

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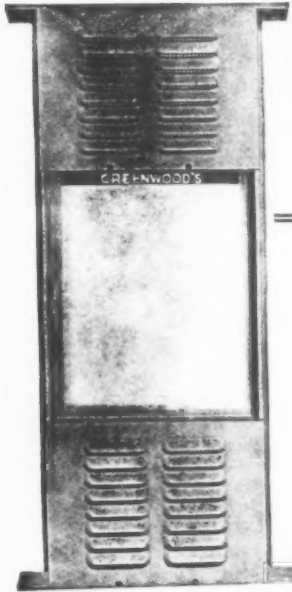
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to I on one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. Department of Architecture, School of Building, Ferndale Road, Brixton, S.W.4.	Brixton 7048
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
AScW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Welbeck 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre. 9, Conduit Street, W.1.	Mayfair 8641/6
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Flaxman 7766
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Sloane 8266
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Borough Architect, Town Hall, Newport, Mon.	Newport 3111
CAS	County Architects Society. C/o A. Guy Chant, F.R.I.B.A., Salop County Council, 5, Belmont, Shrewsbury.	Shrewsbury 3031
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CDA	Copper Development Association. Kendals Hall, Radlett, Herts.	Radlett 5616
CIAD	Central Institute of Art and Design. 41, 42, Dover Street, W.1.	Regent 3074
CIAM	Congrès Internationaux d'Architecture Moderne. Dolderal, 7, Zurich, Switzerland.	
CID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPC	Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	Kensington 8161
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane 4280	
CUJC	Coal Utilization Joint Council. 13, Grosvenor Gardens, London, S.W.1.	Victoria 1534
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 1761
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
EC	Electricity Commission. Savoy Court, Strand, W.C.2.	Temple Bar 7565
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FB 1951	Festival of Britain 1951. 2, Savoy Court, Strand, W.C.2.	Waterloo 1951
FASSC	Federation of Association of Specialists and Sub-Contractors. 21, Tothill Street, S.W.1.	Whitehall 9606
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 5615
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577

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S.W.1. 'Phone: Whitehall 0611


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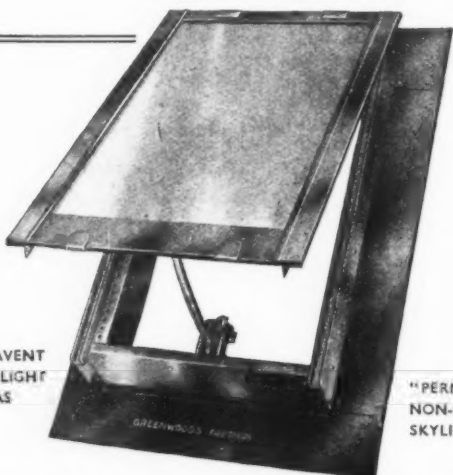
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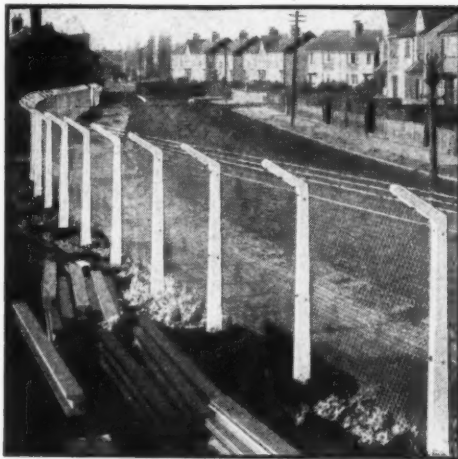
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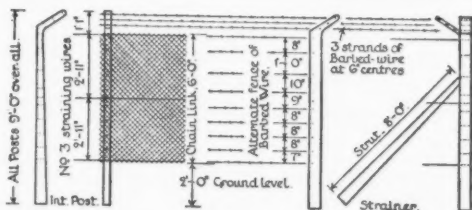
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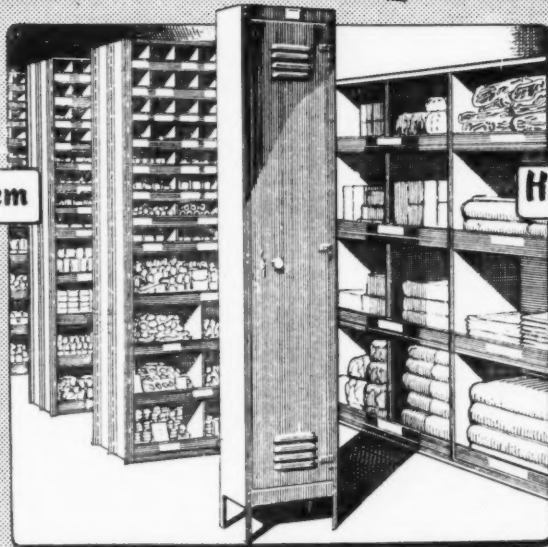
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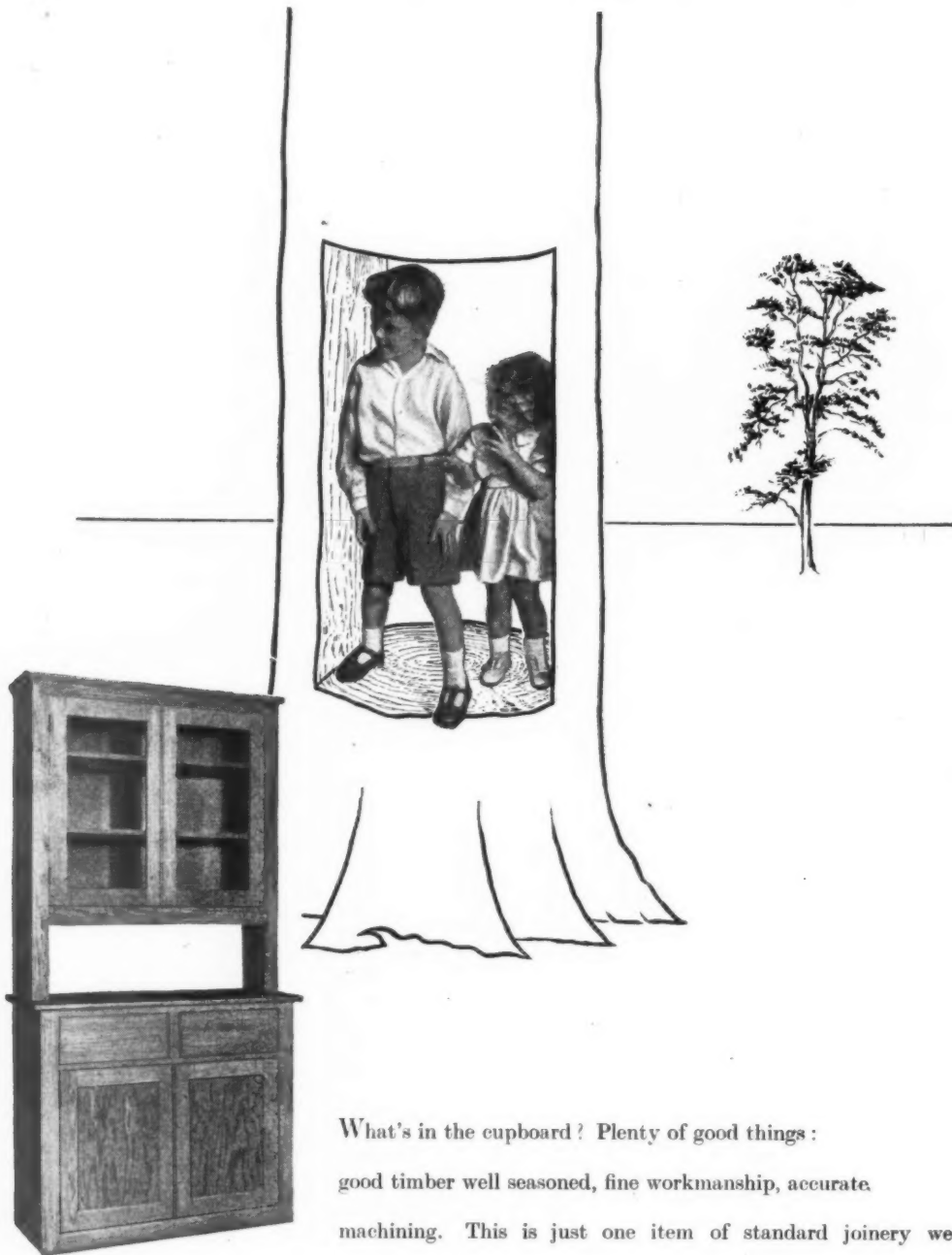
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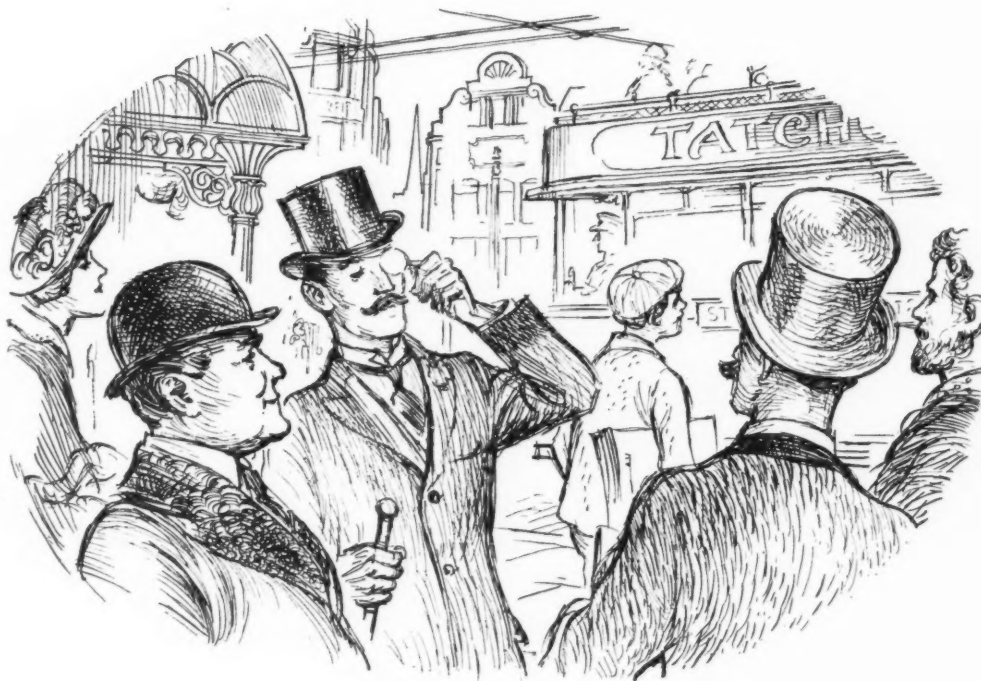
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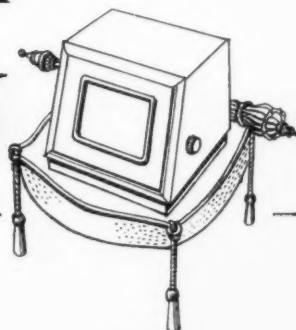
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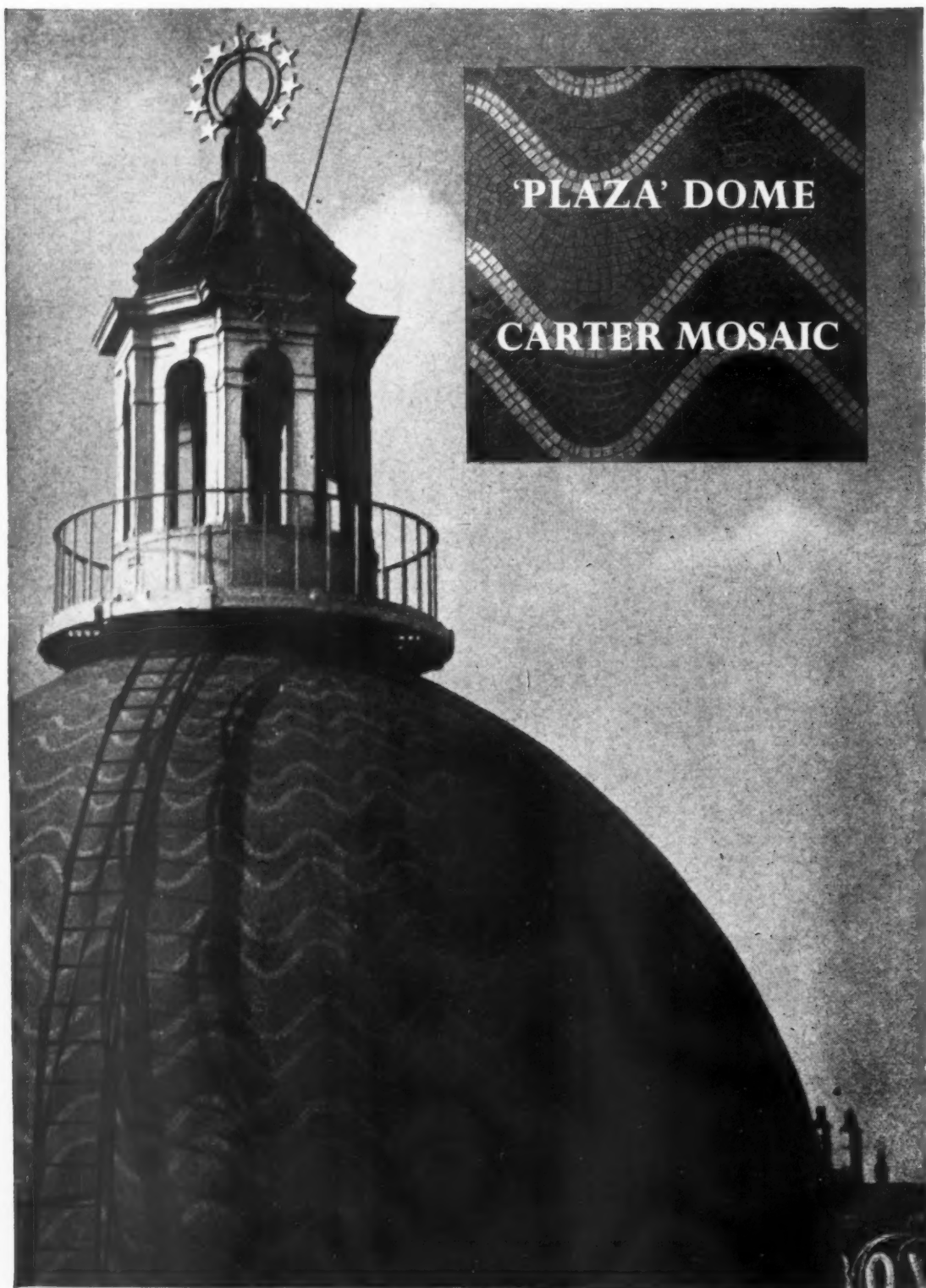


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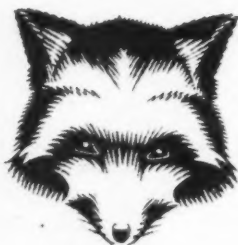
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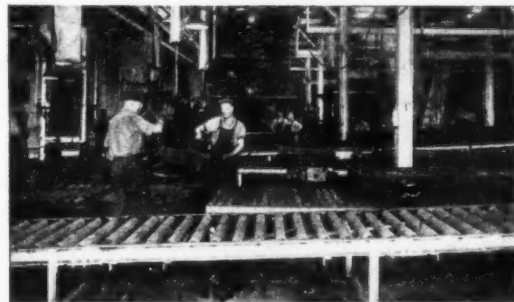


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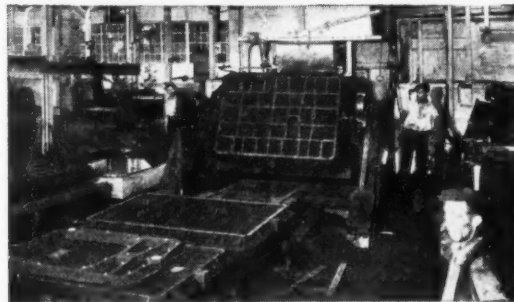
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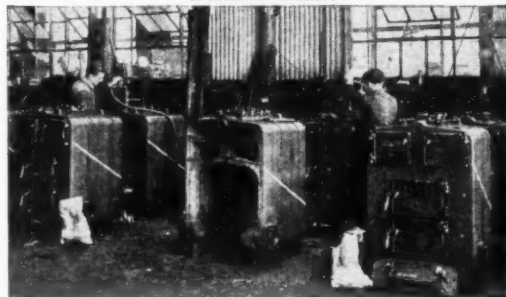
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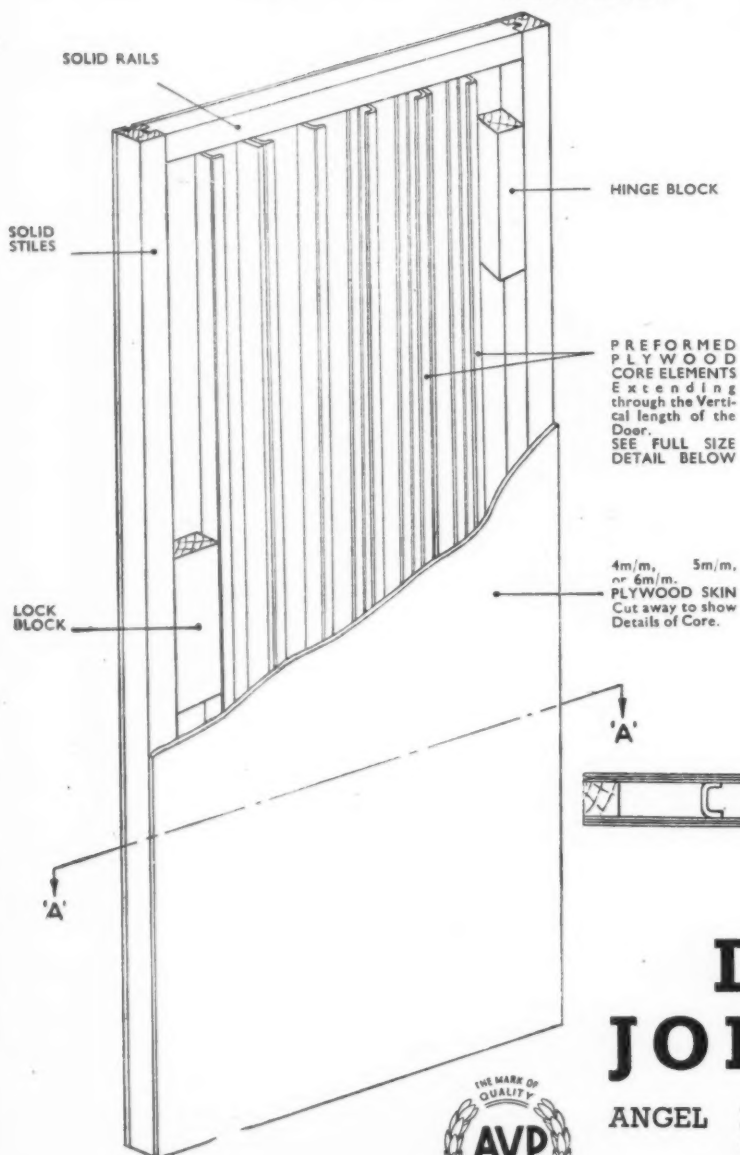
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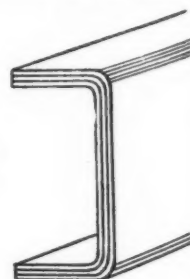


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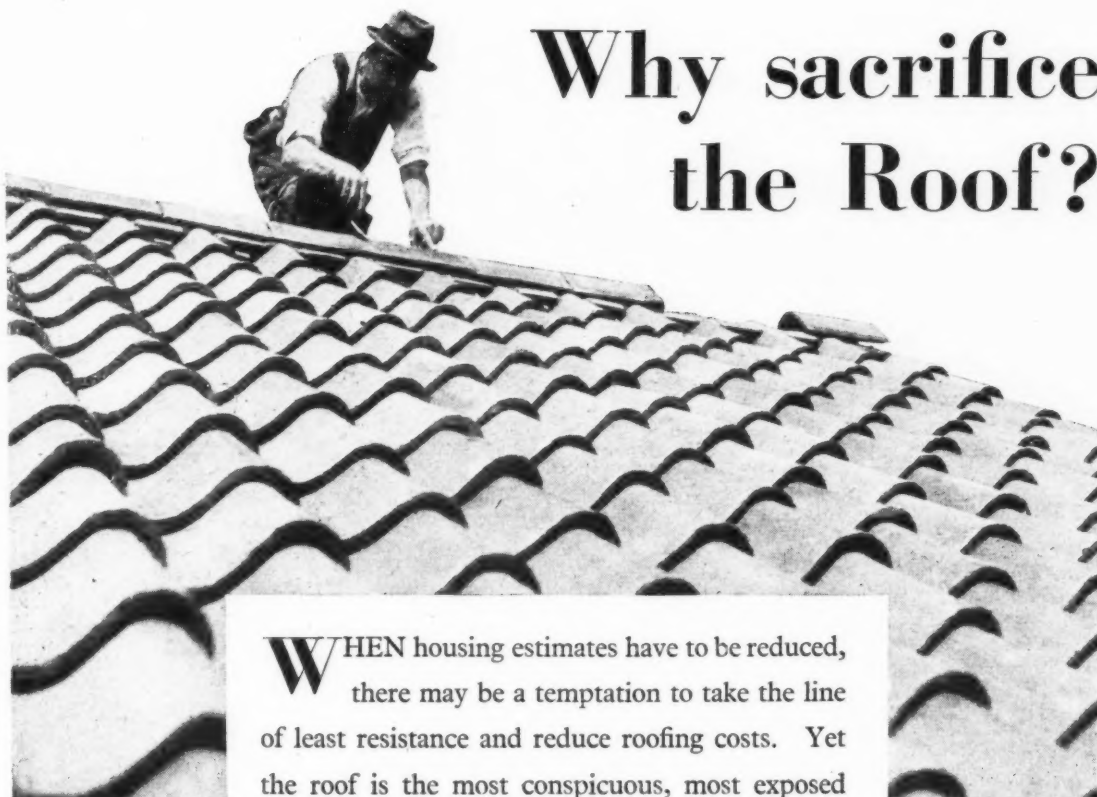
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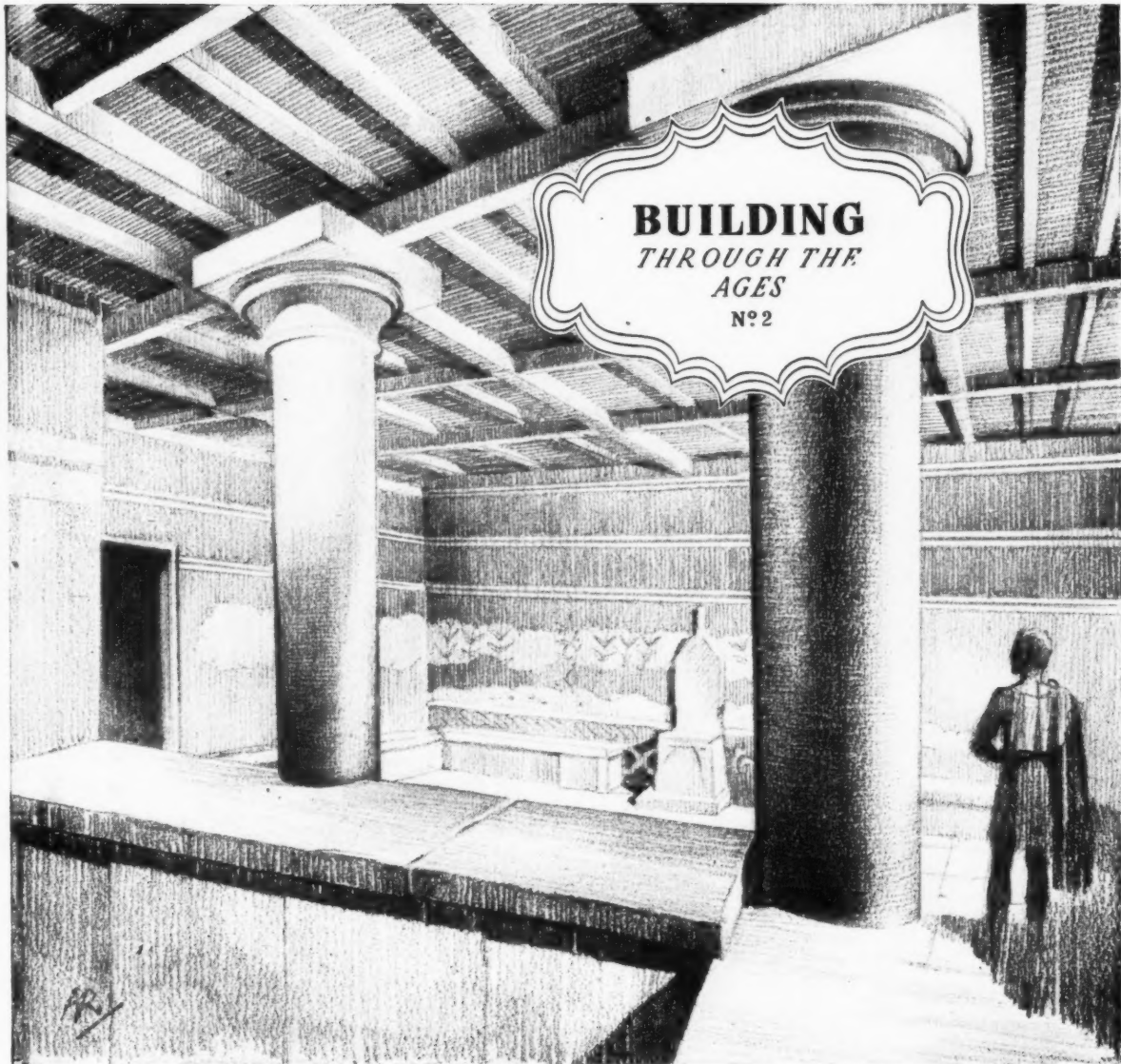
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C.P.42



Minoan Palace at Cnossos, Crete, about 2000 B.C.

CRETAN civilisation was one of the earliest in the world, being contemporary with the great days of Egypt, and preceding the much better known Greek period of prosperity.

Centred largely round the royal palace at Cnossos, on the island of Crete, there developed a long era of peaceful and progressive existence uncommon in that ancient world. The remains which have been discovered prove the Cretans to have been a people of remarkable artistic and creative ability.

In addition to producing beautiful sculpture, pottery, metalwork, and other ornaments, they set

new standards in building, far superior to anything previously known. The Palace at Cnossos was undoubtedly beyond comparison then for size, luxury and building technique.

The picture gives some idea of its interior construction, using wooden beams on great stone pillars. Apart from this original basic structure there were ingenious details such as water pipes all through the place, and many other conveniences we are apt to think were only developed long after that time.

Though Cretan civilisation was eventually wiped out by its enemies, the relics that remain indicate it as a bright spot in the world's history.

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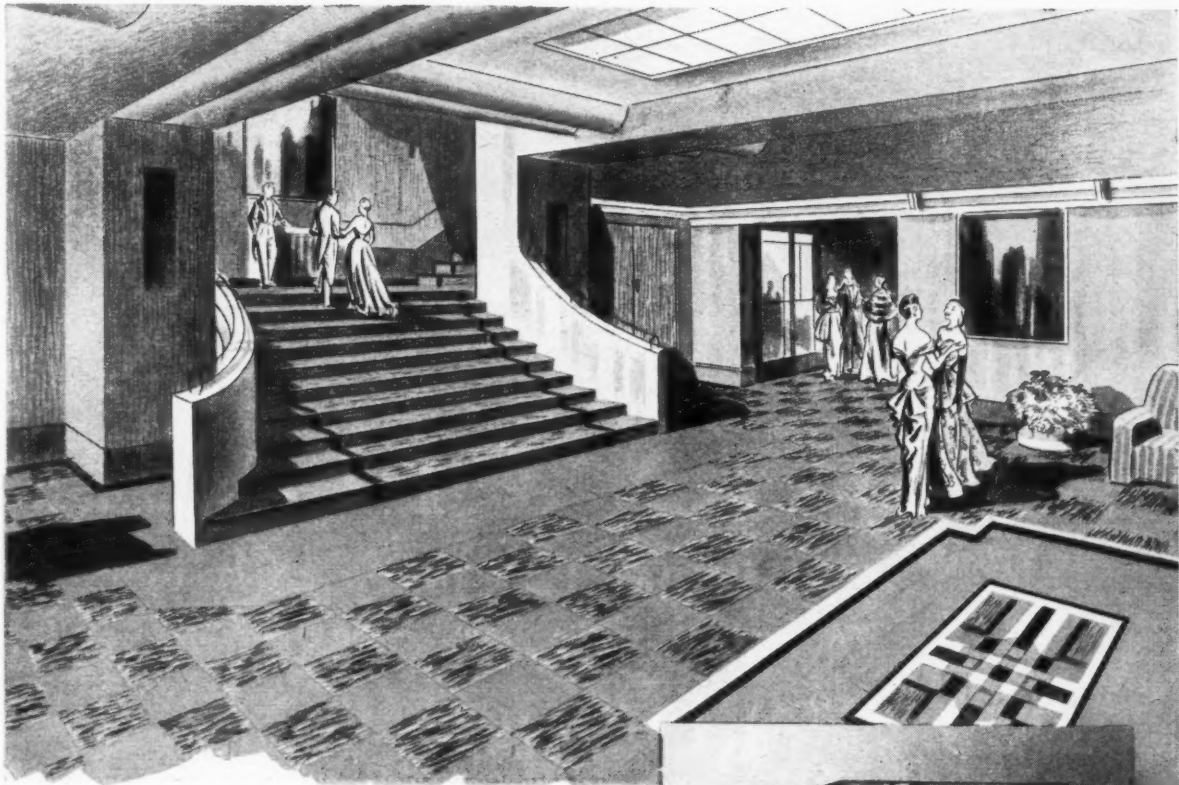


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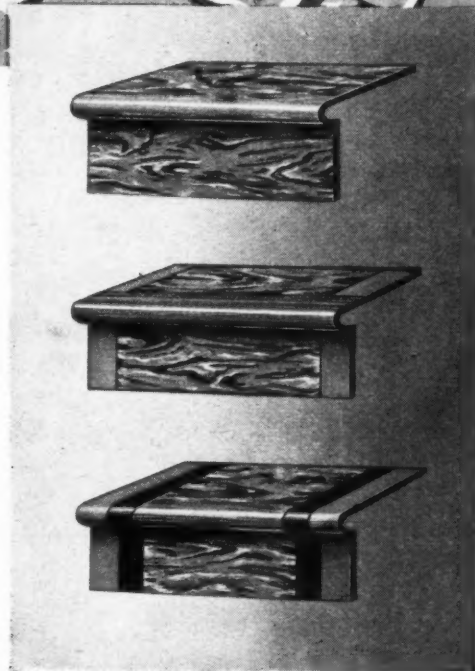


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The North British combination stair covering is available in a number of designs and colours.

THE NORTH BRITISH RUBBER COMPANY LIMITED, CASTLE HILLS, EDINBURGH HEATHHALL, DUMFRIES
London: 204/206, Tottenham Court Road, London, W.1

HIGGS AND HILL
LIMITED

LONDON

LEEDS

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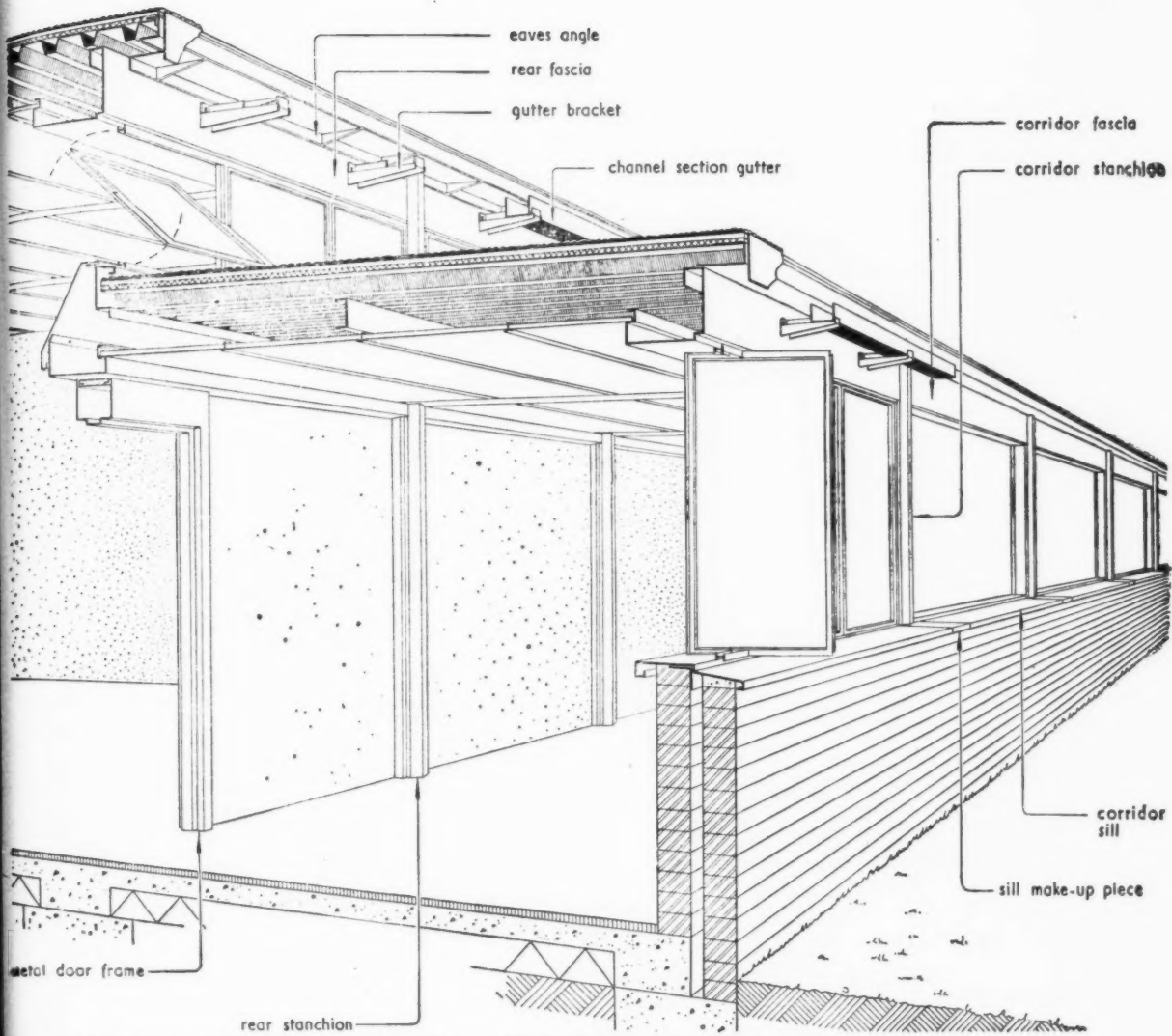
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Detail of Sevenoaks County Primary School. HOLOFORM Pressed Metal Construction. Architect: S. H. LOWETH, F.S.A., F.R.I.B.A.

HOLOFORM

PRESSED METAL CONSTRUCTION

A NEW SYSTEM SUITABLE FOR SINGLE-STORIED BUILDINGS WITH REPETITION OF PLAN UNITS

HOLOFORM is a permanent construction primarily designed to meet the recommendations of the Technical Working Party on School Construction and it is based on the two-dimensional grid system advocated in Post War Building Studies No. 2.

HOLOFORM and normal building methods are

complementary in that composite structures may be designed, if necessary, to combine appropriate elements of each system and to preserve individuality.

Architects concerned with any type of single-storied building which requires repetition of plan units should write for a copy of the HOLOFORM booklet.

THE MORRIS SINGER COMPANY LIMITED

FERRY LANE WORKS · WALTHAMSTOW · LONDON · E17 · TELEPHONE: LARKSWOOD 1055

Supplied and fixed by **MARLEY** means

free maintenance in good condition for **10 YEARS**

guaranteed against lamination and decay for **50 YEARS**

*Whatever tiles you specify insist
on these guarantees backed by a
Company of standing.*

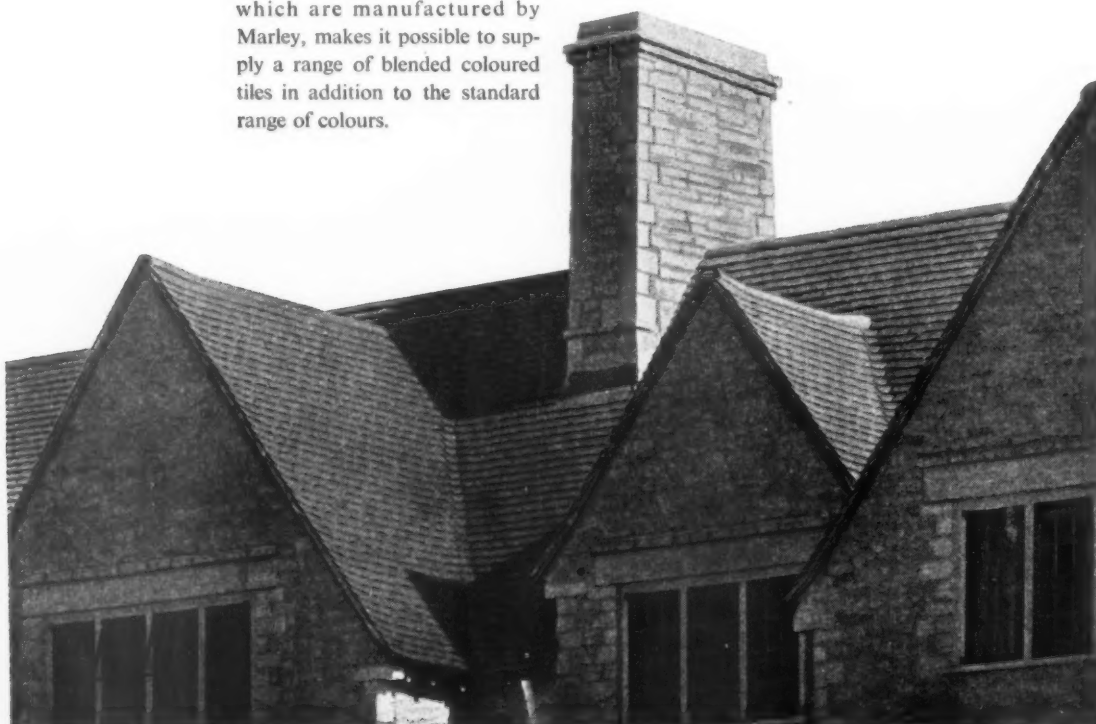


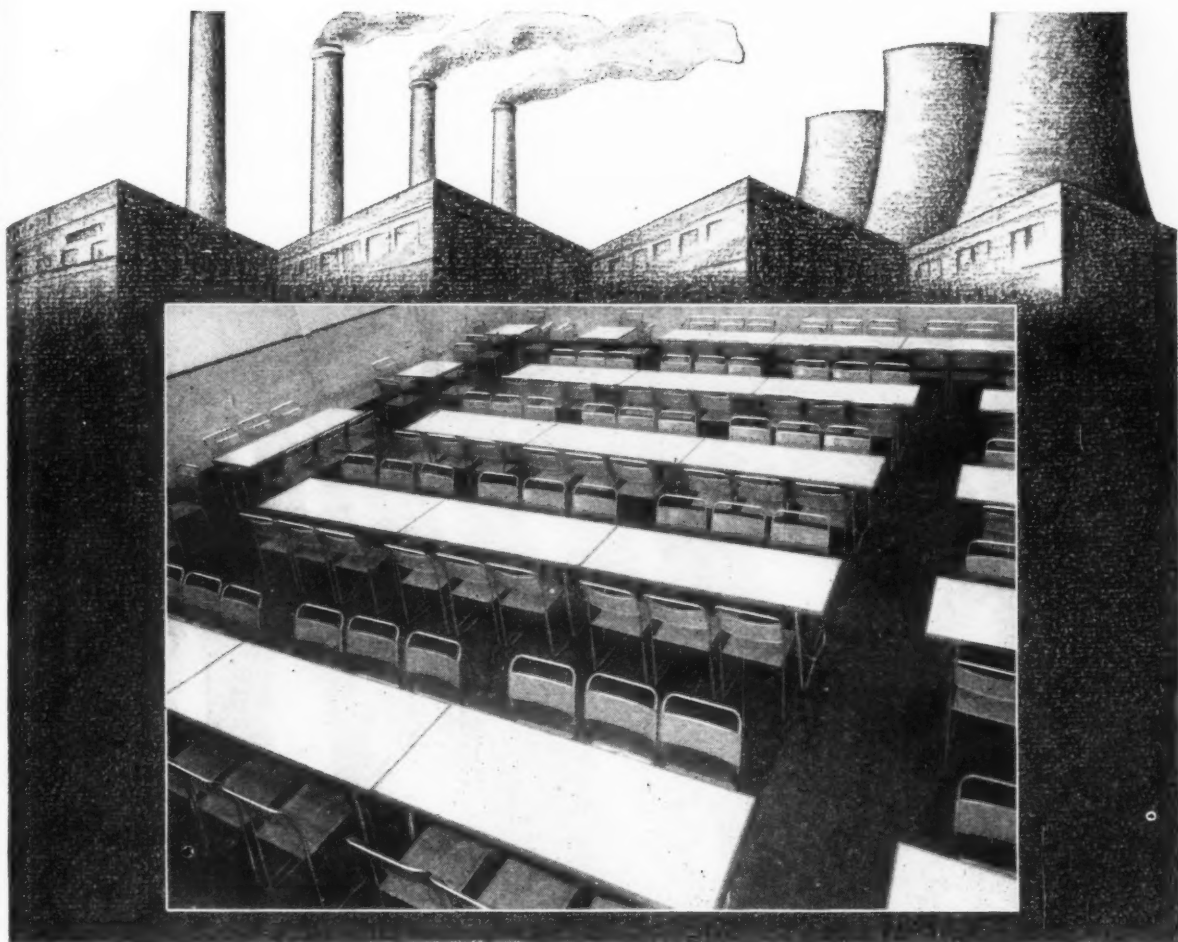
"Not for an age—but for all time"

THE MARLEY TILE CO · LTD · RIVERHEAD · SEVENOAKS · KENT
Telephone : Sevenoaks 2251

PERMANENT COLOUR

All Marley roofing tiles are now surfaced with permanently coloured granules which cannot fade, but give a distinctive texture to the tiles and assist the weathering process. The use of these granules, which are manufactured by Marley, makes it possible to supply a range of blended coloured tiles in addition to the standard range of colours.





Rendezvous for refreshment

The canteen is now accepted as an essential department of the modern industrial system. Here Jack and Bill, Molly and Brenda are refreshed, mentally and physically, ready to tackle their jobs with renewed vigour when the midday meal is over. Kingfisher Equipment makes an important contribution to the problem of furnishing canteens such as these. Their Tubular Steel Nesting Chairs and Tables—renowned for their strength and lightness—are attractively designed to provide restful comfort, and quick and easy assembly or

nesting. The remarkable economy they give in storage space makes them ideal for use in canteens, public halls, civic restaurants and other public buildings.

The photograph, reproduced by courtesy of the British Electricity (London Division) Authority, shows the canteen at the Deptford Power Station equipped with Kingfisher Tubular Steel Nesting Chairs and Tables. The table tops are made of a special scratch-proof, abrasive-resistant plastic.

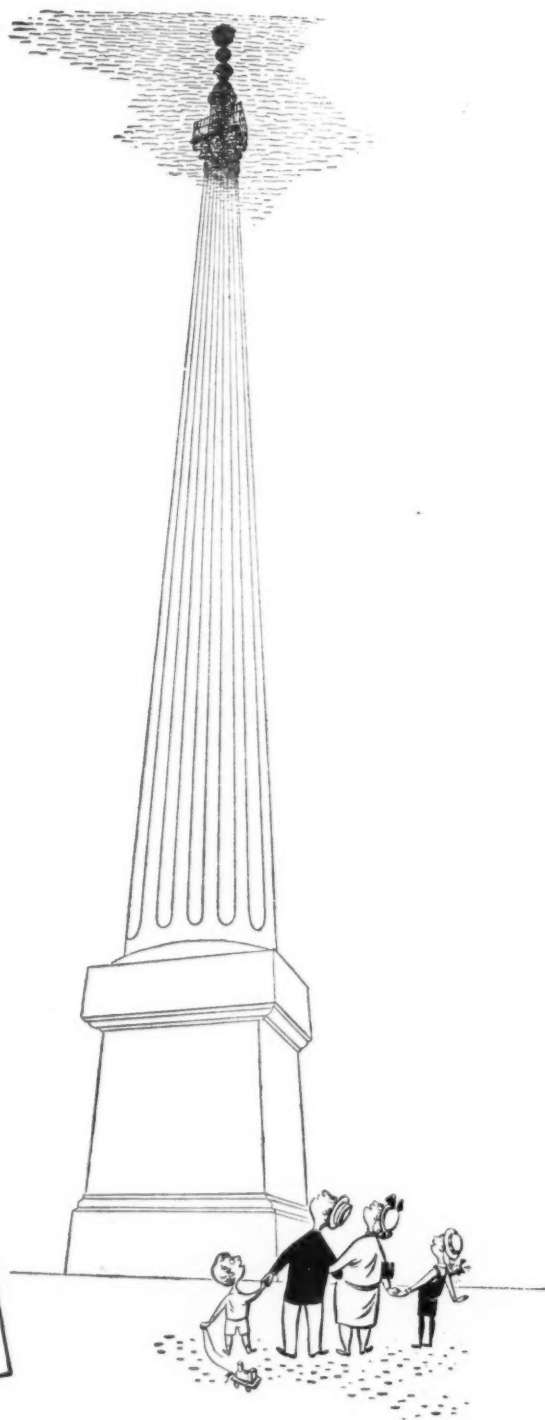


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KINGFISHER LIMITED • CHARLES STREET AND PHOENIX STREET • WEST BROMWICH • STAFFS
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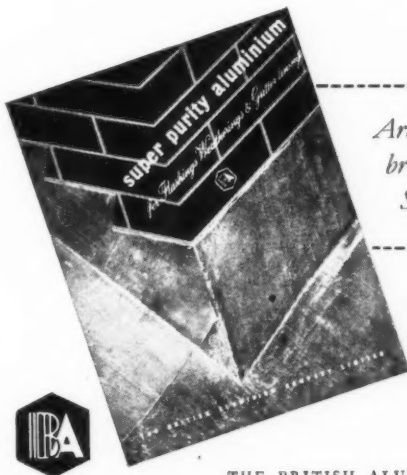
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Flashing . . . Weatherings . . . Gutter linings

DUCTILITY . . . Super purity aluminium offers the builder a ductility and ease of working not obtainable from lower purities of aluminium, and compares very favourably in this respect with other flashing metals.

DURABILITY . . . Super purity is even more durable than commercial purity aluminium which has a proved record as a building material.

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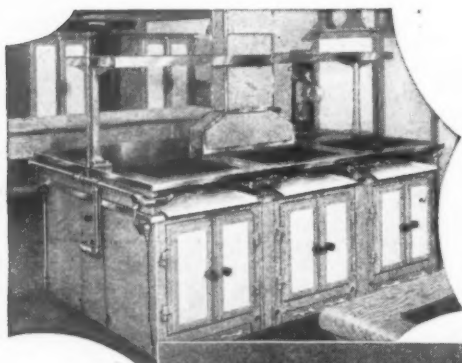


Architects and Builders are invited to write for the brochure illustrating applications and a sample of Super Purity Metal.

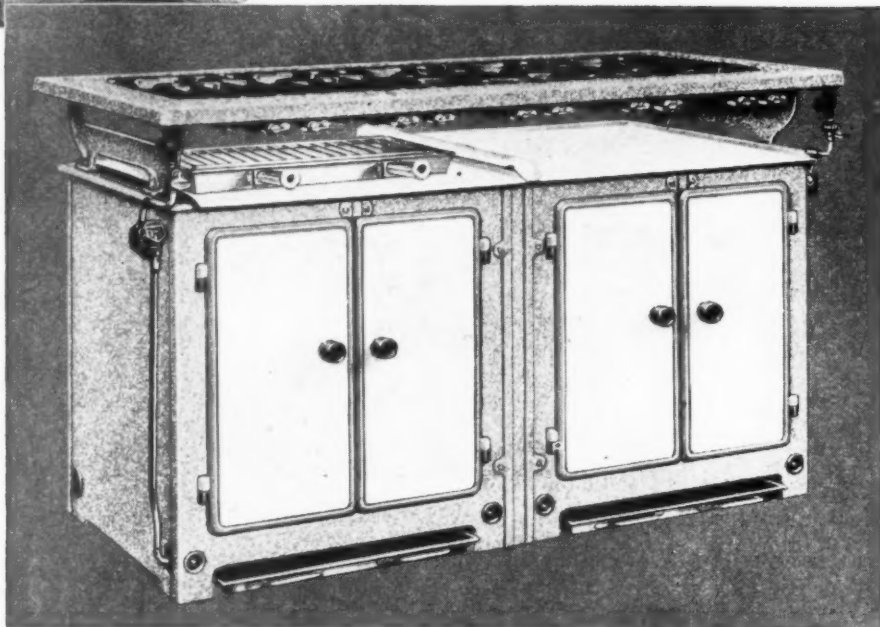


British Aluminium

THE BRITISH ALUMINIUM COMPANY LIMITED SALISBURY HOUSE LONDON EC4



In well-designed kitchens



THE GAS RANGE is an important item in large-scale cooking. One of the best known, the Duke of York, in one or other of its various forms, will satisfy all requirements. As a "wall" type, it can be had as a single oven, either in a 24" or 35" internal width, surmounted by a hotplate 41" wide. Alternatively, any number of 24" or 35" ovens

may be joined in battery form, with a continuous hotplate over. Choice of "open" sectional bars, or of "unit" hotplates, is available, and pottracks can be fitted if desired.

The Duke of York can also be supplied as a "central" range, comprising four, six or more ovens, with or without potrack.

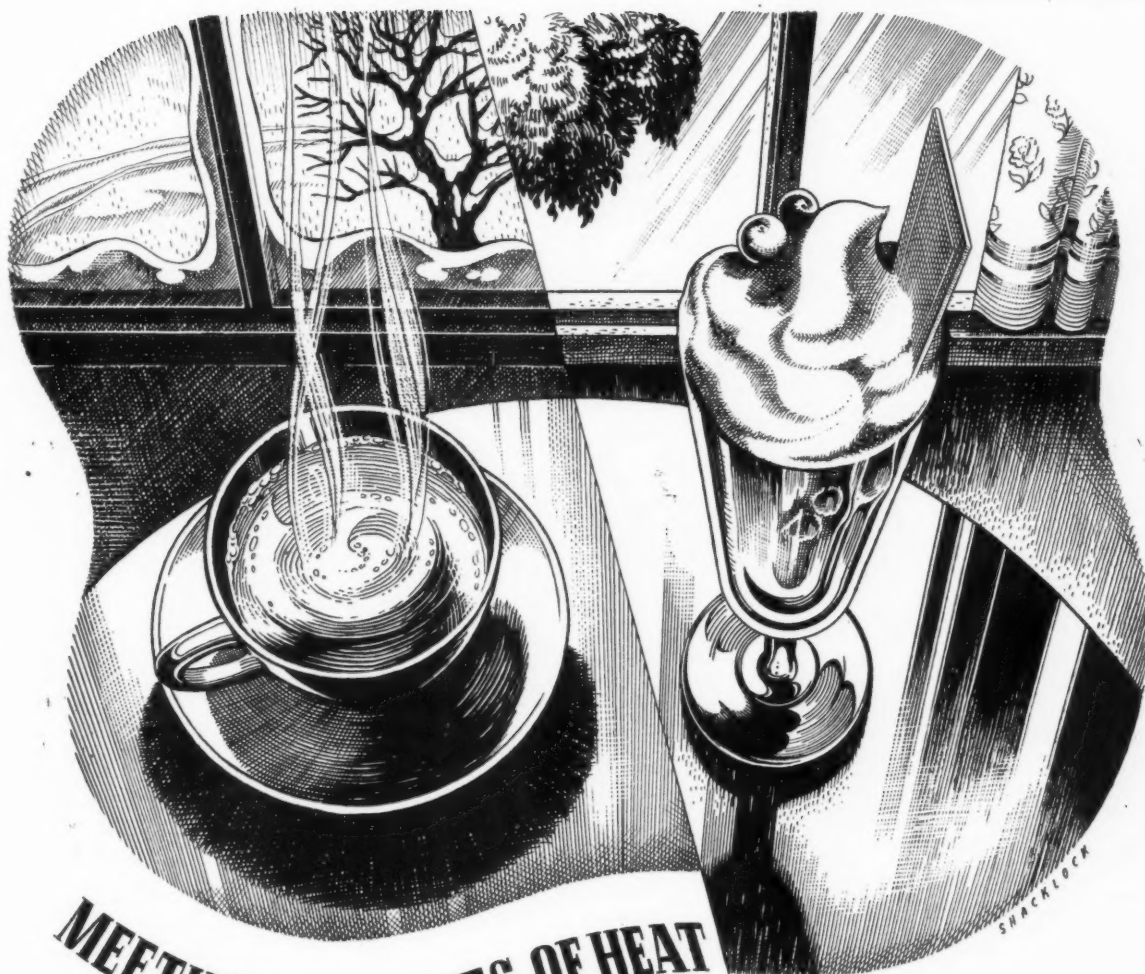
If you have any catering problem, large or small, write to R. & A. Main Ltd. They offer you the benefit of their long experience in the equipping of Kitchens, Canteens, etc. Layouts and estimates of cost will be gladly prepared on request.



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R. & A. MAIN LIMITED
Gothic Works, Edmonton, London, N.18
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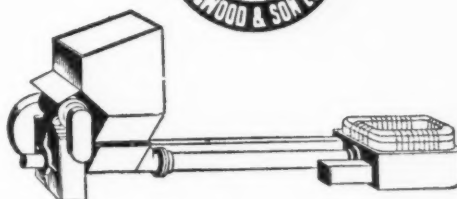


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- AND COLD...

However surrounding conditions may change, a Bigwood Unicalor Stoker automatically adjusts itself to meet them, feeding more or less fuel as required to maintain uniform steam pressure or heating conditions. Invaluable for use where human inattention may result in heavy losses. Write for full particulars.

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WOLVERHAMPTON.**



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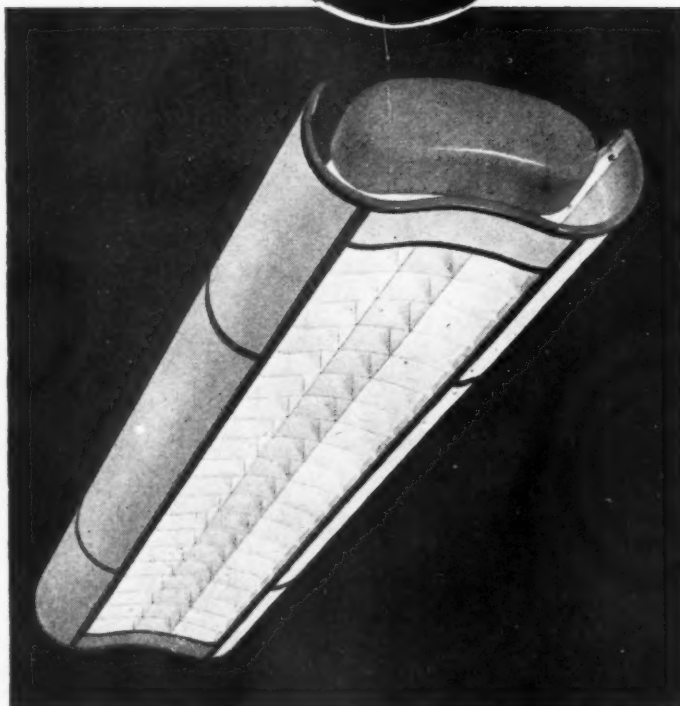
UNICALOR

COAL STOKERS

Another New ATLAS FLUORESCENT UNIT of outstanding charm

PRICE
£8·10·0
DIFFUSING
ATTACHMENT
(ANL 2040) **£2·16·0**
PLUS PURCHASE TAX 13'8d

Exceedingly attractive in appearance, very efficient in use, this new fluorescent fitting is a further step in the steady progress that is so well defined in all Atlas equipment. It consists of a basic twin 4ft. 40 watt unit (available with either a two-pin starter switch or the Atlas 'Quickstart' Unit) and the design of its louvre attachment vests it with more than the usual eye-appeal and light diffusion efficiency. This new fitting certainly represents a big advancement in design. May we supply you with full particulars?

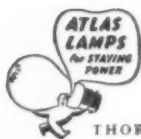


Fitting GN 2040

197



The large illustration shows this unit with the 'louvre' attachment. Also is shown the basic unit, which is suitable for various diffusing attachments. Tubes are available in four standard colours—'Daylight', 'Northlight', 'Warm White', and the new warmer colour 'Peach'.



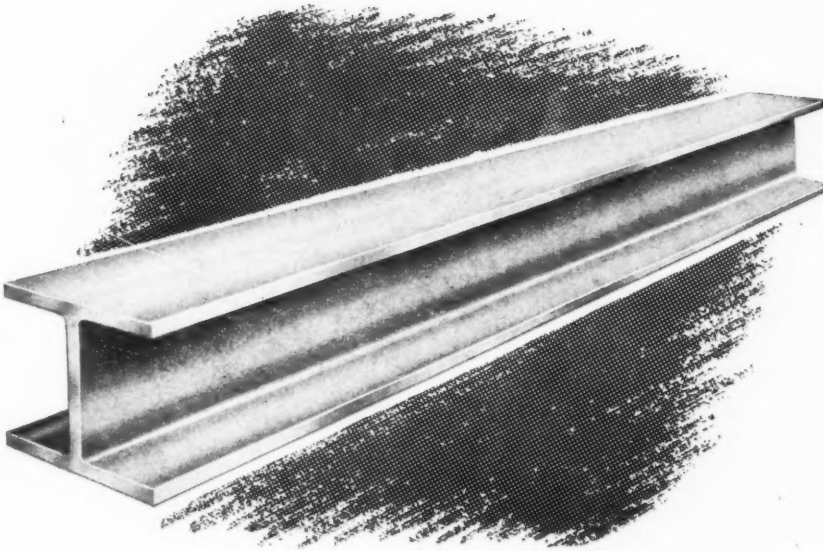
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Range of Sections 6" x 6" to 24" x 12". Full technical details and advice will be gladly sent on request.

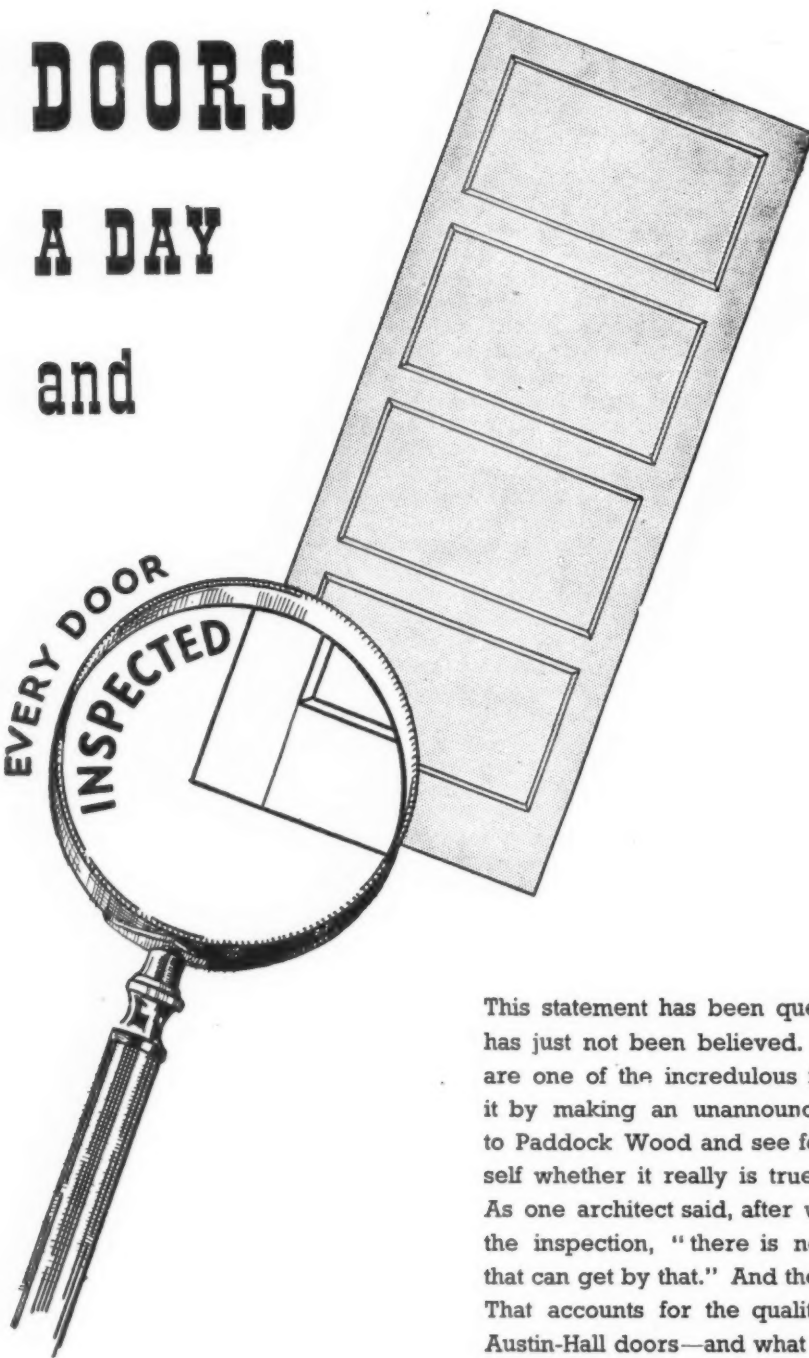
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400 DOORS A DAY and

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This statement has been queried; it has just not been believed. If you are one of the incredulous folk, test it by making an unannounced visit to Paddock Wood and see for yourself whether it really is true or not. As one architect said, after watching the inspection, "there is not much that can get by that." And there isn't. That accounts for the quality of the Austin-Hall doors—and what is more, every one is guaranteed.

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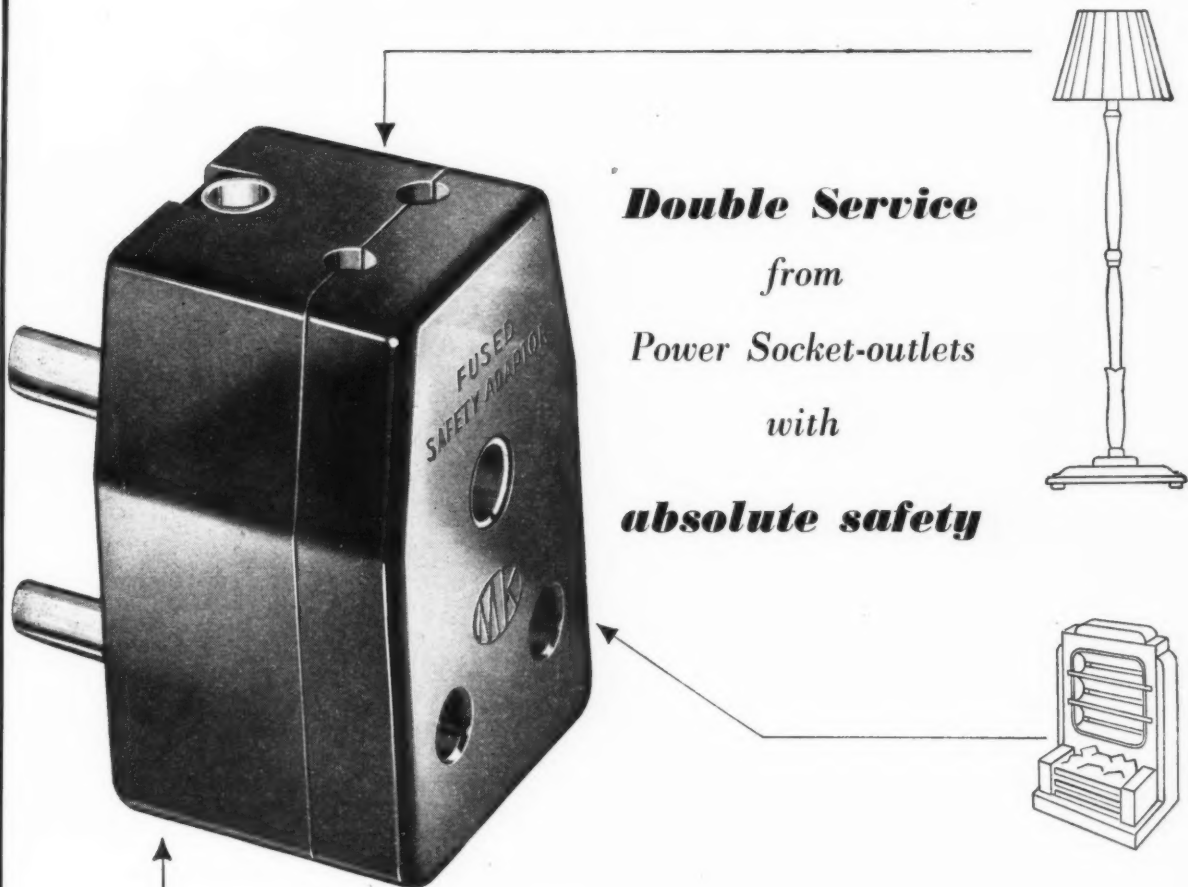
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M.K. fused safety adaptors are the cheapest and simplest way of providing an extra socket-outlet without lowering the standards of safety. Inserted into any *Power* socket-outlet — they automatically provide two socket-outlets — one to take a 15 amp. plug and another to take either a 5 (or 2 amp.) plug. Both outlets can be used together or separately and the 5 (or 2 amp.) outlet is protected by cartridge fuse-links of appropriate current-rating contained within the adaptor.

Made to B.S. 546 : 1934 Appendix D (with shuttered sockets) and in conformity with the Regulations for the Electrical Equipment of Buildings.



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20,000 sq. yds. of Vermiculite concrete screed 2 inches thick were used to insulate the roof of this factory at Kidsgrove, Stoke-on-Trent, the 'U' factor being between .3 and .35. Another interesting example of its use may be seen in the new power-station at Poole.

VERMICULITE

for lightweight, low-cost concrete
with remarkable insulating power

Owing to its combination of light weight with high insulation value, concrete employing VERMICULITE as aggregate has proved a real economy, particularly as a roofing material for factories, schools and power-stations. Experience in typical buildings shows that:—

1. The cost of the concrete is more than covered by the saving which is made possible on the heating installation.
2. The light weight (24lb. per cubic ft.) of the Vermiculite concrete allows of further economies in the cost of the structure.
3. For each 1,000 sq. ft. of roof insulated with Vermiculite concrete the calculated fuel saving is 6 tons per annum.

24 lb. per cubic foot

A typical mix of Vermiculite and Portland cement in the ratio of 6—1 by volume gives a concrete with a bulk density of 24 lb. per cubic ft. and a 'K' factor of 0.65, but the relative factors of weight, strength and insulating power vary with the proportion of large and small Vermiculite granules and the amount of cement. William Kenyon & Sons can supply the correct grade of aggregate to meet any specified requirements, and architects are invited to consult our technical staff, who have complete data at their disposal.

★ Vermiculite concrete has also been used with complete success in the insulation of mains for district heating, for fire-proof doors and partitions and for coating Steel joists and columns.

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INSULATION ENGINEERS

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WHAT VERMICULITE IS

VERMICULITE is an aluminium-magnesium-silicate belonging to the Mica group of minerals and similar in appearance. The laminae which compose it have the peculiarity of expanding enormously and exfoliating when subjected to heat, thus reducing the bulk density of the material to something like 5 lb. per cubic foot.

Supplies of high-quality Vermiculite from South Africa are now available and the raw material is being expanded, ground, sieved and graded at our plants at Dukinfield and in the London area, from which Contractors can be supplied with the correct mix for any purpose.



Summary

of the properties of

"KISOL"

Vermiculite Concrete

Light Weight

24 lb. per cu. ft. (6—1 mix)

Good Insulation

Thermal conductivity ('K') is only 0.65 B.T.U.s per sq. ft. per 1" thick, per 1°F per hour.

Fire Resistance

Up to 2,000° F.
Classified 'Incombustible.'

Sound Treatment

Average transmission loss 42.5 db.

Workability

Can be mixed in an ordinary mixer and poured like any other concrete, sprayed on walls and wallboards, pre-cast into blocks, roofing-slabs or curved sections.

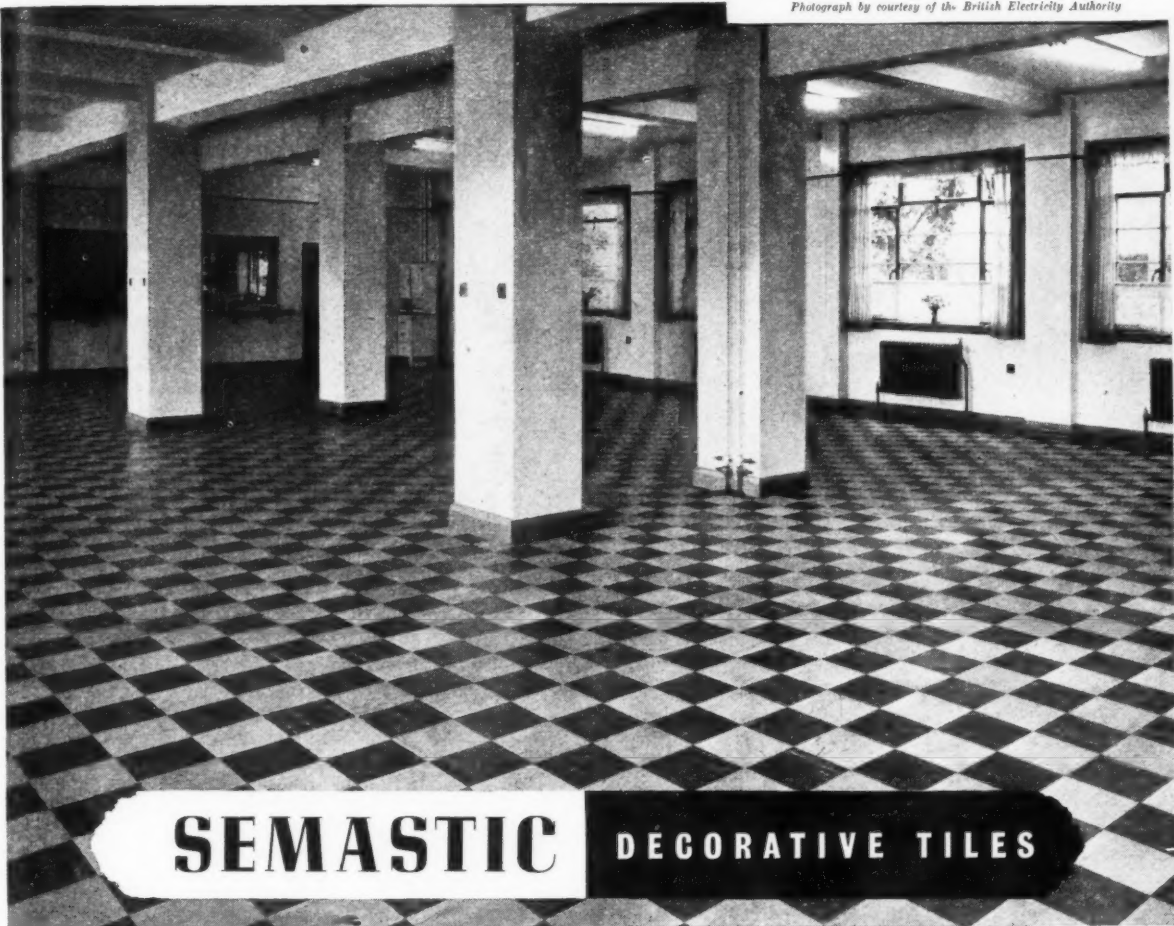
Stability

Low shrinkage on drying.
Unaffected by heat, moisture frost or acids.

In order to provide the fullest possible data on the use of Vermiculite concrete, William Kenyon & Sons, Ltd. have initiated a comprehensive series of tests which are now being carried out by the Building Research Station.

The Canteen at the British Electricity Authority's power station, Kingston, Surrey.

Photograph by courtesy of the British Electricity Authority



SEMASTIC DÉCORATIVE TILES

(A Product of a Company in the DUNLOP GROUP)

In the selection of any floor covering, initial outlay has to be balanced against the cost of maintenance and repairs. Good appearance and underfoot comfort have to be considered in relation to economy. In an industrial canteen, such as this at the British Electricity Authority's Kingston Plant, serviceability and cleanliness are equally important factors.

The British Electricity Authority has found that the best way of meeting all these requirements is to

specify Semastic Decorative Tiles. This is one of a number of installations carried out for the Authority. Semastic Decorative Tiles are easy and economical to instal. They have excellent wearing qualities, yet cleaning and maintenance requirements are of the simplest. They give character and atmosphere to rooms, and they have a pleasant "feel" underfoot. The wide range of plain and marbled colours available affords ample scope for fitting in with any decorative scheme and for originality of treatment.

INSTALLATION SERVICE

Countrywide installation service is provided by the following leading floor laying specialists who represent the highest standard of experience and workmanship available in the country.

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- PILKINGTON'S ASPHALTE CO. LTD. ● SEMTEX LTD. ● THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD.
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PRECISION GRILLAGE ASSISTS RAPID ROOFING

In the form of steel grillage with every intersection welded and gauged according to the size of the covering to be used.

The slates or tiles can be quickly secured at the correct spacing and held by specially designed rustless steel clips. Precision Roofing is a quick and efficient method and needs a minimum of skilled labour; suitable for both industrial and domestic roofing. Write for further particulars.

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General Contractors : David Walton & Co. Ltd., Salford

Roofing Contractors : Manchester Slate Co. Ltd., Manchester



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PR. 6

Gives perfect results
over concrete—

"Crestestone"

CONCRETE BONDING GYPSUM PLASTER

CRETESTONE Plaster overcomes the difficulties normally associated with plastering over concrete, such as flaking, due to failure of the bond, and crazing and cracking, due to expansion and contraction of the concrete.

It saves the expense of "hacking" concrete or applying chemical treatment and at the same time provides the first plaster coat.

CRETESTONE is essentially a low expansion, retarded hemihydrate gypsum-plaster conforming to B.S. 1191, Class B, and containing specially shredded and prepared wood fibre.

CRETESTONE is chiefly used as a bonding coat to receive PARISTONE Browning and Wall Finishing Plasters. Over exceptionally level concrete surfaces CRESTESTONE may be finished directly with PARISTONE Wall Finishing Plaster used neat or gauged with lime.

Further information about this, or other GYPROC products or systems, will gladly be supplied.

GYPROC PRODUCTS LIMITED

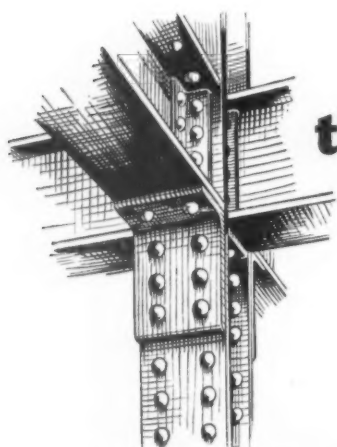
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Telephone: Gravesend 4251-4. Telegrams: Gyproc, Gravesend.

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"GYPSTELE" Partitions and Ceilings,
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GCz



the heart of the matter..

applied to buildings lies in the strength and durability of the steelwork. The ubiquitous appearance of the sign BOOTH STEELWORK is evidence that this country will have "good-hearted" buildings for many years to come.



The steelwork shown above is part of a project which required riveted and welded steelwork. Both types were fabricated and erected by BOOTH, BOLTON.

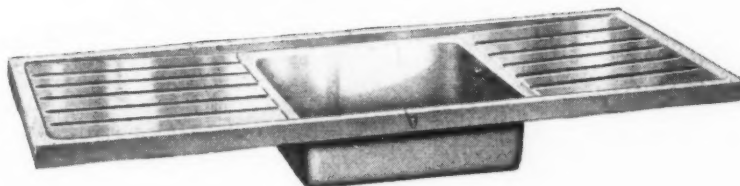
**BOOTH
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JOHN BOOTH & SONS (BOLTON) LTD. HULTON STEELWORKS, BOLTON



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Cordially invite you to visit

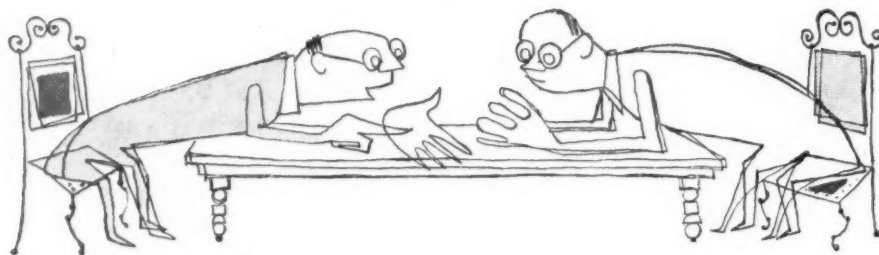
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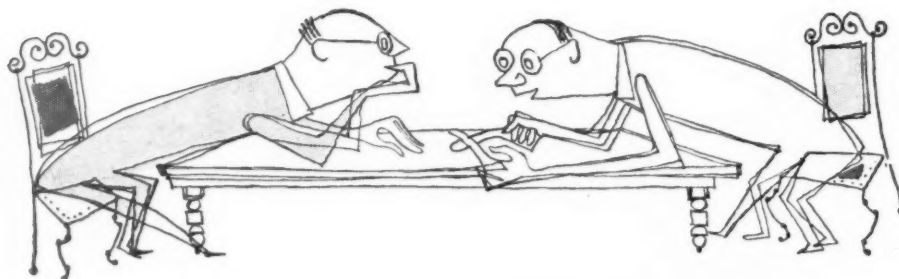
Cooks and Conferences

The Hydro Hotel, Harrogate, is famous for its cooking and popular for Conferences and Conventions.

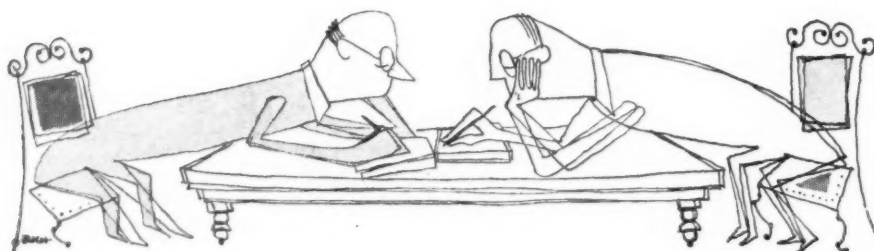
Like many another first-class hotel, its kitchens were planned and completely equipped by Radiation Large Cooking Equipment, Ltd.

The services of Radiation engineers are available to all who are or may be concerned in the planning and equipping of kitchens for schools, hospitals, hotels, restaurants, canteens and similar establishments.

Please send a note of your requirements to either of the addresses shown below.



Radiation
Large Cooking Equipment, Ltd.,
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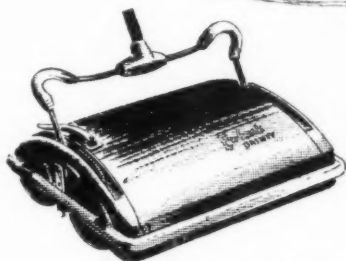
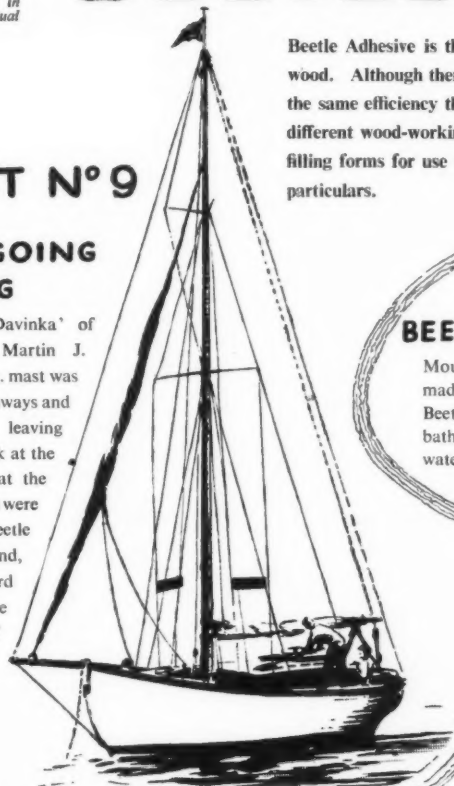
A LITTLE **BEETLE** GOES A LONG WAY —

This is the third in a series of factual announcements.

FACT N° 9

STILL GOING STRONG

This shows 'Davinka' of Ipswich (Mr. Martin J. Slater). Her 38 ft. mast was cut in half lengthways and hollowed out, leaving walls $1\frac{1}{2}$ in. thick at the foot and $\frac{3}{4}$ in. at the head. The halves were joined with Beetle Adhesive 'A' and, after three hard seasons, there are no signs of deterioration.



FACT N° 11

SWEEPING STATEMENT

Beetle finds its way into many domestic as well as industrial applications. It is used to bond the curved, laminated, streamlined cover of the Ewbank Carpet Sweeper. "Entirely satisfactory," say the makers.

FACT N° 10

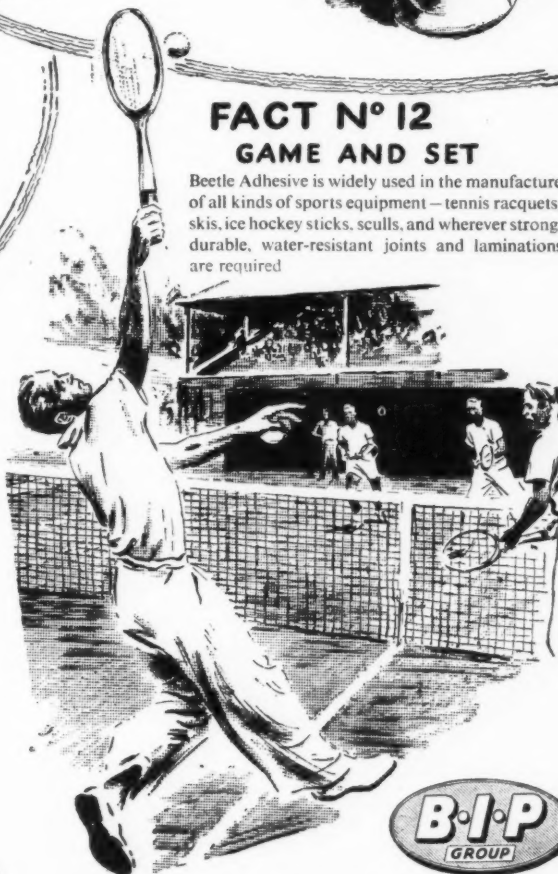
BEETLE IN THE NURSERY

Moulded dolls' heads are nowadays being made from wood-waste, bonded with Beetle Adhesive. Even when dolly gets a bath, no damage results, thanks to the water-resistant properties of Beetle Adhesives.



FACT N° 12 GAME AND SET

Beetle Adhesive is widely used in the manufacture of all kinds of sports equipment — tennis racquets, skis, ice hockey sticks, sculls, and wherever strong, durable, water-resistant joints and laminations are required.



BEETLE ADHESIVES

STRONG, DURABLE, WATER-RESISTANT

Sole Agents in the United Kingdom: THE BARTER TRADING CORPORATION LTD., 14, Waterloo Place, London, S.W.1.

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BEETLE is a trade mark registered in Great Britain and most countries of the world.



... and the floors?

Yes, floors are such an everyday feature that they are often—too often—taken for granted. Yet surely it is all-important to choose a flooring that will do the most effective and trustworthy job? Consider the qualities of Martyn Bituminous Domestic Flooring. It is damp-proof and dust-proof, warm and noiseless to the feet, resistant to fire, oil, grease and acid, unaffected by changes of temperature, and requires no expensive screeding. Users will appreciate the fact that the flooring can be polished to give a pleasing appearance very similar to linoleum, the colours available being black, dark red, middle red, dark brown. Nor is this effect liable to be spoilt by pittings or indentations made by the furniture; Martyn Bituminous Flooring is proof against damage of this nature. It is indeed the ideal type of flooring for all domestic purposes.

In addition to being used on numerous other contracts in various parts of the country, Martyn Bituminous floors have been laid with great success on many new housing estates for the London County Council.

★ Martyn Bituminous Industrial Flooring is also available for factories and other industrial purposes.

Our Technical Staff are always ready to advise on your problems

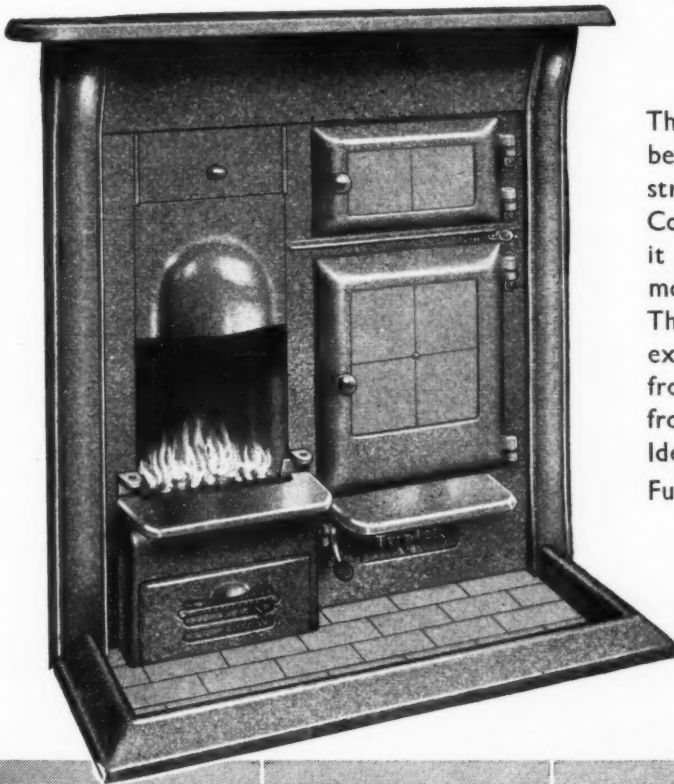
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SPECIALISTS IN DOMESTIC AND INDUSTRIAL JOINTLESS FLOORING

PICCADILLY HOUSE, REGENT ST., S.W.1. PHONE REGENT 6296-7



NEW *The* **TRIPLEX** **38 C.F.** **GRATE**



The Triplex Tradition for quality has been strictly observed in the construction of the No. 38 C.F. Grate. Continuous burning when required, it will give excellent service with most available types of fuel.

The reliable Hot Water Service, excellent Cooking Oven and the heat from the fire provide three services from the one economical fire. Ideal for Housing Schemes.

Full details on request.

SEE THIS GRATE
AT WORK AT THE

B.I.F.
BIRMINGHAM
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APPROVED

BY THE MINISTRY
OF HEALTH FOR
HOUSING SCHEMES.

HEATING

BY CONTINUOUS,
ECONOMICAL BURN-
ING DAY & NIGHT.

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IN SPACIOUS AND
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HOT WATER

ALWAYS READY IN
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TRIPLEX FOUNDRY LTD · GREAT BRIDGE · STAFFS.

Leonardo...

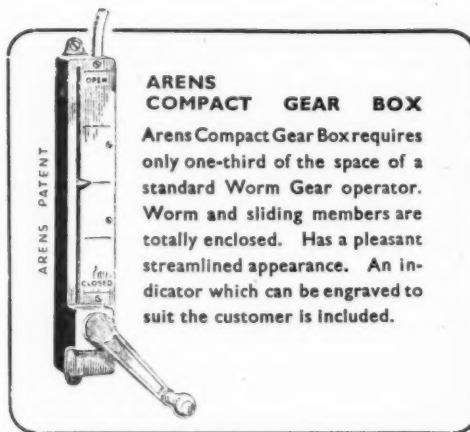
had the answer...

The most brilliant and far-seeing genius the world has known excelled at painting, music, sculpture, aeronautics, architecture, mathematics, hydraulics. Leonardo da Vinci lived nearly 500 years ago, yet his engineering innovations are still of great importance to-day.



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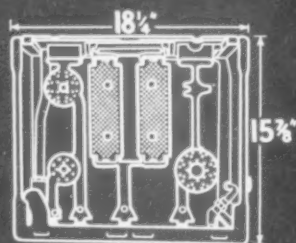
FLAG

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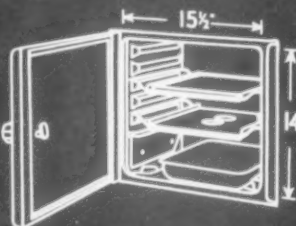
UNIQUE TAP DESIGN provides a simmering position beyond the "full-on" position and prevents the taps being "knocked-on" accidentally. The oven tap is fitted with a locking device to prevent the gas being turned on in error.



THE AJUSTO AUTOMATIC OVEN HEAT Control is conveniently on the right-hand side of the cooker. A chart giving Ajusto dial settings for all types of dishes is supplied with the cooker to ensure trouble free cooking.



PLAN OF THE HOTPLATE with the top bars removed to show the three boiling burners and grill burner.



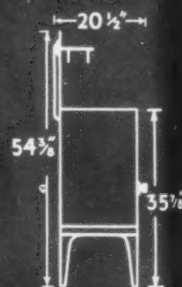
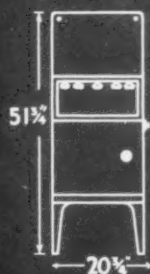
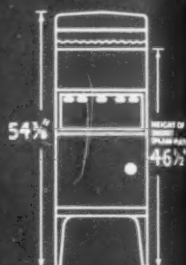
THE AMPLE OVEN SPACE gives ideal heat distribution for perfect cooking. The embossed oven sides provide easy cleaning.

DIMENSIONS

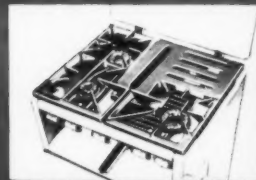
Cooker Overall

Height with Cover Top open	...	...	...	51 1/2"
Height over Splashplate	...	...	...	54 1/2"
Height over Short Splashplate	...	...	...	46 1/2"
Width including Ajusto	...	...	...	20 1/2"
Depth, including Door Handle and Plate Rack or Cover Fittings	...	...	...	20 1/2"
Height to Hotplate	...	...	...	35 1/2"

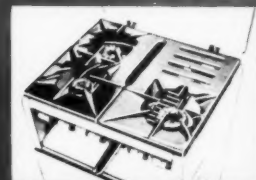
Oven				Hotplate	
Door opening:	...	Height	14"	Width	18 1/2"
"	...	Width	15 1/2"	Depth	15 1/2"
Depth	...	...	12 1/2"		



The main illustration shows the FLAG Cooker with Splashplate and Platerack. The small illustrations above show the alternative fittings of Folding Cover Top (left) and Short Splashplate (right).



The Flag Cooker can be fitted either with Stoved Black open type top bars—



or with Black Vitreous Enamelled semi-solid Top Bars.

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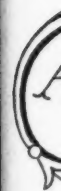
INDICATOR OF
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THE ARCHITECTS' JOURNAL

No 2882 4 May 1950 VOL 111

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WORKING PARTY

As the Report for the Working Party was only published on Monday, I have hardly had time to do more than glance at it, but as far as I can see, it does not suggest any major changes in the structure of the industry or, for that matter, say very much which could not almost equally well have been said 15 or 20 years ago. For instance, it points out that the architect does not let the contractor have enough drawings in time and that the client does not always know enough of what he wants for drawings to be possible. These are old problems over which we may be helped by the US Productivity Team. But the Working Party does, at least, tidy up quite a number of loose ends and it is interesting to read the considered views of a group representing all sections of the industry.

A FORMIDABLE RA

What is there to say about the Architecture Room at the Royal Academy that has not been said many times in the past? This year it is more depressing than ever, and gives the impression of containing a number of designs that have been seen there before. It is depressing, not only as an exhibition, but as a forecast of some of the things we may in due course see in our streets. To condemn it wholesale may seem unfair to the few examples of good architecture that are to be found there; but I am sure the authors of these would be the first to agree that their contributions can do little to leaven the whole lump of dough.

The poor standard of architecture exhibited must be due to one of three reasons: Is it that the good designers don't send their work to the Academy? Or do they send it and have it rejected? The third alternative is that there aren't many good designers anyway. I would not presume to decide which is the right answer. Readers may care to do so.

ART ON THE AIR

Don't miss the Third Programme series of talks called *Aspects of Art in England*—one a week until midsummer. It differs from most things of the kind in two important ways: first, there is a book of plates* to illustrate the talks; secondly, each of them lasts half an hour.

It is a long time since the BBC published illustrations for a series of talks on art, and the advantages are obvious. The half-hour length, too, has everything in its favour. Given any reasonably broad subject, the usual twenty-

minute talk always is (and often sounds) a feat of compression, while most people will agree that if you can listen to a speaker for three minutes you can listen to him for thirty; in nine cases out of ten, anyhow.

Certainly thirty minutes won't be too long if the rest of this series comes up to the standard set by Jack Isaacs in the first two talks, on Thornhill and on Hogarth. And with such names as Rudolph Wittkower, Christopher Hussey, Nikolaus Pevsner and Geoffrey Grigson on the list there is reason to expect that it may.

SALISBURY: FOR AND AGAINST

May I add my small voice to many louder and more eminent ones in support of the appeal, launched last week, for funds to repair the spire of Salisbury Cathedral. The latest report of the architect, W. A. Forsyth, states that the top twenty-five feet of the spire must be taken down and rebuilt, and the thirty-five feet below this extensively restored. This will cost £30,000, and while they are about it the Dean and Chapter are asking for another £70,000. This sum is likely to be needed shortly for further repairs, particularly to the tower and roof.

I need not emphasise the special position that Salisbury spire holds among the architectural monuments of the Middle Ages. It must be safeguarded at all costs. But I hope I shall not be thought captious if I say that I would have greeted this appeal for funds with even more enthusiasm if the Dean and Chapter were not, at the same time, permitting the intrusion of a new red-brick building of a most unfortunate design into the Close, which is, itself, an archi-

* BBC Publications. 2s.



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structural monument that is just as much their duty to safeguard as the spire.

*

A wing of the old Deanery has been pulled down and has been replaced by this structure which, I believe, is for use by the Diocesan Theological College. There have been local protests, but without result. I am afraid that posterity will not be too pleased with this Chapter in the history of one of the finest enclosures in Britain.

COOP D'ETAT

Until recently, only chicken houses of less than 1,000 cubic feet were exempt from official scrutiny of elevations and plans. It was thought that if copious coops were permitted there might be foul play in the fowl houses. Poultry farmers, it was believed, would become paltry criminals if they were tempted to build garages and call them hen houses; so they were protected from themselves. I gather that many of them found the two months for consideration of a projected hen house to be an effective discouragement to expansion of their undertakings. However, now that Dr. Dalton has withdrawn the regulation I hope they will concentrate on netting hens and profits and will not conceal coupés in their coops. And I hope that they will seek advice on the problems of coping with coop siting and design.

THE CAMERA LESS OBSCURE

Two very useful books on architectural photography have just been published.* If you study them seriously you will know all about photographing buildings and sculpture—except how to do it. That can only come with plenty of practise and an eye for composition. Both books contain a mass of technical information and are very fully illustrated. Of Mr. Gernsheim's pictures, I found his close-ups, especially of sculpture, more charming than his straight photographic views. In Mr. Shaw's book the overall effect of the pictures (taken by a number of well-known British photographers) is rather pedestrian and too exclusively restricted to purely architectural subjects in the academic sense

of the word. I would like to have seen some work too, by such superb foreign photographers as Kidder-Smith of the USA, Hürliman of Switzerland and Klicka of Czechoslovakia, and also some of the work of the early pioneers in the architectural field.

*

Dr. Pevsner writes a foreword to Mr. Gernsheim's book, which is particularly interesting because it helps to place photography in a comfortable position among the arts. That photography is an art, the Doctor has no doubt, in spite of what Ruskin said about it; but he believes that it is an every-day art, an "art not-fine," to use Lewis F. Day's term. "Photography is," said Dr. Pevsner, "just as pottery is nowadays, one of the crafts which achieve their goal with the aid of machinery, and the great respect we have for the good photographer is connected with the respect for the designer as a man who is ready to put his æsthetic powers into the service of every man, instead of playing them off in the seclusion of his private studio."

*

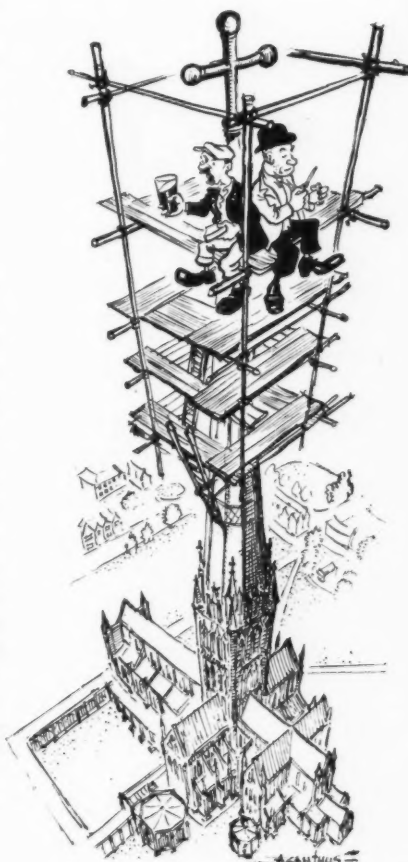
There is no doubt that the photographer is having an enormous effect on our way of looking at things and his power has increased greatly since he had the courage to free himself from the painter's influence. The value of the camera as an educator in the appreciation of "significant form" (something this country lacks perhaps more than any other; our approach is always too literary and too conditioned by Puritanism) lies in its products being acceptable to every man, who may shy away in terror from modern painting but will accept enthusiastically, in a photograph, what the painter is trying to say in his own medium.

*

Architects should welcome these two books, which may help to speed the day when the camera, as a visual educator in architectural training, will be treated on a par with the pencil.

RIBA RECEPTION

The RIBA Reception last Friday seemed a little less crowded than last year but garnished with an even greater flash of mayoral chains and decorations.



"Exactly how much is this spire out of plumb?"

The principal activities of food, drink, conversation and a whirl round the dance floor were sandwiched between puppets on the lower deck and an exhibition of unidentified drawings in the library—an answer I suppose to the AA quiz. I quailed at hazarding even one guess, but considering the whole as an exhibition of architects' drawings felt it compared more than favourably with what the Academy had shown me earlier in the day.

*

I always groan at the "beer and cider only" element of the buffet, but at least it kept me alert enough to learn that food was more plentiful than last year. Beavers and ice cream were in short supply, and I am eternally grateful to the man who gave me a box of matches.

TOO OLD AT 45?

I have just received some potted biographies of would-be AA Council members, and have been struck by the comparative youth of most of them. Only three out of eighteen are over 40, and the average age is between 30 and 35.

* *Focus on Architecture and Sculpture*, by Helmut Gernsheim (Fountain Press, 25s.), *Architectural Photography*, by Leslie Shaw (Newnes, 30s.).



The BIF Exhibition

The British Industries Fair opens simultaneously at Birmingham, Olympia, and Earls Court on May 8, and remains open until May 19. Above is an exhibition

feature in the Earls Court Exhibition Hall, which has been designed by Neville Conder. It was constructed by City Display, Ltd.

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Specialist Editor No. 9

TRADITIONAL MATERIALS

SEVERAL times recently we have noted that changes in building technique have come about almost unnoticed.

It is also true that the focusing of attention on new materials and new ways of building may lead to an unfortunate loss of appreciation of the proper methods of dealing with traditional materials. BRS references to sulphate attack in brickwork, for instance, have been fairly prevalent in recent years and it is to be wondered whether this is a sign that there is a falling off in the quality of technique in the application of our most widely used traditional material. There may be new and attractive systems of building round the corner in 1951, but brick is a natural material to many areas of England and one which has so many attractions that, although its method of use may change, we cannot believe that it will cease to be widely used. A new National Building Study* dealing with common defects in brickwork therefore comes as a timely reminder that though brick can give good service for a thousand years, as it has done in places like the tower of St. Albans Cathedral, it must be properly designed if it is to give such service. It is significant that this latest publication puts more emphasis upon methods of use than upon the material itself, i.e., it is up to the architect rather than to the manufacturers to avoid trouble.

FIRE IN BUILDINGS

Technical literature dealing with the architect's responsibilities for guarding against catastrophe by fire has been very limited in the past and most members of the profession have probably relied chiefly upon regulations laid down by the various authorities. Often they must have found such regulations irksome and sometimes apparently silly. It is true that much of the existing law on the subject has been built up without a great deal of scientific evidence. The setting up of the Fire Testing Station at Elstree before the war and the publication of the Post-War Study Committee Report on the Fire Grading of Buildings were good steps in the right direction, but the latter was a fearsome thing to read and it is doubtful if many architects have found time to study it in detail. In any case, it deals only with one aspect of the subject. There is a new publication,† however, which is eminently readable and is written from the architect's viewpoint by authors who really know their subject. It is likely to become the standard reference for years to come, and should be included as one of the books to be read by all architects and architectural students.

* Some Common Defects in Brickwork. National Building Studies Bulletin No. 9. HMSO 1950. Price 1s. 3d.
† Fire in Buildings. Eric L. Bird and Stanley J. Docking. A. & C. Black, Ltd. Price 15s.

Before the war I would have guessed the average as being a good 10 or 15 years higher. I am all for a young Council, particularly in an organisation like the AA, which has an Advisory Council of elder statesmen. But are the 50-year-olds too busy for the fairly high percentage of attendances the present Council members seem to be able to manage, or is it just that nobody wants them?

STANDARD CRITICISM

A fortnight ago, I mentioned that the *Evening Standard*, quoting *Cement Marketing*, had said that 240 tons of cement a day were going to the South Bank site. Now I am told that what was actually said was "just under 500 tons a week." The reason for this error has not yet been explained. So the mountain gradually returns to mole-hill size and by the time the correction (if any) is published, nobody will remember what the original fuss was about. But the Festival will have had its weekly smack.

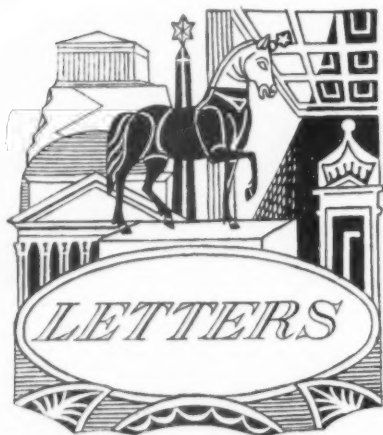
ARCHITECTURAL LIBRARIES

I gather from a librarian who was present that the Conference, held by the RIBA last week, for librarians of schools architecture was a worthwhile occasion. It is evident that, apart from a few instances in London, the majority of schools are ill-served. There are, of course, a number of recognized schools which form part of a university and enjoy the use of a university library, but the collections on architecture, building and planning in such libraries are frequently inadequate.

•

Most schools, even if they have libraries, do not employ full-time librarians; this responsibility is often taken over by a member of the teaching staff as one of his duties. It was to help such part-time librarians that the Conference was originally considered. I hope that the RIBA principles of architectural education will serve as an example to the recognized schools of the importance of the maintenance of school libraries as an effective instrument of education. And, incidentally, should it not be the responsibility of the Ministry of Education, together with the RIBA, to see that schools are properly equipped in this respect?

ASTRAGAL



R. Pater

Support for "The Architectural Review"

SIR,—In the JOURNAL for February 16 I read three letters from readers criticizing *The Architectural Review*. I expected to read in subsequent issues of the JOURNAL a flood of disagreement with these letter writers and some praise given to the *Review* for attempting the difficult task of making the architectural profession think. In the JOURNAL of April 20 I read another letter complaining about the prize-winning designs for the Pub Competition, and I have no doubt that a reader will also complain, in due course, about Gordon Cullen's proposals for city gardens published in the same issue. In the apparent absence of any professional support for the *Review* in the JOURNAL'S pages, may I, a layman, attempt, no doubt inadequately, to point out some of its virtues.

The *Review's* number on the functional tradition, despite photographs of lichen, worn paving, etc., was not merely being whimsical, but was trying to point out the wealth of detail, designed for an earlier age, which still enriches the visual scene. In contrast, the architects and engineers today do not appear to care two hoots for the little things which still matter. These details, from drain covers to traffic signals, are being designed by impersonal authorities (i.e., LPTB, AA, etc.) and ironworkers far removed from the handcraft tradition and not yet familiar with the machine tradition. The *Review* set itself the task (and here, I am afraid, I disagree with Astragal's interpretation of it), not of endeavouring to continue the handcraft functional tradition, but of ensuring that in the machine age we pay equal attention to detail. These past enrichments which we now enjoy are fast wearing out, and, judging by the detail of architects' work illustrated in the contemporary journals, the profession is sadly in need of a whole series of *Review* special numbers on the subject.

With regard to the Pub Competition, the winning designs were surely neither Victorian, Georgian nor modernistic. The "oil-lamp" holding electric light bulbs, complained of by Mr. Lister, is not Victorian or any other specific period, but only a variation of a method of concealing the naked light, be it candle, oil flame or electric. Such sharpshooting gets us nowhere.

I freely admit that most numbers of the *Review* make me so angry that I could climb up the wall, but I would be disappointed if this were not the case; one does not pay 3s. 6d. every month merely for a bundle of trade puffs and some holiday snaps.

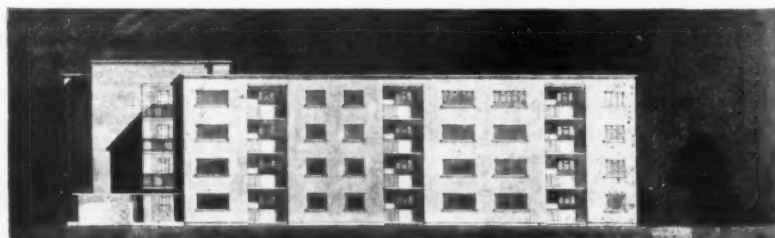
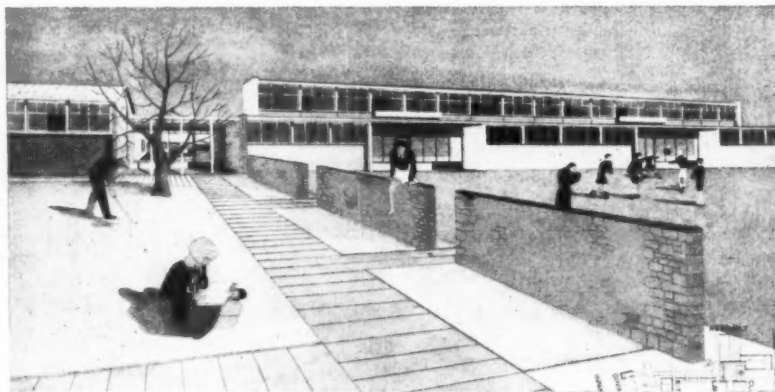
R. PATER.

Pinner.

The EDITORS reserve the right to shorten letters from readers. Whenever possible, however, they are published in full.

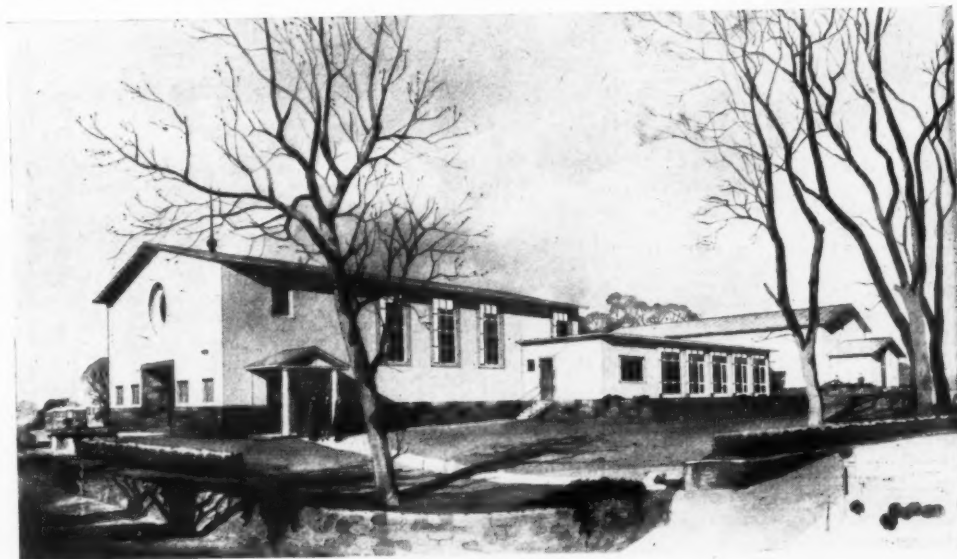
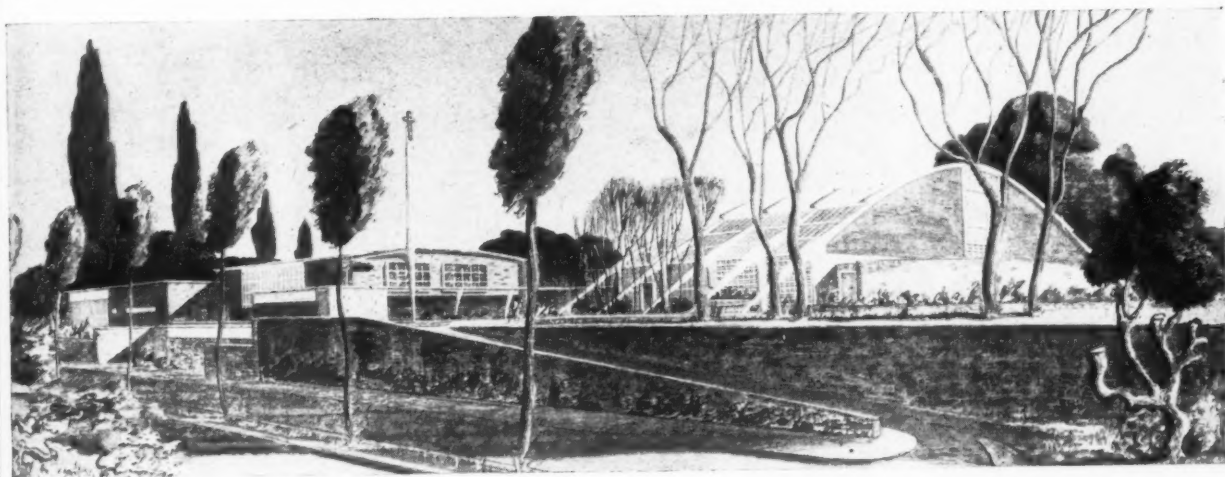
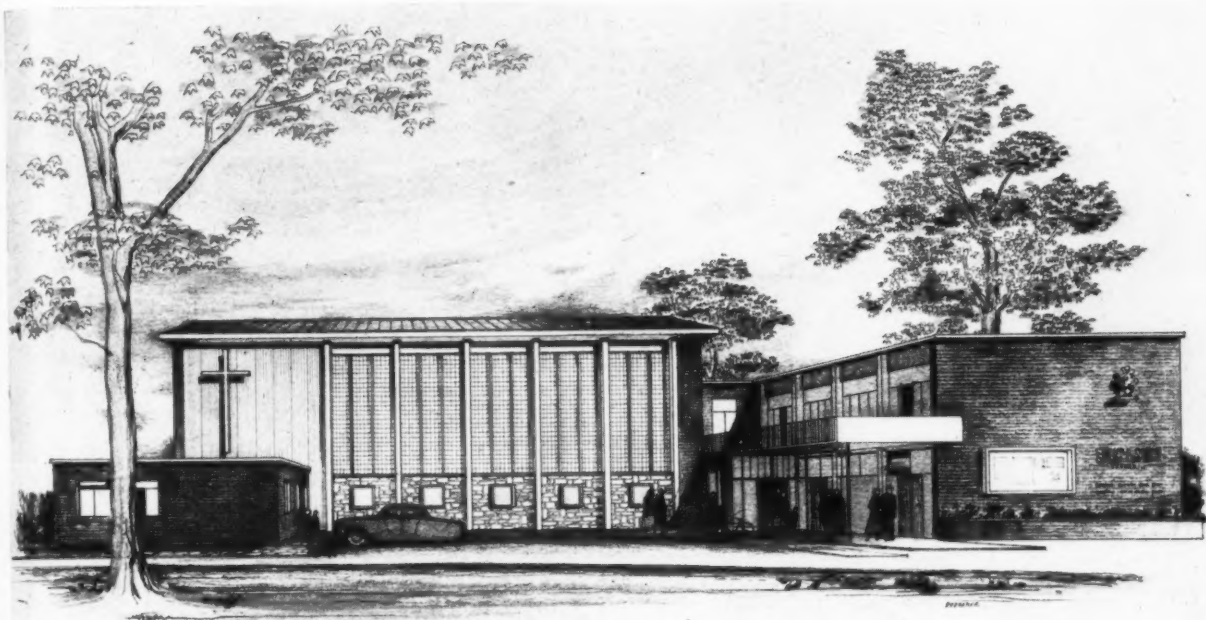
THE ROYAL ACADEMY EXHIBITION:

This year there are eighty architectural drawings and models displayed at the Royal Academy Exhibition which opened to the public last Saturday. This is an increase of fourteen over last year. On this and the following pages is shown a selection of the designs. The undermentioned designs are not included as they have already been illustrated: a community building at Llanefydd, Denbighshire, by Herbert Thearle (see JOURNAL September 16, 1948); a school at Brighton, by Percy Billington (December 9, 1948); Brett Manor Flats, Hackney, by Edward D. Mills (May 5, 1949); a shop at Bromley, by Bertram Carter (June 16, 1949); the new Colonial Office, Broad Sanctuary, Westminster, by Thomas S. Tait (August 4, 1949); part of Mark Hall neighbourhood, Harlow New Town, by Frederick Gibberd (February 9, 1950); Spurgeon's Orphan Homes, by Woodroffe, Buchanan and Coulter (March 23, 1950); and a block of offices and shops, at Exeter, by Lucas, Roberts and Brown (April 13, 1950). Below: 1259, Junior School, Birchen Coppice, Kidderminster, by F. W. B. Yorke and H. M. Barker in association with F. R. S. Yorke, E. Rosenberg and C. S. Mardall. Centre: 1228, Ramsgate: Newington County Primary School (Infants) for Kent Education Committee, by Howard V. Lobb. Bottom: 1214, Metropolitan Police Housing; new married quarters, Brixton, by John I. Elliott



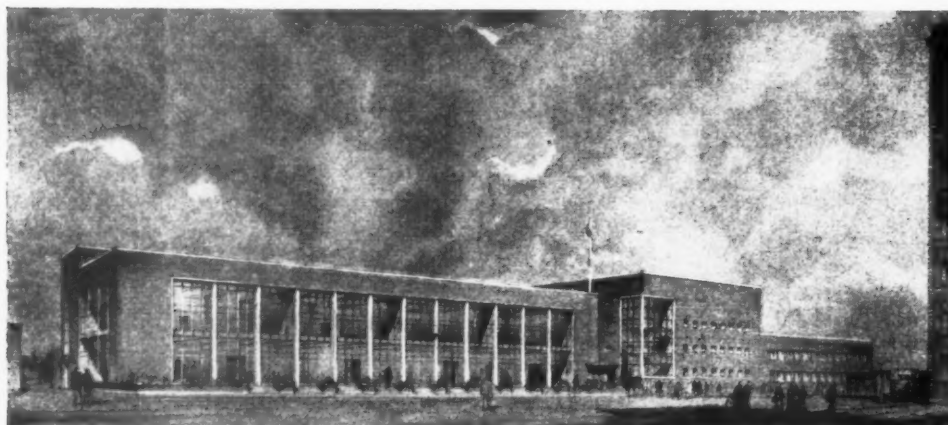
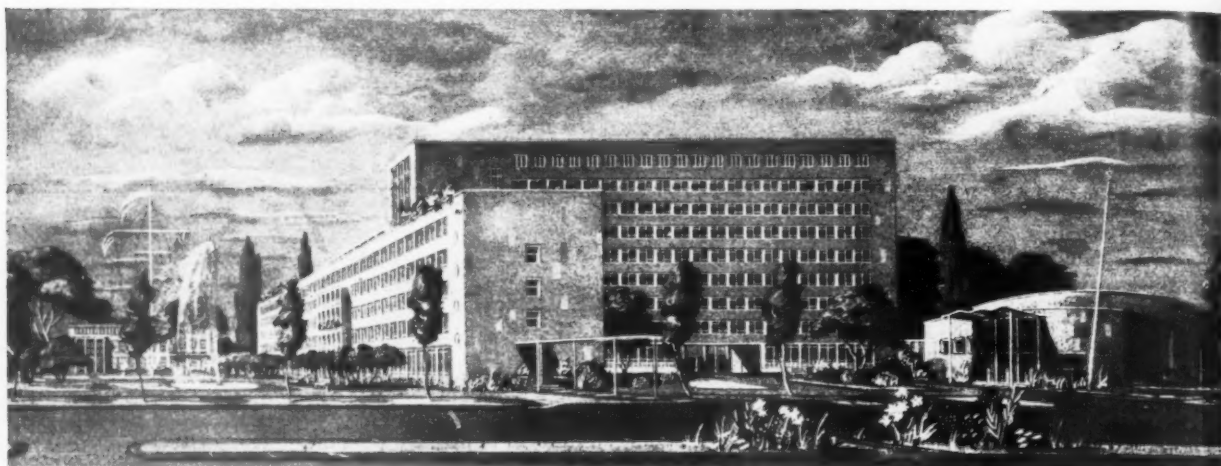
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N ; A SELECTION OF THE DESIGNS ON VIEW



Top ; 1240, Methodist Church, Mitcham, Surrey, by Edward D. Mills. Above ; 1250, proposed church of Saint Nicholas, Coventry, by Messrs. Arcon. Right ; 1198, Baptist Church, Ham Estate, Plymouth, by Louis de Soissons, ARA, and Partners.

THE ROYAL ACADEMY EXHIBITION : A SELECTION OF THE

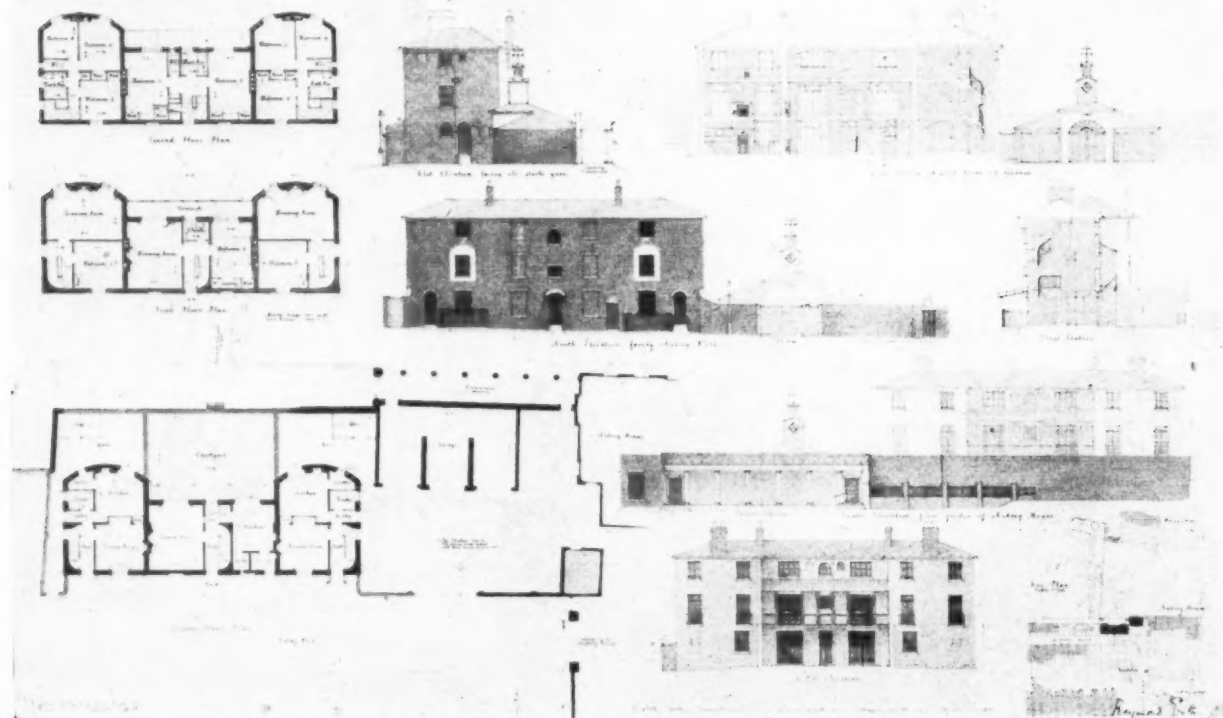


Above ; 1249, proposed civic centre at Portsmouth, by Thomas L. Marshall.

Left ; 1201, proposed welfare buildings at Bow, by Harry C. Constantine.

Below ; 1200, design for three small houses in Aubrey Walk, Campden Hill, by Raymond Erith. Opposite page ; 1264, Trinity Church, Poplar, by C. C. Handisyde and D. R. Stark.

Design for three small houses in Aubrey Walk and garage at Aubrey House, Campden Hill was for the Misses Alexander.



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THE DESIGNS ON VIEW



Third (£150), G. Whitby, M.B.E., A.R.I.B.A., 28, Great Ormond Street, W.C.1.

The following were mentioned:—Louis Erdi, L.R.I.B.A., A.I.A.A. and S., Knighttrider Street, E.C.2; W. F. Mullins, A.R.I.B.A., and Frank S. Knight, A.R.I.B.A., 12, Charleville Court, West Kensington, W.14; and D. D. Attwater, A.R.I.B.A., DIP.ARCH., and J. Baker-Mellor, A.R.I.B.A., DIP.ARCH., 1, Eastgate, Fulwood, Preston.

The assessor was Denis Clarke Hall, F.R.I.B.A.

Nottingham Hall of Residence

Following are the results of the competition for a University Hall of Residence, for Women Students, organized by the University of Nottingham and assessed by Sir Percy Thomas:—

First (£1,000), Richard Turley, A.R.I.B.A., A.M.T.P.I., and W. H. Williamson, A.R.I.B.A., 14, Eldon Place, Newcastle-on-Tyne.

Second (£750), W. F. Howard, F.R.I.B.A., 110, Old Brompton Road, S.W.7.

Third (£500), J. D. Mead Taylor, A.R.I.B.A., and Miss J. V. Wilson, A.R.I.B.A., 17, Sheffield Terrace, Campden Hill, W.8.

RIBA

Golfing Society's Results

The results of the RIBA Golfing Society's meeting held at the Berkshire Golf Club on Monday, April 24, were as follows:—The Sullivan Trophy was won by A. V. Farrier

with a score of 92—16—76. Runners-up were W. R. C. Clarke 88—9—79, W. D. White 93—14—79 and E. H. Firmin 84—5—79. The four-ball Stapleford competition in the afternoon was won by Sir Giles G. Scott and W. R. F. Fisher with a score of 36½ points.

IUA

Warsaw Conference

The International Union of Architects announce that for various technical reasons it has been decided to postpone the conference arranged for September of this year in Warsaw. It had been agreed with the currency authorities that sufficient Polish currency would have been made available for twenty architects to attend, two of whom, Anthony Chitty and the Hon. Godfrey Samuel, would have been official delegates from the British National Committee.

RIBA

Ashpitel Prize Awarded

The Ashpitel Prize, which is a prize of books to the value of £20 awarded to the candidate who, taking the Final Examination to qualify as an Associate, most highly distinguishes himself among the candidates in the Final Examinations of the year, has been awarded to Roger Nicholas Radford, B.A.(CANTAB.), A.R.I.B.A. (Cambridge University School of Architecture).



COMPETITIONS

Hunstanton Secondary School

The winners of the competition for a secondary modern school at Hunstanton, sponsored by the Norfolk Educational Committee, are as follows:—

First (£500), Alison M. Smithson, A.R.I.B.A., DIP.ARCH., and Peter D. Smithson, A.R.I.B.A., DIP.ARCH.(DIST.), 32, Doughty Street, Mecklenburgh Square, W.C.1.

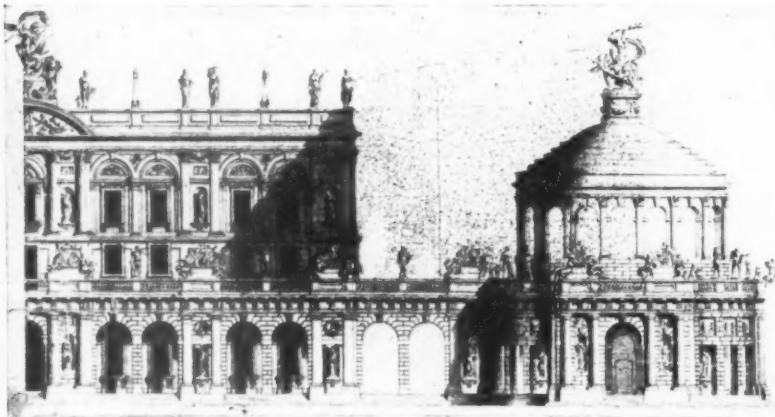
Second (£250), John B. Diamond, A.R.I.B.A., 7, Upper Grosvenor Street, W.1.

STAND AT BIF EXHIBITION



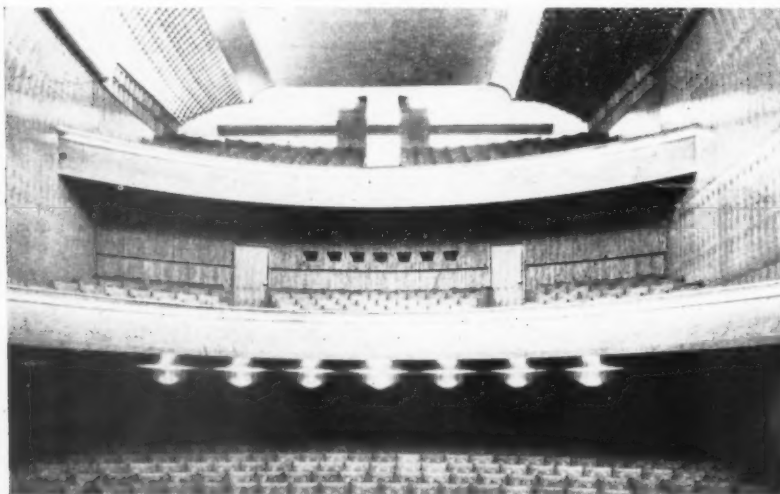
This stand has been designed by Basil Spence for the Earls Court section of the BIF, which will be held from May 8 to May 19.

UNIDENTIFIED DRAWINGS AT RIBA



The RIBA librarian will be glad to receive suggestions that may lead to identification of the unscripted drawings (such as the one above) now on view in the Institute's library.

A NATIONAL THEATRE FOR ICELAND



The first National Theatre of Iceland, designed by Professor Gudjon Samuelsson, State Architect, was opened recently at Reykjavik, the country's capital.



*Below is a summary of conclusions and recommendations extracted from the long awaited report of the MOW's Building Industry Working Party.**

MOW

Working Party's Report

Productive Efficiency. During 1946 and 1947 productive efficiency in the building industry was about two-thirds of its pre-war level; by the end of 1948 it was about three-quarters; there are indications of a further improvement. The combined effect of lower productivity, higher wage rates and higher cost of materials was that building costs generally throughout 1948 and 1949 were about two and a half times those of 1939.

The fall in the level of productive efficiency was due to the great reduction in the building labour force during the war, its rapid increase to almost the pre-war level immediately afterwards, the dislocation of managements during the war, the launching of a building programme greatly in excess of existing resources, the subsequent changes in this programme, the delays and uncertainties owing to shortages and controls, the compulsory use of untried materials, and the inflationary condition of the country's economy. Most of these are temporary and efficiency is slowly recovering; there are, however, two new factors which affect efficiency: "full employment" and planning controls.

Full Employment. Full employment means the absence of the large reserve of unemployed labour previously available; the industry must adjust itself to this.

Building Programmes and Controls. Existing arrangements for issue of licences and permits cause delays and uncertainties which are inimical to efficiency and make pre-planning of jobs impossible; a determined effort must be made to remedy this. Frequent modifications of the general building programme disorganize the industry.

Conditions for Improving Efficiency. To raise productive efficiency above its pre-war level:—(a) All concerned in

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building operations should co-operate fully in everything that helps to improve efficiency, and to extend the advantageous use of the appliances, methods and materials which scientific and technical advances place at their disposal. (b) Building operations of any size must be completely pre-planned. (c) Building research must be efficiently organized and the results made widely known.

Layout and Personnel of the Building Industry. The existing layout of building concerns provides the necessary flexibility and variety of capacities required by building operations; no change in the craft basis is suggested, though greater interchange between crafts would be of advantage. For the personnel of the industry the need is to develop training schemes for all grades. Craft apprenticeship under proper indentures has been encouraged though much remains to be done. The selection and training of foremen require further attention. University courses for future building managers need to be extended and coupled with adequate pay and prospects for those who have successfully completed their courses.

In view of the control which the architect exercises over building operations, it is important that his training should give him adequate knowledge of the practical aspects of building; he should be prepared to adopt new materials and methods wherever appropriate.

Government Departments which control much building work have a special responsibility in regard to efficient practice; to ensure that full advantage is taken of new developments, technical advice on building matters should be provided by one technical Department.

Registration of Builders. No general scheme of qualitative registration is recommended to the industry; the present registration of employers should continue for statistical purposes; some form of registration in the plumbing and electrical trades is desirable; the National Housebuilders' Registration Council performs a useful function.

Direct Labour Organizations. The conditions under which direct labour departments of Local Authorities should operate are laid down in satisfactory terms in a Memorandum on the subject issued by the Ministry of Health and should be adhered to.

Contract Arrangements in the Industry. Before a contract is let the contractor should be furnished with full working drawings from which bills of quantities can be prepared.

More general adherence to a standard form of building contract is required; Government Departments should adopt a standard form.

The number of nominated sub-contractors should not be unnecessarily multiplied. When nominated sub-contractors are employed they should, if possible, be selected after competition, and, save in certain special cases, design should be by a consultant firm.

The Management of Building Operations. Before starting work on a site the builder, with full knowledge of the operation he is going to undertake, should draw up a programme of work. Site organization should then be carefully planned as regards supply of materials and tools, correct balance of operations and labour, and in all other respects: the progress of work should be compared periodically with the programme and necessary adjustments made. Work Studies can assist management particularly by reducing the amount of wasted time.

Incentive Schemes. Incentive payments are essential if output is to be adequately increased.

Joint Production Committees. Joint production committees are valuable.

Safety and Welfare. Adequate safety and welfare facilities are an important means of securing production: a standard is now prescribed by the industrial Code of Welfare and by a Factory Act Regulation.

Costing Systems. Adequate costing is an essential factor in management, in promoting efficiency in the use of labour, materials and plant, in controlling overheads, and in providing information for tendering. A uniform costing system is impracticable; a report on costing systems is printed in Appendix D.

The Materials and Methods Employed. The distribution of building materials and components has recently been examined by a Committee of Inquiry appointed by the Minister of Works. More economical use of building materials is essential if costs are to be lowered.

Greater use of British Standard Specifications should be made. There is scope for further standardization.

Codes of Practice are valuable.

Mechanical Aids. Mechanical aids appear to be used where available and profitable. It would be of advantage if the service of plant hiring firms could be extended. Greater use of power driven tools on site is desirable.

Bye-laws. Model Series of Building Bye-laws should be kept up to date and promptly amended: they should take account of British Standard Specifications and Codes of Practice.

Research. In the selection of subjects for research representatives of the industry should be fully consulted and given opportunities for making suggestions. Actual conduct of research should be carried out in the main by organizations of primarily scientific character. Effective arrangements should be made to present research results so that they can be readily applied in practice. The Ministry of Works has special responsibilities in the field of research.

Building Finance. The industry appears generally satisfied with existing arrangements for financing the builder: prompt payment by the building owner of sums due is essential. A difficulty

about performance bonds is at present the subject of negotiation. The question of securing to nominated sub-contractors payment due to them should be further examined by the parties concerned.

The Building Industry of other Countries. The building industry can profit greatly from the visit to the USA of the building team sponsored by the Anglo-American Council on Productivity.

Contact should be made with other countries on the lines of the visits to Sweden and the Netherlands; the industry itself might maintain closer touch through employers' and operatives' organizations.

DIARY

Exhibition of Danish Architecture. At Royal Scottish Museum, Edinburgh. (Sponsor, RIBA.) UNTIL MAY 7

1951 Stock List Exhibition: Domestic Equipment. At Murray House Exhibition Hall, Vandon Passage, Petty France, S.W.1. (Sponsor, CID). Daily, 10 a.m. to 5 p.m. Saturdays, 10 a.m. to noon.

UNTIL MAY 24

Percy Smith Memorial Exhibition. At RSA, John Adam Street, W.C.2. (Sponsor, RSA). Daily, 10 a.m. to 5.30 p.m. Saturdays, 10 a.m. to 12.30 p.m.

UNTIL MAY 26

New Ideas in Furniture: Exhibition. At the Tea Centre, 22, Regent Street, S.W.1. (Sponsor, CID). Daily, 10.30 a.m. to 6.30 p.m. Saturdays, 10.30 a.m. to 12.30 p.m.

UNTIL MAY 27

Exhibition of Unidentified Drawings. At 66, Portland Place, W.1. (Sponsor, RIBA). Daily, 10 a.m. to 7 p.m. Saturdays, 10 a.m. to 5 p.m.

UNTIL WHITSUN

Picasso. (Series of lectures, admission free). Professor A. F. Blunt. At Courtauld Institute of Art, 20, Portman Square, W.1. 5.30 p.m. MAY 9, 16 AND 23

Percy Smith Memorial Exhibition. RSA, John Adam Street, W.C.2. Daily, 10 a.m. to 5.30 p.m. Saturdays, 10 a.m. to 12.30 p.m.

UNTIL MAY 26

Annual General Meeting. IRA. At Waldorf Hotel, Aldwych, W.C.2. 6.30 p.m.

MAY 5

British Industries Fair. At Earls Court and Olympia. Daily (except Sunday), 9.30 a.m. to 6 p.m. Closing 4 p.m., May 19. (Also at Birmingham.) MAY 8-19

Exhibition of Paintings, Sketches and Photographs. Work of IAAS members. At 75, Eaton Place, S.W.1. Daily, 10 a.m. to 5 p.m.

MAY 8-12

Rent Rebates. C. C. Carter. At 13, Suffolk Street, Haymarket, S.W.1. (Sponsor, HC). 1.15 p.m.

MAY 9

LMBA Central Area Meeting. At Derry and Toms' Restaurant, Kensington, W.8. 1 p.m.

MAY 10

Open Evening. At Building Centre, 9, Conduit Street, W.1. All building technicians and students invited. (Sponsor, ABT). 6 p.m.

MAY 10



This feature covers aspects of legislation, parliamentary news and statutory rules and regulations which are of special significance to the architectural profession.

ERNEST WATKINS

The Architect and Current Affairs

I doubt if any new body started on its career with omens more favourable to its future than the National Parks Commission. It escapes—in fact it benefits—from all the complications of the present political deadlock. Economically, it owns a double-headed penny. Under the conditions of today, it can hope to be allowed to spend very little money, but that does not matter, at least over the next year or so. It can make its first, and most important, impact almost on the traditional shoestring. But, if con-

ditions were to worsen, it could, with equal force, claim to be an ideal channel through which employment could be provided by the expenditure of public money. If it is wise, it will see that all its pigeon holes are filled with all the plans that events might turn into projects.

But its principal asset over the next twelve months, is Dr. Dalton, the Minister under whom it has come into effective existence. Dr. Dalton is a man of considerable energy and drive. He has a deep personal interest in the countryside and in its increasing enjoyment by every section of the population. He is also an experienced politician. No public body could hope for a more favourable combination of circumstances.

After all, a politician is in his peculiar business for two reasons—to get things done, and to appear as the man who has got those things done. For him, the worst consequence of inaction is the obscurity that inevitably accompanies it. He may last longer in the public eye than does a film star but he makes his first appearance there by very much the same methods. His predecessor left Dr. Dalton with two major Acts of Parliament to administer, the 1947 Planning Act and the National Parks Act of last year. The political situation to-day is such that it is extremely unlikely that any Minister of Town and Country Planning could hope to amend the 1947 Act during the lifetime of the present Parliament, which means that his operations on that side of his responsibilities must be limited. Consequently any Minister would be bound to see what he could do with the 1949 Act. Dr. Dalton is a man who will derive great personal satisfaction from everything that he can do to make the Act a success.

I believe, too, that the country is in a mood, at last, to take National Parks seriously. The period of incubation for the idea is over. To some it has been overlong, but I think it is fortunate that the necessary Act of Parliament setting up the machinery was not passed before the war—the contrast between the Access to Mountains Act of 1939 and the 1949 Act is a remarkable example of how the climate of opinion has changed. Now, the simple fact that the boundaries of a national park can and will be drawn will,

I think, naturally produce a great deal of practical support in the areas involved. Some, of course, will think in terms of "What is there in this for me?" Others will want to give flesh and bones to the actual plan. But people will accept the parks as facts, which is the main difference between now and the days before the war.

*

To turn to a legal problem; how far does the liability of an employer for the safety of his workmen go? Directly, this is not a concern of the architect. Indirectly it is, for unless the architect and the contractor understand the problem in the same terms they are likely to get at cross purposes over some, at least, of the items in the specification.

The point has recently been argued out in a case that arose from an accident to a man engaged in repairing a ship, but the principle has a far wider application than that. Roughly, the point can be put in this way: is a contractor entitled to assume that the higher the degree of skill his workmen possess the fewer the precautions he need take over their safety? After all, the skilled man knows the risks and the dangers of the job. He does not need the same warnings and safety measures as a novice. Is the contractor, then, entitled to rely on the man's own experience to keep him out of trouble? In substance, the Court's answer to that is, "No." The general proposition can, I think, be put in this way: An employer is not compelled to ensure that his skilled workmen cannot possibly hurt themselves by downright stupidity, but it is the duty of the employer to protect his workmen against the consequences of any casual lapse in their normal care and watchfulness. He may not assume that their skill is, so to speak, always working at 100 per cent. of its capacity.

How this rule works out in practice on any job depends, naturally, on the job itself, but it is obviously important that architects should have a general grasp of the liabilities that a contractor has to meet and of the need for the various safety measures and equipments that appear in the specifications for any job of size.

MODEL OF FLATS FOR STONY HALL, STEVENAGE



This model is of flats, designed by Yorke, Rosenberg and Mardall, in course of erection at Stony Hall, Sish Lane, Stevenage. There will be 112 flats; 54 in a 7-storey block, and the remainder in 3-storey blocks. The blocks will consist chiefly of 1-, 2- and 3-bedroom flats, with a few bed-sitting rooms for unmarried

people. There will be a central laundry, a small social hall for a tenants' association, garages and children's play shelters. The 7-storey block will be of reinforced concrete construction and the 3-storey blocks will have load-bearing walls and reinforced concrete floors.

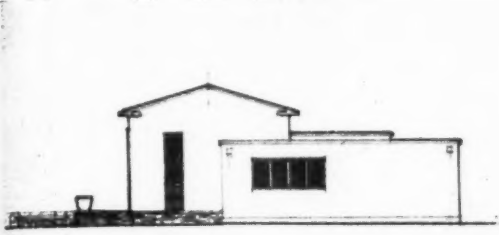
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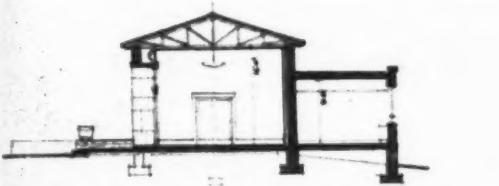
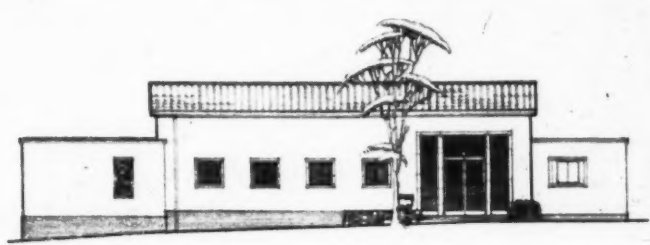
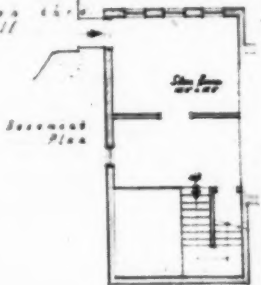
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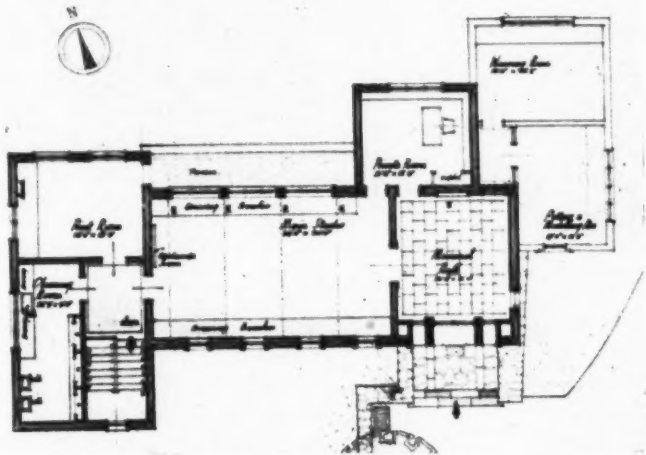
WINNING DESIGN IN JERSEY ART SCHOOL COMPETITION



East and south elevations

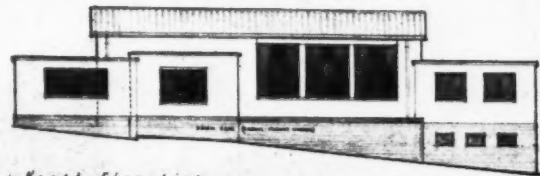
Cross Section
Entrance Hall

Basement Plan

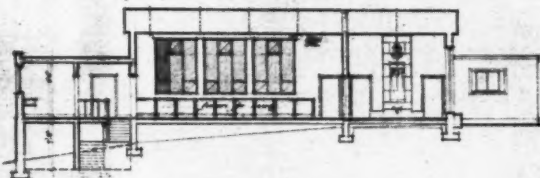


Ground floor plan

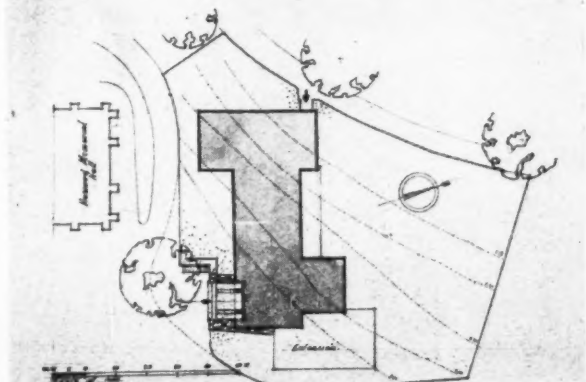
Below, north elevation, long section and site plan



North Elevation



Long Section

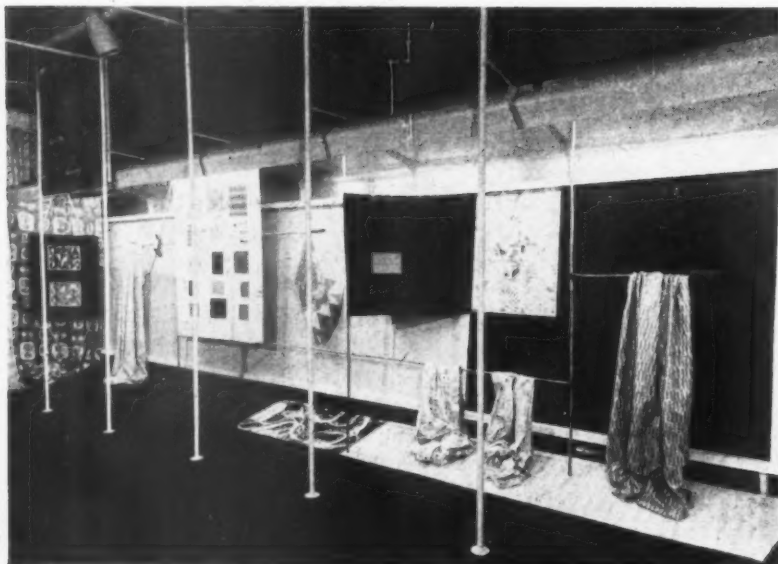
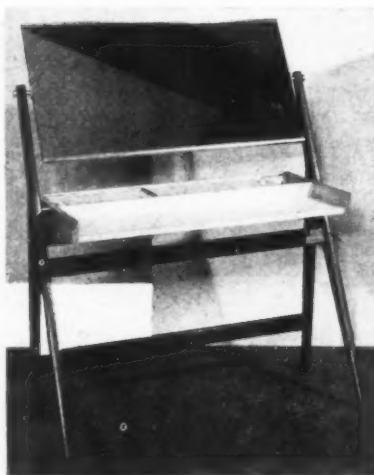


The following extract from the report of A. E. O. Geens, assessor of the competition for a proposed Art School at Jersey (organised by the Association of Old Victorians, Jersey), refers to the entry of the winning designer, Margaret B. Brodie, BSc. Arch., ARIBA, of Glasgow, which is illustrated here:—"The best use of the site has been made by placing the building square to the existing Howard Memorial Hall, so that the main entrance provides a natural focal point from the main approaches to the proposed building. The planning is straightforward and simple, resulting in a well proportioned and dignified Memorial Hall. This design, more than any other, complied with the conditions of the competition and has relied mainly on good proportion and fitting architectural expression, rather than elaborate decoration and detail. No attempt has been made in the design to match in detail or character any of the existing buildings, but by restrained design and careful selection of colour for roofing materials and rendering of walls the new building will blend with the existing and by its very simplicity should provide a worthy Art School to Victoria College."

LCC CENTRAL SCHOOL'S EXHIBITION



The three pieces of furniture shown here, which were designed by students of the LCC Central School of Arts and Crafts, were included in a recent exhibition of the work of LCC students at the Rayon Industry Design Centre, 1, Upper Grosvenor Street, W.1. The chair was designed by J. Padiak; the desk, by J. Dabrowski; and the dressing table, by A. H. M. Z. Afifi. A general view of the exhibition, which consisted mainly of displays of painted and woven fabrics, is given below. [The furniture photographs were supplied by the CID Magazine, Design].



Below is an article outlining some of the financial problems of the architect in private practice. It has been written by a partner in the firm of chartered accountants who are auditors for the firm of Arcon.

ARCON

The Financial Problems of Architectural Practice

The present-day architect, whether practising on his own or as a member of a large firm, is confronted with financial problems, many of which were unknown to his predecessor of a generation ago. Such factors as the necessity for obtaining a fair fee for abandoned work, provision of adequate working capital, present day level of taxation and the mechanics of PAYE, have forced him to divert some of his attention from the work he loves to what is to him the drudgery of figures, the taste for which, it must be admitted, has to be acquired.

The size and number of these financial problems will, of course, vary according to the size of the practice. Obviously an architect employing no staff will not need to bother about PAYE, which applies to employed persons (i.e., staff), since he himself will be assessed for income tax under Schedule "D" as a self-employed person. Nor will that same architect be concerned with financial arrangements necessary between partners. The basic problems of book-keeping will, however, be common to most. The writer was about to state "common to all" in the last sentence when he remembered having seen the accounts submitted by an architect to an Inspector of Taxes in which the profit and loss account comprised fees received, expenses under five headings (the total not exceeding £60, excluding rent) and resulting profit. In this case it was obvious that book-keeping scarcely existed. It should be added, how-

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ever, that despite the paucity of information, HM Inspector of Taxes agreed the profit figure without question, possibly due to the fact that the architect had practised in that district for very many years and was a well-known and highly-respected citizen in that locality.

In this article it is proposed to deal first with the general financial problems, followed by a consideration of the book-keeping requirements of a practice and to conclude with a reference to some of the consequences which result from the present high level of taxation.

GENERAL FINANCIAL PROBLEMS

Let us first consider what information the architect must have in his book-keeping system. The emphasis which different architects place on their requirements will vary according to their circumstances and the items which follow are, therefore, not arranged in any order of importance.

There must be sufficient information to extract a set of accounts at regular intervals, and at least once a year, if only because the taxation liability (assuming a profit!) will have to be agreed with HM Inspector of Taxes.

The same set of accounts should suffice to give all the information as to expenses, etc., which the architect may require for his own internal use. The days are past when, according to the apocryphal story, a farmer asked his accountant to produce three different sets of accounts, one for HM Inspector of Taxes, showing low profits, one for his bank manager, showing good profits, and one for himself, giving the true figures.

The state of the balance at the bank should be readily available. Simple though this may sound, many architects rely on their pass book sheets, sometimes without having a separate account for their practice, to give them the information. The pass book figures can be misleading when it is remembered that cheques may be still un-presented. Moreover the banks normally send pass book sheets to their clients only when completed and this may be at very infrequent intervals.

Records of all staff salaries and statutory deductions must be maintained. The introduction of PAYE has placed an additional responsibility upon all employers.

Although many of an architect's fees may be on a fixed scale, certain jobs may be undertaken on a "quantum meruit" basis; or a fee for an abandoned job must be agreed, circumstances which make it essential for time records to be kept of all or at least some jobs.

In our profession, where there are no scale fees, it is the custom to keep time records of all work performed.

The time is evaluated on the basis of a rate per hour per person employed, which covers salaries, overheads, and a normal ratio of profit. The rates are, of course, fixed for different levels of skill, e.g., principal, managing clerk, senior assistant, juniors and typists. From the time cost thus computed it is possible to fix a fair fee to be charged for special work. In the case of work normally performed for an agreed fee, e.g., an annual audit, the work on which may not fluctuate very much from year to year, the time cost records throw up the relative efficiency of various clerks and sometimes serve to draw attention to the effect of increasing work involved from year to year and so justify a request for an increased fee in the future.

It is suggested that similar considerations apply to the need for architects' costing records. Indeed the case for them is strengthened when it is borne in mind that the architect has many more out-of-pocket expenses chargeable directly to jobs, e.g., survey charges, travelling expenses, and copies of documents. Certain of these expenses are recoverable in addition to the percentage fee on the RIBA scale, and it is, therefore, important that the book-keeping staff should be thoroughly familiar with the scales of charges so that chargeable items should not be omitted from accounts rendered to clients.

BILLS RENDERED AND CLIENTS LEDGER

A Bills Rendered book should be kept. It will save a great deal of copying if duplicate copies of the actual bills rendered are bound up in a loose leaf cover provided with a suitable index. From these copies the charges can either be debited direct to clients' accounts in the Clients Ledger or summarized in a Fees Book and posted from there, the monthly total being posted to the Fees Account in the Private Ledger.

EFFECTS OF HIGH LEVEL TAXATION

As we have dealt with the day to day problems of book keeping, there is one other aspect of the architect's financial problem which should be mentioned.

There is general agreement that the professions are as hardly hit as any section of the community by the present high level of taxation, and this applies both to principal and staff.

The principal finds that the provision of working capital for an expanding practice is now extremely difficult. It is not always realized that as soon as taxable earnings exceed £2,000 the rate of tax (including sur-tax) is 11s. in the £ up to £2,500, as against a maximum of about 7s. 2d. (9s. in the £ less 1/5th earned income relief) up to £2,000. In other words, at the

level of £2,000 of earnings the full earned-income relief ceases and sur-tax begins to operate.

The effect of such a steeply graduated system of taxation is to inflict substantial hardship on incomes which are liable to sharp fluctuations. Thus an architect who has earned £1,000 per annum for two years may win a competition as a result of which his taxable income rises in one year to £4,000. Sur-tax takes £287 10s., whereas if the profit had been spread over the three years, he would have paid no sur-tax at all, and he would have received additional earned income relief worth £180 at present rates. Until 1926 the basis of assessment for tax was on the three years average. The subsequent change to the preceding year's profit or loss has been detrimental to the professions.

A further problem of the professional man in practice is how to provide for a reasonable pension or capital sum on his retirement. Other members of the profession, holding salaried positions in industry or employed by the state, usually enjoy the benefits of a pension scheme, and all their own contributions to the scheme are allowed in full in computing their assessments in income tax and also, where applicable, to sur-tax.

In the case of the professional man in private practice, the only relief available is the acquisition of a life assurance policy on an endowment basis, and then his relief is restricted to 2/5ths of the standard rate of income tax (worth at present about 3s. 7d. in the £).

The qualified assistant's problems are firstly, how to provide for an adequate life assurance endowment policy in the absence of a pension scheme to which he can belong, and secondly, to save sufficient money to start a practice of his own or to enable him to contribute his quota of capital and possibly payment for a share of goodwill if he is invited to become a partner in an existing practice.

These problems have been set out in a Memorandum, submitted on March 1, 1949, to the Chancellor of the Exchequer by the Law Society and The Institute of Chartered Accountants in England and Wales, in regard to "Anomalies in, and the detrimental effect of, the present basis of assessment to taxation of the earnings of professional men engaged in private practice as individuals or members of partnership firms."

No reply has been received from the Chancellor of the Exchequer that such problems will have favourable consideration, and the matter has, therefore, been raised again by the Council of the Institute of Chartered Accountants in its submissions to the Committee on Taxation of Trading Profits (Chairman, Mr. J. Millard Tucker, KC), who is now sitting.

Hopes of alleviation of the burden

of direct taxation on the professions cannot be pitched very high. If none is granted, the difficulty of admitting qualified assistants to partnership without adequate capital will continue, particularly in the larger firms. To them the following suggestion is made:—

Bonuses to staff and especially senior staff should be computed on a share of profits basis after providing a basic amount for partners, one half of the bonus to be paid in cash and the other half (less PAYE thereon) to be placed on loan with the firm, bearing interest at, say, 5 per cent. to 6 per cent., the principal being repayable only on leaving the firm. The advantages of this system are that working capital is thus more easily provided, savings by senior assistants will assist their being taken into partnership and, in the case of all staff, there is an incentive to greater efficiency.

Finally, there is one aspect of staff relationship which should not be overlooked, namely, the possibility of providing pension schemes for architects' staffs. At the moment only the larger professional practices have sufficient staff to warrant the establishment of a scheme whether run in conjunction with an insurance company or otherwise.

If it is conceded that pensions are now necessary to supplement the state pensions, and the drift to the commercial world seems to indicate this, would it not be possible for some body, such as the Royal Institute of British Architects, to sponsor a scheme covering the whole profession? It is suggested that contributions should be payable by employer and employee alike on the basis of salary earned and that the employee should remain in the scheme so long as he was still employed by an architect in private practice. It is probable that one of the principal insurance companies would be prepared to administer such a scheme.

In addition to details of the work in progress, as recorded on the cost cards and bank balance, the architect will want to have available details of other assets such as debtors, office equipment, model making and printing plant, motor car, etc.

The modern clientele of the architect may be chiefly large industrial organizations or public corporations and he will often find that his bills are outstanding for three to four months, for no other reason than that the very size of some of these organizations tends to slow down the speed of payment. Such delay may seriously embarrass the architect financially but he must allow for it when budgeting for his receipts. Moreover he will be well-advised to ensure, as far as possible, that no query is likely to arise on his account, otherwise the length of delay might easily be doubled.

On certain large jobs, especially con-

struction work extending beyond a period of a year, periodical payments on account are receivable and the following considerations arise:—

(a) Accounts must be rendered promptly when due.

(b) Adequate records must be kept to ensure that later accounts are rendered correctly.

(c) At the end of the architect's accounting period adjustments may be necessary:— (i) To exclude a proportion of fees received but not wholly earned, or (ii) To reduce the value of the work in progress as shown by the cost records to a fair valuation (e.g., on work carrying a fee of £200 the cost records may show cost to date of £150, though on review it is estimated that only 50 per cent. of work has been completed. Clearly the work in progress should be valued at not more than £100).

As regards plant, equipment and the like, the smaller firms probably have very little and are content for the figures to be kept by their accountants, who can be relied on to provide adequate depreciation in drawing up the annual accounts and to claim the correct rates of capital allowances when dealing with HM Inspector of Taxes. The large firms will keep these records themselves.

Finally, there must be records of the partners' capital and/or personal accounts, particulars of drawings and interest charged or credited. In this connection the desirability of having properly drawn Articles of Partnership cannot be over-emphasized. The Articles define the rights and obligations of partners as between themselves and include, *inter alia*, provisions as regards capital to be contributed by each partner, shares of profit, drawings on account of profit, valuation of goodwill and dissolution of partnership.

BOOK-KEEPING

The number and type of books to be kept will vary with the size of the practice. Most architects will, rightly, wish to keep the absolute minimum of financial books, and the writer is far from suggesting that the architect whose practice is too small to warrant the employment of a book-keeper should embark on the troublesome course of keeping a complete set of double-entry books.

To most of the larger firms much of what follows regarding book-keeping is probably only of academic interest, since skilled book-keepers are almost certain to be employed. In such cases it is suggested that at least one partner should find time to understand thoroughly the book-keeping system employed and take an active interest in controlling it properly, e.g., scrutinizing salaries books, seeing that accounts are collected promptly, signing cheques and examining all expenses accounts, etc.

Now let us consider what books and methods are needed to control the financial operations of a practice.

The first essential is a separate bank account. All cheques drawn should bear the signature of at least one partner and all communications from the bank should be sent to one or other of the partners personally.

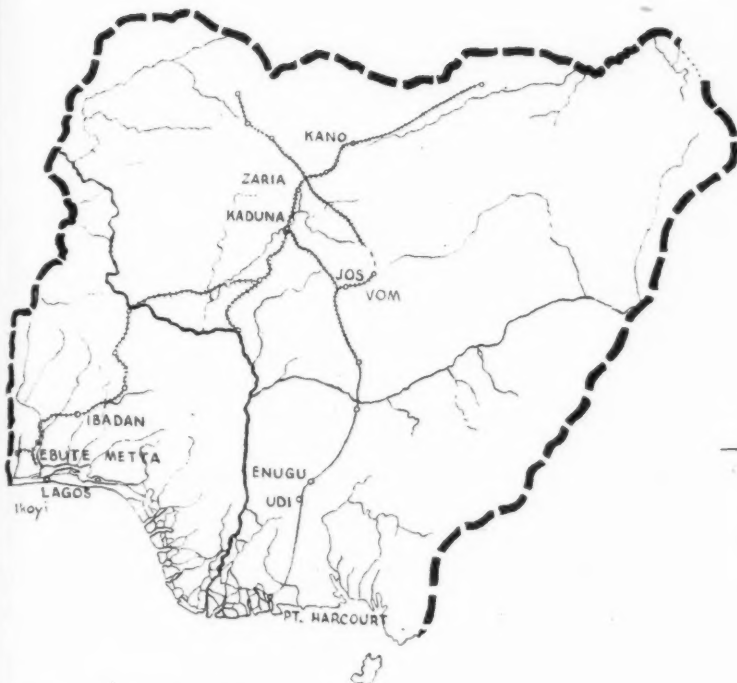
EXPENSES

The general cash book in all but the larger practices might be of the analyzed type with headings for different types of expenses, leaving one column for private ledger, to which items of a capital or special nature should be posted. A petty cash book and stamp book should, of course, be kept. The petty cash book should also be of the analyzed type. The petty cashier will be reimbursed by payments from the main cash book on the Imprest System. Briefly, this means that, e.g., if the petty cash "float" is £20, then the petty cashier will be reimbursed for expenses incurred so as to bring the total cash held by him up to £20. Therefore, whoever signs the cheque for such reimbursement has his attention automatically drawn to the actual expenditure of Petty Cash items. If round sum cheques are drawn, this automatic signal is not present.

The important feature of the analyzed books is that rechargeable items can be readily posted direct to the cost records and the monthly totals are available for posting to the relative impersonal account in the private ledger.

WORK IN PROGRESS

The necessity for having some system of computing the value of work done has been previously mentioned. The basic requirement is that all technical assistants, and, it is suggested, principals, should record all time spent on jobs. The time should be summarised weekly or monthly and posted to the job cards to be evaluated in terms of money by applying the rate per hour applicable to the assistant or principal. This rate can be either an all-in rate to include a loading for overheads and a margin for profit, or according to the salary paid, in which case an addition will have to be made for the actual overheads, calculated monthly or quarterly, and a rate for profit. The overhead expenses consist of all expenses which are not chargeable to any specific job, e.g., rent, lighting, certain wages, such as telephonist, etc. As to whether the overhead rate should be the same for all grades of assistants is a debatable point. The space and therefore the loading for rent, lighting, etc., occupied by a drawing board is the same whether it is used by a young draughtsman or a senior assistant; on the other hand the latter will probably make greater demands on other services included in the overhead rate, such as telephone, typists, etc. Reference has already been made to out-of-pocket expenses—these should be debited to the job whether recoverable or not.



Nigeria [Scale: 1:12,000,000]

Mr. Foyle visited Nigeria as a result of being awarded a grant for post-graduate research from the University of London.

ARTHUR M. FOYLE Nigeria

For the Nigerian the universal building material is mud. Generally the houses of the people have little architectural interest (1), but in the main towns the Chiefs' houses are well worth noting. At Benin, for example, there is a highly organized traditional method of house planning reminiscent of the courtyard plan of ancient Roman houses and tracing its origin back to the Portuguese colonization of the fifteenth century. Domestic architecture in the northern areas reflects the influence that the Moslem religion has had on the people. Constructional methods had become standardized by age-old tradition, and there is a general air of uniformity about the cities of the north (2) which is not apparent in their southern counterparts.

Of the large volume of building being carried out by the Government at the present time through its Public Works Department, a large proportion is in the form of housing for African and European staffs, both of which are rapidly expanding. In the south, the housing provided for African staff is based on a standard room size of 12 ft. by 10 ft., and no attempt is made to conform to the diverse tribal conditions. The number of rooms pro-

vided varies in accordance with the salary of the occupant. Present practice is for the smallest type of house, for those with a basic salary of £18-£36 p.a. excluding recent increases, to consist of two rooms, a living room and a bedroom, with a cycle shed store and kitchen in a back addition. Showers and earth closets, or wc's where drainage is available, are grouped in separate blocks whose size depends on whether the houses are in detached or terrace form. The maximum number of houses placed together is three, giving a total of six rooms in elevation, and a continuous verandah is usually arranged along the whole front. For the next income grade (£42-£128) two-bedroom



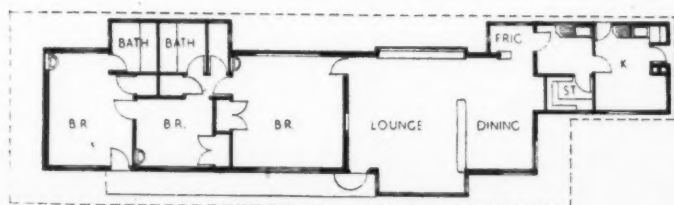
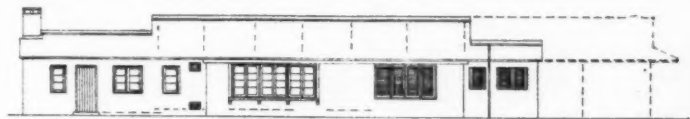
1. A village compound near Port Harcourt. The walls of the huts are decorated with brightly coloured plates embedded in the mudwork.



2. Kano City, from a minaret of the new Mosque. The actual living quarters cover a relatively small area, the remainder consisting of individual courtyards for the seclusion of women.



3. A street in the Model Village at Udi Siding, Enugu. Due to the war-time shortage of corrugated iron, roofs are of weather boarding, brush-treated with palm oil and kerosene.



4. A new bungalow at Ikoyi, Lagos



5. New flats for policemen, Ebute Metta, Lagos.



6. The Village Hall at Udi Siding, Enugu.



7. Range dwellings for policemen at Lagos.



8. Houses for Northern Moslem students, at Vom. The houses are laid out in compound form. Construction is of local stone with dressed copings, etc. Openings in the external walls are kept to a minimum.

houses are provided. These are planned singly or in pairs, while the back addition accommodates the store, cycle shed, kitchen, wc and shower, which in this case are all in one block and accessible from the living rooms by a covered way. A verandah is provided as before. The two largest types of house (£140-£300 and £310-£400) each have three bedrooms, are invariably detached and have similar covered way access to the additional rooms at the back.

The most important examples of African housing in Nigeria are the Colliery Housing Schemes at Enugu. Before they were built the Enugu coal miners lived either in barrack-like buildings, unsuitable for family life, or in village settlements near the mines, which had degenerated into slums of the worst possible character. The first Model Village at Udi Siding (3) completed in 1943 and followed by two additional schemes, occupies a site of 12 acres and consists of separate two- and four-room blocks on plots of 60 ft. by 40 ft. and 60 ft. by 80 ft. respectively. Flexibility of accommodation is obtained by provision of doors in the dividing partitions. The whole lay-out is arranged on Garden City lines around a central green where the Village Hall is sited (6). Separate kitchens are at the back of each house, and communal latrines and wash-houses have been provided, each with clothes washing slabs for women and men.

The whole scheme was planned and undertaken during the war, at a time of great disorganization and shortage of materials. Much of its success must be attributed to the energies of the site architect, who lived on the job and was constantly forced to improvise. For example, all the bricks

were manufactured on the site, experiments were carried out in the use of bamboo to reinforce concrete, and new types of roughcast were made from local materials. By comparison with the hovels in which the Enugu miners lived until 1943, the new housing is a remarkable achievement.

The range type of housing such as existed at Enugu, can still be seen elsewhere, but is gradually being replaced by up-to-date quarters. At Lagos, the Police Barracks (7) consist of a range of single rooms of the standard size with a continuous verandah in front. The blocks are in quadrangle form with kitchens and latrines in separate buildings away from the living quarters. As at Enugu, these buildings have long outlived their useful life and are now being replaced by three-storey blocks of flats. Each of the new blocks has nine two-roomed flats on each floor. These consist of a living room and a bedroom facing on to a verandah which is screened from its neighbour by a store. Corridor access is at the back from a common central staircase, while kitchens are grouped at each end in projecting wings and a central wing contains the sanitary block. Flats of this type have already been built at Ebute Metta, near Lagos, and are a successful piece of architectural design (5). The front elevation with its precast concrete balustrading has a strong and dignified character.

In the planning of African Staff Quarters in the northern areas, a definite attempt has been made to satisfy the requirements of their Moslem occupants. At the Vom Veterinary School, a group of semi-detached houses has been laid out for Moslem students (8). Each house has a living room and a bedroom of the usual size facing on to an enclosed courtyard, containing the kitchen and surrounded by a high wall to screen it from public view. The total frontage of a pair of houses is 75 ft., while the depth is 26 ft., and a large proportion of the cost of building has been absorbed by the provision of the courtyard wall. This is one of the problems inherent in the Moslem type of plan, and economies can only be effected by grouping a series of houses together so that as many as possible of the courtyard walls are common. This has been attempted at Zaria, where a group of houses has been built for employees of the Gaskiya Corporation's printing works. Here the separate courtyards give on to a central garden to which access can be obtained by all the women in the group and in this way it is hoped that purdah may be broken down.

The Vom houses satisfy Moslem requirements in a concise manner, but would be improved if allowance could be made for the expansion of the courtyard area upon the acquisition of addi-

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tional wives. This is an added complication to any attempt to simplify the Moslem plan and yet to make it as flexible as possible.

Housing for European officials follows the same system of gradation according to salary as is the case with Africans. Early houses were often built so that the main accommodation was at first floor level, the whole house being supported on piers. A continuous verandah surrounded the first floor rooms and in many cases this was enclosed later on and incorporated into the house, while rooms were added at ground level. Examples of these houses still exist (9) and many of them have a charming quality of their own.

Accommodation, at least for the upper income groups, has up to date been provided on a lavish scale (10), the assumption being that the occupant would maintain a staff of three or more servants who live in a separate block at the back. A typical example, which is still being built in large numbers, has a large entrance hall approached under a covered porch. Of this, to left and right, are the lounge and the dining room, the former having ample covered verandah space, while beyond the latter is the kitchen block. On the first floor are two identical suites of rooms, each containing a bedroom, separate dressing room, bathroom, and wc. Possibly only one of these suites is actually occupied, the other being reserved for the use of friends and officials in transit. At present, due to the rapid expansion of staff and the consequent shortage of accommodation, a house such as the one described is often being shared by two families.

The present acute housing shortage and the rise in the cost of living have resulted in two notable innovations. The first of these is the construction of bungalows for Europeans, designed to a minimum plan and requiring fewer servants for their upkeep (4 and 11). The plan of these bungalows is most compact in arrangement and alternative types with one, two and three bedrooms are being built. Given proper siting, they are architecturally more satisfying than many of the more pretentious larger houses.

The second departure from pre-war practice is the building of flats, in some cases with a communal restaurant attached. Three-storey blocks are being built at Ikoyi, Lagos (13), each flat having a living room, a bedroom with balcony, a spare bedroom or dressing room, and a kitchen. The construction of flats on the scale now being undertaken represents a recognition that the European is no longer able to keep up an infinitely higher standard of living than his African colleagues.

Housing erected by the Government is, as far as possible, of a permanent character; mud, the traditional material, is not used to a great extent. In

certain instances, however, particularly in view of present shortages and where it is necessary to provide houses at once and to a minimum specification, mud blocks (14) are used. A common size is 18 in. by 6 in. by 6 in., and in order to produce a homogeneous block great care is necessary in tamping the wet mud and allowing it to dry out slowly. With the laterite earth available a greatly improved block can be made by the addition of cement in a proportion as small as 20 mud:1 cement. The result is known as "stabilized laterite" and, when laid in mortar, 10 mud:1 cement, or 6 sand:4 mud:1 cement, and rendered externally with the same mix—"Dutch Plaster"—forms a practically permanent wall. If adequate protection can be provided, the render may be omitted and the blocks pointed in cement and sand. Mixtures vary considerably according to the quality of the laterite earth available, and experiments are being pursued in all parts of the country with this promising material.

As well as mud, stone is used where it is available, for example at Jos and Vom on the central plateau. Bricks, as made by Africans, are generally of poor quality due to inadequate burning and except at Enugu, and in some early buildings, they have not been used to a great extent in Government work. The universal material for permanent buildings is the sandcrete block (15), which is pressed out and cured on the site, laid in cement mortar and either rendered externally or treated with a colour wash. Roofs, before present shortages, were generally of corrugated iron. Experiments are now being made with thatch in temporary work, while for permanent buildings, tiles and corrugated asbestos or aluminium sheets are being used.

Ever since the drastic reduction of



9. An early European House, Force Street, Lagos. Constructed chiefly in timber with tiled roof. The slender cast iron supports to the first floor are an example of the early use of this material.



10. A house for a European Civil Servant, Ikoyi, Lagos. Walls are of sandcrete block, ground floor of concrete, first floor of timber, roof of corrugated asbestos.



11. View of new bungalow at Ikoyi, Lagos.



12. A house for the manager of a commercial company, Ikoyi, Lagos. A most successful design, careful attention having been given to the detailing of the balcony, overhanging eaves and entrance porch.

Government staff during the depression of 1931. The Public Works Department has been understaffed, and the architectural department has been one of the heaviest sufferers. Shortage of staff has necessitated the production of type designs for houses and other buildings, which, in many cases, takes little account of varying local and climatic conditions. This over-standardization, coupled with the ubiquitous use of sandcrete blocks, has resulted, particularly in the case of African staff housing, in an admitted drabness of appearance. The problem of treating small uniform blocks of buildings in a satisfactory manner is a difficult one and can only meet with success if combined with an interesting layout, set off by tree and shrub planting, as has been the case at Enugu. There is need, however, for research into the question as to whether a Garden City type of plan or one in which the houses are grouped in compound form is more acceptable to low-income Africans. The compound is the basis of village and tribal life and should not be abandoned without careful consideration.

The recent opening of the Senior Service to Africans prompts the question whether the typical Yoruba civil servant, even though he may have spent some years in England on a government scholarship, will wish, on his return to Nigeria, to live in a house such as is provided for his European colleague (12). He will certainly not wish to revert to the old tribal conditions of communal living, but on the other hand a "type plan" with detached servants' quarters will not suit the Yoruba idea of a wide family circle. A compromise will probably be found with a plan that is flexible and allows for expansion in an orderly manner as the family increases in number. This problem must be given serious consideration in advance if the new generation of African civil servants is to have adequate housing conditions.

Nigeria's Development Plan envisages a large programme of electrical and hydro-electrical development. Apart from the possibilities which this will open up for the building industry in the increased production of modern materials, as soon as electric power is available on any scale it will be possible to provide air conditioning for buildings at a cheap cost. A few houses for the employees of commercial firms have already been built with a limited form of air conditioning, and the projected Law Courts at Lagos will be the first public building in the country to be fully air conditioned. This, more than any other factor, is likely to change the traditional appearance of buildings in a country of climatic extremes. Hitherto, not only domestic but all types of buildings, have been planned on single block lines, with windows

on opposite walls, in order to provide through ventilation, and this has imposed strict limitations on all plan forms. With the use of air conditioning on a large scale the familiar sprawling plan will no longer be a strict necessity. The general appearance of buildings will become more compact, windows and other openings may be reduced in size, and large overhanging eaves partly dispensed with. It is too early yet to make an accurate forecast, but radical changes are on the way, changes which will have a fundamental effect on all building activity.

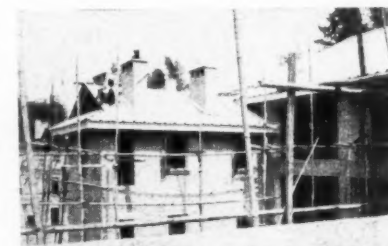
Under the Development Plan a vast Government building programme is projected, and the Public Works Department have already produced several buildings worthy of note. Among these must be mentioned the new Mosque at Kano, with a central dome and twin minarets. This building has been given careful supervision, and the Islamic ornamentation in cast concrete reaches a high standard of workmanship; the offices and printing works of the Gaskiya Corporation at Zaria with a dignified tower rising above the barren landscape; the building for the Western House of Assembly at Ibadan, and the extensions to the Secretariat at Lagos (16). Delays and bottlenecks in the supplies of materials are having a retarding effect on the original schedule, but architects and engineers are responding to the urgency of the situation and working with enthusiasm and energy. The Architectural Department is now reorganized on a regional basis with local headquarters at Ibadan, Kaduna and Enugu, and each Provincial Architect enjoys a certain amount of independence. This decentralization is undoubtedly a step in the right direction, and when adequate staff are available will signal the end of the "type plan."



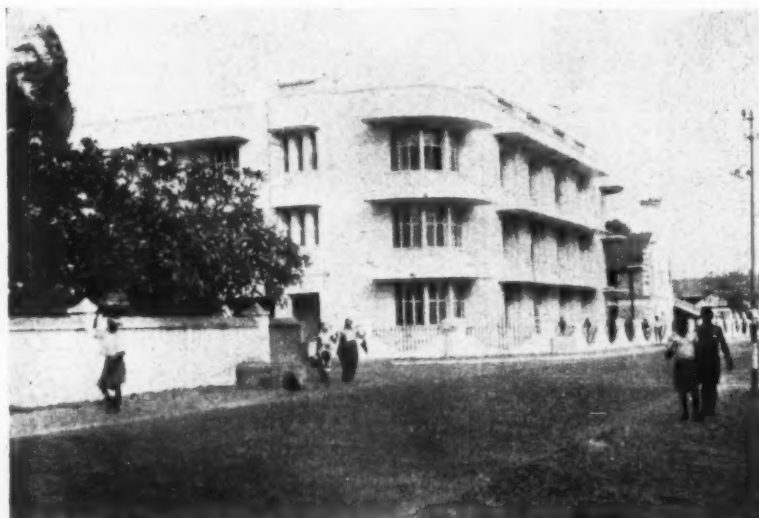
13. Flats at Ikoyi, Lagos. The double roof, consisting of precast concrete slabs placed on the main roof, adds a considerable superimposed load but is an efficient and cheap method of insulation.



14. Mud block work in course of construction at Ibadan. The foundations are of sandcrete block and the concrete is taken through the external wall as an anti-termite barrier.



15. Constructional details of the new Police Barracks at Ikoyi, Lagos. Walls are of sandcrete blocks, supplemented by precast and in situ concrete. Roofs are of corrugated asbestos.



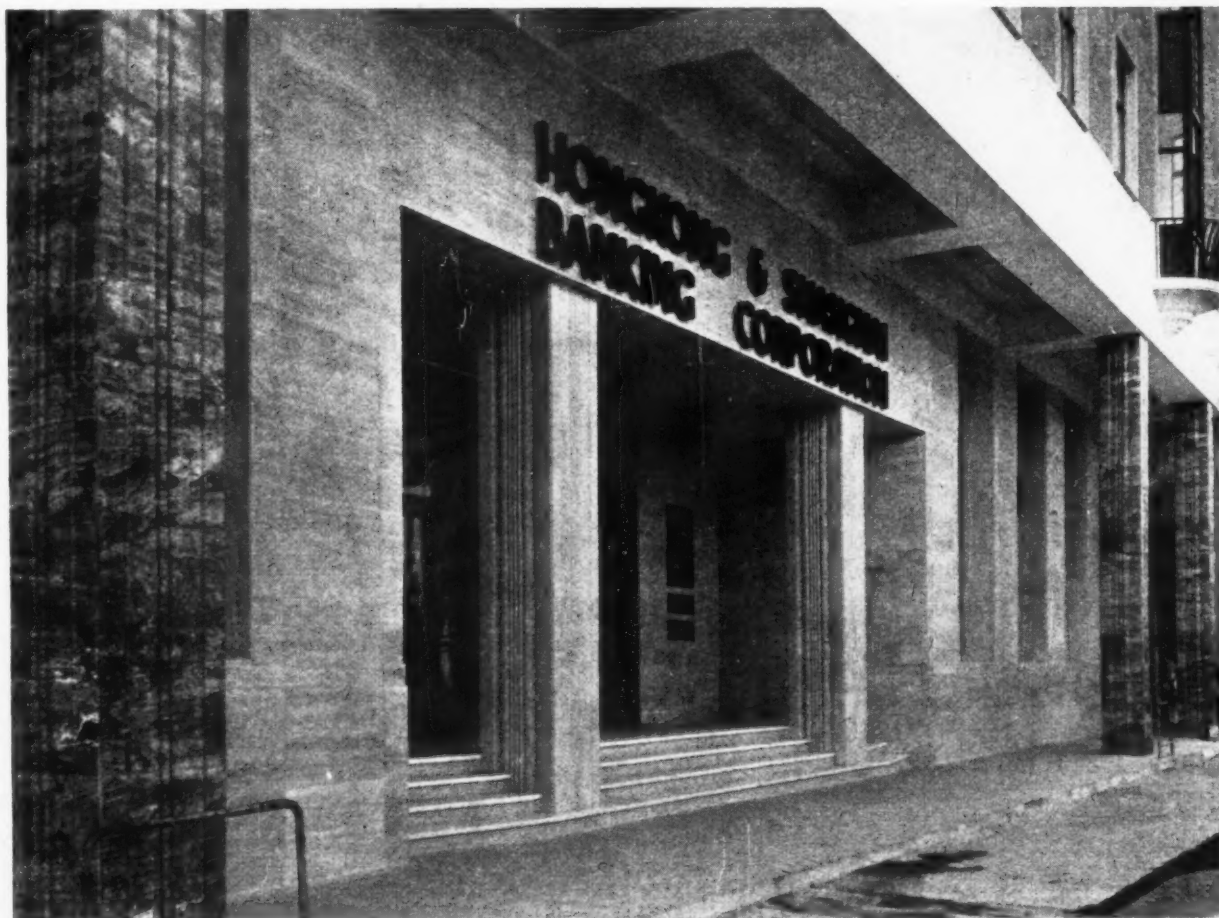
16. Extensions to the Secretariat, Lagos. Note the strong lines of the sun hoods projecting over the windows.

BANK AND OFFICES

at ORCHARD ROAD, SINGAPORE
designed by MESSRS. PALMER AND TURNER

Macdonald House is owned by the Hongkong and Shanghai Banking Corporation, who have a tradition for leading building activities in the Far East. The first post-war, large-scale building in Singapore, it is sited in the important motor and provision trade area of Orchard Road. The clients required banking, security and safe deposit facilities on the ground floor and the maximum development possible within byelaws to provide offices and two staff flats.

The entrance to the banking hall.

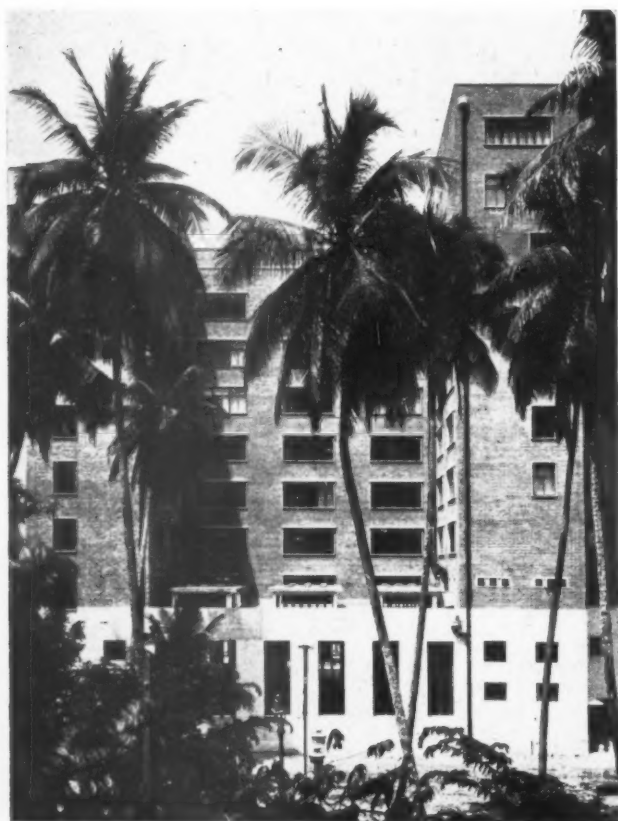


BANK AND OFFICES

at ORCHARD ROAD, SINGAPORE
designed by MESSRS. PALMER AND TURNER

PLAN—The site, which has a 140 ft. frontage and is 100 ft. deep, lies on old mangrove swamp. Within the maximum permissible height of 105 ft. is the banking floor of 24-ft., and seven office floors of 11-ft. Within the setback line are provided two staff flats on the eighth floor, servants' quarters on the ninth, and lift machinery and tanks on the tenth. The office floors are planned around an open well, which gives adequate natural light to inner offices, and permits the use of six skylights in the banking hall ceiling, which render artificial lighting unnecessary during normal daylight.

The back elevation.



The elevation facing Orchard Street.

CONSTRUCTION.—Piled foundations are of precast reinforced concrete with supplementary extension units lowered into a pre-driven tube. 263 piles were driven in 41 groups. Structure is reinforced concrete frame with flat slab construction for the office floors. External walls are 14-in brickwork with specially made facings, except walls on cantilevered areas (including main facade), which are 9-in. composite facing brick and reinforced concrete. Parapets are also composite construction to prevent thermal movement. Window trims are rubbed reconstructed stone. Roofing is three-layer bituminous sheeting finished with granite chips, except foot traffic areas which have 2-ft. square 1½-in. concrete slabs jointed with bitumen. Protective projecting cornices have green glazed pantiles.

EXTERNAL FINISHES.—Facing bricks with a light sandy texture and a soft golden-red colour are used externally. The banking floor has a facade of Roman travertine with a light polish. The four moulded detached columns are onyx travertine, which is mainly rusty red and brown in colour. The bank entrance is flanked by moulded Botticino columns, and has

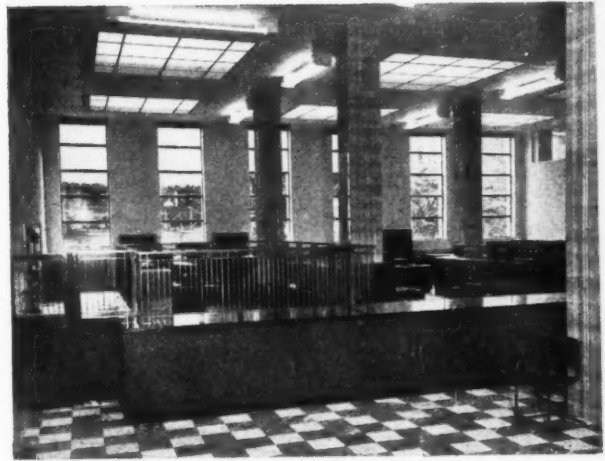
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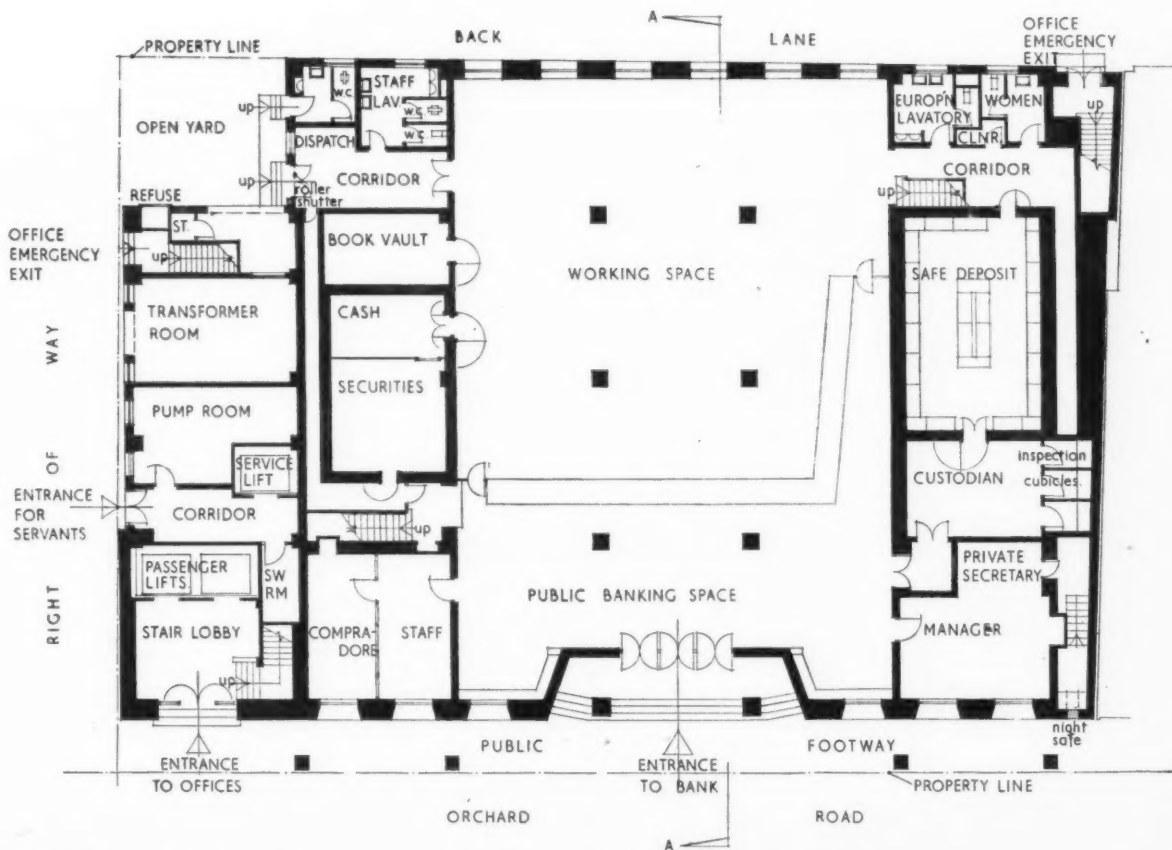
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grey Cararra steps with travertine risers. The triple entrance doors are dark brown, sandblast finish, extruded bronze with etched plate glass panels. The lettering "Hongkong and Shanghai Banking Corporation" and "Macdonald House" is of a specially cast deep section bronze with raised edges and is supported $\frac{1}{4}$ in. away from the travertine marble facing to prevent staining. The oriel windows are fabricated in mild steel and are bronze sprayed over zinc. The cappings are of weltemp copper.

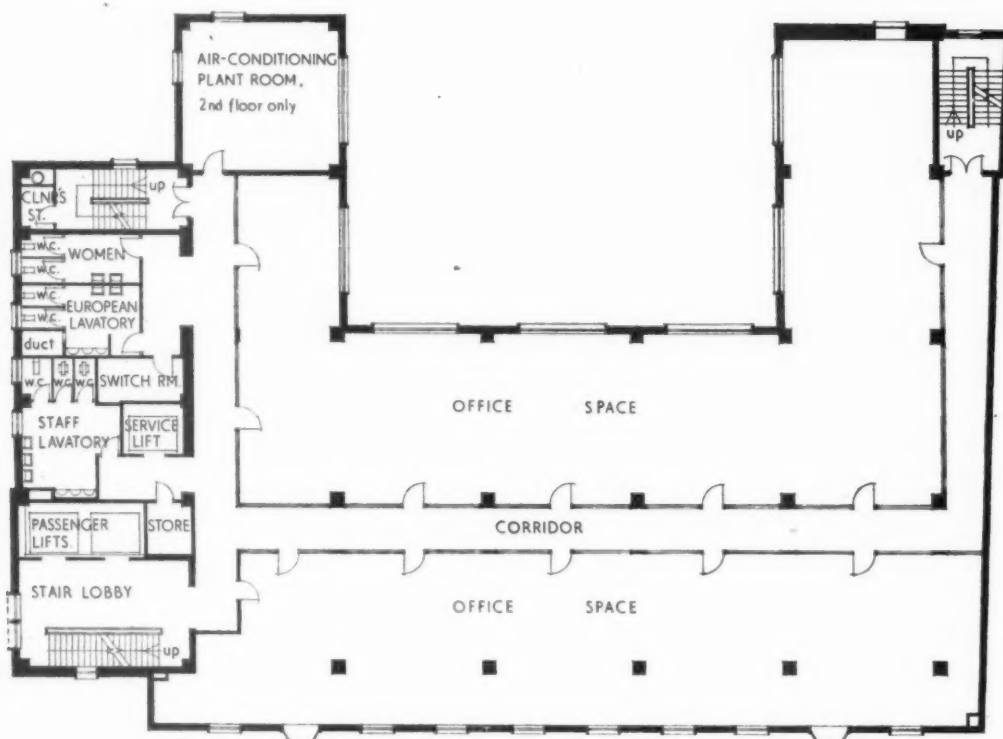
INTERNAL FINISHES.—The banking hall has a Filletto Rosso marble dado trimmed with Botticino. The columns are moulded Filletto Rosso. The ceiling is of perforated acoustic tile. Internal stairs are finished in varying shades of brown mosaic tiles with non-slip inserts on treads; risers are dark brown mosaic. The strong room doors are finished in stainless steel. The 1,700 safe deposit lockers are faced with satin finished aluminium alloy. Landings, steps and skirtings to main stairs have brown and fawn mosaic tiles. The surrounds to the lift doors are faced in Roman travertine, laid to show the contrast of grain. Main lift doors are cellulosed a metallic silver-bronze.



The banking hall



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



Second to sixth floor plan [Scale: $\frac{1}{4}$ "=1'-0"]

BANK AND OFFICES

at ORCHARD ROAD, SINGAPORE
designed by MESSRS. PALMER AND TURNER

An office on the sixth floor.



Stair handrails are of polished teak on cellulosed iron supports. Air conditioning units in offices abutting 14-in. walls are built in under a terrazzo cill combined with bookshelves. On other walls they are free standing. Air conditioning grilles to the banking hall were fabricated locally and designed to fit above the cold cathode lighting. The flats are finished with five coats of oil paint on gypsum plaster. Floors are tongued and grooved teak parquet, except in lounges, where fitted carpets are laid on felt underlay over patent bituminous type floor covering. All furniture was imported from Great Britain to special design, and includes veneered fitted wardrobes. Working space floors are finished with rubber tiles on asbestos cement backing.

SERVICES.—Two 500-ft. per minute gearless traction lifts are provided for passenger traffic, one lift is arranged for automatic night operation. The freight lift is a geared type of 350 ft. per minute. The motor rooms are above the shafts. The building, except for the stairs, is completely air conditioned. The banking hall has a normal low-pressure duct system, while the office floors have a high-pressure conduit system. Machinery is on the first and second floors, occupying a total of two and a half bays of structure. The capacity is 170 tons of refrigeration. The office floors have an air

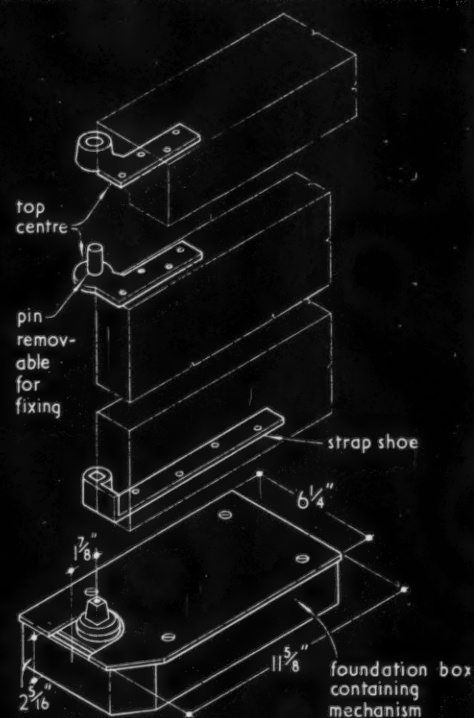
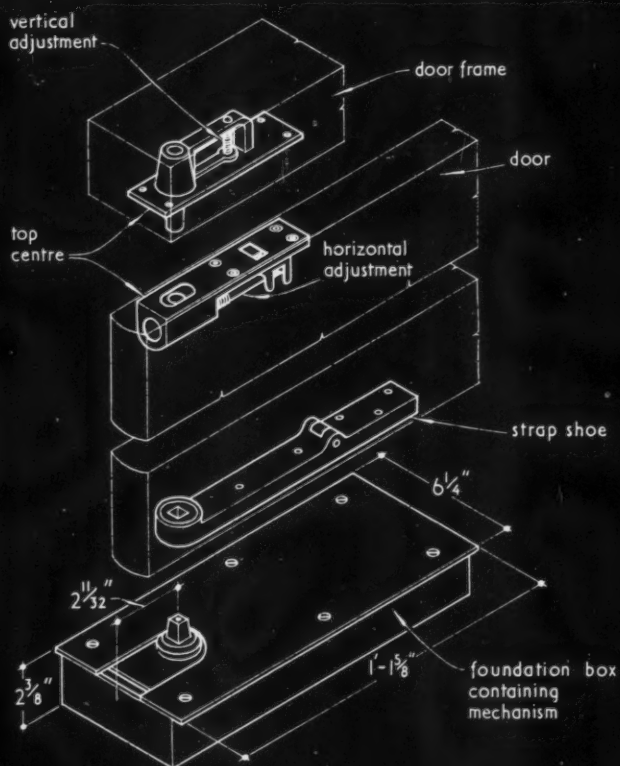
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FITTINGS | DOORS | SPRINGS AND CHECKS

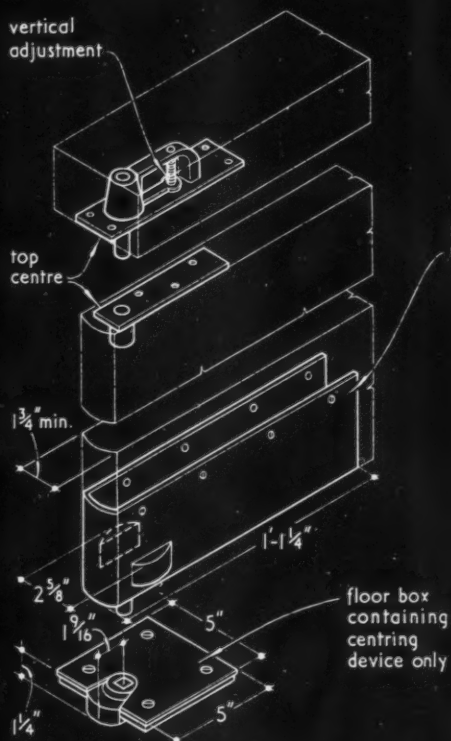
44.E2

The Architects' Journal Library of Information Sheets 271. Editor: Cotterell Butler, A.R.I.B.A.



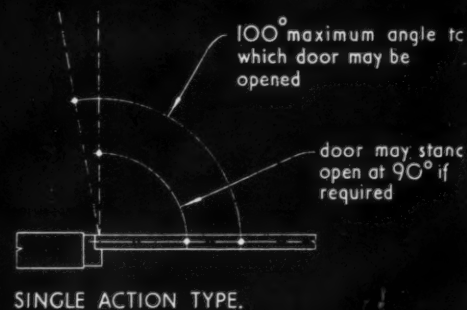
floor spring: type no. B420IA

- floor spring: type no. B420IA with or without check

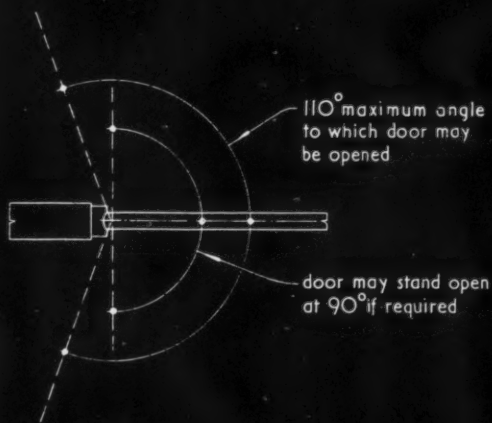


shoe spring: type no. B 359 with or without check

DOUBLE ACTION TYPES.



SINGLE ACTION TYPE.



44.E2 FLOOR SPRINGS AND CHECKS

This Sheet describes double and single action floor and shoe springs and checks.

Construction Generally

The springs and checks are constructed from high quality material and are manufactured to very close limits. They are supplied filled with oil and set for the average weight of door. The check cylinders are tapered and the oil used is of thin viscosity to ensure smooth checking. Machined parts are hardened and ground where necessary and oil leakage is entirely prevented by the use of synthetic rubber oil seals. Special fittings can be supplied to meet all conditions, such as pressed metal doors, steel casement doors, glazed doors, etc.

Double Action Floor Spring Type No. B.4201A

Top centre: This may be plain bearing, Oilite bush or ball bearing. Alternatively a top centre with horizontal and vertical adjustment can be supplied as shown.

Shoes: The springs are supplied with adjustable strap shoes (as shown), complete shoes or with special blocks for metal doors. All types have a centring device. Unless otherwise stated the springs are supplied with plain top centres and adjustable strap shoes.

Maximum angle to which door can open: 110°. A door-stop must be provided if there is danger of the door being forced beyond this angle.

Springs without checks: Where no check is required the same spring is supplied but the check cylinder is omitted.

Orders

The following particulars should be given when ordering double action springs:

Type of top centre.

Finished thickness of door and weight.

Whether to stand open at right angles or not.

If shoes are required, whether they are to be covered by kicking-plates; if not, whether the shoe is to be flush with the door or proud.

Whether required without checking device.

Single Action Floor Spring Type No. B.4201A

Top centre: This is either Oilite bush or ball bearing. The pin in the top centre is removable to facilitate fixing.

Shoes: The springs are supplied with standard strap shoes as shown.

Unless otherwise stated the springs are supplied with Oilite bush top centres and standard strap shoes.

Maximum angle to which door can open: 100°. A door stop must be provided if there is any danger of the door being forced beyond this point.

Orders

The following particulars should be given when ordering single action springs:

Type of top centre.

Hand of door and weight.

Whether to stand open at right angles or not.

Check Shoe Spring Type No. B.359

Top centre: This may be plain bearing, Oilite bush or ball bearing.

Alternatively, a top centre with horizontal and vertical adjustment can be supplied as shown.

Shoe spring: This is so constructed that it can be readily fitted to wood or metal doors. When fixed to metal doors the side plates are omitted and the overall width is 1½ in. except where the cover-plate for the cam occurs.

Maximum angle to which door can open: 110°. A door stop must be provided if there is danger of the door being forced beyond this angle.

Springs without checks: Where no check is required the same spring is supplied but the check cylinder is omitted.

Orders

The following particulars should be given when ordering shoe springs:

Type of top centre.

If for wood doors, finished thickness of door and weight.

Whether to stand open at right angles, or not.

Whether shoe, when fixed, will be covered by kicking-plates; if not, whether the shoe is to be flush with the door or proud.

Whether required without checking device.

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James Gibbons Limited.

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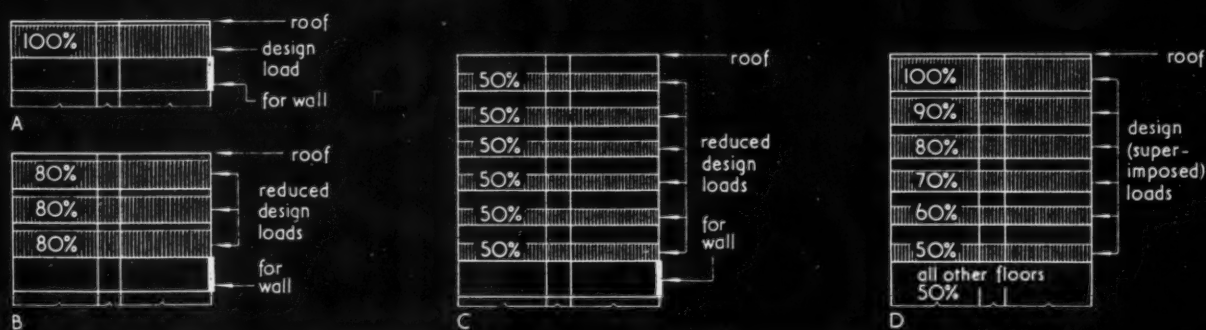
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class of loading	description	uniformly distributed			
		superimposed floor load lb/sq. ft.	minimum load on slabs or floor boards lb/ft width	minimum load on beams lb.	load on beams lb./sq. ft. of floor area
I	private dwellings, not more than two storeys	30 50	240 560	1920 2240	- 40 ● ○
II	rooms in private dwellings of more than two storeys, including flats; hospital rooms and wards; bedrooms and private sitting rooms in hotels and tenement houses	40 50	320 560	2560 2240	- 40 ● ○
III	offices, entrance floor and below	50 80	400 840	3200 4480	- 80 ● ○
III ^a	offices above entrance floor	50 80	400 840	3200 4480	- 50 ● ○
IV	classrooms in schools and colleges	60 80	480 840	3840 4480	- 80 ● ○
IV ^a	minimum for light workshops	60 150	480 840	3840 4480	- 120 ● ○
V	banking halls and offices where the public may congregate	70	560	4480	- ●
VI	retail shops; places of assembly with fixed seating; churches and chapels	80 80	640 840	5120 4480	- 80 ● ○
VII	places of assembly without fixed seating (public rooms in hotels, dance halls etc.)	100 100	800 840	6400 4480	- 100 ● ○
VII ^a	restaurants	80 100	640 840	5120 4480	- 100 ● ○
VII ^b	minimum for filing or record rooms in offices; light workshops including light machinery	100	800	6400	- ●
VIII	garages to take all types of vehicles	100 150	worst combination of actual wheel loads but not less than 2000 lb. considered distributed over area 2'6" square not less than 1.5 x worst combination of wheel loads: minimum wheel load 1 ton.		- 120 ● ○
VIII ^a	garages for private cars, light vans etc.	80 80	640 840	5120 4480	- 80 ● ○
IX	light storage space in commercial and industrial buildings; medium workshops	150 150	- -	- -	- 120 ● ○
IX ^a	corridors, stairs, landings	generally same loading as floor to which they give access 100 (min.)			
X	minimum for warehouses and general storage space in commercial and industrial buildings; heavy workshops, excluding heavy plant and machinery	200 200	- 840	- 4480	- 200 ● ○

● denotes compliance with B.S. code of practice CP4:1944, chapter V loading; also BS.449:1948 part III loads, (amend't July 1949)

○ denotes compliance with London County Council building by-laws 1938

SUPERIMPOSED FLOOR LOADS FOR VARIOUS TYPES OF BUILDING.



DIAGRAMS SHOWING REDUCED SUPERIMPOSED FLOOR LOADS EXPRESSED AS A PERCENTAGE OF LOADS IN TABLE ABOVE.

SUPERIMPOSED FLOOR LOADS FOR VARIOUS TYPES OF BUILDING.

2.B4 SUPERIMPOSED FLOOR LOADS FOR VARIOUS TYPES OF BUILDING

This Sheet sets out in tabular form the uniformly distributed superimposed floor loads for various types of building. They are minimum loads recommended for the design in accordance with L.C.C. by-laws, British Standards and Codes of Practice.

Superimposed Floor Loads

The figures given in the table on the face of this Sheet do not include the dead loads (weight of walls, floors, roofs, partitions and other permanent construction). For the purpose of calculating dead loads see B.S. 648 : 1949 *Schedule of Weights of Building Materials*.

For all floors in which partitions are intended but are not located on the plans, a uniformly distributed load per sq. ft. of not less than 10% of the weight per ft. run of finished partition or 20 lb. per sq. ft., whichever is greater, shall be provided for as an allowance over the whole of each floor bay upon which partitions are to be carried.

The minimum loads on slabs and on beams (4th and 5th columns of table) shall be used in place of the loads per sq. ft. (3rd column of table), where these minimum loads cause higher stresses.

Reductions in Superimposed Floor Loads

For the design of columns, piers, walls, their supports and foundations (not floors and beams) the following

reductions in assumed total superimposed loads are permitted.

1. In B.S. Code of Practice CP 4 : 1944, Chapter V Loading and B.S. 449 : 1948 *The Use of Structural Steel in Building*, Part III Loads (with amendment No. 1, July, 1949) as shown in the following table :

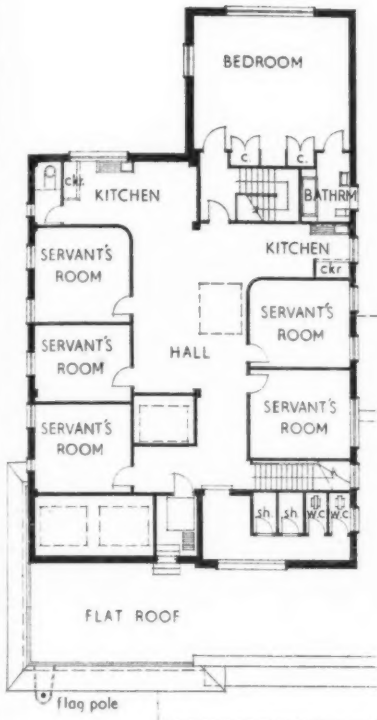
Number of floors carried by member under consideration	Per cent reduction of superimposed load on all floors carried by member under consideration
1	0
2	10
3	20
4	30
5	40
6 or more*	50*

* These figures are given in B.S. Code of Practice CP4 : 1944 only.

This reduction does not apply to buildings designed for storage purposes.

For examples of the above see diagrams A, B and C on the face of this Sheet.

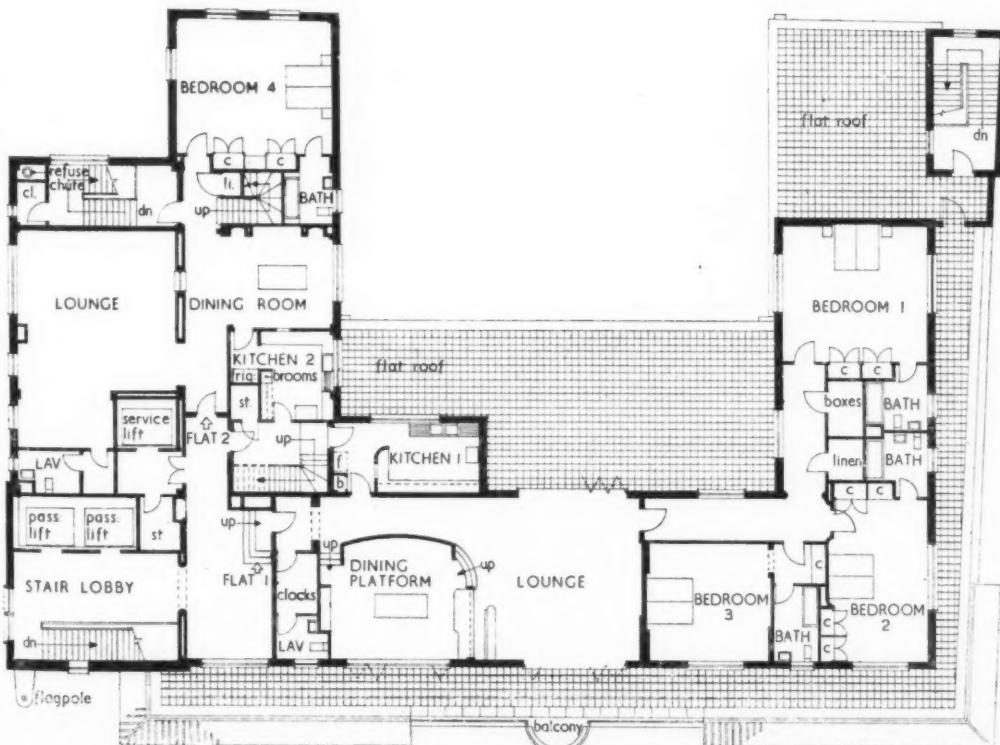
2. In London County Council building by-laws, 1938, only where the superimposed loads as shown in the table on the face of this Sheet do not exceed 100 lb. per sq. ft., as shown in Diagram D.



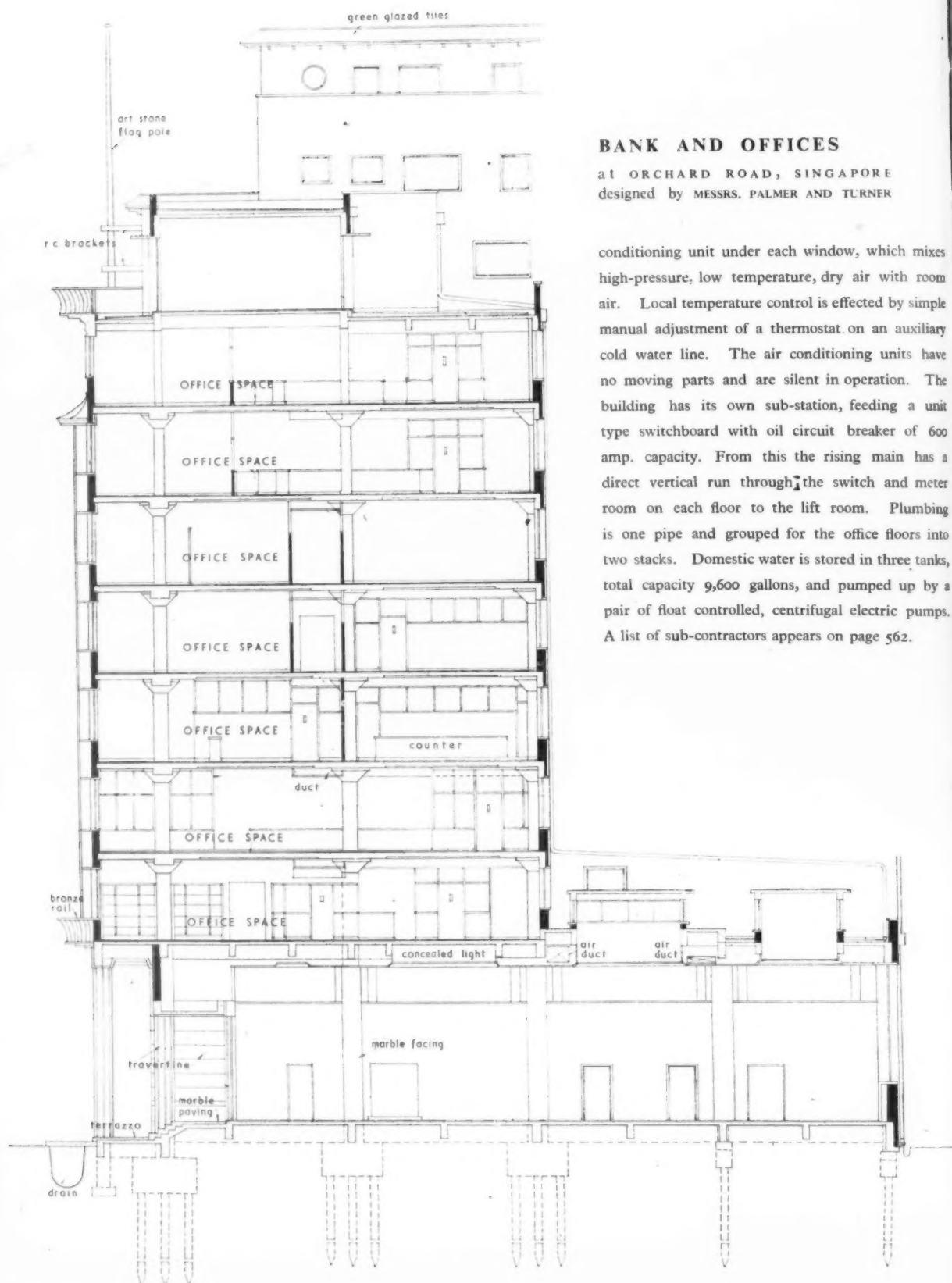
Ninth floor plan [Scale: $\frac{1}{4}$ " = 1'0"]



The lounge in flat No. 1 looking towards the bar and raised dining platform.



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



Section AA (Scale: 1/4"=1'-0")

BANK AND OFFICES

at ORCHARD ROAD, SINGAPORE
designed by MESSRS. PALMER AND TURNER

conditioning unit under each window, which mixes high-pressure, low temperature, dry air with room air. Local temperature control is effected by simple manual adjustment of a thermostat on an auxiliary cold water line. The air conditioning units have no moving parts and are silent in operation. The building has its own sub-station, feeding a unit type switchboard with oil circuit breaker of 600 amp. capacity. From this the rising main has a direct vertical run through the switch and meter room on each floor to the lift room. Plumbing is one pipe and grouped for the office floors into two stacks. Domestic water is stored in three tanks, total capacity 9,600 gallons, and pumped up by a pair of float controlled, centrifugal electric pumps. A list of sub-contractors appears on page 562.



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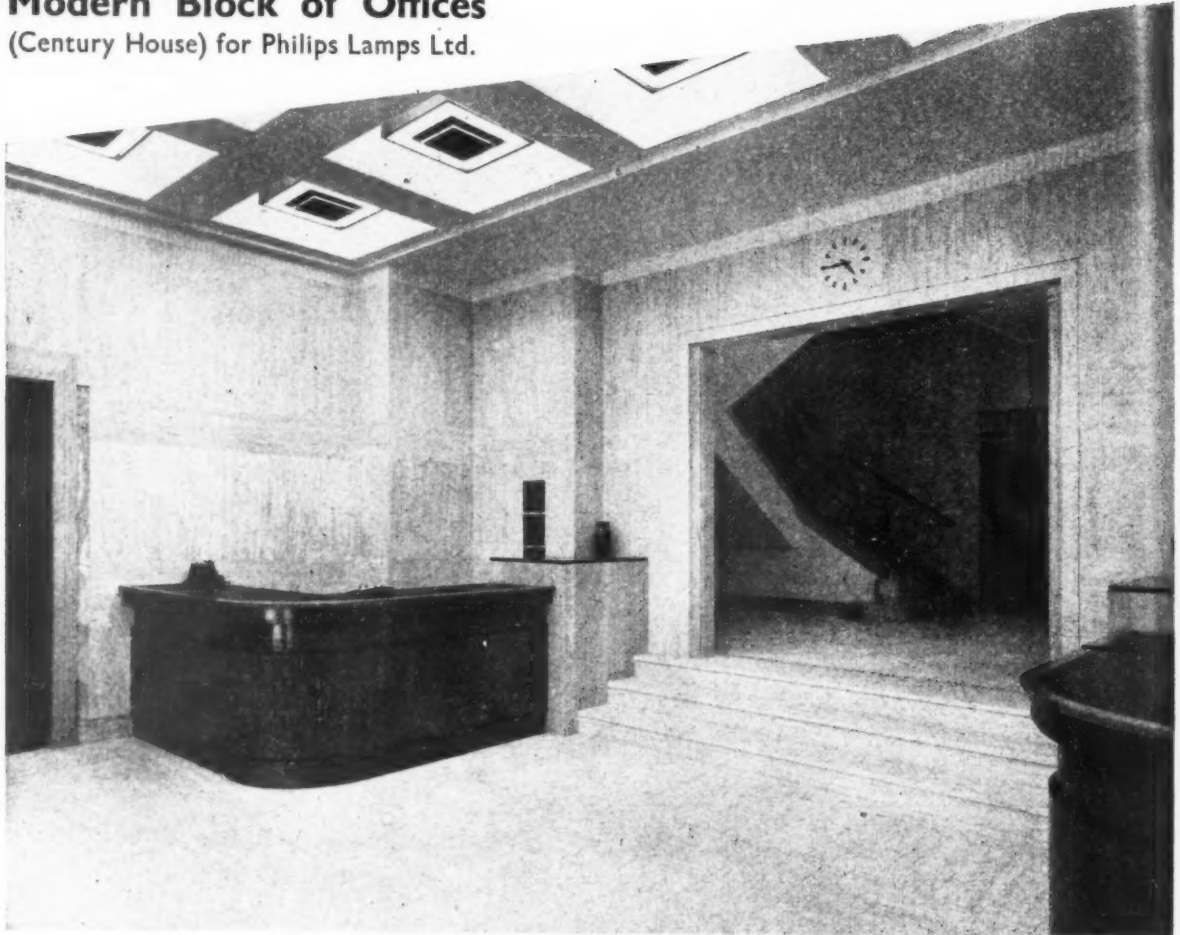
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TECHNICAL SECTION

A digest of current information prepared by independent specialists; printed so that readers may cut out items for filing and paste them up in classified order. Headings below.

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9.12 design: general

BUILDING RESEARCH STATION

Building Research, 1948. (HMSO, 1949. 1s. 6d.)

Report of the work of BRS during 1948. Useful means of keeping in touch with recent developments.

This report, although once again very tardy in appearing, gives a useful quick review of what is going on in the way of research. As such, all architects would do well to glance through it, though for information of any detailed kind it is necessary to go elsewhere—usually to National Building Studies, the BRS Digests or reports of papers which appear in the technical press.

12.43 materials: metal

COPPER SHEET

Copper Sheet and Strip for Roofing and Other Building Purposes. BS 1569:1949. (British Standards Institution. 1s.)

British Standard controlling quality, mechanical properties and dimensional tolerances of sheet copper up to 18 SWG, in width up to 48 in. The material specified is intended for roofing, flashings, weatherings, gutters and damp proof courses.

12.44 materials: metal

SOLDERS

Soft Solders. BS 219: 1949. (British Standards Institution. 2s.)

Revision of war emergency standard, to include fine antimonial and fine non-antimonial solders, which, it is considered, will cover all common requirements. Appendix gives melting characteristics and typical uses of the solders.

15.75 materials: applied finishes and treatments

BITUMEN MACADAM

Bitumen Macadam with Crushed Rock or Slag Aggregate. BS 1621:1950. (British Standards Institution. 2s.)

Prepared at request of Ministry of Transport, the RRL and the industries concerned with manufacture and laying of bitumen macadam.

Compositions specified may be supplied either for cold or warm laying with various types of binder.

Special feature of the standard is that, for measuring coarse mixtures, both the gradings of the aggregate and the binder contents vary with the type of aggregate used.

16.62 materials: miscellaneous

CHIPBOARDS

Specification and Code of Testing. (The British Chipboard Manufacturers' Association—undated. 4 pp.)

Requirements laid down by the association for quality of chipboards produced by their members.

Any move by trade associations to ensure standards of quality is to be commended. The present specification covers workability, density, dimensional accuracy, transverse strength, deflection, impact strength, inflammability and thermal conductivity—a formidable array, but one notices there is nothing covering dimensional stability, i.e., moisture movement.

17.68 construction: general

BRICKLAYING IN COLD WEATHER

Bricklaying in Cold Weather. Ministry of Works Advisory Leaflet No. 8. (HMSO, 1950. 2d.)

Simple precautions outlined. Mortar mix, protection of the work, heating of mortar.

This very brief advisory leaflet appears at first glance to give just the ordinary information which any reasonably competent architect thinks he knows. Closer reading shows, however, that there are several points which are not very often appreciated. For example, how many specifications still call for "thorough wetting of the bricks" without any reference to cold weather conditions? This leaflet specifically says that bricks must not be wetted in cold weather but that brick piles should be protected by tarpaulins. There are several other equally sensible points, and the leaflet is well worth the five minutes required to read it.

19.89 construction: details

FLAT ROOF DECKS

A Roof Deck the Weather won't Bother. Harlan H. Edwards (Architectural Record [USA] Feb. 1950.)

Brief illustrated article on construction of roof to take traffic. Chiefly concerned with avoiding failure by thermal movement.

That the protection of flat roofs by means of tile or concrete overlays is not always successful is often discovered only by the

painful method of building a "failure." Much of the trouble is due to the high thermal movement of the protecting material causing a tearing or dragging of the waterproof membrane, whether this is felt or asphalt. This article describes in fair detail the methods employed on a building in Seattle (where climate is much the same as in England). Essentially it relies upon the use of two layers of waterproof building paper below the felt roofing and two layers between the felt and the tile walking surface. The use of two layers is claimed to give a really good slip joint. In addition the membrane is reinforced. The article gives some details about drainage and methods of treatment of walls, etc.

19.90 construction: details

PRESTRESSED CONCRETE

Steel-Alloy Bars used in Prestressed Concrete. (Concrete & Constructional Engineering, April, 1950, pp. 127-8, and other journals.)

Lee-McCall system of prestressed concrete using large diameter bars of high-tensile alloy steel with threaded ends and anchorages.

This new system of prestressed concrete was demonstrated on April 5 at the Thatched Barn. The system differs from those used at present both regarding the reinforcing material and the method of anchorage.

The steel used in prestressed concrete work has hitherto been high carbon wire varying in diameter between 0.08 and 0.276 in., and of a guaranteed minimum tensile strength of 100 to 140 t/sq. in., of which about 67 per cent. can be utilized as initial pre-stress. These wires are either bonded to the concrete (in the case of pre-tensioning), or anchored by special anchorage devices such as the Freyssinet cones or the Magnel sandwich plates (in the case of post-tensioning).

The new system uses an alloy steel, in bars of diameters from $\frac{1}{2}$ in. to $1\frac{1}{2}$ in., with a new type of nut at the ends. The ultimate strength of the new steel (called "Macalloy") is 64 to 72 t/sq. in., and its guaranteed minimum 0.1 per cent. proof stress is 54 t/sq. in. The recommended initial prestress is 42 t/sq. in. It is claimed that at this stress no creep of the steel occurs, so that after losses due to shrinkage and creep of the concrete a stress of about 35 t/sq. in. may be assumed as effective.

The ends of the bar are provided with fine screw-threads to take the anchor nuts. It is claimed that these nuts, when fully tightened, develop practically the ultimate strength of the bar.

The new system is applicable to post-tensioning only.

The bars are tensioned by a patented hydraulic jack, which is hand operated. The jack is connected by means of a cotter to the adapter screwed to the extended screw-thread on the end of the bar, and the thrust is transmitted through the legs of the jack to the anchor plates (see illustration). When the full stress has been applied to a bar the anchor unit is screwed home and the jack disconnected.

The jack is fitted with rollers for moving about and the whole stressing operation is both simple and quick.

The first part of the demonstration showed the post-tensioning of a 24 ft. long beam of I-section designed to carry a live load of 3 tons. The bottom reinforcement, a $\frac{7}{8}$ -in. bar, was tensioned to 25 tons, and the top reinforcement, a $\frac{1}{2}$ -in. bar, to 6 tons.

The second part of the demonstration showed the behaviour of a 48 ft. long beam. This beam has an I-section of 30 in. \times 13 $\frac{1}{2}$ in., reinforced with three bars of $\frac{7}{8}$ in. diameter at the bottom and one $\frac{7}{8}$ in. bar at the top. It was cast in



Hills Patent Glazing at York Road Station, Belfast, for the Northern Counties Committee. Engineer: N. C. Cain, B.Sc.

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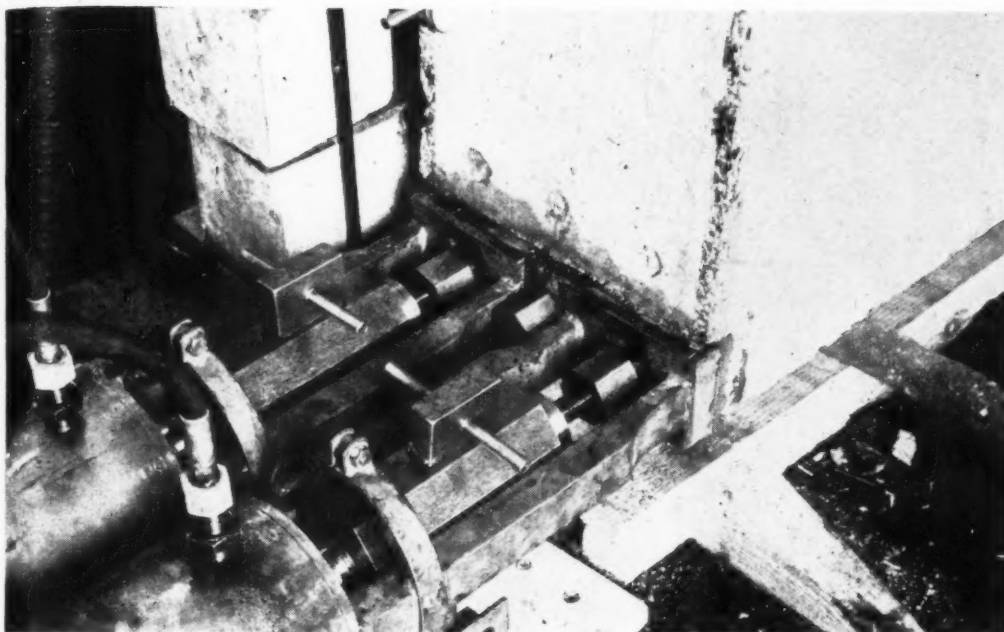
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Hills Lantern Lights at New Factory for Messrs W. Canning & Co. Ltd. Architects: Harry Bloomer & Sod.



Lee-McCall system of prestressed concrete. Photograph showing two jacks operating simultaneously to avoid lateral loading. The anchor plates, nuts, threaded ends of the bars, adapters, cotters and legs of the jacks transmitting the prestressing force are clearly visible. See 19.90.

sections and mortar jointed. The beam was supported at 46 ft. 6 in. centres and loaded at the third points to 16 tons, which is twice its design load. Soon after exceeding the design load cracks became visible, not only at the joints, but also between

them. This was an indication of efficient grouting.

After unloading, the cracks disappeared and there was no permanent deflection.

It is claimed that the new alloy steel has a higher resistance to corrosion than mild steel, so it may be used in tie bars which are left exposed.

The possibilities of the new system have not yet been fully explored; its most prominent feature is the simplicity and speed of prestressing.

24.134 lighting DAYLIGHTING

Recommended Practice of Daylighting. A Report by the Daylighting Committee of the Illuminating Engineering Society [USA]. (Illuminating Engineering, Feb, 1950, p. 107.)

Sky brightness, sunshine, control techniques; schools, offices, factories and homes; appendices on sky conditions, sunshine, production methods; useful, well illustrated.

For British architects the usefulness of this report is chiefly in the illustrations of fenestration. The text is clear and direct, but the subject as a whole is much better understood in this country, with the exception of certain kinds of window design of which we have relatively little experience.

The section on principles gives data on the distribution of sunny and cloudy days over the USA. Unfortunately this material is not used for the development of any particular policy. Brief reference is made to distribution from windows and to reflection.

Principles for sunlighting form the next (and most interesting) section, and there are a lot of pictures showing the use of glass blocks with clear glass, and louvering and screening in various ways. Oddly the use of these to control sky glare is glossed over. School lighting is discussed in terms of levels of illumination and brightness ratios. The latter are still difficult to anticipate and at present are interesting mainly to investigators. All they say about amount of light is that glazing should be at least 1/5th of the floor area. Desirable reflection factors for the various surfaces are listed.

Office lighting has much the same sort of recommendations, including the same ratios of glass to floor area (which seems a little

pointless since office blocks are usually designed without sub-division).

Industrial lighting is discussed uncritically, side lighting and various top-lighting arrangements being dealt with mainly in terms of the amount of light they give. Illustrations are interesting, but fall short of reflecting the real achievements of American factory design.

Home lighting again finds a recommendation for glazing to be 1/5th of the floor area, but a discreet reticence is shown in touching upon domesticity.

The appendices are interesting technically, but they do not have such simple methods of predicting sky factors as our own.

This is less advanced than the British Post-War Building Study No. 12, published during the war.

This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.

QUESTIONS AND ANSWERS

3020 PARTY WALLS: FIRE RESISTANCE AND SOUND INSULATION

Q I have been told that an investigation has been carried out recently by a research organisation to determine ideal requirements for party walls. Can you tell me if the results of this work are available and whether they cover any aspects of party wall design other than fire resistance?

A Research carried out by the Building Research Station at Garston has been published as National Building Study Special Report No. 5. This is obtainable from His Majesty's Stationery Office (price 2s.), and deals with sound insulation and structural stability in addition to fire resistance.

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 please).

Please ask manufacturers to send further particulars to:—

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Buildings Illustrated

Bank at Singapore (pages 553-558). Architects: Palmer & Turner. Sub-contractors: Piling, Sime Darby; foundation contractor. Ahong Construction Co.; superstructure. Woh Hup Ltd.; sculpture, Cavalier Rodolfo Nelli; air conditioning, Carrier International Ltd.; lifts, Otis Elevator Co.; plumbing, William Jacks; plumbing fittings, Shanks, Braithwaite tanks, Worthington-Simpson pumps; electrical, Hume Industries, Reyrolle Switch gear; small fittings and cold cathode lighting, GEC; fluorescent lamps, GEC and Atlas; steel windows, United Metal Works Singapore; bronze doors & windows, etc. Morris Singer Ltd.; safe equipment, Chubb & Sons; banking hall equipment, Roneo Ltd.; Kirsch Sunaire blinds; Malayan Wire Mesh; acoustic tiles, Newalls Paxtiles; marble, R. Bertelli, per Harrisons & Crossfield; roofing Challenge, per Anglo-Thai Corporation; mosaic flooring, Clouet & Co.; rubber flooring, Cressonite Industries; cork tiles, Armstrongs; green glazed pantiles, Langleys; ironmongery, Walter Rowley Ltd., Erebus Mfg. Co. Ltd.; furniture for flats, Trollope & Sons London Ltd.; roller shutters, Haskins.

Announcements

Speaking at a meeting of the British Wood Preserving Association recently, Sir James Calder, President of the Association, said: "Some of our Timber Merchant friends have an idea that in explaining the necessity for timber preservation they are reflecting on the use of wood, but this seems to me a complete mistake. You might as well say that Iron or Steel Manufacturers who insist on the exposed beams, columns, etc., being regularly painted are suggesting that

Iron or Steel are not suitable materials for their purpose. On the contrary, it seems to me as far as wood is concerned that if we can prove, as we can prove, that at a very small expense this timber can be made immune from the attacks of dry rot, worm beetle and fungus attack, that would very much strengthen its position as a competitive article for a great many uses which may be at present doubtful.

"The Association, I should like to explain, has nothing to do with price competition or anything of that description. It is purely a scientific and explanatory Association aiming to try and help the users of timber to get the best preservative they can for the timber to be used for different purposes. This is all the more urgent at the present time of high prices and restricted imports. The Association has been very lucky in securing the services as Secretary of Mr. Cox with his scientific training and extensive knowledge of the use of timber and these preservatives. He has already been able to assist large numbers of users of timber who were in difficulty owing to the attacks of dry rot, beetles, and other forms of attack on timber already in use which had not been treated with preservative, and to help these users in curing the attacks which had been made. Ultimately this Association hopes to be in a position to draw up specifications of the different preservatives so that the users can know that they are being supplied with a reliable preservative. They will give preservatives suitable, from which the users will select the preservative most suited for their requirements.

"The necessity of this Association is very evident from the large number of complaints of attacks on wood in houses which are regularly appearing in the daily Press. We ask you to assist the Association in increasing its strength by becoming associate Members, and by insisting when you are able that any timber of which you have the con-

trol should be properly preserved before being used, and that you will take the opportunity when in doubt to write to the Association for information and help on any question of this description."

The chairman of the TDA, Sir Gerald Lenanton, and the Director, Mr. Reece, visited Dublin recently to meet representatives of the Irish Timber Importers' Association, the South of Ireland Timber Importers' Association and the West of Ireland Timber Importers' Association, whose members are also members of the TDA. Mr. Stanley Davidson, who represented the Northern Ireland Area Committee, was also present at the meeting. The provision of TDA services in the form of publicity, exhibitions, lectures, Brains Trusts, timber technology classes, etc., in Ireland has been under consideration by the council of the Association since the end of the War, and the purpose of the visit was to discuss with representative timber associations in Ireland details for future activities. At the discussions it was decided to form an All Ireland Committee, representing both Eire and Northern Ireland, and Mr. Craig of Brooks, Thomas & Co., Ltd., was elected Chairman of the Committee. The first task of this Committee will be to discuss the type of TDA service required for Ireland, the necessity to appoint a full or part time TDA representative, and the possibility of increasing membership throughout the country.

For the third successive year, a party of 30 students from the architectural department of Nottingham University visited the factories, mill and stack yards of the Midland Joinery Works, Ltd., Burton-on-Trent, to examine modern methods of joinery production. All stages in the various departments were explained in detail, including conversion, processing, general machining and assembly.



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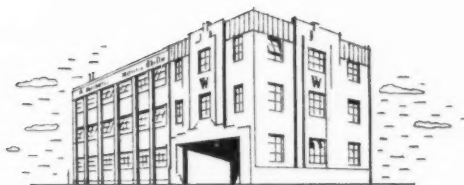
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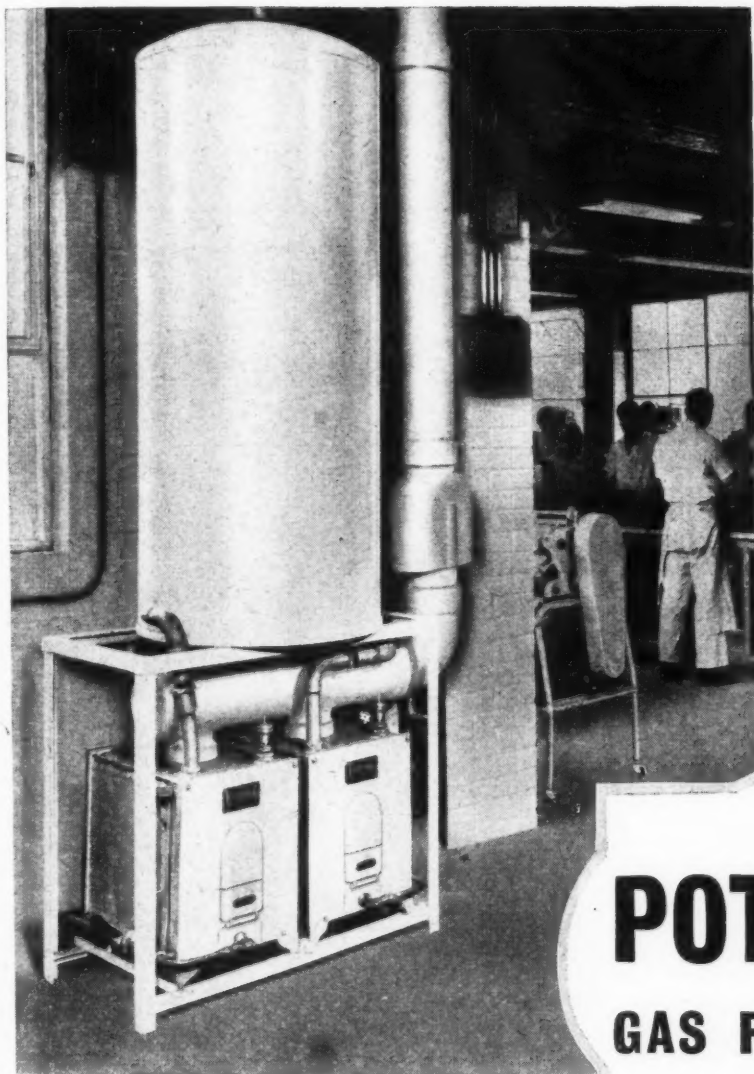
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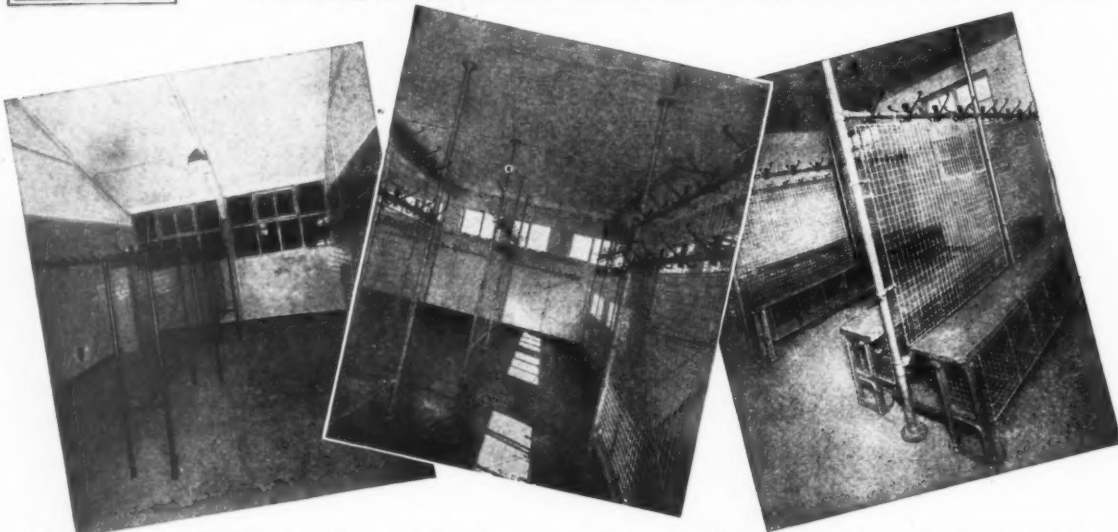
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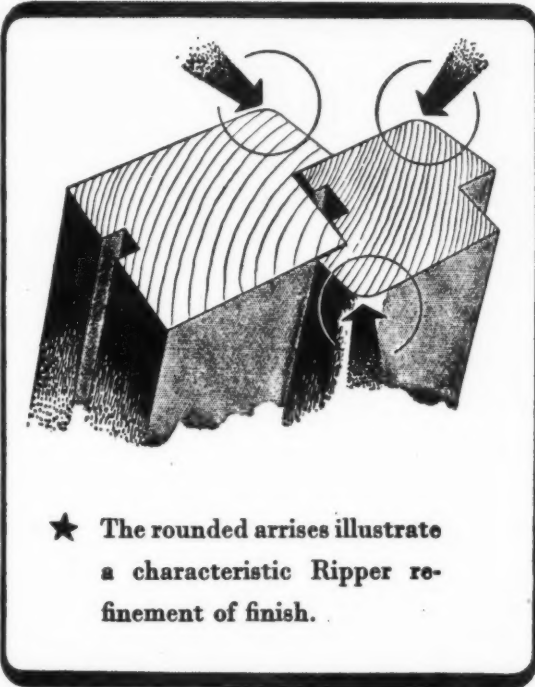
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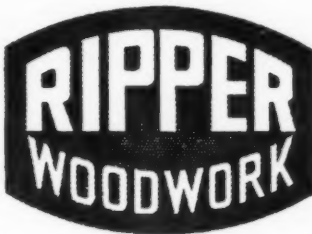
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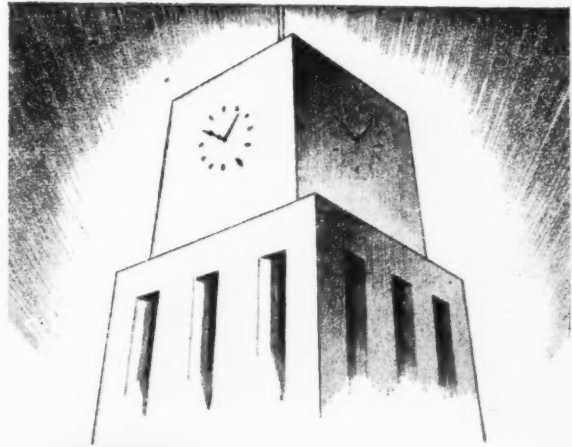


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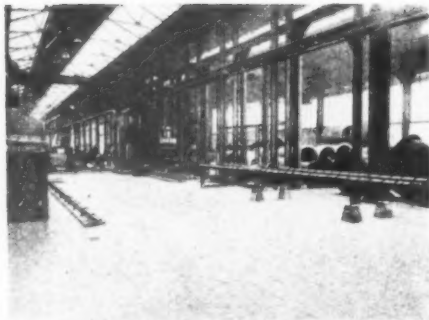
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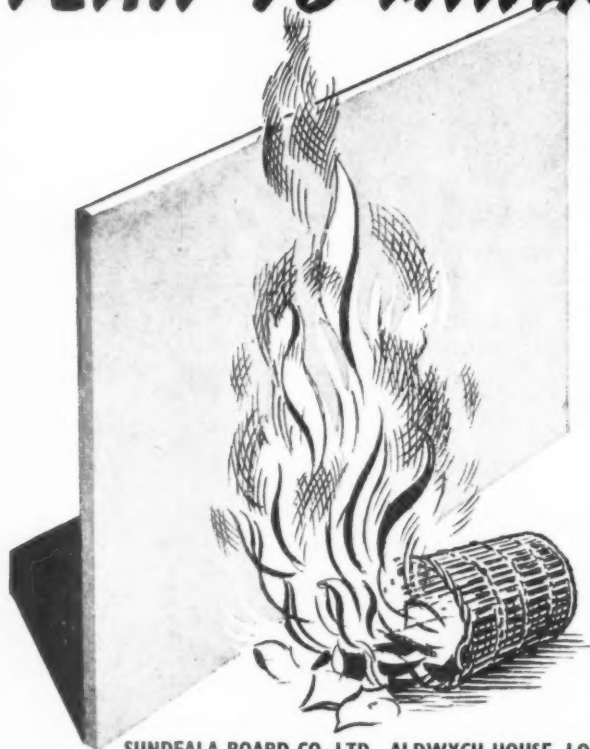
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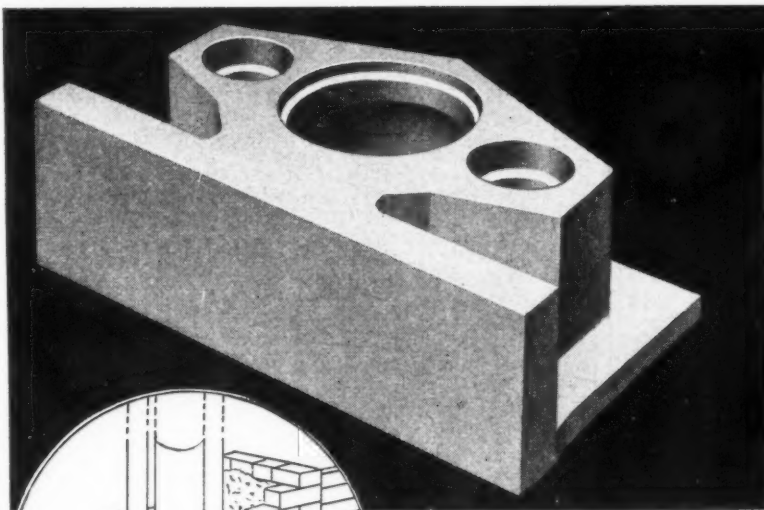
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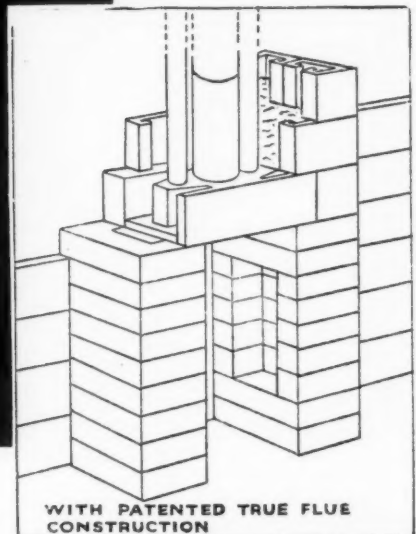


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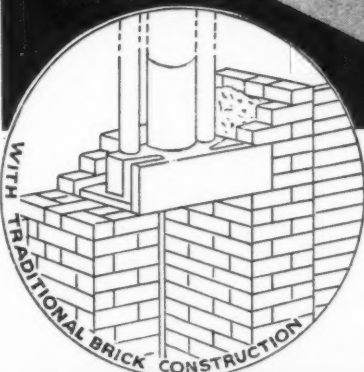
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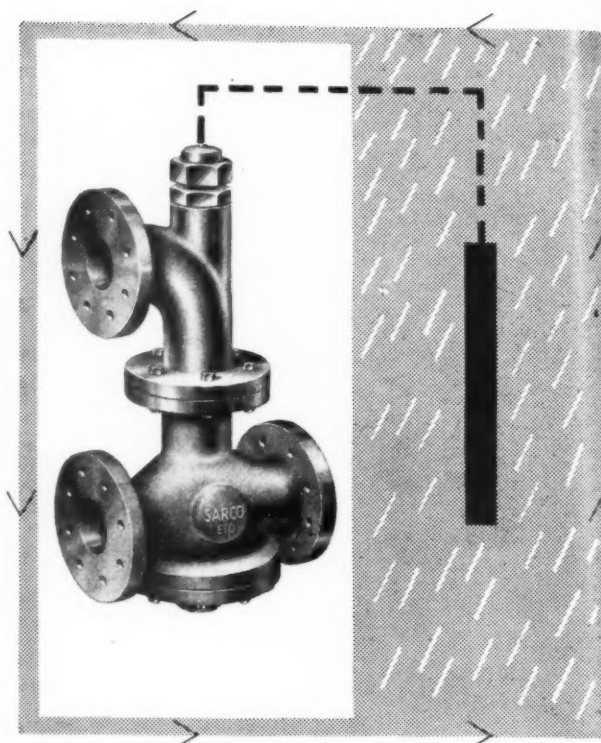
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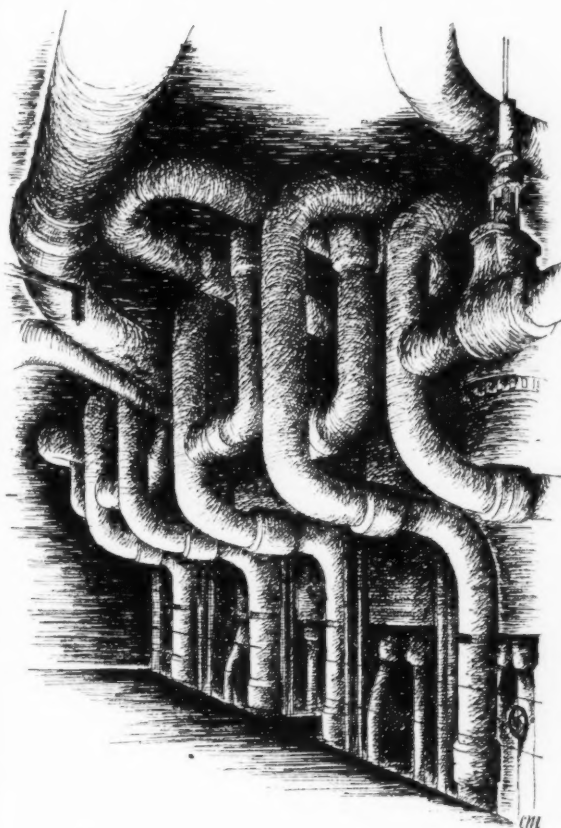
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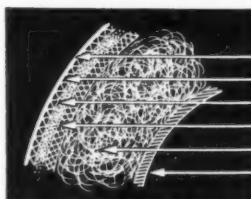


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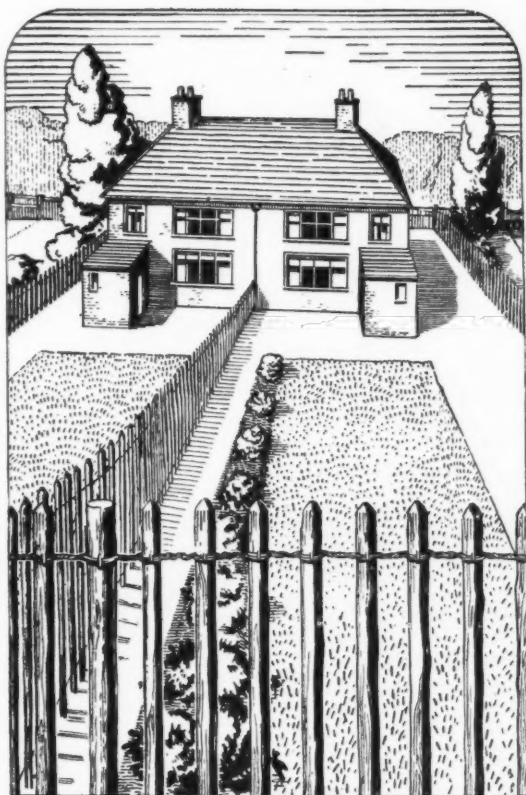
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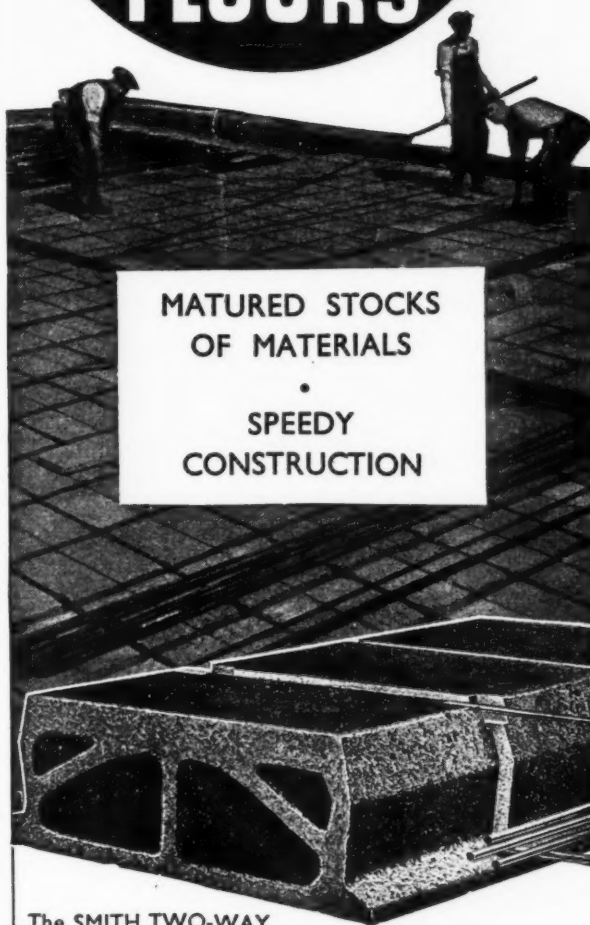
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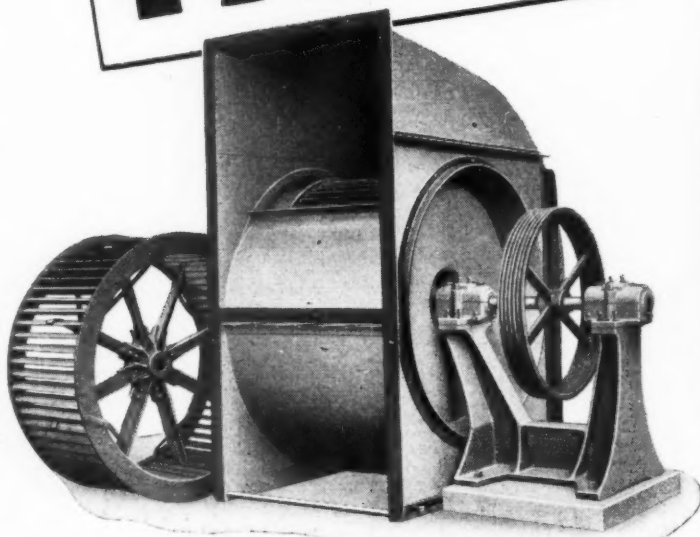
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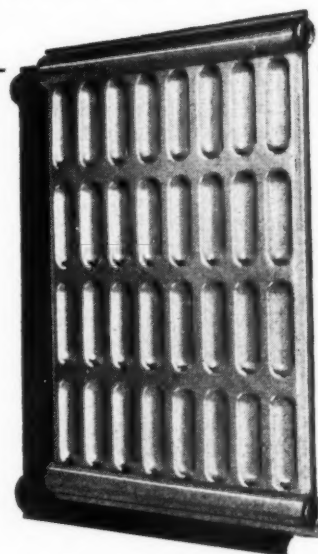
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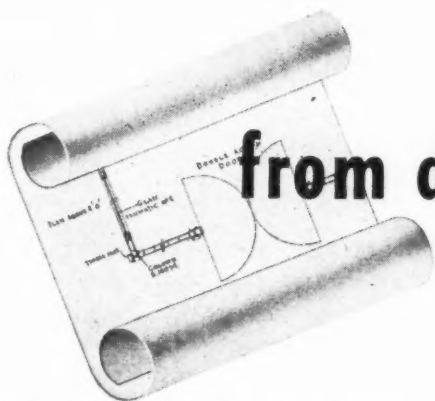
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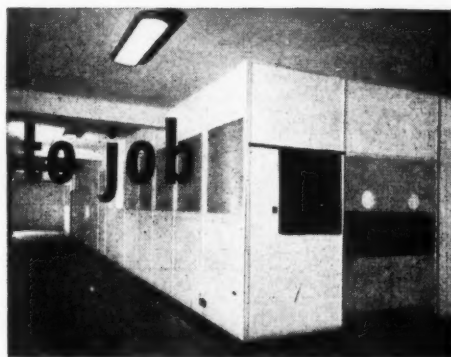
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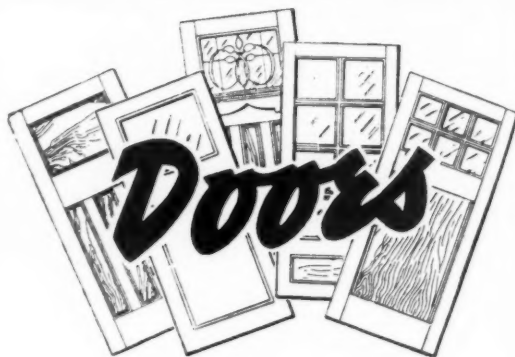
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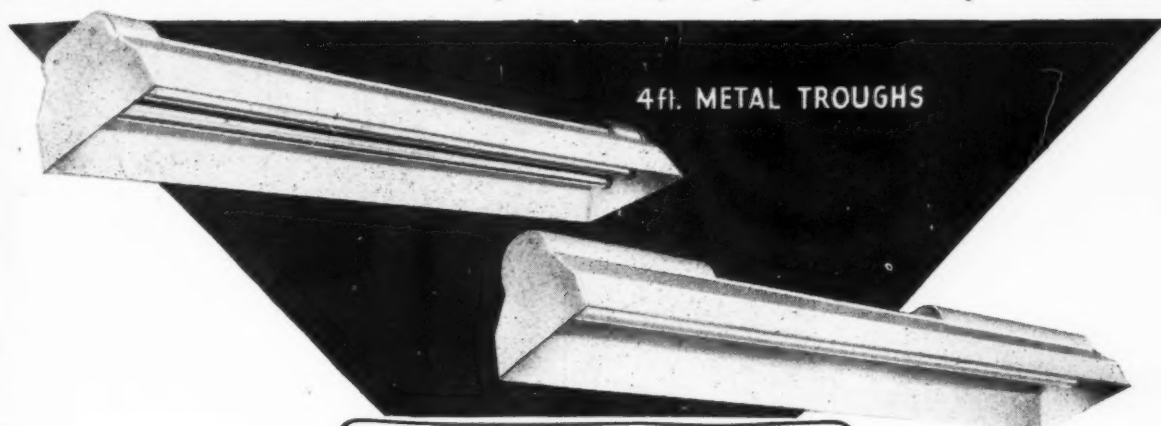
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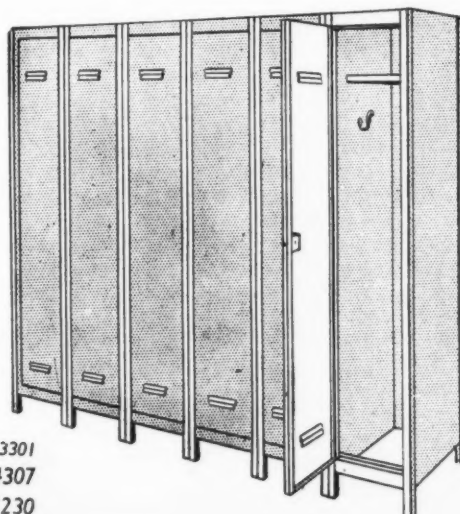
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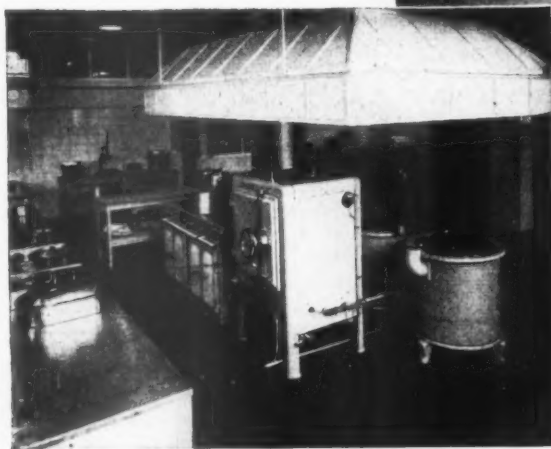
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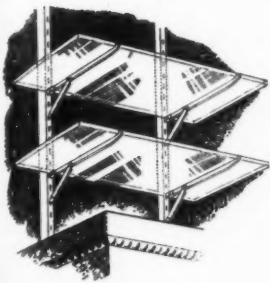
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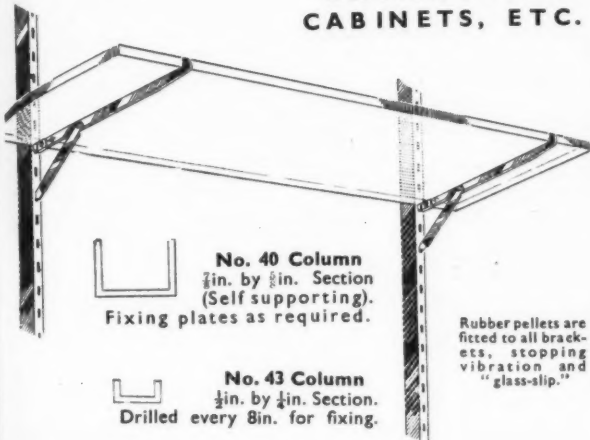
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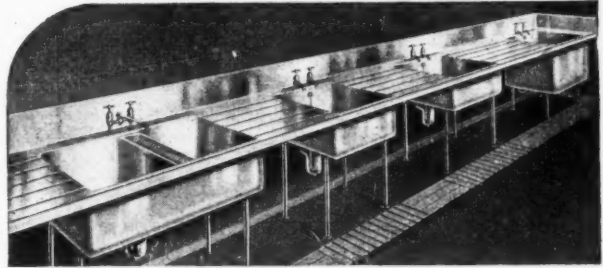


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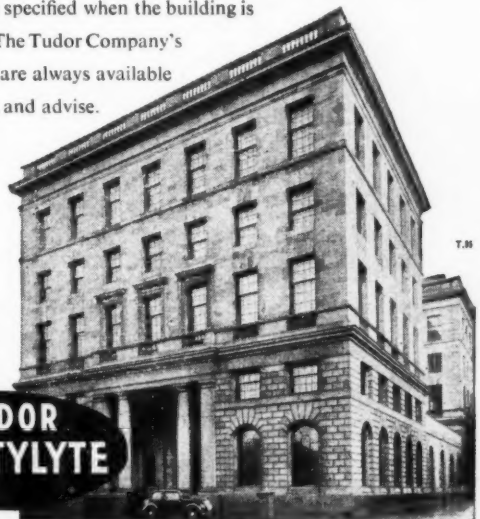
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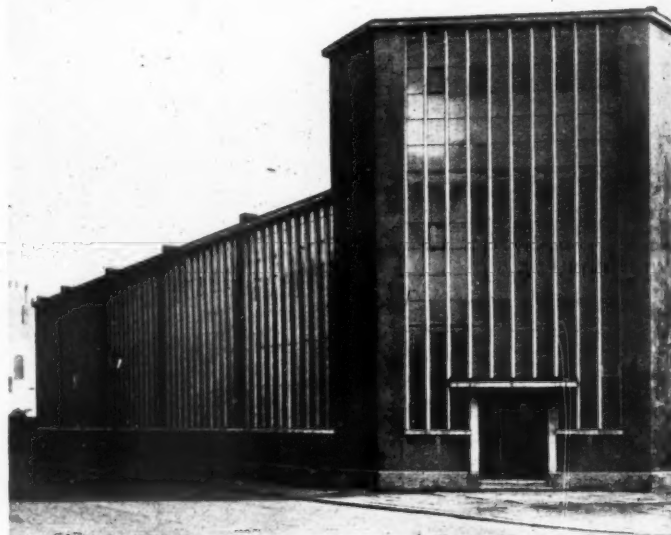
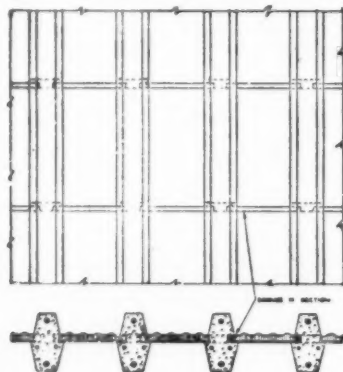
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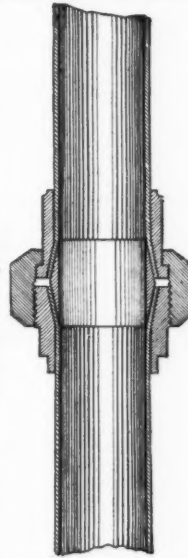
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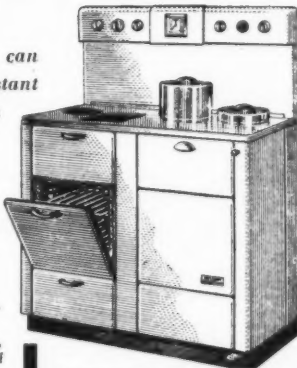
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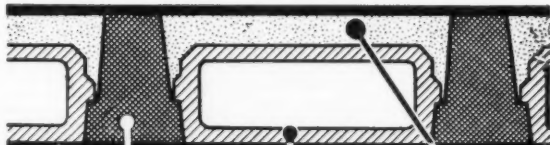
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Applications are invited for unestablished positions of (i) ARCHITECT, Grade III (salaries up to £700 a year) and (ii) ARCHITECTURAL ASSISTANTS (salaries up to £580 a year), in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (cottages and multi-storey flats), and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognised professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required, and quote Ref. G.R.3). Canvassing disqualifies. (2269) 1046

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Vacancies exist for SENIOR and LEADING ARCHITECTURAL ASSISTANTS in London, at Bisleigh (Warrington) and at Capenhurst (Cheshire), for drawing office duties in connection with important Research Establishments.

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Further information may be had from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, to whom application on the prescribed form should be sent not later than 31st May, 1950. 4041

COUNTY BOROUGH OF DERBY

BOROUGH ARCHITECT'S DEPARTMENT. Applications are invited for the following appointment on the permanent staff in accordance with the National Scale of Salaries:—

ONE JUNIOR QUANTITY SURVEYOR, Grade III, IV and V. Salary £450-£570.

Applicants should be fully experienced in working up, final accounts, the taking off of minor works and have passed the Intermediate Examination of the R.I.C.S.

The appointment will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service and the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Form of application may be obtained from Thom. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with a copy of one testimonial and the names of two persons to whom reference may be made, to arrive not later than Monday, 15th May, 1950.

Canvassing, directly or indirectly, will be a disqualification.

E. H. NICHOLS,

The Council House, Derby 4095

THURROCK URBAN DISTRICT COUNCIL. ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE IV).

An Architectural Assistant is required on the staff of the Engineer and Surveyor, Mr. C. S. Hawkes, A.M.I.C.E., M.I.Mun.E., M.R.San.I., at a salary in accordance with Grade IV of the A.P.T. Division of the National Scale of Salaries, i.e., £480 per annum, rising by three increments of £15 to £525 per annum.

General architectural experience is necessary, and candidates must be capable of preparing detailed plans and specifications and supervising housing schemes.

Candidates should have passed some part or parts of the Associate Membership Examination of the Royal Institute of British Architects.

Housing accommodation, if necessary, will be provided for the successful candidate if he lives beyond twenty miles from the Thurrock Urban District.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Applications, endorsed "Architectural Assistant IV," stating age, qualifications and experience, and quoting three references, should reach the undersigned not later than the first post on Tuesday, 2nd May, 1950.

Canvassing will disqualify, and applicants must disclose in writing any relationship to any member or senior officer of the Council.

A. E. POOLE,

Clerk of the Council.

Council Offices, Whitehall Lane, Grays, Essex. 4070

SURREY COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of ASSISTANT QUANTITY SURVEYOR, Grade V, at a commencing salary of £520 per annum, rising by annual increments of £15/20 to a maximum of £570 per annum, plus London allowance of up to £30 per annum, according to age.

Applicants should have passed the Intermediate Examination (Quantities) of the Royal Institution of Chartered Surveyors, and have experience of site measuring, abstracting and Billing on substantial contracts and taking off smaller works.

The appointment will be subject to the provisions of the Local Government Act, 1937, and the successful applicant will be required to pass a medical examination.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 13th May, 1950.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

The Council will be unable to provide any housing accommodation, and the successful applicant will be expected to make his own arrangements in this direction.

DUDLEY AUKLAND,

Clerk of the Council.

County Hall, Kingston-upon-Thames. 4079

DERBYSHIRE COUNTY COUNCIL

COUNTY PLANNING DEPARTMENT

Applications are invited for the following appointments:—

(a) SENIOR PLANNING ASSISTANT (DEVELOPMENT CONTROL) in the Peak Area Planning Office, Bakewell, A.P.T., Grade VI (£595-£660). Applicants should be Associate Members of the Town Planning Institute and/or Associate Members of the Royal Institute of British Architects. Experience in the Planning Department of a Local Authority will be an advantage. A motor car allowance in accordance with the County Council's scale is attached to this post.

(b) DRAUGHTSMAN, in the (1) Headquarters Office, Derby; (2) Area Planning Office at Chesterfield, Misc. Div., Grade I (£315-£360). Applicants should be competent architectural draughtsmen, preferably with experience in the office of a private architect or the Architectural department of a Local Authority.

(c) MODEL MAKER, in the Headquarters Office, A.P.T., Grade IV (£480-£525). Applicants should have a comprehensive experience in the making of architectural and relief models. Additionally, experience in general presentation of plans and drawings would be an advantage.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, the Council's Conditions of Service and medical examination. Applications from registered disabled persons would be considered. The appointments may be filled at a commencing salary within the range of the Grade indicated, according to qualifications and experience.

Canvassing, either directly or indirectly, will be a disqualification, and candidates should state whether they are, to their knowledge, related to any member of the Council or to any senior official.

Applications, stating age, qualifications and experience, accompanied by one recent testimonial, and the names of two persons to whom reference can be made, should reach the undersigned at 8a, Bold Lane, Derby, not later than 13th May, 1950.

MAURICE J. HELLIER,

County Planning Officer.

4091

ANGLESEY COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

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

(a) ONE SENIOR ASSISTANT ARCHITECT, Salary Grade VII, commencing at £535 per annum and rising to £710 per annum. Applicants should be registered Architects and Members of the Royal Institute of British Architects, with considerable experience in the design of Education Buildings, supervision of Technical staff, etc.

(b) ONE ASSISTANT ARCHITECT, Salary Grade V, commencing at £320 per annum and rising to £570 per annum. Preference will be given to Associate Members of the Royal Institute of British Architects, with good general experience in design and construction.

(c) TWO ASSISTANT ARCHITECTS, Salary Grade IV, commencing at £480 per annum and rising to £525 per annum. Applicants should have had good experience in the preparation of working drawings, and preference will be given to applicants who have passed the Intermediate Examination of the Royal Institute of British Architects.

(d) ONE ARCHITECTURAL ASSISTANT, Salary Grade III, commencing at £450 per annum and rising to £495 per annum. Applicants should have had good architectural training and be good draughtsmen.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and will be subject to three months' notice in the case of (a) and one month's notice in the cases of (b), (c) and (d) on either side.

Candidates called for interview will be required to undergo a medical examination by the County Medical Officer.

A lodging allowance of 26s. per week will be paid for a period up to six months to the successful candidates who are married (or, if single, with dependent) and unable to secure housing accommodation in the district, as from the date of their appointment.

Further particulars regarding the appointments may be obtained from N. Sq. Johnson, A.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Llangefni, Anglesey.

Applications, stating age, training, experience, qualifications, names of two referees, and accompanied by a copy of one recent testimonial, are to be sent so as to reach the undersigned not later than Monday, the 22nd May, 1950.

WILLIAM JONES,

Clerk to the County Council.

Shire Hall, Llangefni, Anglesey. 4118

24th April, 1950.

NORTH THAMES GAS BOARD

Applications are invited for the following appointment in the Architects' Section of the Chief Engineer's Department of Westminster: SENIOR ARCHITECTURAL ASSISTANT, minimum starting salary £650 per annum.

Applicants, who must be Registered Architects and should be studying for or have passed the Final Examination of the R.I.B.A., should be capable of preparing working and detailed drawings and specifications, and supervising and controlling the work on contracts. Experience in design and planning of industrial buildings would be an advantage.

The appointment is of a permanent nature, and pension arrangements will be discussed with short list candidates.

Applications, stating age, qualifications and particulars of previous appointments held, must be submitted to the Staff Controller, North Thames Gas Board, 30, Kensington Church Street, London, W.8, quoting reference 9767. 3963

LANCASHIRE COUNTY COUNCIL

COUNTY PLANNING DEPARTMENT

Applications are invited for the following appointments:—

(a) SENIOR ARCHITECTURAL ASSISTANT, in the Estate Development Section at Preston. Salary £585-£760.

A Degree in Architecture or Corporate Membership of the Royal Institute of British Architects is essential. Previous experience in housing and the preparation of comprehensive development schemes would be an advantage.

(b) SENIOR PLANNING ASSISTANTS (Engineering) at Preston, Lancaster, Accrington, Liverpool, Wigan, Bury and Manchester Divisional Offices. Salary £595-£660. Applicants should possess one of the following:—A Degree in Engineering, A.M.I.C.E., A.M.I.Mun.E., and Planning experience would be considered an advantage.

(c) LANDSCAPE ARCHITECT, A.P.T., Grade VII (salary £535-£710).

Candidates for this appointment should possess one or more of the following qualifications: A.R.I.C.S., A.M.T.P.I., A.I.L.A., or should have taken a recognised course in Landscape Design.

(d) PLANNING ASSISTANT, A.P.T., Grade V (salary £520-£570).

Experience of planning Rural Areas would be an advantage.

Candidates should possess one or more of the following: A.M.T.P.I., A.R.I.C.S. (Land Agency Sub-Division), or membership of Land Agency Society.

All appointments are subject to the National Joint Council Scheme of Conditions, the Local Government Superannuation Act, 1937, and to a medical examination.

Applications, giving the names and qualifications of two referees, and indicating for which appointment or appointments application is made, to be forwarded to the County Planning Officer, County Offices, Preston, by 27/5/50. 4117

COUNTY COUNCIL OF THE COUNTY OF LANARK. PROPERTY DEPARTMENT. ARCHITECTURAL ASSISTANTS.

Vacancies exist within the establishment of Architectural Assistants on the staff of the County Architect's Department (Motherwell). Appointments range from a junior to senior capacity, and salary will be in accordance with the F.I.C. Scheme of Salaries and Conditions of Service ranging from General Division to A.P.T., Grade VII. If preferred, appointment could be a temporary one.

While the work of the Department is mainly of an educational character, consisting largely of the design and development of a large schools building programme, an interesting and varied syllabus embraces every branch of architectural development, including Police Housing, but not general housing.

Although the salary grade and scale will be discussed and adjusted at the interview of selected candidates, written applications should indicate a preference compatible with the qualifications of the applicant.

Applications, stating age, particulars of training, experience and qualifications, together with the names and addresses of three referees, should be addressed to the County Architect, Property Department, 34, Albert Street, Motherwell, not later than 20th May, 1950.

The appointments (permanent) will be subject to the provisions of the Local Government Superannuation (Scotland) Act, 1937, and the successful applicants will require to pass a medical examination.

Canvassing, directly or indirectly, will be a disqualification.

WM. C. BROWNIE.

County Clerk.
Lanarkshire House, 191, Ingram Street,
Glasgow, C.I. 4115

COUNTY BOROUGH OF BOURNEMOUTH. APPOINTMENT OF PLANNING ASSISTANTS.

Applications are invited for the following appointments:—

SENIOR PLANNING ASSISTANT. A.P.T., VII (£635-£710).

PLANNING ASSISTANT. A.P.T., V (£520-£575).

TWO PLANNING ASSISTANTS. A.P.T., IV (£480-£525).

PLANNING ASSISTANT. A.P.T., II (£420-£465).

Applicants for Senior Planning Assistant must be an A.M.T.P.I., and should hold a recognized qualification in Architecture, and/or Engineering, and have had considerable experience in planning practice.

Applicants for Planning Assistant, A.P.T., V, should be suitably qualified and be eligible for Associate Membership of the T.P.I. or other professional body, and have experience in the preparation of Development Plans.

Applicants for Two Planning Assistants, A.P.T., IV, should have passed the Intermediate Examination in Town Planning, Architecture or Engineering, and have experience in Development Plan work or Survey and Research and be good draughtsmen and colourists.

Applicants for Planning Assistant, A.P.T., II, should have had some Town Planning experience, including Survey and Research work, and be good draughtsmen and colourists.

All appointments will be terminable by one month's notice in writing on either side, and subject to the conditions of the National Scheme of Conditions of Service, the provisions of the Council in force from time to time, and the Local Government Superannuation Act, 1937. The successful candidates must pass a medical examination. Canvassing will disqualify.

Applications, appropriately endorsed, and stating in the following order:—Name, address, age, qualifications, present and past appointments, with dates and full details of experience, together with copies of two recent testimonials, should reach me not later than Monday, the 15th May, 1950.

A. LINDSAY CLEGG.

Town Clerk.
Bournemouth. 4112

LUNESDALE RURAL DISTRICT COUNCIL.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT in the Council's Architect's Department, at a salary in accordance with Grade IV of the National Joint Council Scale, viz., £480 × £15-£525.

The successful applicant will be required to work under the supervision of the Architect, primarily in connection with the preparation of Bills of Quantities, the Measurement of Executed Works, and the settlement of Contractors' accounts. He will also be required to render such other assistance in the general work of the department as may reasonably be required of him.

The appointment is definitely for the purpose of the Housing Capital Constructional Works and necessarily of a temporary nature.

The appointment will be subject to the Local Government Superannuation Acts, 1937 and 1939, and to the National Joint Councils Scheme of Service Conditions, and will be determinable upon one month's notice on either side.

Applications, giving particulars of age, experience and qualifications, accompanied by three recent testimonials, should be forwarded to the undersigned, to be received not later than 10 a.m. on the 18th May, 1950.

J. M. ARROWSMITH.

Clerk to the Council.
Council Offices, Hornby, near Lancaster.
24th April, 1950. 4141

FLINTSHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments in the County Planning Department:—

(a) SENIOR PLANNING ASSISTANT. Salary in accordance with Grade A.P.T., VI (£595 per annum, rising to £660 per annum).

(b) PLANNING ASSISTANT. Salary in accordance with Grade A.P.T., IV (£480 per annum, rising to £525 per annum).

(c) PLANNING ASSISTANT / DRAUGHTSMAN. Salary in accordance with Grade A.P.T., I (£390 per annum, rising to £435 per annum).

Applicants for (a) must be Corporate Members of the T.P.I., and/or R.I.B.A., and should have had considerable experience in the work of a planning office, particularly on the architectural side and the control of development.

Applicants for (b) must have had good experience in Town and Country Planning, and should have passed at least the Intermediate Examination of the Town Planning Institute.

Applicants for (c) should be expert draughtsmen and colourists experienced in perspective work.

A motor car is essential in connection with appointment (a), and the possession of a motor car would be an advantage in connection with appointment (b). Appropriate mileage allowances will be paid in accordance with the National Joint Council's Scales.

The appointments will be subject to (a) the National Scheme of Conditions of Service, as modified by the County Council, (b) the provisions of the Local Government Superannuation Act, 1937, and (c) a satisfactory medical examination.

Applications will be considered from registered disabled persons.

Applications, on a form to be obtained from the undersigned, accompanied by copy of one recent testimonial and the names and addresses of two other persons to whom direct reference can be made, are to be submitted to me not later than 15th May, 1950.

W. HUGH JONES.

Clerk of the County Council.
County Buildings, Mold. 4135

April, 1950.

NATIONAL COAL BOARD—EAST MIDLANDS DIVISION.

ARCHITECTURAL STAFF.

Applications are invited for the following permanent and supernumerary appointments:—

(a) ARCHITECTS, Grade II. Salary £450 × £25 to £700 per annum.

(b) ARCHITECTURAL ASSISTANTS, Grade I. Salary £410 × £20 to £550 per annum.

(c) ARCHITECTURAL ASSISTANTS, Grade II. Salary £300 × £20 to £400 per annum.

The Architectural work of the Department covers all new projects in the Division which embraces five counties. The work is of great variety and interest, and includes the design of industrial buildings of all types concerned in the planning of collieries, such as workshops, power plants, offices, stores, pithead baths, canteens, medical centres, institutes, recreation buildings, domestic work, convalescent homes and rehabilitation centres.

Part-time studying facilities are given to assistants in the Department to avail themselves of the advantages of the Nottingham School of Architecture.

The point of entry into the relevant salary scales will depend on the qualifications and experience of the successful applicants and, subject to satisfactory service, opportunities will be available for promotion to higher grades.

Applications, stating age, education, qualifications, experience, present appointment and salary, should be submitted within 14 days of publication of this notice to the Secretary, National Coal Board, East Midlands Division, Sherwood Lodge, Arnold, near Nottingham. Original testimonials should not be sent. Envelopes to be marked "Architectural Staff." 4133

THURROCK URBAN DISTRICT COUNCIL. ENGINEER & SURVEYOR'S DEPARTMENT.

ARCHITECTURAL ASSISTANT, GRADE VI.

An Architectural Assistant is required on the staff of the Engineer and Surveyor, Mr. C. H. Hawkes, A.M.I.C.E., M.I.Mun.E., M.R.San.I., at a salary in accordance with Grade VI of the A.P.T. Division of the National Scale of Salaries, i.e., £595 per annum, rising by three increments to £660 per annum.

Candidates should be Associates of the Royal Institute of British Architects, and should be experienced in the preparation of drawings, specifications and estimates for building and architectural work usually undertaken by a Local Authority, particularly in connection with housing schemes on a large scale.

Housing accommodation, if necessary, will be provided for the successful candidate if he lives more than 20 miles from the district.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination. Applications, endorsed "Architectural Assistant, Grade VI," stating age, qualifications and experience, and quoting three references, should reach the undersigned not later than the first post on Tuesday, the 16th May, 1950.

Canvassing will disqualify and applicants must disclose in writing any relationship to any member or senior officer of the Council.

A. E. POOLE.

Clerk of the Council.
Council Offices, Whitehall Lane, Grays, Essex.
25th April, 1950. 4157

LONDON COUNTY COUNCIL. ARCHITECT'S DEPARTMENT.

Applications are invited for positions of ARCHITECT, Grade III (£550-£700) and TECHNICAL ASSISTANT (up to £580), for work on new schools and other public buildings. The positions are supernumerary. Candidates for Grade III positions should possess professional qualifications. Application forms from the

Applications are invited for positions of minister Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. 3914

LONDON COUNTY COUNCIL. ARCHITECT'S DEPARTMENT.

PLANNING STAFF.

Applications are invited for positions of PLANNING OFFICER, Grade I (£840-£960), Grade II (£700-£840), Grade III (£550-£700), and TECHNICAL ASSISTANT (up to £580). The positions are supernumerary. Candidates for Grade I positions should have architectural and town planning qualifications, and will be engaged on Reconstruction Areas and Detailed Planning.

Candidates for Grade II and III positions should have architectural or surveying qualifications with town planning qualifications in addition, and will be engaged on Development Plan, Development Applications and Detailed Planning.

Particulars and application forms from the Architect (AR/P/P), The County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (385) 3915

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

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the following permanent appointments at salaries in accordance with the under-mentioned Grades of the A.P.T. Division of the National Scheme of Conditions of Service:—

(a) CHIEF ARCHITECTURAL ASSISTANT, Grade VIII, at the maximum, viz., £760 per annum, plus £30 London weighting.

(b) TWO ARCHITECTURAL ASSISTANTS, Grade VI, commencing at £595 per annum and rising by annual increments to £660 per annum, plus £30 London weighting.

Applicants must be Corporate Members of the Royal Institute of British Architects or possess a recognized equivalent qualification. Preference will be given to candidates with Municipal experience.

The Council are unable to provide housing accommodation for the successful candidate.

Forms of application, together with conditions of appointment, may be obtained from the Borough Engineer and Surveyor, Town Hall, Ealing, W.5, and must be returned to me not later than the 15th May, 1950.

E. J. COPE BROWN.

Town Clerk. 4126

Town Hall, Ealing, W.5.

20th April, 1950.

BOROUGH OF BRENTFORD AND CHISWICK. APPOINTMENT OF TEMPORARY ARCHITECTURAL ASSISTANT.

BOROUGH SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of a Temporary Architectural Assistant, at a consolidated salary according to A.P.T. Division, Grade V, of the National Scheme (£530 to £570 p.a., plus appropriate London weighting, commencing 1st year), the appointment to be determinable by one month's notice on either side.

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects (or hold a similar qualification), but consideration will also be given to applicants intending shortly to take the Intermediate Examination.

Applicants should have had experience in general architectural work and possess a sound knowledge of design and construction of housing estates, including the preparation of working drawings and specifications. It may be possible to provide housing accommodation for the successful applicant.

Applications for the above-mentioned appointment must be made on the prescribed form (which contains particulars and conditions of appointment), obtainable from the undersigned, to whom applications should be sent not later than the 11th May, 1950.

W. F. J. CHURCH.

Town Clerk. 4078

Town Hall, Chiswick, W.4.

CITY OF BIRMINGHAM EDUCATION COMMITTEE.

APPOINTMENT OF QUANTITY SURVEYOR.

Applications are invited for appointment as QUANTITY SURVEYOR in the Architect's Branch. Salary A.P.T., VII (£635-£725-£710).

Applicants should have had good general experience and will be required to prepare bills of quantities for minor contracts in addition to the checking of accounts and the general supervision of staff dealing with applications for controlled materials.

Application forms, which may be obtained from the undersigned on receipt of a stamped addressed envelope, must be returned not later than three weeks after the appearance of this advertisement.

E. L. RUSSELL.

Chief Education Officer.
Education Office, Margaret Street,
Birmingham, 3. 4151

AUSTRALIA. AUSTRALIA.
ARCHITECTS AND PLANNERS
(PASSAGE PROVIDED).
BRISBANE CITY COUNCIL
(Queensland, Australia).

The Department of Works, Brisbane, invites applications from Architects and Planners in gradings and with salaries shown below:—

ARCHITECT, Grade I. £A623-£A718 per annum.
ARCHITECT, Grade II. £A728-£A773 per annum.
ARCHITECT, Grade III. £A773-£A823 per annum.
ARCHITECT, Grade IV. £A848-£A903 per annum.
DEPUTY CITY PLANNER. £A978-£A1,028 per annum.

PLANNING OFFICER-IN-CHARGE. £A928-£A978 per annum.

PLANNING OFFICER, Grade I. £A573-£A728 per annum.

PLANNING OFFICER, Grade II. £A728-£A773 per annum.

PLANNING OFFICER, Grade III. £A773-£A823 per annum.

PLANNING OFFICER, Grade IV. £A848-£A903 per annum.

Salaries shown include cost-of-living adjustment, at present £A17. Three weeks' leave is granted annually. Retiring age is 65. Superannuation will be available. First-class steamer and train passage will be provided free for appointees, and wives and children up to 18 years conditional upon appointees undertaking to remain in the Council's service for five years from date of embarkation. The Council will pay reasonable cost of transportation of personal effects, excluding furniture and household goods. Salary will be paid from date of sailing. Flat accommodation (mostly with ample gardens and grounds) will be available on a rental basis.

The Department of Works is responsible for all Municipal architectural and building activities and planning in all its aspects in city area of 375 square miles.

ARCHITECTS must have full qualifications to the standard of Associateship of the R.I.B.A. Membership will be considered an advantage. Applicants should be experienced in design and/or supervision of varied aspects of building work.

DEPUTY CITY PLANNER: Applicants must be qualified Architects, Engineers or Surveyors having in addition Diploma in Town Planning of the R.I.B.A. or equivalent. At least ten years' experience in Town Planning subsequent to qualification is desirable, with a thorough knowledge of all aspects of this work.

PLANNING OFFICERS must be qualified Architects or Town Planners, preferably with Town Planning Diploma of the R.I.B.A. or equivalent, with sound experience of Town Planning subsequent to qualification.

Classifications and commencing salaries will be dependent upon qualifications and experience. Applicants should not be over 50 years old.

Further information and application forms may be obtained from the Agent-General for Queensland, 409-410, Strand, London, W.C.2, with whom applications should be lodged before or on 12th June, 1950.

J. C. SLAUGHTER,
Town Clerk. 4103

CITY OF SALFORD.

The Council invites applications for the following appointments on the Permanent Staff of the City Engineer and Surveyor's Department:—

(a) ONE ENGINEERING ASSISTANT. Grade A.P.T. V (£520-£570).

(b) ONE TOWN PLANNING ASSISTANT. Grade A.P.T. V (£520-£570).

(c) TWO BUILDING INSPECTORS' ASSISTANTS. Miscellaneous, Grade I (£315-£360), or Grade II (£375-£420), according to qualifications and experience.

Candidates for appointment (a) should be Associate Members of the Institution of Civil Engineers and/or possess the Testamur of the Institution of Municipal Engineers and, in addition, have good training and adequate experience in the design and construction of Civil Engineering works.

Candidates for appointment (b) should hold a recognised qualification in Architecture, Engineering and/or Town Planning, and have had previous experience in Town Planning.

Candidates for appointment (c) should have had good general experience in the Building Trade—including the testing of drains—and the possession of an appropriate qualification will be an added advantage.

The appointments will be subject to:—

(a) The provisions of the Local Government Superannuation Act, 1937;

(b) The passing of a medical examination.

(c) The Standing Orders of the Council.

(d) The Conditions of Service of the National Joint Council.

Applications, stating age, qualifications and experience, together with particulars of past and present employment—accompanied by copies of two recent testimonials—should be forwarded in envelopes endorsed clearly as to the appointment for which application is submitted, addressed to the City Engineer, Town Hall, Salford, 3, Lancs., so as to be received not later than Friday, 26th May, 1950.

Applicants must disclose, in writing, whether or not they are related to any member of the Council or an officer of the Authority.

H. H. TOMSON, Town Clerk. 4149

BRACKNELL DEVELOPMENT CORPORATION (Bracknell, Berks) invites applications from suitably qualified persons for the following appointments:—

1. (a) SENIOR PLANNER.

(b) SENIOR ARCHITECT (Housing).

(c) SENIOR ARCHITECT (Other Buildings). Salary £900 × £50-£1,000.

2. (a) PLANNER.

(b) ARCHITECT (Housing).

(c) ARCHITECT (Other Buildings). Salary £750 × £50-£900.

3. (a) PLANNER.

(b) ARCHITECT (Housing).

(c) ARCHITECT (Other Buildings). Salary £550 × £40-£750.

4. FIVE JUNIOR ASSISTANTS.

Salary £420 × £20-£520.

Applicants for 1(a), 2(a) and 3(a) should be Corporate Members of the T.P.I., and also have an appropriate Architectural qualification. They should have a sound knowledge of town planning, with particular reference to the problems of New Town development.

Applicants for 1(b), 1(c) 2(b), 2(c), 3(b), 3(c) should be Corporate Members of the R.I.B.A. and an additional town planning qualification will be an advantage. Architects (Housing) should have had experience of the design and construction of large housing layouts, and Architects (Other Buildings) of all types of industrial and public buildings appropriate to New Town development.

Applicants for (4) should have passed at least the examination of the appropriate professional body. Successful applicants will work under the direction of E. A. Ferby, B.Arch., A.R.I.B.A., A.M.T.P.I., Chief Architect to the Corporation. The posts will be superannuable under the Local Government Superannuation Act, 1937, and successful candidates will be required to pass a medical examination.

Applications, giving full particulars of the candidate's age, qualifications and experience, together with the names of two persons to whom reference can be made, must reach the General Manager, Bracknell Development Corporation, 11, Grosvenor Square, London, W.1, on or before 31st June, 1950.

HARLOW DEVELOPMENT CORPORATION.

Applications are invited for the under-mentioned post in the Department of the Architect/Planner (Frederick Gibberd, F.R.I.B.A., M.T.P.I.):—

ONE JUNIOR ASSISTANT ARCHITECT. Salary £400 × £25 to £450 per annum.

Candidates should have received appropriate training and have experience in the preparation of working drawings and details for large scale building projects.

The appointment will be subject to the Corporation's Staff Rules and Conditions of Service (which are similar to the National Joint Council's Conditions of Service for Local Authorities' Administrative, etc., Staffs), and will in particular involve a contribution to a Superannuation Fund either in accordance with the Local Government Superannuation Act, 1937, or an Assurance Scheme.

Applications, giving full details and names of two referees, should be addressed to the under-mentioned, to reach him within seven days of the publication of this advertisement.

W. ERIC ADAMS,
General Manager. 4138

Terlings, Gilston, Harlow, Essex.

METROPOLITAN BOROUGH OF PADDINGTON.

HOUSING DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECT (ONE).

Applications are invited for the above-mentioned appointment on the permanent establishment of the Housing Department, Architectural Section (which also deals with all Council's building work). Particular stress is laid on the desirability of candidates having been engaged on and having an interest in the best contemporary Architecture.

Salary A.P.T., VI/VII (£595-£710 per annum), plus London weighting, according to age.

Applicants must be Registered Architects, preferably Associates of the Royal Institute of British Architects, and have had experience in Architectural design and construction of general Municipal work, including multi-storey flats, or similar experience with private firms of Architects.

The appointment will be subject to one month's notice on either side, to the provisions of the Council's Superannuation Acts and Standing Orders, and to the National Joint Council's Scheme of Conditions of Service.

The commencing salary will be at an appropriate point within the grades, dependent upon the qualifications and experience of the successful candidate.

Forms of application and conditions of appointment can be obtained from me on receipt of a stamped, addressed, foolscap envelope. Applications should be delivered to me, in an envelope endorsed "Assistant Architect," not later than noon on Tuesday, 30th May, 1950.

Candidates must state, in writing, whether, to their knowledge, they are related to any member or senior officer of the Council.

Canvassing, directly or indirectly, will disqualify.

W. H. BENTLEY,
Town Clerk. 4159

Town Hall, Paddington, W.2.

4th May, 1950.

NORTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.

ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts:—

(i) ASSISTANT ARCHITECTS. A.P.T., VI (£595-£660 p.a., plus London weighting). Applicants should be Members of the R.I.B.A. or about to take Final Examination; good general experience in design and construction essential.

(ii) JUNIOR ARCHITECTURAL ASSISTANTS. A.P.T., V (£520-£570 p.a., plus London weighting). Applicants should have passed Intermediate Examination of the R.I.B.A., and have good general experience in design and construction.

The appointments will be subject to the National Health Service (Superannuation) Regulations, 1947-49, and conditions prescribed by Ministry of Health, and will be terminable by one month's notice.

The Architect's Department is responsible for the actual preparations and supervision of schemes for building hospitals for acute sick, mental, mentally defective and tuberculous patients, including staff housing schemes, and for extensions and adaptations to existing hospitals and other premises in the Region which covers the whole of Bedfordshire and large areas of Hertfordshire, Middlesex, London, Berkshire and Buckinghamshire.

Applications, giving details of age, qualifications and experience, together with names and addresses of two referees, should be addressed to the Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, not later than 15th May, 1950.

4168

COUNTY BOROUGH OF MIDDLESBROUGH.

EDUCATION COMMITTEE.

ARCHITECTURAL STAFF.

Applications are invited for posts of ASSISTANT ARCHITECTS and ARCHITECTURAL ASSISTANTS, in the Education Architect's Sub-Department of the Education Offices, offering excellent opportunities in the design and construction of modern school buildings, in addition there is a vacancy for a JUNIOR DRAUGHTSMAN on the General Division Scale of Salaries.

The former posts are at grades of salary within the range A.P.T., IV, to A.P.T., VI, and in the case of a senior appointment housing accommodation can, if necessary, be provided by the Authority.

Forms of Application and Conditions of Service may be obtained from the Director of Education, Education Offices, Woodlands Road, Middlesbrough.

E. C. PARR,
Town Clerk. 4140

CROWN AGENTS FOR THE COLONIES.

ARCHITECTURAL DRAUGHTSMAN (Male or Female) required by the Government of Tanganyika for the Public Works Department for one tour of two to three years in the first instance. The appointment will be on probation for permanent and pensionable employment.

Commencing salary according to age and experience in scale (male) £670 a year, rising to £940 a year; (female) £536 a year, rising to £672 a year. Outfit allowance up to £45. Free passages and liberal leave on full salary. Candidates, not over 40, must be expert draughtsmen, with considerable experience in a large drawing office, preferably architectural, and must be able to prepare finished architectural plans, working drawings and tracings from original designs. They should be fully conversant with normal building and Architectural details, and have a knowledge of plan, registration and print manufacture.

Female candidates must be single. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/25364/3A on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications, and will communicate only with applicants selected for further consideration.

4165

DURHAM COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of Architectural Assistants in the following grades, in accordance with the National Joint Council for Local Authorities, Administrative, Professional, Technical and Clerical Services scales and conditions:—

Grade A.P.T., VII, £635-£710.

Grade A.P.T., VI, £595-£660.

Grade A.P.T., V, £520-£570.

The persons appointed will be required to pass a medical examination, and the appointments are subject to the Local Government Superannuation Act, 1937.

Canvassing will disqualify, and a candidate who is related to a member or a senior officer of the Council must disclose this fact in his application.

Applications, giving particulars of age, experience and qualifications, previous and present appointments, etc., and giving the names of three persons to whom reference can be made, should be forwarded at once to Mr. G. R. Clayton, F.R.I.B.A., County Architect, Court Lane, Durham, and in any case not later than Friday, 12th May, 1950.

J. K. HOPE,
Clerk of the County Council. 4158

Shire Hall, Durham.

25th April, 1950.

DEVON COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the under-mentioned appointments on the permanent staff. Conditions of service and salaries are in accordance with the National Joint Council Scheme for Local Authorities:

ONE ASSISTANT ARCHITECT. Grade A.P.T., IX (£750-£900 per annum).

TWO ASSISTANT ARCHITECTS. Grade A.P.T., VIII (£685-£760 per annum).

ONE ASSISTANT ARCHITECT. Grade A.P.T., VII (£635-£710 per annum).

TWO ASSISTANT ARCHITECTS. Grade A.P.T., VI (£595-£660 per annum).

Application forms, with full particulars of qualifications and experience required for the various posts, are obtainable from the County Architect, 97, Heavitree Road, Exeter, and must be returned to him by Wednesday, the 24th May, 1950.

Canvassing, directly or indirectly, will disqualify.

H. A. DAVIS, Clerk of the County Council.

The Castle, Exeter. 4154
26th April, 1950.

BURGH OF KILMARNOCK.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the appointment of Clerk of Works in the Burgh Architect's Department, at a salary of £400 per annum.

The appointment is on the temporary staff, but the successful candidate may be considered for placing on the permanent staff at a later date. One month's notice on either side will terminate the appointment.

Applicants should have an extensive practical experience in the building trade and experience in the supervision of large Housing contracts.

Applications, stating age, qualifications, experience, and particulars of past and present employment, and accompanied by copies of recent testimonials, should be submitted to N. S. Sutherland, Esq., Burgh Architect, 64a, Bank Street, Kilmarnock, not later than 16th May, 1950.

W. L. WALKER, Town Clerk.
Council Chambers, Kilmarnock. 4153
24th April, 1950.

BUCKS COUNTY COUNCIL.

The County Architect invites applications from qualified ASSISTANT ARCHITECTS who possess a keen and energetic enthusiasm for their profession. Candidates should preferably have been trained at a recognised School of Architecture.

Salary Grade VIII, £685-£760 p.a.

Further particulars and form of application may be obtained from the County Architect, County Offices, Aylesbury, to whom they must be delivered by 22nd May, 1950.

4156

HEREFORDSHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments on the Established Staff:—

(a) ASSISTANT COUNTY PLANNING OFFICER. Grade VIII (£685-£760).

Candidates for this appointment should be fully qualified. Experience in the development of rural areas will be an advantage.

(b) DRAUGHTSMAN. Grade I (£390-£435).

Preference will be given to candidates who are Students of the Town Planning Institute.

Appointments are subject to the Superannuation Act, 1937, and in the case of appointment (a), scale allowance for the use of a motor car is payable.

Applications, stating age, qualifications, experience, present salary, and giving the names and addresses of two referees, to be delivered to me not later than 13th May, 1950.

Canvassing will disqualify.

A. R. DUNCAN, County Planning Officer.
Chandos House, St. Owen Street, Hereford. 4136

CANTERBURY EDUCATION COMMITTEE.

SCHOOL OF ARCHITECTURE.

Required as soon as possible a full-time STUDIO MASTER for work in connection with the Final Course. The College is approved by the R.I.B.A. as a Listed School. Candidates must be Associates or Fellows of the R.I.B.A., preferably school trained and with some professional experience in Architecture. Previous teaching experience is desirable but not essential. Salary in accordance with Burnham Scale. Up to ten increments may be allowed for suitable professional experience.

Applications, giving full particulars of training, qualifications and experience, should be sent to the Principal as soon as possible.

N. POLMEAR, Chief Education Officer.
73, London Road, Canterbury. 4145

BOROUGH OF GRAVESEND.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECT, GRADE IV.

Applications are invited for the above appointment, at a salary in accordance with Grade IV of the National Scales (£480×£15-£525 per annum).

Conditions of appointment and form of application may be obtained from the undersigned, to whom completed forms should be returned not later than Monday, the 22nd May, 1950.

GEORGE E. HILL, B.A., A.M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor.
Municipal Offices, Woodville Terrace, Gravesend. 4121
April, 1950.

IMPERIAL WAR GRAVES COMMISSION.

Applications are invited from suitably qualified candidates for the post of ASSISTANT DIRECTOR OF WORKS in the French District.

Candidates should be Associate Members of the Institution of Civil Engineers or the Royal Institute of British Architects, under 50 years of age, and preferably have had experience in carrying out constructional work abroad.

Considerable Administrative experience and a good knowledge of French necessary. Preference will be given to ex-Service men.

Salary £750×£25-£875 per annum, plus variable temporary local allowance, at present at the rate of £185 per annum for a single man or £280 per annum for a married man.

Applications to be addressed to Appointments Officer, Wooburn House, Wooburn Green, High Wycombe, Bucks. 4140

BOROUGH OF WEDNESBURY.

ASSISTANT ARCHITECT.

Applications are invited for the appointment in the Borough Architect/Engineer's Department of an ASSISTANT ARCHITECT, at a salary of £520-£570, in accordance with A.P.T., Grade V, of the National Scales.

The successful candidate will be required to pass a medical examination for the purpose of the Local Government Superannuation Act, 1937.

Applications, stating age, qualifications, experience, and present position, accompanied by two recent testimonials or references, are to be received not later than 20th May, 1950.

ARTHUR BOOTH, F.R.I.B.A., Borough Architect/Engineer.
Town Hall, Wednesbury. 4139
3rd May, 1950.

BURGH OF MUSSELBURGH.

ARCHITECTURAL ASSISTANT (JUNIOR) required for Architectural Department of Burgh Surveyor's Office, Musselburgh. Salary scale £195 per annum, rising to £370 per annum.

Applications, stating age and experience, to be lodged with the Town Clerk of Musselburgh not later than 19th May.

4161

GOVERNMENT OF NORTHERN IRELAND.

MINISTRY OF FINANCE.

CHIEF ARCHITECT'S BRANCH.

ARCHITECTURAL ASSISTANTS.

Applications are invited for posts of ARCHITECTURAL ASSISTANT in the Ministry of Finance. Appointments will be non-pensionable, but successful candidates will be eligible for consideration for appointment to pensionable posts as vacancies arise. Rates of pay will be fixed in accordance with the experience and qualification of the successful candidates, and will be within the range £400-£540.

Qualifications: Candidates must have passed the Intermediate Examination of the Royal Institute of British Architects and have had at least two years' experience in an Architect's Drawing Office.

Preference will be given to candidates who have served with H.M. Forces in wartime, provided the Ministry is satisfied that such candidates can, or within a reasonable time will be able to, discharge the duties efficiently.

Applications, giving full details of training and qualification, should be sent immediately to the Director of Establishments, Ministry of Finance, Stormont. 4129

SALOP COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments to established posts in the Department:—

(1) SENIOR ASSISTANT ARCHITECT. A.P.T., Grades V-Va. Salary £520 to £610 per annum.

(2) ASSISTANT ARCHITECT. A.P.T., Grades II-III. Salary £420 to £495 per annum.

The appointments will be subject to one month's notice in writing on either side, to the terms of the National Joint Council's Scheme of Conditions of Service, and to the provisions of the Local Government Superannuation Act, 1937.

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

Application forms may be obtained from the County Architect, A. G. Chant, F.R.I.B.A., Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Tuesday, 23rd May, 1950.

G. C. GODBER, Clerk of the Council.
Shrewsbury. 4127
April, 1950.

CO-OPERATIVE WHOLESALE SOCIETY, LTD.

ARCHITECT'S DEPARTMENT, LONDON.

Applications are invited for the following:—

FOUR ASSISTANT ARCHITECTS. Salary £490-£555 per annum. Applicants should have a sound knowledge of building construction and Architectural design, capable of preparing working drawings and details under supervision.

SURVEYOR'S ASSISTANT. Experienced, taker-off, with sound knowledge of present day prices.

TAKER-OFF. Experienced in all branches of building work, with sound knowledge of present day prices, and preferably Member of the R.I.C.S. (Quantities Section). Salary £600-£750.

The appointments are permanent and offer prospects of up-grading.

Successful candidates will be required to undergo medical examination for a compulsory Superannuation Scheme.

Applications, stating age, experience, qualifications and salary expected, to the Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1. 4119

COUNTY OF ESSEX.

ILFORD COMMITTEE FOR EDUCATION.

The Essex County Council invite applications for the following posts in the Office of the Borough Engineer of Ilford:—

(a) SECTIONAL ASSISTANT ARCHITECT. A.P.T.D., Grade VII.

Salary scale £635×£25 to £710 per annum.

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.

(b) ARCHITECTURAL ASSISTANT. A.P.T.D. Grade II.

Salary scale £420×£15 to £465 per annum.

Applicants should have had good general training and experience.

The appropriate London area allowance is payable in each case. There will also be paid such travelling and subsistence allowances as may from time to time be determined by the Council.

Application should be made on a form to be obtained from, and returned to, the Borough Education Officer, Town Hall, Ilford, together with copies of three recent testimonials, within 14 days of the appearance of this advertisement.

4164

OXFORDSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) ONE ASSISTANT ARCHITECT. A.P.T., Grade V, £520-£570.

(b) ONE ASSISTANT BUILDING SURVEYOR. A.P.T. Grade III, £450-£495.

(c) ONE ASSISTANT QUANTITY SURVEYOR. A.P.T. Grade II, £420-£465.

Candidates for (a) must be Associates of the R.I.B.A., with sound knowledge of design and construction, preferably in connection with schools; for (b) should have experience in surveying and maintenance work, and have passed the Intermediate Examination of the R.I.C.S. (Building Surveying); and for (c) should be able to abstract and bill and have some knowledge of taking off, and preference will be given to candidates who have passed or are at the standard of the Intermediate Examination of the R.I.C.S. (Quantities Sub-Division).

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination to the satisfaction of the Council.

The Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, as from time to time amended, and as adopted by the Council, is at present applicable to persons appointed on the established staff.

Applications, stating age, qualifications and experience, accompanied by copies of three recent testimonials, are to be sent to the County Architect, 3, Becket Street, Oxford, not later than the 27th May, 1950.

F. G. SCOTT, Clerk of the Council. 4163
County Hall, Oxford.

COUNTY BOROUGH OF BLACKPOOL.

Applications are invited for the appointment of a SENIOR ARCHITECTURAL ASSISTANT, A.P.T. Division, Grade VI, £595-£660 p.a., in the Department of the Borough Surveyor.

Applicants must be Registered Architects and Associates of the Royal Institute of British Architects. They should have worked in an Architectural office for a period of at least five years, and experience in housing and school building work would be an advantage.

Applications, stating in the following order—present position and salary, previous appointments, qualifications and full details of experience—accompanied by copies of not more than three recent testimonials, should be forwarded to Arthur Hamilton, B.Sc., A.R.I.B.A., Borough Surveyor, Municipal Buildings, Blackpool, not later than 12 noon on Friday, 12th May, 1950.

The Council do not assist in providing housing accommodation.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Canvassing of the Council will be a disqualification.

TREVOR T. JONES, Town Clerk. 4162

CITY OF NOTTINGHAM.

HOUSING ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT. The salary offered will depend on experience and ability, but will not exceed A.P.T., Grade IV.

The appointment will be subject to the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937.

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

Applications, giving full details of age, training, qualifications, experience, present appointment and salary, together with the names and addresses of two persons to whom reference may be made, should be forwarded to C. A. Pilkington, L.R.I.B.A., Housing Architect, The Guildhall, Nottingham, not later than Wednesday, the 17th May, 1950.

J. E. RICHARDS, Town Clerk. 4134
The Guildhall, Nottingham.

**SPALDING RURAL DISTRICT COUNCIL.
ARCHITECT'S DEPARTMENT.**

Applications are invited for the full-time appointment of **TECHNICAL ASSISTANT** in A.P.T. Division, Grade V, of the National Scale (commencing at £550 and rising to £570 per annum). The successful applicant will work under the direction of the Council's Architect, and his main duties will be to prepare Bills of Quantities, Estimates, Valuations and settlement of accounts in connection with the Council's housing schemes. Applicants should have a sound and practical knowledge of architectural and quantity surveying work.

The appointment will be subject to the Local Government Superannuation Act, 1937, and to a satisfactory medical examination.

Applications, stating age, qualifications and experience, together with the names and addresses of three persons to whom reference may be made, to be sent at the earliest possible date to the Clerk to the Council, Rural Council Offices, 10, The Crescent, Spalding, Lincs.

A candidate who is related to a member or official of the Council must disclose the fact in his application. Canvassing will disqualify.

The Council are prepared to let a house in the Rural District to the successful applicant. 4125

**CITY OF WAKEFIELD.
CITY ENGINEER'S DEPARTMENT.
APPOINTMENT OF PRINCIPAL ARCHITECTURAL ASSISTANT, GRADE VII.**

Applications are invited for the following appointment of **PRINCIPAL ARCHITECTURAL ASSISTANT** (Housing and General), at a salary on Grade VII (£635-£710).

The appointment will be subject to the Local Government Superannuation Act and to the passing of a medical examination.

Candidates should state in writing whether to their knowledge they are related to any member or senior official of the Corporation. Canvassing will be a disqualification.

Applications, endorsed "Principal Architectural Assistant," stating age, qualifications, present and previous appointments, and details of experience, together with copies of two testimonials or name of two referees, should be sent to me not later than Tuesday, the 16th May, 1950.

The Council will give consideration to the provision of a house for the successful candidate if required.

W. S. DES FORGES,
Town Clerk.

Town Hall, Wakefield.
21st April, 1950. 4120

COUNTY COUNCIL OF THE COUNTY OF STIRLING.

COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the posts of **QUANTITY SURVEYORS** in the County Architect's Department, on the following scales of salaries:—

A.P.T., Grade VIII.
A.P.T., Grade VI.
A.P.T., Grade Va.

Applicants for the post on Grade VIII must be Members of the Royal Institute of Chartered Surveyors, and applicants for the post on Grade VI should preferably be Members of the Royal Institute of Chartered Surveyors.

All applicants should have had wide experience in the preparation of estimates, specifications and schedules of quantities, measuring up and the adjustments of final accounts.

The appointments will be subject to the J.I.C. Scheme of Salaries and Conditions of Service, and the successful applicants will require to undergo a medical examination for admission to the Superannuation Scheme.

Applications, with copies of not more than three recent testimonials, should be sent to the County Clerk at the undernoted address within 14 days from the date of this advertisement.

(Sgd.) JAMES D. KENNEDY,
County Clerk.

County Offices, Viewforth, Stirling. 4152

SCOTTISH SPECIAL HOUSING ASSOCIATION, LTD., invite applications for the following Superannuable appointments:—

(a) **ESTIMATOR.** £700 × £25-£900.
(b) **QUANTITY SURVEYOR.** Grade II. £450 × £25-£675.

No bonus is payable in addition to the salary stated. Forms of application with full particulars can be obtained from the Secretary, 15/21, Palmerston Place, Edinburgh, 12. 4132

CITY OF STOKE-ON-TRENT.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited from suitably qualified persons for the following appointments to the permanent staff:—

(a) **SENIOR ASSISTANT ARCHITECTS.** Salary A.P.T. Division, Grade VII, £635-£710.
(b) **ASSISTANT ARCHITECTS.** Salary A.P.T. Division, Grade V, £520-£570.

The selected applicants will be required to pass a medical examination, and the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.

Previous experience of Local Government work is not essential.

Suitable housing accommodation can be made available to the successful candidates for appointment (a).

Applications, giving date of birth, particulars of training, experience, etc., with copies of two recent testimonials, should be received by J. R. Piggott, F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, endorsed with the title of the appointment applied for, not later than Tuesday, 23rd May, 1950.

HARRY TAYLOR, Town Clerk.
Town Hall, Stoke-on-Trent. 4106

SCOTTISH SPECIAL HOUSING ASSOCIATION, which is a non-profit making Co., Ltd., by guarantee, and financed by H.M. Treasury, invite applications for the appointment of **ARCHITECT**, Grade II, £450 × £25-£675, with placing for age and experience. The post is superannuable under the Local Government Superannuation (Scotland) Act, 1937. Forms of application with full particulars can be obtained from the Secretary, 15/21, Palmerston Place, Edinburgh, 12. 4131

FROME RURAL DISTRICT COUNCIL.

Applications are invited for the appointment of an **ARCHITECT** in the part-time service of the above Council to carry out their Housing Programme.

The fees payable will be those as laid down by the Royal Institute of British Architects (Scale of Architects' Fees for State-Aided Housing Schemes).

Candidates must be Registered Architects and Fellows or Associates of the Royal Institute of British Architects.

Applications, stating age, qualifications, and full details of experience, and accompanied by copies of two testimonials, should be addressed to the undersigned, and the envelope endorsed "Architect," so as to reach him not later than the 13th May, 1950. Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

A. E. NEWMAN,
Clerk of the Council.
Public Offices, Frome, Somerset. 4142

BOROUGH OF BEXLEY.

APPOINTMENT OF ASSISTANT ARCHITECT.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following post:—

ASSISTANT ARCHITECT (EDUCATION).

Salary within Grade A.P.T., VI, plus London "weighting" allowance.

Form of Application with Conditions of Appointment may be obtained from the Borough Engineer and Surveyor, Council Offices, Bexleyheath, to whom completed applications must be returned by noon, Saturday, 20th May, 1950.

Canvassing, directly or indirectly, will disqualify.

W. WOODWARD,
Town Clerk. 4144

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

ASSISTANT required in busy Berkshire office, with work in all parts of the country; an opportunity for a man with initiative and drive to show his capabilities; good prospects for a capable man. Apply, with full particulars of experience and salary required, to Box 3342.

ARCHITECTURAL ASSISTANT required in Maidenhead for large Practice of London and Provincial work; applicants must be capable of supervising work and conversant with by-laws. Reply, with particulars of experience and salary required, to Box 3343.

SENIOR ARCHITECTURAL ASSISTANTS required by United Dairies, Limited; applicants to state age and experience in the preparation of surveys, sketch plans and working drawings, and be able to supervise work in progress. Apply in writing, stating qualifications and salary required, to Chief Architect, 31, St. Petersburg Place, London, W.2. 3974

ARCHITECTS' SENIOR ASSISTANT also **JUNIOR**, for urgent industrial and other schemes; very interesting experience. Watson, Johnson & Stokes, Victoria Square, Birmingham, 2. 3624

ASSISTANT to Technical Editor of "The Architects' Journal"; qualifications required: Interested in building construction, R.I.B.A. Inter. standard, or equivalent qualifications; experience in architect's or builder's office an advantage. Replies to Cotterell Butler, 9-13, Queen Anne's Gate, S.W.1. 492

STUDENT or JUNIOR ARCHITECT for editorial work; applicants to have a bias towards building technology and the science of building; salary according to qualifications and experience. Box 493.

ARCHITECTURAL ASSISTANTS required in South Devon offices; must have passed R.I.B.A. Intermediate Examination. Full details of experience and salary required to Box 4058.

ARCHITECT'S ASSISTANT required for general Country practice; must be capable of preparing surveys, specifications, details, etc.; knowledge of housing an advantage. Reply, stating age, training, experience, and salary required, Edwin H. Earp, L.R.I.B.A., Scholars Lane, Stratford-on-Avon. 4004

ARCHITECTS require **SENIOR ASSISTANT** with good office experience; salary £500-£650, according to experience; permanent; excellent prospects. Stephenson & Gillis, 2, Saville Chambers, Newcastle-on-Tyne. 4094

ASSISTANT QUANTITY SURVEYOR required in professional office in South Devon; capable of preparing bills, valuations and dealing with contractors' accounts for housing schemes. State age, experience, and salary required. Box 4104.

SENIOR ASSISTANT required for general practice; able to take charge of small group and fully experienced in professional routine; good office accommodation and working conditions; share of profits; salary £550-£700, according to experience. S. Morisco, A.R.I.B.A., Derwent House, Full Street, Derby. 4111

OPPORTUNITY for young **ARCHITECT** with flair for colour and interior decoration to join Lighting Engineering Department of leading progressive lamp manufacturers. Write Box A.C.905, c/o Central News, Ltd., 17, Moorgate London, E.C.2. 4088

EXPERIENCED SENIOR ARCHITECTURAL ASSISTANT, with practical experience in layout of Brewery and Food Production Plant; sound knowledge of Industrial Building Construction essential and ability to prepare schemes and supervise work. Reply, stating age, qualifications, experience, present and previous appointments and duration, and salary required. The appointment is permanent and pensionable subject to completion of satisfactory probation period. Box 4073.

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ARCHITECT'S ASSISTANT required in well established provincial practice, North of London; permanent post with good prospects. Apply, giving full particulars of qualifications, age, experience, and salary required, to Box 4092.

ARCHITECTURAL ASSISTANTS required immediately; good salary and prospects; 5-day week. Write to Messrs. J. M. Sheppard & Partners, 38, Bedford Place, W.C.1, giving particulars of age, qualifications, experience, and salary required. 4081

SENIOR AND JUNIOR ASSISTANTS required immediately, mainly in connection with School Buildings; salary according to ability and experience. Apply to J. Kennedy Hawkes, A.R.I.B.A., 119, Victoria Street, S.W.1 (Victoria 7462).

ARCHITECTURAL ASSISTANT required by Firm of Private Architects, Bromley, Kent district; qualified man preferred, capable of taking responsibility; salary £500-£600; interesting work and pleasant surroundings; state age, experience, when free. Applications to A.B., 19, Beckenham Grove, Shortlands, Bromley, Kent. 4155

DEPARTMENTAL Store Organisation in Midlands and North-West requires qualified **ARCHITECT**, age between 30 and 40 years, to assist in internal planning and store maintenance; state qualifications; commencing salary £850. Box 4160.

ASSISTANT (Male); send full particulars, experience, salary required, etc.; general practice. P. P. Trepass & Son, 1, Church Street, Warwick. 4171

ARCHITECT in Midlands requires **SENIOR QUALIFIED ASSISTANT**; varied office experience essential. Write Box 4124.

ASSISTANT required immediately by London Architect; good draughtsman, interested in contemporary architecture and structural technique. Apply in writing with full details. Box 4128.

URGENT—ARCHITECTURAL ASSISTANT with experience required to take charge of London office; conversant with specifications, surveys, working drawings, supervision; high salary paid to suitable applicant. Apply Box 4143.

ARCHITECT'S JUNIOR ASSISTANT required; should be up to Intermediate standard; salary according to experience. Apply in writing to Graham Crump, F.R.I.B.A., 9, King's Bench Walk, Temple, E.C.4. 4150

YOUNG ASSISTANT, interested in Ecclesiastical work required in private East Midlands office; student considered. Full particulars to Box 4167.

SENIOR fully qualified **ASSISTANT** required by East Midland office with post-war experience in School or Hospital work; responsible position—familiar with latest constructional methods; in reply please state age, salary and experience; small flat available. Box 4166.

EDITORIAL ASSISTANT required for architectural journal. Applicants should be interested in current building problems, capable of understanding working drawings, and with a good command of English. Box 510.

THE CO-OPERATIVE WHOLESALE SOCIETY, LTD. invite applications for the following appointments on the staff of the Manchester Architect's Department:—

THREE ASSISTANT ARCHITECTS. Salary £510-£625 per annum. Applicants, suitably qualified, are required to have a sound knowledge of construction and architectural design, and be able to produce sketch plans, working drawings and details from rough sketches with the minimum of supervision.

ONE LAND AND BUILDING SURVEYOR. Salary £400-£465 per annum. Applicants should be experienced in surveying sites and buildings, possess a sound knowledge of building construction, and be capable of preparing survey drawings.

The appointments are permanent and offer prospects of up-grading to competent Assistants. Successful candidates will be required to undergo a medical examination for entry into compulsory superannuation scheme.

Applications, stating age, experience and qualifications, to be addressed to:—The Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 4123

Architectural Appointments Wanted

ASSISTANT (30) wishes to graduate from bomb-damage repairs to real architecture; interested in contemporary design; working for Special Final; would be wildly enthusiastic in progressive office. Box 512.

JUNIOR ARCHITECTURAL ASSISTANT requires appointment in Hertfordshire or N.W. London area; experience in detail drawing, surveying. Box 507.

ASSISTANT, of Intermediate standard, 4 years' experience, age 22, requires position in progressive office, preferably in London. Box 506.

A.R.I.B.A. (29), fully experienced general practice, desires congenial employment in position of responsibility on contemporary work, with prospects; N.E. coast area. Box 502.

STUDENT R.I.B.A., 8 years' experience, seeks permanent position of responsibility, preferably within daily access of Bournemouth; own car; now living in Midlands. Box 508.

EXPERIENCED DANISH ARCHITECT seeks a responsible position with first-class English firm; personal interview. Box 509.

ARCHITECT, A.R.I.B.A. (Female) seeks position as **ASSISTANT** in or near London area; previous office experience. Box 511.

Other Appointments Vacant

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

INTELLIGENT and enthusiastic young man, with some knowledge of building construction and materials, wanted for unusually interesting selling job, mainly in London (full-time). Write, with full particulars of age, training, experience, salary required, to Box 366.

ESTIMATORS wanted; used to Brakepress work. Apply personally or by letter to Morris Singer Co., Ferry Lane Works, Forest Road, Walthamstow, E.17. 2143

ARCHITECTURAL Metalworkers require a **DESIGNER-DRAUGHTSMAN** of considerable merit; top salaried position for skilled man. Apply The Morris Singer Company, Hopn House, 61, Peter Street, Westminster, S.W.1. 3564

BETTER-OUT wanted for Architectural Metalwork; good wages and ideal working conditions. Apply: The Morris Singer Co., Ltd., Ferry Lane, Forest Road, Walthamstow, E.17. 3524

TECHNICAL ASSISTANT required by Architectural Publishers; must have first-hand practical knowledge of the building industry; salary according to qualifications and experience. Box 494.

RICHARD COSTAIN, LTD., require **ONE STRUCTURAL STEEL DRAUGHTSMAN** and **ONE RE-INFORCED CONCRETE DESIGNER DRAUGHTSMAN** immediately; age in both cases preferably about 30; work of a varied character. Apply in writing, giving full details of age, experience, salary required, etc., to Personnel Director, Richard Costain, Ltd., Dolphin Square, London, S.W.1. 4130

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QUANTITY SURVEYORS, with offices in London and the North, are desirous of meeting Architects and others to whom their services would be of assistance. Box 4170.

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R. I.B.A. EXAMS—Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I., Dist. in T.P. (Tutor in the Sch. of Arch. Lond. Univ.), prepares Students by correspondence tuition. 15, North Road, N.6. MOU. 8104.

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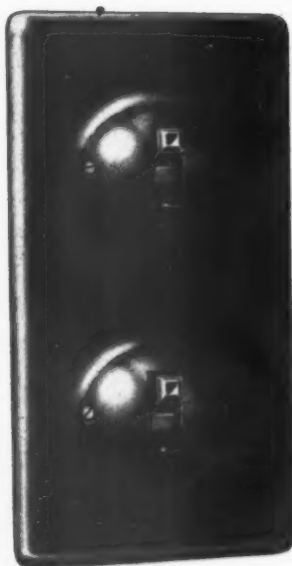
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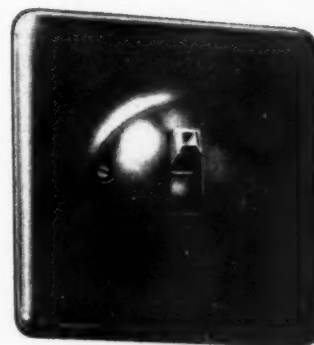


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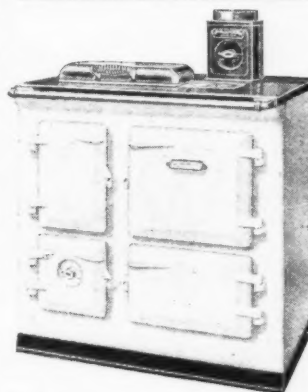
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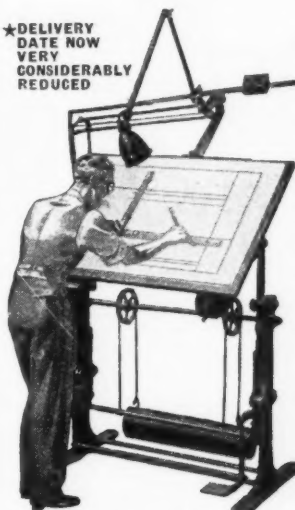
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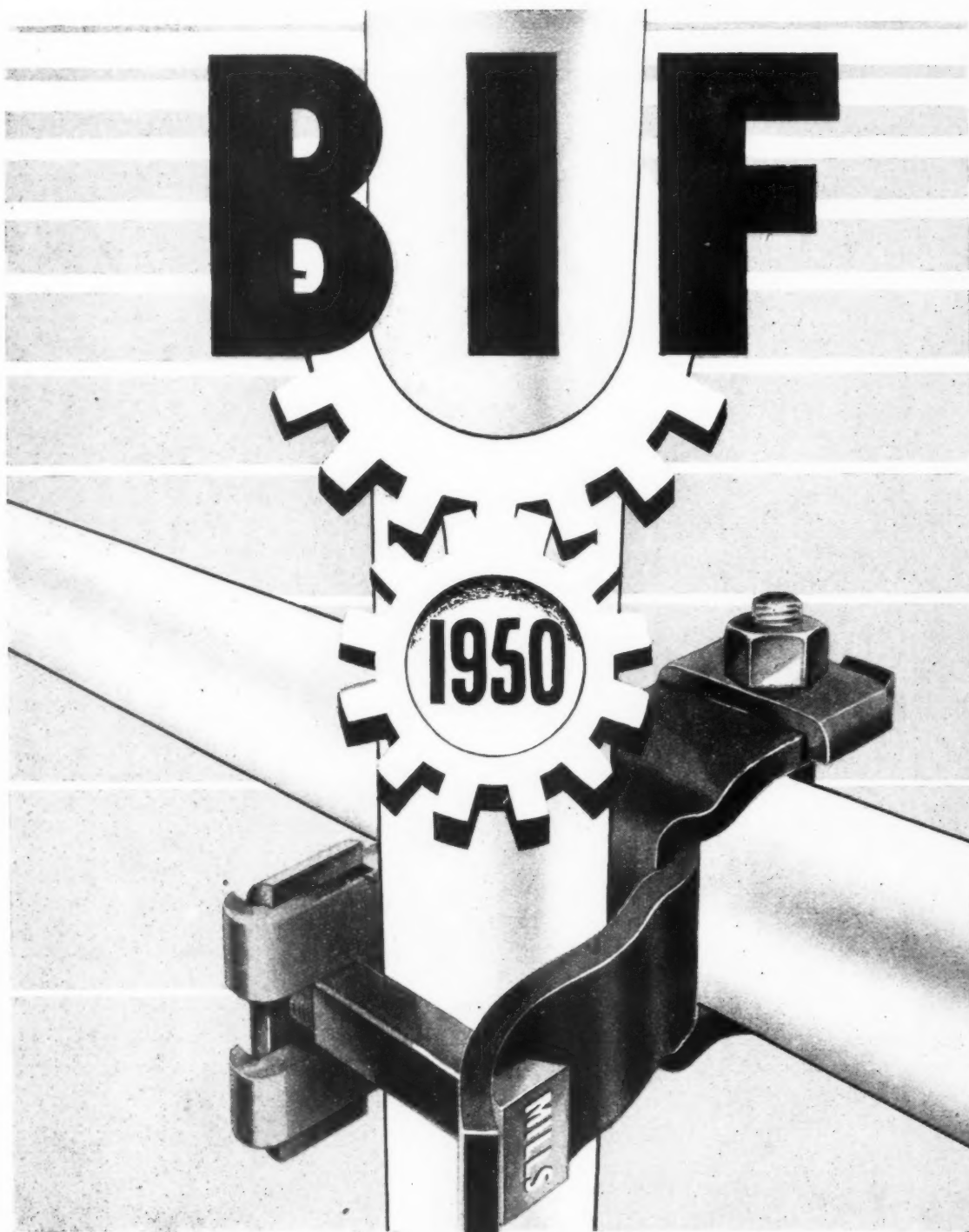
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