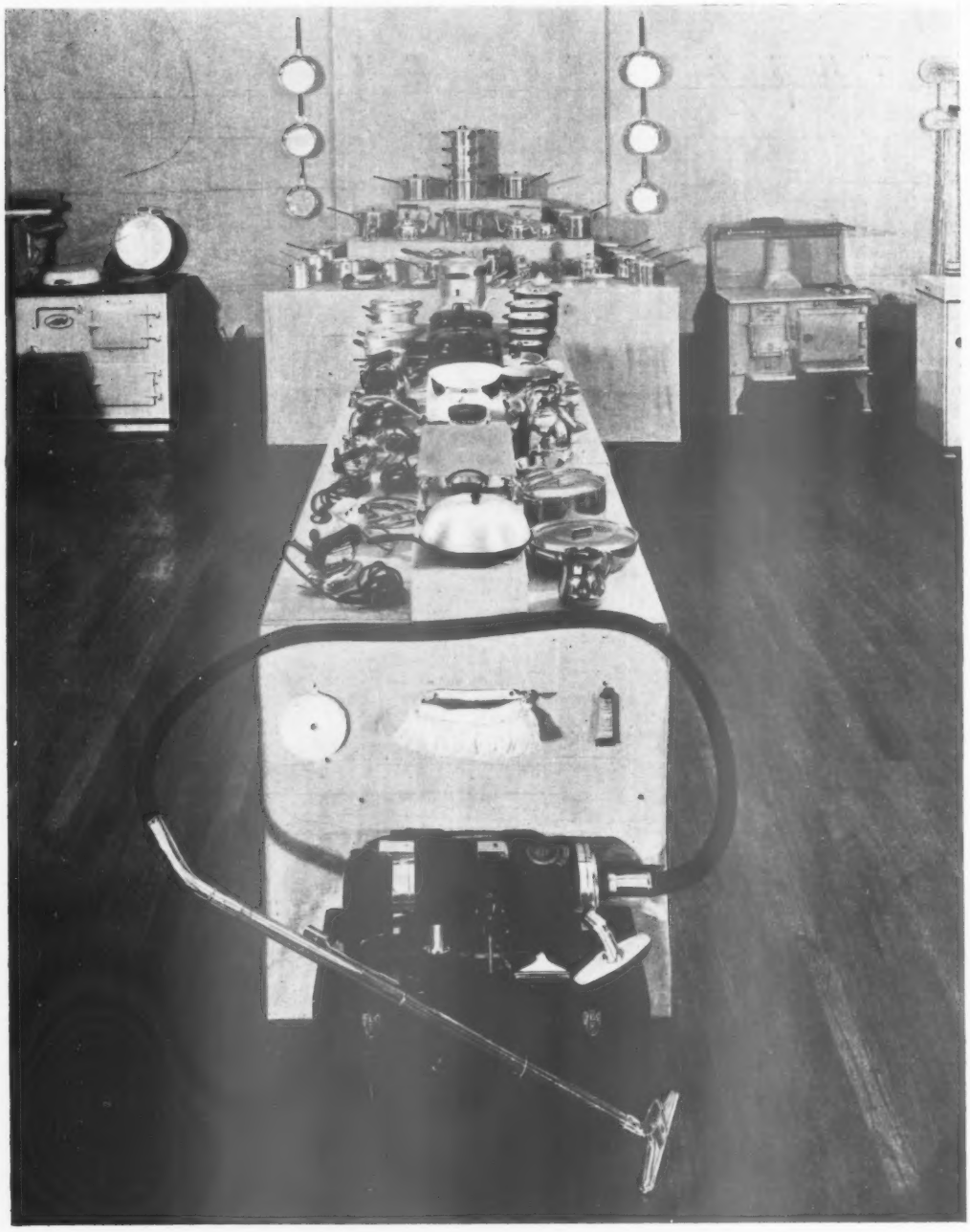
# NEW FIRE BRIGADE HEADQUARTERS

## *ON THE ALBERT EMBANKMENT*

*ABOVE is a drawing of the main elevation of the new headquarters of the London Fire Brigade, which is now in course of construction on a site near Lambeth Bridge lying between the Albert Embankment and the Southern Railway. The building will be opened early next year.*

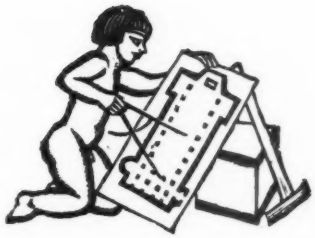
*The new building will be divided into two blocks. The main block, about 210 ft. long by 47 ft. deep, will have ten storeys, including a basement. The ground floor and part of the first floor will be stone-faced, while the upper part of the building will be finished in light-coloured brick. The rear block, facing High Street, Lambeth, will be four storeys high. Behind this building will be large workshops, partly of two-storey construction, with an area of 43,000 sq. ft.*

*Mr. E. P. Wheeler, F.R.I.B.A., the Chief Architect to the L.C.C., is responsible for the planning and design of the new Headquarters, the Assistant Architect in charge of the work being Mr. G. Weald, L.R.I.B.A.*



## EVERYDAY THINGS

*The kitchen equipment section at the R.I.B.A. Exhibition. The Exhibition was opened yesterday by Lord Bessborough and will remain open until March 14.* *See also pages 298 to 300.*



# THE MODERN PLAN

IN the JOURNAL of next week will appear the first pages of a new section devoted to the planning of specialized types of buildings.

Planning in one or another of its forms occupies the largest part of an architect's time and interest. In consequence, isolated plans of most building types have been illustrated before and the planning principles governing many of them have been variously expounded.

In setting about the preparation of its first planning section the JOURNAL braved the fact that some of the examples which should be reproduced, and even some of the data given, might be familiar to its readers. It has considered that the value of a concise reference series to the whole planning of a particular building type will more than remedy this disadvantage. But a reference file has been only a part of its objective.

It has been intended to emphasize in the planning sections the major importance of a particular point of view towards the whole question of planning buildings, and before publication of the first section begins some explanation of this point of view would not seem out of place.

A building's plan may be regarded as a sociological document; as a document of the history of construction; as the framework upon which is stretched an internal or external decorative treatment; as a chart from which may be deduced how well a building fulfills the practical needs required of it; or as all four. Any work of architecture contains all four of these aspects in an intimate co-ordination.

For the purpose of the JOURNAL's library of planning only the fourth aspect will be considered; and in the assessment of *practical needs* the attainment of æsthetic effect by symmetrical composition will not be highly rated.

This concentration upon one aspect of planning is recognized to possess disadvantages, but it is held to be the aspect upon which concentration of architectural thought is now needed far beyond all others.

A fine architecture is not incompatible with inconvenient and wasteful planning, but the best examples of such architecture belonged to ages, or to social groups, which could afford to be careless of bad planning in this sense. The most radical difference between the architecture of the past and that of the present and future is the inability of contemporary society to bear the expense of bad planning.

As the density of population within a few small area increases and as labour costs mount, so also does the need increase for the best possible use of the cubic space within the buildings in those areas. This need is of comparatively recent growth, and by its growth has given to the word "planning" a much more concentrated significance.

By a slight extension of a famous dictum this significance may be summarized as meaning that a building is a machine for doing something in. The reluctance of architects to accept this definition as that of the whole of architecture is justified, but their reluctance has sometimes resulted in an underestimate of its importance.

Too easily is it forgotten that the architect survives today, in all except a minute number of cases, not because of his taste or knowledge of form, not because of his skill in designing internal and external elevations, but because he is the only person trained to *plan*. If once the supreme difficulty of good planning without a good architect were overcome period buildings would be as easily supplied by active emporiums as are period dining-rooms today.

In his acknowledged pre-eminence in planning lies the architect's chief hope of educating the public in the better use and form of their surroundings.

It is for this reason primarily that the planning library of the JOURNAL will concentrate upon the organization of the cubic subdivisions and services of the building types it considers. But it is not the only reason. The number of fine historical buildings which, in the modern sense, possess bad plans, and the large part which scholarship played in the past training of students, have all influenced textbooks, architectural periodicals and research, and through them the attitude of mind of many architects towards planning—and that influence has not been one of realism. It has been forgotten that the majority of these badly planned good buildings were designed by architects approaching their problems from a viewpoint entirely different from that demanded from a modern architect.

It is in an endeavour to redress the balance in what is believed to be a necessary direction that the JOURNAL's library of modern planning will be based upon a different attitude of mind—the attitude that the principal future task of the architect will lie in organizing with the greatest efficiency within his power the internal space and services of all types of buildings.

The first planning section to be thus prepared will appear next week and will examine municipal offices, assembly halls and law courts, under the general heading of "TOWN HALLS."

*The Architects' Journal*
*Westminster, S.W.1*
*Telephones: Whitehall*
*9 1 2 - 7*
*Telegrams*
*Buildable*
*Part*
*London*

# NOTES & TOPICS

## BRITISH STANDARDS ?

WHEN the principle of British standard specifications was extended from engineering to building, I, for one, welcomed the idea. The very words "British Standard Specification" smack of high quality and sound workmanship.

*

It was with something of a shock, therefore, that I read through a number of these specifications the other day. True, they were a miscellaneous collection, some of recent date and others a year or two old. But I was really shocked to find that the standard achieved in at least half of them was so low that any self-respecting architect would hesitate to use them.

*

Why is this? The older drainpipes specification is still sound, and anyone wanting a first-class drain can specify B.S. pipes, pay a little more for them, and be sure of getting the goods. But the recent wood windows specification (to mention only one), while showing reasonably proportioned sashes and casements, shows details of construction and sizes and thicknesses of timber flimsier than the lightest and cheapest among my shelf of trade catalogues.

*

Two specifications I thought admirable in idea: that for "Unit Weights of Materials" and that for "Identification Colours for Pipes, etc." It was later that I realized these were really schedules and not specifications at all . . but why two standards, a high one for schedules which architects will use and a low one for specifications which the majority will not?

## THAMES-SIDE

That practically all the local authorities concerned with the banks of the Thames and the Medway should meet together in conference over their lands is a notable example of co-operation. That they should agree upon a simple course of collective action and to have set up a Thames-side Development Board sounds excellent—such a course would have been improbable even ten years ago.

*

But what is the new Board going to do? Their initial statements that they are intending to develop the Thames and the Medway on the "successful lines of the Tyne, Wear and Tees," that there is a lot of vacant land about the Thames and that they will set up a central office for its sale . . . these are not very reassuring.

*

No one will deny that the Thames and Medway banks need planning for proper development, but there is a deal of difference between planning for development in the wide sense and selling sites for factories.

*

May we hope that the new Board will tackle their task with a realization of their responsibility to the public and relate their development schemes to regional and even national planning?

## GAINSBOROUGH

The Gainsborough Exhibition at Sir Philip Sassoon's house in Park Lane—which opened yesterday and runs till the end of March—is an exceptionally good opportunity of seeing known and unknown masterpieces that are normally quite inaccessible; and seeing them, instead of in the hurly-burly of an exhibition, surrounded by the imposing decorations and framed by the corinthian pilasters of such a mansion as many of them must have been commissioned for.

*

This privilege costs quite a lot—5s.—but charity is to benefit; and such a complete collection of Gainsborough's work can hardly, if ever, have been brought together before. It is a pity, perhaps, that the works—there are 130 in all—could not have been hung in strictly chronological order; that would have made serious study easier, though it might have lessened the magnificence of the spectacle.

*

How much better a painter is Gainsborough in his early works, before he came under the influence of Van Dyck, entered London Society and established a much followed precedent by indulging in a series of quarrels with the Royal Academy.

*

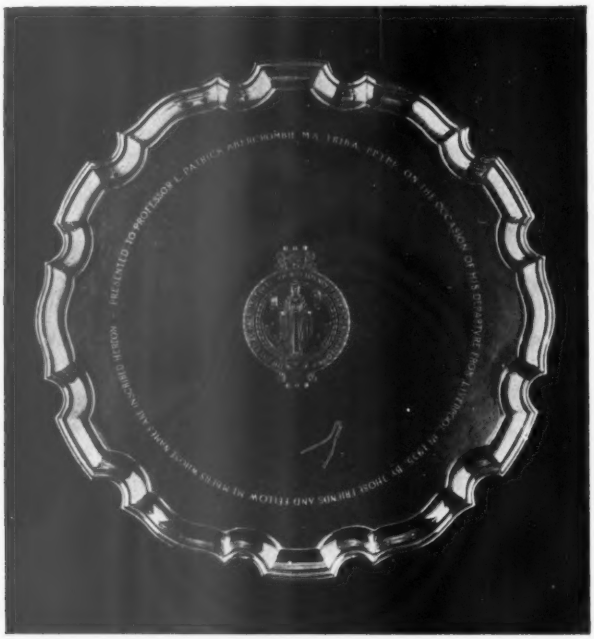
I say that in all seriousness, despite a certain respect for his celebrated "handwriting": that when he reached for the Grand Manner he became a far less worthy painter than he showed himself in, for example, his Ipswich period.

*

There are some remarkable examples of the latter and other early periods in the Park Lane show—of startlingly rich porcelain-like figures generally seated in the foreground of a romantically unreal landscape. Especially notable are numbers 81, "Two Ladies and a Sheep," 83, "A Lady Seated in a Park," both very early works, and 99, "Mr. and Mrs. Brown of Tunstall," a rather later work, but still in the same style.

## ART AND INDUSTRY

The reappointment of the Council for Art and Industry with the same membership as before only seems to call for the same comment: it seems a pity that so important a



*A photograph of the salver presented by past and present students of the School of Architecture, Liverpool, to Professor L. Patrick Abercrombie on his retirement from the Lever Chair of Civic Design.*

body should have but one architect among the members seeing the part architectural knowledge should play in every one of its activities.

*

Surely one may assume that architects would be most willing to serve on it ; their advice would be invaluable.

*

The *Manchester Guardian* complains that there are not enough architects on the Committee, but it seems rather hard to make several architects put in a good deal of work with no hope of reward, for I imagine that membership of the Committee would be an automatic bar to the carrying out of any of its architectural proposals.

C. W. LEMMON

The Military Engineering Services in India have now appointed Mr. C. W. Lemmon to be Civilian Consulting Architect at Quetta.

*

This is good news. Mr. Lemmon is young, his work at the building materials bureau at Liverpool shows him to be energetic and his responsibility for the fifth-year studio in the Liverpool School of Architecture proves his worth as a designer.

*

Add to this his special experience in earthquake-resisting construction in America and you will agree with me in wishing him every scope for his abilities in the Quetta reconstruction.

EVERYDAY THINGS

Last week I wrote in promising terms of those sections of the R.I.B.A. Exhibition which I had then seen. This week I have seen the remaining sections.

*

I still think the show as a whole achieves a high standard, but am surprised to see so many obviously badly designed articles exhibited.

*

In the Kitchens and Building Equipment sections only a minimum of unsuitable clumsiness protrudes ; the silver and dressing table wares may be excused a slight extravagance, but the carpets and fabrics suggest everyday conditions in houses more expensive than £1,500 ; the church fittings are simpler than I had expected, and the pottery richer ; the furniture, perhaps the most difficult section to select, moderately overruns its price-range.

LETTER-BOXES

So the Postmaster-General has written to the R.I.B.A. to say that letter-boxes very often aren't big enough. Nor, for that matter, are his own pillar boxes, for my diary tells me that letters may be up to 24 in. by 12 in., and that means a pretty big slit in the average door, not to mention an enormous box if letters aren't to fall all over the floor.

*

And anyway the R.I.B.A. itself has done all that is possible, for it has a huge slit opening into a small room big enough to take several letters from each member I should say.

*

And talking of this same letter-box, has anyone ever rung the R.I.B.A.'s front-door bell ? It's a fearsome experience. I went round there on Sunday to see how the Everyday Things Exhibition was getting on and timidly pressed a small button underneath this same box.

SHATTERING SUNDAY

Instantly a most horrid clangour started inside and went on and on, so that I stood on the step feeling like a smash and grabber and wondering if anyone had ever been seen running in so respectable a vista as Portland Place.

*

But apparently it always happens like that, or so the worthy King assured me, adding various remarks about the behaviour of small boys looking for a little unquiet fun.

ICE RINK . . .

So unnerved was I by my too conspicuous entry that I once more fell a victim to those slippery R.I.B.A. floors, and started wondering whether a little freezing mixture in those floor panels wouldn't convert the whole of the Henry Florence hall into a very good ice rink.

*

I commend the idea to the social committee for one of those evenings of theirs ; I'm sure lots of people would turn up even if it were only roller skating.

. . . AND DÉCOR

And I should insist that Mr. Felton be there, too, with his latest toy. This Sunday I found him and his camera perched on a smaller version of those contraptions that tramway companies keep for mending overhead wires. The whole device moves quite easily I discovered, though Felton doesn't like fast cornering at that height, and becomes more than usually emphatic over tangles in floodlight flex.

ASTRAGAL

# NEWS

## POINTS FROM THIS ISSUE

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*Blocks of flats which will resemble in shape the Isle of Man coat of arms or a three-leaved shamrock* 294

*Although the date of the Architectural Congress in Moscow has been provisionally fixed for March 1, it is possible that it may be postponed* 294

*"I am unable to go to Hong Kong, and also at the same time unable to converse with elephants* ..... 296

*Noise insulation cannot be obtained by small structural adjustments after the building is completely designed* ..... 310

### *QUETTA*

The Secretary of State for India in Council has appointed Mr. Cyril Whitefield Lemmon, A.R.I.B.A., as Civilian Consulting Architect to the Military Engineering Services, India, in connection with the reconstruction of Quetta.

Mr. Lemmon is 34 years of age. He joined the staff of the Liverpool School of Architecture, University of Liverpool, in 1933, and now holds the appointment of Senior Instructor in Design and Lecturer in Construction at that School. Prior to holding his present appointment, Mr. Lemmon spent a number of years in America during which time he had experience in reinforced concrete and other forms of construction specifically developed to resist earthquake disturbances. Some of the buildings of this type for which he was responsible are Scripps College, Claremont, California, including administration buildings, classroom buildings, dormitories, chapel library and gymnasium; the Athenæum and a large dormitory for the California Institute of Technology, Passadana, California; and country houses in the vicinity of Los Angeles and Santa Barbara, California.

Arrangements are being made for Mr. Lemmon to sail for India towards the end of this month.

### *THE SOUTH LONDON EXHIBITION*

Nearly 300 national and local manufacturers are supporting the sixth annual South London Exhibition at the Crystal Palace which will be held from Wednesday, March 4 until Saturday, March 14.

## THE ARCHITECTS' DIARY

**Thursday, February 20**

R.I.B.A., 66 *Portland Place, W.1. Exhibition of "Everyday Things." The Exhibition is open free to the public until March 14, 10 a.m. to 8 p.m. (Saturdays 10 a.m. to 5 p.m.)*

BUILDING CENTRE, 158 *New Bond Street, W.1. Exhibition of Lead Sheet and Pipe Work. Until Feb. 24. Also, Exhibition of drawings, models and photographs of buildings, erected from the designs of women architects. Until February 29, 10 a.m. to 6 p.m. (Saturdays, 10 a.m. to 1 p.m.)*

INTERNATIONAL EXHIBITION OF CHINESE ART. *At the Royal Academy, Burlington House, Piccadilly, W.1.*

INCORPORATED ASSOCIATION OF ARCHITECTS, 43 *Grosvenor Place, S.W.1. "How the Housing Problem is Being Solved Abroad." By F. R. Yerbury.* 7 p.m.

INSTITUTION OF STRUCTURAL ENGINEERS, *Yorkshire Branch. At the Hotel Metropole, Leeds. "Reinforced Concrete Structures for the Retention of Water and Other Fluids." By Hunter Rose.* 7.30 p.m.

SOCIETY OF ANTIQUARIES, *Burlington House, Piccadilly, W.1. "Excavations at Clarendon House." By Dr. Tancred Borenius.* 8.30 p.m.

**Friday, February 21**

LONDON SOCIETY. *At the Royal Society of Arts, John Street, Adelphi, W.C.2. "Piccadilly, 1836–1936: A Comparative Survey." By Professor H. S. Goodhart-Rendel.* 5 p.m.

INSTITUTION OF STRUCTURAL ENGINEERS *South Wales and Monmouthshire Branch. Annual Dinner at the Metropole Hotel, Swansea.*

**Saturday, February 22**

ST. PAUL'S ECCLESIASTICAL SOCIETY. *Visit to St. Bride's Church, Fleet Street, E.C.4.* 2.30 p.m.

**Monday, February 24**

R.I.B.A., 66 *Portland Place, W.1. "Sculpture." By Frank Dobson.* 8 p.m.

INSTITUTE OF WELDING, *North Eastern (Tee-side) Branch. At the Cleveland Institute, Corporation Road, Middlesbrough. "Welding as Applied to Engine Structure and Pressure Vessels." By Dr. S. F. Dorey.* 7.30 p.m.

**Tuesday, February 25**

SOUTH EASTERN SOCIETY OF ARCHITECTS, *Croydon Chapter. At 1 Edridge Road, Croydon. "Sculpture on Modern Buildings." By Eric Gill.* 8 p.m.

**Wednesday, February 26**

ROYAL SOCIETY OF ARTS, *John Street, Adelphi, W.C.2. "Pottery in England's Industrial History." By John Thomas.* 8 p.m.

ST. PAUL'S ECCLESIOLOGICAL SOCIETY. *At 66 Portland Place, W.1. "St. Mark's, Venice." By G. J. B. Fox.* 8 p.m.

INSTITUTE OF WELDING, *North Western Branch. At the School of Technology, Manchester. "Welding and Works Production." By G. A. Mozley.* 7.30 p.m

### *ARCHITECTS' REGISTRATION COUNCIL*

The fourth annual meeting of the Council will be held on Friday, March 20, at 3.30 p.m. at 66 Portland Place, W.1, to be followed by the sixteenth ordinary meeting of the Council at 5 p.m.

### *GREENOCK HOUSING SCHEME*

The Housing Committee of Greenock Corporation considered recently (states the *Glasgow Herald*) a novel design of building for the new housing scheme in the John Street area. It is described as a "revolutionary departure" in municipal schemes, and if the proposal is adopted, the type of building will be the first of its kind in Scotland.

About 120 houses are included in the scheme, and it is proposed to erect them in blocks of four storeys. Each block will have three wings, and it will resemble in shape the Isle of Man coat of arms or a three-leaved shamrock. A central well stairway will provide access to the building, and there will be two houses in each wing on each flat, giving a total of 24 houses in each block.

The Housing Committee remitted the scheme to the medical officer and sanitary inspector for a report.

### *ARCHITECTURAL CONGRESS, MOSCOW*

Although the date of the above Congress has been provisionally fixed for March 1, it is possible that it may be postponed.

The subjects to be discussed at the Congress include: Soviet architectural problems; architectural education and the training of the highly skilled workers; foreign architecture; dwelling houses; public buildings; industrial buildings; building technique and building materials; town planning, etc.

### *ESSEX, CAMBRIDGE AND HERTS SOCIETY OF ARCHITECTS*

The gold medal awarded by the R.I.B.A. for the best building erected in the above Society's area during the last three years has been awarded to Professor W. G. Newton, M.A., F.R.I.B.A., for the Merchant Taylors' School buildings at Rickmansworth.

Mr. Percy Thomas, President of the R.I.B.A., will unveil the plaque and present the medal to Professor Newton at the school buildings at 3 p.m. on March 25.

### *LEEDS SCHOOL OF ARCHITECTURE*

In addition to the special prize for the design for a poster in connection with the R.I.B.A. Exhibition of "Everyday Things" which was awarded to Mr. R. Thompson, a fifth-year student of the above School, the cover of the catalogue to the Exhibition has been designed by Mr. F. Digby Firth, who is a fifth-year student of the school.

### *LEEDS SQUARE IMPROVEMENT*

Mr. J. C. Proctor, F.R.I.B.A., has been commissioned by the Corporation to prepare plans for the improvement of Victoria Square, in front of the Town Hall.

### *ART AND INDUSTRY*

The President of the Board of Trade (Mr. Runciman) has reappointed the Council for Art and Industry, with the following membership: Mr. Frank Pick (chairman), Sir A. Steven Bilsland (vice-chairman), Sir T. D. Barlow, Mr. F. V. Burridge, A.R.C.A., Lady Chamberlain, Mr. J. O. M. Clark, Mr. R. Copeland, Sir William S. Crawford, Mr. J. T. Davis, F.R.S.A., Mr. W. C. Eaton, Mr. E. R. Eddison, Sir Ambrose Heal, F.S.A., Mr. Oliver Hill, F.R.I.B.A., Mr. Geoffrey Holme, F.R.S.A., Mr. A. S. Hoskin, Mr. E. McKnight Kauffer, Mr. Sidney Lee, R.A., R.E., Sir Eric Maclagan, F.S.A., Sir F. J. Marquis, Mr. F. M. Morris, Mr. Paul Nash, Mr. J. W. Peck, F.R.S.E., Mr. J. Murray Reid, Mr. R. Hugh Roberts, Sir Hubert Llewellyn Smith, Mr. W. L. Stephenson, Mr. C. L.

Stocks, Mr. Douglas Strachan, Hon. R.S.A., and Mr. Charles Tennyson.

Mr. J. O. M. Clark, Mr. Geoffrey Holme and Mr. F. M. Morris are new members.

Mr. Runciman has also reappointed the Scottish Committee of the Council, with the following membership :—

Sir A. Steven Bilsland (chairman), Mr. A. O. Curle, Mr. J. O. M. Clark, Mr. F. J. Donald, Mr. G. R. Donald, Mr. Stirling Draffen, Mr. R. F. J. Fairlie, R.S.A., F.R.I.B.A., Sir Thomas Henderson, Mr. W. O. Hutchison, Sir W. W. McKechnie, Mr. Sam Mavor, Lady MacGregor of MacGregor, Mr. David Milne, Mr. J. W. Peck, F.R.S.E., Mr. J. Murray Reid, Mr. Douglas Strachan, Hon. R.S.A., Mr. H. L. Wellington, Hon. A.R.C.A., Lady Victoria Wemyss.

Mr. J. O. M. Clark, Mr. F. J. Donald, Mr. Stirling Draffen, Sir W. W. McKechnie, Lady MacGregor of MacGregor and Mr. David Milne are new members.

An exhibition of "Scottish Everyday Art" is to be held at the Royal Scottish Museum, Edinburgh, from May 1 to August 31.

### *CIVIC CENTRE, NEWPORT*

The Newport Town Council has decided to hold an open competition for the lay-out of a new civic centre. The President of the R.I.B.A. has been asked to appoint an assessor.

### *DUNDEE COLLEGE OF ART*

Mr. J. R. Leathart, F.R.I.B.A., has been appointed assessor for the forthcoming competition in connection with the plans and designs for the new Duncan of Jordanstone College of Art, Dundee.

## R. I. B. A.

ELECTION OF MEMBERS

At a recent meeting of the Council of the Institute the following members were elected :—

As FELLOWS (7) : Messrs. P. J. Bartlett (Nottingham) ; E. Cole (Cirencester) ; I. B. Hamilton (London) ; W. J. Lewis (Ilford) ; C. W. Yates (Gloucester) ; T. H. Longstaff (Huntingdon) ; and W. D. Taggart (Belfast).

As ASSOCIATES (23) : (Miss) M. M. Baird (London) ; Messrs. J. E. Brownrigg (Pirbright, Surrey) ; G. E. Cassidy (Farnborough, Hants) ; (Miss) Y. Crane (London) ; E. M. Galloway (Slough) ; J. G. Grace (London) ; A. S. Hughes (London) ; D. H. Lewis (Eastbourne, Sussex) ; R. H. Macartney (London) ; T. A. Medlycott (Bromley, Kent) ; D. W. Mitchell (London) ; R. H. Ouzman (London) ; E. H. Owen (Pretoria, South Africa) ; (Miss) M. M. Phillips (London) ; R. Purvis (Bickley, Kent) ; (Miss) B. J. Read (London) ; A. E. Rice (Lock Ferry, Cheshire) ; (Miss) E. M. Sherwell (Edinburgh) ; D. Steel (London) ; P. M. Thompson (Lerwick, Shetland) ; (Mrs.) W. K. Walker (London) ; E. W. Warne (Claremont, Western Australia) ; and L. T. Wilkins (Wembley, Middlesex).

As LICENTIATES (7) : Messrs. C. W. Eastick (London) ; G. E. Gibson (Newcastle-on-Tyne) ; N. Heppenstall (Huddersfield) ; P. A. Kelly (London) ; J. E. Lunn (Huddersfield) ; E. K. Rowe (London) ; and N. Wright (Liverpool).

# LETTERS *FROM* READERS

*W. H. ANSELL, F.R.I.B.A. (Past-Chairman, Board of Architectural Education).*
*R. C. JACKSON*
*JACK H. NAPPER, A.R.I.B.A.*
*ARTHUR A. THOMAS*
*STUDENT*
*REGISTERED ARCHITECT*

## *Architectural Education*

SIR,—I have read with much interest the various letters and articles recently published by you on Architectural Education.

On March 23 a Paper is to be read at the R.I.B.A. on this very subject. It will not, I understand, be a lengthy one, as it is desirable and desired that ample time for discussion shall be available. Need I say more ?

W. H. ANSELL
*London*

SIR,—I should like to join with Mr. Walters in his criticism of architectural education. The men turned out of the schools are not even equipped for the present day, let alone 20 years hence.

But it seems to me that criticism could go further. How can a man call himself an architect unless he understands the community he is designing for ? I suspect that the average student knows nothing of the people he is accommodating in his "paper" building. The architectural school remains snug in a splendid isolation.

R. C. JACKSON
*London*

SIR,—Throughout the series of letters dealing with education two important factors have been overlooked : (*a*) the types of students and (*b*) the present object of school courses.

These are at the root of all problems connected with architectural education, and they must be fully appreciated if any constructive proposals are to be advanced by organized student thought. To deal only briefly with them will serve to show their importance.

(*a*) With regard to the students entering schools of architecture we find a very wide variation in age and training. It should be realized that it is possible for students to enter schools with little enthusiasm for the subject, and without possessing average intelligence or education—the Probationership of the R.I.B.A. is no guarantee that they possess even elementary knowledge as to the nature of architecture and of its relation to society. It is with this very varied material that the schools deal at present.

(*b*) The object of the school course follows logically from (*a*). Briefly, this object is to cater for the average intellect, but not for the student designer capable of facing contemporary problems. There is nothing to prevent the energetic student from developing beyond the school course, but, on the other hand, there is little to help him. From such students comes the present appeal for a better system of training.

It would be a hopeful outlook if the standards demanded by these students could be reached in the schools—graduates might then achieve a unity of outlook and sufficient collective strength to raise the standard of practice. Whilst the average type enters the schools and is catered for by the school course it is only too clear that the intelligent few are in danger of being swamped after graduation.

JACK H. NAPPER
*Hull*

## *Students and Building Materials*

SIR,—Your correspondent Mr. Walter Goodesmith suggests the Building Centre as a happy hunting ground for students in search of new materials.

Is he aware that the Centre closes at six o'clock in the evening, so that it is impossible for students working in offices to make use of the centre ?

Perhaps the Directors of the Building Centre will consider keeping it open until nine or ten o'clock at least one evening a week.

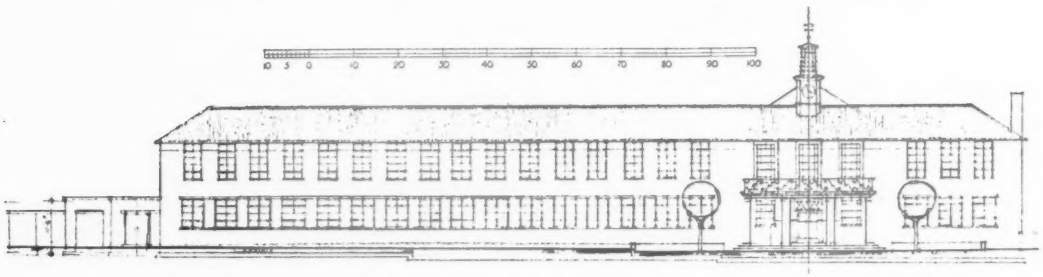
A. A. THOMAS
*London*

SIR,—I can quite appreciate "Casements's" point of view, and will readily agree that the private practitioner, who, should he desire to use his materials, is in a position to give immediate orders with his client's approval. I also firmly believe in his philosophy—that of "catching 'em young." For myself, however, I would much rather be caught now than when I hold a position of responsibility.

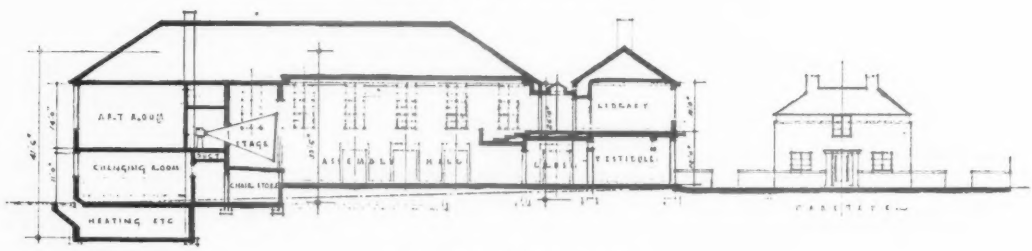
"Casements" gives me some very interesting information as to the cost of his publications, postage, etc., but has been misinformed when he says there are 3,000 (or thereabouts) students. The number, according to the R.I.B.A. Kalendar, 1935-1936, is approximately 2,000, and half of this number will be students of schools of architecture, for which my appeal is directed.

"Casements" pitifully enquires, "What are we likely to get in return ?" to which I answer, "One never knows."

# COMPETITION FOR SCHOOL AT



MAIN ELEVATION




CROSS SECTION

*The winning scheme, by Paul V. Mauger and Arthur J. May, in the competition (limited to five firms of architects) for a school at St. Albans for the Hertfordshire County Council. The assessor was J. R. Leathart. The authors of the winning design state, in their report, that the building generally will be built of brick, the external walls being of local facing bricks; the roof will be covered with hand-made pantiles.*

It depends largely upon the quality of his wares—if they are good and he is proud of them, he should advertise their particular qualities to people who might use them not only immediately, but possibly at some later date, with a profitable result. If I, as a student, am not acquainted with his product I might make the ghastly mistake of specifying a substitute product from another firm on my first commission.

"Casements" hopes that I possess some vague knowledge about his products, but may I venture to suggest that by vague knowledge the products themselves become vague—i.e., of doubtful origin—and are dismissed on this score.

I deduce, however, from "Casements's" pseudonym that he is connected with the manufacture of metal windows, and, acting on his advice (as I am *really* trying to learn), I looked at the metal window advertisements in the JOURNAL to glean some information which he assures me I shall receive, and I find that in one instance metal windows have been supplied to a building in Hong Kong, and in the other that another type of window has been inserted in the elephant house in order that the elephants could have a much wider range of vision from their new home. Realizing that at the moment I am unable to go to Hong Kong, and also at the same time unable to converse with the elephants, the further information I require must come from the manufacturers.

In conclusion, I would like to remind "Casements" that the student of today is the architect of tomorrow, and that it is in the interests of architecture that the student is given absolutely first-hand information about the various building products; the results of this will have to be seen. I am grateful, however, to "Casements" in that *he* will send on information on receipt of a post card, and trust he did not seriously misinterpret my meaning when I suggested that he should forward information without my having to ask for it—it was the trouble and time occupied in writing which I find takes up a great deal of time.

STUDENT
*Yorkshire*

## *Registered Architects*

SIR,—The R.I.B.A. for many years laboured to obtain registration by law, and was eventually given Government recognition.

Now what I am at present interested in is this: why is it that so many vacant appointments advertised make the condition that the applicants must be members of the R.I.B.A., never a mention of the Registered Architects?

Seeing that registration is now a fact, I feel that the Registered Architects who are not members of the R.I.B.A. are still as much handicapped as they were before registration took place, in that they are often barred from applying for posts.

Is it not time that something was done to bring these two together by the R.I.B.A. incorporating the Registered Architects as a body?

The time will come, no doubt, when all architects will be members of the R.I.B.A., and registration will embody only R.I.B.A. members, but at present the registered members are deprived of many likely jobs.

Why should it ever have been necessary for there to be an Institute of Registered Architects? I can see no reason at all if the R.I.B.A. would only do what was obviously its proper course when Registration was a fact. Is it too late yet?

REGISTERED ARCHITECT
*Huddersfield*

# IN PARLIAMENT

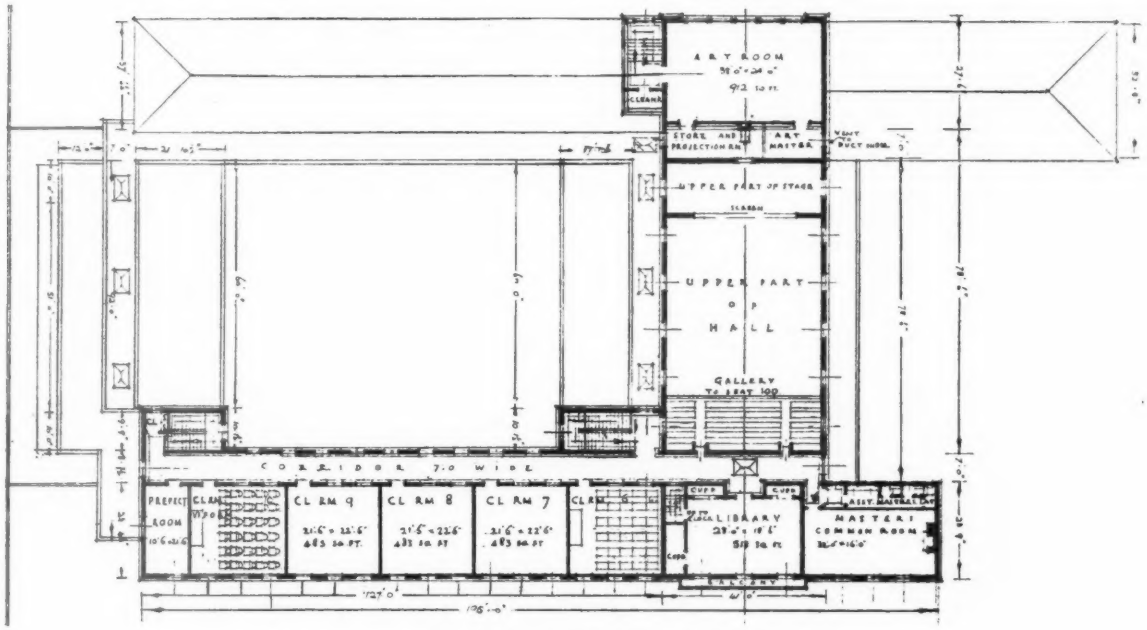
[BY OUR SPECIAL REPRESENTATIVE]

*Houses*

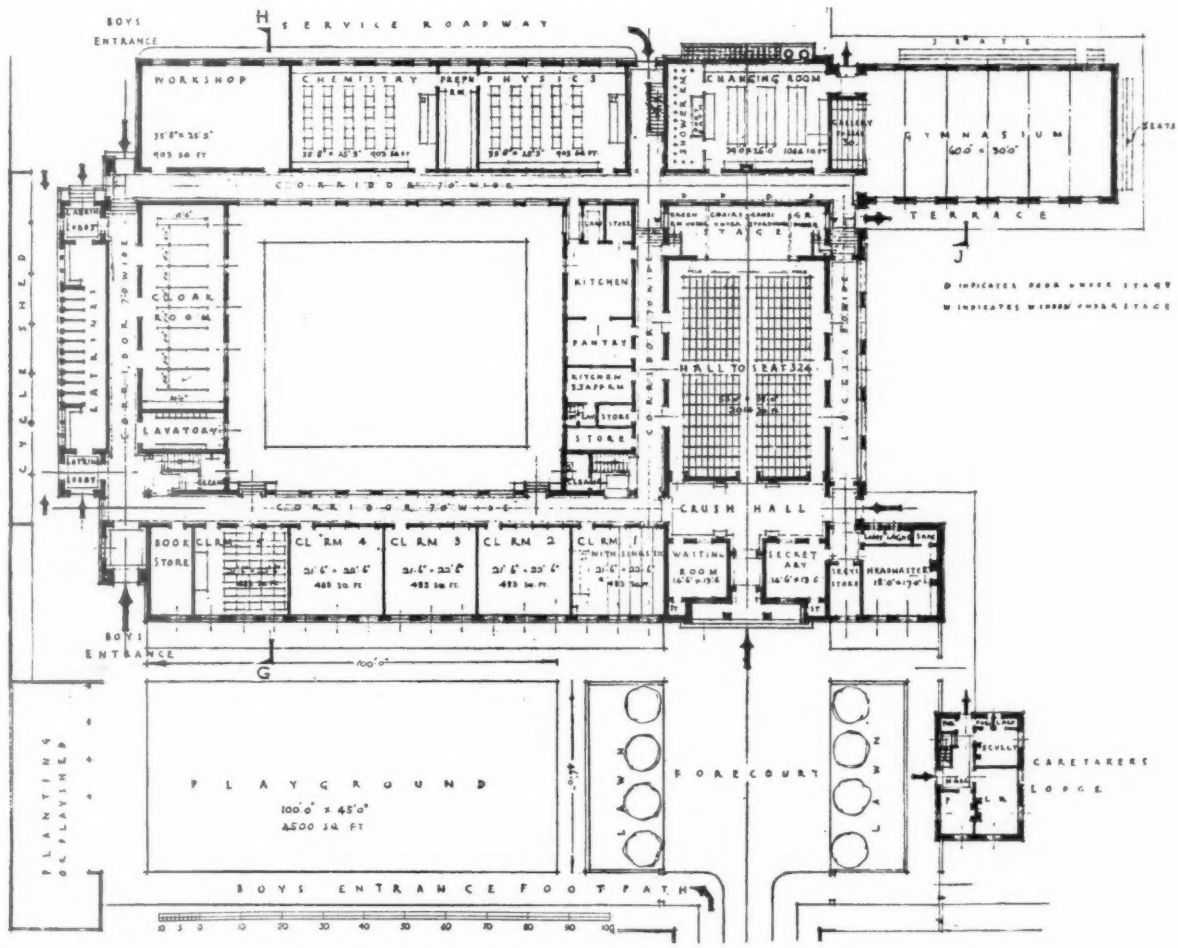
Sir F. Fremantle asked the Minister of Health if he was satisfied with the quality of workmanship, design and equipment of the cheaper houses now being built, respectively, by local authorities and by private enterprise; and whether he would soon be able to approve a standard minimum qualitative specification for the purpose.

Sir K. Wood said he had no reason to suppose that satisfactory standards were not in general being maintained both by local authorities and by private enterprise, though there was no doubt in some respects room for improvement. As regarded the second part of the question, he assumed that his hon. friend had in mind the Joint Committee appointed at the instance of the National Federation of Building Trades' Employers, under the Chairmanship of Sir Raymond Unwin, to consider the

# ST. ALBANS, HERTS.: WINNING DESIGN




FIRST FLOOR PLAN




GROUND FLOOR PLAN

*BY PAUL V. MAUGER AND ARTHUR J. MAY*

adoption of a standard of the kind mentioned for the voluntary use of the building industry. The conclusions of the Committee, which was an independent body, would not require his approval. He had, however, arranged for an officer of his Department to attend the deliberations of the Committee, and he had no doubt that the work of the Committee would materially assist in securing progressive improvements.

*Housing Associations*

Mr. Whiteley asked the Minister of Health what arrangements were being made to grant subsidy and rate relief to local authorities who refused to become part of a housing association, but were prepared to undertake the work set forth in the 1930 to 1935 Housing Acts; if he would state, in the case of local authorities agreeing to come into the housing association, what was to be the position of the existing staffs; and if he would also state, in the event of the dissolution of a housing association, what would be the position regarding houses completed under the scheme; and if any burden would be placed on the local authorities after the review of 1937.

Sir K. Wood said that the amount of Exchequer assistance for local authorities in the discharge of their obligations under the Housing Acts and the amount of contributions from the rates were determined by the Acts. When a local authority were able to make arrangements with a Housing Association there was no obligation on them to make any contribution from the rates and the terms of the arrangements were a matter for agreement between the authority and the Association with his approval. Any changes in staff would be a question for the consideration of the authority. The review of 1937 would not affect houses completed before the date fixed in that review.

## *ANNOUNCEMENTS*

The Department of Architecture and Interior Decoration of the Croydon School of Art will be pleased to receive all technical and trade catalogues and samples at the following address: The Croydon School of Art and Crafts, George Street, Croydon, Surrey.

Mr. David Goddard, A.R.I.B.A., and Mr. C. J. E. Marshall, A.R.I.B.A., have entered into partnership and are practising at 7 Southampton Street, London, W.C.1, under the name of Praxis, architects. Telephone number: Holborn 9996. Miss M. J. Blanco White is in collaboration with Messrs. Praxis at the same address. Mr. David Goddard is also acting as advisory architect to Messrs. Consultants, Limited, at 200 High Holborn, on all matters relating to industrial design.

Mr. Reginald T. Longden, F.R.I.B.A., F.R.S.A., has removed his offices to 10 King Street, Newcastle-upon-Tyne. Telephone number: 67561.

Mr. S. T. Walker, M.A., A.R.I.B.A., has removed his offices to Essex House, Temple Street, Birmingham, 2.

Mr. Frank H. Heaven, A.R.I.B.A., has been appointed Education Architect to the Borough of Walthamstow, London.

## *ARCHITECTS' WILLS*

Mr. R. C. H. Hamilton, A.R.I.B.A., of Coulsdon, left £2,672 (net personalty, £1,684).

Mr. C. H. B. Quennell, F.R.I.B.A., of Berkhampstead, left £6,508 (net personalty £6,367).

# EVERYDAY THINGS

## *EXHIBITION AT THE R.I.B.A.*

*The Exhibition of Everday Things, organized by the R.I.B.A., was opened yesterday by Lord Bessborough, and will remain open until March 14. The hours of opening are from 10 a.m. to 8 p.m. on weekdays; Saturdays 10 a.m. till 5 p.m.*

WHEN the Royal Academy presented a year ago its exhibition of Art in Industry, it received a fairly unanimous chorus of blame for too much Art and too little Industry: for allowing its snobismus centre-of-art complex to provide the specially designed luxury work which has little or nothing to do with industry and even less with the unfortunate general public, who were expected to buy expensive purpose-made goods to fulfil their almost standardized wants.

Destructive criticism was easy, and the *Architectural Review* criticized as firmly as most, carrying the idea farther and finally adopting the unusual course of producing something constructive in the Interior House Equipment number, published last December. Everything shown in that issue was simple reach-me-down stuff that could be bought through the ordinary retail channels.

So too this exhibition at the R.I.B.A. The catalogue gives no indication of the limit of income for which the exhibits are suitable, but we gather unofficially that a figure of £1,500 for a house was taken as an upper limit. On this assumption some of the exhibits seem a little expensive but it may be pointed out that people will often willingly pay fairly large sums for good equipment, even if the cost of it is not really justified by the total outlay on the house.

The exhibits themselves are very uneven. Kitchen equipment, lighting fittings and sanitary ware are good: well arranged and, with few exceptions, reasonably cheap. The plastics are a desolation: admittedly only a small section, there is hardly anything in it


*Blue and white "kitchen" china by A. E. Gray & Co., Ltd.*

that has not already been done as well or better, a notable exception being some well designed fans and electricity meters, and one or two other items which are triumphs of moulding skill, but very little else.

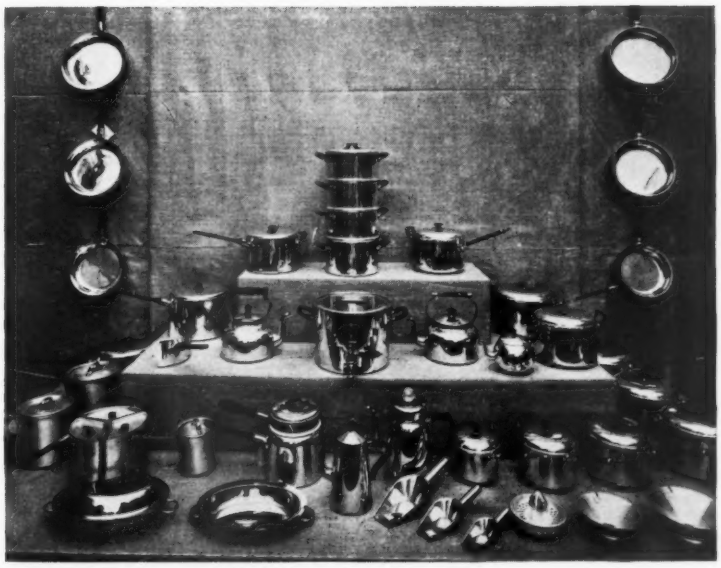
Fabrics are a little uninspired, but nobody seems yet to have solved the problem of displaying in a small space things which should essentially be seen in large areas. The same argument applies to the building finishes, where the paints and distempers are shown on the usual small sample panels. Such pottery as is shown in its own section has a rather depressing and naïf flavour, contrasting sharply with the cheerful blue and white of the so-called kitchen pottery which has good simple lines. Criticism of a section such as this is probably unjustifiable without a mental catalogue of what else is available at the same price, but none the less a suspicion remains that both stuff *is* to be obtained, and that some of it should be here, for restrained colouring while making a good uniform display, is only popular with a small proportion of the public for which this exhibition has presumably been arranged.

Silverware has about the right amount of space. Its popularity is rapidly declining probably because of the usual cleaning troubles (even sports trophies are now frequently made of glass) but also because for some years little was produced in silver that was not ill-designed. The exhibits shown here should dispel this last criticism, for they do show that good stuff is available if one knows where to go for it.

For the rest of the exhibition, the photographs on this, the facing and following page give some idea of the type of goods shown, and no useful purpose could be served by going through the exhibits seriatim.

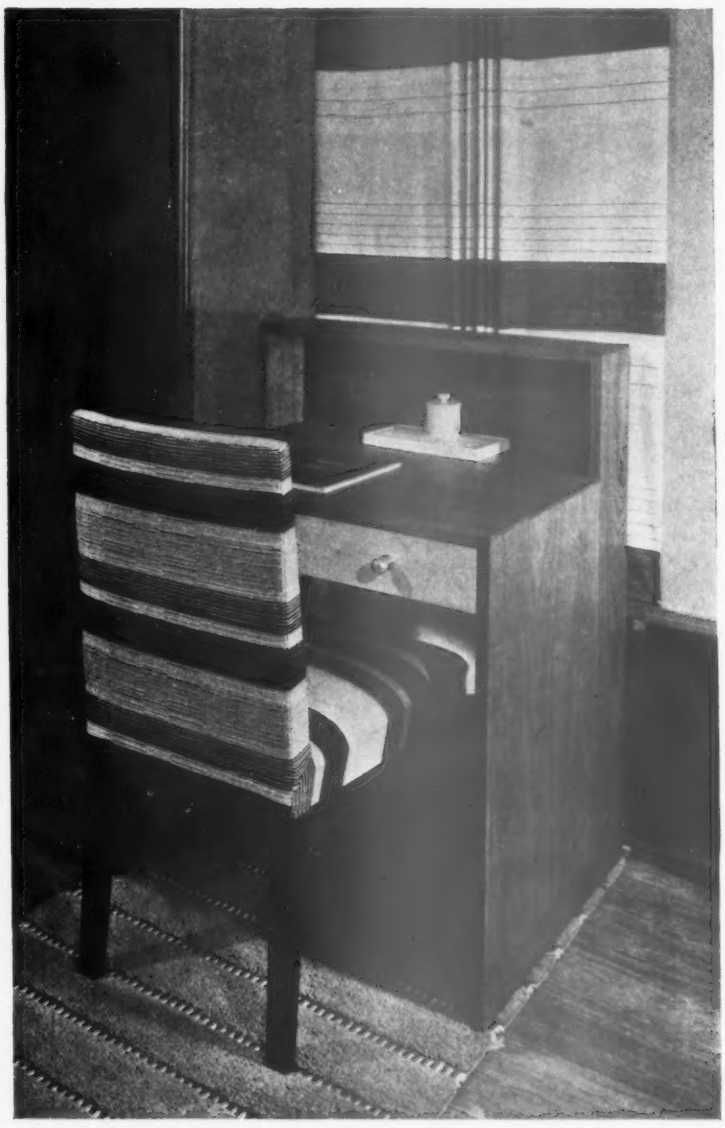
The whole exhibition has the right idea behind it, and is peculiarly a work that should be done by architects. The preparation of it must have involved an immense amount of work by a large number of people. That it is not perfect is obvious : the committee would probably be the last to claim that there is nothing more to be done.

In the provinces the exhibition should do a great deal of useful propaganda : with a steady process of revision and pruning it might well become a standard source for obtaining news of new designs.



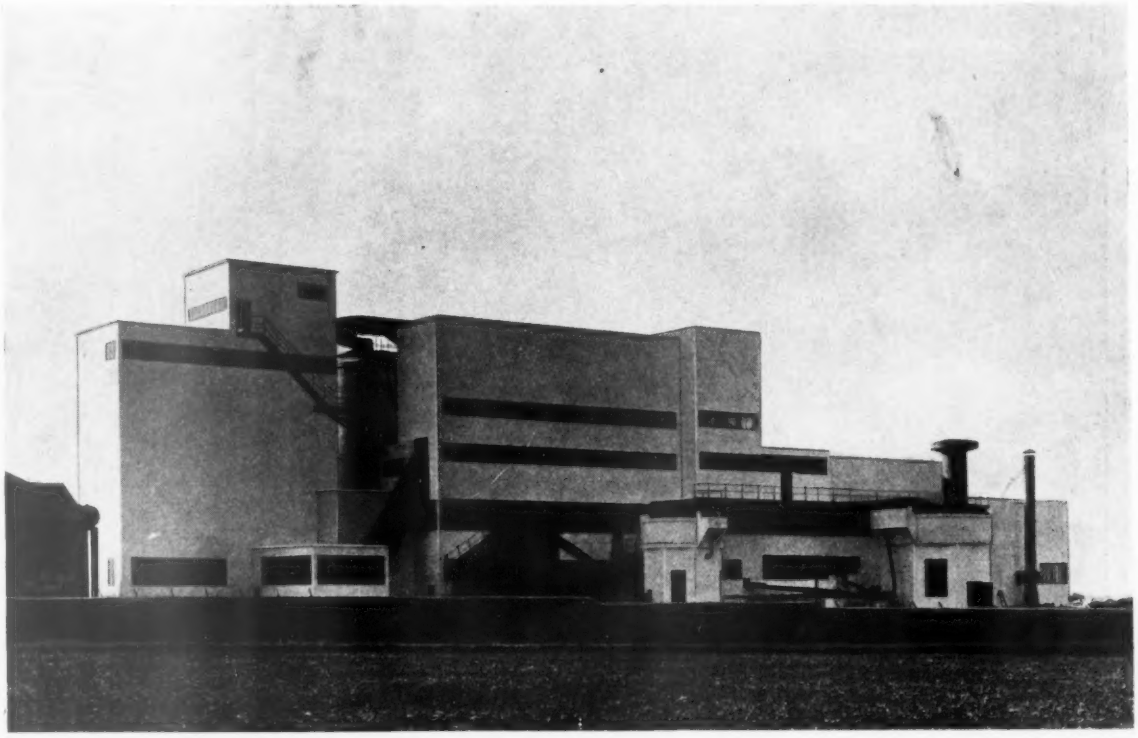
*Above : a case of glassware and toilet accessories ; below : saucepans and cooking utensils by various designers.*

# R.I.B.A. EXHIBITION: EVERYDAY THINGS



*Left, top: furniture by Gordon Russell, the Rowley Gallery, Heals, and P. E. Gane; bottom: writing desk and chair by Gordon Russell; right, top: bath, shower and screen by Tylors, Ltd.; bottom: basic furniture units by B. Cohen and Sons, Ltd.*

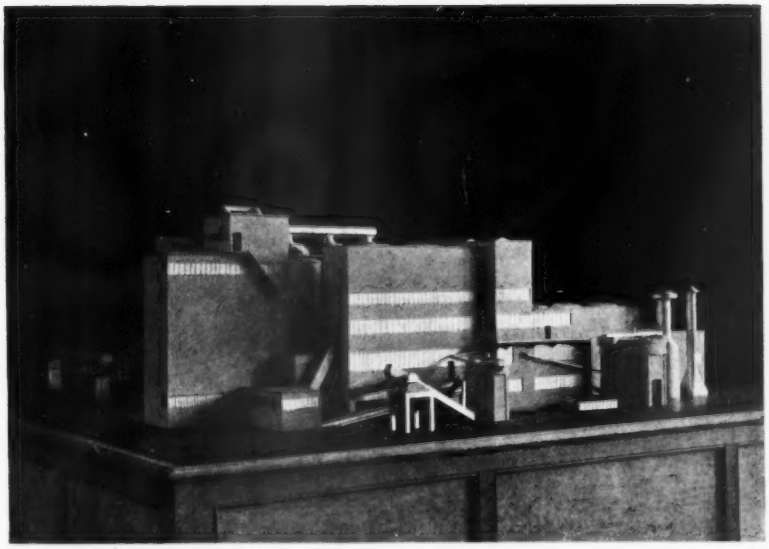
# RISING SUN COLLIERY, WALLSEND



*COAL CLEANING PLANT:*

*R. A. CORDINGLEY,*

*CONSULTANT ARCHITECT*

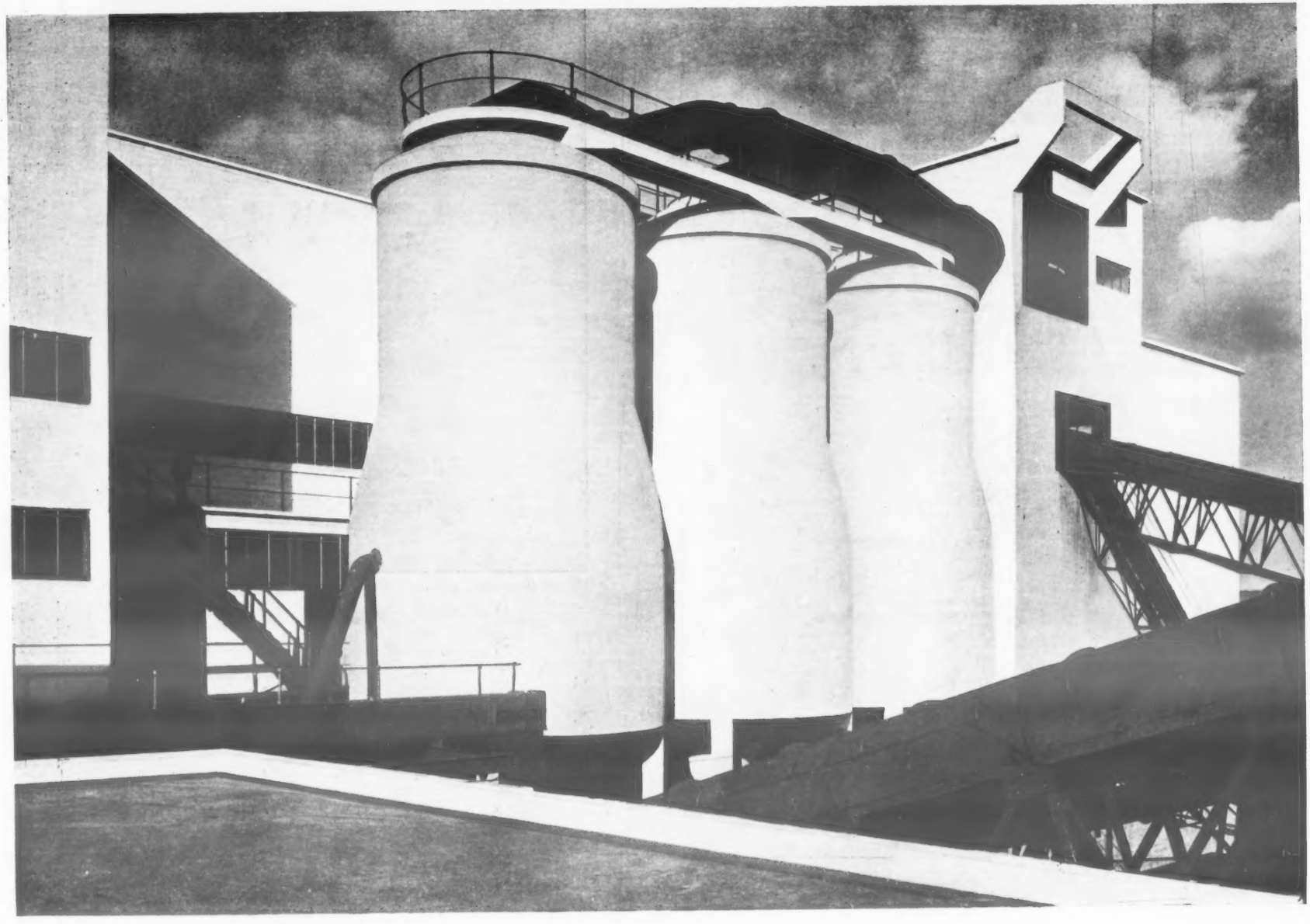


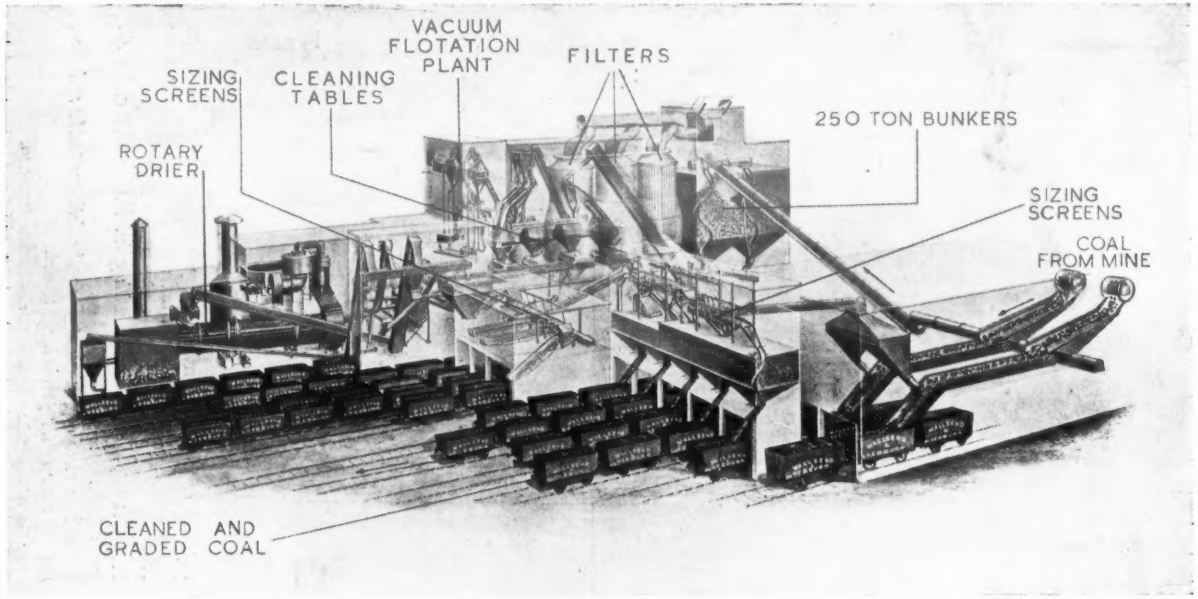
PROBLEM.—*A coal preparation plant.*

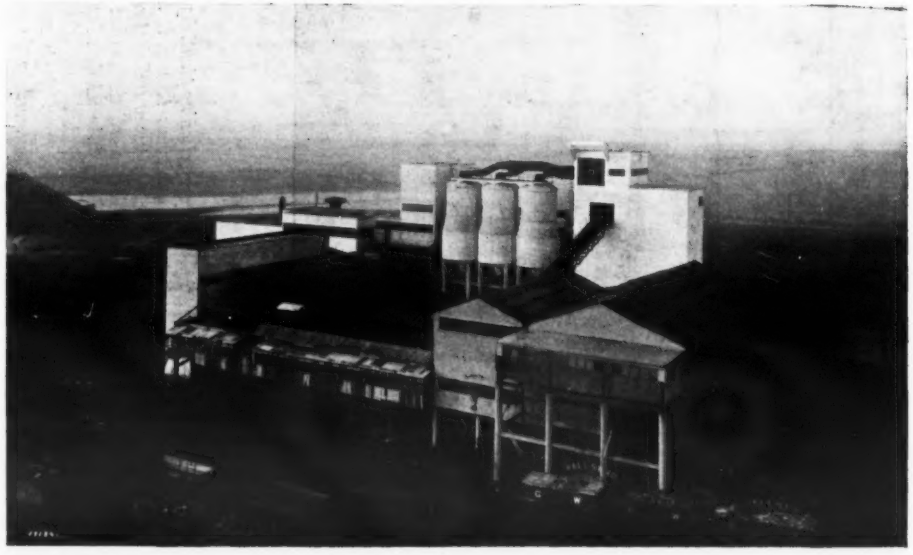
PROCESSES.—*The coal at pithead is screened in two sizes, above and below 4 in. The 4 in. coal is then delivered by conveyor to the plant and stored in two 250-ton bunkers, which act as a reservoir ensuring a steady feed to the plant. Total input is 160 tons per hour.*

*Above is a general view of the plant, and below a preliminary model prepared to judge the effect of the completed scheme.*

# NEW PLANT, RISING SUN COLLIERY, WALLSEND





R. A. CORDINGLEY,

CONSULTANT ARCHITECT

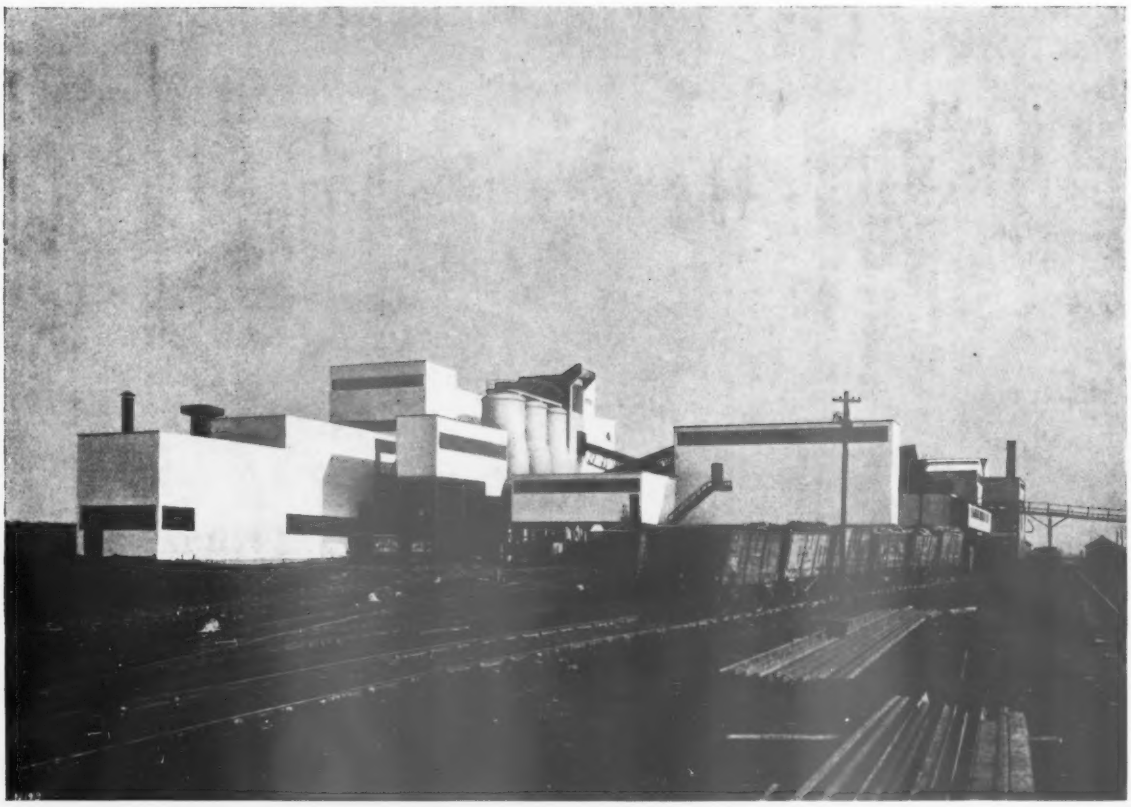
*The smaller sizes of coal are dry-cleaned and the larger washed, and the various sizes are separated from dust, washed or dry-cleaned, graded, blended and delivered to further storage hoppers and finally to trucks. The exhaust air from the dry-cleaning plant is filtered before being discharged into the atmosphere; three Birtley-Waring filters are provided, and these are shown in the illustration on page 302.*

*Drying of the washed coal is carried out in a rotating drum which is heated by the dust extracted by the filters from the exhaust of the dry-cleaning plant mentioned above; the dust is fed direct to the burners, and no separate pulveriser is necessary since 60 per cent. of it will pass a 200-mesh screen.*

*Above is a diagram drawing showing the arrangement of the plant, and below a photograph of the plant showing the coal access and dispatch tracks.*

*On the facing page is a detail of the coal-dust collectors and filters.*

# RISING SUN COLLIERY, WALLSEND



*COAL CLEANING PLANT:*

*R. A. CORDINGLEY, CONSULTANT ARCHITECT*

**EQUIPMENT.**—*Since all the conveyors, cleaning plant, dryers, etc., are performing one section of a continuous process, it has been necessary to arrange for an elaborate system of electrical control in order that the failure of any motor, or the omission to start it, shall not disorganize the smooth working of the whole scheme. All essential motors, therefore, are interlocked, and the general starting-up of the plant is controlled by a single switch, the stopping of individual sections being followed by the automatic stopping of the next process. Any other processes which can be considered as self-contained units are interlocked in the same way.*

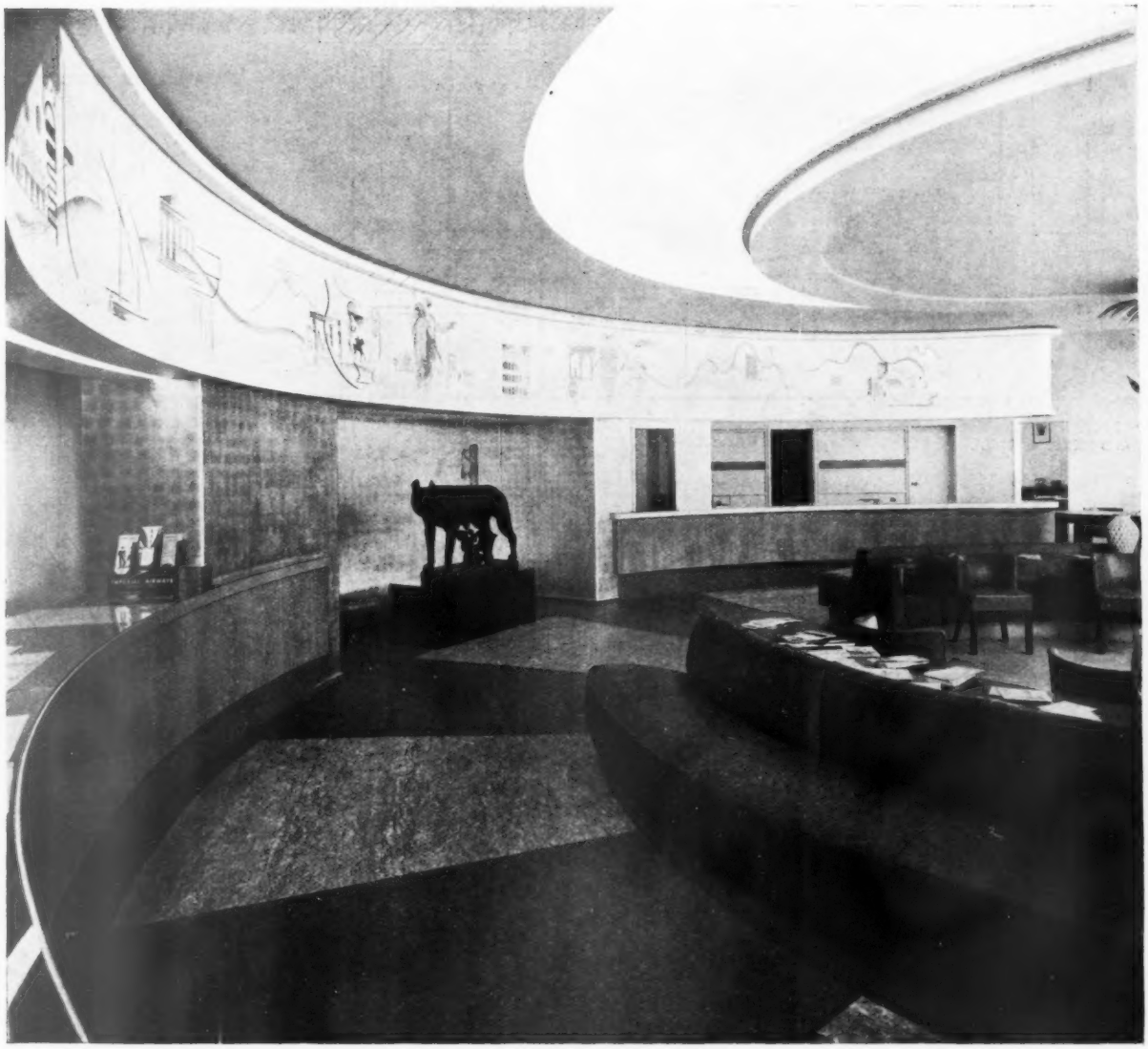
**STRUCTURE.**—*Steel-framing with 3 in. R.C. walls and R.C. walls and roof.*

*Above: a view of the plant from the delivery tracks; below, another view of the preliminary model.*

For list of general and sub-contractors see page 320.

# WORKING DETAILS : 407

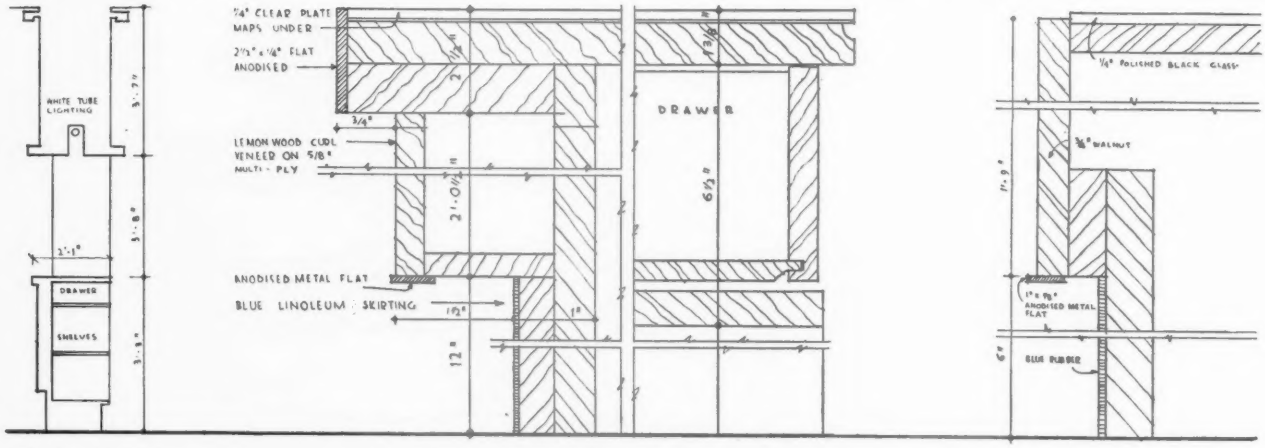
INFORMATION BUREAU • C.I.T. OFFICES, REGENT STREET, W. • RACHLIS, PULITZER-FINALI AND MANNER



The information bureau illustrated above depends for its effect upon concealed illumination, colour, and the surface textures of the materials employed. Anodized aluminium in extruded sections has been largely used, the sections being fitted together before the anodizing is carried out and then re-assembled afterwards. An axonometric and details are shown overleaf.

# WORKING DETAILS : 408

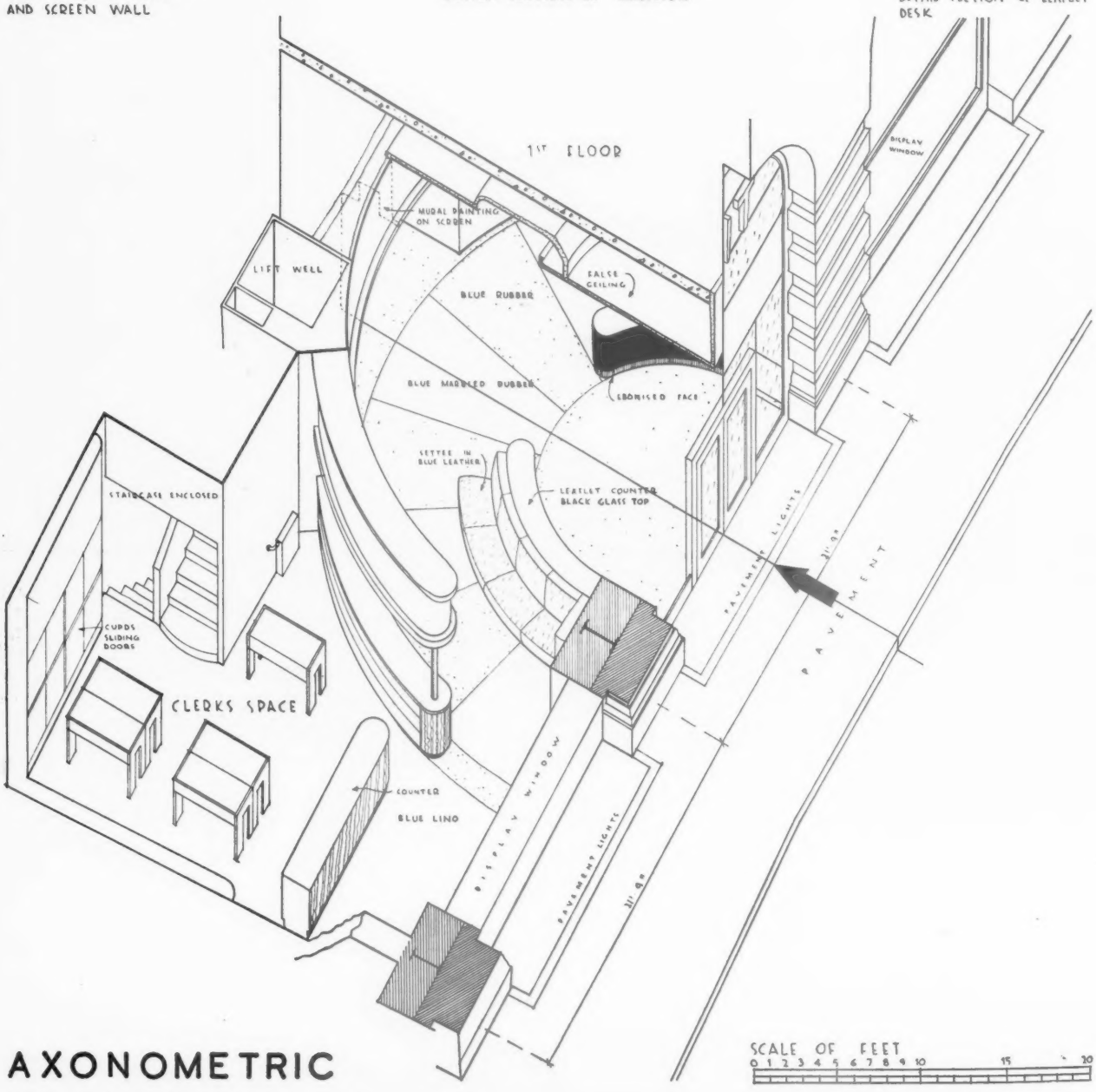
INFORMATION BUREAU • C.I.T. OFFICES, REGENT STREET, W. • RACHLIS, PULITZER-FINALI AND MANNER




SECTION OF COUNTER AND SCREEN WALL

DETAIL SECTION OF COUNTER

DETAIL SECTION OF LEAFLET DESK




## AXONOMETRIC

Axonometric and details of the information bureau illustrated overleaf.

# WORKING DETAILS : 409

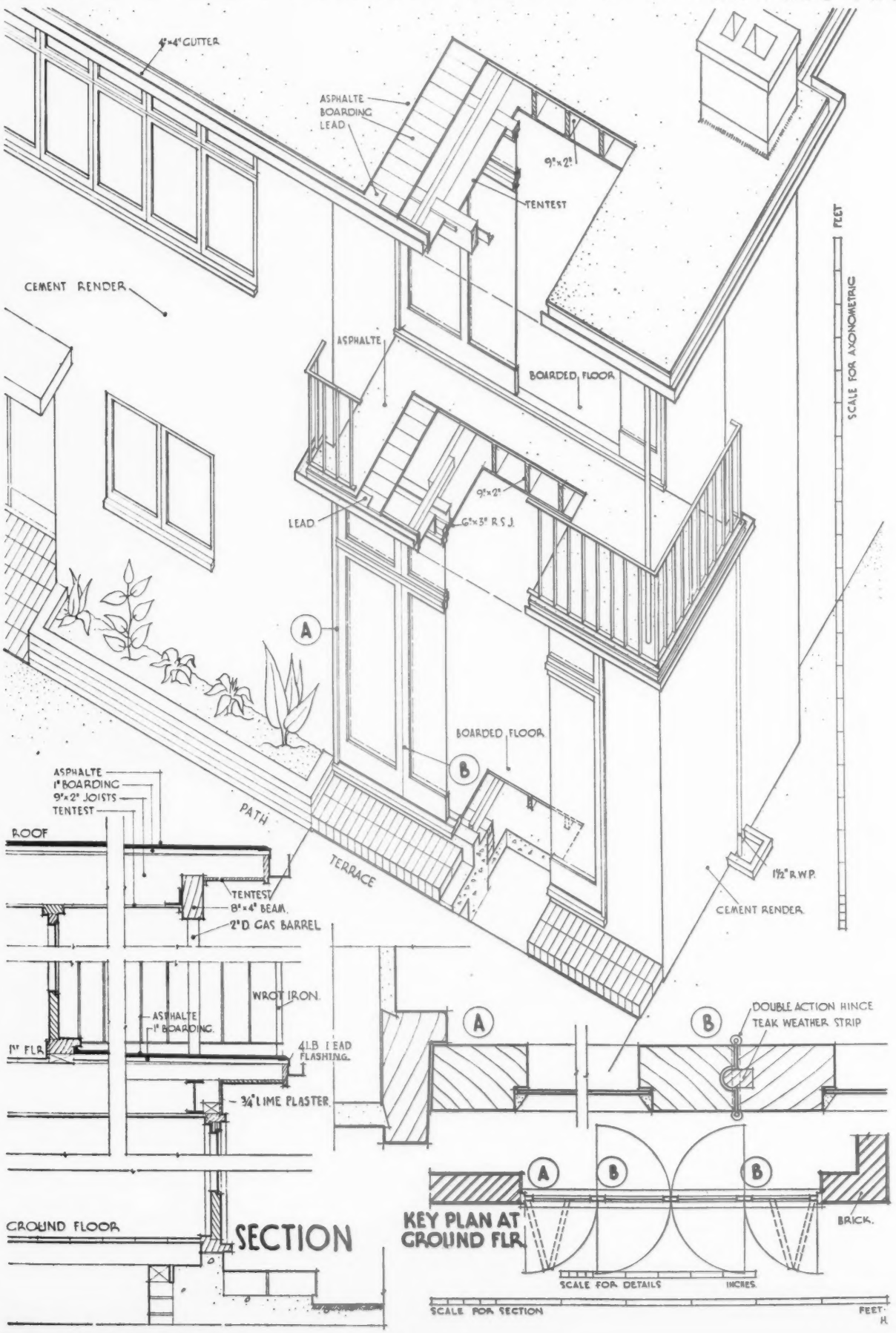
## BALCONY • HOUSE AT CHIPPERFIELD • E. MAXWELL FRY

The balcony illustrated above is arranged over a pair of french windows on the ground floor, the bedroom above being set back some 4 ft. at the corner of the building. An axonometric and details are shown overleaf.

FILING REFERENCE:

# WORKING DETAILS : 410

## BALCONY • HOUSE AT CHIPPERFIELD • E. MAXWELL FRY




Axonometric and details of the balcony treatment shown overleaf.

# L I T E R A T U R E

## THE ART OF SPECIFICATION

[*BY WALTER GOODESMITH*]

### GENERAL—

*Specification, 1936.* London: The Architectural Press. Price 10s. 6d.

THE value, to all concerned, of an orderly, concise specification should be obvious. It is surprising, however, to find that a large number of specifications still fall far short of the ideal, being couched so often in that personal language common to Victorian times, and caused, no doubt, through the habit of rewriting new drafts of specifications over spare copies of previous efforts, long since defunct.

The perfect specification is an undefined ideal. It should, however, be based upon accepted standards, such as quality of materials and manufacture, methods of working and fabrication, application, fixing and finishing, special requirements being noted as variations from standard.

The general specification is also qualified by special specifications based upon research, tests, maintenance reports, etc., on various materials or groups of like materials, Codes of Practice and publications of research bodies.

In addition to the legal and semi-official demands of acts, bye-laws regulations, handbooks, pamphlets, etc., published by authorities, standard specifications covering practically the whole of the building industry are issued, or are in preparation, by the British Standards Institution. Codes of Practice representing the best practice in special spheres are available, of which the concrete code is typical. Publications by professional institutions like the I.E.E. Regulations for the Electrical Equipment of Buildings, and publications by research bodies such as the Department of Scientific and Industrial Research, and the Building Research Station; and research-development associations covering such subjects as electricity, fuel, metals—copper, iron, steel—paint, rubber, timber, water, etc., should be investigated, where relevant, by the specification writer. In addition, there is a host of good trade catalogues by reputable firms which should be systematically filed for reference.

Generally speaking, the normal specification can be improved by the addition of extra sub-headings, placed in the margin, and not in the body of the page. A column for reference to relative drawings is also worth considering. Clauses should be numbered and a good index with cross references included.

All references to B.S.I. specifications and the like might be collected together in the various sections immediately after the title. Scheduled lists of surface finishes, doors, door furniture and hardware, fires, windows, electrical installation and fittings, sanitary installation and equipment are invaluable additions to the specification.

The British Standards Institution is preparing a specification for the "Sequence of Trade Headings and Specification Items" the foreword from which might well be quoted. It is printed below:

It is not the intention of this specification to attempt the almost impossible task of giving a list of the various items that are likely to appear in any architect's specification but it is thought that if there were a standardized order for the various trades, together with a standardized order for certain key headings belonging normally and naturally to these trades, it is expected that every item likely to appear in an architect's specification would fall into place under one of the standard headings and that such standardized practice would make it easier to trace items in any specification and tend to reduce the chance of omission. In order to avoid reduplication no items which occur in the standard R.I.B.A. form of contract are included among the standard headings.

In searching for the best authority upon which to base this standardization it has appeared to the committee that only one course could be adopted—namely, to make the order of the trades and key headings to run or agree with the order given in the standard method of measurement drawn up by the Quantity Surveyors' Association* in the new edition of 1935.

When this draft has been approved it is the intention to transfer all the items now given in B.S. specification (C.D. (B) 4000) to their appropriate places in this new specification, thus making B.S. CD (B) 4000 obsolete.

B.S.I. ORDER FOR TRADE HEADINGS

Preliminaries
Excavator
Concretor
Bricklayer
Drainlayer
Asphalter
Pavior
Mason
Slater and Tiler
Carpenter
Joiner
Steel and Iron Worker
Plasterer
Plumber, Gas and Hot Water Fitter, Zinc Worker, Copper Smith and Wireworker
Glazier
Painter

All provisional sums are listed at the end of the specification.

* Now incorporated in the Chartered Surveyors' Institution.

ORDER OF SECTIONS IN *Specification*

Roads and Footways
Demolition, Excavator and Foundations
Concretor and Reinforced Concrete
Floors
Structural Steelwork
Fire-Resisting Constructor
Bricklayer
Drainlayer
Pavior
Mason
Marble Mason and Mosaic Worker
Terra Cotta, Faience and Glazed Wall Tiling
Roofer
Carpenter and Joiner
Plumber, Sanitary Engineer and Water Supply
Metal Worker
Ironmonger
Electrical Engineer
Lighting Engineer,
Gas Engineer
Heating and Ventilating Engineer
Plasterer
Glass and Glazing
Painter and Decorator
Acoustics
Insulated Construction
Equipment and Furniture
B.S.I. Draft Order of Trade Headings
General, Analytical and Alphabetical Index

### —AND PARTICULAR

THE thirty-eighth annual issue of *Specification*, which has just appeared, has more than upheld the high standard of improvement noted in the 1935 issue and it has now become the standard work of its kind in the English speaking world. It is logically based upon the ideals previously mentioned and crystalizes the framework guide to the sequence of trade headings, to which it reasonably conforms, amplifying these divisions with subjects not specifically dealt with in such a skeleton list.

The present issue has been brought up to date in all sections, added to considerably in some cases and further condensed and standardized in others.

The special articles on Industrialized Buildings, Swimming Pools and Metal Windows are up to the usual high standard of previous contributions. To "Roads and Footways" has been added "Clause 16, with note, and the First Schedule from the Ministry of Health, Town and Country Planning Model Clauses for use in the preparation of Schemes"; "Demolition, Excavator and Foundations" section has been rewritten and enlarged and now includes diagrams on shoring, timbering to trenches, underpinning, retaining walls, concrete foundations, and an excellent

and comprehensive tabulation of the better-known proprietary systems of piling, with brief notes and sectional diagrams. Useful diagrams of comparative types of fittings have been added to "Drainlayer."

In "Carpenter and Joiner" the addition of a list of Empire woods recommended for special use and a table of timbers permitted by the L.C.C. to be used as fire-resisting materials are welcome.

In "Plumber, Sanitary Engineer and Water Supply," diagrams on sewage ejectors have been included and "Water Purification" has been re-written. Bicycle Parks are new to "Metal Worker," and to "Ironmonger" has been added excellent diagrams on butts and hinges, locks and door-spring hinges. Sliding Members and Gear has also been included in this section. "Electrical Engineer" has been re-written and considerably enlarged and is in accordance with the I.E.E. Regulations for the Electrical Equipment of Buildings. Many diagrams and tables have been added on supply and installation, cable capacity, lifts and escalators and standard graphical symbols. "Lighting Engineer" has been re-cast and extended and includes full tables on illumination values, reflection values of surfaces, dimensions and properties of lamps, methods of designing a lighting system, luminous tubes and floodlighting.

The section on "Heating and Ventilating Engineer" is now a very comprehensive contribution. In "Glass and Glazing" a chapter is added on external surfaces.

In both the "Acoustics" and "Insulated Construction" sections the tables have been brought up to date. Refuse removal from flats is dealt with under "Equipment and Furniture."

Lastly, all B.S.I. specifications and other such references are listed under their relevant sections.

There is a matter calling for improvement—the advertisement pages. This matter is discussed by the Editor in his preface. Whilst some manufacturers exhibit an intelligent appreciation of how to present their wares in an informative and technical manner—which is expected in a book of this nature—others show considerably less appreciation of the problem. It is to be hoped, however, that they will perceive the error of their ways and emulate the worth-while advertisements in future issues.

# IN THAT CONTINGENCY

The following abstracts of inquiries represent a number of those recently submitted to the Building Research Station. The information given in the replies quoted is based on available knowledge. It has to be borne in mind that further scientific investigations may in the course of time indicate directions in which replies might be supplemented or modified. Moreover, the replies relate to the specific subject of each inquiry, and are not necessarily suitable for application to all similar problems. [Crown copyright is reserved.]

### *Planning Against Noise*

¶ *AN architect asked the advice of the Station as to the structural precautions necessary to obviate trouble due to noise in a new residential building for the staff of an institution. The plans had been completed, but it was stated that certain modifications to the floor and wall constructions could be arranged if necessary.*

*An inspection of the drawings showed that a large games and recreation room had been placed on the top floor above bedrooms which were to be used for staff on night duty.*

It is not considered that any but normal precautions need be taken to insulate staff quarters from one another, especially as it is understood that musical instruments will not be allowed, but obviously the rooms of the staff on night duty must be insulated from those parts of the building which may be noisy by day. The presence of the recreation room above is therefore serious.

Whereas it would no doubt be possible to suggest a construction for the recreation-room floor giving better sound insulation than the wood or lino finished hollow tile floor at present allowed for there is no reasonable construction with which the Building Research Station is familiar that could be relied upon adequately to prevent the transmission of the impacts to which this floor is likely to be subjected at times when the night staff is trying to sleep.

It appears that the only really satisfactory solution to this problem would be to find an alternative position for the recreation room. It is appreciated that such an alteration in design at this stage may be impossible and it may be necessary to compromise by finding alternative accommodation for the night staff, possibly on a lower floor, placing day staff under the recreation room. In this case it is recommended that a sound insulating floor construction be included for the recreation-room floor and for the floor over the rooms allotted to night staff.

This enquiry is a good illustration of the great importance of considering the question of noise in the early stages of planning. Noise insulation cannot be obtained by small structural adjustments after the building is completely designed. It is essential that all probable sources of noise be considered from the start and be planned as remotely as possible from other parts of the building where they will be a nuisance. The prevention of transmission of sound in buildings by structural means is, under modern conditions and in the present state of knowledge, an extremely difficult problem and everything must be done to assist by careful planning. With careful planning many structural problems can be simplified and expense saved; without careful planning not only will extra cost be involved to provide additional structural defence against noise, but in certain cases, as in the present one, a completely satisfactory solution may be unattainable.

### *Deposits in Chimneys*

¶ *A BUILDER reported that he had received several complaints from clients regarding the accumulation of treacle-like deposits in kitchen flues connected to domestic boilers. Staining of the plaster on the chimney breast had subsequently occurred.*

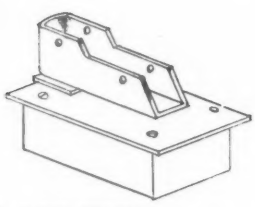
*Information was sought regarding the cause and possible methods of obviating the trouble.*

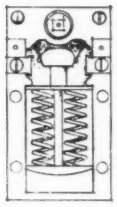
The defects described appear to be commonly associated with domestic boilers, as several previous cases have been brought to the notice of the Station. It is considered that the fundamental cause of the trouble is that boilers of this type are frequently damped down very low, so that the flue temperature is reduced, and some of the products of incomplete combustion are condensed in the flue. This does not happen in open fire flues because these are generally much hotter. House refuse, of course, is a source of excessive moisture. It may be that incompletely burned fatty materials pass into the flue, and cause the soot to adhere in lumps, thus forming the treacle-like deposits complained of. The staining of internal plaster and external brickwork is due to the condensed moisture in the flue penetrating the brickwork and carrying with it in solution some of the soluble organic matter.

Methods of treatment are difficult. A distinct improvement would probably be effected by ceasing to burn house refuse in the fire, or by using an open textured fuel such as coke, but in order to prevent penetration of the moisture completely, some form of impervious lining such as glazed earthenware pipes would be necessary. Asbestos cement pipes appear to be an alternative. Provision for removing the condensed moisture at the lower end of the flue would be desirable. Such a procedure would, of course, entail rebuilding the stack.

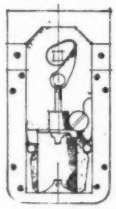
As regards the staining in the internal plaster, if the flue cannot be rebuilt, this may be effectively concealed by lining the affected part with wall board or plaster board carried on battens fixed to the wall.

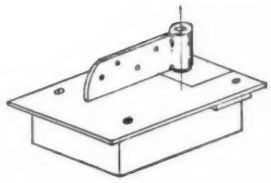
# DOOR SPRING HINGES



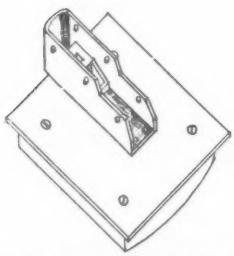


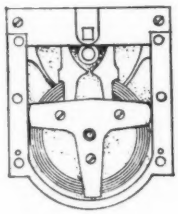
1 FLOOR SPRING
(without check). *Simplest form of type with two helical springs. Variations have more springs, with boxes of varying depth.*



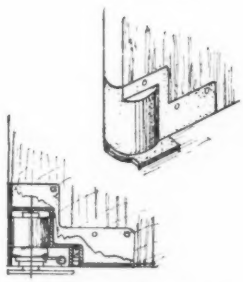


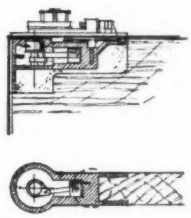
2 HYDRAULIC FLOOR SPRING
*With check. Shallow varieties multiply springs and oil-cylinders.*





3 CIRCULAR SPRING FLOOR SPRING
*With hydraulic check, very shallow. Other patterns multiply springs. Also made without check in various depths.*

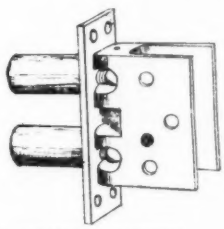




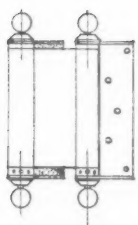
4 DOOR SPRING
*Separate hydraulic check in door-head. Spring mechanism accommodated in bottom of door.*

6 SYMPATHETIC DOOR SPRING GEAR
*Each door actuates the other simultaneously. Available for single and double action springs.*

5 SPRING BUTT HINGE
*Adjustable steel spring hinge (single acting). (For double acting doors see 8). Some patterns fitted with stops to prevent overwinding. Springs slackened for fixing. The single action type slams the door.*

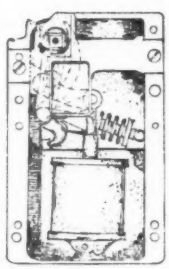


7 HAWGOOD PATTERN SPRING HINGE
*Also made with one spring.*

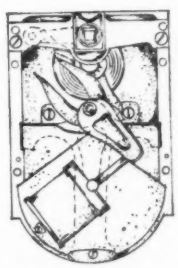


8 DOUBLE ACTION ADJUSTABLE SPRING BUTT (see 5).

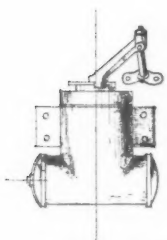
9 HYDRAULIC CHECK ACTION HINGE.



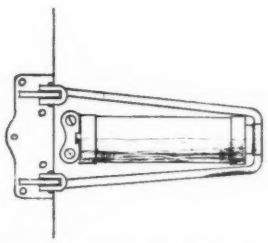
10 PNEUMATIC CHECK DOOR SPRING
*Single action; in suitable weights for light, medium, heavy and extra heavy doors.*



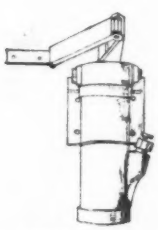
11 PNEUMATIC CHECK DOOR SPRING
*Double action; with ball bearings.*



12 OIL CHECK AND SPRING
*Single action, but double action type is available. Checking mechanism in this pattern is placed horizontally.*



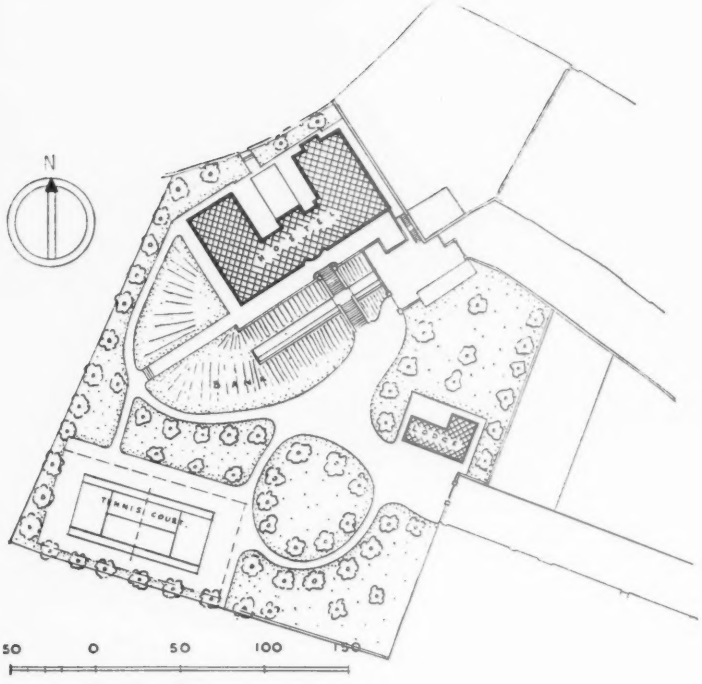
13 DOOR CHECK AND SPRING
*To push or pull the door. The sketch shows the former.*



14 CHECK AND SPRING
*Similar to* 10, *but with check mechanism arranged vertically.*

*A specimen page from the Ironmonger section of "Specification," reviewed on pages 309–310.*

# GIRLS' HOSTEL, NOTTINGHAM: DESIGNED BY




SITE PLAN

**PURPOSE.**—*Living accommodation for approximately 50 girl employees of a departmental store. Both single and double bedrooms were requested to be included, each with a lavatory basin and built-in wardrobes, and a caretaker's lodge was asked for near the entrance.*

**SITE.**—*The site is about two acres in area and is at one of the highest points of the city, with a fine view over the Trent valley. The building stands considerably above the general site level.*

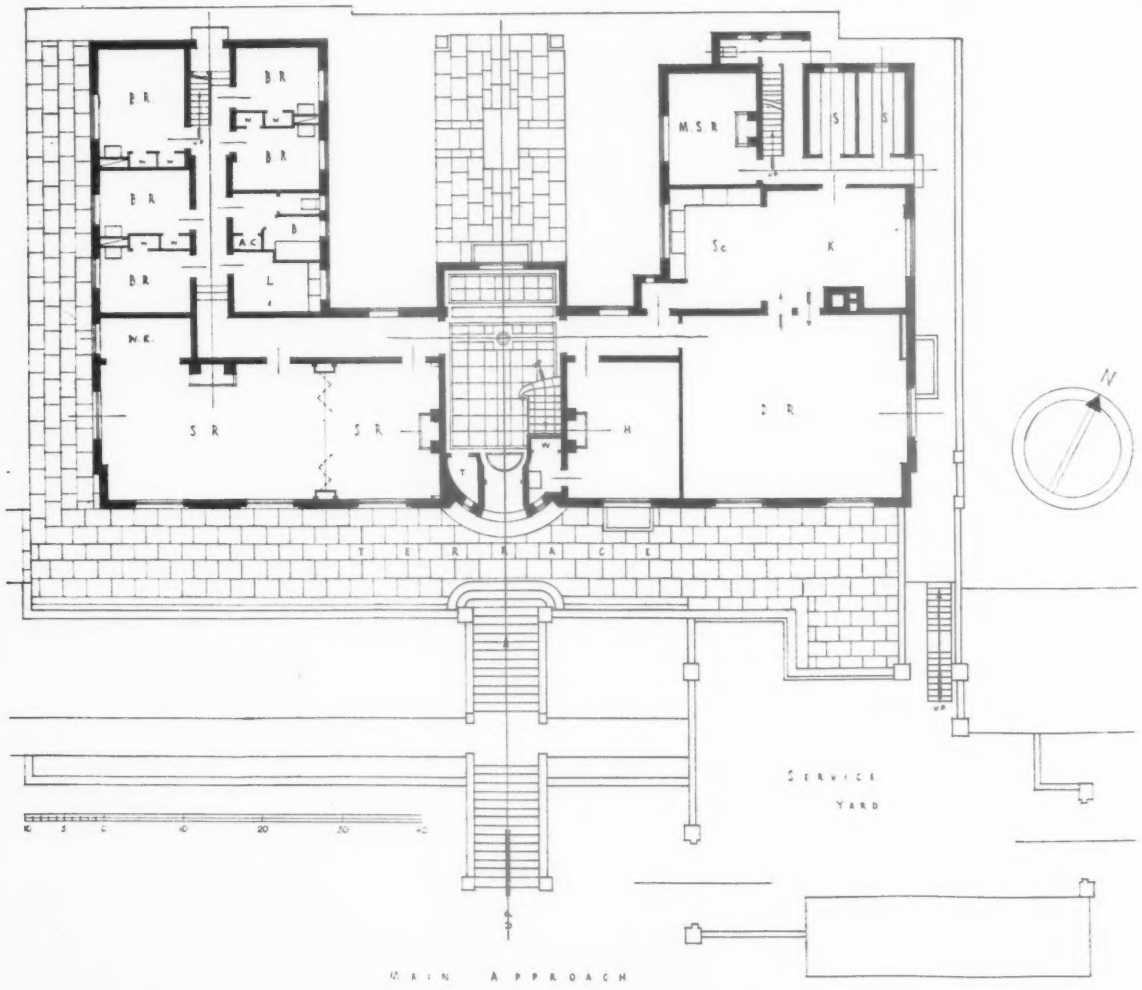
*Above is a general view of the south-east elevation.*

# BROMLEY, CARTWRIGHT AND WAUMSLEY

**CONSTRUCTION.**—*Weight-carrying brick walls, wood-joisted floors to living-rooms, service room floors of concrete. Flat roof of precast R.C. beams asphalted, with suspended ceiling leaving air-space for insulation. Partitions of hollow blocks.*

**ELEVATIONS**—*Building faced with grey bricks with flush cream-tinted joints. Dressings are of artificial stone. Windows are standard steel in wood frames.*
*Above is a view of the main entrance.*

# GIRLS' HOSTEL, NOTTINGHAM: DESIGNED BY




GROUND FLOOR PLAN

KEY TO ACCOMMODATION

| | | |
|---|---|---|
| S.R. | = | SITTING ROOMS |
| M.S.R. | = | MAIDS' SITTING ROOM |
| D.R. | = | DINING ROOM |
| K. | = | KITCHEN |
| P. | = | PANTRY |
| Sc. | = | SCULLERY |
| S. | = | STORES |
| H. | = | HOUSEKEEPER |
| B.R. | = | BEDROOMS |
| W. | = | WARDROBES |
| M.B.R. | = | MAIDS' BEDROOMS |
| B. | = | BATHROOMS |
| L. | = | LAUNDRY |
| A.C. | = | AIRING CUPBOARDS |
| H.M.C. | = | HOUSEMAIDS' CLOSET |
| H.C. | = | HEATING CHAMBER |
| G. | = | GARAGE. |
| T. | = | TELEPHONES |
| W.R. | = | WRITING RECESS |

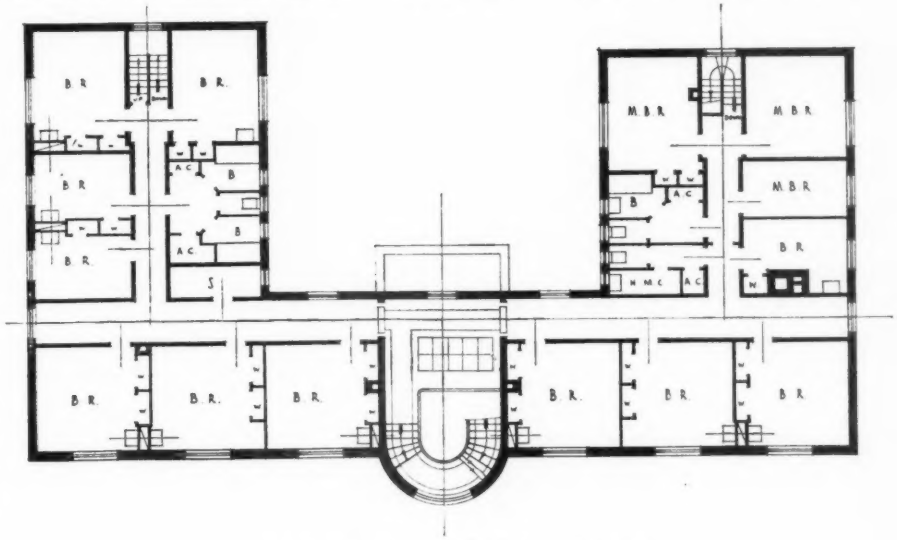
*On the left is a view of the sitting room.*

# BROMLEY, CARTWRIGHT AND WAUMSLEY

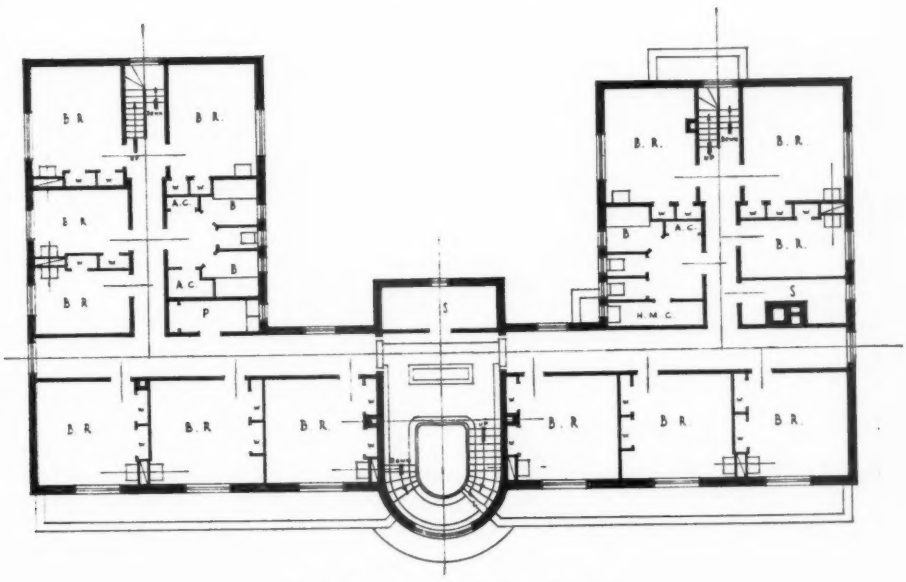
**PLAN.**—*The plan shape was controlled by obtaining sunlight for each bedroom during some part of the day. The fitted wardrobes and pipe ducts were used to assist sound-proofing between rooms.*

**INTERNAL FINISH.**—*All living rooms have hardwood polished floors, plastered walls and ceilings cream-coloured. Joinery to sitting and dining rooms is in ebonized and natural coloured waxed oak; bedrooms are painted deal. Entrance hall floor is in travertine terrazzo, inlaid with blue and silver mosaic borders, and ebonized jointing strips. Main staircase and landings are in travertine terrazzo, inlaid with blue marbled rubber treads. Balustrade is in iron painted pale blue with polished aluminium handrail. Corridor floors are in marbled blue linoleum; composition floors in bathrooms, kitchen, etc., with white tiled walls and cinnamon coloured quarry tiled floors.*

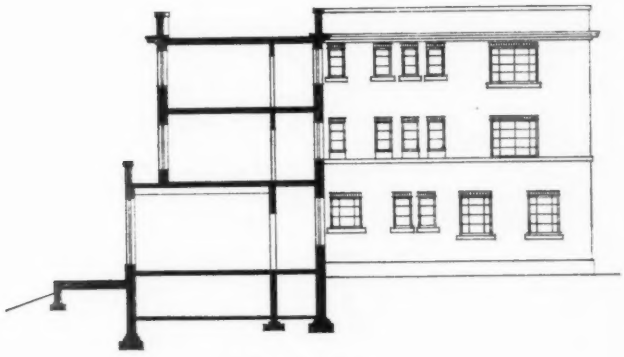
*Below is a photograph of a typical bedroom.*




SECOND FLOOR PLAN




FIRST FLOOR PLAN



SECTION

# GIRLS' HOSTEL AT NOTTINGHAM

*DESIGNED BY BROMLEY, CARTWRIGHT AND WAUMSLEY*

SERVICES.—*Heating is by low pressure hot water. Boilers for heating and hot water services are fired by automatic stokers using solid fuel. All services run in vertical ducts with access under lavatory basin in each bedroom. There are coal fires in sitting and housekeeper's rooms.*

COST.—*Single contract; 1s. 6d. per cu. ft., including terraces, garden and boundary walls and fences.*

*The photographs show two views of the staircase: left, in the entrance hall; above, at first floor level.*

For list of general and sub-contractors see page 320.

# TRADE NOTES

*On Monday last, February 17, the "Heavy Industries" Section of the British Industries Fair was opened at Castle Bromwich, Birmingham. The Exhibition will remain open until February 28. Below are some notes on the principal exhibits; the usual Trade Notes section, edited by Mr. Philip Scholberg, will be resumed next week.*

## *The British Industries Fair, Birmingham*

A SPECIAL feature of the Stands (B.609 and 508) of Aga Heat, Ltd., is the Aga cooker. This cooker is claimed to be the only one of its kind with a guaranteed maximum fuel cost for coke, and is said to be suitable for private houses, hotels, hospitals, schools, canteens, convents, yachts, etc.

•

Many of the products manufactured by Allied Guilds, Ltd., are exhibited on their Stand (A.737). These products include Guildstone fireplaces, Guildstone architectural stone dressings, fibrous plasterwork, sculpture, modelling, cast lead panels and signs, rainwater goods, special joinery, stained glass, etc.

•

Allied Ironfounders, Ltd., are exhibiting on Stands B.609 and 508, their general castings, stove pipes, baths, lavatory basins, cookers, oil-fired combination grates, mantel register grates, portable ranges, boilers and fireplaces in bronze, copper and stainless steel.

•

One of the chief features of the Stands (Ca.505 and 404) of the "Ascot" Gas Water Heaters, Ltd., is the firm's instantaneous gas water heater for domestic purposes. The exhibits include single-point bath and sink heaters, and multi-point heaters serving bath, basin and sink, which are automatic in operation.

•

The use and application of Stoniflex is demonstrated on panels which act as supports to the fascia of the Stand for D. Anderson and Son, Ltd. (B.618). The panels show the correct method of fixing the boards, covering the joints and the finished job complete with one or two coats of Stoniflex hardwall plaster. There are also exhibited the firm's "Red Hand" brand roofing felts, lining felts and damp-courses, and small models of modern flat-roofed houses, showing the progressive construction of several types of built-up flat-roof covering.

•

Steel plates and constructional steelwork sections, high-tensile steels, steel mine arches and props, and collapsible pit props are exhibited by the Appleby-Frodingham Steel Co., Ltd., on Stands D713 and 614.

•

The Iron Fireman solid fuel stoker for sectional heating and steam boilers is exhibited on the Stand (D.419) of Ashwell and Nesbit, Ltd. Other exhibits include cast-iron tanks, cast-iron trench covers and the Runwell semi-rotary pumps.

•

Sanitary fittings in earthenware and fireclay, salt-glazed stoneware drainpipes (3 in. to 36 in.), Stonite one-piece fireplaces, in colours and effects said to suit any decorative scheme, are being exhibited by the Associated Clay Industries, Ltd., on Stands B.403 and 302.

•

Bratt Colbran, Ltd. (Ca.808) exhibit several new models, notably the Dunbar (self-contained) and Arundel (flush-fitting) fires, and a new panel fire which is equipped with a concealed boiling ring and which is marketed under the name of Martello. An entirely new form of gas-heating appliance—the high-temperature radiant panel—is also shown.

•

On the Stands (Cb.311 and 210) of Berry's Electric, Ltd., there is exhibited a complete range of the firm's domestic heating apparatus, including the Magicoal Plus and Haloberry series, and electric lighting fittings and switchgear.

*

The Tenbyluxe wiring systems and accessories are shown by S. O. Bowker, Ltd., on Stand Cb.417. The exhibits include: Tenbyluxe switches and switchplugs, Tenby pilot switch, Bakelite ceiling roses and switchplates, brass and rubber bushes, insulated cables and porcelain connectors.

•

Belling and Co., Ltd. (Cb.701), are exhibiting their new Belling electric cookers, including the new "Baby" Belling and De-Luxe models, with glass oven doors and Tem-Set oven control; also, the Belling electric fires and water heaters.

•

The British Commercial Gas Association's Stands (Ca.609 and 506) have been organized to provide advice and information on any matter relating to the uses of gas for domestic and industrial purposes.

•

The British Insulated Cables, Ltd., on Stands Cb.413 and 312, are exhibiting a complete range of electric wires and cables which may be used for all purposes. They are members of the Cable Makers' Association.

•

On the Stands of the British Oxygen Co., Ltd. (D.511 and 410), equipment and materials for oxy-acetylene welding, cutting, lead-burning and brazing equipment are available for inspection and demonstration. The B.O.C. oxygen-cutting machines exhibited comprise types for cutting parts from steel plate, for trimming plates, etc., and also types for cutting and shaping steel bars, structural sections, rails and tubes.

A section of the Stand shows the spraying of metals with the metal-spraying pistol. This process is extensively used for applying protective or decorative coatings of metals—e.g., aluminium, bronze, etc., to metallic and non-metallic surfaces.

•

The Mazda Mercra and Mazda gas-filled lamps are specially featured on the Stands (Cb.506 and 504) of the British Thomson-Houston Co., Ltd. Other exhibits include: B.T.-H. lanterns, projectors, reflectors, accessory equipment for street lighting, floodlighting, industrial lighting, aerodrome lighting, cinema studio lighting, etc.

•

On the Stand (B.418) of the British Trane, Ltd., there is a working model (in steam) of the Univectair, which is fitted with the new type fixed louvre

grille, giving the more positive direct and extensive spread of warm air than is afforded by the adjustable louvre type. The Electric Univectair, also exhibited, is of similar construction to the steam models, comprising sheet metal casing with fan and motor mounted at the back. The actual heater in this case is constructed of suitable alloy resistance wire elements mounted on a frame protected from all external contact by a stout wire grille behind the louvres. The air is blown over the element in a similar manner to the steam heaters. The element can be arranged for all normal electricity supplies, including Polyphase, and a terminal box is fitted on the top of the casing.

The 1936 Vectair models contain detachable front panels giving the easiest possible access for pipe fitting, etc., and also contain the flush, square moulded top and new-type registered horizontal grille (similar to that on the Univectair), affording 90 per cent. (instead of the former 50 per cent.) free area for warm air distribution. Vectairs, it is stated, can also be supplied to fit into curved walls or alcoves within certain limits of radii.

•

A series of exhibits have been grouped on the Stands (D709 and 610) of British Tube Mills (Export), Ltd., the export sales organization for Accles and Pollock, Ltd., Britannia Tube Co., Ltd., Bromford Tube Co., Ltd., Chesterfield Tube Co., Ltd., Reynolds Tube Co., Ltd., Tubes, Ltd., Tube Products, Ltd., Simplex Electrical Co., Ltd., and Brookes (Oldbury), Ltd.

•

The exhibits on Stands (Cb.413 and 312) have been prepared by the members of the Cable Makers' Association, and are intended to be generally representative of the various types of cables and accessories used in electric light, power and telephone installations.

•

Callenders Cable and Construction Co. Ltd. are exhibiting on the Stands of the Cable Makers' Association (see note above) a complete range of electric wires and cables which may be used for all purposes.

•

Devon fires, faience and tile fireplaces, glazed roofing and wall tiling, and a display of Candy hand-thrown pottery in a variety of coloured glazed effects, are exhibited by Candy & Co., Ltd., on Stands B.607 and 506.

•

A display by the Carron Co. (Cb.501 and 400) includes firegrates in various finishes, kerbs, combination grates, kitchen ranges, stoves, electric fires, cookers, irons, gas fires, cookers, baths, portable boilers, drop forgings, and structural iron.

•

The Cellacite and British Uralite, Ltd. (Ca.705) exhibit their Cellacite asbestos protected metal roofing and roof ventilators. They are displayed with the Urastone incorrodible flue pipes and fittings, and Uralite fireproof sheeting.

Exhibited and marketed for the first time is the New Urastone, an asbestos cement gas flue, which is claimed to be 33⅓ per cent. lighter than formerly; and will stand satisfactorily in temperatures up to 1000° C.

•

Cellon, Ltd. (B.625), exhibit their Cerric cellulose lacquers for wood, metal, leather, etc.; and Cerrux synthetic lacquers, air-drying or stoving for industrial purposes.

•

Claughton Bros., Ltd. on Stand B.619, are exhibiting architectural lead work, flushing cisterns, drawn lead traps and bends; cast lead plumbers' fittings, cast lead traps, washers, laboratory wastes, low level cistern fittings, lead rainwater heads, pipes, gutters, offsets and fittings.

•

The Stands of the Coal Utilization Council (B.715 and 641) exhibit several domestic and industrial appliances for the utilization of coal. Information can also be obtained on modern methods of combustion.

•

Adjustable steel shelving, bins, racks, cycle parks, lockers, office and factory steel equipment, plan filing cabinets, steel partitions glazed, wire mesh screens, slotted steel for electrical industries, and Rolls typists' desks, are being exhibited by Constructors, Ltd. on Stand Cb. 911.

•

The exhibit of Crane, Ltd. (B.306) is a comprehensive one, and shows examples of their boilers which cover practically the whole range usually furnished in cast iron, and radiators of all types. Two new exhibits being the "OO" Ipswich domestic boiler, and the Carlton boiler, which can be supplied in all the usual shades of vitreous enamel.

•

Crittall Cookers, Ltd. (B.612), are exhibiting semi-insulated coal ranges, made of steel, in black finish or vitreous enamelled in colours. The sizes are from 3 ft. to 6 ft. with one or two ovens, with or without hot closets underneath.

•

Croft Adamant reconstructed stone and marble, Croft Hydromant solid reconstructed stone, Hopton wood and terrazzo floors and wall linings, Acme stone window surrounds, stone fireplace surrounds and stone garden ornaments, are being exhibited by The Croft Granite Brick and Concrete Co., Ltd. on Stand A.533.

•

The display by the Davis Gas Stove Co., Ltd., on Stands Ca.605 and 502 includes the Alpine New World gas cookers, gas-heated steamless radiators, geysers, Panella Build-in and other gas fires. Large scale catering equipment (ovens embodying Regulo Control) for hotels, restaurants, institutions, etc., are also shown.

A comprehensive range of Dunlop rubber flooring is on view on the Stand (D.609) of the Dunlop Rubber Co.

•

Eagle Range and Grate Co., Ltd. exhibit (B.601 and 500) comprises a wide selection of combination grates, ranges, coke grates, etc. The new coke range is displayed as a working model, and demonstrations are carried out daily.

•

On Stand (D.600) of Earle, Bourne & Co., Ltd., is shown a large selection of brass, copper and Sebalin aluminium alloys in strip, sheet, tubes, angles, channels, sections, mouldings and ornamental tubes.

•

Various types of wires and cables are shown on the Stands (Cb.413 and 312) of Edison Swan Cables, Ltd. (See note dealing with the Cable Makers' Association.)

•

The Electrical Development Association's Kiosk and Information Bureau is situated in the centre of the Electrical Section (Cb.507 and 406). The object of the Bureau is to enable visitors to obtain any guidance required in connection with electrical exhibits at the Fair. Particulars with regard to the latest rates and tariffs for electricity supply, terms for the hire and hire-purchase of electrical apparatus and assisted wiring, and any other information concerning electrical facilities available in all parts of Great Britain can also be obtained at the Stand. Four dioramas depicting industrial and domestic applications and street lighting are displayed on the Kiosk and, in addition, illuminated graphs show the development of the electricity supply industry since the inception of the E.D.A.

•

John Ellis and Sons, Ltd. (A.338), are showing reconstructed Cornish granite, reconstructed fine combed Clipsham and reconstructed Portland. These various stones are built into the design of the Stand. Considerable prominence is being given to Emalux, a new wall covering which may be worked to pattern with various textures, giving a glass-hard finish, and which can be applied to cement screeded walls, concrete walls, plaster walls; also to glass and metals if an insulating coat of a special cement is used.

•

The Elsan Manufacturing Co., on Stand B.710, are featuring the Elsan chemical sanitary systems for buildings without sewers or water services. Models exhibited include permanent tanks, portable self-flushing and standard types, also special models for camping, caravans and aircraft.

•

The Falkirk Iron Co., Ltd., are showing (on Stands B.609 and 508) new designs in cast iron mantel grates, Allustre enamel finish; and gas cookers, enamel finish.

•

Sidney Flavel & Co., Ltd. (Ca.507 and 406), are exhibiting a wide range of cookers and heaters. These include the Flavel

Jubilee cooker, Kabineat enclosed gas cooker, built-in and independent gas fires, Radiant-Panel gas heaters, Il-Co-Rad, illuminating, convecting, radiating, semi-portable gas heaters, improved Metro gas-ignited coke fires, Metro-Log and Lumetro gas fires, Paradise gas grill, etc.

•

Firth-Vickers Stainless Steels, Ltd. (D.513/412), have on display a number of fittings in Staybrite stainless steel for hotels, restaurants, hospitals and household use.

•

Samuel Fox & Co., Ltd. (D.829/728 and D.713/614), are featuring new process stainless steels. Also, cold rolled steel, strip and wire, alloy steels (including high frequency electric); die steels for plastics and road vehicle springs.

•

The Gascoigne tubular clamp, exhibited by the Geo. H. Gascoigne Co., Ltd. (D.106), provides a means of erecting tubular formed structures and buildings without screwing, drilling, riveting or bolting. They claim that no skilled labour is required for erecting their storage racks, garages, guards, scaffolding, etc.

•

The General Electric Co., Ltd. (Cb.506 and Cb.615/514), have a complete exhibit of lighting for all purposes; also, a range of Magnet electric cookers, fires, appliances, water heaters, G.E.C. ironclad switchgear, mercury arc rectifier, Osram lamps, and overseas radio receivers. Another section is devoted to an electric furnace for heating treatment of copper.

•

The idea of a balanced door—that is, one which, working on a sash principle, is capable of lifting horizontally and leaving a completely free opening—is one that is bound to recommend itself itself for all sorts of uses. There is an opportunity for one to inspect this type of door at the exhibit of Messrs. Hawkes and Snow, Ltd. (B.343).

•

Messrs. W. T. Henley's Telegraph Works Co., Ltd. (Cb.413 and 312), are exhibiting a complete range of electric wires and cables which may be used for all purposes. This firm are members of the Cable Makers' Association.

•

Patent roof glazing, glass roofs, sliding and folding doors and windows, glass and metal lantern lights, metal windows, architectural metalwork, steel doors and partitions, roof glazing, etc., are being shown on the stand of Hills Patent Glazing Co., Ltd. (B.422).

•

The exhibit of Henry Hope and Sons, Ltd. (B.717 and 616), consists of a central kiosk designed and built with the object of displaying the firm's products in a clear and straightforward manner. One side of the kiosk is constructed entirely of glass glazed into their Lok'd Bar factory sash, which can be obtained in standard units and coupled to form large areas of glass almost without limit. The front of the exhibit shows examples of curved metal windows, standard doors for all types of houses. Hope's patent glazing and electrically controlled roof ventilators for factories, warehouses, etc., and Hope's patent sliding folding window are also incorporated in this kiosk. Other exhibits include rainwater heads in lead and cast iron, which are claimed to be suitable for buildings of contemporary design.

•

Hope's Heating and Lighting, Ltd., exhibit (Stands B.717 and 616) the automatic motor stoker which actually conveys the coal from the coal store direct to the boiler without intermediate hoppers or the man-handling of fuel. It is stated that as long as there is a supply of coal in the store, the installation can be kept running at a thermostatically controlled temperature without any attention whatever over long periods.

•

The products of the Hurry Water Heater Co., are fully exhibited on stand No. Ca.407. The chief exhibits include gas boilers, gas water heaters, geysers, wash boilers, water heaters, etc.

•

A complete range of Ideal boilers and radiators for central heating and hot water is exhibited on the Stands (B.419 and 318) of Ideal Boilers and Radiators, Ltd. Other features of the stands include: heating accessories, towel rails, vitreous enamelled baths, copper fittings for heating and hot water installations, etc.

•

I.C.I. (Metals), Ltd. (D.503/402), are showing their new Everdur, a copper-manganese-silicon alloy. It is claimed to be non-corrosive and almost as strong as steel. There is also a large display of their main products—sheet, strip, rods, tubes, plates and wire. On Stand D.405 the I.C.I. degreasing plant is shown. This is an apparatus for removing oil, grease, swarf, polishing compound, etc., from metal parts prior to overhauling. To demonstrate the Cassell method of case-hardening, there are three furnaces working on Stand D.306, including an oil-fired furnace for light cases and a Rapideep furnace gas fired, this being a comparatively recent introduction for obtaining a deep coat with rapidity.

•

Insulation for all electrical purposes is dealt with on the Stand (Cb.827) of the Ioco Rubber and Waterproofing Co. The exhibits include: Formapex boards (cloth and paper), tubes, gear blanks, Artoco, interior panelling, varnishes, treated paper, Linapex insulating cloths, silks and tapes, cable cottons, oil papers, etc.

•

Photographs of Stelcon Anchor steel plates in many well-known concerns are displayed on the Stand (D.112) of Langley, London, Ltd. These plates are already well known in factories. One foot square and $\frac{3}{8}$ in. in depth, each plate has four flanges and 53 projections or anchors on the undersurface, so arranged that when laid each anchor grips firmly, thus providing a level, all-steel floor. The plates are butted close to each other and are generally laid to break joint.

•

Boilers for all types of buildings are exhibited by Lumby's, Ltd., on Stand B.312. These include: automatic steel sectional boilers, cast sectional boilers and radiators, steam boilers, domestic boilers, gas boilers, caterers' appliances, calorifiers and copper goods, etc. Brass valves and fittings are also shown.

•

Synthetic resin mouldings, including Bakelite, are shown by Moulded Products, Ltd., on Stand Cb.315. The range consists of articles of all kinds for domestic use, hotels, flats, hospitals, schools, public institutions, factories, shops, etc., including electric light fittings.

•

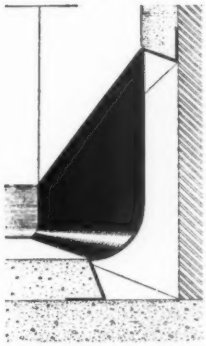
Prior Burners, Ltd. (B.405), show their automatic coal-burning equipment: firing, steam and hot water boilers, with automatic feed control. There is also on view a non-working model of the Prior-Whitfield grate.

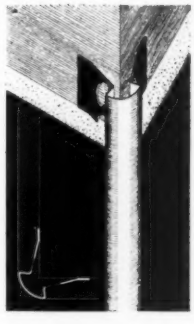
•

Radiation, Ltd., exhibit (Ca.605 and 502) the Regulo Controlled New World gas cookers, High Beam gas fires, gas radiators, gas-operated hot water apparatus and large cooking apparatus suitable for hotels and boarding houses.

•

Bitumen roofings claimed to be suitable for every type of roof and building are exhibited by the Ruberoid Co., Ltd., on Stand B.411. The exhibits include: Ruberoid roofing for large buildings; Starex and Pluvex roofing for smaller buildings; and Bitumen dampcourses (Ruberoid and Pluvex) and the Astos 100 per cent. mineral dampcourse, standard and lead-lined. Astos is a dampcourse of





*Pressed metal coved skirting (left) and corner bead (Joseph Sankey and Sons, Ltd.).*

new and outstanding advantages. It is entirely mineral in composition.

•

The St. Helens Cable and Rubber Co., Ltd., are showing, on Stands Cb.413 and 312, their complete range of electric wires and cables for all purposes. They are members of the Cable Makers' Association.

•

The main exhibit of Messrs. Wm. Sanders & Co. (Wednesbury), Ltd. (Cb.310), consists of a large scale model of their safety socket and plug (introduced late last year). This is operated electrically, the plug making and breaking contact with the socket once every ten seconds. This model clearly demonstrates the screening of the live socket tubes and shows how the movement of the shutter is controlled and synchronized with the position of the plug pins. The remainder of the exhibit is devoted to a comprehensive display of the company's ironclad switch and fuse gear.

•

On the Stand (B.707) of Joseph Sankey and Sons, Ltd., are shown some representative door frames, together with specimens of metal trim, i.e., pressed steel skirting, picture rails, corner beads, window cills, window linings, cornices, architraves, etc. Special attention is paid to the Sankey patent corrugated panel radiators, which are claimed to be unique inasmuch that whilst being as low in price as the ordinary multicolumn pattern they have the advantages of panel heating by virtue of their unbroken surface and high radiant heat emission, which is nearly 100 B.T.U.'s per square foot of projected face area. Other articles on show include : Pressed steel enamelled side and end panels for I.B.A. baths ; stainless steel and enamelled sinks and draining boards and steel wheelbarrows.

•

Serck Tubes, Ltd., exhibit, on Stand D.616, their solid drawn tubing in all non-ferrous metals.

•

The exhibits on the Stands (Cb.515 and 414) of Messrs. Simplex Electric Co., include Creda electric fires, cookers, water heaters, wash boilers, tubular heaters, domestic appliances, Mersey cables, Simplex electrical installation material, including conduits, conduit fittings, switchgear, industrial, flameproof and street lighting equipment.

•

The Spiral Tube and Components Co., Ltd. (D.912), are exhibiting a complete range of their products, including radiators for internal combustion engines, air heaters (plenum type), unit heaters (using steam and water), cooling coils for refrigerators, etc.

•

The Stonite Co., Ltd., show, on Stands B.403 and 302, their Stonite one-piece fireplaces in glazed fireclay, with colours and effects claimed to be suitable for any decorative schemes.

•

The TenTest Fibre Board Co., Ltd., demonstrate (on Stands B.723 and 622) the use of their material on ceilings without joint coverings by use of chamfered edge and grooved effects. The principal exhibit shows the use of the Company's new patent metal fireproof grounds for use in buildings where timber grounds are not permissible. These grounds are so constructed that if the steel framework is out of alignment the necessary adjustment for carrying square-cut sheets is immediately obtainable. The grounds are designed to be supported at 6 ft. centres, thus cutting out considerable quantities of heavier steelwork usually employed on structures of this character. The TenTest is secured to the special metal grounds with Parker Kalon screws. The method of wall treatment of both $\frac{5}{8}$ in. ribbed faced material and $\frac{1}{2}$ in. standard board are also shown.

•

Terry's Anglepoise lamps are featured on the Stand (B.511) of Herbert Terry and Sons, Ltd. Other exhibits include : Anglepoise mirrors, springs for all purposes, wirework, presswork, automatic machined parts, ironmongery, etc.

•

Working demonstrations are being given on Stands B.505-404 of four different models of the comprehensive range of porcelain-enamelled combination cooking and water-heating grates made by Triplex Foundry Co., Ltd. These include the Triplex, the Tweedie, Greybridge and Workwell grates, which are claimed to be suitable for large or small houses. A new exhibit is the No. 7 Tweenie.

•

The chief feature of the Stand (D.615) of Tube Products, Ltd., is a model showing the uses of tube. The products manufactured and exhibited by this firm include: Electrically welded steel tubes, transformer tubes, flushpipes, etc.

•

A complete range of asbestos cement building products is shown by Messrs. Turner's Asbestos Co. (branch of Turner and Newall, Ltd.) on Stand Ca.401. The many exhibits shown include : Tumall Trafford tiles, Tumall asbestos cement building slabs, Poilite asbestos cement flat building Sheets, Decolite jointless flooring, Tumall asbestos wallboard, etc.

•

The display (B.720) of the Universal Asbestos Manufacturing Co., Ltd., comprises the firm's reinforced flat troughing and reinforced and ordinary asbestos cement ; corrugated sheets, twin-twelve sheets, flat sheets, slates, decorated sheets, rainwater gutters, downpipes, bath panels, draining boards, cooker bases, etc.

•

The Stand (B.615) of the Walpamur Co., Ltd., features sections of a factory and office, including exhibits painted with Walpamur paints, etc.

•

The Stand (B.413) of Williams and Williams, Ltd. contains a complete range of their Reliance metal windows and doors, a type for every kind of structure (including public buildings, factories, schools and residences) being exhibited.

The exhibits shown by Wilson and Mathiesons, Ltd. (B.701 and 600,), include Swan White and Lexos coloured baths and fittings, Yorkist combination stoves, Granby interior cookers portable ranges, Lexos mottled mantel registers, Glenburn domestic boilers, Yorkdale back-to-back ranges, barless fires, interior frames, etc. On Stands 605 and 502 the firm show, amongst other things, the Regulo controlled Carlton New World gas cookers and Mardale High Beam gas fires. Regulo controlled Eureka New World gas cookers, high Beam gas fires, Console and other gas radiators, gas operated hot water apparatus, and large cooking apparatus suitable for hotels and boarding houses are also shown by John Wright & Co., Ltd., on these stands.

•

The Stand of Zinc Alloy Rust Proofing Company (B. 726) serves as a technical information bureau where particulars of the rust-proofing of ironwork and fittings by the Sherardizing process may be obtained. Various samples may be seen, and the exhibit includes specimens of architectural, electrical and other classes of ironwork which have been rust-proofed by the Sherardizing process.

## THE BUILDINGS ILLUSTRATED

**RISING SUN COLLIERY, WALLSEND-ON-TYNE** (pages 301-304). The general contractors were the Birtley Company, Ltd. The principal sub-contractors and suppliers included :—

Redpath Brown & Co., Ltd., steelwork ; Henderson Bros., reinforced concrete ; Wallsend and Hebburn Coal Co., Ltd., foundations, sidings, etc. ; Metropolitan-Vickers Electrical Co., Ltd., electrical equipment.

**HOSTEL, ST. ANN'S HILL, NOTTINGHAM** (pages 312-316). The general contractors were G. A. Pillatt and Son. The principal sub-contractors and suppliers included :—

The Midland Rock Asphalte Co., asphalt ; Proctor and Lavender, bricks ; Croft Granite Brick and Concrete Co., Ltd., artificial stone ; Moreland Hayne & Co., Ltd., structural steel ; J. C. Edwards, Ltd., floor tiles ; Moler Products, Ltd., partitions ; Duranbrite Flooring Co., Ltd., patent flooring ; G. N. Haden and Sons, Ltd., central heating ; A. R. Knight, gasfitting, plumbing ; W. J. Furse & Co., Ltd., electric wiring and bells ; Troughton and Young, electric light fixtures ; Adamsez, Ltd., sanitary fittings ; Griffin and Spalding, Ltd., stairtreads ; Roanoid, Ltd., door furniture ; Williams and Williams, Ltd., casements and window furniture ; T. Simmons, Ltd., rolling shutters ; Goodacre Glover and Butler, Ltd., iron staircases ; Midland Plastering Co., Ltd., plaster ; Dryad Metal Works, Ltd., metalwork ; E. Decaia and Son, terrazzo pavings ; Griffin and Spalding, Ltd., textiles and furniture ; Fenning & Co., Ltd., marble mantels ; Darlington Fencing Co., Ltd., fencing ; Midland Art Paving Co., Ltd., tiling ; William Barron and Son, Ltd., shrubs and trees.

# THE WEEK'S BUILDING NEWS

## LONDON & DISTRICTS (15-MILES RADIUS)

BROMLEY. *School.* The Bromley Education Committee is to erect an elementary school for 400 pupils in the Southborough ward.

CITY OF LONDON. *Extensions.* Mr. Alban H. Scott has prepared plans for extensions at the premises of the *News of the World* Building, Bouverie Street, and Whitefriars Street, City of London.

ELTHAM. *School.* The L.C.C. is to erect an elementary school for 2,200 pupils at Eltham.

ENFIELD. *Houses, etc.* Plans passed by the U.D.C.: Five houses, Garnault Road, for Messrs. E. Dover & Co., Ltd.; three bungalows, Cranleigh Gardens, for New Ideal Homesteads, Ltd.; cinema, London Road, for Mr. R. Cromie; shop and flat, St. Marks Road, for Mr. E. W. Palmer; six houses, Linden Crescent, for Mr. L. R. Badcock; hall, Lancaster Road, for Mr. E. R. Knott; hotel, Gt. Cambridge Road, for Mr. James Neilson: five houses, Green Street, for Messrs. Edwin Brown & Co.; 24 houses, Bincote Road, for Mr. Geo. W. Newman; two shops and flats, Hertford Road, for Mr. E. J. Kipps; extensions, United Flexible Metallic Tubing Works, South Street, for Messrs. Eiloart Son and Inman; 24 houses, The Ridgeway, for Mr. C. J. Brewin.

ENFIELD. *Houses.* The U.D.C. has asked the surveyor to prepare plans for the erection of 48 houses at Albany Park.

HACKNEY. *Tenements.* The L.C.C. is to erect 147 tenements at Upper Clapton Road, Hackney, at a cost of £74,550.

LEWISHAM. *Development, etc.* Plans passed by the B.C.: Estate development, Thorpewood Avenue, Sydenham, for Messrs. P. Chase Gardener & Co.; flats, site of 201, Hither Green Lane, for Mr. E. W. Ashton; showroom, 109 Rushey Green, for Mr. G. T. Harman; flats, 1 Church Terrace, Lee, for Messrs. R. Coppin and Sons; extensions, Wesleyan Church, Albion Road, for Messrs. Burnett and Eprile; church, Burnt Ash Hill, for Messrs. T. Spencer Bright & Co.; flats, Honor Oak Park, for Messrs. G. Walsh and Sons; flats, Dacres Road, for Messrs. Elgood and Hastie; 12 houses, Morden Hill, for Messrs. Wates (Streatham) Ltd.; 18 houses, Beckenham Hill, for Messrs. H. F. Thoburn, Ltd.; rebuilding, 30 Sydenham Hill, for Messrs. E. H. Burgess, Ltd.

MITCHAM. *Shops and Flats.* Mr. J. Cooper is to erect three blocks of shops and flats on the site of the old children's homes in London Road, Mitcham.

ROMFORD. *Council Offices.* The Ministry of Health has informed the U.D.C. that approval generally is given to the Council's proposals regarding municipal offices, but before consenting to a loan, would await revised estimate of the cost based on a provisionally accepted tender. In consequence, the U.D.C. has instructed the architects to proceed with the detailed drawings, etc., in order that tenders might be invited.

SOUTHGATE. *Houses.* Plans submitted to the Corporation: Four houses, Avenue Road, for Mr. H. Andrews; 28 flats, Bowes Road, for Mr. Harwood A. Nash; 20 flats, Palmers Road, for Mr. J. R. Scarborough; Catholic church, Bramley Road, for Mr. T. H. B. Scott; 21 houses, Ivy Lodge estate, for Mr. M. Joseph; 82 flats, Eversley Park Road, for Messrs. Crosleigh & Co.: two shops and flats, Bramley Road, for Mr. C. E. Ward; five houses, Prince George Ave, for Mr. B. E. Dixon; 31 houses, Telford Road, for Mr. Bryant Hobbs; two houses, Avenue Road, for Mr. C. J. Hallett; three houses, Stonehall Road, for Messrs. S. E. Hooton and Son; five houses, Arnos Grove, for Messrs. Vine and Vine; hall, Brownlow Road, for Mr. H. W. Ford; 43 houses, Chase Road, for Messrs. Geo. Reed and Sons, Ltd.; six shops and flats, Bowes Road, for Messrs. C. F. Day, Ltd.; 20 flats, Green Dragon Lane, for Messrs. A. W. Amos and Son; eight flats, Chase Road, for Mr. H. Mackhonik; 67 houses, Oakwood Park estate, and four houses, Chaseville Park Road, for Taylor Woodrow Estates, Ltd.

SOUTH RUISLIP. *Licensed Premises.* New premises are to be erected, at the Southern end of the Manor Estate and Northolt Junction, for the Cannon Brewery Company.

SOUTHWARK. *Baths.* The B.C. is obtaining a site in Borough High Street, for the erection of baths.

TILBURY. *Exchange.* H.M. Office of Works are to erect a labour exchange on a site in Calcutta Road.

LANGLEY. *Factory.* Messrs. The Starch Products Co., are to have a new factory erected at the rear of premises at Middle Green. Plans are being submitted.

## SOUTHERN COUNTIES

BARTLEY. *School.* The Hampshire Education Committee propose to erect a new elementary school at Bartley on a site yet to be selected.

CHICHESTER. *Houses.* The City Council has approved a scheme for the erection of 46 houses on the Portfield House Site.

HAVANT. *Houses.* The U.D.C. has approved plans, prepared by the Engineer, for the proposed erection of 28 houses at Emsworth.

HAYLING ISLAND. *Cinema.* The U.D.C. has approved plans for the erection of a cinema in Hollow Lane, South Hayling.

PORTSMOUTH. *Baths.* The Corporation has prepared a scheme for the erection of swimming and medical baths at a cost of £68,732.

PORTSMOUTH. *Flats, etc.* Plans passed by the Corporation: Block of flats, Hewitt Road, for Mr. N. K. Armitage; works extensions, Portsdown Hill, for Messrs. J. Croad, Ltd.; three houses, Havant Road, for Messrs. G. McCormick and Son; four flats, Craneswater Park, for Capt. G. Couzens; two houses, Burrill Avenue, for Mr. F. Small; news reel theatre, Commercial Road, for Capital and Provincial News Theatre, Ltd.; showrooms extension, 18-20, London Road, for Messrs. A. A. Jacobs, Ltd.

PORTSMOUTH. *Church and School.* The Portsmouth Methodist trustees are to erect a church and schools at the corner of Sixth Avenue and Ling Road, Wymering.

REDHILL. *Institution.* The Surrey County Council has decided to purchase the Founding Hospital, which is being acquired in connection with the development of public health and public facilities.

SHOREHAM. *Hotel.* The Steyning Licensing Justices has approved the erection of an hotel (Green Jacket Hotel), on the south side of the Upper Shoreham Road, for the Kemp Town Brewery, at an estimated cost of £8,000.

SOUTHAMPTON. *Schools.* Plans for the new school, to be erected on Hill Lane site, have been approved by the Board of Education.

WORTHING. *Houses.* The Ministry of Health has agreed to the acceptance by the T.C. of a revised tender by Messrs. Willmore Phillips, Ltd., of £62,115 1s. 4d., for the erection of 176 houses on the Durrington Estate.

WORTHING. *Development.* Mr. H. M. Potter is to develop the Marine estate, for Mr. E. A. Brackley, in the vicinity of Wallace Avenue, Worthing.

WORTHING. *Flats, etc.* Plans passed by the Corporation: 48 flats, Chapel Road, for Mr. J. Cannell; 26 houses, Loxwood Avenue, for Gladeside Estates, Ltd.; 10 houses, Offington Drive, for Mr. L. C. Le Maitre; five houses, Trent Road, for Messrs. Maddison and Brookes; mission hall, Ripley Road, for Rev. E. A. Haviland; 10 flats, Limbrick Lane, for Hesketh Estates, Ltd.; 20 houses, Forest Road, for Mr. A. W. T. Goldsmith; six houses, Chesswood Road, for Messrs. Sparks and Sons; hotel, Upper Brighton Road, for Portsmouth and Brighton United Breweries, Ltd.; additions Dome Cinema, Marine Parade, for Mr. C. A. Seebold; 27 houses, Guildford Road, for Messrs. Raworth Hill and Ross McLean.

## EASTERN COUNTIES

COLCHESTER. *Fire Station, etc.* The T.C. has decided to proceed with a scheme for the construction of a highways depot, fire station and ambulance station on a portion of Mercers' Farm, at an estimated cost of £44,700.

HEREFORD. *Houses, etc.* Plans passed by the Corporation: Two houses, Rockfield Road, for Messrs. Griffiths and Jones; offices, for Gloucester Building Society in St. Owen Street, for Messrs. Healing and Overbury; caretaker's house, Central Avenue, for Herefordshire County Architect; development, Broad Leys estate, Ross Road, for Messrs. J. Hallwood, Ltd.; development, Wyedale estate, Hinton Road, for Mr. G. C. Rowe; alterations, Saracens Head, P. H., St. Martins Street, for Cheltenham Brewery Co., Ltd.; shop and house, Ross Road, for Mr. H. Skyrme; two houses, Breinton Road, for Messrs. T. Howard and Son; two houses, Moor Farm Lane, for Mr. G. W. Hiles.

HEREFORD. *Cinema.* The Corporation has sold land fronting the transport station to Mr. R. A. Maddox for the erection of a cinema.

HINTON COURT. *School.* The Hereford Education Committee has approved plans for the erection of a junior school at Hinton Court at a cost of £13,500.

IPSWICH. *School.* The Education Committee is to erect a junior school on the Greenwich estate, at a cost of £14,000.

IPSWICH. *Building Site.* The Corporation has sold a building site in Commercial Road and Wolsey Street, to Messrs. William Brown & Co. (Ipswich) Ltd.

## MIDLAND COUNTIES

CHILWELL. *School.* The Notts Education Committee is to erect a school for 250 pupils at Chilwell, and, in the meantime, provide a temporary school at a cost of £500.

NOTTS. *Village Settlement.* The Notts C.C. has purchased 200 acres adjoining the county sanatorium for the provision of a village settlement.

CRADLEY. *School.* The Worcestershire Education Committee has purchased a site at Homer Hill, Cradley, for the erection of a senior school.

DROITWICH. *School.* The Worcestershire Education Committee is acquiring land in Old Coach Road, Droitwich, for the erection of an elementary school.

EVESHAM. *School.* The Worcestershire Education Committee has approved plans for the erection of a senior school at Evesham.

STOURBRIDGE. *School.* The Worcestershire Education Committee is to proceed with the erection of a senior school for 480 pupils in Pedmore Road, Stourbridge.

UPTON-ON-SEVERN. *School.* The Worcestershire Education Committee is to erect a senior school for 480 at Upton-on-Severn.

WOLVERHAMPTON. *Houses, etc.* Plans passed by the Corporation: Six houses, Ribbesford Road, for Messrs. J. H. Shutt and Son; 16 houses, Pinfold Lane, for Messrs. R. Hallett and Sons; four houses, Hollybush Lane, for Mr. G. Bates; cinema, Warstones Road, for Mr. J. Clark; two houses, Rupert Street, for Messrs. A. Jenks and Son; four houses, off Goldthorn Road, for Mr. F. H. Farrer; two houses, Woodland Road, for Mr. W. Hughes; two houses, off Stafford Road, for Mr. A. B. Tomlinson; rebuilding, Squirrell Inn, Railway Street, for Wolerhampton and Dudley Breweries, Ltd.; shop and house, Deans Road, for Mr. C. Sadler; two houses, Ribbesford Avenue, for Messrs. R. Speake and Co.; shop, Oxley Church Road, for Mr. C. Kay; four houses, Pinfold Lane, for Mr. L. Taylor warehouse extensions, Fryer Street, for Messrs. Attwoods, Ltd.; alterations, Gt. Western Inn, Stafford Road and Northumberland Arms, Stafford Road, for Messrs. W. Butler & Co., Ltd.; rebuilding factory, 9, Swan Street, for Messrs. J. Lysaght, Ltd.; four houses, Warstones Road, for Mr. W. Beard; six houses, Uplands Farm estate, for Mr. J. H. Shutt; two houses, off Birches Barn Road, for Mr. R. Carpenter.

(*Continued on page xxx.*)

# 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. d. | II s. d. |
|---|---|---|---|---|
| $A_1$ | ABERDARE .. | S. Wales & M. | 1 5½ | 1 1½ |
| A | Aberdeen .. | Scotland | 1 6½ | 1 2 |
| $A_1$ | Abergavenny | S. Wales & M. | 1 6 | 1 1½ |
| $A_2$ | Abingdon .. | S. Counties | 1 5 | 1 0½ |
| A | Accrington .. | N.W. Counties | 1 6½ | 1 2 |
| $A_2$ | Addlestone .. | S. Counties | 1 5 | 1 0½ |
| A | Adlington .. | N.W. Counties | 1 6½ | 1 2 |
| A | Airdrie .. | Scotland | *1 6½ | 1 2 |
| C | Aldeburgh .. | E. Counties | 1 2½ | 11 |
| A | Altrincham .. | N.W. Counties | 1 6½ | 1 2 |
| $B_2$ | Appleby .. | N.W. Counties | 1 3 | 11½ |
| A | Ashton-under-Lyne | N.W. Counties | 1 6½ | 1 2 |
| $B_1$ | Aylesbury .. | S. Counties | 1 4 | 1 0 |
| $B_1$ | BANBURY .. | S. Counties | 1 4 | 1 0 |
| $B_1$ | Bangor .. | N.W. Counties | 1 4 | 1 0 |
| $A_2$ | Barnard Castle | N.E. Coast | 1 5 | 1 0½ |
| A | Barnsley .. | Yorkshire | 1 6½ | 1 2 |
| B | Barnstaple .. | S.W. Counties | 1 4½ | 1 0½ |
| A | Barrow .. | N.W. Counties | 1 6½ | 1 2 |
| A | Barry .. | S. Wales & M. | 1 6½ | 1 2 |
| $B_1$ | Basingstoke .. | S.W. Counties | 1 4 | 1 0 |
| $A_2$ | Bath .. .. | S.W. Counties | 1 5½ | 1 1½ |
| A | Batley .. | Yorkshire | 1 6½ | 1 2 |
| $A_2$ | Bedford .. | E. Counties | 1 5½ | 1 1½ |
| $A_2$ | Berwick-on Tweed .. | N.E. Coast | 1 5½ | 1 1½ |
| $A_2$ | Bewdley .. | Mid. Counties | 1 5½ | 1 1½ |
| $B_2$ | Bicester .. | S. Counties | 1 3 | 11½ |
| | Birkenhead .. | N.W. Counties | *1 7½ | 1 2½ |
| A | Birmingham .. | Mid. Counties | 1 6½ | 1 2 |
| $A_1$ | Bishop Auckland | N.E. Coast | 1 6 | 1 1½ |
| A | Blackburn .. | N.W. Counties | 1 6½ | 1 2 |
| A | Blackpool .. | N.W. Counties | 1 6½ | 1 2 |
| A | Blyth .. .. | N.E. Coast | 1 6½ | 1 2 |
| $B_1$ | Bognor .. | S. Counties | 1 4 | 1 0 |
| A | Bolton .. | N.W. Counties | 1 6½ | 1 2 |
| $A_2$ | Boston .. | Mid. Counties | 1 5 | 1 0½ |
| $A_2$ | Bournemouth .. | S. Counties | 1 5½ | 1 1½ |
| $B_2$ | Bovey Tracey | S.W. Counties | 1 3½ | 11½ |
| A | Bradford .. | Yorkshire | 1 6½ | 1 2 |
| $A_1$ | Brentwood .. | E. Counties | 1 6 | 1 1½ |
| A | Bridgend .. | S. Wales & M. | 1 6½ | 1 2 |
| B | Bridgwater .. | S.W. Counties | 1 4½ | 1 0½ |
| $A_1$ | Bridlington .. | Yorkshire | 1 6 | 1 1½ |
| A | Brighouse .. | Yorkshire | 1 6½ | 1 2 |
| $A_2$ | Brighton .. | S. Counties | 1 5½ | 1 1½ |
| A | Bristol .. | S.W. Counties | 1 6½ | 1 2 |
| B | Brixham .. | S.W. Counties | 1 3½ | 11½ |
| A | Bromsgrove .. | Mid. Counties | 1 5½ | 1 1½ |
| B | Bromyard .. | Mid. Counties | 1 3 | 11½ |
| A | Burnley .. | N.W. Counties | 1 6½ | 1 2 |
| A | Bursiem .. | Mid. Counties | 1 6½ | 1 2 |
| A | Burton-on-Trent .. | Mid. Counties | 1 6½ | 1 2 |
| A | Bury .. .. | N.W. Counties | 1 6½ | 1 2 |
| A | Buxton .. | N.W. Counties | 1 6 | 1 1½ |
| $A_1$ | CAMBRIDGE .. | E. Counties | 1 6 | 1 1½ |
| $B_1$ | Canterbury .. | S. Counties | 1 4 | 1 0 |
| A | Cardiff .. | S. Wales & M. | 1 6½ | 1 2 |
| A | Carlisle .. | N.W. Counties | 1 6½ | 1 2 |
| B | Carmarthen .. | S. Wales & M. | 1 4½ | 1 0½ |
| B | Carnarvon .. | N.W. Counties | 1 4½ | 1 0½ |
| A | Carnforth .. | N.W. Counties | 1 6½ | 1 2 |
| A | Castleford .. | Yorkshire | 1 6½ | 1 2 |
| $A_2$ | Chatham .. | S. Counties | 1 5 | 1 0½ |
| A | Chelmsford .. | E. Counties | 1 5 | 1 0½ |
| A | Cheltenham .. | S.W. Counties | 1 5 | 1 0½ |
| A | Chester .. | N.W. Counties | 1 6½ | 1 2 |
| A | Chesterfield .. | Mid. Counties | 1 6½ | 1 2 |
| $B_1$ | Chichester .. | S. Counties | 1 4 | 1 0 |
| A | Chorley .. | N.W. Counties | 1 6½ | 1 2 |
| $B_1$ | Cirencester .. | S. Counties | 1 4 | 1 0 |
| A | Clitheroe .. | N.W. Counties | 1 6½ | 1 2 |
| A | Clydebank .. | Scotland | 1 6½ | 1 2 |
| A | Coalville .. | Mid. Counties | 1 6½ | 1 2 |
| $A_2$ | Colchester .. | E. Counties | 1 5½ | 1 1½ |
| A | Colne .. .. | N.W. Counties | 1 6 | 1 1½ |
| $A_2$ | Colwyn Bay | N.W. Counties | 1 5½ | 1 1½ |
| $A_1$ | Consett .. | N.E. Coast | 1 6 | 1 1½ |
| $A_2$ | Conway .. | N.W. Counties | 1 5½ | 1 1½ |
| A | Coventry .. | Mid. Counties | 1 6½ | 1 2 |
| $A_2$ | Crewe .. | N.W. Counties | 1 5½ | 1 1½ |
| A | Cumberland | N.W. Counties | 1 5 | 1 0½ |
| A | DARLINGTON | N.E. Coast | 1 6½ | 1 2 |
| A | Darwen .. | N.W. Counties | 1 6½ | 1 2 |
| $B_1$ | Deal .. .. | S. Counties | 1 4 | 1 0 |
| $A_2$ | Denbigh .. | N.W. Counties | 1 5 | 1 0½ |
| A | Derby .. | Mid. Counties | 1 6½ | 1 2 |
| A | Dewsbury .. | Yorkshire | 1 6½ | 1 2 |
| B | Didcot .. | S. Counties | 1 4½ | 1 0½ |
| A | Doncaster .. | Yorkshire | 1 6½ | 1 2 |
| $B_1$ | Dorchester .. | S.W. Counties | 1 4 | 1 0 |
| A | Driffield .. | Yorkshire | 1 5 | 1 0½ |
| $A_2$ | Droitwich .. | Mid. Counties | 1 5½ | 1 1½ |
| A | Dudley .. | Mid. Counties | 1 6½ | 1 2 |
| $A_2$ | Dumfries .. | Scotland | 1 6 | 1 1½ |
| A | Dundee .. | Scotland | 1 6½ | 1 2 |
| A | Durham .. | N.E. Coast | 1 6½ | 1 2 |
| $A_2$ | EASTBOURNE .. | S. Counties | 1 5½ | 1 1½ |
| $A_1$ | Ebbw Vale .. | S. Wales & M. | 1 6 | 1 1½ |
| A | Edinburgh .. | Scotland | 1 6½ | 1 2 |
| $A_1$ | E. Glamorganshire, Rhondda Valley District | S. Wales & M. | 1 6 | 1 1½ |
| $A_2$ | Exeter .. .. | S.W. Counties | *1 5½ | 1 1½ |
| B | Exmouth .. | S.W. Counties | 1 4½ | 1 0½ |
| $A_2$ | FELIXSTOWE .. | E. Counties | 1 5 | 1 0½ |
| A | Filey .. .. | Yorkshire | 1 5 | 1 0½ |
| A | Fleetwood .. | N.W. Counties | 1 6½ | 1 2 |
| $B_1$ | Folkestone .. | S. Counties | 1 4 | 1 0 |
| A | Frodsham .. | N.W. Counties | 1 6½ | 1 2 |
| $B_2$ | Frome .. .. | S.W. Counties | 1 3½ | 11½ |
| A | GATESHEAD .. | N.E. Coast | 1 6½ | 1 2 |
| B | Gillingham .. | S. Counties | 1 4½ | 1 0½ |
| A | Glasgow .. | Scotland | 1 7 | 1 2½ |
| $A_2$ | Gloucester .. | S.W. Counties | 1 5½ | 1 1½ |
| $A_2$ | Goole .. .. | Yorkshire | 1 5½ | 1 1½ |
| $A_2$ | Gosport .. | S. Counties | 1 5½ | 1 1½ |
| $A_2$ | Grantham .. | Mid. Counties | 1 5 | 1 0½ |
| $A_1$ | Gravesend .. | S. Counties | 1 6 | 1 1½ |
| A | Greenock .. | Scotland | *1 6½ | 1 2 |
| A | Grimsby .. | Yorkshire | 1 6½ | 1 2 |
| B | Guildford .. | S. Counties | 1 4½ | 1 0½ |
| A | HALIFAX .. | Yorkshire | 1 6½ | 1 2 |
| A | Hanley .. | Mid. Counties | 1 6½ | 1 2 |
| A | Harrogate .. | Yorkshire | 1 6½ | 1 2 |
| A | Hartlepools .. | N.E. Coast | 1 6½ | 1 2 |
| B | Harwich .. | E. Counties | 1 4½ | 1 0½ |
| $B_1$ | Hastings .. | S. Counties | 1 4 | 1 0 |
| $A_2$ | Hatfield .. | S. Counties | 1 5½ | 1 1½ |
| B | Hereford .. | S.W. Counties | 1 4½ | 1 0½ |
| $A_2$ | Hertford .. | E. Counties | 1 5½ | 1 1½ |
| A | Heysham .. | N.W. Counties | 1 6½ | 1 2 |
| A | Howden .. | N.E. Coast | 1 6½ | 1 2 |
| A | Huddersfield .. | Yorkshire | 1 6½ | 1 2 |
| A | Hull .. .. | Yorkshire | 1 6½ | 1 2 |
| A | ILKLEY .. | Yorkshire | 1 6½ | 1 2 |
| A | Immingham .. | Mid. Counties | 1 6½ | 1 2 |
| $A_2$ | Ipswich .. | E. Counties | 1 5½ | 1 1½ |
| $B_2$ | Isle of Wight .. | S. Counties | 1 4½ | 1 0½ |
| A | JARROW .. | N.E. Coast | 1 6½ | 1 2 |
| A | KEIGHLEY .. | Yorkshire | 1 6½ | 1 2 |
| $A_2$ | Kendal .. | N.W. Counties | 1 5 | 1 0½ |
| $A_2$ | Keswick .. | N.W. Counties | 1 5 | 1 0½ |
| $A_1$ | Kettering .. | Mid. Counties | 1 6 | 1 1½ |
| $A_2$ | Kidderminster | Mid. Counties | 1 5½ | 1 1½ |
| $B_1$ | King's Lynn .. | E. Counties | 1 4 | 1 0 |
| A | LANCASTER .. | N.W. Counties | 1 6½ | 1 2 |
| $A_1$ | Leamington .. | Mid. Counties | 1 6 | 1 1½ |
| A | Leeds .. .. | Yorkshire | 1 6½ | 1 2 |
| A | Leek .. .. | Mid. Counties | 1 6½ | 1 2 |
| A | Leicester .. | Mid. Counties | 1 6½ | 1 2 |
| A | Leigh .. .. | N.W. Counties | 1 6½ | 1 2 |
| B | Lewes .. .. | S. Counties | 1 3 | 11½ |
| $A_2$ | Lichfield .. | Mid. Counties | 1 5½ | 1 1½ |
| A | Lincoln .. .. | Mid. Counties | 1 6½ | 1 2 |
| | Liverpool .. | N.W. Counties | *1 8 | 1 3 |
| $A_2$ | Llandudno .. | N.W. Counties | 1 5½ | 1 1½ |
| A | Llanelly .. | S. Wales & M. | 1 6½ | 1 2 |
| | London (12-miles radius) | | 1 8 | 1 3 |
| | Do. (12-15 miles radius) | | 1 7½ | 1 2½ |
| A | Long Eaton .. | Mid. Counties | 1 6½ | 1 2 |
| A | Loughborough | Mid. Counties | 1 6½ | 1 2 |
| $A_1$ | Luton .. .. | E. Counties | 1 6 | 1 1½ |
| A | Lytham .. | N.W. Counties | 1 6½ | 1 2 |
| $A_1$ | MACCLESFIELD | N.W. Counties | 1 6 | 1 1½ |
| $A_2$ | Maidstone .. | S. Counties | 1 5 | 1 0½ |
| $A_2$ | Malvern .. | Mid. Counties | 1 5 | 1 0½ |
| A | Manchester .. | N.W. Counties | 1 6½ | 1 2 |
| A | Mansfield .. | Mid. Counties | 1 6½ | 1 2 |
| $B_1$ | Margate .. | S. Counties | 1 4 | 1 0 |
| A | Matlock .. | Mid. Counties | 1 5 | 1 0½ |
| $A_1$ | Merthyr .. | S. Wales & M. | 1 6 | 1 1½ |
| A | Middlesbrough | N. E. Coast | 1 6½ | 1 2 |
| $A_2$ | Middlewich .. | N.W. Counties | 1 5½ | 1 1½ |
| $B_2$ | Minehead .. | S.W. Counties | 1 3½ | 11½ |
| $B_2$ | Monmouth .. & S. and E. Glamorganshire | S. Wales & M. | 1 3½ | 11½ |
| A | Morecambe .. | N.W. Counties | 1 6½ | 1 2 |
| $A_2$ | NANTWICH .. | N.W. Counties | 1 5½ | 1 1½ |
| A | Neath .. .. | S. Wales & M. | 1 6½ | 1 2 |
| A | Nelson .. | N.W. Counties | 1 6½ | 1 2 |
| A | Newcastle .. | N.E. Coast | 1 6½ | 1 2 |
| A | Newport .. | S. Wales & M. | 1 6½ | 1 2 |
| A | Normanton .. | Yorkshire | 1 6½ | 1 2 |
| A | Northampton | Mid. Counties | 1 6½ | 1 2 |
| A | North Staffs .. | Mid. Counties | 1 6½ | 1 2 |
| A | North Shields | N.E. Coast | 1 6½ | 1 2 |
| $A_1$ | Norwich .. | E. Counties | 1 6 | 1 1½ |
| A | Nottingham .. | Mid. Counties | 1 6½ | 1 2 |
| A | Nuneaton .. | Mid. Counties | 1 6½ | 1 2 |
| A | OAKHAM .. | Mid. Counties | 1 5 | 1 0½ |
| A | Oldham .. | N.W. Counties | 1 6½ | 1 2 |
| $A_3$ | Oswestry .. | N.W. Counties | 1 5 | 1 0½ |
| $A_1$ | Oxford .. | S. Counties | 1 6 | 1 1½ |
| A | PAISLEY .. | Scotland | *1 6½ | 1 2 |
| $B_3$ | Pembroke .. | S. Wales & M. | 1 3 | 11½ |
| A | Perth .. .. | Scotland | *1 6½ | 1 2 |
| $A_1$ | Peterborough | E. Counties | 1 6 | 1 1½ |
| A | Plymouth .. | S.W. Counties | *1 6½ | 1 2 |
| A | Pontefract .. | Yorkshire | 1 6½ | 1 2 |
| $A_1$ | Pontypridd .. | S. Wales & M. | 1 6 | 1 1½ |
| $A_2$ | Portsmouth .. | S. Counties | 1 5½ | 1 1½ |
| A | Preston .. | N.W. Counties | 1 6½ | 1 2 |
| A | QUEENSFERRY | N.W. Counties | 1 6½ | 1 2 |
| $A_2$ | READING .. | S. Counties | 1 5½ | 1 1½ |
| B | Reigate .. | S. Counties | 1 4½ | 1 0½ |
| A | Retford .. | Mid. Counties | 1 5 | 1 0½ |
| $A_1$ | Rhondda Valley | S. Wales & M. | 1 6 | 1 1½ |
| A | Ripon .. .. | Yorkshire | 1 5 | 1 0½ |
| A | Rochdale .. | N.W. Counties | 1 6½ | 1 2 |
| B | Rochester .. | S. Counties | 1 4½ | 1 0½ |
| $A_1$ | Ruabon .. | N.W. Counties | 1 6 | 1 1½ |
| A | Rugby .. | Mid. Counties | 1 6½ | 1 2 |
| $A_2$ | Rugeley .. | Mid. Counties | 1 5½ | 1 1½ |
| A | Runcorn .. | N.W. Counties | 1 6½ | 1 2 |
| $A_1$ | ST. ALBANS .. | E. Counties | 1 6 | 1 1½ |
| A | St. Helens .. | N.W. Counties | 1 6½ | 1 2 |
| $B_3$ | Salisbury .. | S.W. Counties | 1 3½ | 11½ |
| $A_1$ | Scarborough .. | Yorkshire | 1 6 | 1 1½ |
| A | Scunthorpe .. | Mid. Counties | 1 6½ | 1 2 |
| A | Sheffield .. | Yorkshire | 1 6½ | 1 2 |
| A | Shipley .. | Yorkshire | 1 6½ | 1 2 |
| $A_2$ | Shrewsbury .. | Mid. Counties | 1 5½ | 1 1½ |
| $A_2$ | Skipton .. | Yorkshire | 1 5½ | 1 1½ |
| $A_2$ | Slough .. | S. Counties | 1 5½ | 1 1½ |
| $A_1$ | Solihull .. | Mid. Counties | 1 6 | 1 1½ |
| $A_2$ | Southamton .. | S. Counties | 1 5½ | 1 1½ |
| $A_1$ | Southend-on-Sea .. | E. Counties | 1 6 | 1 1½ |
| A | Southport .. | N.W. Counties | 1 6½ | 1 2 |
| A | S. Shields .. | N.E. Coast | 1 6½ | 1 2 |
| $A_1$ | Stafford .. | Mid. Counties | 1 6 | 1 1½ |
| A | Stirling .. | Scotland | 1 7 | 1 2½ |
| A | Stockport .. | N.W. Counties | 1 6½ | 1 2 |
| A | Stockton-on-Tees .. | N.E. Coast | 1 6½ | 1 2 |
| A | Stoke-on-Trent | Mid. Counties | 1 6½ | 1 2 |
| B | Stroud .. .. | S.W. Counties | 1 4½ | 1 0½ |
| A | Sunderland .. | N.E. Coast | 1 6½ | 1 2 |
| A | Swansea .. | S. Wales & M. | 1 6½ | 1 2 |
| A | Swindon .. | S.W. Counties | 1 5 | 1 0½ |
| $A_1$ | TAMWORTH .. | N.W. Counties | 1 6 | 1 1½ |
| B | Taunton .. | S.W. Counties | 1 4½ | 1 0½ |
| A | Teesside Dist. .. | N.E. Counties | 1 6½ | 1 2 |
| $A_2$ | Teignmouth .. | S.W. Coast | 1 5½ | 1 1½ |
| A | Todmorden .. | Yorkshire | 1 6½ | 1 2 |
| $A_1$ | Torquay .. | S.W. Counties | 1 6 | 1 1½ |
| $B_2$ | Truro .. .. | S.W. Counties | 1 3½ | 11½ |
| $A_3$ | Tunbridge Wells .. | S. Counties | 1 5 | 1 0½ |
| A | Tunstall .. | Mid. Counties | 1 6½ | 1 2 |
| A | Tyne District | N.E. Coast | 1 6½ | 1 2 |
| A | WAKEFIELD .. | Yorkshire | 1 6½ | 1 2 |
| A | Walsall .. | Mid. Counties | 1 6½ | 1 2 |
| A | Warrington .. | N.W. Counties | 1 6½ | 1 2 |
| $A_1$ | Warwick .. | Mid. Counties | 1 6 | 1 1½ |
| $A_1$ | Wellingborough | Mid. Counties | 1 6 | 1 1½ |
| A | West Bromwich | Mid. Counties | 1 6½ | 1 2 |
| $A_2$ | Weston-s.-Mare | W. Counties | 1 5½ | 1 1½ |
| $A_2$ | Whitby .. | Yorkshire | 1 5½ | 1 1½ |
| A | Widnes .. | N.W. Counties | 1 6½ | 1 2 |
| A | Wigan .. | N.W. Counties | 1 6½ | 1 2 |
| B | Winchester .. | S. Counties | 1 4½ | 1 0½ |
| $A_2$ | Windsor .. | S. Counties | 1 5½ | 1 0½ |
| A | Wolverhampton | Mid. Counties | 1 6½ | 1 2 |
| $A_2$ | Worcester .. | Mid. Counties | 1 5½ | 1 1½ |
| $A_3$ | Worksop .. | Yorkshire | 1 5 | 1 0½ |
| $A_1$ | Wrexham .. | N.W. Counties | 1 6 | 1 1½ |
| A | Wycombe .. | S. Counties | 1 5 | 1 0½ |
| B | YARMOUTH .. | E. Counties | 1 4½ | 1 0½ |
| B | Yeovil .. | S.W. Counties | 1 4½ | 1 0½ |
| A | York .. .. | Yorkshire | 1 6½ | 1 2 |

* 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.

# 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. The whole of the information given is copyright.

## WAGES

| | | s. | d. |
|---|---|---|---|
| Bricklayer | per hour | 1 | 8 |
| Carpenter | " | 1 | 8 |
| Joiner | " | 1 | 8 |
| Machinist | " | 1 | 8 |
| Mason (Banker) | " | 1 | 8 |
| " (Fixer) | " | 1 | 9 |
| Plumber | " | 1 | 8 |
| Painter | " | 1 | 7 |
| Paperhanger | " | 1 | 7 |
| Glazier | " | 1 | 7 |
| Slater | " | 1 | 8 |
| Scaffolder | " | 1 | 4 |
| Timberman | " | 1 | 4 |
| Navvy | " | 1 | 3 |
| General Labourer | " | 1 | 3 |
| Lorryman | " | 1 | 5½ |
| Crane Driver | " | 1 | 7 |
| Watchman | per week | 2 | 10 |

## MATERIALS

### EXCAVATOR AND CONCRETOR

| | | £ | s. | d. |
|---|---|---|---|---|
| Grey Stone Lime | per ton | 2 | 2 | 0 |
| Blue Lias Lime | " | 1 | 16 | 6 |
| Hydrated Lime | " | 3 | 0 | 9 |
| 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 | 0 | 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 |
| ¼" 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. | 1 | 6 | 2 | 6 |
| Bends | each | 5 | 0 | 10 | 6 |
| Inspection bends | " | 9 | 0 | 15 | 0 |
| Single junctions | " | 8 | 9 | 18 | 0 |
| Double junctions | " | 13 | 6 | 30 | 0 |
| Lead Wool | lb. | | 6 | | — |
| Gaskin | " | | 5 | | — |

### BRICKLAYER

| | | £ | s. | d. |
|---|---|---|---|---|
| Fletton | per M. | 2 | 15 | 0 |
| Grooved do. | " | 2 | 17 | 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 | 17 | 6 |
| " Wirecuts | " | 7 | 17 | 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 | " | 5 | 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 | lb. | | 1 | 4 |
| " copper | " | | 1 | 6 |

### CARPENTER AND JOINER

| | | s. | d. |
|---|---|---|---|
| Good carcassing timber | F.C. | 2 | 2 |
| Birch | as 1" F.S. | | 9 |
| Deal, Joiner's | " " | | 5 |
| " " 2nds | " " | | 4 |
| Mahogany, Honduras | " " | 1 | 3 |
| " Atrican | " " | 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, | | £ | s. | d. |
|---|---|---|---|---|
| ¾" | Sq. | 18 | 6 | |
| ¾" | " | 1 | 1 | 6 |
| 1" | " | 1 | 2 | 0 |
| 1¼" | " | 1 | 5 | 0 |
| 1½" | " | 1 | 10 | 0 |
| Deal matchings, ¾" | " | | 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 | ¼" | | | ½" | | | ¾" | | | 1" | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 2½ | – | 4 | 3½ | – | 5 | 4½ | – |
| Gaboon Mahogany | 4 | 3½ | – | 5 | 4½ | – | 7 | 6½ | – | 8 | 7 | – |
| Figured Oak | 6½ | 5 | – | 7½ | 5½ | – | 10 | 8 | 0 | 11- | 9 | – |

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.)

| | ¼" | ⅜" | 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 | 65 | Galvanized gas | | 52½ |
| Water | 61½ | " water | | 47½ |
| Steam | 57½ | " steam | | 42½ |
| FITTINGS. | | | | |
| Gas | 57½ | Galvanized gas | | 47½ |
| Water | 52½ | " water | | 42½ |
| Steam | 47½ | steam | | 37½ |

### SMITH AND FOUNDER—*continued*

| | | s. | d. |
|---|---|---|---|
| Rolled steel joists cut to length | cwt. | 12 | 9 |
| Mild steel reinforcing rods, ⅜" | " | 10 | 6 |
| " " ½" | " | 10 | 3 |
| " " ⅝" | " | 10 | 0 |
| " " ¾" | " | 9 | 6 |
| " " ⅞" | " | 9 | 8 |
| " " 1" | " | 9 | 6 |
| " " 1¼" | " | 9 | 6 |
| " " 1½" | " | 9 | 6 |

| | | ¾" s. | d. | 4" s. | d. |
|---|---|---|---|---|---|
| Cast-iron rain-water pipes of ordinary thickness metal | F.R. | 8 | | 10 | |
| 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. | 24 | 6 |
| " drawn pipes | " | 24 | 6 |
| " soil pipe | " | 30 | 0 |
| " scrap | " | 16 | 0 |
| Solder, plumbers' | lb. | | 9½ |
| " fine do. | " | 1 | 0 |
| Copper, sheet | " | | 8½ |
| " tubes | " | | 11 |

| 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 | 5 | 0 |
| Plaster, coarse | " | 2 | 10 | 0 |
| " fine | " | 4 | 15 | 0 |
| 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 | 9 |
| Lath nails | lb. | | | 3 |

### GLAZIER

| | | s. | d. | s. | d. |
|---|---|---|---|---|---|
| Sheet glass, 21 oz., squares n/e 2 ft. | | | | s. | F.S. |
| " " 26 oz. | " | | | | 2½ |
| Flemish, Arctic, Figures (white)* | " | | | | 3 |
| Blazoned glasses | " | | | | 7 |
| Reeded: Cross Reeded | " | | | 2 | 6 |
| Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite | " | | | | 11 |
| Crown sheet glass (n/e 12 in. x. 10 in.) | " | | | | 6 |
| Flashed opals (white and coloured) | " | 1 | 0 | and | 2 0 |
| ¼" rough cast: rolled plate | " | | | | 2 0 |
| ¼" wired cast; wired rolled | " | | | | 5½ |
| ¼" Georgian wired cast | " | | | | 9½ |
| ¼" Polished plate, n/e 1 ft. | " | †10 | to | ‡1 | 11 |
| " " 2 | " | †1 | 2 " | ‡1 | 1 |
| " " 4 | " | †2 | 3 " | ‡2 | 4 |
| " " 8 | " | †2 | 9 " | ‡3 | 6 |
| " " 20 | " | †3 | 7 " | ‡4 | 2 |
| " " 45 | " | †3 | 11 " | ‡4 | 7 |
| " " 100 | " | †5 | 0 " | ‡5 | 7 |
| 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 ¼" and ⅜" | " | | 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 | 8 | 6 |
| Linseed oil | gall. | | 2 | 3 |
| Boiled oil | " | | 2 | 9 |
| Turpentine | " | | 4 | 1½ |
| 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 | " | 5 |
| " " 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 9 |
| " junctions | " | 3 9 | 4 6 |
| Gullies and gratings | " | 16 6 | 18 0 |
| Cast iron drains, and laying and jointing | F.R. | 4 9 | 6 0 |
| Extra, only for bends | Each | 10 6 | 15 6 |

## 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 |
| " raising on old walls | " 2 0 0 |
| " underpinning | " 5 10 0½ |
| 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 | " 6 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 labours 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 |
| ¾" deal sawn boarding and fixing to joists | Sqr. 1 14 6 |
| 1" " " " " | " 1 17 6 |
| 1¼ " " " " | " 2 3 0 |
| 4" × 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 | F.S. 1 2 |
| 1¼" " " " | " 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 |
| 1¼" do. | " 1 9 |

## CARPENTER AND JOINER—*continued*

| | s. d. |
|---|---|
| 1¼" 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, ¾" parting beads, and with brass faced axle pulleys, etc., fixed complete | 3 7 |
| 2" " " " " | " 3 10 |
| Extra only for moulded horns | Each 6 |
| 1¼" deal four-panel square, both sides, door | F.S. 2 0 |
| 2" " " " " | " 2 8 |
| 1¼" " but moulded both sides | " 2 4 |
| 2" " " " " | " 3 0 |
| 4" × 3" deal, rebated and moulded frames | F.R. 1 0 |
| 4¼" × 3¼" " " " | " 1 4 |
| 1¼" deal tongued and moulded window board, on and including deal bearers | F.S. 1 9 |
| 1¼" deal treads, 1" risers in staircases, and tongued and grooved together on and including strong fir carriages | " 2 6 |
| 1¼" 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 |
| 1¼" × 1¼" " " " | " 2 9 |
| 3" × 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. 16 6 |
| Riveted plate or compound girders, and hoisting and fixing in position | " 1 0 6 |
| Do., stanchions with riveted caps and bases and do. | " 19 0 |
| Mild steel bar reinforcement, ½" and up, bent and fixed complete | " 17 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. | ½" s. d. | ¾" s. d. | 1" s. d. | 1¼" s. d. | 2" s. d. | 4" s. d. |
|---|---|---|---|---|---|---|---|---|
| Milled lead and labour in flats | cwt. | 1 18 6 | | | | | | |
| Do. in flashings | " | 2 2 0 | | | | | | |
| Do. in covering to turrets | " | 2 7 6 | | | | | | |
| Do. in soakers | " | 1 13 3 | | | | | | |
| Labour to welted edge | F.R. | 3½ | | | | | | |
| Open copper nailing | " | 3 | | | | | | |
| Close " " | " | 4 | | | | | | |
| Lead service pipe and fixing with pipe hooks | F.R. | | 10 | 1 0 | 1 3 | 2 0 | 2 10 | — |
| Do. soil pipe and fixing with cast lead tacks | " | | — | — | — | — | — | 5 6 |
| Extra, only to bends | Each | | — | — | — | — | 2 0 | 6 9 |
| Do. to stop ends | " | | 6½ | 8 | 9 | 11 | 1 0 | — |
| Boiler screws and unions | " | | 3 3 | 3 9 | 5 0 | 8 0 | — | — |
| Lead traps | " | | — | — | — | 6 3 | 8 9 | — |
| Screw down bib valves | " | | 6 9 | 9 6 | 11 0 | — | — | — |
| Do. stop cocks | " | | 7 0 | 9 6 | 12 6 | — | — | — |
| 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 2 | | | | | | |
| 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 6 |
| 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 render on walls | " 1 2½ |
| Render, float and set in lime and hair | " 1 9 |
| Render and set in Sirapite | " 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 |

# THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

## SOUND INSULATION AND ABSORPTION :

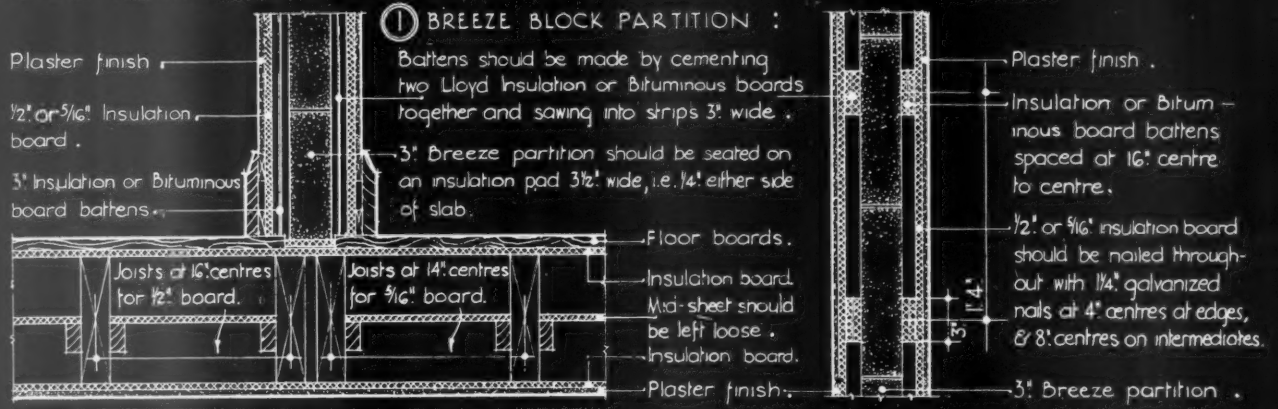
**CELLULAR STRUCTURE :** The boards are made from toughwood fibre and with the addition of chemicals, are felted into a board. This ensures a cellular structure, entrapping numerous air cells between the fibres. The cells give the board its heat and sound insulation and sound absorption.

Lloyd Insulation board has an average sound insulation of 27 decibels over a frequency range in cycles per second between 200 and 4000, and an average sound absorption of .375 open window units (O.W.Us.) per square foot of its surface.

## METHODS OF INSULATING FLOORS AND PARTITIONS AGAINST SOUND AND HEAT TRANSMISSION :

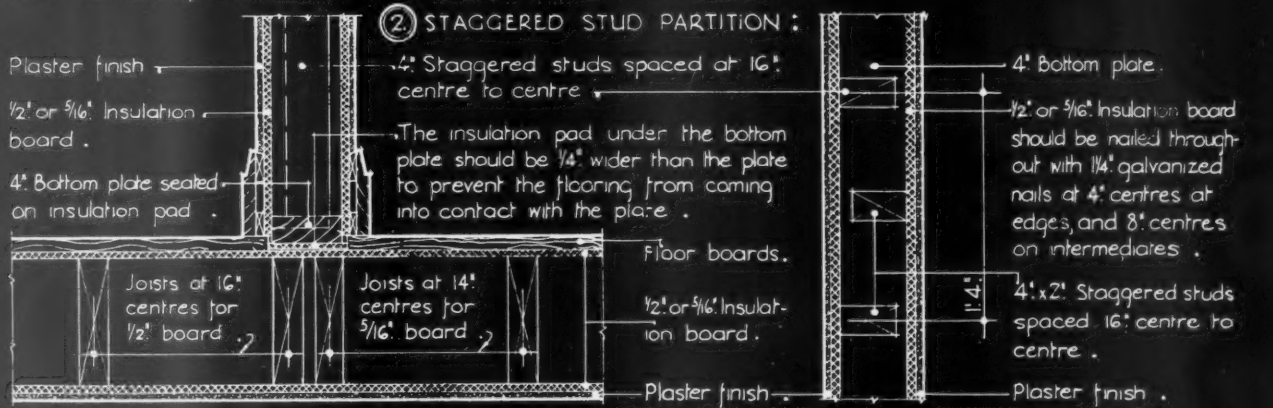
SECTION THROUGH JUNCTION OF FLOOR AND PARTITION : PLAN OF PARTITION :

### (1) BREEZE BLOCK PARTITION :



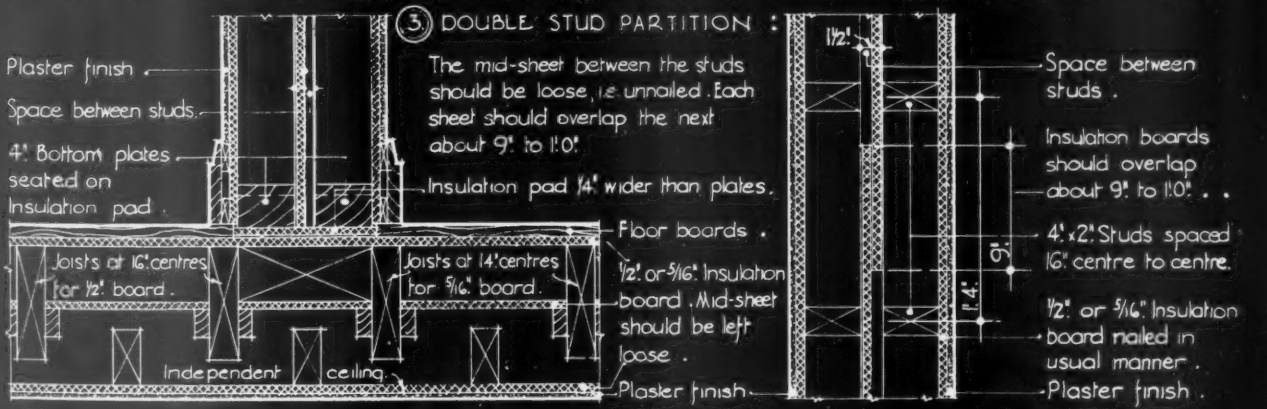

Finish for sound absorption. Distemper is better than a paint or plaster finish as these diminish the effect of the insulation board considerably. The distemper should be sprayed on to the boards.

### (2) STAGGERED STUD PARTITION :




Condensation. Can be avoided by the use of Lloyd Insulation board which quickly absorbs the heat of the atmosphere, so that the surface temperature of the walls is equivalent to that of the room and vapour will not condense into water.

### (3) DOUBLE STUD PARTITION :




*Information from Edward Lloyd Wallboards Ltd.*

INFORMATION SHEET : LLOYD INSULATING BOARD ② SOUND INSULATION & ABSORPTION.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 • Alan A. Bayne

Supplement to THE ARCHITECTS' JOURNAL for February 20, 1936

THE ARCHITECTS' JOURNAL
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# INFORMATION SHEET

## • 316 •

# SOUND INSULATION AND ABSORPTION

Product : Lloyd Insulation Board

This Sheet sets out in detail methods of obtaining sound-resisting partitions and floors.

Finishes on Insulation Board.

The board may be left without any extra applied finish, or it may be distempered, painted, plastic painted or plastered.

Plaster.

Any type of plaster is suitable for application to the board, and one coat work may be used with a good patent plaster.

Where the board adjoins plaster work, such as at an angle, adhesion between the board and the plaster should be prevented by running a knife along the joint before the plaster is dry, or by painting the edge of the board before plastering.

A wood fillet, mould, or other covering, should be fixed to all angles.

This is the second of a series of Information Sheets dealing with Lloyd Insulation Board and Hardboard.

On the first Sheet (No. 302) were given full details in regard to Lloyd Insulation Board, and details of fixing to various surfaces and alternative type of jointing.

Manufacturers : Edward Lloyd Wallboards, Ltd.

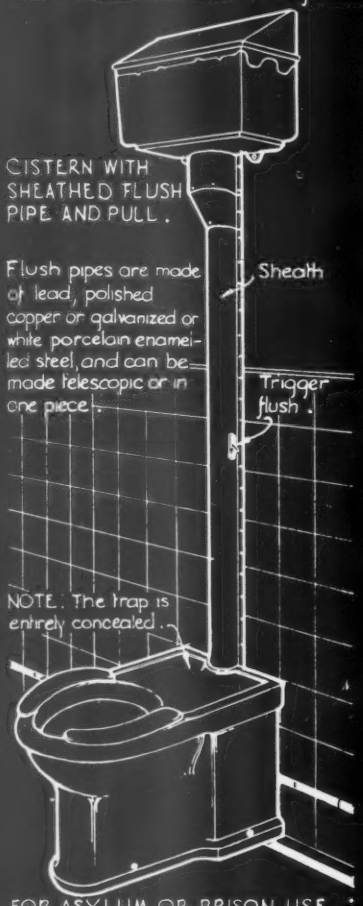
Address : Shell-Mex House, Strand, W.C.2

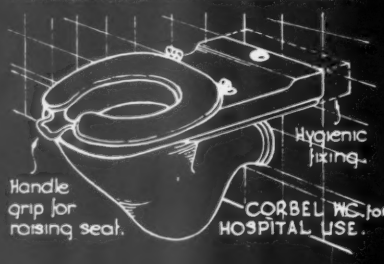
Telephone : Temple Bar 9221

75.

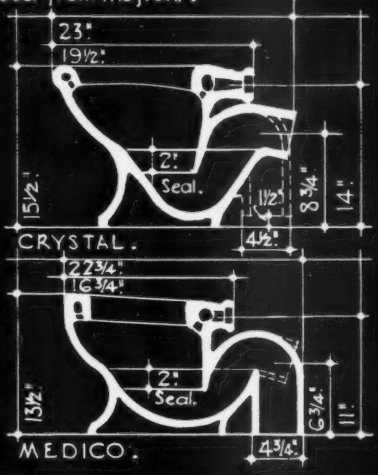
# THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

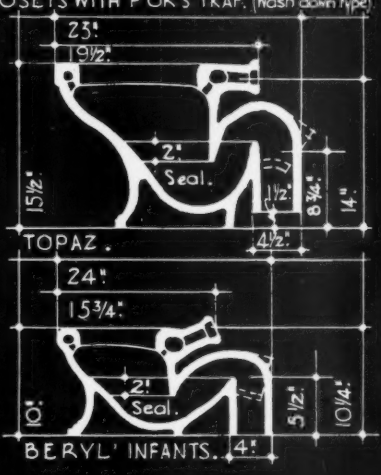
When specifying Water Closets details of traps and vents should be stated. Hand is determined when viewing Water Closet from the front.




TYPES OF FIRECLAY WATER CLOSETS WITH 'P' OR 'S' TRAP. (Wash down type)



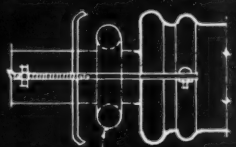



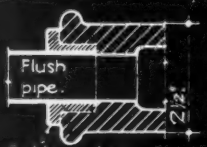




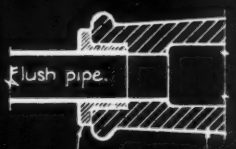


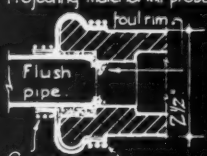

SECTIONS OF TYPES OF ADAPTORS (OR CONES).



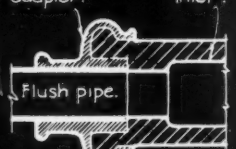





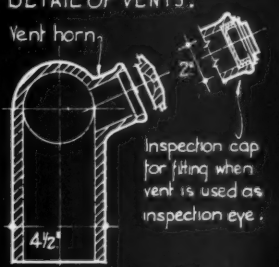



NOTE: these are used to make watertight connection between the flush pipe & W.C. inlet & to ensure flush pipe is centrally fixed in position.



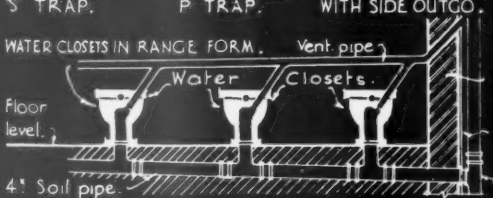

DETAIL OF VENTS.

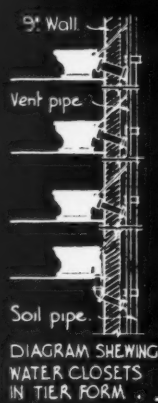


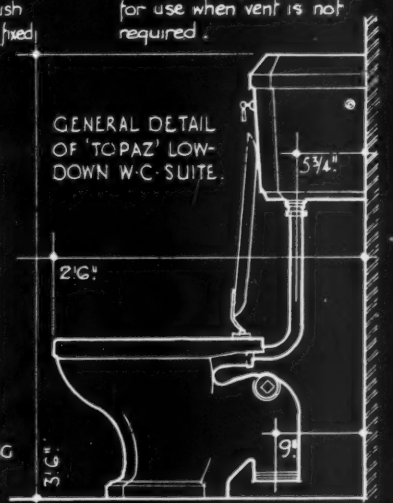

Detail showing Vent Stopper for use when vent is not required.

RIGHT OR LEFT HAND TURNED TRAPS.


NOTE: Any of the W.C.S. shown can have the alternative turned traps for use in compartments of limited projection or where it is desired to take soil pipe through the side wall.




*Information from Associated Clay Industries Ltd.* (W.R. Pickup Ltd. Branch).

INFORMATION SHEET • SANITARY FITTINGS • 4 • FIRECLAY WATER CLOSETS:
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 • Alan E. Bayes.

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

# INFORMATION SHEET

# • 317 •

# SANITARY FITTINGS

Product : Fireclay Water Closets

For Earthenware w.c. Basins see Information Sheet No. 311, issued by Robert Brown and Son, Ltd., Branch, Paisley.

Utility :

Fireclay w.c.'s are extremely durable and are unaffected by climatic variations. They are suitable for all classes of work, and are specially recommended for public, factory, school and outdoor use, or where there is likely to be hard usage.

Types of Closet :

Wash-down closets are made in the following main types :

(a) With straight front.
(b) With cut-away front.
(c) Corbelled out from the wall.
(d) With sloping top.

Weights :

The weight of the pan depends upon the type and design, but usually ranges from 45 to 60 lb. for adult sizes, and from 32 to 45 lb. for juvenile sizes.

Colour :

Closets are finished either :

(a) White enamelled inside and out.
(b) White enamelled inside and buff enamelled outside.

Traps :

Closets are made with S traps for ground floor w.c.'s and P. or Q traps for floors above.

Seal :

Minimum depth for most authorities is 1½ inches and for the City of London 2 inches.

Vents :

Water closets are vented to prevent inter w.c. action when fixed in ranges or tiered.

See Information Sheet on Earthenware Water Closets.

Inspection Arms :

Inspection arms are fitted to the w.c. outlet branch with removable brass caps to facilitate inspection and cleaning.

Water Waste Preventers (Cisterns) :

Cisterns are made in fireclay ; white porcelain enamelled iron ; painted cast iron ; pressed steel or wood, lead lined.

*Note.*—Capacity, type and class of internal fittings should be according to local Water Board regulations. The valveless syphon type is generally used and will pass most water authorities if in accordance with their requirements. A valveless syphon is an above-water fitting in the sense that the water has to be forced above the normal level to begin syphonage. The valve type is sometimes used, but the water authorities usually stipulate that it must be fed through a meter. A valve fitting is an underwater fitting depending on the water pressure or suction to retain the plunger on its seating. When the plunger is raised the contents of the cistern are discharged and a float valve or catch keeps the plunger raised during discharge.

Height of Cisterns :

The recommended average heights are :

6 ft. 9 in. to the underside for high-level cisterns, and
2 ft. 3 in. to the underside for low-level cisterns.

Flush Pipes :

Flush pipes may be of lead ; polished copper ; galvanised or white porcelain ; enamelled steel, made telescopic or in one piece.

Adaptors or Cones :

These are used to make a water-tight connection between the flush pipe and w.c. inlet, and to ensure that the flush pipe is fixed centrally in position.

Seats :

Seats may be of single thickness ; double thickness, or laminated. They are generally made of whitewood ; birch ; mahogany or moulded materials. Anti-V.D. seats are made for use in hospitals, public conveniences, etc. Hardwood seat pads are for use with school and factory w.c.'s or where rough usage of seats may occur.

Prison and Asylum Types :

Special designs of heavy pattern are generally used, the trap being entirely enclosed. The cistern is sometimes fixed outside the w.c. compartment in a cavity wall, but operated inside. If the cistern is fitted inside the compartment the fittings and flush pipe are encased in metal.

Bad Flushing :

Should not always be attributed to the w.c. basin, as this may be caused by bad plumbing, e.g., when the basin is tilted forward, deepening the seal, bad alignment of flush pipe in relation to the inlet of w.c., or excessive use of putty.

Hand of Traps :

The hand of w.c. traps (referring to the direction of the outlet) is always specified when viewing the w.c. from the front.

Information from : Associated Clay Industries, Ltd. (W. R. Pickup, Ltd., Branch)
Address : Horwich, Bolton, Lancs
Telephone : Horwich 271
London Office : 554-8 Grand Buildings, Northumberland Avenue, W.C.2
Telephone : Whitehall 4115

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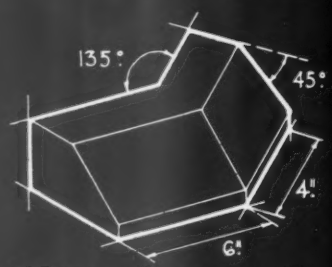
# THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

All specials are made in 8⅞" x 4⅝" x 2⅝" sizes, 8" where not otherwise shown, conform to the R.I.B.A. Standard sizes.

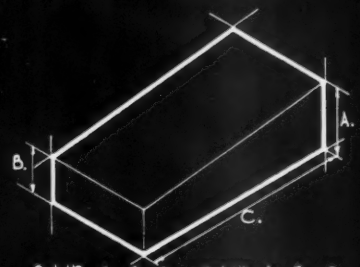
## SCHEDULE OF MOULDED BRICKS.

The numbers given below are the reference Nos. of Midhurst Brick Co. Ltd.



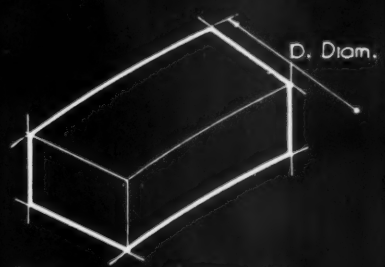

| Catalogue number. | SET BACK. | HAND. |
|---|---|---|
| 425 | 2¼" | R.H. |
| 426 | 2¼" | L.H. |

PLINTH EXTERNAL ANGLE.



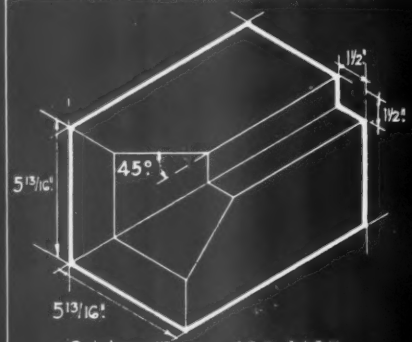

| Cat.No | A. | B. | C. | Cat.No | A. | B. | C. |
|---|---|---|---|---|---|---|---|
| 460. | 3" | 2" | 8⅞" | 464. | 2¾" | 1¾" | 8¾" |
| 461. | 3" | 2¼" | 8⅞" | 465. | 2½" | 2¼" | 9" |
| 462. | 3" | 2½" | 8⅞" | 466. | 2¾" | 2½" | 9½" |
| 463. | 3" | 2¾" | 8⅞" | | | | |

CULVERT STRETCHER.



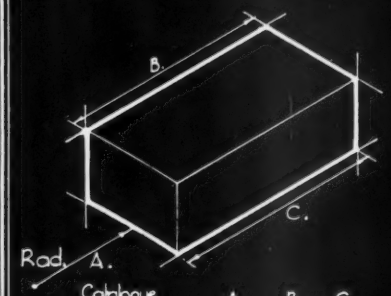

| Catalogue number. | D. | Catalogue number. | D. |
|---|---|---|---|
| 510. | 4'0" Dia. | 513. | 11'0" Dia. |
| 511. | 6'0" Dia. | 514. | 13'0" Dia. |
| 512. | 8'0" Dia. | 515. | 16'0" Dia. |

CHIMNEY (OR WELL) STRETCHER.



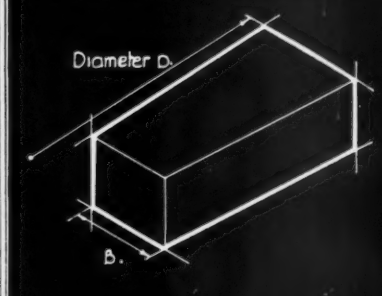

| Catalogue No. | SET BACK. |
|---|---|
| 435. | 2¼" |

CANT MITRE BLOCK.



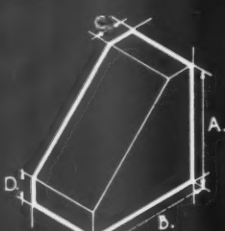

| Catalogue number. | A. | B. | C. |
|---|---|---|---|
| 480. | 4'9" Rad. | 8⅞" | 8⅞" |
| 481. | 3'9" Rad. | 8⅜" | 9⅜" |

CONCAVE HEADER.



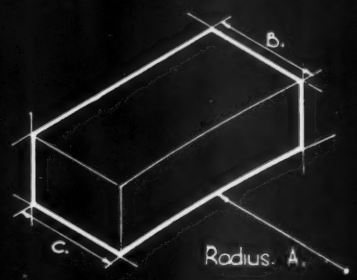

| Catalogue No. | B. | D. |
|---|---|---|
| 520. | 3⅝" | 4'9" Dia. |

CONVEX HEADER.



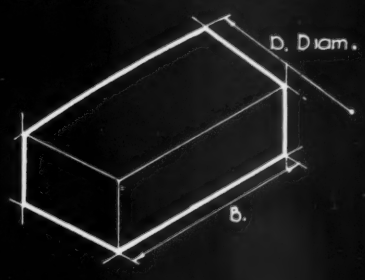

| Catalogue number. | A. | B. | C. | D. |
|---|---|---|---|---|
| 440. | 5" | 5" | 1½" | 1½" |
| 441. | 5" | 6½" | 1" | 2⅝" |

CILL BRICK.



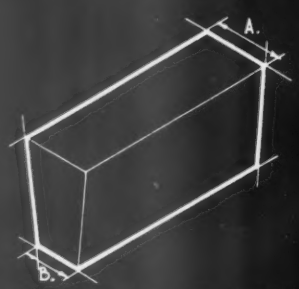

| Catalogue number. | A. | B. | C. |
|---|---|---|---|
| 490. | 5'2" Rad. | 4⅝" | 4⅝" |

CONCAVE STRETCHER.



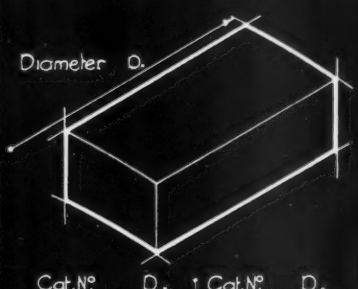

| Catalogue number. | B. | D. |
|---|---|---|
| 530. | 8 3/16" | 4'9" Dia. |

CONVEX STRETCHER.



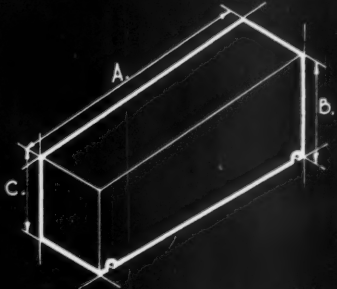

| Cat. No | A. | B. | Cat. No | A. | B. |
|---|---|---|---|---|---|
| 450. | 3" | 2" | 452. | 3" | 2½" |
| 451. | 3" | 2¼" | 453. | 3" | 2¾" |

CULVERT HEADER.




| Cat.No | D. | Cat.No | D. |
|---|---|---|---|
| 500. | 4'0" Dia. | 503. | 11'0" Dia. |
| 501. | 6'0" Dia. | 504. | 13'0" Dia. |
| 502. | 8'0" Dia. | 505. | 16'0" Dia. |

CHIMNEY (OR WELL) HEADER.




| Catalogue number. | A. | B. | C. |
|---|---|---|---|
| 550. | 10½" | 4 5/16" | 3 5/16" |

COPING BRICK.

*Information from the Midhurst Brick Co. Ltd.*

INFORMATION SHEET • CALCIUM-SILICATE BRICKS • No 4 • MIDHURST WHITES

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

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

# INFORMATION SHEET

# • 318 •

# CALCIUM SILICATE BRICKS

Type of Product : Midhurst Whites

This is the fourth of a series of Sheets setting out the standard sizes and shapes of the Midhurst White moulded bricks.

Standard Size :

Midhurst Whites are made to conform with the R.I.B.A. standard sizes and are $8\frac{7}{8}$ in. × $4\frac{5}{16}$ in. × $2\frac{5}{8}$ in.

Special Sizes :

The standard size of brick can be varied to give any required thickness, and the method of manufacture permits of the economical production of special sizes and shapes to specification.

Method of Manufacture :

See notes on Information Sheet No. 309

Strength:

See notes and test results given in Information Sheet No. 312.

Laying, Porosity and Chemical Reactions:

See notes on Information Sheet No. 314.

Jointing :

Midhurst Whites being, as the name implies, of a white surface, the effect of the joint used on the general appearance is practically the reverse of the effect obtained with clay bricks. Where in clay brick the lighter the joint the greater the contrast with the brick, with Midhurst Whites the whiter the joint the less will be its effect.

For this reason, where an all-white surface is required it is usual to point the joints in white cement. When this is done the effect is of a sheer white surface in which the joints are almost unnoticeable except at a short distance.

Correspondingly the effect obtained by using a grey, dark, or recessed joint is increased and the importance of selecting the appropriate jointing material and type of joint is emphasised.

Previous Sheets :

Previous Sheets of this series are Nos. 306, 309, 312 and 314.

Manufacturers : The Midhurst Brick Co., Ltd.

Address : Windsor House, Victoria Street, S.W.1

Telephone : Victoria 5551-2

Works : Midhurst and Cocking, Sussex

## Schedule of Moulded Bricks

| | | | Radius |
|---|---|---|---|
| 100 | Single Bullnose | | $1\frac{1}{8}$″ |
| 101 | | | $2\frac{1}{4}$″ |
| 105 | | | $2\frac{1}{4}$″ |
| 110 | Bullnose Stop Single | Left hand | $1\frac{1}{8}$″ |
| 111 | | Right hand | $1\frac{1}{8}$″ |
| 112 | | Left hand | $2\frac{1}{4}$″ |
| 113 | | Right hand | $2\frac{1}{4}$″ |
| 120 | Bullnose Header Single | | $1\frac{1}{8}$″ |
| 121 | | | $2\frac{1}{4}$″ |
| 125 | Bullnose Stretcher Single | | $1\frac{1}{8}$″ |
| 126 | | | $2\frac{1}{4}$″ |
| 130 | Double Bullnose | | $1\frac{1}{8}$″ |
| 131 | | | $2\frac{1}{4}$″ |
| 132 | | | $1\frac{1}{8}$″ |
| 135 | Double Bullnose Stop | | $1\frac{1}{8}$″ |
| 136 | | | $2\frac{1}{4}$″ |
| 140 | Bullnose on End (Cownose) | | $2\frac{1}{4}$″ |
| 145 | Cownose Stop | | $2\frac{1}{4}$″ |
| 150 | Double Headed Bullnose | | $1\frac{1}{8}$″ |
| 151 | | | $2\frac{1}{4}$″ |
| 155 | Double Stretcher Bullnose | | $1\frac{1}{8}$″ |
| 156 | | | $2\frac{1}{4}$″ |
| 160 | Bullnose Internal Return on end | Right hand | $1\frac{1}{8}$″ |
| 161 | | Left hand | $1\frac{1}{8}$″ |
| 162 | | Right hand | $2\frac{1}{4}$″ |
| 163 | | Left hand | $2\frac{1}{4}$″ |
| 170 | Bullnose Internal Return on edge | Right hand | $1\frac{1}{8}$″ |
| 171 | | Left hand | $1\frac{1}{8}$″ |
| 172 | | Right hand | $2\frac{1}{4}$″ |
| 173 | | Left hand | $2\frac{1}{4}$″ |
| 180 | Bullnose Internal Return on flat | Left hand | $1\frac{1}{8}$″ |
| 181 | | Right hand | $1\frac{1}{8}$″ |
| 182 | | Left hand | $2\frac{1}{4}$″ |
| 183 | | Right hand | $2\frac{1}{4}$″ |
| 190 | Bullnose External Return on flat | Right hand | $1\frac{1}{8}$″ |
| 191 | | Left hand | $1\frac{1}{8}$″ |
| 192 | | Right hand | $2\frac{1}{4}$″ |
| 193 | | Left hand | $2\frac{1}{4}$″ |
| 200 | Bullnose External Return on edge | Left hand | $1\frac{1}{8}$″ |
| 201 | | Right hand | $1\frac{1}{8}$″ |
| 202 | | Left hand | $2\frac{1}{4}$″ |
| 203 | | Right hand | $2\frac{1}{4}$″ |
| 210 | Stop end to Double Bullnose | | $1\frac{1}{8}$″ |
| 215 | Stop end to Standard Double Bullnose | | $2\frac{1}{4}$″ |
| 220 | Cill Brick | | $1\frac{1}{8}$″ |
| 225 | Bullnose Mitre | Left hand | $2\frac{1}{4}$″ |
| 226 | | Right hand | $2\frac{1}{4}$″ |
| 227 | | Left hand | $1\frac{1}{8}$″ |
| 228 | | Right hand | $1\frac{1}{8}$″ |
| 235 | Bullnose Mitre Block | | $2\frac{1}{4}$″ |
| 240 | Bullnose Mitre Block on edge | Left hand | $2\frac{1}{4}$″ |
| 241 | | Right hand | $2\frac{1}{4}$″ |
| 242 | | Left hand | $1\frac{1}{8}$″ |
| 243 | | Right hand | $1\frac{1}{8}$″ |
| 250 | Pistol Brick (Circular Corner) | | |

| | | Angle |
|---|---|---|
| 260 | Squint Brick | 30° |
| 261 | | 45° |
| 262 | | 45° |
| 263 | | 60° |
| 264 | | 60° |
| 265 | | 70° |
| 270 | Angle Brick | 113° |
| 271 | | 113° |
| 272 | | 135° |
| 273 | | 135° |
| 274 | | 153° |
| 275 | | 153° |

| | | | Angle |
|---|---|---|---|
| 280 | Angle Brick | | 135° |
| 290 | Birdsmouth | | 130° |
| 291 | | | 135° |
| 292 | | | 165° |
| 300 | Header Splay | | $8\frac{7}{8}$″-$8\frac{1}{2}$″ |
| 301 | | | $9\frac{1}{4}$″-$8\frac{1}{4}$″ |
| 302 | | | $8\frac{5}{8}$″-$7\frac{5}{8}$″ |
| 303 | | | $8\frac{7}{8}$″-$8\frac{3}{8}$″ |
| 304 | | | $8\frac{7}{8}$″-$8\frac{1}{8}$″ |
| 305 | | | 10″-9″ |
| 350 | Cant Brick | | |
| 360 | Double Cant | | |
| 365 | Cant Stop | Right hand | |
| 366 | | Left hand | |
| 367 | | Right hand | |
| 368 | | Left hand | |
| 375 | Plinth Header | | |
| 385 | Plinth Stretcher | | |
| 395 | Plinth Internal Return | Right hand | |
| 396 | | Left hand | |
| 400 | Plinth Internal Return | Right hand | |
| 401 | | Left hand | |
| 405 | Plinth External Return | Right hand | |
| 406 | | Left hand | |
| 415 | Plinth Internal Angle | Right hand | |
| 416 | | Left hand | |
| 425 | Plinth External Angle | Right hand | |
| 426 | | Left hand | |
| 435 | Cant Mitre Block | | |
| 440 | Cill Brick | | |
| 450 | Culvert Header | | 3″-2″ |
| 451 | | | 3″-$2\frac{1}{4}$″ |
| 452 | | | 3″-$2\frac{1}{2}$″ |
| 453 | | | 3″-$2\frac{3}{4}$″ |
| 460 | Culvert Stretcher | | 3″-2″ |
| 461 | | | 3″-$2\frac{1}{4}$″ |
| 462 | | | 3″-$2\frac{1}{2}$″ |
| 463 | | | 3″-$2\frac{3}{4}$″ |
| 465 | | | $2\frac{1}{2}$″-$2\frac{1}{4}$″ |
| 466 | | | $2\frac{3}{4}$″-$2\frac{1}{2}$″ |

| | | Radius |
|---|---|---|
| 480 | Concave Header | 4′ 9″ |
| 481 | | 3′ 9″ |
| 490 | Concave Stretcher | 5′ 2″ |

| | | Diameter |
|---|---|---|
| 500 | Chimney (or Well Header) | 4′ 0″ |
| 501 | | 6′ 0″ |
| 502 | | 8′ 0″ |
| 503 | | 11′ 0″ |
| 504 | | 13′ 0″ |
| 505 | | 16′ 0″ |
| 510 | Chimney (or Well Stretcher) | 4′ 0″ |
| 511 | | 6′ 0″ |
| 512 | | 8′ 0″ |
| 513 | | 11′ 0″ |
| 514 | | 13′ 0″ |
| 515 | | 16′ 0″ |
| 520 | Convex Header | 4′ 9″ |
| 530 | Convex Stretcher | 4′ 9″ |
| 550 | Coping Brick | |
| 560 | Arch Brick | |
| 600 | Special Purpose Bricks | |
| 650 | Air Brick | |
| 700 | Key Brick | |