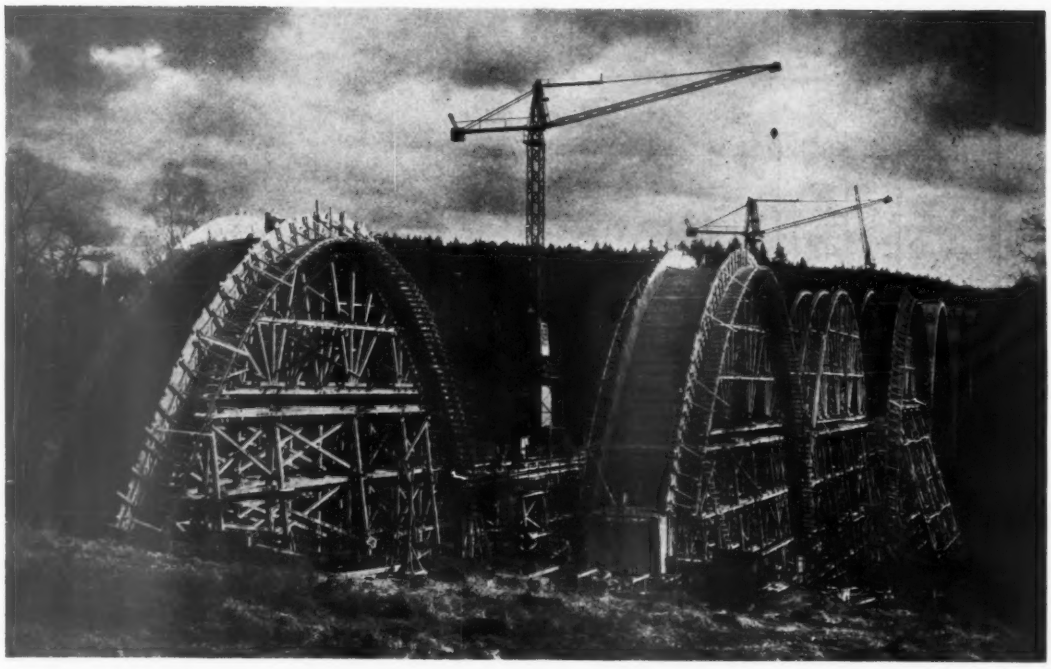
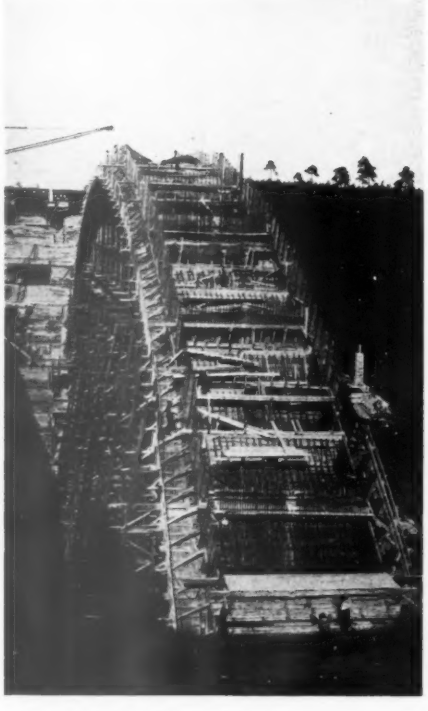
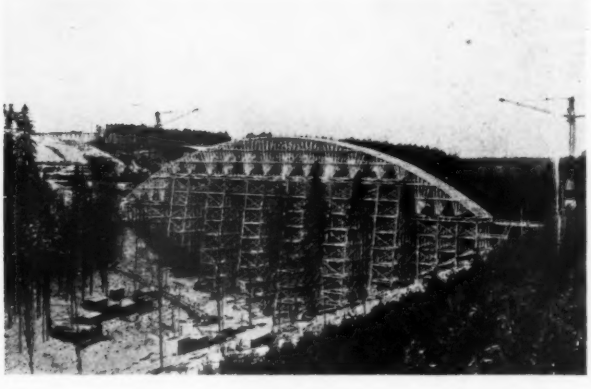


AUTOBAHNEN BRIDGES

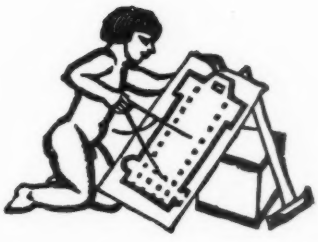
CENTERING and shuttering for the reinforced concrete bridges on the German motor roads. The photographs give an idea of the great scale of the work involved in building the roads. Top, the Rohrbachtal bridge near Stuttgart; left and below, the bridge over the Teufelstal near Gera.





CULTURE OF THE CITIES

"THE CITY IS A COLLECTIVE WORK OF ART." Above: Middleburg, a greenbelt town in the Middle Ages. Below: Frankfurt-Römerstadt, a sample of the coming biotechnic civilization. (From Lewis Mumford's "Culture of Cities." *See page 66.**)*



EVACUATION'S POSSIBILITIES

THE Ministry of Health has just issued to local authorities circulars, memoranda and specimen forms to guide them in making an evacuation survey. The chief object of the survey is to schedule the amount and the nature of accommodation which would be immediately available in outlying districts in the event of sudden evacuation from congested urban areas. The compulsory surveys required by the Overcrowding Act will form the basis of this more detailed and more intimate survey.

It is assumed that most people will be necessarily kept where they are by their duties, but that many in the big cities, " in the national interest and on grounds of humanity," will have to be transferred to places comparatively safe from air attack. Children are to be evacuated first. This is to be done by schools whenever possible, but in the case of pre-school children, mothers will be evacuated with their children. Teachers and doctors will accompany the evacuated units so that education can be continued.

Unfortunately, the Government's plans find it necessary to give preference to billets instead of camps. Billets are available, but very few suitable camps have been constructed. The " Save the Children Fund " have been working for over four years on emergency evacuation plans, and their research has stressed the need for camps which in normal times would provide the much-needed month-in-the-country for badly-nurtured children, and in a war would be readily expanded to serve as child refugee centres.

But so far, the Government has done little to encourage the construction of such camps. Writing in *The Times* last week, Mr. A. E. Morgan made the very reasonable suggestion that the unemployed youth of this country should be put to work, under paid skilled foremanship, constructing camps in rural zones outside all big urban centres. He points out that nothing makes a greater appeal to youthful energy than building, and that if the purpose were protection of child life in peace or war, the appeal would be even greater. It is certainly true that we miss a great opportunity if we refuse to give an outlet to any " desire to serve," and Mr. Morgan reminds us that authoritarian States are powerful today because they have " exploited to the uttermost the willingness of youth to lay itself on the altar of altruism."

There is undoubtedly scope in this country for the equivalent of America's Civilian Conservation Camps, by which city-bred youths, instead of being handed the dole and left to rot, have been introduced to a country life and given work of national importance to do—such as the constructing of highways and parkways, the laying of trails and building of camps in new-made National Parks.

If evacuation schemes and A.R.P. activities, in themselves depressing and demoralizing, could be co-ordinated in a nation-wide PLAN to provide adequate recreational facilities *for all time*, not merely hide-aways for a dreaded war, this part at least of our defence money would be well spent and the work would be carried out with an enthusiasm now notably lacking.

The present trouble is lack of co-ordination, lack of any scheme (for London, anyway) which can be called *comprehensive*. For instance, there has been no mention so far of an Evacuation Officer-in-Chief, or central supervising authority, to co-ordinate the schemes of the various local authorities.

This JOURNAL has already suggested that all urban districts should be classified in three degrees of vulnerability ; that it should be made compulsory for local authorities in the first two classifications to employ an A.R.P. officer, architect and engineer to prepare a comprehensive scheme for each area ; that time-cost estimates should be prepared ; that each authority should appoint an Evacuation Officer to arrange in advance the transport, billeting and maintenance of refugees from constituent boroughs. But it is not enough that there should be " efficient and responsible authorities, with duties clearly allocated." The dual problem of *protection* and *evacuation* has got to be an integral part of a fully-developed A.R.P. PLAN for each area. And it should be obvious that even when this is done, there will be confusion in all big urban centres unless the component plans are unified by a central supervising authority, whose chief job will be to see that each plan is consistent with national transport and food supply and that new encampments are well placed in relation to agricultural, industrial and other developments in the city-region as a whole.

In short, the whole machinery of city and regional planning needs to be applied to the evacuation problem. If this is done with thoroughness A.R.P. can be made into a far more important and beneficial social service than any yet undertaken.

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

NOTES & TOPICS

THIS YEAR AND NEXT

SINCE Christmas a large proportion of the correspondence addressed to the more serious newspapers has been concerned with one problem: how the measures which we must take to protect ourselves against aerial attack can be made to serve a constructive purpose in time of peace.

*

A great many able men in every calling see that it is *possible* to do this; a great many ordinary people would like to see it done.

*

Why does it seem so unlikely that it will be done?

*

The answer is, of course, that the country has never taken a bold comprehensive action except under the compulsion of immediate danger. And the mass of the public are not persuaded, even yet, that the immediate danger exists, that anything permanently constructive can be made out of measures desirable for defence purposes.

*

It is encouraging that more and more people think otherwise. The Royal Commission on the Distribution of Population, the increasing belief in regional planning, the resolution of the National Housing and Town Planning Congress, the suggestion of permanent holiday camps as a constituent of A.R.P.—all these are evidence that the Government could, with a very little effort, and not much money, transform defensive measures into a social service, a social reorganization, permanently beneficial.

*

There is plenty of enthusiasm available. Consider the recently announced Empire Youth Movement and its plan for a £1,000,000 Empire Youth City in London.

*

At the moment it would seem better, if this organization can raise £1,000,000, to have ten Regional Youth Camps *anywhere* but in London. But the scheme shows that, with a little co-ordination, the country is prepared to do something better than crouching in shelters, however safe and numerous.

ROYAL GOLD MEDALLIST

Mr. Percy Thomas has been nominated as Royal Gold Medallist for 1939, and at fifty-five is one of the youngest architects to receive this honour.

*

Mr. Thomas made his name as the winner of a succession of open competitions, beginning with the Cardiff Technical College in 1911 and including the Swinton and Pendlebury Town Hall in 1934. He will be known to all architects as the very successful P.R.I.B.A. from 1935–37.

CREMATORIA . . .

Having just been to Cambridge when I wrote my notes for December 22, I made these remarks about the new crematorium along the Huntingdon Road.

*

Last week . . . I passed the newly completed Cambridge crematorium, sitting aloofly in a yet unfilled cemetery not far from Girton. It is a building in Banker's-Georgian, crowned with vacant urns, which have here a rather sinister significance.

As far as I remember, there was a competition recently held for this building, assessed by the President, Mr. Goodhart-Rendel. The winning design had a pleasant, formal austerity, but has evidently not been used, for there is no trace of it left in the existing building.

It is curious that local authorities will go to the trouble of obtaining competitive designs only to reject the winner in favour of something which looks more expensive and is certainly less attractive. Does anyone know the full history of this case?

*

Mr. H. H. Hammond, of the Cambridge and Counties Crematorium, Ltd., has been nice enough to help me, both with some photographs and the following letter:

*

Let me first of all say what an unfortunate thing it was that Astragal did not stop and inspect both the exterior and the interior of the crematorium when a chat with the superintendent would have provided him, if not with a full history of the case, certainly with sufficient facts about cremation in general and this crematorium in particular to prevent him making the mistakes he has.

It so happens that the crematorium Astragal saw is one erected by my company. The Corporation of Cambridge, after hearing that this company was providing facilities for cremation in Cambridge, decided that it was not the proper time to erect one of its own in the borough cemetery.

Had Astragal had the chat suggested above he would have learnt, too, that the vast majority of persons who wish to be cremated at death desire to rest not among rows of gravestones, but among flowers and trees in a pleasant garden of the type which will surround our crematorium after the coming spring. It is to this end and not to provide "filled" cemeteries that the workers of the cremation movement are striving.

So far as the design of the crematorium is concerned, I am sorry it does not meet with the approval of Astragal, particularly as every architect I have spoken to had commented on its pleasing appearance. However, I enclose herewith three photographs, and if you so desire you are at liberty to publish them and let your readers judge for themselves.

*

I reproduce one of the photographs on the next page, and am very sorry about the unfilled cemetery.

. . . AND OTHER COMPETITION NEWS

A would-be competitor in the Godalming Municipal Offices Competition reports that, upon applying for Conditions in the usual way, he was told that all available copies had been distributed. The official letter of regret

A view of the Crematorium near Cambridge which is mentioned on the opposite page.

added that for the past week architects' applications had been refused and their cheques returned to them.

*

Since the closing date for this competition is January 31, this zeal for economy on the part of the Borough Council of Godalming is presumably a matter for congratulation rather than protest.

WAR RISKS INSURANCE

There has been, lately, somewhat of a drop in the returns for house-building, and it is suggested in some quarters that lack of cover against war risks is partly responsible. There is, of course, no actuarial basis for working out insurance rates, and the premiums might, at the moment, be prohibitive—even if obtainable, which they do not seem to be. No very sensible solutions have so far been put forward, though a Government reserve fund, backed by a stamp duty on fire policies, might be a possibility. Houses have always been an almost gilt-edged security, and many clients look on a mortgage as the natural way of finding the money for a house : if the banks are going to be diffident about putting up the money, a good many of us will see more than one job retreating into the distance again.

*

And what have the building societies got to say about it ? Their stake seems to be largest.

ARCHITECTURE, THE TIMES . . .

When I had read half a column of the political summary in *The Times*' 12 or 16 page review of 1938, published on January 1, I felt doubtful of going much further.

*

At the statement that " since September aircraft of these types (Hawker Hurricane and Supermarine Spitfire) have been pouring into the squadrons," my spirit failed altogether.

*

But a more sturdy correspondent tells me that in all those closely printed columns architecture received a mention of 6½ lines at the bottom of a section on Art.

*

I'm not surprised.

. . . AND THE VOICE OF ARCHITECTURE

Sometimes, however, the Press gets its own back : it mentions architecture with a vengeance, and who are we to complain if the result leaves us a little breathless ?

*

The *Evening Standard* last week gave a whole column to chat, under the signature Ian Coster, about the new Imperial Airways building that is rising in Buckingham Palace Road. In this case the architect (Mr. Albert Lakeman) was mentioned ; in fact, the best passage in the article was quoted as his words.

*

I repeat it here, as it gives you a good idea of the building's style :

> There is no building like it in any other city in the world. We had to design it as the starting and finishing point of all air journeys by Imperial. We wanted it simple, with no fussy detail, and modern, but not ultra-modern in the style which looks like a box with a few holes. So it is of Portland stone, plain except for a little fluting. The metal window frames and sashes are painted green, the only colour relief.

JOHN CITIZEN SPEAKING

In these days Civic Design begins, and very often ends, with the embellishment of the civic offices. The *Kentish Mercury* has been looking at some of the local town halls through the ratepayers' eyes. The idea, it says, of erecting a hall in the middle of a town is conceivably the outcome of the desires of those who have to pay for it, but it doesn't seem to work out that way : some have greatness thrust upon them.

*

Of Deptford, the *Mercury* makes the cryptic comment : " It would be classical if it weren't something different." Of Woolwich it gives us the old gag : " Its marble halls have been done for posterity, but what has posterity done for Woolwich ? Most of Greenwich town hall is high up in the air, so that at least the majority of citizens can see what they've paid for."

ASTRAGAL

Next week the JOURNAL *will publish a Special New Year Double Issue which will contain, in addition to reviews of the principal events and buildings of 1938, a section in which the bewilderingly popular technique of the news magazine is applied to architecture and architects.*

NEWS

POINTS FROM THIS ISSUE

STOCKLEIGH HALL: R.I.B.A. PLAQUE

The plaque commemorating the award to Stockleigh Hall, Albert Road, Regent's Park, of the R.I.B.A. London Architecture Bronze Medal for 1937 was unveiled yesterday by the Rt. Hon. Viscount Samuel.

INCREASING SLUM CLEARANCE AND DECROWDING ACTIVITY IN SCOTLAND

In the eleven months ended November 30, 1938, 16,443 families living in overcrowded conditions were transferred to larger houses suitable to their needs, as compared with 8,994 families transferred during the corresponding period of 1937. The large increase in the number of families decrowded between January 1, 1938, and November 30, 1938, is doubtless mainly due to the increased number of houses completed by local authorities during that period. During the month of November, 1938, 1,820 families living in overcrowded conditions were transferred to larger houses where they would not be overcrowded. Of these larger houses, 1,605 were owned by local authorities.

Returns received by the Department of Health for Scotland show that in the same month Scottish local authorities in their operation of the Housing Act caused 770 houses unfit for human habitation to be vacated preparatory to demolition or closure. From these houses, 3,418 persons were displaced. During the eleven months ended November 30, local authorities have dealt with 8,247 of these unfit houses occupied by 37,434 persons.

APPOINTMENT

Mr. L. Stuart Stanley, M.A., F.R.I.B.A., Tutor in the School of Architecture, London University, has been appointed by the External Department of the University to deliver Sir Banister Fletcher's Lectures in Classic Architecture at the Central School of Arts and Crafts during Sir Banister's absence in India.

MONTH'S EXHIBITION OF CONTEMPORARY ART

The fourth exhibition of the Artists International Association will open on February 7 at the Whitechapel Art Gallery, and will remain open for a month.

This aims to be in the fullest sense a representative exhibition of British creative art of today. It is the most ambitious show yet organized by the Artists International, and, like their previous exhibitions, is intended as a demonstration of the unity of artists for Peace, for Democracy, and for Cultural Progress.

THE ARCHITECTS' DIARY

Thursday, January 12

INSTITUTION OF STRUCTURAL ENGINEERS, 10 *Upper Belgrave Street, S.W.1.* "*Masonry Construction.*" *By S. B. Hamilton. 6.30 p.m. Yorkshire Branch. At the Hotel Metropole, Leeds.* "*Some Details in the Design of Reinforced Concrete.*" *By P. G. Bowie. 7 p.m.*

Friday, January 13

REIMANN SCHOOL, 4–10 *Regency Street, S.W.1.* "*Art in the Machine Age.*" *By Charles Marriott. 6.15 p.m.*

INSTITUTION OF STRUCTURAL ENGINEERS. *Western Counties Branch. At the Merchant Venturers' Technical College, Bristol.* "*A.R.P. and the Structural Engineer.*" *By Capt. R. Hazeldine. 7.15 p.m.*

Monday, January 16

ROYAL SOCIETY OF ULSTER ARCHITECTS. *At 7 College Square North, Belfast. Lecture by Raymond Walker. 8.15 p.m.*

Tuesday, January 17

INSTITUTION OF HEATING AND VENTILATING ENGINEERS (*London and District Branch*), 39 *Victoria Street, S.W.1.* "*Some Notes on Engineering Works in Switzerland.*" *By J. H. Bryant. 6.45 p.m.*

INSTITUTION OF CIVIL ENGINEERS, *Gt. George Street, S.W.1. Joint Meeting with the British Section. Société des Ingénieurs Civils de France, and the Institution of Structural Engineers.* "*The Strengthening of the Austerlitz Viaduct in Paris.*" *By M. Fauconnier. 6 p.m.*

ILLUMINATING ENGINEERING SOCIETY, 32 *Victoria Street, S.W.1. Discussion on* "*Lighting in Relation to Air Raid Precautions.*" *7 p.m.*

Wednesday, January 18

INSTITUTION OF STRUCTURAL ENGINEERS. *Lancashire and Cheshire Branch. At the College of Technology, Liverpool.* "*Road Bridges.*" *By R. Heywood. 7 p.m. Scottish Branch. At 129 Bath Street, Glasgow.* "*Steelwork in Buildings: Thirty Years' Progress.*" *By S. Bylander. 7 p.m. South Wales and Monmouthshire Branch. At the Baltic Lounge, Swansea.* "*New Magnesium Works at Swansea.*" *By H. G. Hope.*

Painting, sculpture, drawings and graphic work of all kinds will be shown. There will be special sections for representational painting and drawing, for abstract work, for surrealist work, and for sculpture. One section will also contain examples of propaganda work.

The last exhibition of this series was held at Grosvenor Square in 1937.

THE ROYAL INSTITUTE OF THE ARCHITECTS OF IRELAND

At the annual general meeting of the above Institute, held in Dublin, the officers for 1939 were announced as follows: Messrs. J. J. Robinson, M.ARCH. (President); Eoghan D. Buckley (hon. secretary); Stephen S. Kelly (hon. treasurer). Council members: Messrs. T. J. Byrne; W. H. Howard Cooke; J. V. Downes; J. M. Fairweather; C. A. Harrington; R. C. Keefe; Vincent Kelly; H. V. Millar; T. F. Strahan; T. F. Inglis, representative of the Architectural Association of Ireland; John O'Gorman, representative of the Architectural Graduates' Association, N.U.I., and Past Presidents, *ex officio* members: Messrs. Lucius O'Callaghan, George P. Sheridan, James H. Webb, F. G. Hicks, G. F. Beckett and Harry Allberry.

The annual report of the Council was read by the hon. secretary and was adopted unanimously. It recorded a very satisfactory and extensive year's work.

Mr. H. Allberry was appointed to represent the Institute on the R.I.B.A. Council for the session 1938–1939. The president, Mr. J. J. Robinson, was elected to represent the Institute on the Allied Societies Conference for 1938–1939. Mr. W. H. Howard Cooke was appointed to represent the Institute on the R.I.B.A. Board of Architectural Education for the session 1938–39.

PROFESSIONAL ANNOUNCEMENTS

The partnership hitherto existing as Watkin and Maddox, Chartered Architects, Burslem, Stoke-on-Trent, has terminated. Mr. E. T. Watkin, F.R.I.B.A., will continue to practice at Burslem under his own name only, while Mr. F. Morrall Maddox, A.R.I.B.A., has commenced practice at Cathcart Chambers, High Street, Stourbridge, Worcs.

Mr. J. Mawson Rounthwaite, B.SC., ASSOC.M.INST.C.E., has resumed, at 3 Ellison Place, Newcastle-on-Tyne, 1, the practice of architect and civil engineer previously carried on for many years at 13 Mosley Street, in the same city, by the late J. Wm. Rounthwaite, A.R.I.B.A., and himself.

Mr. William Roseveare, M.INST.R.A., has opened a branch office at No. 67 Fore Street, Salcombe, where he would be pleased to receive trade catalogues, etc.

Mr. Hubert Bennett, A.R.I.B.A., has moved from 1 Chester Terrace, Regent's Park, N.W.1, to 17 Park Crescent, Portland Place, W.1. Telephone: Welbeck 4253.

A NEW COMPETITION

The conditions of an open competition for a New Civic Centre at Margate will shortly be available. Mr. A. F. B. Anderson, F.R.I.B.A., is the assessor.

Obituary

WALTER FREDERICK CAVE

It is with deep regret we announce the death of Mr. Walter Frederick Cave, Retired Fellow of the R.I.B.A., which took place on January 7. He was a former vice-president of the R.I.B.A.

Born on September 17, 1863, Mr. Cave was educated at Eton, and played in the Eton cricket and football XIs in 1879, 1880, and 1881.

He was articled to Sir Arthur William Blomfield, A.R.A., and was a student at the Royal Academy School. After travelling extensively abroad to study architecture, he began practice in 1889. His works included: Orchestrelle Company's premises in New Bond Street, the Chappell Galleries in the same street, Messrs. Bechstein's premises in Wigmore Street; cottage hospital at Sidmouth; extension of Somerville College, Oxford; Church of the Nativity, Watlington; entrance hall, Adelphi Theatre, London; and various banks and factories.

For many years Mr. Cave was surveyor to the Gunter estate, covering a large part of South Kensington, and was also consulting architect to the Whiteley Trust.

Mr. Cave was elected a Fellow of the Institute in 1906, and served as President of the Architectural Association in 1907–1908.

BRUNO TAUT

Professor Bruno Taut, the famous German architect, who died suddenly in Istanbul, was one of the leading pioneers of the modern movement in Europe and a personality whose great artistic and literary activities were devoted to nearly all important problems of architecture and design. His work and his many books belong to the most outstanding contributions to the development of the new feeling in architecture starting towards the beginning of this century.

Born in Koenigsberg in 1880, he built as early as 1913 the Pavilion of the Stahlwerksverband, which constitutes a break with the stylistic traditions and showed a way to a new architecture rising out of function, new materials and imagination. The "glass house," 1914, in Cologne, which became widely known, is among the first buildings where the architectural possibilities of this material have been developed and treated in a new spirit.

Head of the office for Town Planning and Municipal Works at Magdeburg after the war, he erected many important buildings. His special devotion to the problem of colour in architecture and the results thereof excited great interest. Since 1924 he was chief architect to communal building societies in Berlin, and under his direction more than 12,000 flats were built which belong to the best and most advanced in design in post-war Germany.

As Professor at the Technische Hochschule, Berlin, he introduced a new method of collective group work which proved highly effective. Elected hon. member of the American Institute

of Architects, he spent a year on invitation by the Borough Council in Moscow. From 1933-36 he stayed in Japan, where he studied and published several books on the arts and culture of that country.

In 1937 he was elected professor to the Academy of Beaux Arts in Istanbul, where he was in charge of the Faculty of Architecture and occupied with the design and erection of important buildings.

WALTER SEGAL

ALFRED JOHN TAYLOR

We regret to record the death of Mr. Alfred John Taylor, F.R.I.B.A., M.I.STRUCT.E., City Architect of Bath. He was sixty years of age.

Mr. Taylor was articled to Mr. Charles E. Davis, F.S.A., and was elected a Fellow of the R.I.B.A. in 1925. He was responsible for a large number of buildings in the West country, including the Forbes Fraser Hospital and Nurses' Home, Bath ; Medical and Swimming Baths, Torquay ; Bournemouth racecourse and buildings ; Chepstow racecourse and buildings ; and several Bath housing schemes. He was the author of *Roman Remains, Bath*.

R.I.B.A. Prizes and Studentships

The first meeting of the Royal Institute of British Architects in 1939 was held last Monday at 66 Portland Place, W.1, with Mr. A. H. Moberly (Vice-President) in the chair. The principal business was to hear announced the names of the various winners of prizes and studentships, followed by a criticism of the work they had submitted. Mr. Howard Robertson, F.R.I.B.A., was to have made this criticism ; in his absence the task fell to Mr. S. Rowland Pierce, F.R.I.B.A.

Previously to this part of the proceedings, the formal business of the meeting was conducted. On this occasion it included the announcement that the Council proposed to submit to H.M. the King the name of Mr. Percy Thomas, O.B.E., F.R.I.B.A., as a fit recipient of the Royal Gold Medal for 1939.

The names of the successful competitors were then read out as follows :

The Tite Prize : A Certificate and £50 for the Study of Italian Architecture. The subject set for this year was "The Meeting Place of an Academy within the Grounds of a Palace." Mr. Robert Brodie Thomson, student R.I.B.A., 15 Beehive Road, Sheffield, 10 (Department of Architecture, The University of Sheffield).

A Certificate of Honourable Mention was awarded to : Mr. Charles Roy Fowkes, student R.I.B.A., 2 The Limes, North End Road, Hampstead, N.W.3 (Department of Architecture, The Northern Polytechnic, London).

The Victory Scholarship and £150 for the Advancement of Professional Education. The subject set this year was "A Hostel for University Students." Mr. Reginald Cave, A.R.I.B.A., 123 Leicester Road, Barnet, Herts (Bartlett School of Architecture, University College, London). A Certificate of Honourable Mention was awarded to : Mr. David E. Lang, student R.I.B.A., c/o Grubb, 6 Lauriston Gardens, Edinburgh (School of Architecture, Edinburgh College of Art).

The Pugin Studentship : A Silver Medal and £75 for the Study of Mediæval Architecture of Great Britain and Ireland. Mr. S. J. Clewer (student R.I.B.A.), "Hillside," Hyde Lane, Kinver, Stourbridge, Worcs (Birmingham School of Architecture). A Certificate of Honourable Mention and £20 was awarded to : Mr. C. C. Fraser (A.R.I.B.A.), 3 Randolph Street, Dunfermline, Scotland (School of Architecture, Edinburgh College of Art).

The Owen Jones Studentship : A Certificate and £100 for the improvement and cultivation of knowledge of the successful application of colour as a means of architectural expression. The subject set for this year was "A National Publicity Pavilion." Mr. Serge G. Kadleigh, student R.I.B.A., 34 Margravine Gardens, London, W.6 (School of Architecture, The Architectural Association, London).

Mr. Percy E. Thomas, who has been nominated by the R.I.B.A. as a fit recipient of the Royal Gold Medal for 1939.

The Royal Institute Silver Medal and £50 for an Essay. Miss Kathleen Gibbons, student R.I.B.A., Eaton Villa, Clifton Down, Bristol, 8 (The Royal West of England Academy School of Architecture, Bristol), for an essay entitled "The Architectural Development of the Florentine Villas."

The Banister Fletcher Silver Medal and £26 5s. for the Study of History of Architecture. The subject set for this year's competition was "The Development of the English Parish Church in Plan and Structure." Mr. Noel B. Dant, student R.I.B.A., 6 Robert Adam Street, Baker Street, London, W.1 (School of Architecture, The Polytechnic, Regent Street, London). Certificates of Honourable Mention were awarded to : Mr. Robert L. Jenkins, student R.I.B.A., 76 Redlands Road, Penarth, Nr. Cardiff (The Welsh School of Architecture, The Technical College, Cardiff) ; and Mr. Norman Harrison, probationer R.I.B.A., 21 Glenaire Drive, Baildon, Nr. Shipley, Yorks (Leeds School of Architecture).

The Alfred Bossom Travelling Studentship : A Gold Medal and £250 for the study of Commercial Architecture in America. The subject set for this year was "A Country Club." Mr. Nelson Foley, 95 Goldsmith Street, Nottingham (School of Architecture, The Polytechnic, Regent Street, London). A Silver Medal for the competitor placed second in the competition was awarded to : Mr. Stanley Jordan, 822 Portland Place, W.1 (School of Architecture, The Polytechnic, Regent Street, London).

The Godwin and Wimperis Bursary : a Silver Medal and £200 for the study of Works of Modern Architecture Abroad. Mr. Herbert Thearle, DIP.ARCH.Liverpool, F.R.I.B.A., 66 Rodney Street, Liverpool, 1 (Liverpool School of Architecture, The University of Liverpool).

The Henry Saxon Snell Prize : £100. (Offered jointly by the R.I.B.A. and the Architectural Association for the study of the improved design and construction of hospitals, convalescent homes and asylums for the aged and infirm poor.) Mr. D. R. Harper, B.ARCH. Liverpool, A.R.I.B.A., 10 Dellcott Close, Welwyn Garden City, Herts (Liverpool School of Architecture, The University of Liverpool).

The Hunt Bursary : £60 for the encouragement of the Study of Housing and Town Planning. Mr. A. G. Ling, B.A.HON.(ARCH.)Lond.,A.R.I.B.A.,A.M.T.P.I., 39 Howitt Road, Belsize Park, London, N.W.3 (Bartlett School of Architecture, University of London).

The Arthur Cates Prize : £75. (In the current year the prize was offered for the promotion of architecture in relation to the application of geometry to vaulting, stability of edifice and design.) Mr. W. T. C. Walker, A.R.I.B.A., British School at Rome, Valle Giulia, Rome 51, Italy (School of Architecture, Edinburgh College of Art).

The Athens Bursary : £100 for study at the British School at Athens. Dr. Ronald Bradbury, B.A.(ARCH.)Mancr., M.SC., D.PHIL., A.R.I.B.A., 67 King Street, South Shields (School of Architecture, The University of Manchester).

The Henry L. Florence Bursary : A Certificate and £350 for the study of Greek, Hellenistic and Byzantine Architecture of the Mediterranean Basin. Mr. Arnold Silcock, F.R.I.B.A., The Studio, 29 Abercorn Place, St. John's Wood, London, N.W.8.

The Ashpitel Prize, 1938. This is a prize of books, value £20, awarded to the candidate who, taking the final examination to qualify as an Associate, shall most highly distinguish himself among the candidates in the Final Examinations of the year. Mr. George Gaze Pace (Student R.I.B.A.), 9 Eldon Avenue, Shirley, Croydon, Surrey (School of Architecture, The Polytechnic, Regent Street, London).

The Rome Scholarship in Architecture : £250 per annum for two or three years' study and research at the British School at Rome. Offered by the R.I.B.A. and awarded by the Faculty of Architecture of the British School at Rome. Mr. Alexander B. Wylie (Student R.I.B.A.), 29 Dreghorn Loan, Edinburgh, 13 (School of Architecture, Edinburgh College of Art).

The R.I.B.A. Silver Medal and £5 in books for Students of Schools of Architecture recognised for exemption from the Final Examination. Mr. Frank Booth (Student R.I.B.A.), "Craiglands," Halifax Road, Hartshead Moor, Cleckheaton, Yorks (Leeds School of Architecture). A Certificate of Honourable Mention was awarded to Mr. Dewi P. Thomas (Student R.I.B.A.), 23 Ducie Street, Liverpool 8 (Liverpool School of Architecture, University of Liverpool).

The R.I.B.A. Bronze Medal and £5 in books for Students of Schools of Architecture recognised for exemption from the Intermediate Examination. Mr. Geoffrey Robson (Probationer R.I.B.A.), 95 Aston Road, Dudley, Worcs (School of Architecture, The Architectural Association, London).

The Archibald Dawnay Scholarships : Three Scholarships of the value of £50 each for the Advanced Study of Construction. Scholarships awarded to (1) Mr. John R. M. Poole (Student R.I.B.A.), 316 Shooters Hill Road, London (School of Architecture, The Polytechnic, Regent Street, London) ; (2) Mr. Thomas E. Fennell (Student R.I.B.A.), 10 South Crescent, Fence Houses, Co. Durham (School of Architecture, King's College, Newcastle-on-Tyne) ; (3) Mr. John B. Hall (Student R.I.B.A.), Ladhope Vale, Galashiels (School of Architecture, Edinburgh College of Art).

The R.I.B.A. Henry Jarvis Studentship at the School of Architecture, The Architectural Association : £50. Mr. Richard D. Hammett (student R.I.B.A.), 9 Genoa Avenue, Putney, London, S.W.15.

The R.I.B.A. Howard Colls Travelling Studentship at the Architectural Association : £15 15s. Miss Margaret Reid Morgan (probationer R.I.B.A.), 40 Redlands Road, Reading.

The R.I.B.A. Donaldson Medal at the Bartle

School of Architecture, University of London. Mr. Lawrence F. Baker (student R.I.B.A.), 70 Crowborough Road, London, S.W.17.

The R.I.B.A. Prize for Art Schools and Technical Institutions with Facilities for the Instruction of Intending Architects (£5 in books). Mr. Anthony Petty (student R.I.B.A.), 11 Welbeck Avenue, Southampton (Department of Architecture, The Municipal School of Art, Portsmouth).

The R.I.B.A. Prizes for Public and Secondary Schools. These prizes are of a total value of £10 10s. They are offered for an essay of not more than 1,000 words or for sketches or scale drawings of a building or part of a building.

The prizes are offered for competition between boys and girls in public and secondary schools.

The prizes were awarded as follows :—

(*a*) *Essays.* (1) A prize of £3 3s. to Madge Walker, of the Convent of Our Lady of Compassion, Olton, Birmingham, for her essay on "Olton Court."

(2) A prize of £1 1s. to E. W. Fenton, of the Drax Grammar School, Yorks, for his essay on "Drax Parish Church."

(*b*) *Sketches.*

(1) A prize of £3 3s. to G. M. Harper, of the Grammar School, Dudley, for his miscellaneous sketches.

(2) A prize of £2 2s. to Alan H. Hughes, of Whitgift Middle School, Croydon, for his drawings of Whitgift Hospital, Croydon.

(3) A prize of £1 1s. to J. S. Whyte, of The Academy, Alloa, for his miscellaneous sketches.

The competition drawings (with the exception of those submitted in competition for the Godwin and Wimperis Bursary, The Hunt Bursary, The Saxon Snell prize, and The Archibald Dawnay scholarships) will be on exhibition at the R.I.B.A., 66 Portland Place, London, W.1, from January 10 to January 28, 1939, inclusive, between the hours of 10 a.m. and 8 p.m. Saturdays, 10 a.m. and 5 p.m. (Sundays excluded.)

Mr. Rowland Pierce then followed with his criticism. In the course of his preliminary remarks he said he believed that student competitions were the finest training ground for anyone preparing to face hard work with possible triumph or disappointment as the reward ; because a graduate or post-graduate test of this sort was not only an exercise and test of a man's ability, but was something that made him face up to his position in relation to his contemporaries. Ultimately, the completion of a set of drawings carried to a fine state of finish and combining all the best a man might know was a test not only of knowledge, of skill and craft, but of character. To work to the end of a competition was a job for the constant worker and not for the slacker.

Speaking later of the difference between student competitions and those later competitions in which practising architects take part, Mr. Pierce said the student programme was written in what might be called an ideal manner—it must be complete both in facts and in such indications for inspiration as were possible, and it must be clear and not contain statements that were confusing or ambiguous. No questions were allowed. The issued programme was the only basic document that a competitor had for his guidance throughout the competition.

A further difference between professional and student competitions was that the former was for the ultimate erection of a building, whereas the student competition ended with the finishing of the drawings. The buildings created on paper in a student competition would not be built, but the drawings could not have too great a clarity or completeness, and should be given the fullest study. A brilliant design could not be wrecked by bad presentation, nor could a bad design be saved by magnificent handling of pen and pencil, but if a design was worthy why not accept the fullest aid that the art of architectural draughtsmanship could give?

Mr. H. B. Wallis, of the Board of Education, moved the vote of thanks, which was seconded by Mr. G. A. Jellicoe, F.R.I.B.A.

The President, Mr. H. S. Goodhart-Rendel, will present the medals and prizes for 1939 and will deliver an address to students at a general meeting to be held at 66 Portland Place, London, W.1, on Monday, January 23, at 8.30 p.m.

LETTERS

For Demolition

SIR,—One wonders why you have chosen to present this very perfect example of what used to be known as "Architecture" in your issue for December 22. After the persistent stream of engineering works, and those utilitarian contraptions supposed, by the easily imposed upon, to be "functional," it comes rather as a shock.

Can it be that there is some satisfaction to yourselves and other modernists in the words beneath "For Demolition"? The sort of feeling that, if we cannot produce architecture ourselves, at least we can prevent the public from seeing what architecture is, lest, when they find out, we may be treated as certain priests in the Old Testament were "and more also."

As for the words "For Demolition," is it possible to believe that any well-informed body would build or extend a "hospital for sick children" in London at the present time? If so, they should be separately treated in a mental department of the Bethlehem hospital or its successors.

But there is another aspect. This hospital depends on subscriptions, and those subscriptions depend on the susceptibility of the public to appeals to their feelings. Is it wise to outrage a considerable body of public opinion by destroying something they believe to be valuable? I recommend every subscriber at least to suspend their subscriptions until the question has been thoroughly investigated.

Your own attitude I believe to be best explained by a small parable. Some years ago I had a dog which, for reasons which need not be gone into, I gave away. I used afterwards to meet the dog with his new master. At first he used to hesitate between the two allegiances, which was rather painful ; but as time went on one memory was effaced by one who was, I hope, a better master, until the recognition became just a look, a wavering from his rightful course.

The photograph referred to by Mr. Falkner in the above letter.

You, sirs, are the dog, and Architecture was your former master (or shall we say, mistress), but the difference is your first master was the good one, the present is a bastard of the worst description ; you are looking back, you want to forget how good it was, but you can't, it will not fade (in spite of the "For Demolition" notices), and in a little while you will be in forefront of the "rediscoverers."

And now, if your patience is not exhausted, I will indulge in a second dissertation on Lord Derwent's letter and Astragal's comments.

His Lordship was pleased to cavil at my late "half-section," Stanley Jeeve's, colossal effort in Berkeley Square, and then to be pleased to say that he and his friends were not hostile to modernism in architecture—wherein, of course, he can confidently expect to "carry his audience"—but unfortunately, descending from the general to the particular, gave a list of the "beams he was prepared to swallow."

"The Air Ministry's aerodromes. Well, they are at least harmless. They, as they should, to some extent, sink into the landscape. With more experience of hostile bombing, they will probably find a still more effective way of sinking in by turfing over."

But he goes on to Battersea Power Station, Broadcasting House, and the St. James's Tube Station, a group of which it is difficult to find a common factor except that they are each "matter out of place," which has, I believe, received a very short and definite description.

The Battersea Power Station in itself is a mistaken effort to give an engineering problem an architectural trimming—as well put lace round a prize-fighter's shorts. Broadcasting House, besides being very nearly the worst building in London, replaced some very charming Regency buildings, knocked the composition out of two Georgian streets, and spoilt two vistas. It is not, I believe, intended to be anything but symbolical of the nasty noises issued from its roof. The St. James's station is fortunately only visible in its entirety by considerable craning of the neck, and in any case it is only a temporary lapse by the author of the Law Society's Library, who, in his later work, London University, is returning to his earlier ideals.

The point is that all these buildings are out of place. We know that we have (or had) in London the finest buildings and streets in the world, and also that all of them cannot remain as

they are. What is required is the application of Town Planning powers to certain streets and squares. The Surrey C.C. have done this; the richest city in the world can easily afford to do it.

HAROLD FALKNER

Germany Builds

SIR,—I was interested in the letters published in your issue for December 29 about my articles on contemporary architecture and design in Germany. I think they call for some reply, although they both referred only to my first article and not to the series.

The articles were written while I was in Germany last October. I went there soon after the crisis to see what effect it had produced in the country; also, I wanted to see what changes had occurred in architecture and design since my previous visit in 1929.

Although this may be difficult for some people to understand, I tried to go there with an open mind. I did not, as Mr. J. H. Gifford seems to suggest, believe everything I was told; but I did not disbelieve everything I saw. I wanted to know what sort of propaganda was put over to foreign visitors—particularly after all the protestations of friendship which followed the Munich agreement. I have recorded my observations in a book which deals with these aspects of German propaganda, and which also includes some reflections upon English liberty. It will be published early next month, and I should like to present a copy to the Secretary of the Architects' Group of the Left Book Club, if he can obtain permission to read it from the Karl Marx Brothers—Laski, Strachey, and Gollancz.

I detest the three tyrannies which now disfigure Europe—in Germany, in Italy, and in Russia. In our own country I detest the ideas and the forms of government advocated by Sir Oswald Mosley and Sir Stafford Cripps; but I detest even more the person who would deny to either of those wrong-headed people, or their followers, the right to express their opinions anywhere and everywhere. If Mr. "Left" Leggett would learn to stand upon his own feet, instead of in those little red slippers provided by Uncle Marx, he might realize that he has the privilege of living in a great civilization—the one we have here in England. It has much in it of which we should be proud; and many things of which we should be heartily ashamed. (Under the Nazi regime, for example, no German citizen would be allowed to rot and starve as people are allowed to rot and starve in our Depressed Areas. Germany would not waste a generation of potential craftsmen. I mention this because it happens to be one of the problems Germany has solved, and one which we are still tinkering with. I dislike the way the Germans have solved it; I loathe such forms of State compulsion.) But, really, Mr. Leggett must think very small beer of his privileges as a British subject if he calls for the suppression of any opinion which doesn't square up with his own pet brand of faith.

During the crisis in September, when air raids seemed imminent, everybody cleared out their lofts and attics. All kinds of things were disinterred, sorted out, and, after the crisis was over, much rubbish was thrown away. It would be a good thing if some crisis could make us do this to our own heads. Periodically, we should sort our prejudices, look at our beliefs, prune off the stupid growths on them, and fling away the unwanted, unnecessary documents and dusty things that accumulate. But maybe the lads of the "Left" can't do this: I hesitate to suggest that, like a house with a flat roof, they have no loft which can be cleared out!

JOHN GLOAG

National Emergency

SIR,—The receipt of the National Emergency questionnaire from the R.I.B.A. has come as a shock to many of us and brought home to us the nearness of war.

We are eager, of course, to play our part in the most effective way possible in the defence of the democracy and free institutions of this country and to safeguard and ensure further advances in the liberty, in the standard of living and in the happiness of all people. Nevertheless, we feel that the Institute should not offer the co-operation of its members to a government with such a record of obstruction and betrayal as the present, or, for that matter, to any future government, without conditions.

The Institute should join with the other architectural bodies and professional organizations involved, such as engineers and doctors, in obtaining from the Government a guarantee:

(1) That the results of the census can and will be used both by the Institute and by the Government to facilitate immediately, and not only after an emergency has come upon us—the protection of the whole population against air raids by means of effective bomb-proof shelters, and the construction of evacuation settlements and additional hospitals.

(2) That the results will not be used to compel architects to undertake work for which they may have described themselves in the census as qualified but which, in the circumstances of a particular emergency or war, they may not think it right to perform.

[To take an example—the present Government, at a later stage of its decay, *might* require architects to build concentration camps for those who oppose co-operation with totalitarian aggressors.]

24 REGISTERED OR CHARTERED ARCHITECTS

Faculty of Architects and Surveyors

Following is a list of outings arranged by the Faculty of Architects and Surveyors:

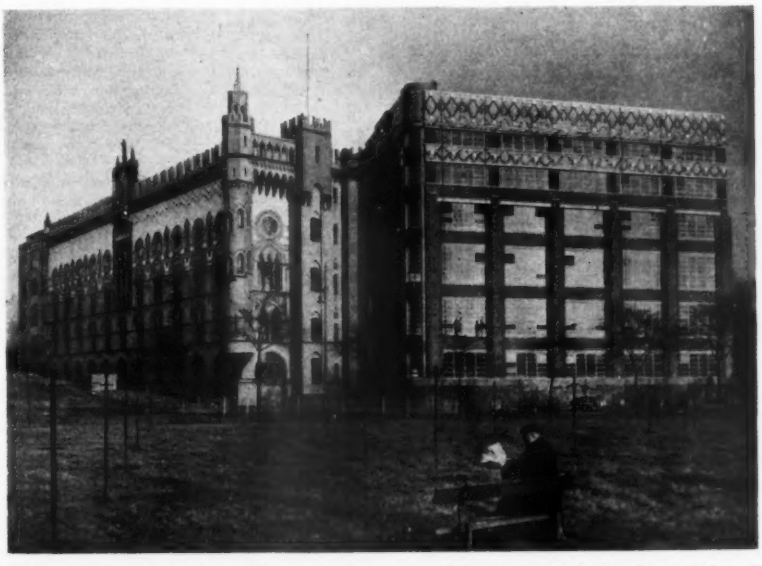
January 26: Visit of members and friends to wallpaper factory of Messrs. Arthur Sanderson and Sons at Perivale, Ealing.

February 9: Visit of members and friends to Research Station, Fulham, of the Gas Light and Coke Co.

February 17: Dinner and dance at Frascati's, Oxford Street, W.1. Tickets, 11s. 6d. each.

We are asked by the Secretary, Mr. W. F. G. Wyborn, to state that it is desired to complete arrangements for these functions as soon as possible; therefore, will those who propose attending communicate with him at the earliest possible moment.

THIS ARSHETECTURE



The recently completed extension to a factory at Glasgow, which has been designed to harmonize with the old building—a replica of the Doge's Palace at Venice. (Daily Express: *Glasgow Edition.*)

FINSBURY HEALTH CENTRE : DESIGNED BY TECTON

PROBLEM AND SITE—*The purpose of the building is to co-ordinate all the health services, which were previously scattered over different parts of the Borough of Finsbury. It contains clinics and treatment centres of various kinds and the offices of the Medical Officer of Health and the Sanitary Engineer, all these being accommodated in the two wings. The centre block contains the public waiting and enquiry hall, a lecture theatre and, in the basement, cleansing and disinfecting stations.*

The building has been erected on the corner of Pine Street and Northampton Street near the south-west boundary of the Borough. The site was previously occupied by houses which were in a poor state of repair and provided bad living conditions. The remaining row of these houses is shortly to be pulled down and the space it occupies to be thrown into the large garden space which is eventually to surround the Health Centre. The scheme is proceeding slowly owing to the difficulty of acquiring land, but it includes further demolition in front of the building to throw the site open to the Farringdon Road, one of the Borough's main arteries. The ground between the Health Centre and Farringdon Road would also be laid out as a garden, but portions of it might be utilized for smaller public buildings such as a branch library.

Above, a general view taken from an adjoining roof. The main entrance, in the centre, is approached up a ramp which crosses the entrance forecourt.

Left, an aerial view ; below, the Northampton

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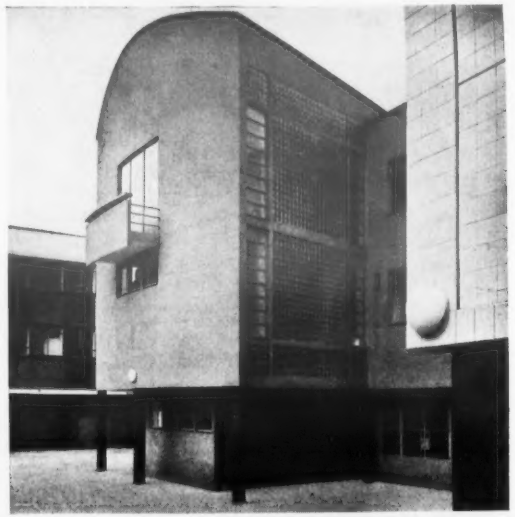
Left, an aerial view; below, the Northampton Street elevation; right, the exterior of the lecture hall from the courtyard at the back of the building; bottom, the main front by night.



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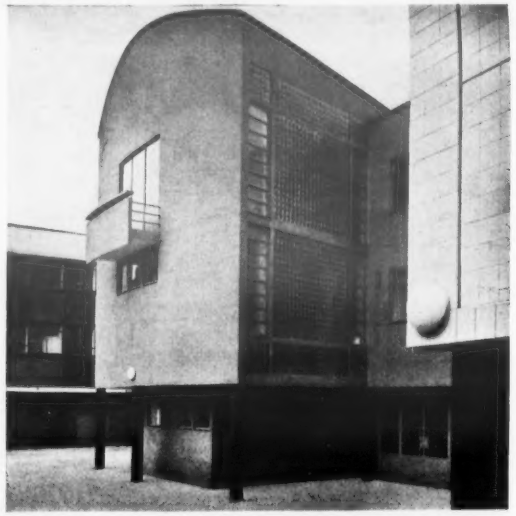

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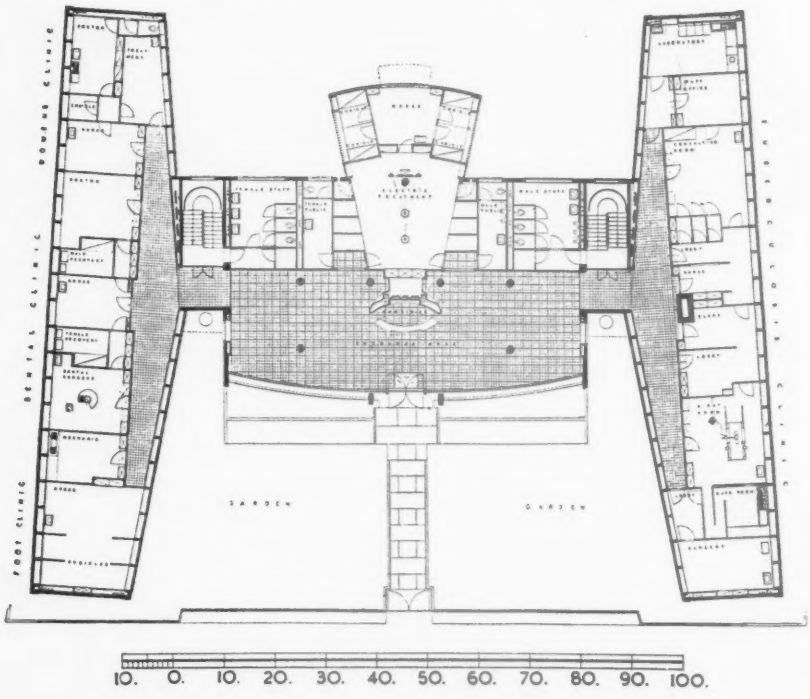
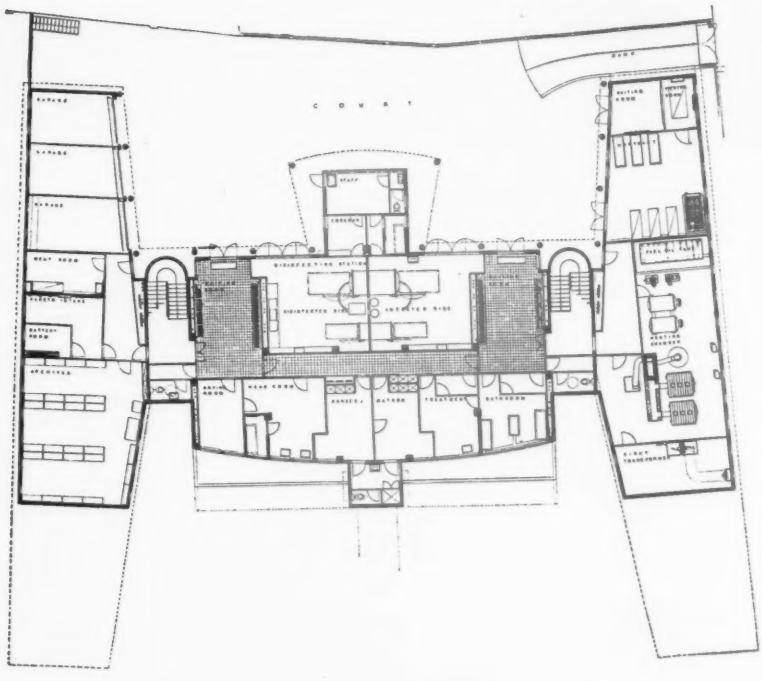
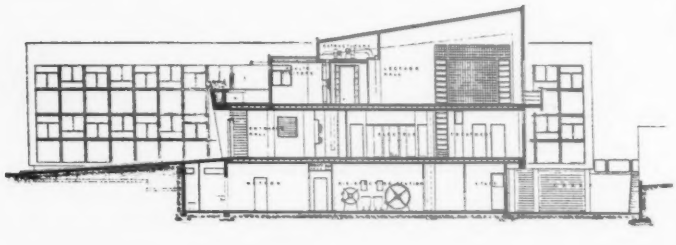




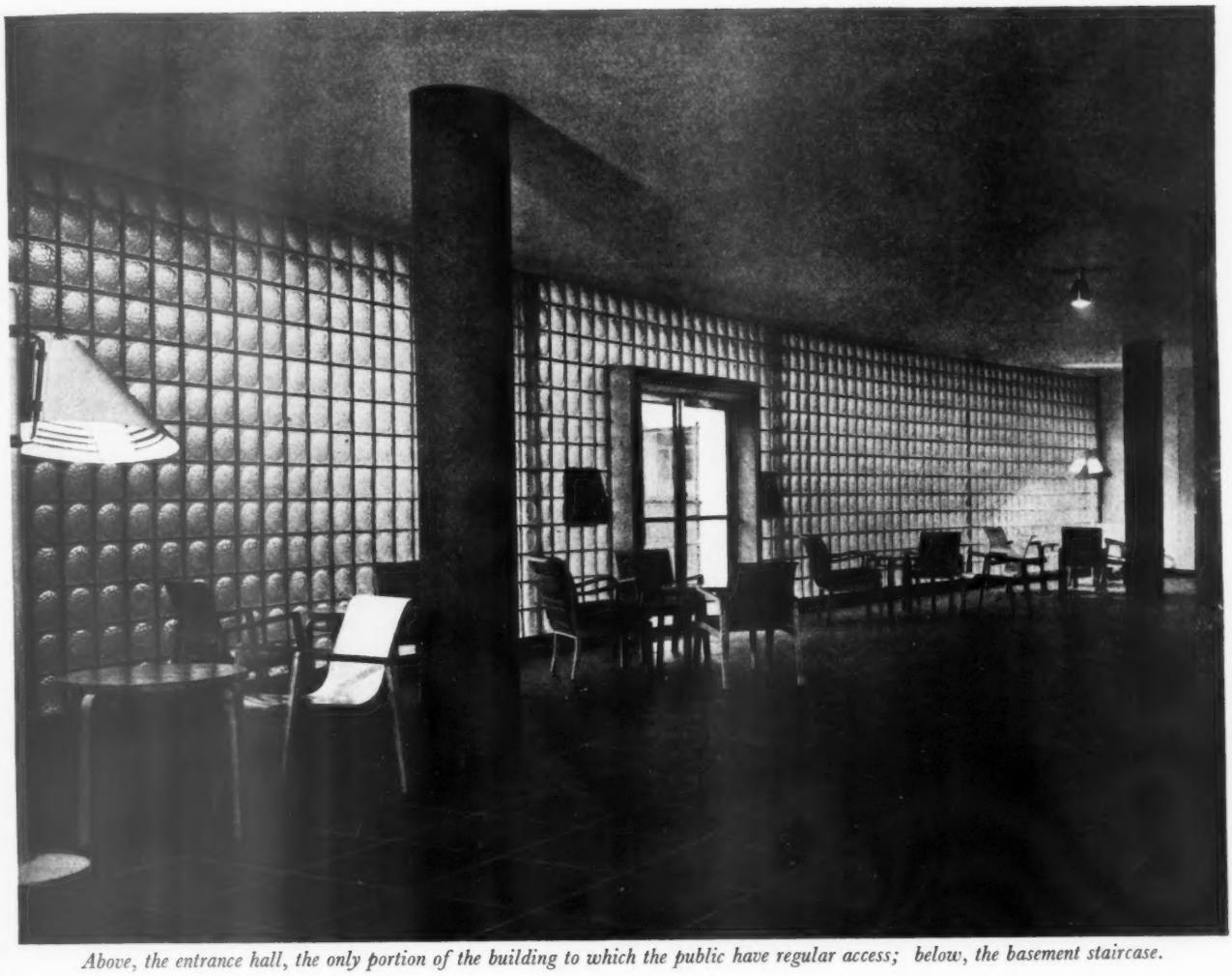
PLAN—*The cleansing and disinfecting station is placed in the basement with its own entrance from a rear courtyard at basement level. It is connected with the main portion of the building above it by a pair of service staircases closed to the public. This main portion is planned so that the part to which the public has access is all on the ground floor. It is immediately reached from the central entrance and waiting hall, while the offices and the other accommodation in either wing of the first floor can communicate with each other along a corridor over the entrance hall, so that the various circulations are effectively separated. Another factor determining the arrangement of the plan was that both the clinics, which occupy a large proportion of the ground floor, and the offices on the upper floor had to be flexible as regards the sub-division of their floor-space; new kinds of electrical and other treatment and alterations in public health administration mean changes in the allotment of space. On the other hand, certain elements in the plan could be labelled as fixed: the public entrance hall, the lavatories, the lecture hall and staircase and other service units. The logical solution was to place the latter elements in the centre, to form a fixed nucleus to the whole building, with the public entrance and waiting hall as its core, and to place the variable accommodation in two wings of a simple rectangular shape that could be constructed so as to be quite free of internal supports. By arranging the whole in the shape of a letter H with the fixed nucleus as its crossbar an ideally open plan could be obtained.*

ABOVE: BASEMENT AND GROUND FLOOR PLANS

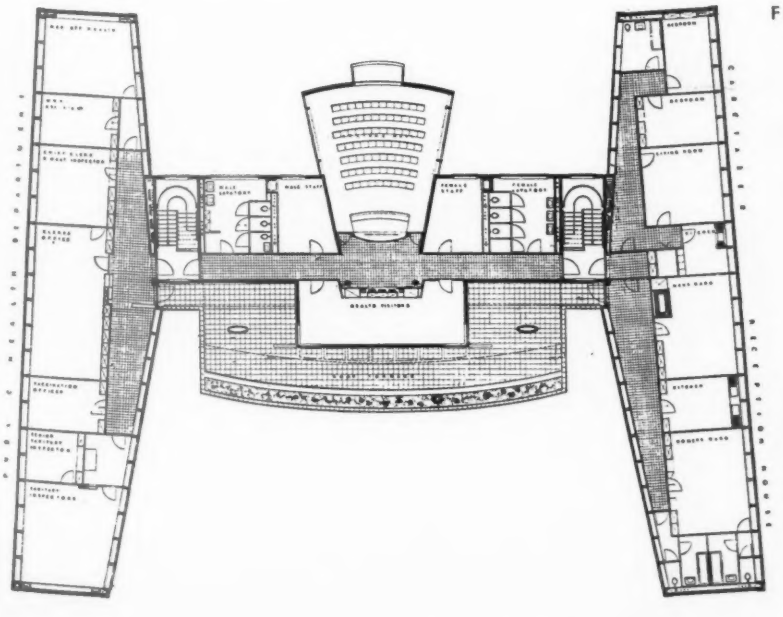


SECTION THROUGH CENTRE BLOCK

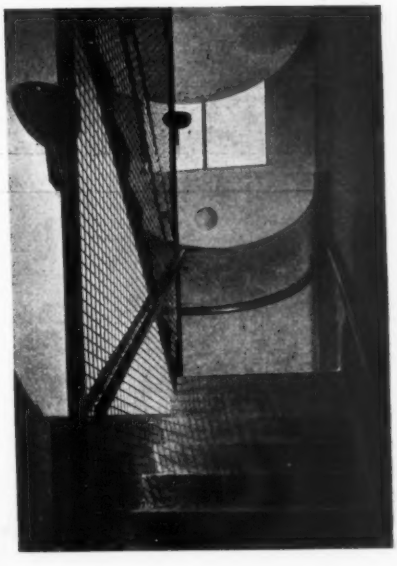
DESIGNED BY TECTON



Above, the entrance hall, the only portion of the building to which the public have regular access; below, the basement staircase.



FIRST FLOOR PLAN



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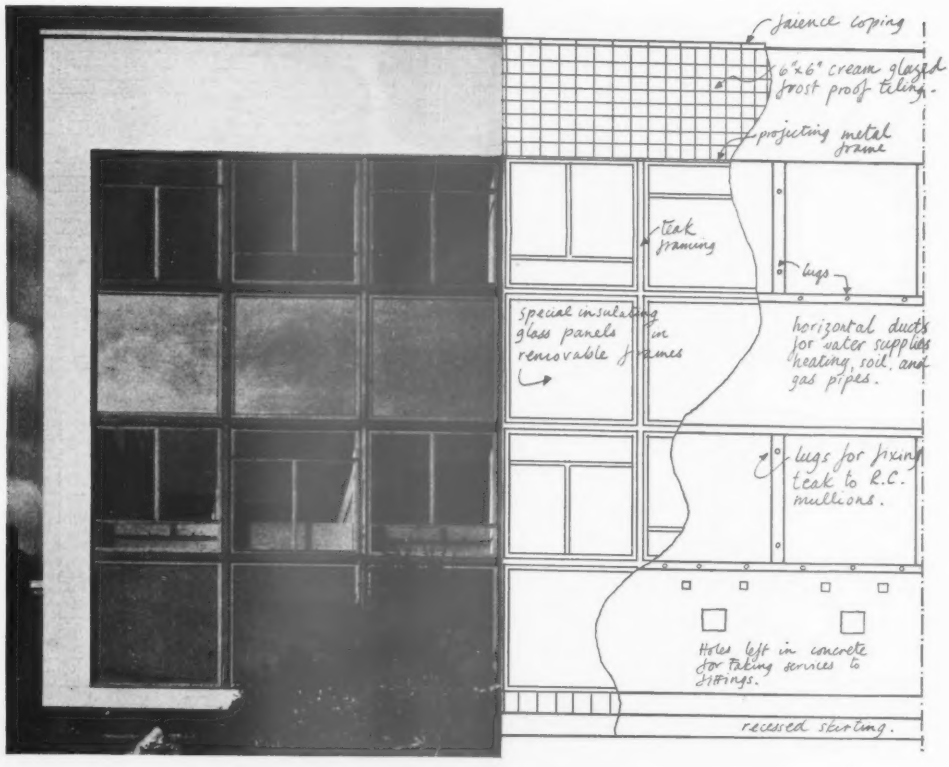


CONSTRUCTION—*The construction of the wings is unusual. Double R.C. floors span between deep R.C. channel beams in outside walls which extend vertically between window heads on one floor and window cills on floor next above. Vertical loads are carried on small R.C. columns or mullions between each window. The channel beams have concave sides outwards; a teak frame is bolted on their nibs and on the mullion faces, and removable insulating glass panels are fixed in this frame. In the space behind the glass are the hot and cold service runs, waste pipes and gas supply.*

Power and light runs are housed in metal skirtings with removable covers so that new fittings can be attached at any point. Ceiling runs are in a similar metal trunk. Heating is by ceiling coils.

By this means the accommodation in the wings can be rearranged in any way necessary in the future.

Above, detail of elevation of one of the wings; centre, one of the corridors, used as waiting space for the Public Health Department, showing the R.C. mullions. Left, one of the offices.

DESIGNED BY TECTON

On the right are two photographs of the entrance hall. The floor is of matt brown tiles grouped in squares of eight; the columns are painted bright red. The chairs and tables are for the public when awaiting treatment. The upper photograph shows one of the murals by T. Gordon Cullen incorporating advice on health. The centre photograph shows the mural of an Ordnance map of London, printed white on black, with the Borough of Finsbury picked out in the recess. Below (left) is a detail of the waiting room outside the cleansing station in the basement. Its size is sufficient to accommodate a bus load of schoolchildren at a time. The floor and skirtings are of tiles. Below (right) a typical corridor.

The general contractors were Patman and Fotheringham, Ltd. For list of sub-contractors, see page 72.

Three photographs taken during one of the series of three lectures for boys and girls given by Mr. R. A. Duncan at the R.I.B.A. during the Christmas holidays.

R.I.B.A.

INTERMEDIATE EXAMINATION

Following is a revised syllabus for the R.I.B.A. Intermediate Examination Testimonies of Study which will come into operation on January 1, 1940 :

The Testimonies of Study must consist, except where otherwise stated, of sheets of drawings, not less than 27 in. by 20 in., neatly and carefully finished as follows :

(a) *Freehand Drawing.*

Satisfactory evidence of the candidate's ability to draw, which may be in the form of sketches.

(b) *Historical Study.*

(1) The study of the façade, or part of a façade, of a building of recognized importance, showing the application of one or more orders of Greek, Roman and Renaissance architecture. Candidates must state their authority for the order and the building, which should not be of recent design. Two sheets are required, as follows :

One sheet comprising a general drawing of the building sufficient to illustrate the application of the order or orders, with section of the façade wall and plans of the façade wall in the storeys where the orders occur.

One sheet of details of the order or orders.

(2) The design of a small building or feature involving the study of historical architecture. The following list, indicating the type of subject, is given for the guidance of students, and the design is to be developed in a manner characteristic of the period chosen. Candidates are expected to study actual buildings or authentic records of buildings erected during that period, and to pay due regard to the appropriate materials and craftsmanship.

(*a*) A Roman Triumphal Arch.

(*b*) One bay of the Cloister of a Mediæval Cathedral.

(*c*) A fourteenth or fifteenth century Tithe Barn.

(*d*) A Loggia in a fifteenth century Italian garden.

(*e*) A Wall Fountain in the Courtyard of an Italian Renaissance Palace.

(*f*) A Pavilion in an eighteenth century garden in France.

(*g*) An Orangery in a seventeenth century English garden.

(*h*) A Gatehouse to a seventeenth or eighteenth century house.

One sheet is required illustrating the design as fully as possible with ¼-in. scale or ½-in. scale drawings.

(c) *Measured Drawings.*

One sheet of measured drawings of an existing building or portion of a building to be selected. The candidate is advised to select a building for its architectural character rather than one which is distinguished for quaintness, elaborate decoration or archæological interest, and the building selected should not have been built later than 1851. If the candidate is in doubt as to a suitable subject, he should communicate with the Secretary to the Board of Architectural Education.

Candidates are recommended to draw at least a part of the building to a scale of ½ in. to 1 in. to 1 ft., and to indicate such essentials as materials, stone jointing, etc. The candidate's plottings and sketches are also to be submitted. The relative position of the portion detailed should be indicated by means of a small scale diagram.

(d) *Construction applied to Elementary Design.*

Working drawings of a house containing two or three living-rooms, four or five bedrooms, garage and offices, to be designed by the candidate, preferably in one of the local styles traditional in this country, on an actual site to be selected by the candidate.

The drawings should show clearly the construction of floors, roofs, joinery, etc., and should be fully dimensioned working drawings as normally issued to a contractor.

Work not reaching a reasonable standard of simple design will be disqualified.

One sheet comprising general drawings to a scale of 8 ft. to 1 in., and a site plan to a small scale indicating the locality, contours, aspect and approaches to the house and garage. A garden layout is not required.

One sheet comprising a comprehensive ½-in. detail.

One sheet of full-size details to be in pencil on detail paper of any size.

Candidates are required to submit all the Testimonies of Study together.

•

The R.I.B.A. Intermediate Examination was held in London, Belfast, Hull, Manchester, Newcastle and Plymouth, from November 18 to 24, 1938.

Of the 219 candidates examined 88 passed and 131 were relegated. The successful candidates are as follows :—

B. C. Adams, J. B. Anderson, S. H. Bates, K. M. Baxter, J. D. Blacklock, A. W. Bowman, R. S. Brindle, S. Broome, J. C. Brown, K. D. Bundy, P. F. Burgoine, J. E. Carney, C. E. N. Carter, G. E. Carter, L. Chandler, E. J. Cheeseman, (Miss) H. M. Cole, F. W. T. Croydon, H. L. Dawes, E. W. Draper, J. Dryburgh, F. P. Edmed, J. E. G. Edwards, M. England, J. R. Findlay, B. R. Flury, R. W. Ford, F. Forrest, E. S. Fowkes, N. Havers, G. C. Haydon, G. H. Haynes, A. C. S. Hickes, F. R. Huggins, M. H. Hutchinson, G. R. Ingleby, L. Jeffery, P. Kent, J. C. Kenyon, S. Kershaw, J. K. Kirkham, C. A. Kitchen, R. J. Lane, C. T. Larrington, C. A. Legerton, F. H. Lloyd, V. H. Loney, G. K. McKnight, S. J. McMullon, W. C. McVeigh, D. J. Maguire, L. Mallinson, A. E. Matthews, G. S. Melland, E. J. Miller, J. Mitchell, C. P. Moon, G. W. Nightingale, A. B. Owles, G. M. Pearson, A. Petty, T. L. Rampton, K. H. Roberts, J. Scott (Jnr.), R. Silkstone, T. Sims-Hilditch, A. E. Smith, H. S. Smith, R. V. R. Smith, D. Snidall, F. L. Southey, J. C. O. Stansfield, E. Taylor, L. J. Terry, C. M. Thompson, K. J. Thompson, S. L. Towler, V. A. Tregoning, P. D. Tugwell, F. H. Vaughan, J. L. S. Vincent, C. J. Wallis, R. St. G. Whelan, J. Wilkinson, L. P. Williams, H. E. Wilson, F. W. Young, L. Young.

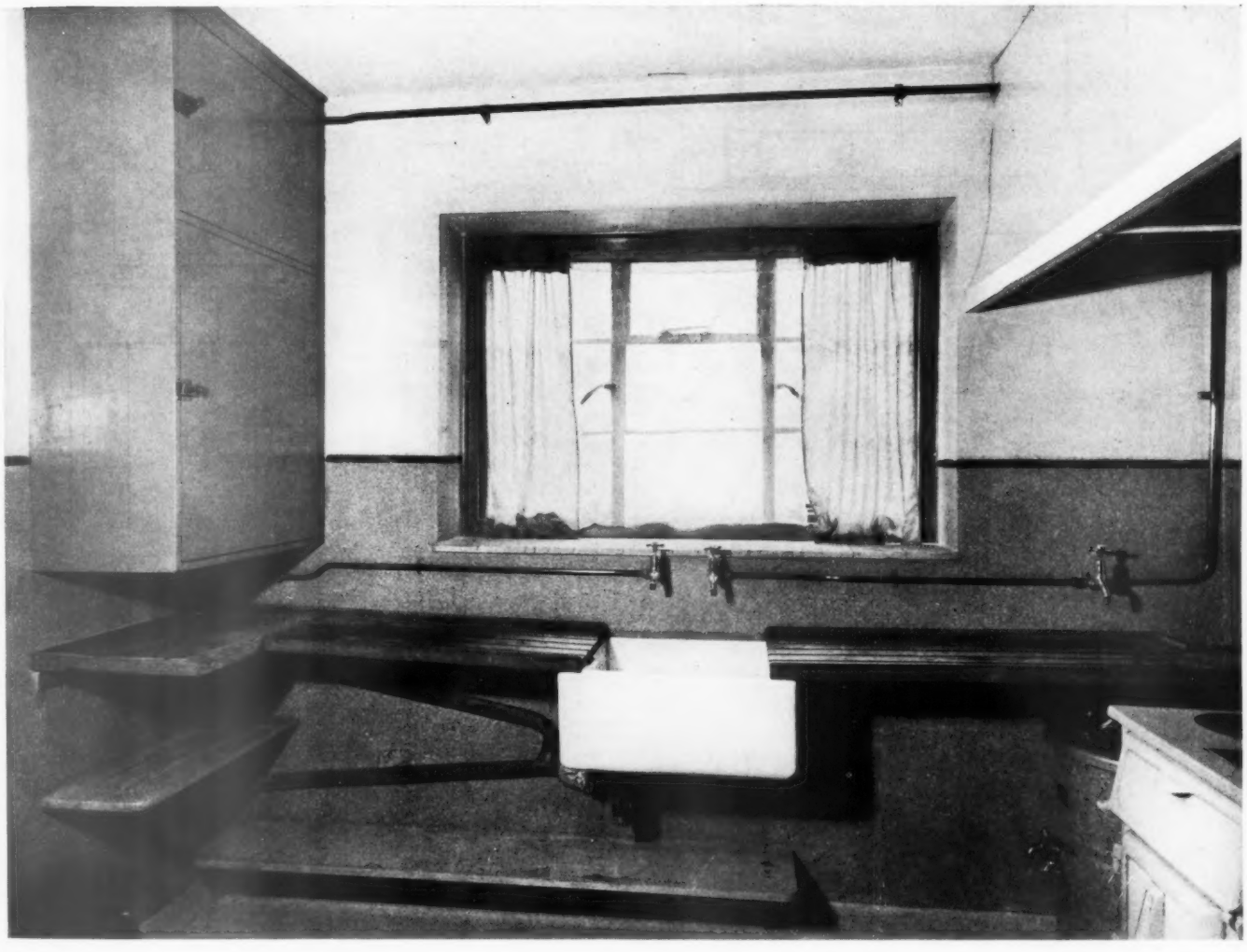
•

MEDAL AWARD

The R.I.B.A. medal for the best building erected in the area of the Birmingham and Five Counties Architectural Association during the three years ended March 31, 1937, was presented recently to Mr. E. C. Bewlay, of Peacock and Bewlay, for the Coroner's Court, Newton Street, Birmingham.

WORKING DETAILS : 715

KITCHEN • REHOUSING SCHEME, UNION STREET, SOUTHWARK • EDWARD ARMSTRONG

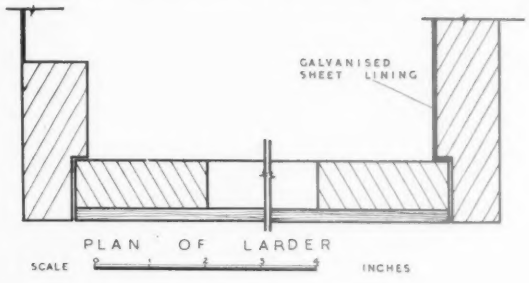


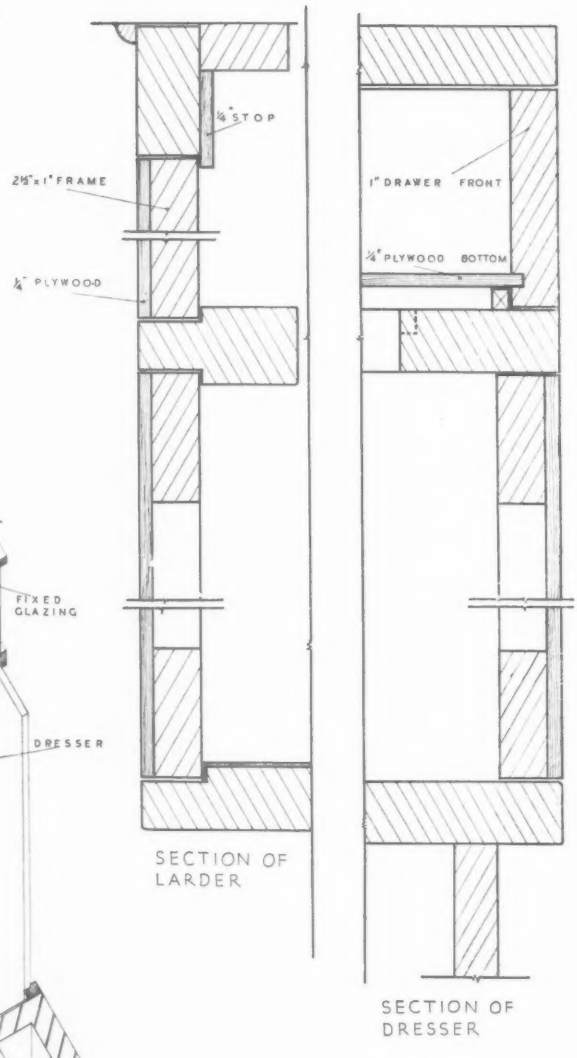
The kitchen illustrated is a typical one for the complete rehousing scheme. The scheme was illustrated in THE ARCHITECTS' JOURNAL for June 2, 1938. Each flat is equipped with its own hot water installation, run from the small coke-burning boiler in the kitchen, supplying hot water direct to bath, sink and copper at a minimum cost to the tenant. Each kitchen is also fitted with gas stove, copper, ventilated larder, dresser and shelving.

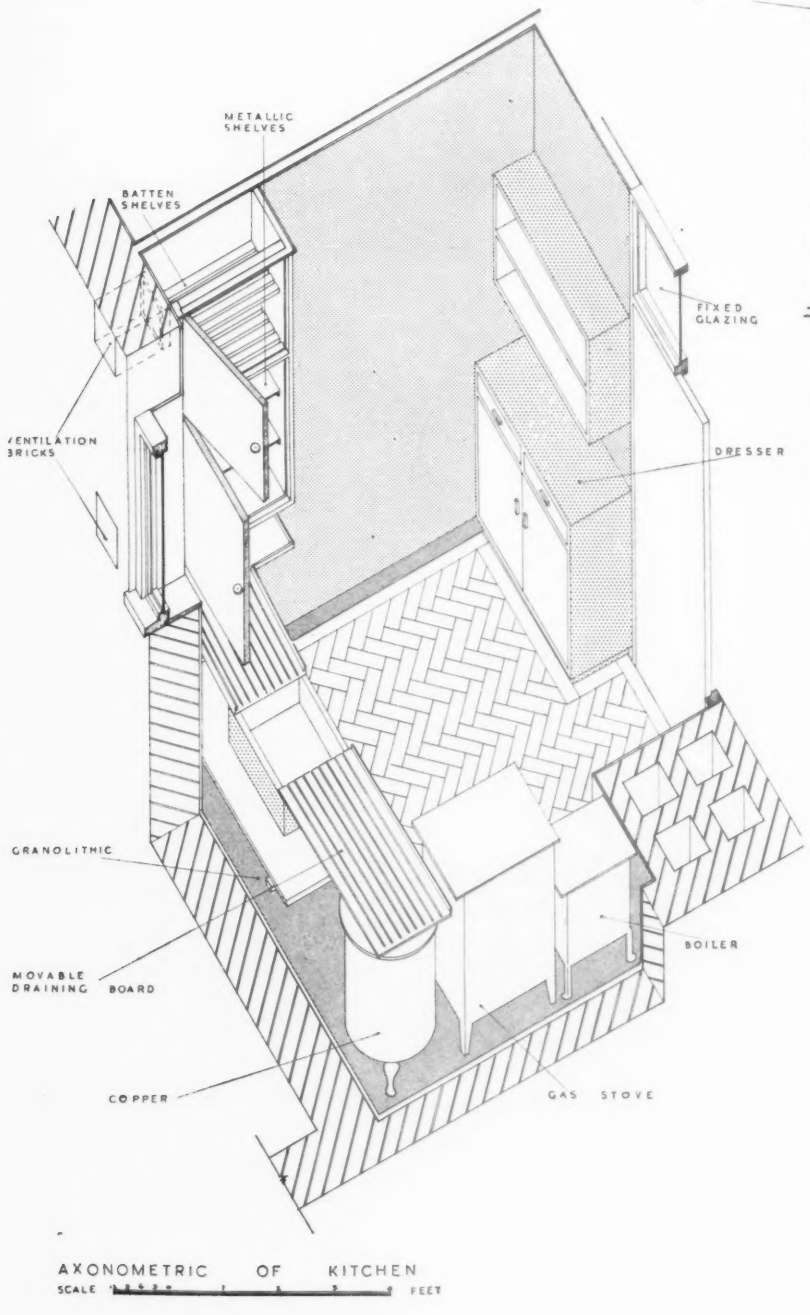
Details are shown overleaf.

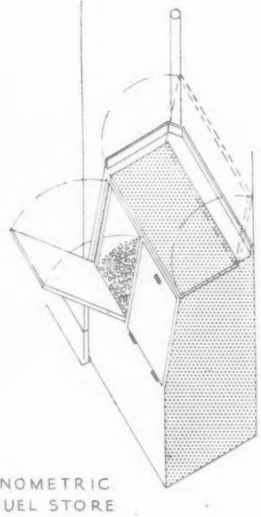
WORKING DETAILS : 716

KITCHEN • REHOUSING SCHEME, UNION STREET, SOUTHWARK • EDWARD ARMSTRONG









Axonometric and details of the kitchen illustrated overleaf.

The Architects' Journal Library of Planned Information

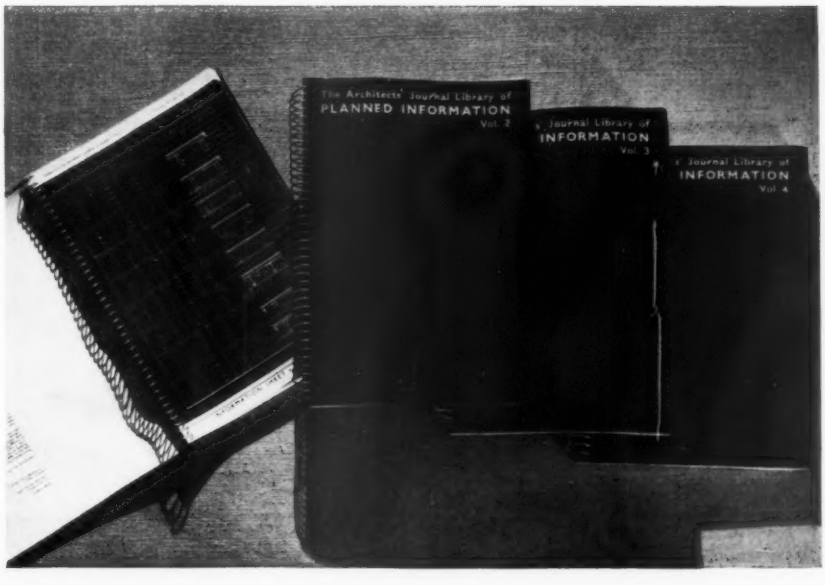
INFORMATION SHEET

SUPPLEMENT

SHEETS IN THIS ISSUE

695 Wallboard Fixing

696 Waterproofing and Damp-proofing



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.

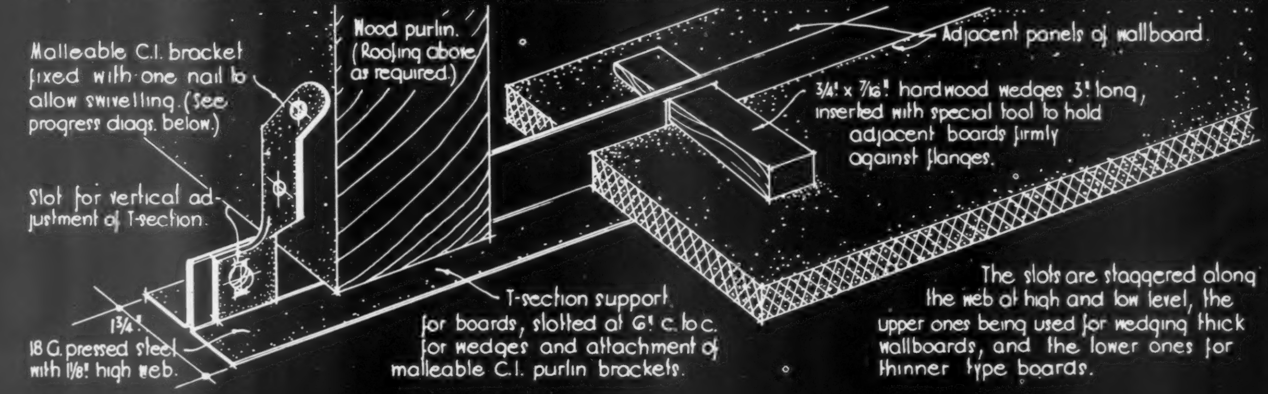
Sheets issued since index :

601 : Sanitary Equipment
602 : Enamel Paints
603 : Hot Water Boilers—III
604 : Gas Cookers
605 : Insulation and Protection of Buildings
606 : Heating Equipment
607 : The Equipment of Buildings
608 : Water Heating
609 : Fireplaces
610 : Weatherings—I
611 : Fire Protection and Insulation
612 : Glass Masonry
613 : Roofing
614 : Central Heating
615 : Heating : Open Fires
616 : External Renderings
617 : Kitchen Equipment
618 : Roof and Pavement Lights
619 : Glass Walls, Windows, Screens, and Partitions
620 : Weatherings—II
621 : Sanitary Equipment
622 : The Insulation of Boiler Bases
623 : Brickwork
624 : Metal Trim
625 : Kitchen Equipment
626 : Weatherings—III
627 : Sound Insulation
628 : Fireclay Sinks
629 : Plumbing
630 : Central Heating
631 : Kitchen Equipment
632 : Doors and Door Gear
633 : Sanitary Equipment
634 : Weatherings—IV
635 : Kitchen Equipment
636 : Doors and Door Gear
637 : Electrical Equipment, Lighting
638 : Elementary Schools—VII
639 : Electrical Equipment, Lighting
640 : Roofing
641 : Sliding Gear
642 : Glazing
643 : Glazing
644 : Elementary Schools—VIII
645 : Metal Curtain Rails
646 : Plumbing
647 : Veneers
648 : U.S.A. Plumbing—V
649 : U.S.A. Plumbing—VI
650 : Ventilation of Factories and Workshops—I
651 : School Cloakrooms (Boys)
652 : U.S.A. Plumbing—VII
653 : Plumbing
654 : U.S.A. Plumbing—VIII
655 : School Cloakrooms (Girls)
656 : Ventilation of Factories and Workshops—II
657 : Floor Construction
658 : Partitions
659 : Equipment
660 : Asbestos-Cement Decorated Sheets
661 : Aluminium
662 : Sound Resistance
663 : Adjustable Steel Shelving
664 : Sheet Lead Work
665 : Adjustable Steel Shelving
666 : Sound Insulation
667 : A.R.P.
668 : Aerodromes
669 : Aluminium
670 : Metal Trim
671 : Rainwater Gutters
672 : Waterproofing
673 : Aluminium
674 : Roof Insulation
675 : Furniture
676 : Ventilation of Factories and Workshops—III
677 : Oil Paint
678 : Ventilation of Factories and Workshops—IV
679 : Plumbing
680 : Aluminium
681 : Corded Curtain Rails
682 : Sound Insulation
683 : Roofing Tiles
684 : Sheet Metals
685 : Partitions
686 : Aluminium
687 : Plumbing
688 (81 revised) : Bricks (Standard Specials)
689 : Suspended Ceilings
690 : Acoustics
691 : Fuel Storage
692 (84 revised) : Bricks (Standard Specials)
693 : Fuel Storage
694 : Kitchen Equipment

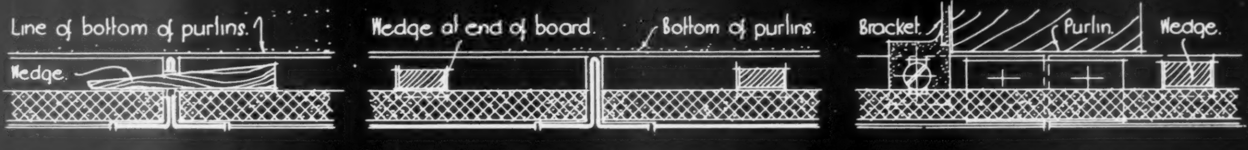
851.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

SKETCH SHOWING ARRANGEMENT OF METAL T-SECTION & INSULATING BOARD IN RELATION TO PURLINS.



The slots are staggered along the web at high and low level, the upper ones being used for wedging thick wallboards, and the lower ones for thinner type boards.

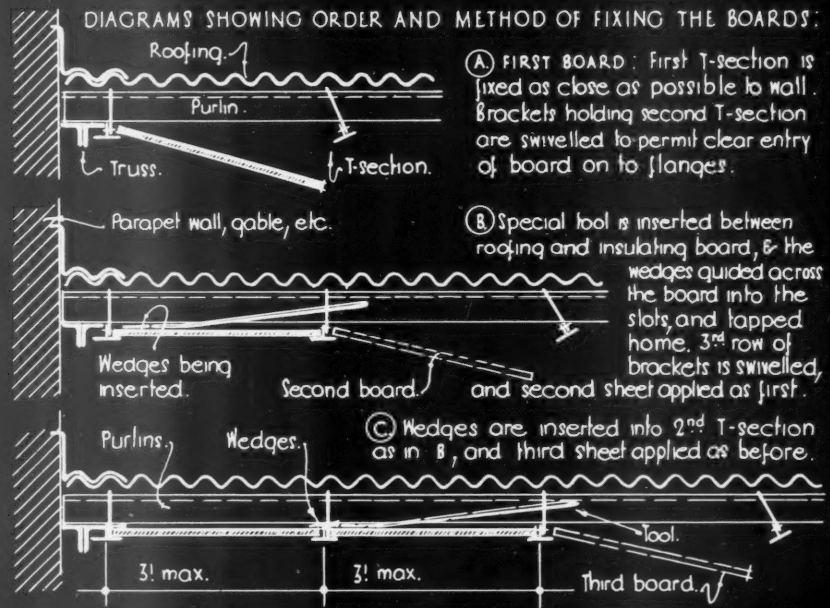


SECTION parallel with purlins showing long edges of adjacent wallboard panels wedged down on to the flanges of the T-section support.

SECTION parallel with purlins showing cross T-sections supporting ends of wallboards. The flanges are cut back to permit the webs only to bear on the flanges of the long T-section members.

SECTION across purlins showing method of joining lengths of T-section. Joint must occur beneath a purlin, & fish-plate is fixed after bracket is attached.

DIAGRAMS SHOWING ORDER AND METHOD OF FIXING THE BOARDS:

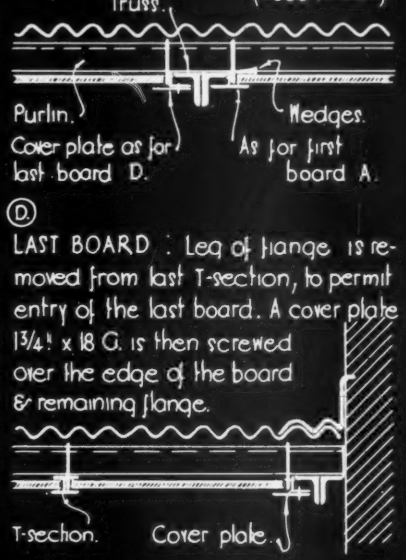


(A) FIRST BOARD: First T-section is fixed as close as possible to wall. Brackets holding second T-section are swivelled to permit clear entry of board on to flanges.

(B) Special tool is inserted between roofing and insulating board, & the wedges guided across the board into the slots, and tapped home. 3rd row of brackets is swivelled, and second sheet applied as first.

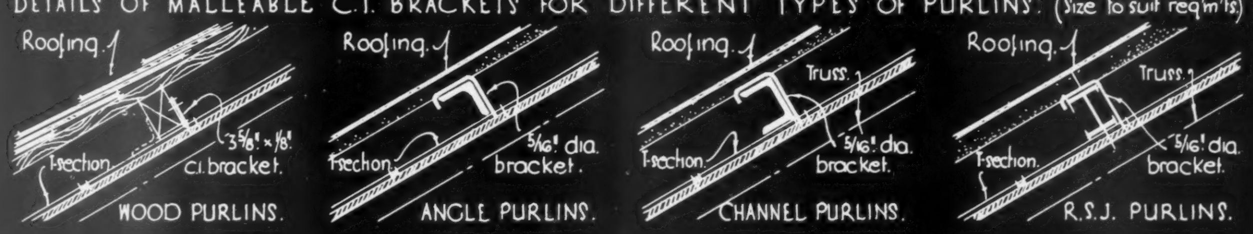
(C) Wedges are inserted into 2nd T-section as in B, and third sheet applied as before.

TREATMENT AT STEEL TRUSSES:
(Wood similar.)



(D) LAST BOARD: Leg of flange is removed from last T-section, to permit entry of the last board. A cover plate 1 3/4" x 18 G. is then screwed over the edge of the board & remaining flange.

DETAILS OF MALLEABLE C.I. BRACKETS FOR DIFFERENT TYPES OF PURLINS: (Size to suit req'm'ts)



Information from C. F. Anderson & Son Ltd.

INFORMATION SHEET: WALL & CEILING INSULATION: WEDGE SYSTEM OF APPLICATION

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

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 695 •

WALLBOARD FIXING

Subject : Wedge Method of Applying Wall or Insulating Boards
(Patent Application No. 34383/38)

General :

This Sheet illustrates a wedge method of applying any thickness of building board to the underside of pitched roofs of wood or steel framed construction. It is known as the AND method and can be adapted to the light framing of flat suspended ceilings by suitable adjustment to the malleable C.I. suspension brackets, or can be used beneath solid, hollow tile or precast floors if suspension straps or other provision is made for the attachment of the brackets.

It can also be used to support the insulation beneath filler joist or other steel-framed roofs. In these instances either wood fixing fillets could first be attached to the steelwork, or alternatively the $\frac{5}{16}$-in. diameter hook brackets can be adapted for direct application.

The soffits of curved roofs may be lined likewise, depending on the purlin spacing and/or the radius. In this type of work the finished appearance would be a series of chords.

Components :

(a) *Brackets.* For trussed or other framed roofs, the C.I. brackets are always attached to the purlins. Suitable adaptations of the brackets are shown for both wood and steel construction. All types of bracket are provided at the base with a flat plate for bolting to the web of the T-sections, and the bolt hole is slotted to allow vertical adjustment of the supports to suit irregularities in the level of the purlins.

It will be noticed that the flat plate bracket for wood purlins is shown fixed with only one nail. This is to allow the swivelling of the T-section as shown in the progress diagrams. A second nail is fixed when the T-section is swivelled back to its original position.

None of the hook type brackets is directly fixed to the purlins, but it is essential that the full depth of these members should be used as a bearing surface. This ensures resistance to any movement of the T-sections down the slope of the roof.

(b) *T-sections.* The edges of the wallboards are supported throughout on the $\frac{7}{8}$-in. wide flanges with 18-G. pressed steel T-sections. These members are bolted direct to the brackets through appropriate slots in the web, and are amply strong to carry all weights and thicknesses of wallboards. The sections are made in lengths up to 18 ft., and brackets should be provided at every purlin throughout this length. The method of butt jointing beneath a purlin by means of a fish plate is shown.

The web of the section is punched at 6-in. centres at alternately high and low level. This permits the entry of wedges into the slots irrespective of the thickness of board used. The web stands $1\frac{1}{8}$ in. high and will accommodate boards up to $\frac{5}{8}$ in. in thickness.

Joints between ends of the boards are supported and wedged in the same way as the long edges. The flanges of the cross T-section are cut back as indicated, and only the web bears on the flanges of the main supports. This ensures a flush soffit to all flanges.

(c) *Wedges.* The 3-in. teak wedges are inserted by means of a special metal tool. As each board is placed in position, wedges are guided by the forked end of the tool into the visible slots along the far edge.

Wedges must be spaced along the T-section at 12-in. centres, and should be well driven home by means of a sharp push with the tool. The upper edge of the slot thereby bites into the upper edge of the wedge, and the edges of adjacent boards are closely and permanently held against the flanges.

The ends of the boards are treated similarly, and the procedure followed with subsequent boards.

Trusses :

The maximum spacing of the T-sections, and therefore the maximum width of wallboard, is 3 ft. Should the roof be trussed, however, the space between trusses should be equally divided. The last T-section before the truss has one flange removed, and the purlin brackets should be placed hard up against the truss. The last board before the truss can then be pushed up into position without any swivelling of the last T-section, and the edge held in place by an 18-G. steel cover plate screwed on as shown in the section.

Another complete T-section is then suspended immediately behind the truss members, and the work proceeds as before. The method of fixing remains the same for both steel and wood trusses, and the cover plate is used at all projections below the general wallboard soffit level.

Finish :

The whole of the T-section is rust-proofed, but may be supplied with any desired surface treatment. The exposed bottom faces of the flanges may be left as supplied, or painted or otherwise treated like the rest of the roof.

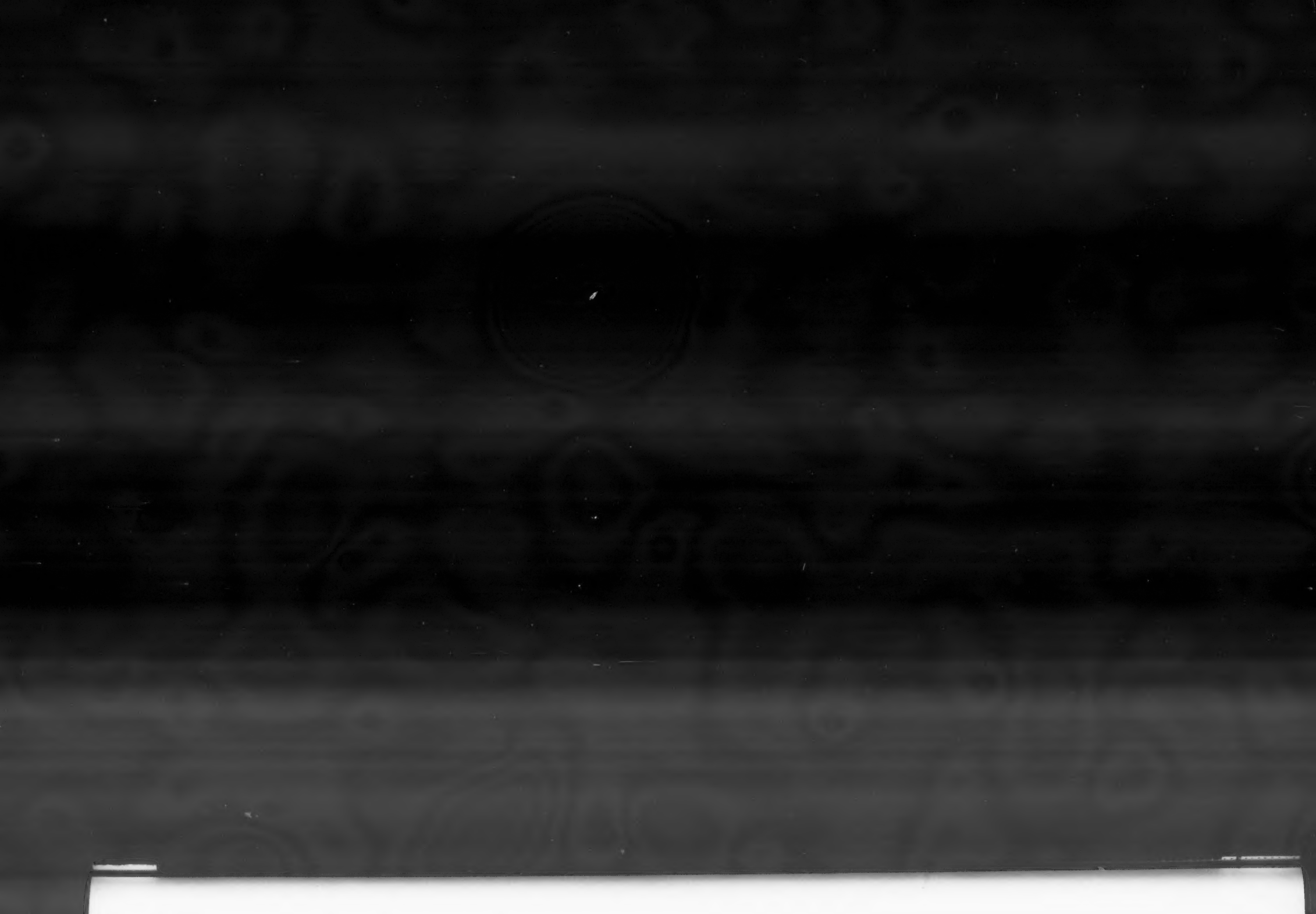
Prices :

The cost of the method is dependent upon the size of the wallboard panels and the type and number of the purlin brackets. Using 12 ft. by 3 ft. panels and normal wood purlin brackets spaced at 4 ft. 6 in. centre to centre, the cost of the material and labour is approximately 4s. per square yard.

Distributed by : C. F. Anderson and Son, Ltd.

Address : Harris Wharf, Graham Street, N.1.

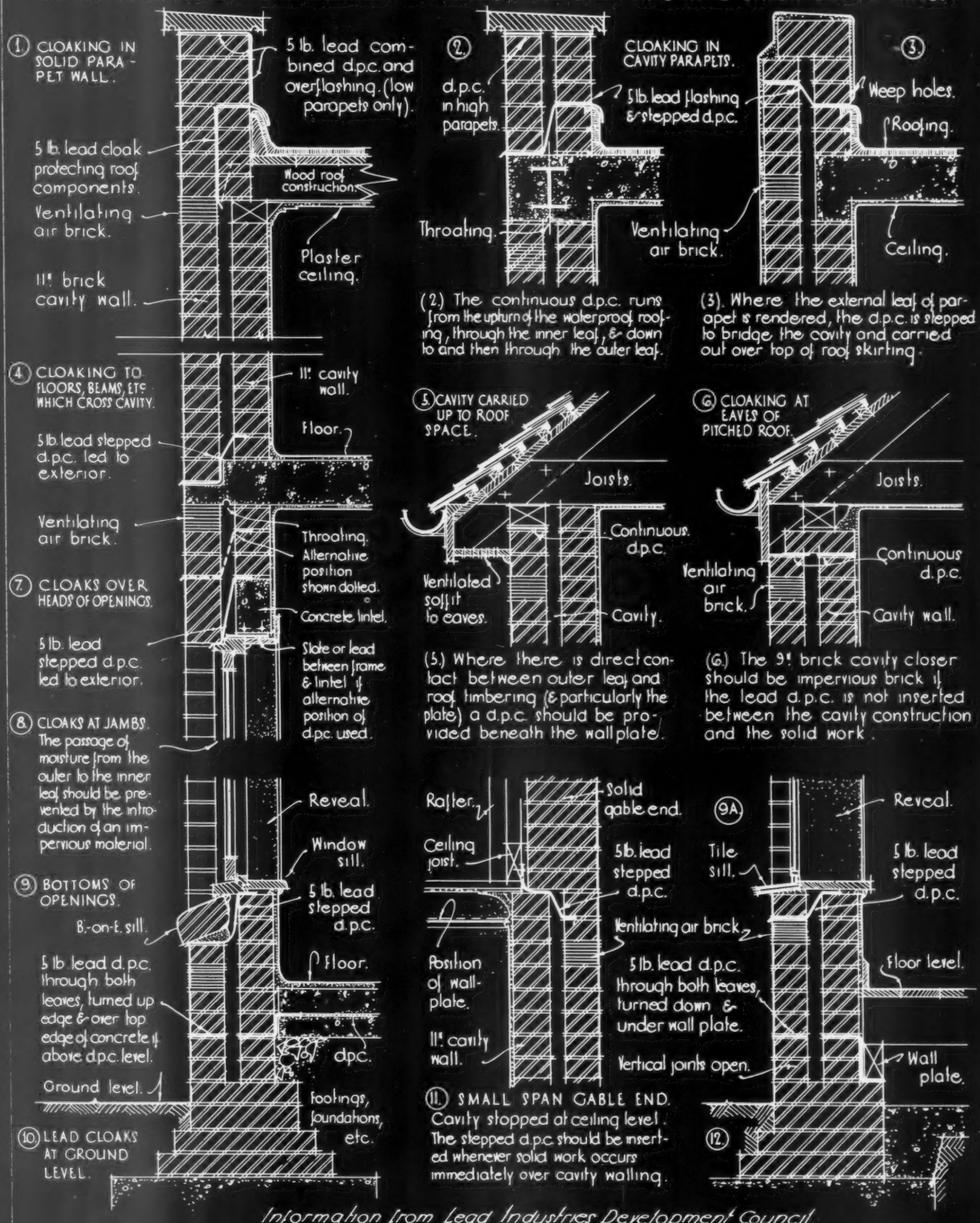
Telephone : Clerkenwell 4582.



852.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

THE APPLICATION OF LEAD CLOAKS IN VARIOUS PARTS OF EXTERNAL BRICK CAVITY WALLS:



Information from Lead Industries Development Council.

INFORMATION SHEET: LEAD CLOAKS IN BRICK CAVITY WALLS: No. 55.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Stan. C. Payne.

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INFORMATION SHEET

• 696 •

WATERPROOFING AND DAMP-PROOFING

Subject : Lead Cloaks in Cavity Walls

This Sheet deals with the use of lead for cloaks at various points in cavity walls, the particular value of lead for this purpose being :—

(1) Its flexibility, which prevents all risk of fracture due to movement of the brickwork or masonry.
(2) The ease with which it may be dressed into special or unusual shapes and may be laid or tucked into parts of the structure at any level, even when sections of the work are completed at different times.
(3) Its complete impermeability, which is permanent provided reasonable precautions are taken.
(4) The long lengths and freedom from joints which may be obtained.
(5) The ease with which changes of direction may be arranged.
(6) Its great resistance to side-thrust, the co-efficient of friction being high compared with that of the majority of other dampcourse materials.

The weights of lead depend largely upon the amount of dressing which will be required. 3-lb. lead is adequate for all practical considerations, but where there is considerable dressing, and particularly where cloaks span the cavity and are subject to mechanical damage when the droppings are cleared out in the ordinary course of building, not less than 5-lb. lead should be used.

Protection of Lead :
Where lead is used in direct contact with Portland cement mortar or gauged lime mortar, both surfaces of the metal should be coated with a good quality bituminous paint before building in, in order to prevent the risk of corrosion which arises during and shortly after the setting process due to the liberation of free caustic alkalis present in all Portland cements during setting. Where lime mortar is used the necessity for protection is less, but since there is no appreciable difficulty in application the precaution remains a wise one.

Construction :
In practice many other variations in construction will arise, but treatment following these suggestions should be found satisfactory. In each case ventilated cavities have been shown, although all authorities do not agree as to the necessity for this ventilation.

Detail 1 :
In this, a dampcourse immediately under the coping is combined with the over-flashing to the roof or gutter at the back. Not less than 5-lb. lead should be used. It is advisable to combine the flashing and dampcourse where the dampcourse is more than four courses above the top of the cover flashing. It is possible to obtain adequate key for a coping bedded on lead in this way, but it is naturally desirable to interlock the individual lengths of coping, to reduce the oversail to the minimum and to keep a minimum thickness of 3 ins. in order to prevent lifting in gales. Alternatively, the dampcourse can be carried horizontally through the parapet at the level of the top of the cover flashing. The most important dampcourse at this point is the combined vertical and horizontal one between the outer and wet leaf of the cavity wall and the inner part of the wall between the joist ends. It is difficult to maintain a full cavity past the ends of the joists without some risk of bridging, and a vertical lead dampcourse provides complete security.

Detail 2 :
This is a typical detail of cavity panel wall construction in steel or reinforced concrete-framed buildings. In such structures, it is generally necessary for the whole of the panel fill to be completely supported at each floor level. This necessitates a break in the cavity and the ingress of water can only be securely prevented by means of a continuous cloak such as that shown at every floor level, and particularly at the parapet level where both faces of the parapet must lie wet, and where there is a risk of water working under the roof membrane.

Detail 3 :
Dampcourses are equally necessary where external surfaces are rendered, since should the rendering crack at any point, the brickwork will tend to lie wet for a long period owing to the restriction of evaporation. The insertion of dampcourses will follow the same rules as for unrendered brickwork. It is preferable to run the dampcourse through the rendering on both faces, which in practice necessitates a projecting moulding or fillet on the outer face in order to ensure a neat line. On the inner face it can as usual form the cover flashing, weep holes being allowed for at intervals.

Detail 4 :
This is similar to (2) above.

Detail 5 :
Since the external leaf of the cavity wall may remain damp, where there is any likelihood of it coming in permanent contact with either the ceiling joists or the rafter feet, a dampcourse should be inserted one or more courses from the top whether there is a plate on the outer leaf or not. Ventilation is shown to the soffit board, but it is desirable where possible to ventilate the roof adequately in other ways if water pipes have to be installed close to the eaves in the roof space.

Detail 6 :
It is considered good practice to bind the two halves of the cavity wall at the upper end in order to distribute loads equally. Wherever this is done it is essential that there should be a damp-proof course immediately below the bridging to prevent transference of moisture from the inevitably wet outer skin.

Detail 7 :
All openings in cavity work must be provided with a cloak which should run not less than 6 in. beyond the opening at either side to ensure clearance for drips in the cavity. The exact formation of the opening head will vary in every case, and this will affect the position of the cloak. The inner edge of the cloak should be turned in never less than three and preferably four courses above the outer edge, in order to prevent all risk of bridging by droppings. Adequate weep holes should be left in the vertical joints in the outer wall.

Detail 8 :
A strip of 3-lb. lead close copper-nailed to the back of the jamb provides a permanent method of preventing bridging between the inner and outer leaves of the wall. It allows the frame to be placed in any position in relation to the cavity, which is not always the case with other methods of preventing bridging, and simplifies the building up of a strong reveal at what may otherwise be a weak point in a cavity wall.

Details 9 and 9A :
The prevention of bridging under cills which depends on the relationship of the position of the frame and the cavity is often difficult and in exposed positions a good deal of water may be blown under the cill. A flexible metallic dampcourse such as that shown (which can be dressed to the exact position required) has many advantages, and is particularly useful where brick-on-edge cills are used, since it is difficult to ensure that the lower inside corner is snapped back sufficiently to prevent all risk of contact.

Details 10 and 12 :
Lead dampcourses are particularly advantageous at ground level where it is necessary, owing to the levels inside and out, to form a step in the dampcourse, the corner between horizontal and vertical being as impervious as the rest of the dampcourse. In these examples the entry of ground water to the inner leaf *via* the surface concrete is prevented.

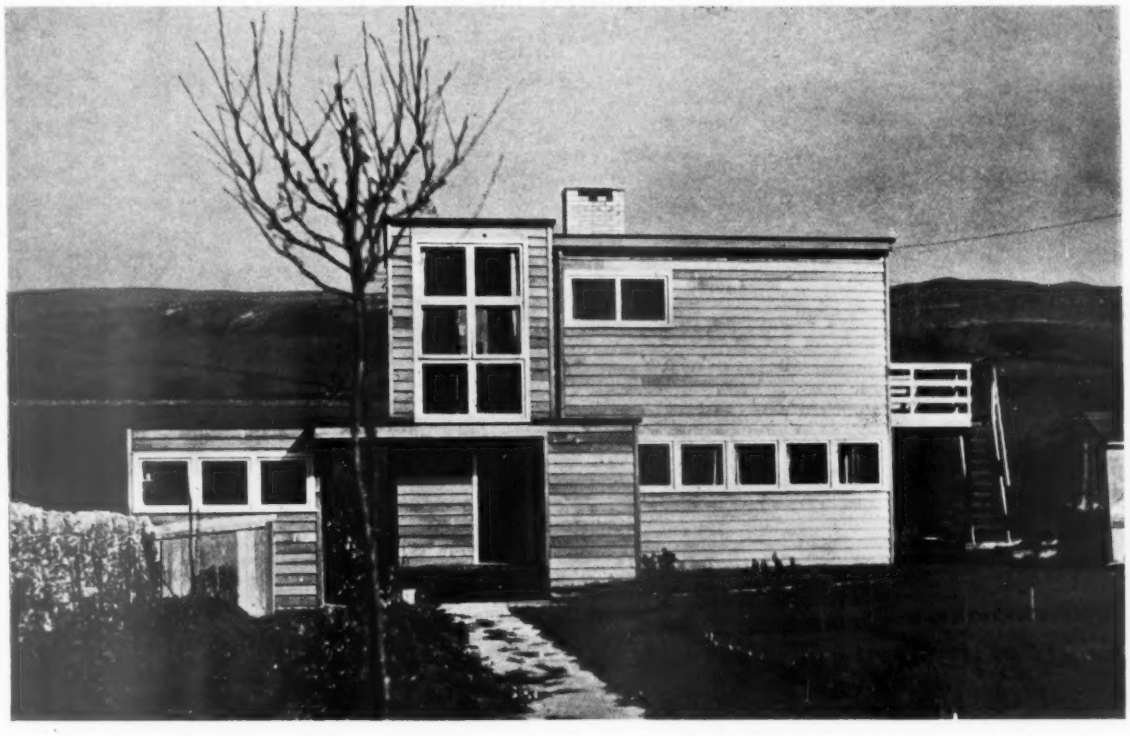
Detail 11 :
This example, while shown in relation to gable filling, is also applicable for every case in which solid work is placed above and in contact with cavity work.

Issued by : Lead Industries Development Council

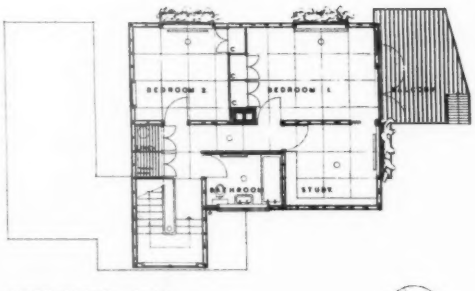
Address : Rex House, 38 King William Street, London, E.C.4

Telephone : Mansion House 2855

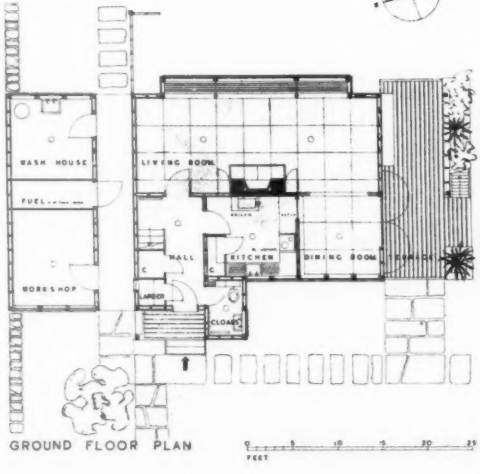
HOUSE AT KIRKBY STEPHEN, WESTMORLAND



DESIGNED BY B. A. LE MARE



FIRST FLOOR PLAN.

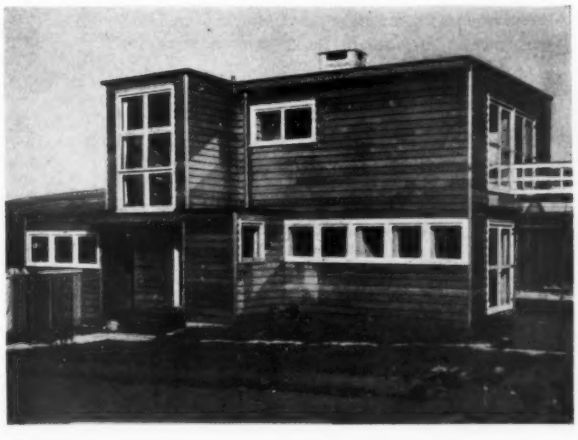


GROUND FLOOR PLAN

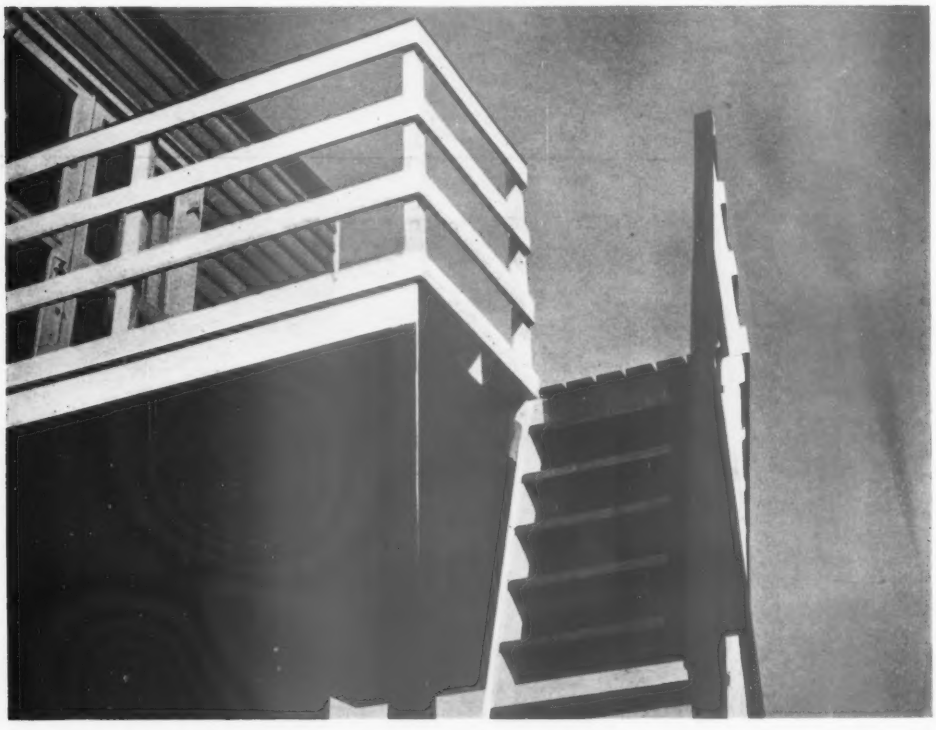
SITE—*Situated about a mile to the south of Kirkby Stephen, on a fairly exposed site 600 ft. above sea level, and approached by road running north-east to south-west.*

PLAN—*As far as possible a large living space rather than numerous small rooms were required. Client particularly desired a large window in living-room, in order to see the good view to south-east; this window plays an important part in the design and planning.*

The illustrations show (at top) the entrance front from the north-west, and (below) the same from the west.



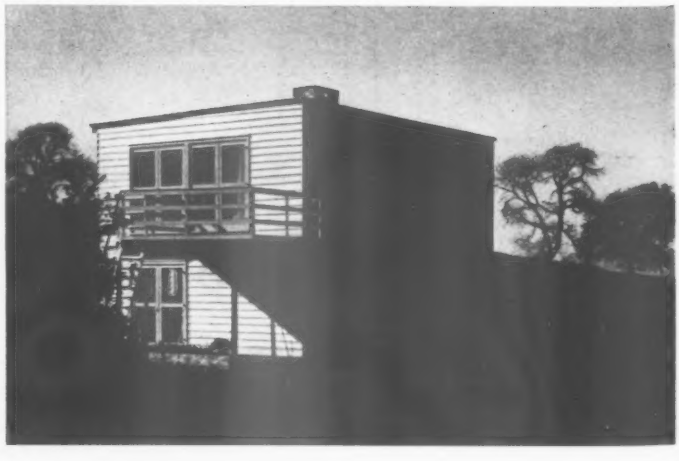
HOUSE AT KIRKBY STEPHEN, WESTMORLAND



On the left is shown a detail of the stairway and balcony on the south side of the house. Below is the living room, and a general view of the house from the south-east.

DESIGNED BY

B. A. LE MARE

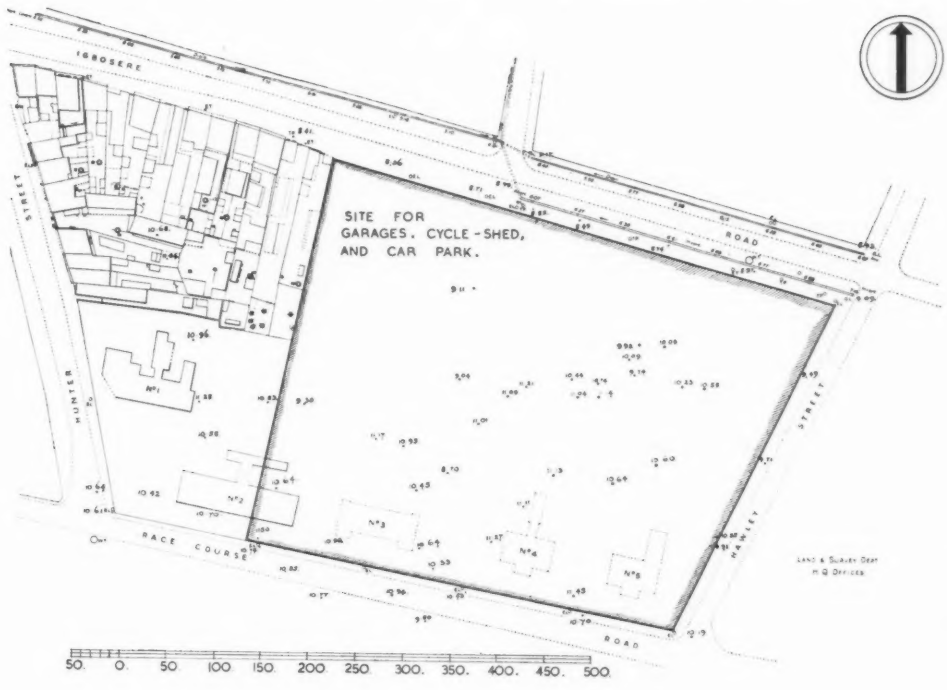


CONSTRUCTION—*Concrete and 9-in. brick foundations. Main walls: 4-in. by 2-in. pine studs at 18-in. centres covered externally with (1) ½-in. rough boarding fixed diagonally, (2) waterproof building paper, (3) horizontal western red cedar weatherboarding. Roof: 7-in. by 2-in. joists, 1-in. deal boarding, 1-in. patent insulation, 2-ply bituminous roofing felt, 8-in. by 2-in. curb bolted through wall plate, projecting 4 ins. and covered with 24 S.W.G. copper sheeting. Terrace and balcony: 4-in. by 1½-in. slats at 5-in. centres on 6-in. by 2-in. joists at 18-in. centres.*

FINISHES—*Entrance hall and staircase: 4-in. by ½-in. vertical pine matchboarding. Living- and dining-rooms: ⅛-in. alder faced ply on ½-in. insulation board; fireplace in living-room has surround of golden travertine with copper curb. Kitchen, bathroom and lavatory: asbestos cement sheeting, painted. Bedrooms and study: building board with V-joints. Ground floor: 1-in. T. and G. deal boards on sub-floor of diagonal boards. Ceilings: ¼-in. building board. Stairs: 1-in. cork treads. Built-in cupboards in bedrooms; two-way cupboard and hatch between kitchen and dining recess.*

SERVICES—*All plumbing in copper. Boiler in kitchen for domestic h.w. supply and central heating. Electric power for auxiliary heating in all main rooms. Electric cooking.*

COST—*House and outbuildings, £1,000. 1s. 2d. per ft. cu.*



SITE PLAN

GOVERNMENT OF NIGERIA

PROPOSED SUPREME COURT, LAGOS

The Competition Conditions reviewed

Assessor : A. F. B. Anderson, F.R.I.B.A., S.A.D.G.

Promoters : The Government of Nigeria.

Premiums : £500, £300, £200.

Fees : 4½ per cent.—no supervision required.

Conditions from : The Crown Agents, 4 Millbank, London, S.W.1.

Questions : To the above by February 14.

Sending in date : June 30, 1939.

THIS is an excellent set of conditions, and the assessor is to be congratulated on their clearness and precision, no less than on the minimum amount of work asked for from competitors. The promoters do not ask for the impossible, adequate expenditure is provided for, and no unnecessary and crippling conditions are imposed.

DRAWINGS REQUIRED

One-eighth in. scale : Main front and one other. 16 ft. to 1 in : Plans, remaining elevations, sufficient sections. Scale 30 ft. to 1 in. : Block plan.

Drawings to be delivered flat, but need not be mounted. Drawings are to be in ink ; otherwise no annoying restrictions as to manner of presentation.

REPORT

The usual report and schedule of cubic contents are required along with a schedule of accommodation as asked for and as provided.

COST

Restricted to £100,000. As the main building is only required to provide 26,686 ft. sup. and a basis of 1s. 10d. per cub. ft. maximum is fixed, there should not be much difficulty in providing an adequate design.

GENERAL INSTRUCTIONS

The site is roughly a square with the east boundary to Hawley Street canted outwards towards its north end. There are no site dimensions given, but competitors will have no difficulty in scaling them. The site is practically level.

APPROACH

The chief approach will be from the centre of the town ; but access is to be provided from each of the surrounding roads—Igbosere Road on the north, Hawley Street on the east, Race Course Road on the south. There is no boundary road on the west, where the garages, cycle shed, and car park will be located.

ENTRANCES

Separate entrances to be provided for judges, counsel, public, and prisoners.

PRINCIPAL FRONTAGE

The principal frontage will be to Race Course Road, which faces approximately S.S.W.

BUILDINGS

Steel-framed construction is admissible, and must comply with the requirements of the London Building Act. No restriction as to height. Construction generally to be fire-resisting.

Owing to the prevalence of termites, timber construction should be avoided where possible, and finishings should be in metal or hardwood.

Exterior main walls on the south, west, and east are to be protected from the sun. Similarly, no direct roof lighting to courts or rooms is possible.

No restrictions as to style, but the use of architectural ornament either internally or externally is to be restricted.

PLANNING

The building is to be planned on not more than three floors. Public and press galleries are not desirable and should be omitted.

Legal procedure in the Nigerian courts is modelled closely upon the procedure in England.

VENTILATION

A separate air-conditioning unit will be provided for each court, and for the approaches to them, and special care will be taken to ensure that offices, etc., are provided with adequate cross-ventilation and electric fans.

ACOUSTICS AND LIGHTING

The acoustics and lighting in the courts should be very carefully studied. Light must shine on the witnesses' faces and not behind them.

In the Nigerian climate horizontal roof-lighting to the courts is not admissible.

Very careful particulars and instructions are given as to what is required. The chief difficulty will be that except for aggregate, all building materials will have to be imported, neither brick nor stone of suitable quality is available. In the rainy season the standing water level may rise to some 2 or 3 ft. below the surface of the site.

H. T. W.

LITERATURE

BOOK OF YEAR '38

LEWIS MUMFORD'S "THE CULTURE OF CITIES"*

[*By R. GARDNER-MEDWIN*]

LEWIS MUMFORD'S name is not yet familiar in England, except to readers of *The New Yorker*. In that paper, since 1932, he has contributed a column called "The Skyline": the most keenly perceptive architectural criticism to be found in the States. To our shame we have nothing like it in our English papers, technical or otherwise.

Mumford was born a New Yorker. At Columbia and New York Universities he studied philosophy, biology, literature—apparently without taking a degree in any of them. He is not an architect. But he has, in the completest sense, an intuitively architectural mind. In 1915, at the age of twenty, he is said to have had his eyes opened by Sir Patrick Geddes, the biologist who became a great social planner. The teaching of Geddes is developed by Mumford in an earlier book, *Technics and Civilization*,† and to an even greater extent in his latest colossal work which anatomizes the growth of cities from medieval times and forecasts the characteristics of cities yet unformed.

The main theme of the book is the social basis of the new order of civilization, conceived within a regional framework.

> **Fresh accumulations of historical insight and scientific knowledge are ready to flow over into social life, to mould anew the forms of cities, to assist in the transformation of both the instruments and the goals of our civilization.**

For the first time we are to plan systematically for the common welfare, no longer for private gain: there is to be a change "from a money economy to a life economy."

Of fundamental importance is Mumford's concept of the geographic region as dynamic social reality. A grasp of this fact, he claims, is the first step toward a constructive planning policy. With the end of *laissez faire* and each-for-himself, the great metropolis—with its huge concentration of individual wealth, its turbid pool of labour—becomes an obsolete liability. The smaller city becomes a nucleus of the geographic region, not a satellite of the swollen metropolis. Political boundaries must be abandoned, first nationally then internationally:

> **The task of modern civilization is to live in a wall-less world.**

* Published by Secker and Warburg. Price 25s.

† Written in 1934: a brilliant study of the machine in its social, cultural and economic aspects.

THE REGIONAL COMFLEX: AGENTS OF REGIONAL DEVELOPMENT

THE Tennessee Valley project, with its fundamental policy of public conservation of power resources, land, forest, soil and stream, in the public interest, is an indication of a new approach to the problems of regional development: an advance in certain ways over those already initiated in New York and Wisconsin. The river valley has the advantage of bringing into a common regional frame a diversified unit: this is essential to an effective civic and social life, and has been overlooked in many schemes of regional development that are erected on the basis of purely homogeneous resources or interests. Regional unity is partly an emergent: a cultural product: a result of co-operative political and economic action. Upland areas, from the Alps to Norway, from the Cascade Range to the Appalachians, are scenes for neotechnic planning with electric power and decentralized industry. In the Tennessee Valley and kindred areas, like the Upper Connecticut Valley, a basis can be laid, not merely for a more efficient industrial order, but for a new social order and a new type of urban environment, provided the requisite political courage and social imagination are collectively brought to bear.

(*Upper Left*) High tension standards, marching across a rough terrain: expressive of the freedom of location that electric power, in contrast to old-fashioned uses of coal and water, carries with it.

(*Upper Right*) Dam and spillway at Norris, Tennessee: power house below: the order and beauty of modern geotechnics. White coal: smokeless cities.

(*Middle*) Upland area in Tennessee: potentially the scene of a more intensive settlement that will conserve rather than blot out the natural foundations for a good and durable social life. Sun, wind, cloud, earth, grass, forest, farm, garden—these are constants in human life that only shrivelled imaginations would displace by mechanical substitutes: but the finer utilizations of these gifts of nature are themselves a product of a higher type of scientific and technical organization. Airplanes and electric lights are but beginnings: the sun-accumulator and the solar engine are already in embryonic existence: we await, among other things, an efficient electric accumulator, ligh. and powerful, to displace the gasoline-driven engine, and a localized domestic method of sewage disposal which will convert sewage into fertilizer. Domestic hothouses capable of supplying fresh vegetables and fruits throughout the year should soon be available where power and fuel are cheap: these things promise a diminishment of wheeled transportation except for travel and association.

(*Bottom*) Top of the Norris Dam, facing the wild park area that has been set aside for recreation.

Mumford's city, his regional nucleus, is a development of the garden city—or *greenbelt town*, to use the more apt American name for it. There is no question here of garden-houses versus town-flats: the new city must "meet the need for concentration (social advantage), for openness (hygienic and biological advantage), and for collective order and beauty: an environment in which the varied needs of the individual and the common life are effectively reconciled." The political issue is made perfectly clear: progress toward new cities with balanced environment and fully equipped social services, can only be achieved by public ownership of the land—all the land. And functional balance in housing implies redistribution of income.

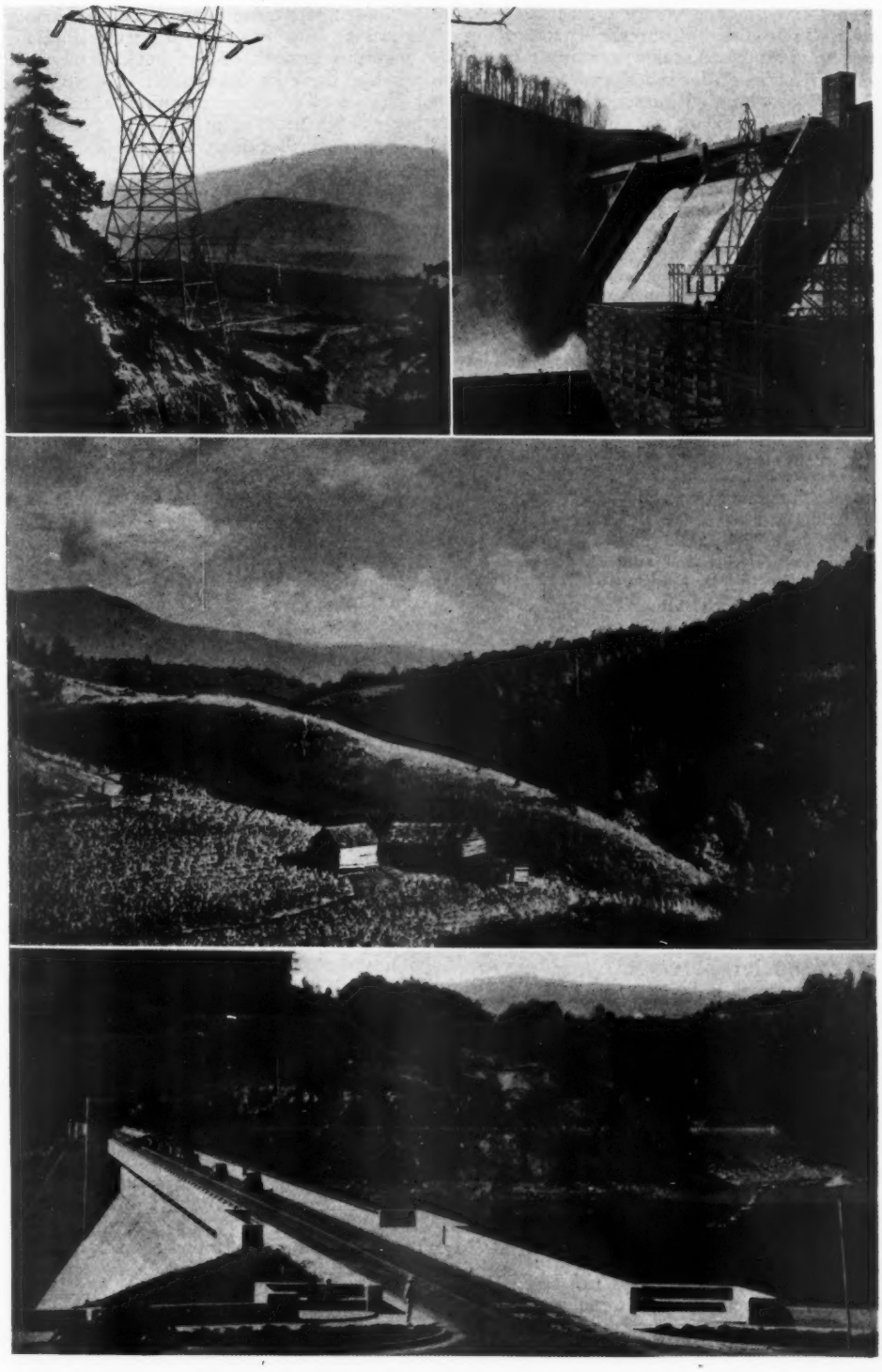
The same healthy social bias pervades the historical survey. One of the most valuable chapters in the book, from the point of view of propaganda, is the whole-hearted debunking of the baroque city which "sacrificed the uses of life to the formalities of plan and elevation." The baroque ideology is with us today. Very much so. It is seen as a constipating formal preconception in house design; as neo-Georgian school façades; as an avenue-vista-monument complex in town improvement schemes. And what is more, the geometric application of planning, "the abstract figure determining the social contents," is still pumped into students in some of our architectural schools.

> **For those on the inside of baroque life, the courtier and the financier, this formal order was in effect organic: it represented the values they had created for themselves as a class. For those outside, it was a denial of reality and a form of oppression.**

Mumford fully recognises the enlightened innovations of the baroque epoch, including the functional landscaping of the countryside, but he takes care not to over-emphasize them.

He reminds those who regard him as revolutionary—and there will be even more of them in the States, where

A typical example of Mumford's photo-caption technique: incidentally, a condensed version of his regional philosophy of planning. Opposite is the reprinted caption.



"rugged individualism" dies hard, than in England—that just over a century ago half of North America was public domain. And not long before that, the New England village was an experimental anticipation of biotechnic city life.

In the seventeenth century the great capitals had begun to absorb population with no effort at limitation. But the New England town during this period ceased to grow beyond the possibility of socializing and assimilating its members: when near crowding, a new congregation would move off under a special pastor, erect a new meeting house, form a new village, lay out fresh fields. Hiving off to new centres discouraged congestion in old ones; and the further act of dividing the land among the members of the community in terms of family need, as well as wealth and rank, gave a rough equality to the members, or at least guaranteed them a basic minimum of existence. Each family had its rights and common lands; each family had fields on the outskirts as well as gardens near their homes; each male had the duty of participating in the political affairs of the town through the town-meeting. A democratic polity—and the most comely and healthy of urban environments: a typical contrast to the despotic order of the dominant baroque city. To describe it is almost to define everything that the absolute order was not.

The New England village is described as a " mutation " from the baroque system : Mumford makes constant and effective use of biological metaphor. Mutations within our present " megalopolitan " framework are the English garden city idea (as opposed to the garden suburb) and the more recent regional planning developments in the States under Roosevelt's new deal, notably the Tennessee Valley Authority. But it is worth noting, as an instance of lack of co-operation between so-called regional planning, town-planning and housing, that this otherwise imaginative venture in large-scale social planning made no attempt to locate greenbelt towns as regional nuclei.*

The importance of this book lies not so much in its effect on town planners and architects (it will preach either to the converted or the deaf), but in its power for enlightenment among the thinking public in every field.

It needs a terrific exertion of social force to overcome the inertia, to alter the direction of movement.

Mumford's thesis cannot be dubbed visionary or nebulous. On the contrary, his concern is emphatically for the immediate possibilities of the growing present. The biotechnic concept is already in the air : we have seen the first fruits of it in pre-Hitler Germany, in England, Russia, America. But though we have proved the idea possible, progress towards it is desperately slow. We have the means : medical science, industrial technics, rapid transit, radio, cinema, psychology, mass production. . . . But we have not yet the common will

it needs a terrific exertion of social force

to achieve the ends. There is a danger that, through inertia, outworn social attitudes will condition future development.

Mumford is a new and valuable species of scholar. His method is scientific, analytical, backed by an astonishing perceptive range. He is no arid rationalist. In fact, for all his precision of thought, he is a straight romantic. In this decade of tenuous intellectualism and phoney psychology, how invigorating to come upon a man whose faith in humanity is firm as a mountain, whose virile utterances are keen and penetrating as the March wind.

It is our responsibility, as architects and planners, to create the physical environment for the renewed social state which Mumford points to as a vital " emergent " in our degenerate civilization. If we are to make this renewal possible, mere intellectual conviction is not enough : it must be our common religion, a passionately shared faith.

* The area controlled by the Tennessee Valley Authority is more than a third of the area of England.

A new biotechnic terminology (the word biotechnic is an example) is part of the vigorous pattern of the book. Mumford has the American habit of coining phrases to condense meaning : a healthy enough habit in a changing world. The evolutionary terms, " eotechnic (dawn age of modern technics), paleotechnic (coal and iron economy), neotechnic (new economy based on electricity) and biotechnic (an emergent economy in which biology will be freely applied to technology)" were originally coined by Geddes. Mumford has coined several more—such as geotect, mechanocentric—which are useful if not so successful phonetically. His occasional lapse into the American habit of over-heavy dramatization is offset by his equally American gift for crisply concentrated metaphor

This book, which diagnoses so competently the world's sickness and prescribes with such inspiring confidence its cure, should earn the label " book of the year " in almost every field of thought.

LONDON FOR THE YOUNG

[*By PHILIP MASSEY*]

London Tells Her Story. By Walter G. Bell. London : George Routledge & Sons, Ltd. Price 6s. net.

MR. BELL points out that children are taught about ancient Rome, Athens and Carthage, but very little about London's history. And for adults " our habit of working with heads down in London and rushing out of it at all times of leisure, does not make the Londoner always the best-informed person in the story of his own city." *London Tells Her Story* is intended, therefore, primarily for boys and girls, but the author hopes that it may have some usefulness for the older reader. He has been in difficulty when asked to recommend a book on the story of London because of their dullness and (often) the inadequate equipment of their writers.

Mr. Bell's equipment is more than adequate (he is a well-known London historian), but in his avoidance of dullness he has unfortunately gone rather far in the opposite direction. No one would wish to see such things as statistical tables or lengthy chronologies of the details of administration in a book of this kind. But it would have been better to have produced more of a history of London and the Londoners, and less of a political history of England with a London " slant." When the history becomes a " history of everyday things," as in the chapter on the medieval city and in several short passages elsewhere, then Mr. Bell, as I see it, is doing what he set out to do ; when he devotes a page or two to an anecdote which appears already in far too many of the history books which are written for children one feels a sense of irritation—and there are a good many of these anecdotes.

The book contains a large number of illustrations of old buildings which are still in existence, and these may serve to bring home to the reader the continuity of London's history and to stimulate further inquiry. But it is unfortunate that greater attention has not been paid to the last hundred years and to the life of the ordinary people, both in the illustrations and in the text. This weighting of the subject-matter, together with the anecdotage already referred to, is likely to leave unimpaired the impression which the orthodox history book implants in the minds of the young—that history is something apart and not " philosophy teaching by example."

MORE COTTAGES

[*By HUGH CASSON*]

The English Cottage. By Harry Batsford and Charles Fry. B. T. Batsford, Ltd. Price 7s. 6d. net.

I AM always rather reluctant to read a book which is illustrated by the sort of pen-and-ink drawings in which the majority of the lines develop into series of dots. It is not just a question of stylistic prejudice. I have found that this type of draughtsmanship is an almost certain indication of prosy curio-hunters and amateur antiquarians.

Although this, the latest in Batsfords' " British Heritage " series, contains many such drawings, they are well counterbalanced by admirably selected photographs. The history of the cottage is traced from medieval times to the nineteenth century, when agriculture was drastically changed by the industrial revolution. Farming became the rather haphazard industry of today, and the organization of village life was broken up. With it disappeared all tradition of craftsmanship and sound building.

The authors appeal for the preservation of such examples of this craftsmanship as still exist, not in the form of forced revivalism, the dead cult of the antique, but as important units in the English scene. Every age has contributed to their creation, and their continuity value is enough to make their preservation a worthy object, even though it may mean more expense than demolition and rebuilding.

The book is concisely and practically written, containing chapters on regional methods of construction and a study of the life of village people through the ages. The whole subject is treated without sentimentality, though you wouldn't think so from the dust cover—brightly designed by that colourful artist, Brian Cook.

Four different finishes for cast iron paving slabs; on the right is a sketch of the back, showing the feet at each corner.

TRADE NOTES

[*By PHILIP SCHOLBERG*]

Testing Electrical Installations

THE testing of electrical installations for continuity and insulation is obviously not the architect's business in that he cannot be expected to carry out the tests for himself. There are, however, certain provisions in the regulations made by the Electricity Commissioners, notably one which prescribes that supply undertakings shall not permanently connect an installation unless they are satisfied that the connection would not cause a leakage exceeding one ten-thousandth part of the maximum current to the installation. There is also a further section which stipulates that supply companies shall not be compelled to give a supply to any consumer unless they are convinced that "all conductors and apparatus are constructed, installed and protected so as to prevent danger." Generally speaking, most of these regulations are covered by the provisions of the Institution of Electrical Engineers, and the average specification generally contains some clause to the effect that the I.E.E. regulations shall be followed, though not very many architects know what these are or how to tell whether they have been followed or not. It is therefore worth while reading two little booklets which have recently been produced by Evershed and Vignoles, one on insulation testing, and one on continuity and polarity testing, this last being to determine whether the switches are in the live side of the circuit. Both of them are quite small, and although they very naturally describe the testing instruments made by this firm, the methods employed are much the same with most of these small test meters, and are generally applicable to the products of other firms. Few architects ever see a proper report on an electrical installation, and fewer still would understand it if they did. These booklets are of educational rather than practical value, but they go a long way towards showing why tests should be carried out and what the results mean.—(*Evershed and Vignoles, Ltd., Acton Lane Works, Chiswick, London, W.4.*)

Iron Paving

Anyone who has ever been to a show at the Agricultural Hall in Islington must have noticed the cast-iron paving slabs in the road outside. The first small experimental area has been several times enlarged, and the slabs seem to wear almost indefinitely, though this is only to be expected when one remembers how extraordinarily hard the skin of cast iron is. True, there is a certain amount of extra noise as compared with an asphalt surface, steel-tyred horse-drawn vehicles being particularly bad. But horse-drawn traffic, at any rate in urban areas, is getting less and less, and at the same time there is a growing tendency to fit the carts with pneumatic tyres, for Dunlops have for some years been busy showing what a lot more a horse can pull when the tractive resistance is lowered by rubber tyres. For bus stops, too, these tiles are specially suitable, since they provide a good non-skid surface for traffic and at the same time a good foothold for pedestrians. The tiles are made triangular on plan with a small foot at each corner, so that they will not rock about if the road foundation is slightly uneven.

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Five different surface finishes are available, including a plain pattern for kitchens and bakeries, or anywhere else that scrupulous cleanliness is necessary. The units can be taken up if road repairs are necessary, and are not liable to be damaged in the process. Prices are reasonable and laying is easy. —(*The Butterley Co., Ltd., Butterley Iron Works, near Derby.*)

Big Business

What with dictaphones, miniature telephone exchanges, coloured lights to say come in or go away, cigarette lighters and what-nots, the desk of the contemporary big business shot looks more like the pilot's seat in an air liner than anything else. I have seen, too, an extraordinary and very expensive machine which looks like a signal gantry at Clapham Junction and which will tell you something frightfully important, only the man who knows how to work it is out. Nobody has so far produced an automatic reminder panel which will say hair cut or manicure at appropriate intervals, but it cannot be far off, and would doubtless sell in fair quantities as long as the price was high enough. I offer the idea gratis to some enterprising maker of synchronous clocks, who could do the job quite easily.

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There are, however, a number of devices which are really quite sensible, and I have just come across a new one which seems to have a good many advantages. It is called the Textophone, and it is a dictating machine which can also be connected to the ordinary G.P.O. telephone system and can record both sides of a telephone conversation as well as dictated letters like the ordinary wax cylinder recording machine. The actual recording mechanism consists of a steel tape running between magnets, and is much the same as the method used by the B.B.C. for recording pronouncements by Prime Ministers and such. A certain number of firms seem to do most of their business by telephone, and it is therefore probably an advantage to have records made so that there can be no opportunity for quarrelling afterwards, while there is much to be said for any device which will prevent messages getting garbled or forgotten while you are away.

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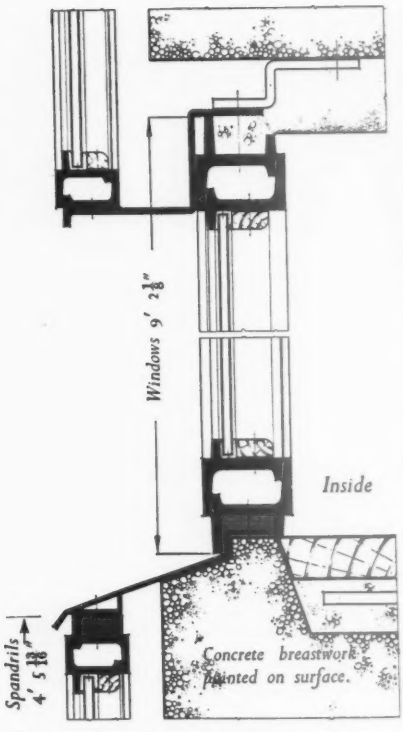
I do not suggest that this is the sort of thing every architect ought to have in his office, but it is to be assumed that quite a number of firms will want to have machines like this installed, and it is therefore up to architects to know what it is all about. The recording part of the machine can be placed more or less anywhere in the building, though it must be fairly easy of access for the steel tapes to be changed when necessary. The cabinets are about the same size as a small radiogram, but the desk fittings for both principal and typist are quite small, taking up about the same space as an ordinary telephone. It is perhaps worth adding that the Postmaster-General has given permission for these appliances to be connected to the telephone system.—(*E. Shipton & Co., Ltd., 24 Broadway, Westminster, London, S.W.1.*)

Pressed Steel

Hopes, having recently extended their factory, are doing pressed steel work of many different kinds, including radiator surrounds, louvred panels and partitions, as well as the more usual doors and frames and window sub-frames which they have been turning out for some time. They are also prepared to turn out work to special order, though with the inevitable high cost of dies the order would have to be pretty big if cost is to be kept to a reasonable figure. A recent catalogue from this firm deals very thoroughly with all the standardized products, and the Hope tradition of superfine draughtsmanship is continued in the excellent drawings which show very clearly how all these should be used. There are also a number of drawings showing how architects have used various sections to do slightly out-of-the-ordinary jobs, notably in the Peter Jones' building, the spandrils and main windows of which are shown in the section on next page, while both Troy Court and Unity House (for the Liverpool Co-operative Society) show interesting treatments of special requirements. In the standard designs few alterations seem to have been made. I notice an improved form of fixing lug used in the steel door frames, for a corrugated tongue has taken the place of the wire loops: this form of fixing is probably not very much firmer, but it should be easier from the point of view of the works, as there is no need to punch a series of slots in the frame and the tongue is a little easier to adjust to exactly the height required on the job. There is also an interesting type of sliding door gear which was supplied to Messrs. Willink and Dod's Central School at Wallasey: here the track is fairly normal, but the door hangers are in rubber composition. Most sliding door gears nowadays are fairly quiet,



Section through spandrils and main windows, Peter Jones' building. See note overleaf.

but there is a slight rumble with even the quietest, and anything which breaks the continuity between the door and the gear will make for quietness. The doors on this job are wood, but the improvement with steel doors should be even more marked as they have quite a considerable sounding-board effect. Hopes have always had the sense to design something that is wanted rather than just something which will sell, and as a result their catalogue is very nearly a text-book of current pressed steel practice.—(*Henry Hope and Sons, Ltd., Halford Works, Smethwick, Birmingham.*)

The Kingston Current Failure

The electrical papers are somewhat concerned over the recent current failure in the Kingston area, quite rightly pointing out that electricity is now used for so many purposes that any failure has much more severe results than in the days when electricity was used for lighting only. The cause of the trouble seems to have been a human error which destroyed a switch, the resultant fire damaging the 11,000-volt switchboard and rendering it unfit for use, so that other arrangements had to be hurriedly improvised before the current could be restored. The authorities seem to have rallied round pretty efficiently, but high voltage connections are not quite the same thing as mending a fuse in the basement, and the supply was interrupted for a considerable period. The remedy, of course, is to separate the various components of the power station so that a fire in one unit cannot destroy the rest of the plant, or any other essential part of it, and to arrange that duplicate supplies do not have to pass through a bottle-neck of switchgear which may be destroyed by fire or some other cause. It is probably not the function of this JOURNAL to lay down the law on the planning of power stations, but anyone interested in the problem can find most of the story in the *Electrical Review* for December 23.

Manufacturers' Items

The Holophane "Built-In" lighting system is based on the power of a prism to control light, and makes use of special prismatic plates built flush into the fabric of a building as a modern style of efficient lighting. The system was designed on a unit principle to enable fittings of various dimensions to be constructed. This unit principle has now been used in the lighting scheme at the new Corporation Swimming Bath, Wakefield. A photograph of this building is reproduced on this page.

The lighting scheme of the new bath was by means of three rows of Holophane "Built-In" Controlens fittings. These units were mounted flush with the ceiling. The centre row comprises 15 plate units, each equipped with 150-watt lamps, whilst the side rows comprise nine lens plates, each equipped with 150-watt lamps.

The average lighting intensity measured in different places throughout the main bath shows a reading of 17½ ft. candles which, state the manufacturers, must be one of the highest intensities yet achieved for such a type of building. Underneath the gallery of the main bath there are installed a number of Holophane "Widerlite" bulkhead fittings.

The lighting scheme was prepared by the technical department of Holophane, Ltd., in conjunction with the borough architect's department, Wakefield, with Mr. H. White, of the Corporation electricity department, as consulting electrical engineer. The electrical contractors were H. Smith, Church Institution, Westgate, Wakefield.

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Messrs. John Laing & Co., Ltd., have just purchased 500 acres of industrial and residential land at Elstree.

When this neighbourhood was planned for industry, it was expected that it would be covered with film studios, and in the district there are a number of these, but film studio development provides largely spasmodic employment.

Messrs. Laing, in contrast to this, are developing the industrial area which they control for stable industries which will give regular employment to the workers.

The district lends itself in almost a unique manner for this development, being situated on the main artery between London and the important Midland towns, with some miles of frontage to this artery; also adjoining the main line of the London Midland and Scottish Railway, being within the free delivery area of this railway and also the London and North Eastern Railway.

In order to ensure a development which will be probably one of the most attractive industrial schemes in the country, Messrs. Laing have entrusted the architectural control of the factories on the west side of the Barnet by-pass to Messrs. Wallis, Gilbert and Partners. The architectural control of the domestic development on the east side of the road is in the hands of Mr. C. M. Crickmer, F.R.I.B.A.

The foundation stone was laid by Sir Godfrey Baring, Bt., Chairman of the Institute, on January 5, for the new factory which is being erected for the Royal National Lifeboat Institution at Elstree. The architect is Mr. Herbert Kenchington, F.R.I.B.A.

Factories have already been built on the site for the manufacture of cosmetics, side-cars, plastic jointing, babies' toys, aircraft accessories and paint products, etc.

Although Messrs. Wallis, Gilbert and Partners have control of the factory development on the main frontage, factory owners are encouraged as far as possible to employ their own architects to work in collaboration with the estate architects.

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An interesting ceremony took place during this year's Tucker panto-night on December 30 at the Theatre Royal, Birmingham, when Miss Evelyn Laye presented on behalf of the directors of Messrs. J. H. Tucker & Co., Ltd. a gold watch as mark of appreciation to sixteen employees—three ladies and thirteen gentlemen—each of whom had, during 1938, completed 25 years' continuous service with the company.

In addition to the 16 with 25 years' service mentioned above, there are 24 with over 20 years' service to their credit, 57 with over 15 years, and 97 with over 10 years.

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Housecraft is one of the most important branches of education today as far as girls are concerned (many people think that boys too should have a working knowledge of cookery and the management of a house); and the Board of Education has laid down a number of recommendations regarding the planning and equipment of domestic science classrooms. One of the most interesting of these is the provision in schools of "housewifery flats," comprising

The main bath of the new Corporation Swimming Bath, Wakefield. See note on this page.

kitchens and other rooms of a size comparable with those in an ordinary house. Here, the children, in surroundings similar to those in their own homes, can gain a very useful practical knowledge of home-running.

In the equipment of these rooms and the main classrooms naturally gas appliances play an important part. It is obvious that, by using the type of equipment they are most likely to meet in after-life, the pupils will get the most useful training, and gas nowadays is to be found carrying out various useful purposes in more than ten million homes in this country.

Gas equipment for cooking and home laundry, as well as for water heating and other purposes, figures prominently therefore in an illustrated booklet, *Domestic Science Classrooms : Planning and Equipment*, just published. Everyone interested in this branch of education should obtain a copy of this publication, which is a valuable guide to the planning of domestic science classrooms on the lines of the Board of Education's recommendations. It is produced by the British Commercial Gas Association, Gas Industry House, 1 Grosvenor Place, S.W.1, from which body copies can be obtained free of charge, or application can be made to any gas undertaking.

TIMBER HOUSE, HULL

A general view of the timber house recently opened at Hull by Major W. H. Carver, M.P. The architect is Mr. Roper Spencer

GROUND AND FIRST FLOOR PLANS

LAW REPORTS

FIRE ESCAPE STAIRCASE DISPUTE

Horton v. *Town Investments, Ltd.—Chancery Division. Before Mr. Justice Simonds*

THIS was a motion by Mr. Walter Thomas Horton to restrain the defendants from commencing the demolition of No. 247 Vauxhall Bridge Road till they had provided a temporary means of escape in case of fire.

The plaintiff is the owner of adjoining property, and he has erected an hotel on the site at an expenditure of £30,000, having some 65 rooms. On the adjoining premises defendants also proposed to erect an hotel, and there had to be a fire escape staircase. Under these circumstances there were negotiations between the parties and it was arranged that there should be one fire escape stairway from the defendants' premises to plaintiff's, and that plaintiff would pay the cost.

Mr. Romer, K.C., for the plaintiff, complained that the defendants had not taken the proper steps to protect the plaintiff's interests. A licence had been given by the L.C.C., but it might be determined at any time or in a year's time. There might be an abandonment by the defendant of his proposal or other causes to prevent the building being put up within the year. Such a result would be a serious matter to the plaintiff.

Counsel read an affidavit by Mr. Griffiths, F.R.I.B.A., stating that the L.C.C. had consented to the erection of the staircase of steel and wood. A licence for a definite period was granted and it might be extended.

Plaintiff now asked for an injunction restraining the defendants from commencing the demolition of their premises until they had provided, to the satisfaction of those concerned, temporary means of escape in case of fire from plaintiff's building, and had obtained a licence until defendants' new building was completed.

Mr. Gover, K.C., for the defendants, argued that there was a common mistake under the agreement and that therefore his clients were not bound by it. The defendants' whole interest was to get their building erected and not run any risks. Defendants had done everything possible and performed their obligations as far as possible, and there was no risk to the plaintiff.

His lordship, in giving judgment, said the defendants undertook to provide a temporary means of escape from the plaintiff's premises, and to obtain the licences necessary for such staircase. The dispute centred around the obligation by the defendants to obtain and deliver to the plaintiff licences and permits permitting the staircase to remain till the completion of defendants' new building. That obligation had not been performed. The licence issued by the L.C.C. gave approval to the structure subject to certain conditions that the period during which it will be allowed to remain will be till November, 1939, or the completion of the new building, whichever would be the earlier, and that then the stairs will be removed if the licence was not extended.

With regard to the argument that there was a common mistake in regard to the licence that was to be obtained, he did not agree that such was the case. He granted the injunction with costs.

ACTION AGAINST AN ESTATE CO.

Smith v. *Barkhill Estates, Ltd.—King's Bench Division. Before Mr. Justice Greaves-Lord.*

THIS was an action by Mrs. Elizabeth Smith, of Mosley Hill, Liverpool, against Barkhill Estates, Ltd., of Liverpool, to recover damages for alleged negligence and breach of contract and duty in and about the erection of a house.

Mrs. Smith's case was that the defendants erected a house for her at Abbotsbury Avenue and she paid them the sum of £499, and she now alleged that the land upon which the house stood was not adequately filled in and that it was unsuitable to carry the building without subsidence.

The defence was a denial of the plaintiff's allegations.

His lordship, in giving judgment, said it appeared that in July, 1936, the plaintiff agreed to buy a plot of land and a house to be erected upon it from the defendants, and they in their turn undertook to erect and complete a house in good and workmanlike manner. The plaintiff was in doubt about her plot of land, but she was assured that it was a suitable site. In April, 1937, plaintiff went into possession and she soon complained of the damp. There had been a leak from a pipe in the front of the house, but the Corporation had remedied the defect, and his lordship was satisfied that the dampness noticed previously was not caused by this pipe. By the end of 1937 cracks began to appear in the walls, and the attention of defendants was called to it. The defendants blamed the Corporation for the dampness, but his lordship was satisfied that the Corporation's pipe was not the cause of the settlement of the house. The plaintiff had alleged that the house had been built on a concrete raft supported by only two pillars in the centre. Proceeding, his lordship said such a raft was unsatisfactory and unless the whole of it were supported by solid ground it appeared that it was certain it would break. The defendant company suggested that this method of construction was prescribed by the building surveyor, but the fact was that it was suggested by the defendant company and approved by the surveyor. Bearing in mind the history of

the land (which contained many pits, which had been filled up with household rubbish), his lordship came to the conclusion that the nature of the subsoil was very unsatisfactory and that the site was one where houses should have been erected with great care.

In his lordship's opinion, having regard to the site, the defendant company had failed to safeguard the house and they had not constructed it in a good and workmanlike manner, and further, they had failed to erect it similar to another house they represented to the plaintiff, the foundations of which were on solid ground.

Under these circumstances the defendant company had failed to comply with their implied warranty. The house was not fit for habitation and would cost a substantial amount to repair, as the walls were fractured.

The matter would be referred for inquiry as to the amount of damages the defendant company must pay to put the house into proper condition, and the defendant company must pay the costs of the action.

Decay of Soft Woods

DESCRIPTIONS of 26 of the principal fungi which cause decay in soft woods used commercially in Great Britain, notes on their economic importance, and a key by which they may be identified are contained in a Forest Products Research publication* issued recently by the Department of Scientific and Industrial Research. "The timbers from coniferous trees," the report states, "as a class must be considered as only moderately resistant to fungal decay and insect attack, though there are a few important exceptions to this general statement. Of the commercial softwoods commonly used in this country, only two or three species can be considered as sufficiently durable for use in an untreated condition in exposed situations." Among species very resistant to decay, listed in the report, are yew, cedars, Californian redwood and Southern cypress. Though the basis of resistance to decay is probably mainly chemical and due to the presence of substances in the wood poisonous to fungi, the physical nature of the wood undoubtedly has a considerable influence on its durability. Obviously a very dense wood has more resistance than a light, porous one of the same chemical composition. Again, practically no very light-coloured soft woods (such as spruces and firs) are durable. Those species which have a definitely coloured heartwood are, on the whole, the more durable.

Damage to growing conifers occurs either as the result of fungal infection introduced through a broken branch or a wound in the stem leading to rotting of the trunk, or from butt rots in which infection enters through dead or diseased roots.

After trees have reached a certain age, which varies with the species concerned, they become very much more liable to heart rot and may then be described as overmature. For instance, it has been shown that the percentage of decay in Douglas fir in Oregon increases very definitely with increasing age of the trees, and that in trees somewhere between 300 and 350 years of age the loss resulting from decay equals the growth increment and from then on exceeds it.

The Report states that the fungus known as *Fomes annosus* is responsible for more damage in plantations of conifers than all the heart-rotting organisms put together. Another troublesome fungus, which can also cause decay in felled timber, is known as honey fungus (*Armillaria mellea*). This fungus can often be traced to old, decaying stumps.

"Decay," the Report states, "should never develop in properly stacked timber, but sap-stain often appears even when the timber is properly piled with adequate ventilation around the boards. To ensure that the sapwood remains bright and free from stain and mould, it is often necessary, particularly when the temperature and the atmospheric humidity tend to be high, to dip the freshly sawn boards in an antiseptic solution."

While creosote is an enemy to most fungi, there is one, *Lentinus lepideus*, which does not object to the presence of considerable amounts of creosote in the wood. It is the most important fungus causing decay in railway sleepers, telegraph poles, and woodpaving blocks. If the spores of the fungus, the Report continues, can gain access through cracks to untreated wood in the interior of the timber, decay will spread throughout the whole piece. Sleepers may therefore appear superficially sound while the interior is extensively decayed.

In order to obtain sufficient penetration of preservatives, it may be necessary to incise certain timbers. Paving blocks must also be treated with the preservative under pressure and not merely dipped or steeped in the creosote, as the wear of traffic on the blocks will soon expose untreated wood unless the preservative has penetrated several inches into the wood.

The fungus most dangerous to mine timber is *Poria Vaillantii*. It can rot pit-props in damp airways with amazing rapidity, often rendering them useless in less than a year. It produces great masses of growth, which run over the surface of the rock or coal face, infecting the neighbouring props; frequently it develops great tassels, which hang down for several feet.

This fungus can also cause decay in buildings where leakage of water has occurred, but unlike the more important dry rot fungus, *Merulius Lacrymans*, it cannot spread to the dryer parts of the building or penetrate deeply into the brickwork.

Every year, many thousands of pounds' worth of timber are unnecessarily lost through decay caused by fungi. Properly seasoned timber, however, which is kept either dry in use or treated with preservatives is a most durable material since it does not deteriorate with age alone.

* *The Principal Decays of Soft Woods used in Great Britain.* H.M. Stationery Office, 2s. 6d. net.

The results were announced last week of the competition for West Riding architects organized by the West Riding Brick Manufacturers Limited for a design for their stand at the Yorkshire Post *Building Exhibition which opens at the Fenton Street Drill Hall, Leeds, on January 18. The competition was assessed by the President of the West Yorkshire Society of Architects, Mr. F. L. Charlton, F.R.I.B.A., and the first premium of £25 has been awarded to Messrs. Frank Booth and E. Allan Heppenstall, whose joint design will be used in the construction of the Company's stand. The design is reproduced above.*

The second premium of £15 was awarded for the joint design submitted by the Head of the Leeds School of Architecture, Mr. J. S. Allen, B.Arch., A.R.I.B.A., M.T.P.I., and the two principals, Mr. F. W. H. Allison, A.R.I.B.A., and Mr. J. R. Tolson, Dip. Arch., A.R.I.B.A., while the third premium of £10 was won by a fourth-year student at the school, Mr. Sam Brown.

THE BUILDINGS ILLUSTRATED

FINSBURY HEALTH CENTRE (pages 48-53). Architects: Messrs. Tecton. The general contractors were Patman and Fotheringham, Ltd., and the sub-contractors and suppliers included: Road Foundation Co., Ltd., demolition; J. L. Kier & Co., Ltd., foundations and glass brick; Permanite, Ltd., asphalt and roofing felt; Carter & Co., Ltd., external tiling; Ramsdens, internal tiling; V. Naudeau, Ltd., glass bricks; Thermolux Glass Co., Ltd., glass; G. N. Haden and Sons, Ltd., panel heating, boilers, electric wiring and heating, ventilation, bells and internal telephones; Gas Light and Coke Co., Ltd., gasfitting; Davis Bennett & Co., Ltd., sanitary fittings; Carraratile, Ltd., terrazzo stairtreads; Oscar Kanter, Ltd., Wehag door furniture; Williams and Williams, Ltd., casements, window furniture and metalwork; London Telephone Co., telephone; F. A. Norris & Co., Ltd., folding gates and iron staircase; Hill and Smith, Ltd., folding gates; Haywards, Ltd., rolling shutters; Tidmarsh and Sons, sunblinds; John Hull and Sons, Ltd., dark-room blinds; D. Sebel & Co., Ltd., metalwork; L. E. Vigar and Son, Ltd., and H. Mills and Sons, Ltd., joinery; F. G. White & Co., Ltd., carved crest and marble;

Oetzmann, Ltd., curtains ; Maple & Co., Ltd., carpets ; United London Workshops for the Blind, mats ; Roneo, Ltd., office furniture and fittings and lockers ; Synchromatic Time Recording Co., Ltd., clocks ; Harris the Sign King, external signs ; Baker and Son, internal signs ; Photographic Spraying Co., Ltd., map in entrance hall ; Aveling-Barford, Ltd., disinfecting equipment ; Watson and Sons, electrical treatment equipment and X-ray equipment, X-ray combined couch and screening stand : Newton and Wright, Ltd., X-ray equipment and X-ray high tension units ; L. Porro, Ltd., dental equipment ; International Refrigerator Co., Ltd., mortuary refrigerator ; Kinematograph Equipment Co., Ltd., cinema screen ; British Vitrolite Co., Ltd., mirrors and vitrolite shelves and backings ; Frigidaire, Ltd., refrigerator ; Minimax, Ltd., fire extinguishers ; New Light Fittings, Ltd., Oswald Hollmann, Ltd., General Electric Co., Ltd., Ascog, Ltd., Troughton and Young, Ltd., and Best and Lloyds, Ltd., electric light fixtures ; Art Metal Construction Co., Ltd., Pel, Ltd., Tan-Sad Co., Ltd., office furniture and fittings ; Thonet Bros., Ltd., Finmar, Ltd., Kingfisher, Ltd., and Frederick Parker and Sons, Ltd., furniture ; Stic B Paint Sales, Ltd., external paint finish ; Medical Supply Association, Ltd., general medical equipment ; Sumerling & Co., Ltd., Rosebery Metal Works Co., A. L. Hawkins & Co., Ltd., C. F. Thackray, Ltd., and Allen and Hanbury, Ltd., trolleys, cabinets, operating table, stools, drums, electric sterilizers, miscellaneous medical equipment ; Willen Bros., foot clinic equipment ; A. L. Hawkins & Co., Ltd., urological chair ; Shanks & Co., Ltd., mortuary slabs.

THE WEEK'S BUILDING NEWS

LONDON

BETHNAL GREEN. *Housing.* The L.C.C. is to prepare a scheme for the re-development of the Bethnal Green area by the erection of over 900 dwellings.

CROYDON. *Houses, etc.* Plans passed by the Croydon Corporation : 23 houses, Norbury Station Estate, off Green Lane, B. G. Utting & Co., Ltd. ; 14 houses, Palace View and Annesley Drive, Bennett, Worskett & Bennett.

DEPTFORD. *Housing.* The L.C.C. is to erect 150 dwellings on the Tanners Hill area, Deptford, at a cost of £93,740.

GREENWICH. *Hospital Extensions.* The L.C.C. is to construct sanitary annexes at St. Alfege's Hospital, Greenwich, at a cost of £13,580.

ILFORD. *Houses, etc.* Plans passed by the Ilford Corporation : 32 houses, Chadacre Avenue, and 20 houses, Mellows Road, Lord and Mellodew, Ltd. ; eight houses, 14–26 and 5 Budock Drive, Mr. J. T. Perrin ; 29 houses, Chalgrove Crescent, Mr. B. C. Tappin ; six houses, Stoneleigh Road, Hurstwell & Co. ; 32 maisonettes, 43–73 Brunswick Gardens, 12 houses, three bungalows and 18 maisonettes, 2–20 and 15–35 Merlin Grove, Davis Estates, Ltd. ; 41 houses, Franlyn Gardens, etc., Mr. W. M. Edwards : 13 shops and flats, Cranbrook Road, Knight & Co.

LEWISHAM. *Shops, etc.* Plans passed by the Lewisham B.C. : 18 shops and flats over, Randlesdown Road, Bellingham, Varley Estates, Ltd. ; two blocks of flats, adjoining 174 Grierson Road, Brockley, Mr. J. Giles.

LEWISHAM. *A.R.P. Buildings.* The Lewisham B.C. recommends a scheme for provision of buildings for use as a first-aid post, storage purposes and as depot accommodation for repair and decontamination parties, etc., at a cost of £41,500.

ROTHERHITHE. *Hospital Improvements.* The L.C.C. is to improve and enlarge the St. Olave's Hospital, Rotherhithe, at a cost of £17,225.

TOTTENHAM. *Flats.* The Tottenham Corporation is to erect 42 flats in Falconer Road at a cost of £27,350.

WEST HAM. *Tenements.* The West Ham Corporation is to erect 44 tenements in C. n Road, at a cost of £29,884.

PROVINCES

ASHBY DE LA ZOUCH. *Houses.* The Ashby de la Zouch R.D.C. is to erect 77 houses in various parishes, at a cost of £35,230.

BARNSLEY. *Baths.* The Barnsley Corporation has approved an estimate of £36,500 for the provision of new public baths.

BARNSLEY. *Hospital Enlargement.* The Barnsley Corporation is to enlarge St. Helen Municipal Hospital, at a cost of £27,000.

BARNSLEY. *Houses.* The Barnsley Corporation is to erect 74 houses on the New Street clearance area.

BEDFORD. *School Extensions.* The Bedford Education Committee has approved plans by Mr. de Soissons for extensions at Silver Jubilee Infants' School, at a cost of £7,150.

BEDFORD. *School.* The Bedford Education Committee has approved plans by Mr. M. J. Slater, A.R.I.B.A., for the erection of a junior school at Kingsbrook, at a cost of £31,000.

BEXHILL. *School.* The Bexhill Education Committee has approved plans for the new senior school at a cost of £61,620.

BIRKENHEAD. *Flats, etc.* Plans passed by the Birkenhead Corporation : 18 flats, Rose Mount ; 20 houses, Wirral Way.

BLACKPOOL. *Houses, etc.* Plans passed by the Blackpool Corporation : Six houses, Ryldon Place, A. & G. R. Fletcher ; six houses and shops, Devonshire Road, R. Fielding and Son ; 10 houses, St. Luke's Road, J. Birtwistle, Ltd. ; 12 houses, Clifton Drive, Mr. W. H. Airey ; 14 houses, Hathaway, Mr. H. Eckersley ; 12 houses, Galway Avenue, R. Fielding and Son.

BLACKPOOL. *Houses.* The Blackpool Corporation is to erect 106 houses in St. Walburga's Road.

BLACKPOOL. *Houses.* The Blackpool Corporation is to erect 64 houses by direct labour, at Bristol Avenue.

BOOTLE. *Flats.* Plans passed by the Bootle Corporation : 28 flats, Breeze Hill.

BOSTON. *Houses.* The Boston R.D.C. is to erect 58 houses in various parishes, at a cost of £21,845.

BOURNEMOUTH. *Health Centre.* The Bournemouth Corporation is to prepare plans for the erection of a health centre in Stewart Road. The cost is estimated at £5,800.

BRENTWOOD. *Cottages.* The Essex C.C. is to erect staff cottages at the Brentwood mental hospital at a cost of £5,663.

BRIGHTON. *Houses.* The Brighton Corporation recommends the erection of 266 houses on the East Moulsecoomb Estate by direct labour, at a cost of £105,584.

BRISTOL. *Housing.* The Bristol Corporation has purchased 112 acres at Horfield for housing schemes.

CHELMSFORD. *Houses.* Plans passed by the Chelmsford Corporation : 20 houses, Second and Third Avenues, H. Jackson & Co.

CHELTENHAM. *Houses, etc.* Plans passed by the Cheltenham Corporation : 20 blocks of maisonettes, off Brooklyn Road, Melville and Webber ; 58 houses, off Brooklyn Road, Pye Bros.

CHELTENHAM. *Town Hall Extensions.* The Cheltenham Corporation has approved a revised town hall extension scheme, at a cost of £91,412.

CHEPPING WYCOMBE. *School.* The Chepping Wycombe Education Committee is to erect an elementary school at a cost of £56,070.

CHESTER. *Houses.* Plans passed by the Chester Corporation : 48 houses, The Drive and Sedgeley Road, Blacon, Mr. E. R. Gorst.

COVENTRY. *School.* The Coventry Education Committee is to erect a secondary school at Stoke at a cost of £55,886.

CRANBROOK. *Houses.* The Cranbrook R.D.C. is to erect 62 houses on various parishes at a cost of £20,903.

DURHAM. *Houses.* The Durham R.D.C. is to erect 268 houses in six parishes, at a cost of £98,762.

ENFIELD. *Flats, etc.* Plans passed by the Enfield U.D.C. : Eight houses and 86 flats, Sunny Road, etc., Mr. R. Bohan.

ESHER. *School.* The Surrey Education Committee has obtained sanction for a loan of £54,558 for the erection of a central school in Esher.

HONITON. *School.* The Devon Education Committee is to erect an elementary school at Honiton, at a cost of £34,956.

HORNCHURCH. *School Extensions.* The Essex Education Committee has approved plans for extensions at South Hornchurch junior school at a cost of £10,931.

KEIGHLEY. *Houses.* Plans passed by the Keighley Corporation : 12 houses, Whitley Road, etc., Hird Bros. & Co., Ltd.

KENTON. *School.* The Roman Catholic authorities are to erect a new R.C. senior school in Kenton for about 450 children.

KIDDERMINSTER. *School Extensions.* The Kidderminster Education Committee is to enlarge the Foley Park School, at a cost of £5,440.

MANCHESTER. *Flats.* The Manchester Corporation is to erect 248 flats on the Miles Platting clearance area.

MANCHESTER. *School Enlargement.* The Manchester Education Committee is to enlarge Old Hall Drive Municipal School, at a cost of £42,963.

MANCHESTER. *Schools.* The Manchester Corporation has approved sites for three elementary schools in Wythenshawe.

MANCHESTER. *Houses.* The Manchester Corporation is to erect 18 houses in Parkside Road, Wilbraham.

MANNINGTREE. *School Extensions.* The Essex Education Committee has approved plans for the enlargement of the Manningtree school at a cost of £8,204.

PLYMOUTH. *School Reconstruction.* The Plymouth Education Committee has obtained sanction for a loan of £54,432 for the reconstruction of Montpelier school.

RAWTENSTALL. *Houses.* Plans passed by the Rawtenstall Corporation : 16 houses, Clayton Avenue, G. Clayton and Sons, Ltd.

REDCAR. *Houses.* The Redcar Corporation has obtained sanction to borrow £10,856 for the erection of dwellings for aged persons.

REDCAR. *Fire Station.* The Redcar Corporation has prepared plans for a centralized fire station at a cost of £16,450.

ROTHERHAM. *School.* The Rotherham Education Committee is to erect an open-air school for physically defective children in East Bawtry Road, at a cost of £27,215.

ROTHERHAM. *Houses.* Plans passed by the Rotherham Corporation : 34 houses, Watson Road, etc., Mr. W. J. Broadhead.

RUGBY. *College.* The Warwickshire Education Committee is to erect a college of technology at Rugby, at a cost of £70,200.

SALFORD. *Flats.* The Salford Corporation is to erect flats in Orsdall Lane at a cost of £11,873.

SEDGLEY. *Houses.* Plans passed by the Sedgley U.D.C. : 26 houses, off Coton Road, Brookes and Son.

SHEFFIELD. *Houses, etc.* Plans passed by the Sheffield Corporation : Eight houses, Walders Avenue, Mr. T. Barker ; six houses, Furniss Avenue, Mr. W. Redmile ; eight flats, Roe Lane, Mr. F. Dey ; 32 houses, Stradbroke Road, Mr. F. Sayles.

STOKE-ON-TRENT. *Houses.* Plans passed by the Stoke-on-Trent Corporation : 14 houses, Riverside Road, Trent Vale, for Mr. H. W. Cartlidge ; 16 houses, Pool Street, Fenton, for Mr. G. Pennell ; 14 houses, Grove Road, Fenton, for Mr. J. B. Thompson ; 18 flats, Uttoxeter Road, Meir, for Modern Architectural Estates, Ltd. ; 19 houses, off Spring Garden Road, Longton, for Messrs. Holloway & Co. ; 36 houses, Charles Street, Longton, for Messrs. W. C. Beech & Co.

TYNEMOUTH. *Gymnasium.* The Tynemouth Education Committee is to erect a gymnasium for the Linskill senior school at a cost of £5,617.

TYNEMOUTH. *Bungalows, etc.* The Tynemouth Corporation is to erect bungalows and conveniences at Long Sands at a cost of £3,274.

WALLSEND. *Houses.* Plans passed by the Wallsend Corporation : 32 houses, Low Willington Farm Estate, Mr. D. Gateshill.

WARRINGTON. *School.* The Warrington Education Committee has obtained a site on the Long Lane estate for the erection of an elementary school.

Copies of the loose supplement containing the labour rates for the principal towns and districts throughout the country can be obtained from the JOURNAL, price 2d. to cover postage.

PRICES

ON the following pages appears Prices of Materials —Part I, with the prices, last published on December 15, brought up to date.

Immediately below, Messrs. Davis and Belfield mention the principal changes which have occurred in the last month. Similar notes will be published on this page each month.

NOTES ON PRICE CHANGES

Prices generally remain at about the same level. Such changes as have occurred are marked as indicated below.

O. A. DAVIS, F.S.I.

• *Items marked thus have risen in price since last quotation on December 15.*

* *Items marked thus have fallen in price since last quotation on December 15.*

★ *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 will consist 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.

★ ***The previous complete Supplement is contained in the issues of the JOURNAL for December 15, December 22, December 29 and January 5.***

Prices vary according to quality and the quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit.

PART 1

CURRENT MARKET PRICES OF MATERIALS—I

BY DAVIS AND BELFIELD

CONCRETOR

Cements

All delivered in paper bags (20 to the ton) free and non-returnable.

		4 Tons and over	In 80-ton freights F.A.S. Safe Wharf in River Thames, London Area.
Portland	per ton	42/–	39/6
Rapid hardening	per ton	48/–	45/6
Water repellent	per ton	72/–	—
Atlas White (1 barrel 376 lbs.)			per barrel 44/– 1 ton upwards
Colorcrete rapid hardening, Nos. 1 and 2		per ton	69/–
Colorcrete non rapid hardening		per ton	139/– to 309/–
Snowcrete		per ton	175/–

	1–10 cwts.	11–15 cwts.	16–20 cwts.	1 ton and upwards
Ciment Fondu, delivered Central London area per cwt.	7/9	7/3	6/–	6/–

Aggregate and Sands (Full Loads)

2″ Unscreened ballast	per yard cube	5/9
¾″ (Down) Washed, crushed and graded shingle	per yard cube	6/–
¾″ (Down) Ditto	per yard cube	7/3
2″ Broken brick	per yard cube	10/6
¾″ Ditto	per yard cube	11/9
Washed pan breeze	per yard cube	5/3
Coke breeze 1″ to dust	per yard cube	12/6
$\frac{1}{16}$″ Sharp washed sand	per yard cube	8/–
White Silver Sand for white cement (one ton lots)	per ton	25/–

(For Sands for Bricklaying and Plastering see respective trades)

Pavings

Brick hardcore	per yard cube	2/9
Concrete ditto	per yard cube	3/9
Clean furnace clinker and boiler ashes	per yard cube	3/3
Coarse gravel for paths	per yard cube	6/9
Fine ditto	per yard cube	9/6
Clean granite chippings	per ton	18/6
Red quarry tiles, 6″ × 6″ × $\frac{1}{2}$″	per yard super	6/–
Buff ditto, 6″ × 6″ × $\frac{1}{2}$″	per yard super	6/6
Hard red paving bricks	per 1,000	150/–

Reinforcement

*Basis price for mild steel rods, ¼″ diameter and upwards, from London stocks	per ton	£13 0 0
Extras for :—		
$\frac{1}{16}$″ and ⅛″ diameter	per ton	10/–
$\frac{7}{16}$″ diameter	per ton	15/–
⅜″ diameter	per ton	20/–
$\frac{7}{16}$″ diameter	per ton	30/–
½″ diameter	per ton	40/–
$\frac{9}{16}$″ diameter	per ton	60/–
Lengths of 40 ft. to 45 ft.	per ton	10/–
Lengths of 45 ft. to 50 ft.	per ton	15/–

CONCRETOR—(*continued*)

Sundries

Retarding liquid, in 5-gallon drums (for exposing aggregate) per gallon	20/–	Ex Warehouse, Southwark Bridge. Drums chargeable and credited, if returned.
Ditto. (for obtaining a bond) per gallon	12/6	

BRICKLAYER

Common Bricks

Rough stocks	per 1,000	67/6
Third stocks	per 1,000	52/6
Mild stocks	per 1,000	69/6
Sand limes	per 1,000	50/–
* Phorpres pressed Flettons	per 1,000	46/8
* Phorpres keyed Flettons	per 1,000	48/8
Blue Staffordshire wirecuts	per 1,000	160/–
Lingfield engineering wirecuts	per 1,000	95/–
Breeze fixing bricks	per 1,000	57/6
Firebricks, best Stourbridge 2½″	per 1,000	155/–
Firebricks, best Stourbridge 3″	per 1,000	190/–

* At King's Cross. For delivery in W.C. district add 4/3 per 1,000.

Facing and Engineering Bricks

Sand Limes, No. 1	per 1,000	85/–
Sand Limes, No. 2	per 1,000	70/–
* Phorpres rustic Flettons	per 1,000	66/8
Midhurst Whites	per 1,000	75/–
Hard stocks, firsts	per 1,000	98/–
Hard stocks, seconds	per 1,000	86/–
Sand-faced, hand-made reds	per 1,000 from	115/–
Sand-faced, machine-made reds	per 1,000 from	110/–
Red rubbers (9½-in.)	per 1,000	300/–
Hunziker (white)	per 1,000	67/6
Hunziker (creams, light greys etc.)	per 1,000	from 85/– to 100/–
Dunbricks (concrete), multi reds, ex works	per 1,000	72/–
Dunbricks (concrete), multi lavender, ex works	per 1,000	75/–
Southwater engineering No. 1 (first quality red pressed)	per 1,000	145/–
Southwater engineering No. 2 (second quality red pressed)	per 1,000	125/–
Blue pressed	per 1,000	180/–

* At King's Cross. For delivery in W.C. district add 4/3 per 1,000.
Discount if accompanied by order for pressed 2/– per 1,000.

*** Items marked thus have fallen since December 15.**

CURRENT PRICES

BY DAVIS AND BELFIELD

BRICKLAYER AND DRAINLAYER

BRICKLAYER—(*continued*)

White, Salt and Coloured Glazed Bricks (9″ × 4½″ × 2⅝″)

The following prices are subject to 2½ per cent. trade discount and 2½ per cent. cash discount, and include delivery to any railway station (minimum 4-ton loads). Add 10/– per 1,000 for delivery in London area.

Prices per 1,000	White, Ivory and Salt Glazed				Buff, Cream and Bronze	Other Colours	All Colours	
	Best		Seconds		Best	Best	Seconds	
	£	s. d.	£	s. d.	£ s. d.	£ s. d.	£	s. d.
Stretcher, glazed one side ..	24	0 0	22	0 0	26 0 0	29 10 0	23	0 0
Header, glazed one end	23	10 0	21	10 0	25 10 0	29 0 0	22	10 0
Double stretcher, glazed two sides	32	10 0	30	10 0	34 10 0	38 0 0	31	10 0
Double header, glazed two ends	29	10 0	27	10 0	31 10 0	35 0 0	28	10 0
Quoin, glazed one side and one end	30	10 0	28	10 0	32 10 0	36 0 0	29	10 0

Limes and Sand

		1-ton lots	6-ton lots
Lime, greystone	per ton	43/–	37/6
Lime, chalk	per ton	43/–	37/6
Lime, blue Lias (including paper bags)	per ton	47/–	42/6
Lime, hydrated (including paper bags)	per ton	47/–	42/6
Washed pit sand	per yard cube		7/6

(For cements, *see* "Concretor.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left, charged at 1/9.

Sundries

Wall ties, self coloured	per cwt.	19/–
Wall ties, galvanized	per cwt.	24/6
Hoop iron, black	per cwt.	25/–
*D.P.C. slates, size 18″ × 9″	per 1,000	150/–
*D.P.C. slates, size 14″ × 4½″	per 1,000	59/–
*Ledkore D.P.C. Grade A	per foot super	5d.
*Ledkore D.P.C. Grade B.	per foot super	6½d.
*Ledkore D.P.C. Grade C	per foot super	8d.

* Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £4 orders.

	9″×3″	9″×6″	9″×9″	12″×9″	14″×9″
Earthenware airbricks: red, blue, vitrified and buff terra cotta each	–/8	1/4	2/4	4/–	6/8
	9″×3″	9″×6″	9″×9″	12″×6″	12″×9″
Black cast iron, School Board pattern airbricks per doz.	3/–	5/6	11/–	11/–	20/–
Galvanized ditto per doz.	5/6	11/–	22/–	22/–	40/–
Black hit and miss cast iron ventilators per doz.	12/–	15/–	21/–	21/–	36/–
Galvanized ditto per doz.	24/–	30/–	42/–	42/–	72/–
	1′ 0″	1′ 6″	2′ 0″	2′ 6″	3′ 6″	5′ 0″
Buff terra cotta chimney pots .. .. each	2/6	3/–	4/4	5/9	13/4	22/6
Fireclay .. per cwt.	4/–					

Wall reinforcement supplied in standard rolls containing 25 yards lin.
2″ wide black japanned per roll 2/1
2″ wide galvanized .. per roll 3/2
2½″ wide black japanned per roll 2/7½
2½″ wide galvanized .. per roll 3/10½
Greater widths pro rata 2½″ price carriage paid on orders of £5. Discounts for quantities.

Partitions

		2″	2½″	3″	4″
Breeze ..	per yard super	1/3½	1/5½	1/8	2/3
Clay tiles ..	per yard super	2/3	2/6	2/9	3/1
Pumice ..	per yard super	2/8	3/–	3/6	4/–
Plaster ..	per yard super	2/3	2/9	3/3	4/–

BRICKLAYER—(*continued*)

Shepwood Partition Bricks size 9″ × 2⅞″ and 2½″ on bed. Terms, as for Glazed Bricks

Prices per 1,000 except where stated per brick	White, Ivory and Salt Glazed				Buff, Cream and Bronze	Other Colours	All Colours	
	Best		Seconds		Best	Best	Seconds	
	£	s. d.	£	s. d.	£ s. d.	£ s. d.	£	s. d.
Double stretcher, glazed two sides	32	10 0	30	10 0	34 10 0	38 0 0	31	10 0
Single stretcher, glazed one side	24	0 0	22	0 0	26 0 0	29 10 0	23	0 0
	Each		Each		Each	Each	Each	
Round end glazed two sides and one end ..	–/10½		–/10		1/0½	1/0½	–/10½	

Gas Flue Blocks

		Single Flues	Double Flues
Straight blocks	each	1/1	1/11
Building in set	per set of 3	2/8	4/10
Cover blocks	each	1/5	3/–
Raking blocks 45°	each	2/9	3/11
Raking blocks 60°	each	1/11	2/10
Offset blocks	each	3/4	4/10
Closer blocks	each	1/1	1/11
Closer flashing blocks	each	1/–	1/8
Straight flashing blocks ..	each	1/–	1/8
Terminal and cap	per set	6/9	11/6
Middle terminal and cap ..	per set	6/3	10/9
End terminal and cap	per set	6/6	11/3
Corbel block	each	4/10	3/2
Gathering block	each	—	9/8

DRAINLAYER

Agricultural Pipes

		2″	3″	4″	6″
Pipes in 12″ lengths ..	per 1,000	67/6	92/6	120/–	210/–

(Delivered in full loads Central London Area.)

Salt Glazed Stoneware Pipes and Fittings

		4″	6″	9″
Pipes (2′ lengths)	each	1/8	2/6	4/6
Bends, ordinary	each	2/6	3/9	6/9
Single Junction, 2′ long	each	3/4	5/–	9/–
Yard Gulley, without grating ..	each	6/3	6/10½	11/3
Ordinary round or square Grating, painted	each	–/7½	1/3	2/6
Ordinary round or square Grating, galvanized	each	1/0½	2/1	4/4½
Extra for Inlets, horizontal	each	1/6	1/6	1/6
Extra for Inlets, vertical	each	2/3	2/3	2/3
Intercepting Trap with Stanford Stopper	each	17/6	22/6	37/6
Grease and mud interceptor with bucket for removing silt and grease for 6″, 9″ and 12″ drains, with iron grating, painted	each		20/–	
Ditto, with iron grating galvanized	each		21/10½	

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over	Less 20%	Plus 5%
Orders under 2 tons, 100 pieces upwards	Less 2½%	Plus 22½%
Orders under 2 tons, less than 100 pieces	Plus 7½%	Plus 32½%

	Best	Seconds
Orders for 2 tons and over	Less 27½%	Subject to 15% off the price of best quality for all sizes
Orders under 2 tons, 100 pieces upwards	Less 10%	
Orders under 2 tons, less than 100 pieces	Nett	

* Items marked thus have fallen since December 15.

CURRENT PRICES

BY DAVIS AND BELFIELD

DRAINLAYER AND MASON

DRAINLAYER—(*continued*)

Cast Iron Drain Pipes and Fittings

Socket and Spigot Pipes :—

Weight (per 9 ft.)	Size	9 fts.	6 fts.	4 fts. each	3 fts. each
1.1. 8	4″ per yard ..	6/6	7/3	11/7	8/9
1.1.20	4″ per yard ..	6/9	7/5	11/10	9/–
2.0. 6	6″ per yard ..	10/–	11/11	19/3	15/4
4.0. 2	9″ per yard ..	18/2	23/9	41/3	31/5

Socket and Spigot Pipes :—

Weight (per 9 ft.)	Size	2 fts.	18 ins.	12 ins.	9 ins.
1.1. 8	4″ each	7/3	6/6	5/8	5/2
1.1.20	4″ each	7/4	—	—	—
2.0. 6	6″ each	11/6	—	—	—
4.0. 2	9″ each	—	—	—	—

Tonnage Allowances :—
Orders up to 2 tons nett.
Orders 2 to 4 tons less 2½%
Orders 4 tons or over less 5%

		4″	6″	9″
Bends	each	6/3	12/10	40/7½
Single junctions	each	11/–	22/–	70/11
Intercepting traps	each	37/6	48/3	137/6
Gulleys ordinary trapped ..	each	15/–	—	—
Extra for inlet 4″	each	4/3	—	—
Grease Gulley trap	each	117/6	—	—
H.M.O.W. large socket gulley trap with 9″ gulley top and heavy grating and one back inlet ..	each	23/9	42/9	—

Cast Iron Inspection Chambers

The larger figures below refer to the main pipes and the smaller figures to the branches

	4″×4″	6″×4″	6″×6″	9″×6″
Straight chambers with two branches one side .. each	56/3	66/10	78/9	153/9
Straight chambers with three branches in all .. each	66/3	76/10	91/3	166/3
Straight chambers with four branches in all .. each	76/3	87/10	103/9	178/9
Straight chambers with three branches one side .. each	71/3	88/9	101/3	—
Straight chambers with four branches in all .. each	81/3	98/9	113/9	—
Straight chambers with five branches in all .. each	91/3	108/9	126/3	—
Straight chambers with six branches in all .. each	101/3	118/9	138/9	—
Straight chambers with four branches one side .. each	93/9	111/3	133/9	—
Straight chambers with five branches in all .. each	103/9	108/9	146/3	—
Straight chambers with six branches in all .. each	113/9	131/3	158/9	—
Straight chambers with seven branches in all .. each	123/9	141/3	171/3	—
Straight chambers with eight branches in all .. each	133/9	151/3	183/9	—

The branches to the above are at 135°

		4″	6″
Extra for branches between 135° and 180°	each	7/6	7/6
Extra for branches between 90° and 135° other than standard angles	each	6/3	6/3

		4″×4″	6″×4″	6″×6″
Curved chambers, no branch 90°–112½°	each	26/10	—	38/2
Curved chambers, no branch 135°	each	26/10	—	38/2
Curved chambers, one branch 135°	each	33/9	48/9	55/–
Curved chambers, two branches 135°	each	40/8	65/8	76/3

Channels in White Glazed Ware (Unselected Quality)

		4″	6″	9″
Half round straight channels, 6″ long ..	each	2/4	3/2	5/3
Half round straight channels, 12″ long ..	each	3/3	4/5	6/11
Half round straight channels, 18″ long ..	each	4/–	5/3	8/5
Half round straight channels, 24″ long ..	each	4/8	6/4	10/6
Half round straight channels, 30″ long ..	each	5/10	7/11	13/2
Half round straight channels, 36″ long ..	each	7/–	9/6	15/9
Half round ordinary or long channel bends	each	8/5	12/11	21/–
Half round ordinary or short channel bends	each	6/–	8/5	—
Three-quarter round ordinary branch bends	each	8/1	11/8	—
Three-quarter round ordinary branch bends, midgets	each	7/3	—	—

		6″×4″	9″×6″
Half round taper channels 24″ long ..	each	7/10	11/3
Half round taper channel bends	each	10/3	17/9

These prices are subject to 20% discount.

DRAINLAYER—(*continued*)

Channels in Brown Glazed Ware

		4″	6″	9″
Half round straight channels 24″ long ..	each	1/3	1/10½	3/4½
Half round straight channels 30″ long ..	each	—	—	4/2½
Ditto, short lengths	each	1/3	1/10½	—
Half round ordinary channel bends ..	each	1/10½	2/9½	5/0½
Ditto, short	each	1/10½	2/9½	—
Ditto, long	each	3/9	5/7½	10/1½
Three-quarter round branch bends ..	each	5/–	7/6	—

		6″×4″	9″×6″
Half round taper channels 24″ long ..	each	3/9	6/9
Half round taper channel bends ..	each	4/8½	8/5½

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

Manhole Covers

		Black	Galvanized
24″ × 18″ single seal for foot traffic. (Weight 0.3.0 in lots of 24)	each	11/3	22/6
24″ × 18″ single seal for light car traffic. (Weight 2 cwt. in lots of 24)	each	30/–	56/6
24″ × 18″ Wood Block pattern. For road traffic. (Weight 3 cwts.)	each	Coated 48/6	

		Fine Cast	Galv.
Cast step irons, 13½″ long, 6″ wide, 9″ in wall, approximate weight 5½ lbs. each	per dozen	11/6	19/–

		4″	6″
Galvanized fresh air inlets with cast brass fronts (L.C.C. pattern)	each	5/6	20/3

MASON

Yorkstone

Building quality Robin Hood and Woodkirk Blue Stone.

Blocks scrappled, random sizes ..	per foot cube	4/6
Add for blocks to dimension sizes ..	per foot cube	6d. (each dimension)
Templates with sawn beds, edges rough (up to 4 ft. super and not over 2′ 6″ long)	per foot cube	5/–
Templates with sawn beds, sawn one edge	per foot cube	6/–
Templates with sawn beds, sawn two edges	per foot cube	7/–
Prices f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 6-ton loads.)		18/3

Ancaster Stone

Freestone, random blocks	per foot cube	3/6
Brown weather bed stone selected for polishing all brown blocks	per foot cube	8/–
Brown and blue weather bed stone selected for polishing	per foot cube	7/–

Prices f.o.r. Ancaster, railway rate to London Station approximately 11½d. per foot cube (minimum 6-ton loads).

White Mansfield Stone

Random blocks (yellow bed) for dressings	per foot cube	4/–
Random blocks (hard middle bed) for steps, pads, pavings and copings	per foot cube	3/6
Prices f.o.r. Mansfield, railway rate to London station, 6 ton lots	per foot cube	1/2

Bath Stone

Random blocks, delivered railway trucks, Paddington or South Lambeth	per foot cube	2/10½

Portland Stone

Whitbed, in random blocks of 20 feet cube average, delivered railway trucks Nine Elms, South Lambeth or Paddington	per foot cube	4/5
Basebed—add to the above	per foot cube	–/8
For every foot over 20 ft. cube average—add	per foot cube	–/1
For every foot over 30 ft. cube average—add	per foot cube	–/0½

¾″ Thick Plain Marble Wall Linings

Roman Travertine	per foot super	5/–
Golden Travertine	per foot super	6/8
Roman stone	per foot super	4/6
Hopton-wood stone	per foot super	5/–
Second statuary	per foot super	4/6
Sicilian	per foot super	4/–

Artificial Stone

6″ × 3″	Copings and sills	per foot run	1/6
6″ × 6″	Copings and sills	per foot run	2/4
9″ × 3″	Copings and sills	per foot run	2/–
9″ × 6″	Copings and sills	per foot run	3/4
12″ × 3″	Copings and sills	per foot run	2/4
12″ × 6″	Copings and sills	per foot run	3/9

Cornices according to detail, per foot cube (from) 6/9

CURRENT PRICES

BY DAVIS AND BELFIELD

MASON, SLATER, TILER AND ROOFER, AND CARPENTER

MASON—(*continued*)

Reconstructed Stone to match Natural Stone

Sills, lintols, coping, cornices, ashlar, etc., average size	per foot cube	11/–
Window sills, 9″ × 3″ section	per foot run	2/1
„ „ 7″ × 3″ section	per foot run	2/–

Slate Slabs, cut to size and Planed

	1″	1½″	1½″
Not exceeding 4′ 6″ long or 2′ 3″ wide, per foot super	3/1	3/4	3/11
„ „ 6′ 6″ long or 3′ 3″ wide, per foot super	3/9	4/1	4/10
Exceeding 6′ 6″ long or 3′ 3″ wide, per foot super	4/1	4/6	5/2
Rubbed faces, per foot super	–/5	–/5	–/6
„ edges, per foot run	–/4	–/4	–/5

Combined Slate Cills and Window Boards for Metal Windows

Window Width	Straight Cills, Wall thickness 9″	11″	13½″	Circular Cills for C.O.P. Frames, Radius	External reveals 2″	4½″
1′ 8″	4/–	4/8	5/8	2′ 4½″	21/–	24/–
3′ 3½″	7/4	8/7	10/4	2′ 7½″	25/6	28/6
4′ 10½″	10/6	12/3	14/10	2′ 10½″	30/–	33/3

SLATER, TILER AND ROOFER

Best Bangor Slates

	£	s.	d.
24″ × 12″ per 1,000 actual	33	6	6
22″ × 12″ per 1,000 actual	27	19	0
22″ × 11″ per 1,000 actual	25	4	9
20″ × 12″ per 1,000 actual	24	14	6
20″ × 10″ per 1,000 actual	21	15	5
18″ × 12″ per 1,000 actual	20	19	3
18″ × 10″ per 1,000 actual	17	4	0
18″ × 9″ per 1,000 actual	15	11	9
16″ × 12″ per 1,000 actual	17	14	9
16″ × 10″ per 1,000 actual	15	11	9
16″ × 9″ per 1,000 actual	13	19	6
16″ × 8″ per 1,000 actual	12	1	11

Prices include for delivery to site in lots of 1,000 and upwards.

Old Delabole Slates (f.o.r.)

Standard sizes.

Prices and computed weights per 1,200.

		20″ × 12″	16″ × 10″
Grey medium gradings	per 1,200 cwts.	597/– 46½	366/– 30
Unselected greens (V.M.S.)	per 1,200 cwts.	672/– 55½	413/– 36

Random sizes.

Prices per ton and computed covering capacities in squares per ton.

		No. 1 Grading 24″/22″ to 12″/10″
Ordinary grey greens	per ton	128/–
Covering cap.:	per ton (3″ lap)	2·37 squares
	per ton (4″ lap)	2·19 squares
		No. 2 Grading 24″/22″ to 12″/10″
Weathering grey greens (V.M.S.)	per ton	139/–
Covering cap.:	per ton (3″ lap)	2·25 squares
	per ton (4″ lap)	2·08 squares
		No. 2 Grading 24″/22″ to 12″/10″
Weathering greens (V.M.S.)	per ton	149/–
Covering cap.:	per ton (3″ lap)	2·25 squares
	per ton (4″ lap)	2·08 squares
		No. 2 Grading 24″/22″ to 12″/10″
Rustic reds (25%) and weathering greens (V.M.S.)	per ton	174/–
Covering cap.:	per ton (3″ lap)	2·25 squares
	per ton (4″ lap)	2·08 squares

Railway rate to Nine Elms, London, minimum 4 tons, 21/9, minimum 6 tons per truck, 18/1 per ton.

Tiles

	£	s.	d.
Hand-made sandfaced 10½″ × 6½″ red roofing tiles, per 1,000	4	15	0
Machine-made sandfaced 10½″ × 6½″ red roofing tiles, per 1,000	4	0	0
Berkshire rustic pantiles, per 1,000	18	10	0

SLATER, TILER AND ROOFER—(*continued*)

Westmorland Green Slates

	Price per ton	Bests, 24″ to 12″ long. Proportionate widths. Computed cover in sq. yds. per ton
Random sizes.		
No. 1 Buttermere fine light green	240/–	30
No. 2 „ light green (coarse grained)	215/–	27–28
No. 5 „ olive green (coarse grained)	197/–	25–27
No. 5 Medium green	197/–	25–26
No. 7 Elterwater fine light green	216/–	27–28
No. 15 Tilberthwaite fine light green	214/–	26–28
No. 16 „ light green (coarse grained)	202/–	25–27
Broughton Moor, light sea green, olive green, silver grey green, and mixed shades	227/–	27

Prices include for delivery to any station, minimum 6-ton truck loads.

Asbestos-cement

6″ corrugated sheets, grey	per yard super	2/11
Standard 3″ corrugated sheets, grey	per yard super	2/7½
Slates:—		
15¾″ × 7⅞″ grey	per 1,000	£6 16 3
15¾″ × 15¾″ diagonal, grey	per 1,000	£12 18 6
15¾″ × 15¾″ diagonal, russet or brindled	per 1,000	£16 6 6
Pantiles.		
Large russet brown	per 1,000	£19 8 6

Prices are for minimum two-ton loads.

Cedar Wood Tiles

Canadian cedar wood shingles, per square 32/– (normal quantity).

Prices include for delivery to nearest railway station in England but vary with quantity.

CARPENTER

Carcassing Timber

Prices are for Standards in one delivery; when less than a standard is required, or special lengths, add £1 per standard.

	Per standard £ s. d.	Per foot cube
4″ × 11″ Scantling	25 5 0	3/0¾
4″ × 9″ „	24 5 0	2/11½
3″ × 11″ „	23 0 0	2/9½
2″ × 11″ „	23 10 0	2/10½
3″ × 9″ „	22 10 0	2/8½
2″ × 9″ „	22 10 0	2/8½
3″ × 8″ „	20 10 0	2/6
2″ × 8″ „	20 5 0	2/5½
3″ × 7″ „	20 5 0	2/5½
2″ × 7″ „	20 0 0	2/5½
4″ × 6″ „	24 0 0	2/11
3″ × 6″ „	21 0 0	2/7½
2″ × 6″ „	20 0 0	2/5½
3″ × 5″ „	20 0 0	2/5½
3″ × 4″ „	20 0 0	2/5½
*2″ × 5″ „	18 10 0	2/3
*2″ × 4″ „	18 10 0	2/3
1½″ × 11″ „ (20 ft. lengths and over)	per ft. run	–/4½
1½″ × 9″ „ (20 ft. lengths and over)	per ft. run	–/3½
1½″ × 7″ „ (20 ft. lengths and over)	per ft. run	–/2¾

Yellow Deal Battens

¾″ × 1″	per 100 feet run 1/4
¾″ × 1½″	per 100 feet run 2/3
¾″ × 2″	per 100 feet run 2/9
1″ × 2″	per 100 feet run 4/3
1½″ × 2″	per 100 feet run 5/3

Weather Boarding

Deal:—		
¾″ × ¼″ × 6″ Feather edge	per square	10/6
¾″ × ¼″ × 4″ Feather edge	per square	8/9
Western red cedar:—		
1″ × 6″ Drop sidings	per square	32/–
11/16″ × 5/16″ × 6″ Feather edge	per square	11/–
¾″ × ¼″ × 4″ Feather edge	per square	12/6

Roof Boarding

Deal:—		
*¾″ × 6″	per square	15/6
*1″ × 6″	per square	19/6

* Items marked thus have fallen since December 15th.

TO BE CONTINUED IN NEXT ISSUE