

# THE ARCHITECTS' JOURNAL

DETROIT



## Standard contents

every issue does not necessarily contain all these contents but they are the regular features which continually recur

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Wanted and Vacant

★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	Sloane 1601/3158
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb	Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
JRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 14, Great James' Street, W.C.2.	Chancery 7718
LDA	Lead Development Association. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
LSPC	Lead Sheet and Pipe Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary: Trevor Dannatt, 6, Fitzroy Square, W.1.	Euston 7171
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service. 8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1.	Welbeck 0619
NCBMP	National Council of Building Material Producers. 10 Princes Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NSA	National Sawmilling Association. 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5051
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford	Oxford 47988

No. 3105]

[Vol. 120

THE ARCHITECTURAL PRESS

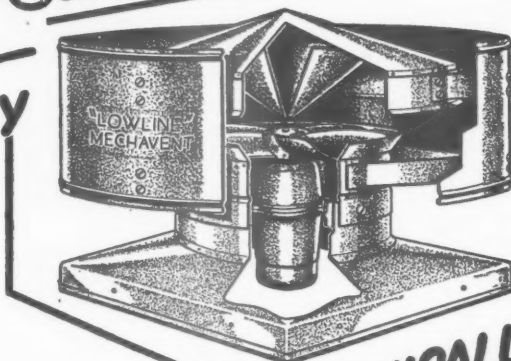
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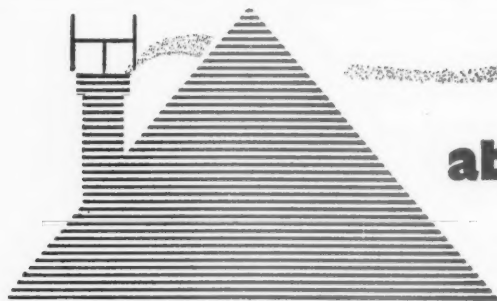
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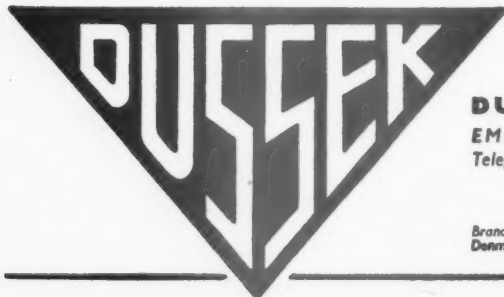
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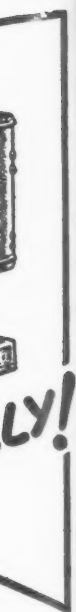
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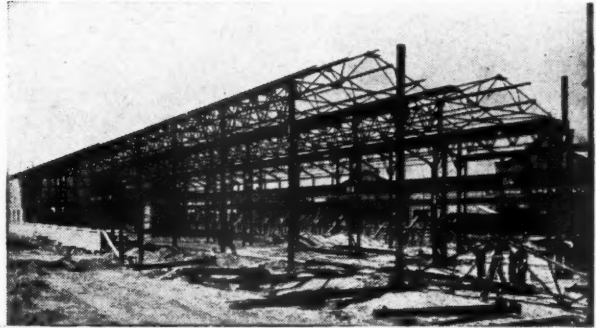
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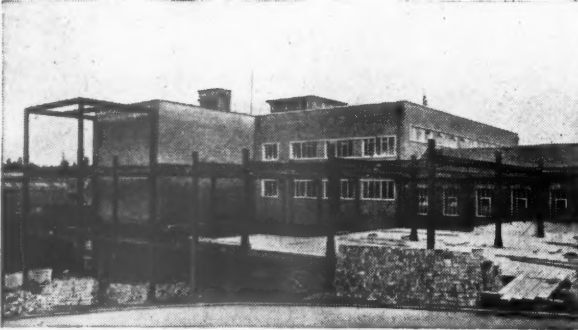
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# Single or...

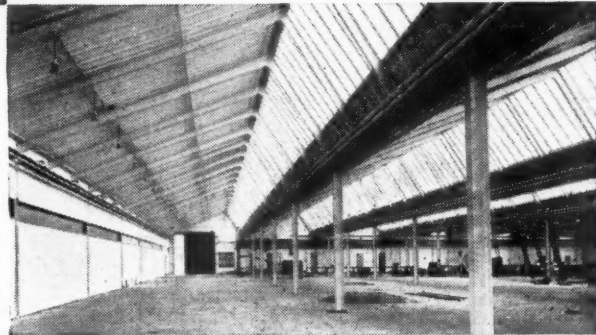


*Stores building in course of erection  
for National Gas & Oil Engines Limited.*



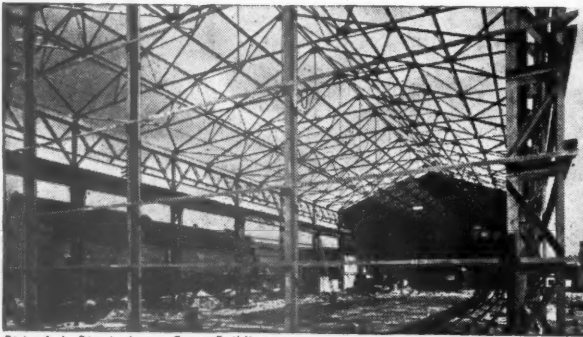
*Extension to Factory—  
Messrs. F. E. Fox & Son Limited, Batley. Biscuit Manufacturers.  
Architects: Smith & Curry, Heckmondwike.*

# Multi-storey



*Interior view of the Factory at  
Barnsley, Messrs. Brook Motors Ltd.*

# Welded or...



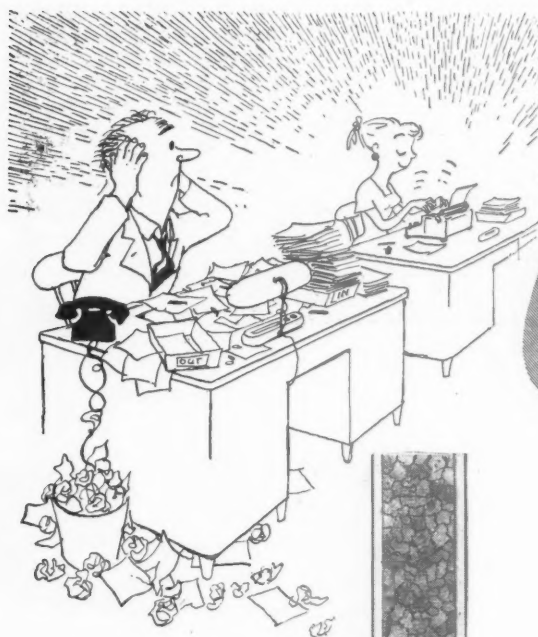
*Birlec Ltd., Birmingham. Stores Building.*

# Riveted

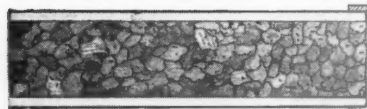
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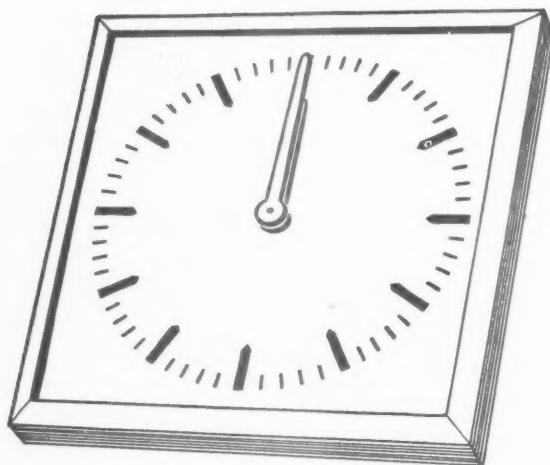
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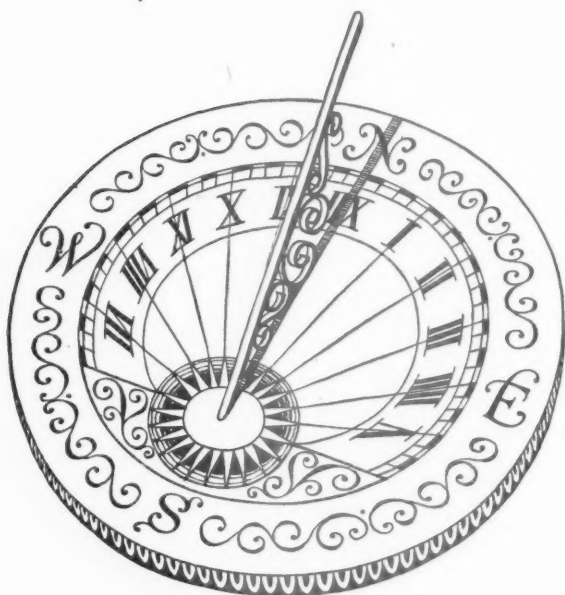
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### ***They shall inherit***

*Here in this squalid world is no privacy, no dignity, no hope; here  
children play between dank walls beneath grimy sky; here men  
and women make homes in hovels, battle with the dirt of decades.*

*But soon this gloomy heritage will be a memory. Soon children like  
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for today we build for a healthier and happier generation.*

*Bernard Sunley and Sons are proud  
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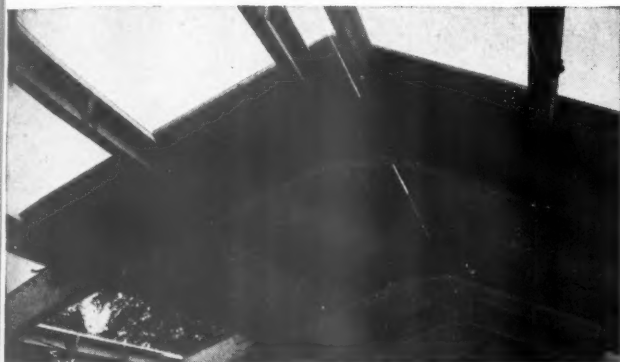
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$\frac{3}{4}$ " PLIMBERITE boards were supported on purlins at 3' 2" centres and covered with mineralised roofing felt. This use of PLIMBERITE provides a solid, permanent roof quickly constructed with minimum labour, the 8' x 4' boards being laid in position and bolted. Electrical fittings are easily fixed with ordinary screws.



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from floor to ceiling, from wall to wall

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Specify and use it  
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# The Advantages of PHILPLUG Inserts

PRE-CAST IN CONCRETE, ARTIFICIAL STONE, TERRAZZO Etc.

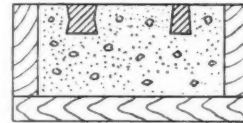
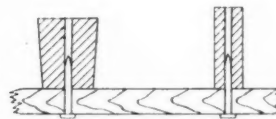
**for fixing metal windows, hinges  
switches, heating points, etc. etc.**

The use of PHILPLUG INSERTS saves time, labour and money, with no delay in making holes, the Inserts being pre-cast at pre-determined points of fixing. They are made from asbestos fibres and cementitious powders, achieve a natural bond with concrete, will not shrink, and protect screws and nails from heat, damp and rust. Available in many shapes and sizes as fixing points for metal windows, door frames, skirtings, picture rails, hinges, switches, heating points, ceiling and wall boarding, also for fixings in concrete, lamp standards, posts, etc. PHILPLUG INSERTS are competitively priced and offer many advantages over the use of wood blocks.

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Inserts are provided with  $\frac{1}{8}$ " diameter holes for fixing into moulds. Treat as hard wood blocks and pierce with bradawl or drill any part of the screwing face to provide entry for screw.

Fixed to bottom  
of mould with nail  
or screw.

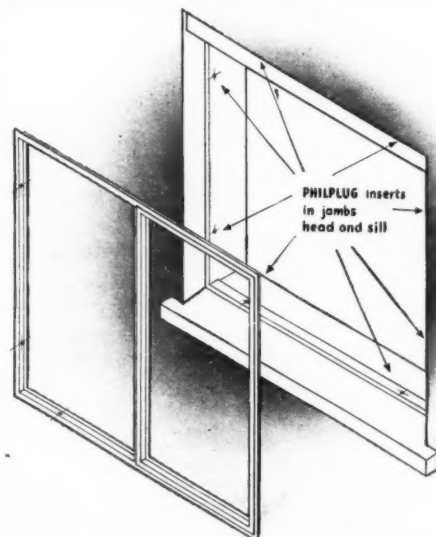


Pressed into concrete  
in top of  
mould.

## PHILPLUG INSERTS

Available in various shapes and sizes to cover any application.

- Are unaffected by heat or by damp.
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- Give suitable degree of tolerance for fixing.
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- Can be specified for use by manufacturers of all types of pre-cast work.



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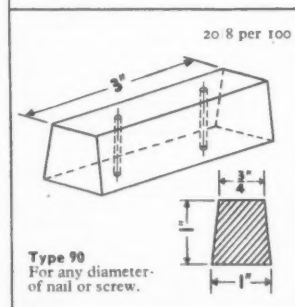
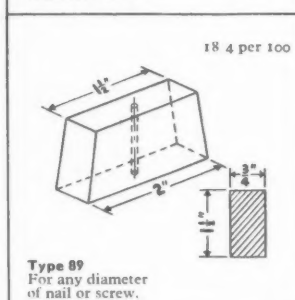
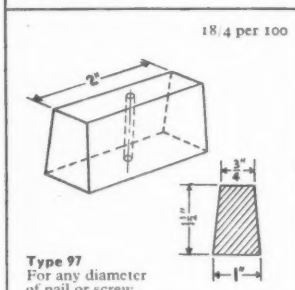
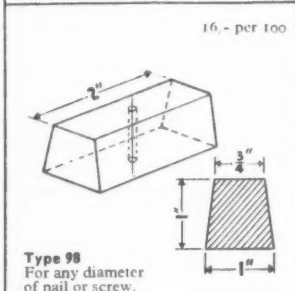
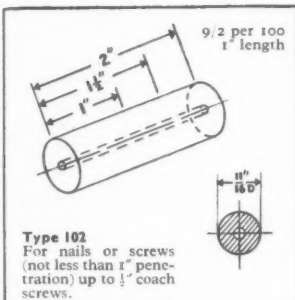
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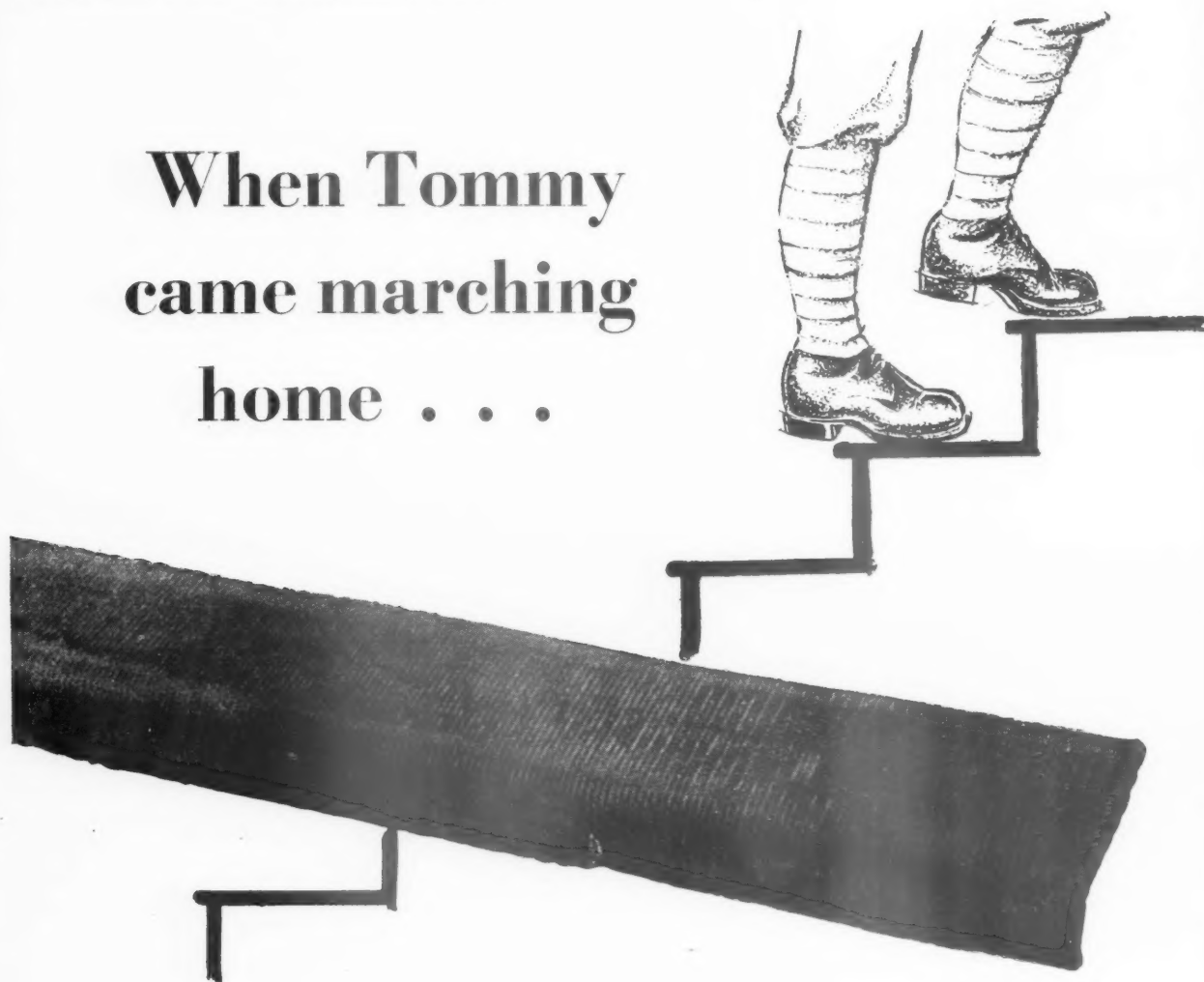
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In 1918, when the students returned to the University Union in Manchester, they might have noticed that the stairway had been fitted with Ferodo

Stairtreads. At that time there were between 500-700 students, but as the years went by the number of feet tramping up and down the stairway grew, until in 1953 the student body had reached the 6,500 mark.

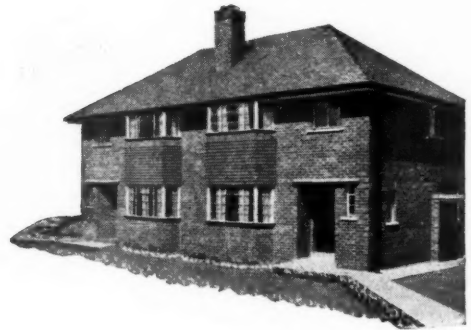
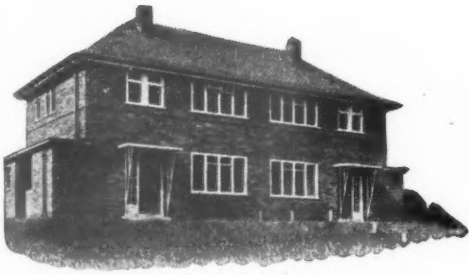
Recently it was decided—after 36 years of continuous traffic—to renew the Ferodo Stairtreads. Today the University Union of Manchester have, of course, a wide range of types and colours from which to choose, but the same Ferodo tradition remains . . . a guarantee of long, safe service.

*This is a photograph of one of the actual Stairtreads which was in continuous use at the University Union Building in Manchester for 36 years.*

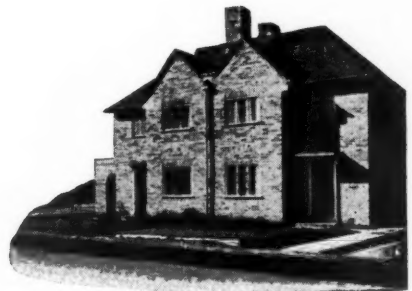
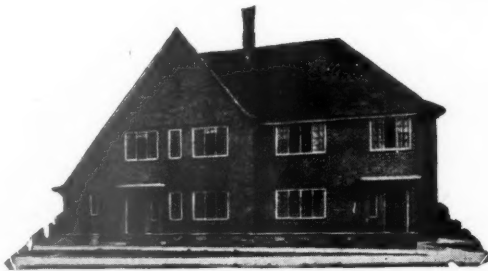
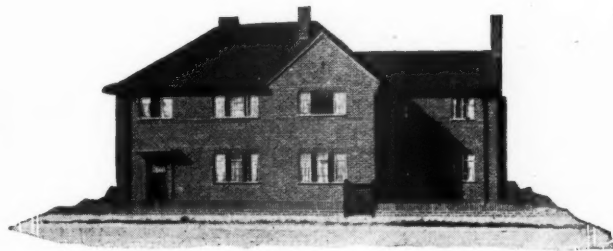
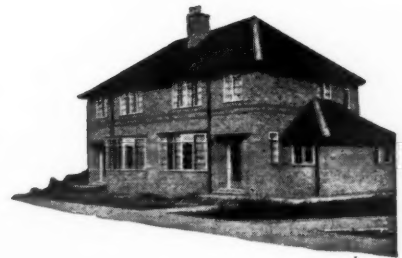


## **FERODO** *Non-slip Stairtreads*

FERODO LIMITED · CHAPEL-EN-LE-FRITH · A Member of the Turner & Newall Organisation

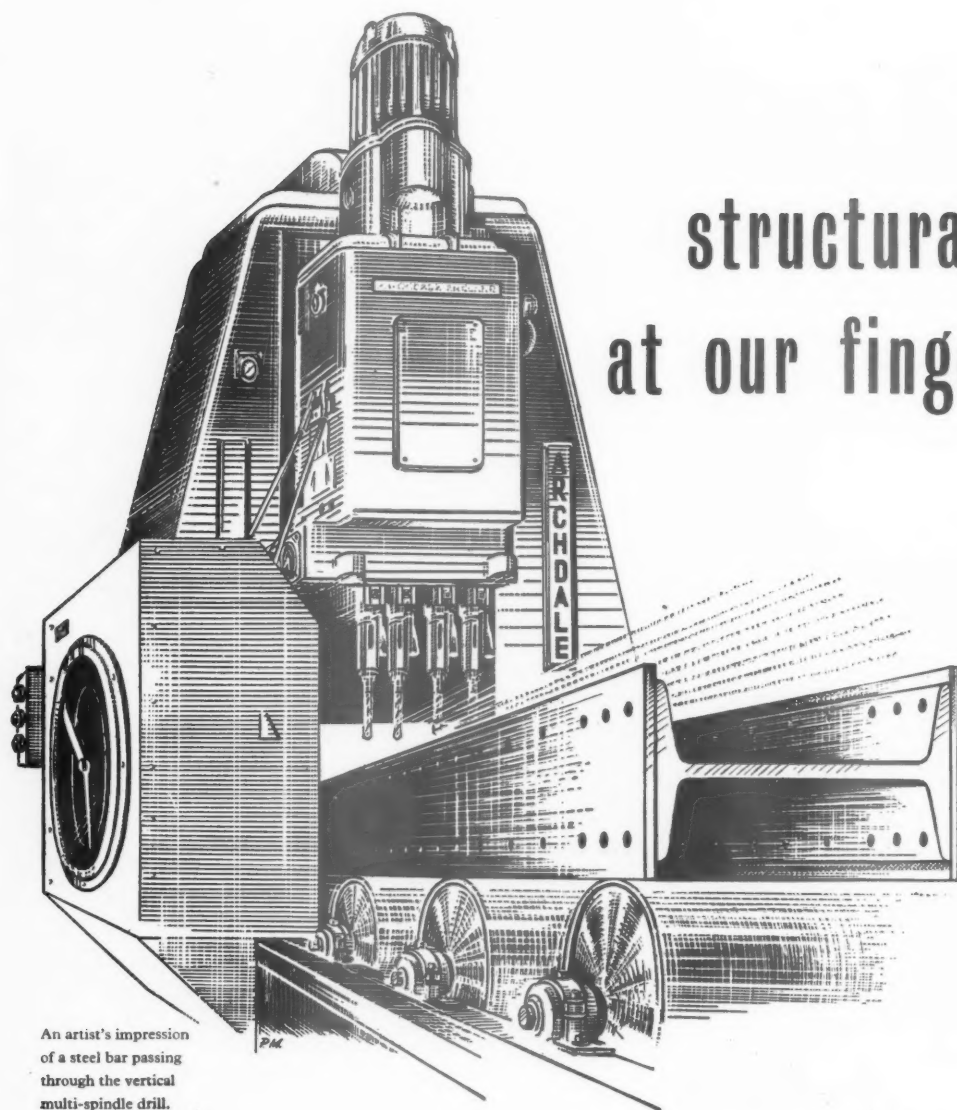


# *Avoid Monotony in Housing*



*Build in*  
**BRICK**

*Issued by the National Federation of Clay Industries, London, W.C.1*



An artist's impression of a steel bar passing through the vertical multi-spindle drill.

## structural steel at our finger tips

The operator literally 'pushes a button' to fabricate steel girders in Boulton & Paul's new plant at Norwich. Gone are the days of crane-handling, of templates, of cutting and drilling the bars separately. Today, batches of bars flow evenly and quickly on the conveyors to be worked to fine limits by the high speed cold-saws and multiple drills—all by the touch of a finger.

WHEN THE STRUCTURAL STEEL IS BY

**BOULTON  
AND PAUL**

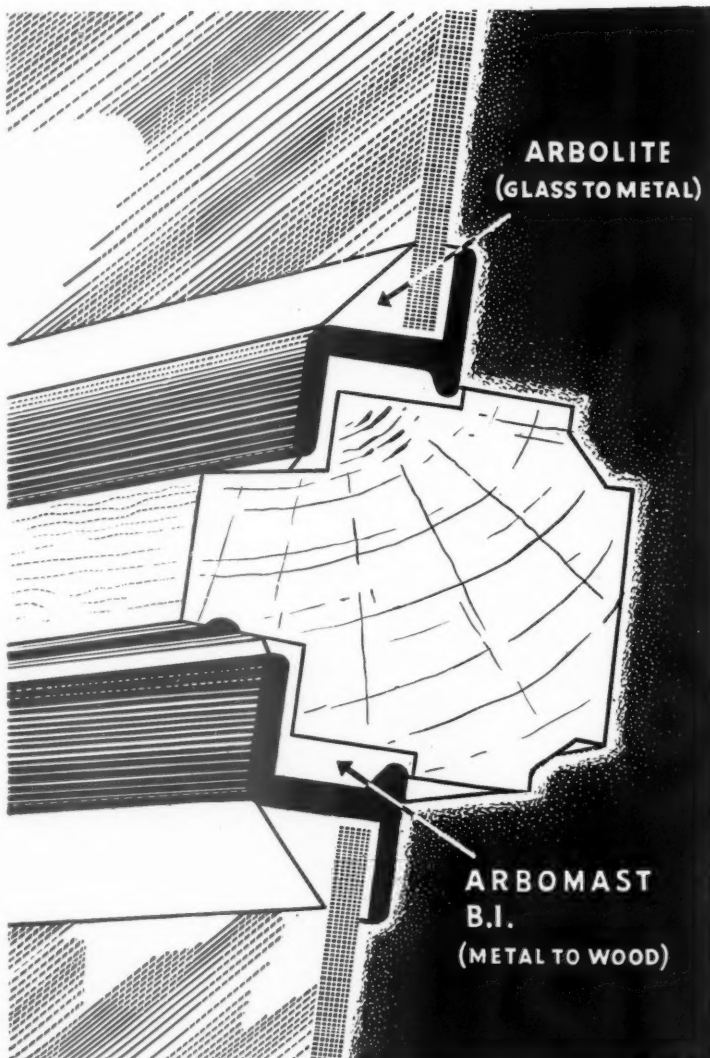
IT'S A FIRST CLASS JOB

NORWICH LONDON BIRMINGHAM



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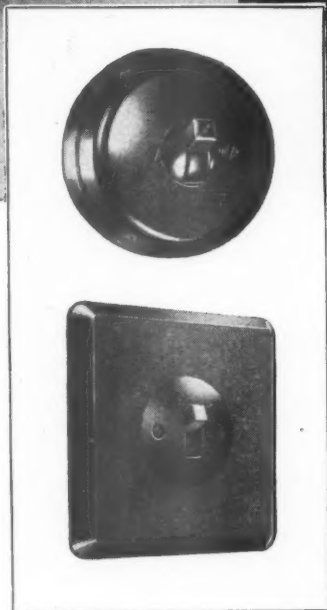
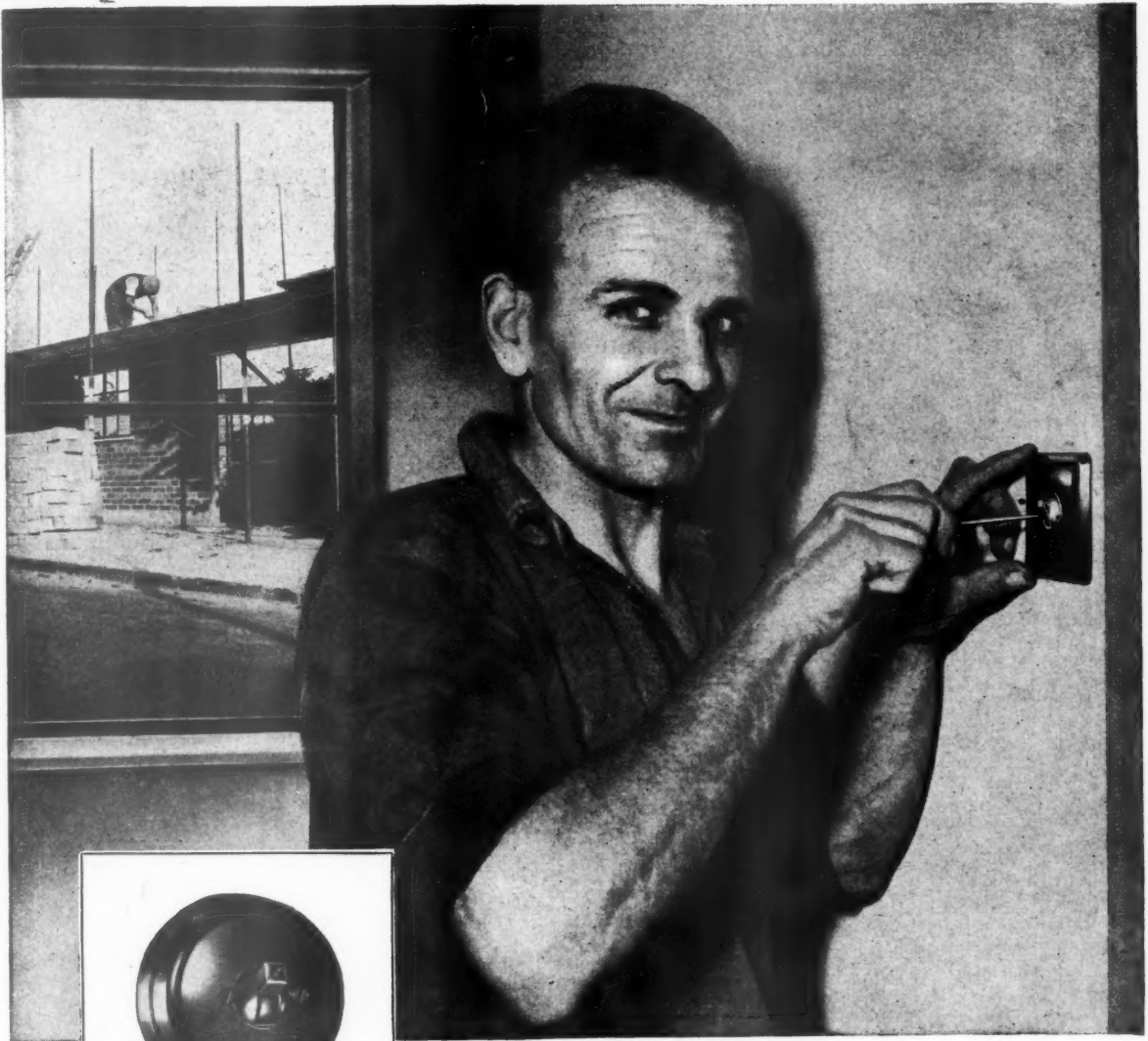
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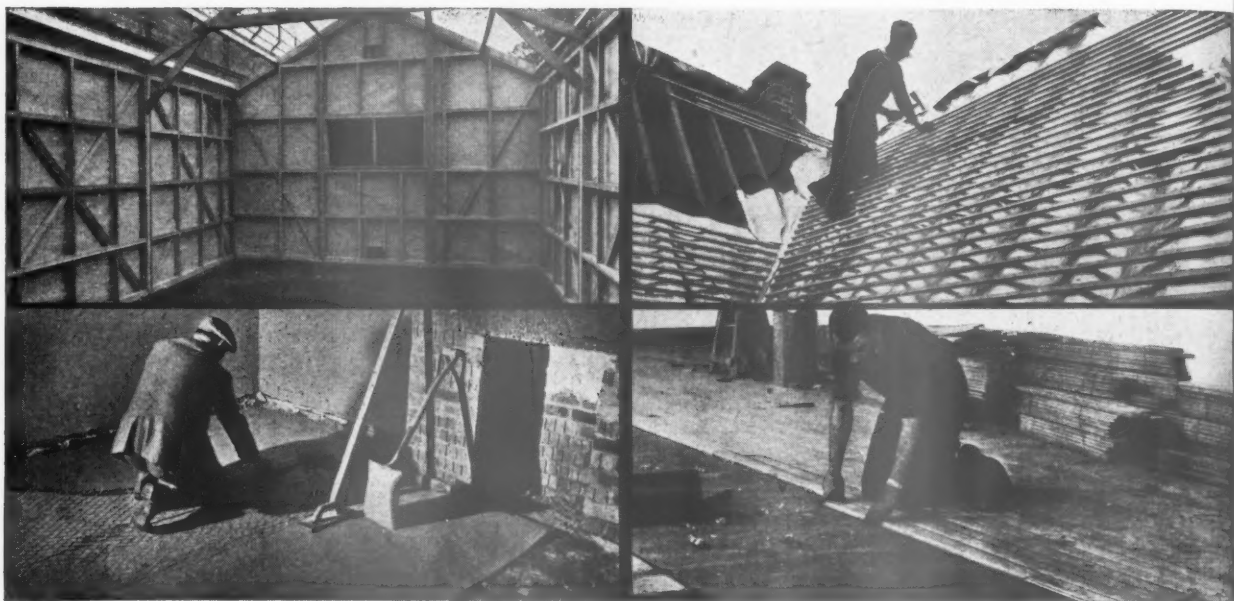
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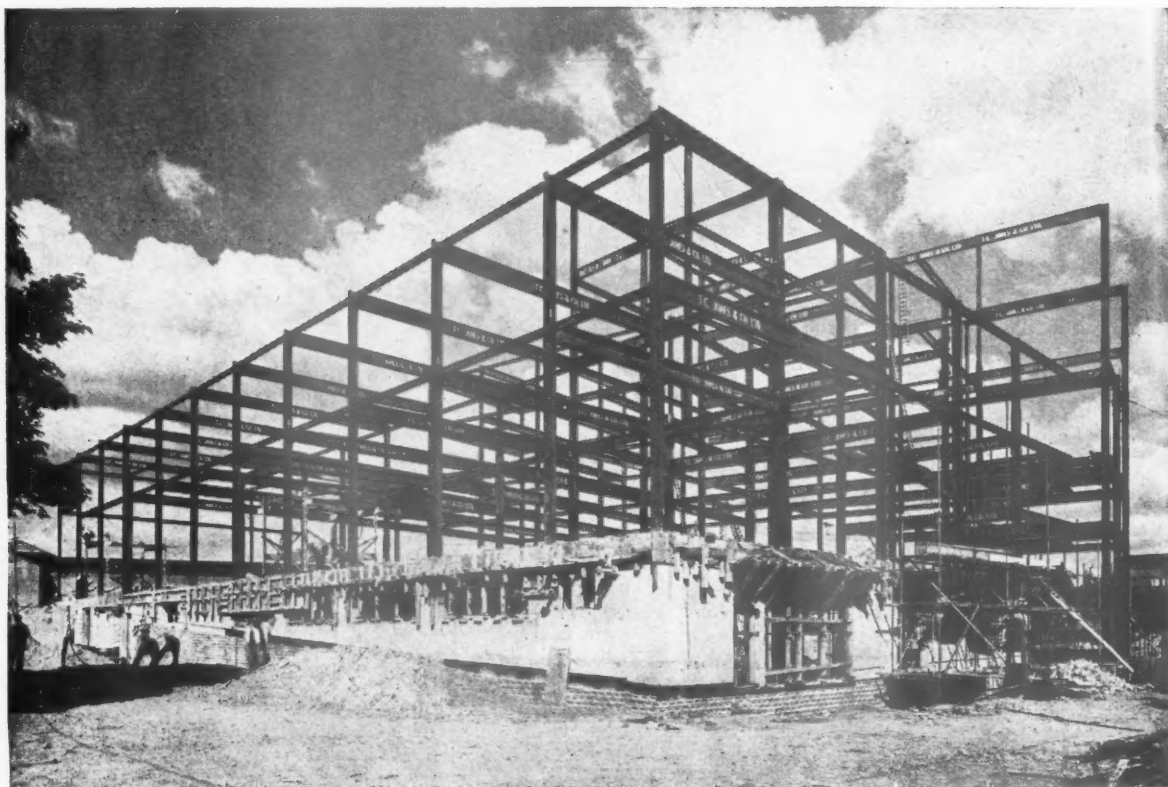


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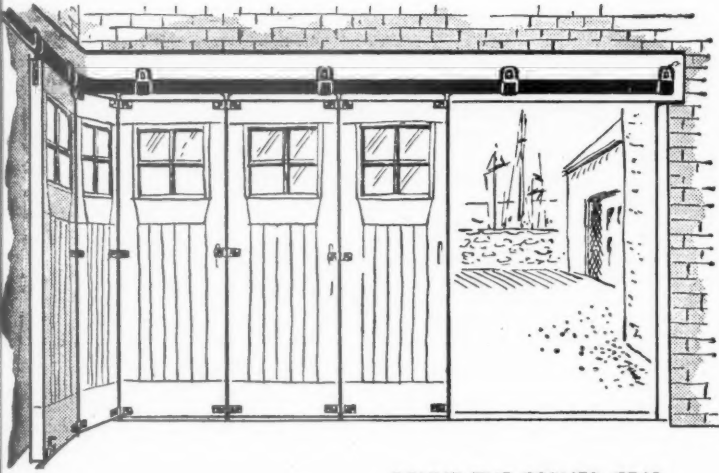
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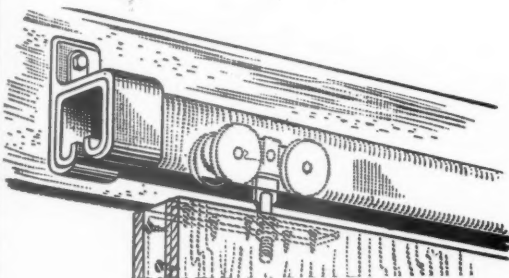
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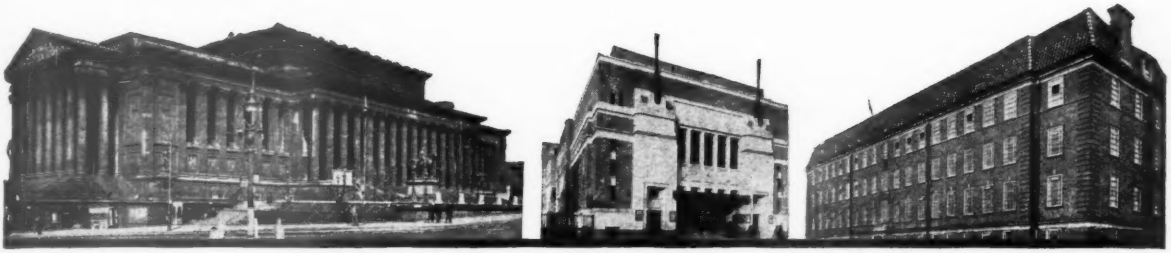
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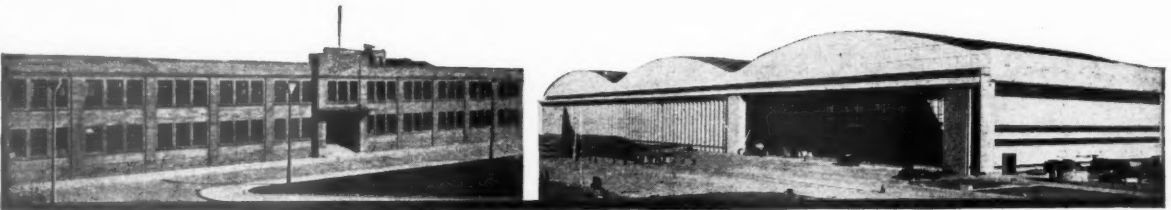
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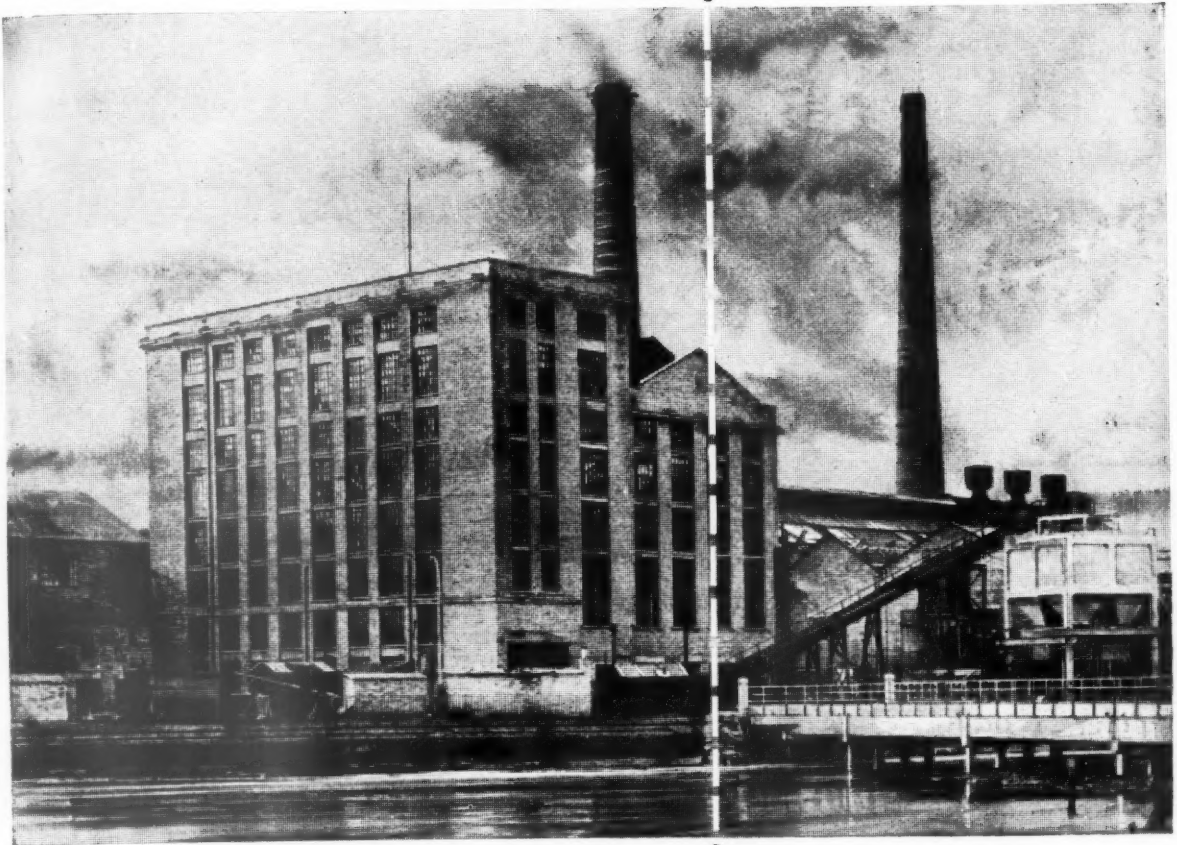
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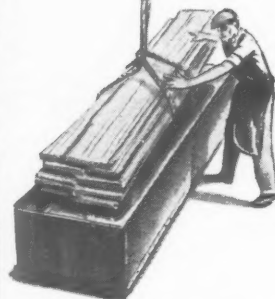
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8

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## *what is the menace?*

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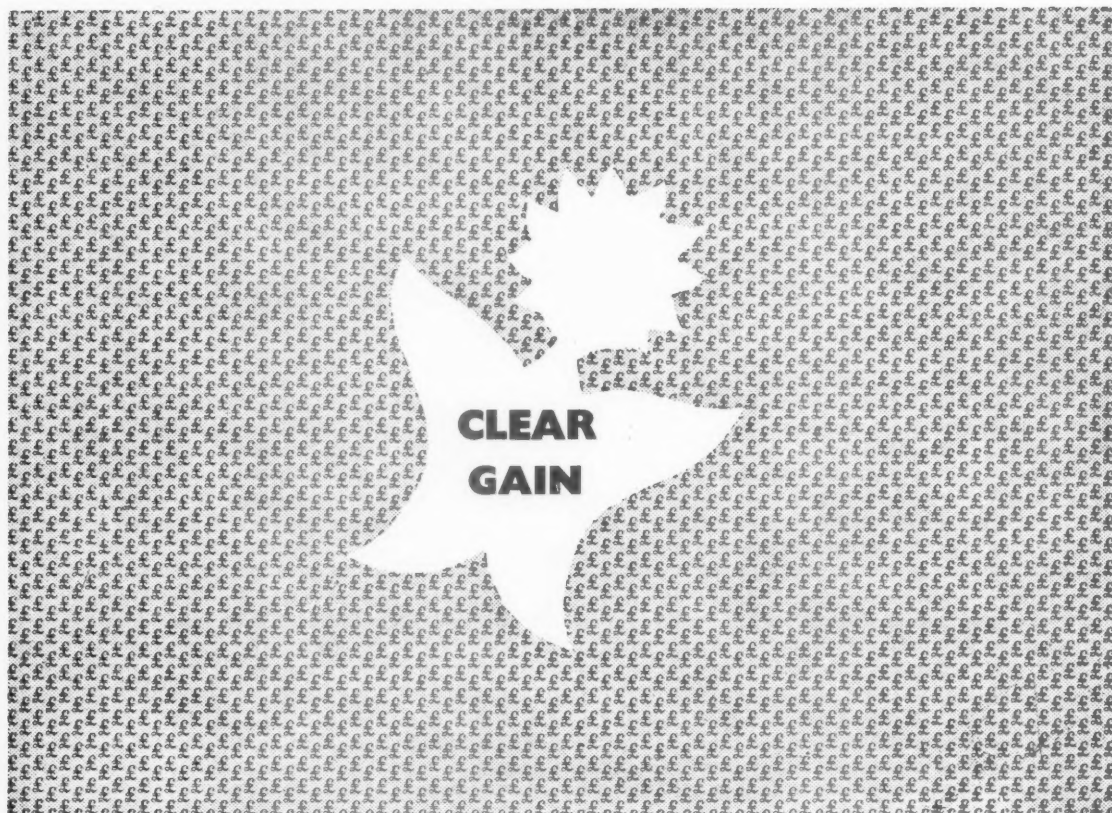


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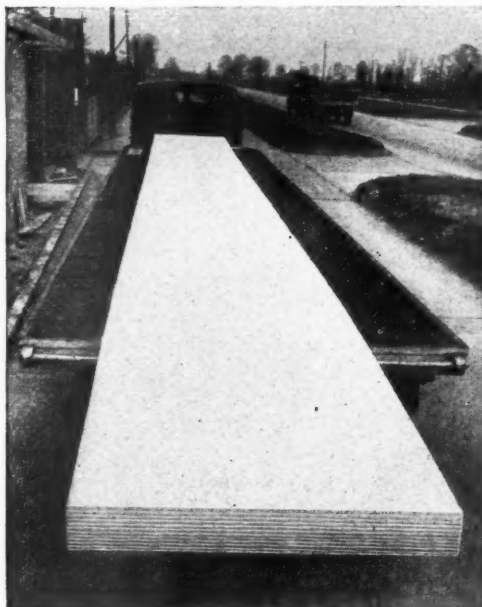
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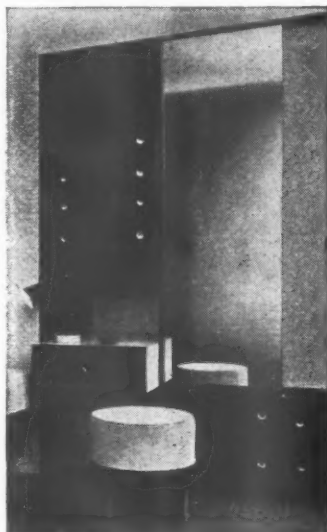
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The contents of this second volume are classified under the same headings as those in Volume I (WINDOWS, DOORS, STAIRCASES, WALLS AND PARTITIONS, ROOFS AND CEILINGS, BALCONIES, COVERED WAYS AND CANOPIES, HEATING AND FURNITURE AND FITTINGS) and a new heading, LIGHTING, has been added. The details appearing under those headings have, as in the case of Volume I, been selected from the series of Working Details now regularly appearing in the *Architects' Journal*; they all represent recent work of leading architects and show the actual details used in the solution of a wide variety of contemporary design problems.

Future volumes will contain further examples under each of the present headings, and from time to time additional subjects will be introduced, so that the architect will be provided with a gradually accumulating and always up-to-date reference library of useful



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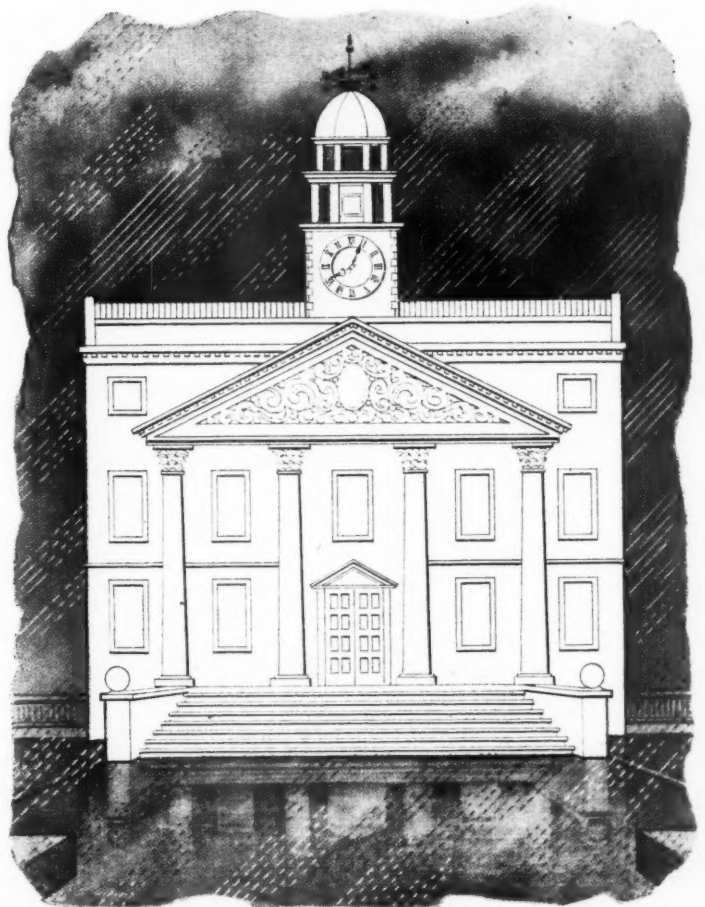
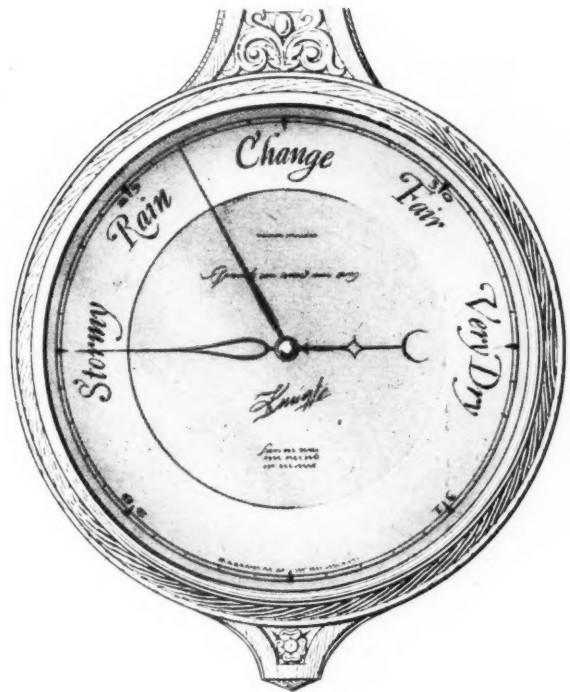
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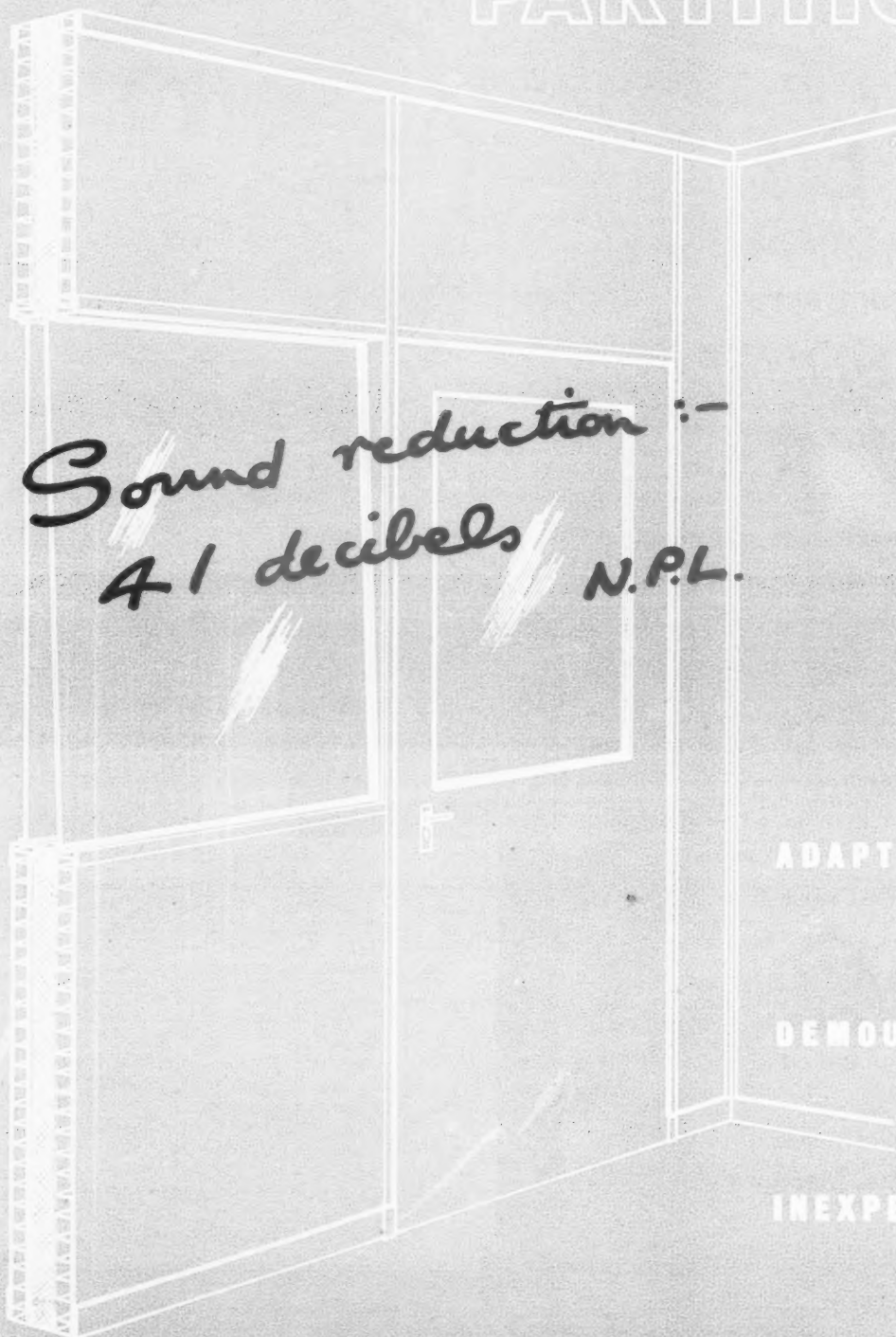


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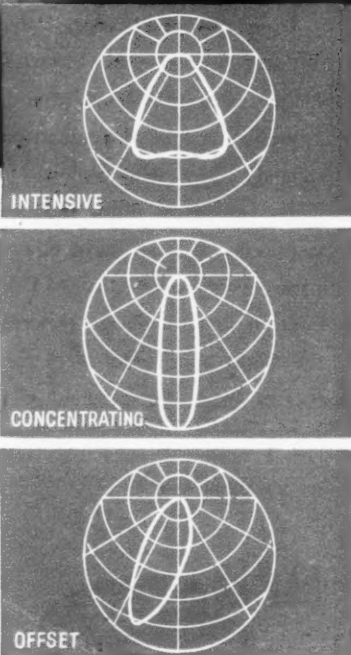


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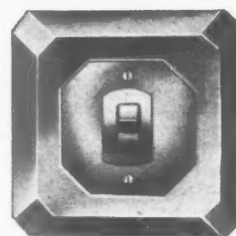
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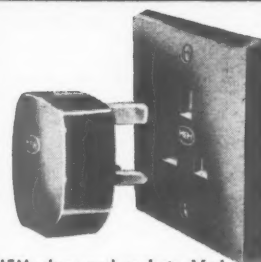
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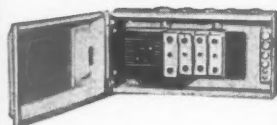
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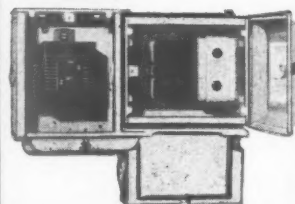
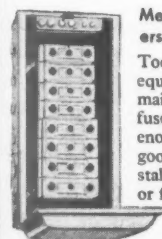


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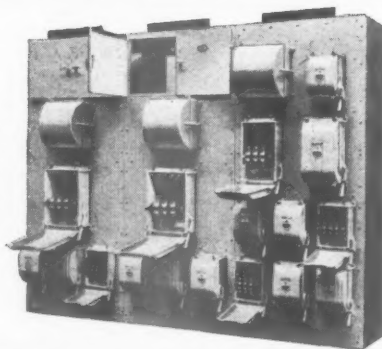
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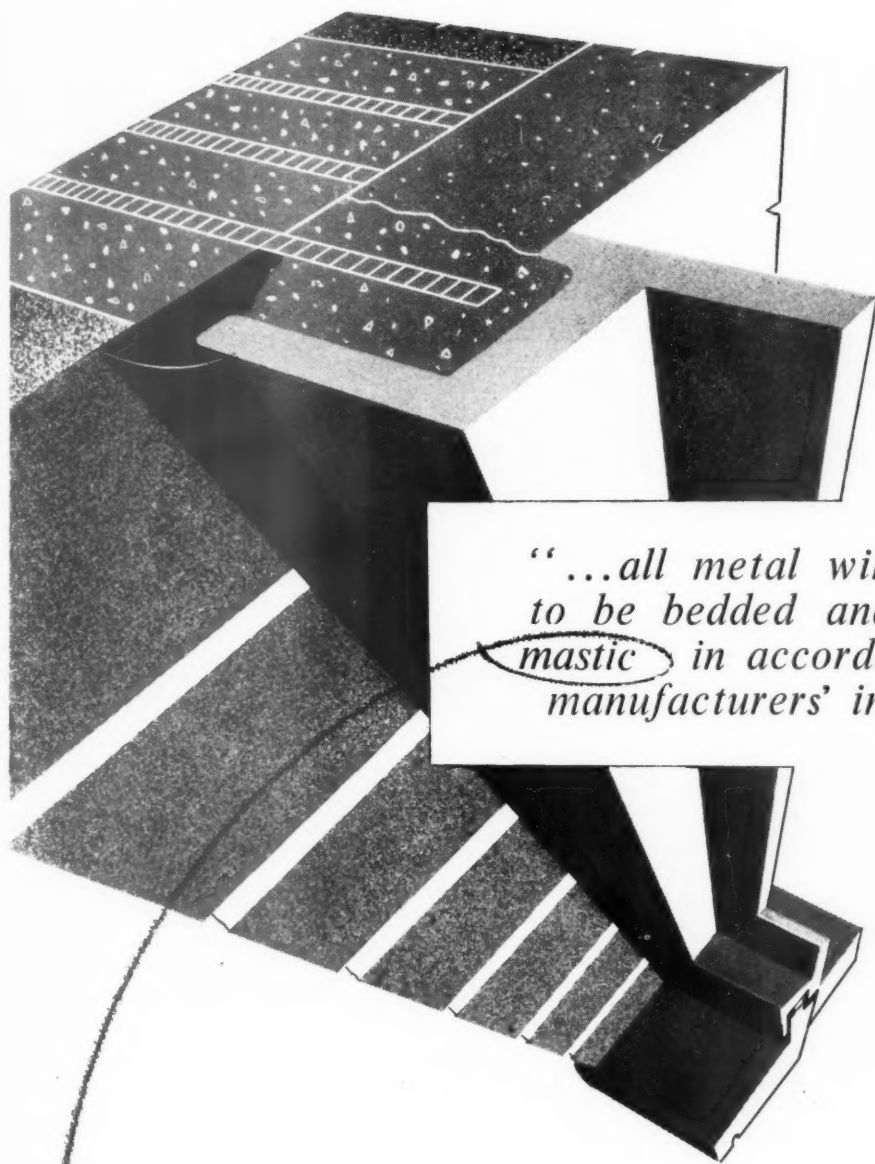
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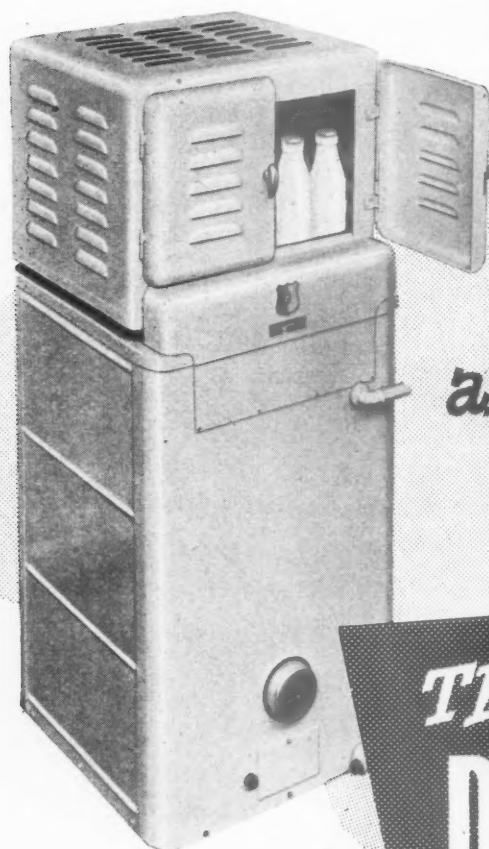


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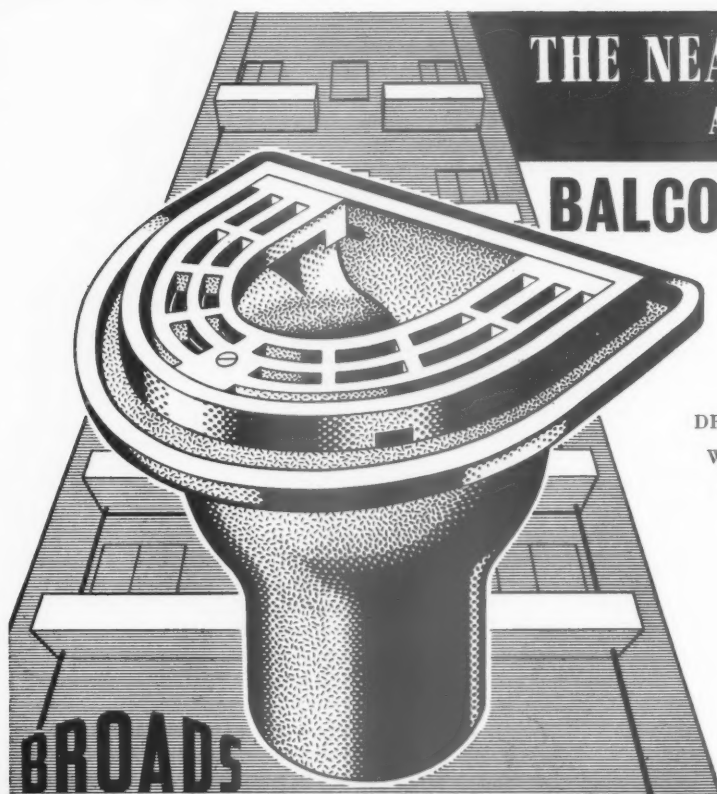


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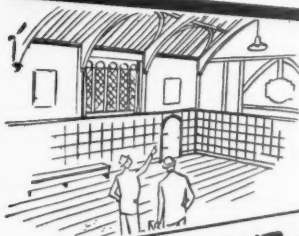
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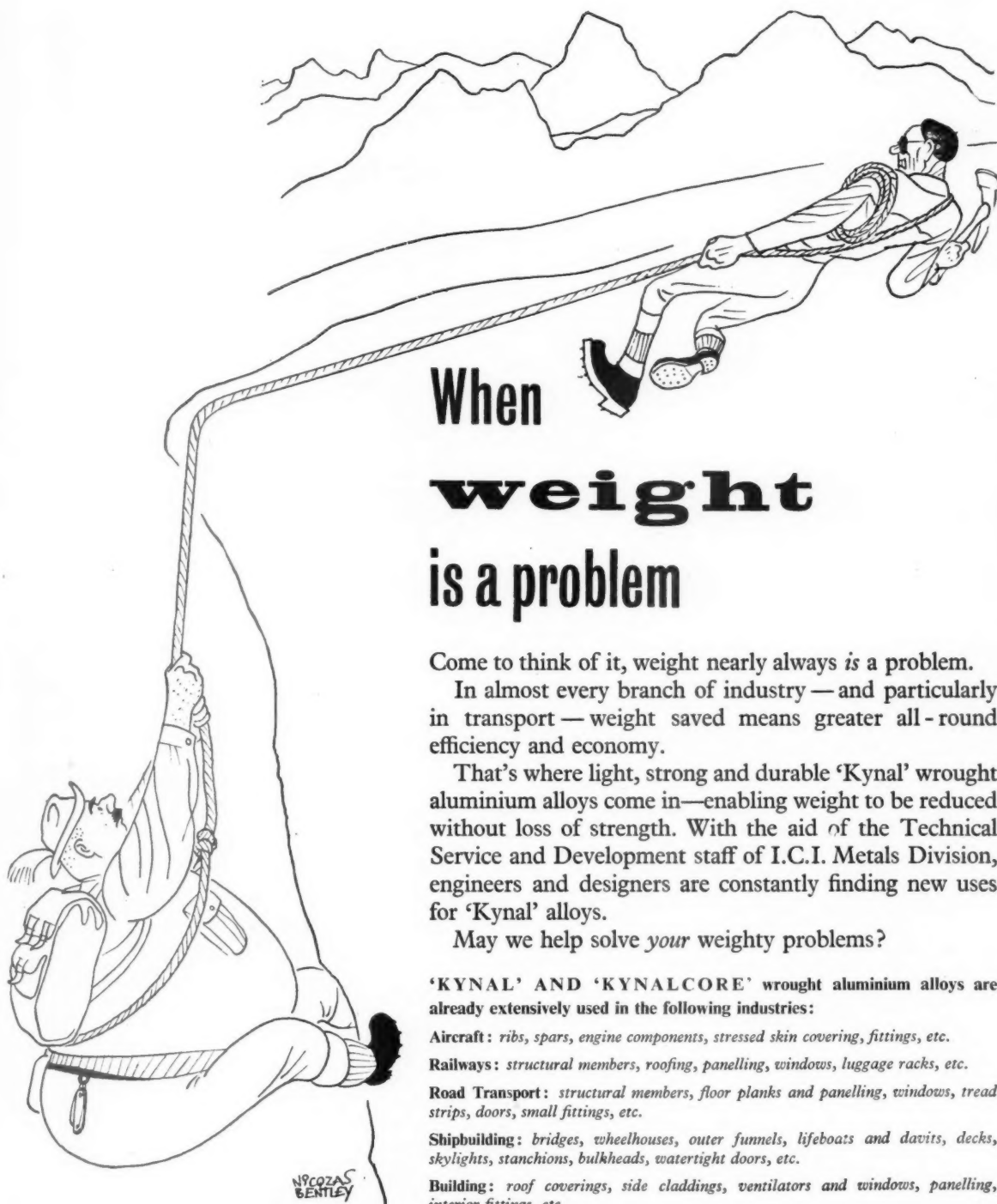
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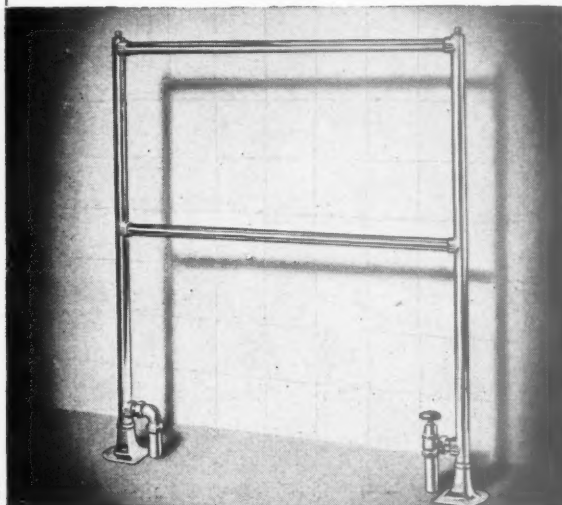


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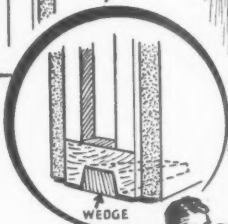
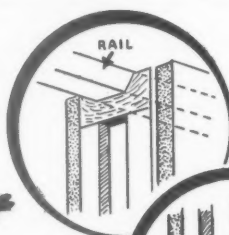
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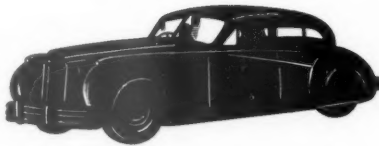
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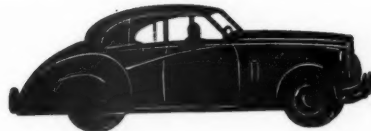




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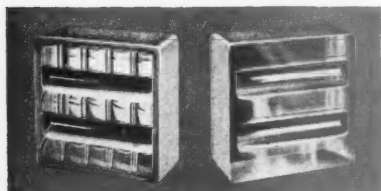


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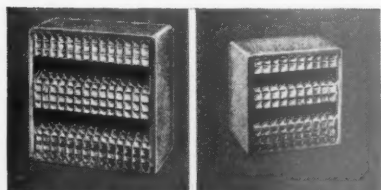


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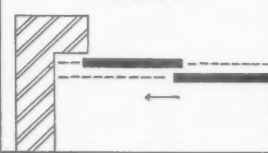


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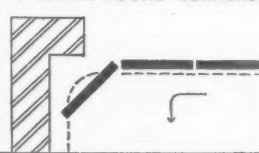
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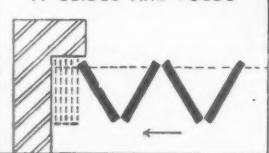
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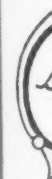






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#### WESTMINSTER HOUSE, COLOMBO

One by one the colours of reaction are being struck, making the task of dread-nought ASTRAGAL progressively harder as design targets for abuse become more and more scarce. That battered hulk, the MOW has barely a period style left in its locker—witness the latest product of the Chief Architect (Eric Bedford)'s Division of the MOW—the UK High Commissioner's residence in Colombo (see page 273). Four years ago the MOW was always good for a bit of abuse—you will remember the full fig classic of the Rio Embassy. The scathing roar of opprobrium began even before the object of it had been clearly identified, so sure was every critic of

the MOW's inadequacy in design. Occasionally there is still a little flutter in the legs of dying reaction—witness this week's frontispiece, page 274. But now, on the whole, the indiscriminate bludgeon of abuse must be dropped and replaced with sharper, more precise comment, oiled with praise.

Plans and interior photographs of the residence are not yet available, so the design cannot be judged fairly—indeed, there is a lot to be said for making no comment on a building without first seeing it “in the flesh” so to speak. Not being able to get to Colombo this week, however, a cautious assessment on the evidence provided by the photographs shown must suffice. There is a refreshing absence of pretentiousness about the design and the general impression is of simple workmanlike clarity.

The paired french windows on the right-hand balcony seem a trifle clumsy, however, as is the handling of the supporting columns to balcony and eaves. It is to be hoped, too, that the light grey strips between the square panels of stone on the ground floor are, in fact, concrete columns and are not purely decorative.

Apart from these small misgivings, it would seem that a creditable effort has been made which is surely nearly up to the standard of a second-rate power.

#### RADIO SHOW

The current radio and television exhibition at Earls Court is another field where old-style abuse is no longer necessary. It took quite a determined plod round before even a small stock of period and

modernistic horrors in cabinet design could be accumulated. The bulk of the exhibits were what passes for modern. Dull, but safely on the contemporary band-wagon.

ASTRAGAL could not find, unfortunately, two things for which he has been waiting for years: decent cupboard space for storing gramophone records, and radio, TV, radiogram and record racks, designed on a multi-unit system (building up vertically and/or horizontally on the lines of unit furniture) at a reasonable price.

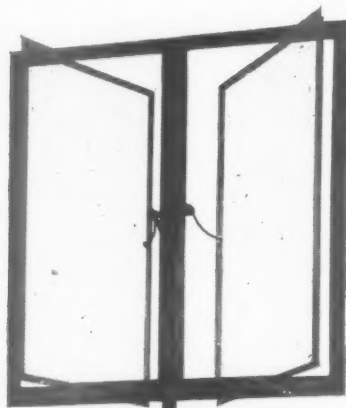
TV's commercialisation seems to have made hardly any difference either to the appearance or the price of sets and most makers are now producing models which will receive either programme. The screens are larger and some are flatter and it seems that the older 9-in. tube is now dead. You can also buy radio sets to receive the very high frequency service which is to start in certain regions next year.

The standard of stand design varied considerably. One got the impression that this world has been handed over entirely to the industrial designer and the exhibition firms who can deal fairly competently with the architect-created clichés. Ecko, Invicta, and others, favoured tubular frames and coloured panels, Mullard favoured Mies—Murphy and Ferranti were good enough and Sobell's was neat, colourful and straightforward. All these, and a few others, were much improved, by contrast, by Regentone's mock Regency and Ferguson's and RGD's vulgarity

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amongst many others, not forgetting the worst feature of all: the gilded baskets, palms, tubbed shrubs and striped canvas chairs of the overseas visitors' reception area, right opposite, needless to say, the main entrance.

#### ABC(3)D

The wag, who observed, after looking at some competition drawings liberally adorned with stuck-on mechanical tints, that their author must have been born with silver scissors in his mouth, is going to have a gay old time when he sees a new development which has just reached my ears: a new kind of stick-on lettering which has the unarguable advantages of being three-dimensional, and is designed (by W. M. de Majo) in the sort of type-faces which will cause smooth operators to say "that's for me!"

The usefulness of these Graforel letters when one has to turn out a big scheme for public inspection is obvious, though there will be only a limited future for those who stick them on drawings that have to be rolled. Sensibly made from cork, they will take practically any conceivable ink or paint, and their backs are already gummed, so that, unless you do your rendered perspectives on sheets of glass, you will have no more worries about making them stick. Before ASTRAGAL goes out to burn his stencils there is one further observation to make: Graforel advertise north points as well as lettering, but isn't it time that someone made a magnetic north point that always pointed true and saved one the bother of orienting the drawing?

#### PICCADILLY POTTAGE

Bombs were, architecturally, the most impartial of objects. Not least the one on St. James', Piccadilly. It destroyed the most charming of rectories and the most pretentious of gateways. It has, in the end, given us a most successful and even magnificent piece of restoration, all but ruined by the most abominable of light fittings—lamp-posts or whatever you call them—stuck among the pews. That, however, is not all that



*St. James', Piccadilly, magnificently restored by Professor A. E. Richardson, showing the new standard lamps, to the design of which ASTRAGAL strongly objects. See this page.*

the bomb gave, and we look forward to the disappearance of the Yardley Lavender poster hoarding—ininitely more distasteful in its way than the more robust Esso and Windsmoor nonsense

across the street. We also await with trepidation the new iron railings for the church—the drawings are not promising—and the new steeple. A Richardson steeple on a Wren church! After the



*A night view of the new residence for the High Commissioner of Colombo, Ceylon, designed by the Chief Architects' Division, MOW and praised by ASTRAGAL on page 271. Some of the specially designed furniture for the Residence was shown in the JOURNAL of December 17, 1953.*



## *A Green Thought in a Green Shade*

A new statue in a Royal Park is a rare occurrence and deserves attention. This bronze fountain in Green Park, a stones' throw from Piccadilly, was presented to the MOW by the Constance Fund, and officially accepted by Sir David Eccles in July of this year. It is the result of a competition; six sculptors were invited by the Constance Fund (a fund formed in memory of Sigismund Goetze, artist, to promote the art of sculpture) to submit designs under the title: "Diana of the Treetops." This winning, but nevertheless, in our opinion, most inadequate, design is by Estcourt J. Clack. The top part is in bronze and depicts Diana unleashing a hound on top of three spiralling "cactus forms." Three gilded "flowers" void trickles of water into three basins, while, in the centre of the bronze branches, rises a very fine spray to damp Diana's feet. The banality and

immaturity of the design is most obvious in the treatment of the polished Cornish granite base. Diana herself, though depicted in a style of beauty somewhat reminiscent of trademarks for cosmetics, has at least the evocative charm of nakedness. The cacti, three times the size and without the flowers would have a certain expressive forcefulness. But no praise can be given to the triple drinking fountain, triple dog's bowl and triple washbasin which form the base. The purpose of a fountain, surely, besides providing a drink, is to please the ear with the sound of running water and delight the eye with movement, reflection, and shimmer. As the water in the waist-high basins and the accompanying trickle is almost invisible and inaudible from a few yards, this design has none of the essential qualities of a fountain and scarcely merits the title.

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## POINTS FROM THIS ISSUE

failure of the light fittings let us hope the Professor tempers his personal design sense and relies on Wren's.

## CHEAP LABOUR

ASTRAGAL rarely reads the advertisements for jobs with Dominion governments overseas with the same microscopic attention as he did in the days of post-qualification penury. One could hardly be unaware, though, after glancing at *The Times* during the last month or two, that Canada is in the market for town-planners—presumably in connection with the St. Lawrence sea-way project. And salaries quoted in dollars always have a tempting look, so that one has thought “not a bad job for a youngster.”

\*

But certain sections in Canada haven't seen it that way, and the Brantford *Expositor* carried a sharp editorial, which a friend kindly clipped out, pointing out that the money offered—3,600 dollars p.a., to start with—was less than the average weekly earnings of a Canadian plumber or brickie, and as good as accused the Department of Labour of sharp practice.

\*

There's more to it than that though. This wage is offered for men between 35 and 45 years of age, and if one allows, say, two dollars eighty to the pound, it is barely as much as many planning assistants would be getting over here at that age, ignoring for the moment the fact that the cost of living in Canada is about twice what it is here. So remember, young—no, middle-aged—men, before going west ask to see the colour of their money, and then consult a conversion table before you sign anything.

## SEMI-DECADENT

Designers, magazine editors and store managers who now flinch at the word “contemporary” as being un-modish and inexact will probably welcome the suggestion of a newspaper correspondent who puts forward the claims of “Mid-Century.” ASTRAGAL prophesies some success for this adjective as being stimulating, reasonably precise, and, best of all, limited in life . . . say until 1960.

\*

But what ASTRAGAL really looks forward to, of course, is the “fin-de-siecle” period. What will it bring this time?

ASTRAGAL

## Results of Irish Church and Indian Hospital Competitions

pages 276 and 277

## New Statue for Royal Park

opposite page

## High Commissioner's Residence, Colombo, commented

on by ASTRAGAL and illustrated on . . . pages 271 and 273

## The Editors

## PRIVATE WORK BAN FOR PUBLIC ARCHITECTS

**S**HOULD architects employed by local authorities be allowed to run private practices in their spare time?

The issue is raised by the recent decision of the Hastings Council, as reported in the *News Chronicle*, for July 30, to forbid its architects to prepare plans for private clients. The *News Chronicle* quoted a councillor as saying: “so many private plans were being prepared by council employees that architects in private practice were becoming alarmed.” That is not, of course, the best reason for banning private work by public architects, although it is no doubt considered adequate enough by private architects.

The difficulty in this kind of issue is to ensure that there is a dividing line between enterprise and initiative on the one hand, and abuse of privilege on the other. There are two obvious reasons why an architect in a local authority should not practise privately. Firstly, however well intentioned he may be at the start, he will not always be able to keep his two practices apart in terms of office hours. Inevitably his spare time work will encroach on the other, unless all his work is given him by “spare time” clients. Secondly, such dual work, which will inevitably mean part or whole responsibility for public and private finance, lays him open to charges of unprofessional conduct, however upright he might in fact be.

On the other hand, there is considerable sympathy to be felt for the keen assistant eager to carve a career. If he is prepared to give the hours to architectural practice which his fellow assistants give to idle amusement why should he not profit from it? Are not these the type of go-ahead architects the country needs? The answer, although George Schwartz might not agree, is surely no. If he worked a night shift in a factory or sold newspapers or fish and chips, well and good, provided his health did not suffer. As a professional man, however, responsible for other people's money, it is impossible for him to undertake the dual role of whole-time public office and private practice and be truly loyal to both.

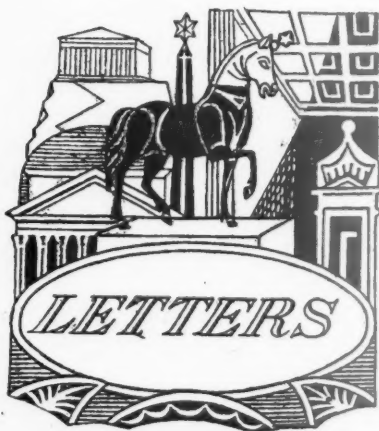
The position of the assistant in a private office is similar. He, too, should not attempt to run his own, even embryonic, practice. He, too, cannot serve two masters.

All this may seem somewhat idealistic and very hard on the junior with guts and enterprise. But it is the burden the professional man should carry. What one should look for, in Hastings and in all offices, public or private, where such



"homework" is undertaken, is the cause of such behaviour. Inevitably it is due to frustration in some form. The salaried man has realised that it is no use putting extra energy into his job because there is no foreseeable return for it. It is essential, if, through the necessity of preserving "professional status," private work is forbidden, that offices have some form of incentive scheme—payment by results scheme, call it what you will—of greater effect than the certainty of a gold watch after forty years of scrupulous time-keeping.

The more go-ahead private offices have realised this. The bonus and the proffered partnership, properly handled, readily absorbs surplus energy. In official offices such incentives do not exist. Too many offices have achieved reputations for good design through the penurious grind of a few dedicated architectural idealists. And too many local authorities—particularly in rural areas—shut their eyes to private work because it enables them to underpay assistant surveyors and architects. If a profession expects from its members the virtues inherent in the term "professional conduct," it should do all that it can to ensure working conditions which do not put an unnecessary strain upon the individual's moral rectitude.



### "Spec." Building

SIR,—Further to recent correspondence in connection with speculative building, I would say that I have sought an interview with my Member of Parliament on this important matter. He has agreed to put the case before the Minister of Housing and Local Government.

If my brother architects adopted a similar measure, when necessary combining themselves into deputations, I feel sure that some steps would be taken to promote an improved quality of house design and construction.

ALBERT G. GATES.

Essex.

SIR,—I am certain that this correspondence in which we are all saying "Heigh! Why don't you buy your apples from our stall" is ridiculous. We have a body to which we all owe allegiance, but we are surely entitled to say to the RIBA "Come on RIBA—you are in this you know—what is your suggestion for handling this problem." Let us go into a huddle and decide our own quiet and effective action, not go

Albert G. Gates, A.R.I.B.A.

J. E. Jackson, A.R.I.B.A.

Eric Bellingham Director-General, Coal Utilisation Council

A. Roscoe-Hudson, A.R.I.B.A.

crying to Big Business—they are interested in money and as every lay person thinks we are an expensive luxury what is the use of saying "Buy your apples from our Stall, they won't cost you much more"—its got to be "We can prove to you they'll be cheaper."

J. E. JACKSON.

Folkestone.

### Not to be Built—By Order

SIR,—When I saw the above words in a recent issue of your JOURNAL, underneath the reproduction of a drawing showing a house with only one flue, and that one on an external wall, I had a moment of elation in which I thought that my campaign against such methods of construction had borne practical fruit.

On reading further I saw that the ground on which the design had been rejected was that the house was "far too modern." I hope that no one really thinks that it is "modern" to provide such a wasteful method of heating.

ERIC BELLINGHAM.

London.

SIR,—On opening the JOURNAL for August 19 I was amazed to see the design under the title "Not To Be Built—By Order." I must say I am very pleased to see your editorial attacking the building societies because the design shown is, with all due respect to its designer, a nice, neat and very unoffensive design, in fact I am at

a complete loss to understand how it was turned down.

It may be that the FRIBA in question got out of bed the wrong side, and I should like to ask him what his reaction would be if he had been approached with the design for the Health Centre shown on page 219 of the same JOURNAL and designed by the Nuffield Foundation. Would he have said "far too modern . . . good of its kind but discordant with its surroundings . . ."

It seems that we are all going round in circles and some good sound legislation is required.

A. ROSCOE-HUDSON.

Oxford.



### COMPETITIONS

#### Hospital for New Delhi

In a competition for an All-India Institute of Medical Sciences open to all architects practising in India, the first prize has been awarded to H. J. Brown and L. C. Moulin, in association with A. H. Antrum.

The building is a teaching hospital, with 650 beds, which will cost £1,290,000. The assessors were Walter George, F.R.I.B.A., of New Delhi, and Paul Jeanneret. It is hoped to illustrate the winning design shortly.

#### Church in Ireland

T. J. Ryan was awarded the first premium in the design competition for the new Church of the Immaculate Virgin Mary of the Miraculous Medal, Clonskeagh, Co. Dublin. F. J. Barry received the second premium, the third went to F. Rogerson, and the fourth to Messrs. O'Brien, Morris & McCullough. Designs by the following were commended:—H. P. Banahan, S. Rothery, Peppard and Duffy, Hooper and Mayne, McCarthy and Feeney and Robinson, Keefe and Devane. There were 102 entries. The assessors were:—G. McNicholl (chairman), N. Montgomery, and F. Gibney. They were assisted in adjudicating the designs by the Very Rev. W. J. Fitzpatrick.

The assessors made the following statement on the general standard and design of the entries:

One hundred and two designs were received and examined by the assessors. Presentation and draughtsmanship were generally excellent. Many of the unpremiated schemes are imaginative, ingenious and have great architectural quality, but a large number of competitors failed to



reduce the design problem to its simplest terms and instead of solving it created planning and construction difficulties. Many simple ground plans were developed in complicated and unworkable sections. The design and relative disposition of the Shrine Altar does not seem to have been satisfactorily solved. Competitors tended to provide something less than the accommodation required, perhaps to keep within the maximum cost allowed. As against that, many of the more ambitious schemes could not be built for the required figure.

It is hoped to illustrate the winning designs shortly in the JOURNAL.

## Town Hall for Montrose

The Corporation of Montrose is to invite architects to submit plans and estimates for their new Town Hall to be erected to replace the former one burned down 17 years ago.

Professor R. H. Matthew, C.B.E., A.R.I.B.A., of the University of Edinburgh, has been appointed assessor.

## SAO PAULO

### Architectural Schools Competition

The entries for a second international competition open to all Schools of Architecture will form the exhibits in an international Exhibition of Architecture at the Third Biennial of the Sao Paulo Museum of Modern Art. Schools entering can present only one design, the subject for which is: "a resting place fit to accommodate 3,000 workmen during their holidays." The assessors will be architects and representatives of the Sao Paulo Museum of Modern Art. The closing date is May 30, 1955. Prizes total 200,000 cruzeiros (172 cruzeiros, approximately, to the pound sterling). Further information and entry forms can be obtained from: Secretaria da Bienal do Museu de Arte Moderna de Sao Paulo, Rua 7 de Abril, 230, Sao Paulo, Brazil.

## MOHLG

### New Members of Advisory Committee

Harold Macmillan has appointed three new members to the Committee which advises him on matters concerning buildings of special architectural and historic interest. Professor Sir William Holford is chairman of the Committee and the new members are Lord Euston, J. D. K. Lloyd and W. A. Eden. Lord Euston is deputy chairman of the SPAB and is a member of the Historic Buildings Council for England. Mr. Lloyd was secretary of the CPRW for many years and is now a member of the Historic Buildings Council for Wales. Mr. Eden is architect in charge of the Historic Buildings Section of the LCC and is a lecturer in the history of architecture in England at University College, London.

## RIBA

### Conference on Design of Health Buildings

A two-day Conference on the Design of Health Buildings is to be held at the Royal Institute of British Architects on October 21 and 22, 1954. The conference is open to members of the Royal Institute of British Architects who apply in advance for tickets. Tickets cost 10s. each which includes morning coffee and tea on both days, programmes and advance copies of the conference papers.

The following are the arrangements for the four sessions into which the conference will be divided:

THURSDAY, OCTOBER 21, 1954

Morning Session, 10.30 a.m. Mr. C. H. Aslin, President, RIBA, in the chair.

Opening address by the Minister of Health, the Rt. Hon. Iain Macleod, M.P.

The Organization of the Health Service in relation to the Provision of Health Buildings: Sir John Charles, Chief Medical Officer, Ministry of Health.

Afternoon Session, 2 p.m. Mr. J. H. Forshaw in the chair.

Papers dealing with the General Design

Problems of the Hospital from the Architectural Point of View by:

Mr. R. Llewelyn Davies, Director, Division of Architectural Studies, The Nuffield Foundation.

Mr. M. E. Molander, Director, The Central Hospital Planning Bureau, Sweden.

FRIDAY, OCTOBER 22, 1954

Morning Session, 10.30 a.m. Mr. Maxwell C. Tebbitt in the chair.

A paper dealing with the Hospital from the Nursing Point of View by:

Miss T. Turner of the Royal College of Nursing, Birmingham.

A paper dealing with the Hospital from the Medical Point of View by:

Mr. J. O. F. Davies, Senior Administrative Medical Officer, Oxford Regional Hospital Board.

Afternoon Session, 2 p.m. Mr. Donald A. Goldfinch in the chair.

Mr. Donald A. Goldfinch, Architect to the Birmingham Regional Hospital Board, will sum up the papers given during the previous sessions and this will be followed by a general discussion.

It will greatly assist the organization of the conference if members of the RIBA will apply for tickets as soon as possible. Applications (enclosing cheque or postal order) should be addressed to the Secretary, RIBA, 66, Portland Place, London, W.1. Envelopes should be marked "Hospitals Conference" in the top left-hand corner.

## DIARY

LCC Open-Air Sculpture Exhibition. Holland Park. Daily, including Sunday. 10 a.m. until dusk. UNTIL END OF SEPTEMBER.

Current American Practice in Heating, Ventilating and Air Conditioning. Paper to be presented by John K. M. Pryke at a special meeting of the IHVE. At the Lecture Hall of the IME, 1, Birdcage Walk, S.W.1. 6 p.m.

SEPTEMBER 14

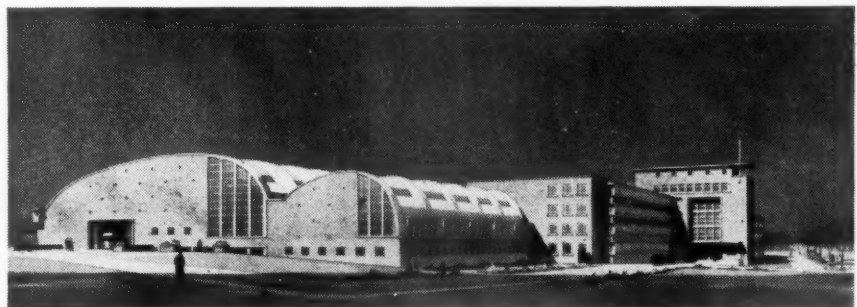
Conference on the Design of Health Buildings. At the RIBA, 66, Portland Place, W.1. Tickets 10s. each.

OCTOBER 21 TO 22

## NEW PRINTING WORKS FOR BANK OF ENGLAND, DEBDEN, ESSEX

On this and the following four pages we illustrate the structural techniques being employed in the construction of the new printing works for the Bank of England at Debden, Essex. The architects are Easton and Robertson, the consulting engineers for the structure are Ove Arup and Partners and the Contractors are Sir Robert McAlpine & Sons Ltd.

The main building is 800 ft. long and has a maximum width of 300 ft. Construction began in June, 1953. The perspective, right, (Architectural Review, January, '54) shows how the building will look when complete. The arched shape of the roof was chosen partly on aesthetic grounds, partly to ensure a good daylight factor and partly to make use of the advantage of the economies of the arch form in concrete. In



the foreground of the perspective is a smaller production hall on which construction has not yet started. The end walls and the office blocks will be of brick, with Portland stone dressings. The standard of finish of the concrete, whether precast or in situ, is very high, due to careful concreting and the copious use of resin-bonded plywood shuttering.

## BANK OF ENGLAND PRINTING WORKS (continued)

**main printing hall**

Above, the interior of the main printing hall of the Bank of England Printing Works, Debden, now under construction. It consists of twenty-two bays each 36 ft. long, the span being 125 ft. Each bay consists of a pair of prestressed arched beams connected by north-light concrete shells spanning between them. The bays are 3 ft. 6 in. apart, and this gap between the arched beams is used as ventilation and service ducts and as expansion joints. Warmed air will be pumped into the hall from between the pairs of arch legs, and extracted through the holes to be seen at the ends of the north light shells into an extract duct within the space between the arches. The centrally-pivoted windows are lockable, and are cleaned only from the outside. Running the length of each side of the hall at the springing of the arch is an observation gallery. The fluted fronts of these were precast on teak shutters. The floor of the hall is of flat slab construction, 15 in. thick, supported on columns in bays of 18 ft. by 19 ft. from a lower floor containing service ducts, heating and electrical plant, lavatories, cloakrooms and workshops. The floor finish of the main hall will be wood blocks.

**casting the main arches**

The 125-ft. arches of the main hall were cast in segments. The

legs of the arches were cast in situ, and the centre of the arch in units of about 5 tons weight. This operation is shown above opposite. On the left is an arch-centre already poured. It is not possible to distinguish the separate units, but the reinforcing bars which will tie the arch to the in situ-cast north light shells can be plainly seen. In the foreground are the ducts in which the tensioning wires will run to tie all the units together.

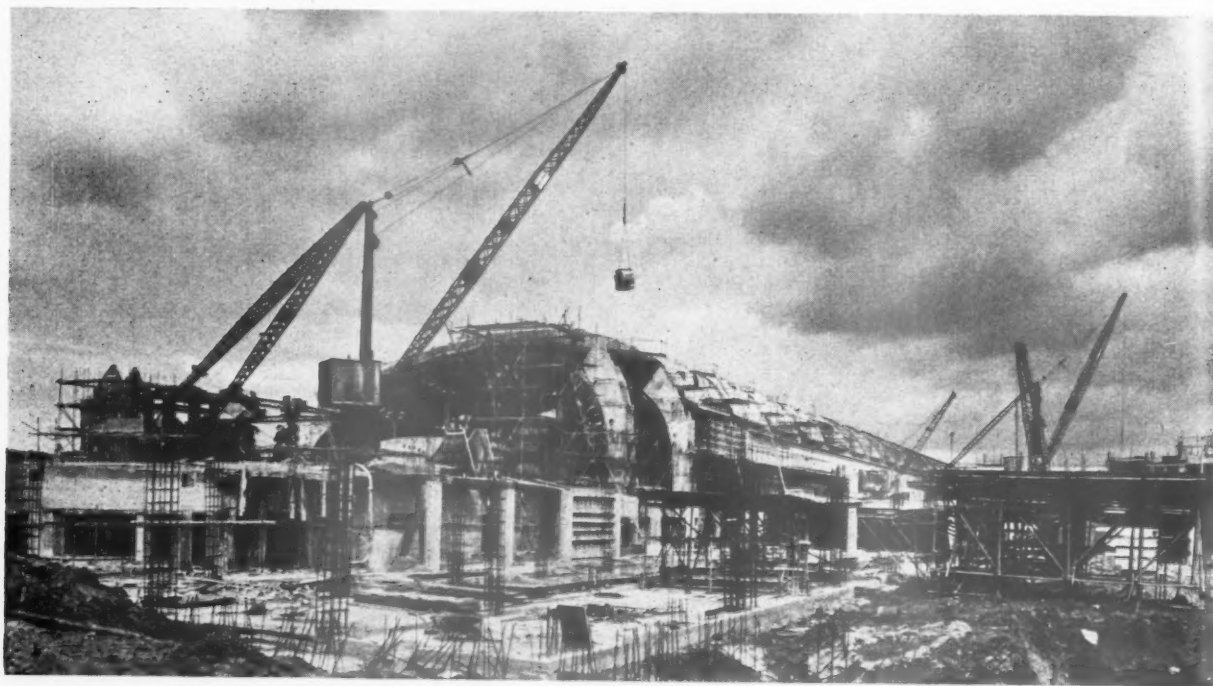
**erection of main arches**

The precast segments, below opposite, waiting to be lifted onto the centering. By casting these units on a flat bed good control of the concrete pouring was obtained, together with accurate placing of duct tubes and fixings for mechanical equipment. Some of the fixings can be seen on the units. In the background, centre, are the in situ-cast legs of a pair of arches, and, on the left, part of the gantry which, with centering for the 125-ft. arches at each end, and the shuttering for the shell roofs in the middle, spanning from arched beam to arched beam, moves on rails down the 800 ft. length of the hall. The shell roof shuttering can be raised and lowered by winches within the main frame of the gantry. A five-ton derrick with 120-ft. jib handles the precast elements.





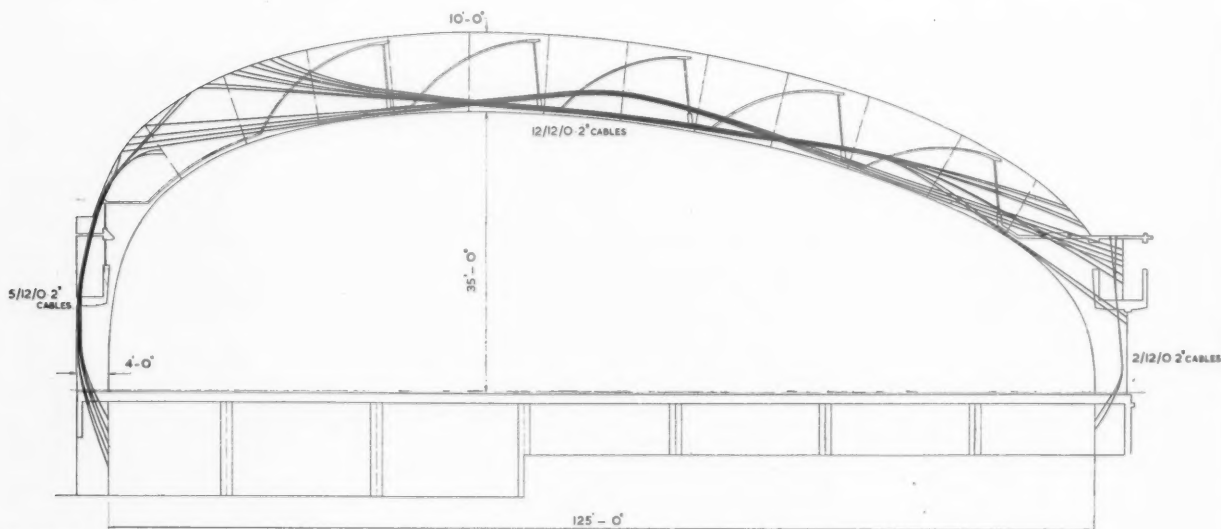
BANK OF ENGLAND PRINTING WORKS (continued)



**the building under construction**

*A progress photograph showing the main printing hall under construction. The crane is lifting concrete for casting the in situ north-light shells which will tie together the inner two of the four arched beams shown in the centre of the photograph. These beams consist, as explained above, of separate units—*

*or segments—for the centre portion which are formed into a continuous structure by being tied together under the Freyssinet system of prestressing which also reduces the tie force acting at floor level on the arch and, in consequence, the bending moments in the legs of the arch. The position of these prestressing cables is shown in the cross section below.*



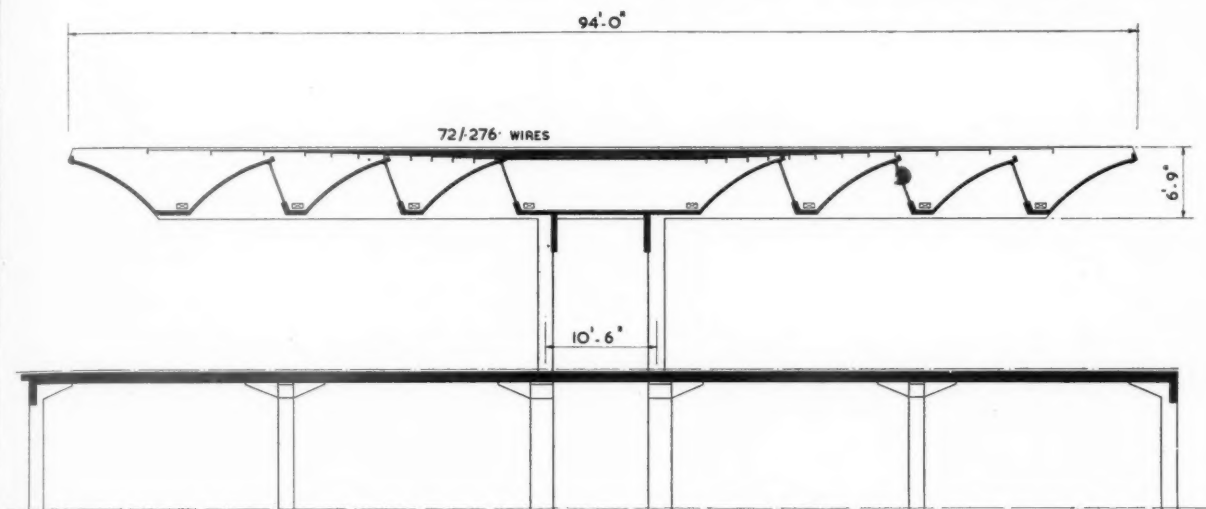
Cross section of main printing hall

**the general printing hall**

*South of the main printing hall is a general printing hall, and south of this again is a block of offices and laboratories. It was thought necessary to provide expansion joints between these three*

*blocks. To reduce the number of columns and avoid the alternative of a roller bearing on the flanking structures, the roof of the general printing hall was designed as a balanced cantilever, see section above, opposite page. These cantilevers were pre-*





Cross section of general printing hall

stressed to limit the deflexion and to reduce the thickness of beam which could have been required in reinforced concrete. The roof, see below, is 100 ft. wide. It consists of four free standing bays, each bay being made up of four cantilever beams spanned by a series of three 24 ft. long north-light shell roofs. Each bay is therefore 72 ft. by 100 ft. The shells weigh 5 tons and are precast. The 6 ft. 9 in. deep beams are cast in situ and prestressed on the Gifford-Udall-CCL system. When cast, but before being stressed, the precast shells are placed between the four beams. There are 8 shells between each pair of beams. When all 24 shells in the bay are in position, the whole roof is prestressed in a transverse direction, i.e., along the shells and through the

beams, with six wires to each shell. When the shells have been stressed and the loading of the beams provided, the beams are prestressed. On the right of the photograph is the roof of the main hall. The pairs of arched beams have been roofed with copper, the shells covered with 3-ply bituminous felt. On the left is a floor of the office block. This has floor spans of from 24 ft to 30 ft. The floor slabs consist of L-shaped beams 15 in. deep at 2-ft. centres covered with a 3-in. slab. There are service holes cast in horizontally and vertically at frequent intervals. The horizontal arm of one L rests on a recess in the horizontal arm of the next. These ribs span on to a 21-ft. deep edge beam supported by columns at 12 ft. or 6 ft. centres.



## PRIMARY SCHOOL

at FORD, near SHREWSBURY

for the Shropshire County Council

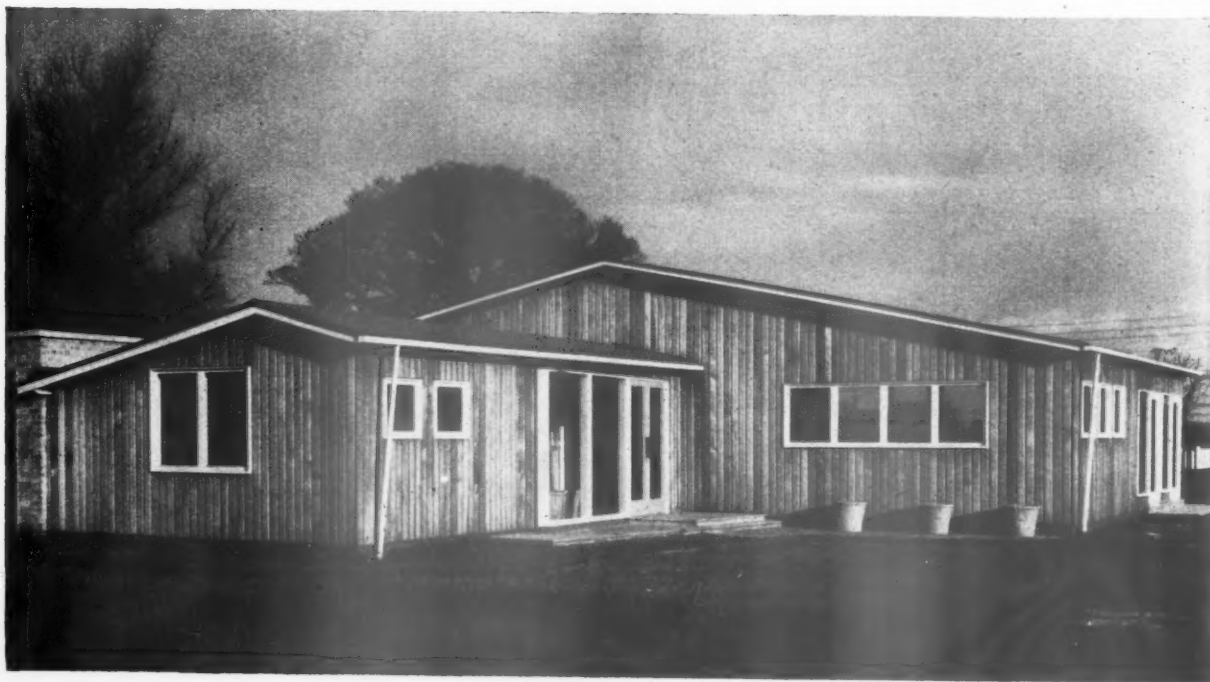
designed by C. H. SIMMONS, county architect

chief assistant, R. BOOTH, assistant architect, G. CHAMBERLAIN

consulting engineers, OVE ARUP and PARTNERS

The new primary school in the village of Ford, at the foot of the Breiddon Hills, replaces an old school built during the latter part of the last century. The first phase only, consisting of two classrooms, boiler house, lavatories and staff room, has so far been built. Both the planning and construction have been in the nature of an experiment as the clients, the County Education Authority, wished to bring the ablution and cloakroom facilities into the classrooms, within the control and supervision of the teacher.

*Phase I of the school from the south.*



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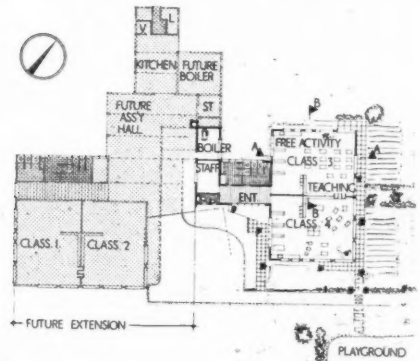
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Above, classrooms 3 and 4 from the east. Right, the entrance and hall of phase 1 of the school.



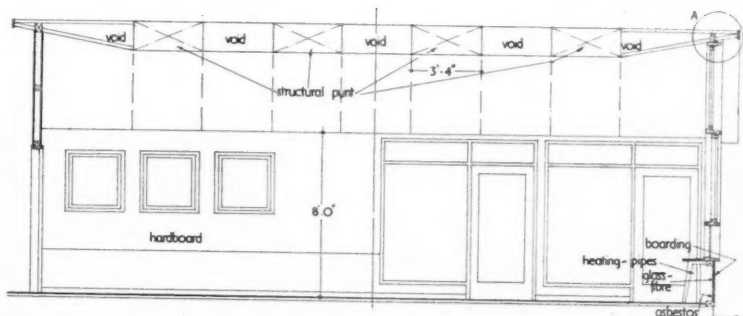
Ground floor plan [Scale :  $\frac{1}{4}'' = 1' 0''$ ]

**PLAN.**—As will be seen from the plan above, a future extension consisting of two additional classrooms, an assembly hall and kitchen, are to be added to the west of the present building and the present entrance hall will become a corridor leading to the future entrance, which will be basically part of the assembly hall. Classroom furniture has been designed to be as flexible as possible, with cupboards and shelving as separate units, capable of being arranged in different ways. Cloak racks are also designed as movable trolleys within the classrooms. By this method a saving in circulation space has been made and there is more usable space in classrooms.

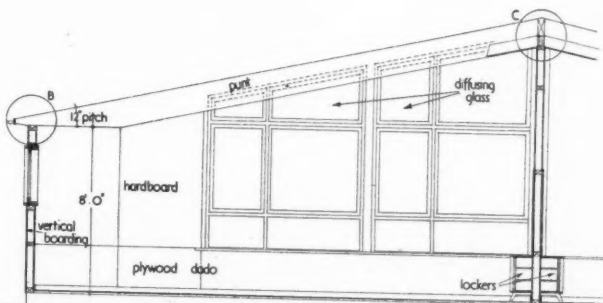


**CONSTRUCTION.**—The architects chose timber as a cheap and suitable material for the school, in view of the MOE cost limit in force at the time, and stocks of red cedar board were reserved at a local merchant at the sketch design stage. Cedar clapboards on studding with vertical damp-proof membrane, aluminium foil sheathing and fibreboard linings provide load-bearing external walls with a thermal value greater than for 11-in. cavity brickwork. A simple concrete floor slab carries the superstructure along its edge. Roofs, which were erected complete in three days, consist of the "punt" system of construction adapted for the roof pitch used here. The parallel system of plywood "punts" spans from apex to eaves and the alternating spaces between them, which carry conduits have similar soffits of perforated hardboard.

**FINISHES.**—The tall windows which occur on the east side have the upper parts glazed in ply-glass to eliminate morning glare in summer, and the sills are low enough to allow little children to look out. One



Section A-A (for details A, B and C, see overleaf)



Section B-B [Scale :  $\frac{1}{4}'' = 1' 0''$ ]



## PRIMARY SCHOOL

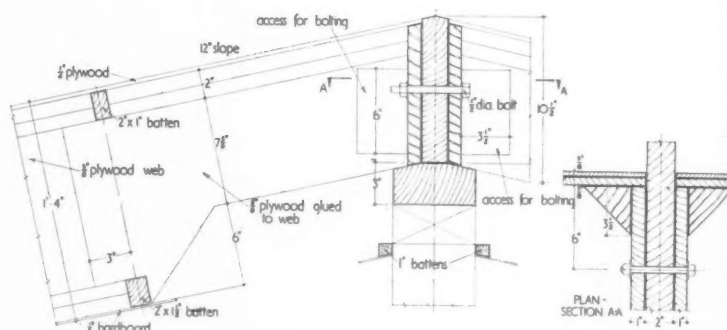
at FORD, near SHREWSBURY  
designed by C. H. SIMMONS  
county architect

of these windows was illustrated as a Working Detail in the JOURNAL of March 25, 1954. Colours used in the interior are carefully chosen to form a background to the cupboard and shelf units, which are painted in a series of colours, including turquoise and coral. The floor finish is dark brown plastic tiles. In spite of the large areas of glazing in the classrooms the combination of perforated hardboard ceilings and fibreboard for the upper parts of the walls has produced a good acoustic quality.

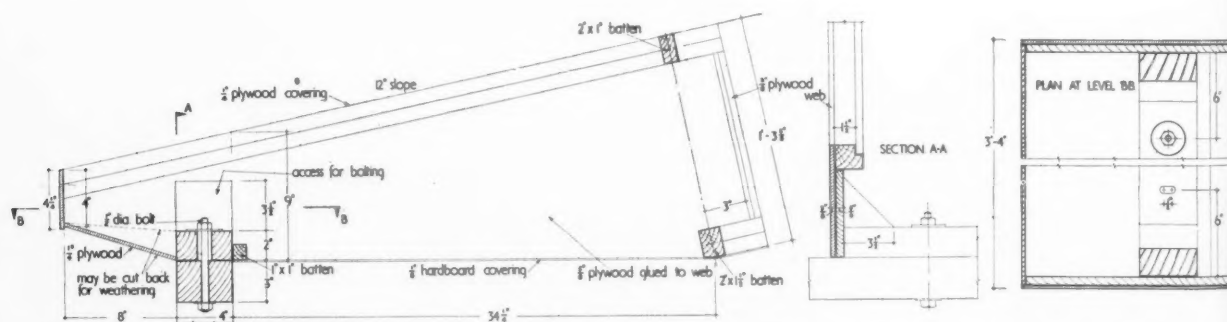
The contract price was £7,011. Cost per foot cube, 3s. 5d., and per ft. sq. 53s. 8½d. nett. The general contractors were Shrewsbury Building Contractors Ltd. For sub-contractors see page 300.



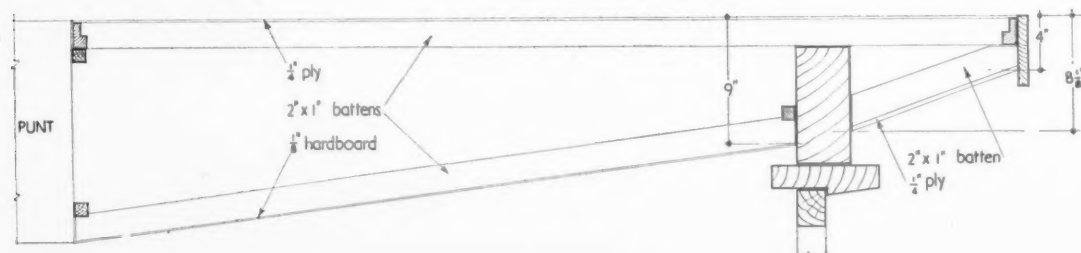
Above and above left, two views of classroom 4. Cloakroom and washing facilities have been included in the classroom area to save circulation space and to help supervision by the teacher.



Detail at C



Detail at B. (These details show where the standard punt-roof system has been adapted for the pitched roof used on this school)



Detail at A (Scale: 1" = 1' 0")



## FACTORY

in CAXTON WAY, STEVENAGE, HERTS  
for the STEVENAGE DEVELOPMENT CORPORATION  
designed by CLIFFORD HOLLIDAY, formerly chief architect  
L. G. VINCENT, deputy chief architect  
L. W. AKED, group leader, R. E. OWEN, assistant architect  
consultants, reinforced concrete, TRUSSED CONCRETE STEEL CO.  
quantity surveyors, GARDINER and THEOBALD

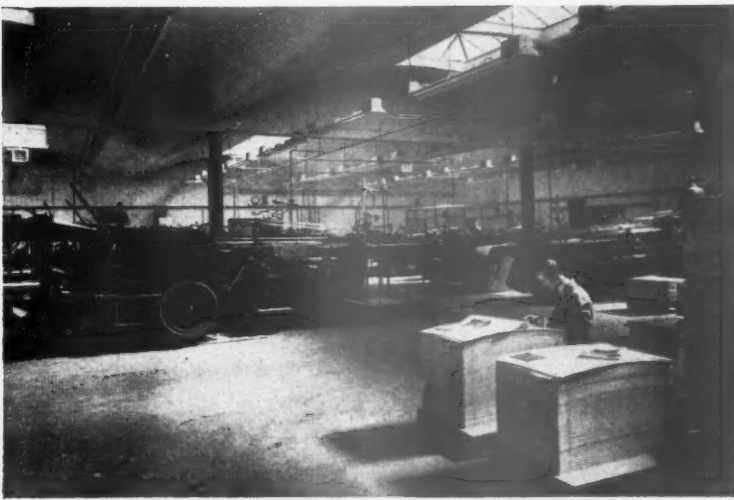
This standard factory on the industrial estate at Stevenage was designed for Samson, Clark & Co. Ltd., who are printers of advertising material and magazines. The site chosen had to be reasonably flat as the entire production must be on one level and also be large enough to take a 60 per cent. future expansion. The factory has a production staff of 60 and an administrative staff of 10.



*The office entrance and loading bay on the right.*

*The administration block, which faces Caxton Way.*





Above, part of the main production area, which has concrete barrel vaults sprayed on the under side with asbestos to avoid condensation. There is a production area of 20,000 sq. ft. and an administration area of 4,000 sq. ft. Both areas are heated by radiators placed under windows and there are high level unit heaters in the production area, as described in the text.

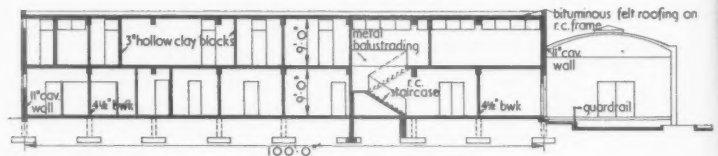
Left, office entrance hall.

## FACTORY

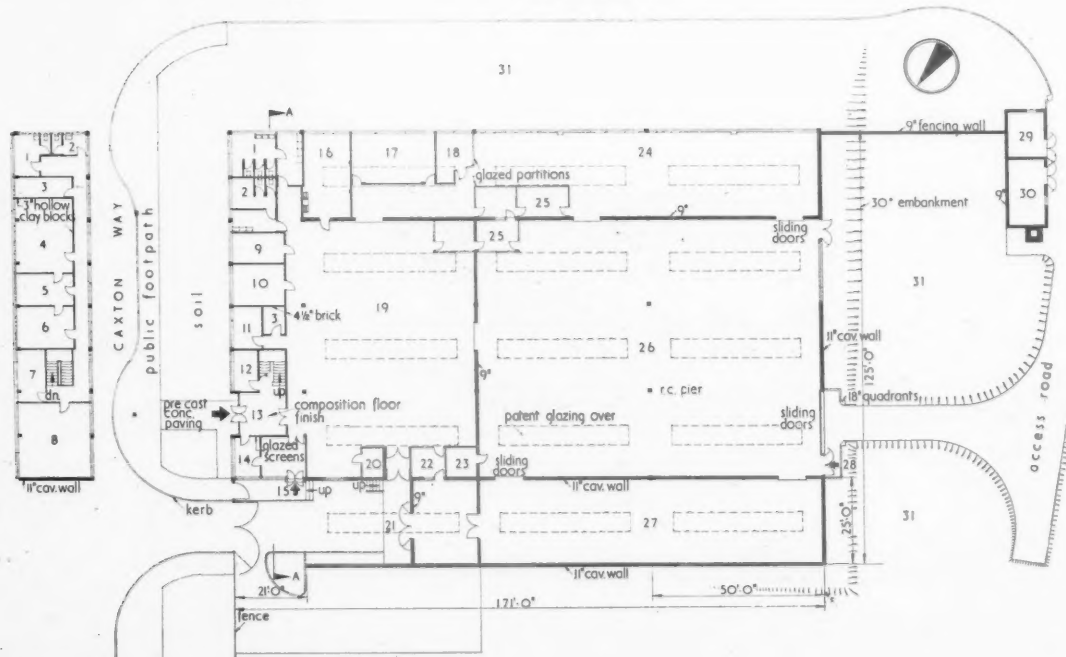
at STEVENAGE, HERTS

designed by CLIFFORD HOLLIDAY

formerly chief architect



Section A-A



First and ground floor plans [Scale:  $\frac{1}{8}'' = 1' 0''$ ]

### KEY

1. Men's lavatory.
2. Women's lavatory.
3. Stores.
4. General office.
5. Secretary's office.
6. Manager's office.
7. Proof reading room.
8. Board room.
9. Women's drying room.
10. Men's drying room.
11. First aid room.
12. Interview room.
13. Office entrance hall.
14. Timekeeper's office.
15. Works entrance.
16. Tea room.
17. Mono casting.
18. Mono key-board.
19. Warehousing.
20. Switch room.
21. Loading dock.
22. Storekeeper.
23. Ink store.
24. Compositors.
25. Supervisor's office.
26. Machine room.
27. Paper store.
28. Rear entrance.
29. Fuel store.
30. Boiler house.
31. Grass area.

**GENERAL.**—The tenants had certain special requirements, which the architects had to solve in the design of the factory. (a) the complete avoidance of condensation, which would ruin expensive printed work. This was achieved by an absorbent blanket of asbestos spray on concrete soffits and warm air from hot-water unit heaters being blown along glass surfaces of skylights. (b) an even humidity in the production area and paper store, to avoid movement of paper in the machines. Identical heating and extracting plant is provided throughout, with the unit heaters blowing air down the length of the barrel vault roof in the production area. The air is extracted through the barrel by fans and isolating lobbies are provided to the loading bays. (c) good daylighting with some sunlight allowed. Aluminium skylights were found to be the most economical solution, the size adjusted to give the correct level of lighting. Decorations light in tone were chosen throughout. (d) the plan had to be adaptable. Partitions are built up off the floor slabs. Office block window mullions are at 3 ft. centres to receive partitions, with a steel filler plate between mullion and partition. The contract price was £58,500, at a cost of 2s. 7½d. per ft. cube and 49s. 1d. per ft. sq. The general contractors were Gilbert-Ash Ltd. For sub-contractors see page 300.

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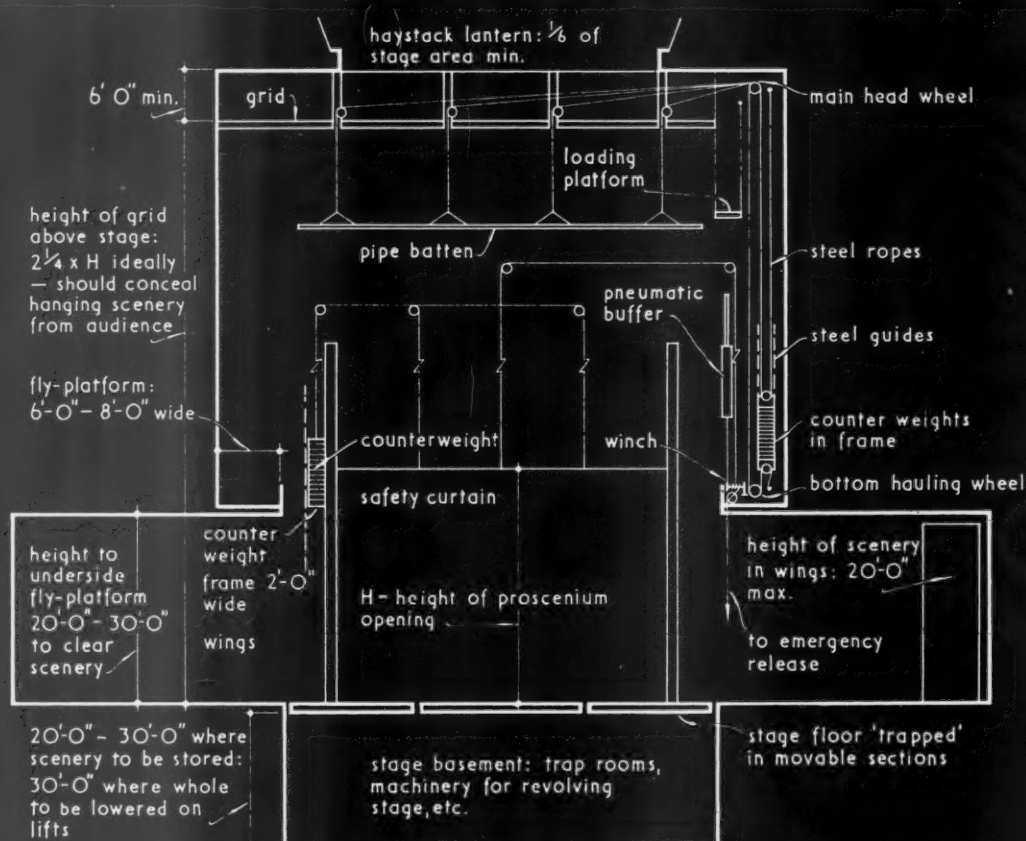




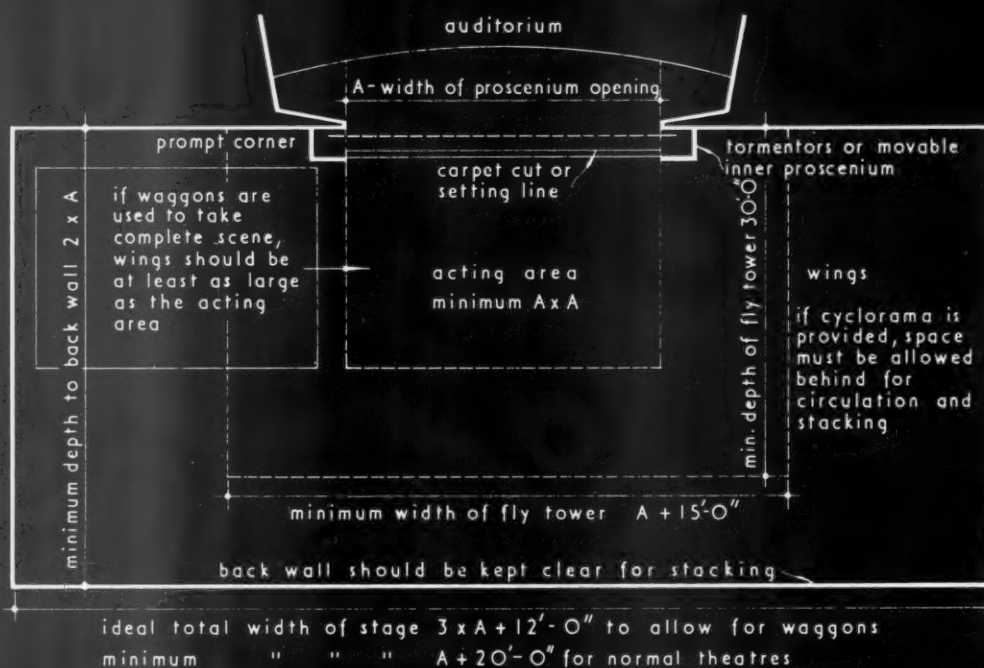
## DESIGN DATA | ENTERTAINMENT | THEATRES

4. L4

The Architects' Journal Library of Information Sheets. 483. Editor: Cotterell Butler, A.R.I.B.A.



SECTION THRO' STAGE.



PLAN OF STAGE.

#### 4.14 STAGE PLANNING

This Sheet, one of a series on the planning of theatres, is intended to cover some general aspects of stage planning. For detailed technical information reference should be made to the publications given at the end of the Sheet.

##### Key Dimensions

The main dimensions given in the diagrams on the face of the Sheet serve as a rough guide. They will vary according to the requirements of any specific project and the space available on the site.

It is important to provide as much space as possible on the stage for the handling of bulky scenery during the performance: in practice, there is very seldom sufficient.

##### Planning Considerations

The following points must be considered if any theatre is to be planned to work efficiently.

*Scene-shifting:* This is basically simple: scenery such as "flats" and "cloths," which are parallel to the proscenium, are "flown" or hoisted into the stage roof by means of counterweights (see drawing at top of face of Sheet). Scenery that cannot be thus disposed of is shifted, either mechanically or by hand, to the sides, the back or beneath the stage. The space in all cases must be adequate and of the correct proportions, so that the scene shift does not become involved, slow or noisy, or in any way interfere with the continuity of the performance.

*Stage direction:* Another important requirement in planning is the provision of sufficient space for stage direction. This is usually arranged in the prompt corner, immediately inside the proscenium on the left of the stage. It is very important that the stage director should have a complete view of the stage which he controls and immediate contact with all the chief technicians. This involves the accommodation of a considerable amount of machinery (amplifying apparatus for reproduction of sound effects, cue system, system for signalling technicians, etc.) and necessitates a position convenient for handling scene shifts and checking on actors and properties.

The stage director's work has grown in importance with the increase in technical efficiency, and it is impossible to control a modern stage where space is cramped: the older theatres seldom provide adequate facilities.

*Forestage:* Where a forestage is required, the planning of the stage and auditorium will be affected from the beginning, in particular with regard to the placing of the stage director and the chief electrician.

##### Bibliography

Stage Planning by Marshall, Bell and Leacroft (Muller).

Theatres and Auditoriums by Meyer and Cole (Reinhardt).

Scenery for the Theatre by Meyer and Cole (Harrap).

Prosceniums and Sight-lines by R. Southern (Faber).

Stage Setting by R. Southern (Faber).

Changeable Scenery by R. Southern (Faber).





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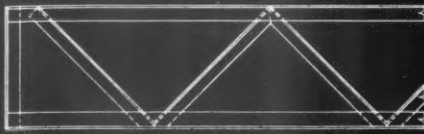
V



## FLOOR AND ROOF STRUCTURAL ELEMENTS | STEEL

20.C10

The Architects' Journal Library of Information Sheets 484. Editor: Cotterell Butler, A.R.I.B.A.



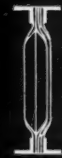
WELDED (W) TYPE.



section



HIGH-TENSILE (H.T.) TYPE.



section

type of beam and depth in inches		safe distributed loads in tons for spans in feet													
		6	8	10	12	14	16	18	20	22	24	26	28	30	35
W 6	L	1.89	1.43	1.14	0.87	0.65	0.49								
	M	2.54	2.54	1.97	1.37	1.01	0.77	0.61							
	H	3.30	3.30	2.75	2.00	1.48	1.13	0.89	0.73						
W 8	L		1.22	1.16	1.05	0.94	0.84	0.75	0.61						
	M		2.70	2.30	1.98	1.72	1.49	1.18	0.96						
	H			3.05	2.90	2.54	2.27	1.77	1.41	1.16					
W 10	L			2.53	2.38	2.13	1.90	1.72	1.56	1.29	1.08				
	M			3.16	3.05	2.84	2.75	2.40	2.21	1.88	1.60				
	H			4.20	3.94	3.66	3.27	2.93	2.70	2.05	1.73				
W 12	L				2.42	2.26	2.08	1.92	1.78	1.65	1.52	1.38	1.19		
	M				2.66	2.70	2.68	2.45	2.30	2.30	2.13	2.03	1.75		
	H				3.68	3.62	3.50	3.26	3.04	2.82	2.62	2.38	2.06		
W 14	L				2.23	2.42	2.38	2.31	2.19	2.08	1.96	1.83	1.71		
	M					3.22	3.46	3.30	3.14	3.00	2.80	2.65	2.54	2.32	
	H					4.05	4.05	4.00	3.85	3.57	3.36	3.16	3.00	2.83	
W 16	L							3.10	3.08	3.00	2.90	2.78	2.68	2.52	2.26
	M					3.65	3.80	3.80	3.80	3.75	3.54	3.32	3.18	3.02	2.67
	H					5.00	5.00	5.00	5.00	4.80	4.60	4.35	4.20	3.96	3.48

WELDED TYPE.

type of beam and depth in inches		safe distributed loads in tons for spans in feet													
		16	18	20	22	24	26	28	30	32	34	36	38	40	45
H.T.20	L	2.25	2.24	2.19	2.15	2.08	2.01	1.92	1.86	1.81	1.73				
	M	3.07	3.01	2.94	2.81	2.72	2.62	2.53	2.44	2.31	2.24				
	H	4.10	4.09	4.04	3.94	3.86	3.74	3.62	3.50	3.37	3.25				
H.T.26	L	2.50	2.46	2.44	2.33	2.27	2.18	2.10	2.04	1.95	1.83	1.80			
	M	3.70	3.64	3.58	3.48	3.36	3.22	3.11	2.95	2.84	2.75	2.67	2.48		
	H			5.75	5.68	5.60	5.48	5.37	5.16	5.00	4.85	4.68	4.50	4.86	4.00
H.T.32	L			2.78	2.75	2.67	2.60	2.52	2.46	2.37	2.32	2.26	2.17	2.08	
	M			4.07	4.00	3.92	3.82	3.71	3.60	3.46	3.36	3.24	3.17	3.05	
	H				6.50	6.42	6.30	6.19	6.00	5.81	5.68	5.50	5.34	5.18	4.81
H.T.38	L			3.04	3.01	2.97	2.88	2.80	2.71	2.63	2.57	2.51	2.45	2.39	
	M			4.23	4.13	4.09	4.00	3.87	3.77	3.63	3.54	3.42	3.32	3.22	2.95
	H				7.10	7.07	7.00	6.91	6.80	6.63	6.50	6.30	6.16	6.00	5.60

HIGH-TENSILE RIVETED TYPE.

note: loads have been reduced so that deflection is not greater than  $\frac{1}{325}$  of the span

## SOMMERFELDS' STEEL LATTICE BEAMS: GENERAL DATA.

Compiled by R.A. Sefton Jenkins B.Sc., A.C.G.I., A.M.I.Struct.E., A.M.I.C.E., consulting engineer, in collaboration with O. Schaltsche, Technical Director of Sommerfelds Ltd.

## 20.C10 · SOMMERFELDS · STEEL LATTICE BEAMS : GENERAL DATA

This Sheet is one of a series dealing with structural components fabricated from light steel sections, and supersedes Sheet 20.C10, published 3.4.52. It describes two ranges of lattice beams, one of welded mild steel construction (W) and one of riveted high-tensile steel construction (H.T). The tables on the face of the Sheet give the safe distributed loads for each type and size of beam.

### Design and Construction

**W (welded) range:** These beams are intended for short roof and floor spans. They are of all-welded construction, using mild steel sections. The top boom consists of two angles and the bottom boom is normally also of two angles but may be a single flat where beams are exposed or where dictated by architectural requirements.

**H.T (high-tensile) range:** These are of riveted construction, the sections being made from high-tensile steel. The top and bottom booms are each composed of two angles. The diagonals are single angles, the flanges of which are squeezed together at the ends to allow them to pass between the angles forming the booms. The material has greater strength than steel to BS. 548 : 1934 *High Tensile structural steel for bridges etc. and general building construction*. In calculating the design loads, however, the stresses for steel complying with BS. 548, given in BS. 449:1948 *The use of structural steel in building*, have been used.

All beams are designed with a slight upward camber to counteract the natural deflection of the beam.

### Sizes and Types

The standard depths of beams are:—

W (welded) type: 6 in. to 16 in. in 2-in. increments.

H.T (high-tensile) type: 20 in. to 38 in. in 6-in. increments.

Other depths can be specially fabricated. Lengths of beams are as required. Each size of beam is made for three loading capacities, L (light), M (medium) and H (heavy).

### Use of Tables

The loads are in tons and are the safe, uniformly-distributed loads that the given beam can carry for the span shown. If point-loads are applied to the beams (by purlins, for example) at the node points, a slightly greater total load can be carried. Where the deflection of the beam would otherwise be critical, the safe loads have been reduced so that the deflection is not greater than 1/325 of the span.

**Note:** For maximum loads provision should be made for supporting the beams laterally at approximately 4 ft. 0 in. centres. This can often be done by ensuring that the decking or purlins are adequately fixed to the beams.

### Applications

The beams are suitable for all types of floor and flat roof construction. Typical applications are given on Sheet 20.C13.

For the present practice of using prefabricated roofing units which span directly between supporting members, lattice beams may be used for spans up to 50 ft. Where r.s.j.'s or channels are used for supporting the roofing units, it has been found that, though adequate for flexural rigidity, they are generally heavier than required for countering the maximum bending moment. A specially-designed lattice beam can obviate this disadvantage.

Trusses formed by two lattice beams acting as rafters with horizontal tie-bars can produce one of the cheapest forms of pitched roof construction. Further details of this application can be obtained from the manufacturer.

### Finish

In addition to the normal steelwork finishes, e.g., red oxide on wire-brushed steel, special finishes are available.

### Ordering

The following information should accompany orders for lattice beams:—

- (a) Overall length of beams
- (b) Load and type (uniformly-distributed, point, etc.)
- (c) Details of end fixing
- (d) Detail of roof overhang (if any)
- (e) Application for which beams are required

### Further Information

The manufacturer designs structural steelwork of all types and can advise as to whether a lattice-beam or traditional structure would be more economical in any particular case.

Compiled from information supplied by:

Sommerfelds Ltd.

Address : Wellington, Shropshire.

Telephone : Wellington 1000 (5 lines).

London Office : 167, Victoria Street, S.W.1.

Telephone : Victoria 1000 and 8843.

## FACTORY

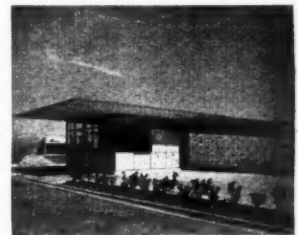
at MORETON, WIRRAL, CHESHIRE

designed by C. J. WILKINSON

assistant architects, J. M. MURTAGH and J. C. HOLT

landscape consultant, G. A. JELlicoe

This new factory for Cadbury Bros. Ltd., designed by their staff architect, provides a single-storey building for the production of chocolate biscuits and two-storey storage accommodation for raw materials and finished stock. The factory employs 450 men and women, with an eventual capacity for 600 employees in the existing buildings. The total floor area is 220,000 sq. ft. The site is on the north side of the Wirral Electric Railway.



Gate keeper's lodge.

Office entrance at the north-west corner of the main building.





Above, the western edge of the site which is laid out with ponds and cascades of water following the fall of the site from south to north.

## FACTORY

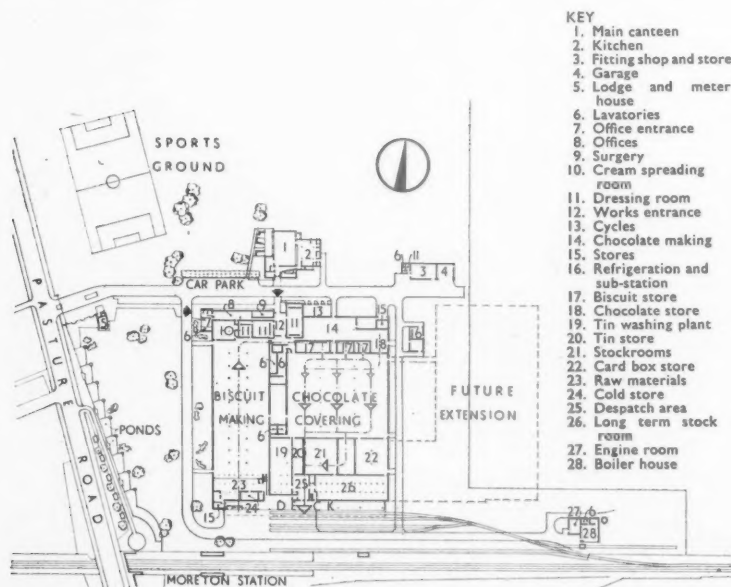
at MORETON,  
CHESHIRE  
designed by  
C. J. WILKINSON

**SITE.**—The natural fall of the site is from the railway, northwards towards the River Birket, with a drop of 10 to 12 ft. The north side of the site is low lying and the ground was marshy, requiring extensive site levelling to provide a level platform for the main factory buildings above the highest known flood level, and then to grade the land towards the river, into which all surface water is discharged. The west portion of the site, seen in the photograph above, has been designed by the landscape consultant and includes a series of ponds and cascades

down from south to north. The water is kept in constant circulation by a pump in the lodge building. To the north of the factory approach road the ground is to be kept permanently for playing fields and recreation.

**PLAN.**—The production areas are mainly single storey north light structures and other departments are contained in flat roofed, framed buildings, with top light wherever possible. Delivery of raw materials and despatch of finished goods is at present by road vehicles from the loading deck on the south road. Later a rail siding will be built. On arrival, raw materials are taken up to first floor level by lift and are fed by gravity to the mixing machines in the biscuit making area. Baking takes place in continuous ovens which extend from south to north of this area. Uncovered biscuits then pass through the biscuit stores to the chocolate covering room. On completion of cooling and packing the finished goods proceed to the stockrooms and are subsequently despatched from the east end of the loading deck.

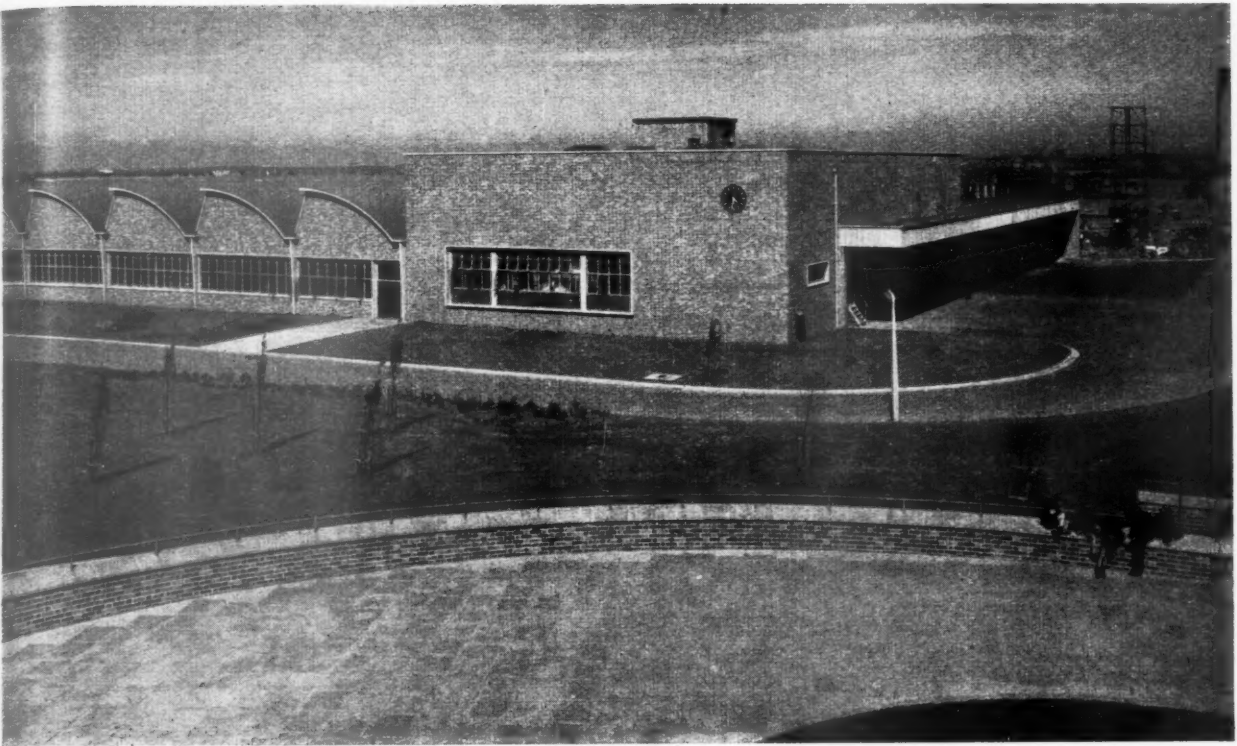
**CONSTRUCTION.**—Most of the buildings are of reinforced concrete frame construction, with non-load bearing brick external walls. The main production areas are roofed with north light r.c. barrel vaults. Spans average 40 ft. and the chord width is a standard 28 ft. 6 in. External brick panel walls and north to south internal walls are generally



Site plan

- KEY
1. Main canteen
  2. Kitchen
  3. Fitting shop and store
  4. Garage
  5. Lodge and meter house
  6. Lavatories
  7. Office entrance
  8. Offices
  9. Surgery
  10. Cream spreading room
  11. Dressing room
  12. Works entrance
  13. Cycles
  14. Chocolate making room
  15. Stores
  16. Refrigeration and sub-station
  17. Biscuit store
  18. Chocolate store
  19. Tin washing plant
  20. Tin store
  21. Stockrooms
  22. Card box store
  23. Raw materials
  24. Cold store
  25. Despatch area
  26. Long term stock room
  27. Engine room
  28. Boiler house

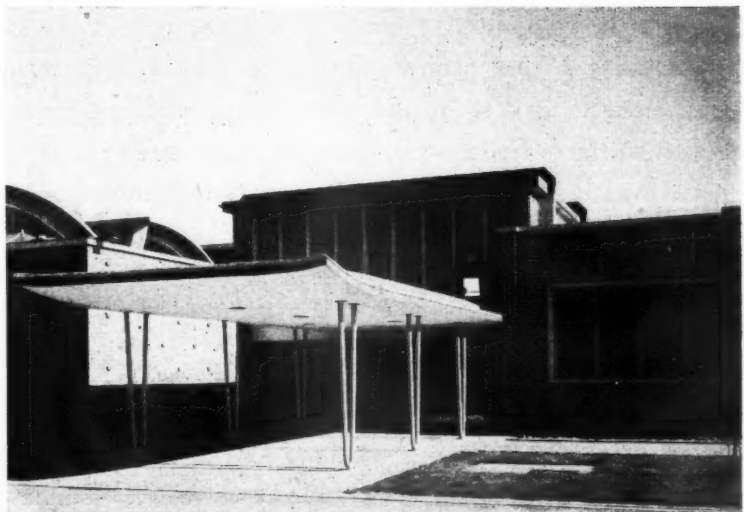




of 13½-in. brickwork and east to west external walls are 9-in. brickwork. Flat roofed blocks have r.c. floors and roofs and the main canteen has a continuous shell concrete roof to provide a room free from columns. The flat roofed sections have load-bearing brick walls.

The general contractors were J. Gerrard & Sons, Ltd. For sub-contractors see page 300.

*Above, the south-west corner of the main building with the loading deck on the right. Right, main works entrance. Below, part of the main production area. Below right, the office entrance which has a false ceiling painted egg-shell blue.*



## HOUSE

at GORTNAMONEY, MOIRA, CO. DOWN, NORTHERN IRELAND  
designed by E. W. BEAUMONT OF HOUSTON and BEAUMONT  
heating consultant, J. R. W. MURLAND

At the time this house, built by the architect for his own occupation, was designed the limit for houses of this type in Northern Ireland was 1,500 sq. ft. Just before construction started, however, the limit was raised to 2,000 sq. ft. and some of the dimensions were increased, mainly in the bedroom wing, raising the floor area to 1,650 sq. ft. The house is heated throughout by floor panels, thermostatically controlled. The layout of the panels is shown on the plan opposite.

*A general view from the north-west.*



*The entrance from the north-east.*

GENERAL  
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mc  
mixing volu  
livin  
stud  
groun

Diagram



Grou

**GENERAL.**—The site, which is of 2 acres, is a mile from the village of Moira and 18 miles from Belfast, close to a main road. The ground slopes down towards the south. After considerable thought the architect decided not to use the open type of plan, but to divide the house into three separate zones, living room and study, bedrooms, and dining room and kitchen. The hall can be used as addi-

*Right, the dining room, looking towards the built-in fitting, with hatch and communicating door to the kitchen.*

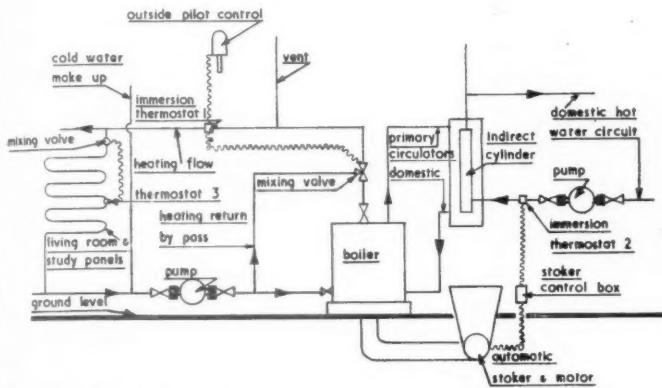
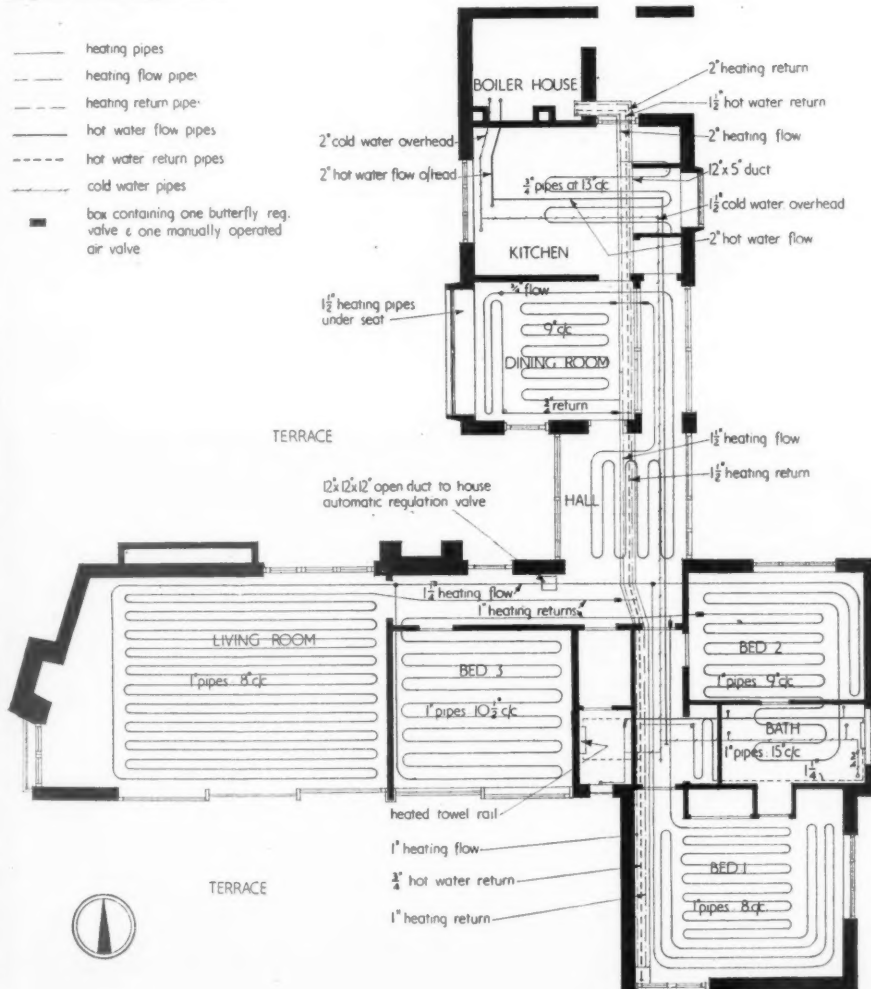
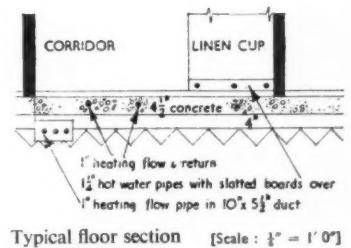


Diagram of heating controls

- heating pipes
- heating flow pipe
- heating return pipe
- hot water flow pipes
- hot water return pipes
- cold water pipes
- box containing one butterfly reg. valve & one manually operated air valve



Ground floor plan showing layout of floor heating panels [Scale: 1/2" = 1' 0"]



Typical floor section [Scale: 1/4" = 1' 0"]



## HOUSE

at GORTNAMONEY, N. IRELAND

designed by E. W. BEAUMONT

tional dining space. The study has a dual use, and is shown as a third bedroom on the plan. The living room and study face south on to a terrace and there is another terrace to the north, which receives early morning sunshine over the house and direct sunshine in the evening in summer. There is an outside, log-burning fireplace, for sitting out in the evenings. The house is built of 11-in. cavity external walls, stone chimneys and terrace walling

and a timber roof. Floors are finished with ceramic tiles in kitchen and bathroom, gurjun hardwood in dining room and study, and softwood in bedrooms. The house is entirely floor heated and the architect wished to test the efficiency of an entirely automatic system which requires the minimum attention, except for filling the skip of the automatic stoker and removing clinkers from the boiler. The system, which was fully described in the JOURNAL for February 19, 1953, has proved very successful. The panels are laid in the centre of the 4½-in. site concrete, under which is a 4-in. layer of vermiculite concrete insulation. The house, which was built by direct labour, cost approximately 65s. per ft. sq. For sub-contractors see page 300.



*Top, the main living room and study windows from the south-west. Above right, the living room fireplace. The floor finish is granolithic with a border of hardwood and close-carpeting. This room, and also the remainder of the house is heated by floor panels. Right, the sliding windows in the living room.*





## TECHNICAL SECTION

The latest report in the National Building Studies series\* gives an account of the efficiency of concreting methods on housing sites. The broad conclusion to be drawn is that concrete mixers are rarely used to the full extent of their performance. This is partly a question of the number and organisation of men in the concreting team, and partly a question of using mechanical aids for the transport and deposit of concrete. The report illustrates various devices that BRS have developed for this latter purpose, and it is encouraging to notice that some of them have already been taken up by the industry and are to be seen in use on sites here and there in the country. Credit is due to the BRS staff for winning co-operation in this way, but it is surely appropriate to renew the plea made by Sir David Eccles some time ago that the industry should contribute to the cost of building research.

\* NBS Special Report No. 23. "A Study of Concreting Methods on Housing Sites." HMSO 2s. 6d.

### CURRENT PRICES FOR MEASURED WORK

Prepared by Davis, Belfield & Everest, chartered quantity surveyors

*Prices are for work executed complete and are for an average job in the London area. All prices include overhead charges and profit for the general contractor. Current prices of materials and rates of wages last appeared in the JOURNAL for August 19.*

#### PRELIMINARIES

To all valuations for measured work add for Preliminaries, Water and Insurances, according to the nature of the job (say) .... 10%

#### EXCAVATOR

##### Excavation

N.B.—The following prices are applicable to hand excavation in heavy soil.

Surface digging, 6" deep	per yard super	1/-
Ditto, 12" deep	"	2/1
Excavating not exceeding 10' 0" deep to reduce levels	per yard cube	8/3
Excavating not exceeding 5' 0" deep to form basement	"	9/4
Ditto exceeding 5' 0" and not exceeding 10' 0" deep ditto	"	13/6
Excavating not exceeding 5' 0" deep to form surface trenches	"	11/5
Ditto exceeding 5' 0" deep and not exceeding 10' 0" deep ditto	"	15/7
Excavating not exceeding 5' 0" deep to form basement trench commencing 10' 0" deep	"	19/8

#### EXCAVATOR—(continued)

##### Disposal

Returning, filling and ramming around foundations	per yard cube	3/8
Wheeling excavated soil not exceeding 100 yards and depositing	"	4/2
Ditto and spreading and levelling	"	5/5
Ditto, ditto, and consolidating to make up levels under floors and pavings	"	6/10
Filling into lorries and carting away	"	13/1

##### Planking and Strutting

Planking and strutting to sides of surface or basement excavation not exceeding 5' 0" deep	per ft. super	-/7
Ditto not exceeding 10' 0" deep	"	-/9
Planking and strutting to sides of surface trenches not exceeding 5' 0" deep (both sides measured)	"	-/2
Ditto not exceeding 10' 0" deep (ditto)	"	-/3

#### CONCRETOR

##### Concrete (Basic Prices)

Portland cement concrete 1 : 3 : 6 with 1½" coarse aggregate in foundations and masses exceeding 12" thick	per yard cube	69/9
Ditto 1 : 2 : 4 with 1½" coarse aggregate ditto	"	70/3

## CONCRETOR—(continued)

## Add to Basic Prices for:—

Working around rod or mesh reinforcement	per yard cube	4/2
Being in beds less than 12" thick (6"-12")	"	2/1
Ditto less than 6" thick (4½"-6")	"	6/3
Being in small quantities not exceeding 3' cube	"	16/7
Being in suspended floors and roofs	"	12/5
Being in walls not exceeding 6" thick	"	20/9
Ditto exceeding 6" but not exceeding 12" thick	"	14/6
Ditto exceeding 12" thick	"	10/5
Being in lintels, beams, etc., not exceeding 72 sq. in. sectional area	"	31/1
Ditto exceeding 72 and not exceeding 144 sq. in. sectional area	"	24/10
Ditto exceeding 144 sq. in. sectional area	"	20/9
Being in columns not exceeding 72 sq. in. sectional area	"	39/5
Ditto exceeding 72 and not exceeding 144 sq. in. sectional area	"	31/1
Ditto exceeding 144 sq. in. sectional area	"	24/10

## Formwork

Close boarded formwork and supports to soffits of floors not exceeding 12' high	per yard super	15/3
Ditto to vertical faces of walls (both sides measured)	"	15/5
Ditto to sides and soffits of lintols and beams	per foot super	2/3
Add to any of the above for wrot formwork and rubbing down concrete	per yard super	2/10

## Reinforcement

½" to 1" diameter mild steel rod reinforcement, hooked, bent and tied at intersections as required and fixing in concrete	per cwt.	53/7
½" diameter ditto	"	57/11
¾" diameter ditto	"	71/9
Steel wire mesh fabric reinforcement to B.S. 1221, weighing 4-71 lb. per yard super, well lapped at joints and embedded in concrete	per yard super	3/5
Ditto weighing 9-32 lb. per yard super ditto	"	6/7

## BRICKLAYER

## Common Brickwork

	Flettons	Rough stocks
Reduced brickwork one brick thick in cement-lime mortar (1 : 3 : 9)	per yard super 30/-	36/-
Add to the above:—		
If in cement mortar (1 : 3)	" -/3	-/3
If circular on plan to flat sweep	" 4/10	5/1
Ditto to quick sweep	" 9/8	10/4
Half brick wall in cement lime mortar (1 : 3 : 9)	" 16/3	19/4
Ditto built fair and pointed both sides with a neat flush joint	" 18/3	21/5
One brick wall built fair and pointed both sides with a neat flush joint	" 35/5	41/6
11" hollow wall with 2" cavity and galvanized iron twisted ties	" 35/3	41/4

## Engineering Brickwork

	Lingfield Engin-eering Wirecuts	Blue Pressed bricks
Reduced brickwork one brick thick in cement mortar (1 : 3)	per yard super 43/10	76/6
Half brick wall in cement mortar (1 : 3)	" 23/8	40/4
Ditto built fair and pointed both sides with a neat flush joint	" 25/8	43/2
One brick wall built fair and ditto	" 48/3	81/9

## Sundries

Extra for internal fair face and flush pointing	per yard super	1/2
Horizontal damp-proof course of two courses of slates and bedding and pointing	per foot super	3/9
Ditto of hessian base bitumen well lapped at joints	"	-/10
Fixing only metal window, size 1' 8" x 4' 0", including cutting and pinning lugs to brickwork, bedding frames and pointing in mastic one side	each	8/6
Ditto 3' 3" x 4' 0" ditto	"	13/2
Ditto 6' 6" x 4' 0" ditto	"	23/3

## BRICKLAYER—(continued)

## Partitions

	2"	2½"	3"	4"
Clinker concrete solid partition blocks to B.S. 492 and setting in cement mortar	per yard super 8/2	9/6	11/3	13/8
Hollow clay partition blocks to B.S. 1190, keyed on both sides and ditto	" 8/11	9/10	11/3	-
Moler hollow partition blocks, keyed on both sides and ditto	" 18/3	19/9	21/3	25/8

## Facings

	Ordinary facings, p.c. 242/- M.	White glazed facings p.c. 261/4 M.	White cement
Extra over common brickwork built with bricks p.c. 113/- M for facings as described, and pointing with a neat weathered joint:—			
To solid wall in Flemish bond	per yard super 14/3	15/7	84/8
To cavity wall in stretcher bond	" 11/8	12/8	67/9
To ditto in Flemish bond with snapped headers	" 13/10	15/1	—
Half brick wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint	" 26/9	27/9	—
Ditto pointed both sides	" 27/10	28/10	—
One brick wall in facings built fair and pointed one side	" 49/10	51/11	—
Ditto pointed both sides	" 50/10	53/-	—
Brick on end flat arch in facings 4½" on soffit and 9" high and pointing	per foot run 3/1	3/2	—
Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing	" 5/2	5/3	—

## ASPHALTER

## Tanking

	To B.S. 1097	To B.S. 1418
Horizontal asphalt tanking in three thicknesses on brick or concrete	per yard super 18/5	29/5
Vertical ditto	" 23/8	33/7

## Roofing

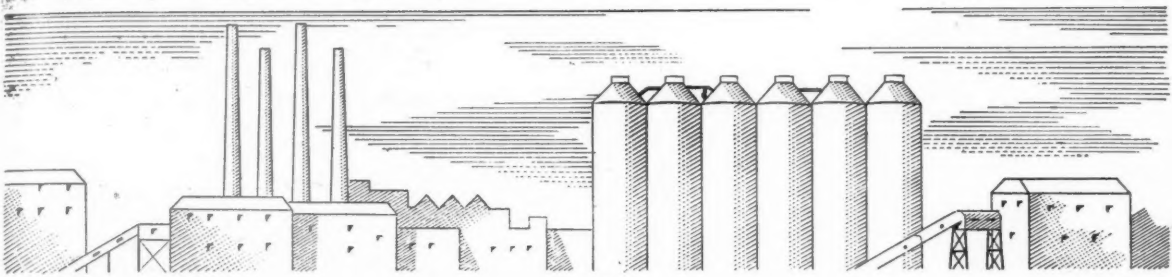
	To B.S. 988	To B.S. 1162
½" asphalt flat in two thicknesses on and including felt underlay	per yard super 13/2	22/1
½" asphalt skirting 6" high with angle fillet at bottom and rounded top, turned into groove	per foot run 2/4	2/7
½" asphalt fascia 6" high with solid water check roll at top and under-out drip at bottom	" 4/6	5/3

## DRAINLAYER

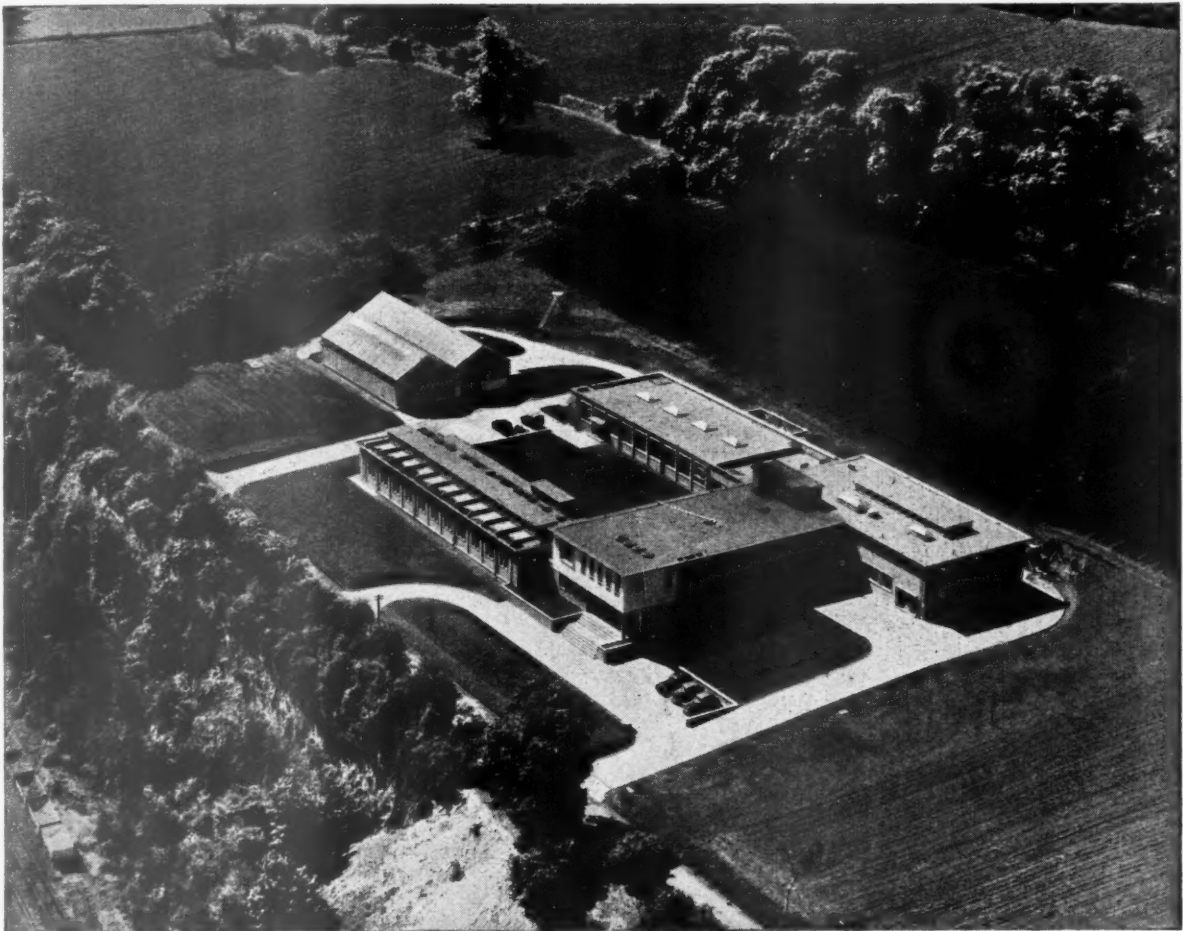
## Trenches and Beds

N.B.—The following prices are applicable to hand excavation in heavy soil, only requiring planking and strutting for depths of 3' or more.

Excavate trenches for 4"-9" pipes, including planking and strutting, filling in and ramming, and wheeling and spreading surplus:—		
For each 12' in depth, for trenches not exceeding 3' 0" deep	per yard run	3/4
Ditto for trenches exceeding 3' 0" and not exceeding 5' 0" deep	"	4/9
Ditto for trenches exceeding 5' 0" and not exceeding 10' 0" deep	"	7/5
6" concrete (1 : 3 : 6) bed and benching for pipes	per yard run	4" 9/4 6" 10/11
6" ditto, and surround	"	15/3 18/4



## Building for the Industries of the World



### CEMENT

The new Research Laboratories of the Associated Portland Cement Manufacturers Ltd., recently constructed by Richard Costain Ltd. to the design of the Architects, Westwood, Sons & Harrison, FF.R.I.B.A.

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## DRAINLAYER—(continued)

Drains		3"	4"	
Clayware butt-jointed land drains and laying in trench	per foot run	-4½	-5½	
"Seconds" quality glazed stoneware socketed drains and laying and jointing in trench	"	4"	6"	9"
"British Standard" quality ditto	"	2/1	2/11	4/11
Extra on "Seconds" quality for bends	each	3/2	4/9	13/9
Ditto "British Standard" quality ditto	"	4/-	5/11	17/7
Extra on "Seconds" quality for equal single junction	"	5/5	8/-	17/3
Ditto "British Standard" quality ditto	"	7/11	9/10	21/8
Cast iron socketed drains to B.S. 437 and laying and jointing in trench	per foot run	11/5	17/4	33/11
Extra for short radius bend (Fig. No. 4)	each	22/7	44/6	125/-
Extra for single junction (Fig. No. 18)	"	41/3	79/11	221/2

## Fittings, etc.

		4"	6"
Glazed stoneware trapped gulley with galvanized grating and outlet and setting in concrete	each	22/9	42/5
Ditto with vertical inlet ditto	"	28/5	47/11
Cast iron trapped gulley with high invert, grating, and 4" outlet and setting in concrete	"	63/9	—
Ditto with vertical inlet ditto	"	72/8	—
Glazed stoneware intercepting trap with inspection arm, stopper and chain and fixing in manhole and jointing to drain	"	72/3	84/2
Brown glazed stoneware half round straight channels and bedding and jointing in cement mortar	per foot run	1/11	2/10
Ditto ordinary channel bend and ditto	each	5/8	7/11
Cast iron coated single seal manhole cover and frame to B.S. 497 Grade C and setting frame in cement and cover in grease	"	41/9	61/8
Galvanized ditto	"	69/10	105/11

## PAVING

		3"	1"	1½"
Cement and sand (1:3) floated screed to receive pavings	per yard super	3/7	4/4	4/11
Ditto trowelled smooth to receive linoleum	"	3/11	4/8	5/3
Cement and sand (1:3) paving trowelled hard and smooth	"	4/-	4/9	5/4
Granolithic paving (1:2½) laid on concrete	"	6/5	7/3	8/1
1" red composition paving to B.S. 776 laid on prepared screed	per yard super			16/6
1" terrazzo paving (Portland cement and spar aggregate) laid on prepared screed	"			33/8
Extra for white or cream cement	"			5/3
1" rubber flooring in all colours, laid on prepared screed	"			58/3
1" x 12" x 12" rubber tile flooring ditto	"			48/10
1½" x 12" x 12" cork tile flooring (brown shades) laid in mastic on prepared screed, surfaced and polished	per yard super			45/11
1½" hard red paving bricks p.c. 404/6 per M. laid flat on prepared bed in cement mortar	"			23/6
1½" ditto laid herringbone	"			25/7
6" x 6" red quarry tile paving to B.S. 1286 laid on prepared screed with straight joints	per yard super	22/10	25/5	
6" x 6" buff quarry tiles as last	"	25/9	29/2	
2½" (finished) gravel path laid on prepared bed, well watered and rolled to cambers and falls	"			2/10

## MASON

		Port-land	Arti-ficial
Portland stone and all labours in pilasters, and quoins	per foot cube	37/-	
Ditto in jambs, lintols, etc.	"	39/4	
Ditto in arches	"	47/9	
Ashlar av. 6½" on bed with plain dressed face	per foot super	21/9	
Portland stone or artificial stone to B.S. 1217:—			
4½" x 4" sill, sunk, weathered, throated and grooved for water bar, set and jointed in cement mortar	per foot run	7/2	4/3

## MASON—(continued)

		Port-land	Arti-ficial
9" x 3" ditto	per foot run	8/5	6/6
2" x 12" Coping, weathered and twice throated, set and jointed as last	"	7/6	5/9
3" x 12" Ditto	"	11/2	8/8
5" x 12" Saddle back coping twice throated, set and jointed as last	"	18/8	13/2
6" x 12" Ditto	"	20/9	14/11

## SLATER, TILER AND ROOFER

		20" x 10"	16" x 10"
Best Bangor slates to B.S. 680 laid with 3" lap, each slate nailed with two stout copper nails	per square	304/6	254/7
Ditto hung vertically to dormer cheeks and gables	"	309/9	262/6

## Tiles

		Hand made	Machine made
Best sand faced plain (nibbed) tiles to B.S. 402, 10½" x 6½" laid to a 4" gauge with each tile in every fourth course nailed with galvanized nails	per square	183/9	165/11
Ditto hung vertically to dormer cheeks and gables to 4½" gauge with each tile nailed with galvanized nails	"	199/6	186/4
Berkshire hand made sand faced red pantiles 14½" x 10" laid to 2½" head and 1½" side laps, each tile in every third course nailed with galvanized nails	per square		191/7
Ditto to mansard slopes	"		212/8
Bridgwater hand made Double Roman red sandfaced tiles 16½" x 14" laid to 3" laps, each tile in every course nailed with galvanized nails	"		138/1
Concrete plain (nibbed) tiles to B.S. 473, 10½" x 6" laid as before described for plain tiles	"		131/3
Ditto hung vertically to dormer cheeks, and gables, ditto	"		157/6
Concrete interlocking tiles 15" x 9" laid to 3" lap, each tile in every third course nailed with galvanized nails	"		97/1
Ditto to mansard slopes ditto	"		102/4
6" corrugated asbestos cement sheeting fixed to wood roofs with galvanized drive screws and washers with a side lap of 1½ corrugations and an end lap of 6"	"		101/10
6" ditto but fixed vertically	"		112/10
Add to both last if fixed to steel purlins or sheeting rails with galvanized hook bolts	"		5/3

## Felt

		Two layer	Three layer
Reinforced bituminous roofing felt laid with 3" laps and nailed to rafters at 18" centres with galvanized clout nails	"		20/9
One-ply bitumen felt to B.S. 989 laid on concrete. Each layer bedded in hot bitumen	per yard super	8/8	11/6
Extra on last for finishing with granite chippings	"		-9½

## CARPENTER

## Carassing

		per foot cube	
Softwood, sawn and fixed, in plates, sleeper joists and lintols		14/5	
Ditto in floor and ceiling joists	"	16/7	
Ditto in stud partitions	"	18/5	
Ditto in rafters	"	18/3	
Ditto in purlins and struts	"	18/5	
Ditto and framing in ridge	"	18/3	
Ditto in hip and valley rafters including cutting rafters to sizes	"	20/6	

## Battening and Boarding

		Roof slopes	Vertical hanging
3" x 2" battens nailed to softwood for 20" x 10" slates to 8½" gauge	per square	29/11	32/7
Ditto 16" x 10" slates to 6½" gauge	"	39/11	43/1
3" x 1½" ditto for 10½" x 6" tiles to 4" gauge (4½" for vertical hanging)	"	52/6	52/6
3" x 2" ditto for 14½" x 10" pantiles to 12" gauge	"	23/1	24/2
3" x 1½" ditto for 15" x 9" concrete interlocking tiles to 12" gauge	"	17/10	18/11
Roof boarding in batten widths close jointed and fixed to flat or sloping roofs	"	110/-	136/5
Ditto tongued and grooved and prepared for felt roofing including furring to falls	"	163/11	190/10

# FINE BUILDINGS

Everywhere these days you can see really fine buildings—attractively designed and really well-built. Such a building is illustrated below—"Four Gables" at Bure Lane, Friars Cliff, Christchurch, Hants.

**Architect:** P. H. Rose, A.R.I.B.A., A.R.I.C.S.,  
Chartered Architect and Surveyor,  
Matthews & Rose,  
Priory Chambers,  
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Christchurch, Hants.

**Builders:** Messrs. Taylor & Son,  
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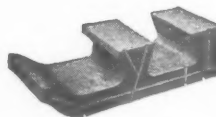
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## CARPENTER—(continued)

		Roof Slopes	Mansards
Sawn gang boarding fixed to joists in roof	per foot super	1/2	1/5½
Wrot and cross-tongued eaves soffit	"	1/11	2/2½
6" wrot and grooved eaves fascia planted on	per foot run	-/10½	1/-

## Wall and Ceiling Boards

		Verti- cally	Soffites
1" fibre board to B.S. 1142 fixed with galvanized flat headed nails to softwood	per yard super	5/11	6/1
1" asbestos cement flat sheeting to B.S. 690 fixed as last	"	6/10	7/3
1" ditto	"	8/-	8/5

## JOINER

Floors and Skirtings  
(All thicknesses stated are nominal)

		¾"	1"	1½"
Plain edge softwood flooring in batten widths nailed to floor joists	per square	135/6	151/-	181/-
Tongued and grooved ditto	"	145/-	161/-	192/6
1" double grooved and tongued and grooved wood block floor laid herringbone with two-block border, set in hot mastic composition on prepared screed and wax polished :-				
Swedish softwood	per yard super			29/5
European beech	"			35/2
English oak	"			46/9
European oak	"			39/11
Burma teak	"			44/8
Softwood skirtings with splayed or molded top edge, planted on (per inch sectional area)	per foot run	-/2½	-/2½	
Extra for grounds plugged to brickwork	"		-/8	

## Windows in Softwood

		1½"	2"
Rebated and molded softwood fanlights and casement sashes divided into squares for glass	per foot super	3/2	3/5
Extra for hanging	each	6/10	6/10
Cased frames with 6" x 3" oak sill and 2" molded double hung sashes including pulleys, line and weights	per foot super		10/4

N.B.—The above prices are for purpose made joinery. Standard pattern casement windows and double hung sashes and frames to B.S. 644 are cheaper.

## Doors in Softwood

		1½"	1¾"	2"
Framed ledged and braced doors filled in with 1" T. & G. and V-jointed boarding and hanging	per foot super	6/6	7/3	7/3
Four-panel door, square both sides and hanging	"	5/4	6/1	6/1
Ditto molded one side	"	5/11	6/7	6/7
Ditto molded both sides	"	6/6	7/3	7/3

N.B.—The above prices are for purpose made doors. Standard paneled doors to B.S. 459 are cheaper.

1½" standard flush doors 2' 6" x 6' 6" internal pattern	each	120/8
2" ditto external pattern	"	129/5

## Linings, Frames, etc., in Softwood

		Sectional area Up to 6" 6" to 12"
Window and door linings etc. (per inch in sectional area)	per foot run	-/4 -/3½
Frames wrot all round and framed (ditto)	"	-/3 -/2½
Mullions, transoms and cills (ditto)...	"	-/3½ -/3
Moldings, architraves, etc. (ditto)	"	-/3½ -/3½
6" Window boards with rounded nosings, tongued at back and including bearers	"	1" 1½"
9" Ditto	"	3/3 3/6
	"	3/8 4/-

## Shelving and Fittings in Softwood

		¾"	1"
Shelving of 2" slats spaced 1" apart on bearers (measured separately)	per foot super	2/9	3/1
Shelving on ditto	"	2/6	3/1½
Cross tongued shelving on ditto	"	3/1½	3/9
Shelving 9" wide on ditto	per foot run	1/9	2/2
2" shelf bearers plugged to walls	"	1/1	1/3
The following in framed up cupboard fittings :-			
T. & G. & V-jointed back	per foot super	2/2	2/6½
Cross tongued top, bottom shelf or division	"	3/2½	3/9
1½" flush cupboard doors	"	7/5	
Labour rebate or groove	per foot run	-/3½	

## JOINER—(continued)

Labour cross-grain	per foot run	-/4½
1" x 2" bearers screwed on	"	-/6

N.B.—The above prices are for purpose-made cupboard fittings. Standard pattern kitchen fittings to B.S. 1195 are cheaper.

## IRONMONGERY

		Soft- wood	Hard- wood
3" steel butts (medium quality)	per pair	5/2	6/4
4" ditto (ditto)	"	6/11	8/6
Double action floor springs and top centres including filling boxes with oil	each	182/8	188/10
Overhead check action door springs. P.C. 66/8	"	84/11	88/9
6" barrel bolts. P.C. 5/6	"	7/9	8/3
Cupboard locks. P.C. 8/2	"	12/5	13/7
Norfolk latches. P.C. 5/6	"	10/8	12/3
Cylinder night latch. P.C. 15/11	"	23/6	25/6
Mortice latch. P.C. 9/4	"	14/11	16/7
Rim lock. P.C. 10/-	"	14/6	15/8
Mortice lock. P.C. 15/2	"	22/6	24/5
Door furniture. P.C. 24/-	per set	27/7	27/11
Sash fasteners. P.C. 9/-	each	11/9	12/4
Casement fasteners. P.C. 7/11	"	10/1	10/7
Casement stays. P.C. 11/6	"	14/-	14/6

## STEEL AND IRONWORKER

## Structural Steelwork

The following prices are for Basic sections only. Prices for other sections vary roughly in proportion to the price of the steel ex mills—see "Current Market Prices of Materials."

		£	s.	d.
R.S.J.—in steel framed structures hoisted and fixed complete	per ton	60	14	0
Riveted compound girders including plates and rivets	"	71	4	0
R.S. stanchions including caps, bases, cleats, etc.	"	70	3	0
Riveted compound stanchions ditto	"	75	8	0
Riveted roof trusses with flat and angle members, plates, cleats, etc., 30' span	"	105	17	0
Ditto 40' span	"	102	14	0

## Sundries

Simple wrot iron balustrades fixed complete (excluding mortices etc.)	per cwt.	11	10	6
Bolts with heads, nuts and washers and fixing	"	11	13	10

## PLASTERER AND TILE FIXER

24 gauge expanded metal lathing and fixing to softwood soffites	per yard super	5/4
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## Lime and Gypsum Plaster

		Lime "Sirapite"
Three coat lime and two coat "Sirapite" or similar gypsum plaster :-		
On brick walls and partitions	per yard super	6/4 4/11
On concrete soffites including hacking	"	7/8 7/-
On soffite of E.M.L. (measured separately)	"	6/5 7/8
1" Gypsum plasterboard fixed to softwood soffites, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster	per yard super	7/9
Plaster moulded cornice or cove (per inch in girth)	per foot run	-/5

## Cement Rendering

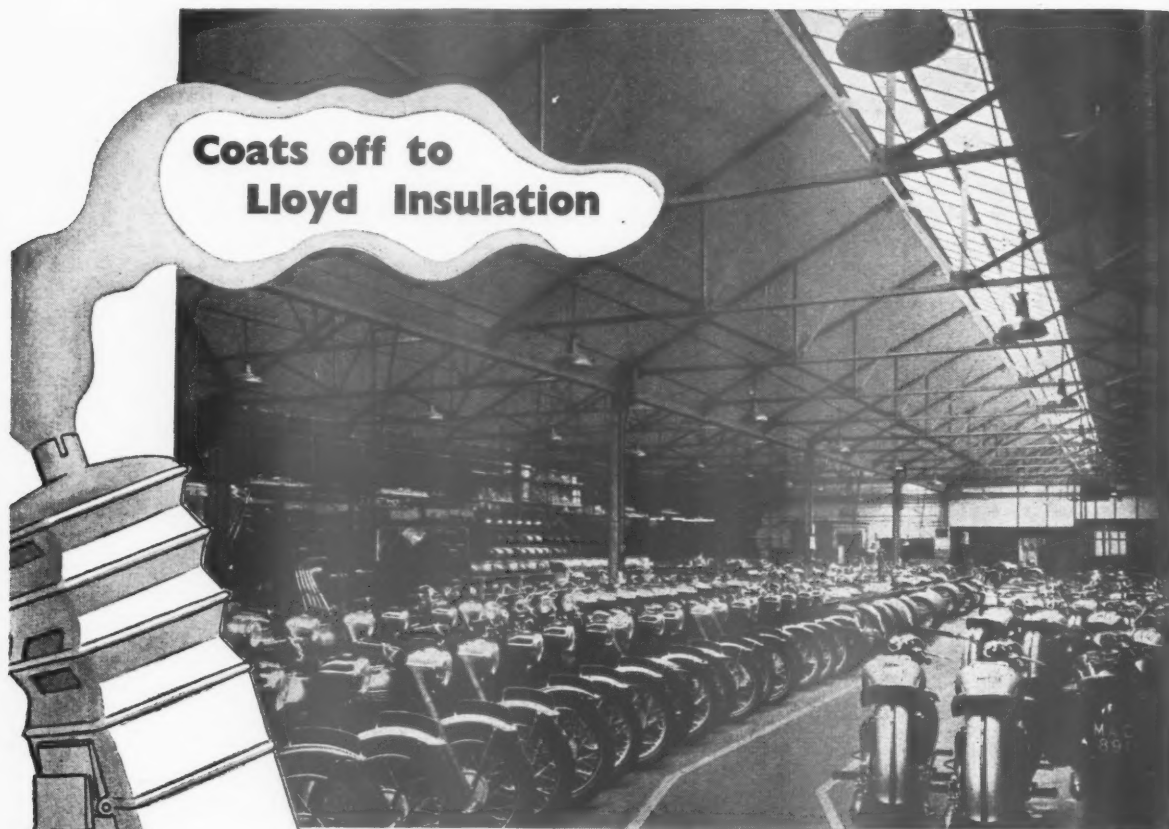
Rendering in Portland cement lime sand (1:1:6) and setting in Keenes cement on brick walls and partitions	per yard super	6/1
Portland cement and sand (1:3) plain face trowelled smooth on ditto	"	5/7
Portland cement and sand (1:3) screed for tiling on ditto	"	2/11

## Wall Tiler

6" x 6" x ¾" standard quality white glazed wall tiles set and jointed on prepared screed	per yard super	39/11
Ditto eggshell matt or glossy glazed enamelled	"	50/2

## EXTERNAL PLUMBER AND COPPERSMITH AND ZINC WORKER

		Gutters, Stepped Flats Milled sheet lead and labour	nash- ings, etc.	flash- ings
	per cwt.	198/9	198/9	209/5



## Coats off to Lloyd Insulation

Architects: Harry W. Weedon, F.R.I.B.A. & Partners, Birmingham 15.

The Triumph motorcycle factory at Coventry was built in 1942 to replace, in the shortest possible time, an existing factory which was destroyed by enemy action. Lining material and new boilers were unobtainable at the time and after the war the factory grew too large for its heating plant. In addition to the boiler house at full capacity, sixteen coke stoves, about a dozen two-kilowatt fires were needed—and even then people had to wear overcoats on occasions to keep warm.

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**EXTERNAL PLUMBER AND COPPERSMITH AND ZINC WORKER—(continued)**

		Flats	Gutters, Stepped flash-ings, etc.	flash-ings
24 S.W.G. sheet copper and labour	per foot super	5/3	5/7	5/10
23 S.W.G. sheet copper and labour	"	5/7	5/11	6/2
14 gauge zinc and labour	"	2/3	2/6	2/8

**Rainwater Pipes and Gutters**

Cast iron medium section ( $\frac{3}{8}$ " metal) R.W. pipes and jointing and fixing to walls with pipe nails and distance pieces or holderbats (cutting and pinning holderbats measured separately)	per foot run	3" With holder-bats	4" With holder-bats	5" With holder-bats	6" With holder-bats
Pressed steel R.W. pipes and ditto	"	3/9	3/1	5/4	4/8
Asbestos cement R.W. pipes and ditto	"	2/8	—	3/6	—
Cast iron half round eaves gutter and jointed and fixed with brackets to fascia	"	2/11	3/2	4/3	4/10
Ditto O.G. ditto	"	3/3	4/-	4/8	6/-
18 Gauge pressed steel half round ditto	"	2/9	—	3/8	—
Ditto O.G. ditto	"	3/5	—	4/4	—
Asbestos cement half round ditto	"	2/6	—	3/9	—

**Soil and Ventilating Pipes**

Lead soil, waste and ventilating pipes (17 lb. per yard for 3" and 22-8 lb. per yard for 4" diameter) fixed to walls with lead tacks and brass screws	per foot run	3"	4"
Medium or heavy section cast iron soil, waste and ventilating pipes with caulked joints, fixed to walls, with pipe nails and distance pieces	"	5/3	6/8

**INTERNAL PLUMBER****Lead Pipes**

Prices are based upon the following weights per yard.

	1"	1 1/2"	2"	2 1/2"
Supply	7	11	16	21
Distributing	6	9	12-5	16
Flushing and overflow	3	5	7	9
Waste and ventilating	—	—	—	7
Supply pipe in trench (measured separately)	3/9	5/9	8/1	10/9
Ditto fixed to walls and ceilings	4/2	6/5	9/-	12/-
Distributing pipe fixed to walls and ceilings	3/10	5/6	7/5	9/9
Flushing and overflow pipe ditto	2/5	3/8	4/11	6/6
Waste and ventilating pipe ditto	—	—	—	5/8
Joints to fittings	each 5/-	5/11	6/4	7/-
Bends	—	—	—	2/-
Branch joints	6/5	7/4	7/10	9/2

**Steel Tubes and Fittings**

Galvanized steel tubes to B.S. 1387 Class C with screwed joints in red lead as supply pipe laid in trench (measured separately)	per foot run	2"	2 1/2"	3"
Ditto Class B ditto fixed to walls and ceilings as supply, distributing, waste pipe, etc.	"	1/11 1/2	2/2	2/4
Joints to fittings	each 3/9	4/6 1/2	5/3	6/4
Bends	—	—	3/11	5/9
Tee, equal or reducing	2/2	2/6 1/2	3/2	4/4

**Copper Tubes and Fittings**

Prices are based upon the following gauges:—

	1"	1 1/2"	2"	2 1/2"
Supply	18	17	16	16
Distributing, waste, etc.	19	19	18	18
Copper tubes to B.S. 1386, as supply pipe laid in trench (couplings and trench measured separately)	per foot run 1/10	2/8	3/7	4/7
Ditto to B.S. 659 as distributing, waste pipes, etc. fixed to walls and ceilings. Couplings measured separately	1/10	2/4	3/2 1/2	3/10

**INTERNAL PLUMBER—(continued)**

Brass compression type couplings—copper to copper	each	1"	1 1/2"	2"	2 1/2"
Ditto bends	"	5/8	6/7	7/3	11/9
Ditto tees	"	7/3	8/4	12/6	18/-

**Sanitary Fittings**

Fireclay sinks 24" x 18" x 10" including cutting and pinning brackets to tiled wall. P.C. 75/-	each	£ s. d.
Combined metal sink and drainer 42" x 18" x 8 1/2" to bearers (measured separately). P.C. 330/-	"	18 12 6
Fireclay lavatory basin 25" x 18" with taps and towel rail bracket including screwing brackets to tiled wall. P.C. 138/6	"	8 8 0
Rectangular cast iron porcelain enamelled bath 5' 6" long, with taps, and panels to side and one end fixed to framing (measured separately) P.C. 390/6	"	23 10 3
Fireclay w.c. pan with trap, plastic seat, high level cistern and flush pipe, including screwing pan to floor and cistern brackets to backboard. P.C. 200/-	"	12 13 0
Ditto with low level cistern. P.C. 240/-	"	14 18 6

**GLAZIER**

18 oz. Ordinary quality sheet glass and glazing with putty in squares not exceeding 4 ft. sup.	per foot super	To wood	To metal
24 oz. Ditto and ditto	"	1/-	1/1 1/2
32 oz. Ditto and ditto	"	1/1 1/2	1/3 1/2
1/2" figured, rolled, and cathedral—untinted and ditto	"	1/7 1/2	1/9
1/2" rough cast and ditto	"	1/4	1/5 1/2
1/2" wired cast and ditto	"	1/8 1/2	1/10
1/2" Georgian wired cast and ditto	"	1/11	2/0 1/2
1/2" Georgian wired polished plate and ditto	"	1/11 1/2	2/1
1/2" polished plate (glazing quality) and ditto	"	6/1 1/2	6/3
1/2" polished plate (glazing quality) and ditto	"	6/-	6/2

**PAINTER****Whitening, Distemper and Paint on Walls**

Prepare and twice whiten plastered walls and ceilings	per yard super	1/2
Prepare and twice distemper with washable distemper on plastered walls and ceilings	"	1/9
Ditto on brick or concrete	"	2/4
Prepare and paint two coats emulsion paint on plastered walls	"	2/7
Prepare, prime, and paint two coats oil colour on plastered walls and ceilings	"	4/9

**Paint on Metal**

Prepare, prime, and paint one coat oil colour on general surfaces	per yard super	Basic price	Add for each additional coat
Ditto metal casements	"	3/-	1/5
Ditto members of roof trusses	"	4/8	2/1
Ditto balustrades one side	"	3/10	1/9
Ditto bars, etc., not exceeding 6" girth	per yard run	4/8	2/1
Ditto small pipe	"	-/9	-/4
Ditto large pipe	"	1/7	-/8 1/2

**Paint on Wood**

Knot, prime, stop and paint one coat oil colour on general surfaces of woodwork	per yard super	Basic price	Add for each additional coat
Ditto on skirtings, rails, frames, etc., not exceeding 3" girth	per yard run	3/4	1/5
Ditto ditto for each additional 3" in girth	"	-/5	-/2
Ditto on sash squares one side	per dozen	4/5	1/8
Ditto on large sash squares one side	"	7/11	3/1

**Stain and Varnish on Wood**

Prepare, size, stain and twice varnish on general surfaces of woodwork	per yard super	3/9
Ditto on skirtings, rails, frames, etc. not exceeding 3" girth	per yard run	-/6
Ditto ditto for each additional 3" in girth	"	-/5

*F.R.I.C.S., F.I.Arb.*



# IBSTOCK CHESTNUT BROWN SAND-FACED BRICKS at IVEAGH HOUSE

(Guinness Trust Flats)

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Contractors :  
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Bricks supplied through  
*R. Y. Ames Ltd., W.C.2.*

For this seven storey block of 161 flats for the Guinness Trust at Loughborough Road, Brixton, Ibstock Chestnut facings are used with sanded finish.

Many architects choose an Ibstock facing for the distinction imparted to brick elevations by the attractive colours and varieties that are available.

## Ibstock FACINGS for Colour

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## THE INDUSTRY

*From the Industry this week Brian Grant reports on the uses of rubber, trade films, a different kind of stacking chair, and two new space heaters.*

## TWO NEW FILMS

Two new films, one on Canadian cedar shingles, the other on Colterro plaster lath, are now available on loan, free, from W. H. Colt (London) Ltd. Both are silent 16 mm. films in black and white, and both deal thoroughly with application methods and fixing details. Running times are 30 and 50 minutes. Obtainable from 15, Langley Road, Surbiton, Surrey.

## NEW FURNITURE

The photograph below shows a chair which cannot be described as a new design, since it first appeared several years ago in, I think, America. But readers may care to know that it is now being produced in this country and retails at the comparatively low price of £6 14s. 9d. The removable canvas covers are made in a number of shades and the frames ( $\frac{1}{2}$  in. diameter steel tube cellulosed) will stack. The manufacturers are new to me, but I understand that they are developing other contemporary pieces. Good luck to them. (*Slinga Furniture*, 18/20 Canonbury Park North, London, N.1.)

## EXPANSION JOINTING

A leaflet from the Expanded Rubber Company sets out the advantages of Rubazote as an expansion jointing material for all types of reinforced concrete construction, including roads. The material is composed of expanded rubber and does not deform permanently even under high compression loads. Normally the material has a smooth skin and forms its own surface finish, but

where mechanical retention, e.g., by reinforcing rods or rebated concrete, is not possible, the surface is removed and the face provides an excellent key for any of the recommended sealing compounds. (*The Expanded Rubber Co. Ltd.*, Mitcham Road, Croydon, Surrey.)

## A NEW CONVECTOR GAS FIRE

Bratt Colbran's are shortly introducing a new type of convector gas fire known as the Bamburgh. It has been evolved at the suggestion of the Northern Gas Board, in whose area there is apparently a marked demand for larger capacity domestic space heaters; the makers have worked in collaboration with the Board's Appliance Laboratory and the fire is now on the Gas Council's list of tested and approved appliances.

There is no refractory backing behind the radiants, the usual brick being replaced by a sheet metal pressing finished in vitreous enamel. There is a vertical passage behind this pressing and chambers in the cheeks at the side, and these form a heat exchanger, air entering through openings in the base and being discharged into the room through a grille in the head of the fire (see illustration). The effect is to increase the overall heating efficiency by some 25 per cent. compared with the neat burner radiant fire. The absence of any refractory back provides a very quick air-warming effect which is particularly useful when the fire is installed in the bedroom. Price is about £13 10s. 0d. including purchase tax. (*Bratt Colbran Ltd.*, 10, Mortimer Street, London, W.1.)

## FACTORY HEATING

Oil fired factory heating units with an output of 200,000 B.Th.U. per hour are produced by Messrs. Tropicair, who maintain that, with an efficiency of 80 per cent, they can provide heat at a cost of 9-75 pence per 100,000 B.Th.U., corresponding figures for coal and coke being 12-0 and 12-92 pence, allowing for labour at 35s. 0d. per ton of fuel. Their heating unit consists of a burner using gas oil, a heat exchanger and an air circulating fan with an output of 2,500 cu. ft. a minute. Standardized extra items include thermostats and humidity control and fresh air inlets which can be adjusted to any required proportion of fresh and recirculated air. Installation is quite simple, as a floor space of only 27 by 29 in. is needed, and a 6 in. flue pipe. Heated air is either ducted or emitted through a

grille at the top of the unit. There are the usual safety devices to cover fuel or current failure. (*Tropicair Ltd.*, Waterside Works, Ashford Road, Ashford Common, Middlesex.)

## FACTS ABOUT RUBBER

The British Rubber Development Board has just published a well illustrated book *What Every Engineer Should Know About Rubber*, by W. J. S. Naunton. The title is accurate, and the book, as one might expect, deals mainly with the properties of rubber of interest to the mechanical engineer. Some of it, however, is of considerable interest to architects, notably the section dealing with the insulation of machinery and the elimination of transmitted vibration. Copies are 3s. 6d. post free from Market Buildings, Mark Lane, London, E.C.3.

## Buildings Illustrated

*Primary School at Ford, Nr. Shrewsbury, for the Shropshire County Council.* (Pages 282-284). Architects: C. H. Simmons, A.R.I.B.A., DIP.T.P., County Architect; R. Booth, A.R.I.B.A., Chief Assistant; G. Chamberlain, A.R.I.B.A., Assistant Architect. Consulting Engineers: Ove Arup & Partners. Quantity Surveyors: County Architect's Department. General Contractors: Shrewsbury Building Contractors Ltd. Clerk of Works: F. C. Griffiths. General Foreman: W. Gwilliam. Sub-contractors: damp-courses, roofing felt, The Ruberoid Co. Ltd.; bricks, Proctor & Lavender Ltd.; special roofings, C. D. Productions Ltd. (pump roofing); "Ply-glass" by James Clark & Eaton Ltd.; Thermoplastic Floor tiles,

(continued overleaf)

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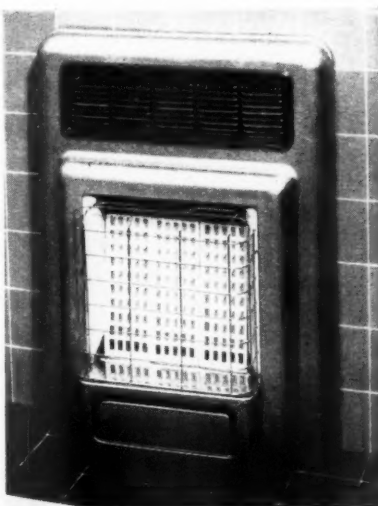
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Left: the Slinga canvas covered chair, price: £6.14.9. Colbran, price: £13.10.0 (inc. p.t.)



Right: the Bamburgh convector gas fire by Bratt



Flooring (North Staffs) Ltd.; central heating, Scull Bros. Ltd.; boilers, Ideal Boilers & Radiators Ltd.; electric wiring, Cooper & Co. (Shrewsbury) Ltd.; electric light fixtures, Merchant Adventurers of London Ltd., and Falk, Stadelman & Co. Ltd.; sanitary fittings, A. D. Foulkes Ltd.; window furniture and door furniture, James Gibbons Ltd.; fireproof doors, Leaderflush Ltd.; textiles, W. H. Smout & Son Ltd.; wallpapers, Wallpaper Manufacturers Ltd.; plant pots, Clement Dalley & Co. Ltd.; school fittings, furniture, Educational Supply Association Ltd.; cloakroom fittings, B. Finch & Co. Ltd.; interior decoration, G. Green.

*Standard Factory for Samson Clark & Co. Ltd., in Caxton Way, Stevenage, Herts, for the Stevenage Development Corporation.* (Pages 285-286). Architects: Professor Clifford Holliday, M.A.R.C.H., F.R.I.B.A., M.T.P.I., formerly Chief Architect; Leonard G. Vincent, Deputy Chief Architect; Group Leader, L. W. Aked, A.R.I.B.A.; Assistant Architect: R. E. Owen, A.R.I.B.A. Sculptor for commemoration stone: Philip Evett. Consultants (reinforced concrete structure): Trussed Concrete Steel Co. Quantity Surveyors: Gardiner & Theobald. General Contractor: Gilbert-Ash Ltd. Clerk of Works: S. A. J. Culpin. General Foreman: S. F. Harding. Sub-contractors: foundations, reinforced concrete, Trussed Concrete Steel Co.; bricks, E. H. Smith Ltd. (mild stocks), London & Sussex Merchants Ltd. (selected Sussex blues); asbestos spray to barrel soffits, Turners Asbestos Co. Ltd.; roofing felt, Ragusa Asphalte Paving Co. Ltd.; hollow clay blocks, London Brick Co. Ltd.; glass, Faulkner, Greene & Co. Ltd.; patent glazing, casements, Williams & Williams Ltd.; patent flooring, Semtex Ltd.; plaster, W. A. Telling Ltd.; metalwork, H. & C. Davis Ltd.; joinery, H. P. Barker & Son Ltd.; painting, J. L. Cunningham; paints and distempers, Sir W. A. Rose & Co. Ltd.,

and Silexine Paints Ltd.; central heating and ventilation, James Combe & Son Ltd.; gasfitting, Eastern Gas Board; electric wiring, Eastern Electricity Board; plumbing, J. S. Wright & Co. Ltd.; sanitary fittings, Stitsons Sanitary Fittings Ltd.; stairtreads, Jaconello Ltd.; door furniture, Dryad Metal Works Ltd.; folding gates, Esavian Ltd.; iron staircase, balustrading and guardrails, H. & C. Davis Ltd.

*Factory at Moreton, Wirral, Cheshire, for Cadbury Bros. Ltd.* (Pages 287-289). Architect: C. J. Wilkinson, L.R.I.B.A., Staff Architect. Cadbury Bros. Assistant Architects: J. M. Murtagh, A.R.I.B.A., J. C. Holt, A.R.I.B.A. Landscape Consultant: G. A. Jellicoe, F.R.I.B.A., P.P.I.L.A. General Contractors: J. Gerrard & Sons Ltd., Lloyd & Cross Ltd. (site levelling). Sub-contractors: quarry tile flooring, grey quartzite flooring, gold quartzite fascia (office entrance), John Stubbs (Marble & Quartzite) Ltd.; faience tiling, Shaws Glazed Brick Co. Ltd.; reconstructed stonework, The Empire Stone Co. Ltd.; metal windows and lantern lights, Crittall Manufacturing Co. Ltd.; north light patent glazing, patent glazing to boiler house, Mellows & Co. Ltd.; chimney stack, P. C. Richardson & Co. Ltd.; felt waterproofing to shells, The Ruberoid Co. Ltd.; facing bricks, Buckley Junction Brick & Tile Co. Ltd.; reinforced concrete, "Twistee" Reinforcement Co.; granolithic reinforcement, Surfastol Ltd.; factory fencing, Bayliss, Jones & Bayliss Ltd.; folding doors, Bolton Gates Ltd.; sliding door gear, P. C. Henderson Ltd.; locks, Chubb & Sons Ltd.; dressing room fittings, Lockerbie & Wilkinson Ltd.; roller shutters, Roller Shutters Ltd.; finish to underside of shell roofs, etc., John Ellis & Sons Ltd.; sanitary fittings and office partitions, Rowe Brothers Ltd.; asphalt roofing, Val de Travers Ltd.; glass domes, T. & W. Ide Ltd.; furniture, fabrics and carpets, Browns of Chester; lay-

out of grounds, Clapham's Nurseries Ltd.; heating and ventilating, Brightside Engineering Co.; electrical installation, British Insulated Callenders Cables Ltd. and Lee Beesley & Co. Ltd.; tubular scaffolding and metal shuttering, Scaffolding (Great Britain) Ltd.

*House at Gortnamoney, Moira, Co. Down, Northern Ireland.* (Pages 290-292). Architect: Major E. W. Beaumont, A.R.I.B.A., A.M.T.P.I., of Houston & Beaumont. Heating Consultant: J. R. W. Murland, B.S.C., M.CONS.E., M.L.C.E., M.I.MECH.E., M.I.E.E. Clerk of Works: J. Callaghan. General Contractors: direct labour. Sub-contractors: dampcourses, D. Anderson & Son Ltd.; bricks, Coalisland Brick Co.; shingles, J. P. Corry & Co.; glass, W. F. Clokey & Co.; wood strip flooring, A. N. McDougal & Sons; floor tiles, Langley London Ltd.; central heating, T. Crowe & Sons; stoves, Aga Heat Ltd.; electric wiring, F. Caldwell & Co.; electric light fixtures, Merchant Adventurers of London Ltd.; sanitary fittings, Shanks & Co.; casements, Wm. Logan & Sons; door and window furniture, Dryad Metal Works Ltd.; plaster, F. Johnson; joinery, stonework, tiling, water supply, direct labour; textiles, Storey Bros. & Co. Ltd., Hanna & Brown; wallpapers, A. Sanderson & Son; furniture, direct labour, Storey Bros. & Co. Ltd.; shrubs and trees, Walker & Abraham Seagoe.

## Correction

In the issue of August 5 the list of sub-contractors on page 180 for the school at St. Paul's Cray, Kent, attributed the patent flooring to Armstrong Cork Co. Ltd. This was incorrect. The flooring was carried out by Neuchatel Asphalte Co. Ltd. F. J. Moreton & Son Ltd. were responsible for all joinery work, apart from the doors.

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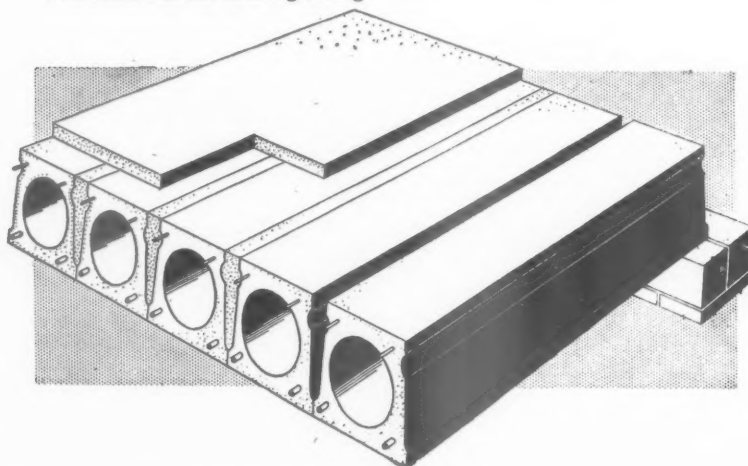
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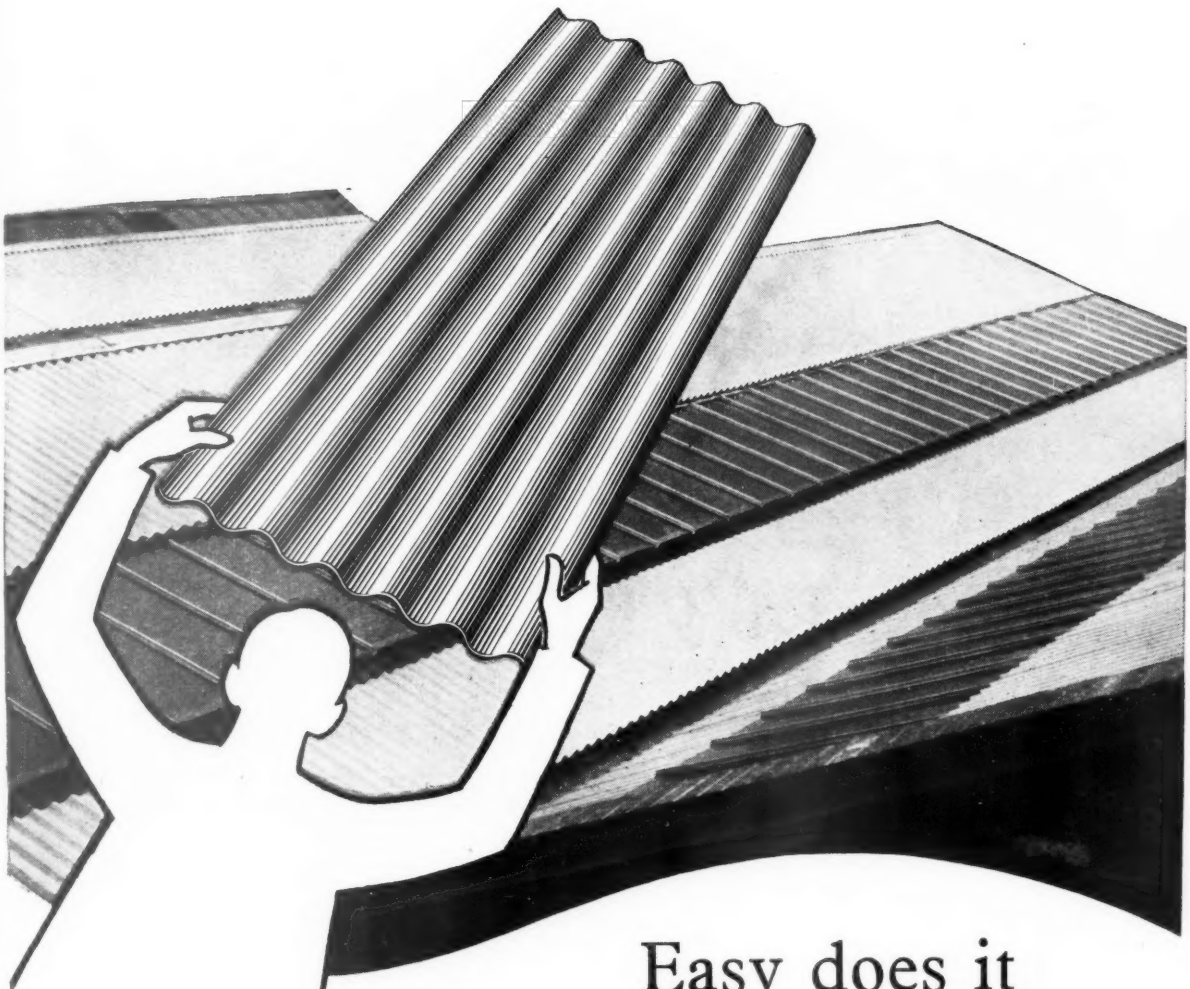
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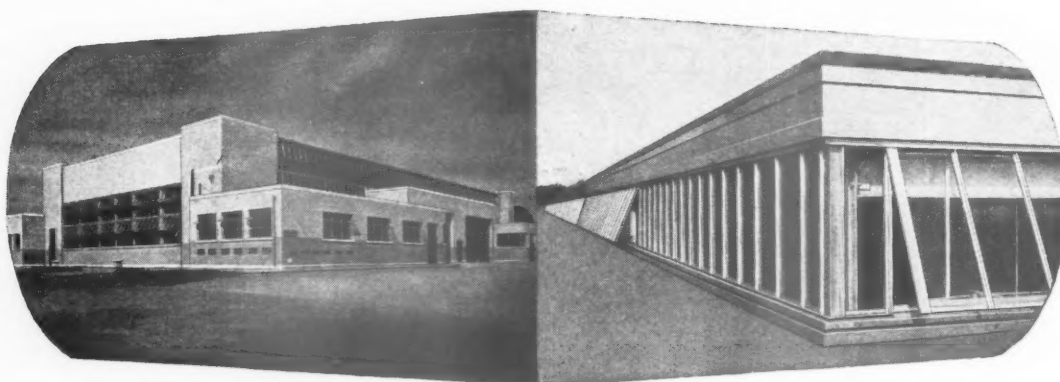
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*Minnesota Mining & Manufacturing Co., Ltd., Factory Roof Lighting. Architect: Henry Bugden & Co., F.R.I.B.A. Main Contractor: G. Percy Trentham Ltd. Window Installations by Williams & Williams, Ltd.*

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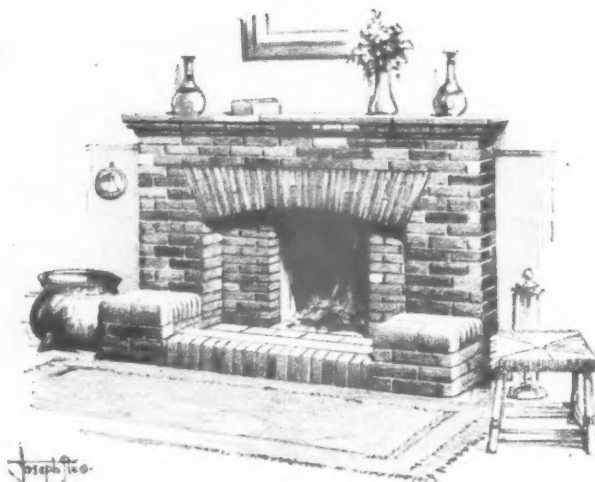
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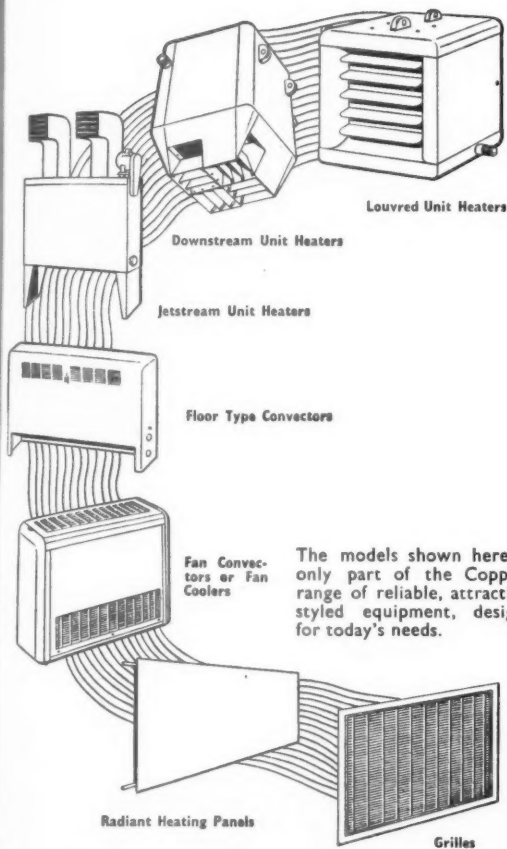


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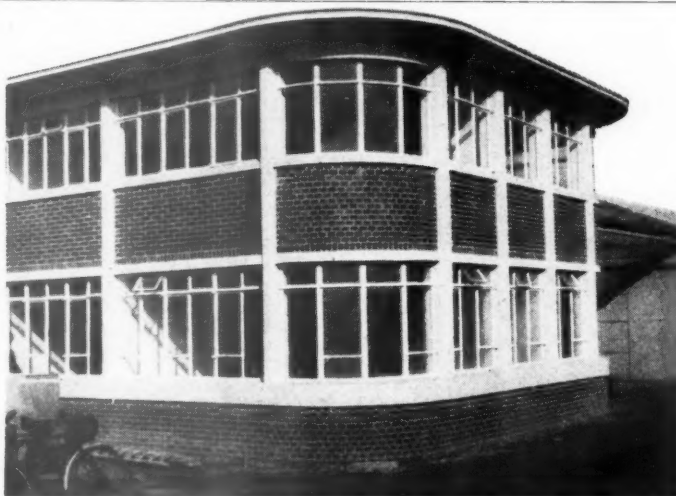
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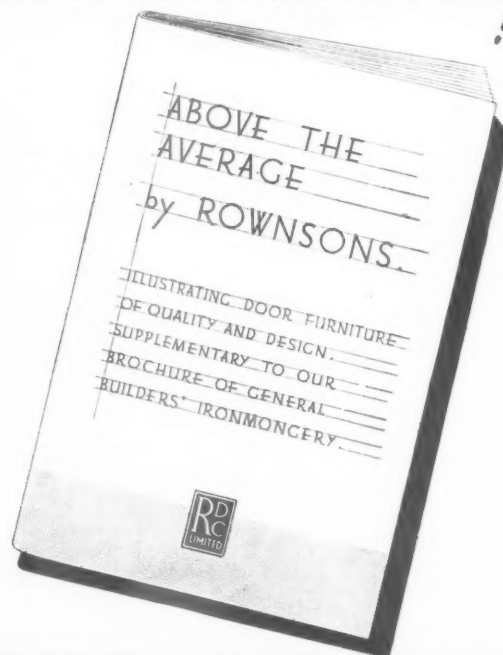
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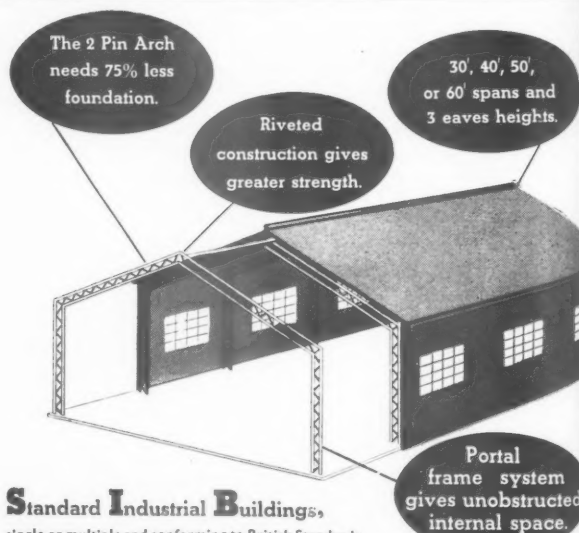


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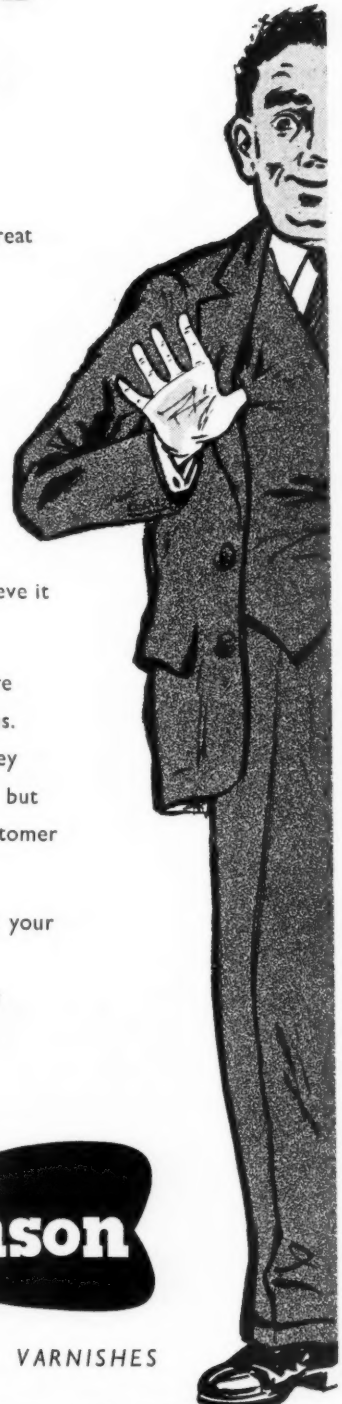
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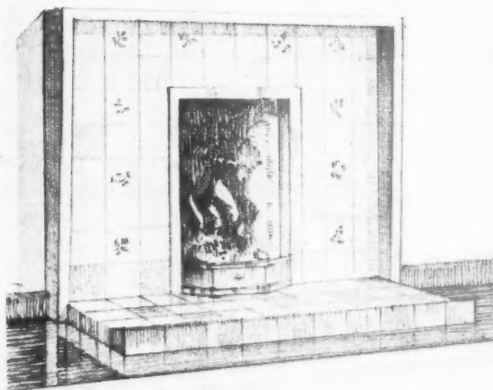
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(ABOVE) Nurses' Recreation Room, 30' span by approx. 100' long. (Photo: courtesy Paddington Hospital Management Committee.)

(TOP) Hall's prefabricated partitions and standard lining to walls and underside of roof. (Photo: courtesy No. 10 Group B. Wakefield Hospital Management Committee.)

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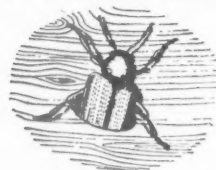
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## Woodworm and the Architect

Architects are finding woodworm an ever increasing menace in both old and new properties and they are employing us more and more for the important work of preserving timbers in buildings. Here are the four common wood-borers which concern the Architect.

**COMMON FURNITURE BEETLE.** (*Anobium punctatum*) Attacks both hard and soft wood and causes about 80 per cent. of all wood borer damage in this country. Adults emerge from June to August, complete life cycle lasting from one to three years.

**POWDER POST BEETLE.** (*Lyctus s.p.p.*) Attacks sapwood in comparatively new hardwood, and is a major pest of timber yards. Costs U.S.A. alone \$18,000,000 every year. Adults emerge April to August, complete life cycle lasts about a year.

**DEATH-WATCH BEETLE.** (*Xestobium rufovillosum*) Found only in old hard-woods which have usually been subject to some degree of fungal attack. Causes severe damage in old buildings. Adults emerge April to June, complete life cycle lasting three to six years.

**HOUSE LONGHORN BEETLE.** (*Hylotrupes bajulus*) Destroys sapwood of soft-woods—usually roofing timbers. A serious pest in Central Europe and more recently in a part of Southern England. Adults emerge from June to August and the life cycle may last up to eleven years in this country.

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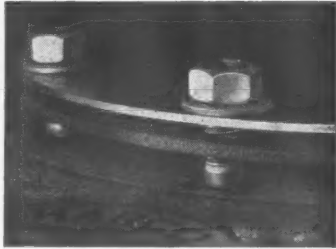
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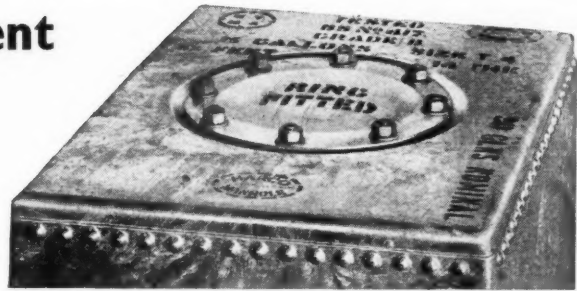
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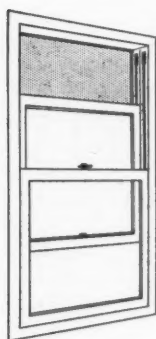
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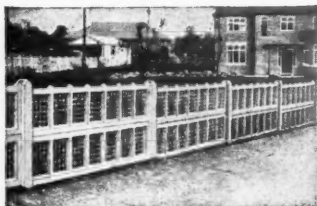
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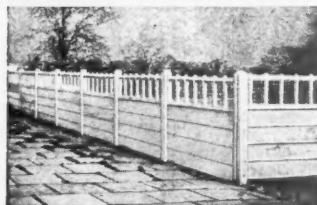
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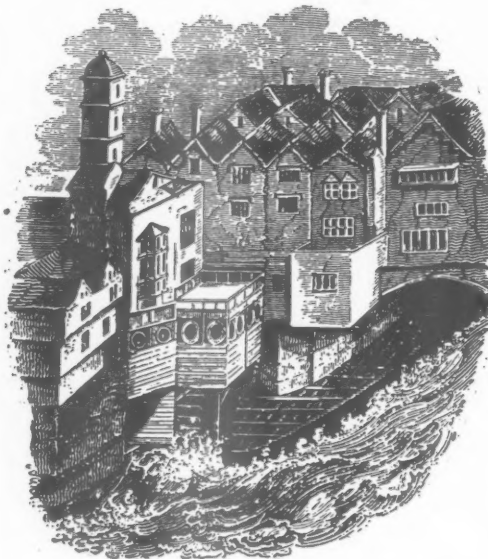
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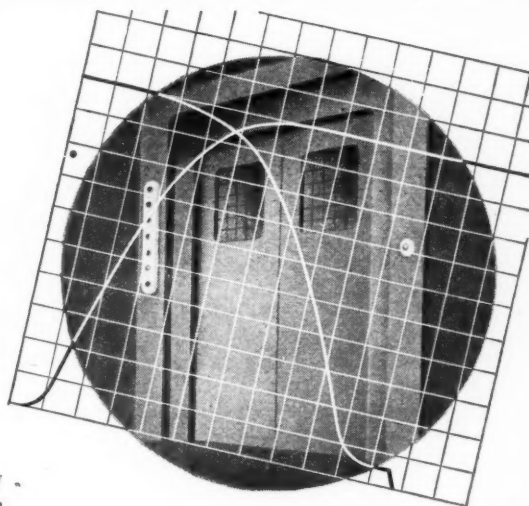
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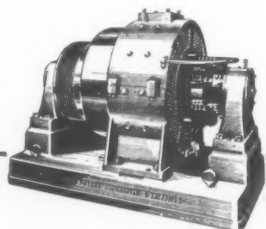
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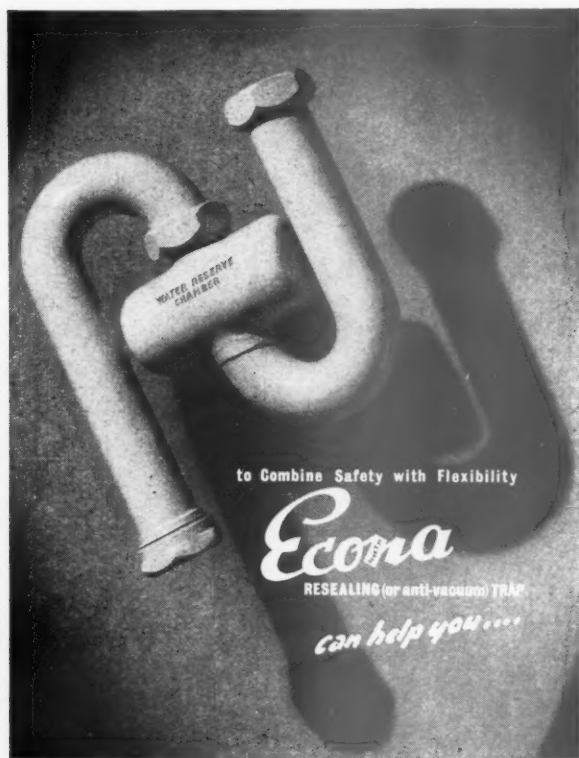
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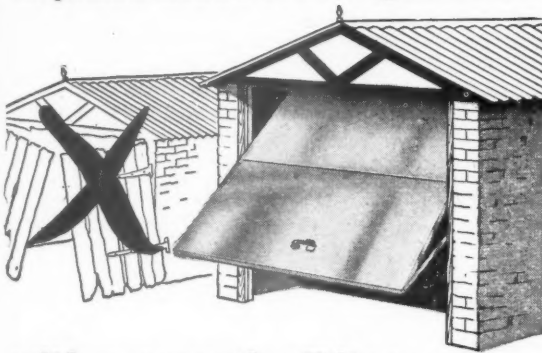
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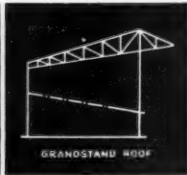
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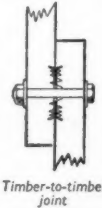
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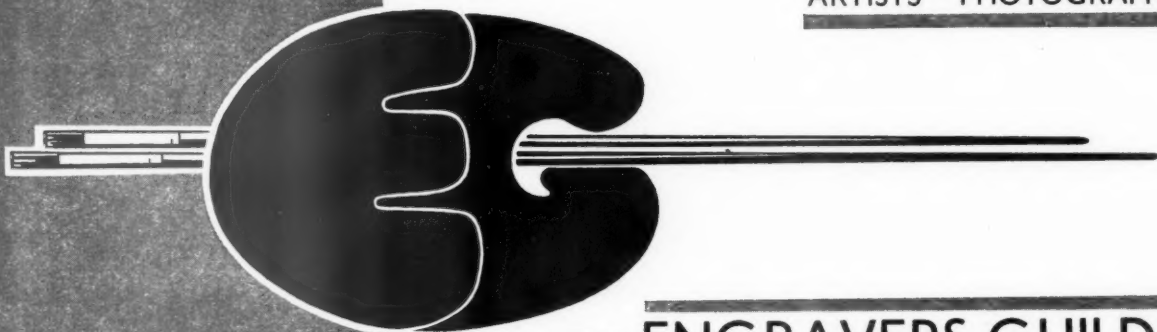
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## ARCHITECTURAL ASSISTANT, A.P.T., Grade IV.

Salary: £580-£625 per annum, plus London "weighting." Duties include the preparation of drawings and specifications, and supervision of works on new buildings and works of maintenance and repair.

The appointment will be subject to the provisions of the Local Government Superannuation Acts; to the passing of a medical examination; and to the National Joint Council's Scheme of Conditions of Service.

The Council cannot assist in obtaining housing accommodation.

Canvassing will be a disqualification.

Forms of application may be obtained from the undersigned, to whom they should be returned not later than Friday, 17th September, 1954.

D. H. PRITCHARD.

Town Clerk's Office, Harrow Weald Lodge,  
Harrow, Middx. 3773

## CO-OPERATIVE WHOLESALE SOCIETY, LTD.

## ARCHITECT'S DEPARTMENT, MANCHESTER.

Applications are invited for the appointment of ASSISTANT ARCHITECTS.

Candidates must have had several years' experience, preferably of commercial or industrial projects, possess a sound knowledge of construction, and be able to prepare working drawings and details from preliminary sketches.

The appointments are permanent, with prospects of promotion. Successful applicants will be required to undergo a medical examination for entry into a compulsory Superannuation Scheme.

Applications, stating age, experience, qualifications and salary required, to be addressed to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester. 3657

## BOROUGH OF FINCHLEY.

## TEMPORARY ARCHITECTURAL ASSISTANT.

## HOUSING AND TOWN PLANNING

## DEPARTMENT.

Salary: A.P.T., Grade IV (£580-£625), or A.P.T., Grade V (£620-£670), plus London weighting, according to qualifications.

Candidates must have reached R.I.B.A. Intermediate standard, and have at least two years' practical office experience in housing work.

The National Scheme of Conditions of Service and the Local Government Superannuation Acts apply, and medical examination required.

Applications, stating age and full particulars of qualifications and experience, with the names of two referees, to the Borough Housing and Town Planning Officer, The Avenue, Finchley, N.3, by first post on Tuesday, 14th September 1954.

R. M. FRANKLIN.

Town Clerk.  
3648

## URBAN DISTRICT COUNCIL OF CORBY.

## ARCHITECTURAL ASSISTANTS.

Applications are invited for the undermentioned appointments on the established staff of the Council's Engineer and Surveyor.

## (1) CHIEF ARCHITECTURAL ASSISTANT.

Salary in accordance with Grade VIII A.P.T. division of the National Scale of Salaries, commencing at £785 per annum (£785-£860). Applicants must have considerable and varied experience in design, construction and supervision of contracts, including local authority housing.

Candidates must be Registered Architects and preferably possess the R.I.B.A. qualification.

## (2) ARCHITECTURAL ASSISTANT.

Salary in accordance with Grade V A.P.T. division of the National Scale of Salaries, commencing at £620 per annum (£620-£670). Applicants must have not less than two years' experience in an architect's office (exclusive of pupillage) and have passed the R.I.B.A. intermediate examination, or its equivalent, at a recognised School of Architecture.

The provisions of the Local Government Superannuation Act, 1937, will apply in respect of each appointment. Housing accommodation will be made available to the successful candidates, if married.

Forms of application may be obtained from the undersigned and requests therefore should indicate the position for which application is being made. Completed forms must be received not later than Thursday, 16th September, 1954.

G. B. BLACKALL.

Clerk of the Council.

Council Offices,  
Corby, Northants.  
19th August, 1954. 3752

## METROPOLITAN BOROUGH OF

## ST. MARVLEBONE.

SENIOR ARCHITECTURAL ASSISTANT required for Housing Department, Grade A.P.T. Va (£650-£710), plus weighting. Candidates should be Registered Architects, with good experience in design of Municipal flats and supervision of contracts. Appointment subject to National Scheme of Conditions of Service, medical examination, and Council's Superannuation Scheme.

Applications, stating age, qualifications, full details of experience and positions held, with names of three referees, to Town Clerk, Town Hall, St. Marvlebone, W.1, by Saturday, 18th September, 1954. Canvassing disqualifies. Housing accommodation cannot be provided. 3805

## LONDON COUNTY COUNCIL.

## ARCHITECTS' DEPARTMENT.

## (a) PLANNING OFFICERS, Grade III (up to £922 10s.).

## (b) PLANNING ASSISTANTS (up to £739 10s.).

Professional qualifications: A.R.I.B.A., A.R.I.C.S. and/or A.M.T.P.I., required. Application forms and particulars from Architect (AR/EK/P/4), County Hall, S.E.1. 342

## CITY OF WAKEFIELD.

## QUANTITY SURVEYOR (GRADE A.P.T. IV, £580-£625).

Applications are invited for the above appointment in the City Engineer's Department, from qualified Quantity Surveyors who have had experience in the settling of final accounts for housing and schools.

Applications, giving full particulars of experience, etc., and the names of two referees, to be sent to me by the 15th September, 1954.

W. S. DES FORGES.

Town Hall, Wakefield. Town Clerk, 3794

## Air Ministry Works Department requires

## ARCHITECTURAL ASSISTANTS in Design Branch.

Applicants should be experienced in planning and preparation of working drawings and details for permanent and semi-permanent buildings. Professional qualifications an advantage. Vacancies mainly London, few Provinces. Appointments carry liability for overseas service for which allowances payable. Salaries up to £780 p.a. for men, £618 for women. Starting pay dependent upon age, qualifications and experience. Extra duty allowance or overtime payable. Reasonable prospects of promotion. Posts temporary and non-pensionable but have long term possibilities. Competitions held periodically to fill established vacancies. Applications from natural born British subjects only, quoting A/C and stating age, qualifications and previous appointments, giving dates and stating terms of work done, to Air Ministry, S.2(h)/NA, Cornwall House, Stamford Street, London, S.E.1. 3443

## LONDON COUNTY COUNCIL.

## Architects and surveyors required for safety

## regulations of theatres and special buildings, and

## for general building regulation work. Salaries up

## to £892 10s., according to experience. A.R.I.B.A.

## or A.R.I.C.S. essential. Particulars and application

## form from Architect (AR/EK/TBR/3), The

## County Hall, S.E.1. (848) 3457

## LONDON COUNTY COUNCIL.

## Grade III ENGINEERS (salary up to £892 10s.)

## and SURVEYING ASSISTANTS (up to £739 10s.)

## required in District Surveyor's Service. Qualifica-

## tions A.R.I.B.A., A.M.I.Str.E., or A.R.I.C.S.;

## structural knowledge essential. Particulars and

## application forms from Architect (AR/EK/DS/4),

## County Hall, S.E.1. (1025) 3521

## BELFAST EDUCATION COMMITTEE.

## COLLEGE OF TECHNOLOGY.

Principal: D. H. ALEXANDER, O.B.E., M.Sc.

Wh.Sch., M.I.Mech.E., M.I.Mar.E.

## COLLEGE OF ART.

## SENIOR LECTURER IN ARCHITECTURE.

Applications are invited for the position of Senior Lecturer in Architecture. Applicants must have followed full-time course at a recognised School of Architecture, and should hold a degree, or equivalent qualification, in Architecture. They must also be Associates of the Royal Institute of British Architects, and have had adequate office experience.

The salary attached to the position is £900 per annum, rising by annual increments of £25 to £1,100 per annum.

Further particulars and forms of application may be obtained from the Principal, College of Technology, Belfast, with whom applications must be lodged not later than Thursday, 30th September, 1954.

J. STUARTHAWNT.

Director of Education. 3763

## BOROUGH OF MAIDSTONE.

## APPOINTMENT OF ARCHITECTURAL

## ASSISTANT.

Applications are invited for the above appointment in the Borough Surveyor's Department, at a salary in accordance with Grade V, commencing at £620 per annum.

The successful candidate should be an Associate of the Royal Institute of British Architects or other Architectural Association, and should have had considerable experience in general Municipal building work, particularly in regard to housing development, of which the Council has an extensive programme, including a shopping centre. Applicants also should have had experience in handling jobs in progress, dealing with contracts, and some experience in valuations under the Small Dwellings Acquisition Acts.

The appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, the passing of a medical examination, and one month's notice on either side. Canvassing will disqualify.

Applications, on forms to be supplied, accompanied by copies of two recent testimonials, must reach the undersigned not later than the 13th September, 1954.

S. F. DIXON.

Borough Surveyor's Department,  
Palace Avenue, Maidstone.  
20th August, 1954. 3799



# COUNTY COUNCIL OF ESSEX. COUNTY LAND AGENT AND VALUER'S DEPARTMENT.

Applications are invited for the appointment of a BUILDING AND ARCHITECTURAL ASSISTANT on the established staff. Salary in accordance with A.P.T., III (£550, rising to £595 by three annual increments).

Candidates should be capable draughtsmen and have been trained in an appropriate professional office. They should also have sound knowledge of building details and construction, and ability to write specifications for minor works. Regard will be had to the qualifications and experience of the candidates, and it will be an advantage if the latter has been in connection with farm buildings and rural houses.

Application forms from the County Land Agent and Valuer, 69, Duke Street, Chelmsford, to whom they should be returned not later than 8th September, 1954.

Canvassing disqualifies. 3785

## GLOUCESTERSHIRE COUNTY COUNCIL.

ASSISTANT ARCHITECTS, Qualified Members of R.I.B.A. N.J.C. Conditions of Service, Grades VII, VI, V, and also ARCHITECTURAL ASSISTANT, Inter. Exam. R.I.B.A., Grade IV. Medical examination. Motor car driving licence.

Apply, giving age, present position, salary, and date appointment, previous appointments, names and addresses of two persons for references, County Architect, Shire Hall, Gloucester, by 8th September, 1954.

GUY H. DAVIS,  
Clerk of the County Council. 3786

## COUNTY BOROUGH OF DARLINGTON.

BOROUGH ARCHITECT'S DEPARTMENT.  
Applications are invited for ASSISTANT ARCHITECT. Salary: Grade A.P.T., VI (£695-£760).

The Department is dealing with a large programme of Education work, Housing, Welfare Buildings and other general work.

Candidates who have had previous experience and are Members of the R.I.B.A. will receive preference.

Applications, giving full particulars of age, qualifications, present appointment with salary, previous experience, and names and addresses of three referees, to be sent to Borough Architect, Central Buildings, Darlington, not later than for 13th September, 1954.

H. HOPKINS,  
Town Clerk. 3788

## COUNTY BOROUGH OF SOUTHPORT.

Applications are invited for the following appointments in the Borough Architect and Town Planning Officer's Department:—

(a) ASSISTANT QUANTITY SURVEYOR, A.P.T. Division, Grade IV (£580-£625 per annum). Candidates must have passed the Intermediate Examination of the R.I.C.S. (Quantities Division).  
(b) ARCHITECTURAL ASSISTANT, A.P.T. Division, Grade II (£550-£595 per annum). Candidates must have passed the Intermediate Examination of the R.I.B.A.

Application Forms obtainable from the Acting Borough Architect and Town Planning Officer, 93/105, Lord Street.

R. EDGAR PERRINS,  
Town Clerk. 3790

## THE WEST OF SCOTLAND AGRICULTURAL COLLEGE.

The Governors invite applications for the post of JUNIOR ASSISTANT IN THE FARM BUILDINGS ADVISORY SERVICE of the College from candidates with either Architectural, Quantity Surveying or good general Building Trade Training and with experience in preparing drawings.

Salary Scale Grade B (Intermediate) £245 rising to £540 plus Pay Addition £24.12/- rising to £52.6/- with entry according to age up to 25).

Conditions of appointment and application forms are obtainable from the Secretary, 6, Blythswood Square, Glasgow, C.2, with whom applications should be lodged not later than 8th September, 1954.

3854

## CITY OF STOKE-ON-TRENT.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment:—

ASSISTANT QUANTITY SURVEYOR. Salary: A.P.T. Div. Grade VIII (£785-£860).

Housing accommodation may be made available to the successful candidate.

Applications, stating date of birth, particulars of training and experience, with copies of two recent testimonials, should be received by J. R. Piggott, T.D., F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, endorsed with the title of the appointment, not later than Monday, 20th September, 1954.

HARRY TAYLOR,  
Town Clerk. 3807

## WORCESTERSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for two posts of SENIOR ASSISTANT ARCHITECTS, Grade A.P.T., Grades V-Va, of National Joint Scheme, dealing with major building works.

Experience in Local Authority work will be an advantage.

Application forms may be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14, Castle Street, Worcester. (R.119) 3817

## COUNTY BOROUGH OF HALIFAX.

APPOINTMENT OF QUANTITY SURVEYOR.  
Applications are invited for the above appointment, at a salary in accordance with Grade A.P.T., VII/VIII (£735-£860).

HOUSING ACCOMMODATION FOR THE SUCCESSFUL CANDIDATE WILL BE PROVIDED IF NECESSARY.

The successful candidate will take charge of the Quantity Surveying Section of the Borough Engineer's Department, and will be responsible for the whole of the Quantity Surveying work entailed on architectural work, including new schools, housing, etc.

Candidates should possess appropriate technical qualifications, and will be required to pass a medical examination. The appointment will be subject to the conditions of service adopted by the Corporation and to the Local Government Superannuation Acts, 1937-53.

Candidates must disclose whether, to their knowledge, they are related to any member of or the holder of, any senior office under the Council.

Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, should be appropriately endorsed and delivered to the undersigned not later than Friday, 10th September, 1954.

RICHARD DE Z. HALL,  
Town Clerk. 3811

## Town Hall, Halifax.

20th August, 1954.

## CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment:—

CHIEF ASSISTANT ARCHITECT. A.P.T., IX (£840-£960).

The successful candidate will be in charge of a section of the Department dealing with public buildings and the redevelopment of central areas.

The payment of salary increments will be subject to satisfactory service, and will be granted normally with effect from the 1st April following the completion of six months' service.

The appointment is subject to the Local Government Superannuation Acts, 1937-1953, and the successful applicant will be required to pass a medical examination.

Application forms may be obtained from the City Architect, Priestley House, Quarry Hill, Leeds, 9, to whom they should be returned, together with copies of three testimonials, by 12 noon on Saturday, 18th September, 1954.

Canvassing in any form, either directly or indirectly, will be a disqualification.

R. A. H. LIVETT, O.B.E., R.I.B.A.,  
City Architect.

Priestley House, Quarry Hill, Leeds, 9.

23rd August, 1954. 3839

## THE NORTH-WESTERN ELECTRICITY BOARD.

APPOINTMENT OF QUANTITY SURVEYOR

(THIRD ASSISTANT ENGINEER) CONSTRUCTION SECTION, CHIEF ENGINEER'S DEPARTMENT, AREA BOARD HEADQUARTERS, MANCHESTER.

Applicants should be Corporate Members of the R.I.C.S. (Quantities Sub-Division) or I.Q.S., and must be able to undertake the complete preparation of Bills for all types of work, valuation for interim certificates, and settlement of Final Accounts.

Commencing salary within range £649-£790 p.a., according to experience, rising ultimately to £883 p.a. Class AX/EX, Grade 5, Schedule "C", N.J.B. Conditions.

Note.—Applicants who responded to the previous advertisement of this post need not re-apply, as their applications will be considered together with those received in response to this advertisement.

APPOINTMENT OF CLERK OF WORKS (GENERAL ASSISTANT ENGINEER), CHIEF ENGINEER'S DEPARTMENT, AREA BOARD HEADQUARTERS.

Applicants should have been building craftsmen and must have had previous experience as either Clerk of Works or General Foreman on work comprising all trades on small and large contracts. They must possess a sound knowledge of construction and be able to supervise the work of all trades, including painting and installation of heating systems and other specialist services. They must be capable of setting out, checking and recording variations, control of day work and be able to submit clear and concise reports.

Starting salary within the range £501-£639 p.a., according to qualifications and experience, rising subsequently to £714 p.a. Grade AX/EX 6, N.J.B. conditions.

Applications to Establishment Officer, The North-Western Electricity Board, Cheetham Road, Manchester, 8, by 11th September, 1954.

3840

## URBAN DISTRICT OF FELTHAM.

TEMPORARY ARCHITECTURAL ASSISTANT

required. Salary within Grade A.P.T. VI (£695-£760 per annum), plus London "weighting". Applicants must be Registered Architects.

Forms of application, obtainable from the undersigned, must be returned, accompanied by copies of two testimonials, not later than 17th September, 1954. Canvassing directly or indirectly will disqualify and applicants must disclose, in writing, whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

M. W. COUPE,  
Clerk of the Council.

Council Offices, Feltham, Middlesex. 3823

## ZETLAND COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department:—

(1) ARCHITECTURAL ASSISTANT. Salary in A.P.T., Grade V-Va, of National Joint Scheme. Candidates should be Associates of the Royal Institute of British Architects, and have had experience in the preparation of sketch plans and working drawings for housing, schools, and other local authority projects.

(2) ARCHITECTURAL DRAUGHTSMAN. Salary in General Division of National Joint Scheme. Candidates should preferably have passed the Intermediate Examination of the Royal Institute of British Architects, and have had experience in the preparation of sketch plans, working drawings and details.

Written applications, giving particulars of age, qualifications and experience, and stating when applicants can take up duty, should be lodged with the Subscriber by 30th September, 1954. One copy of not more than three recent testimonials should be enclosed. Canvassing in any form will disqualify.

JOHN N. SINCLAIR,  
County Clerk.. 3820

County Buildings, Lerwick.

25th August, 1954.

## BOROUGH OF KETERING.

APPOINTMENT OF CHIEF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a Chief Architectural Assistant, in the Borough Surveyor's Department, Kettering, at a salary within Grade VII of the A.P.T. Division of the National Scale of Salaries (£735-£830). In determining the commencing salary the experience of the successful applicant will be taken into consideration.

Applicants must be Registered Architects, and preference will be given to persons who are Associates of the Royal Institute of British Architects. Applicants must have had experience of local authority housing schemes.

The appointment will be subject to the National Scheme of Conditions of Service and to the successful candidate's passing satisfactorily a medical examination.

The Council will consider the provision of housing accommodation if necessary.

Applications, stating age, qualifications, experience, past and present appointments, and the names of three referees, must be delivered to the undersigned not later than the 11th September, 1954.

D. DUNSFORD PRICE,  
Town Clerk. 3808

Town Clerk's Office, Kettering.

## CITY OF BATH.

CITY PLANNING OFFICE AND ARCHITECTS' DEPARTMENT.

Applications are invited for appointment as ARCHITECTURAL ASSISTANT, on A.P.T., Grade III (£550-£595), in the above department.

Applicants must have passed the R.I.B.A. Intermediate Examination, and have had at least two years' practical office experience in Municipal Housing and be a quick and accurate draughtsman.

Applications, stating age and particulars of training, qualifications, experience present and past appointments, together with names of two persons to whom reference can be made, must reach the City Planning Officer and Architect, 7, North Parade Buildings, Bath, not later than 13th September, 1954.

(Sgd.) JARED. E. DIXON,  
Town Clerk. 3831

Guildhall, Bath.

## PADDINGTON BOROUGH COUNCIL

require (a) ASSISTANT ARCHITECT (£725-£840 p.a.) (A.171), preferably A.R.I.B.A., with experience in contemporary design, the construction and supervision of general Municipal works, particularly multi-storey flats, or should have had similar experience with architects in private practice.

(b) ARCHITECTURAL ASSISTANT (£580-£625 p.a.) (A.172). Candidates should have passed Inter. R.I.B.A., be neat and accurate draughtsmen, and possess a sound knowledge of modern building construction.

Commencing salary in each case dependent upon qualifications and experience of successful candidate. N.J.C. conditions. One month's notice.

Applications (quoting reference No.) should state age, qualifications, experience, past and present appointment (with salary), and names and addresses of two referees, and should reach the undersigned by 8th September, 1954.

W. H. BENTLEY,  
Town Clerk.

Town Hall, Paddington Green, W.2. 3694

12th August, 1954.

## CHESTERFIELD RURAL DISTRICT COUNCIL

invite applications for the appointment of ASSISTANT ARCHITECT on salary scale 1-V (£490-£670) according to qualifications. The appointment is subject to the Scheme of Conditions of Service, to the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

All possible assistance will be given with housing accommodation.

Applications, on forms to be obtained from Mr. J. B. Wikeley, M.Eng., A.M.I.C.E., Barrister at law, Engineer and Surveyor to the Council, should be returned to the Clerk of the Council, Rural Council House, Saltergate, Chesterfield, by 13th September, 1954. 3821

**LONDON COUNTY COUNCIL.  
ARCHITECT'S DEPARTMENT.**

Vacancies in District Surveyors' Service for ENGINEERS, Grade II. Salary: £392 10s. to £1,071. A.M.I.Struct.Eng. (or equivalent). Structural knowledge essential. Particulars and application form from Architect (A.R.E.K./DS 3), County Hall, London, S.E.1. Closing date, 22nd September. (1149) 3819

LONDON COUNTY COUNCIL requires (i) an ARCHITECTURAL ASSISTANT for preparation of surveys, sketch schemes, working drawings and specifications for buildings and ancillary works in parks and open spaces, and (ii) LANDSCAPE DESIGNERS for preparation of surveys, sketch schemes, working drawings and specifications for lay-out of garden areas to housing estates.

Salaries according to qualifications and experience. Application forms from Chief Officer, Parks Dept., Spring Gardens, S.W.1. (906) 3835

**CANNOCK URBAN DISTRICT COUNCIL.**  
(Population—41,230 (est.))

Applications are invited for the following appointment in the Architect's Department:—  
QUANTITY SURVEYOR. Salary within Grades A.P.T., VII (£735-£810) and A.P.T., VIII (£785-£860).

A.R.I.C.S. required, to take charge of Section to enable junior officers to take qualifying examinations.

HOUSING ACCOMMODATION AVAILABLE for married candidates.

Further particulars and forms of application are available from the undersigned.

Closing date: 15th September, 1954.

W. C. SPEEDY,

Clerk of the Council.

County House, The Green, Cannock.  
26th August, 1954. 3844

**LINDSEY COUNTY COUNCIL.  
COUNTY ARCHITECT'S DEPARTMENT.**

Vacancies on the permanent staff for:—

(a) ASSISTANT ARCHITECT, A.P.T., 7-8, £735, rising to £860. Candidates must be A.R.I.B.A., and preferably had experience in design of schools.  
(b) SENIOR ARCHITECTURAL ASSISTANT, A.P.T., 5-6, £620, rising to £760. Candidates must be A.R.I.B.A.

Allowance of 25s. per week and return fare home bi-monthly may be paid up to six months to married men unable to find housing accommodation.

N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

Applications, stating age, qualifications and experience, with names of two persons to whom reference can be made, to be sent to the undersigned by 10th September, 1954.

A. RONALD CLARK,

A.R.I.B.A., A.M.T.P.I.,

County Architect.

County Offices, Lincoln. 3846

**BUCKS COUNTY COUNCIL.**

Applications are invited from ARCHITECTS, who are capable designers and really interested in Architecture, to fill a permanent post on the staff of the County Architect, and to work on a large and interesting building programme.

Salary: J.N.C., Scale "A," £925-£1,075 per annum.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Applications on forms, giving further particulars of the appointments, obtainable from F. B. Pooley, County Architect, County Offices, Aylesbury, and returnable by Monday, 27th September, 1954. 3845

**COUNTY OF LEICESTER.**

SENIOR ASSISTANT ARCHITECT (£735-£860).

Candidates must be Registered Architects, should have good experience in the design and construction of modern buildings; be capable of carrying through projects from inception to completion; and if necessary able to take charge of a group.

Apply by 20th September on form obtainable from County Architect, 123, London Road, Leicester. 3852

**CORBY DEVELOPMENT CORPORATION.**

Applications are invited for the under-mentioned appointments in the office of the Chief Architect:—

QUANTITY SURVEYORS (TWO).

Salary within the scale £630-£750 (subject to review in September).

The appointments are subject to one month's notice on either side, the provisions of the Local Government Superannuation Act, and to the passing of a medical examination.

Applications, stating age, education, training, qualifications, experience, past and present appointments and salaries, together with the names of two referees, must be received by the undersigned not later than the 11th September, 1954, in envelopes endorsed "Appointments."

Housing available.

R. F. BROOKS GRUNDY,

General Manager.

Spencer House, Corporation Street.  
Corby, Northants. 3848

**COUNTY BOROUGH OF WEST HARTLEPOOL.  
BOROUGH ARCHITECT'S DEPARTMENT.  
APPOINTMENT OF ASSISTANT ARCHITECT,  
GRADE A.P.T. III.**

Applications are invited for the position of ASSISTANT ARCHITECT, Grade A.P.T. III (£550 × £415-£595) in the Borough Architect's Department.

The appointment is subject to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and to the Local Government Superannuation Acts, 1937 to 1953. The successful candidate will be required to pass a medical examination.

Applications stating age, experience and qualifications, together with copies of not more than three testimonials, should be addressed to the Borough Architect, Municipal Buildings, West Hartlepool, and received by him not later than Friday, 17th September, 1954.

ERIC J. WAGGOTT,

Town Clerk.

Town Clerk's Office,  
Municipal Buildings,  
West Hartlepool,  
23rd August, 1954. 3822

**SOUTHERN ELECTRICITY BOARD.  
QUANTITY SURVEYING ASSISTANT.**

No. 4 (Bournemouth) Sub-Area Office. Salary N.J.B. Class L, Grade 13, Column 1 (£616 per annum). N.J.B. Conditions of Service.

Applicants should be capable of preparing estimates, Bills of Materials and of measuring up and dealing with contractors' accounts relating to light industrial buildings, offices and Service Centres.

The successful candidate will be required to contribute to the B.E.A. and Area Boards' Superannuation Scheme, if eligible.

Applications on the standard form obtainable from the Sub-Area Secretary, 1, Priory Road, Bournemouth, and returned to him in envelopes suitably endorsed not later than 16th September, 1954. 3824

**BOROUGH OF BRENTFORD AND CHISWICK.  
JUNIOR ARCHITECTURAL DRAUGHTSMAN.**

Applications are invited for the above-mentioned temporary appointment in the Borough Engineer & Surveyor's Department at a salary commencing on the first year of Misc. Division Grade III (£395-£460) of the National Scheme of Conditions of Service (plus appropriate London weighting).

Applicants should be well experienced in the tracing and colouring of architectural drawings and have a working knowledge of building construction.

Applications giving details of previous experience and qualifications, together with copies of two testimonials, should be forwarded to the undersigned not later than 12 noon on 13th September, 1954.

W. F. CHURCH,

Town Clerk.

Town Hall, Chiswick, W.4. 3828

**CITY ARCHITECT'S DEPARTMENT,  
EDINBURGH.**

Applications are invited for the undernoted posts:—

(1) ARCHITECTURAL ASSISTANT, fully qualified by examination. Salary Scale A.P.T. Va. £660 × £20/£720 per annum.

(2) ARCHITECTURAL ASSISTANTS, must have passed intermediate stage of an examination recognised by the Architects' Registration Council for U.K. Salary Scale A.P.T. IV/V £580 × £415/£480 per annum.

(3) TEMPORARY ASSISTANT with experience in Drawing Office. Salary £450 per annum.

(4) APPRENTICE ARCHITECT, must be of educational standard for acceptance by College of Art.

Apply by letter giving full details and stating clearly which post is applied for, within 14 days of the appearance of this advertisement, to A. Steele, City Architect, City Chambers, Edinburgh 1. 3830

**COUNTY BOROUGH OF WEST BROMWICH.  
BOROUGH ENGINEER AND SURVEYOR'S  
DEPARTMENT.**

Applications are invited for the following permanent appointments:—

(a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T.VII (£735-£810).

(b) ASSISTANT ARCHITECT, Grade A.P.T.V. (£620-£670).

(c) ARCHITECTURAL ASSISTANT, Grade A.P.T.IV (£580-£625).

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Applications, naming two referees, to Borough Surveyor, Town Hall, West Bromwich, by 16th September, 1954. 3857

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The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-55 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

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ARCHITECTURAL ASSISTANT required, intermediate standard or above, apply Ward & Woolnough, 8, South Brink, Wisbech, Cambs. 3702

ARCHITECTS, ASSISTANTS required, R.I.B.A. Pension Scheme in operation. Applications, stating age, particulars of experience and salary required, to Wylie, Shanks & Wylie, Chartered Architects, 12 Clairmont Gardens, Glasgow, C.3. 3634

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**ONE SENIOR and One JUNIOR ASSISTANT** required. Previous office experience essential, knowledge and sympathy with contemporary design and construction. Salary according to ability and experience. Apply: David Stern, A.R.I.B.A., A.A.D.I.P.L., 24, Gloucester Place, London, W.1. Tel.: HUNter 0451. 3810

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November 3rd: The Physical Background—H. Hackett, M.A., A.R.I.B.A.  
November 17th: Landscape as a Design Medium—H. F. Clark, F.I.L.A.  
December 1st: Economics of Landscape Design—A. Grove, A.M.T.P.I., A.I.L.A.  
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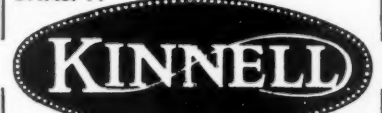
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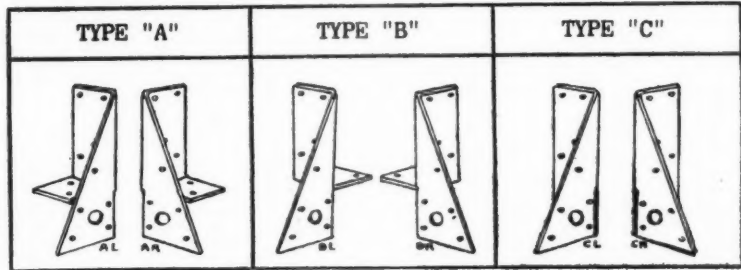


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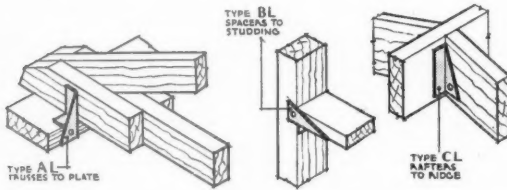
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