THE ARCHITECTS' JOURNAL

standard contents

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

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CURRENT BUILDING
Major Buildings described: Details of Planning, Construction, Finishes and Costs
Buildings in the News
Building Costs Analysed

Architectural Appointments Wanted and Vacant

No. 3154] [VOL. 122

THE ARCHITECTURAL PRESS

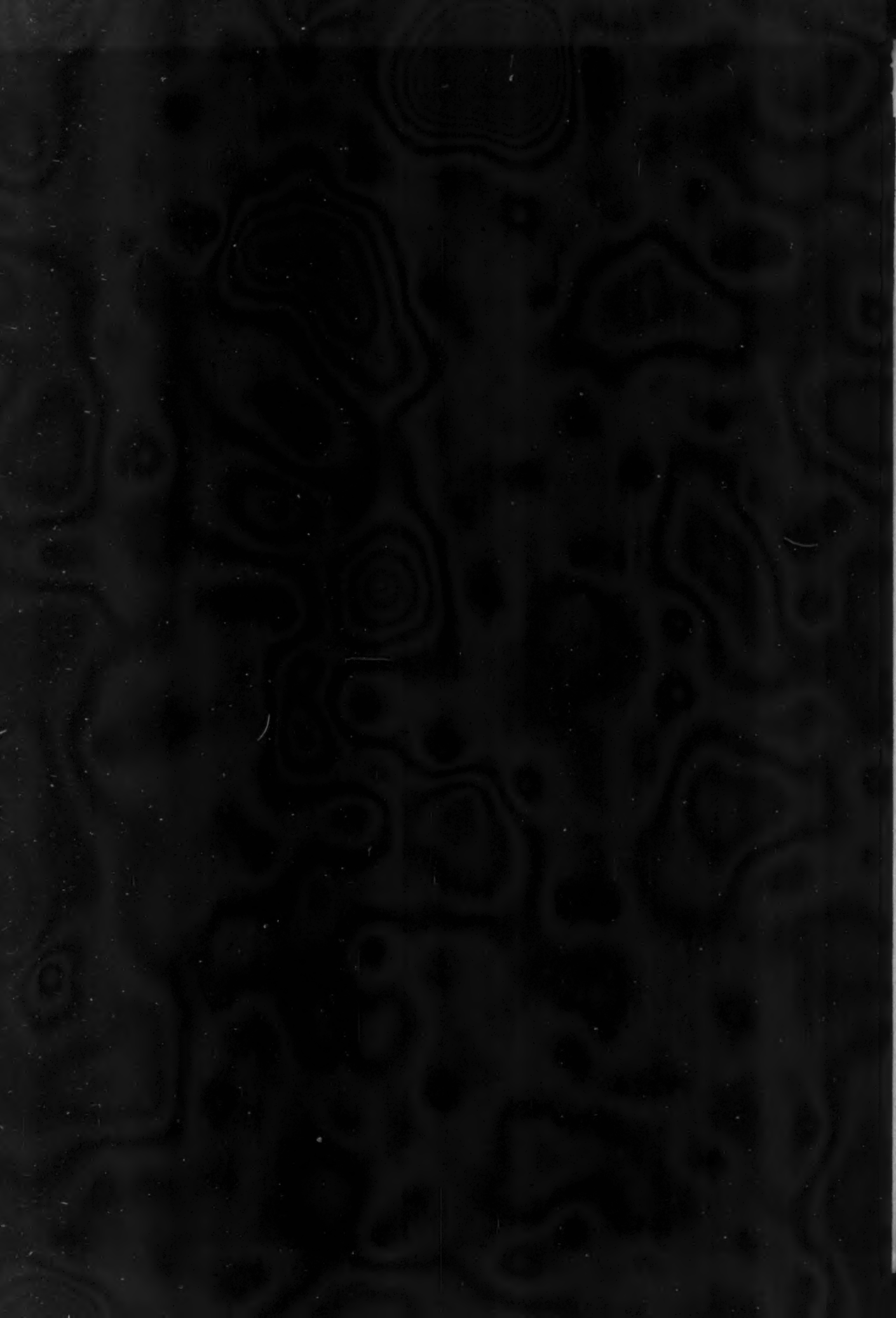
9, 11 *and* 13, *Queen Anne's Gate, Westminster, S.W.*1. *'Phone: Whitehall* 0611

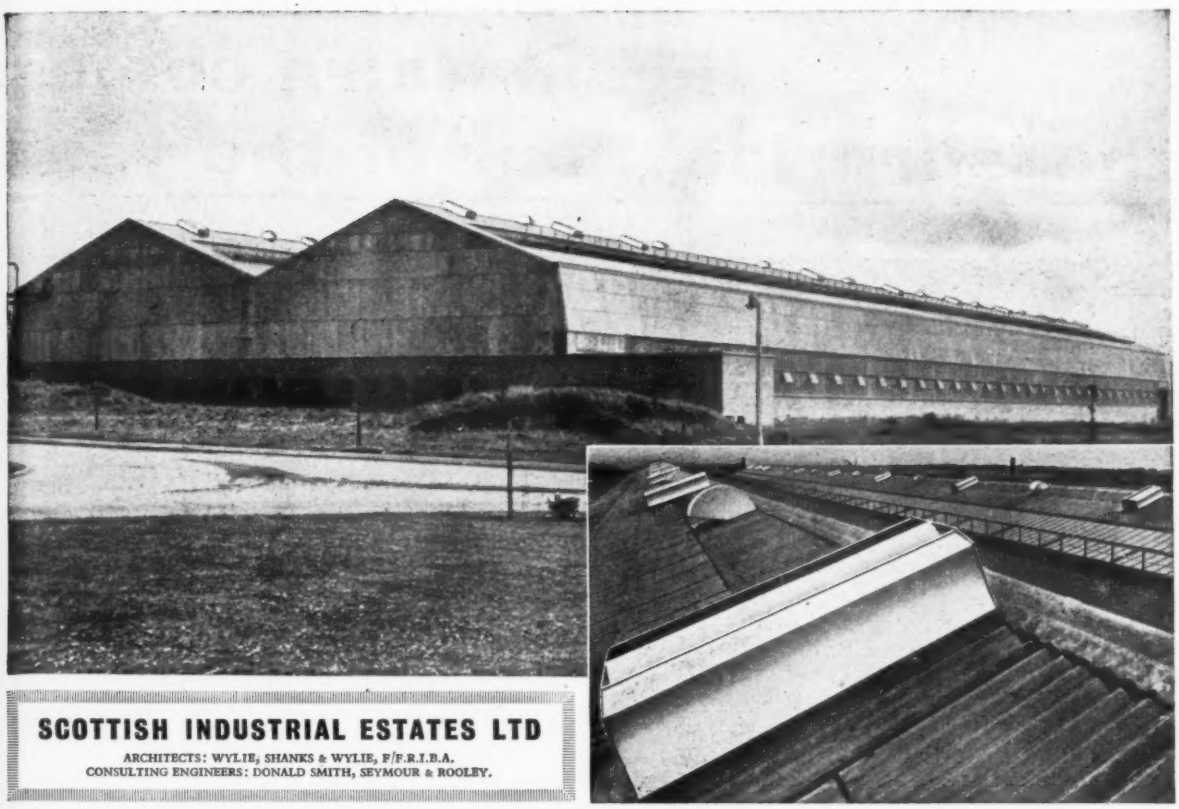
Price 1*s.* 0*d.*

Registered as a Newspaper.

★ 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
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 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
IQS	Institute of Quantity Surveyors, 98, Gloucester Place, W.1.	Welbeck 1859
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institute of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
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 Storey's Gate, S.W.1.	Abbey5111
NEFMAI	National Employers Federation of the Mastic Asphalt Industry. 21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
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. 12, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
N.P.L.	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
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
RSFH	Royal Society for the promotion of Health. 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. 34, Berkeley Square, W.1.	Grosvenor 6636





SCOTTISH INDUSTRIAL ESTATES LTD

ARCHITECTS: WYLIE, SHANKS & WYLIE, F/F.R.I.B.A.
CONSULTING ENGINEERS: DONALD SMITH, SEYMOUR & ROOLEY.

...one of over 7,000 major industrial organisations using natural ventilation planned by COLT

One of several factories built by the Scottish Industrial Estates Limited which has been ventilated by COLT is that for EUCLID LTD. on the Newhouse Industrial Estate. The photograph shows COLT SRC/3080 High Duty Roof Extractor Ventilators which provide natural roof extraction and COLT Air Inlet Terminals which are connected to the mechanised inlet and heating system.

Other industrial development schemes where COLT Ventilators have been used are the Ex-Wartime, Silicosis, Advance and Standard South Wales Programmes involving approximately 100 factories under Sir Percy Thomas & Son PP/A.R.I.B.A., The Wales & Monmouthshire Industrial Estates where COLT equipment has been specified by Jonah, Arnold & Smith throughout, The Remploy Programme of nearly one hundred factories and Harlow New Town, where some thirty factories so far completed have been ventilated by COLT equipment specified by Frederick Gibberd, F.R.I.B.A., M.T.P.I.

COLT Ventilation equipment has also been employed for many further contracts on Industrial Estates at Slough, Stevenage, Crawley, Trafford Park for The Ministry of Supply, The Northern Ireland Factory Programme and Irish Estates Limited.

FREE MANUAL with full specifications of the wide range of Colt Ventilators is available on request from Dept.A38/152

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A NAIRN VINYL TILE FLOOR IN THE CAR SHOWROOM OF TANKARD AND SMITH, CHELSEA

All over the country, in shops, offices, private houses and hotels you'll see Nairn Vinyl Tile Floors. Everywhere in fact—and on *any* level surface. With limitless pattern sequences in a magnificent range of ever-fresh colours, Nairn Vinyl Tile Floors are the most attractive laid today. But there's much more to a Nairn floor than beauty. There is . . .

The 'surprise' in WEAR-ABILITY

Since the floors of the 53 laboratories in the new Biology Building of Nottingham University would be subject to continual traffic and exposure to all manner of chemicals, the University laboratories themselves tested various types of floor covering. Nairn Vinyl Tiles proved to be the most satisfactory and were used exclusively.

The 'surprise' in CLEAN-ABILITY

Grease, oil, mud . . . bleach, alkalis, cooking fats . . . all the things that might ruin an ordinary floor don't affect a Nairn Vinyl Tile Floor. And all that's needed to keep it shining is an occasional polishing.

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Nairn Vinyl Tile Floors can be laid on any kind of level surface, upstairs, downstairs, or in the basement. As a design component, the Nairn Vinyl Tile is extremely versatile, too . . . AND, LAST BUT NOT LEAST, THE COST IS SURPRISINGLY LOW.

For years, both here and in the U.S.A., laboratory research and stringent practical tests have *proved* the wear-resistance of Nairn Vinyl Tile Floors.

Please write for further information, literature and advice, to Office 130.

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Made in Newhouse, Scotland

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Here's a chap who knows Tretolin is a "natural" for the job. It's not just an ordinary painting problem because asbestos cement is alkaline and attacks ordinary paints. Not Tretolin though—Tretolin is one of the toughest paints available and stands up to alkalinity and the most severe conditions—even on roofs. Above all it's made *specially* for painting asbestos cement—without special primers—so write today for leaflet No. TA/2 and colour range.

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NOW– greater fuel-to-heat efficiency with the NEW

FINCH FIRE UNIT

Meets Ridley Report requirements • Retains open-fire pleasure

The report of the Ridley Committee has stressed the necessity of improving the efficiency of the open-fire. The FINCH Fire Unit demonstrates very clearly that the open-fire when correctly developed and designed, can attain a high degree of efficiency comparable with the less liked openable-stove type of appliance yet retaining the irresistible appeal of the true open fire.

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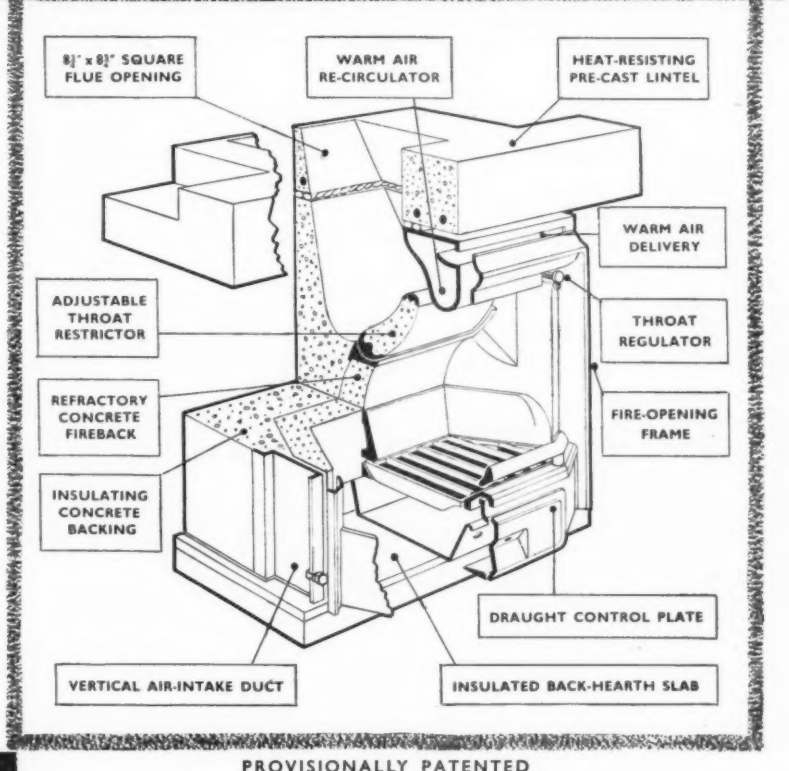

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Write or telephone for descriptive brochure which gives full details and specifications of the FINCH Fire Unit. It is part of the FINCH service to answer your queries and offer help in solving any of your problems.

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VALentine 8888 (30 lines) Showrooms: FINCH CORNER, 679/687 EASTERN AVENUE, ILFORD, ESSEX

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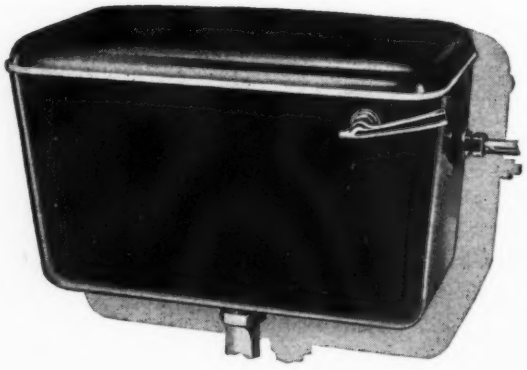
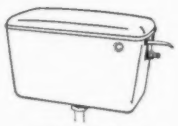
PLASTIC CISTERNS BACKED BY 74 YEARS' EXPERIENCE

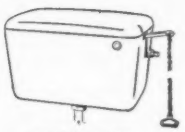


Modern styling, old-time quality—the 'contemporary' look of the Lawley plastic cisterns is backed by seventy-four years' specialised experience in cistern manufacture. Smoothly hygienic, rust and corrosion-proof, these newest members of the Lawley range are perfectly suited to today's building requirements. Prices, too, are planned to meet the need for economy when large-scale building projects—estates, office blocks and workshops, etc.—are on the agenda.

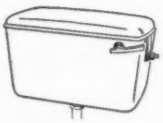
Our illustrated folder gives details of four Lawley models in plastic, to suit all water regulations. We shall be pleased to forward copies on request.



Model LL/SP



Model HL/P



Model LL/FP

Model WB/P

Lawley BRITANNIA

pioneers in cistern manufacture since 1881

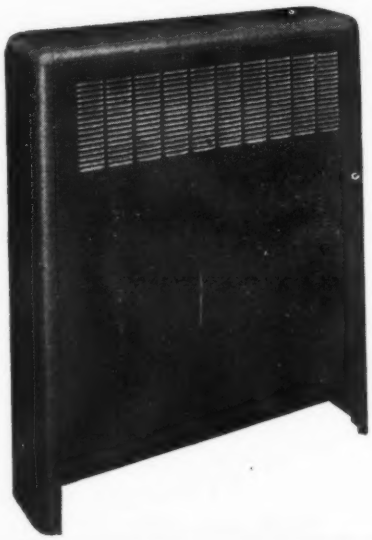
W. & J. LAWLEY LTD., BRITANNIA WORKS, SAMS LANE, WEST BROMWICH

M-W.64

"Which ever way the wind blows"

We can give you the conditions you are looking for; you can select from our range of Air Treatment equipment units that will create just whatever atmosphere you may require—where and when it is needed.

The Biddle range of Air Treatment equipment covers Heating, Cooling, Ventilating, Dehumidifying and Humidifying, and in each case models are available for industrial, domestic, commercial, medical or marine applications.



"Vectair" convectors are used to provide simple, yet highly efficient heating in schools, hospitals, offices, and homes in all parts of the world. They are acclaimed for the ease with which they can be installed, and for their well known qualities of long lasting, trouble-free service. They can be supplied for use with steam, hot water, gas or electricity, and models are available for free-standing, wall mounting, or concealing in the structure of the building.

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...creates the right atmosphere..

MANUFACTURERS OF HEATING · COOLING · VENTILATING · AIR CONDITIONING EQUIPMENT

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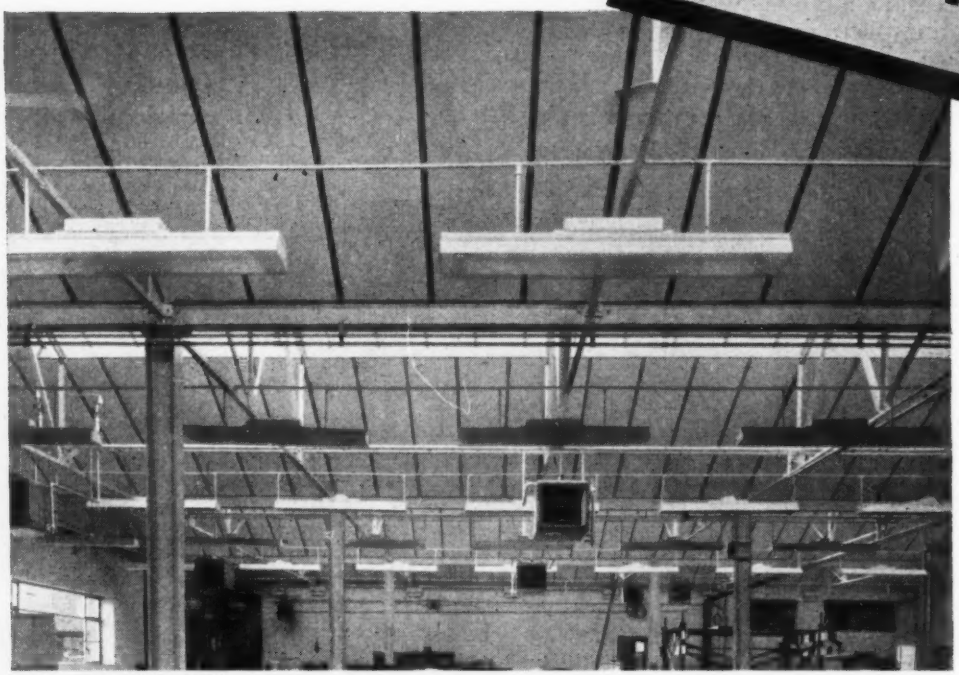
The thermal insulation of Celotex and the fire resistance of asbestos

Combine in

CELOTEX F.R.I. BOARD



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Now you can have both the high efficiency of Celotex cane fibre insulation and the fire resistance of asbestos. They have been combined with great success in Celotex F.R.I. Board. It consists of a core of strong durable Celotex cane fibre insulation sheathed on both sides with asbestos felt. It is as easy to handle and to decorate as normal Celotex insulation—and it is just as economical! Use Celotex F.R.I. Board for wall, roof and ceiling linings and partitions. Samples and further details of this all-British Celotex product will be gladly sent on request.

In the B.S. 476 Surface Spread-of-Flame Test, Celotex Fire Resistant Insulating Board — Rated Class 1 — showed no spread of flame whatsoever!

- ECONOMICAL PRICE
- EASY TO USE
- EASY TO DECORATE

Another Economical CELOTEX product

MADE IN GREAT BRITAIN WITH ALL-BRITISH MATERIALS BY

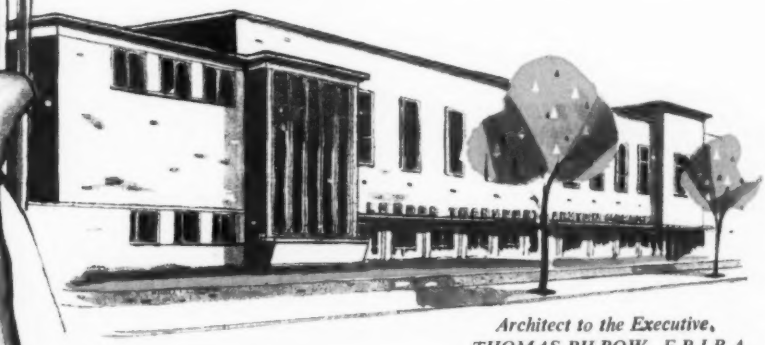
CELOTEX LIMITED · STONEBRIDGE PARK · LONDON, N.W.10 Telephone: ELGar 5717 (10 lines)

plenty of room inside...

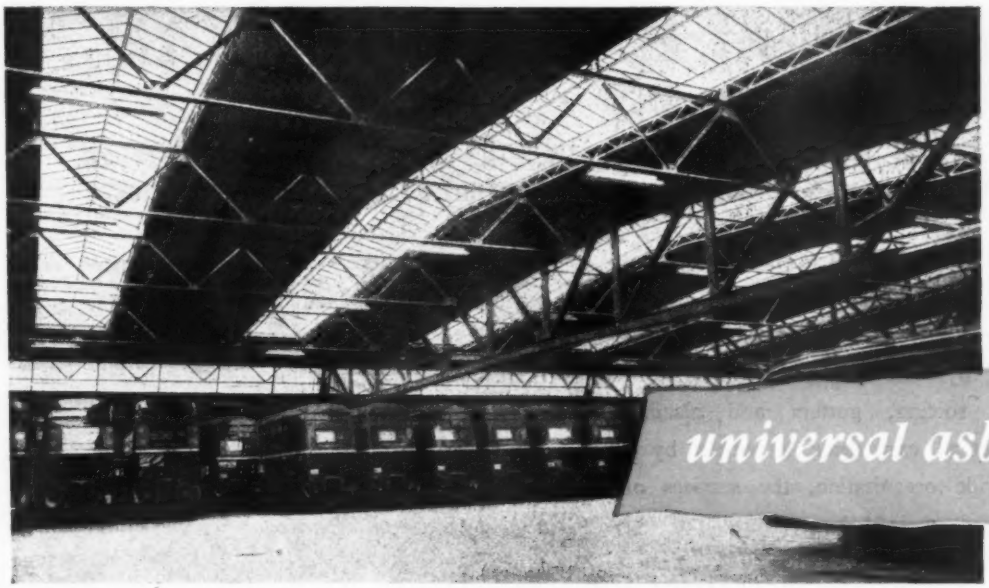
and, indeed, in this new garage for London Transport there is a floor area of over 45,400 square feet, completely free from any vertical roof support.

Universal Reinforced Troughing, with its low dead weight of 4·75 lbs. per square foot, was the obvious choice of roof covering to meet the requirements for a semi-flat roof combining strength and durability.

Wherever a specialised application of asbestos cement is required, our Technical Department will be pleased to place their wide experience at your service.

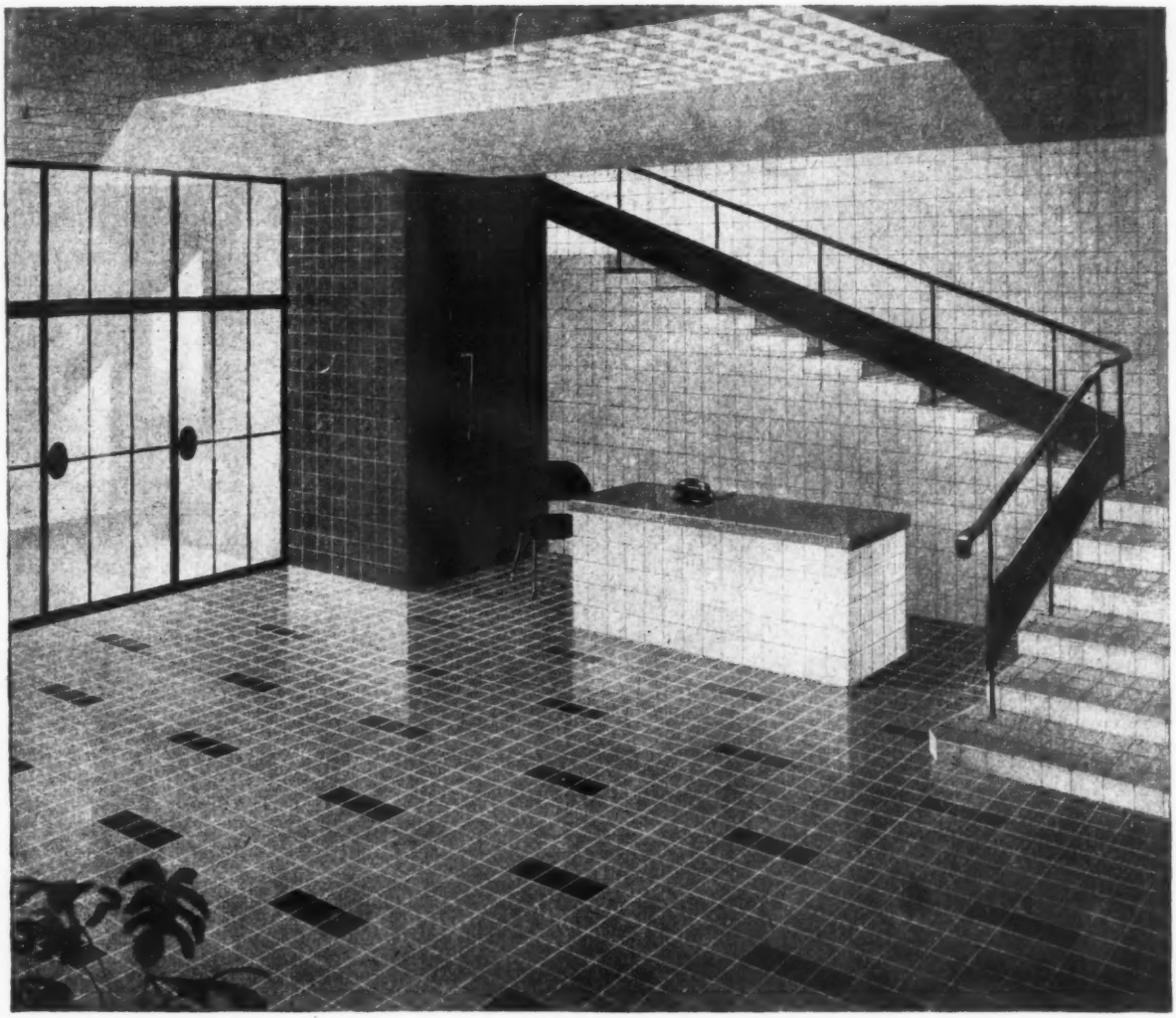


Architect to the Executive,
THOMAS BILBOW, F.R.I.B.A.



universal asbestos

The Universal Asbestos Manufacturing Company Limited · Tolpits · Watford · Hertfordshire



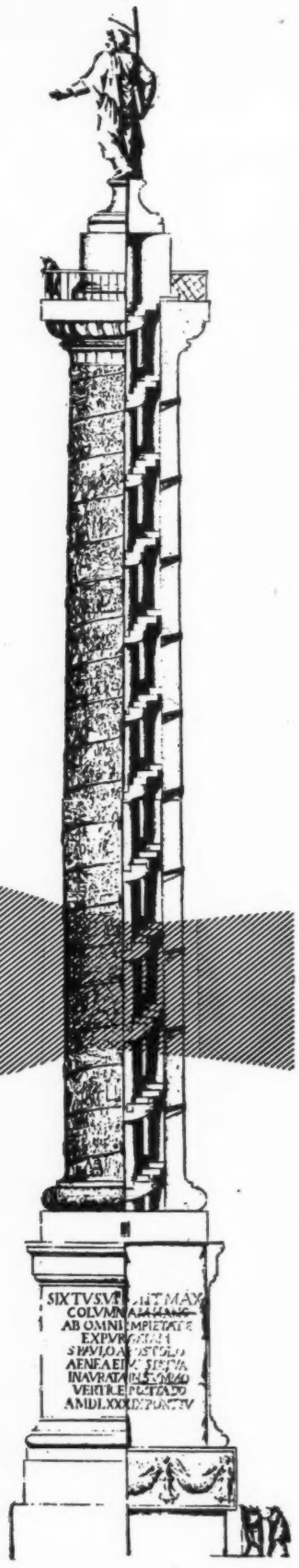
There is no more lasting, attractive or economical floor and wall surface than genuine ceramic tiles

Generations of use have proved that Ceramic Glazed and Floor Tiles best meet the requirements of durability, economy and appearance. Manufactured under intense heat, their hard, long-life surface and permanent characteristics remain unaltered throughout the years. Re-decorating costs are eliminated; cleaning staff is kept at a minimum and because the colour pigments are sealed within, sunlight, dust and moisture cannot fade or discolour them. Information can be obtained from tile manufacturers through the Glazed and Floor Tile Manufacturers' Association.

Ceramic TILES

Glazed & Floor Tile Manufacturers' Association · Federation House · Stoke-on-Trent

The Column of Marcus Aurelius in Rome
like that of Trajan, records in relief this Emperor's
victories against Germanic tribes in the years 172-175 A.D.
It consists of 28 blocks of marble and is 95 feet high;
to reach the top there is a spiral staircase
in the interior which has 190 steps.



vertical transport in 190 A.D.

vertical transport today

is resolved with efficiency and
comfort, using lifts and
escalators by

J & E Hall *Limited*

Lift, Escalator and Refrigerating Engineers

DARTFORD KENT

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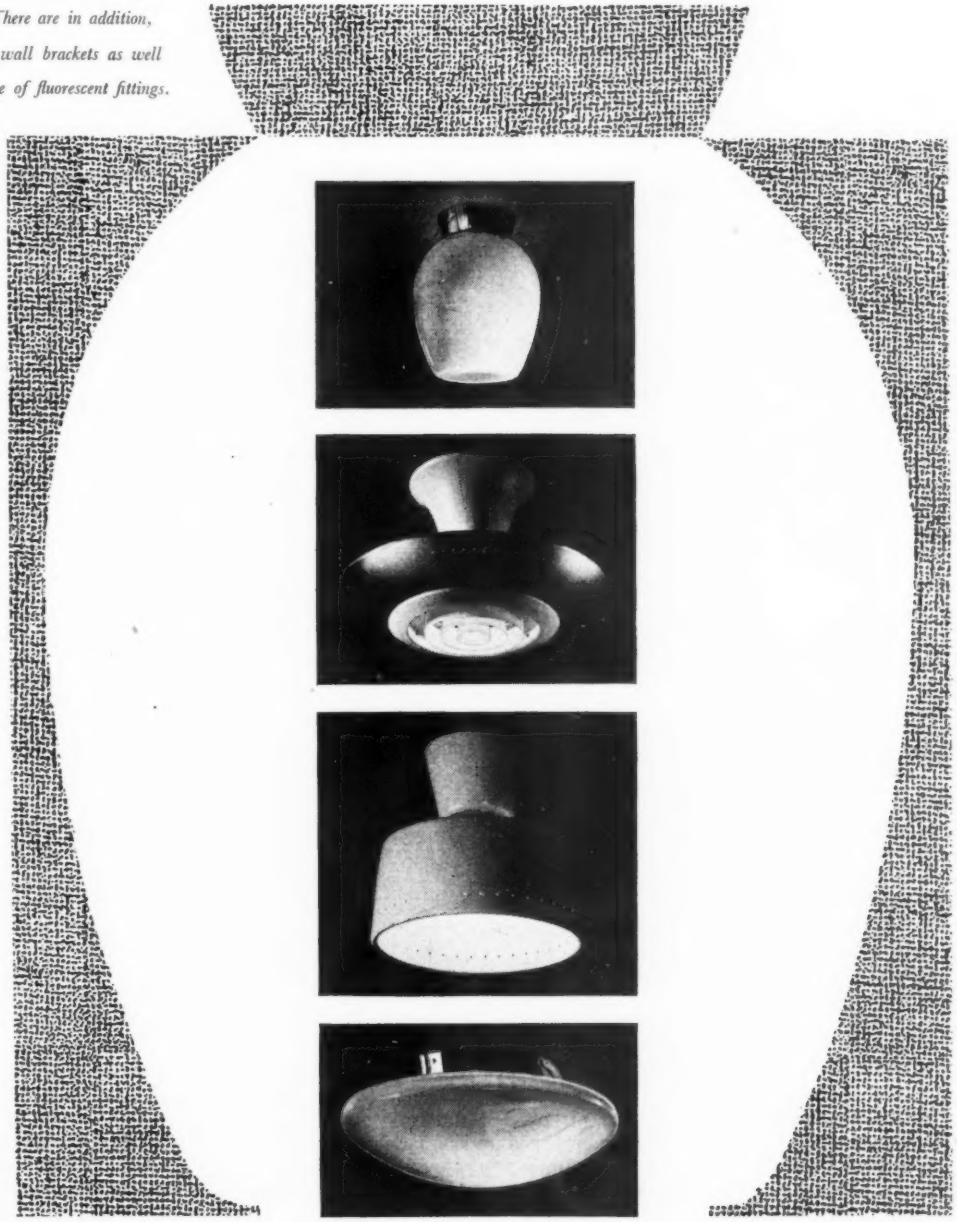
These are a few of the various ceiling fittings from our standard ranges. These fittings are readily available in various sizes and there are many other designs both simple and decorative. There are in addition, pendant fittings and wall brackets as well as our range of fluorescent fittings.



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The Lighting Centre · 143 Knightsbridge, London, S.W.1. Kensington 3444. Also at 46 Rodney Street, Liverpool, 1

Manufacturers of Ultralux, Versalite, Tubalux and Mondolite lighting fittings.

"VEELAP"

INSULATING BOARDS FOR CEILINGS AND WALLS

but here used as

Permanent Shuttering to Hollow Pot Floors

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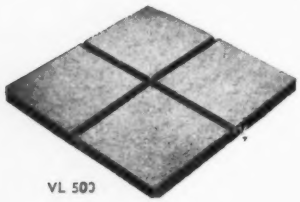
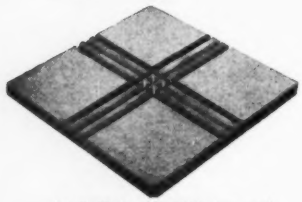
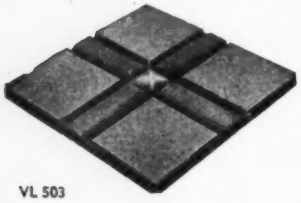


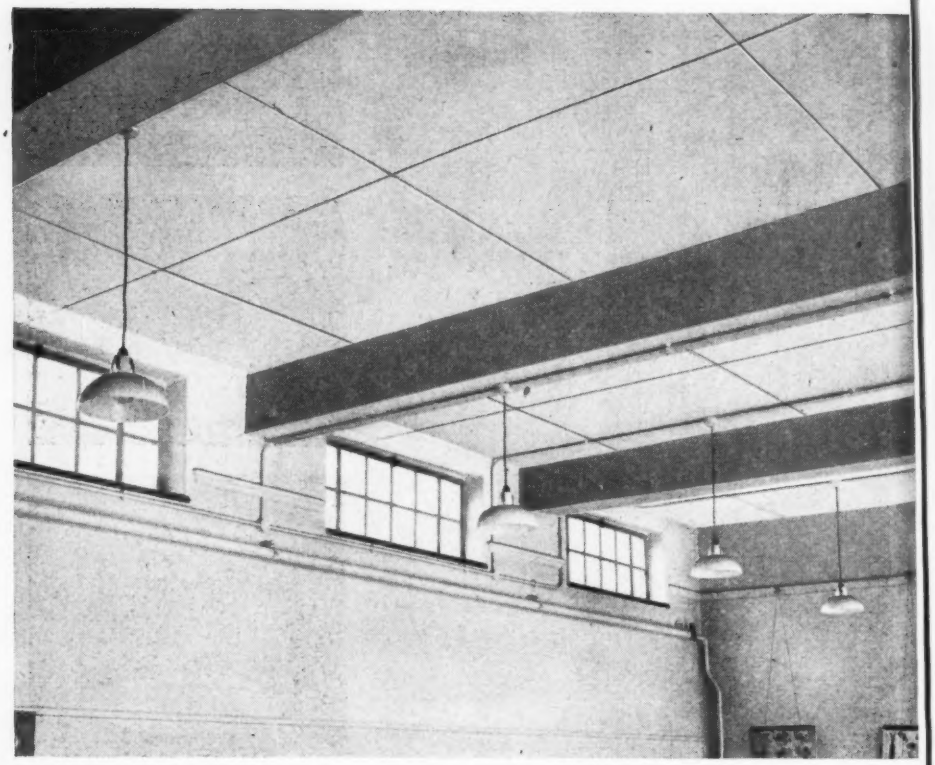
VL 503



VL 502B (as VL 502A but with three instead of two beads)



VL 503



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With the "Veelap" system we supply lay-outs for approval, after which the boards are cut to size and the edges processed with Veelap. The boards are then numbered on the back to conform to plan and sent to site—in other words, a prefabricated sheet using dry technique finish.

"Veelap" Insulating Board may *also* be nailed, using "Metco" Sheradised Gimp Pins, or P.K. screwed, or bonded to joists and/or battens. The "lap" takes up any movement of the boards when in place.

The "Veelap" system is now used in conjunction with our Metal fixing methods of suspended ceilings and walls (concealed fixing)

The MERCHANT TRADING COMPANY Limited.

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Your plans deserve a specification that includes the 'Lynx'. The 'Lynx' is a lavatory cistern. Noiseless. Efficient. Pleasing to the eye. Its silent Shires internal fitting flushes at a touch — first time, every time — and the cistern quickly refills ready for use again. The gleaming Duranite shell — designed by a leading industrial designer — has no dust-collecting nooks or crevices, will not rust or corrode, never needs painting, wipes clean with the flick of a cloth, and is beautifully hygienic. The 'Lynx' costs very little more than the old-fashioned type of lavatory cistern.

See the 'Lynx' lavatory cistern at The Building Centre, Store St., London, W.C.1

'Lynx' high and low level cisterns are available in White Keramic Ware and a range of colours, or in Black Duranite. They can be supplied with a reversible side lever operation. This important feature eliminates the need for handed duplicate stocks. The 'Lynx' has a powerful flush syphon conforming to B.S.S. 1125 and Water Works specifications. Fixing brackets are completely concealed. Capacities:—2, 2½ and 3 gallons.

made by Shires for your convenience

S.15

Shires are the largest manufacturers of moulded cisterns in the country. They also make W.C. pans and seats, flush-pipes and complete W.C. Suites. Leaflets from:—
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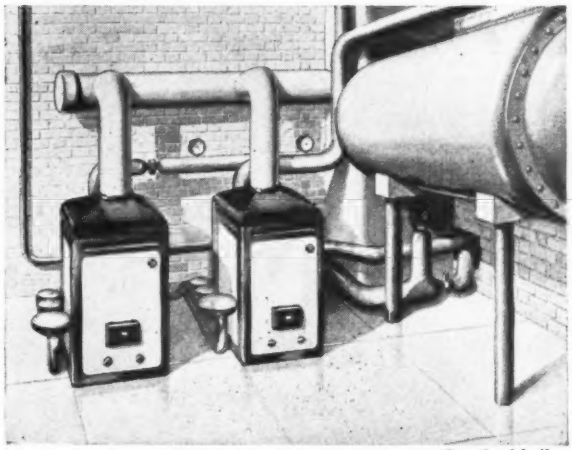
(Factories also at London and Stoke). Shires (Ireland) Ltd., Stannaway Drive, Crumlin, Dublin.

There's always another use for gas

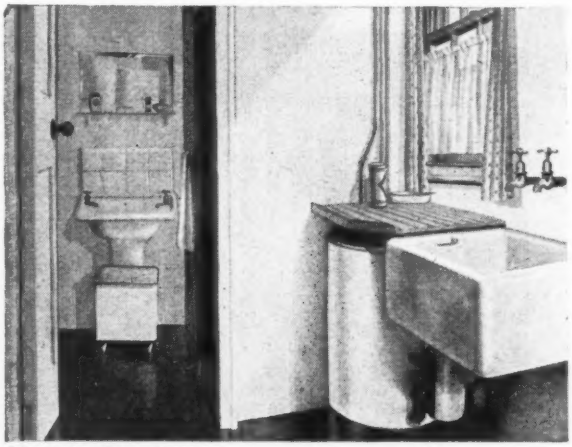
There's always another use for gas...

...for heating liquids

From swimming-bath water to salt-bath solutions, gas heating has no rival. Gas goes to work rapidly and is simple to operate. Whatever the quantity, whatever the liquid, it burns clean and constant to give you the precise heat you require.



Gas-fired boilers



'Operation Rescue'

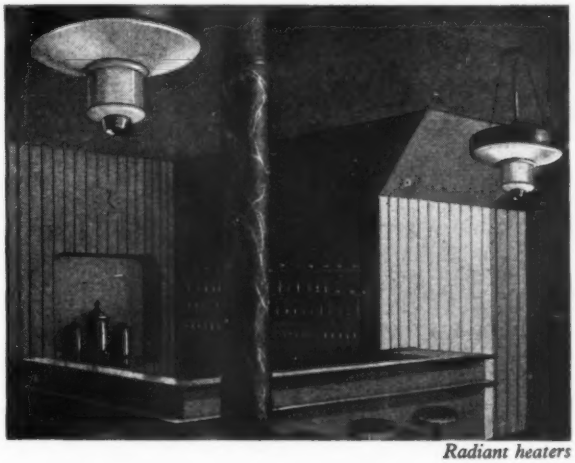
...for 'Operation Rescue'

Gas can play an important part in improving housing conditions. Costs are kept low by use of existing gas supplies and absence of elaborate structural work. Gas adaptability is particularly suitable to the conditions found in 'Operation Rescue' properties, and, of course, the popularity of gas for water heating and cooking is unquestioned.

...for heating air

Practically any problem requiring heated air can be solved by gas whether it is for space heating, drying or for industrial processing.

Apart from its smokelessness and cleanliness, gas gives you infinite, accurate and automatic controllability at every stage. Supply is assured and constant calorific value is guaranteed. And gas saves because it needs no stoking or storage space.



Radiant heaters

Consult your area gas board

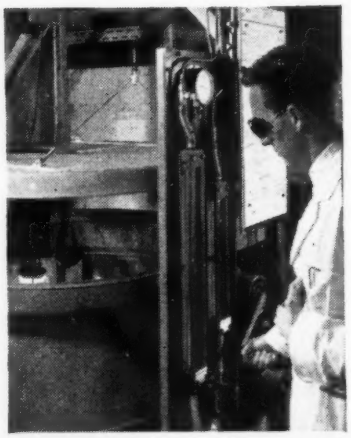
The Gas Industry makes the best use of the Nation's coal

ISSUED BY THE GAS COUNCIL

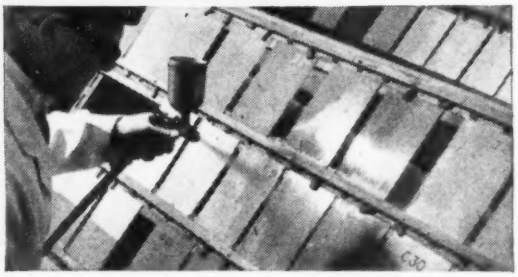
G.C.G.C12

Here's the CELLON weather man!

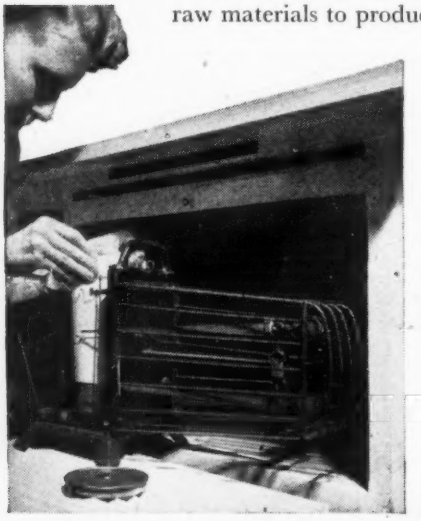
He can't tell whether it's a brolly or a sunshade you'll be needing to cope with to-morrow's climate, but when it comes to knowing how a finish is going to stand up to its working environment, he's your man—or rather he's our man. The equipment he uses can reproduce and record how the finish you will be buying is going to look after years of exposure to the worst influences of the elements and working conditions. His knowledge is collated with that of equally keen and far-sighted specialists and technicians to help the finest machinery and the finest raw materials to produce the finest paints.



Machine for accelerated weathering tests.



Test panels receiving salt spray treatment.



Recorder for temperature and humidity.

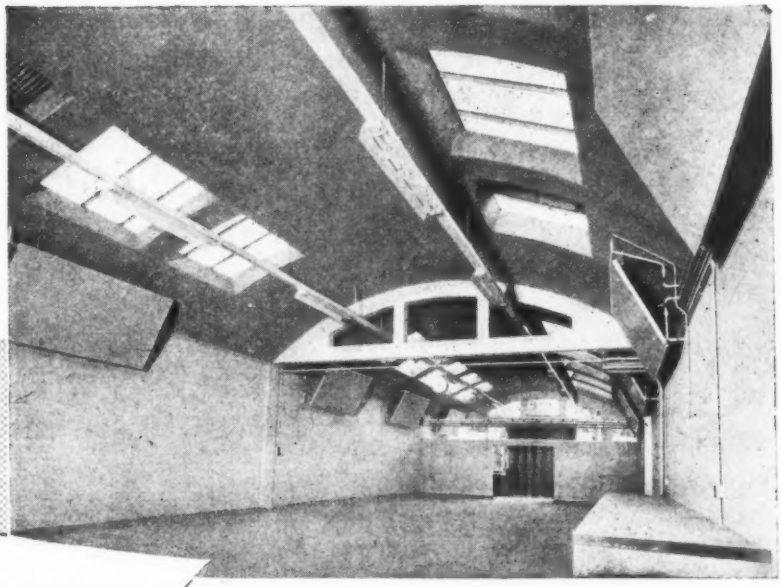
Cerrux Decorative Paints

The Cerrux range of Decorative Finishes includes suitable materials for all classes of decoration, whether for the home, public buildings or the more rigorous conditions of the factory. There is also available Cerreen Satin Emulsion Paint—the ideal wall finish. The Building and Decorating Division of Cellon Limited will gladly give advice on specifications and colour schemes.

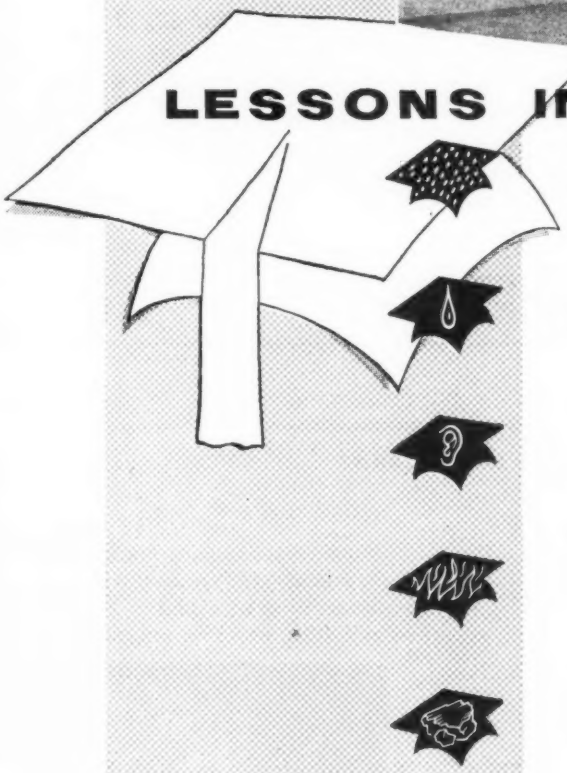
CELLON FINISHES *the best*

CELLON LIMITED · KINGSTON-ON-THAMES · PHONE: KINGSTON 1234
CVS-804

Architect: E. G. CHANDLER, Esq., A.R.I.B.A., A.M.T.P.I., City Architect, Oxford.



LESSONS IN PROTECTION



THERMAL INSULATION—'k' values from 0.32 B.Th.U's sq. ft./1hr./°F/in. Complies with the requirements of British Standard 1785/1951—"Thermal Insulating Materials for Buildings."

ANTI-CONDENSATION—Prevents condensation by maintaining the treated surfaces above the dew point temperature; also under peak conditions Sprayed "LIMPET" Asbestos, roughly pressed, will absorb several times its own weight of water.

SOUND ABSORPTION—Ideal for reducing the noise level.

FIRE PROTECTION—Non-combustible and acceptable under the revised building bye-laws for the fire protection of structural steelwork and concrete floors.

FUEL ECONOMY—½" thick Spray applied to a "single skin" roof will reduce the heat loss through the treated surfaces by as much as 65 per cent.

ONE APPLICATION · · · SPRAYED "LIMPET" ASBESTOS MANY ADVANTAGES

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TURNERS ASBESTOS CEMENT CO. LTD.

A MEMBER OF THE TURNER & NEWALL ORGANISATION

TRAFFORD PARK MANCHESTER 17

A5.6.

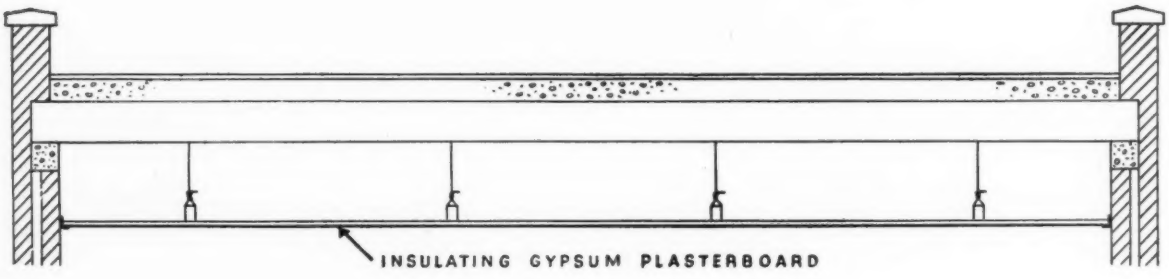
Thermal Insulation of SCHOOLS.....

Example: Job No. CR. 1085

Construction: Typical metal roof decking with suspended Insulating Gypsum Plasterboard ceiling.

SUSPENDED CEILING

Area	583 sq. yds.
Contract Cost (erected)	18/9d. per sq. yd.
'U' value (roof only)	0.33
'U' value (roof and ceiling lining)	0.19
Flame Spread Rating	Class 1 (B.S.476)



Whatever the building, fire hazard must be minimised. Gypsum plasterboard is fire-resisting to a higher degree than any other board of comparable cost.

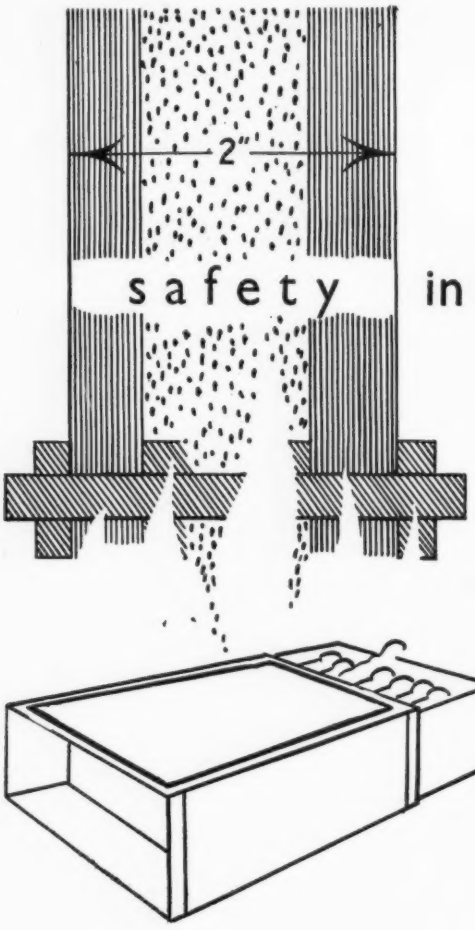
MINISTRY OF EDUCATION Building Bulletin No. 7: Fire and the Design of Schools states where incombustible materials are recommended, plasterboard may be used

For information and literature please write to one of these addresses:

IMPERIAL CHEMICAL INDUSTRIES LIMITED, MILLBANK, LONDON, S.W.1 Victoria 4444
GYPROC PRODUCTS LIMITED, WESTFIELD, UPPER SINGLEWELL ROAD, GRAVESEND, KENT Gravesend 4251
PLASTER PRODUCTS (GREENHITHE) LIMITED, GREENHITHE, KENT Greenhithe 2251 5
THE BRITISH PLASTER BOARD (MANUFACTURING) LIMITED, BATH HOUSE, 82 PICCADILLY, W.1 Grosvenor 7050

Published by The Gypsum Building Products Association

G15

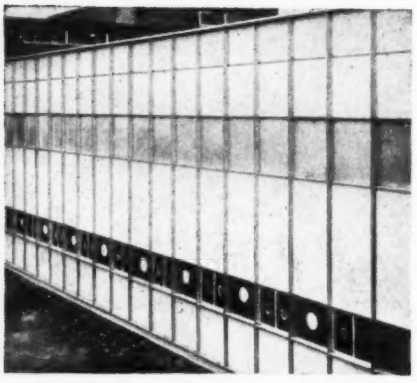


in **curtain walling**

ASBESTOLUX gives the essential resistance to fire, combined with minimum thickness and minimum weight. A curtain wall panel only 2" thick, consisting of an infill of "Rocksil" rock wool between skins of ASBESTOLUX will maintain its integrity in a fire for several hours. The units can be made up on or off site at low cost by local contractors.

Light, thin, inorganic and incombustible – you cannot afford to dispense with any one of these qualities in a curtain wall. ASBESTOLUX has them all.

Design suggestions giving details of a number of suitable external finishes are available on request.



ASBESTOLUX panels in a "Wallspan" frame at the Adhesive Tapes Limited factory at Borehamwood.

Architect: J. E. COLLINS, A.R.I.B.A.

dry construction *needs* ASBESTOLUX

THE CAPE ASBESTOS COMPANY LIMITED

114-116 PARK STREET · LONDON · W1 · Telephone: GROsvenor 6021

and at: Blackfriars House, Parsonage, MANCHESTER 3 · *Phone:* Blackfriars 9355/6 · Eagle Buildings, 217 Bothwell Street, GLASGOW, C.2 · *Phone:* Central 2175 · 246a Corporation Street, BIRMINGHAM 4 · *Phone:* Central 8168

YOU CAN NOW BUY

CANADIAN DOUGLAS FIR PLYWOOD

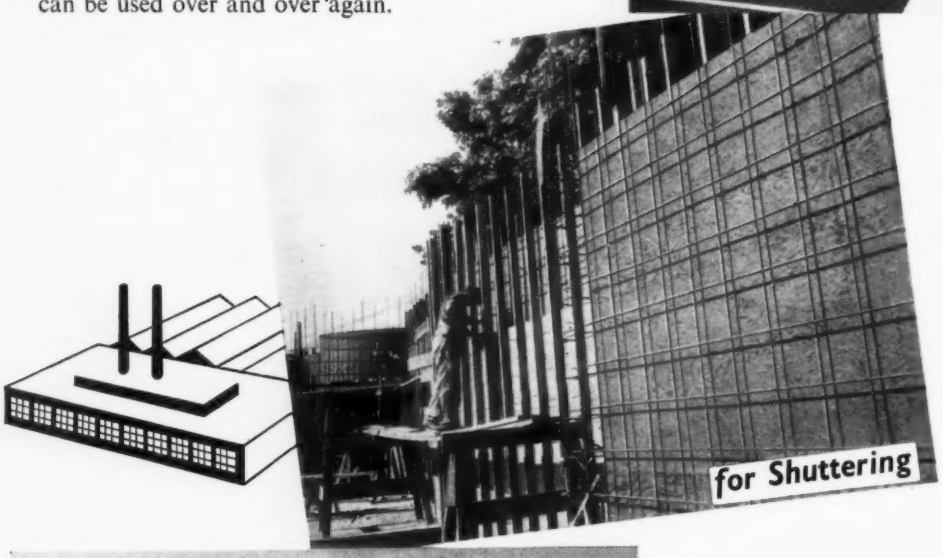
—every panel bonded with Phenolic Formaldehyde Glue!

Engineers, architects, contractors and master builders who have once used waterproof Douglas Fir Plywood continue to specify and buy this versatile material. Standard 8′ x 4′ panels are available in grades and thicknesses suitable for most applications—special sizes can be supplied to your order.

An excellent flooring and ideal base for linoleum or carpet. A single panel covers 32 square feet—requires less nailing—less handling.

Its high strength/weight ratio and diaphragm action will add strength and rigidity to the structure you are building.

Properly designed Douglas Fir Plywood concrete shuttering produces superior concrete finishes and can be used over and over again.



FOR FURTHER INFORMATION concerning Canadian woods contact The Commercial Secretary (Timber), Canada House, Trafalgar Sq., London, S.W.1

Canadian Douglas Fir Plywood is :

Easy to handle ***Speedy to use***

Split-proof ***Dimensionally stable,***

Bonded with Phenolic Formaldehyde Glue

This advertisement is one of a series featuring Canadian Spruce, White Pine, Western Red Cedar, Red Pine and Pacific Coast Hemlock.

D

ing

British European Airways, Staff Catering Block, London Airport.

It's well worth looking into

- Medium price — high quality contemporary style
- Speed of erection and dismantling with complete adaptability to unusual layouts and high recovery value
- Tough, consistent, infra-red dried SaR-ReZ plastic surface, factory finished in standard colours
- Excellent heat and sound insulation from thick, continuous cork core which eliminates drumming
- Many optional features such as double glazing, concealed wiring or decorative wood veneer faces
- Rigidity with light weight

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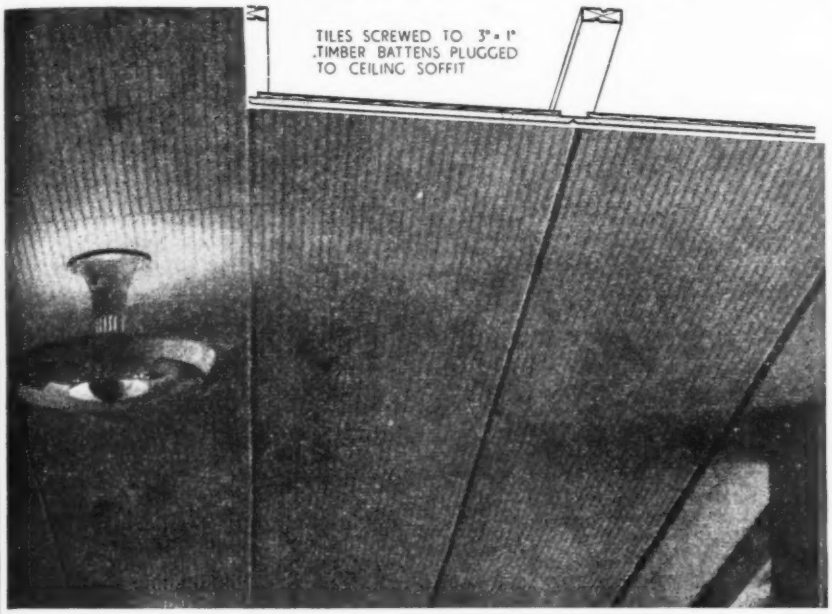
SARO LAMINATED WOOD PRODUCTS LTD.
EAST COWES, ISLE OF WIGHT. Telephone: COWES 704-9
LONDON OFFICE: 45 PARLIAMENT STREET, S.W.1. Telephone: TRA 6291

SUPACOUST

PERFORATED ACOUSTIC TILE

"SUPACOUST" Tiles are manufactured from "Superplaster" (a fine Gypsum plaster admixed with "Superite" the plaster hardener).

"SUPACOUST" Tiles combine high sound absorption with all the advantages of a plaster ceiling.



- EXCELLENT ACOUSTICS
- SIMPLE FIXING
- BEAUTIFUL FINISH
- HYGIENIC SURFACE
- NOT EXPENSIVE

Typical Installation of "Supacoust" Tiles

PERFORMANCE

Frequency (Cycles per second)	125	250	400	500	1000	2000
Supacoust Tile, (Fibre glass backing)	0·25	0·55	0·65	0·60	0·35	0·25
Ditto, Open at back (Fixed to Battens)	0·20	0·35	—	0·75	0·60	0·15

SIMPLE FIXING

Superite Acoustic Panels can be fixed to any surface by screwing. It is normal to only fix at the corners so that support for the standard panels is only required at 2' 0" centres of say 3" x 1" timber battens. (15" centres for the 30" x 15" size Tiles).

SIZES

Standards (supplied from stock)

24in. x 24in. x $\frac{5}{8}$in.
24in. x 12in. x $\frac{5}{8}$in.
30in. x 15in. x $\frac{5}{8}$in.

Other sizes to specification in 8 to 10 weeks from order.

WEIGHT

Standard Tiles, 3 lb. per sq. ft.
If Vermiculite Plaster is used, 2 to 2$\frac{1}{2}$ lbs. per sq. ft.

SALES SERVICE

Petradene Ltd. retain the services of fully qualified Architects as Consultants who are available for consultation in connection with problems of a technical or aesthetic nature.

Quotations will be gladly given for either:
(*a*) Supply to the Site only for fixing by the General Contractor; or
(*b*) Supply and fixing as a Sub-Contract.

Write for particulars to

PETRADENE LTD.

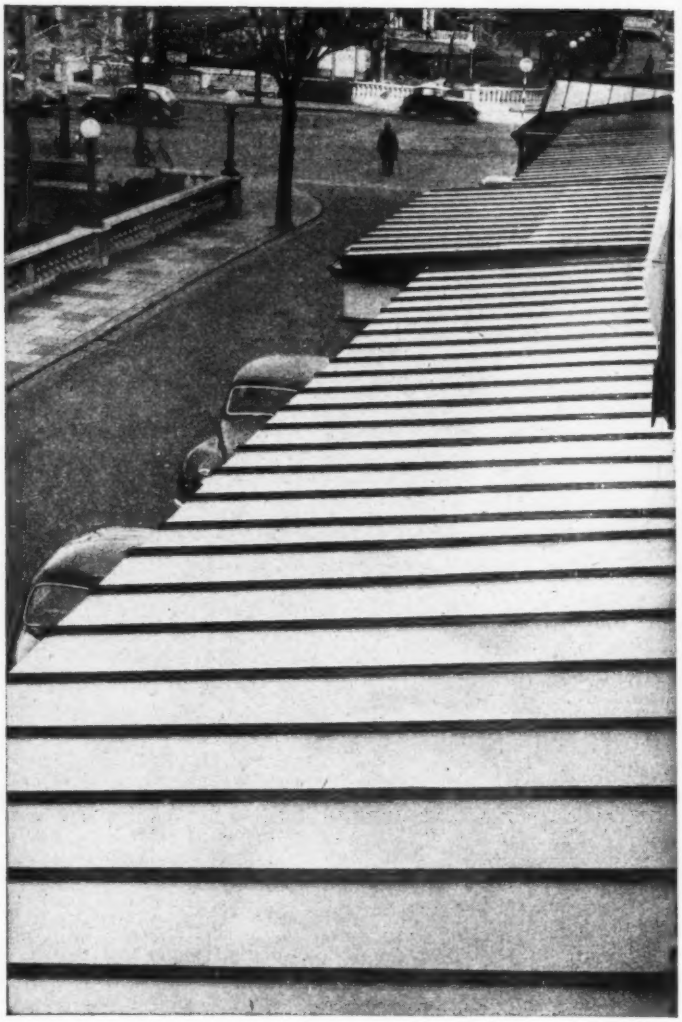
Sole Manufacturers of "Superplaster" & Superplaster Products

23-39, BENDON VALLEY, GARRATT LANE,
LONDON, S.W.18

Telephone: Battersea 2497-8-9

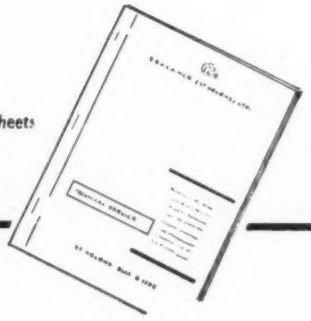
SEAFLEX Roofing PUTTY

This non-hardening Putty remains pliable throughout its life and provides a durable seal which accommodates the extremes of structural and thermal movements caused by climatic conditions on very exposed structures. It is recommended for fixing "INSULIGHT" double glazing units. Seaflex is of a soft consistency and is applied in the same way as normal putty. Seaflex remains adherent to glass, wood and metal without cracking, crumbling, shrinking or flowing, and has a considerably longer life than ordinary putty on the frame. Frames may be easily removed for maintenance since Seaflex remains pliable.



The Palace Cinema, Southport glazed by DUXBURY, HARTLEY & Co. LTD., Salford. SEAFLEX Supplied by CHARLES LIGHTFOOT Ltd. Manchester.

For glazing Wood or Metal Rooflights & Greenhouses ... and for Bead glazing



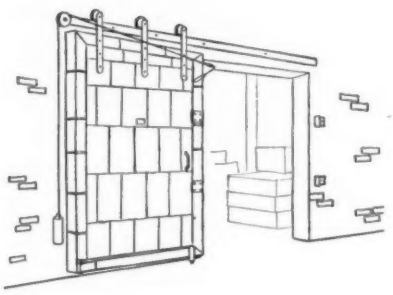
Specification Sheets forwarded on request.

SEALANCO (ST. HELENS) LTD. ST. HELENS. TEL. 2432 & 7782 LANCS.

The largest exclusive manufacturers of Putty & Compositions in Gt. Britain

"INSULIGHT" is the registered trade mark of Pilkington Bros. Ltd.

Fire Resisting Doors



Wherever rooms are in communication with one another through doorways, or where floors are connected by means of stairways or lift wells, there are vulnerable points which demand protection against the passage of fire. All should be sealed by the fitting of efficient fire resisting doors.

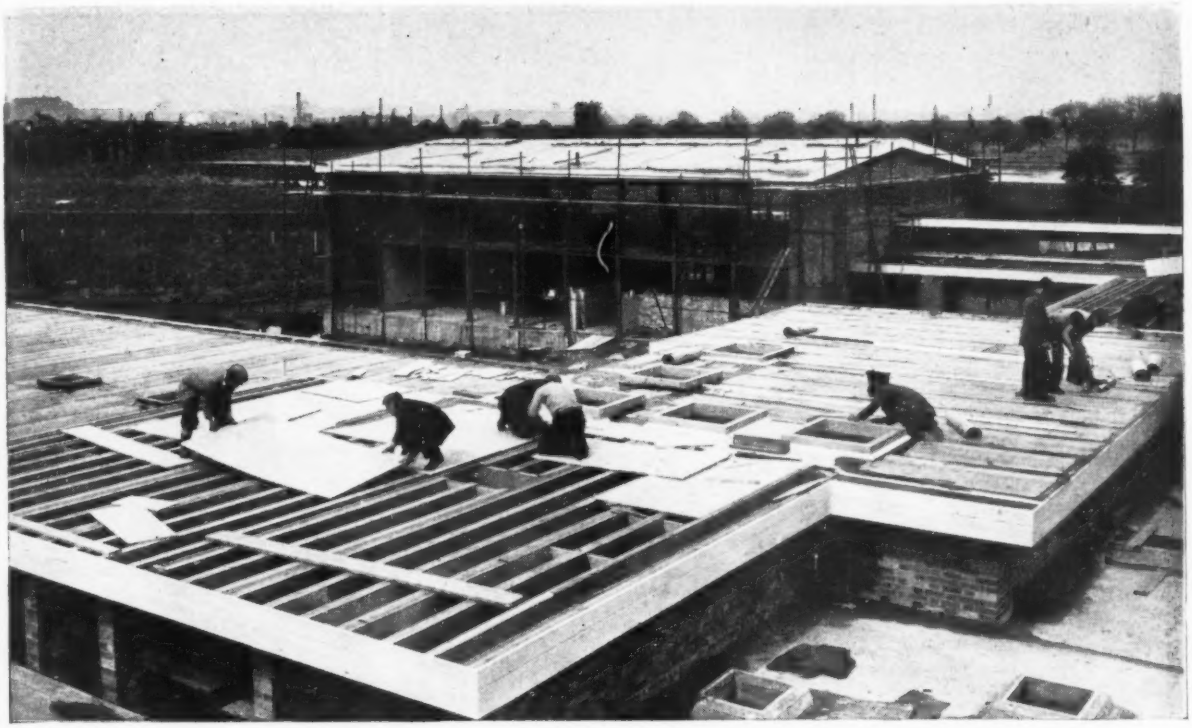
The above photograph shows a Mather & Platt double-swing folding composite type fire resisting door with wired glass panels at the works of well-known pharmaceutical chemists.

Mather & Platt Ltd.

Write for descriptive literature to:—

MATHER & PLATT LTD.
Park Works · Manchester, 10
Park House, Gt. Smith St., London, S.W.1

514



Bartrev the chipboard supplied in any length

Bartrev is now widely used in all kinds of building. It is shown here being laid on TROFDEK roofing at Deering Secondary School, Wilford, Nottingham, designed by R. M. Finch, O.B.E., M.I.C.E., City Engineer.

The board was supplied by William Evans and Company Limited.

For further information write to one of the Bartrev distributors any of whom can supply to any part of the country.

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Effingham House, Arundel Street, London WC2
Telephone: Temple Bar 5303 (8 lines)

WM. EVANS AND CO. (Distributors) LTD.
52 Stanley Street, Liverpool 1
Telephone: Central 5171

THE METAL AGENCIES CO. LTD.
Avon Works, Winterstoke Road, Bristol 3
Telephone: Bristol 64611

MONTAGUE L. MEYER LTD.
14 Buckingham Street, Adelphi, London WC2
Telephone: Trafalgar 7766

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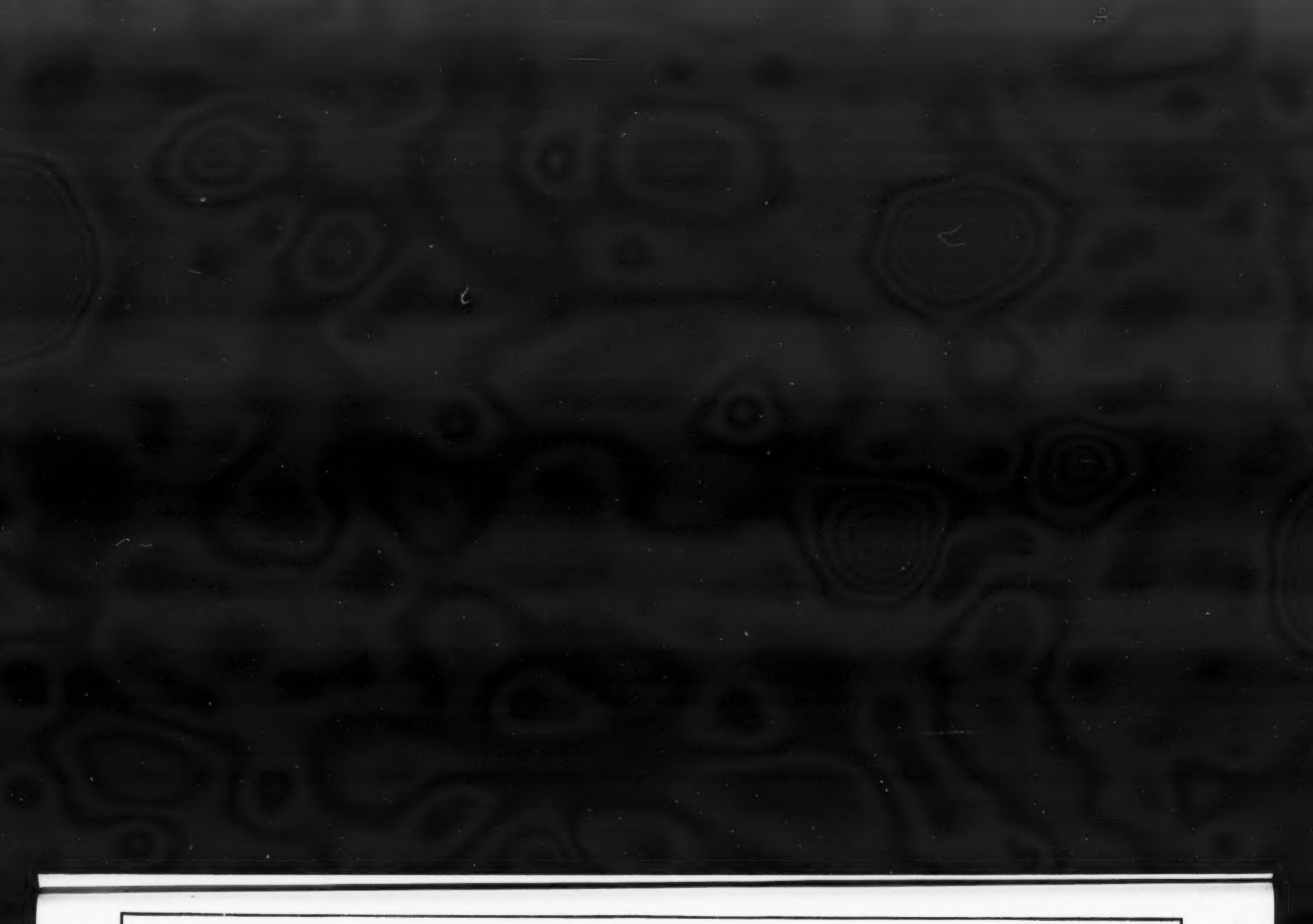
12 Dixon Street, Glasgow C1
Telephone: Central 6092-3

H. T. TENNISON AND CO. LTD.
21 Story Street, Hull
Telephone: Hull 36902-3

THE BRITISH DOOR MARKETING CO. LTD.
Shobnall Road, Burton-on-Trent
Telephone: Burton 4851

BARTREV



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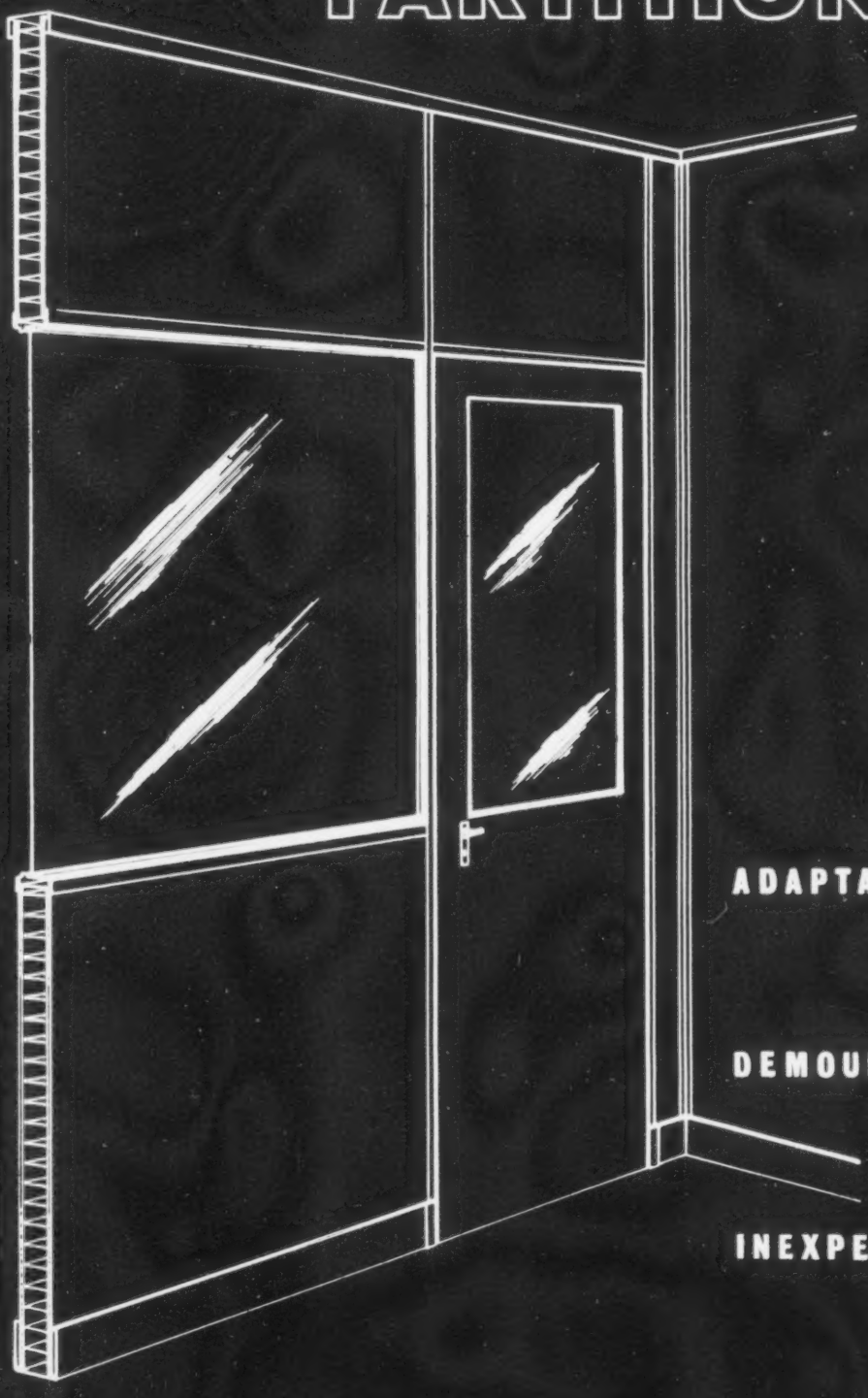
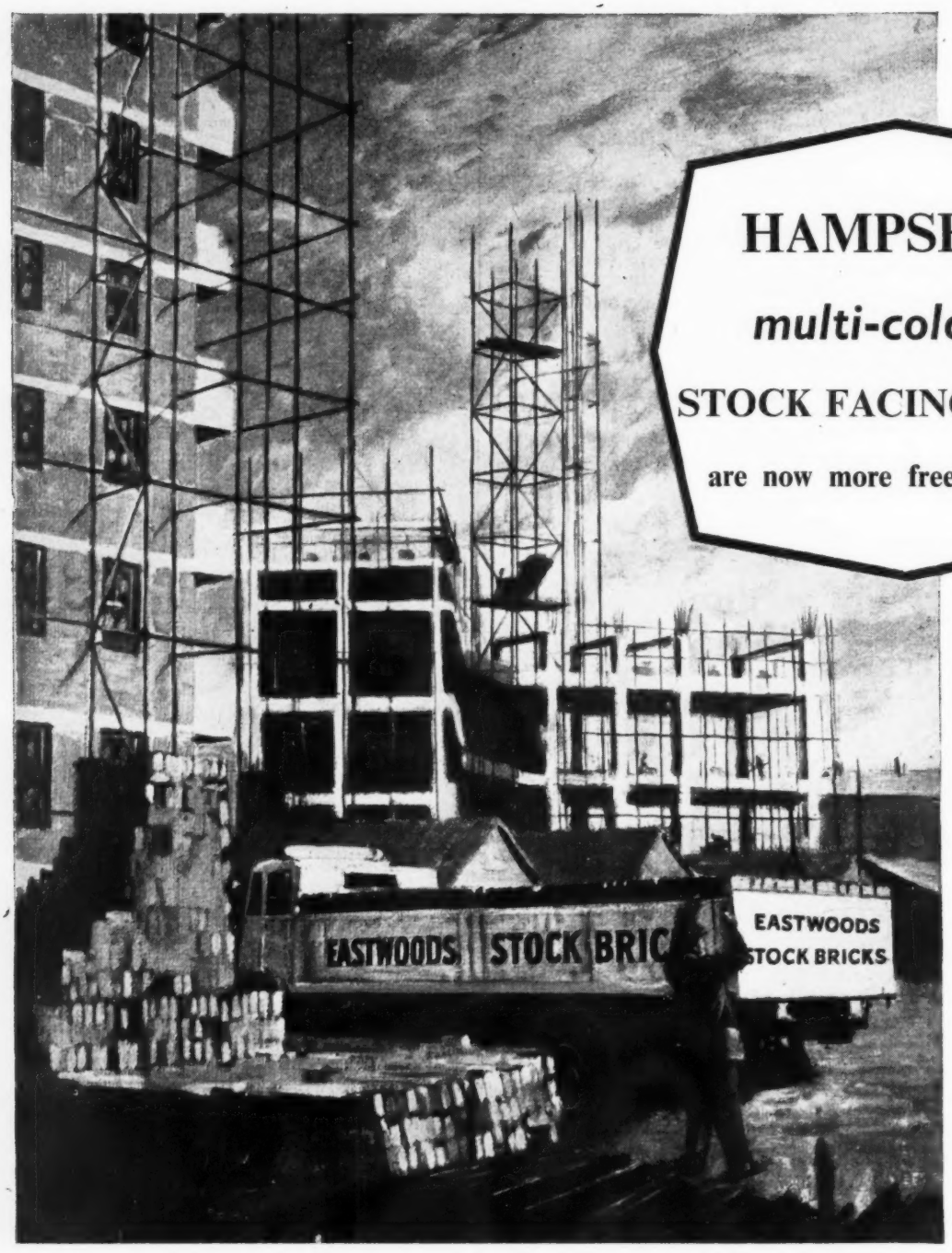


ADAPTABLE

DEMOUNTABLE

INEXPENSIVE

GYPROC PRODUCTS LIMITED



HAMPSHIRE

multi-coloured

STOCK FACING BRICKS

are now more freely available

A Brick of the Sussex Stock Type

Here is a machine-made facing brick in keeping with the tradition of the hand-made brick. Made in both medium and dark shades, the Hampshire multi-coloured Stock provides Architects and Builders with a well burned brick in a pleasing range of texture and colour; their appearance and durability have proved them to be of excellent quality.

Produced by EASTWOODS at Allbrook, Eastleigh, Nr. Southampton

EASTWOODS SALES LIMITED *Head Office:* Eastwood House, City Road, London, E.C.1. *Tel:* CLErkenwell 2040 (30 lines)
STOCK BRICK WORKS AT CONYER, KENT · HALSTOW, KENT · FUNTON, KENT · OTTERHAM, KENT · SHOEBURYNESS, ESSEX

EA5013

This recessed lighting scheme of the canteen in the American Embassy was designed by Philips

For Imaginative Lighting

Talk to PHILIPS

Some of the more imaginative lighting schemes of recent years have been the result of close co-operation between architects, electrical contractors, and the Philips Lighting Design Service.

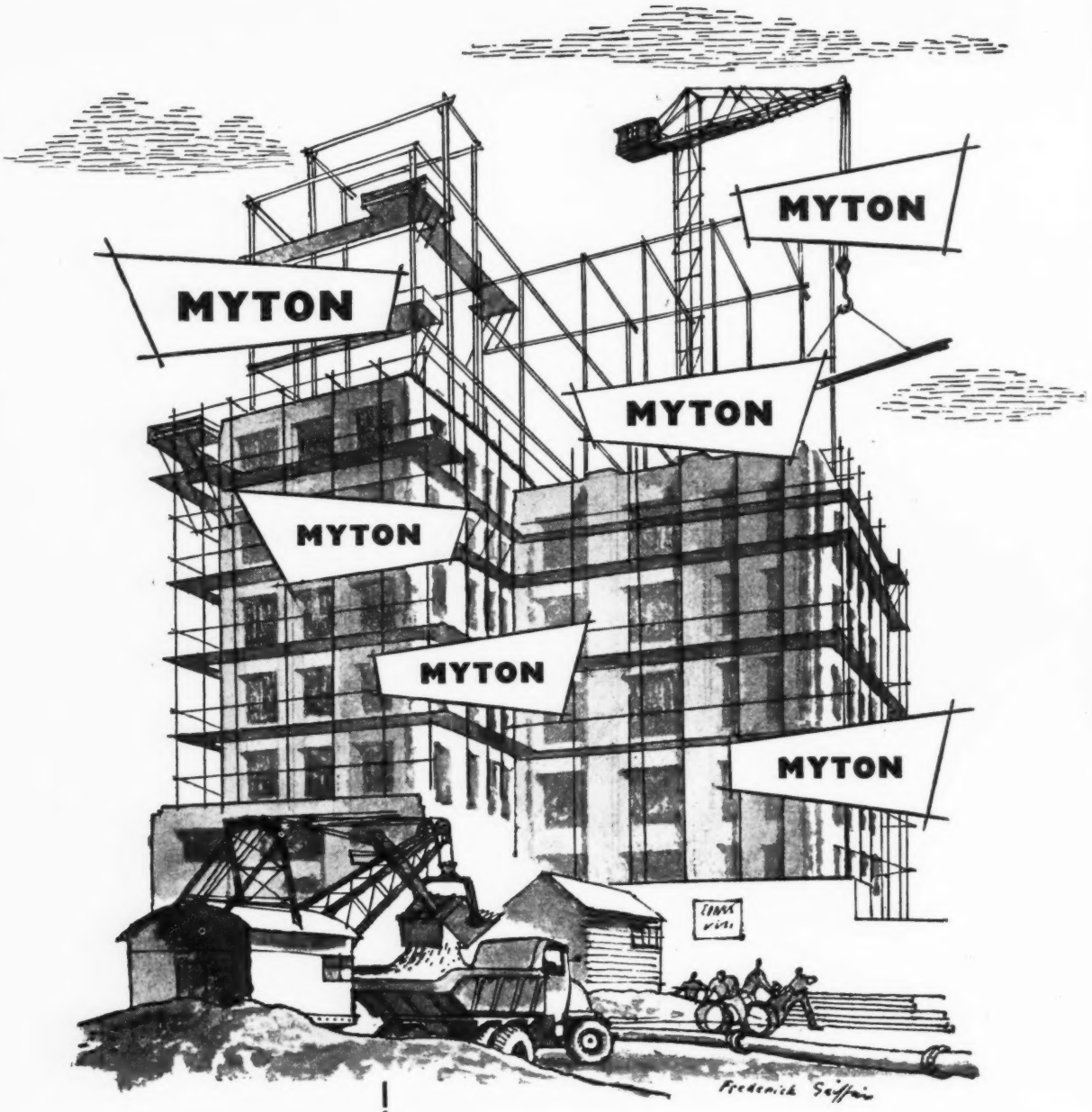
The advice and assistance provided by this Philips Service is entirely free, and experienced lighting engineers in each Philips branch area are at your service. In addition, a fully qualified architect with special experience of lighting in its relation to architecture and colour is available to co-operate with you.

Philips will be happy to design for you—there is no charge

PHILIPS ELECTRICAL LTD

LIGHTING DIVISION · CENTURY HOUSE · SHAFTESBURY AVENUE · LONDON · W.C.2

Tungsten, fluorescent, blended and discharge lamps & lighting equipment · Radio & Television Receivers · "Photoflux" flashbulbs, etc.



You'll be seeing more and more of

MYTON

It is of considerable interest and significance that MYTON LIMITED are now a part of the TAYLOR WOODROW GROUP OF COMPANIES, with all the valuable advantages which automatically spring from membership of that vast organisation

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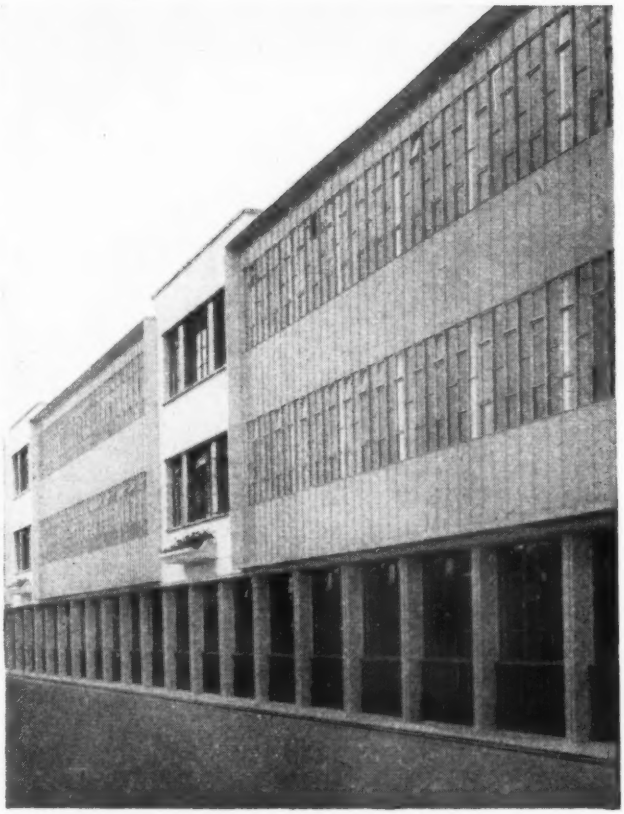
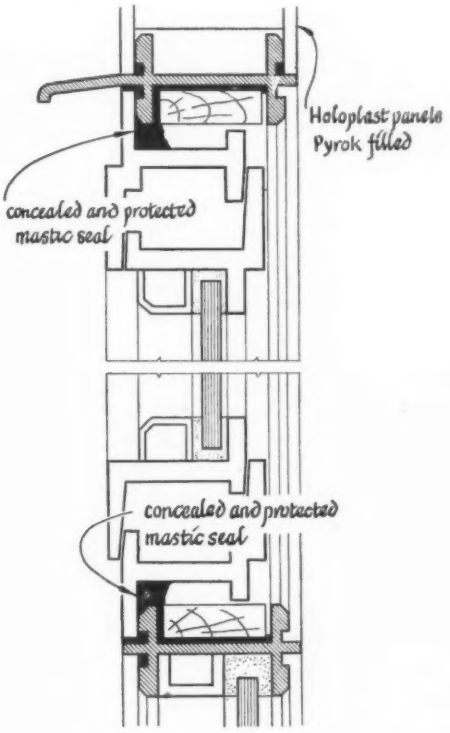
MYTON LIMITED ***Building and Civil Engineering Contractors***

Now a member of the **TAYLOR WOODROW GROUP**

HEAD OFFICE: NEWLAND, HULL



Experimental and Design Office Block
De Haviland Aircraft Co. Ltd., Hatfield, Herts.
ARCHITECTS: *Messrs James M. Monro & Son, B.Sc., A.R.I.B.A.*

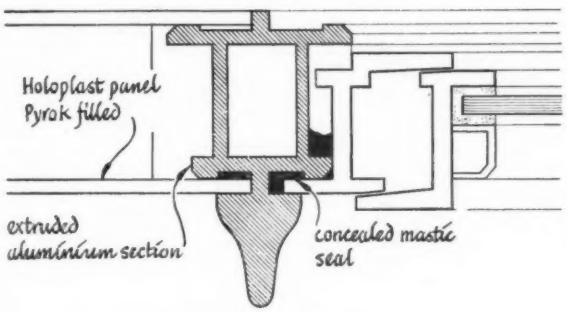


Typical vertical section showing use of specially designed aluminium sections

In the cladding of framed buildings

SECOMASTIC REGD.

provides lasting protection at the joints



Typical sectional plan

An important problem common to all techniques for cladding framed buildings is that of providing an effective and lasting waterproof barrier at the joints.

Correctly used, a non-hardening mastic can make a valuable contribution to the solution of this problem. But since the maintenance free life of the joints will be determined by the life of the mastic, the greatest care should be taken in using the correct grade applicable to the type of joint.

The Technical Department of SECOMASTIC Limited has studied the special problems connected with the sealing of joints in Wall Cladding and is in a position not only to advise on the particular grade of mastic best suited to a specific case, but also, where applicable, to collaborate in the design and detailing of suitable joints.

Please address all enquiries to Architectural Dept.

SECOMASTIC LIMITED · BRACKNELL · BERKSHIRE · *Telephone: BRACKNELL 910 (5 lines)*

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STAIRWAY TO THE STARS

This staircase at the Empire Theatre, Liverpool, is pounded by heavy traffic twice nightly, six nights every week—not counting matinees!

That's why Ferodo Stairtreads have been fitted. They do a double job . . . speeding the feet of hurrying theatregoers by providing a firm, reassuring grip under foot, and also protecting the carpeting by saving wear and tear on the stair edges.

Ferodo Stairtreads are practically unaffected by hard and continual use. One set fitted at the University Union, Manchester, and only recently renewed, had been down for 33 years! Cleaning is speedy and simple; a quick wash or brush down soon restores all their good looks.

Specify Ferodo Stairtreads for your next interior design. There's a wide range of colours to choose from, and you are sure to find one that will merge into, or even enhance your colour scheme. All the information you need . . . prices, colours, types and method of ordering . . . is in the Ferodo Stairtread Catalogue No. 888.

FERODO Non-Slip Stairtreads

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

harlequin

H.C.7. JAUNT

The new floor tiles by MARLEY at no extra cost

The Marley Tile Co. Ltd., Sevenoaks, Kent. Sevenoaks 2251

London Showrooms at Alfred Goslett & Co. Ltd., 127-131 Charing Cross Road, W.C.2. Tel: Gerrard 7890

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HB.3 GALA

HC.12 FIESTA

HD.21 MAYPOLE

HD.17 MOTLEY

HD.22 BIG TOP

HD.26 CAROUSEL

HD.16 CAREFREE

HB.2 SPOTLIGHT

HC.11 CARNIVAL

C.7. JAUNT

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THE ARCHITECTS' JOURNAL

9, 11 & 13, Queen Anne's Gate, Westminster, London, S.W.1 Whitehall 0611

No. 3154 August 11, 1955 VOL. 122

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THE NEW COLONIAL OFFICE

Sometimes we have to put up with unsatisfactory pieces of planning because the force of circumstances prevents anything better. The use of the old Westminster Hospital and Stationery Office sites in Broad Sanctuary for a huge new Colonial Office looked like a case in point when, five years ago, the Government decided to go ahead with this scheme in spite of much dislike of it.

*

But things are different now, as *The Times* recently pointed out. Not only is the Colonial Office still not begun, but both its neighbours, the Institution of Chartered Surveyors and Middlesex County Council, have building plans or expansion problems and there is an obvious opportunity to reconsider the area as a whole. Unsatisfactory planning becomes quite unacceptable if it drives other people to plan badly too, and this is what may happen if the area between Broad Sanctuary and Great George Street is rebuilt piecemeal—congestion will be increased and new buildings will go too high, disturbing the skyline from Parliament Square and throwing out of scale that charming example of the late Gothic Revival, Middlesex Guildhall. I hope the Ministry of Works are now examining their Colonial Office project afresh.

*

Incidentally, the objections to the latter do not rest only on the design and planning of the building itself, but on its effect on the lighting of the offices round it, especially the Middlesex County offices in Great George Street. The Colonial Office, being a Government project, was able to ignore planning regulations, but the privilege of so doing which is granted to the Crown was never meant to excuse Government buildings from the courtesies due from one neighbour to another.

THE BOULEVARD AGAIN

One of the better things of recent years has been the space given to architecture by the Press—both the "serious" and popular Press. But surely the difference between these two should be one of presentation, not of content. The issue should be informed and intelligent, the facts correct—however elementary and snappy the manner.

*

I say this because the *Evening Standard* has rushed in to explain—and almost to adopt—the Hyde Park Boulevard scheme. There are things to be said both for and against the scheme, as letters in *The Times* have shown. The *Standard* is not expected to run anything on the level of a *Times* correspondence column, but need it offer us—as it did the other day—elementary little plans unrelated to any kind of reality? Apparently the *Standard* wants to compensate the park for what is lost to the Boulevard by demolishing all buildings west of the Hyde Park Hotel—Knightsbridge Barracks included.

*

Where will the Boulevard scheme end? The west end of the park is as congested as the east; will Kensington Palace Gardens (which, inevitably, the *Standard* would have to call "Millionaires' Row") be opened to one-way traffic, paralleled by Kensington Church Street. Why not? Then new roundabouts at St. Mary Abbots and at Notting Hill . . . and so on. The *Evening Standard* should think again. But I must not be too harsh to a paper which is so sure that its enlightened readers know about our profession that it is running a strip-cartoon featuring "Arki-Teckt" . . . .

DEARER MONEY

If you don't know what that title means it doesn't matter because ASTRAGAL doesn't either. It has, however, a technical Financial Correspondent smell and means, so far as I can discover, that your overdraft will cost you more. And so, probably, will your house if you are buying it through a building society. But not necessarily, for at least one of the largest building societies has as much money to lend as

ever, investments *not* having fallen off, and is prepared to keep interest at four and a half per cent. Rates of the smaller societies have gone up, but this will mostly mean that repayments will be made over longer periods and not that individual payments will become larger.

*

In any case, the real problem that the enlightened client encounters when he wants to build a contemporary house is not how to raise an extra half per cent. per annum, but how to raise a loan at all from conservative-minded building societies who won't take a risk on non-Tudorbethan property. No one would mind having to pay five per cent. interest if he could be sure of getting a loan for a good modern house. Indeed some of the more enlightened insurance companies which already charge five per cent. have been doing business with would-be house-buyers who had been rejected by building societies.

*

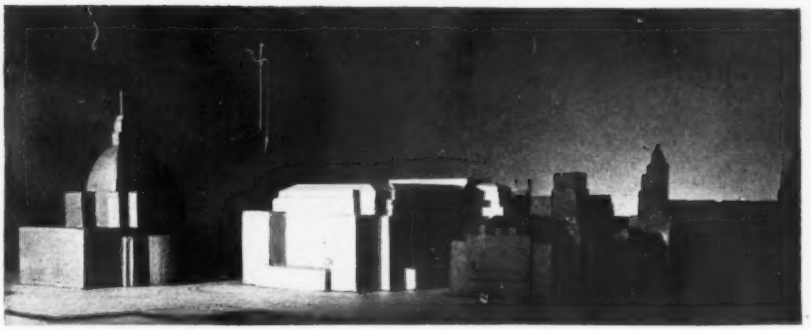
Mr. Butler's h.p. restrictions seem to involve no particular hardship unless you regard radio and TV as essential furniture. But surely *all* appliances for such essentials as cooking and heating should be free of purchase tax.

GOOD NEWS FROM KEW

About eighteen months ago the JOURNAL read a funeral oration over Decimus Burton's great Palm Stove at Kew (" Stove " as Prof. Hitchcock has taught us to call it, no longer " palm house ") and illustrated a lash-up made of the Coronation arches from the Mall which was to take its place. Note my " was "—for in a subterranean sort of way events have been on the move. It was fairly easy to miss a little news paragraph a couple of months ago (ASTRAGAL certainly missed it) announcing that the arches had been disposed of by MoW, but it was much less easy to miss a photograph in *The Times* showing the Palm Stove being re-built and made good and put back as it was —marvellous news for all those who feel Paxton's performance at the Crystal Palace has been grossly over-rated for its originality, and that Decimus is more their man—for our descendants will now still have the Palm Stove to study, in all its ingenuity, while the Crystal Palace will be no more than a picture of the best bonfire that ASTRAGAL can remember seeing.

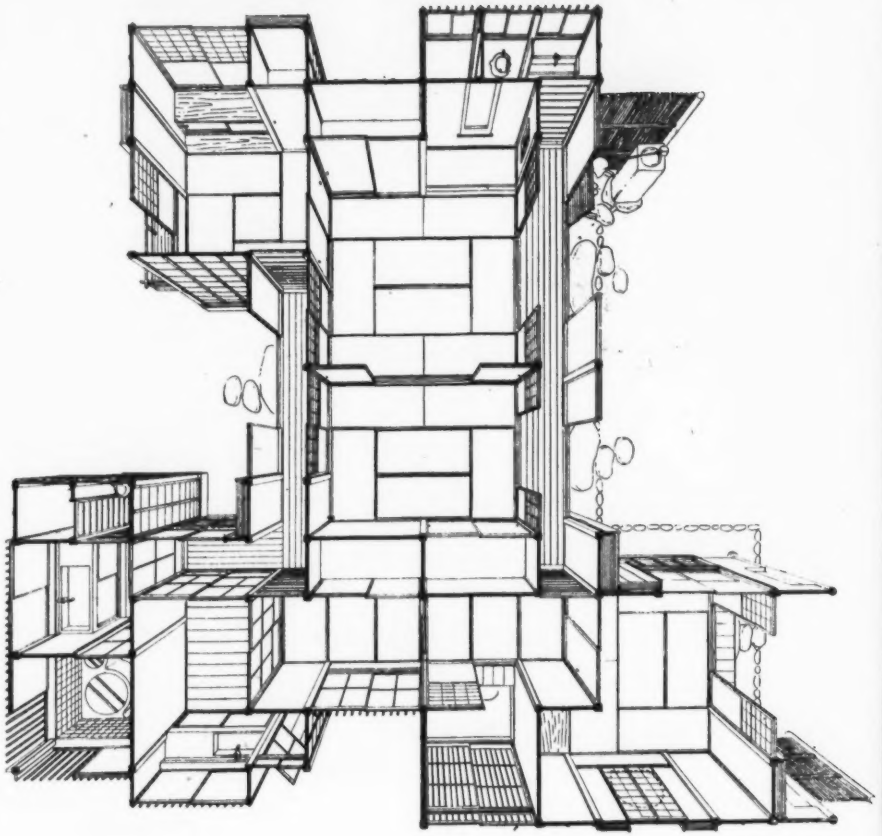
*

But what about those arches? Answer: they are going to Stowmarket to form the framing of a super straw-store for some straw-board makers whose name ASTRAGAL must not mention. How do you make a barn out of those arches? Ask Felix Samuely, who is preparing a scheme. ASTRAGAL, for one, can hardly wait to see the result. Incidentally, isn't Post-Atom Posterity going to have fun when it tries to piece together pictures of the Mall arches and remains of the Stowmarket store?



Work on the proposed Colonial Office at Westminster has been suspended for some time. On page 171 ASTRAGAL *suggests that it may not be too late for the MOW to change its mind about the design and placing of this building, which—as shown in the model (the white block)—is too aggressive and domineering to its neighbours.*

This " cybernetic-type tower " was set up at the recent International Building and Public Works Exhibition in the Parc St. Cloud, in Paris. (Cybernetics, as readers will of course know, is the study of dynamic sound.) The tower, which worked on the principle of the aeolian harp, brought up to date by electronics, had thin metal plates which responded to wind, heat, cold and light and played—or so ASTRAGAL *is told—a tune.*



Planning on the Mat

Most architects know, vaguely, that traditional Japanese houses are designed around a standard module—the mat. Such a method is bound to be of interest to us at the moment when so much effort is being devoted to attempts to devise ways and means of using standard modular components in Western architecture, and one turns with interest to Tetsura Yoshida's newly published book *The Japanese House and Garden* (Architectural Press, 60s.) to see how the Japanese tradition dealt with our currently-vexatious problem of measuring-to-centres *versus* measuring-to-surfaces. One finds that the Japanese designed around an ideal mat, rather than a real one, and measured to the centres of uprights, the mats being purpose-made the required degree narrower than the ideal in order to allow for the thickness of the partitions against which they butted. The resemblance of the resulting designs to, say, the later Hertfordshire schools, is very noticeable as in the diagram shown above left, and the resulting interiors, such as the one above right, still provide an example which the Western Modern Movement seems nowhere near following.

Doubtless there will be many pilgrimages to Suffolk to see brass plaques reading "Queen Elizabeth II rode here."

WHAT YOU MUSN'T DO

ASTRAGAL always hopes that you make a close study of the Journal's serial history of ARCUK at work, which appears, almost weekly, under the rubric *What you Musn't Do*. No doubt you think that quite a lot of it is fogging of the pettiest kind, but, if you do, consider yourself lucky that you are not trying to practise in California without a Californian qualification.

*

For the heinous crime of having qualified in Indiana, John Lloyd Wright, distinguished son of famous father, has just been given a suspended sentence of sixty days in jail by an obviously embarrassed member of the Californian judiciary, after a sixteen-month wrangle with the Californian Board of Architectural Examiners. The heart of the matter would appear to be that JLW displayed a notice with the letters "AIA" after his name, thus claiming to be an architect, but without having passed a civil engineering exam required by the Examining Board, and that he failed to notify a client that he was thus *not* an architect.

*

Judge Cottingham, who seems to have regarded the whole case as too stupid for words, tore several strips off the Board of Examiners and the wording of the Californian architectural statutes, pointing out, among other things, that the statutes permit people with "no more education than is necessary to write the sentence 'I am not an architect' to practise architecture and enjoy the benefits from doing so." Although most of the charges were thrown out early in the proceedings, enough have stuck to make the sentence inevitable, but John Lloyd Wright is to appeal. Good luck to him. Suppose, dear reader, that your Liverpool degree did not qualify you to practise in Middlesex. Thank goodness for the poor old ARIBA which is at least a *national* qualification.

*

How about awarding Judge Cottingham the next RIBA Gold Medal?

ASTRAGAL

POINTS FROM THIS ISSUE

A new way of becoming a **FRIBA** .. .. page 177

Architect makes film about **modular co-ordination** .. .. pages 177 and 197

Three new **architectural competitions** .. .. page 178

Three reports on the **IUA Congress** .. .. page 179

Heating system in the Herts. schools .. .. page 197

The Editors

COUNCIL OF INDUSTRIAL DESIGN

THE transfer of the Council of Industrial Design to new premises in the West End marks the inception of yet another effort to bring good design to the notice of a wider public. The increasing use made by intelligent householders of the facilities offered by the Building Centre suggests that if the public knows that information on better products is available, they will go and get it, and CoID doubtless expects that similar use will be made of the services available at Haymarket House.

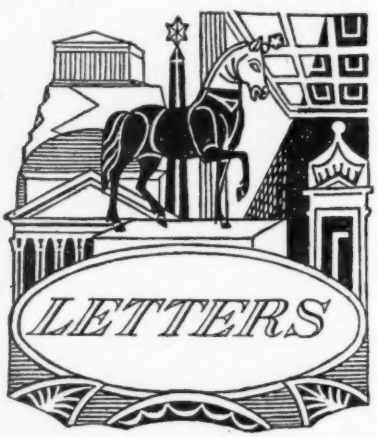
But an increased flow of intelligent people through CoID's library, photographic section and exhibition rooms will only tickle the surface of the Council's basic problem, which is to sell good design to mass-producers and mass-consumers. In the last resort this can be done only by persuading the former group that good design is better business, and the latter group that good design is better value for money. In both cases these are factors which are open to objective evaluation, and one might properly expect the Council to be devoting a great part of its energies to: (*a*) quality testing, and (*b*) market research. It isn't.

Both activities would, in fact, cause considerable alarm, both inside CoID and outside it. Quality-testing is the business of BSI, most people feel, and market research is up to the manufacturers themselves. Precisely what does this leave the Council ? The answer appears to be: superficial appearances only; pure aesthetics, in fact. But how many people would be happy to admit this ? We belong to a generation whose mental attitudes are slanted for "objectivity" through such slogans as "Truth to Materials" and "Form follows Function," all of which imply that aesthetics and performance are organically linked. How can we tell which material to be true to, until we have ascertained which gives optimum performance for the function, and how can we tell which function form must follow, until we know what the consumer expects of the product ?

CoID, through its house-magazine *Design*, has always spoken as if it, too, held these latter views, and has given much space to the more sensational aspects of product-evaluation, such as Ergonomics. But for the most part, *Design's* product-criticism has been based on criteria such as Vulgarity/Refinement, Taut/Slack, Simple/Ornate—imponderables from the world of

subjective taste. In a recent widely-noticed (and much criticised) feature *Space for Decoration* value-judgments were freely passed on automobile and refrigerator design without any reference to objective criteria derived from quality-testing or market-sampling.

This does not help CoID, nor the progress of design. Manufacturers of cars and refrigerators do not want to know which products the editors of *Design* like or dislike; they want to know why an automobile design which the editors have frequently praised will not sell in USA. CoID cannot now move into the quality testing field without redundantly duplicating work already being put in hand, but real market research, which could be as wide and deep as the new functional-research initiated by the Nuffield Trust on hospital design, is a wide-open field for exploratory work in this country, where no manufacturer currently conducts studies as profound or ingenious as those of the major US producers of consumer goods. And if CoID reply again that consumer research is "simply a statistical smoke-screen for playing down to the lowest common denominator of public taste" then they reveal themselves as merely a group of aesthetic snobs such as no democratic nation should be called upon to support.



R. B. Corless, A.R.I.B.A.

Jack Pritchard

Joseph Berry, F.R.I.B.A.

A. E. Souter, A.R.I.B.A.

Architectural Paradise

SIR,—A large part of your correspondence columns has already been taken up in the cause of the private architect and quite a lot written about more and more co-operation between builder and architect.

It is, therefore, sufficient for me to quote part of the report in the local press of the proceeding of a Ministerial inquiry over the speculative development of some land. The quotation is part of a solicitor's address to the Inspector and goes, "Mr. X said that it was not criticism of design which troubled builders, indeed one builder had told him (our enlightened solicitor) he liked the planning officers to alter his design as he need not employ an architect."

It would appear that co-operation is only meant to work one way and that in future we must look with due reverence upon our planners' idea of architectural paradise . . . heaven forbid!

And also . . . why shouldn't I write my own will? (with aid from the Planning Officer).

R. B. CORLESS.

Lowestoft.

What Furniture Owes To Wells Coates

SIR,—My wife and I were deeply touched by ASTRAGAL'S note in THE ARCHITECTS' JOURNAL for July 21, but you do Wells Coates less than justice.

It is true that some furniture was tried out before Isokon, but I think Wells Coates probably invented the name. No one else would, at that time, have thought of associating the three words isometric, unit and construction, and "Isokon" quickly followed.

It is hard to recapture the conditions and thoughts of the period, but in the minds of many architects the new ideas were still nebulous. One thing however is certain—with Wells Coates they had already begun to crystallize. It was the cogency of his ideas that was so impressive and did so much to make a practical demonstration possible.

JACK PRITCHARD.

London.

Study Groups

SIR,—We have noted in this office with interest the correspondence, etc., following up the conference discussions at Harrogate, and entirely concur with the views expressed by Messrs. Brunton & Partners recently. As a firm we should be glad to send a representative to any study meeting, whether held in London or the provinces.

We had rather thought that the RIBA might have been taking some official initiative in this direction: the allied society sponsoring the conference, WYSA, have already decided to invite Mr. Parrish to lead a further discussion at a General Meeting next winter in Leeds.

JOSEPH BERRY.

Huddersfield.

Poaching

SIR,—My letter, which you kindly published in your issue of June 23, appears to have caused another unhappy private practitioner to dive for his typewriter.

This gentleman, who, to judge from his pseudonym, must either be, or have been, in very hot water, has firmly grasped the wrong end of the stick.

Neither the President of the RIBA, nor "Poacher" (see AJ for June 23, 1955) nor I, have suggested that salaried architects do not carry out private work; of course they do. What has been said is that they do not carry this out *in their employer's time*. This I will repeat again and again and will receive support to my statement from the majority of employed architects.

Let us now consider "Poacher's" second paragraph. I would like him to explain what is ludicrous or dangerous about the suggestion that if an architect is not employed in any building project (let us ignore, for a moment, his mode of employment) then some other person, necessarily not an architect, will be so employed. This, surely, is a logical statement and cannot be contested.

No one doubts that private architects are pleased to carry out schemes for small houses and that a certain number of such commissions are carried out by salaried architects; but does "Poacher" really suggest that, if he were in a salaried position and able to undertake private work in his spare time, he would refer a prospective client to a local Private Practitioner.

"Poacher," and the school of thought which he represents, appears to assume that the ethics of the individual architect undergo a change as soon as he enters salaried employment. This is the attitude about which I complained in my original letter and is exemplified in statements which suggest that the salaried architect will give to his client an inferior service.

Why should this be assumed? A man of integrity will not accept a commission if he cannot give the services for which he claims his fee. What, in any case, is so very difficult in advising clients upon the choice of the various items which "Poacher" mentions? In most cases it is far more convenient for the client and his wife to consult their architect out of normal business hours and visits to showrooms on a Saturday morning are just as effective as at any other time. I can see no reason why the salaried architect cannot do all things required of the efficient architect, still without encroaching upon his employer's time, to the complete satisfaction of his client.

I suspect that "Poacher" when, in his letter, he referred to "pitiful commissions," was endeavouring to impress the idea of the very small value of the private work carried out by salaried assistants when set against the total value of architectural work done.

If the situation is faced fairly it would appear that "Poacher" and his colleagues, in a small way of business, look with envy upon *any* work that is not carried out by them, evidence of such envy being evident in the fourth paragraph of his letter. This envy sufficiently warps their sense of proportion as to insult fellow members of their profession, who do not earn their living in private practice, with charges of unethical behaviour.

Is it less honourable to practice one's profession in one's spare time than, say, to encroach upon the preserves of the qualified building surveyor, the journalist, or the professional teacher, all of which is done by a large number of architects with, as far as can be ascertained, no protest from any of these people.

I have tried, as "Poacher" suggests, to look at the situation through the eyes of a small private practitioner, recognizing his difficulties and frustrations.

I have, in my assumed role, seen a very great deal of work to be done; I have seen a lot of it being carried out by large organizations employing their own architects; I have seen a large number of the larger contractors employing architects upon their work: I have seen a lot of very large, medium-sized and very small jobs carried out by private offices (both large and small); and I have seen a very small number of little jobs carried out by salaried assistants in their spare time.

And the conclusion I have drawn from all this? Far too much work still eludes the profession, but, thank Heaven, at last there are signs that the public, our great unaesthetic British public, are becoming aware of our existence; and I see (still as a hypothetical private architect) more chance of further commissions because every good job done by one of *us*, however employed or whatever the motive, is an advertisement to the whole profession to all those that see and inquire.

ALLEN E. SOUTER.

Sussex

RIBA

News for Would-be Fellows

Next year anyone who wants to be a Fellow of the RIBA will have his work scrutinized by the Fellowship examiners. And he himself may be scrutinized as well. Until next January the existing method of election will be continued, *i.e.*, associates who have been principals in private practice for not less than seven successive years, and "other associates regarded as being in a position of equivalent responsibility, have been able to proceed to the Fellowship" automatically.

MOHLG

"Green Belts Are Needed"

The under-secretary to Duncan Sandys, the Minister of Housing and Local Government, has sent a circular to local planning authorities, saying that the Minister "recommends planning authorities to consider establishing a Green Belt wherever this is desirable in order: (*a*) to check the further growth of a large built-up area; (*b*) to prevent neighbouring towns from merging into one another; or (*c*) to preserve the special character of a town."

MODULAR SOCIETY

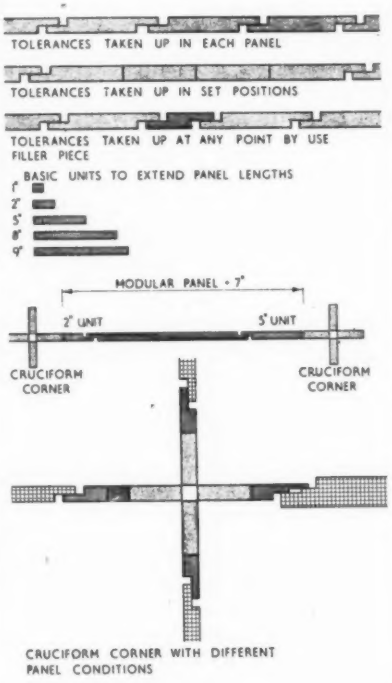
An Arcon Film

Last week a film on Rodney Thomas's current studies in prefabrication and dimensional co-ordination was shown to the Modular Society.

In this film Mr. Thomas demonstrates that industrial production will necessitate tolerances, and that these can be taken up either at individual panel joints, collected at set positions, or covered by a filler piece placed at any point in the assembly. His objective is to find a way of building with components having any plan, dimension, thickness and edge shape, and a solution is arrived at by considering the space between components and not the components themselves. He points out that, given a set span and a number of panels which do not fill the opening, the resulting discrepancy can be overcome by strips of five basic dimensions of one, two, five, eight and nine inches, applied at both wall ends. These strips become part of the corner or end fixing and act as interpreter pieces between components. Finally, to give freedom of thickness, the same strips can be used to move the component ends away from the corners where they will not foul each other.

In the discussion which followed the showing of the film, Mr. Thomas emphasized that he was only seeking to establish a principle and suggested that such an approach might overcome the economic drawbacks in present-day fabrication, where a tooled factory soon became inflexible because of the necessary long-term capital policy involved.

The film is discussed in the technical leader on page 197.



The system described above.

NANTES

What Figaro Thinks of Corbusier's Scheme

In the autumn of last year (December 2) the JOURNAL published a technical report on Le Corbusier's second Unité d'Habitation at Nantes. The new block has now been officially opened, and on July 4 an account of it appeared in "Le Figaro," over the signature of Jean Mendras. We think it worth while to translate M. Mendras' article in full (complete with Gallicisms), since it not only indicates a welcome standard of intelligent criticism (English contemporaries please copy) but also provides remarkable evidence that the Enfant Terrible has so graduated in public opinion that the common reader in France knows his name and what it stands for without being told.

"Coming from the centre of Nantes, you cross the two branches of the Loire, and notice in the distance, looming up on the right, one building dominating all the rest; it is the *Cité Radieuse de Rezé*, younger sister to the one at Marseilles. One is tempted to say twin sister, so close is the resemblance between them.

"108 metres in length, and 65 metres high, it is a veritable monument. Let us go and visit it, in the wake of the authorities by whom it was inaugurated yesterday.

"This vertical city towers above the surrounding trees and roof-tops. Its façade—which is simply a series of loggias with their side walls in vivid colours, really begins 13 metres above ground level; the height of the *pilotis*, which are more numerous and less bulky than at Marseilles, giving a somewhat lighter aspect to this mass of concrete.

"Let us penetrate 'beneath' the building. On the left is a post office (with its public telephone mounted inside a red bell-shaped hood) to be opened in a few days. On the right, unlike Marseilles, is a group of three automatic lifts. These are not without occasional inconvenience, as the circuit-breaker goes if the load exceeds sixteen passengers. You press a button, and there you are. The doors open and close automatically. Let us stop at the second street up (there are six). It is like a corridor in the Metro; low (you can touch the ceiling with your hand), about a hundred yards or so in length, darkish. To right and left are low-powered lamps whose light is reflected on to the different-coloured entrance doors, each bearing a number. To the right of each door is a sort of cupboard attached to the wall: here the delivery boy can leave the groceries without disturbing anyone.

"The living room appears less pleasant than at Marseilles. It is not very high, for the parents' bedroom closes over it instead of remaining as an open projection. Thus the ceiling stretches right out to the terrace.

"A staircase gives access to the bedrooms. Each of the children's rooms includes a corner for play or for work, and a space for beds and a linen cupboard. A sliding section of the partition between them disappears, forming a communication between the two bedrooms and creating a play-room; a solution which permits the children to play well away from the living-room at the other end of the flat. From their balcony there is a view of Nantes, with its cathedral, its port with the transporter bridge, and the Loire, flowing peacefully by.

"Back to the lift again. There is no stop half-way up for the shopping street, for there is none, and some people are already regretting the fact. We go up to the top street at a speed of three metres per second. Here is the municipal nursery school with its four classrooms. It is gay, with its walls painted in different colours, and the light streaming in through brightly coloured window panes. Over the nursery school there is a further terrace, unoccupied at the moment, but on which it is hoped to have an open-air theatre. The view from it is splendid. Yesterday, when the sky was blue, you could see the lake at Saint-Philibert-le-Grand-Lieu, sparkling 30 kilometres to the south.

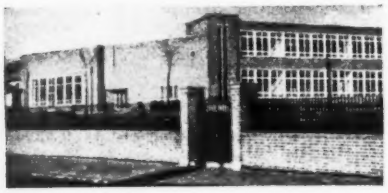
"Doing the honours of his city of Rezé, Le Corbusier was yesterday a happy man. The tenants acclaimed him. In his speech he announced:

'—In the autumn work will be started on a third *cité radieuse*: at Briey-en-Foret, in the department of Meurthe-et-Moselle.'"

COMPETITIONS

Offices for Enniskillen

Anyone wishing to enter for a two-prize competition (first, £500; second, £200) for a £45,000 block of council offices, which is to be built by Fermanagh County Council at Enniskillen, must submit designs not later than December 20. Conditions may be obtained (until September 5) from the secretary, Fermanagh County Council, Courthouse, Enniskillen, Co. Fermanagh, in return for a deposit of £2 2s.



The assessor will be R. S. Wilshere, An example of his work, a school at Belfast, is shown above.

Replan Manhattan for Five Thousand Dollars

Have readers any ideas for replanning the mid-town areas of Manhattan, where—according to the magazine, *USA Tomorrow*—"traffic congestion has cost New York business firms upwards of a billion dollars a year, housing has deteriorated rapidly, and the delinquency and tuberculosis rates have risen alarmingly"? If so, they will be glad to know that a redevelopment competition sponsored by *USA Tomorrow* has now been opened to entrants outside America. It is, in fact, open to "architects, city planners, engineers, their employees, students and faculty members, and all others identified with these or allied professions, regardless of their place of birth or current residence."

The first prize will be $5,000; the second, $2,500; the third, $1,500; and the fourth, $1,000.

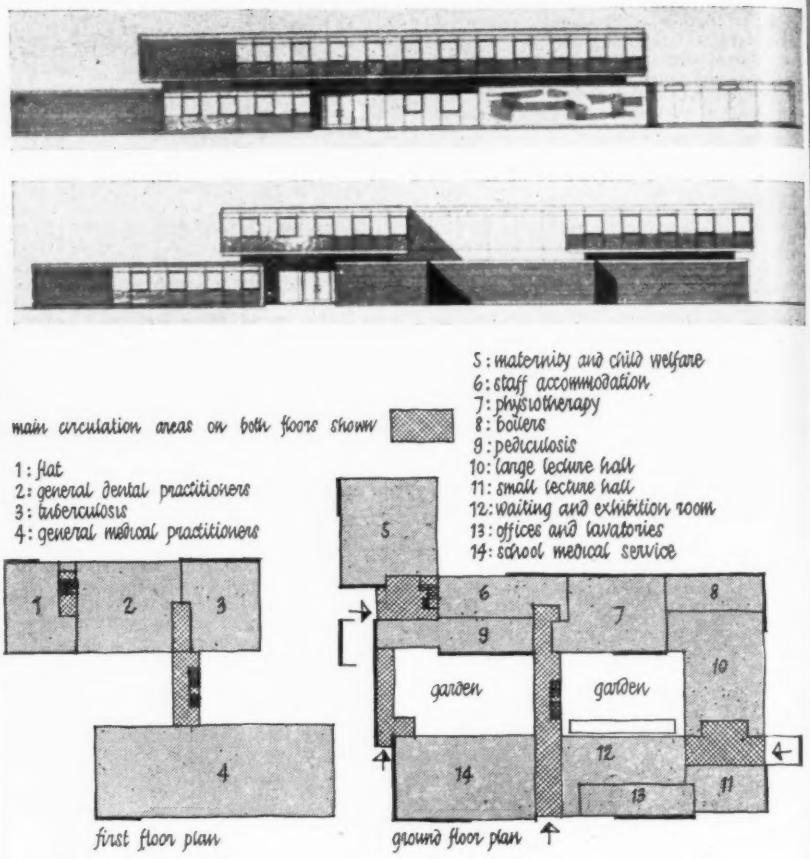
The jury will consist of Charles Abrams, attorney, consultant to the United Nations on housing, formerly consultant to the United States Housing Authority and Counsel, New York City Housing Authority; Percival Goodman, architect, professor, Graduate School of Design, Columbia University; Jose Luis Sert, Dean of the Graduate School of Design, Harvard University; William W. Wurster, Dean of the College of Architecture, University of California; and Maurice E. H. Rotival ("professional adviser").

In sponsoring this competition, neither *USA Tomorrow* nor any associated sponsor "undertakes or promises that any award-winning entry, or any part thereof, will be used or adopted, or that any person or firm who prepared or assisted in the preparation of any entry will be engaged by the sponsor or by any person to aid in the execution of any plan or presentation, as a consultant, or otherwise."

The competitor may submit any material which he considers relevant to his presentation, in whatever manner, form or technique which he believes will best present his ideas.

Each entry must include the following:—1. A land use map indicating the functional analysis of the district. 2. A plan showing the relationship of the architectural elements to the physical layout of the district. 3. A plan showing circulation of the district, including all forms of transportation involving the movement of people and goods, and including off-street parking facilities. 4. The following architectural elements must be included: (*a*) A cultural centre adequate for the district and adjacent areas. (*b*) Civic buildings, such as health, welfare, recreation, police, fire, school and any other such facilities deemed necessary. (*c*) Plans for major commercial facilities including a fashion centre with space for trade conventions and promotions, and structures for combined office, showroom, and modern manufacturing needs of the garment industry. Also, adequate provision for other industries, such as printing trades, housewares, etc., now concentrated in the area. (*d*) Luxury, middle-income and low-rent housing. (*e*) Adequate hotel facilities. 5. A written description of proposals, their objectives, and possible staging. The length of this written material is left to the discretion of the competitor.

The competition closes on June 1, 1956. Entries should be made on a form obtainable from *USA Tomorrow*, Manhattan Development Competition, 210, Fifth Avenue, New York 10, NY.



This is part of the health centre design which won a prize of £50—there were two entrants—in a competition organised by the National Eisteddfod of Wales. The prizewinner was R. John Lansdown, of London. The elevations are, top, from the south; below it, from the east. The rough plans were drawn for publication.

Design "The House for the Professional Man"

Architects who would like conditions of a competition for "The House for the Professional Man" should write (enclosing a deposit of £1 1s.) to the sponsors, Tretol Ltd., House Competition Department, Tretol House, The Hyde, N.W.9.

The house (to cost £4,250) will not necessarily be built, but all entries will be exhibited at the Building Exhibition, Olympia, in November.

The prizes will be: (1) £250, (2) £150, (3) £100. The assessor will be Clifford Culpin.

CUMBERNAULD

New Scottish Town

The draft of an order designating 4,150 acres at Cumbernauld as the site of a proposed new town for a population of about 50,000, chiefly Glasgow overspill, was published recently by the Secretary of State for Scotland.

NEW MOTEL

Opened in New Forest

The New Forest Motel at Ower, seven miles from Southampton, was officially opened on July 21. This is the second of three projected Motels designed by Louis Erdi for Graham Lyon Motels Ltd., and it is hoped to complete the third near Exeter by mid-August. (This one is illustrated on page 182.)

DIARY

Students' Work and *Members' Work*. Two exhibitions at the AA, 36, Bedford Square, W.C.1. Monday to Friday 10 a.m.—6 p.m. Saturday 10 a.m.—2 p.m. AUGUST 3 TO 12

International Conference on Regional Planning and Development. At Bedford College, London. Registration fee, £3. Information from Norman J. Hart, 45, Northcote Avenue, W.5. SEPTEMBER 29-OCTOBER 2

Two of the Congress delegates, M. Thyssen, of the Dutch Ministry of Reconstruction and George Atkinson, of the BRS, in the Lijnbaan, Rotterdam's pedestrian shopping centre.

The JOURNAL *editors asked four people, a planner, two students and an architect, to report on the fourth congress of the International Union of Architects, which was held recently at the Hague. They were all very impressed by the excellent way the Dutch organized the congress and it is clear that if the plan for the* 1959 *congress in Britain materializes, a great deal of work will have to be done if we are to maintain the standard set in The Hague.*

THE FOURTH IUA CONGRESS

Reports from a planner, two students and an architect

Percy Johnson-Marshall, assistant senior planning officer of the LCC, writes:

The Fourth IUA Congress, held at the Hague in Holland from July 11-16, can be emphatically described as a great success, and as a happy, but formidable, augury for future international gatherings of architects. It is formidable because of the outstanding quality of the planning and organization which the Dutch architects put into this Congress, and because, although the next Congress is due to be held in Moscow in two years' time, the one following it is scheduled for London. We can feel sure that the Russian architects will have full official support for their efforts, so it is surely not too early for us to start thinking about our own efforts for the London Congress of 1959.

But to return to the Hague; first, a few notes about the general character of the Congress. The principal theme which had been decided upon at the third (Lisbon) Congress in 1953 was "Housing, 1945-1955. Programme—Projects—Production," and the main objects of discussing this theme internationally can fairly be said to have been accomplished. But what was more important in a Congress of this kind was the informal meetings and discussions between leading architects from all over the world. There were, of course, some notable absences, but one felt that the loss was theirs on balance, for there were no less than 1,000 delegates and members from nearly 40 countries.

At the end of the Congress two eminently respectable "elder statesmen," Sir Patrick Abercrombie and William Olssen, put forward a resolution on the need for peace (now no longer an unmentionable word) between nations, but this to my mind was merely a formal expression of the fact that the Congress itself was the very best of peaceful gestures, for, as I have mentioned, one could, and did, meet leading architects from north and south, east and west, from the USA and Russia, from Brazil and Poland, from Mexico and Yugoslavia, and so on.

Another factor I found of special interest was the number of keen and vigorous modern architects who were present, architects who were trying to solve the real architectural problems of their countries. Equally promising, too, was the large number of students present, many of whom had done an exercise specially for the Congress. One found, of course, that in every country the serious architects had come up against the same intractable problems—how to produce good architecture in large quantities, quickly and economically, and how to create a form of architectural education to fit the architect of the future to deal with these problems.

The quality of the architects present was typified by the Congress President, Mr. van den Broek, a Dutch member of CIAM, and he was supported by a strong team of leading Dutch architects (a revealing sidelight was the excellent quality of design and layout of the Congress documents). The well chosen British delegation was led by Professors Abercrombie and Robert Matthew, and seconded by Arthur Ling, widely known as the LCC's Senior Planning Officer and now City Architect and Planner of Coventry. Other delegates included Professor Gardner-Medwin, head of the Liverpool School; Gontran Goulden, of the Building Centre; George Atkinson, the BRS tropical expert; Bruce Martin, of BSI; Richard Sheppard, and Austin-Smith. It was good, too, to see the RIBA President, C. H. Aslin, present in an informal capacity, lending his support to this great gathering. One could, of course, go on listing names for pages, but mention must be made of the outstanding South American contingent—and especially the Brazilians. There was Affonso Reidy, the Brazilian architect and one of the world's great architects; his colleague Dra. Portinho, Rio's Housing Director, and Rino Levi, another world-famous architect from Sao Paolo.

Another very interesting South American was Rene Eyheralde, a Chilean architect, who is working at the famous Inter-American Housing Research Centre at Bogotá.

From the Russians came a studious group which included M. Gradov, who is well known for his criticism of the high cost of Russian building, and of course from Poland came, with half-a-dozen other important architects, the well-known Helena Syrkus, perhaps the best known woman architect/town planner anywhere—but here the catalogue must stop.

The simplest way of describing the Congress is to treat it chronologically. Passing over the preliminary delegate meetings on Friday and Saturday, we come on Sunday evening to the first of a series of successful receptions, this one given by the Hague section of the Union of Netherlands Architects at the Chateau Oud-Wassemaar, a large Victorian pile set in formal gardens.

On Monday morning came the Inaugural Session, and here we British architects might ponder a little, for it was held in the Hall of the Knights at the Hague, which corresponds to our St. Stephen's Hall of Westminster. Remembering that Prince Bernhard was the Congress President of Honour, that the Committee of Honour included no less that five Dutch Ministers among an illustrious list of notabilities, that the opening address was given by the Minister of Reconstruction and Housing, and that the Dutch Government subscribed several thousand pounds, should give us cause to think carefully about 1959.

The rest of Monday was taken up by formal speeches and opening sessions of the various Commissions, inevitably slightly boring in spite of the simultaneous translation service. There was, however, an excellent presidential speech by van den Broek, and the session on programmes was enlivened by a first-rate survey of world housing prefabrication by Mrs. Helena Syrkus. Discussions on modular co-ordination also began to produce fruitful results at an early stage.

On Tuesday there was an all-day visit to Rotterdam, beginning with a walk through the city centre, where the reconstruction is well worth a visit to Holland on its own account (and especially for the new pedestrian shopping centre by van den Broek and Bakema). Then came a reception

at the town hall, organized by the City Corporation, of a quality which should make any of our city councils envious. After this came lunch on board a boat which took the whole party on a tour of the reconstructed harbour, and one could not fail to notice the high general standard of the Dutch industrial building, and that someone had obviously thought in design terms about nearly every structure.

After the boat trip came alternative visits to the now historic Van Nelle factory of Brinkmann and van der Vlugt, the new Boucentrum (Building Centre), or of the new residential areas of south Rotterdam. Whichever one chose, there was plenty of interest, although one must admit that travelling continuously round a large residential area in a non-stop coach is not the best way of seeing architecture. The day ended with a visit to E55, which is a kind of Dutch Festival of Britain. It is strange, by the way, that one has heard a great deal about the excellent Swedish H55 Exhibition at Halsingborg, but very little about this extremely invigorating Dutch contribution to exhibition architecture.

Wednesday consisted of working sessions in the morning, and in the afternoon a tour of the residential areas of the Hague followed by a visit to Delft. Delft is, of course, one of the most beautiful historic towns in Europe, and one could wander happily around absorbing its atmosphere for days, but here again activities were organized (to be just to our Dutch friends, they were optional). First there was an exhibition of architectural students' work, which included both the work of the students of the Architectural Department of the Technological University at Delft, and the results of the international scheme which was set for architectural students of member countries of IUA. It is very difficult to assess work of this kind in the crowded conditions of a Congress, but it seemed to me that insufficient time had been allotted or devoted to the international scheme, but this in no way alters the fact that it was a very good idea to hold it.

Then came another reception, held in the Prinsenhof Museum; some organizer had skilfully arranged the food and drink in a room right at the end of the whole museum suite, so that willy nilly one had to see the wonderful collection of portraits, historic maps, and other exhibits. It was thus that the Dutch managed to convey discreetly to the world of achitects the extent of their cultural contribution to civilization.

In contrast, the day ended with a fun fair in the Agathaplein, which is a tree-shaded court in the Museum precincts; but it was no ordinary fun fair, for the music was produced at one end by the Dutch students with a vintage Dutch barrel organ bedecked with a multi-coloured baroque façade (similar to the one which was seen recently on the South Bank), and at the other by the Ecole des Beaux Arts students' band, all dressed in bowler hats, striped jerseys, and drain-pipe trousers. Everyone relaxed, especially the South Americans, and it soon became a real international occasion.

Thursday was spent all day on working sessions, enlivened by the opening of the International Housing Exhibition in Berlage's Municipal Museum at The Hague (his last work, completed in 1936). One hopes that the Exhibition will remain intact for circulation to member countries—the British contribution, which was very sensibly confined to work actually completed, was universally appraised as one of the best exhibits, and looking round in Europe, generally, as well as at this Exhibition, it is clear that our best housing layouts are as good as anything now being produced anywhere.

Thursday evening closed with a Municipal Concert in the The Hague Kursaal and a fireworks display on the beach—both equally good in their own way.

On Friday there was an all-day visit to Amsterdam, which took a somewhat similar course to the day at Rotterdam, for at the beginning of each, every member was issued with a plan and list of modern buildings. In the morning came a round trip of residential areas, then lunch (lunch for 1,000, without a hitch!) at the central Krasnapolsky restaurant, and afterwards a launch trip on the canals. Anyone who knows Amsterdam knows how very beautiful is its concentric rings of canals, tree-lined canal roads, and 17th and 18th century brick terraces. After this came two receptions, one at the new extension of the International Cultural Centre (a striking modern building, almost entirely of glass, and it was sheer bad luck that the intensely hot day exposed one of its almost inevitable defects, albeit for only a few days a year), and the other at the National Museum, where the Dutch had on view, and excellently displayed, another of their superb collections of old masters.

Apart from Congress delegates, this closed the week, but mention must be made of some of the official results of the Congress. For instance, a very important international Architects' Charter was discussed and agreed, which should prove of great help to the many countries who are still endeavouring to establish our profession on a proper basis. Then there was the statement on International Competition Conditions, which the IUA is asking all member countries to abide by, and also the agreement on modular co-ordination. In addition there was a great deal of discussion on housing, supplemented by a series of reports on the situation in various countries, which should prove a very useful reference.

But undoubtedly the outstanding thing about the Congress was that one could meet good architects from so many different countries, for nearly always the informal discussion proves to be more personally valuable than the formal session. In fact, I see no reason why these IUA Congresses should not be made the main venue as modern architects' meeting places.

The highest praise must be given to our Dutch colleagues, who organized such a large and complicated affair without a hitch, and without a suspicion of over-organization. Everything worked smoothly and well, thanks not only to munificent Government support, to the untiring efforts of van den Brock and what appeared to be about half the architects in Holland, and to the ready co-operation of the Dutch students, who were everywhere guiding and helping. Everything had been carefully thought about, a typical example being the complete parallel series of activities for the architects' wives in order that their husbands could be left to their occupational disease of arguing about, and looking at, architecture. Finally, the fact that all round us, in The Hague, in Rotterdam, and in Amsterdam, were the exciting and impressive results of their work over the last 40 years was very moving to achitects of countries who have only really got started since the War. We shall have to think very carefully about the Congress of 1959!

Two students from Birmingham School of Architecture, B. Berrett and S. Sellers, write: There can be no question as to the social success of the IUA's recent 4th Congress at The Hague. How could it have been otherwise with such smooth and efficient organization. The question is, was it a success as an architectural conference? It depends one supposes on what was to be expected of such a conference. If it was to be a concise statement of post-war solutions, a sort of architectural Geneva, then it was moderately successful. If however it was an attempt to say something new, to assess the social and architectural failings of the past few years, then it failed.

At the inauguration session both the Minister of Reconstruction and Housing, H. B. J. Witte, and the Burgomaster of The Hague, F. M. A. Schokking, continually put the problems of post-war housing before the Congress.

Economics, social conditions, the need for the architect to adapt himself to his changing role amongst an increasing number of experts, all were mentioned in speeches that showed remarkable understanding of the architect's problems. Quite a change in fact from the usual ministerial political platitudes.

Only one speaker in the rest of the Congress rose to this higher level of discussion. Madame Hélène Syrkus of Poland gave a report on rationalization of plans that was masterfully put together. Dealing with detail planning, she was able to infuse it with practical idealism. It was a fitting climax as the whole assembly rose to its feet to acclaim her stimulating report. In this she dealt with the need for standardization, for the development of industrialization and systems of modular co-ordination. Whilst Madame Syrkus seemed to regard modular co-ordination as a formula for good architecture, Bruce Martin, in a following speech, pointed out these things could be the liberation of architectural techniques. As someone said later, it might be compared to the impact of oil painting, when it was first introduced, on the range of painting expression.

The rest of the conference dealt with more detailed points. Reports were made on programme, individual plans, equipment and production. Too much valuable time was spent in deciding how information should be presented before any information had been gathered.

The two special themes, the "Formation of the Architect" and "The Social Position of the Architect," seemed to be too far separated from the main theme.

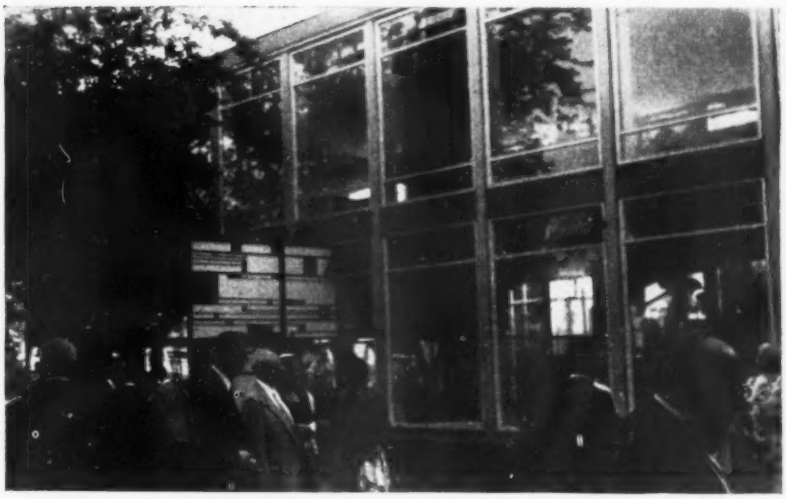
Professor W. Dunkel of Switzerland presented the report on "The Formation of the Architect." As few countries, Britain excluded, had answered the questionnaire sent out to the IUA's national sections, comparison was not possible. Professor Dunkel therefore gave some personal observations. Stepping neatly off on the wrong foot, he said that he assumed that all present would agree that architecture was a purely abstract art. He advocated as essential, entrance examinations and creative work by the student with his hands, "divine instruments of nature." He wished to see the year of post-graduate practical experience operating in Switzerland and Poland extended to other countries.

The "Social Position of the Architect," as proved by the statements of the Minister of Reconstruction and Housing, and the Burgomaster, could well have been extended to a whole congress study. As it was, time was limited. There seemed a certain fear that the architect's position was in possible danger from the increase in specialization and exports of varying types. It could be that architects are conscious perhaps of their failure as yet to master the problems of present day society. Much additional information may come to light when the conclusions of the Congress are published. During the Congress, an exhibition of architecture of the various national sections of the IUA was held in the Municipal Museum, at The Hague. It was yet another of those glossy exhibitions that show the triumphs of photographic art.

The British section was rather poorly presented when compared with many of the others. Those who saw it at the Building Centre will agree that the little cotton Union Jacks and the tombstone lettering are difficult to forgive. The photographs themselves compared very favourably with the rest.

It was pleasing to see that the architecture that managed to penetrate beyond the jungle of veteran cars, railway engines, builders' rubbish, and those beautiful "Review" skies, was generally liked for its humanity. Is it too much to hope that Britain is going to avoid the "International" romanticism that the Modern Movement is tottering into throughout Europe?

Those members of the profession who are worried about the way architecture is going would have been wise in not visiting the Concours D'Emulation (Students' work). There seemed to be little material advance on the 1930's and in most cases it adhered very nicely to canons of International style. ASTRAGAL has said that the IUA has an important part to play in international relations and in the development of architectural standards, if it can continue the good work it has started. It would seem to us that the IUA will have a considerable effect on architectural standards *when* it starts its good work. Here is an international organization which by its energy has shown its will to work, but the five-day conference is no way of doing it.



These pictures were taken at the recent IUA Congress, in the Hague. Top: visitors arriving for the first reception, in Amsterdam. Centre: the plenary session of the Congress; left to right in the foreground, are Arthur Ling, Coventry's city architect and planner; George Atkinson, of BRS; Percy Johnson-Marshall, who wrote the first report on page 179, and the deputy secretary of the RIBA, W. R. F. Ellis. Bottom picture: delegates and members embarking on the boating trip in Rotterdam harbour. In the light suit top right, is Rino Levi, of Sao Paolo, Brazil. On his left is Jabas Karman, Brazilian hospital architect, and on his right is Alan Reiach, of Edinburgh. In the foreground is one of the groups of students which made the congress a lively affair.

J. M. Austin-Smith writes :

All the major groupings of the world, both geographically and ideologically, are represented in the IUA. This aspect of the Union was most forcibly demonstrated at the excellent exhibition of housing work by some 30 different nationalities which, together with work from 49 schools of architecture throughout the world, made this a unique international exhibition of architecture.

The main theme of the Congress was "The Architect and the Evolution in Housing." This was discussed under the headings of Programme, Individual plans, Rationalization in Projects, Equipment and Production. The outcome of these discussions was naturally on a very broad basis, but the main impression gained was the unanimity of all nations in agreeing to the necessity of gearing building to an industrialised process so that the basic requirements of housing should be available to all not as a favour but as a right.

In addition to this more general type of discussion IUA has been responsible for two important international agreements. Firstly, the conditions for international architectural competitions, which have been approved by Unesco and secondly, an International Code of Conduct.

Obtaining agreement on the conditions for international architectural competitions is an important step and should be of benefit to architects in this country who may take part in such competitions. The international code of conduct will have no effect on the profession in this country since it is already fully furnished with such documents.

It will, however, be of great help to architects who are endeavouring to institute codes of conduct in countries where the profession is not on such a sound footing.

The text of the code published on July 7 in the JOURNAL was modified slightly by the working committee, and the final text as approved by the IUA Assembly contained several alterations. A Cuban delegate asked that it should be laid down that an architect should not only show "a constant regard for economic realities" (as in original draft), but also a constant regard for "all the factors which have a bearing on the overall situation." The delegate felt that everything in architecture must be governed by integrated planning in its four fundamental aspects, Housing, Work, Social Services and Communications.

The Russian delegation, headed by Modrinov, who recently received such severe criticism, asked that an addition should be made to the phrase, "He (the architect) . . . should try to remain objective and courteous in criticising the work of his colleagues." This should read, "And should accept in the same spirit any criticism of himself."

Two other matters which might be of interest to the JOURNAL are firstly, the intention to very widely increase the circulation of the IUA JOURNAL, and, secondly, the idea of each country producing a guide to contemporary architecture in their own country.

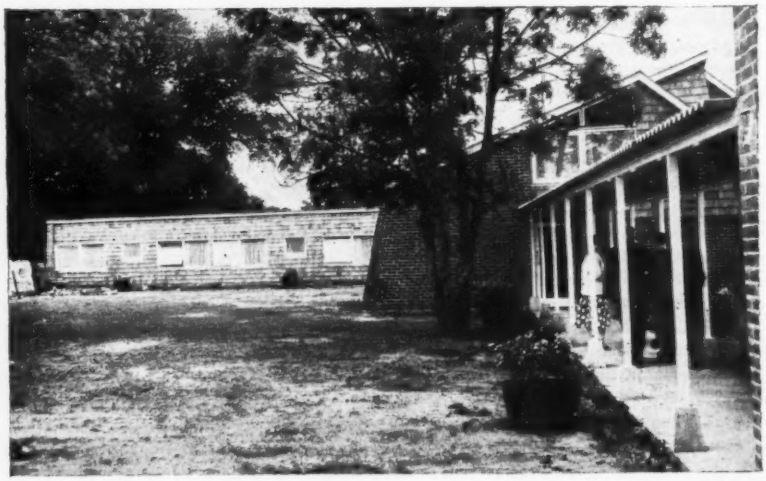
BUILDINGS IN THE NEWS

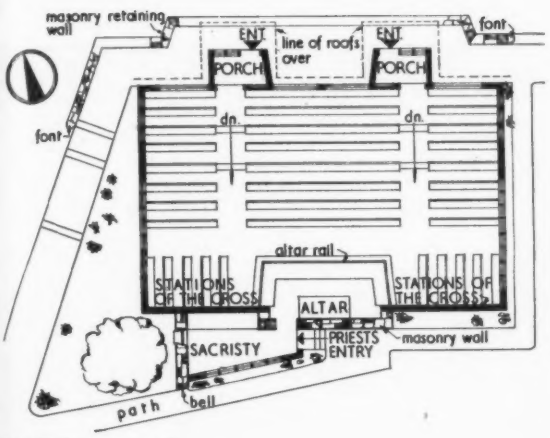
A Factory to make Factories at Manchester

The photograph above shows precast, prestressed concrete arch frames now being erected by Matthews and Mumby (architects Taylor and Young) for their new precast concrete factory at Denton near Manchester. The arches span 90 ft. and give 15 ft. high working space below the springing line. Infilling between the arches will be wood (oiled cedar) patent glazing, with a low brick wall. The building is almost completely prefabricated, offering quickly-erected, low-cost, permanent construction with a large span. It can hardly be said to be revolutionary, but the logical interpretation of prestressing theory, with carefully worked out assembly details, combine to produce an atmosphere of elegant simplicity too rarely seen in industrial projects.

Motel at Ower, Southampton

The view below shows a covered way leading to garages and suites at the Graham Lyon Motel at Ower, near Southampton (Architect : Louis Erdi). This is the second of a projected network designed specifically to assist overseas visitors. A third motel will be completed near Exeter this month.

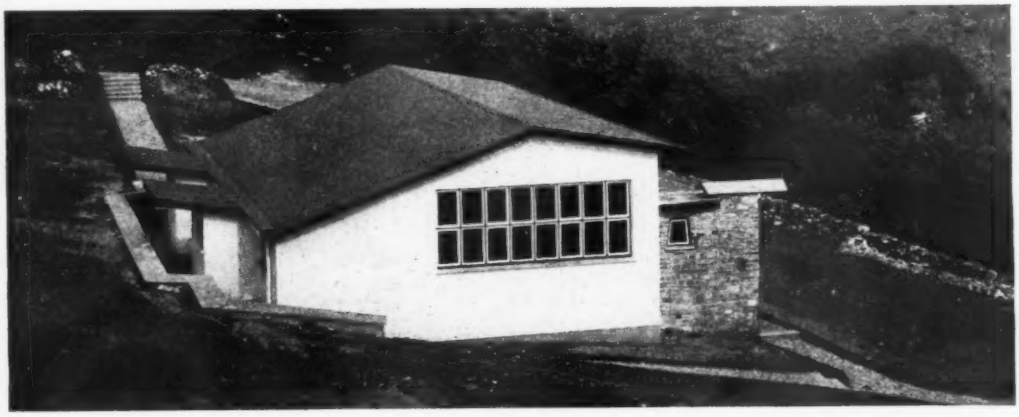




Plan [Scale : $\frac{1}{16}$" = 1' 0"]

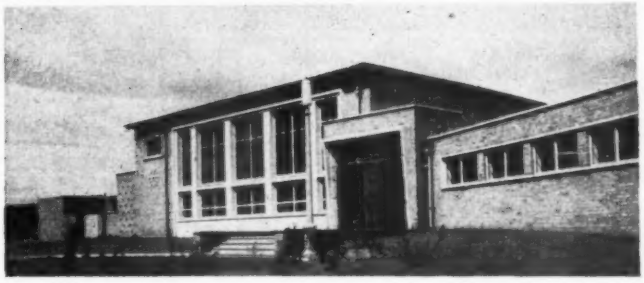
Chapel at Rosgoill, Co. Donegal

The Roman Catholic chapel illustrated above right (from the south-east) and below (from the north-west) is at Rosgoill, Co. Donegal, and was designed by Brendan O'Connor to serve a widely scattered Catholic congregation. The chapel will seat approximately 300 and the plan shape was decided upon so that there should be a generally good view of the altar and so sermons could be heard easily by all. The chapel cost £3,600, including site works and the seating and altar rail cost £800. The general contractors were Thomas Dillon. Sub-contractors, *on page 204.*



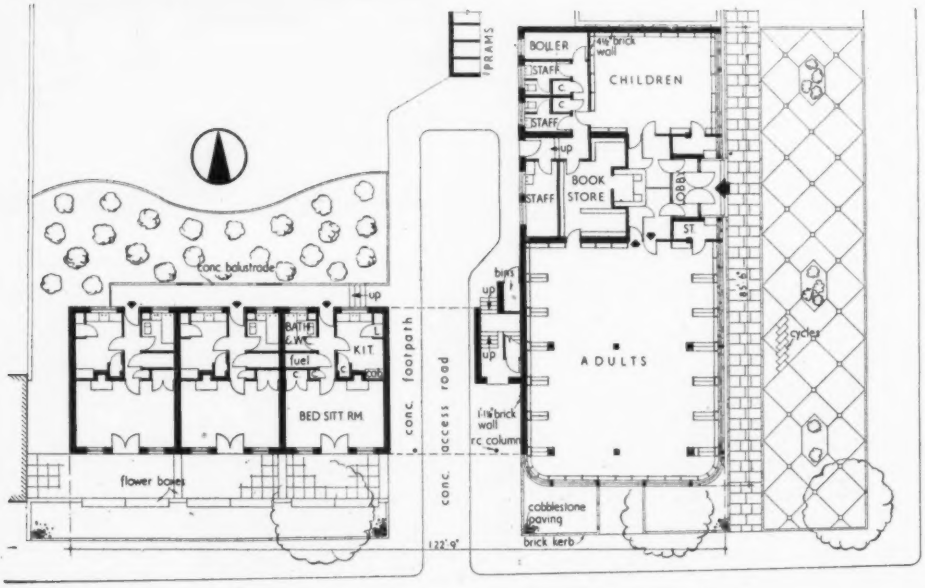
Sledmere Junior School at Dudley

This school at Dudley was designed by Webb and Gray for the County Borough of Bolton. The photograph below shows the school from the access road to the north-west; in the centre is the assembly hall and beyond it the main entrance, cloakroom block and, extreme right, the two-storey classroom block. Above, another view of the main entrance and the south-west facade of the assembly hall. The school was designed for 480 pupils. Cost per place, approximately £147 5s.



PUBLIC LIBRARY, MAISONETTES AND FLATS IN HIGH R

The Coombes Croft Branch library, on the corner of High Road (on the east) and Brereton Road, Tottenham, is one of the first new libraries to be built in the London area since the war. The building, which also contains maisonettes and flats, was designed by V. A. Jolley, chief architectural assistant and R. L. Head, assistant architect-in-charge, of the Borough Engineer and Surveyor's Department. The building line has been set well back from the High Road, in order to be behind the line of an underground culvert along the roadside. The area remaining has been paved and provided with flower beds and flower boxes. The library is entered from the main road on the east and there is a side entrance from Brereton Road, on the south, leading to a courtyard, which gives access to three ground floor flats, 19 upper floor maisonettes and the rear of the library. Advantage has been taken of the fall in the ground from west to east to make the ceiling heights in the three ground floor flats



Ground floor plan [Scale : $\frac{1}{16}$" = 1' 0"]

ROAD, TOTTENHAM, LONDON N.17

at the west end of the block equal to that of the library on the main frontage. There was an urgent need for a library in this area and the Borough Council also required housing accommodation, including flats for old people. The library, which is divided into adult and children's departments, occupies the ground floor area on the east side and there are three bed-sitting room flats in the south-east wing. Access to the maisonettes, which occupy the upper four floors of both wings, is by a staircase at the inner angle of the L plan, and thence by access balconies. The photographs show, top, on opposite page, part of the south facade, with the side entrance leading to the internal courtyard on the left; centre, opposite page, the east facade, with the library entrance on the right; on this page, top, adult section, centre the library entrance. In the centre are seen the two doors by which the public enter and leave, after having their books checked at the counter on the right. Bottom, the children's room. The library is of reinforced concrete frame construction and the remainder of the building has brick load-bearing walls and r.c. floors. The contract price, was £47,457. Price per ft. cub. 3s. 8d. (dwellings) and 5s. 3d. (library) and per ft. sq. £2 5s. 7d. and £4 3s. 4d. respectively. General contractors, C. J. Manning (Builders) Ltd. Sub-contractors, page 204.

CRICKET

The Vitruvians v *The Palladians at the Old Pauline's Ground, Thames Ditton*

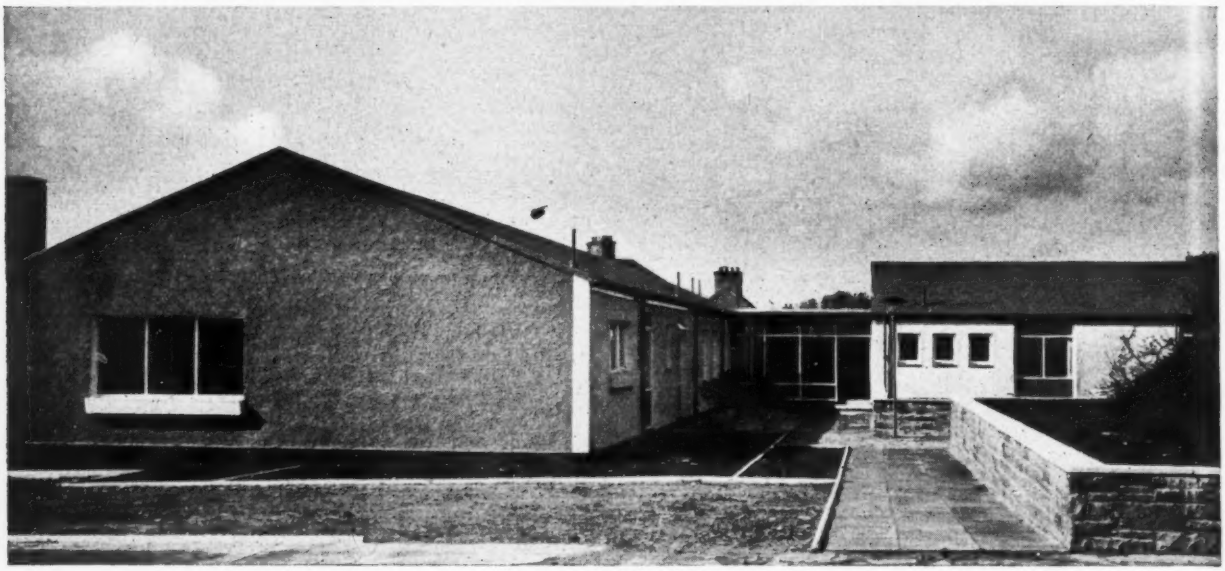
On winning the toss, deciding to bat and opening the innings for the first time, the Vitruvian skipper, Ian Leslie, of the *Builder*, took a very fine one-a-minute half-century off the Palladians this year. He smote the ball with doughty aplomb and ran between the wickets like the youthful Bradman at Bowral. He was very good. The others were not so good, though R. Knott (AA School), who opened with him, then Alastair Boyd, who skippers the Invalids, and finally K. Skelton, of the GEC, contrived meritorious double figures. The JOURNAL'S representative, if it is of any interest, was mortifyingly disposed of round his legs by a rogue of a ball from R. Case (AA School). Case bowled excellently—7 for 47. Leaving R. Binfield, of the *Contract Journal*, with an unresolved duck to his credit, the innings was polished off for 116; not a good score on a fast wicket and the ball fast across the outfield off the bat.

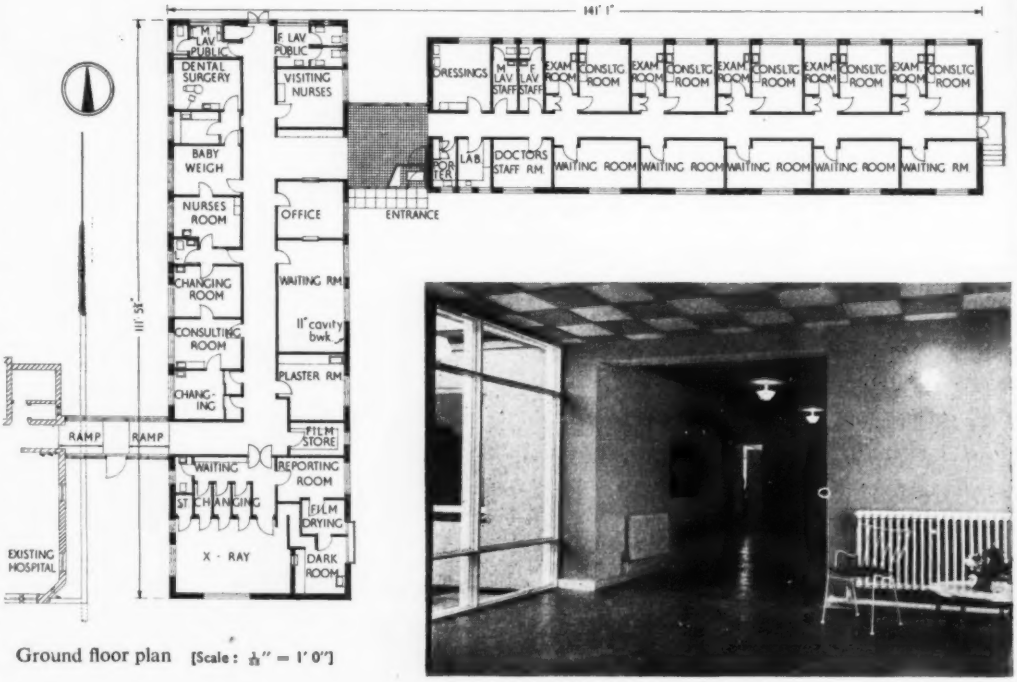
However, in addition to causing Alastair Boyd's car horn to blow without stopping in the middle of tea, a demure thunderstorm obliged the Vitruvians by putting a bit of life into the wicket. The ball lifted a bit sharpish and behind the stumps the *Builder* stood up to J. Dalton (slow left arm) of the AA School and even to the AJ. This was certainly Ian Leslie's match. He took a good fast-rising catch to dismiss John Drew of the Crusaders, appealed volubly and successfully when Gasson, Jnr., was plumb lbw and then stumped top-scorer G. Heagerty off Dalton for 21. Boyd in the meantime atoned for a former, soporific lapse in the slips by holding on to a stinger directed at his midriff by M. G. Gorer, and immediately afterwards Ian Leslie snapped up another difficult fast-rising catch that sent G. White marching off to the showers.

Resistance now was staunch but unavailing. At 59 for 9 the Palladians' last hope was their skipper, Peter Winton Lewis—an architect with gorgeous handlebars who is a well-loved figure on the cricket fields frequented by the profession. One of his quirks is to pad himself up and equip himself religiously before his team's innings has even commenced, and then, with contradictory modesty, to come in to bat at No. 11. Today he was out of luck, poor Peter. Lunging amiably at a fast ball outside his off-stump, he found himself straddled bottom-uppermost across the pitch on the wrong side of the crease and Ian, this making his fourth victim in the match, had the bails off. The Vitruvians had won by 57 runs, avenging their defeat of last year—John Dalton 5 for 33. Smiling, unperturbed, Peter returned to the pavilion amid cheers and immediately re-affirmed his standing offer for this fixture—a magnum of champagne for the batsman who can hit the pavilion clock.

ROBIN MUDIE.

HEALTH CENTRE, STRANRAER, WIGTOWNSHIRE, SCOTLAND





Ground floor plan [Scale: $\frac{1}{16}$" = 1' 0"]

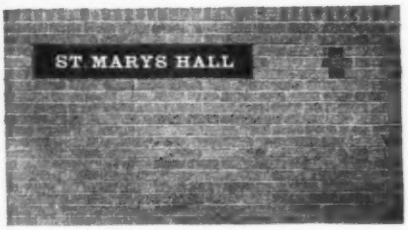
The health centre at Stranraer, the second to be built in Scotland, was designed in the office of the chief architect to the Department of Health for Scotland. (T. A. Jeffryes, Chief Architect and Planning Officer; R. S. Morton, Deputy Chief Architect; G. H. Lawrence, Senior Architect; J. R. McKee, architect-in-charge.) The health centre which was built as an extension to an existing hospital (and is the first of its kind in Great Britain), was designed in collaboration with the Chief Architect of the Western Regional Hospital Board (Scotland), Forbes Murison. The wing on the left in the photograph above is linked to the Garrick Hospital and contains an X-ray suite and rooms shared by the hospital and the local authority. The two wings of the extension are linked by an entrance hall, above right. The central corridor in this wing is lit from both ends and also by glazed screens forming one wall of each waiting room. The ceiling height throughout the building is 8 ft. 3 in. and the total floor area is 6,800 sq. ft. External walls are of 11-in. load-bearing cavity brickwork, carrying TDA industrial trusses at 8 ft. 4 in. centres. The external finish is rough-cast, with a lime harling. All windows are softwood casements and main windows have a painted wood panel infilling below sill level. Partitions are of 4½-in. brick and ceilings are of patterned insulating board. Floors are plasted with 4-in. sq. clay tiles in the entrance hall and thermoplastic tiles elsewhere. The heating consultants were Ian Hunter and Partners, and the quantity surveyors, Richard H. Hall and Logan. For contractors see page 204.

CHURCH HALL

in CHURCH LANE, CHESSINGTON, SURREY

designed by KENNETH WOOD in association with HENRY BLYTH

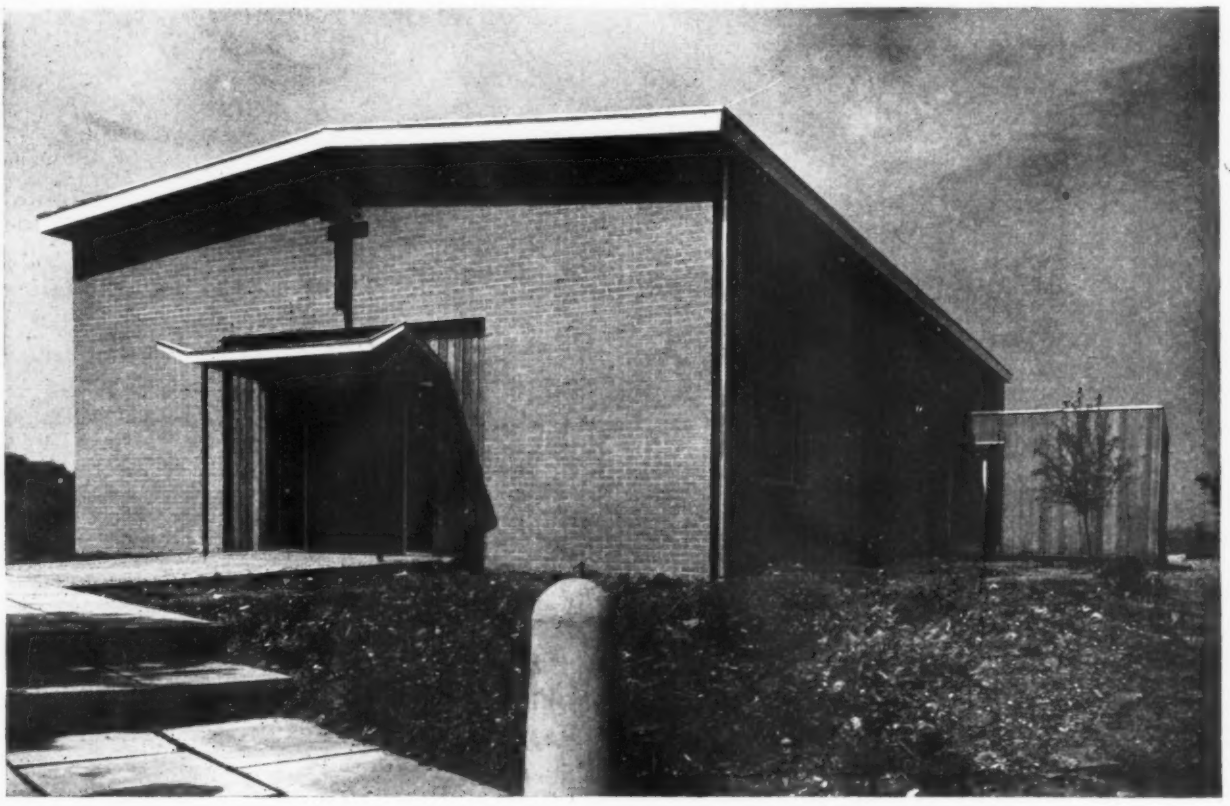
consultants, structural, W. H. WILLATTS, electrical, M. W. BAYLEY

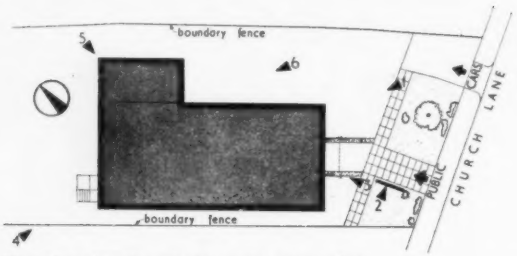


Free-standing wall bordering access path, from viewpoint 2.

A parish hall to seat 250-300 was required for St. Mary's, Chessington. It had to be high enough to accommodate indoor games. Further extension without excessive cost was to be provided for, and the initial scheme was limited to £6,500. The present building consists of a large hall with a stage, and is connected to a small utility block containing lavatories and kitchen. The total cost was £6,450. The general contractors were Thorogood & Sons Ltd. For sub-contractors see page 204.

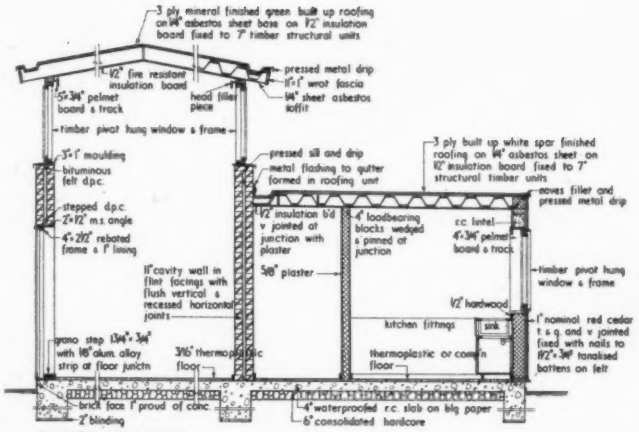
The hall from the east, viewpoint 1.



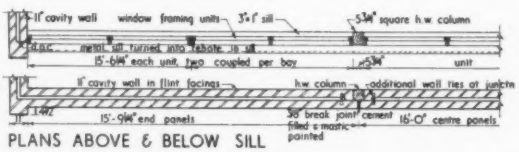


Key plan showing photographic viewpoints

Above, viewpoint 3: entrance porch consisting of 2-in. diam. m.s. tubular supports carrying timber framed canopy with a bituminous felt covered chipboard roof. Hardwood fascia with alloy trim along roof line. Soffit sealed with ribbed asbestos cement sheet and central recessed light fitting. Double glazed doors flanked on either side with clear varnished cedar boarding. Mahogany cross above entrance with oiled finish. Colour: fascias, white; canopy soffit, yellow (Munsell ref. 2.5GY/3/10); tubular supports, dark blue; eaves soffit, grey green. Top, viewpoint 4: from the north-west, showing the unloading bay and double door access to the stage on the left and the emergency exit from the hall on the right centre. The stage doors are faced with a chequer-board pattern of ply with alternate panels stained dark and the whole clear-varnished. Two colours have been chosen for facing bricks, and these have been used along the length of the hall to form alternate non-load bearing panels corresponding with the structural bays. A vertical joint separates the panels and is filled with a recessed mastic joint. A recessed plinth painted black occurs beneath the brick panels whereas the load bearing gable walls are taken through the ground to strip foundations below. The alloy r.w. pipes are in one length and untreated. Opening lights in the high-level range of windows are framed in oiled hardwood set in painted softwood sub-frames.



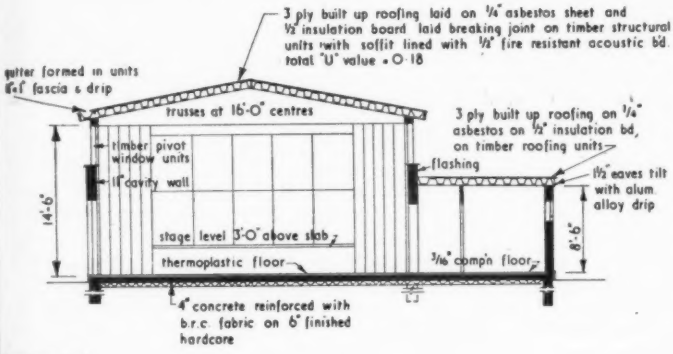
CROSS SECTION



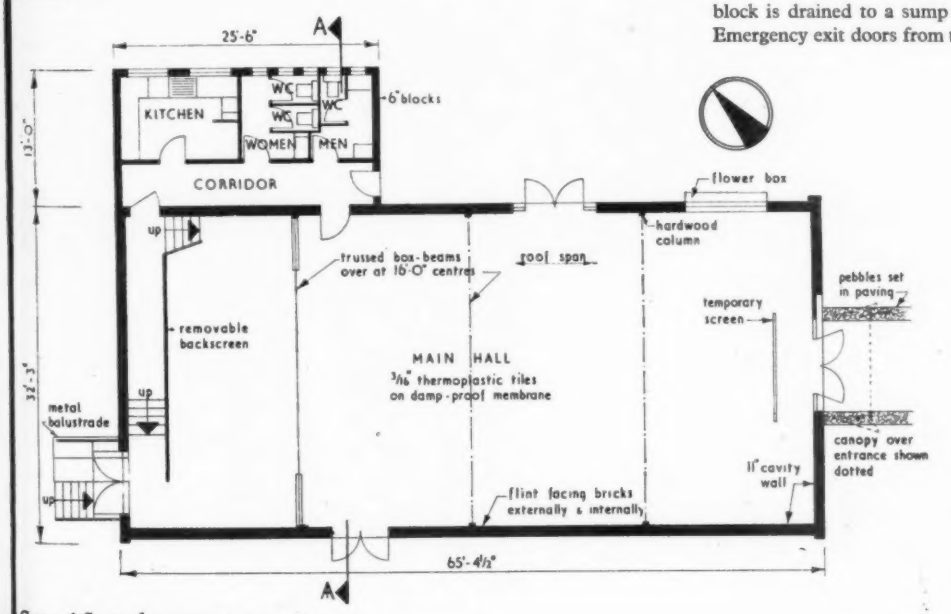
PLANS ABOVE & BELOW SILL

Cross section through hall and annexe and plans of external walling to hall [Scale : ½" = 1' 0"]

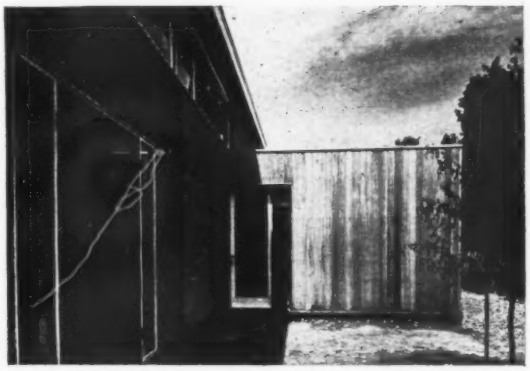
CHURCH HALL AT CHESSINGTON



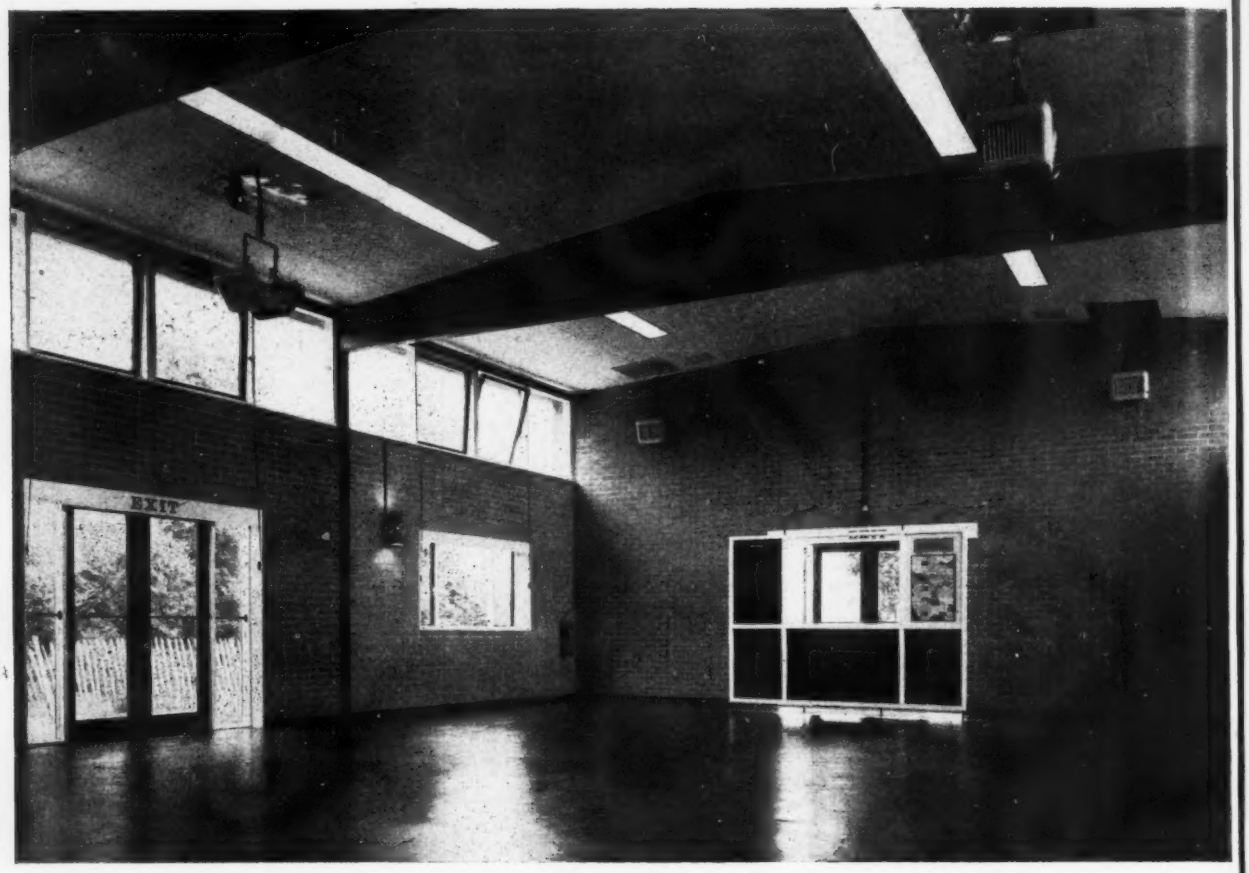
Section A-A



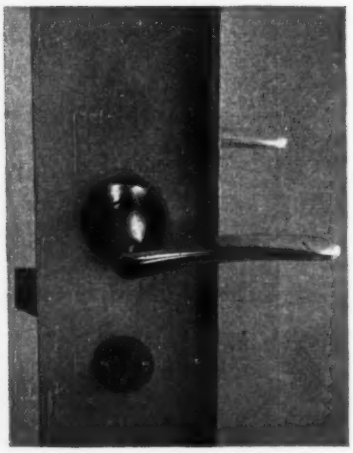
Ground floor plan [Scale : 1/16" = 1' 0"]



Top: the kitchen and lavatory extension (viewpoint 5) from the north, with the two large windows serving the kitchen. Double door access to dustbins beneath kitchen window (second from right). When the future committee room has been built the present blank return end to the kitchen will be swung through a right angle and will continue in the same plane as the window wall. The t. and g. vertical boarding is untreated cedar nailed to 1½-in. × ¾-in. horizontal battening with muntz nails. Eaves line formed with aluminium trim. Hardwood sill above recessed concrete plinth. Colour: cedar boarding—natural; concrete plinth—black; s.w. frames to windows—white gloss; mahogany frames—natural, oiled. Above, viewpoint 6: from the south-east, showing the entrance to the low cedar clad utility block. The roof to this block is drained to a sump located above an internal r.w.p. Emergency exit doors from the hall are on the left.

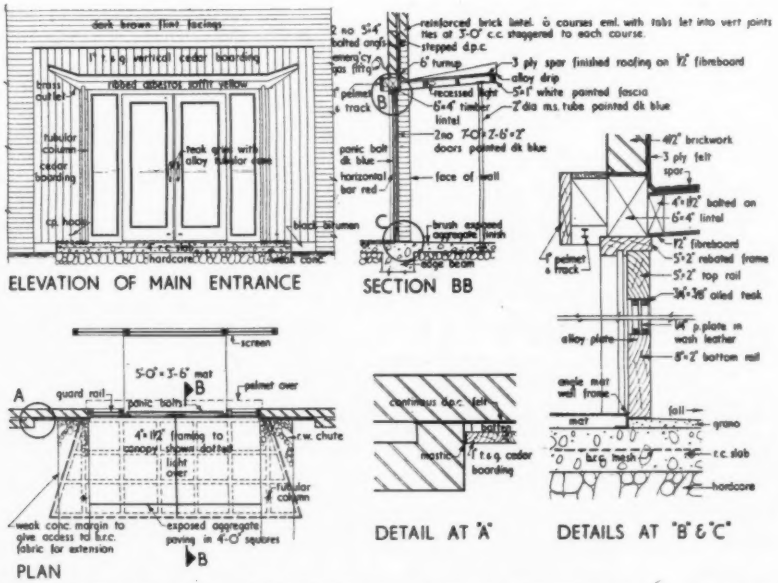


Above: a view from the stage end of the hall. Instant-start fluorescent lighting is recessed into the prefabricated roof troughs. The suspended gas radiant heaters have coloured stove enamelled plates fixed above them to obviate staining. The ceiling is lined with ½-in. flame retardant insulation board fixed direct to the timber roofing units. The centre pivoted opening lights in the clerestory glazing are cord operated. Pelmet boards above windows and doors conceal curtain track and pulley cords. The stress skinned ply-faced timber beams are connected to pairs of 6-in. × 3-in. hardwood posts bolted together, the completed frame occurring at 16 ft. 0 in. centres. The gable end wall is load bearing. Non-load-bearing brick panels occur on either side of hall with alternate panels in a darker facing brick. The floor finish is in-situ thermoplastic laid on a cement sand screed to a finished thickness of $\frac{1}{16}$ in. Colour: floor, dark green; pelmets at clerestory level, and doors, dark blue; lights and subframes, reveals, sills and ceiling, white; beams and columns, mahogany faced, flat varnish; panels above heaters, primary colours. Below left: spring loaded lever handles to mortice latch. Escutcheon and handles finished in satin chrome. A German product typical of the standard used throughout the building. Below right: satin chrome locking handle and stay to horizontal centre pivot windows to kitchen (two pairs of each per window). A large free opening is achieved at the expense of a small actual window projection. It was necessary to restrict the projection of opening lights where they fronted on to the narrow drive.



CHURCH HALL AT CHESSINGTON

Left : emergency exit doors leading from the hall. Thermoplastic in-situ floor and skirting. Vertical cedar boarding on the right backed with ½-in. asbestos board to form stage proscenium. Colour: floor—dark green; door—dark blue; panic bolts—dark red; asbestos board—light grey; lettering—white on blue, black on white; pelmet and door frame—white. Above: temporary screen acting as draught baffle, defining entrance porch and providing notice board and advertising space. Client requested that the public should be able to see into the hall from the main entrance, hence the glass panel in the centre of the screen. Colour: softwood framing—white eggshell; notice board—dark olive green; ¾-in. centres rod supports—dark blue; bottom panels—gaboon mahogany face, plywood; with one coat gloss and one coat flat varnish; floor—thermoplastic in-situ finish.



Elevation, plan and section and details of entrance doors and canopy (Scale: ½" and ¾" = 1' 0")

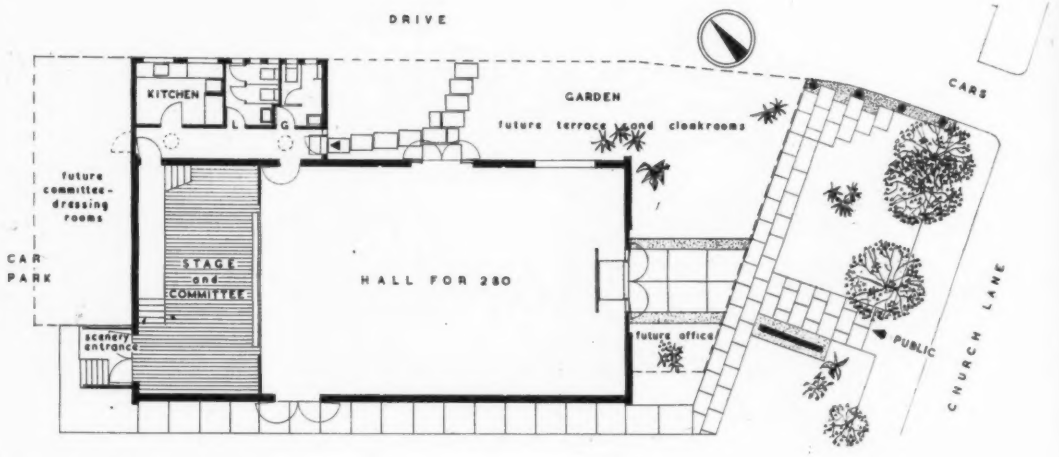
CHURCH HALL AT CHESSINGTON

CLIENT'S BRIEF: his stated requirements

A hall, to seat 250-300, in which badminton and other indoor games will be played. Kitchen and lavatory accommodation to be provided to meet Licensing Authority requirements. A committee room and additional lavatories to be considered as further extensions. Ease of maintenance to be an important consideration owing to limited running funds. Initial cost to be restricted to £6,500.

SITE: topography, surroundings, access, planting

A very slight fall from the north, with a number of small trees bordering this boundary. Pasture land flanks the north-west and south-west boundaries, with small cottages to the south-east. Access gained from Church Lane (south-east). A scheme of new planting has been prepared, and is to be undertaken by a voluntary labour force after sufficient funds have been donated for the purchase of shrubs, etc.



Site plan

PLAN: general appreciation

Kitchen and lavatories to be used in conjunction with stage, but accessible to general public. After extensions have been completed, the existing kitchen and lavatory area will become essentially back-stage, and the public will use new cloakrooms to be located adjacent to the main entrance. The new committee room will be approached from the existing corridor, adjacent to kitchen, and will double as a dressing room. Cedar boarding, forming external cladding to the existing kitchen, etc., will be partially removed and re-used to clad the committee room extension to conceal the junction between old and new work.

MAIN CONSTRUCTION: general appreciation

Light prefabricated timber roof units supported on composite hardwood frames spaced at 16 ft. 0 in. centres. Non-load bearing panels of brickwork with clerestory glazing above are interspaced between bays with load bearing brick walls at gable ends. Loads transmitted through reinforced-concrete perimeter ground beams.

MAIN CONSTRUCTION

Load bearing element	*Location*	*Beam span*	*Column grid*
Cavity brickwork	Hall gables	—	—
Composite timber frame	Hall	29 ft. 9 in.	16 ft. 0 in.
Concrete block	Kitchen and lavatories	—	—

Foundation type	*Location*	*Sub-soil*	*Depth*	*Reason*
Reinforced concrete perimeter beam	Throughout	Clay	Reinforced concrete beam 10 in. deep on mass concrete strip average depth 2 ft. 6 in. below finished g.l.	Existence of a dew pond on site necessitated r.c. slab

Outer wall type	*Location*	*Material*	*Finish*
11-in. cavity wall	Hall	Facing bricks	Fairface both sides. Thumbed joint horizontally, flush joint vertically
Load bearing blocks	Kitchen and lavatories	Lightweight concrete	Cedar boarding on battens and felt externally with plaster internally

Roof type	*Location*	*Material*	*Finish*	*Reason*
Prefabricated trough units 7 in. deep	Throughout	Tanalised timber	¼-in. asbestos board and 3-ply bituminous felt and green and white spar surfacing	Room for services in troughs. Impregnated because of ultra light sections

Floor structure type	*Location*	*Material*	*Finish*	*Reason*
Solid	Throughout	Minimum of 6-in. hardcore. 4-in. r.c. site slabs damp proof membrane. 2-in. cement and sand screed	*In-situ* plastic flooring average thickness ⅜ in. laid in five coats	See foundation type

Internal wall type	*Location*	*Materials*	*Finish*	*Reason*
Lightweight blocks	Kitchen and lavatories	Lightweight concrete and clinker block	Plastered both sides	Economy

Ceiling types	*Location*	*Materials*	*Finish*	*Reason*
Direct fixing	Hall, corridor and lavatories	½-in. flame retardant insulation board	Fire retardant paint and emulsion paint decoration	
Direct fixing	Kitchen	⅜-in. asbestos fibreboard	Emulsion paint	Resistant to condensation

ARTIFICIAL LIGHTING

Source and fitting type	*Location*	*Illumination level*	*Quality*	*Comments*
Fluorescent, instant start, recessed in roofing troughs	Hall	7 f.c.	Direct—little shadow	General illumination
Tungsten, wall mounted	Hall	7 f.c.	Indirect	Sparkle (to relieve walls and ceiling)
Tungsten, surface mounted on ceiling	Elsewhere	7 f.c.	Diffusing	General purpose

Wiring and switching types	*Location*	*Comments*
Surface conduit and V.I.R. cables to C.I. switch boxes	Hall	Fairface brickwork
Chased conduit and V.I.R. cables to sunk C.I. switch boxes and flush switch plates	Elsewhere	

Power supply	*How distributed*
13-amp shuttered sockets and fused plugs	Light and power on 60-amp ring main

NATURAL LIGHTING

Wall glazing

Mainly high level, centre pivoted windows to hall ensuring adequate cross ventilation and providing pleasing quality of light

Roof glazing	*Location*	*Comments*
Circular dome roof lights	Corridor	To maintain adequate standard of illumination throughout its length

THERMAL INSULATION

Type	*Location*	*U/value*	*Comments*
Structure plus ½-in. asbestos board and ½-in. insulation board	Roofs generally	0·14	Essential with high level gas heaters and compensates for unventilated brickwork
11-in. cavity brickwork (unventilated)	Hall walls	0·30	Some sacrifice to achieve maintenance-free wall surface
Plastered concrete block plus boards on battens and felt	Walls elsewhere	0·13	Unheated rooms therefore standard height for comfort and protection of services

HEATING AND VENTILATION: artificial and natural

Heater type	*Criteria temp.*	*Reason*
Gas radiant heaters suspended from ceiling in hall. Stove enamelled plate above heater protects ceiling from staining	65° F. with outside temperature at 32° F.	Low initial cost and intermittent heating requirements

Water heater type	*Location*
Gas operated multipoint	Lavatories
Gas operated boiling point	Kitchen

Pipes and jointing Type	*Materials*
Gas pipes	Malleable iron, screwed connections
Water pipes	Copper with brazed joints

Cold water storage	*Location*	*Material*	*Capacity*	*Comments*
Tank	Above meter cupboard in kitchen	Galvanized steel	75 gallons	Additional storage when extensions built

SPECIAL ACOUSTICAL TREATMENT

Sound absorption material	*Location*	*Absorption coefficient*	*Comments*
½-in. insulation board	Hall ceiling	0·3	To compensate for fairfaced brick wall finish

Sound insulation

Corridor as sound buffer between hall and kitchen

SOIL WASTE

Type of system	*Location*	*Materials*	*Comments*
Direct from fitting to manhole	Kitchen and lavatories	4-in. S.G.P.	Copper waste pipes with 3-in. deep seal traps to S.G.P. connection

Drain types	*Materials*	*Comments*
Soil and surface water	Bitumen impregnated fibre pipes	Pipes obtained in long lengths using a simple self sealing chamfered hammered joint. Soil and surface water pipes laid in one day and passed full water test immediately on completion

Rainwater disposal type	*Location*	*Comments*
Gutters to single length alloy pipes	Down pipes carried on external face of building	No joints or fixing except at head and foot. No maintenance required

FIRE

Structural precautions	*Grade of protection*	*Apparatus*	*Access for fire fighting*	*Means of Escape*
Incombustible brick to hall. Fire retardant insulation board to hall ceiling	Statutory Class I	3 soda/acid extinguishers in hall and backstage	Access all round building and easy access backstage	Three hall exits. One stage exit. All fitted with bolts to Surrey C.C. requirements

COLOUR

Paint types	*Where used*	*Comments*
Emulsion	Ceilings and other than brick walls	White and grey used mainly as background colours with doors, fitting, etc., picked out in brighter colours
Semi-gloss	Internal woodwork	
Gloss	External woodwork	
Flat varnish and oil	Hardwood surfaces	

TIME SCHEDULE

Drawings	*Contract signed*	*Work commenced*	*Work completed*	*Type of contr act*
5 months	September, 1954	November, 1954	May, 1955.	Lump sum—RIBA without quantities

Comments

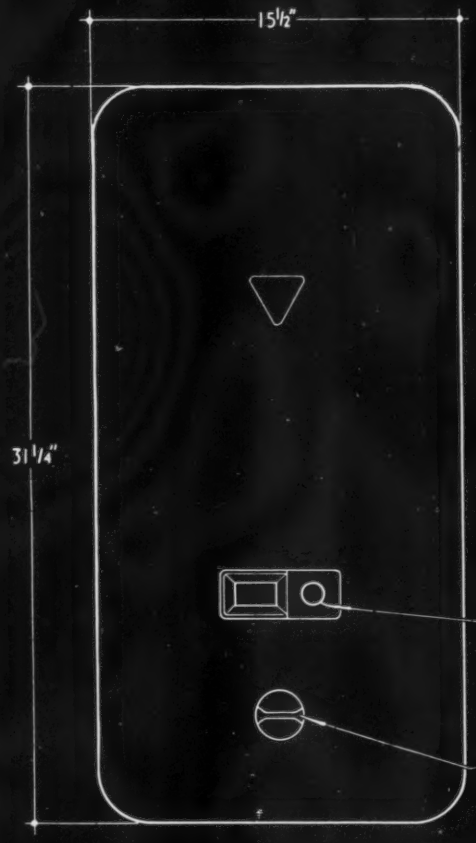
Drawings completed before contract started

COST ANALYSIS

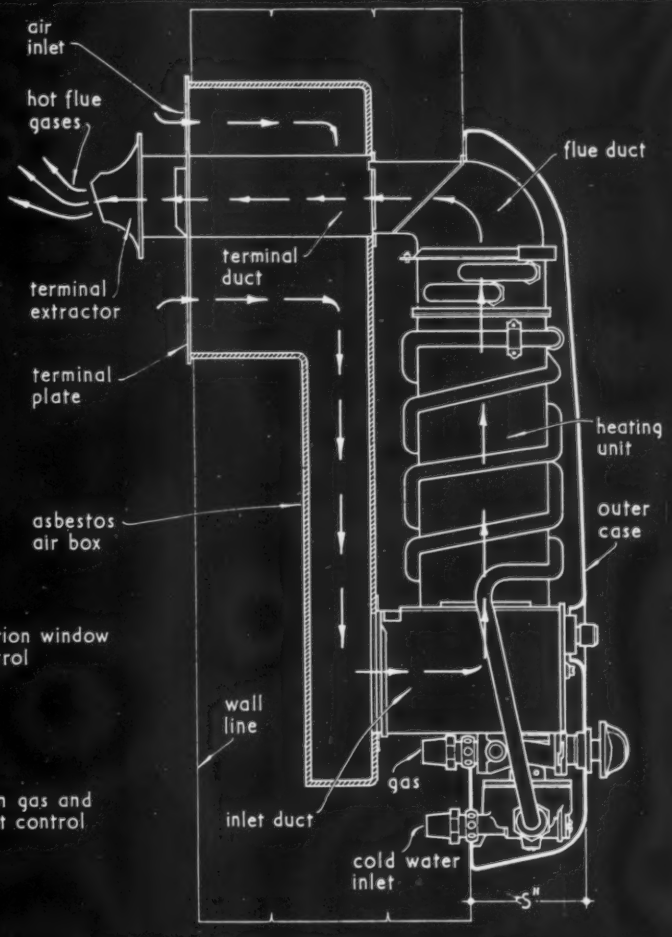
Tender date	September 1954
Tender cost of superstructure	£2,645
installations and fittings	£2,869
foundations	£806
external works	£130
Gross total	£6,450
Total floor area	2,232 ft. sup.
Cost per ft. sup.	58s. 0d.
Cost per ft. cube	3s. 2d.

Element	*Per cent. of cost*	*Cost per sq. ft. in pence*
Preliminaries and insurances	1	6·96
Contingencies	2½	17·42
Work below ground	12	83·52
External walls	9	62·63
Internal walls	10	69·58
Frame	3	20·88
Roof complete	17½	121·75
Floor finishes	3	20·88
Windows and doors	6	41·76
Wall finishes	4½	31·32
Ironmongery	1½	10·11
Plumbing and sanitary fittings	5	34·84
Gas installation	4½	31·32
Electric installation	4½	31·32
Drainage	6	41·76
Glazing	2	13·92
Decoration	6	41·76
Paved areas	2	13·92
	100	58s. 0d.

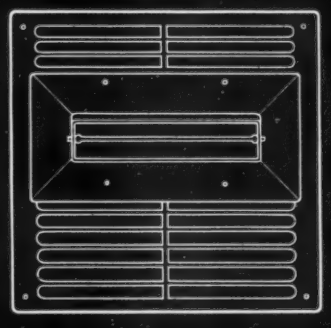
Difference between tender cost and final costs is the contingency sum
Reason: increases in labour, materials and p.c. items



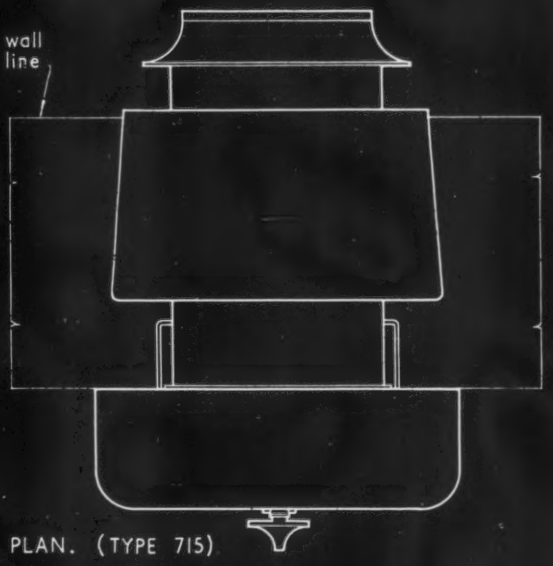
FRONT ELEVATION. (TYPE 715)



SECTIONAL ELEVATION SHOWING AIR-FLUE CIRCUIT.



ELEVATION OF TERMINAL.



PLAN. (TYPE 715)

·ASCOT· BALANCED FLUE GAS WATER HEATERS: TYPE NOS. 715 AND 715/1 : GENERAL DATA.
Manufacturer: Ascot Gas Water Heaters Ltd.

32.C31 ·ASCOT· BALANCED FLUE GAS WATER HEATERS: TYPE NOS. 715 AND 715/1: GENERAL DATA

This Sheet describes Ascot balanced flue gas water heaters (types 715 and 715/1) which differ fundamentally from previously designed heaters in having a sealed air circuit incorporating air inlet and flue, and no draught diverter and vertical flue outlet. They give a full instantaneous multipoint hot water service. Type 715 is partly recessed in the wall, with the inner projection equal to the depth of the heater case, and type 715/1 is fully recessed, in a service duct, or where wall thickness permits. For details of fixing the heaters see Sheets 33.C32 and 33.C33.

Principle and Design

The heater must be fitted in an outside wall, as the air necessary for combustion is drawn through a duct from the external atmosphere. The products of combustion are expelled through an adjacent flueway. The design of the wall terminal admits air to the inlet duct, allows unobstructed escape for the flue gases and prevents recirculation. Wind conditions affecting the pressure at the flue outlet similarly affect the air inlet, so the balance of pressure is maintained. Hot flue gases escape in the normal way by convection, and internal frictional losses are minimised by a single-stage heat exchanger of new design. The absence of draught diverter and vertical flue make for a compact and unobtrusive appearance inside the room, while the external terminal is convenient in multi-storey buildings where the old type of flue terminal would be impracticable.

Characteristics

Output: 3 gal./min. raised through 40° F., or 2·5 gal./min. raised through 50° F. or 1·25 gal./min. raised through 100° F.
Input: 1,625 B.Th.U./min. or 3·25 cu. ft./min. of 500 C.V. gas.

Components

Automatic valve: Prevents gas passing to the burner unless a predetermined minimum quantity of water is flowing through the heater.
Heating body: A single-stage high efficiency heat exchanger of the finned type with combustion chamber.
Burner: Stainless steel luminous pinhole type incorporating pilot safety device.
Main gas and pilot controls: These are interlocking and are of the rotary control type.
Gas governor: A gas pressure governor is supplied with the heater.
Outer casing: Vitreous enamelled sheet steel (type 715 only).

Finish

Type 715: The casing is white or cream enamelled with black plastic gas control knob and polished metal surround to ignition window.
Type 715/1: Flush fitting panel not supplied by manufacturers. Gas control knob and ignition window as for type 715.

Installation

The heater must always be sited in an outside wall but may be installed in any room, closet or duct without regard to the ventilation available therein as it relies solely upon the outside air for intake and there is no possibility of any products of combustion escaping inside the building. It should be installed as closely as possible to the most frequently used draw-off tap (normally at the kitchen sink) in a position convenient for normal access and maintenance. Support brackets are fitted as an integral part of the heater.
The alternative model type 715/1, without the outer enamelled casing, is available for building into a duct behind a flush panel: see Sheet 33.C33 for details.

Gas

Connection: ¾-in. tapered B.S.P. male thread.
Supply pipe: Up to 15 ft. from the meter—¾ in. int. dia.
15 ft.-30 ft. from the meter—1 in. int. dia.
Pressure governor: ¾-in. to 1-in. B.S.P. female connection. Can be fitted to the heater or in the supply pipe adjacent to the heater.
Meter: Rated capacity to be not less than 200 cu. ft./hour of 500 B.Th.U. gas in addition to requirements for all other gas appliances.
Stop cock: Must be fitted in the supply line close to the heater to facilitate maintenance.

Water

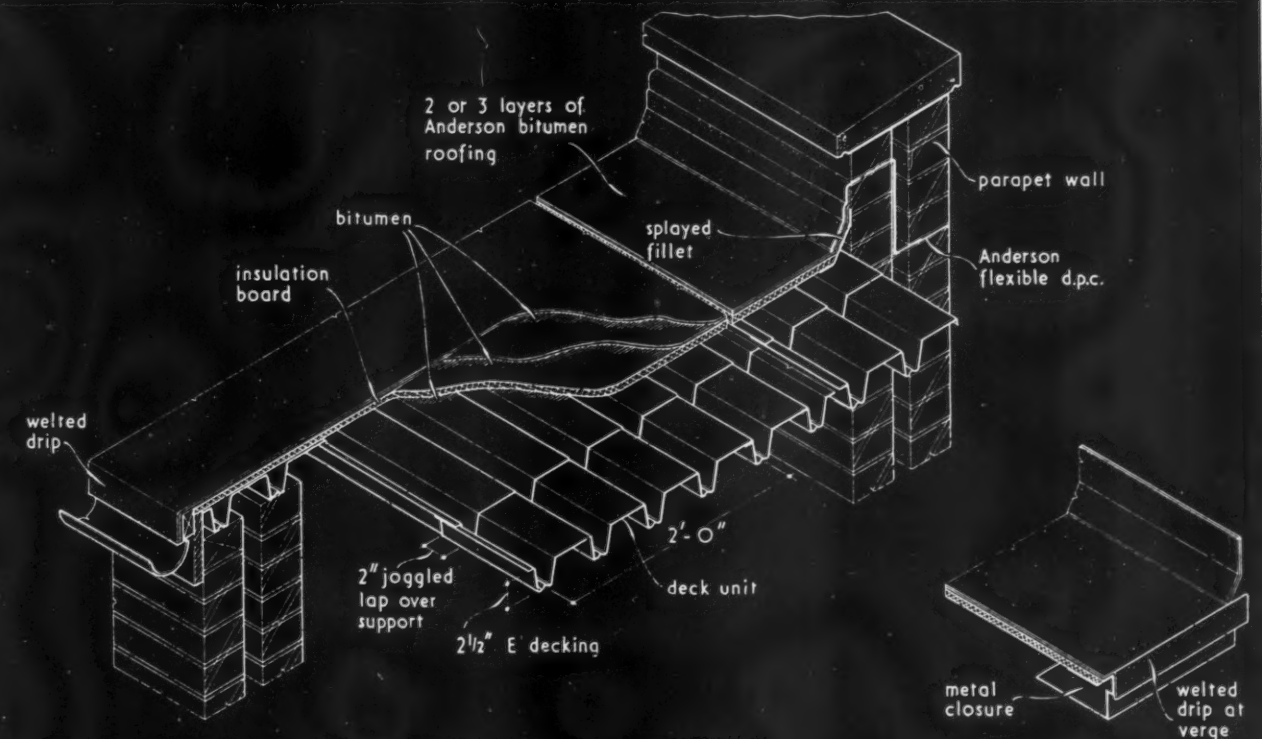
The heater should be connected for preference to a tank supply but may be supplied from the mains if desired.
Tank supply: Minimum head required 10 ft. measured vertically from the level of the water in the tank to the level of the highest draw-off point.
Mains supply: Permission must be obtained from the water authority. The minimum working pressure required is 4½ lb./sq. in.
Connection: ¾-in. B.S.P. male taper thread.
Supply pipes: Mains: ½ in. to ¾ in.
Tank: ¾ in. to 1 in. dependent on head of water and length of run.
Stop cock: A stop cock (of a pattern approved by the water authority) must be fitted in the cold water supply in an accessible position.

Further Information

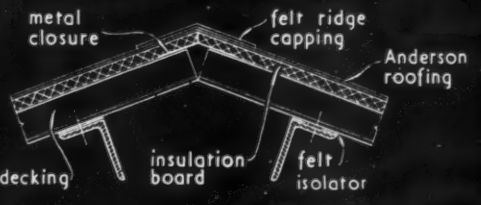
The manufacturer maintains a Technical Department with an outside staff who are available to answer questions and advise generally on technical problems dealing with the installation of the 715 and 715/1 balanced flue heaters in any part of the country.

Compiled from information supplied by:
Ascot Gas Water Heaters Ltd.
Head Office and Works: 255, North Circular Road, Neasden, London, N.W.10.
Telephone: Willesden 5121.
Telegrams: Gascot, Phone, London.
Branch Offices and Service Depots: Belfast, Birmingham, Bournemouth and Glasgow.
Service Depots: Bristol, Cambridge, Manchester, Oxford, Southampton, Stoke-on-Trent and Jersey.

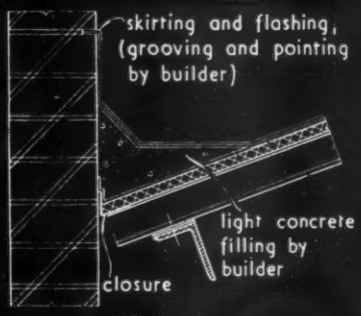
The Architects' Journal Library of Information Sheets 532. Editor: Cotterell Butler, A.R.I.B.A.



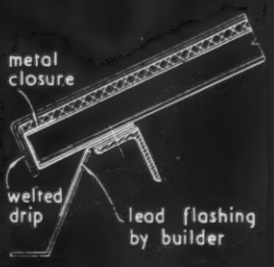
GENERAL ASSEMBLY OF ROOF SHOWING TYPICAL TREATMENTS AT PARAPET WALL, VERGE AND EAVES.



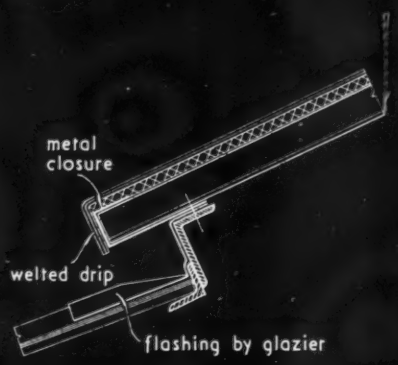
RIDGE.

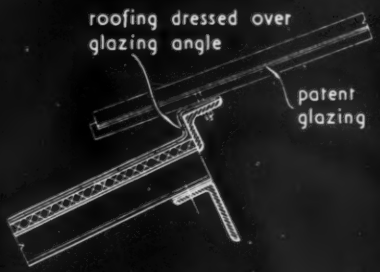


BOUNDARY WALL.

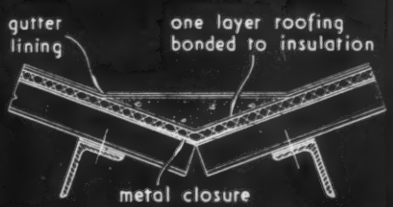


EAVES GUTTER.





ROOFLIGHTS : FINISHES ABOVE AND BELOW GLAZING.



VALLEY GUTTER.

ANDERSON INSULATED ALUMINIUM 'E' DECKING.

Manufacturer: D. Anderson and Son Ltd.

20.Z7 ANDERSON INSULATED ALUMINIUM ·E· DECKING

This Sheet describes a composite roof built up from aluminium roof decking, rigid insulation and bituminous roofing. It is strong though lightweight, economical in cost and is quickly and easily erected using " dry " construction. It may be used for flat, sloping or curved roofs and also for most vertical construction.

Construction

The deck units are fabricated as shown in the isometric sketch on the face of the Sheet, and the sides overlap with adjacent units Ends of units are joggled to give a smooth, rigid joint.

All wallplates on which the decking bears should be securely anchored to the walls with straps or by other suitable method. Closures for eaves, verges, etc. can be provided to suit requirements.

Where a prevalently humid atmosphere is anticipated inside the building a layer of felt should be fixed below the insulation board as a barrier against vapour.

The drawings on the face of the Sheet show the treatment at ridge, eaves, valley and boundary wall and the finishes above and below patent glazing.

Fixing: The decking is secured to the supporting structure by hookbolts, special clips or hammer-drive screws.

Sizes

The deck units are 2 ft. 0 in. wide and up to 10 ft. 0 in. in length according to span required. Standard lengths are 7 ft. 0 in., 8 ft. 0 in. and 9 ft. 0 in. but non-standard lengths can be supplied. Aluminium E decking is available in 18, 19 and 20 gauge and is 2½ in. deep in section. Deck units 1in. deep in section are also available for short spans, suitable for sloping roofs and vertical work.

Weight

The weight of the completed roof is 4 lb./sq. ft.

Safe Load-Span Table

The safe working loads in the following table are based on:

Maximum bending stress 11,200 lb./sq. in. Deflection limited to 1/250 span

Span	18 gauge		19 gauge		20 gauge	
	Stress	Deflection	Stress	Deflection	Stress	Deflection
5 ft. 0 in.	175	162	146	135	131	121
6 ft. 0 in.	121	92	101	77	91	69
7 ft. 0 in.	89	59	74	49	67	44
8 ft. 0 in.	68	40	57	33	51	30
9 ft. 0 in.	54	27	45	22	40	20
10 ft. 0 in.	44	20	37	17	33	15

Thermal Transmittance

The thermal transmittance (U) value for the complete roof without ceiling below is 0·32 B.Th.U./sq. ft./hr./°F.

Compiled from information supplied by:

D. Anderson & Son Ltd.
Head Office: Stretford, Manchester.
Telephone: Longford 1113.
Telegrams: Roofing, Stretford.
London Office: Old Ford, E.3.
Telephone: Amherst 2388.
Birmingham Office: Suffolk House. Suffolk Street, 1.
Telephone: Midland 4988.
Nottingham Office: 4, Low Pavement.
Telephone: Nottingham 46704.
Leeds Office: 2, Central Road, 1
Telephone: Leeds 21403.
Glasgow Office: Queen Elizabeth Avenue. Hillington, S.W.2.
Telephone: Halfway 2514.
Belfast Office: Short Strand.
Telephone: Belfast 57143.
Bristol Office: 81, St. George's Road.
Telephone: Bristol 28207.

CHURCH HALL

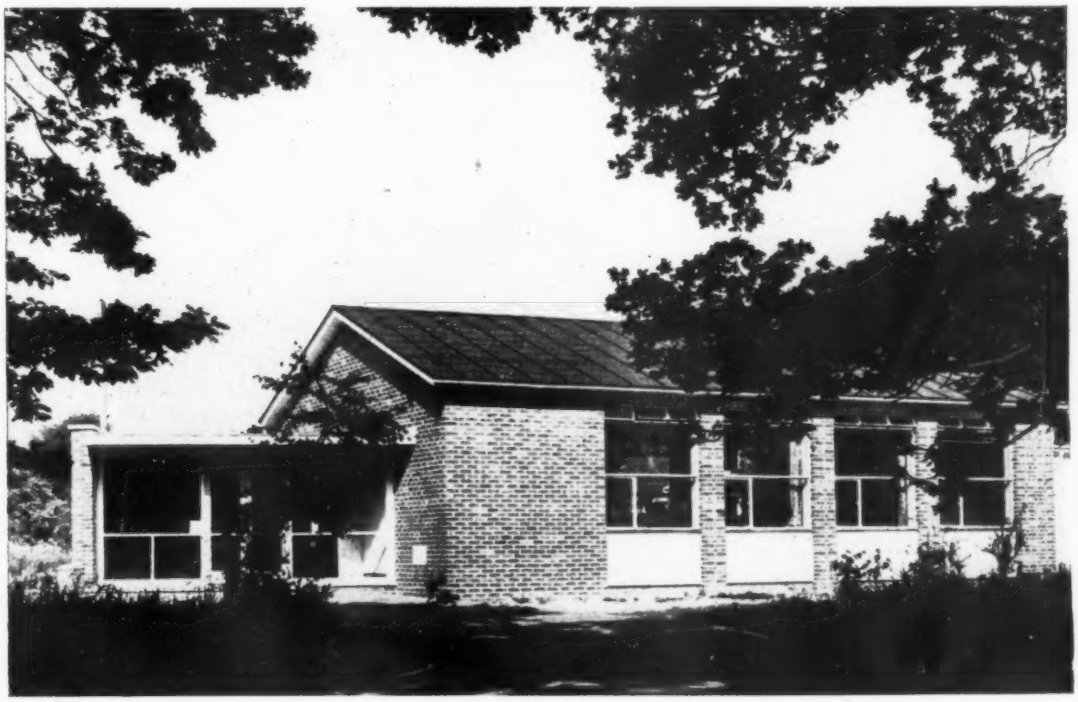
at FERNHILL ROAD, HAWLEY, HANTS

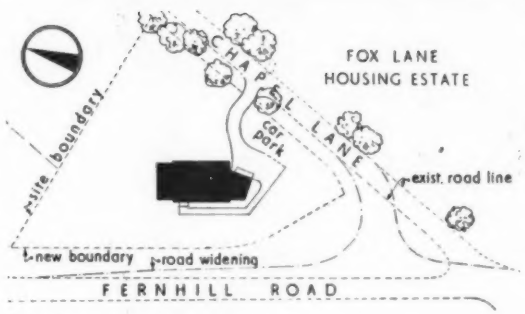
designed by ALEC LIVOCK

The hall from the north-east.

This church hall was designed for the Parochial Church Council at Hawley. The hall was required for social activities for the parish and as a community centre. The general contractors were Raymond C. Kemp (Camberley) Ltd. Sub-contractors, page 204.

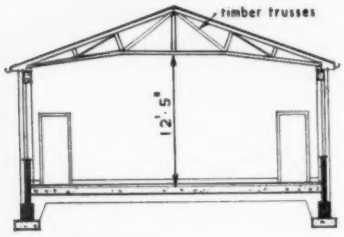
The entrance drive from the east of the hall.





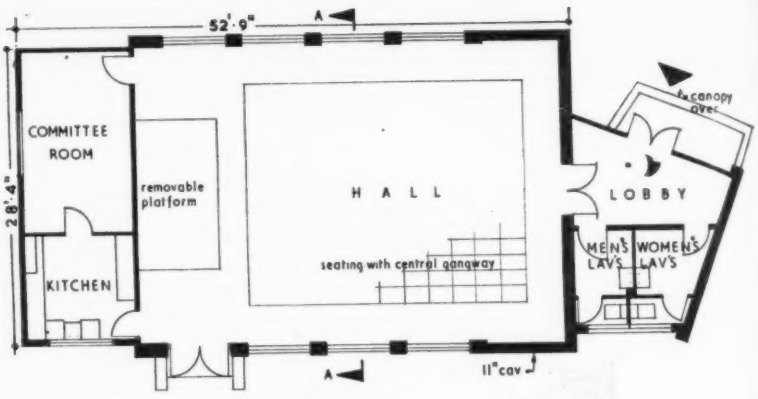
Site plan

The placing of the building on the site was largely determined by the building line imposed, due to a road-widening scheme, and also by the possibility of a future extension with a permanent stage and ancillary rooms to the north of the hall. The gable wall at this end of the hall was therefore constructed with a timber frame and weather boarding with plasterboard internally. The hall, which measures 40 ft. 6 in. by 28 ft. 6 in. and seats approximately 200, is constructed of 11-in. cavity walls and 13½-in. by 18-in. brick piers. The facing bricks are Rudgwick stocks. The panels below the windows are faced externally with horizontal weatherboarding, painted white, and are of breeze blocks internally. These panels and the hardwood window sills form recesses for the electric convector heaters. The low pitched roof is of light gauged copper, bonded to insulating board laid on prefabricated trussed rafters spanning 28 ft. 6 in.



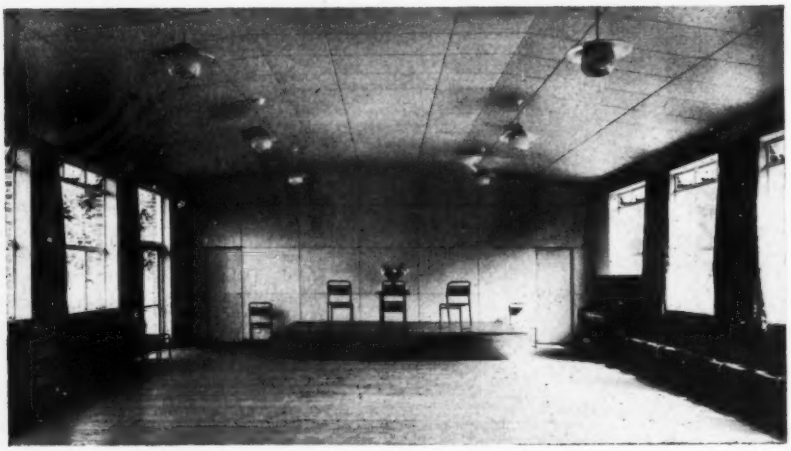
Section A-A

CHURCH HALL AT HAWLEY



Ground floor plan [Scale: $\frac{1}{16}$" = 1' 0"]

Below, the main entrance doors and porch. Bottom, the interior of the hall, looking towards the portable platform. The floor finishes are gurjun wood strip in the hall, heather brown quarry tiles in the lobby and lavatories, and thermoplastic tiles in the committee room and kitchen. Because of the wetness of the site, a d.p.c. membrane was laid on the surface concrete with screed to all floors. The walls are lime plastered, and the whole ceiling is lined with insulating fibreboard, giving sufficient absorption for satisfactory acoustics. Funds for the hall granted by the diocese were severely limited, and an initial target of £4,400 was set. To achieve this, the entrance lobby and lavatories were kept to a minimum, a cloak room was omitted, and electric convector heaters and standard metal windows with wide central fixed lights were used. The panelling planned to line the timber-framed wall behind the platform was substituted by plasterboard in squares with V joints, thus saving £100. The final cost was £4,061 for the building, £520 for external works and drainage, and £84 for the sectional platform. The cost per sq. ft. was £2 10s. 2d. and per ft. cub. 3s. 2d. (for building and site works).



TECHNICAL SECTION

This week we report a film which has been prepared by Rodney Thomas of the Arcon Group of Manufacturers (see page 177). This film illustrates, in diagram form, an approach to the problem of jointing prefabricated units. The Arcon Group and their architects have now had twelve years experience in manufacturing building components. Most of their products have been complete structures. Readers will remember their demountable bungalow (1945), their tropical roof (1947), their storage building (1950), their saw-tooth roof (1951) and their three-pin frame (1952). Though doubtless Arcon will continue to father whole structures, their present attention to jointing is interesting as it substantiates a change in our concept of prefabrication which has been observable for some time. More people are coming to the opinion that even if a manufacturer makes all the parts in a building it will be in his interest to make these parts interchangeable with those of other manufacturers. Up to now we have assumed that this implies mutual adherence to a modular system. Rodney Thomas, in his film, puts forward an alternative—namely the use of a system of jointing which will be sufficiently versatile to accommodate infilling units of any reasonable dimension, profile and tolerance. This solution proposes in effect a frame structure which will be as accommodating as traditional brickwork. In view of the high cost of working to engineering tolerances, this deserves fuller investigation.

This week's special feature

10 DESIGN: BUILDING TYPES
Hertfordshire schools development: 3

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

On May 12 and again on May 26, 1955, we published two articles by W. D. Lacey and H. T. Swain describing development work carried out by the Herts County Architect's Department on their school building programme. These articles were confined to the development of the structure; this week, the same authors describe the parallel development of heating. This falls into three stages represented successively by the prototype Cheshunt JMI Infants' School of 1946-47, the 1947 programme and the 1948-49 plus the 1950 primary programme. Similar work was carried out on other services; that on heating has been chosen for this article as being typical of the kind of development work done in this field.

In 1945 the architects began a search for a system of heating which would be appropriate for a building of light frame construction and would be its counterpart in reducing builders' work on the site to a minimum. The Building Research Station was approached with a view to finding out if there was any possibility of obtaining inexpensive air-conditioning equipment. At that time this was unobtainable, but the BRS put the architects in touch with Weatherfoil Heating Systems Ltd., a firm manufacturing and installing a ductless heating system based on recirculating warm air. An investigation of this system suggested that it had the required character, but before adopting it for use in

the Cheshunt JMI School (the prototype school) it was decided to try it in an existing school. Weatherfoil Ltd. therefore installed one of their cabinets in a Ministry of Works hutment in Barnet: the system was operated for a month while the classroom was in use and the results were most satisfactory.

The advantages that the system appeared to have were:

(*a*) *Rapid installation.* No ducts were required, and the simple pipe runs and the heater cabinets could be largely prefabricated. The amount of builders' and fitters' work on the site was therefore small.

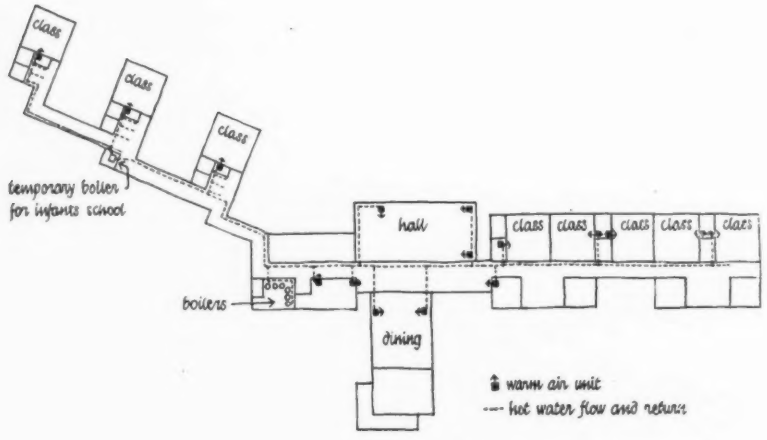
(*b*) *Efficient performance.* The economy of a solid fuel installation was combined with the accuracy of electrical controls. These controls enabled a high degree of fuel economy to be made in spite of the low thermal capacity of the light construction by taking advantage of the intermittent use of the school buildings. The temperature of the buildings could be allowed to drop after 4 p.m., and after idling through the night the system could rapidly reheat the school in the morning. Hence the boilers would be "ticking over," using very little fuel, for about 75 per cent. of the week. In addition, the controls could maintain the room temperature regardless of sudden changes in weather or of the haphazard opening and shutting of windows inevitable in a school.

(*c*) *Ease of planning.* Positions had to be found for only a small number of heater cabinets. Valuable wall space in classrooms was not taken up with heating appliances.

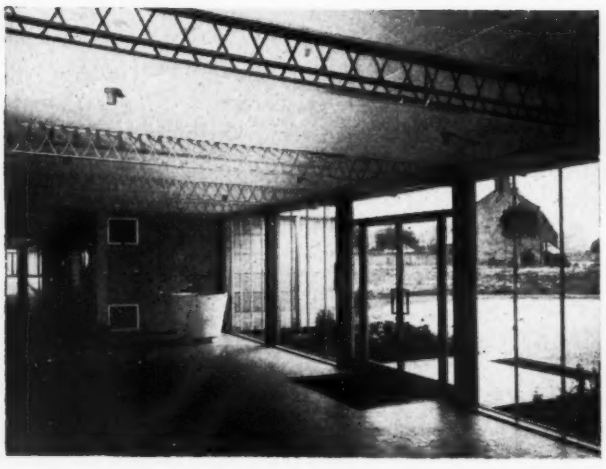
(*d*) *Good appearance.* Grilles in the partition walls were all that could be seen of the heating system, apart from pipe runs in the corridors.

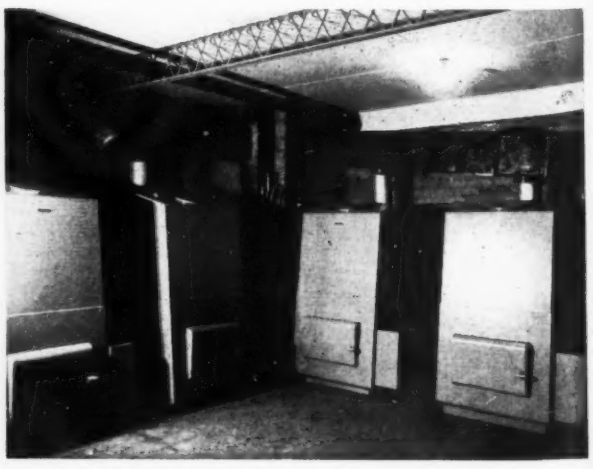
It was decided to adopt the Weatherfoil system for the prototype school at Cheshunt, and to develop it over successive school building programmes in a similar way to the development of the constructional system. During the early meetings between the manufacturers and the architect it became apparent once again (as was the case with the manufacturers of the structure) that the management's approach to design problems was similar to that of the architects, and a working partnership was built up which played an important part in the development work.

The pages which follow describe the development of the heating system up to the end of the 1948-49 programme, the period for which the structural system has already been described in earlier articles (AJ, May 12 and May 26, 1955).



Left, heating layout plan of the Cheshunt JMI School. The three prototype infants classrooms on the left of the plan were heated from a temporary boiler, and later connected to the main boiler house of the school. The plan shows the simple pipe runs from the boilers to the isolated warm air units positioned throughout the school. Below left, a view of the entrance hall of the school, with the grilles of a warm air unit on the far wall. On the beam in the foreground the flow and return pipes to the assembly hall units can be seen. Pipe runs were largely prefabricated, and since they were exposed great attention was paid to avoiding unnecessary complications. Below right, the boiler house. A battery of magazine boilers burning anthracite was used for this school and throughout the 1947 *programme.*





1946: CHESHUNT JMI SCHOOL (INFANTS' SECTION)

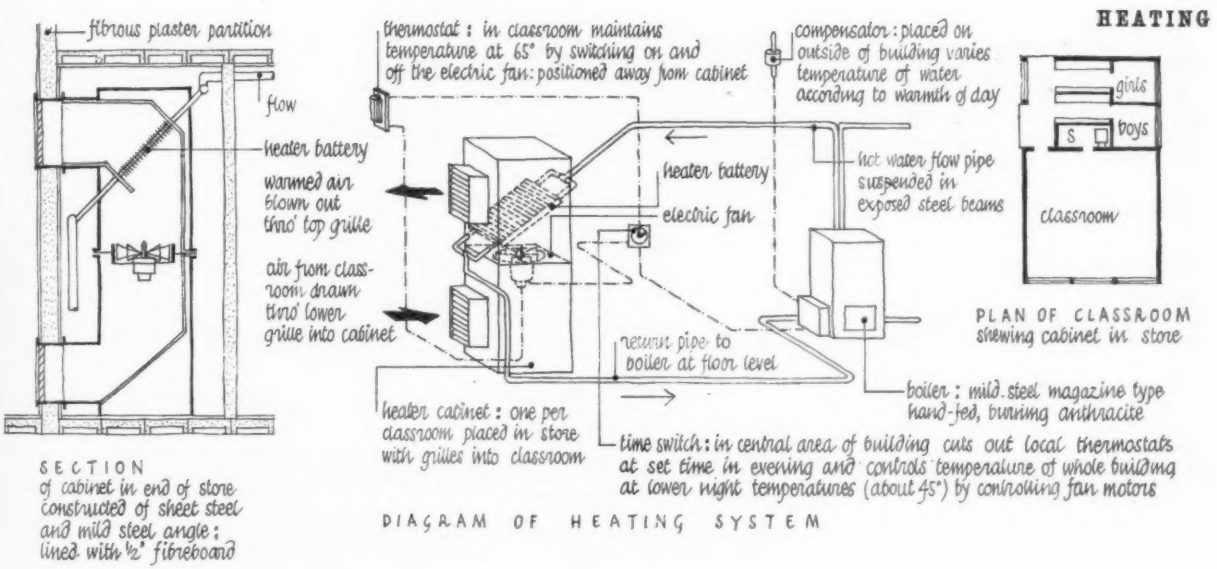
DEVELOPMENT WORK

The main decisions governing the required performance and design of the heating system were agreed by discussion between Weatherfoil Heating Systems Ltd. and the architects.

At that time there was little information available concerning what were the desirable standards of comfort for schools, and some of the decisions were taken in the knowledge that modifications would be needed when experience had been gained in operating the system.

Temperatures were to be 65 deg. for the classrooms, 50 deg. for the cloak spaces and 45 deg. for the corridors, for an outside temperature of 30 deg. The air change rate for heating calculations was to be assumed as one per hour. Insulation of the building was to be U = 0·3 for walls and suspended floors and U = 0·2 for roofs. In order to avoid bulky equipment it was agreed to supply hot water to the lavatories from a separate electric system which would be switched on an hour before use and turned off afterwards.

For the prototype classrooms of the Infants' section, heat for the system would be provided by a temporary boiler in one of the store rooms. Cabinets were to be located in the classroom stores. On the basis of these decisions, Weatherfoil Ltd. prepared heating layout drawings for use by the builder and by their own fitters, and wiring diagrams for the electrical sub-contractors. A price was submitted for the installation and the firm became sub-contractors to the general contractor building the prototype school.



CRITICISM

Performance. Early in the winter of 1947 Messrs. Weatherfoil carried out tests on the prototype. Observers studied the school routine and its effect on the heating apparatus and the temperatures of the rooms. In spite of continuous opening of windows and doors and variations in outside weather conditions the internal temperature remained virtually constant. The temperature gradients and the heat distribution throughout the building were satisfactory. In addition, it was noted that the smallest amount of winter sun shining through the large south-east windows had a surprisingly marked effect in raising the room temperatures, and hence producing an economy in fuel consumption. The reactions of teachers and children were most favourable to the system, and, after inspection by representatives, approval was given to it by the Ministry of Education.

Weatherfoil Ltd. advised the architects that the effectiveness of the system was being limited by the low insulation value of the structure.

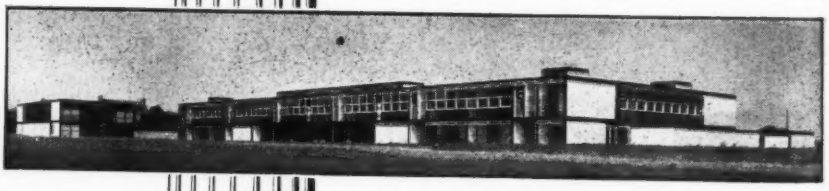
Controls. The simplicity of the apparatus and its ease of installation came up to expectation. It was clear, however, that the night control, in which the central thermostat controlled each individual fan motor, had proved far too complicated in electric wiring, and was, in fact, an unnecessarily refined control for a primary school.

Heater cabinets. The sheet metal cabinets were obviously over-elaborate. Access to the fan motors was difficult, involving the unscrewing of all the bolts securing the side plates. After the system had been in operation for some time it was found that the walls immediately adjacent to the heater grilles were becoming discoloured due to leakage of warm air between the wall surfaces and the flanges of the grilles.

Circulating Pipes. The inconvenient return pipe running at floor level was an expedient required by the temporary gravity circulation adopted for the prototype.

At the end of the last century, Luxfer specialised in the manufacture of all constructions through which daylight is admitted into a building, and in the middle of this century Luxfer still do.

from Corinthian to... contemporary



LUXFER manufacture windows in Steel - Bronze - Light Alloy for every form of architecture.

Illustrations :
Hunstanton Secondary Modern School.
Architects :
Peter & Alison Smithson, AA.R.I.B.A
Metal Windows and Doors by Luxfer.

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WAXLOW ROAD, HARLESDEN, LONDON, N.W.10
Telephone : ELGAR 7292 Telegrams : LUXFER, HARLES, LONDON

1947 : CHESHUNT JMI SCHOOL (JUNIOR SECTION) & 1947 PROGRAMME

DEVELOPMENT WORK

Performance. In order to test the running costs of the new system it was decided to instal an orthodox radiator central heating system in Oxhey Infants School, one of the schools in the programme, and use it for the purpose of comparison.

Weatherfoil Ltd. recommended, in the light of the observations at the prototype, that the classroom temperature be lowered to 62 deg., and the heat loss be calculated on the basis of three air changes per hour instead of one.

Roof insulation was to be increased to U = 0·15, and since the suspended floor was to be abandoned in favour of a solid floor, the new figure for floors was to be U = 0·2. Walls were to be designed to give U = 0·21.

Controls. Weatherfoil Ltd. redesigned the night control to simplify the wiring. The night switch, operated by a clock (instead of connecting each cabinet to a low-set central thermostat) would switch control to a non-compensated thermostat on the main boiler flow set to reduce the water temperature by shutting down the boilers. Thus the water temperature would remain constant throughout the period of idling regardless of air temperature in the building or outside weather conditions.

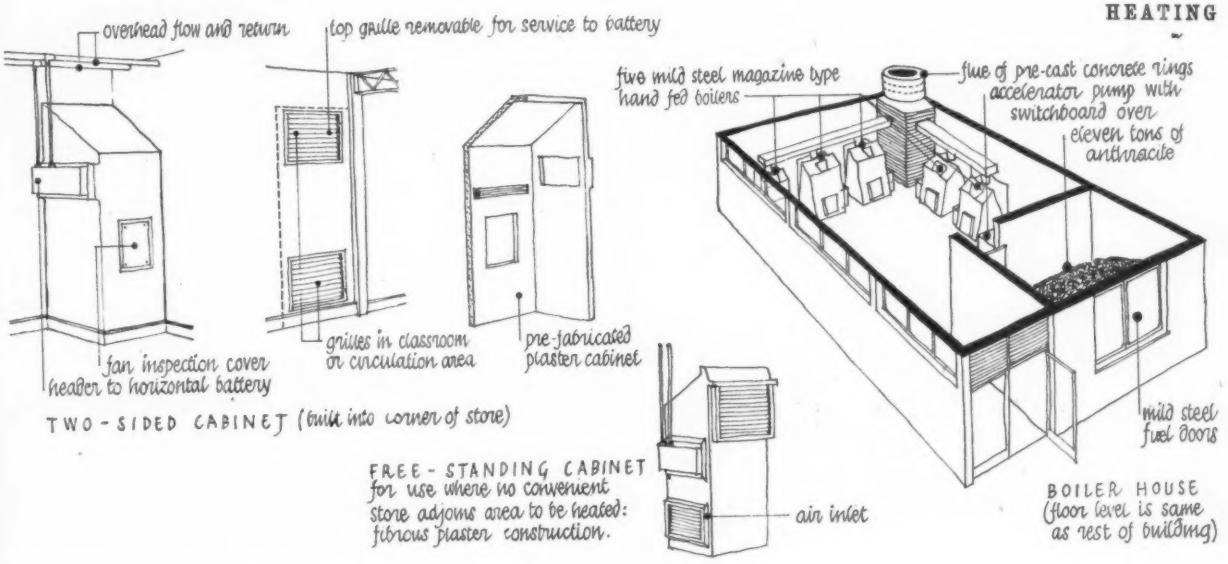
Heater cabinets. Two cabinet designs were standardized for the programme. Weatherfoil Ltd. gave their mechanical requirement and overall dimensions. A prototype cabinet was made in fibrous plaster to the architect's drawings and sent to the Weatherfoil works where it was tested. The design was finalized and the cabinets were produced in quantity for all schools in the programme. It was decided to mount the grilles on a felt gasket to prevent discoloration by air leakage.

Circulating Pipes. Return pipes were raised to run through beam lacings beside the flow pipes, an accelerating pump being now incorporated in the system.

Boiler House. A standard boilerhouse was designed for the programme. Mild steel, hand fed, magazine type boilers burning anthracite were used. These were available for immediate delivery whilst cast iron boilers needed to be ordered up to two years in advance. It was considered that the cost of the high-grade fuel would be offset by the high thermal efficiency of the boilers. Also these boilers required the minimum amount of builder's work in their installation, and the boiler room and fuel store were on the surface.

Contract. The direct contract procedure was established with Weatherfoil Ltd. This enabled the firm to place orders for materials in short supply and begin prefabricating heating components in the works before the main school contracts were let. An engineer from the firm began a regular weekly visit to the County Architect's office to advise on heating layouts at the drawing board stage.

HEATING



CRITICISM

Performance. During the winter of 1949 Weatherfoil Ltd. carried out continuous running tests of the completed schools of the 1947 programme. Head teachers and caretakers of the schools collaborated and kept records of fuel consumption and of work needed to operate the heating system. In addition to confirming that the system could provide and maintain good comfort conditions the tests showed the value of an almost automatic operation. Caretakers had little to worry about except stoking the boilers, and it was found in all cases that it was possible to leave the system entirely unattended for 48 hours over the week-end. Each school could have the controls set to provide for its own special requirements.

Comparison with the figures from Oxhey Infants' School, with its orthodox radiator system, established that the new system required substantially less fuel. (Average consumption of 1947 schools, with modified night control: 5·5 cwt./week/therm of heat loss. Oxhey Infants' School: 10·5 cwt./week/therm of heat loss.)

Heater cabinets. The cabinet cases were needed at a very early stage in construction since the carcassing of the heating system followed on almost immediately after the erection of the steel frame. Difficulties were experienced in protecting the self-finished fibrous plaster surfaces from damage by subsequent trades.

The wood screw fixings of the inspection panels and upper grilles were not standing up to repeated removal and replacement.

Circulating pipes. The flow and return pipes slung overhead between the lacings of the roof beams had proved to be easy and cheap to install, and generally satisfactory in appearance. The best looking arrangements were those where the pipe runs were as simple and direct as possible with couplings and bends kept to a minimum. This depended on good collaboration between manufacturer and architect at drawing board stage and on the site.

Boilerhouse. The precast concrete flue had proved very difficult to build correctly, and also looked enormous when complete.

The placing of fuel doors above cladding blocks allowed the wall to get dirty. A washable surface at this point would be preferable.

It was noted that the national position regarding fuel supplies was changing. Anthracite was now being exported and not only was it in short supply but an artificially high price had to be paid by the consumer.

Hot water supply. The demand for warm water in the lavatories proved to be continuous rather than intermittent. The electric immersion heaters were never switched off during the day and were therefore expensive to run.

Christ Church Cathedral, Oxford, from a recent painting by Felix Kelly.

Christ Church Cathedral, Oxford, is a fine illustration, in one building, of architectural development from Norman to Tudor times. But it is very much a living church and attracts large congregations. An oil-fired heating system was installed in 1950.

CHRIST CHURCH CATHEDRAL HAS A MODERN HEATING SYSTEM

It is kept comfortably warm by oil-fuel.

A CATHEDRAL CHURCH, many centuries old, is not the easiest of buildings to maintain at a comfortable temperature, one would think. But Christ Church has no heating problem. It has an oil-fired heating system—the last word in efficiency, cleanliness and ease of maintenance. The building is quickly warmed up to the temperature chosen and kept at this temperature for as long as is required.

There is no difficulty about maintenance. There is no stoking to be done. No ash to clear away. The system virtually runs itself. And because oil is such a clean-burning fuel there is the minimum of atmospheric pollution—an important point in a city of so many architectural beauties as Oxford.

These advantages of oil-fired heating are equally important in many other public buildings—in blocks of flats and offices, in hospitals and schools, in factories and large stores. In largish private houses, too, there is every reason for using this labour-saving, automatically controlled heating system. Have you considered making provision for oil-firing in any of the buildings you are designing or modifying? For detailed information of a technical nature please write to Shell-Mex and B.P. Ltd., Fuel Oil Dept. 13F, Shell-Mex House, Strand, London, W.C.2. A representative will be glad to answer your queries, and this will, of course, place you under no obligation.

1948-49 PROGRAMME

DEVELOPMENT WORK

Performance. The results of the continuous running tests on the 1947 schools indicated that, from the point of view of comfort in the schools, no alteration was required to the performance of the system. The need still existed, however, to reduce the running cost still further. An experiment carried out at Malvern Way School by Weatherfoil Ltd. suggested that the temperature setting on the night control thermostat could be drastically lowered. This would allow the building to cool off to a greater extent during the hours of darkness. By thus reducing the temperature difference a very great saving in fuel could be made. It was decided to incorporate this low setting in all new schools as well as retrospectively modifying the controls in the 1947 schools.

It would in future be possible to assume a smaller cube for the schools when designing the heating systems, for ceiling heights in infants' classrooms had been reduced for architectural and educational reasons. This had been made possible by the adoption of a satisfactory opening roof light.

Heater cabinets. It was unnecessary to continue with the use of the free-standing case since it was always possible to position cabinets in store rooms, etc. Since the batteries had already been made it was decided to go on using the two-sided fibrous plaster cabinets for the first schools of the 1948-1949 programme. Thereafter a new cabinet would be adopted, having the whole of one side removable for inspection, and designed for erection at an early stage of the job by the builder, the finishes being applied later. Switches were to be incorporated in the room thermostats to enable the fans in the cabinets to be switched off when the room was being cleaned and the air dusty. In addition the regular cleaning of batteries was arranged to take place with the annual servicing of the fan motors.

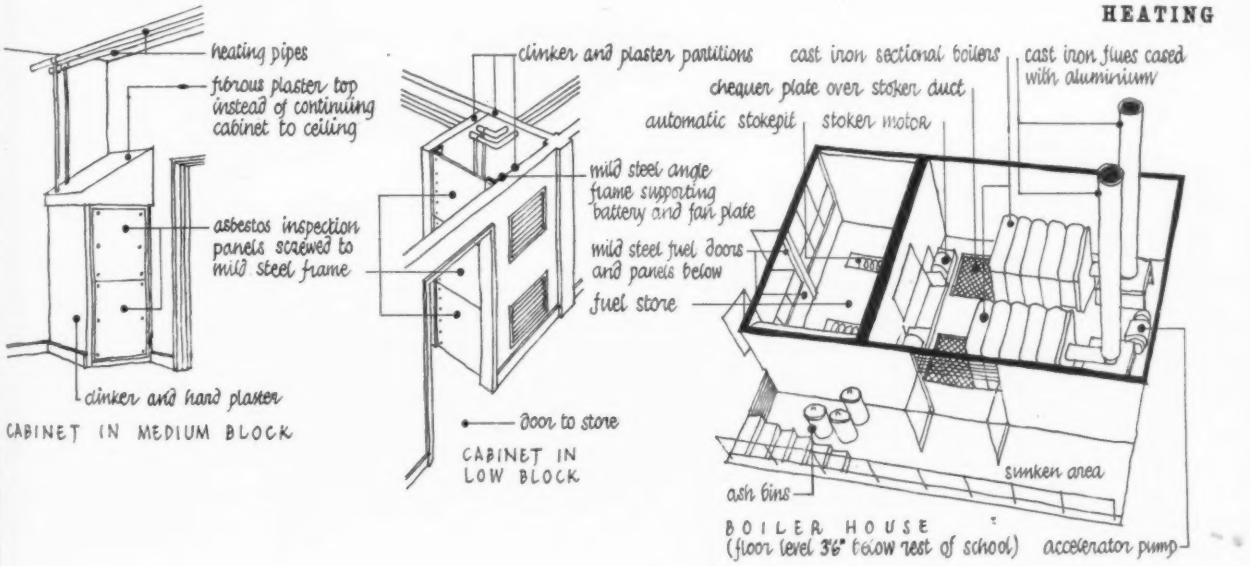
Boilerhouse. As high grade fuel was in short supply it was decided to change from the mild steel magazine type boilers to underfed cast iron boilers with automatic stokers. There was still a delay in the delivery of these boilers and the first schools of the new programme had to be built with the old type of boiler.

To feed the stoker worms and slightly increase the capacity of the fuel store the boilerhouses had to be sunk 3-ft. 6-in. below the general floor level. The increased cost of builder's work was, to a certain extent, offset by the rather cheaper apparatus. Two boilers were provided in each boilerhouse; in the event of a break-down one boiler alone was just capable of maintaining the heating.

The fuel doors were redesigned for easier cleaning and insulated cast iron flues with an aluminium outer sleeve were adopted.

Hot water supply. Calorifiers, heated by coils from the heating circuit, were provided in the lavatories. Electric immersion heaters were retained for staff lavatories where warm water was required throughout the year.

HEATING



CRITICISM

Performance. The system continued to provide satisfactory standards of comfort in what was now a very large number of new schools. The modifications made to the night temperature setting and the introduction of a calorifier to supply warm water to the lavatories had helped to reduce fuel bills still further.

The introduction of mechanical stokers to schools in the programme had made the daily operation of the system completely automatic except for the removal of ash and clinker.

Heater cabinets. The cabinet had been designed for location in store rooms. Both its shape on plan and its appearance from behind made it unsuitable for backing into habitable rooms. In the 1948-1949 programme this had not been a limitation, but during the 1950 programme the Ministry of Education imposed a cost per place maximum price for new schools and it was becoming necessary to compact the plans and provide fewer store rooms. The cabinets were, in fact, tending to dictate the provision of separate rooms for storage when other, more economical methods, such as open shelves and cupboards, were indicated.

The inspection panel was an improvement on previous designs but it was still not satisfactory. It was clear that no panel fixed with a screwdriver would provide the ready accessibility needed.

Boilerhouse. As had been expected, the excavation, tanking and additional brickwork by the general contractor necessitated by the sunken boilerhouse had tended to complicate the jobs and make rapid construction slightly more dependent on weather and site conditions. Whilst this was offset by other advantages it was clear that the sunken area and the boilerhouse needed to be reduced in size.

The provision of a standby boiler to even the smallest schools for use only in case of breakdown seemed wasteful.

The new fuel doors had assisted cleaning but had to be designed for a full width opening between steel stanchions. The hinging of one door on another was not satisfactory; the result being that after some use the doors sagged and would not close properly.

And now-

the T.D.A. Ground Floor follows the T.D.A. Roof, known and used by Housing Authorities in all parts of the country, as a further contribution to efficiency and economy in building.

the TDA-

floor design saves cost, time, excavation and bricks; it allows the use of joists in random lengths, finished with softwood boarding or decorative hardwood strip, and above all provides a warm, resilient . . .

Ground Floor

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TD 73A

THE INDUSTRY

From the Industry this week Brian Grant reports on a new range of emergency lighting sets, a plastic tile, plastic seat backs, steel rolling shutters, and a booklet on floor maintenance.

EMERGENCY LIGHTING

A new series of self-contained emergency lighting sets, all conforming to Home Office and cinematograph regulations, has recently been added to the Keepalite range. Of the four sizes available in the new range the two smaller run at 12 volts and the two larger at 24 volts. The accumulators are housed in the lower half of a sheet-steel cubicle and above them are the necessary transformers and rectifying gear. These sets are intended for use in village halls, community centres, school assembly halls, small cinemas and similar buildings, and work on the floating battery principle in which current for the emergency lighting normally comes from the mains supply through a transformer and rectifier, with the battery floating across the output circuit. There is therefore no break in lighting continuity if the mains supply should fail. (*Chloride Batteries Ltd., Clifton Junction, Swinton, Manchester.*)

NEW PLASTIC TILE

A new tile made from P.V.C. resin and known as Vinylex has been added to the range of Semastic decorative tiles produced by Semtex Ltd. It is intended to meet the demand for a vinyl asbestos type of thermoplastic tile at moderate cost, and has a high resistance to wear and tear and to the effects of oil, grease, acids, alkalis and also alcohol. Two thicknesses are produced, $\frac{1}{8}$-in. and $\frac{3}{16}$-in., and the prices are 24s. 6d. and 34s. per square yard supplied and laid and inclusive of Purchase Tax. The tiles are available in seven different colours. (*Semtex Ltd., Semtex House, The Broadway, Welsh Harp, London, N.W.9.*)

SEATING AT WIMBLEDON

Anyone who was lucky enough to have a centre-court seat at Wimbledon last month may have noticed that the seating has been somewhat revised since last year. The previous park-bench type seating was never particularly comfortable and had given rise to a number of complaints. Post formed Delaron laminated plastic backs are now being used, some 9,000 being installed. The moulded backs were screwed to the existing rails using four plastic blocks as packing to allow for the curvature, and numbers were machined on each seat back and were filled in with white.

Since these seats are exposed to the weather all the year round it was essential to choose some material which would not need painting and would also neither warp nor rot. The material used seems an obvious choice, as maintenance costs should be virtually negligible. (*Thomas de la Rue & Co. Ltd.*)

STEEL ROLLING SHUTTERS

Messrs. Mather & Platt have just issued a booklet giving constructional information about steel rolling shutters of all kinds. The object of the book is to provide a ready reference for designers, and it should be useful in that it provides details of the clearances required for different types of shutters so that it should be possible to avoid the additional expense of last minute alterations. The firm makes shutters of all kinds from the comparatively small self-coiling type suitable for openings up to 80 square feet, to the more elaborate electrically-operated shutters controlled by push-button. Fire resisting shutters are also produced both to the regulations of the London County Council, which require an automatic release mechanism operated by a fusible link, and to the Fire Offices Committee regulations which have no objection to the fitting of automatic release mechanism, but do not make it compulsory. (*Mather & Platt Ltd., Park Works, Manchester* 10.)

FLOOR MAINTENANCE

There are now so many types of floor finish on the market that it is little wonder mistakes are made in the choice of cleaning and polishing materials. The architect is probably more immediately concerned with factors such as resistance to abrasion and to grease, acids, or even molten metal. The choice of a floor finish, however, presumably has to be justified to the building owner, who may well also ask for information about suitable cleaning materials. A booklet entitled " Maintenance of floors and floor coverings " has now been published by H. Russell Ltd., who are manufacturers of cleaning and polishing materials. The booklet deals with many different types of floor from concrete and wood to asphalt, linoleum, and the newer types of thermoplastic tiles. It gives concise information, not only about routine maintenance but on the steps to be taken when a floor has been allowed to become exceptionally dirty. The polishes and cleaning agents recommended are naturally those produced by Messrs. Russell themselves, but it would be scarcely reasonable to ask them to recommend the products of rival manufacturers. This is an enlightened piece of publicity, which contains a great deal of useful general information and only a very moderate amount of propaganda. Copies are obtainable from the manufacturers at *Kirkby Trading Estate, Liverpool.*

Part of the seating at Wimbledon with the Delaron laminated plastic backs installed.

THE LIBRARY OF INFORMATION SHEETS

CANCELLATION

Sheet 32.C31 (*published* 18.3.48) *has been cancelled and should be removed from collections. It is replaced by Sheet* 32.C31 *published in this issue.*

Buildings Illustrated

Public Library, maisonnettes and flats at High Road and Brereton Road, Tottenham, London, N.17, for the Tottenham Borough Council. (Pages 184-185.) Architects: V. A. Jolley, A.R.I.B.A. Chief Architectural Assistant: R. L. Head, A.R.I.B.A. Assistant Architect in charge of the Borough Engineer and Surveyor's Dept. Quantity Surveyors: E. C. Harris & Partners. General Contractor: C. J. Manning (Builders) Ltd. Clerks of Works: F. Cole and H. Graves. General

Readers requiring up-to-date information on building products and services may complete and post this form to the Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order of manufacturers' names please.)

.....

.....

.....

Please ask manufacturers to send further particulars to :—

NAME .....

PROFESSION or TRADE

.....

ADDRESS .....

.....

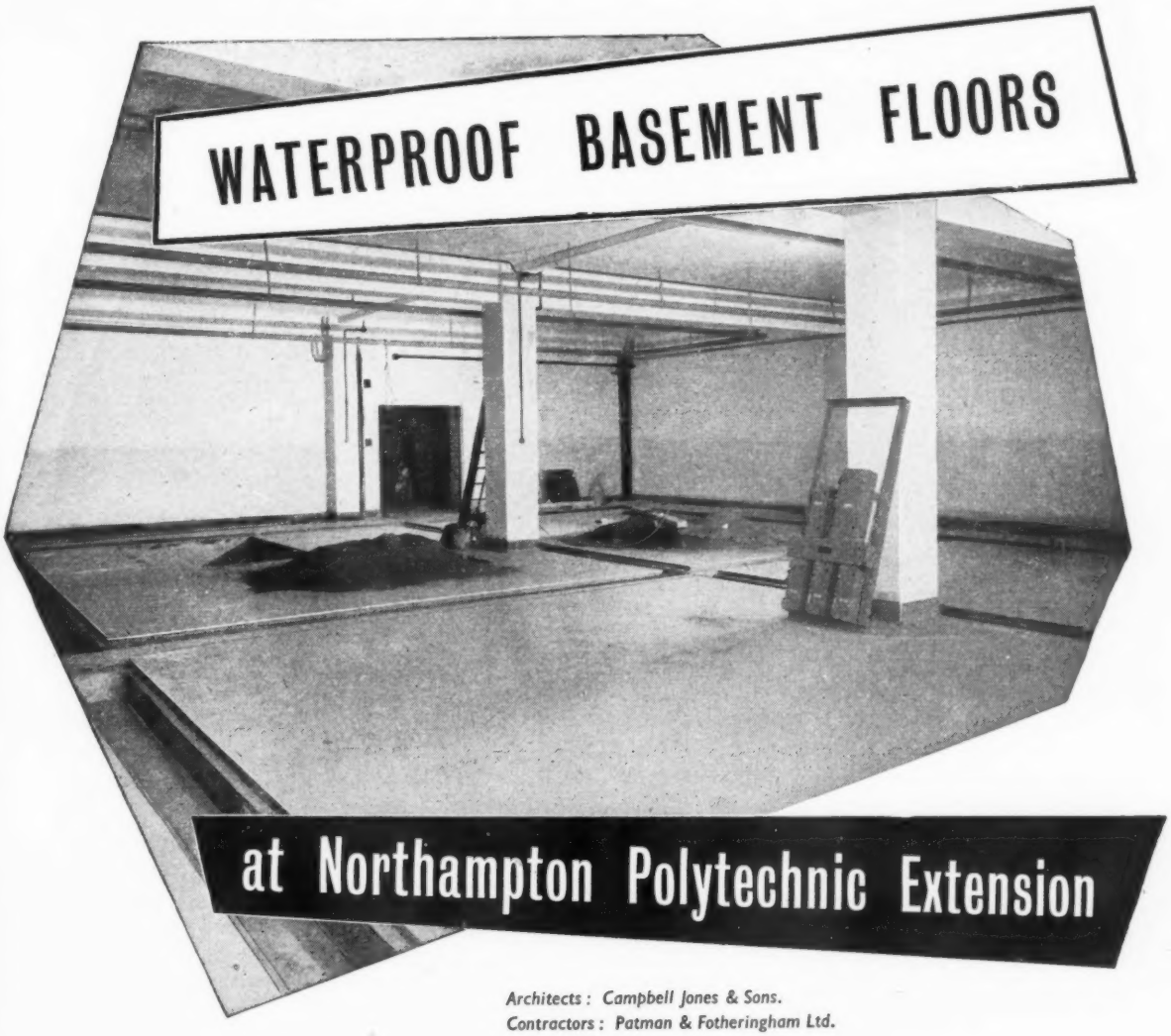
11.8.55

Foreman: H. Strong. Sub-contractors: asphalt, H. V. Smith & Co. Ltd.; reinforced concrete, Caxton Floors Ltd.; facing bricks, National Brick Co. Ltd.; artificial stone, Hubert C. Leach Ltd.; tiles, Ernest Wedge; woodblock flooring, Hollis Bros. Ltd.; patent flooring, Neuchatel Asphalt Co. Ltd.; central heating, Stitson White & Co. Ltd.; gasfitting, Eastern Gas Board; gas-fired heaters, Ideal Boilers & Radiators Ltd.; electric wiring, Tottenham Borough Council; electric light fixtures (library only), Troughton & Young Ltd., Merchant Adventurers of London Ltd., and Courtney Pope (Electric) Ltd.; sanitary fittings, Stitson Sanitary Fittings Ltd.; door furniture, G. & S. Allgood; casements, John Thompson (Beacon Windows) Ltd.; joinery, Geo. M. Hammer & Co. Ltd. (library fittings); library and garden furniture, Ernest Race Ltd.; shrubs and trees, Tuck & Ballard; library notice boards, Frederick Sage & Co. Ltd.

Health Centre, Stranraer, Wigtonshire, Scotland. (Page 186.) Architects: T. A. Jeffryes, A.R.I.B.A., M.T.P.I., Chief Architect and Planning Officer, Department of Health for Scotland, R. S. Morton, A.R.I.B.A., Deputy Chief Architect, G. H. Lawrence, A.R.I.B.A., Senior Architect, J. R. McKee, F.R.I.B.A., Architect-in-charge, in collaboration with Forbes Murison, A.R.I.B.A., Chief Architect, Western Region Hospital Board (Scotland). Heating consultants, Ian Hunter & Partners; quantity surveyors, Richard H. Hall & Logan. Contractors: excavation, foundations, brickwork and plastering, J. Alexander & Son; joinery, J. Brown & Son (Building Contractors) Ltd.; plumbing, S. & M. Davidson; heating, James Boyd & Son Ltd.; electrical work, Alexander Arkley; paintwork, Adam Hannah.

St. Mary's Hall, Churchfields, Church Lane, Chessington, Surrey, for the Parochial Church Council of St. Mary's Chessington. (Pages 187-194.) Architect: Kenneth Wood, A.R.I.B.A., A.M.I.S.E., in association with Henry Blyth. Consultants: structural, W. H. Willatts; electrical, M. W. Bayley; general foreman, A. E. Robinson. General contractors, Thorogood & Sons Ltd. Subcontractors: dampcourses, Ruberoid Co. Ltd.; bricks, Uxbridge Flint Brick Co. Ltd.; load bearing blocks, Thermalite Ltd.; stressed skin ply faced timber boxbeams, laminated mahogany columns, Elliott's of Reading; roofing felt, Permanite Ltd.; glass and rooflights, C. Clifford Ltd.; patent flooring, Torginol Ltd.; cedar boarding, Hazelby & Co.; drainage conduits, Key Engineering Co. Ltd.; central heating (radiant gas), gas fixtures and fittings, South Eastern Gas Board; electric wiring, Meredew & Sons; electric light fixtures, Merchant Adventurers of London Ltd., Simplex Electric Co., Universal Metal Furring and Lathing Co. Ltd.; Phillips Electrical Co. Ltd.; door and window furniture, A. Roberts; gas heaters, Radiant Heating Ltd.; sanitary fittings, Builders' Merchants; joinery (windows), Newsums & Sons; textiles, Dryad Ltd.; furniture, Remploy Ltd.; r.c. concrete, bollards and cantilever steps, Cooper Wettern; "veelap" ceiling lining, Merchant Trading Co. Ltd.; sign writing, Clifford Clark; paint, T. Parsons & Sons Ltd.; foundation stone, F. Roberts; muntz metal nails, J. Stone & Co. (Deptford) Ltd.

Church Hall, Fernhill Road, Hawley, Hampshire. (Pages 195-196.) Architect, Alec Livock, A.R.I.B.A. General Contractors, Raymond G. Kemp (Camberley) Ltd. Subcontractors: Copper roofing, Broderick Insulated Structures Ltd.; electrical installation, Dewson Electrical Contractors; gas installation, Aldershot and District Gas Undertaking, Southern Gas Board; windows and roof lights, Wottons (Croydon) Ltd.; hardwood strip flooring, Acme Flooring and Paving Co. Ltd.; accotile flooring, Gabriel, Wade & English Ltd.



Architects: Campbell Jones & Sons.
Contractors: Patman & Fotheringham Ltd.

In constructing the new extension to the Northampton Polytechnic, St. John Street, London, E.C.1, the whole of the basement floor was made waterproof by the inclusion of 'PUDLO' Brand Cement Waterproofer throughout the thickness of the concrete. The illustration above shows the Hydraulics Laboratory which occupies a small section of the new basement.

'PUDLO' BRAND

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CEMENT WATERPROOFING POWDER

The most reliable fire cement is 'FEUSOL'. Have you tried it?

The word 'PUDLO' is the registered Trade Brand of Kerner-Greenwood & Co. Ltd. by whom all articles bearing that Brand are manufactured. Sole Proprietors and Manufacturers:

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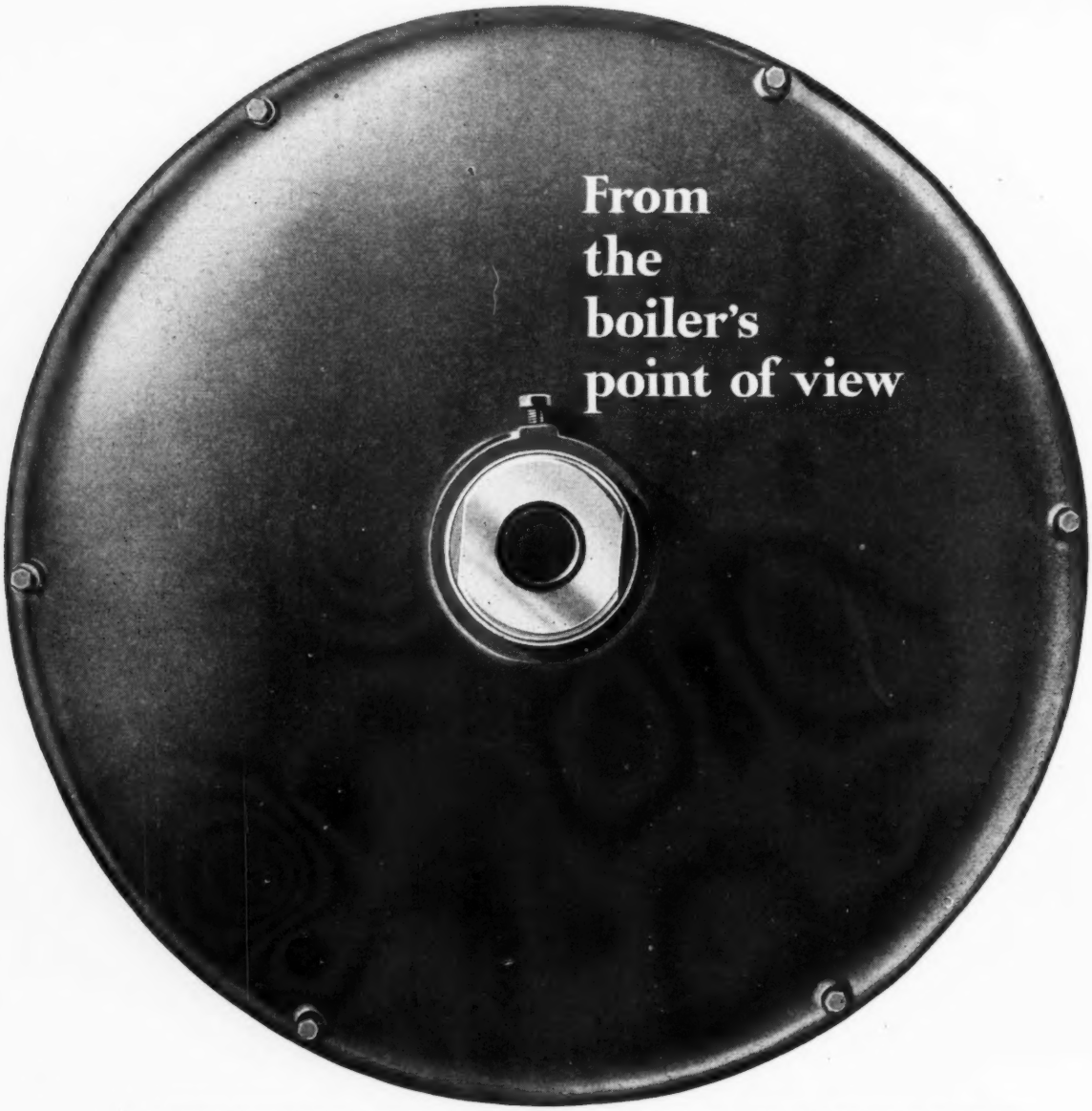

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★ BURNS ANY VISCOSITY FUEL (INCLUDING 100% WASTE) WITHOUT CHANGING THE SELF-CONTAINED HYDRA BURNER

For thirty years, Hydra burners have been precision engineered to a constant standard of supremacy.

Leading industries throughout Britain use

HYDRA OIL FIRING EQUIPMENT

for topmost efficiency and utmost economy

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Special methods of application for Cochran and other vertical boilers. Enquiries invited.

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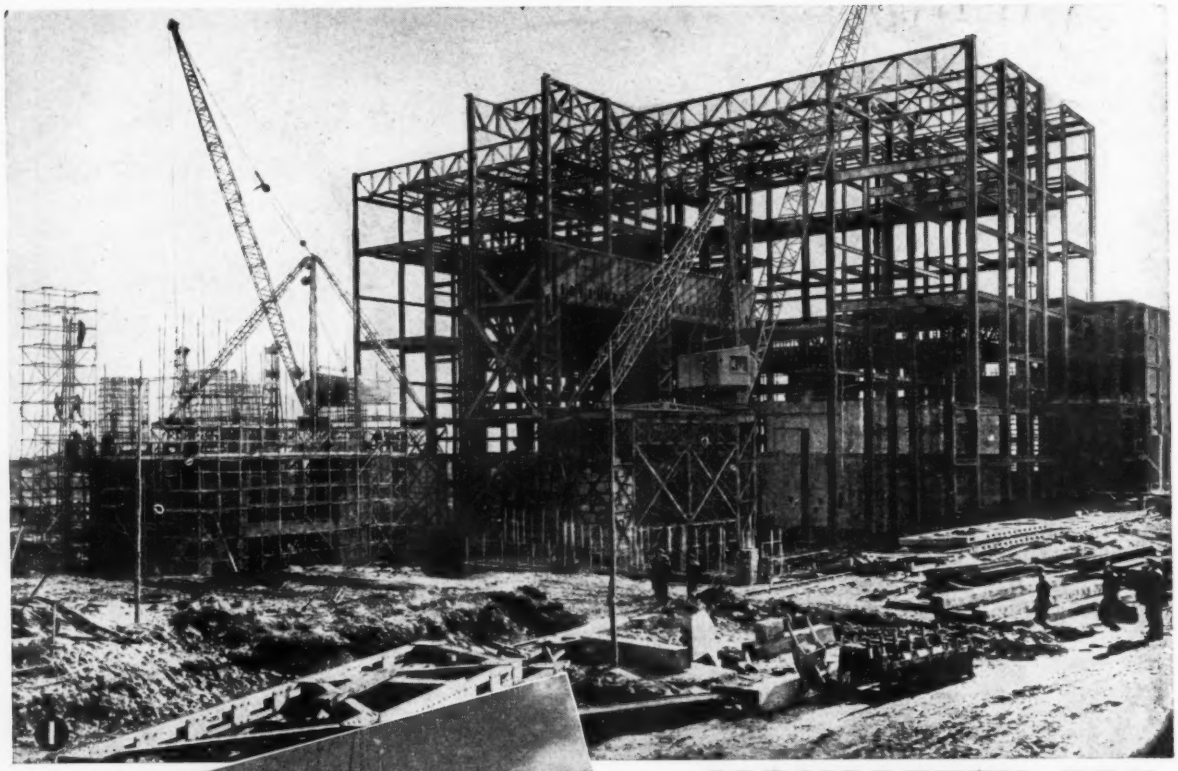
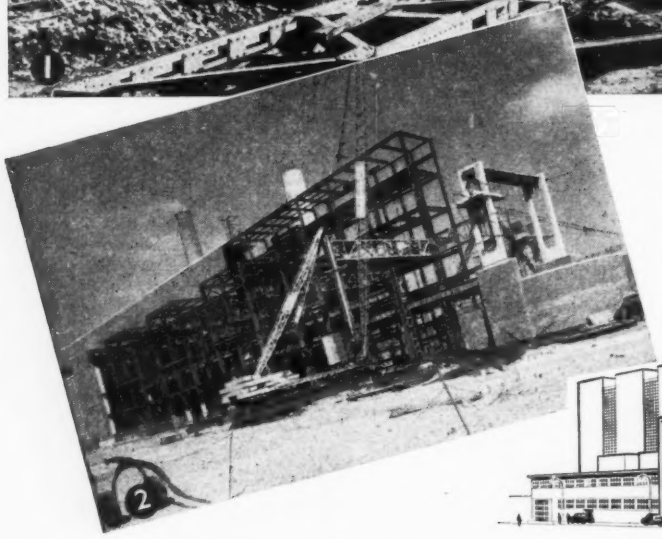
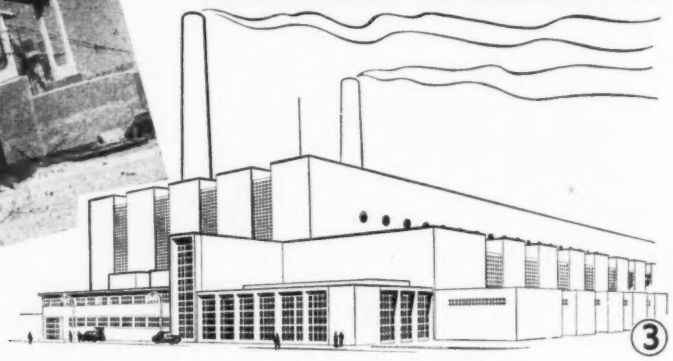




CARMARTHEN BAY POWER STATION



1. View towards South-East across No. 1 Boiler House site showing also No. 1 Chimney Plinth in course of construction.
2. Main Building. General view of No. 3 Turbine Room and tank annexe steelwork from South side, looking North-West.
3. Main building. General view of Station building from foreshore, looking North-East.

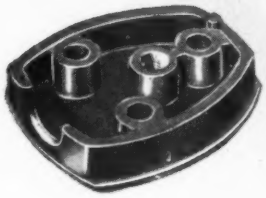
Photographs by courtesy of the Central Electricity Authority, South Wales Division.
Engineers and Contractors: Messrs. Balfour, Beatty & Co. Ltd.

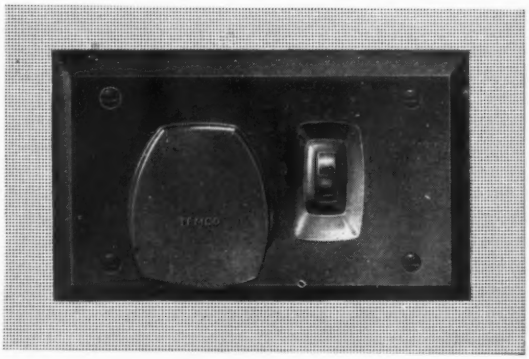
STRUCTURAL STEELWORK BY

SOUTH DURHAM

SOUTH DURHAM STEEL & IRON CO. LTD. (incorporating CARGO FLEET IRON CO. LTD.)
Central Constructional Department, Malleable Works, Stockton-on-Tees. Telephone : Stockton-on-Tees 66117.

Right at every point





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"It come 'orf in me 'and, mum..."

Our sympathy's entirely with you, Mrs. B. There are some people who cheerfully spend a small fortune on redecorating, yet positively seem to enjoy living with antiquated locks and door furniture, cracked and stained finger plates, rusty postal knockers, and so on. But the more enlightened 'furnish' their doors as well—refitting with elegant and enduring Yale door furniture chosen from an impressive range of designs and finishes.

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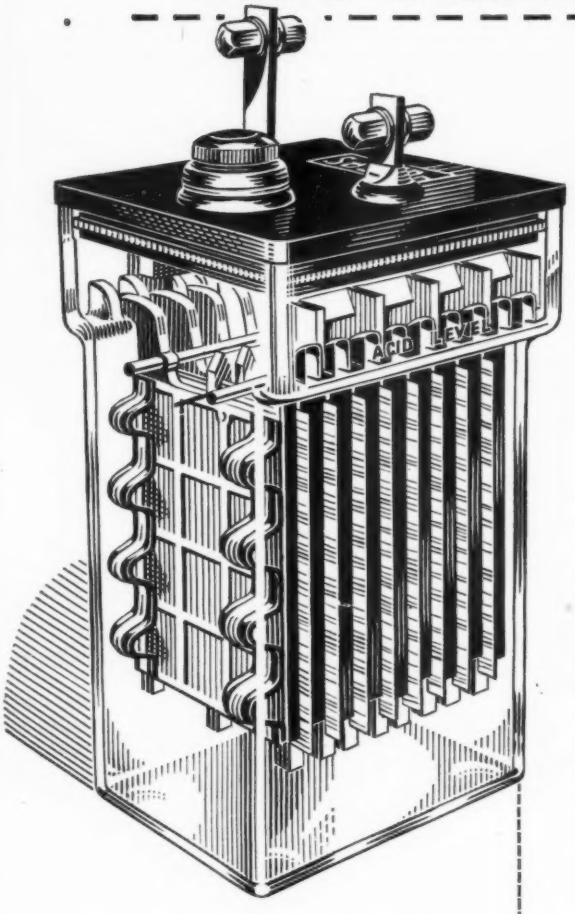
The Ideal Cell for



The P.& G. Closed Top Cell has a lid of moulded Dagenite composition with a rubber joint ring, and rubber gaskets between the terminal pillars and lid, to render the lid acid-tight

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– exclusive to the P&G system

Every link in the chain of an emergency lighting system must be completely reliable—not least the source of electricity supply: THE BATTERY.

In the P. & G. Closed Top Cell this reliability rests upon the longest experience in battery manufacture. A design has been evolved which gives all the advantages of a sealed cell—yet there is a lid which can be removed with the minimum of trouble. This is the ideal battery cell for emergency lighting.

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The P. & G. emergency lighting system is instantaneous and automatic in operation and is covered by the P. & G. 3-Point Service comprising:

—Technical advice and specification
—Complete equipment
—Regular inspection and report

P. & G. also supply self-contained battery and charger cubicles for fire alarms, telephones and electric clocks.

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The Future of Architecture

BY FRANK LLOYD WRIGHT

THIS BOOK PROVIDES a valuable contribution to the philosophy of architecture by one of the greatest living American architects; the Grand Old Man of American architecture as the *Architects' Journal* has called him—he is now 88. To practising architects, to students of architecture, to connoisseurs and to interested laymen—all of whom have long been familiar with illustrated examples of Frank Lloyd Wright's work—it will prove provocative and stimulating because it comprises in one volume the major statements he has made during the past quarter-century of the thought and feeling that have inspired his work.

In the first section, 'Conversation,' Mr. Wright explains his aims and achievements as a creative designer in more than sixty years of strenuous practice from his early days in Chicago under Louis Sullivan until the present time. The remainder of the book brings together, for the first time in a single volume, several rare works originally published in separate editions, only one of which—*An Organic Architecture: The London Lectures* (1939)—has previously been published in this country (it has long been out of print). The other sections, new to English readers, are *Modern Architecture: The Princeton Lectures* (1930); *Two Chicago Institute Lectures* (1931); and *Some Aspects of the Future of Architecture* (1937).

Finally, as a useful appendix to the theories, beliefs and criticisms that have preceded it, Mr. Wright adds (1953) a brief essay, *The Language of an Organic Architecture*, in which he clearly and carefully defines his terms, and appends his 'nine-word lexicon needed, world-wide, at this moment of our time.'

The book has a portrait frontispiece, and many illustrations of Frank Lloyd Wright's buildings.

Size 10¼ *in. by* 8¼ *in.,* 326 *pages thoroughly illustrated.* 50*s. net, postage* 1*s.* 3*d. inland.*

This edition for sale only in U.K. and Commonwealth.

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CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

Public and Official Announcements

25s. per inch; each additional line, 2s.

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 18-59 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

BOROUGH OF SOLIHULL.
APPOINTMENT OF ASSISTANT ARCHITECTS.

Applications are invited for the following posts in the Borough Engineer & Surveyor's Department:—

PRINCIPAL ASSISTANT ARCHITECT A.P.T. Grade VI £825—£1,000 (to be in charge of the education section).

ASSISTANT ARCHITECT A.P.T. Grade IV £675—£825.

ASSISTANT ARCHITECT, A.P.T. Grade III, £600—£725.

JUNIOR ASSISTANT ARCHITECT A.P.T. Grade I—£500—£580.

Solihull has a population of 75,000 which is to increase to 110,000 over the next few years, and the appointments are primarily in connection with the large programme of schools, etc., which is in hand as a result of the rapid expansion of the Borough.

No application forms are being issued, but the Borough Engineer will be pleased to answer specific questions regarding the positions.

The appointments are subject to the Local Government Superannuation Acts, the National Scheme of Conditions of Service and one month's notice.

Where applicable housing accommodation will be made available, as soon as possible.

Applications, giving the names of two referees should be sent to Mr. C. R. Hutchinson, B.Sc., A.M.I.C.E., Borough Engineer & Surveyor, 90, Station Road, Solihull, not later than 1st September, 1955.

W. MAURICE MELL,
Town Clerk.

26th July, 1955. 2144

COUNTY BOROUGH OF SUNDERLAND.

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

(*a*) ASSISTANT ARCHITECTS—salary within Grade A.P.T. IV (£675—£825).

(*b*) SENIOR ARCHITECTURAL ASSISTANTS—salary within Special Scale (£650—£775).

(*c*) ASSISTANT QUANTITY SURVEYORS—salary within Grade A.P.T. IV (£675—£825).

(*d*) SENIOR QUANTITY SURVEYING ASSISTANTS—salary within Special Scale (£650—£775).

(*e*) QUANTITY SURVEYING ASSISTANTS—salary within Grade A.P.T. II (£560—£640).

Applicants for (*a*) must be members of the R.I.B.A., for (*b*) have passed Parts I and II of the R.I.B.A. Final or Special Final examination or their equivalent at a recognised School of Architecture, for (*c*) and (*d*) have passed the Final examination of the R.I.C.S., and for (*e*) have passed the Intermediate examination of the R.I.C.S. Commencing salaries will be fixed according to experience.

Application forms and further details from the Borough Architect, Grange House, Stockton Road, Sunderland (state for which appointment it is desired to apply).

Closing date for receipt of completed applications, 26th August, 1955.

Canvassing, either directly or indirectly, will disqualify.

G. S. McINTIRE,
Town Clerk.

Town Hall,
Sunderland.
22nd July, 1955. 2100

CWMBRAN DEVELOPMENT CORPORATION.
APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the above superannuable post in my Department, which carries a salary range of £760×£25—£885 per annum. The commencing salary will be in accordance with the qualifications and experience of the successful candidate.

Applicants must be Chartered Quantity Surveyors, and be fully experienced in taking-off, billing and abstraction, site measurement, valuation of work, and preparation of final accounts.

Housing accommodation will be made available in suitable cases, or otherwise lodging expenses, in accordance with the Corporation's scale, will be paid to married men for a limited period.

Applications, stating age, experience, details of present and former employment (together with applicable salaries), and the names and addresses of two referees, must reach the undersigned by first post on 1st September, 1955.

J. C. P. WEST, A.R.I.B.A., M.T.P.I.,
Chief Architect.

Victoria Street, Cwmbran, Mon.
3rd August, 1955. 2246

CARDIGAN COUNTY COUNCIL.

Applications are invited to fill the following vacancies in the County Architect's Department, County Hall, Aberayron:—

(*a*) ARCHITECTURAL ASSISTANT, Grade A.P.T. I—II (£500—£640).

(*b*) ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£560—£640).

Applicants should have passed the R.I.B.A. Intermediate Examination and should have had a minimum of one year's experience in an Architectural Office. Commencing salary will be in accordance with qualifications and experience.

Application forms and conditions of appointment can be obtained from the County Architect and these must be returned to the undersigned by not later than 22nd August, 1955.

J. E. R. CARSON,
Clerk of the Cardiganshire County Council.

Swyddfa'r Sir,
Aberystwyth. 2101

CITY OF PETERBOROUGH.
CITY ENGINEER & SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of a SENIOR ARCHITECTURAL ASSISTANT on the staff of the City Engineer & Surveyor, at a salary within A.P.T. Grade IV (£675/£30/£825).

Applicants must be qualified architects, experienced in school building and capable of carrying out sketch designs, working and detail drawings and site control, with the minimum of supervision.

In a suitable case, the Council will, if desired, provide housing accommodation.

Forms of application may be obtained from the City Engineer, Town Hall, Peterborough. Closing date for applications is the 18th August, 1955.

C. PETER CLARKE,
Town Clerk.

Town Hall,
Peterborough.
July, 1955. 2143

SKIPTON URBAN DISTRICT COUNCIL.
ARCHITECTURAL ASSISTANT.

Salary within £675 × £30—£825 (Grade IV) according to qualifications and experience. N.J.C. Service Conditions.

Established post for Capital Works (houses, shops, flats, public baths, park development, etc.). House available, if required.

Apply, giving age, qualifications, salary grading, experience and names of three referees, to the Surveyor and Water Engineer (Mr. K. B. Robinson, B.Sc. (Eng.), A.M.I.C.E.), Town Hall, Skipton, by 22nd August, 1955.

L. E. SMITH,
Clerk to the Council.

2150

BEDFORDSHIRE COUNTY COUNCIL.
ASSISTANT QUANTITY SURVEYORS.

APPLICATIONS are invited from suitably qualified persons for the following vacancies on the permanent establishment:—

(*a*) ASSISTANT QUANTITY SURVEYOR, A.P.T., Grade IV (£675—£825 per annum).

(*b*) QUANTITY SURVEYOR'S ASSISTANT, A.P.T., Grade II (£560—£640 per annum).

Application forms can be obtained from the County Architect, Shire Hall, Bedford, and should be returned to him as soon as possible.

2133

I.A.A.S.
FORTHCOMING EXAMINATIONS.

The Incorporated Association of Architects and Surveyors will hold the following examinations during the week beginning 21st November, 1955:

QUANTITY SURVEYORS' SECTION:
Intermediate grade (Relegations only).
Final grade—Part I (Relegations only).
Final grade—Part II.
Direct Final grade (Relegations only).

BUILDING SURVEYORS' SECTION:
(Including Municipal)
Intermediate grade (Relegations only).
Final grade—Part I (Relegations only).
Final grade—Part II.
Direct Final Grade (Relegations only).

The examinations will be held in London, and at selected provincial centres. Applications from candidates for permission to sit, made on the prescribed form, must be received not later than Monday, 29th August, 1955.

Full information on application to the General Secretary, I.A.A.S., 75, Eaton Place, London, S.W.1. 1544

CITY OF LEEDS.
CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

ASSISTANT QUANTITY SURVEYORS, A.P.T. IV (£675—£825).

ASSISTANT QUANTITY SURVEYORS, A.P.T. II (£560—£640).

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 appointments are subject to the Local Government Superannuation Acts, 1937-1953, and the successful applicants 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 recent testimonials, by 12 noon Friday, 26th August, 1955.

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

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

Priestley House, Quarry Hill, Leeds, 9.
28th July, 1955. 2225

COUNTY BOROUGH OF BARROW-IN-FURNESS.
BOROUGH ENGINEER AND SURVEYOR'S DEPT.
APPOINTMENT OF CHIEF ARCHITECT.

Applications are invited from qualified Architects with wide Municipal experience for the post of Chief Architect on Grade A.P.T. VII (£900—£1,100 per annum). The commencing salary will be fixed within the grade.

A car allowance in accordance with the N.J.C. Scales will be paid.

It is possible that the Council will allocate a Corporation house subject to the merits of the case being satisfactory to the interviewing Committee.

Full details of the post, conditions of appointment and application forms, may be obtained from the Borough Engineer and Surveyor, to whom completed forms must be returned not later than Monday, 5th September, 1955.

LAWRENCE ALLEN,
Town Clerk.

Town Hall, Barrow-in-Furness. 2232

COUNTY COUNCIL OF ESSEX.
ARCHITECT, A.P.T.D. VI.

Required on the established staff, experienced Architect Grade VI A.P.T.D., to be in charge of work required by, amongst others, the Civil Defence Committee of the County Council. Commencing salary according to qualifications and experience but not exceeding £1,000.

Previous local government experience is not essential, but a knowledge of, and interest in, Civil Defence work will be an advantage.

Application form from H. CONOLLY, F.R.I.B.A., County Architect, County Hall, Chelmsford, to be returned with copies of three testimonials by 26th August, 1955.

Canvassing disqualifies. 2365

COUNTY BOROUGH OF SOUTHAMPTON.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the post of GROUP ARCHITECT, Grade VI (£825—£1,000). Candidates should be Associate Members of the Royal Institute of British Architects. Applicants should state their housing needs.

Applications, on forms obtainable from the Borough Architect, Civic Centre, Southampton, should be returned by 22nd August, 1955. 2189

DURSLEY RURAL DISTRICT COUNCIL.
TECHNICAL ASSISTANT.

Applications are invited for the above appointment, in the Department of the Engineer and Surveyor, at a salary in accordance with A.P.T., Grade I.

Candidates should be competent draughtsmen, capable of producing detail plans and working drawings in connection with new housing schemes, and a knowledge of Building Construction will be an advantage. Applications, stating age, experience, and qualifications, must be delivered to the undersigned not later than first post on Tuesday, 23rd August, 1955.

H. A. PATE,
Clerk of the Council.

Council Offices, Kingshill, Dursley, Glos.
3rd August, 1955. 2361

CORBY DEVELOPMENT CORPORATION.

Applications are invited for the following appointments in the Department of the Chief Architect:—

SENIOR MAINTENANCE ASSISTANT (£900×£50—£1,100) for site supervision in connection with final certificates and building maintenance. Candidates should have had considerable office and site experience, preferably with major housing schemes.

SENIOR CLERK OF WORKS (£725 × £25—£825) and CLERK OF WORKS (£600×£25—£700) for the supervision of major building contracts.

The work of expanding the New Town of Corby from 22,000 to 40,000 population in the next 6 to 10 years is now reaching its most intensive phase and offers exceptional experience.

Appointments are subject to the Local Government Superannuation Scheme. Housing is available. Applications, stating age, education, training qualifications, experience, appointments and salaries, together with the names of two referees, must reach the undersigned by Monday, 22nd August, 1955.

F. BROOKS GRUNDY,
General Manager.

Spencer House, Corby, Northants. 2239

CWMBRAN DEVELOPMENT CORPORATION.
APPOINTMENT OF ASSISTANT ARCHITECTS.

Applications are invited for two superannuable posts as Assistant Architects in my Department.

The salary range will be £760 × £25—£885 p.a., and the commencing salary will be in accordance with the qualifications and experience of the successful candidates.

Applicants must be Associates of the R.I.B.A. with not less than four years' office experience, and should have had good experience in house design, construction and layout.

Housing accommodation will be made available in suitable cases, or otherwise lodging expenses, in accordance with the Corporation's scale, will be paid to married men for a limited period.

Applications, stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees, must reach the undersigned by first post on 1st September, 1955.

J. C. P. WEST, A.R.I.B.A., M.T.P.I.,
Chief Architect.

Victoria Street, Cwmbran, Mon. 2245
3rd August, 1955.

GOVERNMENT OF NORTHERN IRELAND.
ASSISTANT ARCHITECT (SCHOOLS ADVISORY).

Applications are invited for an unestablished appointment as Assistant Architect in the Schools Advisory Section of the Directorate of Works, Ministry of Finance.

The salary scale, which attracts pay supplement of amounts between £25 and £35 per annum, is £675×£25—£750×£30—£960×£40—£1,000. The minimum is linked to age 26, plus an increment for each year above that age, subject to a commencing salary not exceeding £900, plus pay supplement of £30. An officer between 25 and 26 will be given an inclusive commencing salary of £675; and if under 25 will be paid according to qualifications and experience.

Candidates must be Registered Architects by examination and have had experience in schools design, preferably in the Architect's Department of an Education Authority.

The duties of the successful candidate will be, inter alia, to assist in the examination of and report on plans for all types of school buildings and community centres which have been submitted to the Ministry of Education for approval.

Preference will be given to candidates who served in H.M. Forces in the 1914-18 or 1939-45 wars, provided that such candidates are, or within a reasonable time will be, able to discharge the duties efficiently.

Application forms may be obtained from the Director of Establishments, Ministry of Finance, Stormont, and should be returned, with copies of two recent testimonials, so as to reach him not later than 26th August, 1955. 2183

CITY OF PORTSMOUTH.
CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(*a*) ASSISTANT QUANTITY SURVEYOR, Grade IV (£675—£825).
(*b*) ASSISTANT QUANTITY SURVEYOR, Grade III (£600—£725).
(*c*) ASSISTANT QUANTITY SURVEYOR, Grade I (£500—£580).
(*d*) ARCHITECTURAL ASSISTANT, Grade II (£560—£640).

Applicants for (*a*) and (*b*) should be experienced in taking off, abstracting, billing, estimating and preparing final accounts, etc.; for (*c*) experienced in abstracting and dealing with sundry accounts; for (*d*) should be of Inter R.I.B.A. standard with adequate office experience.

Applications, setting out in tabular form, name, age, qualifications, present post and salary, previous posts with dates, details of experience, with names of two referees, must be delivered to the undersigned not later than 12 noon, Monday, 29th August, 1955.

Canvassing will disqualify.

V. BLANCHARD,
Town Clerk.

City Council Chambers,
1, Clarence Parade,
Portsmouth. 2263

NEWCASTLE REGIONAL HOSPITAL BOARD.
NEWCASTLE GENERAL HOSPITAL.

(1) New Institute of Pathology and Regional Blood Transfusion Centre.
(2) Other Building Works.

CLERK OF WORKS.

Applications are invited for the appointment of a temporary Clerk of Works to supervise the erection of the above buildings.

The value of the Institute of Pathology is approximately £250,000 and that of the other works will aggregate about £125,000. The larger part of this work is already under construction, and it is expected that the appointment will be for about 18 months.

Applicants for the post must possess a thorough knowledge of the building trade, and have had previous experience as a Clerk of Works. They should also have had experience of reinforced concrete construction, and of specialised engineering services. Membership of the Incorporated Clerk of Works Association of Great Britain would be an advantage.

The salary will be at the rate of £13 16s. per week, and the conditions of service will be those set out in Whitley Circular P.T.B.44.

Applications, stating age, qualifications, previous experience and date when available, together with the names of three architects to whom reference may be made, should be enclosed in an envelope endorsed "Clerk of Works," and must be received by the Secretary within 7 days of the appearance of this advertisement.

Walker Gate Hospital, Benfield Road,
Newcastle upon Tyne, 6.
28th July, 1955. 2188

DERBYSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Vacancies for ARCHITECTS exist on the undermentioned scales:—

(*a*) £825×£35 to £1,000 per annum (Grade VI).
(*b*) £750×£30 to £900 per annum (Grade V).
(*c*) £675×£30 to £825 per annum (Grade IV).
(*d*) £650×£25 to £775 per annum (Special Grade).
(*e*) £560×£20 to £640 per annum (Grade II).
(*f*) £500×£20 to £580 per annum (Grade I).

Attractive work is available in all sections of the Department.

National Joint Council Conditions of Service. Pensionable posts. Canvassing disqualifies. Further details and application forms from the County Architect, County Offices, St. Mary's Gate, Derby—returnable by 2nd September, 1955. 2182

BOROUGH OF HARROW.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the under-mentioned appointments in the Department of the Borough Engineer and Surveyor (Mr. J. H. Melville Richards, A.M.I.C.E., M.I.Mun.E.):—

(*a*) ARCHITECTURAL ASSISTANT. A.P.T., Grade II (£560—£640 per annum, plus London "weighting").
(*b*) ARCHITECTURAL ASSISTANTS (TWO). A.P.T., Grades I/II (£500—£640 per annum, plus London "weighting").
(*c*) ARCHITECTURAL TRAINEE. Higher General Division (£170 (at age 15)—£475 per annum, plus London "weighting"). Commencing salary according to age.

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

The Council is unable to assist in obtaining housing accommodation for the successful candidate.

Forms of Application may be obtained from the undersigned, to whom they should be returned not later than Monday, 29th August, 1955.

D. H. PRITCHARD,
Town Clerk.

Council Offices, Harrow Weald Lodge,
Harrow, Middx. 2187

BOROUGH OF WORTHING.
BOROUGH ENGINEER'S DEPARTMENT.
ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment in the Architectural Section of the Borough Engineer's Department on Grade A.P.T. III, commencing at a salary of £600×£25—£725 per annum.

Applicants should have experience in design, and in the preparation of working drawings, and preference will be given to candidates who have passed the Intermediate Examination of the R.I.B.A.

The appointment will be subject to the National Scheme of Conditions of Service of Local Government Officers; to the provisions of the Local Government Superannuation Acts, and to the successful candidates passing satisfactorily a medical examination. The appointment will be terminable by one month's notice on either side.

Applications, stating age, qualifications, experience, present and past appointments, with dates, and accompanied by copies of two recent testimonials, should be sent to the Borough Engineer and Surveyor, Town Hall, Worthing, not later than Monday, 22nd August, 1955.

ERNEST G. TOWNSEND,
Town Clerk.

Town Hall, Worthing.
28th July, 1955. 2205

COUNTY BOROUGH OF READING.

Vacancies in the Borough Surveyor's and Borough Architect's Departments for:—

(*a*) GENERAL ENGINEERING ASSISTANTS, in Grade A.P.T. IV (£675—£825 starting salary, according to qualifications and experience).
(*b*) JUNIOR ENGINEERING ASSISTANTS, in Grades A.P.T. I-II (£500—£640, according to qualifications and experience).
(*c*) CLERKS OF WORKS, in Grade A.P.T. III (£600—£725).
(*d*) QUALIFIED ASSISTANT ARCHITECTS, in Grade A.P.T. IV (£675—£825 starting salary, according to qualifications and experience).

Appointments subject to (i) medical examination and (ii) determination on one month's notice. N.J.C. Conditions apply. Applications for housing accommodation and assistance towards cost of removal will receive favourable consideration.

Applications, stating age, qualifications and experience, to be sent with two testimonials or names of two referees for (*a*), (*b*) and (*c*) to Borough Surveyor, and for (*d*) to Borough Architect, P.O. Box 17, Town Hall, Reading, by 27th August, 1955.

G. F. DARLOW,
Town Clerk.

Town Hall, Reading. 2258

BOROUGH OF WIMBLEDON.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for an ARCHITECTURAL ASSISTANT, established staff.

Salary: Grade A.P.T. I (£500 to £580 per annum, London weighting additional). Applicants should have attended a full-time course of Architecture and have passed the R.I.B.A. Intermediate Examination or its equivalent; experience in Municipal architectural work an advantage. The appointment is subject to the National Scheme of Conditions of Service, provisions of the Local Government Superannuation Acts, and a satisfactory medical report. Applications, endorsed "Architectural Assistant," stating age, qualifications, former Local Government service, present and previous appointments and experience, length of notice required to terminate present appointment, the names of three referees, must be forwarded to the Borough Engineer and Surveyor by 29th August, 1955. Candidates must disclose in writing to the undersigned if to their knowledge they are related to any member or senior officer of the Council. Canvassing disqualifies.

FRANCIS J. O'DOWD,
Town Clerk.

Town Hall, Wimbledon, S.W.19. 2244

URBAN DISTRICT COUNCIL OF WELLINGBOROUGH.
ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, at a salary in accordance with Grade II of the A.P. and T. Division of the National Scales (£560—£640 per annum).

Applicants should have had general architectural experience (with particular reference to housing), and should be good draughtsmen, possess a sound knowledge of building construction, and be capable of preparing working drawings and details under supervision.

Housing accommodation will be provided if required.

The appointment is subject to the Local Government Superannuation Acts and the National Scheme of Conditions of Service. The successful candidate will be required to pass a medical examination.

Applications, giving particulars of experience and qualifications, the names of two persons to whom reference can be made, must be sent to the Engineer and Surveyor, Council Offices, Swanspool, Wellingborough, by 31st August, 1955.

W. G. PALMER,
Clerk of the Council.

Council Offices, Swanspool, Wellingborough.
28th July, 1955. 2170

COUNTY BOROUGH OF SOUTHEND-ON-SEA.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following established posts:—

ARCHITECTURAL ASSISTANT. Salary: £560×£20—£640.
ASSISTANT ARCHITECT. Salary: £600×£25—£725.
SENIOR ASSISTANT ARCHITECT. Salary: £750×£30—£900.
ASSISTANT QUANTITY SURVEYOR. Salary: £600×£25—£725.
ASSISTANT QUANTITY SURVEYOR. Salary: £675×£30—£825.
DRAUGHTSMAN. Salary: £500×£20—£580.
MAINTENANCE SURVEYOR. Salary: £560×£20—£640.

(With practical knowledge of building construction and experience in measuring and estimating for repairs and maintenance work).

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the N.J.C. Scheme of Conditions of Service so far as adopted by the Council. Medical examination.

Applications, stating age, qualifications and experience, with the names of two persons to whom reference can be made, should be submitted to the Borough Architect, 30, Alexandra Street, Southend-on-Sea, forthwith.

ARCHIBALD GLEN, *Town Clerk.* 2176

CITY AND COUNTY OF NEWCASTLE UPON TYNE.
CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a SENIOR ASSISTANT QUANTITY SURVEYOR in the A.P.T. Division, Grade IV (£675—£825).

Candidates should be thoroughly experienced in the preparation of Bills of Quantities, Specifications and Estimates for Housing, Flats and Building Work of a general character, and the settlement of Final Accounts.

Preference will be given to professional Associates of the R.I.C.S.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937-1953, and to one month's notice on either side. The successful candidate will be required to pass a medical examination.

Applications, stating age, particulars of training, qualifications, experience, present and past appointments, together with copies of two recent testimonials or the names and addresses of two persons to whom reference may be made, should be addressed to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1.

JOHN ATKINSON,
Town Clerk.

Town Hall, Newcastle upon Tyne, 1.
29th July, 1955. 2181

BEDFORDSHIRE COUNTY COUNCIL.

Applications are invited from suitably qualified ARCHITECTURAL ASSISTANTS for the following vacancies in the County Architect's Department:—

A.P.T. Grade VI (£750 to £900 per annum)
A.P.T. Grade II (£560 to £640 per annum)
A.P.T. Grade I (£500 to £580 per annum)

Application forms can be obtained from the County Architect, Shire Hall, Bedford, and should be returned by 31st August, 1955. 2264

BOROUGH OF SHREWSBURY.
APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the post of Junior Architectural Assistant on the permanent staff of the Borough Surveyor at a salary in accordance with Grade II (£560—£640) per annum.

Applications including the names and addresses of two referees should be sent to the Borough Surveyor not later than Friday, the 26th August, 1955.

S. R. H. LOXTON,
Town Clerk.

2nd August, 1955. 2262

CITY OF SALFORD.
TECHNICAL STAFF.

Applications are invited for the under-mentioned appointments to the permanent establishment of the City Engineer and Surveyor's Department:—

(*a*) TWO ARCHITECTURAL ASSISTANTS. A.P.T., Grade IV (£675 to £825).

(*b*) ONE ASSISTANT QUANTITY SURVEYOR. A.P.T., Grade IV (£675 to £825).

Candidates should possess qualifications as under:—

(*a*) Professional Associates of the Royal Institute of British Architects, and have had good experience in the design and construction of schemes for houses, flats, schools and public buildings.

(*b*) Professional Associates of the Royal Institution of Chartered Surveyors (Quantities Section).

The appointments are pensionable and subject to the passing of a medical examination.

Applications, stating age, qualifications and experience, together with names and addresses of two referees, should be addressed to the City Engineer and Surveyor, Town Hall, Salford, 3, appropriately endorsed, and be delivered not later than Wednesday, 7th September, 1955.

Applicants must disclose, in writing, any known relationship to members or officers of the Council.

R. RIBBLESDALE THORNTON,
Town Clerk.
2220

CITY OF LEICESTER.
CITY ENGINEER'S AND SURVEYOR'S DEPT.
MAINTENANCE SECTION.

Applications are invited for the appointment of MAINTENANCE ASSISTANTS in the City Surveyor's Department, in Grade A.P.T. V (£750—£900 per annum).

Candidates should be Members of the R.I.B.A. or R.I.C.S., or equivalent.

The appointments will be subject to the provision of the Local Government Superannuation Act, 1937.

Applicants should have a good knowledge of and be fully experienced in the maintenance of public buildings, preparation of plans, specifications, estimating and schedules, etc. Previous Local Government experience would be an advantage.

The successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications, training and experience, together with the names of not less than two persons to whom reference may be made, should reach the undersigned not later than Monday, 22nd August, 1955.

The Council are unable to assist with Housing Accommodation.

JOHN L. BECKETT, M.Inst.C.E., M.Inst.Mech.E., M.Inst.Mun.E.,
City Surveyor.
Town Hall, Leicester. 2190

COUNTY BOROUGH OF BOLTON.
QUANTITY SURVEYING ASSISTANTS.

Vacancies exist in the Borough Architect's Department for Three Quantity Surveying Assistants. The salaries offered range from A.P.T. I to A.P.T. IV (£500—£825), and the appointments will be made at salaries in accordance with the experience of the successful applicant.

Applicants should have had previous experience in the taking off of quantities for architectural works of various kinds, and all measuring up work for interim and final accounts.

Previous local authority experience is not essential.

Appointments are superannuable and subject to the passing of a medical examination.

Application forms may be obtained from me and should be returned not later than 31st August, 1955.

PHILIP S. RENNISON,
Town Clerk.
Town Hall, Bolton. 2249

HEMEL HEMPSTEAD DEVELOPMENT CORPORATION.
CHIEF ARCHITECT'S DEPARTMENT.

SENIOR ASSISTANT. Salary £715—£835 p.a. Must be A.R.I.B.A., and experienced in commercial and/or domestic architecture.

ASSISTANT I. Salary £520—£685 p.a. Inter. R.I.B.A. essential.

Applications from persons with suitable experience, but not yet qualified, will be considered for appointment to other grades with slightly lower salary scales.

Conditions of service similar to those in Local Government.

Housing accommodation may be available.

Applications, giving age, education, qualifications, and experience, and names of two referees, to reach the General Manager, Westbrook Hay, Hemel Hempstead, by 22nd August. 2254

BOROUGH OF BARKING.
DEPARTMENT OF THE BOROUGH ARCHITECT.
APPOINTMENT OF QUANTITY SURVEYING ASSISTANT, GRADE A.P.T. IV.

Applications are invited for the above appointment, at a salary of £735, rising to £855 per annum, particulars of which, together with form of application, may be obtained from the Borough Architect, Town Hall, Barking, Essex. Completed applications should be returned to the undersigned not later than 9 a.m., 26th August, 1955.

E. R. FARR,
Town Clerk.
2242

CITY OF BIRMINGHAM.
CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an ASSISTANT ARCHITECT in the Housing Design Section which is responsible for a large housing programme for suburban and central redevelopment areas, including multi-storey flats of both traditional and new-traditional construction, garages and large shopping centres.

The appointment will be within Grade A.P.T. IV (£675/£825 per annum) at a commencing salary according to experience.

Applicants must be Associate Members of the R.I.B.A., or hold an equivalent qualification.

The post is permanent, superannuable, subject to a medical examination, and to one month's notice on either side.

Applications, endorsed with the heading of the post, stating age, present position and salary, qualifications and experience, together with the names of two persons to whom reference can be made, should reach the undersigned not later than 31st August, 1955.

Canvassing disqualifies.

A. G. SHEPPARD FIDLER.
Civic Centre,
Birmingham, 1. 2268

LIVERPOOL REGIONAL HOSPITAL BOARD.

Applications invited for the following temporary appointments in the Department of the Regional Architect, in connection with the design and construction of a new 1,000 bedded Mental Deficiency Hospital:—

ASSISTANT ARCHITECT: Salary scale £640 × £25 (4) × £30 (4) × £35 (2) to £930 p.a.

DRAUGHTSMAN: Salary scale £390 at age 21 or over (less £20 for each year below that age) × £20 (2) × £25 (6) to £580 p.a.

The starting salary in each case dependent on age and experience.

The appointments will be terminable by three months' notice on either side.

Applications stating age, experience, qualifications, present and past appointments and salary, and names and addresses of three referees (two technical) to me by 30th August, 1955.

VINCENT COLLINGE,
Secretary to the Board.
19, James Street,
Liverpool, 2.
363/4/AC.MB.
August 3rd, 1955. 2269

COUNTY BOROUGH OF BOLTON.
ARCHITECTURAL ASSISTANT.

Applications are invited for the permanent appointment of an Architectural Assistant in the Borough Architect's Department at a salary in accordance with A.P.T., Grade I (£500—£580). Commencing salary will be according to qualifications and experience.

Applicants should have attended a full-time course of Architecture, and have passed the Intermediate Examination of the R.I.B.A. or its equivalent.

The appointment is superannuable and subject to the passing of a medical examination.

Application forms may be obtained from me, and should be returned not later than 31st August, 1955.

PHILIP S. RENNISON,
Town Clerk.
Town Hall, Bolton. 2250

COUNTY BOROUGH OF READING.

Vacancies in the Borough Surveyor's and Borough Architect's Departments for Draughtsmen (permanent and temporary) in Miscellaneous, Grade III-IV (£420—£545), starting salary according to qualifications and experience.

Appointments subject to (i) medical examination and (ii) determination on one month's notice.

N.J.C. Conditions apply. Applications for assistance towards cost of removal will receive favourable consideration.

Applications, stating age, qualifications and experience, to be sent with two testimonials or names of two referees for Civil Engineering Draughtsmen, to Borough Surveyor, and for Architectural Draughtsmen to Borough Architect, P.O. Box 17, Town Hall, Reading, by 27th August, 1955.

G. F. DARLOW,
Town Clerk.
Town Hall, Reading. 2259

THE DEPARTMENT OF HEALTH FOR SCOTLAND.

LANDSCAPE: Applications are invited for a non-pensionable post of ASSISTANT PLANNING OFFICER. Age at least 25. Applicants must be Members of the Institute of Landscape Architects and have either an architectural or planning qualification. Duties include scrutiny of planting and landscape schemes submitted by local authorities and others, and the preparation and supervision of schemes carried out by the Department.

Salary range £680—£1,090 (women £635—£985), with placing according to age and experience.

Forms of application, obtainable from Establishment Officer, Department of Health for Scotland (Room 30), St. Andrew's House, Edinburgh, 1, must be returned by 31st August. 2166

COUNTY BOROUGH OF EAST HAM.
HOUSING DEPARTMENT.
ARCHITECTURAL ASSISTANT (A.P.T. II).

Applicants should have passed the Intermediate Examination of the R.I.B.A., and have had experience in the detailing of flats and houses. Salary £560×£20—£640 per annum, plus London weighting.

Further details and form of application (returnable by 29th August, 1955) from the Town Clerk, Town Hall, East Ham, E.6. 2216

COUNTY BOROUGH OF HASTINGS.
SENIOR ASSISTANT ARCHITECT.
(HOUSING), A.P.T. V (£750—£900).

Applications are invited for the above post in the Borough Engineer's Department.

The appointment will be subject to the National Scheme of Conditions of Service, the passing of a medical examination, and to one month's notice in writing on either side.

Housing accommodation available if required.

Applications, stating age, qualifications (which must include A.R.I.B.A. or equivalent, present and previous appointments and salary, accompanied by copies of not more than three testimonials, should be forwarded to the Borough Engineer, 37, Wellington Square, Hastings, not later than 22nd August, 1955.

Canvassing will be a disqualification.

N. P. LESTER,
Town Clerk.
2186

BOROUGH OF TAMWORTH.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments:—

(*a*) TWO ENGINEERING ASSISTANTS.

(*b*) ONE ARCHITECTURAL ASSISTANT.

Salaries for these appointments will be within the special N.J.C. salary grades for Engineering and Architectural Assistants, according to qualifications and experience.

Housing accommodation available if required.

Applications, stating age, qualifications and experience, together with names of two referees, should reach the undersigned by first post Thursday, 18th August, 1955.

HENRY WOOD,
Town Clerk.
Municipal Offices, Tamworth. 2210

CITY OF WAKEFIELD.
APPOINTMENT OF SENIOR QUANTITY SURVEYOR.
GRADE A.P.T. IV (£675—£825 p.a.).

Applications are invited for the above superannuable appointment in the City Engineer's Department on Grade A.P.T. IV (New) commencing at £765 per annum.

Candidates must be members by examination of the R.I.C.S. or the I.Q.S., and have had experience in large scale Local Authority housing, schools and other municipal buildings.

Applications, stating age, qualifications, appointments and experience, with the names of two referees, to be sent to me not later than the 31st August, 1955.

HOUSING ACCOMMODATION WILL BE CONSIDERED.

W. S. DES FORGES,
Town Clerk.
Town Hall,
Wakefield. 2266

BOROUGH OF BRIDGWATER.
BOROUGH ARCHITECT'S DEPT.

Applications are invited for the following permanent appointments:—

(*a*) ASSISTANT ARCHITECT. Special Class (£650×£25—£775).

(*b*) ARCHITECTURAL ASSISTANT. A.P.T. I (£500—£580).

Applicants for (*a*) must be A.R.I.B.A. and (*b*) Inter. R.I.B.A., with good experience in Housing and General Works.

Housing accommodation will be considered.

Appointments are subject to medical examination, provisions of Local Government Superannuation Acts 1939-53, and one month's written notice either side.

Applications, stating age, education, experience, with the names of two referees, should be sent to the Borough Architect, Town Hall, Bridgwater, not later than 31st August, 1955.

H. A. CLIDERO,
Town Clerk.
Town Hall, Bridgwater.
July, 1955. 2179

ROXBURGH COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT ARCHITECT. Salary scale Grades VII to VIII, with placing within the scale according to qualifications and experience.

Candidates must be Registered Architects, and preferably Members of the Royal Institute of British Architects.

The appointment is subject to the Local Government Superannuation (Scotland) Act, 1937, and to satisfactory medical examination.

Applications, accompanied by one copy each of three recent testimonials, should be lodged with the undersigned not later than 15th August.

Canvassing, directly or indirectly, in connection with the appointment will disqualify.

JAMES R. HUME,
County Clerk.
County Offices, Newtown St. Boswells.
29th July, 1955. 2177

OXFORD REGIONAL HOSPITAL BOARD.
REGIONAL ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment:

SENIOR ASSISTANT ARCHITECT (£920× £30 (5)×£25 (1)—£1,095 p.a.).

Particulars of the post and of the qualifications expected may be obtained from the Regional Architect, W. J. Jobson, Esq., A.R.I.B.A. Applications, with the names of two referees, should be submitted to the Secretary of the Board, 43, Banbury Road, Oxford, not later than 3rd September, 1955. 2165

LONDON COUNTY COUNCIL requires:—
(i) LANDSCAPE ASSISTANTS, (ii) ARCHITECTURAL ASSISTANTS and (iii) BUILDING SURVEYOR'S ASSISTANTS for preparation of working drawings, schedules, specifications and supervision of contract work for reinstatement, landscaping and building work in parks, gardens and open spaces.
Salaries up to £783 a year according to qualifications and experience.
Extensive programme of layouts for new parks, school grounds, housing estates, etc., provides exceptional opportunities for those desiring to widen their experience in this field and in architectural work in association with landscaping.
Application forms from the Chief Officer of the Parks Department, Old County Hall, Spring Gardens, S.W.1. (WHItehall 3121. Ext. 33.) (1260) 2272

CARLTON URBAN DISTRICT COUNCIL
APPOINTMENT OF ARCHITECTURAL ASSISTANT
Applications are invited for the above appointment. Salary in accordance with Special Grade £650 × £25—£775.
Qualifications—Final Examination R.I.B.A. or Registered Architect.
The appointment will be subject to the provisions of the Local Government Superannuation Act 1937, National Scheme of Conditions of Service and to satisfactory passing of a medical examination.
Applications stating age, qualifications and details of experience, together with names of three referees to be forwarded to the Engineer and Surveyor by first post on Monday, 22nd August, 1955.
Housing accommodation will be made available and removal expenses will be paid by the Council.
A. E. F. WALKER,
Clerk of the Council.
Council House, Burton Road,
Carlton, Nottingham.
4th August, 1955. 2271

COUNTY BOROUGH OF OLDHAM.
Applications are invited for TWO SENIOR ARCHITECTURAL ASSISTANTS within the salary scale £675—£825.
Applicants should be qualified, and the appointments are subject to the Superannuation Acts and to the passing of a medical examination.
HOUSING ACCOMMODATION will be provided if necessary.
Applications, together with copies of two recent testimonials, or names of two persons to whom reference may be made, must reach me not later than Monday, the 29th August, 1955, in envelopes endorsed "Senior Architectural Assistant."
A. L. HOBSON,
Borough Engineer and Surveyor.
75, Union Street, Oldham. 2227

BOROUGH OF EDMONTON
BOROUGH ARCHITECT'S DEPARTMENT
Applications for the following posts must be made on forms obtainable from the Town Clerk, Town Hall, Edmonton, and must be delivered by 27th August.
Salaries subject to the addition of £10—£30 London Weighting. Posts are temporary except where indicated. Candidates must be suitably qualified and experienced in relation to the post applied for.
I. ARCHITECTURAL.
(*a*) Chief Assistant Architect (established), A.P.T. VI, £825 × £35—£1,000.
(*b*) Assistant Architect for Redevelopment, A.P.T. VI, £825 × £35—£1,000.
(Candidates must possess a Town Planning Qualification in addition to the normal architectural qualification.)
(*c*) Architectural Assistants:—
A.P.T. V, £750 × £30—£900.
A.P.T. IV, £675 × £30—£825.
A.P.T. III, £600 × £25—£725.
A.P.T. II (2), £560 ×20—£640.
II. QUANTITY SURVEYING.
(*a*) Chief Quantity Surveying Assistant (established), A.P.T. VI, £825 × £35—£1,000.
(*b*) Quantity Surveying Assistants:—
A.P.T. IV (2), £675 × £30—£825.
A.P.T. III, £600 × £25—£725.
A.P.T. II, £560 × £20—£640.
Interesting work on Direct Labour Schemes, including multi-storey flats and general work. 2275

BOROUGH OF DAGENHAM.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.
Grade A.P.T. II, salary £560 to £640 per annum, plus London weighting (£20 at age 21-25 years and £30 at age 26 and over). Applicants must hold Inter. R.I.B.A. or similar qualification. Experience in Housing or Educational work an advantage.
Forms of application obtainable from the Borough Surveyor, Civic Centre, Dagenham. Closing date: 26th August, 1955. 2208

BOROUGH OF NEWCASTLE-UNDER-LYME.
Applications are invited for the post of:—
ARCHITECTURAL ASSISTANT, A.P. & T., Grade II (£560×£20—£640).
Application Forms and Conditions of Appointment may be obtained from the Borough Engineer and Surveyor, Lancaster Building, High Street, Newcastle, Staffs., and should be returned to him not later than Monday, 29th August, 1955.
C. J. MORTON,
Town Clerk.
District Bank House, High Street,
Newcastle, Staffs. 2226

MIDDLESEX COUNTY COUNCIL—COUNTY ARCHITECT'S DEPARTMENT
(*a*) Assistant Architects, A.P.T. V (£780—£930 p.a.).*
(*b*) Assistant Architects, A.P.T. IV (£705—£855 p.a.).*
(*c*) Assistant Architects, A.P.T. III (£630—£755 p.a.).*
(*d*) Architectural Assistants, A.P.T. I (£530—£610 p.a.).*
* If 26 years or over.
(*e*) Junior Architectural Assistants, Male, £240——£640 p.a. Female, £205—£530 p.a.
Established and pensionable, subject to medical assessment and prescribed conditions. Commencing salaries according to qualifications and experience. Application forms (stamped addressed foolscap envelope) from County Architect, 1 Queen Anne's Gate Buildings, Dartmouth Street, S.W.1, returnable by 31st August (Quote R.29 A.J.) Canvassing disqualifies. 2280

COUNTY OF ESSEX
ILFORD COMMITTEE FOR EDUCATION
The Essex County Council invite applications for an Assistant Architect in the Office of the Borough Engineer of Ilford.
Applicants should be members of the Royal Institute of British Architects and have had considerable experience in the planning, designing, construction and supervision of school buildings and have had administrative experience.
The scale of salary will be in accordance with the National Joint Council A.P.T. Division Grades IV—VI:—£675—£1,000, plus the appropriate London Area Allowance. There will also be paid such travelling and subsistence allowances as may from time to time be determined by the Council. The post is superannuable and subject to medical examination.
Application should be made on a form to be obtained from, and returned to, the Borough Education Officer, Education Offices, Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertisement. 2274

COUNTY COUNCIL OF NORTHUMBERLAND
COUNTY ARCHITECT'S DEPARTMENT
Applications are invited for the appointment of THREE TEMPORARY ARCHITECTURAL ASSISTANTS at a salary of up to £800 per annum according to experience; to work on new School projects. Some office experience essential.
Applications stating age, qualifications, details of training and experience together with the names of two referees should reach the County Architect, County Hall, Newcastle-on-Tyne, 1, not later than Monday, 22nd August, 1955. 2276

EASTERN REGIONAL HOSPITAL BOARD, SCOTLAND

Applications are invited for the following appointments:—

(*a*) Architectural Assistant. Salary £480—£670.

(*b*) Assistant Quantity Surveyor. Salary £640—£930.

Applicants for post (*a*) must have passed the Intermediate Examination of the R.I.B.A., and for post (*b*) must be Corporate Members of the R.I.C.S. with experience of the Scottish Mode of Measurement.

Applications, including the names and addresses of three referees, should be sent to the Secretary, Eastern Regional Hospital Board, "Braeknowe," 430 Blackness Road, Dundee, not later than 14 days after insertion of this advertisement. 2277

PADDINGTON BOROUGH COUNCIL

Require SENIOR ASSISTANT ARCHITECT within A.P.T. Grade V (£780 × £30—£930 p.a., £10 p.a. less if under age 26 years). Candidates must be A.R.I.B.A. with experience of local authority work, contemporary design and construction of general municipal work including multi-storey flats; supervision of large building contracts and architectural staff; Town Planning experience an advantage.

Applications stating age, qualifications, present and past appointments with dates and salaries, details of experience and names and addresses of three referees should be received by the undersigned by 29th August, 1955 (quoting A.229).

W. H. BENTLEY,
Town Clerk.

Town Hall, Paddington Green, W.2. 2273

SOUTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT on the Board's Staff at Winchester. Commencing salary between £480 and £560 per annum, according to age and experience, rising to a maximum of £670 per annum. Candidates must have passed the Intermediate Examination of the Royal Institute of British Architects (or an examination recognised by the Institute as equivalent). The post offers good opportunities for obtaining experience in all aspects of hospital building works.

Applications, stating age, experience, qualifications, and giving the names and addresses of two referees, to be sent to the Area Secretary, "Highcroft," Romsey Road, Winchester, within ten days of the appearance of this advertisement. 2206

LONDON ELECTRICITY BOARD.
ARCHITECTURAL DRAUGHTSMAN.

Applications are invited for the above position in the Architect's Section of the Chief Engineer's Department in Central London.

Applicants should be neat Draughtsmen, and preferably have had several years' experience in an Architect's office.

The post is graded under Schedule "D" of the National Joint Board agreement, Grade VI (£535 10s. to £661 10s. per annum, inclusive of London allowance).

Application forms obtainable from Personnel Officer, 46/7, New Broad Street, London, E.C.2, to be returned completed by 22nd August, 1955. Please enclose addressed envelope and quote Ref. V/2002/A. 2203

HACKNEY BOROUGH COUNCIL require JUNIOR ARCHITECTURAL ASSISTANT for the Engineer's Department. Salary within Grade A.P.T. I (£500—£580 p.a., plus London weighting allowance). Candidates should have had a good architectural training and be at least Probationers of the R.I.B.A., with several years' experience in an architect's office. Application form obtainable from the Town Clerk, Town Hall, Hackney, E.8, returnable by 20th August, 1955. 2213

CHESHIRE COUNTY ARCHITECT'S DEPARTMENT.

Application forms for appointment of ARCHITECTURAL ASSISTANTS in the following grades may be obtained from me, and should be returned completed by 5th September, 1955:—

Grade A.P.T. IV (£675×£30—£825).
Grade A.P.T., III (£600×£25—£725).
Grade A.P.T. 11 (£560×£20—£640).

E. MAINWARING PARKES, F.R.I.B.A.,
County Architect.

The Castle, Chester. 2215

METROPOLITAN BOROUGH OF HOLBORN.
BOROUGH ARCHITECT'S DEPARTMENT.

ARCHITECTURAL ASSISTANT required. Varied work, including Libraries, Baths and Housing. R.I.B.A. Intermediate or equivalent. Salary A.P.T. I-II (£500 to £640, plus London weighting), according to experience.

Application, with two referees, to Town Clerk, Town Hall, High Holborn, W.C.1, by 19th August, 1955. 2207

Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

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 18-59 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

RAMSEY, MURRAY & WHITE have a vacancy for ARCHITECTURAL ASSISTANT, about Intermediate standard, preferably with office experience. Salary according to qualifications. Apply 32, Wigmore Street, London, W.1, or telephone WELbeck 1409. 9823

ARCHITECTURAL ASSISTANT (Intermediate standard) required at once for varied practice in City office. Write, stating age, experience, and salary required, to Henry C. Smart & Partners, L.R.I.B.A., 120, Moorgate, B.O.2. 1611

ARCHITECTURAL ASSISTANTS required urgently for London office. Intermediate stage or above, and with practical experience, particularly in traditional domestic and other work. Please write stating age, experience, and salary required to Box 9896.

REQUIRED for a small busy West End office, ARCHITECTURAL ASSISTANT of Intermediate Standard with 3—4 years' office experience. General practice with wide variety of work in London and Home Counties; five-day week; bonus scheme. Apply in writing stating age, experience and salary required to Welch & Lander, 38, Gloucester Place, Portman Square, W.1. 2023

ARCHITECT'S ASSISTANT required for the London office of a firm of Architects with interests throughout the country, must be of Intermediate to Final R.I.B.A. standard. Superannuation scheme. Apply in writing to Messrs. Cotton, Ballard & Blow, 133a, Wembley Park Drive, Wembley, Middlesex. 1765.

CO-OPERATIVE WHOLESALE SOCIETY, LTD., ARCHITECT'S DEPARTMENT, LONDON.
ASSISTANT ARCHITECTS.
WORKER-UP.

APPLICATIONS are invited from suitably qualified persons. Salary on a scale £485—£945, inclusive of L.W., with placing according to age, qualifications and experience. The posts are superannuable, subject to medical examination. Five-day week in operation.

Applications, stating age, experience, qualifications and salary required, to: W. J. Reed, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1. 1934

ASSISTANT required in busy practice in West End, in early twenties, about Intermediate R.I.B.A. standard. Excellent opportunities for gaining all round experience. Box 1942.

QUALIFYING or QUALIFIED ASSISTANTS wanted in London Architects' office with wide and varied practice. Apply stating age, experience and salary required. Box 2092.

ARCHITECTURAL ASSISTANTS from Inter standard or above required for West End office engaged on Commercial work. Able to prepare working drawings from sketch schemes. Five day week, Luncheon Vouchers, etc. Reply stating age, experience and salary required to Box No. 2074.

REQUIRED in small office, Westminster: ARCHITECT'S ASSISTANT with Inter. R.I.B.A. Able to do working drawings to all scales. Quick draughtsman. Salary by arrangement. box 2231.

SIR JOHN BURNET, TAIT & PARTNERS have vacancies for SENIOR and JUNIOR ASSISTANTS. Write giving particulars to 10, Bedford Square, W.C.1. 2260

ARCHITECTURAL ASSISTANT required in City Office with a wide and comprehensive range of commissions. Salary according to experience. Seely & Paget. Central 0321. 2256

ARCHITECTURAL ASSISTANTS wanted in general London practice. Intermediate standard or above. Please apply with details of experience, age and salary required, to David A. Wilkie & Partners, 45, Chancery Lane, W.C.2. CHAncery 6460. 2255

ARCHITECT'S ASSISTANT required in West End Office. Salary £700 to £800. Write stating age and experience to Box K531, Willings, 362, Grays Inn Road, W.C.1. 2240

ARCHITECTURAL ASSISTANT (One); BUILDING DRAUGHTSMAN (One).

West of Scotland Building Contractors require an ARCHITECTURAL ASSISTANT with design ability and capable of preparing working drawings. An ARCHITECTURAL or BUILDING DRAUGHTSMAN with experience is also required. Varied work. Pension scheme. Good working conditions and salary. Five-day week. Applications stating age, qualifications and experience, to Box 2281.

ARCHITECTURAL ASSISTANTS, also DRAUGHTSMEN required for work on new system of prefabrication for schools, hospital buildings, etc. Permanency. Superannuation scheme available. Write or telephone, stating age, experience, salary required. J. Thorn & Sons Ltd., Brampton Road, Bexleyheath, Kent. ('Phone 305). 2252

ARCHITECTS' CO-PARTNERSHIP require qualified ASSISTANT. Telephone Langham 5791, or write 44, Charlotte Street, W.1. 2247

ARCHITECTURAL ASSISTANTS, Intermediate and Final standard, required immediately in busy established Architect's office, North of London. Varied work of contemporary character comprising industrial, commercial and housing projects. Please reply, giving details of experience, qualifications, when available and salary required, to Box 2243.

JUNIOR ASSISTANTS up to Intermediate Standard required immediately for busy general practice. Apply stating age, experience and salary required to George E. Clay & Partners, A.A.R.I.B.A., 198, Parrock Street, Gravesend, Kent. 2279

YOUNG ASSISTANT required to Staff Architect of Progressive Combine with H.Q. in London and branches throughout the country. Able to run small contracts and to work with minimum of supervision. Occasional travelling involved. Contributory Superannuation scheme. Write giving full details to Box 2278.

SENIOR ARCHITECTURAL ASSISTANT required in office in Charing Cross District. Must be experienced. Write stating age, experience and salary required to Box L.532, Willings, 362, Grays Inn Road, W.C.1. 2241

ARCHITECTURAL ASSISTANAT required in small but expanding London Office, S.W.1. Opportunity for applicant with initiative and all-round ability. Salary according to experience and not necessarily qualifications. Tel.: TAT 0697 or write Box 2233.

CONTEMPORARY DESIGNER, ARCHITECTURAL ASSISTANT required by NAIROBI architect, recently qualified school man of honours or distinction standard might suit. Age pref. 25—30, some practical experience valuable, initial salary £80 per month, passages paid, etc. Apply quoting: OSS. 70/2, to Overseas Technical Service, 5, Welldon Crescent, Harrow. 2234

ARCHITECTURAL ASSISTANT wanted for general practice. Advanced Intermediate standard. Office experience essential. Good prospects. Box 2201.

ARCHITECTURAL ASSISTANT required at once in Central London office for works of varied character. Practical experience desired; Final standard or near. Good salary to the right man. Five-day week. 'Phone Chancery 5211 or write Box 2236.

COMPETENT ASSISTANTS, Intermediate to Final standard, required by busy Architects. Salaries on A.P.T. grades basis. Applications with particulars to Herbert, Son & Sawday, F. & A./A.R.I.B.A., 18, Friar Lane, Leicester. 2237

ARCHITECT'S Department of the Milk Marketing Board, require an ASSISTANT capable of preparing working drawings and details and able to make fied surveys and surveys of existing buildings. The salary will start at £600 per annum and preference will be given to applicants who have already passed their Intermediate R.I.B.A. examination. Apply, stating age and previous experience, to the Establishment Officer, Milk Marketing Board, Thames Ditton, Surrey. 2238

BANK Architect's Department in City requires JUNIOR ASSISTANT age about 20-25 having completed or obtained exemption from National Service. Write stating age, particulars of experience and salary required. Permanency for suitable applicant subject to probationary period. Box 2261.

ARCHITECTURAL ASSISTANTS of R.I.B.A. Final or Intermediate Standard (or equivalent) required immediately for busy private practice, 50 miles London. Salary is in accordance with age and experience. Assistance given with accommodation if required. Please send full details to Box 2229.

SENIOR ASSISTANT ARCHITECTS required for medium sized but busy West End Office, capable of controlling schemes throughout and working mainly on own initiative. Works in hand include Housing, Offices, Churches, etc., Apply stating qualifications, experience, age and salary required, to Box 2221.

SLOUGH ESTATES LTD., require an ARCHITECTURAL ASSISTANT with at least five years' experience and capable of preparing working drawings of factories and other buildings, estate layouts, etc., with the minimum of supervision. The work is interesting and carries the benefits of pension and sickness schemes. Five-day week except for one Saturday in four. Brief particulars, please, of age, experience and salary required, to The Architect, Slough Estates Ltd., Trading Estate, Slough, Bucks. 2224

ARCHITECTURAL ASSISTANTS up to R.I.B.A. Inter. and also R.I.B.A. Final Standard, required by Construction Department of a rapidly expanding large commercial organisation with headquarters in Liverpool. The work, which extends throughout the British Isles, is of an interesting and varied nature, and offers considerable scope for men with initiative, along with excellent chances of advancement. Permanent positions. Five-day week. Staff Life Assurance and Pension Scheme. Commencing salary will be commensurate with experience, and applications should, in the first instance, give full details of experience and salary expected, to Box 2223.

ASSISTANT, about Intermediate R.I.B.A. Standard wanted for small office concerned with good class small jobs besides Schools. S.E. London. Telephone Foots Cray 3166/7 for interview. 2228

JUNIOR ARCHITECTURAL ASSISTANT required in small general practice with contemporary outlook. Write stating full particulars and salary required to Messrs. Percy, Hopkins & Partners, 19, Commercial Road, Woking. 2219

ARCHITECT practising N.W.3 district, requires experienced ASSISTANT for the preparation of working drawings for buildings abroad. Please state details of experience and salary required. Box 2217.

ARCHITECTURAL ASSISTANT required, up to at least intermediate standard, Westminster Office. Pension and Bonus schemes, five-day week. Write stating experience, age and salary required. Box 2214.

ARCHITECTURAL ASSISTANTS required for Coventry and London. All Grades. These positions offer excellent experience in wide variety of work, with salaries closely related to capabilities and reviewed September annually. Pension Scheme available. Travelling expenses paid to applicants selected for interview. W. S. Hattrell & Partners, 1, Queen's Road, Coventry, and 14, Hanover Square, London, W.1. 2211

ARCHITECTURAL ASSISTANT, temporary, required for British Transport Hotels and Catering Services with location in London. Members of R.I.B.A. or with equivalent technical qualifications preferred. Experience in design of hotel and catering establishments an advantage. Salary £700 to £800 according to experience. Apply in writing, giving details of age, qualifications and previous experience, to the Officer for Personnel, British Transport Hotels and Catering Services, St. Pancras Chambers, London, N.W.1. 2204

IMPERIAL CHEMICAL INDUSTRIES LIMITED, Plastics Division, require an ARCHITECTURAL ASSISTANT in the Engineering Department at Welwyn Garden City. Applicants should have passed the Intermediate examination of the Royal Institute of British Architects and it would be to advantage if they had spent a few years in an Architect's office. Five-day, 39-hour week. Write for application form to The Staff Manager, I.C.I. Ltd., Plastics Division, Black Fan Road, Welwyn Garden City, Herts. 2172

JUNIOR ASSISTANT. £7 0s. 7d., rising to £7 7s. 3d. for general duties in drawing office, including filing and binding drawings, stencil lettering, etc. Applications with details of experience, present position, age and referees to City Planning Officer, 55-61, Moorgate, London, E.C.2, within fourteen days. 2184

ARCHITECTURAL DRAUGHTSMAN

BRITISH INSULATED CALLENDER'S CABLES LTD., invite applications from candidates approaching Intermediate R.I.B.A. standard with experience in preparation of working drawings and details for industrial and commercial type buildings. The position offered is progressive, permanent and pensionable. Applications quoting reference P/86/55 should be addressed to the Staff Officer, B.I.C.C. Ltd., Prescot, Lancs. 2180

JUNIOR ARCHITECTURAL ASSISTANT required in Architectural Department at Reading. Staff pension scheme and canteen. Applications, marked Confidential, stating age, experience, and salary required, should be addressed to R. E. Southall, A.R.I.B.A., H. & G. Simonds, Ltd., The Brewery, Reading. 2178

SENIOR ASSISTANT required for University and Hospital Work. Good salary, dependent on experience. Non-contributory pension scheme in being after probationary period. Three weeks holiday a year, and five day week. Reply, stating age and experience, to:—Thomas Worthington & Sons, 178, Oxford Road, Manchester, 13. 2209

ASSISTANT ARCHITECT required in small office Intermediate standard or above, with office experience. Work varied and interesting. Must be keen and conscientious. Write stating full particulars and salary required, to Geo. H. Herring, F.R.I.B.A., 21, Milton Road, Harpenden, Herts. 2202

ARCHITECTURAL ASSISTANT required for varied and interesting practice. Advanced Intermediate or Final standard. Congenial surroundings. 'Phone WESTern 0625 for appointment. 2200

COMPETENT ARCHITECTURAL ASSISTANT required. Able to take charge if required. Partnership considered for suitable man. Manchester area. State age, experience and all particulars to Box 2199.

B.C. requires for Building Department, London:

(*a*) SENIOR ASSISTANT (ARCHITECTURAL): must be registered architect with considerable experience in general planning and preparation of detailed drawings and specifications for office type buildings, able to take charge of several contracts, age 30/45. Salary £1,220 (possibly higher if qualifications exceptional) to £1,600 max.

(*b*) ARCHITECTURAL ASSISTANTS, Class I: must be registered architects experienced in building surveys, general planning and preparation of details and drawings and specifications for office type buildings, age 30/45. Salary £975 (possibly higher if qualifications exceptional) to £1,280 max.

(*c*) ARCHITECTURAL ASSISTANTS, Class III: must be up to Final R.I.B.A. Standard with several years' design office experience. Salary £725 (possibly higher if qualifications exceptional) to £960 max.

(*d*) ARCHITECTURAL ASSISTANTS Class IV: must have passed Inter. R.I.B.A. with at least two years' design office experience. Salary £620 (possibly higher if qualifications exceptional) to £830 max. Apply to Engineering Establishment Officer, Broadcasting House, London, W.1, within five days, quoting ref. E.246 A.J., stating clearly for which vacancy applying. 2167

LLEWELLYN SMITH & WATERS invite applications from (*a*) QUALIFIED ARCHITECTS to take charge of large industrial projects. Experience of job management and knowledge of present-day constructional forms is essential. (*b*) QUALIFIED and UNQUALIFIED SENIOR and JUNIOR ASSISTANTS to work on these and other projects. (*c*) In Worcester Office, ASSISTANT of R.I.B.A. Inter. Standard with three years' office experience. Preferably with experience of job supervision and specifications.

Salary according to experience and ability. Write 103, Old Brompton Road, S.W.7. 2198

ARCHITECTURAL ASSISTANT with at least three years' drawing office experience required by City firm. Knowledge of industrial and commercial buildings an advantage. Good salary and prospects. Box 2196.

ARCHITECT'S ASSISTANT required by small busy office in Essex to handle work of a contemporary nature. Office offers varied experience to assistant. Five-day week. Salary according to experience. Please write or 'phone Tingey Associates, 29a, Longbridge Road, Barking, Essex. Rippleway 1313. 2195

ARCHITECTURAL ASSISTANT required by professional firm in Westminster. R.I.B.A. Final Standard. Experience in industrial buildings advantageous. Salary from £750 upwards, according to experience. Box 2194.

ARCHITECT'S ASSISTANT required; some experience necessary; write stating salary. Folkes & Folkes, 34, Hagley Road, Stourbridge, Worcs. 2193

HULME CHADWICK, A.R.C.A., F.S.I.A., requires qualified MALE ASSISTANT for work on exhibitions, shops & snow-rooms. Office experience not essential. Apply stating age and salary required to 26, Eccleston Street, London, S.W.1. 2171

J. M. AUSTIN-SMITH AND PARTNER require ARCHITECTURAL ASSISTANT, Intermediate or Final Standard with some office experience. Apply giving full particulars to 29, Sackville Street, W.1. 2173

ASSISTANT of Intermediate Standard with general all-round ability required. Telephone Richmond 5412. 2174

EXPERIENCED ARCHITECTURAL ASSISTANT required in Westminster. Neat draughtsmanship. Good knowledge of construction. With or without qualification. Very varied private practice. Salary £600. Apply Box 2022.

WESTWOOD, SONS & HARRISON, F./F.R.I.B.A., urgently require a SENIOR ARCHITECTURAL ASSISTANT, A.R.I.B.A. standard, with office experience; also JUNIOR ASSISTANT. Apply in writing, giving qualifications, to 46, Baker Street, W.1. 1958

ARCHITECTURAL ASSISTANT required for work in the City. State age, experience, and salary required, to Clifford Strange, 5, London Wall Buildings, E.C.2. 1910

CECIL Howitt & Partners, Architects, St. Andrew's House, Mansfield Road, Nottingham, require JUNIOR ARCHITECTURAL ASSISTANTS, preferably Inter. R.I.B.A. standard. Please apply in writing, giving full details and stating salary required. 4706

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