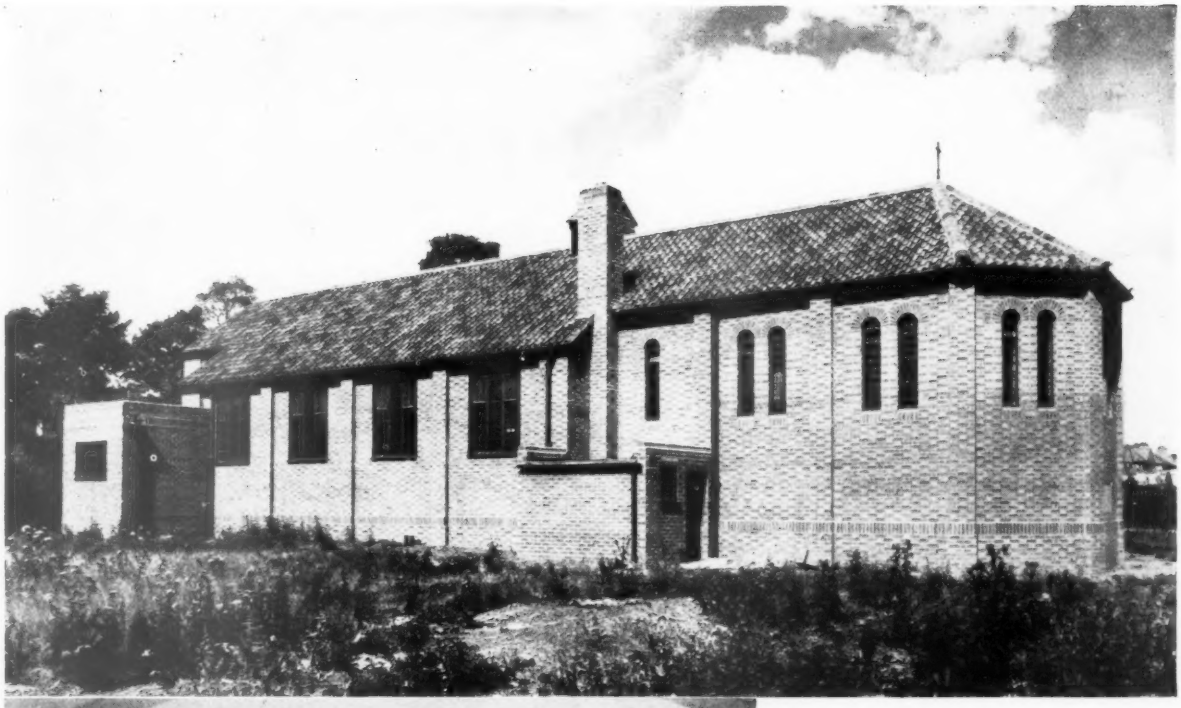

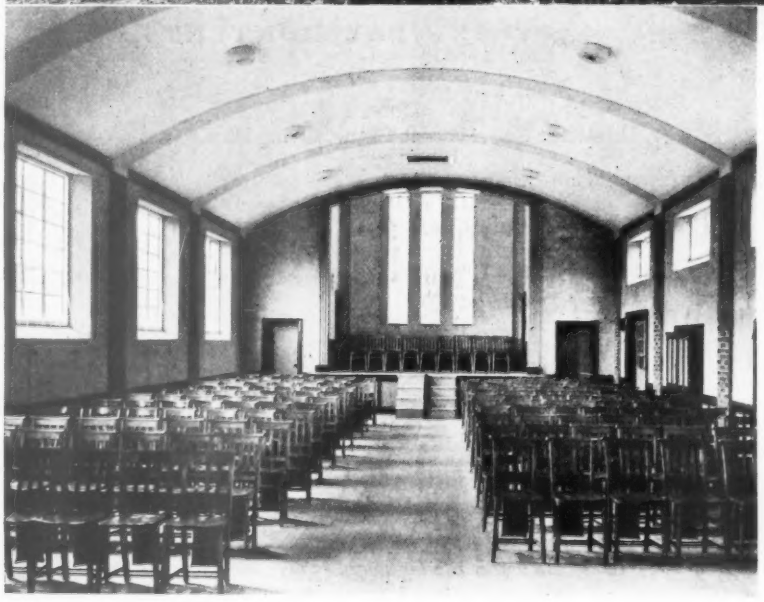

PHORPRES

St. James's Chapel and Hall, Bexley, Kent. Architect: P. M. Andrews, A.R.I.B.A. Contractors: Norman, Wright (Builders), Ltd., London, S.E.25.

"Phorpres" Rustic Facing Bricks are used for this Church, for the external walls and for the decorative brickwork inside.

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THE ARCHITECTS' JOURNAL

THURSDAY, NOVEMBER 11, 1937. NUMBER 2234 : VOLUME 86

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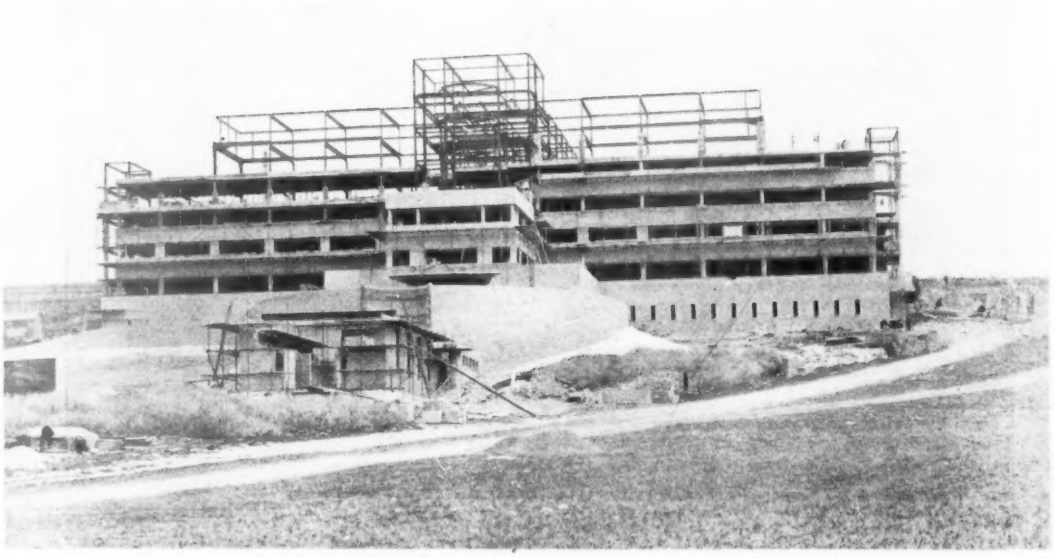
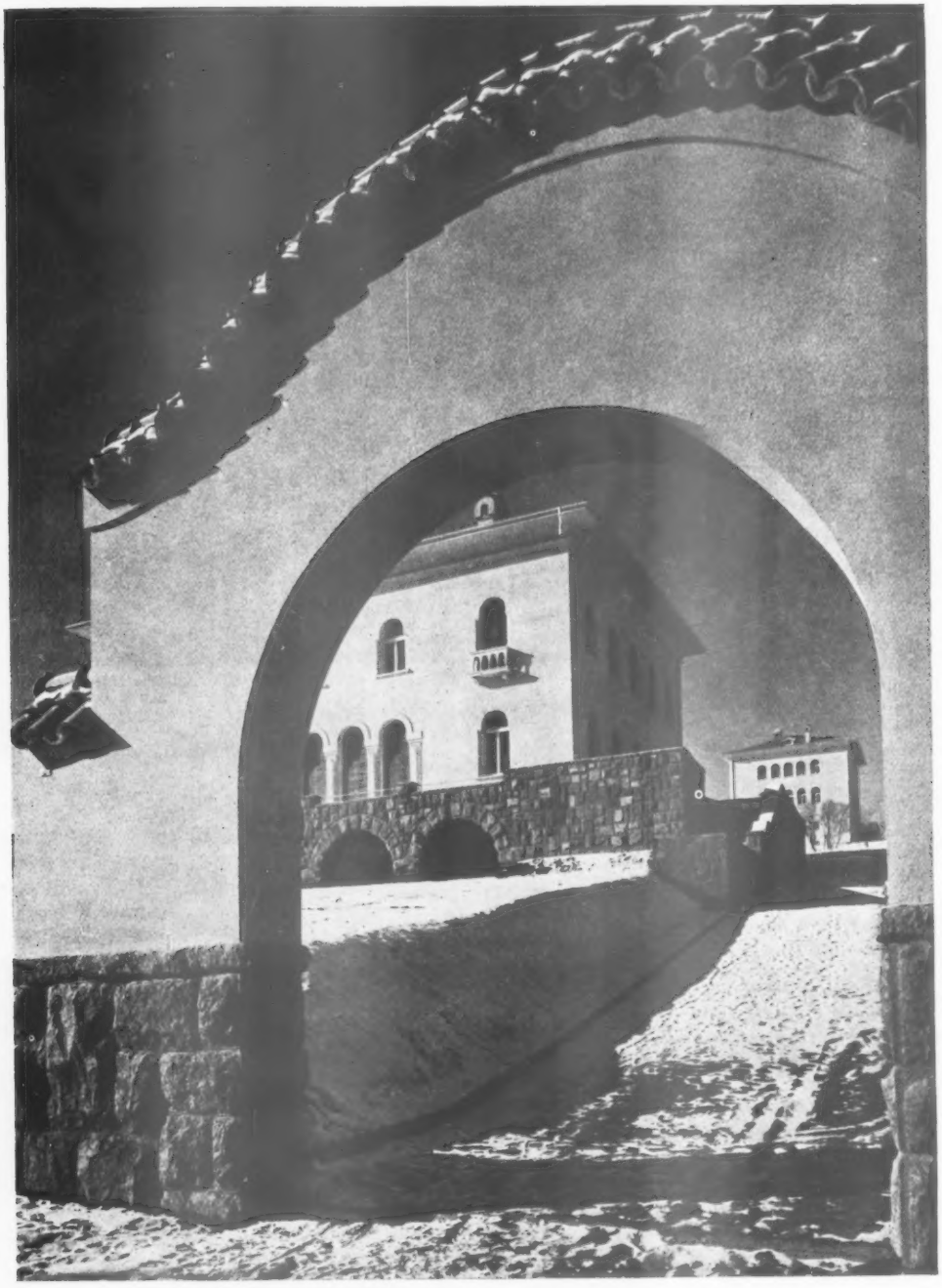
The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

PRINCIPAL CONTENTS

PROGRESS PHOTOGRAPH

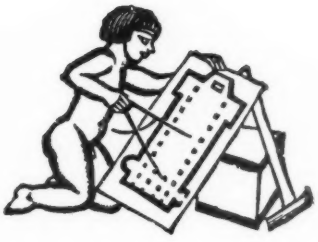


ABOVE is a progress photograph of St. Dunstan's Convalescent Home, Ovingdean, near Brighton, the foundation stone of which was laid on September 6. On the right is a perspective, by Mr. J. D. M. Harvey, hung in this year's Royal Academy Exhibition. The architect is Mr. Francis Lorne of Sir John Burnet, Tait and Lorne.



JUGOSLAV LEGATION

The entrance to the Jugoslav Legation in Ankara.



EDUCATED AT ——

READERS may have noticed that the JOURNAL has been publishing a good deal about schools. When it first began to do so, nearly two years ago, it received a number of letters about its views.

Since then, although schools have continued to be mentioned, correspondence, with one exception, has ended. And from this it is reasonable to suppose that even the many architects interested in schools feel that the JOURNAL's duty towards schools has been decently consummated by the publication of its present planning section.

The exception to the silence about its efforts which is no doubt rightly taken to be the silence of approval is a man who complains that public schools ought to be included in the section which is now appearing. The higher reasons why this kind of school building will not be considered had, it was thought, been adequately explained. The lower reason—that public schools, inhabited by a particularly tough form of youth, rarely build anything, almost never build anything in which planning is considered at all, and generally appear to treasure their architecture in direct ratio to its unsuitability for education—is now confessed for the first time.

In continuing to think about public schools, schools, and architecture, there is, of course, seen to be another aspect to the question. And were it not for Professor Hilton, who has already spoilt the market so completely, the temptation to be arch about the right schools to be considered in the JOURNAL would be hopelessly overwhelming. Even now, when one has gone so far, it is really a very interesting subject.

Politics, the Services, the Bar and the Church—anyone who doubted the necessity of public schools in these methods of keeping one's head above water was put right about a month ago. But what about other trades—Science, the Arts and Architecture? Does the same thing hold good for them?

The JOURNAL, which likes things to be as they should be, first assumed that it did. Then it had doubts, and finally made a little enquiry on its own account.

It began with Science, a dry but not entirely contemptible subject.*

Newton, Davy, Watt, Telford, Rennie, Clerk Maxwell, Lord Kelvin, Charles Parsons—all these save for Clerk Maxwell (Edinburgh Academy) were at grammar or parish schools, or educated at home. The JOURNAL realized, however, that the public school system only got into its stride in the 'seventies, and earlier results were then disregarded.

John Hunter, Owen, Huxley, Lister, J. J. Thomson, Lord Rutherford, Jeans, Eddington, Frank Dyson and Oliver Lodge. (Dare one add H. G. Wells?) This is an impressive list; from it only the name of Darwin is missing among the real giants, and only Darwin (Shrewsbury), odd though it seems, was at a public school.

With diffidence, but now quite interested, the JOURNAL moved on to the Arts. From what one knew of the attitude towards them in every good school, a certain misgiving was unavoidable—the results changed misgiving to dejection.

The first twenty writers, painters and sculptors of note who came to mind could raise but three tolerable schools between them, and the Fine Arts were in so bad a case that the membership of the Royal Academy was examined with care. Of just under eighty Academicians and Associates only three can be said to be from the right schools—a state of affairs which may very well be the cause of the criticisms of the Academy which are heard from time to time.

Having come so far, it was the JOURNAL's sense of duty which made it continue its enquiry into Architecture. For the omens were not auspicious.

The JOURNAL determined that its straw vote would be taken by examining the first forty architects who came to mind—they had to be well-known architects, but apart from this prejudice and seeding were sternly renounced. Sometimes in this census hopes rose, sometimes fell. At the end the moral was doubtful—but the results can be given.

Messrs. Percy Thomas, Vincent Harris, Herbert J. Rowse, Curtis Green and Professor Adshead were not at a public school; neither were Sir Edwin Lutyens, Sir Edwin Cooper, Sir Brumwell Thomas, Sir Arnold Thornley, and Sir Guy Dawber.

Others run: Sir Raymond Unwin, Magdalen College School; Sir J. Grey West, High School, Cardiff; T. Cecil Howitt, Nottingham High School; Edward Maufe, Wharfedale; Sir Herbert Baker, Tonbridge; Sir Reginald Blomfield, Haileybury; Sir John Burnet, Collegiate and Western Academy, Glasgow; Graham Dawbarn, King's School, Canterbury; Sir Thomas Tait, Paisley; H. S. Goodhart-Rendel, Eton; Sir Banister Fletcher, University College School; Sir G. G. Scott, Beaumont; Robert Atkinson, University College School, Nottingham; Oliver Hill, Uppingham; Howard Robertson, Malvern; Clough Williams-Ellis, Oundle; C. F. A. Voysey, Dulwich; Thomas Adams, Daniel Stewart's; Maurice Webb and W. G. Newton, Marlborough; A. H. Moberley, Winchester; P. D. Hepworth, University College School; Morley Horder, City of London School; Percy F. Worthington, Clifton; and G. Grey Wornum, Bradfield.

Before it went to press the JOURNAL was unable to discover from available reference books whether the following had been at public schools or not: Messrs. T. P. Bennett, Berry Webber, Charles Holden, Darcy Braddell, Joseph Emberton and Stanley Hamp.

* The JOURNAL used in its search: *From the Doctor's Notebook.* By Sir James Crichton-Browne. Duckworth. Price 7s. 6d.

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NOTES & TOPICS

P.R.I.B.A.

I AM sure that Mr. Goodhart-Rendel will forgive me if I announce that the operation which he underwent last week was very successful and that he is now recovering very well. All of us will hope that the President will now be permanently in the best of health.

*

I prophesied last week that the Public Relations Officer of the R.I.B.A. would probably hear more of some of the President's more controversial remarks. I am told that on another page of this issue an official architect expresses strong feelings.

*

Personally I feel that the President said the last word about the dangers of official architecture with his little witticism—"Departments . . . like slot-machines in which you pay your penny but cannot take your choice; you expect chocolate and chocolate you will get, of admirable quality, but sometimes a little stale." However, I am told that the official contributor has taken this as an attack on the abilities of official architects instead of realizing, what Mr. Goodhart-Rendel surely made quite clear, that what was being attacked was the system of catering by slot-machines.

*

If the official system ceased I do not think that the men who now work within official offices would do the same work in their own offices—that seems to me one half of the core of the matter.

*

The other half seems to me, as to the President, to be that the R.I.B.A. primarily exists to protect the interests of architecture and only secondarily to increase and protect the incomes of architects. We should not forget this altogether.

ROMANTIC MOVEMENT

We have all been aware for a long time past that M. Corbusier's journalistic efforts failed to explain more than half his work. Functionalism, constructivism—what you will—are hardly adequate explanations of the author's more romantic flights. The flight from functionalism to romanticism has taken about two years and, so far as the *avant-garde* is concerned, it seems to be complete. The next move must be now under consideration.

*

The symptoms are slight but definite. A member of the A.A. staff tells me that the junior students are still justifying wedge-shaped garages and curved bookcases by the exigencies imposed on them by steering locks or the ease with which radially arranged volumes can be pulled from their perches. Their seniors know better, and with all the æsthetic purity of the Art Nouveau, they do it because they like it. Consistent, logical, unanswerable, individualistic, aristocratic and definitely anti-social.

*

There are other symptoms. Mr. Lubetkin was telling me the other day that he had abandoned a certain building process because it was inhuman—it made the workmen's hands bleed. That's fine—but it made me jump a little. William Morris or Lethaby would have been so pleased.

FILMS

Film magnates are the most unaccountable race. I sometimes try to think that they know their own business best, but they seem to positively enjoy spoiling their own productions. Some things I can forgive, if Renaissance realism is best conveyed by Henry VIII tearing chicken bones asunder with his fingers, it is understandable, if annoying, that Anne Boleyn's coiffure should have the true Grafton Street touch.

*

Nevertheless, opportunities are sometimes thrown away in the most reckless fashion. The new Zola film is, on the whole, a sincere effort, and one can admire, if one cannot commend, the tortuous ingenuity which manages to present the Dreyfus Case without using the word "Jew," but the staging of Anatole France's funeral oration over Zola's bier is a different matter. Here we have all the architectural realism of the Panthèon plus the gold lace of the Academy; one thought regretfully of the pouring rain in the crowded cemetery at Montmartre and—"He was a moment in the conscience of man" ringing out over the sea of umbrellas. That was real drama.

ODEON

It was Mr. Sydney Bernstein, I believe, who defended the gorgeous styles of the Granada at Tooting by saying that no other cinema sold "brochures" of its interior at the rate of two hundred a week. So presumably Mr. Oscar Deutsch knows what he is about when he adorns the vast gilded cavern of Leicester Square with pile carpets and leopard skin seats. To Anthony Hope, such a setting for the film of his Ruritanian romance would, I feel, have been a compensation for the omission of his name from the posters. It is in such decor that our lusher Edwardianism lives on.

AND VICTORIA

I also saw "Victoria the Great"—a film which pleased and annoyed me in equal slices. It is going like hot cakes, I read, in the U.S.A.—and for once (in a *long* British film) the photography gets full marks across the water.

*

I, anything but an expert, agree. And I fancy the real Windsor, real Kensington Palace and, in part, real St. Paul's, is what made all the difference. It was a pleasure to see—until the colour came on.

*

What annoyed me was the necessity, no doubt imposed on Mr. Wilcox, of the film's being popular. There was little conviction, no dowdiness, no eccentricity allowed to the representations of the great—it was a great

Three views of the memorial to Earl Haig in Whitehall, which was unveiled by the Duke of Gloucester on November 10. The memorial was executed by Mr. A. F. Hardiman who is seen putting the finishing touches to his work.

(Photographs by courtesy of The British Paramount News.)

big, happy charade. All the *obiter dicta* of a great personality were there, of course—that jaded string from "*Alone*, Mother" to "—as if I was a public meeting, Mr. Gladstone." One had to have them, perhaps, as well as railways, Peelers and postage stamps.

*

Miss Anna Neagle can act, and now and then insisted on doing so—but even up to "We have done our best, Albert" I still felt Victoria's undies were of the silkiest and sheerest ninon. It seemed a pity.

SHIRLEY TEMPLE NOTWITHSTANDING

In common with others whose curiosity overcame their dignity, I joined the queues to buy a copy of the celebrated banned issue of *Night and Day*. And I found to my surprise that the most interesting personal paragraphs in the issue were not those ones about Miss S——y T——e, but were (I need hardly say in quite a different article) about Sir Edwin Lutyens.

A series of personal portraits of public figures is one of the features of that great American weekly, *The New Yorker*, and one does not in the least mind finding it also on the pages of *Night and Day*. I condone with the former that they have not the ready-made subject for intriguing biography that Sir Edwin provides.

*

Though I do look forward to the time when the *New Yorker* publishes one of its full-length studies on Frank Lloyd Wright.

*

However, to return to Sir Edwin, I can pay the article about him the highest compliment by saying that its subject (if he saw it, as I hope, S——y T——e notwithstanding, that he did) must have got more enjoyment from its gentle malice than anyone. I can see him thoroughly enjoying the process of being debunked, while accepting with becoming modesty the sincere tributes to his genius that accompanied the process.

*

There was good trenchant criticism in the article, but that is what Sir Edwin thrives on. The author's words apply in many provinces: "Edwin Landseer Lutyens plays his own game and if it doesn't fit in with what the other boys are doing, somebody may get hurt. And it won't be Lutyens."

AMENDE HONORABLE

Mr. Clough Williams-Ellis has been ruder than most people about the "dismal collection of battered tin huts" which used to disfigure the summit of Snowdon. "Used to," being the operative words, for the railway company has now redeemed its year-old promise and the tin huts are no more, as Mr. Williams-Ellis now testifies, giving the company the greater credit for taking away even more rubbish than its passengers can themselves bring up, for hikers, it seems, can also distribute cigarette packets and silver paper on occasion.

*

I imagine that the Snowdon Railway is run by a small private company, and is independent of our great tentacular main lines. Would they, under the circumstances, have shown an equal public spirit?

BLOOMSBURY SQUARES AGAIN

My worst fears have come true. When I said a fortnight ago that Mecklenburgh and Lloyd Squares were so far safe from the developer, I had heard no rumours of any kind, but within forty-eight hours there was a letter in *The Times* to say that plans were on foot for a students' hostel on the south side of Mecklenburgh, and that Lloyd Square, too, was threatened with developments.

*

Now I know nothing of the architects who are to carry out this work, or indeed if there are to be any architects at all; but is it too much to ask whether there is any plan for these squares as a whole? I suspect that it is only an affair of a few adjoining leases falling in, and that three-quarters of the squares will remain as before. The disappearance of the existing houses I should regret, but I could almost condone it if only there were really coherent plan to keep these squares the unities they are now.

*

Stop press. The Mecklenburgh Square hostel is apparently an extension to an existing year-old job. If you were given three guesses, would you get anywhere near flints as the facing material?

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

A.A. SCHOOL OF PLANNING AND RESEARCH

The first examination has been held for the diploma of the Architectural Association School of Planning and Research for National Development, and for exemption from the Final Examination for Associate Membership of the Town Planning Institute, as set by the Joint Board of Examiners.

Six Members submitted themselves for Examination, Professor Patrick Abercrombie, M.A., F.R.I.B.A., P.P.T.P.I., acting as Visiting Examiner.

The results are as follows :—J. Bland, B.ARCH. (McGill), A.R.I.B.A., Honours Pass; T. Arnold Jeffryes, D.A. (Edin.), A.R.I.B.A., Honours Pass; H. J. Spence-Sales, B.A., Honours Pass; K. C. Brown, A.R.I.B.A., A.A.DIPL., Pass (Distinction in Site Planning); D. L. Blair, B.ARCH. (McGill), Pass; M. E. Taylor, A.R.I.B.A., A.A.DIPL., Pass.

THE LEEDS SCHOOL OF ARCHITECTURE

Mr. R. A. H. Livett, the Director of Housing for Leeds, has been appointed to the newly created lectureship in Housing in the Leeds School of Architecture, Leeds College of Art. The appointment is under the Department of Town and Country Planning, but both planning and architectural students will be able to attend lectures. Mr. Livett will devote himself particularly to Housing in its relation to Town and Country Planning.

WEST YORKSHIRE SOCIETY OF ARCHITECTS

The assessors' awards in the competitions organized by the Huddersfield branch of the West Yorkshire Society of Architects for students of the Architectural Department of the Huddersfield Technical College have been made as follows :—

Senior competition : Mr. Leonard Mallinson (book prize to the value of one-and-a-half-guineas); 2, Mr. Geoffrey A. Rowe (book prize to the value of one guinea). Junior competition : Mr. E. B. Kaye (book prize to the value of one guinea).

The senior students' competition was for the design of a clock tower to commemorate the Coronation of King George VI, the site assigned being a traffic roundabout at West Hill, Huddersfield.

THE ARCHITECTS' DIARY

Thursday, November 11

ARCHITECTURAL ASSOCIATION, 36 *Bedford Square, W.C.1. Annual Exhibition of Water-colour drawings and other etchings by members. Until November 16.*

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. *At the Graves Art Gallery, Surrey Street, Sheffield. "Save the Countryside" Exhibition. Until November 26.*

INSTITUTION OF STRUCTURAL ENGINEERS. *At the Institution of Civil Engineers, Gt. George Street, S.W.1. "Steel Sheet Piles." By Dr. Ing. A. Agatz. 6.30 p.m.*

INSTITUTION OF CIVIL ENGINEERS (Birmingham and District Association). *At the James Watt Memorial Institute, Birmingham. "Tests on Highway Bridges." By Norman Davey. 6 p.m.*

LONDON SOCIETY. *Visit the new St. Pancras Town Hall, Euston Road, N.W.1. 3 p.m.*

WELSH SCHOOL OF ARCHITECTURE. *Technical College, Cardiff. "The Use of Timber and Plywood in Modern Architecture." By Patrick Cutbush. 5 p.m.*

Tuesday, November 16

UNIVERSITY EXTENSION LECTURES. *At 66 Portland Place, W.1. Sixth of the series of lectures : "Architecture—Its Place in Human Society" By Basil Ward. 6.30 p.m. (Admission 1s. 6d.)*

HOUSING CENTRE, 13 *Suffolk Street, S.W.1. "Information." By E. J. Carter. 1 p.m.*

ILLUMINATING ENGINEERING SOCIETY. *At 2 Savoy Hill, W.C.2. "Lighting for Special Industrial Processes." By S. Anderson and W. R. Stevens. 7 p.m.*

INSTITUTE OF WELDING. *At the Institution of Mechanical Engineers, Storey's Gate, S.W.1. "Metallurgical Aspects of the Welding of Low Alloy Structural Steels." By T. Swinden and L. Reeve. 6.30 p.m.*

Wednesday, November 17

CHARTERED SURVEYORS' INSTITUTION, 12 *Gt. George Street, S.W.1. Half-yearly general meeting of the quantity surveyor members of the Institution. "The Scientific Use of Concrete and its Effect on the Cost of Construction; and Vibration in Concrete." By P. H. Mangin. 8 p.m.*

ST. PAUL'S ECCLESIOLOGICAL SOCIETY. *At 6 Queen Square, W.C.1. "The Cathedral and Abbey Church of St. Albans." By J. H. Pledge. 8 p.m.*

THE NEWLYN CASE

Last week the Minister of Health sent to Mr. N. A. Beechman, M.P. for St. Ives, a letter on the subject of the threatened demolition of cottages at Newlyn under a clearance scheme of the Penzance Town Council. It will be recalled that a fortnight ago a party of Newlyn fishermen sailed from Newlyn to London to present a petition to the Minister in connection with the proposed demolition. Extracts from the letter are printed below :—

"The Penzance Council have rightly had regard to the duties imposed upon them under the Housing Acts, and have had to deal with a case involving unusually difficult circumstances and one which, I know, they desire to deal with in a sympathetic way, as regards both the amenities of the village of Newlyn and the interests of the fishermen.

"I particularly welcome the assurances they gave at the inquiry that they were prepared to rehouse the fishermen and the older people near the harbour, and to co-operate with all those who would help them to secure a redevelopment which will meet the legitimate interests of those affected, and also to preserve the amenities of the village.

"The effect of my decision on the area as a whole is that out of 157 properties included in the orders submitted, 23 will be excluded altogether from the orders, 54 will be purchaseable on the bases of their market value, and of the remainder I have directed that payments should be made in regard to 17 houses as well maintained houses.

"You will be aware that since the inquiry I have received two largely-signed petitions from inhabitants of Newlyn, one asking for the preservation and the other for the demolition of properties included in the orders.

"I have given my decision in the light of the evidence given at the inquiry, and after very careful consideration of the report made by my inspector. The conclusion which I have reached does not in fact vary much from what I take to be the opinion common to the two petitions, though expressed in different ways, that there are some houses which must be demolished and others which should be saved.

"Before any action is taken under the orders which will be made in due course, I am anxious that there shall be the fullest consultation about the future of the area in the light of these decisions.

"I have no doubt that, as a result, a scheme can be devised which will secure the objects I have mentioned above, the preservation of artistic amenities and the provision of accommodation adequate for the needs of the fishermen and others near the harbour itself, and that a time-table of procedure can be agreed upon which will reduce to a minimum any temporary inconvenience to the fishermen. I propose also to make certain suggestions to the Council as to the preservation of the elevations of certain houses which will otherwise fall to be demolished, and that, generally, in relation to the scheme, they should utilise the services of the local panel set up by the Council for the Preservation of Rural England, in conjunction with the W.I.B.A.

"I am, therefore, postponing the actual issuing of the orders pending consultations between the Council and officers of my department, and at an appropriate stage there shall be consultations locally with representatives of the fishermen themselves. I believe in this way that a problem of unusual difficulty can be solved to the satisfaction of all proper interests."

NOTTS, DERBY AND LINCOLN SOCIETY'S BRONZE MEDAL

At last week's meeting of the Nottingham, Derby and Lincoln Architectural Society, Mr. T. Cecil Howitt, F.R.I.B.A., was presented with the R.I.B.A. bronze medal and diploma for Miss M. E. Hardstaff's Charity Almshouses, Gedling, Nottinghamshire. The medal and diploma are awarded triennially for a building of outstanding merit erected in the province of the Society.

L.C.C. AND MUNICIPAL AERODROME

On Tuesday last the General Purposes Committee of the London County Council submitted a report in connection with the scheme for a municipal aerodrome. Following are some extracts from the report : "Our general view is that the provision and maintenance of civil aerodromes is a matter which should be undertaken by the State rather than by the local

authorities. This view is primarily based on the need for central planning and co-ordination and on the financial and commercial considerations involved. In particular we think that the Council would be ill-advised to undertake the establishment of a new aerodrome for London. This would involve heavy capital commitments in the acquisition and development of the site, and to the annual burden of debt charges so incurred would be added the operating expenses. The Maybury Committee reported that the advantages of unified ownership of London aerodromes were not at the moment apparent, but it is evident to us that the provision by the Council of the seventh or eighth of an unco-ordinated series of aerodromes serving Greater London would be satisfactory neither from the administrative nor the financial point of view. We therefore recommend that the Secretary of State for Air be informed that the Council is of opinion that the provision and maintenance of aerodromes for civil aviation is a matter for the State."

HISTORY OF WORLD ARCHITECTURE

The Soviet Academy of Architecture is preparing for publication a work in ten volumes, entitled "Sources and Material on the History of Architecture." The aim of the work is to show the development of architecture from ancient times to the present day. Volume I, which will be issued next year, will deal with "Primitive Architecture and the Ancient East." Volume II, which will also be issued in 1938, is on "The Architecture of Antiquity."

APPOINTMENT

Mr. E. F. Davies, B.ARCH., A.R.I.B.A., has been appointed head of the Aberdeen School of Architecture, Robert Gordon College, Aberdeen. Mr. Davies was educated at Flint Council School and Holywell County School. He studied at the University of Liverpool School of Architecture, and received the degree of B.Arch. with honours in architectural design. During his course at Liverpool, Mr. Davies was an R.I.B.A. Tite Prize finalist, R.I.B.A. Soane Medallion finalist, selected candidate for the R.I.B.A. silver medal, and twice Rome Scholarship finalist.

I.A.A.S.

The original drawings of Manchester Town Hall are to be presented to the Lord Mayor of Manchester. The announcement was made at the annual dinner of the Manchester and district branch of the Incorporated Association of Architects and Surveyors by Sir Charles Allom, the vice-president, who said that his grandfather, Thomas Allom, designed the Town Hall, and won the competition, but it was decided that he was too old to carry out the scheme. It was handed over to Mr. Waterhouse to carry out. He had decided to present those original drawings to the Lord Mayor because he felt they ought to be in the possession of the city.

ON THE AIR

In the series "Design in Everyday Things" the broadcast on November 15 (which will be in the *Regional Programme* that evening instead of the National) takes the form of a discussion between Sir Raymond Unwin, Mr. Thomas Sharp, Mr. R. A. H. Livett, A.R.I.B.A., and Mr. Anthony Bertram (as Chairman) on Town and County Planning.

R.I.B.A.

Next General Meeting.—"The Prevention of Noise in Buildings" is the title of the paper that Mr. C. J. Morreau, M.A., A.R.I.B.A., is to deliver on Monday, November 22.

R.I.B.A. Exhibitions.—"Modern Schools" is at the Mortimer Art Gallery, Hull, until November 20. It will open on November 29 at the Public Library and Museum, Rugby.

The opening of "Airports and Airways" at the Corn Exchange, Coventry, was postponed until November 15. Closing date November 22. It opens at Hull on November 30.

"Civic Centres" is at Kidderminster until November 27, and opens at Huddersfield on December 7.

R.I.B.A. Dance Club.—The dance on November 5 was as successful as those of last session, though all tickets—the number of which is limited—were not sold. The next dance is on December 17. Single tickets are 6s. each, obtainable from Mr. R. W. H. Robertson, Clerk of the Dance Club, at the R.I.B.A.

University Extension Lecture.—Mr. Basil R. Ward's sixth lecture in the series "Architecture: Its Place in Human Society," will be on "Ornament." In the Henry Jarvis Hall, Tuesday, November 16, at 6.30 p.m.

COMPETITION NEWS

DUNDEE: DUNCAN OF JORDANSTONE COLLEGE OF ART

The Governors of the Dundee Institute of Art and Technology invite architects of British nationality domiciled in the United Kingdom to submit designs in competition for the Duncan of Jordanstone College of Art, proposed to be erected on a site in Perth Road, Dundee. The assessor is Mr. Julian Leathart, F.R.I.B.A., and the following premiums are offered: £500, £250, and £150. The last day for submission of designs is May 6, 1938; and the last day for questions is January 19, 1938. Conditions of the competition may be obtained on application to The Clerk and Treasurer, Dundee Institute of Art and Technology, Bell Street, Dundee, Angus. Deposit £1 1s.

DEVELOPMENT OF THE "STRAY," REDCAR

Architects are invited to submit designs in competition for the layout and buildings proposed to be erected on the "Stray," Redcar, for the Redcar Corporation. Professor Patrick Abercrombie, F.R.I.B.A., is the assessor, and the following premiums are offered: £200, £100 and £50. The latest date for submission of designs is February 28. Conditions, etc., are obtainable from Mr. T. D. Hockings, Town Clerk, Municipal Buildings, Redcar, Yorks. Deposit £1 1s.

The principal building contemplated is a pavilion or casino with sun colonnade, provision for open air concerts, and a car park hidden by chalets, public shelters, etc. The estimated cost of the scheme is £40,000, and there is the possibility of the successful competitor being asked to design an adjoining building.

AN OFFICIAL ARCHITECT *REPLIES TO THE* PRESIDENT'S ADDRESS

The contribution printed below is unsolicited. It describes the impression made on a member of the R.I.B.A., an official architect, by the President's Address on November 1. The opinions it expresses and the inferences it draws are the writer's own, and are concerned with certain passages in an Address which was described by Mr. Goodhart-Rendel as highly controversial and entirely personal in its opinions. In order to refresh readers' memories some of these passages are printed at the beginning of the contribution.
—Ed., A.J.

"This subject of official architecture has been a controversial subject in the past and will continue to be one if it be not fully and openly discussed in a way that may remove all misapprehension. My personal view is that nothing can be said in defence of the present practice except that it saves public authorities trouble, that it ensures the utilization of special experience and that it gives regular employment to a number of people that might otherwise have to compete for it in our already crowded market. This defence may seem strong at first sight. I am sure that we all wish to save our public authorities trouble, if doing so does not prove unduly expensive. Special experience is a thing that never should be wasted; and regularity of employment is an advantage that the Institute would naturally like to secure, if it could, for every one of its members.

I think, however, that the easy way for the authorities is much more than duly expensive to the public, primarily in the conventionality of much of the work produced and frequently, I suspect, in its actual costliness in money. I think that the special experience acquired by official departments might constantly be used more profitably in collaboration with fresh minds than by those departments unaided. I think that the value of the regular employment given in such departments is discounted by the distress caused in our profession whenever a great number of supernumeraries, recruited by these departments to meet an emergency, is simultaneously dismissed when the emergency has passed. Not very long ago the

Institute sent a deputation to represent this evil to a Minister, I regret to say with little effect.

"The best official buildings in France are certainly not less convenient, less economical or less agreeable to look at than ours. But in that bureaucratic country there is no bureaucracy in architectural design, the Government extending a wise patronage to free-lance architects—often surprisingly young—who have distinguished themselves either academically or in their private practice. I am convinced that until our Government does the same it cannot be exonerated from the charge of neglecting the full possibilities of architectural progress.

"Among those of our members who are customarily called *salaried architects*, official architects are numerous, but that body also includes the architects regularly employed by non-official corporations, by banks and insurance companies, for example, and by commercial firms. The advisability of such restricted and often restrictive employment is not directly a matter of public concern since no public money is spent in it, although indirectly its tendency to weary our eyes with stereotype might be regarded as publicly undesirable. There is, however, a commercial justification for making a certain kind of building an architectural trade mark and this justification cannot be ignored. Perhaps the most that we can ask, and certainly the most that we are likely to get from this kind of practice, is that a design repeated deliberately over and over again shall be a good design. With the method of that design's production it would be presumptuous to suggest any interference.

"Other salaried architects are those employed as assistants in offices not their own, but most of these are probably only salaried of necessity and hope to practise independently as soon as they are in a position to do so. Hitherto this Institute has always conceived that the manner of a member's employment, whether he work for a salary or for fees, was a matter personal to himself into which it would be impertinent to enquire. The interests and status of the salaried architect have not been regarded as differing in the smallest degree from those of the independent architect and have, therefore, not been especially safeguarded. Some people think, and are now pressing their view, that these interests have not been safeguarded equally; that the Institute does more for its independent members than for its salaried ones. If this be true the injustice must be removed. On the other hand, the Council must never forget, in this or in any other connection, that the Institute exists to protect the interests, not primarily of architects, but of architecture. It is in the interests of architecture that a code of professional honour should be upheld, and upon this code the Institute insists. It is in the interests primarily of architects that fees should not fall below a certain scale, and this scale the Institute can do no more than strongly recommend. No doubt there are things we might usefully learn from Trade Unions, but there is one fundamental thing that Trade Unions could profitably learn from us. This is to avoid as factious and anti-social any attempt to protect the craftsman by means that have not as their first objective to protect the excellence of his craft."

REPLY BY AN OFFICIAL ARCHITECT

I WENT to the R.I.B.A. on November 1 hoping to hear in Mr. Goodhart-Rendel's inaugural address some signs that the Institute under his influence would face up to the realities of architectural practice as it is carried on today. Every year some of us go to the R.I.B.A. with the same forlorn hope, so far unsatisfied.

The new President had some witty things to say. Oh, yes—he made us laugh! He also had provocative things to say about various matters, such as Waterloo Bridge, town planning and architects' registration; matters of considerable importance to the profession and to the community as a whole.

Nevertheless, I left the meeting suffering from an uncomfortable mingling of seething anger and deep despondency.

Mr. Goodhart-Rendel had taken pains to emphasize that his address represented his personal opinions, but it is obvious that his opinions as President are bound to influence the Council over which he presides. His comments on official architecture and architects can only be described as reactionary, and unhappily coincide with what is generally believed to be already the general attitude of the Council.

Many of us remember a circular letter which emanated from the R.I.B.A. in 1935. This letter, briefly, tried to persuade local authorities throughout the country that their architectural staffs, in which a majority are members of the Institute, are a sort of inferior breed, only fit to do routine or unimportant work, that all the interesting major work should be farmed out to private architects, and that official architects should be prevented from carrying out private jobs in their own time. This egregious document roused such a storm of anger amongst official architects that it was thankfully allowed by its authors to sink into oblivion. Since the foundation of the Salaried Members' and Junior Members' Committees, some of us have ventured to hope that the attitude of the R.I.B.A. towards the salaried and, particularly, the official architect would be modified.

Alas for our hopes!

Mr. Goodhart-Rendel went out of his way to resurrect the 1935 controversy. He had announced his desire to be controversial, and he was! But what a field he chose for his prancing! Like some military Rip van Winkle seeking to manœuvre a mechanized army while mounted on a superannuated charger, so did our President, clad in all the panoply of Edwardian private practice, cavort before his fellow architects, of whom the great majority are salaried men, mostly in official capacities.

According to Mr. Goodhart-Rendel, official architectural staffs should be kept as a sort of reserve of competent draughtsmen, to do all the dull donkey work of the more attractive jobs, the designing of which should be given to the divinely inspired "freelance" architects.

Official architecture, says Mr. Goodhart-Rendel, tends to become stereotyped, to be unenterprising and lacking in experimental impulse, and it was clear that behind his words lay the traditional R.I.B.A. belief that official architects form a kind of sub-species, with some utility for carrying out work which would bore the private architect, but unfit to tackle any really important work. Furthermore, says Mr. Goodhart-Rendel, official organizations take on large staffs for emergencies and discharge them wholesale when the emergency is ended. Again, Mr. Goodhart-Rendel says that official architects have made no attempt to consider housing and slum-clearance from the point of view of the people to be re-housed.

The outlook displayed by the President is so wholly warped and inaccurate that it is difficult to discriminate between the possible replies to him.

Some official bodies certainly did discharge numbers of assistants during the last slump, and will again, no doubt, in the next. Were they to blame for the stupidity of a panic-stricken Government, which ordered a general standstill of public works? Did not many of them retain men for whom they had no work? It is well known that they did. Middlesex Council, for example, did not discharge a single man. Did the R.I.B.A. make any effective protest against these discharges or against the policy which made them inevitable? Did no private architects discharge staff? Of course they did, far more freely than did official bodies. It is well known that assistants' jobs in private offices are far more precarious than in official offices.

Is it the fault of official architects that they are not allowed by unimaginative committees to use their powers fully in designing housing? I personally know of a case where one such architect, in his own time and from pure enthusiasm, designed a block of flats and worked out all relevant figures of cost, rent, etc., which he submitted to his department. His effort was not only never discussed, it was never even acknowledged! As a matter of fact, however, this attitude is by no means universal, as will appear. In any case, does the working-class housing designed by private architects really outshine by so much, similar work done by official architects?

As to stereotyped design, does not Mr. Goodhart-Rendel know that the best periods of architecture have always been based on fundamentally standardized design? Moreover, is it not a fact that any individual architect inevitably develops a personal style in design which is as stereotyped as any official architecture, and which, in fact, being individual, tends to produce anarchy instead of good architecture? Official architects are not

concerned with the idiosyncrasies of clients, who want " something different," but with designs suitable for the jobs in hand.

The quality of work being done by official architects for many authorities is as good as anything being done by private architects today. Middlesex, Liverpool, Cambridgeshire, Leeds, the Miners' Welfare Committee, are only a few names which occur to me. So far from being stereotyped in any bad sense, most official bodies, especially the local authorities, deal with work as varied as does the average private architect, while some of them are experimenting with new ideas, methods of construction, heating, etc., quite as much as the private architect can do. Mr. Goodhart-Rendel appears to think that the haphazard state of things which makes the development of architecture dependent on the whims of individual clients is quite satisfactory. I think he can be answered by a paraphrase of Wren's famous epitaph, Anglicé " Use your eyes " !

The fact of the matter is that the controversy epitomized by the President's words should never have been allowed to rear its head again. That it should be openly exhumed like this only confirms a belief held by many members of the Institute that the Council is dominated by a minority of private practitioners who are desperately intent on maintaining or increasing a field of activity which is not only inevitably decreasing, but is becoming ever more concentrated in the hands of a decreasing number of euphemistically termed " business architects," and who are willing to gain their end by belittling their own professional colleagues in official posts and by forgetting their obligations to the community they should be serving.

Architecture is essentially a social service, and its focus lies in the official architect, whose work is done for the people as a whole to a far greater extent than is the work of the private architect. Such work is done more conveniently and economically in official offices, and such offices offer more secure lives and better working conditions for architects than do private offices. The younger men, who in pre-war days would have gone into private practice as a matter of course, are tending more and more to take up public work.

Of course there are defects in the official system. It is seriously hampered by " red tape," by the " office-boy mentality " which tends to dominate staff matters, frequently by bad organization. Salaries are often disgracefully low. Committees are unimaginative and timid. Architects are expected to work as subordinates to surveyors and engineers, whose training does not fit them to control architectural work. New ideas and experiments are stifled because the committees deal only with the chief architect or his deputy, who frequently is not directly responsible for the design. It is not realized that a senior or chief assistant in an official office is usually equal in ability, experience and standing to the average private architect, and it would be a great advantage if these men attended committee meetings with their principals when their particular jobs were under discussion. All the foregoing are matters in which the R.I.B.A. could effect great and beneficial changes, were it sufficiently alive to its responsibilities to the community and appreciative of the purposes for which it was founded. By all means protect and further the legitimate interests of the private architect, so long as a field for his activities continues to exist. But let the Institute also throw its very considerable influence into the service of that majority of its members who are official architects. Persistence in publicity belittling these men, and decrying their work, refusal to fight to win them equal status with their engineering and surveying colleagues, will only end by destroying the work and influence of architects as a whole, unless official architects in desperation end by forming an organization of their own and ignoring the R.I.B.A.

A new oil painting for the Manchester Town Hall Extension. The photograph shows Mr. A. Sherwood Edwards at work on his painting " Progress " in the Gas Committee's Showrooms in Manchester.

LAW REPORT

ACTION FOR ARCHITECT'S FEES

Thomas v. *Hammersmith Borough Council Before Mr. Justice Porter.*

THIS was an action by Sir Alfred Brumwell Thomas, F.R.I.B.A., of 3 The Albany, Piccadilly, W., to recover from the Hammersmith Borough Council £1,500 for work done and services rendered by him for the defendants as architect under the footing *quantum meruit* and further, and in the alternative £5,000 damages, being the balance of the plaintiff's scale remuneration for work as the architect of the defendants in pursuance of a contract in writing contained in a series of letters passing between the parties from August 15, 1930, to November 24, 1933, and in a writing under common seal of the defendants, dated June 28, 1933, and which sum the defendants refused to pay.

The plaintiff's case was that in 1930 he, out of a number of nominees of the President of the R.I.B.A., was selected by the defendants for appointment in connection with works proposed by the defendants, for the erection of a Town Hall in the Borough of Hammersmith. At that time the defendants were anxious, in connection with their scheme, to have the same approved by the Unemployment Grants Committee of the Ministry of Health as a scheme meriting a grant out of public funds for the purpose of the relief of unemployment in the Borough. The plaintiff accepted the invitation in consideration of the defendants guaranteeing to him his appointment as architect in connection with the building of a Town Hall and for the consideration aforesaid in or about September, 1930, plaintiff proceeded to prepare the plans and estimates for submission to the Committee, charging the defendants out of pocket expenses only, and agreeing further that his usual fees in connection with the work should merge in his agreed fee payable in connection with the building, which agreed fee was 6 per cent. on the total cost of the executed work. Plaintiff duly prepared the plans and

estimates and the defendants accepted the same and used them for submission to the Committee and in respect of that work plaintiff claimed £1,500.

Further, and in the alternative, by letters passing between the parties and in pursuance of a resolution of defendants of October 22, 1930, plaintiff alleged that the defendants employed him as their architect in connection with the scheme for the erection of the Town Hall building on a site purchased by the defendants, for a sum not exceeding £36,000 and agreed to pay him on the basis of the ordinary scale of fees of the R.I.B.A., being 6 per cent. of the total cost of the executed works estimated at £200,000. Plaintiff entered upon the work and prepared the plans and having completed the work necessary to enable the defendants to proceed with the erection of the building they notified him that the scheme had been abandoned.

In these circumstances plaintiff alleged he was entitled under the scale to be paid 4 per cent. of the estimated cost of the abandoned works, viz. £8,000.

Defendants had paid plaintiff £3,000 but refused to pay the £5,000 outstanding in accordance with the scale. The present action was then brought.

Defendants, by their defence pleaded that in the preparation of the preliminary plans and of the estimates in relation to the loan, the plaintiff was employed as an expert and he undertook such work on the terms of receiving a fee of 250 guineas, or payment of his out of pocket expenses, whichever sum should be the lesser, and in the event of defendants' application failing (as it did in fact) the defendants were under no obligation to employ the plaintiff as the architect, nor was the plaintiff's original engagement accepted by him in consideration of any such right or obligation. In June, 1933, the defendants were considering the preparation of a scheme for the erection of a Town Hall on their site at a reduced cost by means of a loan with the sanction of the L.C.C. and the plaintiff having intimated his willingness to waive any claim to payment for previous work in connection with his appointment as their architect in connection with such new revised scheme, he was employed on the terms of a resolution passed by the defendants on June 28, 1933, and sealed, when accepted by the plaintiff on November 7, 1933. By that resolution plaintiff agreed that the scale charge in respect of the new works should be inclusive of all incidental fees and services whatsoever in connection with the works, including services already performed. They further pleaded that the plaintiff was aware that his designs and detailed drawings had got to be approved by the whole Council before any step would be sanctioned, but in consequence of the suggestion and advice of the plaintiff in June, 1934, that an open space called Brook Green should be exchanged for the defendants' existing site and a new Town Hall built there suitable to the defendants' requirements, plaintiff's designs and plans were suspended pending consideration of suggestions and preliminary designs for the Brook Green site. Defendants said that on November 29, 1934, plaintiff was paid £3,000 on the ground that in the circumstances it was equitable that a substantial payment should be made at that stage on account of his fees. By reason of the public opposition to a Town Hall being built at Brook Green, the defendants had to abandon the project. Then the plaintiff was requested to prepare and re-submit his designs and plans provisionally approved in the previous June and this the plaintiff did. Although provisionally approved towards the end of March at a meeting of the General Purposes Committee of the defendant Council, the plaintiff on June 24, 1935, for the first time, informed the defendants that their site was unsuitable for a Town Hall of the character required and providing the accommodation required. On July 23, 1935, the plaintiff was informed by letter that the scheme was abandoned and his appointment determined. By reason of these matters the defendants denied that they were guilty of any breach of contract to employ the plaintiff, or that the plaintiff was entitled to the alleged remuneration or damages. The defendants, by way of defence, relied upon Section 4 of the London Government Act, 1899, and Section 149 of the Metropolis Management Act, and denied that the statement of claim disclosed any cause of action.

Mr. W. J. Morris, K.C., and Mr. Granville Sharp appeared for the plaintiff and Mr. D. N. Pritt, K.C., and Mr. R. A. Willes for the defendants.

Sir Alfred Brumwell Thomas gave evidence in support of his case. He said his practice extended over 45 years, and had been mainly in connection with the design and erection of public buildings. He prepared plans for the Town Hall at Hammersmith and they were approved by the Council in 1934. Owing to the site of the building being changed, a new set of plans had to be made. He first discussed the matter with the Town Clerk in August, 1930, and he submitted plans in the following October.

Sir Brumwell Thomas, in the course of his evidence, said in August, 1930, he sent a reply to the Town Clerk of Hammersmith accepting the proposal contained in his letter and stating that he would accept a preliminary fee for preparing plans for a building under the scheme in connection with the Unemployed Grant Committee. He submitted the plans with a report. The plans had been based on particulars of accommodation furnished him after a consultation between the chief officers and the advisory sub-committee of the Council. He prepared working drawings of the new Town Hall, but they were never submitted to the Council. The grant of the Unemployed Grants Committee had been refused a long time before—after the financial crisis. There was a proposal to revise the plans on a basis of an expenditure of £200,000, inclusive of the value of the site. He revised his plans so as to reduce the expenditure. It was ultimately agreed to go back to the plans of doing the work for £200,000, not including the value of the site, and he had submitted plans to the Council on that basis. These plans were laid before the advisory sub-committee, and after they had been approved he prepared the working drawings. He agreed that he was struck with the idea of moving the site of the new Town Hall from the original site on to the tennis courts at Brook Green, and the Town Clerk and Council were greatly in favour of it. He did not receive instructions to go forward with the preparation of new plans in connection with that idea until it was approved by the L.C.C.

His lordship : Did you make any change in the design ?—Yes, a complete change. It was entirely a new design.

Sir Brumwell, continuing his evidence, said the site on Brook Green was suddenly jettisoned by the Council and they afterwards went back to the original site, and a revised design came before the Council and was so severely criticized by the Council that it was sent back for further consideration. In August, 1930, in reply to a letter from the Town Clerk, he wrote saying he should be pleased to undertake the work in connection with the grant and that his charge in the initial stage would be 250 guineas or out of pocket expenses. He had discussed the site with the Town Clerk as to the easements and the limitations, and in his report he drew attention to the limitations. He thought the Brook Green tennis site constituted the only site large enough for the purpose. The scheme attracted considerable public attention. The Council affirmed the abandonment of Brook Green at the end of February, 1934. About the middle of March there was a meeting of the Building Committee at which plans were again sent up for the approval of the Council. The first meeting of the Council for the consideration of the plans sent back took place early in June, 1935. Various suggestions were made at the meeting, but no decision was ever formally made. He prepared the elevations showing the proposed building with the dome and without it. It would have made a fine design either way.

Cross-examined by Mr. Pritt, Sir Brumwell agreed that there was nothing in the plans to show any heating. His drawings were such as would enable the quantity surveyor to prepare quantities, but not as to heating. The matter could not go to the quantity surveyor until the question of the heating had been decided. The general quantities were one bill and engineering was quite a separate bill.

Mr. Pritt : I suppose the architect does do something in relation to the building ?—He does all the designing.

Do you read the R.I.B.A. Journal ?—Yes.

The new scale of charges was announced in that, was it not ?—Yes.

I think I am speaking accurately when I say that throughout this correspondence with the Council every reference by you to the scale was the old scale ?—Yes, all my arrangements were made under the old scale.

How did you know that ?—I assumed it to be so.

When you did know, did it not occur to you that you ought to inform the Hammersmith Borough Council about this new scale ?—I hardly know at what stage you expected me to do that.

The moment you knew the new one !—My arrangements were all made during the time of the old scale.

Were you desirous of putting yourself as early as possible into a position in which you could claim 4 per cent. if any difficulties arose ?—I don't think it occurred to me.

Sir Brumwell was then examined at length and in great detail in regard to his plans.

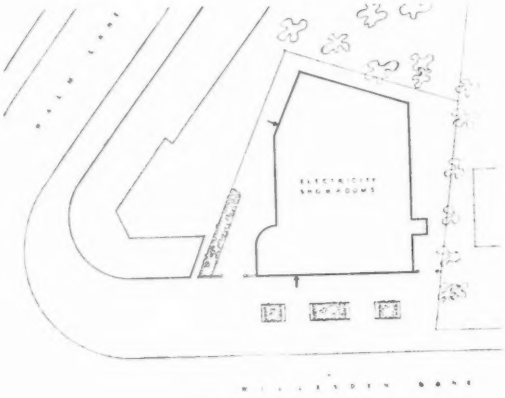
Replying to further questioning by Mr. Pritt, Sir Brumwell said that nothing was done by him in regard to the plans after the abandonment of the contract.

(The hearing is still proceeding ; the case is expected to last for several days.)

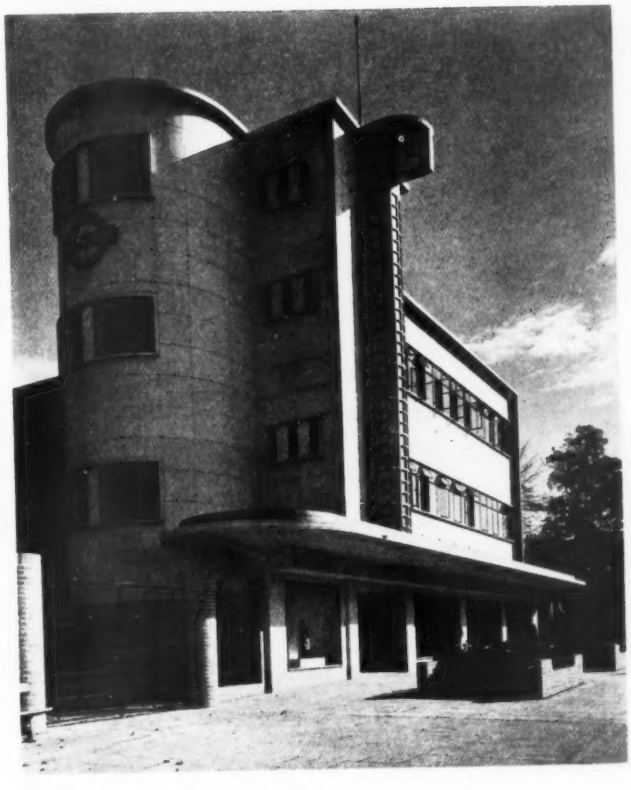
ELECTRICITY SHOWROOMS AND OFFICES, WILLESDEN

DESIGNED BY

F. WAYMAN BROWN



SITE PLAN



GENERAL—*Offices for the Electricity Department of the Borough of Willesden.*

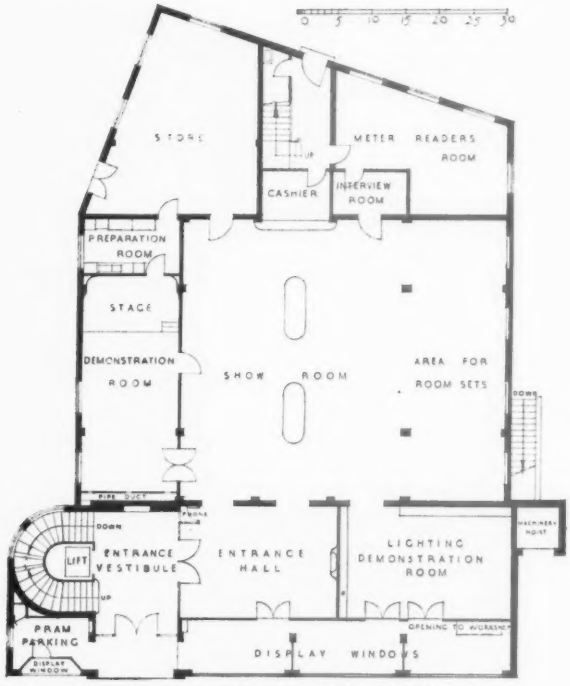
SITE—*In Willesden Lane, N.W. The building, which has a frontage of 74 ft. and a mean depth of 90 ft., is set back to give space for seats and flower beds.*

The photographs show : Above, a detail of one of the side entrances ; right, a general view of the main front.

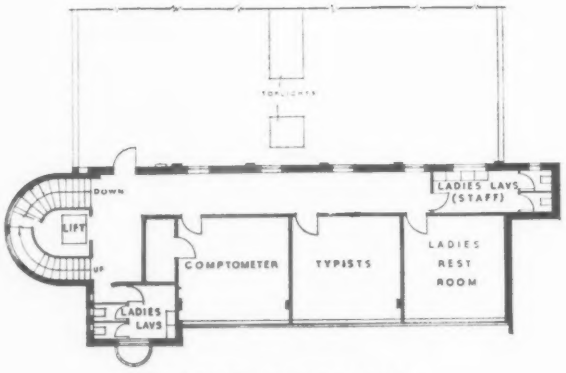
ELECTRICITY SHOWROOMS AND OFFICES

DESIGNED BY

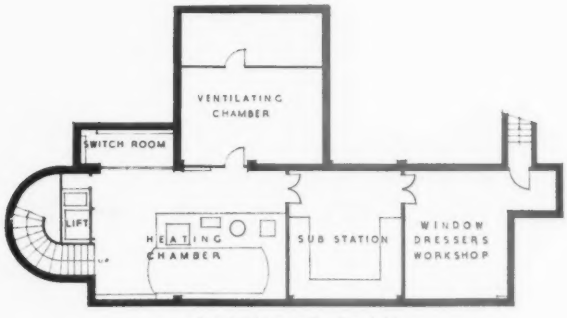
F. WAYMAN BROWN



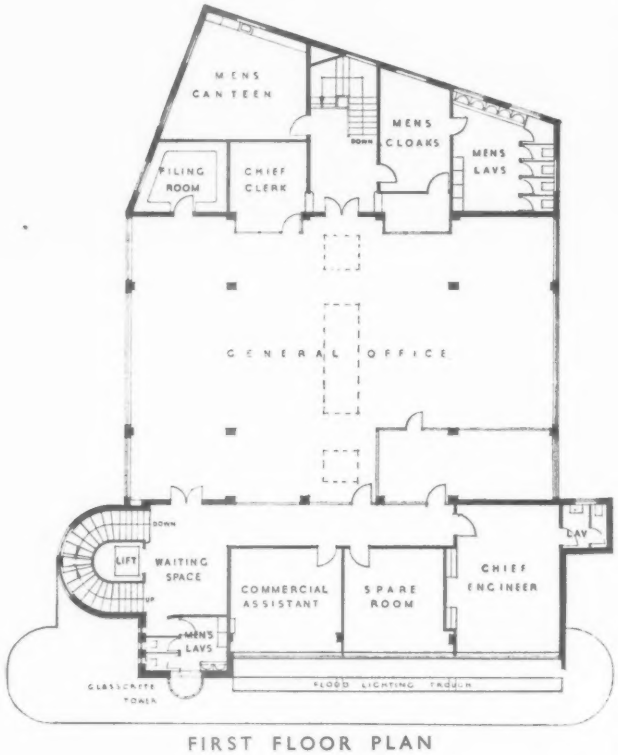
GROUND FLOOR PLAN



SECOND FLOOR PLAN



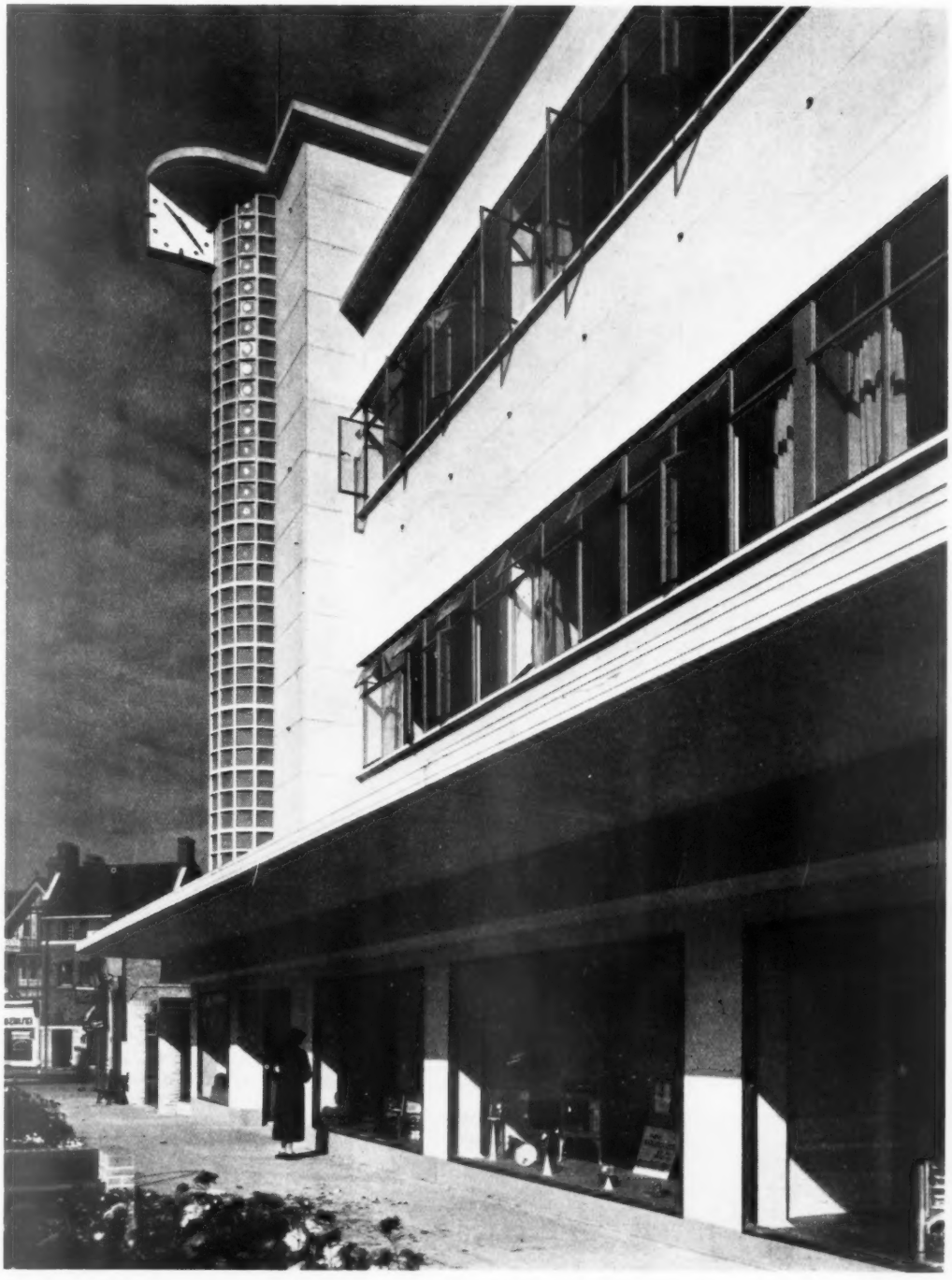
BASEMENT PLAN



FIRST FLOOR PLAN

PLAN—*The main showroom is provided with one small counter for the payment of accounts only. This is placed at the far end and remote from the entrance, so that consumers will see, as they pass in and out, the various exhibits of electrical appliances. The tables for the showroom assistants are placed at intervals along the sides of the room to enable them to deal individually with inquirers. The general office on the first floor accommodates the whole of the male clerical staff. The various departments, such as consumers' accounts, hire and hire-purchase agreements, stores and wages, are grouped in sections. The front section of the second floor only has been erected, and in this the whole of the female staff is accommodated. Separate offices are provided for the typists and machine operators. The ladies' messroom has been designed so that it serves also as a cloakroom and rest-room. The mechanical services plant in the basement has been arranged as a permanent exhibit.*

WILLESDEN LANE, FOR THE WILLESDEN B.C.



CONSTRUCTION AND EXTERNAL FINISHES — *Steel-frame structure, brick-infilled with cream hand-made sand-faced bricks. The tower and the main staircase encircling the lift well are of reinforced concrete, as are also the canopy and copings. The front elevation is finished in travertine terrazzo. The floors are constructed of pre-cast girder section concrete beams. Embedded in the soffits of the girder ribs are teak strips, to which are fixed expanded metal sheets for the plaster ceilings. A flat roof is provided, and the structure has been designed to permit the extension of the second floor in the future when the necessity arises.*

Above is a detail of the main front.

ELECTRICITY OFFICES AND SHOWROOMS, WILLESDEN

DESIGNED BY F. WAYMAN BROWN

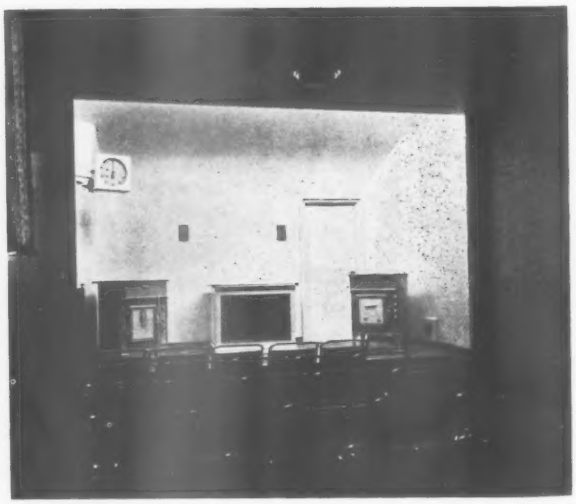
INTERNAL FINISHES—*The entrance hall, vestibule and main staircase are finished in travertine terrazzo; and maple wood flooring is used elsewhere. The principal rooms are panelled with Empire hardwoods and the floors are of compressed cork.*

HEATING—*The heating is electric and entirely automatic in operation. The heating elements are ordinary hot-water radiators.*

COST—*£25,000; 1s. 7½d. per foot cube.*

The photographs show: left, the main entrance hall and staircase; below, left, the showroom; below, right, the demonstration room.

For list of general and sub-contractors, see page 762.



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INFORMATION SHEET

SUPPLEMENT

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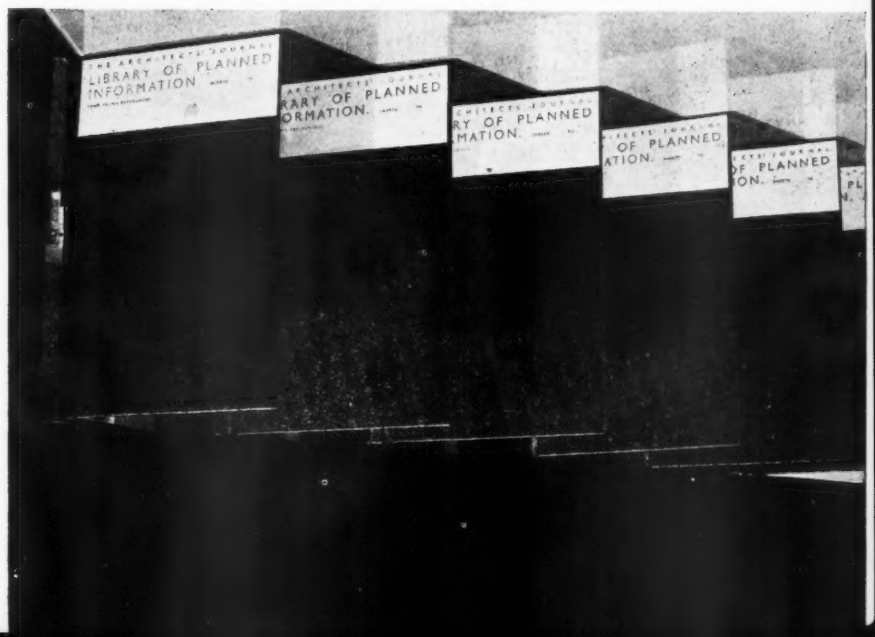

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507 : Plumbing : Jointing of Copper Pipe
508 : Roofing—Valley Flashings
509 : The Equipment of Buildings
510 : Aluminium
511 : Elementary Schools—II
512 : School Lighting
513 : Approximate Estimating—XIV
514 : Air Conditioning
515 : Insulation of Buildings
516 : Cycle Parks
517 : Cycle Parks
518 : Plumbing Systems—II
519 : Kitchen Equipment
520 : Roofing—Flashings
521 : Motor Cycle Parks
522 : Reinforced Asbestos-Cement Roofing Tiles
523 : Poison Gas Precautions
524 : Kitchen Equipment
525 : Metal Reinforced Asbestos Cement
526 : Leadwork to Photographic Developing Tanks
527 : Asbestos-Cement Corrugated Sheets
528 : Cycle Parks
529 : Kitchen Equipment
530 : Asbestos-Cement Corrugated Sheets
531 : Plumbing
532 : Roofing—Flashings
533 : Asbestos-Cement Corrugated Sheets
534 : Insulation of Buildings
535 : The Equipment of Buildings
536 : Asbestos-Cement Ventilators
537 : Slate Window Cills, etc.
538 : Petroleum Storage
539 : Linoleum
540 : Plumbing
541 : Linoleum
542 : Garage Equipment
543 : The Equipment of Buildings
544 : Sheet Leadwork
545 : Elementary Schools—III
546 : Elementary Schools—IV
547 : U.S.A. Plumbing—III
548 : Wallboards
549 : Elementary Schools—V
550 : Elementary Schools—VI
551 : U.S.A. Plumbing—IV
552 : Sheet Leadwork
553 : Kitchen Equipment
554 : Burnt Clay Roofing Tiles
555 : A.B.M. Draining Boards
556 : Kitchen Equipment
557 : Asbestos-Cement Roofing
558 : A.B.M. Rainwater Pipes
559 : Flashing
560 : Kitchen Equipment
561 : Asbestos-Cement Roofing
562 : A.B.M. Rainwater Gutters and Fittings
563 : Asbestos-Cement Roofing
564 : The Equipment of Buildings
565 : Air Conditioning
566 : A.B.M. Rainwater Gutters and Fittings
567 : Plywood—I
568 : Leadwork
569 : Gas Cookers
570 : A.B.M. Moulded Gutters and Fittings
571 : Fuel Storage—I

710.

110.

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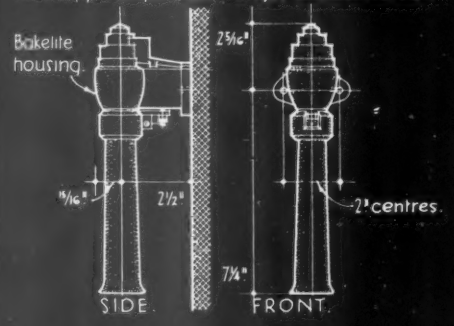
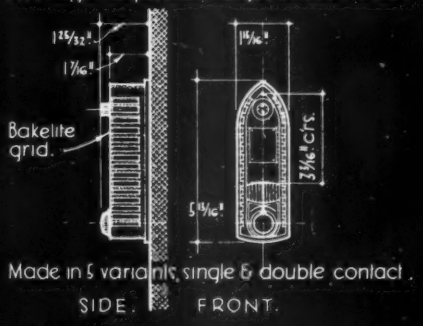
(A) ROOM TEMPERATURE THERMOSTATS for wall mounting: scale: 3/16" equals 1 Foot.

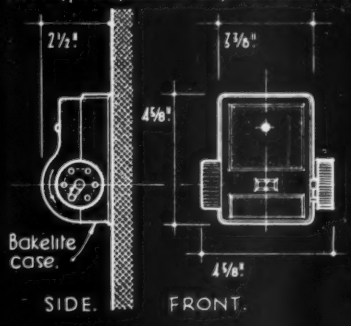
TYPE RT, for temperature ranges between 40-80°F.



TYPE AC, for temperature ranges between 40-80°F.

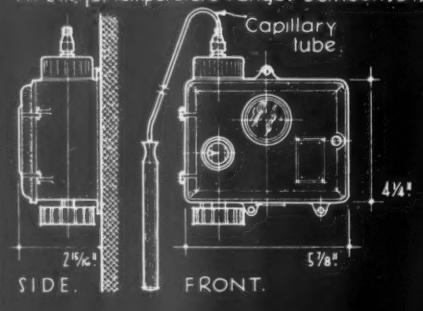


TYPE YM, for temperature ranges between 30-90°F.

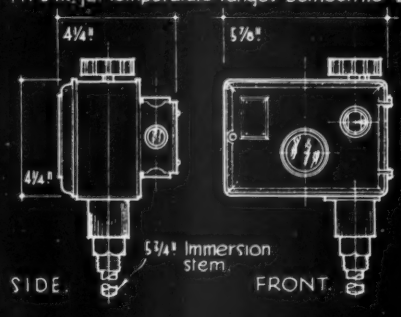


(B) BOILER CONTROL THERMOSTATS for wall and boiler mountings: Scale: 3/16" equals 1 Foot.

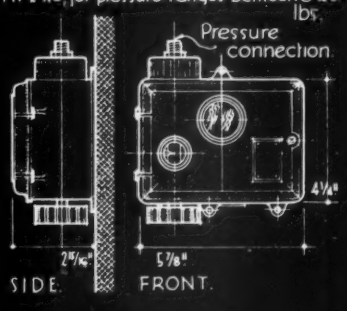
TYPE KF, for temperature ranges between 30-190°F.



TYPE KS, for temperature ranges between 110-200°F.

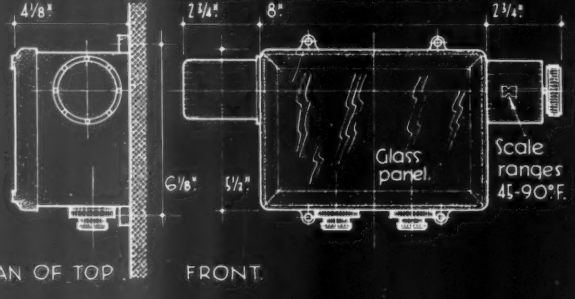


TYPE KG, for pressure ranges between 0-120 lbs.

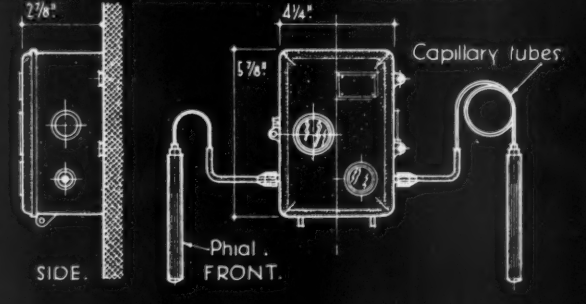


(C) SPECIAL INSTRUMENTS: (1) Multi-contact thermostats. (2) Differential thermostats. Scale: 3/16" equals 1 Foot.

TYPES K14/4&5 Multi-contactor. 2-to7-step available.

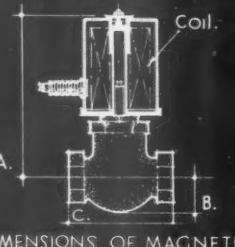


TYPE K30T, temperature range, -F. Ambient control.



(D) MECHANISED CONTROLS: for volume control of gas, oil, steam, water, air, etc. (Not to scale).

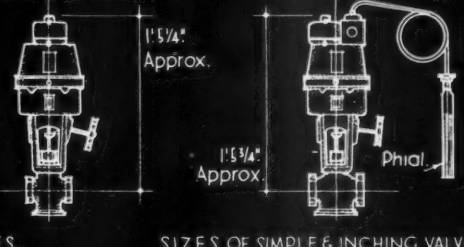
(1) MAGNETIC VALVES.



DIMENSIONS OF MAGNETIC VALVES.

PIPE SIZE.	1/4"-1/2"	1/4"-1/2"	1/2"	3/4"	1"	1 1/4"	1 1/2"
MAX. PRESS.	250 lbs	60.	25	10.	6.	4.	2.
A.	5 5/8"	5"	5"	5"	5 15/16"	6 1/4"	6 1/2"
B.	—	13/16"	13/16"	1"	1 3/8"	1 5/8"	1 3/4"
C.	—	2 1/4"	2 1/4"	3"	4"	4 3/8"	5"

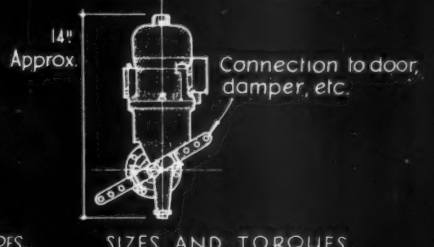
(2) HYDRAULICALLY OPERATED MOTORISED VALVES.
a. Simple valve. b. Inching valve.



SIZES OF SIMPLE & INCHING VALVE TYPES.

SEAT SIZE.	3/4"	1"	1 1/4"	1 1/2"	2"
MAX. PRESS	900 lbs.	500.	350.	250.	150.
SEAT SIZE.	2 1/2"	3"	3 1/2"	4"	5"
MAX. PRESS	110 lbs.	85.	70.	50.	20.

(3) HYDRAULICALLY OPERATED MOTORISED DAMPER UNIT.



SIZES AND TORQUES.

SIZE.	TORQUE.
3 1/2"	35 lbs. - ins.
4 3/8"	50 lbs. - ins.
5"	120 lbs. - ins.

Information from The British Thermostat Co. Ltd.

INFORMATION SHEET: ELECTRIC THERMOSTATS & MECHANISED CONTROLS.

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

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INFORMATION SHEET

• 572 •

ELECTRICAL EQUIPMENT

Products : Teddington Thermostats and Mechanized Controls

General :
This Sheet sets out in diagrammatic form some of the more common electrical instruments and apparatus used for automatic control purposes. The equipment shown represents a range of fittings that may be regarded as standard practice in any one class of installation, one instrument usually being used in conjunction with one or more of the others.

(a) Room Thermostats
The instruments shown are thermostatic switches designed to operate on the room temperature, and to control either electric heating devices directly or through contactor gear, or to control other forms of heating plant *via* magnetic or motorized valves, damper units, stoker-motor or fan switching, etc.

(1) *Type RT*

This model is of the bi-metallic type, i.e. the power for operating the switch contacts is derived from the unequal expansion of two dissimilar metals such as brass and Invar, these being arranged as a compound system to deflect or distort under changing temperature conditions. The "make" and "break" are magnetically assisted and the silver contacts are rated to carry up to 15 amperes at 250 volts A.C. or 1 ampere at 250 volts D.C.

The sensitive element is housed in a vertical moulded bakelite fitment, open at the top and bottom to permit free circulation of air.

This instrument has been designed primarily to avoid two sources of error which, in the past, have militated against accurate temperature control. Owing to the comparatively small contact area between the back-plate and the wall, and to the location of the back-plate at the top of the instrument, wall temperatures do not affect the sensitive element. The thermostat itself projects sufficiently into the room to avoid the abnormal temperature conditions which always exist over a region extending to a distance of at least 1½ inches from the surface of the wall.

The standard normal differential is 4° F., but a special fine setting of ± 1° F. is possible.

The bakelite housing is obtainable in practically every colour, stock finishes being black or walnut.

(2) *Type AC*

This type is available in five variants of single or double contact form, and is provided with the standard adjustable temperature setting range and a hand-operated control which permits the automatic action to be limited or put out of operation at will. A.C. and D.C. switch capacities at 250 volts range between 0·5 and 10 amperes, and the standard differentials are 2, 3 and 4° F. Stock finishes are walnut or mahogany bakelite, but special colours can be supplied to order.

(3) *Type YM*

This model is also suitable for large buildings such as hospitals, institutions, etc., and is of the vapour-pressure type, i.e. the operation of the switch is achieved through the expansion and contraction of a bellows chamber charged with a volatile liquid and exposed to the temperature to be controlled. Model YM shown has a self-contained sensitive element, but a model YM 1 is also available with a sensitive phial and capillary tube. Switch capacity at 250 volts A.C. is 10 amps., D.C. 5 amps.

The case is of bakelite, stock colours being black or walnut.

(b) Boiler Controls
Instruments in this group are heavy-duty fittings operating as thermostats or as pressure controls for steam or hot water heating systems.

(1) *Type K5*

Suitable for remote control hot water circulating systems, etc., this model is of the vapour-pressure type, having a substantially dust and moisture proof metal case fitted with capillary tubing and sensitive phial. Various similar models having circuit and switching variations are available for heating and cooling circuits, marine use, etc. Standard finish, black crackle enamel.

(2) *Type KS*

An immersion type thermostat for boiler house installations, this model is contained in a substantially dust and moisture proof metal case and has a mercury tube type switch, temperature scale adjusting knob and differential adjuster. It is suitable for the direct switching of fan motors, stoker motors, magnetic gas valves, electric heaters, etc., and has a switch capacity up to 15 amperes at 250 volts A.C. or D.C.

(3) *Type K6*

This instrument is for use as a pressure control for low-pressure steam, water, air or gas, interrupting the electrical circuit through a non-oxidising mercury tube switch on an increase of pressure. The mechanism is totally enclosed in a metal dust-tight case, normal glass portholes being provided for the switch and scale. Electrical characteristics are 15 amps. A.C. or D.C. up to 250 volts, while standard and special pressures range between 0 to 250 lbs./sq. in. with minimum differentials from ½ to 15 lbs./sq. in., according to working range.

(4) *Type WV*

"Teddington" Type WV pressure and thermally-operated valves, for controlling either low pressure steam or water, are made in ½-in. and ¾-in. sizes for water pressures between 5 and 100 lbs. per sq. in. and have maximum capacities varying between 160 and 1,000 gallons per hour. For larger capacities, motorized valves such as those shown in Section D below are recommended.

(5) *Type Z*

"Teddington" thermally operated steam traps are made in two series, the ZL trap being for steam pressures up to 20 lbs. and the ZH trap for pressures up to 100 lbs. per sq. in. Both types are normally arranged to discharge condensate on a depression of 15° F. below the prevailing steam temperature. Various inlet and outlet sizes are available.

(c) Special Instruments

(1) *Type K14. Multi-contact Thermostats*

These instruments are intended primarily for the control of electric heating installations where it is desirable to avoid the severe fluctuations in the electric load which occur when a thermostat of the simple on-off type is used. By a method of progressive switching, control is exercised on a comparatively small section of the load, and a certain measure of "inching" control provided. Models having from 2 up to 7 switch elements are made, either with self-contained or with separate sensitive elements on capillary tubes.

(2) *Type K30T. Differential Thermostat*

This instrument is particularly suitable for controlling large central heating installations in such a way that the water flow controls (Section D), and hence the temperatures, are regulated according to the ambient temperature outside the building. The instruments can be supplied in various adjustable ranges and for various electrical characteristics. Maximum length of capillary tube, 20 ft.

(d) Mechanized Controls :

(1) *Magnetic Valves*

"Teddington" magnetic valves for the volume control of gas, oil, steam or water are available for numerous pipe sizes and voltages. The apparatus is suitable for use with the thermostats in sections A, B and C.

(2) *Motorized Valves*

These appliances are intended for amplifying the initial impulse delivered by the temperature-sensitive element of ordinary thermostatic control apparatus, the effort of which is generally too small to effectively operate valves and dampers. The valves are hydraulically operated, pressure being generated by an electrically-driven oil pump contained in the body. In applications where the simple control-cycle of fully-open/fully-closed suffices, the pump motor is switched on and off by a thermostatic switch of normal type. For closer regulation, however, an "inching" control is provided.

Both types are fitted with a hand-wheel for manual operation in the event of current failure, for testing, or for permitting a pre-determined permanent by-pass through the valve.

The valves incorporated in these units are of the normal globe pattern with packed glands suitable for steam or hot water. For refrigeration application, a special type is supplied in which precautions are taken to prevent freezing at the gland. In addition to the straight-through valves illustrated, types suitable for use as mixing and by-pass valves are available. The standard arrangement is for inclusion in a horizontal pipe run, but angle valves are also made, in which, while the control unit remains vertical, the valve itself is arranged horizontally for inclusion in a vertical pipe line.

(3) *Damper Units*

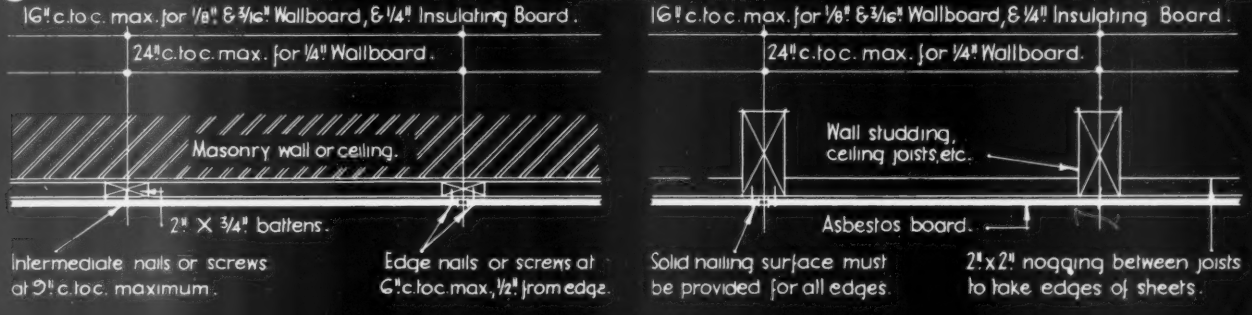
In place of a valve as fitted to the motorized valves described above, the driving unit can be fitted with a rack and pinion mechanism for operating dampers, small doors, louvres, etc., either directly or through rods and cables.

Manufacturers : The British Thermostat Co., Ltd.
Address : Sunbury-on-Thames, Middlesex
Telephone : Sunbury-on-Thames 456 (6 lines)
Telegrams : Thermostat, Sunbury-on-Thames

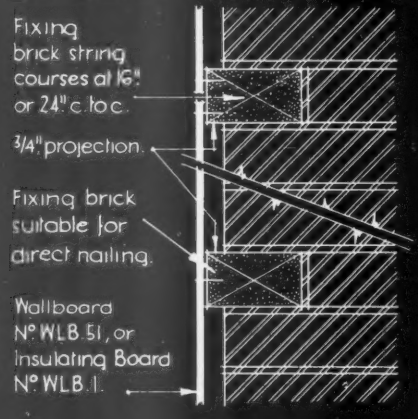
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

· TURNALL · ASBESTOS WALLBOARD Nº WLB.51, AND INSULATING BOARD Nº WLB.1.

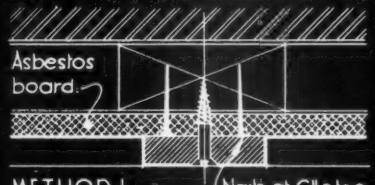
(A) SECTIONS SHOWING TYPICAL BATTEN OR STUD SPACING FOR SURFACE APPLICATION TO WALLS & CEILINGS:



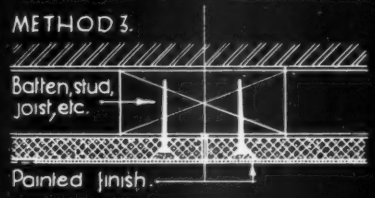
(B) ALTERNATIVE FIXING TO BRICK WALL:



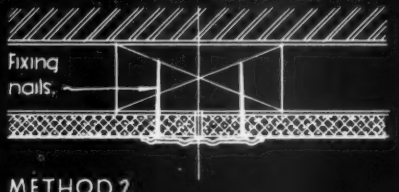
(C) METHODS OF TREATING THE HORIZONTAL & VERTICAL JOINTS:



METHOD 1.



METHOD 3.

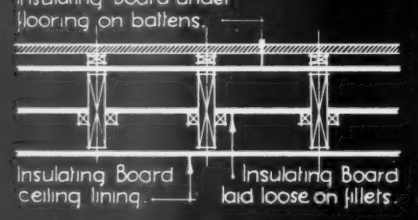


METHOD 2.

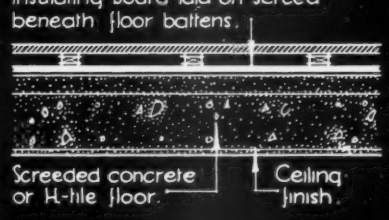
1. Plain or moulded wood or metal cover strips screwed on.
2. Embossed paper strips fixed with a good quality paste.
3. Boards nailed in countersunk holes puttied up, & linen strip fixed over with wallpaper paste.

(D) DETAILS SHOWING THE CONSTRUCTIONAL APPLICATION OF 1/4" INSULATING BOARD TO WALLS, FLOORS & ROOFS:

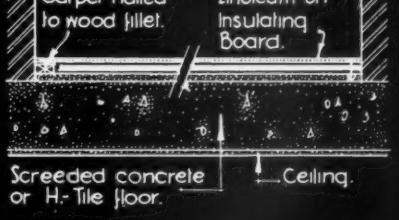
SOUND INSULATING A WOODEN FLOOR.



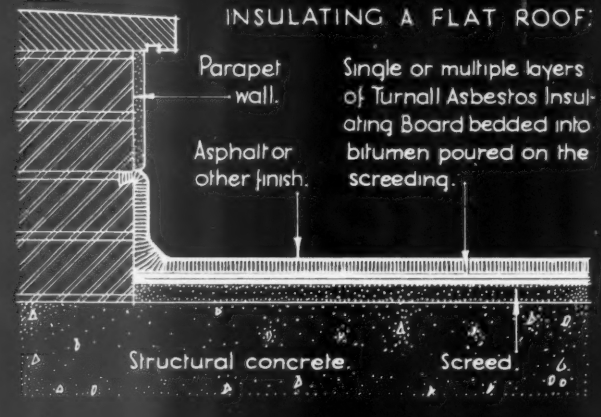
SOUND INSULATING A CONCRETE FLOOR.



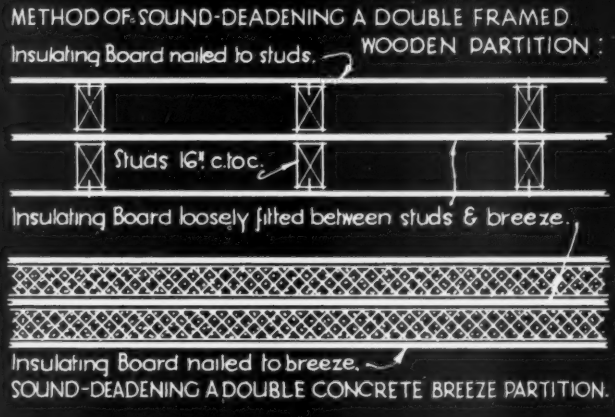
UNDER-FELTING TO CARPET or LINOLEUM.



INSULATING A FLAT ROOF:



METHOD OF SOUND-DEADENING A DOUBLE FRAMED WOODEN PARTITION:



SOUND-DEADENING A DOUBLE CONCRETE BREEZE PARTITION.

Information from Turners Asbestos Cement Co. branch of Turner & Newall Ltd.

INFORMATION SHEET: ASBESTOS WALLBOARD & INSULATING BOARD.

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

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INFORMATION SHEET

• 573 •

WALLBOARD AND INSULATING BOARD

Product : "Turnall" Asbestos Wallboard and Insulating Board

Composition :

The Asbestos Wallboard and Insulating board dealt with on this Sheet are mainly composed of mineral asbestos fibre. During the manufacturing process the raw fibre is crushed, to enable full advantage to be taken, in later processes, of the fine, silk-like structure of the resulting mass. The intricate and closely interlocked structure formed by these asbestos threads is depended upon to a large extent to provide the special properties of the finished product.

Properties :

Both the Wallboard No. W.L.B.51, and the Insulating board No. W.L.B. 1 are supplied in standard size sheets of 8 ft. by 4 ft. Wallboards are made in $\frac{1}{8}$ in., $\frac{3}{16}$ in. and $\frac{1}{4}$ in. thicknesses, weighing 0.72 lb., 1.06 lb. and 1.41 lb. per square foot respectively. The $\frac{1}{4}$ in. Insulating board weighs approximately $14\frac{3}{4}$ oz. per square foot, or $29\frac{3}{4}$ lb. per sheet.

Both types of board are incombustible, non-inflammable, and vermin proof, and may be readily curved without fear of fracture. The $\frac{1}{8}$ in. thick wallboard can be laid to a 15 in. radius. All asbestos boards possess good sound and heat insulating properties, and may easily be cut with a fine saw or a sharp chisel. The sheets are easy to handle and may be fixed either by screws or nails.

Fixing :

The various methods and particulars of fixing are shown in the details overleaf. It should be noted that solid nailing surface is required for all edges of the material regardless of shape or size. When fixing the $\frac{1}{4}$ in. Insulating board No. W.L.B. 1, the surface may, if desired, be nicked with a pocket knife, and secret nailed with $1\frac{1}{2}$ in. nails, the surface of the material being hammered back over the head. Approximately $\frac{3}{4}$ lb. of nails are required per square of 100 square feet of board, and where they are to be covered, $1\frac{1}{4}$ in. by 13 gauge nails should be used.

Finishing :

Both "Turnall" Asbestos Wallboard and Insulating board have a natural surface and tone which provides a finished decoration without other treatment. Various effects can be secured by stippling by any of the well-known methods, while plain or shaded tones are best obtained by staining with dyestuffs or similar stains. There is no necessity to size the boards before the application of distemper, oil or water paints, although a cheap filler or petrifying liquid may be used to prevent undue absorption.

Plastic paints are also suitable for direct application, and they should be applied in a thick coat.

After the joints in the boards have been suitably treated, wallpaper can be applied in the usual manner.

Information from : Turners Asbestos Cement Co. branch of Turner and Newall Ltd.

Address : (Central Office) Trafford Park, Manchester, 17

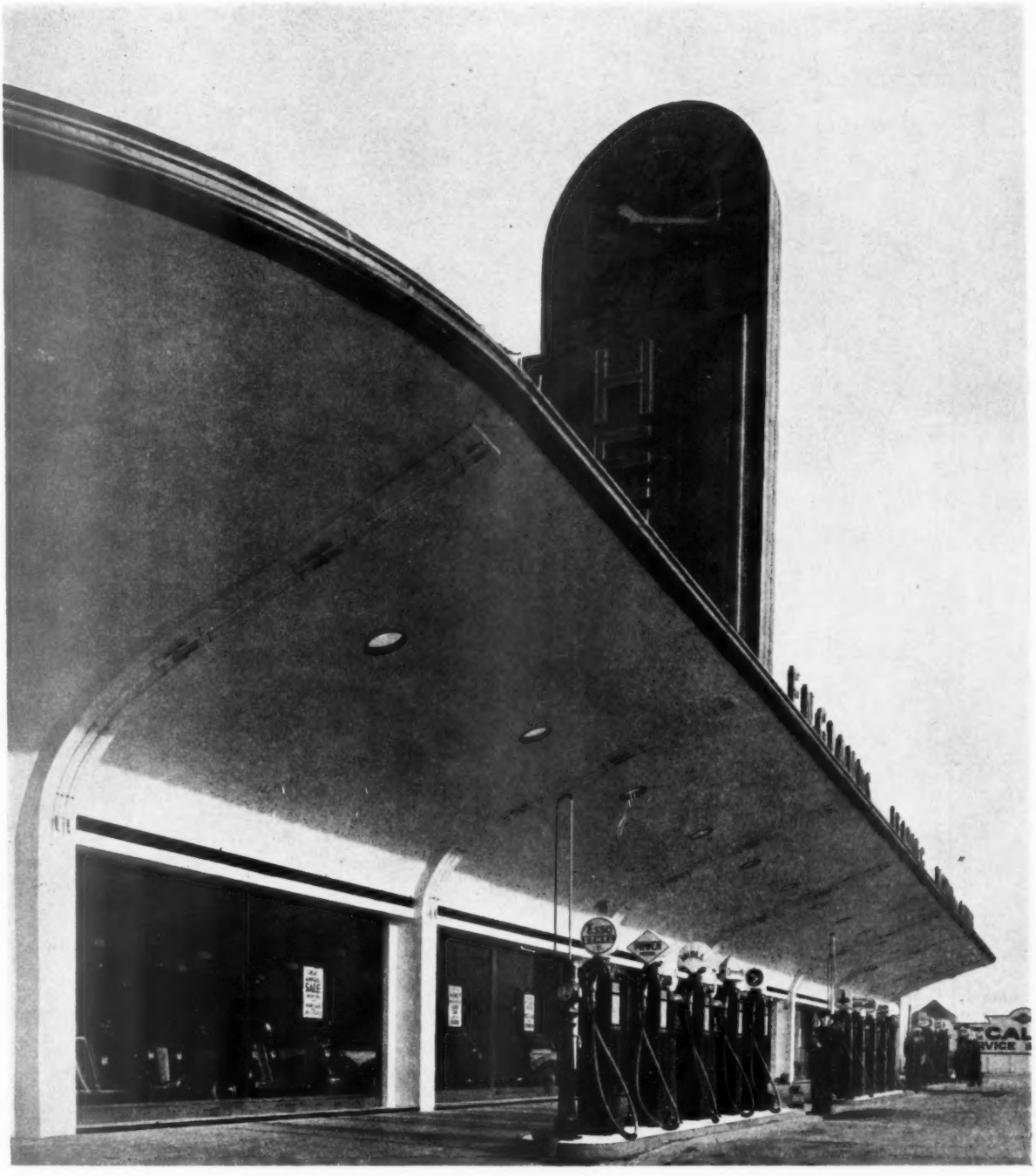
Telephone : Trafford Park 2181 (8 lines)

London Office : Asbestos House, Southwark Street, S.E.1

Telephone : Waterloo 4041

WORKING DETAILS : 605

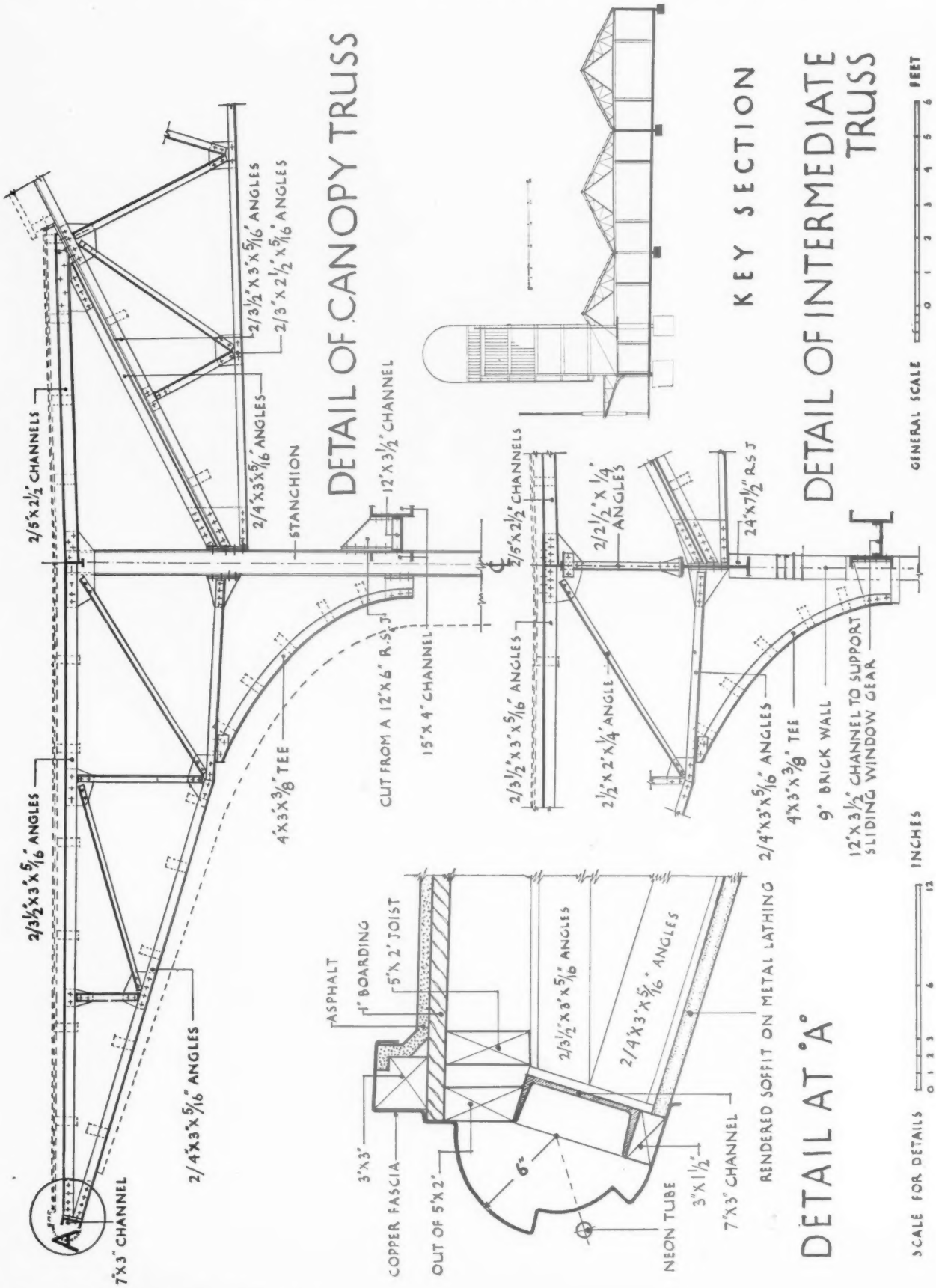
CANOPY • SERVICE STATION, GREAT WEST ROAD, BRENTFORD • WALLIS, GILBERT AND PARTNERS



The canopy runs the whole width of the entrance front allowing the showroom windows to be inspected with protection from the weather. It is constructed of a series of steel cantilever trusses. The soffit of the canopy has a rendered finish, and the fascia is covered in lacquered copper, the girth being moulded to receive a strip of neon lighting.
Details are shown overleaf.

WORKING DETAILS : 606

CANOPY • SERVICE STATION, GREAT WEST ROAD, BRENTFORD • WALLIS, GILBERT AND PARTNERS



Details of the canopy illustrated overleaf.

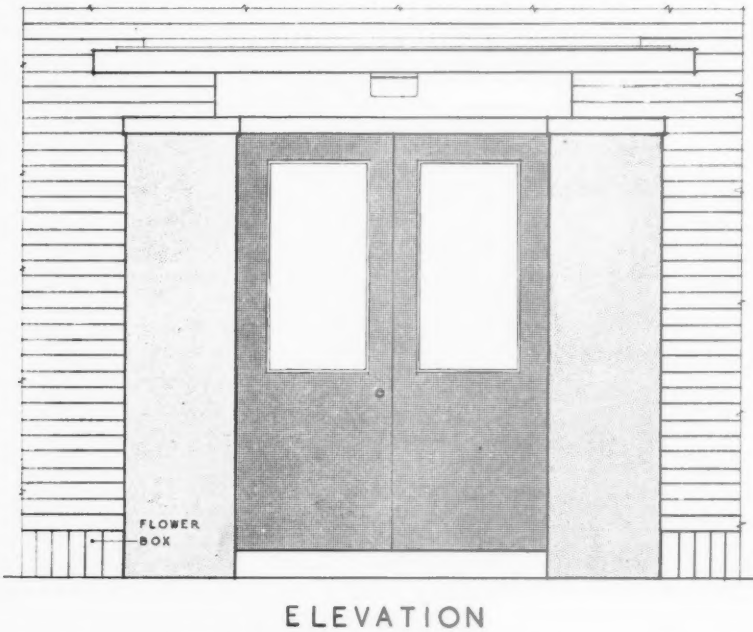
WORKING DETAILS : 607

ENTRANCE • FLATS AT EAST ACTON, W. • G. A. JELLICOE AND PARTNERS

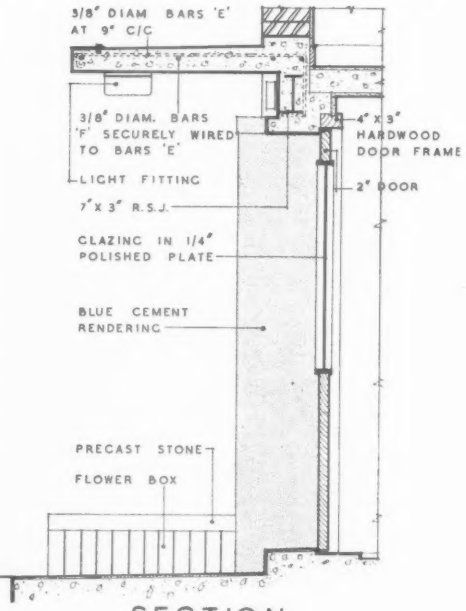
The entrance doorway illustrated is one of four giving access to the flats. The doorway is flanked by two brick piers finished in blue cement rendering. The dressings are artificial stone and the canopy of reinforced concrete.
Details are illustrated overleaf.

WORKING DETAILS : 608

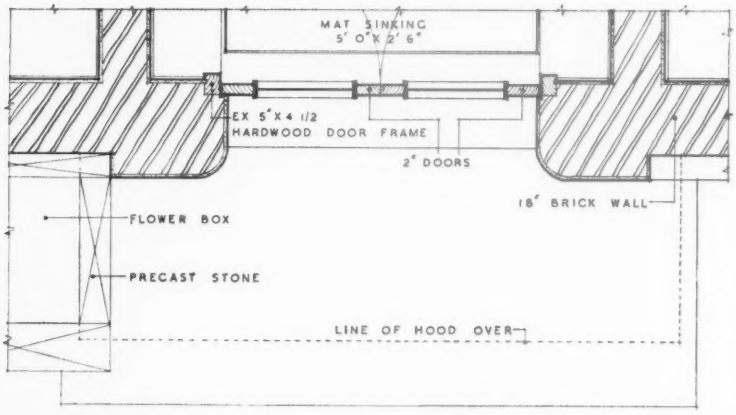
ENTRANCE • FLATS AT EAST ACTON, W. • G. A. JELLICOE AND PARTNERS



ELEVATION

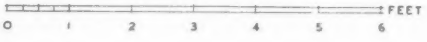


SECTION

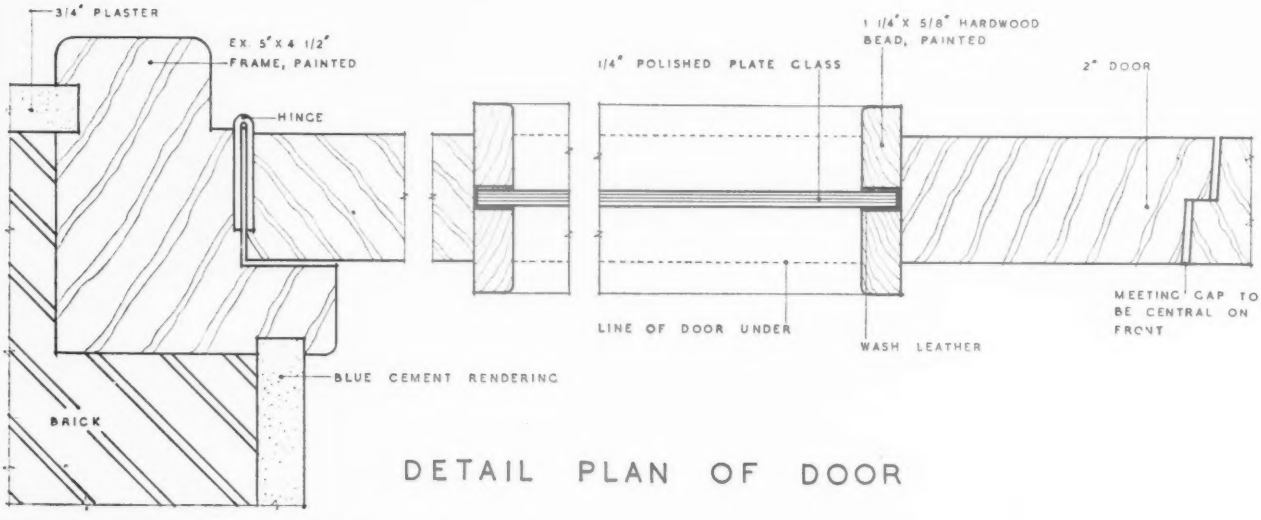


PLAN

SCALE FOR PLAN, SECTION & ELEVATION



SCALE FOR DETAIL PLAN



DETAIL PLAN OF DOOR

Details of the entrance doorway illustrated overleaf.

SCHOOLS

The Architects' Journal Library of Planning

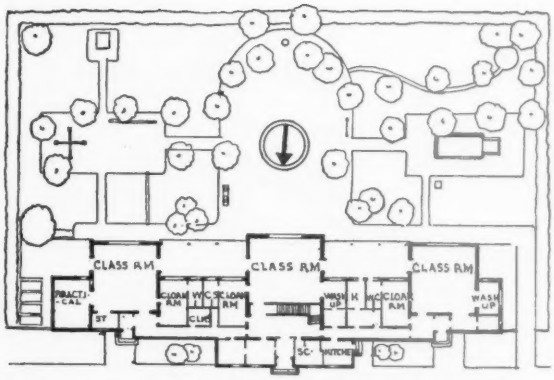
Nursery - Infant Schools

Industry at the "Haus der Kinder," Vienna.

THE PRESENT POSITION

AT present local health services are doing a great deal to look after the health and good progress of children during their earliest months. By means of pre-natal clinics, maternity hospitals, infant and child welfare centres and free milk schemes, the State has assumed a very large responsibility for children whose parents are not in a position to provide all the care that is needed.

Logically, this superintendence, once begun, might be expected to continue until the children are of age to take over responsibility for their own health and well-being. In fact, there may now exist a period as long as four years during which



"Haus der Kinder," Vienna, by Franz Schuster. A good plan with an attractive garden layout. Isolated classrooms with adjoining coatrooms and lavatories form sound baffes. Staff rooms are on an upper floor over the central classroom. Medical inspection is on the left of the main entrance.

the children's development is not supervized in any way.

The majority of children are now looked after fairly well until 12–15 months old. At 5 years of age they go to school and come under the supervision of the school medical service which spends large sums on corrective treatment.

It is illogical to spend money on children's health up to 15 months, to allow that health to go to pieces for three or four years and then to spend money once more bringing it back to a good standard after the age of 5. To cover this gap is the principal aim of the Nursery School.

In January, 1937, there were over 2,000,000 children in Britain between the ages of 1½ and 5 years.

What proportion of these children really need Nursery School training, with its care for health, nutrition and guidance of physical development as the greatest part of its "education," is far more difficult to assess. But none of the authorities consulted put it at less than 500,000 and general opinion is 750,000.

To supply this need there are at present in existence about 70 Nursery Schools containing a total of 6,000 children. In addition about 170,000 children under 5 are now accommodated in nursery *classes* of varying degrees of suitability attached to existing elementary schools.

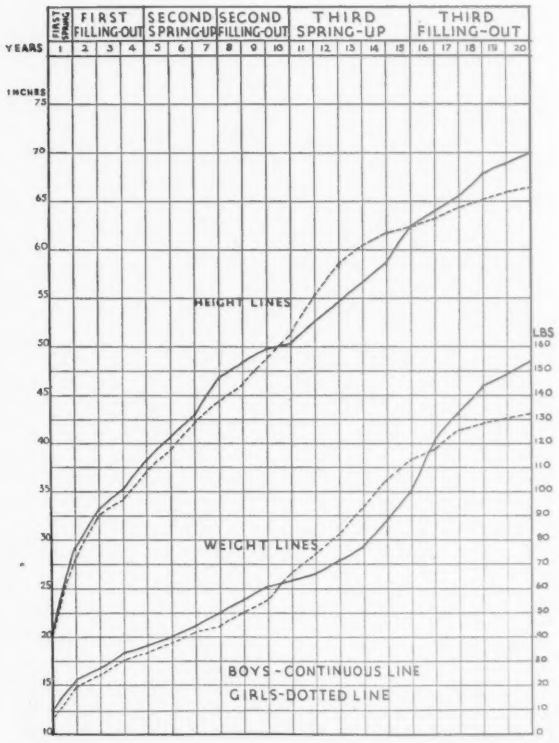
There is, therefore, a need for at least 5,000 new Nursery Schools with an average capacity of 100 children each; a very considerable architectural problem of a new kind.

Eventually the new Nursery School will probably combine and supersede three existing "services" for younger children, which are :—

1. *Nursery Schools.*—Usually under private management; taking children from 2 to 5 years; keeping them all day from 8.30 to 5 or 6; supplying a midday meal; organized in groups of about 35 children looked after by one teacher and one or two "helpers."

2. *Nursery Classes.*—Under local education authorities and forming part of an Infant School; taking children usually from 3 to 5; keeping them only for school hours (9 to 12.30 and 2 to 4); usually organized in classes of 35 to 45 and rarely looked after by more than one teacher. May be described as a poor substitute for a Nursery School.

3. *Infant Schools.* — Under local education authorities, taking children from 5 to 7 (being the youngest age-group for which L.E.A. *must* provide); keeping them during school hours only, often in classes of over 40 under one teacher.



Appropriate scale and proper relation of windows, doors, cupboards furniture to sizes of children are important in the design of a Nursery School. This graph shows relative ages, heights and weights of average children. Actual chair and table heights will be given under "Plan Units." From the Hadow Report.

SCHOOLS

Combined Nursery-Infant Schools will probably not become general for several years. But as it is now agreed that even separate Infant Schools should be run on nursery lines, the planning requirements of all these three (Nursery Schools, Nursery Classes and Infant Schools) will be treated together. The sole reservation in this method is that at the beginning of its Nursery School career the child is barely a toddler while at the end of its Infant School period it is ready for the beginnings of formal education; so accommodation must be planned accordingly.

As the *nursery* portion (age 2 to 5) of the Nursery-Infant School is less understood in its aims and routine than are schools for older children, a short description of these will help to indicate what is wanted.

Aims

The aim of Nursery Schools is to supervise and encourage the healthy development, physical and mental, of children between the ages of two and five. It is considered that all children would probably benefit by attending Nursery Schools, but at first special attention is being given to providing them for the children who will benefit most.

At two years of age children are no longer content to spend most of their time eating, sleeping and playing in a fairly restricted space. They are ready to learn self-reliance, to appreciate the society of those of their own age, to explore and learn by doing things.

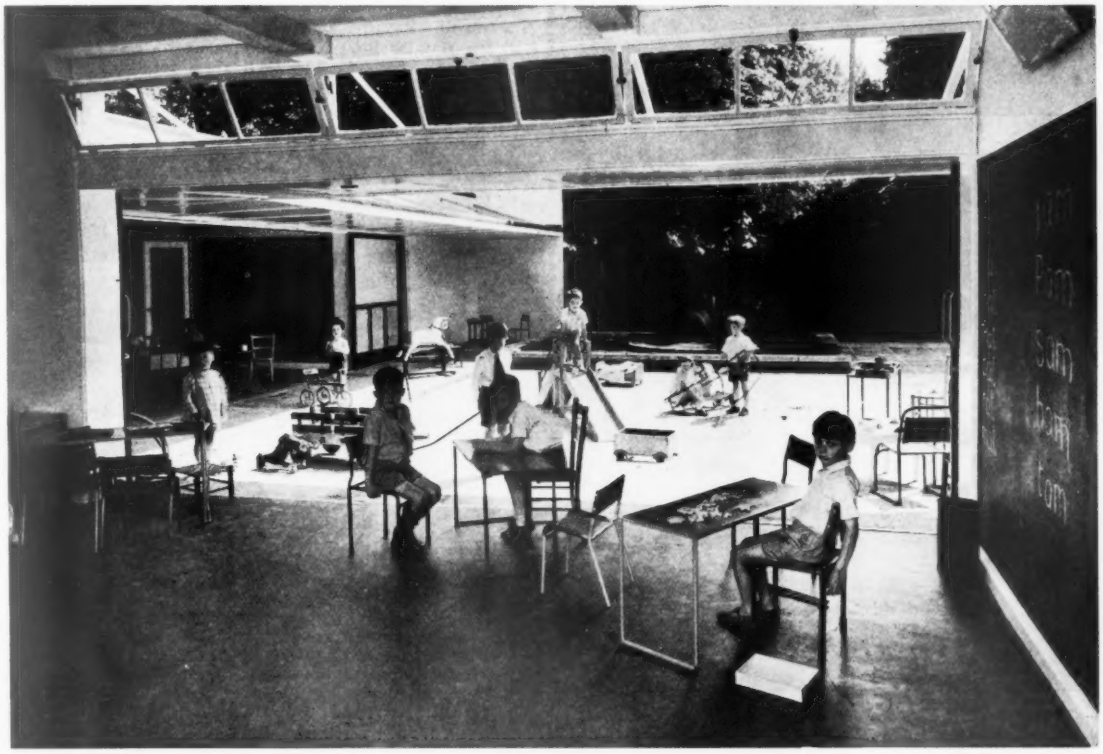
Routine

Even a Nursery School must have a framework of routine.

Broadly, the methods of a Nursery School are those of a large, well-run nursery. Play activities, some of them of an instructive kind, are superintended continuously, but not too closely, and regard for cleanliness and

Right : Makeshift Nursery Class in an obsolete school.

Below : Open-air playrooms at a private Nursery School. A good example of playrooms capable of being thrown completely open on one side.



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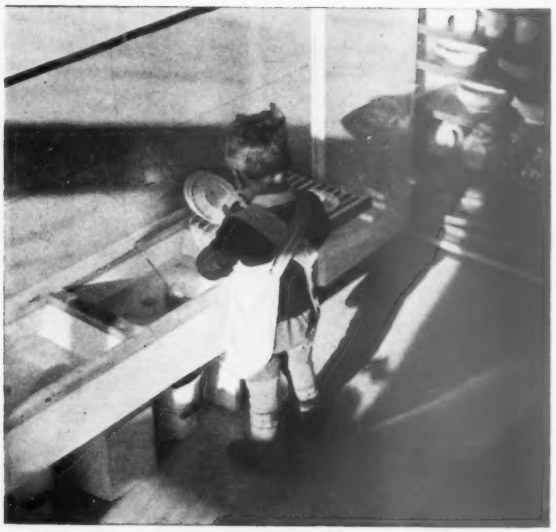

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opportunities for sleep are added to watchfulness for any signs of ill-health. A child's day at a fully-equipped Nursery School is outlined below.

The child is taken to school by his mother or an older child between 7.30 and 9 a.m. (depending on whether the mother subsequently goes to work). On arrival—if it is his first visit—his mother has a few words with the superintendent or the teacher of his group (about 30 children).

During this chat he is studied for signs of ill-health and then runs off to make his own discoveries.

On a normal day this child of say three years goes to the coatroom, hangs up his hat on the hook marked with a pink pig which is his sign, washes his hands and face or suffers a bath by one of the helpers of his group, during which he is watched for signs of anything wrong. He then gets into rompers or an overall provided by the school.

He may help to set the tables for breakfast, feed the pets or play in the garden till breakfast is ready (9 to 9.30).

Afterwards he helps to clear away and wash up, climbs on the jungle-gym, or pushes wheeled toys about.

At 11 to 11.30 he will be ready for various occupations at tables with toys and puzzles, modelling in sand or joining in rhythmic and singing games as well as breathing and nose-blowing exercises. Inspection and minor treatment by a doctor or trained nurse in a room for the purpose may also take place at this time.

At 11.30, after another run in the garden he gets ready for dinner, washing himself and clearing up. He then helps to lay and serve dinner and to wash up afterwards, learning how to be tidy. The meal is usually hot, of two courses, and is served out-of-doors whenever possible.

During the day the child goes to the lavatory under supervision (training in looking after himself properly is important).

After dinner he fetches his own bed and blanket and sleeps out of doors for one-and-a-half to two hours.

At 2.30 p.m. he wakes, revisits the lavatory, washes and then goes into the garden, does simple gardening, messes about in the sand or water pits, arranges flowers, plays with the pets or pursues any other enterprise of his own.

From 3 to 4 p.m. music and rhythmic work is varied by play of several kinds.

At 4 p.m. there is tea, in the preparing and clearing away of which he again takes part.

From 4.30 he plays indoors or in the garden until his mother calls for him. He then gets himself ready in his home clothes, is reminded about shoelaces and forgotten buttons and trots off home.

Sites

The placing of Nursery Schools is extremely important. At present, in the great majority of cases, a site for a school is selected because it is the only one in the neighbourhood which

Six photographs illustrating a Nursery School day in two Viennese schools : 1, medical inspection ; 2, toilet (notice tooth brush and towel racks); 3, housework ; 4, indoor play; 5, outdoor play ; 6, getting ready for home ; 1 to 4 are from a kindergarten by Franz Singer ; 5 and 6, from " Haus der Kinder."

SCHOOLS

can be afforded. But with the increase in new housing schemes and planned residential areas it is probable that more attention will be given to the other requirements of a good site.

Easy Access. Nursery Schools should be placed within easy walking distance for the children who attend. In towns the absolute maximum should be half a mile—especially where no midday meal is given. This means that Nursery Schools must be more closely spaced than other schools and consequently be smaller in size. A moderate nearby site is better than a good distant one.

Separation. A Nursery School should be placed away from traffic and noise, and children should not have to cross main or secondary traffic routes on their way to school. In existing urban areas such a site may be unobtainable, but in new housing schemes it must be planned for and provided.

Space. A very generous amount of space should be allowed around a Nursery School. Almost any piece of ground, provided it is large enough, can be made into an exciting garden for young children, especially if a tree or two is already there. The handicap of too little space is almost insurmountable. Detailed requirements are listed later, but a gross site area of 10 sq. yds. per child should be considered a minimum for a three-group school (90 to 110 children).

Flat Blocks and Nursery Schools. Nursery Schools are slowly becoming a recognized part of low-income multi-storey housing. The greater the density the more important is the school. Yet progress in this direction is still very slow, responsibility for providing the schools being still handed to and fro between education and public health departments.

Probably the best example of this type of Nursery School in Britain is the Kensal Rise scheme, financed by the Gas Light and Coke Company, and designed by Maxwell Fry in association with other architects and Miss Elizabeth Denby.

Nursery Schools on flat roofs of tenements have been tried, but they cannot be considered really successful. Another two flights of stairs are added to the too frequent eight, and soot deposit in large cities is a constant nuisance. It is, however, one way of making provision where there is no other opportunity, and in areas where soot-depositing fuel has been eliminated, one big objection is removed.

Sizes and Groups

It is important that Nursery-Infant Schools should not become too large in size. Generally, the maximum for schools taking children from 2 to 7 + should be 180, averaging six groups of 30 children each, and for separate Nursery Schools (2 to 5), 120, averaging four groups of 30 each.

Apart from the disappearance of all the nursery element when individual children are are not intimately known to the teacher and each other, a large school has inevitably a

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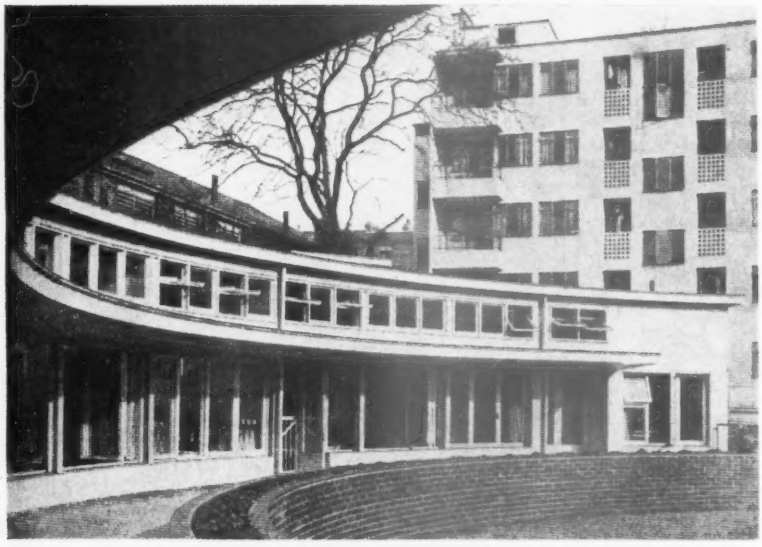


Above : Nursery School as integral part of housing. Karl Marx Hof, Vienna. Architect : Karl Ehn.

Left : Kensal Rise flats and Nursery School : a good English example which should serve as a model for future schemes. Architects, Maxwell Fry, Robert Atkinson, C. H. James, Grey Wornum. Housing consultant, Elizabeth Denby. Plans and details of this school will be illustrated later.

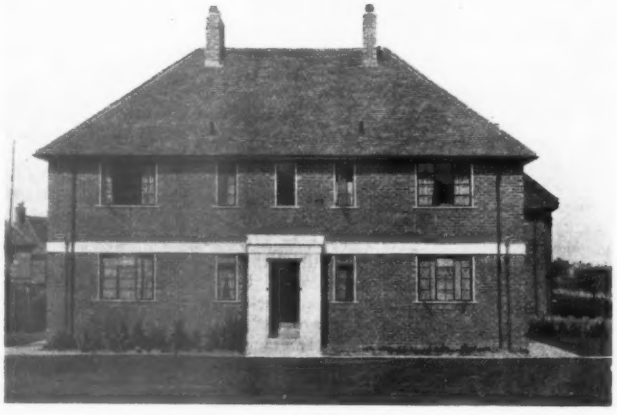
Below : Children in the garden of Chelsea Open Air Nursery School.

crushing effect on young children. In addition, all rooms in a Nursery School—except possibly the staff rooms—should be on the ground floor and in a large building this becomes difficult.

Individual groups (units which in other schools are called classes) must also be kept small. At present 35 children in a group is common and over 40 is not unknown. Most authorities agree that 30 is the desirable maximum; and with this figure one qualified teacher and one helper are necessary for each group. (Helpers vary from interested volunteers and students to girls from 16 upwards who are going to train as nurses, nursemaids and so on).

Groups are changed from time to time and for this reason some variety in the size of playrooms (classrooms) is useful. Within groups children sort themselves, spontaneously or by suggestion, into smaller families for various games—often of mixed ages. It will sometimes be necessary to segregate some of the younger children for extra sleep or while the others are being told a story, and a section of the playroom divided off by folding doors will serve this purpose adequately. In larger schools a hall or larger room, or two rooms capable of being thrown into one, will allow 60 children or more to play communally—an advantage in very cold or wet weather.

DWELLINGS FOR AGED PEOPLE, DUNSTABLE



GENERAL PROBLEM—*Provision of dwellings for aged persons, as an adjunct to existing municipal housing estates. It was decided, after due consideration, not to adopt the bungalow type of dwelling, but "maisonettes," giving two dwellings on the ground floor and two on the upper floor of each block.*

PLAN—*The three blocks have been grouped around the open green. There are side entrances to the lower dwellings and a central porch and concrete stairs leading to the separate entrances to the upper dwellings.*

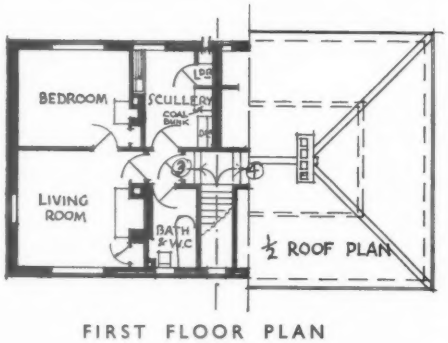
CONSTRUCTION AND FINISHES—*11in. brick cavity walls, rustic facings with flush pointing The roofs are covered with sand-faced concrete tiles. Steel windows are fitted. The porches and string courses are finished in cream cement.*

COST—*£2,880.*

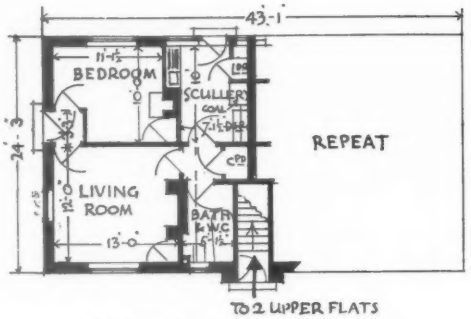
The photographs show : a general view from West Street ; one of the three dwellings.

DESIGNED BY

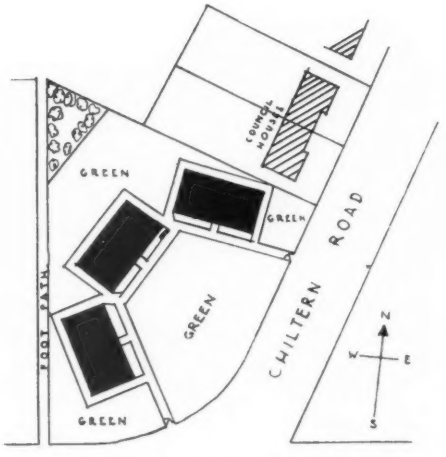
T. ALWYN LLOYD



FIRST FLOOR PLAN



GROUND FLOOR PLAN



SOCIETIES AND INSTITUTIONS

LIVERPOOL ARCHITECTURAL SOCIETY

The Liverpool Architectural Society is to hold a dance at the Bluecoat Chambers Hall, School Lane, Liverpool, 1, on Friday, December 3, from 8.15 until 2.0. Tickets (price 10s. 6d. double, 6s. single), are obtainable from Mr. H. Banister, A.R.I.B.A., 66 Rodney Street, Liverpool, 1.

HANTS AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION

Registration was discussed by Mr. A. L. Roberts, F.R.I.B.A., in his presidential address to the Hampshire and Isle of Wight Architectural Association recently. He said : " There is a general demand in the profession that registration should be compulsory, that is to say, that no one should be permitted to call himself an architect unless he is on the register and qualified to be on. There is ample precedent for this in several of the leading professions. No one may call himself a barrister, solicitor, doctor, dentist or veterinary surgeon unless his name is recorded on the official register or roll of the profession.

" Architects can point out that their profession is of at least equal importance to the public and that they have a history and tradition behind them which goes a good deal further back than some of the professions which enjoy statutory protection. They ask that they shall be put in a position to organize their profession, not only for their own benefit but for the protection of the public. It is a singular fact that, although in the public mind the profession of architect is an honourable and ancient calling, nevertheless, there is nothing to prevent anyone, no matter how uneducated or illiterate, from putting up a brass plate and calling himself an architect. I recall one which I saw in the Midlands some years ago, which announced Mr. ——, Architect, Carpenter and Undertaker.

" At the present time those of the public who are not familiar with the structure of the profession and the safeguards which are available may find themselves at the mercy of any adventurer who sees fit to pretend that he is an architect and calls himself by that name.

" It is a matter of the first importance to the public that the standard of conduct in the architectural profession should be as high as it is in other professions. At present the Architects' Registration Council is only able to exercise disciplinary powers over those members who have registered themselves and voluntarily submitted to disciplinary control. That control takes the form of power to remove from the register for disgraceful conduct after an enquiry by the Discipline Committee set up by the Principal Act, composed of lawyers and architects. For minor offences the Council can censure the offender by passing a formal reprimand. But the unregistered architect is not subject to any such form of control and there is no means of bringing to book the black sheep of the profession except by a civil action brought by the client if there are sufficient grounds for doing so.

" If all architects are brought under the disciplinary control of the Architects' Registration Council, the public will have the advantage of a tribunal to which reference can be made on any question relating to professional conduct or the recognised scale of charges for professional work."

MANCHESTER SOCIETY OF ARCHITECTS

Mr. W. A. Johnson, F.R.I.B.A., discussed " The architect's part in contemporary life " in his presidential address to the Manchester Society of Architects.

"Seldom, now," he said, " is the contemporary architect called upon to disguise the plain and, presumably, slightly indecent facts of building in architectural fancy dress, either as evidence of the culture of the owner or as a symbol of his respectability. He has re-established himself as master builder, and is in course of bringing about a revolution in the material surroundings of his fellow-men by seeking to resolve each problem in terms of itself and in relation to the contemporary scene, and not by reference to a ' standard ' or ' canon,' laid down by authority and sanctified by long usage."

INSTITUTION OF STRUCTURAL ENGINEERS

Following are some extracts from the presidential address, by Professor J. Husband, to the Institution of Structural Engineers :—

" The need for re-housing in all countries is clamant. The new houses are cleaner, better lighted and better provided with water supply and sanitary equipment than the condemned dwellings which they replace. And there we stop. Modern engineering methods have made it possible to erect vast numbers of houses and flats at a record speed, with the result that this, as well as other countries, is rapidly becoming inundated with a type of building which it is to be hoped will vanish as promptly, in the not far distant future, when the framers of by-laws will have acquired a little more vision, architects more inspiration, and builders more rectitude. The art of good and sound building is greatly decayed. It is still possible at an exorbitant price to have erected a pleasing and well-built dwelling, but the number of people who can indulge in such a luxury is rapidly dwindling. For the rest cheapness and ugliness pervade everywhere.

" One cannot mention housing without some allusion to architecture. With the introduction of multifarious constructional materials of the engineering age and the more complex study of their properties, it becomes increasingly difficult to draw any marked line of division between engineering and architecture. The modern building has become an engineering structure, and the principal concern of architecture is with the outer clothing of that structure. Today, architecture flaunts no distinctive style and its loftiest flights are but pale imitations of the glories of the classical age. It is a common statement today that architecture is passing through a transitional stage. Actually, it is in the throes of the struggle to engraft upon the persuasive lines of engineering structures a new and acceptable integument. Engineering has rendered this disservice to architecture, that it has strictly limited its freedom of expression.

" So long as bridges were entirely of the masonry type and buildings were constructed only of stone, brick and timber, these types of construction fell naturally into the province of the architect. Today, bridges are complicated engineering structures and most buildings little less so, and the design of industrial buildings, theatres, public halls, large blocks of flats, garages, railway stations and bridges, with their complex services for heating, lighting, ventilation, air-conditioning, crane equipment, and acoustics has become essentially the work of the structural engineer, the services of the architect being only required in regard to facial and internal decoration where these are needed. The general public realizes and appreciates very slightly, if at all, the extent to which its comfort, well-being and safety are due to the professional services of the structural engineer."

ARCHITECTURAL ASSOCIATION OF IRELAND

" Architecture and the public " was the subject of Mr. Michael Scott's presidential address to the Architectural Association of Ireland. He said : " If we are to produce fine buildings surely it is obvious that their situation in relation to other structures is of primary importance. This can only be obtained by town-planning. Our statesmen have given us an Act of which any country might be justly proud. Are we satisfied as to the manner in which this instrument is being used ? As architects are we doing our utmost to foster public interest in the Act? The selection of sites of new buildings in our country towns offers immediate scope. Churches, hospitals, schools, factories, and housing schemes are under contemplation or are being rapidly constructed. These buildings are being erected without any consideration of their different functions in relation to each other, to existing buildings, or to the probable future development of the town. This is a pathetic state of affairs. How can it be otherwise if the loca authorities will not adopt the Act, or, having adopted it, fail to secure competent advice to ensure that the benefits of its provisions are made available for future generations ? "

CARDIFF CIVIC SOCIETY

Mr. J. E. Barton, in a paper entitled " The Growth of Public Taste," read at the annual meeting of the Cardiff Civic Society, said :—

" The error of the nineteenth century had been the false idea that taste is something additional, something you go in for when you have time for it, and when you have made your money. Hence the soulless industrial town of Victorian days, set off by pretentious and chaotically ornamental suburbs. Such things argued a society which was secretly uneasy and divided, however prosperous it may have been for the money-makers. An age of materialism, which managed to keep its spiritual creeds in a separate compartment from its everyday work, could not fail to produce ugliness. The outstanding fact about all the great creative societies had been their unity of outlook. In Athens, or Florence, or the cathedral-building English communities, or the Dutch cities in the days of Rembrandt, a truly public taste was evident, in the sense that even men of genius were only the mouthpiece of a pervading religious and social spirit. The age of Georgian Bath was not one of superlative greatness, but it was phenomenally marked by the way in which all works and crafts had obeyed common rules, and so had attained a striking harmony.

" The task of our time was to recover the lost

unity and order, under vastly changed conditions and with all sorts of new requirements and materials. The all-too-familiar slogan, 'Art is art and business is business,' was gradually being confuted. It was symbolic that the Cambridge Library and the Battersea Power House had been designed by one architect. Nobody pretended that a genuine new style had been completely born, but intelligent minds everywhere were feeling their way towards it. Style was only another name for clear and masterly expression, and in all ages followed the same laws. It came into being when some big aspiration was shared by a whole people, who were able to embody it in visible form by a sincere use of their own materials and a courageous engineering logic. Such had been the secret of the stupendous Gothic outburst, and only on similar lines could living beauty prevail once more in the man-made world.

"Ornate superfluities belonged always to periods of decline. A new style, in the true sense, could only be born from deep and fresh feeling within the soul of mankind. To-day there was a growing ideal of communal service and happiness, bound up with a quest for wider knowledge, and a craving for the sort of world in which hygiene, order, spaciousness, and serenity would be shared by everybody as a matter of course. A clearer statement of those yearnings was beginning to be legible in all our best public plans and works, and the triumphs of modern mechanism and applied science, so far from being a hindrance, were an important ally. Antiquarians were prone to forget that the spirit of art is ever in process of transmigration. A cosmopolitan age of steel had raised its Parthenon in the Rockefeller Center."

New Rural Housing Report

The report of the Central Housing Advisory Committee on Rural Housing, which was published recently, recommends the grant of a general Exchequer subsidy to local authorities for new houses built for the agricultural population sufficient to enable a substantial proportion of the new houses to be let at rents of not more than 3s. a week, exclusive of rates. The committee also recommends that a similar subsidy, payable annually, should be available to private persons to build cottages for agricultural workers so long as these cottages are let at agricultural rents.

The report points out that the difficulty underlying the provision of proper housing for farm workers is that these workers are not able to pay the economic rent of a new house, or to compete in this respect with industrial workers or other persons in better economic circumstances. In consequence, the latter tend to squeeze out the agriculturalist in any area where they form a substantial part of the population. Several witnesses before the Committee referred to the serious and increasing shortage of competent agricultural labour, one of the main causes of which is the lack of suitable housing accommodation.

The report recommends that new houses should be built so far as possible in existing villages. The Committee considers that with modern transport facilities the disadvantage to the breadwinner of having to travel to his work is outweighed by the great advantage to his family of being near school, shops and other centres of social intercourse. Building in villages rather than in isolated groups also facilitates the best and most economical use of public services like water supply and sewage disposal.

The report recommends that the Housing (Rural Workers) Acts, by which grants are made available to private persons for the improvement of existing cottages for agricultural workers, should be continued. It also contains several useful recommendations on minor points designed to make these Acts more easily workable. It is suggested that local authorities should undertake surveys in their districts to ascertain all cottages suitable for reconditioning, and should then take special steps to persuade the owners of such cottages to take advantage of the facilities afforded by the Acts to carry out the work.

The report was prepared by the Rural Housing Sub-Committee of the Central Housing Advisory Committee after hearing evidence and considering memoranda from the following bodies : The County Councils Association, The Rural District Councils Association, The National Farmers' Union, The National Union of Agricultural Workers, The Land Agents' Society, The Council for the Preservation of Rural England, The National Federation of Women's Institutes, The Central Landowners' Association, The Sanitary Inspectors' Association.

A précis of the evidence is published with the report and shows remarkable uniformity on the main points with which the Committee's recommendations deal.

TRADE NOTES

[*EDITED BY PHILIP SCHOLBERG*]

Good Cooker Design

THE remarks I made last week about the recent improvement in design of water heaters are equally applicable to cookers, which have been getting better and better during the last three or four years, and which now need not shame the simplest and cleanest refrigerator. Flavel's started their part of the good work two or three years ago when they introduced the Kabineat cooker, which was followed by the "kitchen grand" in stainless steel at a rather luxury price, though this was offset at the other end of the scale by a small cheap model arranged to be bracketed from the wall—a commendable piece of design in good clean colours and with no nonsense about it. Their latest effort (Type 37), a photograph of which appears at the head of these notes, is a neat good-looking job built up mainly in pressed steel and finished in porcelain enamel.

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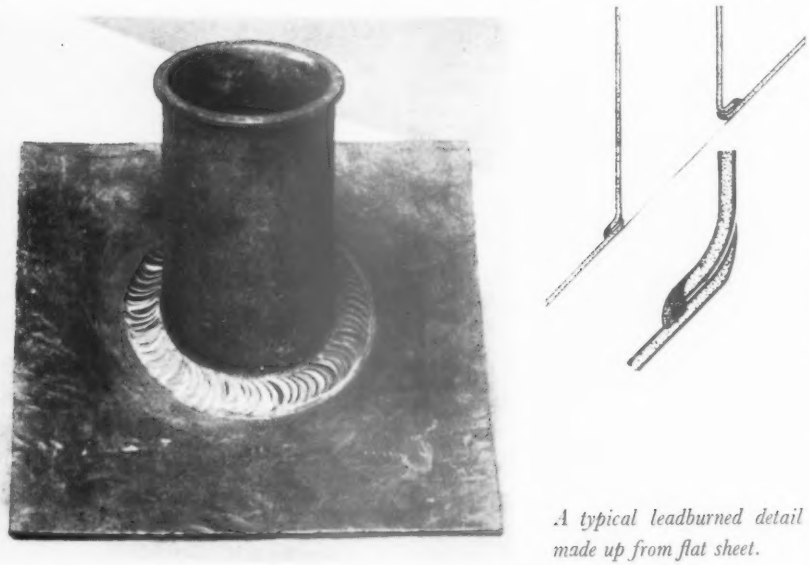
The oven, which is 1 ft. 4½ ins. square on plan, has a depth of 1 ft. 2¾ ins., is lagged all round with slag wool, and has the now usual thermostat control ; one large and two small boiling rings and a griller make the complete unit big enough to cook for six to nine people. The splash back folds down over the hot plate to form a flat table top and the place rack folds itself automatically so that there is no need to fiddle with a large and springy unit which generally tends to jam unless it is worked with more than ordinary care. Price is £11 15s.—(*Sidney Flavel & Co., Ltd., Eagle Foundry, Leamington.*)

Cement Costs

According to a recent issue of the *Architectural Forum* there is a certain amount of fuss and bother going on in the States over the price of cement. The cement producers have apparently established some 60 base points throughout the United States, thus giving each district a single fixed price for cement delivered, the final figure being arrived at by adding to the nearest base point price the cost of transportation to the site. Thus where two firms are competing for the same order the delivered price remains the same even though one firm may have to pay twice as much in transport charges because it is



A typical leadburned detail made up from flat sheet.

further away from the base point market. The fuss has arisen because the U.S. War Department was given seven different prices by firms in different towns, and the Federal Trade Commission has decided that if the firm furthest away can still make a profit then the nearest is therefore making too much.

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Investigations are proceeding, but from the smoke emerges an interesting cost analysis showing how the average price of cement is made up :—

	Per cent.
Manufacturing Costs ..	29
Packing and Shipping ..	2
Overhead and Selling ..	14
Capital and Depreciation* ..	23
Sacks	16
Freight	variable

* Based on 50 per cent. production.

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Transport costs are high, sometimes as much as one-third of the consumer price, and it is generally considered uneconomic to ship cement beyond a radius of about 200 miles. I do not suggest that English cement firms are making too much money, but it would be interesting to see how their cost figures compare with the American data quoted above. As a sideline it is interesting to note that American firms also suffer from Danish and Belgian competition.

Lots about Lead

Three new booklets from the Lead Industries Development Council are good examples of the right way to talk about a material. The first, "Leadburning in Architectural Work," is probably of the greatest immediate interest, though the second, "The Protection of Iron and Steel," is really of much greater importance. The third, on "The Protection and Maintenance of Glasshouses," is useful, though perhaps not of shattering importance to the architect, who is not often concerned with maintenance contracts of this kind.

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Leadburning is nothing more than the autogenous welding of lead, generally with an oxy-acetylene flame. The resultant joint has various advantages over one made with solder, the tin in which gives the joint a different co-efficient of expansion from that of the surrounding sheet, so that cracking may occur owing to the differential movement. But the main advantage seems to be that the job can be done on the site, for welding apparatus is now fairly easily portable, a plant with enough gas for a full day's work weighing only 30 pounds. Maintenance work can therefore be done on roofs or gutters without any difficulty, and the cost is low, the figures in the booklet giving 1s. a foot run for a leadburned seam, as against 1s. 10½d. a foot for a wiped seam.

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The technique of making joints and seams is fairly simple, and the process is also useful in the shop, where it saves a vast amount of trouble in the manufacture of such things as rainwater heads, pipes and cesspits, for the usual laborious bossing and beating up out of flat sheets is replaced by simple cutting to pattern, bending up, and then burning the joints. The photograph above shows a typical leadburned detail made up from flat sheet, and in this can also be seen the typical appearance of a burned seam, though with horizontal seams the circular markings, which are the edges of the molten pools of lead, are more like triangles, so that the pattern becomes a herring-bone.

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The booklet is well produced, and is illustrated with good photographs and drawings, but, more important, it makes no extravagant claims, and states quite frankly that the process is not economical for water services.

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The booklet on "The Protection of Iron and Steel" is mainly an abstract of a report prepared by the Corrosion Committee, a body set up by the Iron and Steel Institute, the British Steelwork Association, the Iron and Steel Industries Research Council and various other interested bodies. It so happens that the results of these investigations show red lead paints in a very good light from the point of view of resistance to corrosion, and the booklet ends with a series of notes on suggested mixes for the protection of interior and exterior ironwork. —(*The Lead Industries Development Council, Rex House, King William Street, London, E.C.4.*)

Manufacturers' Items

Messrs. Turners Asbestos Cement Co., branch of Turner & Newall, Ltd., have sent us a leaflet which describes the most recent wall and insulating board made by that firm. These boards are composed mainly of asbestos fibre which are known as "Turnall" Asbestos Wallboard and "Turnall" Asbestos Insulating Board respectively. The former is an entirely new quality of an old-established product and is the result of many years' experience in the manufacture of this class of material. It is flexible and can be curved to any reasonable radius without difficulty. "Turnall" Insulating Board is specially recommended by the makers for incorporation in situations where the conservation of heat is required. Both these products can be decorated with paper, distemper or paint without special difficulty or preparation of the surface.

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Messrs. D. Anderson and Son, Limited, of Stretford, Manchester, roofing felt manufacturers, inform us that their subsidiary company —Anderson Gypsum Product, Ltd.—formed recently to market their "Silver Seal" Plaster Boards—is proceeding with the erection of an up-to-date plant for the manufacture of plasters and other gypsum products. This new plant is being erected on the site of the company's gypsum deposits near Bunny, Nottingham. The main consultants for the new plant are Messrs. Mactaggart and Evans of 14 Old Queen Street, Westminster, London, S.W.1, and the architect is Mr. Brian L. Sutcliffe, F.R.I.B.A., of 5 Manchester Square, London, W.1.

THE BUILDINGS ILLUSTRATED

WILLESDEN ELECTRICITY SHOWROOMS (pages 739-741). Architect: F. Wayman Brown. The general contractors were Melville Dundas and Whitson, and the sub-contractors and suppliers included: Aston Steel Construction Co., Ltd., steel construction; Trussed Concrete Steel Co., reinforced concrete; Engert and Rolfe, Ltd., asphalte; Ramsdens Wall Tiling and Terrazzo Contractors, terrazzo wall tiling; Bastian and Allen, Ltd., heating; C. B. Jackson & Co., Ltd., ventilating; Hollis Brothers & Co., hardwood floors; Cork Insulation Co., Ltd., cork floors; Carruthers and Pratt, sanitary fittings; Birmingham Guild, Ltd., metal handrails and gates; Crittall Manufacturing Co., Ltd., metal casements; Contemporary Woodwork Ltd., doors; Courtney Pope (London), Ltd., metal shop fronts; Express Lift Co., lift; J. A. King & Co., Ltd., Glascrete; W. & R. Leggott, Ltd., locks, etc.; Limmer & Trinidad Lake Asphalte Co., Ltd., colourphalte floor; Nobel Chemical Finishes, Ltd., paints; W. E. Tamlin and Son, hardwood panelling; Venesta, Ltd., Plymax partitions; Vitreflex, Ltd., rainwater and soil pipes; British Vitrolite Co., Ltd., Vitrolite; Willesden Borough Council (Electricity Department), electrical installation; Smith's English Clocks, Ltd., electric clocks; Hailwood and Ackroyd, Ltd., Troughton and Young, Ltd., lighting fittings; Holophane, Ltd., and Benjamin Electric, Ltd., lighting fittings; Claude General Neon Lights, Ltd., neon fittings in showrooms.

DWELLINGS FOR AGED PEOPLE, DUNSTABLE (page 759). Architect: T. Alwyn Lloyd. General contractors were Gardner Development Co., Ltd.

THE WEEK'S BUILDING NEWS

LONDON & DISTRICT (15 MILES RADIUS)

ACTON. *Town Hall, etc.* The Acton Corporation has obtained sanction to borrow £70,691 for town hall extensions and the erection of an assembly hall.

BARNES. *Clinic.* The Surrey C.C. is to erect a clinic on the site of Worple House, Barnes, at a cost of £6,363.

BATTERSEA, etc. *Relief Stations.* The L.C.C. is to improve and enlarge relief stations at Latchmere Road, Battersea, at a cost of £1,182 ; Park Road, Peckham, at £6,500 ; and Watson Street, Deptford, at £1,252.

BERMONDSEY. *Flats, etc.* The Bermondsey B.C. has approved a revised scheme for the development of the Kipling Street area for the erection of 65 flats and four shops, at a cost of £45,077.

BERMONDSEY. *Flats.* The Bermondsey B.C. is to erect 11 flats and one shop in Redriff Road, at a cost of £8,534.

CHINGFORD. *Housing.* In connection with the development of the new housing estate at Chingford, the L.C.C. has made arrangements with the Unit Construction Co., Ltd., for the construction of one section comprising roads and 400 houses, at £260,526.

ENFIELD. *Flats, etc.* Plans passed by the Enfield U.D.C. : 12 shops and flats, Great Cambridge Road, Marshall and Tweedy ; 84 flats, Myddelton Avenue, Mr. Geo. W. Newman ; 176 houses, off Baker Street, Wates, Ltd. ; 12 flats, off The Grangeway, Hamilton, Son and Campion ; 11 shops and flats, High Street, Mr. H. J. Palmer ; 24 flats, Russell Road, Mr. E. W. Palmer ; 11 houses, Baker Street, Mr. James Neilson ; 15 houses, Rowantree Road, Mr. F. Elmore Jones ; 45 houses, Slades Rise, Mr. A. R. Pilgrim ; 18 houses, Carterhatch Road, Swannell and Sly ; 87 houses, Great Cambridge Road, G. Wimpey & Co., Ltd. ; flats, St. George's Road, Percival Hart, Ltd. ; 36 flats, Gordon Way, Bowyer and Bowyer.

FINCHLEY. *Flats.* Plans passed by the Finchley Corporation : 56 flats, Gordon Road, Wood and Waller.

FINCHLEY. *Flats.* The Finchley Corporation has approved plans by the borough surveyor for the erection of a further 41 flats on the Red Lion Hill Estate, at a cost of £19,089.

HAMMERSMITH. *Flats.* Plans passed by the Hammersmith B.C. : Flats, Uxbridge Road, and block of flats, British Grove, Hanover Flats, Ltd. ; block of flats, Goldhawk Road, Mr. E. G. Cole.

ILFORD. *Hospital Alterations.* The Ilford Corporation has approved plans by the borough engineer for a centralized kitchen, laundry annexe, new dispensary and visitors' room at the Isolation Hospital, at a cost of £21,000.

ILFORD. *Houses.* Plans passed by the Ilford Corporation : 42 houses, Braintree Avenue, P. G. Ashton and Sons ; six houses, Spearpoint Gardens, Aldborough Road, Baskett and Brown ; 326 houses, Mossford Park Estate, New Ideal Homesteads, Ltd. ; 42 houses, Somerville Road, Mr. J. T. Perrin ; 110 houses, Ashbury Gardens, Mr. J. Giles ; 16 houses, Chalgrove Crescent, Hurstwell & Co.

KENSINGTON. *Housing.* The Kensington B.C. is to erect a block of tenements in South Row, at a cost of £43,600.

SHOREDITCH. *Re-housing.* The L.C.C. is to clear an area near Long Street, Shoreditch, to provide re-housing, at a cost of £144,000.

SOUTHALL. *Houses.* The Southall Corporation is to erect 122 houses on the Dormers Wells housing site.

SOUTHGATE. *Houses, etc.* Plans passed by the Southgate Corporation : 12 flats, Avenue Road, for Mr. H. A. Nash ; 84 houses, Oakwood Park estate, Chase Road, for Mr. C. E. Owen Ward ; nine houses, Oakwood Crescent, for Mr. C. W. D. Walden.

SOUTHERN COUNTIES

EGHAM. *School Extension.* The governors of Strode's Schools, Egham, are to extend the premises, at a cost of £4,742.

EPSOM. *Nurses' Home.* The Surrey C.C. has approved a revised scheme at a cost of £82,500, for the erection of a nurses' home at the County Hospital, Epsom.

FAREHAM. *Schools.* The Hampshire E.C. is to erect a school for 480 junior children and a school for 480 senior children at Fareham.

GILLINGHAM. *School Alterations.* The Gillingham Education Committee is to enlarge the Nafin Road school, at a cost of £29,696.

HAMPSHIRE. *School.* The Hampshire E.C. is to erect a boys' school at Basingstoke, at a cost of £28,890.

MALDEN. *Library, etc.* The Malden and Coombe Corporation is to erect a central library, at a cost of £14,700, and a branch library, at a cost of £7,700.

MIDDLESEX. *Cinema, etc.* The Middlesex C.C. Entertainments Committee has approved the following plans : Proposed cinema, High Road, Chiswick ; proposed Carlton Cinema, Staines ; proposed Curzon Cinema, Whitchurch Lane, Edgware (amended plans) ; proposed cinema, Staines Road, Sunbury (second set of plans) ; proposed Grosvenor Cinema, Mandeville Road, Northolt (revised site plan) ; site plan of new cinema, Craven Park Road and Nicoll Road, Harlesden.

MIDDLESEX. *Hospital Accommodation.* The Middlesex C.C. is to construct temporary buildings at West Middlesex County Hospital, to provide additional bed accommodation for 150 patients, at an estimated cost of £16,500.

MIDDLESEX. *Hospital Accommodation.* The Middlesex C.C. is to construct temporary buildings at Hillingdon County Hospital to provide, as a matter of urgency, additional bed accommodation for 60 patients at an estimated cost of £10,000.

NEWBURY. *Houses.* Mr. Palmer, of London Road, is to develop 5 acres of land off Pyle Hill, formerly part of the Greenham Court Estate, Newbury, on which he proposes to erect 40 houses.

SUTTON. *Court House.* The Surrey C.C. is to erect a new court house in Lodge Road, Sutton, at a cost of £7,000.

WORTHING. *Houses, etc.* Plans passed by the Worthing Corporation : Eight houses, Alinora Avenue, Mr. J. E. Lund, for Princes (Worthing), Ltd. ; eight houses, Stone Lane, Willmore Phillips Estates Co. ; 94 houses, Findon Road, Monks Farm Estates, Ltd. ; six houses, Cheviot Road, A. M. Lyne, Ltd.; seven houses, Warren Road, Hasler Estates ; 10 houses, Ham Road, Mr. D. F. Woodward ; seven houses, Anscombe Road, Mr. H. M. Potter.

WORTHING. *Library, etc.* The Worthing Corporation is considering plans by the borough engineer for extensions at the library and museum, at a cost of £11,000.

EASTERN COUNTIES

IPSWICH. *Schools.* The Ipswich Education Committee has obtained sanction to borrow £65,216 for the erection of a senior school and £28,281 for a junior school.

MIDLAND COUNTIES

BIRMINGHAM. *School.* The Birmingham E.C. has obtained sanction to borrow £46,065 for the erection of an elementary school at Turves Green, Northfield.

BLACKTHORN. *School.* The Bacup E.C. is to erect an elementary school at Blackthorn, at a cost of £37,000.

CHILWELL. *School.* The Notts E.C. is to erect a temporary school at Cliff Grove, Chilwell, at a cost of £2,250.

DERBY. *Market Hall Alterations.* The Derby Corporation is to improve and enlarge the market hall, at a cost of £12,200.

DUDLEY. *School.* The Dudley E.C. is to erect a school on the Bowling Green Housing Estate.

MANSFIELD. *Houses.* Plans passed by the Mansfield Corporation : 33 houses, off Charnwood Grove, Ling Forest Estates, Ltd. ; eight houses, Little Barn Lane, Mr. J. E. Baggaley ; 12 houses, The Knoll, Radford and Jenkins.

MANSFIELD. *Houses.* The Manfield Corporation has approved plans by the borough surveyor for 20 houses on the Racecourse Estate and 95 on the Pleasley Hill site.

OLDBURY. *Houses.* Plans passed by the Oldbury Corporation : 56 houses, off Wolverhampton Road, Titford Property Co. ; nine houses, Garland Crescent, J. Harper and Sons.

SUTTON COLDFIELD. *Houses, etc.* Plans passed by the Sutton Coldfield Corporation : Nine houses, Corbridge Road, Newman & Co.; 66 houses, George Road, Mr. F. Morris ; 12 houses, Plants Brook Road, Mr. H. Greaves ; six houses, Whitehouse Common Road, Mr. Burfell.

WEST BRIDGFORD. *Police Station.* The Notts C.C. has approved plans for the new police station to be erected at West Bridgford, at a cost of £3,750.

WEST BRIDGFORD. *Library.* The Notts C.C. is to erect a library at West Bridgford, at an estimated cost of £6,750.

WEST BROMWICH. *Municipal Buildings.* The West Bromwich Corporation has approved plans of the proposed municipal buildings submitted by Mr. Fillmore, architect, at a cost of £145,000.

WEST BROMWICH. *Housing.* The West Bromwich Corporation has purchased 5 acres in Marsh Lane for housing purposes.

NORTHERN COUNTIES

BRADFORD. *Power Station Extension.* The Bradford Corporation is to extend the Valley Road power station at a cost of £704,000.

ESTON. *Houses.* Plans passed by the Eston U.D.C. : 33 houses, Flatts Lane, Ward Jackons Estate.

GRANGETHORPE. *School.* The Manchester Education Committee has approved revised plans in regard to proposals of the governors of the Manchester High School for Girls for the provision of school buildings at Grangethorpe.

HANLEY. *Houses.* Messrs. R. Ray and Son are to erect 40 houses off Queens Road and Bucknall Old Road, Hanley.

LANCASTER. *Omnibus Station.* The Lancaster Corporation has obtained sanction to borrow £13,950 for the construction of an omnibus station.

MANCHESTER. *Library.* The Manchester Corporation has obtained a site in Churnet Street for the erection of a branch library.

MANCHESTER. *Cinema, etc.* Plans passed by the Manchester Corporation : Church and presbytery, Wilbraham Road, Fallowfield ; cinema, dance hall and café, Stockport Road.

MANCHESTER. *Shops.* The Manchester Corporation has asked the city architect to prepare a scheme for the erection of shops at the junction of Greenwood Road and Hollyhedge Road.

MANCHESTER. *Schools.* The Manchester Education Committee is to make grants to the managers of Roman Catholic schools in the Chorlton-cum-Hardy and West Didsbury districts, and the managers and promoters of Roman Catholic schools in the Northendon and Wythenshawe districts, for the provision of two new senior schools.

NORTHALLERTON. *County Hall Extensions.* The North Riding C.C. is to enlarge the County Hall, Northallerton, at a cost of £42,680.

STOCKPORT. *School.* The Church of England authorities are to erect a senior school at Brinnington, Stockport.

RATES OF WAGES

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

			I. s.	I. d.	II. s.	II. d.
A	ABERDARE ...	S. Wales & M.	1	7	1	2½
A	Aberdeen ...	Scotland	1	7	1	2½
A_1	Abergavenny ...	S. Wales & M.	1	6½	1	2
A_2	Abingdon ...	S. Counties	1	5½	1	1½
A	Accrington ...	N.W. Counties	1	7	1	2½
A_2	Addlestone ...	S. Counties	1	[illegible]	1	1½
A	Adlington ...	N.W. Counties	1	7	1	2½
A	Airdrie ...	Scotland	*1	7	1	2½
C	Aldeburgh ...	E. Counties	1	[illegible]	0	11½
A	Altrincham ...	N.W. Counties	1	7	1	2½
B_2	Appleby ...	N.W. Counties	1	3½	0	11½
A	Ashton-under-Lyne	N.W. Counties	1	7	1	2½
B	Aylesbury ...	S. Counties	1	5	1	0½
B	BANBURY ...	S. Counties	1	5	1	0½
B_1	Bangor ...	N.W. Counties	1	4½	1	0½
A_2	Barnard Castle	N.E. Coast	1	5½	1	1½
A	Barnsley ...	Yorkshire	1	7	1	2½
B	Barnstaple ...	S.W. Counties	1	5	1	0½
A	Barrow ...	N.W. Counties	1	7	1	[illegible]½
A	Barry ...	S. Wales & M.	1	7	1	2½
B	Basingstoke ...	S.W. Counties	1	5	1	0½
A_2	Bath	S.W. Counties	1	6	1	1½
A	Batley ...	Yorkshire	1	7	1	2½
A_2	Bedford ...	E. Counties	1	6	1	1½
A_2	Berwick-on-Tweed	N.E. Coast	1	6	1	1½
A_2	Bewdley ...	Mid. Counties	1	6	1	1½
B	Bicester ...	S. Counties	1	5	1	0½
	Birkenhead ...	N.W. Counties	*1	8	1	3
A	Birmingham ...	Mid. Counties	1	7	1	2½
A_1	Bishop Auckland	N.E. Coast	1	6½	1	2
A	Blackburn ...	N.W. Counties	1	7	1	2½
A	Blackpool ...	N.W. Counties	1	7	1	2½
A	Blyth	N.E. Coast	1	7	1	2½
B	Bognor ...	S. Counties	1	5	1	0½
A	Bolton ...	N.W. Counties	1	7	1	2½
A_2	Boston ...	Mid. Counties	1	5½	1	1½
A_2	Bournemouth...	S. Counties	1	6	1	1½
B_2	Bovey Tracey	S.W. Counties	1	4	1	0
A	Bradford ...	Yorkshire	1	7	1	2½
A_1	Brentwood ...	E. Counties	1	6½	1	2
A	Bridgend ...	S. Wales & M.	1	7	1	2½
B	Bridgwater ...	S.W. Counties	1	5	1	0½
A_2	Bridlington ...	Yorkshire	1	6½	1	2
A	Brighouse ...	Yorkshire	1	7	1	2½
A	Brighton ...	S. Counties	1	6	1	1½
A	Bristol ...	S.W. Counties	1	7	1	2½
B	Brixham ...	S.W. Counties	1	5	1	0½
A	Bromsgrove ...	Mid. Counties	1	7	1	2½
B	Bromyard ...	Mid. Counties	1	5	1	0½
A	Burnley ...	N.W. Counties	1	7	1	2½
A	Burslem ...	Mid. Counties	1	7	1	2½
A	Burton-on-Trent	Mid. Counties	1	7	1	2½
A	Bury	N.W. Counties	1	7	1	2½
A_1	Buxton ...	N.W. Counties	1	6½	1	2
A_2	CAMBRIDGE	E. Counties	1	6½	1	2
B_2	Canterbury ...	S. Counties	1	4½	1	0½
A	Cardiff ...	S. Wales & M.	1	7	1	2½
A	Carlisle ...	N.W. Counties	1	7	1	2½
B	Carmarthen ...	S. Wales & M.	1	5	1	0½
B	Carnarvon ...	N.W. Counties	1	5	1	0½
A_1	Carnforth ...	N.W. Counties	1	7	1	2½
A	Castleford ...	Yorkshire	1	7	1	2½
A_2	Chatham ...	S. Counties	1	5½	1	1½
A_2	Chelmsford ...	E. Counties	1	5½	1	1½
A_2	Cheltenham ...	S.W. Counties	1	5½	1	1½
A	Chester ...	N.W. Counties	1	7	1	[illegible]½
A	Chesterfield ...	Mid. Counties	1	7	1	2½
B	Chichester ...	S. Counties	1	5	1	0½
A	Chorley ...	N.W. Counties	1	7	1	2½
B_2	Cirencester ...	S. Counties	1	4½	1	0½
A	Clitheroe ...	N.W. Counties	1	7	1	2½
A	Clydebank ...	Scotland	1	7	1	2½
A	Coalville ...	Mid. Counties	1	7	1	2½
A_2	Colchester ...	E. Counties	1	6	1	1½
A_1	Colne	N.W. Counties	1	6½	1	2
A_2	Colwyn Bay ...	N.W. Counties	1	6	1	1½
A_1	Consett ...	N.E. Coast	1	6½	1	2
A_2	Conway ...	N.W. Counties	1	[illegible]	1	1½
A	Coventry ...	Mid. Counties	1	7	1	2½
A_2	Crewe	N.W. Counties	1	6	1	1½
A_2	Cumberland ...	N.W. Counties	1	5½	1	1½
A	DARLINGTON	N.E. Coast	1	7	1	[illegible]½
A	Darwen ...	N.W. Counties	1	7	1	2½
B_1	Deal	S. Counties	1	4½	1	0½
A_2	Denbigh ...	N.W. Counties	1	5½	1	1½
A	Derby	Mid. Counties	1	7	1	2½
A	Dewsbury ...	Yorkshire	1	7	1	2½
B	Didcot ...	S. Counties	1	5	1	0½
A	Doncaster ...	Yorkshire	1	7	1	2½
B_1	Dorchester ...	S.W. Counties	1	4½	1	0½
A_2	Driffield ...	Yorkshire	1	5½	1	1½
A_2	Droitwich ...	Mid. Counties	1	6	1	1½
A	Dudley ...	Mid. Counties	1	7	1	2½
A_2	Dumfries ...	Scotland	1	6	1	1½
A	Dundee ...	Scotland	1	7	1	2½
A	Durham ...	N.E. Coast	1	7	1	2½
A_2	EASTBOURNE	S. Counties	1	6	1	1½
A_1	Ebbw Vale ...	S. Wales & M.	1	6½	1	2
A	Edinburgh ...	Scotland	1	7	1	2½
A_2	Exeter ...	S.W. Counties	*1	6	1	1½
B	Exmouth ...	S.W. Counties	1	5	1	0½
A_2	FELIXSTOWE	E. Counties	1	5½	1	1½
A_2	Filey	Yorkshire	1	5½	1	1½
A	Fleetwood ...	N.W. Counties	1	7	1	2½
B_1	Folkestone ...	S. Counties	1	4½	1	0½
A	Frodsham ...	N.W. Counties	1	7	1	[illegible]
B_2	Frome ...	S.W. Counties	1	4	1	0
A	GATESHEAD	N.E. Coast	1	7	1	2½
B	Gillingham ...	S. Counties	1	5	1	0½
A_1	Glamorgan-shire, Rhondda Valley District	S. Wales & M.	1	6½	1	2
A	Glasgow ...	Scotland	1	7	1	2½
A_2	Gloucester ...	S.W. Counties	1	6	1	1½
A_2	Goole	Yorkshire	1	6	1	1½
A_2	Gosport ...	S. Counties	1	6	1	1½
A_2	Grantham ...	Mid. Counties	1	5½	1	1
A_1	Gravesend ...	S. Counties	1	6½	1	2
A	Greenock ...	Scotland	*1	7	1	2
A	Grimsby ...	Mid. Counties	1	7	1	2
B	Guildford ...	S. Counties	1	5	1	0
A	HALIFAX ...	Yorkshire	1	7	1	[illegible]½
A	Hanley ...	Mid. Counties	1	7	1	[illegible]½
A	Harrogate ...	Yorkshire	1	7	1	2½
A	Hartlepools ...	N.E. Coast	1	7	1	2½
B	Harwich ...	E. Counties	1	5	1	0½
B	Hastings ...	S. Counties	1	5	1	0½
A_2	Hatfield ...	S. Counties	1	6	1	1½
B	Hereford ...	S.W. Counties	1	5	1	0½
A_2	Hertford ...	E. Counties	1	6	1	1½
A	Heysham ...	N.W. Counties	1	7	1	2½
A	Howden ...	N.E. Coast	1	7	1	2½
A	Huddersfield ...	Yorkshire	1	7	1	2½
A	Hull	Yorkshire	1	7	1	2½
A	ILKLEY ...	Yorkshire	1	7	1	2½
A	Immingham ...	Mid. Counties	1	7	1	2½
A_2	Ipswich ...	E. Counties	1	6	1	1½
B_1	Isle of Wight ...	S. Counties	1	4	1	0
A	JARROW ...	N.E. Coast	1	7	1	2½
A	KEIGHLEY ...	Yorkshire	1	7	1	2½
A_2	Kendal ...	N.W. Counties	1	5½	1	1½
A_2	Keswick ...	N.W. Counties	1	5½	1	1½
A_1	Kettering ...	Mid. Counties	1	6½	1	2
A_2	Kidderminster	Mid. Counties	1	6	1	1½
B_1	King's Lynn ...	E. Counties	1	4½	1	0½
A	LANCASTER ...	N.W. Counties	1	7	1	2½
A_1	Leamington ...	Mid. Counties	1	6½	1	2
A	Leeds	Yorkshire	1	7	1	2½
A	Leek	Mid. Counties	1	7	1	2½
A	Leicester ...	Mid. Counties	1	7	1	2½
A	Leigh	N.W. Counties	1	7	1	2½
[illegible]	Lewes	S. Counties	1	5	1	0[illegible]
A_2	Lichfield ...	Mid. Counties	1	6	1	1½
A	Lincoln ...	Mid. Counties	1	7	1	2½
	Liverpool ...	N.W. Counties	*1	8½	1	3½
A_2	Llandudno ...	N.W. Counties	1	6	1	1½
A	Llanelly ...	S. Wales & M.	1	7	1	2½
	London (12-miles radius)		1	8½	1	3½
	Do. (12-15 miles radius)		1	8	1	3
A	Long Eaton ...	Mid. Counties	1	7	1	2½
A	Loughborough	Mid. Counties	1	7	1	2½
A_1	Luton	E. Counties	1	6½	1	2
A	Lytham ...	N.W. Counties	1	7	1	2½
A_1	MACCLESFIELD	N.W. Counties	1	6½	1	2
A_2	Maidstone ...	S. Counties	1	5½	1	1½
A_2	Malvern ...	Mid. Counties	1	5½	1	1½
A	Manchester ...	N.W. Counties	1	7	1	2½
A	Mansfield ...	Mid. Counties	1	7	1	2½
B_2	Margate ...	S. Counties	1	4½	1	0½
A_2	Matlock ...	Mid. Counties	1	5½	1	1½
A_1	Merthyr ...	S. Wales & M.	1	6½	1	2
A	Middlesbrough	N.E. Coast	1	7	1	2½
A_2	Middlewich ...	N.W. Counties	1	6	1	1½
B_2	Minehead ...	S.W. Counties	1	4	1	0
B_2	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1	4	1	0
A	Morecambe ...	N.W. Counties	1	7	1	2½
A_2	NANTWICH ...	N.W. Counties	1	6	1	1½
A	Neath	S. Wales & M.	1	7	1	2½
A	Nelson ...	N.W. Counties	1	7	1	2½
A	Newcastle ...	N.E. Coast	1	7	1	2½
A	Newport ...	S. Wales & M.	1	7	1	2½
A	Normanton ...	Yorkshire	1	7	1	2½
A	Northampton	Mid. Counties	1	7	1	2½
A	North Shields...	N.E. Coast	1	7	1	2½
A	North Staffs ...	Mid. Counties	1	7	1	2½
A_1	Norwich ...	E. Counties	1	6½	1	2
A	Nottingham ...	Mid. Counties	1	7	1	2½
A	Nuneaton ...	Mid. Counties	1	7	1	2½
A_2	OAKHAM ...	Mid. Counties	1	5½	1	1½
A	Oldham ...	N.W. Counties	1	7	1	2½
A_2	Oswestry ...	N.W. Counties	1	5½	1	1½
A_1	Oxford ...	S. Counties	1	6½	1	2
A	PAISLEY ...	Scotland	*1	7	1	2
B_2	Pembroke ...	S. Wales & M.	1	3½	0	11½
A	Perth	Scotland	*1	7	1	2½
A_1	Peterborough ...	E. Counties	1	6½	1	2
A	Plymouth ...	S.W. Counties	*1	7	1	2½
A	Pontefract ...	Yorkshire	1	7	1	2½
A_1	Pontypridd ...	S. Wales & M.	1	6½	1	2
A_2	Portsmouth ...	S. Counties	1	6	1	1½
A	Preston ...	N.W. Counties	1	7	1	2½
A	QUEENSFERRY	N.W. Counties	1	7	1	2½
A_2	READING ...	S. Counties	1	6½	1	2
B	Reigate ...	S. Counties	1	5½	1	1½
A_2	Retford ...	Mid. Counties	1	5½	1	1½
A_1	Rhondda Valley	S. Wales & M.	1	6½	1	2
A_2	Ripon	Yorkshire	1	5½	1	1½
A	Rochdale ...	N.W. Counties	1	7	1	2½
B	Rochester ...	S. Counties	1	5	1	0½
A_1	Ruabon ...	N.W. Counties	1	6½	1	2
A	Rugby ...	Mid. Counties	1	7	1	2½
A_2	Rugeley ...	Mid. Counties	1	6	1	1½
A	Runcorn ...	N.W. Counties	1	7	1	2½
A_1	ST. ALBANS ...	E. Counties	1	6½	1	2
A	St. Helens ...	N.W. Counties	1	7	1	2½
B_2	Salisbury ...	S.W. Counties	1	3½	0	11½
A_1	Scarborough ...	Yorkshire	1	6½	1	2
A	Scunthorpe ...	Mid. Counties	1	7	1	2½
A	Sheffield ...	Yorkshire	1	7	1	2½
A	Shipley ...	Yorkshire	1	7	1	2½
A_2	Shrewsbury ...	Mid. Counties	1	6	1	1½
A_2	Skipton ...	Yorkshire	1	6	1	1½
A_2	Slough ...	S. Counties	1	6	1	1½
A_1	Solihull ...	Mid. Counties	1	6½	1	[illegible]
A_2	Southampton...	S. Counties	1	[illegible]	1	1½
A_1	Southend-on-Sea	E. Counties	1	6½	1	2
A	Southport ...	N.W. Counties	1	7	1	2½
A	S. Shields ...	N.E. Coast	1	7	1	2½
A_1	Stafford ...	Mid. Counties	1	6½	1	2
A	Stirling ...	Scotland	1	7½	1	2½
A	Stockport ...	N.W. Counties	1	7	1	2½
A	Stockton-on-Tees	N.E. Coast	1	7	1	2½
A	Stoke-on-Trent	Mid. Counties	1	7	1	2½
[illegible]	Stroud ...	S.W. Counties	1	5	1	0½
A	Sunderland ...	N.E. Coast	1	7	1	2½
A	Swansea ...	S. Wales & M.	1	7	1	2½
A_2	Swindon ...	S.W. Counties	1	5½	1	1½
A_1	TAMWORTH ...	N.W. Counties	1	6½	1	2
B	Taunton ...	S.W. Counties	1	5	1	0½
A	Teesside Dist....	N.E. Coast	1	7	1	2½
A_2	Teignmouth ...	S.W. Counties	1	6	1	1½
A	Todmorden ...	Yorkshire	1	7	1	2½
A_1	Torquay ...	S.W. Counties	1	6½	1	2
B_2	Truro	S.W. Counties	1	4	1	0
A_2	Tunbridge Wells	S. Counties	1	5½	1	1½
A	Tunstall ...	Mid. Counties	1	7	1	2½
A	Tyne District....	N.E. Coast	1	7	1	2½
A	WAKEFIELD	Yorkshire	1	7	1	2½
A	Walsall ...	Mid. Counties	1	7	1	2½
A	Warrington ...	N.W. Counties	1	7	1	2½
A_1	Warwick ...	Mid. Counties	1	6½	1	2
A_1	Wellingborough	Mid. Counties	1	6½	1	2
A	West Bromwich	Mid. Counties	1	7	1	2½
A_2	Weston-s.-Mare	S.W. Counties	1	6	1	1½
A_2	Whitby ...	Yorkshire	1	6	1	1½
A	Widnes ...	N.W. Counties	1	7	1	2½
A	Wigan ...	N.W. Counties	1	7	1	2½
B	Winchester ...	S. Counties	1	5	1	0½
A_2	Windsor ...	S. Counties	1	6	1	1½
A	Wolverhampton	Mid. Counties	1	7	1	2½
A_2	Worcester ...	Mid. Counties	1	6	1	1½
A_2	Worksop ...	Yorkshire	1	5½	1	1½
A_1	Wrexham ...	N.W. Counties	1	6½	1	2
A_2	Wycombe ...	S. Counties	1	5½	1	1½
B	YARMOUTH ...	E. Counties	1	5	1	0½
B	Yeovil ...	S.W. Counties	1	5	1	0½
A	York	Yorkshire	1	7	1	2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request. The rates of wages have been revised consequent upon the increase in wages which came into operation on February 1, together with all revisions following authorized annual regradings.

CURRENT PRICES

The wages are the standard Union rates of wages payable in London at the time of publication. The prices given below are for materials of good quality and include delivery to site in Central London area, unless otherwise stated. For delivery outside this area, adjustment should be made for the cost of transport. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

WAGES

		£ s. d.
Bricklayer	per hour	1 8½
Carpenter	„	1 8½
Joiner	„	1 8½
Machinist	„	1 9½
Mason (Banker)	„	1 8½
„ (Fixer)	„	1 9½
Plumber	„	1 8½
Painter	„	1 7½
Paperhanger	„	1 7½
Glazier	„	1 8½
Slater	„	1 8½
Scaffolder	„	1 4½
Timberman	„	1 4½
Navvy	„	1 3½
General Labourer	„	1 3½
Lorryman	„	1 6½
Crane Driver	„	1 7½
Watchman	per week	2 10 0

MATERIALS

EXCAVATOR AND CONCRETOR

		£ s. d.
Grey Stone Lime	per ton	2 2 0
Blue Lias Lime	„	1 18 6
Hydrated Lime	„	2 6 0
Portland Cement, in 4-ton lots (d/d site, including Paper Bags)	„	1 19 0
Rapid Hardening Cement, in 4-ton lots (d/d site, including Paper Bags)	„	2 5 0
White Portland Cement, in 1-ton lots	„	8 15 0
Thames Ballast	per Y.C.	6 6
¾" Crushed Ballast	„	7 0
Building Sand	„	7 6
Washed Sand	„	8 6
2" Broken Brick	„	8 0
¾" „ „	„	10 3
Pan Breeze	„	6 6
Coke Breeze	„	8 9

DRAINLAYER

BEST STONEWARE DRAIN PIPES AND FITTINGS

		4" s. d.	6" s. d.
Straight Pipes	per F.R.	0 9	1 1
Bends	each	1 9	2 6
Taper Bends	„	3 6	5 3
Rest Bends	„	4 3	6 3
Single Junctions	„	3 6	5 3
Double	„	4 9	6 6
Straight channels	per F.R.	1 6	2 6
¾" Channel bends	each	2 9	4 0
Channel junctions	„	4 6	6 6
Channel tapers	„	2 9	4 0
Yard gullies	„	6 9	8 9
Interceptors	„	16 0	19 6
IRON DRAINS:			
Iron drain pipe	per F.R.	2 3	3 8
Bends	each	6 4	13 1
Inspection bends	„	11 5	14 4
Single junctions	„	11 2	22 10
Double junctions	„	17 2	30 9
Lead Wool	lb.	6	—
Gaskin	„	5	—

BRICKLAYER

		£ s. d.
Flettons	per M.	2 12 0
Grooved do.	„	2 14 0
Phorpres bricks	„	2 15 0
„ Cellular bricks	„	2 15 0
Stocks, 1st quality	„	4 11 0
„ 2nd „	„	4 2 6
Blue Bricks, Pressed	„	8 14 0
„ Wirecuts	„	7 12 6
„ Brindles	„	7 0 0
„ Bullnose	„	9 0 0
Red Sand-faced Facings	„	6 18 6
Red Rubbers for Arches	„	12 0 0
Multicoloured Facings	„	7 10 0
Luton Facings	„	7 10 0
Phorpres White Facings	„	3 17 3
„ Rustic Facings	„	3 12 3
Midhurst White Facings	„	4 0 0
Glazed Bricks, Ivory, White or Salt glazed, 1st quality:		
Stretchers	„	21 0 0
Headers	„	20 10 0
Bullnose	„	27 10 0
Double Stretchers	„	29 10 0
Double Headers	„	26 10 0
Glazed Second Quality, *Less*	„	1 0 0
„ Buffs and Creams, *Add*	„	2 0 0
„ Other Colours	„	5 10 0
2" Breeze Partition Blocks	per Y.S.	1 7
2½" „ „ „	„	1 10
3" „ „ „	„	2 1
4" „ „ „	„	2 6

MASON

The following d/d F.O.R. at Nine Elms:

		s. d.
Portland stone, Whitbed	F.C.	4 4½
„ „ Basebed	„	4 7½
Bath stone	„	2 10
York stone	„	6 6
„ „ Sawn templates	„	7 6
„ „ Paving, 2"	F.S.	1 8
„ „ „ 3"	„	2 6

SLATER AND TILER

First quality Bangor or Portmadoc slates d/d F.O.R. London station:

		£ s. d.
24" × 12" Duchesses	per M.	28 17 6
22" × 12" Marchionesses	„	24 10 0
20" × 10" Countesses	„	19 5 0
18" × 10" Viscountesses	„	15 10 0
18" × 9" Ladies	„	13 17 6
Westmorland green (random sizes)	per ton	8 10 0
Old Delabole slates d/d in full truck loads to Nine Elms Station:		
20" × 10" medium grey	per 1,000 (actual)	21 11 6
„ „ green	„ „	24 7 4
Best machine roofing tiles	„ „	4 5 0
Best hand-made do.	„ „	4 17 6
Hips and valleys	each	9
„ hand-made	„	9½
Nails, compo	per lb.	1 4
„ copper	„	1 6

CARPENTER AND JOINER

		£ s. d.
Good carcassing timber	F.C. 2s. 7d.–	2 10
Birch	as 1" F.S.	9
Deal, Joiner's	„ „	5
„ „ 2nds	„ „	4
Mahogany, Honduras	„ „	1 3
„ African	„ „	1 1
„ Cuban	„ „	2 6
Oak, plain American	„ „	1 0
„ Figured „	„ „	1 3
„ plain Japanese	„ „	1 2
„ Figured „	„ „	1 5
„ Austrian wainscot	„ „	1 6
„ English	„ „	1 11
Pine, Yellow	„ „	1 0
„ Oregon	„ „	4
„ British Columbian	„ „	4
Teak, Moulmein	„ „	1 3
„ Burma	„ „	1 2
Walnut, American	„ „	2 3
„ French	„ „	2 3
Whitewood, American	„ „	1 1
Deal floorings, ¾"	Sq.	18 6
„ ⅞"	„	1 1 6
„ 1"	„	1 2 0
„ 1¼"	„	1 5 0
„ 1½"	„	1 10 0
Deal matchings, ½"	„	14 0
„ ¾"	„	15 6
„ 1"	„	1 4 0
Rough boarding, ¾"	„	16 0
„ 1"	„	18 0
„ 1¼"	„	1 6 0

Plywood, per ft. sup.:

Thickness	3/16"			1/4"			3/8"			1/2"		
Qualities	A d.	B d.	BB d.	A d.	B d.	BB d.	A d.	B d.	BB d.	A d.	B d.	BB d.
Birch 60 × 48	4	2½	2	5	3	2½	7	5	4	8	6	5
Cheap Alder	–	2	1½	–	3½	2	–	–	–	–	–	–
Oregon Pine	–	2½	–	3	2¾	–	4	3½	–	5	4½	–
Gaboon Mahogany	4	3½	–	5	4½	–	7	6½	–	8	7	–
Figured Oak	6½	5	–	7½	5¾	–	10	8	–	1/-	9	–

		d.
Scotch glue	lb.	8

SMITH AND FOUNDER

Tubes and Fittings:

(The following are the standard list prices from which should be deducted the various percentages as set forth below.)

			½"	¾"	1"	1¼"	2"
Tubes 2'–14' long	per ft. run		4	5½	9½	1/1	1/10
Pieces, 12"–23" long	each		10	1/1	1/11	2/8	4/9
„ 3"–11½" long	„		7	9	1/3	1/8	3/-
Long screws, 12"–23½" long	„		11	1/3	2/2	2/10	5/3
„ „ 3" M–½" long	„		8	10	1/5	1/11	3/6
Bends	„		8	11	1/7½	2/7½	5/2
Springs not socketed	„		5	7	1/1½	1/11½	3/11
Socket unions	„		2/-	3/-	5/6	6/9	10/-
Elbows, square	„		10	1/1	1/6	2/2	4/3
Tees	„		1/-	1/3	1/10	2/6	5/1
Crosses	„		2/2	2/9	4/1	5/6	10/6
Plain sockets and nipples	„		3	4	6	8	1/3
Diminished sockets	„		4	6	9	1/-	2/-
Flanges	„		9	1/-	1/4	1/9	2/9
Caps	„		3½	5	8	1/-	2/-
Backnuts	„		2	3	5	6	1/1
Iron main cocks	„		1/6	2/3	4/2	5/4	11/6
„ with brass plugs	„		—	4/-	7/6	10/-	21/-

Discounts

TUBES

	Per cent.		Per cent.
Gas	66¼	Galvanized gas	56¼
Water	61¼	„ water	51¼
Steam	58¾	„ steam	46¼

FITTINGS

Gas	57½	Galvanized gas	48¾
Water	53¾	„ water	46¼
Steam	48¾	„ steam	41¼

		s. d.
Rolled steel joists cut to length	cwt.	15 6
Mild steel reinforcing rods, ¼"	„	18 0
„ „ „ ⅜"	„	17 9
„ „ „ ½"	„	17 6

SMITH AND FOUNDER—*continued*

		s. d.
Mild steel reinforcing rods, ⅝"	cwt.	17 6
„ „ „ ¾"	„	17 6
„ „ „ 1"	„	17 6
„ „ „ 1¼"	„	17 6
„ „ „ 1½"	„	17 6

		3" s. d.	4" s. d.
Cast-iron rain-water pipes of ordinary thickness metal	F.R.	1 0	1 3½
Shoes	each	2 0	3 0
Anti-splash shoes	„	4 6	8 0
Boots	„	3 0	4 0
Bends	„	2 7	3 9
„ with access door	„	—	6 3
Heads	„	4 0	5 0
Swan-necks up to 9" offsets	„	3 9	6 0
Plinth bends, 4½" to 6"	„	3 9	5 3
Half-round rain-water gutters of ordinary thickness metal	F.R.	5	6
Stop ends	each	6	6
Angles	„	1 7	1 11
Obtuse angles	„	2 0	2 6
Outlets	„	1 9	2 3

PLUMBER

		£ s. d.
Lead, milled sheets	cwt.	1 7 3
„ drawn pipes	„	1 6 9
„ soil pipes	„	1 9 9
„ scrap	„	18 0
Solder, plumbers'	lb.	1 1½
„ fine do.	„	1 4
Copper, sheet	„	1 0½
„ tubes	„	1 2½

L.C.C. soil and waste pipes:		3"	4"	6"
Plain cast	F.R.	1 0	1 2	2 6
Coated	„	1 1	1 3	2 8
Galvanized	„	2 0	2 6	4 6
Holderbats	each	3 10	4 0	4 9
Bends	„	3 9	5 3	10 3
Shoes	„	2 10	4 4	9 6
Heads	„	4 8	8 5	12 9

PLASTERER

		£ s. d.
Lime, chalk	per ton	2 0 0
Plaster, coarse	„	2 15 0
„ fine	„	4 7 6
Hydrated lime	„	3 0 9
Sirapite	„	3 6 0
Keene's cement	„	5 0 0
Gothite plaster	„	3 6 0
Pioneer plaster	„	3 6 0
Thistle plaster	„	3 6 0
Sand, washed	Y.C.	11 6
Hair	lb.	6
Laths, sawn	bundle	2 4
„ rent	„	3 0
Lath nails	lb.	3

GLAZIER

		s. d.	s. d.
Sheet glass, 24 oz., squares n/e 2 ft. s.	F.S.		2½
„ „ 26 oz. „ „ „	„		3½
Flemish, Arctic, Figures (white)*	„		7½
Blazoned glasses	„		2 6
Reeded: Cross Reeded	„		11
Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite	„		6½
Crown sheet glass (n/e 12" × 10")	„		2 0
Flashed opals (white and coloured)	„	1 0 and	2 0
⅛" rough cast; rolled plate	„		6
¼" wired cast; wired rolled	„		10½
¼" Georgian wired cast	„		11½
¼" Polished plate, n/e 1 ft.	„	†1 0 to	‡1 3
„ „ 2	„	†1 4 „	‡1 6
„ „ 4	„	†2 6 „	‡2 9
„ „ 8	„	†2 11 „	‡3 4
„ „ 20	„	†3 1 „	‡3 9
„ „ 45	„	†3 3 „	‡4 0
„ „ 100	„	†4 0 „	‡4 10
Vita glass, sheet, n/e 1 ft.	„		1 0
„ „ „ 2 ft.	„		1 3
„ „ „ over 2 ft.	„		1 9
„ „ plate, n/e 1 ft.	„		1 6
„ „ „ 2 ft.	„		3 0
„ „ „ 5 ft.	„		4 0
„ „ „ 7 ft.	„		5 0
„ „ „ 15 ft.	„		6 0
„ „ „ over 15 ft.	„		7 6
"Calorex" sheet 21 oz., and 32 oz.	„	2 6 and	3 6
„ rough cast ⅛" and ¼"	„	8½ „	1 0
Putty, linseed oil	lb.		3

* *Colours, 1d. F.S. extra.*

† *Ordinary glazing quality.* ‡ *Selected glazing quality.*

PAINTER

		£ s. d.
White lead in 1-cwt. casks	cwt.	2 17 9
Linseed oil	gall.	3 2
Boiled oil	„	3 5
Turpentine	„	3 9
Patent knotting	„	14 0
Distemper, washable	cwt.	2 6 0
„ ordinary	„	2 0 0
Whitening	„	4 0
Size, double	firkin	3 0
Copal varnish	gall.	13 0
Flat varnish	„	14 0
Outside varnish	„	16 0
White enamel	„	1 15 0
Ready mixed paint	„	13 6
Brunswick black	„	7 6

CURRENT PRICES FOR MEASURED WORK

The following prices are for work to new buildings of average size, executed under normal conditions in the London area. They include establishment charges and profit. While every care has been taken in its compilation, no responsibility can be accepted for the accuracy of the list. The whole of the information given is copyright.

EXCAVATOR AND CONCRETOR

		s.	d.
Digging over surface n/e 12" deep and cart away	Y.S.	2	9
" to reduce levels n/e 5' 0" deep and cart away	Y.C.	8	6
" to form basement n/e 5' 0" and cart away	"	9	0
" " 10' 0" deep and cart away	"	9	6
" " 15' 0" deep and cart away	"	10	0
If in stiff clay add	"		6
If in underpinning "	"	4	0
Planking and strutting to sides of excavation	F.S.	1	0
" " to pier holes	"		5
" " to trenches	"		3
" " extra, only if left in	"		3
Hardcore, filled in and rammed	Y.C.	10	0
Portland cement concrete in foundations (6–1)	"	1	6	0
" " (4–2–1)	"	1	12	6
" " underpinning	"	1	16	0
Finishing surface of concrete, space face	Y.S.			7

DRAINLAYER

		4" s.	d.	6" s.	d.
Stoneware drains, laid complete (digging and concrete to be priced separately)	F.R.	1	6	2	3
Extra, only for bends	Each	2	8	3	0
" junctions	"	3	9	4	6
Gullies and gratings	"	16	6	18	0
Cast iron drains, and laying and jointing	F.R.	5	9	8	3
Extra, only for bends (cast iron)	Each	12	3	18	4

BRICKLAYER

		£	s.	d.
Brickwork, Flettons in lime mortar	Per Rod	26	10	0
" " in cement	"	27	12	6
" Stocks in cement	"	34	0	0
" Blues in cement	"	50	0	0
Extra only for circular on plan	"	2	0	0
" backing to masonry	"	1	10	0
" rising on old walls	"	2	0	0
" underpinning	"	5	10	0
Fair Face and pointing internally	F.S.			1½
Extra over fletton brickwork for picked stock facings and pointing	"			8
" " " red brick facings and pointing	"			11
" " " blue brick facings and pointing	"	1	4	
" " " glazed brick facings and pointing	"		3	6
Tuck pointing	"			7½
Weather pointing in cement	"			3
Slate dampcourse	"			10
Vertical dampcourse	"	1	1	

ASPHALTER

		s.	d.
½" Horizontal dampcourse	Y.S.	4	9
½" Vertical dampcourse	"	7	9
½" paving or flat	"		3
1" paving or flat	"	7	6
1" × 6" skirting	F.R.	1	0
Angle fillet	"		2½
Rounded angle	"		2½
Cesspools	Each	5	6

MASON

		s.	d.
Portland stone, including all labour, hoisting, fixing and cleaning down, complete	F.C.	17	9
Bath stone and do., all as last	"	13	6
Artificial stone and do.	"	13	0
York stone templates, fixed complete	"	10	6
" thresholds	"	13	6
" sills	"	1	0	6

SLATER AND TILER

		£	s.	d.
Slating. Bangor or equal to a 3" lap, and fixing with compo nails, 20" × 10"	Sqr.	3	10	0
Do., 18" × 9"	"	3	7	0
Do., 24" × 12"	"	3	17	0
Westmorland slating, laid with diminished courses	"	6	0	0
Tiling, best hand-made sand-faced, laid to a 4" gauge, nailed every fourth course	"	3	0	0
Do., all as last, but of machine-made tiles	"	2	16	0
20" × 10" medium Old Delabole slating, laid to a 3" lap (grey)	"	2	16	0
" " " " " " " (green)	"	4	15	0

CARPENTER AND JOINER

		£	s.	d.
Flat boarded centering to concrete floors, including all strutting	Sqr.	2	2	6
Shuttering to sides and soffits of beams	F.S.			7
" to stanchions	"			7
" to staircases	"		1	6
Fir and fixing in wall plates, lintols, etc.	F.C.		3	9
Fir framed in floors	"		4	6
" " roofs	"		6	6
" " trusses	"		7	6
" " partitions	"		8	6
½" deal sawn boarding and fixing to joists	Sqr.	1	14	6
1" " " " " "	"	1	17	6
1½" " " " " "	"	2	3	0
½" × 2" fir battening for Countess slating	"		9	6
Do., for 4" gauge tiling	"		12	0
Stout feather-edged tilting fillet	F.R.			4½
Patent inodorous felt, 1 ply	Y.S.		2	3
" " " 2 "	"		2	9
" " " 3 "	"		3	3
Stout herringbone strutting to 9" joists	F.R.			10½
1" deal gutter boards and bearers	"		1	2
1½" " " " " "	"		1	6
2" deal wrought rounded roll	F.R.			8
1" deal grooved and tongued flooring, laid complete, including cleaning off	Sqr.	2	1	0
1¼" do.	"	2	10	0
1½" do.	"	2	17	0
1" deal moulded skirting fixed on, and including grounds plugged to wall	F.S.		1	6
1½" do.	"		1	9

CARPENTER AND JOINER—*continued*

		s.	d.
1½" deal moulded sashes of average size	F.S.	1	9½
2" " " " " "	"	1	11½
1½" deal cased frames double hung, of 6" × 3" oak sills, 1¼" pulley stiles, 1¼" heads, 1" inside and outside linings, ⅝" parting beads, and with brass faced axle pulleys, etc., fixed complete	"	3	7
2" " " " " "	"	3	10
Extra only for moulded horns " " " "	Each		6
1½" deal four-panel square, both sides, door	F.S.	2	0
2" " " " " "	"	2	8
1½" " but moulded both sides	"	2	4
2" " " " " "	"	3	0
4" × 3" deal, rebated and moulded frames	F.R.	1	0
4½" × 3½" " " " " "	"	1	4
1½" deal tongued and moulded window board, on and including deal bearers	F.S.	1	9
1½" deal treads, 1" risers in staircases, and tongued and grooved together on and including strong fir carriages	"	2	6
1½" deal moulded wall strings	"	2	1
1½" " " outer strings	"	2	4
Ends of treads and risers housed to string	Each	1	9
3" × 2" deal moulded handrail	F.R.	1	3
1" × 1" deal balusters and housing each end	Each	2	0
1½" × 1½" " " " " "	"	2	9
3½" × 3" deal wrought framed newels	F.R.	1	3
Extra only for newel caps	Each	6	0
Do., pendants	"	6	0

SMITH AND FOUNDER

		s.	d.
Rolled steel joists, cut to length, and hoisting and fixing in position	Per cwt.	18	6
Riveted plate or compound girders, and hoisting and fixing in position	"	1	6	6
Do. stanchions with riveted caps and bases and do.	"	1	2	6
Mild steel bar reinforcement, ½" and up, bent and fixed complete	"	1	4	6
Corrugated iron sheeting fixed to wood framing, including all bolts and nuts 20 g.	F.S.			11
Wrot-iron caulked and cambered chimney bars	Per cwt.	1	10	0

PLUMBER

		£	s.	d.
Milled lead and labour in flats	cwt.	1	18	0
Do. in flashings	"	2	1	6
Do. in covering to turrets	"	2	7	0
Do. in soakers	"	1	12	9
Labour to welted edge	F.R.			3½
Open copper nailing	"			3
Close " "	"			4

		½" s.	d.	¾" s.	d.	1" s.	d.	1¼" s.	d.	2" s.	d.	4" s.	d.
Lead service pipe and fixing with pipe hooks	F.R.	1	2	1	4	1	5½	2	7	3	6	—	
Do. soil pipe and fixing with cast lead tacks	"	—		—		—		—		—		7	3
Extra, only to bends	Each	—		—		—		—		2	3	7	6
Do. to stop ends	"	6½		8		9		11		1	0	—	
Boiler screws and unions	"	3	3	3	9	5	0	8	0	—		—	
Lead traps	"	—		—		—		8	0	11	6	—	
Screw down bib valves	"	6	9	9	6	11	0	—		—		—	
Do. stop cocks	"	7	0	9	6	12	6	—		—		—	

		s.	d.
4" cast-iron ½-rd. gutter and fixing	F.R.	1	0
Extra, only stop ends	Each	1	0
Do. angles	"	1	6
Do. outlets	"	2	9
4" dia. cast-iron rain-water pipe and fixing with ears cast on	F.R.	1	7
Extra, only for shoes	Each	1	3
Do. for plain heads	"	5	6

PLASTERER AND TILING

		s.	d.
Expanded metal lathing, small mesh	Y.S.	2	0
Do. in n/w to beams, stanchions, etc.	"	2	9
Lathing with sawn laths to ceilings	"	1	3
½" screeding in Portland cement and sand or tiling, wood block floor, etc.	"	1	5
Do. vertical	"	1	7
Rough under on walls	"	1	2½
Render, refloat and set in lime and hair	"	1	9
Render and set in Sirarite	"	1	11
Render backing in cement and sand, and set in Keene's cement	"	2	9
Extra, only if on lathing	"		4
Keene's cement angle and arris	F.R.		6
Arris	"		1½
Rounded angle, small	"		3
Plain cornices in plaster, including dubbing out, per 1" girth	"		1½
1" granolithic pavings	Y.S.	3	6
1½" "	"	4	6
6" × 6" white glazed wall tiling and fixing on prepared screed	"	17	6
9" × 3" " " " " "	"	1	2	6
Extra, only for small quadrant angle	F.R.			8

GLAZIER

		s.	d.
21 oz. sheet glass and glazing with putty	F.S.		6½
26 oz. do. and do.	"		7½
Flemish, Arctic Figured (white) and glazing with putty	"	1	1
Cathedral glass and do.	"	1	2
Glazing only, British polished plate	"		7
Extra, only if in beds	"		2
Washleather	F.R.		4

PAINTER

		s.	d.
Clearcolle and whiten ceilings	Y.S.		6
Do. and distemper walls	"		9
Do. with washable distemper	"	1	1
Knot, stop, prime and paint four coats of oil colour on plain surfaces	"	3	3
Do. on woodwork	"	3	6
Do. on steelwork	"	3	0
Do. and brush grain and twice varnish	"	5	6
Stain and twice varnish woodwork	"	1	11
Stain and wax polish woodwork	"	4	6
French polishing	F.S.	1	2
Stripping off old paper	Piece	2	0
Hanging ordinary paper from	"	2	9