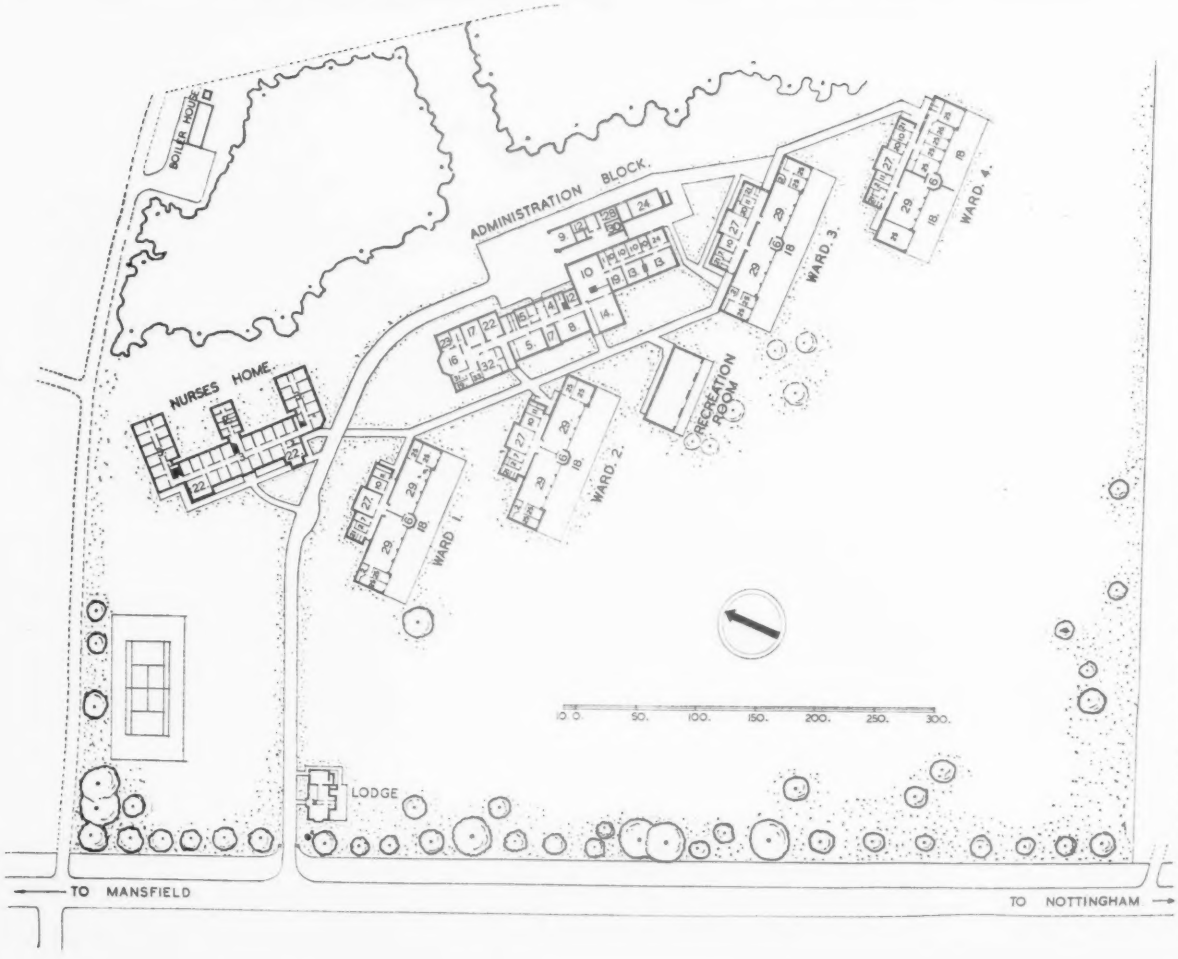


GROUND FLOOR PLAN

VICARAGE, SURREY • BY H. E. AND E. J. MATHEWS. ASSISTANT, A. G. NISBET

HARLOW WOOD HOSPITAL, N

DESIGNED BY BROMLEY, CARTWRIGHT AND WAUMSLEY



KEY TO LAY-OUT PLAN

1. Anæsthetising Room
2. Bathroom
3. Bedroom
4. Consulting Room
5. Temporary Chapel
6. Duty Room
7. Teachers' Room
8. Gymnasium
9. Garage
10. Kitchen
11. Linen Room
12. Mortuary
13. Maids' Dining-room
14. Nurses' Dining-room
15. Office
16. Operating Theatre
17. Receiving Room
18. Solarium
19. Surgeons' Change
20. Sick Room
21. Sluice Room
22. Splint Room
23. Sterilizing Room
24. Store
25. Small Ward
26. Scullery
27. Treatment
28. Transformer
29. Ward
30. Workshop
31. Wash-up
32. X-Ray Room
33. X-Ray Negatives Store

PROBLEM

SITE—*A well prot*

PLAN— *nected by that it co accommo solarium Glazed during separated boiler-ho*

CONSTR *cement-re ally, are concrete. coloured are paint*

INTERNA *boards f plastered Joinery g*

SERVICES *fired by receivers,*

COST—

Right, t No. 3, s a typical

The gen James (

NOTTINGHAM

PROBLEM—*Orthopædic Hospital, near Nottingham.*

SITE—*An area of 17 acres on the Duke of Portland's estate. It is well protected on the north-east by a wood of larch trees.*

PLAN—*The administration block and the ward units are all connected by covered ways, the recreation room being centrally placed so that it can be reached by means of wheelchairs. The ward units, each accommodating 40 beds, are similar in design; each has a wide solarium in front, partially covered with a glass protecting screen. Glazed folding doors along the whole of the south front are closed during bad weather. The closely adjoining nurses' home is separated from the other buildings by the entrance drive, and the boiler-house is entirel concealed by the wood.*

CONSTRUCTION AND EXTERNAL FINISHES—*The brick walls are cement-rendered externally, colour-washed ivory-white. Floors, generally, are of wood; flat roofs, solarium and administration floors are concrete. The timber pitched roofs, covered with hand-made, multi-coloured tiles, have wide overhanging eaves. All window casements are painted white, the doors being green.*

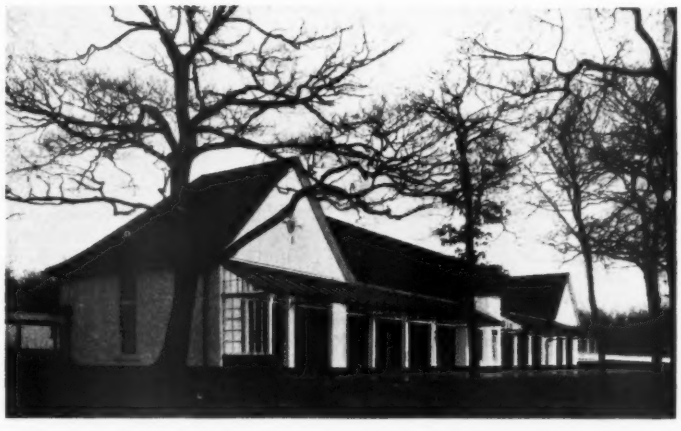
INTERNAL FINISHES—*Terrazzo, granolithic, oak blocks, and teak boards form the general floor finishes. The walls and ceilings are plastered, while kitchens, sluice and bath-rooms have white tiled dados. Joinery generally is of painted deal.*

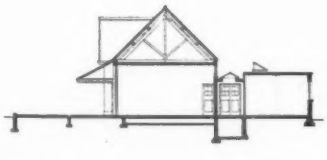
SERVICES—*Hot-water, heating, etc., is by means of a steam boiler fired by an automatic stoker in the boiler house. Nine broadcasting receivers, and a talkie-cinema apparatus are also provided.*

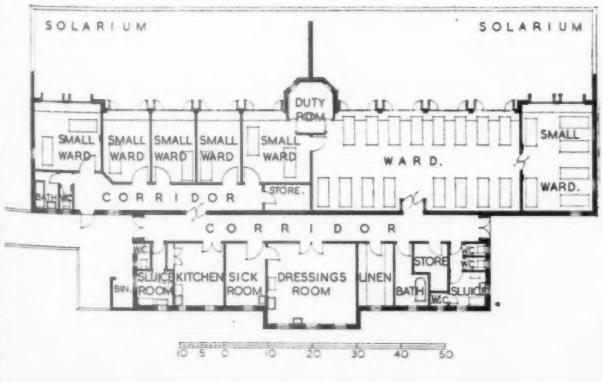
COST—*Approximately £64,000.*

Right, top to bottom: two views of the nurses' home; ward unit No. 3, showing folding doors closed for severe weather; interior of a typical ward unit, showing folding doors open.

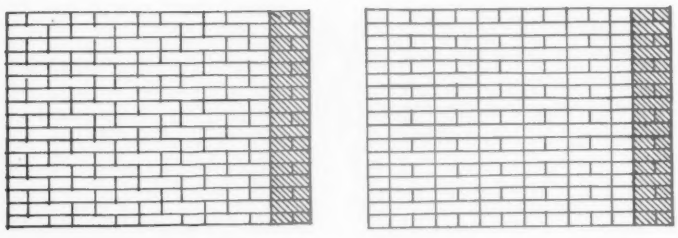
The general contractors were Thomas Long and Sons and Henry James (Mansfield) Ltd.: for list of sub-contractors see page 425.







WARD BLOCK: SECTION AND TYPICAL FLOOR PLAN



Typical Rhom brick bonds.

TRADE NOTES

[*By PHILIP SCHOLBERG*]

A New Shape for Bricks

IF you ask the ordinary person to describe a coin he will probably tell you that it is a round flat metal disc, quite ignoring our own threepenny bit and the coins of other nations, which may be square or hexagonal so that they will stack easily in a small space, and, incidentally, not roll under the sofa when dropped. They may even, like the French and the Chinese, have a hole in the middle to save weight or metal. A reasonable definition for a coin would probably ignore size and shape and merely refer to it as a token which enables the owner to buy certain things.

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By the same reasoning a brick is not necessarily a rectangular object measuring 4¼ in. by 9 in., but could be defined as a unit suitable for building a wall, and, viewed from this angle, there is no reason why its shape should not be modified if necessary, provided always that the one dimension of 4¼ in. is kept more or less unchanged so that the unit remains within the comfortable span of the workman's hand. During the past few years building blocks of various shapes and sizes have been evolved in an attempt to work with a larger unit, but this means an entirely new technique for the bricklayer, who quite possibly has to use two hands to lift each unit. At least one of these blocks has led to endless labour troubles on the job, for the manufacturers claim that it can be erected by unskilled labour, at, of course, a cheaper rate, while the bricklayers maintain that they alone should handle it.

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Mr. W. S. Grice has started with the assumption that there is nothing wrong with the brick as it is, but that it is possible to produce a different shape which will either give better results or be as good with less trouble. He has therefore produced a rhomboid brick with sides measuring 5 in. by 10¼ in. This brick still keeps the hand span at about 4¼ in., although the weight of the brick is slightly greater than that of the ordinary brick, seven Rhom bricks being the equivalent of eight ordinary bricks. It is found in practice that the bricklayers have no objection to this slight extra weight, since they quite often have to work with blue bricks or engineering bricks, which are also considerably heavier than standard. The sketches in the right-hand column show how these bricks are used in a 9-in. or a 13½-in. wall, one of the main points being that the bricklayer does not have to worry at all about getting the right bond. In the ordinary 9-in. wall the bricks in successive courses can be in any position relative to the courses above and below, and are still bound to have a minimum bond over at least three bricks as opposed to two with the more usual brick. This haphazard bond can be laid very quickly and should therefore be specially suitable for foundations or for use with rendered finishes, and at the same time should give a rather stronger wall. In the old days when the normal mortar was lime this extra bonding strength would have been a matter of considerable importance, but with present-day habits of using cement mortar existing bonds probably give quite adequate strength, as anybody will realize if they have spent a certain amount of time watching demolition work. None the less this improved bond may well make it possible to build longer lengths of wall without the use of piers.

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For giving interest to large surfaces it is possible to get a great number of different patterns with the same brick, and this should be a very useful point on any smallish jobs, such as factories where only a limited amount of money is available. It is possible, for instance, to get an all-header wall with the joints running vertically, still maintaining a minimum bond over three bricks. For use at corners a special brick has been designed to give a strong bond and at the same time do away with the need for closers. Apart from this one special shape it seems possible to do as much, if not more, with the standard Rhom brick as with any number of special shapes based on the present rectangular brick.

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The angle of the Rhom brick would be 60 deg. if it were not for the thickness of the mortar joint, but the obtuse angle on the inner face of the wall has to come opposite the acute angle of the adjoining brick on the outer surface of the wall, and a three-eighths thickness of mortar joint makes this angle 58 deg. 48 mins. instead of 60. deg. Various manufacturers have suggested that this acute angle may lead to difficulties in handling at the works and also to an unduly large percentage of breakages during transport to the site. Handling difficulties could presumably be overcome with experience, and Mr. Grice very reasonably points out that *both* acute angles would have to be broken off before the brick became useless, because a broken angle on the inner face of the wall would, if anything, give a rather better key for the plaster than an unbroken brick. At any rate, no snags have been raised on this score by either the bricklayers or the builders on work so far completed.

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The sketches on this page show a pair of typical bonds and a hexagonal pier which can be made quite simply with the standard Rhom brick. It is also quite possible to arrange reinforcement within the thickness of the wall, but it should be realized that this reinforcement will come in the centre of the wall, whereas it should really be as near the edges of the wall as possible if the reinforcement is to develop its maximum strength.

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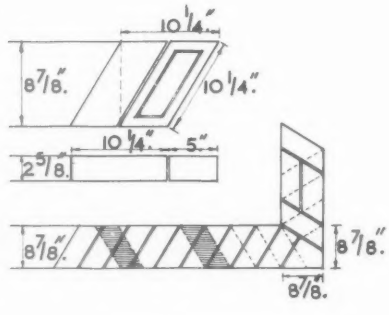
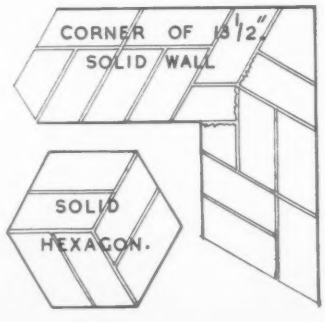
At the moment this design of brick is in process of being patented and manufacturing licences will be granted to any brickmaker on a royalty basis of so much a thousand bricks, the royalty being, so far as I know, comparatively small. No reliable estimates of cost can be given since no manufacturer has as yet had enough experience of them to be able to produce a stable price figure. It seems fairly obvious that the cost per thousand will be higher than for standard bricks, but since 850 of these Rhom bricks are the equivalent of 1,000 ordinary bricks it seems quite possible that the ultimate cost, expressed in terms of actual volume of walling carried out, will not be at all high when one takes into account the additional possibilities of obtaining different patterns and also the improved bond. So far, most attempts to evolve an improved form of walling have failed as a result of complicated shapes which are expensive to produce and seem to concentrate mainly on using a larger unit. Mr. Grice has kept pretty near to the standard shape and technique, and his modifications may therefore well succeed where others have failed. One or two fairly knowledgeable people with whom I have discussed these bricks are of the opinion that if they had been invented even a hundred years ago, they would by now quite possibly be the standard form of brick. As things are today, there will obviously be a certain amount of apathy on the part of the larger brick manufacturers, who will merely want





to go on making the same thing indefinitely. Architects, howe ver, will be able to do easily, so many things that they could never do before that there will very possibly be a loud demand which the manufacturers will just have to supply. Mr. Grice deserves a lot of credit not only for the first idea, but for the very thorough way in which all the details have been worked out, and the profession may also be justifiably pleased that the idea should come from an architect and not from a builder. I am also very glad that the whole thing is on a royalty basis so that no one manufacturer has a monopoly, with the consequent knocking of competitors which is sometimes an amusing but often an annoying habit in the building industry.—(*Rhombrix, Ltd., Richford Street, Goldhawk Road, London, W.6.*)

More A.R.P.

The British Granite and Whinstone Federation have recently been conducting some tests on the resistance of concrete made with granite aggregates to high explosive, and the results of them have been embodied in a booklet recently issued under the title of "Resistance to High Explosive, a New Factor in Concrete Construction." Under test with a half-ounce charge of blasting powder the slabs made with granite aggregate showed considerably less damage than those made with gravel, and exactly the same methods and the same reinforcement were used for each slab. As a result of these tests the Granite Federation suggests that a case has been made out for the use of an aggregate more tough, more angular in fracture and more rough in texture than is generally used on cheap work, and also that the concrete is improved by the addition to the fine aggregate of granite dust. The booklet concludes with a useful table showing all the possible sources of supply tabulated under districts. —(*The British Granite and Whinstone Federation, 4b Frederick's Place, Old Jewry, London, E.C.2.*)

THE BUILDINGS ILLUSTRATED

ST. GABRIEL'S CHURCH, WALSALL (pages 405-409). Architects: Lavender and Twentyman. The general contractors were Deacon and Boardman, Ltd., who were also responsible for the excavation, foundations, dampcourses, plumbing, plaster, joinery, stonework and church fittings. Sub-contractors and suppliers included: Permanite, Ltd., asphalt; British Reinforced Concrete Engineering Co., reinforced concrete; Proctor and Lavender, bricks; Clipsham Quarry Co., stone; G. and J. Downes, glass; Granwood Flooring Co., patent flooring; G. N. Haden and Sons, Ltd., central heating; J. H. Blount & Co., electric wiring: Troughton and Young, Ltd., and New Light Fittings, Ltd., electric light fixtures; Unity Heating, Ltd., electric heating; W. B. Tatlow and Sons, sanitary fittings; James Gibbons, Ltd., metalwork, door furniture and casements; Boosey and Hawkes, Hammond organ and electric church chimes; May Acoustics, Ltd., sprayed asbestos acoustic materials; Venesta, Ltd., doors; Pancheri and Hack, font; Fenning & Co., Ltd., marble; Warham Guild, Ltd., textiles and altar ornaments; Wall Bros., chairs; A. Fowler and Son, garden layout.

THE VICARAGE, OLD MALDEN, SURREY (pages 420-421). Architects: H. Edmund Mathews and E. D. Jefferiss Mathews. Assistant, A. G. Nisbet. The general contractors were H. and G. Jackson, Ltd., who were also responsible for the excavation, foundations, plumbing, joinery and tiling. Sub-contractors and suppliers included: Goodman Price, Ltd., demolition (separate contract); Ruberoid Co., Ltd., dampcourses (Astos); London Brick Co., Ltd., rustic flettons and tiles; Lewis Construction Co., Ltd., dovetail sheeting for balcony; Vulcanite, Ltd., special roofings; L. Carter and Son, Ltd., copper roofing; Imperial Chemical Industries, Pioneer blocks and Pioneer plaster; E. B. Bain & Co., Ltd., central heating; Mitchell Russell & Co., Ltd., stoves; Bratt Colbran & Co., Ltd., gas fires and grates; Wandsworth and District Gas Co., gasfitting; Ideal Boilers and Radiators, Ltd., boilers; Barlow Bros. & Co., electric wiring and electric bells; Shanks & Co., Ltd., sanitary fittings; British Ogro, Ltd., door furniture; R. E. Pearse & Co., Ltd., casements and window furniture; G. A. Harvey & Co., Ltd., pressed steel gutters; Henry Hope and Sons, Ltd., pressed steel door frames; E. Coules and Son, balcony railings; Gliksten Doors, Ltd., and Venesta, Ltd., flush doors; C. J. Simpson-Scott, fencing; Metropolitan Water Board, water supply.

HARLOW WOOD ORTHOPÆDIC HOSPITAL (pages 422-423). Architects: Bromley, Cartwright and Waumsley. General contractors, Thomas Long and Sons and Henry James (Mansfield), Ltd. Sub-contractors and suppliers included: A. R. Knight, H. Hilton (Nottingham), Ltd., and T. C. Stenson, Ltd., plumbing; Midland Plastering Co., Ltd., and A. Witherow and Son, Ltd., plastering; T. and G. Saxton, Chas. Scott and Son, and Thos. Long and Sons, painting; Mumford Bailey and Preston, Ltd., John Hughes & Co., Ltd., and Ashwell and Nesbit, Ltd., heating engineers; W. J. Furse & Co., Ltd., and B. Meggitt, electrical installation and refrigeration; Manlove Alliott & Co., Ltd., sterilizing equipment; Shanks & Co., sanitary goods; E. Decara and Son, Ltd., Pavino Flooring Co., Ltd., and Marsden Tiles, Ltd., terrazzo flooring and wall tiling; Crittall Manufacturing Co., Ltd., steel windows; Educational Supply Association, Ltd., sliding partitions; Benham and Sons, Ltd., kitchen equipment; Moreland Hayne & Co., Ltd., structural steelwork; Singleton and Thurman, roof tiling; Val de Travers Paving Co., and Ruberoid Co., Ltd., flat roofing coverings; J. A. Hewetson & Co., Ltd., wood flooring; Runnymede Rubber Co., Ltd., rubber flooring; E. Somerfield and Son, and Claude Raynor, roadwork; Kent and Bryden, garden work.

Manufacturers' Items

We have received from the Expanded Metal Company, Burwood House, Caxton Street, S.W.1, a copy of a brochure devoted to "B.B." expanded metal lathing for plasterwork. The brochure contains 52 pages and is fully illustrated with sketches and photographs. In the foreword it is pointed out that "metal lathing has long since passed the experimental stage; it has become a necessity in building construction, and its employment is ever increasing: it is fire-resistant and vermin-proof, and has many other advantages over wood lath. 'B.B.' expanded metal lathing is produced by a rotary machine which is patented by the company; it is made from blank mild steel sheets rolled specially for the purpose: and forms an ideal 'key' for plaster in ceilings, steelwork encasement, solid and hollow partitions, interior linings, exterior walls, and other plasterwork. 'B.B.' expanded metal lathing was designed specially to combine the best properties of other types, and is the latest; the meshes are of a small diamond shape and actual practice has proved that a minimum quantity of plaster is required, and very little falls off and is wasted. The lathing is coated with a mineral oil in process of manufacture, and then dipped once in Asphaltum paint. Unpainted lathing should not be used for plasterwork; if the lathing is required for other purposes it may be ordered uncoated. It can be galvanized when required; the hot process adds considerably to the cost and delays despatch; but the company has its own electrolytic cold process plant which, although limiting the length of sheet to 9 ft., allows the galvanizing to be done both promptly and cheaply."

BUILDING NEWS

PROVINCES

MACCLESFIELD. *Houses.* Plans passed by the Corporation: Two houses, Field Bank Road, W. Brough and Son; two houses, Regent Avenue, Rochford Bros.; offices and shops, Market Place, Prudential Assurance Co., Ltd.; bottling store, Parsonage Street, Lonsdale and Adshead; two houses, Cambridge Road, Rochford Bros.; house, Broken Cross, Mr. H. Simcock; alterations, Fox and Grapes Hotel, Pitt Street, Manchester Brewery Co., Ltd.

MACCLESFIELD. *Rehousing.* The Corporation has asked the Borough Surveyor to prepare a scheme for the rehousing of persons at present occupying overcrowded properties.

MAIDENHEAD. *Council Offices.* The Corporation is seeking sanction for a loan of £44,000 for the erection of council offices.

NOTTINGHAM. *Flats.* The Corporation is to erect 48 flats and 390 houses on the Broxtowe estate at a cost of £179,124.

NOTTS. *Hospital.* The C.C. has purchased 48 acres at Sutton-in-Ashfield Grange Farm for the erection of a new county hospital.

PLYMOUTH. *Branch Library.* The Corporation is to erect a branch library at St. Budeaux at a cost of £8,000.

PLYMOUTH. *Housing.* The Corporation has asked the City Architect to furnish a report as to a suitable site, and as to the cost of accommodating up to 100 aged persons.

PLYMOUTH. *Housing.* Plans passed by the Corporation: Six houses, Dovedale Road, Mr. F. Westcott; 36 houses, 116-186 Vicarage Gardens, Davis Estates, Ltd.; sports pavilion, Kathleaven Street, etc., Sutton Dwelling Trust; four houses, Lopes Road, Pengelly Bros.; eight bungalows, 1-15 Westcroft Road, and shops, 101-111 Victoria Road, Mr. W. Andrew; 13 houses, Florence Terrace, London Estate Agents; five houses, Penlee Way, St. Aubyn Estates; alterations and additions, "Thistle Park Tavern," Thistle Park Road, and "Coach Office Inn," Exeter Street, Starkey, Knight and Ford, Ltd.; ten houses, off Pridham Lane, Mr. J. Blatchford; alterations and additions, "Crown Hotel," Chapel Street, Stonehouse, Blundell & Co., Ltd.; alterations and additions, Swarthmore Settlement, Mutley Plain and Ford Park Lane, Society of Friends; alterations and additions to public house, 39 and 40 William Street, Devonport, H. and G. Simonds.

PLYMOUTH. *Cinema.* The Corporation has approved plans submitted on behalf of Mr. A. F. Leest of the elevation of the cinema proposed to be erected at the junction of Stirling Road and Victoria Road, St. Budeaux, subject to the elevation being amended as indicated, and to an agreement being entered into with respect to the restriction of advertisements.

PLYMOUTH. *Offices.* The Corporation is to obtain tenders for new offices and store accommodation for the gas dept., at an estimated cost of £28,000.

ROTHERHAM. *Extensions.* The Corporation is to enlarge the Alma Road institution at a cost of £20,000.

RUDDINGTON. *Cinema.* Plans of the proposed new cinema to be erected in Clifton Road, Ruddington, for Mr. M. Nepolsky have been deposited with the Notts C.C.

SCARBOROUGH. *Houses.* Plans passed by the Corporation: Two houses, 22 Scardale Crescent, J. Petch and Son; two houses, 1 and 3 Mount View Avenue, Mr. P. G. H. Fawcett; three houses, Mount Park Avenue, Mr. F. M. Dixon; four flats, 3 West Park Terrace, and four lock-up shops, Seamer Road, Mr. C. J. Wilson; four houses, Westwood Gardens, A. Moore and Son.

SCARBOROUGH. *Police buildings.* The Corporation is considering plans by the Borough Engineer of the new police buildings proposed to be erected on the site of the present Court House and Police Buildings and St. Mary's Church of England Schools.

YORKSHIRE. *Epileptic Colony.* The Special Area Committee, consisting of representatives appointed by local authorities, is to consider the suggestion to establish an epileptic colony to serve the geographical County of Yorkshire.

IN PARLIAMENT

SIR JOHN ANDERSON, the Lord Privy Seal, in outlining his civil defence and A.R.P. plans, said that part of his protection policy consisted in the strengthening of basements of houses. Plans had been worked out after very careful research, and experiments were made at Winchester ten days ago from which the strutted basements which were subjected to tests emerged in a manner which gave the fullest satisfaction to his technical advisers. They contemplated at once organizing the available resources of architects, surveyors, engineers, and so on, to get ahead, in agreement with local authorities, with a survey of basement accommodation all over the country. As the next stage, they intended to make arrangements, with the co-operation of the engineering contractors and the building trades, for the carrying out of the necessary work.

Mr. Elliot, the Minister of Health, said that in the event of an emergency one of the most urgent tasks would be to repair with the utmost speed any war damage to essential buildings. Included in this category were houses and other buildings used for housing the population. A plan had been prepared for this purpose, and its final details were now being worked out. It aimed at securing that damaged housing accommodation which was occupied and still must be occupied would be immediately rendered reasonably habitable by repairs of a temporary nature, and that subsequently, when time was available, repairs of a more permanent character would be carried out. It was contemplated that the work would be carried out under the control of the housing authority, using as their agents such building staff as they possessed themselves together with locally organized units of the building industry. The Government, through the Lord Privy Seal, were in touch with the building industry, both labour and employers, who had indicated their willingness to render public service to the full extent of their capacity.

To assist local authorities in the task, there would be housing representatives of the Department in each of the local regional offices of the Ministry, while others at headquarters would be available to strengthen the representatives in any hard-pressed region.

In view of the present activity in the building industry it seemed unlikely that there would be demands on ordinary building materials which could not be met, but it might be different with the kind of materials (like roofing felt or corrugated iron) required for temporary emergency repairs. The available supply of such materials was now being examined in the light of possible demands, which of course must take into account likely demands for the repair of other essential buildings such as hospitals, docks, etc. If a shortage is disclosed, the Government would take the necessary steps to see that it was made good at the earliest possible moment.

Mr. Wilson asked the Lord Privy Seal whether he could state, in the case of a steel shelter for the two-storeyed terraced house or cottage-type of modern house, the number of sections for each unit; the space occupied before erection; and how the sections were fastened together.

Sir John Anderson said that the steel shelter which was being provided for houses of this type consisted of 14 sheets of corrugated steel, 6 steel bars and a bag containing the accessory parts—bolts, nuts, etc. The various sections could be packed, before erection, into a space approximately 7 ft. by 3 ft. by 3 ft. The sections were fastened together by means of bolts and nuts. The manufacturers estimated that a shelter could be erected by two persons of average competence in about 15 minutes. The time taken for digging the hole and covering the shelter depended upon the nature of the soil.

Sir L. Smith asked the Minister of Health how many houses were condemned to compulsory demolition under orders confirmed by him during the year 1938; and what staff was available to assist him in checking the reports of the inspectors who held inquiries with regard to such orders.

Mr. Elliot said that in the course of 1938 his predecessor and he confirmed proposals by local authorities for the demolition as unfit for human habitation of 55,583 houses dealt with in 5,010 Orders. The staff available for dealing with the inspectors' reports numbered forty-four.

In the House of Lords Viscount Esher moved the second reading of the National Trust for Places of Historic Interest or Natural Beauty Bill. He said that the National Trust already had vested in it authority for the purpose of preserving some 50,000 acres of land and 300 buildings ranging from castles to cottages. By means of the latest Act it had been possible to establish what was known as the country house scheme, which aimed at the preservation of historic houses for the benefit of the nation in the hands of the Trust, while the families of the owners were enabled to remain in occupation. It had been found ineffective, however, to deal with the transfer of larger houses and estates of national, historic, or architectural interest.

The Bill would give power to the Trust to accept, and the tenant for life under any settlement which comprised the principal mansion house to grant, either gratuitously or otherwise, to the National Trust in fee simple, first, the principal mansion house and the pleasure grounds usually connected with it; secondly, the amenity lands, i.e. any property in the neighbourhood necessary to preserve the amenities of the house; and, thirdly, the endowment lands, or lands to provide income for the maintenance and preservation of the house, its pleasure grounds, and the amenity lands. It was also provided that the National Trust should lease the property to the tenant for life or statutory holder for a term not exceeding 150 years at a nominal or other rent. The lease must contain a covenant by the lessee to admit the public to view such part of the property as might be scheduled by the National Trust. Important restrictions were that the disposition of the property could not be made without the consent of the trustee or an order of the Court; and that the principal mansion house must be one that was certified by His Majesty's Commissioners of Works as being of national interest or historic, artistic, or architectural importance.

The Earl of Onslow, Chairman of Committees, said that the work of the National Trust was something for which they should all be grateful. The ancient houses of England were worthy of preservation. If they did not receive some assistance, such as this Bill offered, they would gradually disappear. But he had doubts whether the Bill ought to be allowed to proceed as a private Bill, because it altered the general law in regard to the settled lands Acts. He suggested that the Bill should be treated as an opposed Bill, and sent to a Select Committee for examination.

The Marquess of Zetland, Secretary of State for India, speaking as chairman of the National Trust, said that he did not dissent from Lord Onslow's suggestion.

The Lord Chancellor called attention to the very wide character of the Bill. He said there was hardly a property owner in the country in possession or reversion who knew that his interests might be affected by the proposals of the Bill. Those owners had not had sufficient opportunity to know that their interests were going to be affected and to take steps in the matter. Before the second reading those people should have an opportunity of considering the provisions. The proper thing would be to adjourn the debate. Then if the House thought it right to proceed with the Bill as a private Bill he should not oppose that course. It could if desired be proposed afterwards that the Bill should go forward as a public Bill. He moved the adjournment of the debate.

The Earl of Crawford said the Bill had been in possession of the House since last November. He could not conceive that it was so predatory as the Lord Chancellor had suggested.

The debate was adjourned.

R.I.B.A. ELECTION OF MEMBERS

As Hon. Corresponding Member (1)

Mariscal, F. E. (Mexico).

As Fellows (20)

Andrews, C. D. (London); Braun, H. S., F.S.A. (London); Burchett, H. W. (London); Fry, E. M., B.ARCH. LIVERPOOL (London); Pearce, O. D. (London); Robertson, David (London); Stokes, D. D. S. (London); Thorpe, A. (London); Wicks, Lt.-Col. H. G., M.C., T.D. (Birmingham); Bernard, Captain O. P., O.B.E., M.C. (London); Cross, W. E. (Hounslow, Middlesex); Deane, H. (London); Dixon, B. E. (London); Gardner-McLean, Colonel G. H., O.B.E., T.D. (Glasgow); Henshaw, Captain F. (Andover); Meredith, H. E. (Bristol); Parr, J. N. (London); Pike, M. W. (Leicester); Rome, A. (Burton-on-Trent); Sutcliffe, E. (Manchester).

As Associates (39)

Arschavir, A. (Manchester); Bacon, Miss A. T. (Wilmslow, Cheshire); Barnes, W. E. (Pitsea, Essex); Beaumont, H. C. (Newport, I.O.W.); Bilimoria, J. P. (London); Bompas, C. H. M. (Pinner, Middlesex); Cocke, P. L. (London); Day, Miss B. (Gravesend, Kent); Duncan, D. (London); Fairbairn, R. R. (London); Gavronsky, A. B. B. (London); Greenwell, Miss K. M. (London); Grubbe, D. C. (London); Hall-Kenney, J. H. (London); Henderson, Miss C. M. H. (London); Henderson, J. C. de C. (St. Albans, Herts.); Henderson, J. G. D., DIP.ARCH. GLAS. (Glasgow); Hobbiss, M. A. H., B.A. CANTAB. (Birmingham); Hodgson, N. D., B.ARCH. (Newcastle-on-Tyne); Inglefield, G. S., M.A. (London); Jenkins, D. T., DIP.ARCH. CARDIFF (Bangor, North Wales); Kan, R. F. N. (London); Ling, A. G. (London); Maycock, S. P. (London); McCulloch, A. J. G., DIP.ARCH. LIVERPOOL (Liverpool); Miller, G. A. G. (Wolverhampton); Murray, D. (Haswell, co. Durham); Okell, J. (Edinburgh); Reed, A. B.A.ARCH.HONS. LOND. (London); Salaman, E. D. P., B.A., A.A.DIP. (London); Shiel, P., DIP.ARCH.T.P. CERT. DUNELM (Newcastle-on-Tyne); Starling, L. B. (Newcastle-upon-Tyne); Sturrock, F. L. (London); Thomas, N. P., DIP.ARCH. CARDIFF (Cardiff); Toplis, G. M. (London); Tordoff, S. W., B.A. (London); Willey, J. B., DIP.ARCH. (Heddon-on-the-Wall, Northumberland); Wooster, C. E. D. (London); Wylie, A. B., B.A. EDIN. (Edinburgh).

As Licentiates (8)

Johnston, W. C., M.C. (Carlisle); Knewstubb, A. (Penrith, Cumberland); Mills, R. (London); Pennells, B. F. (Worthing); Pyne, H. J. E. (London); Shuttleworth, J. C. (Halifax); Whitmarsh-Everiss, E., P.A.S.I. (Leicester); Wilding, H. G., P.A.S.I. (Portsmouth).

Change of Address

Mr. Christopher Tunnard, A.I.L.A., has moved his office to 115 Mount Street, W.1. Grosvenor 2272.

G.T.M.A.

The Galvanized Tank Manufacturers' Association has decided to place the G.T.M.A. brand mark on all tanks, cylinders, and cisterns produced by firms who are members of the Association, as an unmistakable indication, to all concerned in the specifying, ordering, and fitting of these products (and to the public as well), that they are made by a reputable manufacturer and are dependable quality galvanized goods. The trade mark is reproduced below.

P R I C E S

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

JOINER

Deal Flooring

		1″	1¼″
Plain edge flooring in batten widths ..	per square	38/–	46/5
Ditto tongued and grooved ditto ..	per square	41/9	50/6
T. & G. B.C. Pine rift flooring in narrow widths	per square	52/3	—

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	12/1	16/3
★Canadian Maple	per yard super	10/4	11/11
★25–30 per cent. quart Austrian Oak	per yard super	11/7	14/8
★Plain American Oak (no selection made for sap) ..	per yard super	10/6	—
★Gurjun	per yard super	12/2	13/1
★Pitch Pine (50% rift sawn)	per yard super	10/6	12/4
★Ditto (100% ditto)	per yard super	12/1	14/2
★British Columbian Pine ..	per yard super	8/5	8/11
★Deal, 100 per cent. rift sawn	per yard super	8/8	10/1
★Jarrah	per yard super	10/9	—
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
Burma Teak	per square	8 18 6	10 17 4
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	31/7
¼″ (6 mm.) Birch (B) Plywood and fixing to walls	per square	35/7
3/16″ Asbestos cement sheets butt jointed	per foot super	–/3¾
½″ Fibre board and fixing to walls ..	per yard super	2/11
Deal battens as ground plugged to brickwork	per foot super	–/1½
1½″ × ⅜″ wrot and chamfered fillets	per foot run	–/1½
2″ × ½″ wrot and moulded ditto	per foot run	–/1¾

★ **Items marked thus have fallen since February 9.**

CURRENT PRICES

BY DAVIS AND BELFIELD

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	-/6½	-/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	-/2½	-/5½
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	15	16	6

Fabricated Steelwork

	£	s.	d.
Joists cut and fitted .. .. per ton	20	0	6
Stanchions, ordinary sections with riveted caps and bases .. .. per ton	23	10	6
Stanchions, compound .. .. .. per ton	25	11	6
Plate girders .. .. per ton	27	19	6
Framed roof trusses, 25′ 0″ span .. .. per ton	30	4	6
Ditto ditto 60′ 0″ span .. .. per ton	28	5	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	53/5	46/5
Ditto fixed to steel framing .. per square	60/6	54/1

CURRENT PRICES

BY DAVIS AND BELFIELD

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″ × ⅜″ 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.	38/10	39/11	41/0½	33/8
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
Ogee 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	–/10½	1/2	1/8¾	2/4¼
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	2/11½	3/11¼	—	—
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	–/10½	1/2¾	1/7¾	2/2¼
Add if in short lengths	per foot run	–/1	–/1	–/1½	–/2
		1½″	2″	2½″	3″
✱Cold water pipes fixed to walls	per foot run	2/9	3/6¾	—	—
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	–/10¾	1/2	1/5
		1½″	2″	2½″	3″
✱Waste and overflow pipes fixed in short lengths	per foot run	1/9¾	2/5½	—	—

Soil and Ventilating

		3½″	4″	4½″
✱Pipes fixed, including lead tacks	per foot run	5/2¾	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 each	½″ 2/1½	¾″ 2/4	1″ 2/7	1¼″ 2/9	1½″ 3/–	1½″ 3/5	2″
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	7/10	10/4	13/11
Ditto, including two red lead joints for iron each	6/–	8/5	11/10
Ditto, including one soldered and one red lead joint each	6/4	8/7	11/11
High pressure Portsmouth pattern ball valve with flynut and union and one soldered joint each	8/7	11/2	19/5
Ditto, including red lead joint for iron each	6/6	9/1	16/7

	2″	4″
Brass thimble and soldered and cement joints each	5/–	9/6
Ditto, with solder and caulked lead joints each	6/–	11/3

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

✱ Items marked thus have fallen since February 9.

CURRENT PRICES

BY DAVIS AND BELFIELD

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	-/7¾	-/8½	-/9½	-/10
Ditto in gutters, cover flashings, etc.	per foot super	-/8½	-/9	-/10	-/10½
Ditto in stepped flashings	per foot super	-/10½	-/11	1/-	1/0½
Labour and risk dressing over glass	per foot run	-/4¼	-/4¼	-/4¼	-/4¼
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	1/5	1/7
Ditto in gutters, cover flashings, etc.	per foot super	1/6	1/8
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	-/3¼	-/3¼
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	-/6¼
24 oz. ditto	per foot super	-/7¾
32 oz. ditto	per foot super	-/11½

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	-/1⅛
Ditto, metal sashes with ferroput	per foot super	-/2¼
Ditto, solid metal casements and screw beads	per foot super	-/2¼
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	-/2¾
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	-/1¼
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 fourteenth 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	19/1	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 yard run*	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 Feb. 16, 23 and Mar. 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.