

standard

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

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BUILDINGS CURRENT STATISTICS HOUSING

Architectural Appointments Vacant Wanted and

[VOL. 113 ARCHITECTURAL 9, 11 and 13, Queen Anne's Gate, Westminster, 'Phone: Whitehall 0611

Price 1s. od.

Registered as a Newspaper.

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

Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. Sloane 8266 Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1. IHVE Sloane 3158/1601

Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. Euston IIBD

ILA I of Arb.

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Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street,
Strand, W.C.2. Temple Bar 4071
Museum 7197/5176

W.C.1. Museum 7197/5176

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Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851
Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172
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Inland Waterways Association. 11, Gower Street, W.C.1. Museum 9200 IOB IR TRA ISE IWA

LIDC Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.

LMBA MARS

London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891 MARS Group (English Branch of CIAM). Secretary: Gontran Goulden, Building Centre, 9, Conduit Street, W.1. Mayfair 8641 Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Whitehall 3400 Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400 Ministry of Local Government and Planta Mayfair 9400 Whitehall 4300 MOA MOE Ministry of Health. Whitehall, S.W.1.

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W.1. Langham 4041/4054 MOH MOLGP MOLNS MOS MOT

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NBR NCBMP NFBTE

NFBTO

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15, Rutland Square, Edinburgh.
Edinburgh 20396 PEP RCA RIAS

RIBA RICS

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Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.

Whitehall 5322/9242

Whitehall 3935 RFAC Regent 3335 RS RSA

Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Royal Society. Burlington House, Piccadilly, W.1. Royal Society of Arts. 6, John Adam Street, W.C.2. Royal Sanitary Institute. 96, Buckingham Palace Road, S.W.1. Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Trafalgar 2366 Sloane 5134 RSI Wimbledon 5101 RIB Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Society of British Paint Manufacturers. SBPM

Victoria 2186 London, W.8. Western 1571 Society for Cultural Relations with the USSR. 14, Kensington Square, SCR

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School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. SFMA Mansion House 3921 SIA

Structural Insulation Association. 14, Moorgate, London, E.C.2. Society of Industrial Artists. 7, Woburn Square, W.C.1. Scottish National Housing. Town Planning Council. Langham 1984 SIA SNHTPC

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55, Great Ormond Street, W.C.1.
Holborn 2646 SPAE **TCPA**

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Timber Development Association. 21, College Hill, E.C.4.

City 4471
The Gas Council. 1, Grosvenor Place, S.W.1.

Sloane 4554 Timber Development Association. 21, College Hill, E.C.4. The Gas Council. 1, Grosvenor Place, S.W.1. Town Planning Institute. 18, Ashley Place, S.W.1. Timber Trades Federation. 69, Cannon Street, E.C.4. TDA TGC Victoria 8815

War Damage.Commission. Oy, Cannon Street, E.C.4. City 4444

War Damage.Commission. Devonshire House, Mayfair Place, Piccadilly, W.1. TTF Mayfair 8866 Welfare Equipment Development Association. 74, Victoria Street, S.W.1. WEDA

Victoria 5783 Zinc Development Association. Lincoln House, Turl Street, Oxford. Oxford 47988 ZDA

OWLINE NE

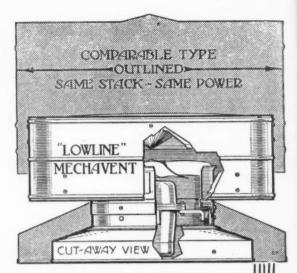
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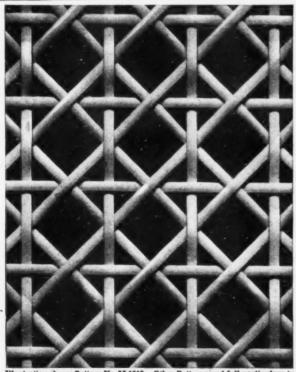
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THE LINES OF THE CLOSER BLEND WITH THE LINES OF THE DOOR

Thus the closer is not unduly noticeable and is ideal for use on panelled doors as the distance from the top of the door to the bottom of the closer is only $3\frac{3}{4}$ in. for all strengths.

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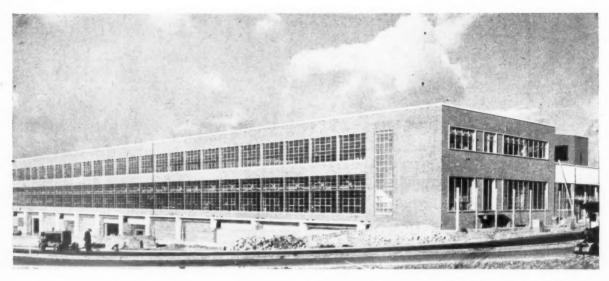
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Architects: Howard, Souster & Partners

The Vauxhall Factory Extension

$\mathbf{F}A$	CTS	AND I	FIGURE	S ON	THE	NEW	VAUXHALL FACTORY
Productiv	ve flo	or space	***	***			852.000 sq. ft.
Length		-					1.695 ft.
Width			***				480 ft.
Total vo	lume	of ea	rth exc	avated	(incl	uding	
facto	IV.	boiler	house,	roads	dra	inage	
tunn	el)						750,000 cu. yds.
Structural steelwork				***	***		4,300 tons
Concrete	***	***	***				35,000 cu. yds.
Bricks					***		1,600,000
Drains							54 miles
6 ft. wate							l mile
Total length of air, water and gas piping						20 miles	
Roof are							950,000 sq. ft.
Roof glas	58						240,000 sq. ft.
Storm water sewer			***		***	5 ft dia. x 3 mile long	
A of							21,000 sq. yds.
Capacity of producer gas plant				***	***	300,000 cu. ft. per hr.	
Consoling of hat make hellen				***		***	150,000,000 B.T.U.'s per hr.
No. of lighting units			***			3,300 x 160 watt.	
Output o							9.000 K V.A.



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The Known and the Unknown

Nobody knows the origin of the carvings on Easter Island, a lonely islet in the South Pacific

EDWARD

RA



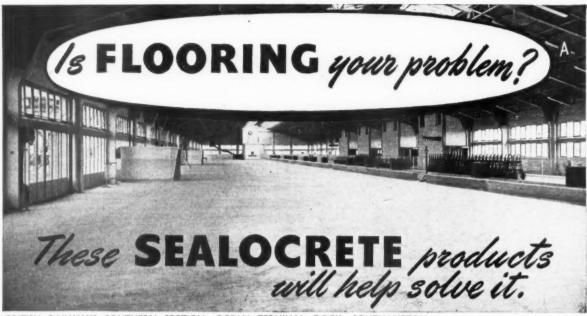


Everybody Knows-

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This solution makes floor toppings permanently dustproof, oilproof and case hardened. Easily incorporated in the gauging water the solution enables floors to be walked on four to six hours after being laid imparting to them additional crushing and tensile strength.



SEALOCRETE METALLIC HARDENER

A finely graded metallic compound which when incorporated with Granolithic floor toppings gives a very hard surface capable of withstanding extremely heavy usage.



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This is a liquid which is applied to newly laid or existing concrete floors to render them dust-proof, oilproof and case hardened. It can be applied to all kinds of existing concrete, granolithic, slag or ballast finished floors. The action of the solution is to penetrate the pores and voids and becomes an integral part of the concrete leaving a case hardened mass.



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Available in many colours and as they are in liquid form they are simple and clean to mix. They have no deleterious effect on cement or concrete. In fact, they give increased crushing and tensile strength as well as increased resistance to oil and grease penetration and prevent dusting.



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This is available in twelve colours and is used on concrete floors not subjected to heavy traffic. Floors so treated should be wax polished after the second application.



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Mixed with Portland Cement and water produces a light duty floor which is warm, resilient, colourful and water-proof. It is unaffected by climatic conditions and can be used as a topping for tile work.

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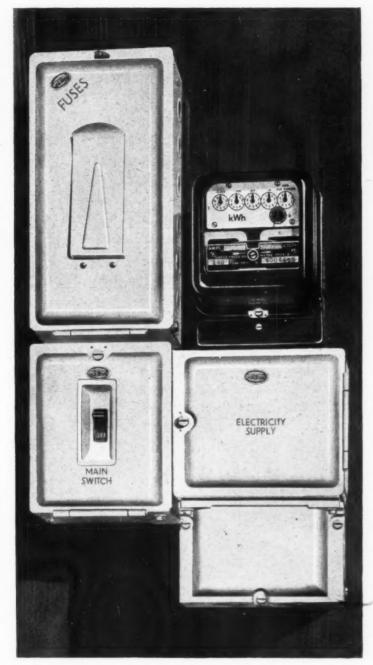
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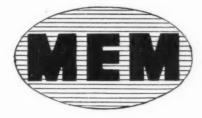




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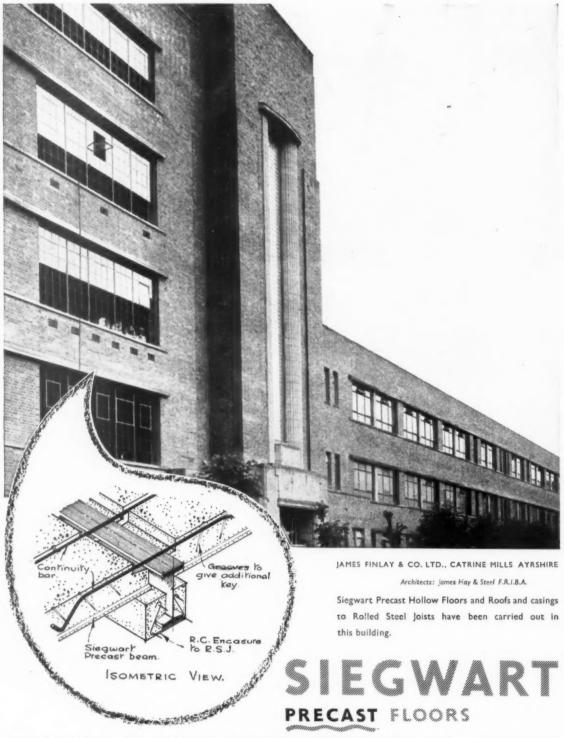
Other advanced features include fuse carriers which will only accommodate the correct cartridge fuse and cannot be replaced in the wrong position—a choice of fuse ratings to suit the needs of different consumers and many points to simplify installation and extensions to wiring. There is a wide range of 'Memera' units to suit every kind of house or flat. And all 'Memera' equipment, like every MEM product, is remarkable value for money.



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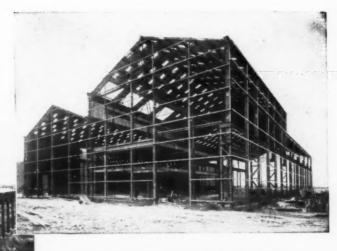
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Wherever your works is situated, Industrial Engineering Ltd., maintain a permanent staff of skilled labour in the district, fully qualified to undertake any gluzing ar roofing contract. Their district representative will be glad to carry out a survey of your roofs without charge, and submit a complete report, together with specifications and estimates for the work required.

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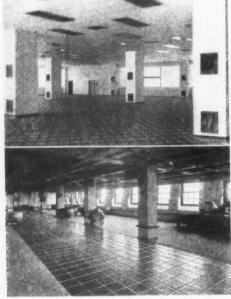
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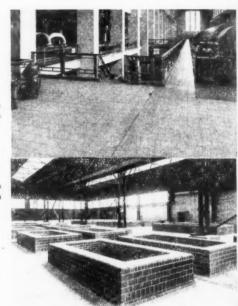
Red "Ferrogran" flag flooring in a Printing Works"Prodordur" tile floor in a Midlands Power Station.

"Consol" steel anchor floor plates in a Dough Room.

Acid Resisting tanks and flooring in a Galvanising shop.

ESTABLISHED 25 YEARS

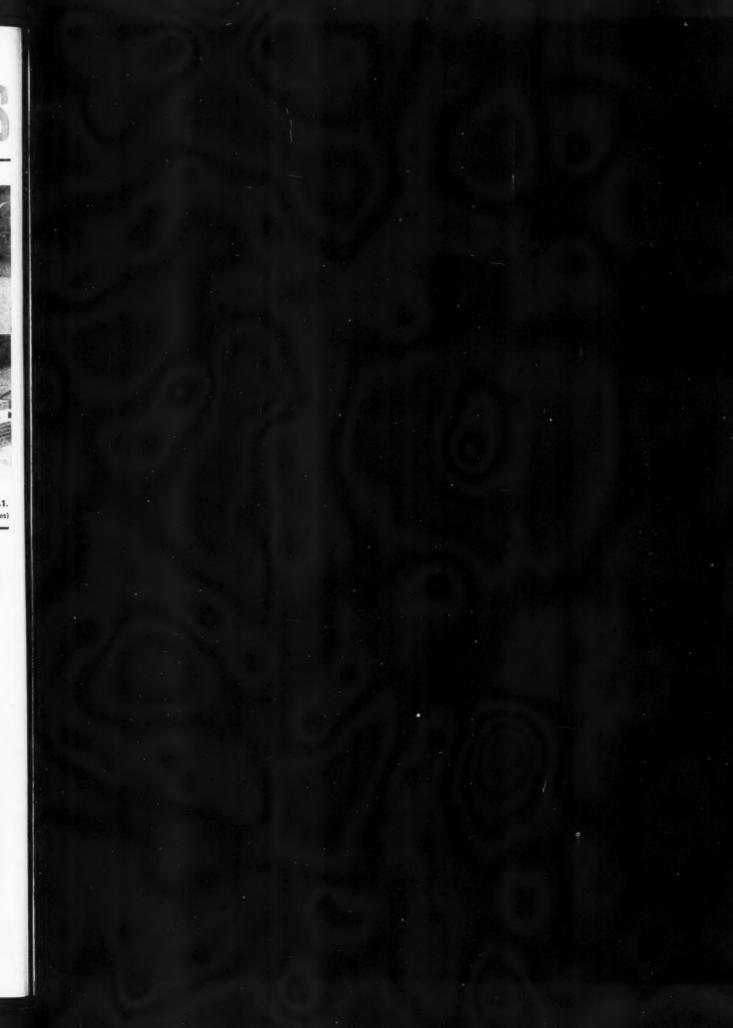




LONDON OFFICE: ARTILLERY ROW, S.W.1.
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Part of the kitchen at Canniesburn Hospital, Glasgow



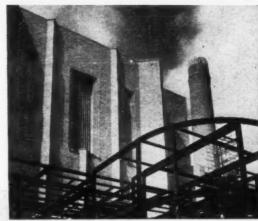


Where are the BRICKS going?

4: POWER STATIONS

The new generating stations are of massive proportions and necessarily conspicuous. They have received much thought from the aesthetic standpoint, and the bricks used have been carefully selected to harmonise with their surroundings.

The high-priority requirements of the British Electricity Authority, added to the urgent demands for Houses and Flats, Schools, Office Blocks, Industrial and many other types of building, have taxed the resources of the brick industry. Production is increasing in the face of many difficulties, and a steady improvement in the supply position is assured.



Above: Portion of Croydon Power Station, under construction. Architect: Robert Atkinson, F.R.I.B.A.

Left: Stourport B' Power Station. Architects: Farmer & Dark, F/F.R.I.B.A.

Below: Staythorpe Power Station. Architect: T. Cecil Howitt, D.S.O., O.B.E., F.R.I.B.A.





BRICK

Photographs by courtesy of British Electricity Authority

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For versatility choose from our wide range of ETGO METAL FIXING SYSTEMS

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BECAUSE it is in the combinations of their application that we can best assist in putting forward proposals to give a finished design properly laid-out and to suit and simplify the work of other Trades.

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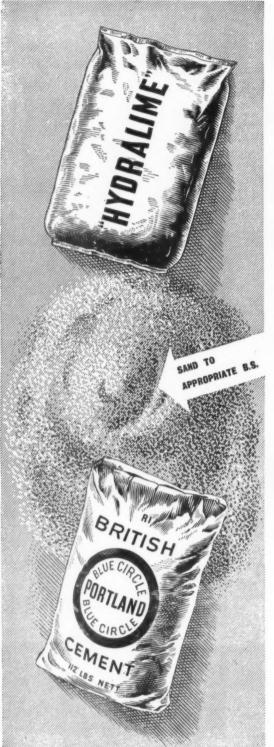
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In these days of uncertainty more and more Building Owners and their professional advisers turn to a method which assures control of speed and cost from start to finish.

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Hydralime + Sand + Blue Circle Portland Cement =

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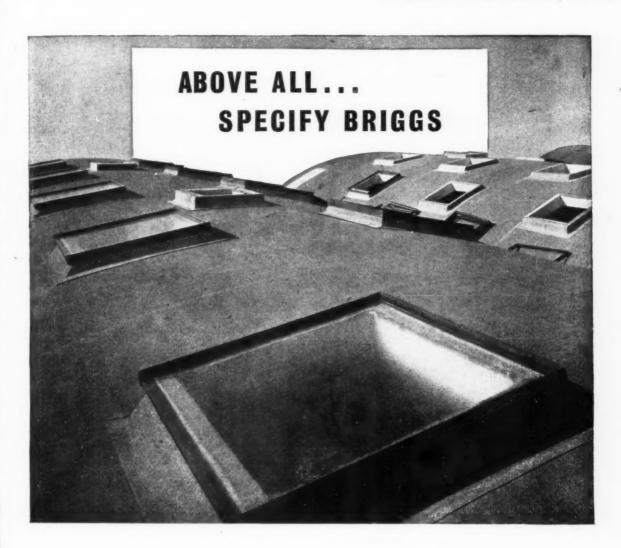
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These Barrel Vaulted Roofs demonstrate the flexibility of BRIGGS ROOFS and how efficiently they adapt themselves to roofs of unusual shape and design.

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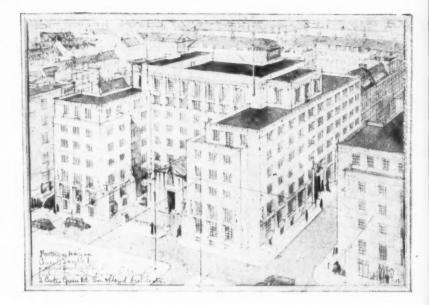
WILLIAM BRIGGS & SONS LIMITED

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OFFICES & DEPOTS AT: ABERDEEN, EDINBURGH GLASGOW _EICESTER, LIVERPOOL, NORWICH This imposing new office block—23 Savile Row, now the headquarters of the Ministry of Local Government and Planning—is floored throughout with Accotile, "the low-cost floor with the luxury look."

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BUILDERS—Sir Robert McAlpine and Sons Ltd., 80 Park Lane, W.1.



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latest block of offices has Britain's

latest, most handsome low-cost flooring

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Accotile will, in most cases, long outlast more expensive floors. Many local authorities have found repair costs, too, much reduced by Accotile installations. Accidental damage is easily and cheaply made good. Broken tiles are quickly replaced.

Accotile durability is proved. Accotile floors laid in England twelve years ago can be inspected. They are still in excellent condition.

DECORATIVE—UNLIMITED CHOICE OF DESIGN

With Accotile there is unlimited scope

for decorative effect. The tiles are made in a wide range of plain and marbled colours and can be laid in any design. The colours are fast since they are an integral part of the tile.

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Accotile is kept fresh and new-looking indefinitely by normal sweeping and washing, but may be polished if an extra high finish is desired. It offers good resistance to most acids and, being non-absorbent, does not stain.

If you would like to hear more about Accotile—please write to us. We shall be pleased to send you full information. Armstrong's Accotile Flooring, Armstrong Cork Company Limited, Bush House, Aldwych, London W.C.2. Tel.: Chancery 6281. Scottish Branch: 5 Oswald Street, Glasgow C.1. Tel.: Central 5703.

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Accotile is quiet and comfortable to walk on, warm and non-slip.

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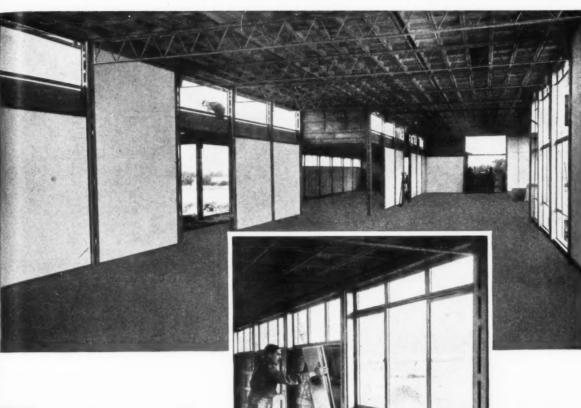
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About Aluminium . . .

3

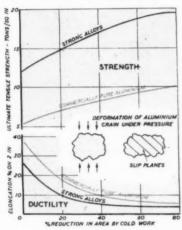
HEAT TREATMENT

As applied to aluminium and its alloys, the term "heat treatment" usually implies those processes, more specifically called solution treatment and precipitation treatment, by which the mechanical properties of certain alloys may be improved.

With these should logically be considered annealing, which has the effect of softening all forms of aluminium, and is often necessary, during fabrication, to remove the effect of work-hardening as a prelude to further cold-forming operations. This is the only thermal treatment applied to the simpler work-hardening type of aluminium alloy, and may well be described first.

Annealing

Aluminium, like other metals, has a structure of innumerable crystals or grains. Cold working, as in rolling or drawing, distorts this structure; the individual grains are deformed, movement taking place along slip planes, and there is as a consequence an increased resistance of the metal as a whole to further deformation. It is then said to be strain- or work-hardened, and this state is permanent at ordinary temperatures.



Work Hardening

If the metal is heated, some relief of the internal stresses begins; this is recovery. As the temperature rises, the distorted original grains disappear and new grains grow to form a stress-free system. This recrystallisation brings the metal to its softest state.

These effects depend on time as well as temperature; so that the change may be completed quickly, it is usual to heat in air at a much higher temperature (340° C to 450° C) than the minimum necessary for recrystallisation. Apart from convenience,

In this series of articles, the student will find the broad outlines of the technology of aluminium. No completeness is claimed for these notes, but it is hoped that they may provide an introduction to the characteristics of this important structural metal.

this is done to avoid the merging of crystals to form larger ones, which is encouraged by, among other factors, long heating time. *Grain growth*, as it is called, impairs mechanical properties and surface finish. Alloys that are especially prone to grain growth are sometimes annealed more rapidly in molten salts at about 500°C.

Annealing, which is normally carried out in electrical or gas-fired air furnaces, is used to make further cold working possible, and several anneals may be needed before the metal reaches its final shape. A variation is partial-, back-, or temperannealing, where fully hard material of some compositions may be allowed to soften only to the intermediate degree of hardness, or temper, required.

Solution Treatment-

Certain metals, of which copper is the best example, are capable, in the solid state, of true solution in aluminium. The amount of such elements that the aluminium will accept is limited, but increases with temperature. If the temperature is lowered again, the excess proportion of the alloying element forms compounds, such as Cu Al₂, which are deposited within the grains, and on their quantity, and more especially on their size, depends the resistance of the structure to deformation and hence the mechanical properties of the alloy.

Solution treatment, sometimes called normalising (from a faulty analogy with steel metallurgy) or simply "heat-treatment", is a process by which this phenomenon is exploited. The temperature is raised to about 500 C, usually in a bath of molten sodium nitrate, until the alloying elements are taken fully into solid solution. The alloy is then cooled, by quenching in water, too quickly for the dissolved elements to be precipitated; the solution remains supersaturated and the metal is temporarily soft. This condition is unstable and precipitation gradually takes place in the form of extremely fine particles. This small particle size (about 1/10,000,000 in. dia.) enhances the tenacity of the metal, which is then said to have age-hardened or aged.

age-hardened or aged.

Refrigeration is sometimes used to delay precipitation from the supersaturated state. In rivets, for example, the soft, formable condition that prevails for an hour or so after solution treatment may be maintained for about twenty hours, if need be, by storing at a low temperature.

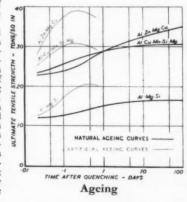
Precipitation Treatment

In some alloys, the spontaneous ageing process just described is complete after a few days at room temperature. A greater degree of precipitation and hardening than occurs naturally is, in certain alloys, induced by heating to about 170°C for ten hours or so (time and temperature depending on the composition). This is called precipitation treatment or artificial ageing. Excess treatment, either in temperature or time, causes undesirable growth of the precipitated particles, reducing their effectiveness in strengthening the metal.

Temper Designation-

The condition of an alloy is conveniently indicated by a symbol placed after its specification number. The system adopted by the British Standards Institution is as follows:

- M as manufactured, with no heat treatment and without regard to workhardening.
- O annealed, soft.
- ¹/₄H, ¹/₂H, ³/₄H or H, the degree of workhardening resulting from rolling or drawing.
- W solution heat treated.
- P precipitation heat treated (artificially aged).
- T solution heat treated and naturally aged.



The fourth article in this series will be concerned with tensile properties.

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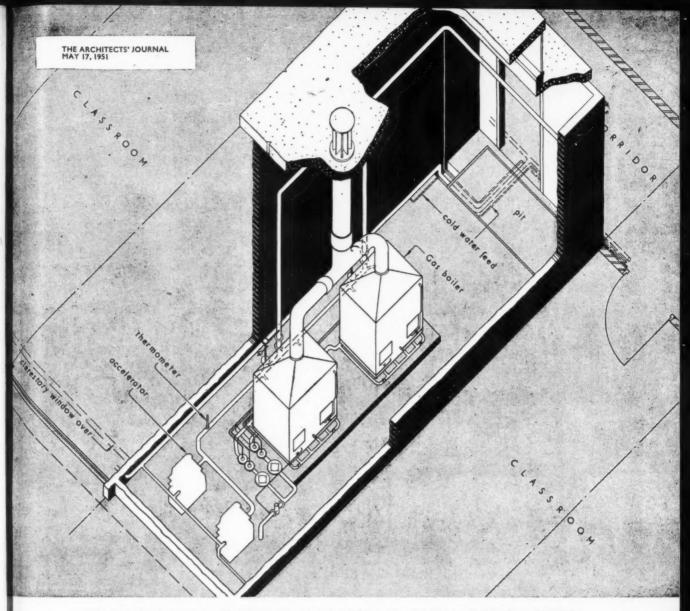
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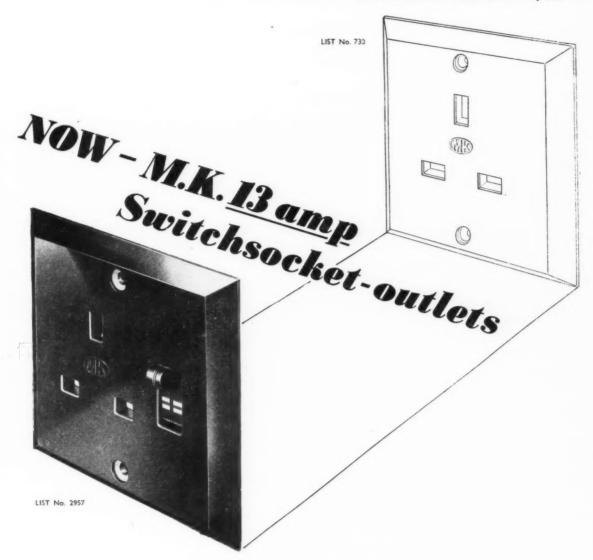


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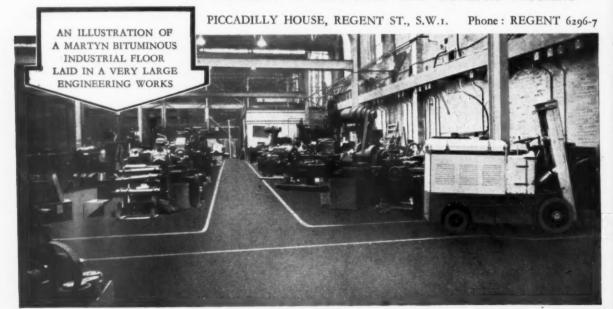
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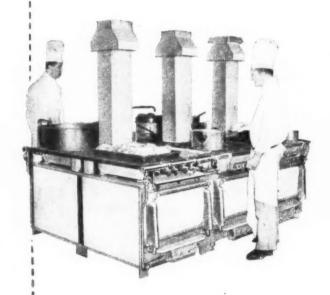


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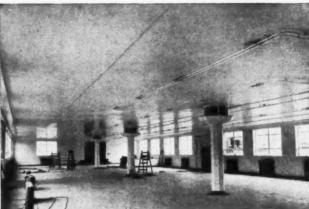
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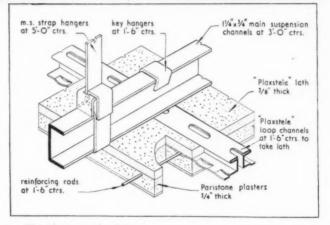




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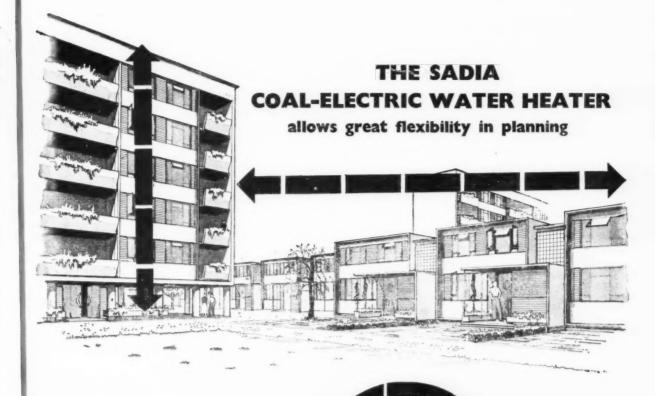


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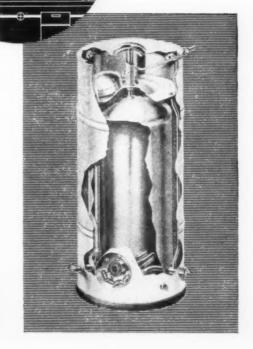
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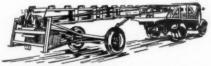


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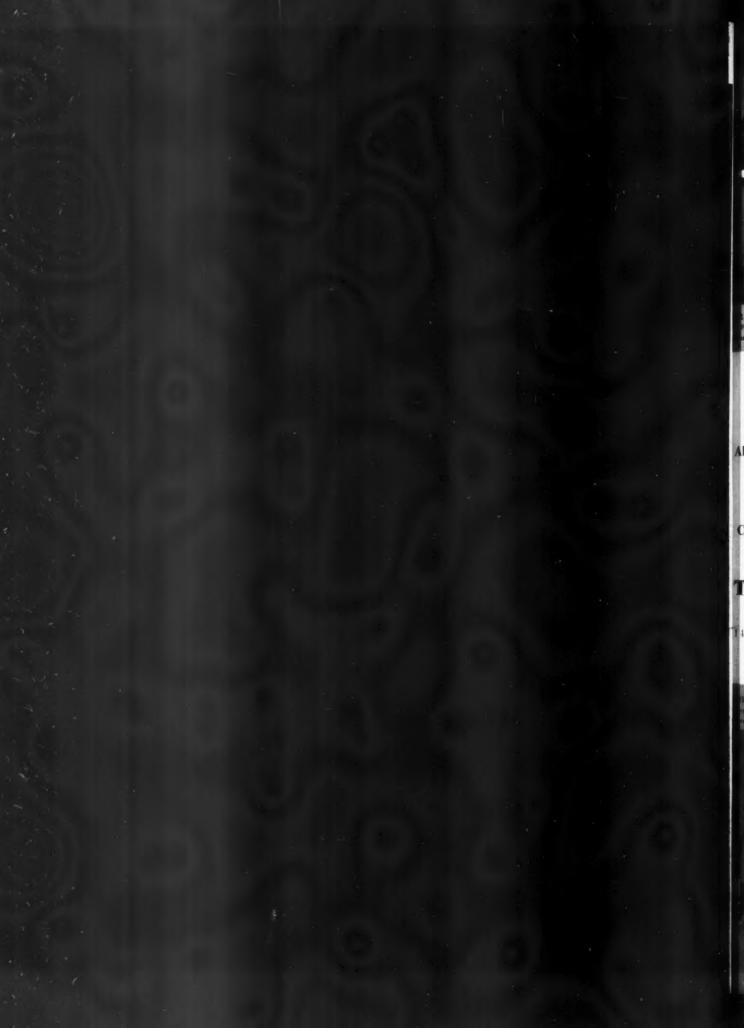
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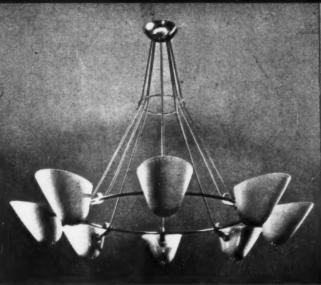
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BRACKET. Fixed. Small metal refinishes: reflector, off-white; backplate, storsatin chromium. Lamp: up to 60 watts.



FV. 118/R PENDANT. Eight-light ring with large metal reflectors. Finishes: reflectors and supports, off-white; remainder, satin brass. Flexible cords, white. Lamps: up to 8x100 watts.



FV. 51/R BRACKET. Adjustable metal reflector. Finish: all off-white. Lamp: up to 150 watts.

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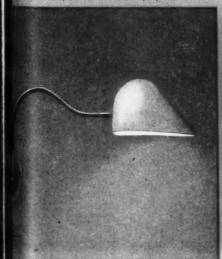
The Lighting Centre

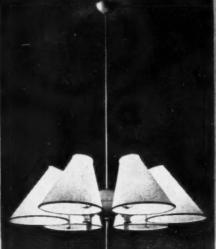
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S/R WALL BRACKET. Adjustable small unpierced effector Finishes reflector and backplace, off-white; arm, and brass. Complete with switch. Lamp: up to 60 watts.

FV. 16/S PENDANT, Six-light. Shades with turning arms. Finishes centre body and ceiling plate, off-white: remainder, saxin brass or saxin chromisum. Shades: ivory or peach plastic. Lamps: up to 6 x 75 watts.

FV. 2/R BRACKET. Adjustable arm. Large metal reflector Finishes: reflector and backplate, off-white, arm, satin brass or satin chromium. Complete with switch. Lamp: up to 100 watts.







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Colour now has other jobs to do besides hiding dirt, or lighting dark corners. It must guide and help the unsophisticated eye, comfort and cheer, stimulate the imagination and encourage a sense of pride. Chameleon-like, children take colour from their surroundings. And so it is good to see schools whose entrance and

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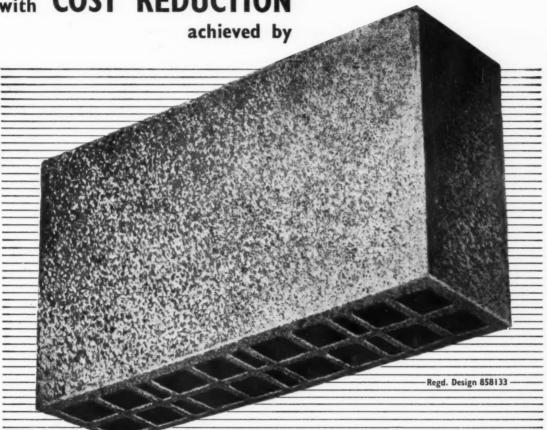
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THE ARCHITECTS' JOURNAL

No. 2933 17 MAY 1951 **VOL 113** Editor, Frank Russon, F.I.O.B." (3) Town Planning Editor, Dr. Thomas Sharp, L.R.I.B.A., P.P.T.P.I. (4) House Editor, J. M. Richards A.R.I.B.A. (5) Technical Editor, R. Fitzmaurice, B.S.C., M.I.C.E., Hon. A.R.I.B.A. (6) Editor Information, Sheets, Cotterell Butler A.R.I.B.A. (7) Editorial Director, H. de C. Hastings' Specialist Editors* (12) General Construction (13) Structural Engineering (14) Sound Insulation and Acoustics (15) Heating and Ventilation (16) Lighting (17) Sanitation (18) Legal.

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* To preserve freedom of criticism these editors, as leaders in their respective fields, remain anonymous

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

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OPEN-AIR SCULPTURE

The LCC were thoroughly justified in deciding that their open-air sculpture exhibition, held in Battersea Park, in 1948, was worth repeating. It should be a regular event, and Mrs. Dalton and her committee are to be congratulated on bringing off another fascinating show. Even the cold east wind that seems determined to be doing all it can to blight every Festival occasion could not prevent the opening last week being a success.

Having said that, I hope I shall be forgiven for saying I didn't think it as good a show as last year. It isn't so much that there are more second-rate pieces, as that the second-rate pieces have been given the most prominent sites so that one is more aware of them. The central lawn is dominated by a huge plaster decoration by Maurice

Lambert which I though quite unworthy of the position-others of course may disagree—and works by Dobson, Epstein and Lipchitz, none of which are anything like the best these sculptors can do.

The best piece on the central lawn I thought was the equestrian figure by Marino Marini (whose one-man show at the Hanover Gallery no one should miss), though it is a little small to look its best out of doors. That is a criticism that can be made of several of the exhibits; it is interesting to notice how an outdoor-setting makes a figure below a certain size lose all its serious qualities and become a toy—a case in point is the Giacometti.

One other general criticism is that several of the exhibits-including an interesting Pevsner abstraction-that happen to be dark in colour are posed against dark vegetation and become almost invisible. But better weather may help this. Better weather, too, should bring people in their thousands. Whatever faults one may find it remains a splendid show, with a number of really good pieces by Henry Moore, Despiau, Skeaping, Reg Butler, Karin Jonzen, Maillol, Soukop, Wotruba and others.

TECHNICAL HITCH

Even the most solemn occasions seldom pass off without a little light relief, and the triumphantly successful opening of the Royal Festival Hall ran true to form with a bit of unrehearsed drama behind the scenes. All that the audience heard of it was the surprising sound of a telephone bell while the Archbishop of Canterbury was conducting the dedication service-and they wouldn't have heard that if it hadn't been for the wonderfully

sensitive acoustics of the auditorium. The telephone in fact rang twice. It was an SOS from Gerald Barry and the Lord Mayor of London, stuck in a lift. They were on the way up to their box when it happened, after attending the ceremony of unveiling an inscription performed by the King when the Royal party entered the building. Fortunately the lifts have a telephone, so when the lift stuck they were able to call down to the auditorium.

The official who answered it, somewhere off-stage (at least that is how the story reaches me) thought his leg was being pulled, told the callers not to be silly and rang off. The imprisoned victims waited as patiently as they could and then rang again. This time they were believed and they were released in time to hear the concert which formed the second part of the programme.

PREMIUMS FOR ARCHITECTS

The Minister of Planning & Local Government has dropped a broad hint to the local housing authorities that it is very much in their interests to employ qualified architects for their housing schemes. In a recent circular the Minister informed the councils that if they employed architects on their work, he would not require them to submit their proposals to his Ministry for approval. This praiseworthy step will, at the same time, eliminate an administrative bottleneck and should improve the standard of design of the housing of certain local authorities. I feel fairly certain that if Councillors realize that by employing an outside architect they can speed up their housing, they will not be so willing to let their unqualified (architecturally) surveyor do the work instead.

CREATION WITH

VITH CRAFTSMANSHII



A section of the new Ladies Powder Room at Messrs. Selfridges Limited, London, W.I. Executed by Courtney, Pope Limited under the supervision of the House Architect, R. L. Heath, L.R.I.B.A.

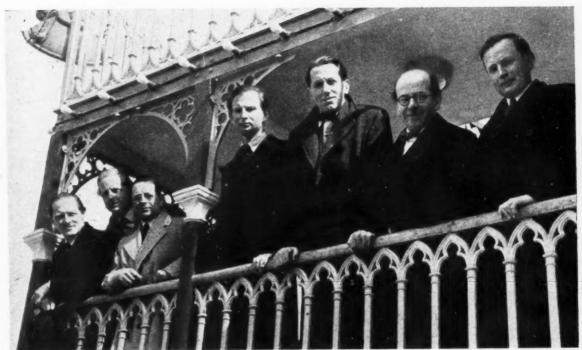
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Astragal takes the opportunity of congratulating the South Bank design team which is shown in the above photograph. From left to right; Hugh Casson, co-ordinating architect, downstream area; James Gardner, co-ordinating designer, downstream area; R. T. James, of R. T. James and Partners, consulting engineer: Ralph Tubbs, architect for the Dome; James Holland, co-ordinating designer, upstream area; Misha Black co-ordinating architect, upstream area; Ralph Freeman, of Freeman, Fox and Partners, consulting engineer.

This latest piece of wisdom from MOLGP should also serve to put architects who do housing work on their mettle. It has seemed from time to time as though architects have been slightly irresponsible about the design of houses for their local committees. There are cases where the same type plans, prepared in 1945 and even then not very good ones, have done duty for every housing scheme since. There have surely been some advances in the last five years or so. Architects would probably be encouraged to think a bit harder if they were required to explain to their housing committee why they had made no change from their designs of the previous year, for with BRS, TDA, and HMSO pouring out technical studies there should be some development even in the most backward areas.

BRISTOL FASHION

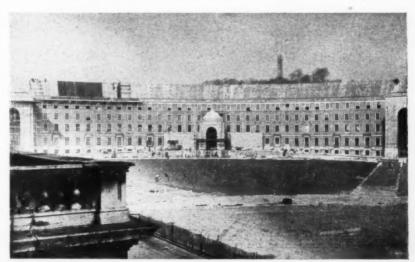
My illustration (right) shows the progress which has been made in providing Bristol's new municipal buildings with a fresh setting. It is the subject of an irate letter from a correspondent published on page 620 of this issue.

The triangular piece of land in the foreground is known as College Green. Until a few months ago it was shaded by some magnificent trees (planes, if I

remember aright) which provided a very pleasant green foil to the intricacy of the fourteenth - cum - nineteenth century cathedral which stands just out of sight on the left of the photograph below.

Adverse criticism before a design is finished is usually hardly fair. Nevertheless there are points already apparent in this design which, deck them out how you will, will always be unpleasant. The way, for example, the axis of the paths is just off centre of the

axis of the building, and the way the paths firmly and splendidly lead nowhere. I will not comment on the architecture, by this year's Gold Medallist Vincent Harris, if only because it is old news, but I would like to make an appeal for the planting on the Green of quick-growing trees as soon as possible. This kind of building will never sit easily beside the cathedral. Geraniums red and delphiniums blue, or the arboreal equivalent, for this particular Bristol dormouse, and the higher the better.



Work in progress on the new setting for Bristol's new municipal building. See note above.



Ruling the Waves

Almost everywhere he goes on the South Bank exhibition site the visitor is drawn to the river, which, as is generally known by now, has been imaginatively incorporated into the exhibition design. If the visitor enters the downstream section of the site from the Waterloo Bridge entrance, the point from which the JOURNAL has started its South Bank tour in this issue, his eye will be directed to the river by the harbour (see page 624) and, as he moves along the overhead walk from here, by the "look-out" platforms which are suspended over the Thames (page 625). If, on the other hand, the visitor goes into the exhibition from the Waterloo Station entrance, he will be persuaded (if he

follows his nose and not the official guide) to approach the river from the main piazza. But if he follows his guide, he will learn as much from his ear as from his eye that he is approaching the water. As he rounds the corner of the Sea and Ships Pavilion he will hear the sound of the sea breaking on the shore, an effect produced by Richard Huw's Mobile water sculpture (above) which virtually rules the waves. Further along the river is Charoux's family group and beyond, the Powell-Moya Skylon, one of several features of the exhibition which are, happily, completely useless, in no way symbolic and altogether pleasant to have about the place.

THE FIVE TO ONE RATIO

Readers will have seen references, no doubt, to the decision of the Minister of Local Government and Planning to allow changes in the ratio of five to one for local authority and private house building when there are a large number of applications for licences to build. I was therefore surprised to see in a recent Hansard that of seventy-five applications made for decreasing the ratio in favour of private building only nine had been granted.

Of course figures can prove anything, but I was interested to see that Mr. Lindgren, Parliamentary Secretary to the MOLGP, could put up a strong case for the small number of applica-On investigation, tions granted. apparently, on the basis of discovering how much separate accommodation was really needed, the long lists of private house builders dwindled rapidly. The nine applications granted were, it seems, the only genuine cases which could be discovered in which the five to one building ratio did not adequately cover the demand of the private builder for essential accommodation.

ASTRAGAL

28. King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 6.15 p.m. Reclaiming the Desert. Ritchie Calder. May 24

British Architects' Conference. At Belfast. (Sponsor RIBA.)

MAY 30-JUNE 2

23th Annual County Meeting. At Southampton. (Sponsors, TPI, 18, Ashley Place, S.W.1.)

FOB South Bank Exhibition. Daily 10.30 a.m. to 11.30 p.m. Sundays, 12.30 p.m. to 11 p.m. UNTIL SEPT. 30

Exhibition of Exhibitions. At Royal Society of Arts, John Adam Street, W.C.2. Mondays to Saturdays, 10 a.m. to 6 p.m. (Wednesdays, 10 a.m. to 8 p.m.)

UNTIL SEPT. 30

FOB Exhibition of Architecture. At Lansbury, Poplar, Weekdays, 10.30 a.m. to 8 p.m. Sundays, 12.30 p.m. to 8 p.m.

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UNTIL SEPT. 30

Exhibition of Science. At the Science Museum. South Kensington. Weekdays (except Tuesdays and Saturdays), 12 noon to 10 p.m. Tuesdays and Saturdays, 10 a.m. to 6 p.m. Sundays, 2.30 p.m. to 6 p.m. UNTIL SEPT. 30

1851 Centenary Exhibition. At Victoria and Albert Museum, South Kensington. Week-days, 10 a.m. to 6 p.m. Sundays, 2.30 p.m. to 6 p.m.

UNTIL OCT. 11

The Editors

MODERN ARCHITECTURE MAKES GOOD

DEOPLE making for the South Bank," wrote the London correspondent of the Manchester Guardian, "begin to smile as they come close to it. This is something new for London—people in the mass with smiles on their faces. And the smiles persist because for once the pleasures of realization more than match those of anticipation." This is something new for architects too: to find that the ordinary citizen, faced by twenty-seven acres of modern architecture and contemporary design, not only accepts it but delights in it, and is eager for more.

The strength of public reaction can be judged pretty accurately by the comments of the daily press, and almost without exception they express approval. Surprise, too, of course, and occasionally mystification, but the really encouraging and most delightful fact is that modern architecture, the contemporary style, call it what you will, is overwhelmingly popular. For the first time it has been given a real chance to show its hand in this country. A wonderful site on the edge of the Thames and, in what appears now to have been the neglected, but true, centre of London. A site which commands views from Westminster Palace to St. Paul's on three sides, and, on the fourth, the black, congested and grimy squalor of Waterloo acting as an acid to etch deep the lesson this exhibition teaches.

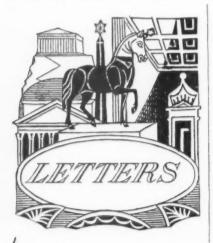
For the last twenty years it has been evident in this country that, in the dreary battle of styles, modern architecture was slowly but inevitably winning. It was not, however, until the members of the Council for Architecture, set up to advise the Festival organization, were named and the Director of Architecture for the Festival of Britain appointed that it became obvious that there was to be given an opportunity to the advocates of contemporary architecture which literally could only occur once, if then, in a hundred years. An opportunity which, we are thankful to report, has been splendidly taken. This '51 Festival as a whole, and in particular the Lansbury and South Bank exhibitions, are showing the nation just how worthwhile modern design can be.

The Journal, then, in acknowledgment of the very great efforts which have been made to launch this Festival, wholeheartedly offers its congratulations to those chiefly concerned. Firstly, to Herbert Morrison, who, as Lord President of the Council, was mainly responsible for Festival preparations. It is only due to his single-mindedness and persistence in the face of intense opposition that we are having a Festival at all. Secondly, to Gerald Barry, Director General of the Festival, for his brilliant organization and for his ability to ensure that the most suitable person was found for each job. to Hugh Casson, Director of Architecture on the Exhibition Presentation Panel, who, with fellow architect members, Misha Black, James Gardner and Ralph Tubbs, planned, directed and ensured the very high standard of architectural design now to be seen on the South Bank.

Most of this week's JOURNAL is devoted to giving an overall survey of the South Bank Exhibition. Next week we hope to pay more attention to the individual pavilions themselves. The lesson which this South Bank exhibition teaches is a simple one, but one of the hardest to carry out successfully. The result has not been matched in this country for well over a hundred years. For the architect, in addition to being an exhibition, it is, above all, an excursion into the art of townscape, in the greatest and most embracing sense of the word. Packed into twenty-seven acres is a richness of visual effect obtained only by capturing the world outside the boundaries of the site as well as by paying meticulous attention to detail. The ground surfaces have been as carefully considered as the planting in the gardens and the surfaces of walls and roofs. The street furniture which can do so much to make or mar a scene has been as carefully positioned as it has been designed.

There are faults; of course there are faults. This is, after all, only a first attempt by the present generation at an art which has nearly died. But study the photographs which follow and see what a magnificent attempt has been made. Better still, go to the site and study the design for yourself. It is every architect's duty to do so. Modern architecture in the mass (surprisingly enough, state approved and sponsored)

has well and truly arrived, and the people love it.



R. Cuddon

C. H. Knight

F. V. Bennett

Desecration at Bristol

The placing of the Unicorns on the new Municipal Buildings in Bristol recently gave rise to considerable public criticism and

Something however seems, to have escaped public comment, that is the felling of the mature plane trees that once graced College Green. On a recent visit to Bristol I was horrified to find that the Cathedral and the lovely Lord Mayor's Chapel are now reduced to insignificance by the dominating character of the new build-ing and the naked expanse that lies before it. anger that I felt on first seeing the levelled site has been replaced by a feeling of uneasiness. This deserration is the latest and perhaps the most obvious of a series of civic tragedies that have occurred in and around this city. I fear now that the misaround this city. I fear now that the mis-guided intentions of the Corporation and its advisers will soon denude Bristol of all its charm and original character.

The carpeting of the site with the finest grass seed, the planting of innumerable flowering shrubs, the possible construction of a pond for goldfish, can surely never re-place the mature and graceful dignity of the trees as they once appeared to my eyes.

R. CUDDON.

[See ASTRAGAL'S comments and illustration on page 617.-ED.]

Durability of Lead Roofs

SIR.—Your correspondent, A. P. Holdsworth writes (April 5) that old lead roofs of churches and cathedrals might be removed for their salvage value and replaced with "equally suitable more modern materials." What is equally suitable? The lead roofs of old churches have a character of their own that is part of the character of these

buildings. Surely it is desirable to preserve a lead roof for the sake of preserving the character of the building.

A well laid lead roof covering on a sound roof structure will have a very long life, and renovations to achieve this condition are worth while if there is intention to extend the life of a church for as long as possible. Whether or not a saving of 40-50 lb. per square yard load on a roof would avoid the need to repair an unsound roof structure, is a question that can only be answered in individual cases. A light roof covering might prolong the life of an unsound roof but there are other loadings to consider—super-imposed and wind pressure—and a roof structure meeting the requirements of these would probably be strong enough to carry a lead covering.

Lead sheet is not exceptionally heavy for a roof covering; single lap tiling is as heavy and plain tiling is at least twice the weight.

C. H. KNIGHT.

Lead Technical Information Bureau. London

Building Bulletin No. 4

SIR,-I have been asked to thank you for thoughtful treatment of Bulletin No. 4 in your issue of April 26, and to seek some more space in your columns for an explanation of one or two points which might lead to misunderstanding.

The third paragraph of Mr. Cleeve Barr's review suggests that the Bulletin "attempts in effect to provide a more scientific basis for approximate estimating." In fact, it ror approximate estimating." In fact, it is not intended that the methods suggested in the Bulletin should supersede the efficient methods of approximate estimating at present in use by quantity surveyors. The idea is simply to encourage the quantity surveyor to supply the architect at the design stage with cost information related to the stage with cost information related to the functions performed by various "elements" as well as to the total cost of the building. The Specimen Cost Analysis at Appendix 5 which you published is not intended to become a standard form of presentation.

The selection of elements to be costed in any particular case will depend on the building technique. For example, "Frame A" may have its structural components spaced at such intervals as to require subsidiary structural members to carry ceilings, floors, etc. In "Frame B," on the other hand, the spacing may be such that no subsidiary structural members are necessary. The costs structural members are necessary. of these two Frames can only be compared if to the cost of "Frame A" are added the elements required to make it func-tionally comparable with "Frame B"; thus it may be necessary to take into account, for instance, the costs of additional items such as reinforcement of floor slabs.

such as reinforcement of floor slabs. Finally, I have been asked to emphasize that the Bulletin implies no change in the current procedure for approval of educational building projects by the Ministry. This does not involve a detailed examination of cost, such as Mr. Russon seems to have in mind. In order to receive approval, schemes have only to comply with the Building Regulations, and to come within the limits of total cost laid down. The Ministry undertakes detailed examinations of cost only for research and development purposes. ment purposes.

F. V. BENNETT.

London.

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

SOUTH BANK EXHIBITION

CO-ORDINATING ARCHITECTS:-

DOWNSTREAM: HUGH CASSON UPSTREAM: MISHA BLACK

The Journal takes its readers this week on a preliminary tour of the South Bank Exhibition. The theme of the exhibition has been ignored here and none of the buildings is shown in any detail. But an attempt has been made to give the readers who have not visited the South Bank an idea of what was in the planners' minds when they laid out the exhibition, with its enclosed spaces leading suddenly into exciting vistas and its incorporation of the river into its design. The architecture and the display were planned under the direction of the Festival Offices' Exhibition Presentation Panel, which has the following membership:—Gerald Barry, director-general, chairman; Cecil Corke, director, exhibitions, deputy chairman; Misha Black; G.A. Campbell, director, finance and establishments; Hugh Casson, director, architecture; Ian Cox, director, science and technology; A. D. Hippisley Coxe (CID); James Gardner; James Holland; M. Hartland Thomas (CID); Ralph Tubbs; Peter Kneebone, secretary. The consultant engineers were Freeman, Fox and Partners and R. T. James and Partners. Below is a view showing the Transport pavilion (Architects: Arcon) at night, when the exhibition has an even more exciting appearance than it has by day, with the star-studded main concourse in the foreground.



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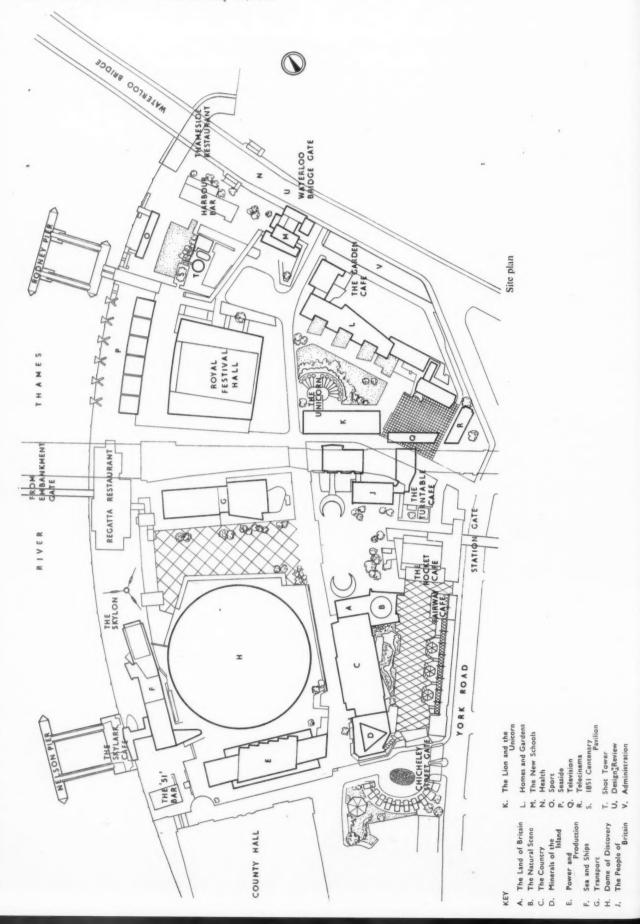
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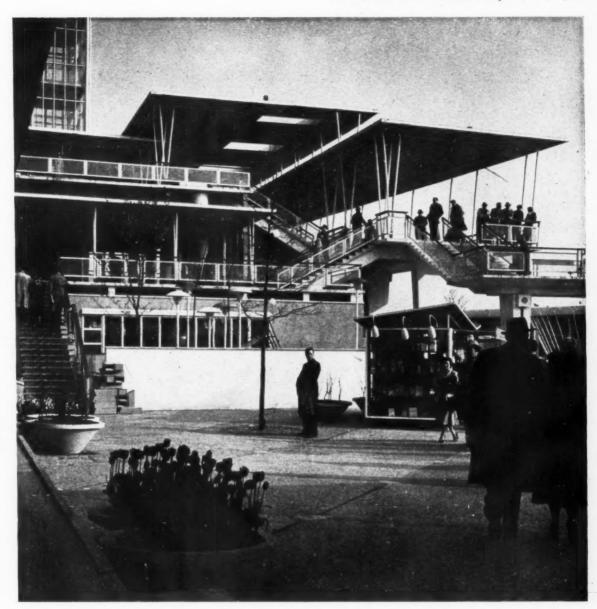
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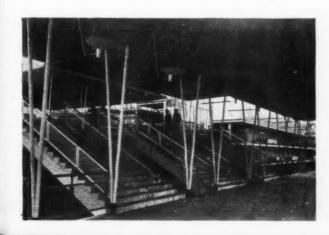
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DOWNSTREAM SECTION: ENTRANCE

The exhibition entrance (above) from Waterloo Bridge, incorporating a tower and The New Schools exhibit is perhaps the most exciting in the exhibition, with its multiple roof slabs poised over an intricate series of stairs and ramps. It was designed by Maxwell Fry and Jane Drew. (Display designer: Neville Conder and Patience Clifford.) Left is a view looking up towards the entrance gates, with the Administration building and staff canteen to the right of the picture. (Architect: Edward Mills.)

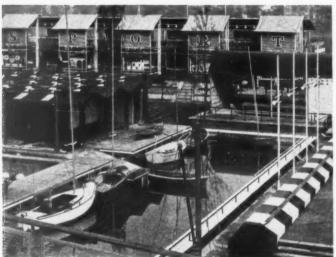
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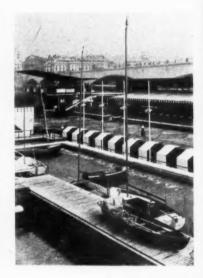
. The People of Britain



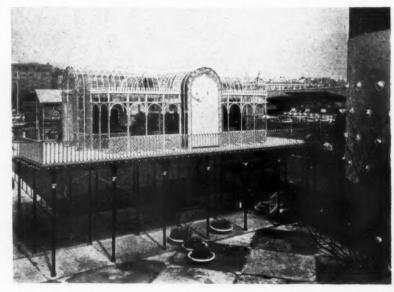
OVERHEAD WALK

Another view (left) of the Administration buildings (Architect: Edward Mills) showing the screen of coloured balls on the Waterloo Road edge of the site. This view, and the one below left, which shows the Sport pavilion behind the harbour, were taken from the overhead walk leading from the Waterloo entrance seen on the previous page.





Another view (above right) of the harbour from the Waterloo entrance walk showing parts of the Harbour Bar and of Waterloo Bridge in the background. Right, a view from the same walk of the 1851 Centenary Pavilion. (Architect: Hugh Casson. Display designer: James Gardner.) Part of the Sport pavilion is visible behind it.

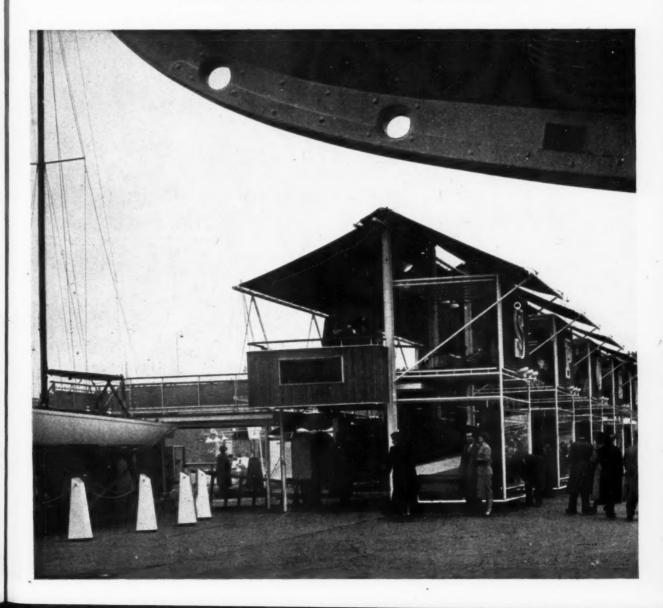




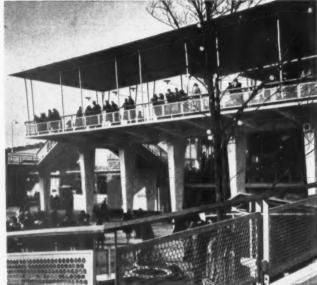


RIVERSIDE

Another view (above left) from the Water-loo Road entrance walk of the Sport forms over the river, designed by Eric pavilion (architects and designers: Gordon Brown and Peter Chamberlin for the and Ursula Bowyer) with the sports Seaside section. Below: another view arena in the foreground and the river of the Sport pavilion.



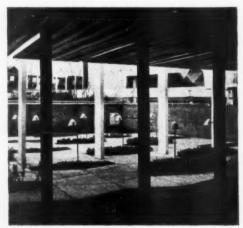


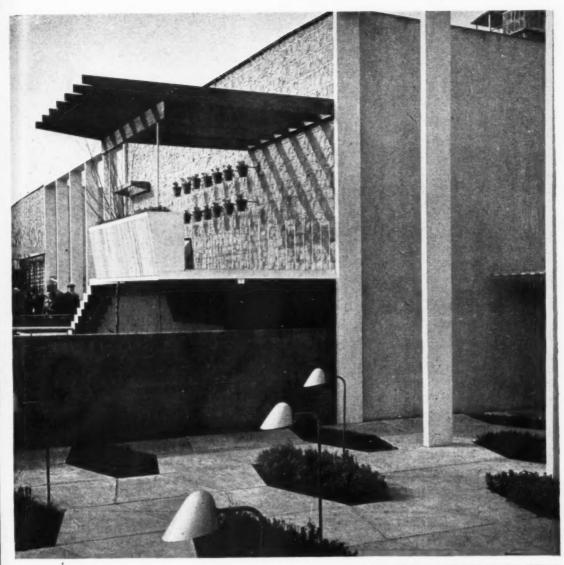




HOMES AND GARDENS

A little farther downstream from the Sport pavilion is the Thames-side Restaurant: top left is the view upstream from its terrace. Crossing the downstream section from north to south one passes under the Waterloo entrance overhead walk, centre left, and sees the Administration buildings and the screen of coloured balls flanking Waterloo Road, bottom left, in the background of the photograph. Below, view from inside the Homes and Gardens pavilion, looking out into one of the garden courts. Opposite page, part of the exterior of the pavilion seen from the same garden. Bottom left: the entrance to the Homes and Gardens pavilion, with the Telecinema (Architect: Wells Coates) to the right of the picture. Bottom right: a view looking back towards the Royal Festival Hall and the Shot Tower from the balcony of the Telecinema.





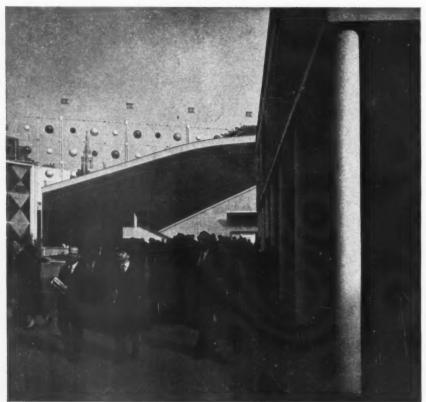


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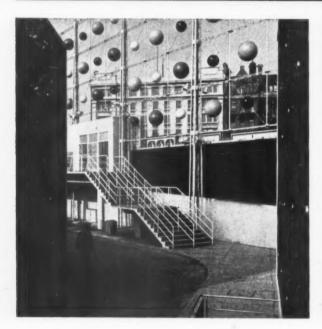
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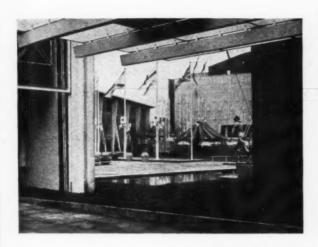
SOUTH ENCLOSURE

Left: the Telecinema, with the TV building, also designed by Wells Coates, on the right. Below left, a photograph taken from the balcony of the Telecinema, showing the coloured balls on the Waterloo Road side of the exhibition and the road that runs between the Homes and Gardens and the Administration buildings. Below right: a view looking from the main entrance of the Homes and Gardens pavilion, showing the Administration building in the background.





Below left: another view from the entrance to the Homes and Gardens pavilion, showing Epstein's gilded bronze sculpture and parts of the concert hall and of The Lion and Unicorn pavilion. Below right: detail of stairs on the outside of The











EATING OUT

Between the Lion and the Unicorn pavilion and the Homes and Gardens pavilion is The Unicorn restaurant (architects and interior designers: R. Y. Goodden and R. D. Russell), the last feature in the Journal's tour of the Downstream Section of the South Bank exhibition. Surrounding it is a garden designed by Peter Shepheard.

UPSTREAM: THE LAND

In the upstream section our tour follows (more or less) the route recommended in the official guide. After glancing across the main piazza (right) the visitor is recommended to go into The Land of Britain (extreme right). (Architect: H. T. Cadbury Brown. Display designer: V. Rotter.)

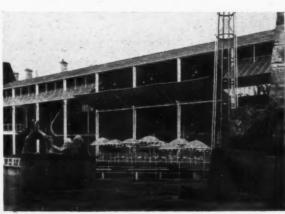






COUNTRY

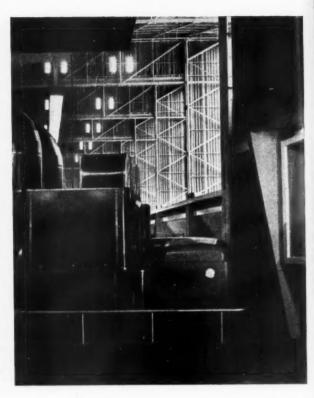
After the Land of Britain comes The Natural Scene (left) (designed by Brian O'Rorke and display designer F. H. K. Henrion) who were also responsible for the next pavilion, The Country (bottom, left and right).





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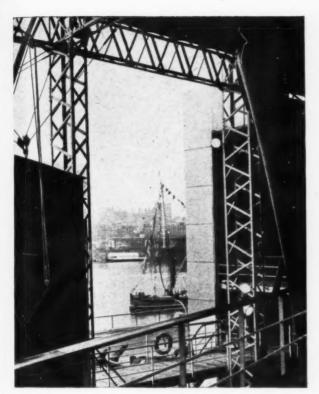


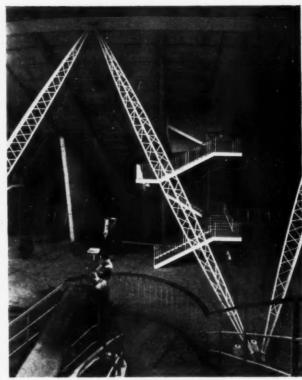
INDUSTRY AND LEISURE

In contrast to the open and spacious Country pavilion is Minerals of the Land (above) designed by the Architects' Co-operative Partnership. (Display designer: Beverley Pick.) the river's edge, is the '51 Bar, seen in a night A bridge leads from this building to Power and Production (above right), designed by G. Manasseh. Sculpture by Daphne Hardy.)

Grenfell Baines and H. J. Reifenberg. (Display designers: Warnett Kennedy and Associates.) In front of the exit to this building, and on

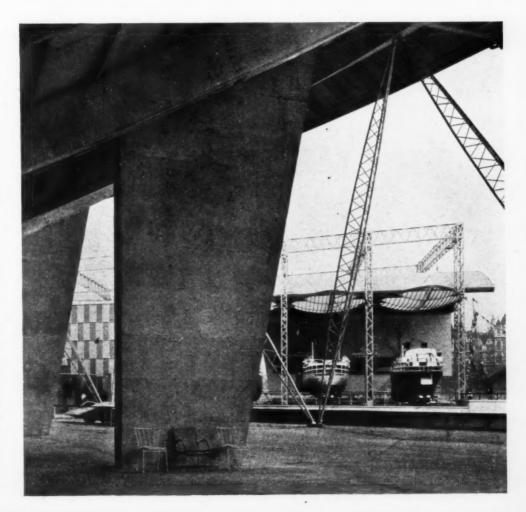


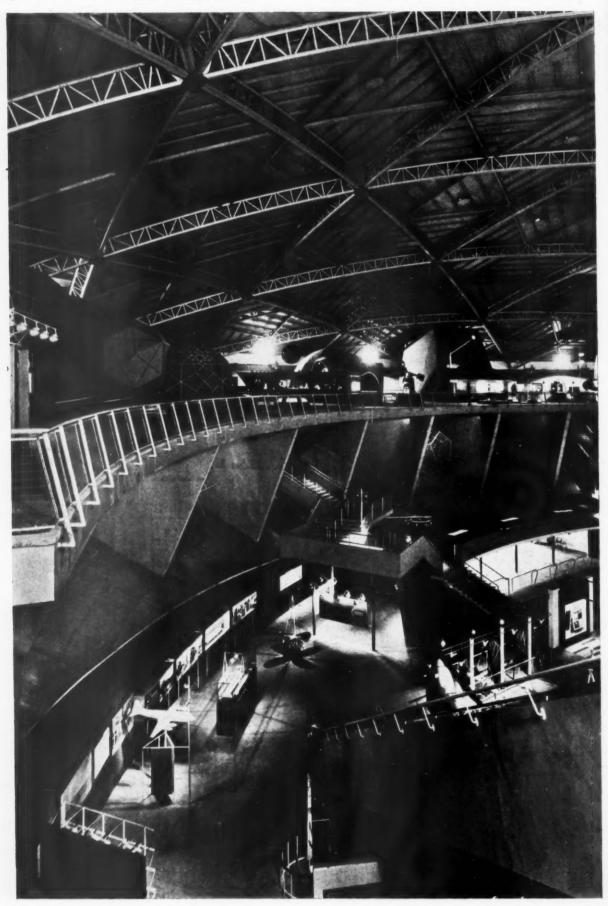




SEA AND SHIPS

On the river's edge, near the '51 bar, is Basil Spence and Partners' Sea and Ships building, from which can be seen, above left, intriguing glimpses of the Thames. (Display designers: James Holland and Basil Spence.) From this building the view, above right, of the Dome of Discovery was also obtained. Another glimpse of the Sea and Ships pavilion is shown right from a point near the entrance to the next building in the sequence, the Dome of Discovery.





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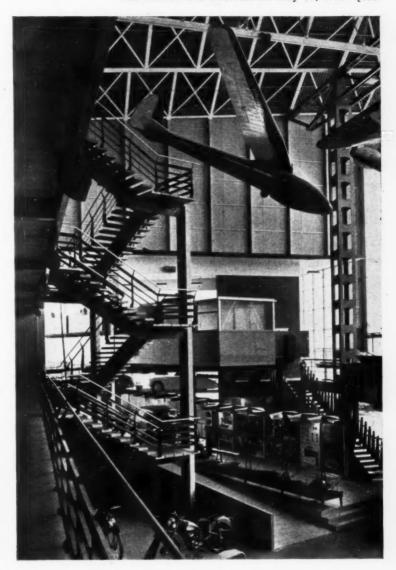
DISCOVERY

The interior of the Dome of Discovery, photographed from the top of the escalator. (Architect: Ralph Tubbs. Display: Design Research Unit.) Just above the escalator can be seen the main entrance, at a lower level than the principal floor. Thrusting through the inward sloping walls are the massive concrete fins which support only the gallery and are structurally disconnected from the Dome itself.

RESTAURANT AND TRANSPORT

Below: the Regatta Restaurant, situated on the river walk. (Architects and interior designers: Misha Black and Alexander Gibson. Theme of decorative patterns: M. Hartland Thomas and Helen Megaw.) The mural on the restaurant's terrace (bottom) is by John Tunnard. (Note the hand-shaped door handles.) Right is an interior view of the Transport building (Architects and designers: Arcon).









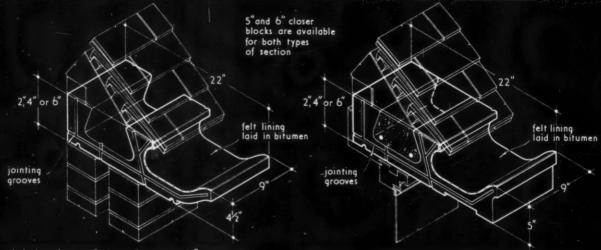
NIGHT-TIME

Seen here, behind the skylon (designed by Phillip Powell and Hidalgo Moya) and the dome are the floodlit buildings over the river.



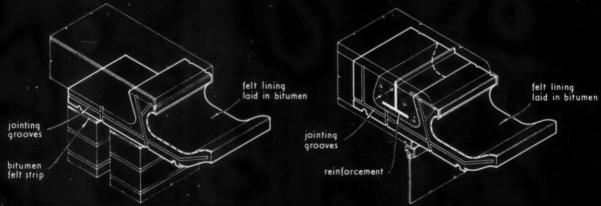


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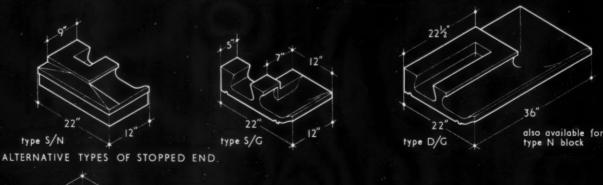


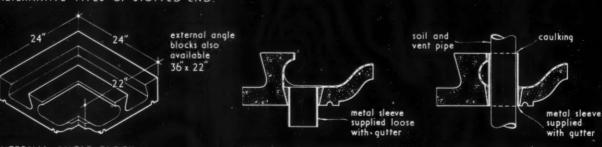
pitched roof: type G shown fixed over Il"cavity wall

pitched roof: type N with integral lintel shown fixed over window



flat roof: type G shown fixed over Il"cavity wall flat roof: type G with integral lintel shown fixed over window STANDARD TYPES OF GUTTER BLOCK AS APPLIED TO PITCHED AND FLAT ROOFS.





INTERNAL ANGLE BLOCK

R.W. PIPE CONNECTION.

S. AND V. PIPE CONNECTION

33.U10 'FINLOCK' PRECAST CONCRETE COMBINED GUTTER, EAVES AND LINTEL

This Sheet describes a gutter, eaves and lintel assembly which is built up from specially formed precast waterproofed concrete blocks. The blocks are 9 in. long by 6 in. high by 22 in. from front to back and when bedded together they take the place of the usual gutter, fascia and soffit, and also, where occurring over window openings, can be reinforced and filled with concrete to form a lintel. The gutter troughs are lined, after erection, with felt laid in bitumen and sealed with a covering of bitumen. The felt and bitumen are supplied with the gutter blocks. The blocks, being 6 in. high, two courses of brickwork are saved at eaves level, in addition to a saving in timber and site labour.

Types of Section

There are two standard types of gutter and soffit moulding available as shown. Each type may be obtained with the following alternative back upstands to accommodate different forms of roof truss construction.

6 in. (types G and N). 4 in. (types G/4 and N/4). 2 in. (types G/2 and N/2).

Special blocks can be made to fit around or incorporate truss shoes where necessary.

Standard Blocks

A wide range of blocks and fittings is obtainable to fit in with any form of construction.

Straight blocks: Size: 9 in. by 22 in. May be obtained if required with sleeved rainwater outlet (2 in., 2½ in., 3 in., 4 in.) or sleeved aperture for soil and vent pipe.

Closers: Sizes: 6 in. by 22 in., 5 in. by 22 in. External angles: Size: 36 in. by 22 in. Right- or left-handed.

Internal angles: Size: 24 in. by 24 in.

Stopped ends: All stopped ends may be obtained right- or left-handed and with rainwater outlets or soil and vent pipe apertures if required.

Type S (moulded end). Size: 12 in. by 22 in.

Type F (flush end). Size: 12 in. by 22 in. For use where gutter finishes against a wall abutment.

Type D (moulded return end). Size: 36 in. by 22 in.

Permits the use of a downpipe on a gable wall.

Weight

The weight per foot run of section G blocks is 60 lb. and of section N, 62 lb.

This is approximately 17 lb. and 19 lb. respectively

This is approximately 17 lb. and 19 lb. respectively more than the weight of the brickwork which would normally be required.

Fixing

No special setting-out is required. Blocks to take ventilating or rainwater pipes are laid in position first. Intermediate blocks are then bedded as closely as possible, closers being used where necessary as cutting is impracticable. The joints are cut off flush and the external surfaces given a thin coat of cement wash well brushed in.

Falls: Falls are unnecessary and the troughs are sufficiently deep to allow up to 75 ft. between outlets, thereby effecting a saving in cost of drainage fittings. Expansion joints: In practice no expansion joints have been found to be necessary when using the blocks with pitched roofs. Where these gutters form part of the construction of concrete flat roofs other considerations for expansion may arise, but the problem can usually be solved by breaking the bed joint from the brickwork with a suitable bitumen felt.

Lining: The bitumen adhesive supplied is poured into the gutter trough and brushed out as required. When it is tacky, the lining felt is unrolled into the trough and firmly pressed into position. A final coat of bitumen adhesive is then applied.

Lintels

The blocks are supported on temporary hangers and support-boards, which may be obtained on hire from the manufacturer. For spans of up to 6 ft. 6 in. two ½-in. reinforcing rods are sufficient; for greater spans the reinforcement must be increased accordingly. The concrete should be run for a distance of at least one foot on either side of the opening.

Order

It is only necessary when ordering to send a dimensioned plan; the manufacturer will calculate the number of blocks and fittings required.

Patents

Manufactured under Snazell Patents 21231/46; 5770/49; 32527/49; Registered Designs 861112/4; 854745/6.

Further Information

The manufacturer maintains a Technical Department and an outside staff who are available to answer questions and advise generally on technical problems dealing with the use of these gutters.

Compiled from information supplied by:

Finlock Gutters Ltd.

Address: 20, St. John's Road, Tunbridge Wells, Kent.

Telephone: Tunbridge Wells 20313.





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REVISED 17,5,51

ΓΥΡΕ	DESCRIPTION	nominal thickness inches (uncom- pressed)	STOCK SIZES OR QUANTITIES	manufactur- ing density Ib/cu.ft.	thermal conduct- ivity B. Th. u./ sq.ft/hr/	APPLICATIONS
quilt, light	lightly felted fibres covered with treated kraft paper and thread- sewn	**	rolls. 15yd. long x lyd. wide	S	0.25	for the heat and sound insulation of floors, walls, partitions and ceilings (for houses)
medium	as for quilt, light	-	rolls: 15yd. Iong x 1yd. wide	\$	0.25	as for quilt, light (for hotels, schools, institutes, etc.)
heavy	as for quilt, light	72	rolls: IOyd long x lyd. wide	S	0.25	as for quilt, light (for telephone boxes and places where absolute quiet is desired)
l in. house nsulation	the material is lightly felted so that it may be used in blanket form	4	rolls: 18ft jong × 12 in., 14 in., 16 in., 18 in. wrde	침	030	for all forms of roof space and attic insulation where the material is laid between the joists
oose wool	unbonded, felted material	1	bags: 28 lb. bales: about 36 lb.	3	0.26	for all types of cavity insulation
itumen-bonded not	lightly felted fibres bonded with bitumen	9-6	rolls: 10 yd. long x 36 in. wide, 12½ yd. Iong x 42 in. wide, both roll lengths also made in widths to suit joist spaces	2	0.28	for the insulation of prefabricated panels, walls and ceilings and of walls, ceilings and floors both in temporary and permanent prefabricated and conventional constructions; for laying over joists in attic insulation
itumen quilt	lightly felted fibres bonded with bitumen and covered with treated kraft paper	7.	rolls: 10yd. Iong x lyd. wide	3	0.28	for attic insulation where the material is laid over the joists
esin-bonded emi-rigid mat	lightly felted fibres bonded with resin	7, 72, 7, 75, 7, 75, 7, 75, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	sizes within the limits 72in.x 42in.	3	0.25	for the insulation of walls, ceilings and roofs

8.E1 'FIBREGLASS' INSULATING MATERIALS

This Sheet supersedes Sheet 8.E1 published 9.10.47. It describes the general properties of Fibreglass insulating material. The table on the face summarises the primary characteristics of the various forms in which the material is available.

Material

Fibreglass consists of glass drawn into flexible fibres, possessing high tensile strength. The material is entirely inorganic, non-hygroscopic, unaffected by moisture and will not rot or cause corrosion of any surface with which it may come in contact. It offers no sustenance to vermin and is non-inflammable.

Thermal Conductivity

National Physical Laboratory tests have been carried out on this material (under the earlier trade name of Glass Fibres). The thermal conductivity figures quoted on the face of the Sheet are based on these tests. Copies of the actual reports may be obtained from the manufacturer.

Applications

Detailed applications of this material will be dealt with on subsequent Sheets.

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Trade Name

The word · Fibreglass · is a registered trade mark.

Compiled from information supplied by:

Fibreglass Ltd. Head Office: Ravenhead, St. Helens, Lancs. Telephone: St. Helens 4224.

Telephone: St. Helens 4224.
Telegrams: Fibreglass St. Helens.
London Office: 63-65, Piccadilly, W.1.
Telephone: Regent 2115-6.
Telegrams: Fibreglass Piccy London.
Glasgow Office: 136, Renfield Street, Glasgow, C.2.

Telephone: Douglas 2687.
Telegrams: Fibreglass Glasgow.
Newcastle Office: c/o Pilkington Brothers Ltd., Westgate Road.

Telephone: Newcastle 20938.
Telegrams: Pilkington Brothers Ltd., Newcastle.
Manchester Office: 11, Piccadilly, Manchester, 1.

Telephone: Blackfriars 8863

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Prices are for work executed complete and are for an average job in the London area; all prices include overhead charges and profit for the general contractor.

CURRENT PRICES FOR MEASURED WORK

BY DAVIS, BELFIELD AND EVEREST, Chartered Quantity Surveyors

For Rates of Wages and Market Prices of Materials see The Architects' Journal for April 26, 1951.

Jawains

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

PRELIMINARIES

(say)	****	10%
EXCAVATOR		
Excavation		
N.B.—The following prices are applicable to soil.	hand excavation	in heavy
Surface digging, 6" deep	per yard super	-/10
Ditto, 12" deep	per yard super	1/8
Excavating not exceeding 10' 0" deep to		
reduce levels	per yard cube	6/9
Excavating not exceeding 5' 0" deep to form		
basement	per yard cube	7/7
Ditto, exceeding 5' 0" and not exceeding	per yard cube	10/11
10' 0" deep ditto Excavating not exceeding 5' 0" deep to form	per yard cube	10/11
	per yard cube	9/3
Surface trenches Ditto exceeding 5' 0" deep and not exceeding	per jura cube	0/0
10' 0" deep ditto	per yard cube	12/7
Excavating not exceeding 5' 0" deep to form	1 0	
basement trench, commencing 10' 0" deep	per yard cube	15/11
Disposal		
Returning, filling and ramming around		
foundations	per yard cube	2/11
Wheeling excavated soil not exceeding 100		0/4
yards and depositing Ditto and spreading and levelling	per yard cube per yard cube	3/4
Ditto, ditto, and consolidating to make up	per yard cube	$4/4\frac{1}{2}$
levels under floors and pavings	per yard cube	5/6
Filling into lorries and carting away	per yard cube	11/74
		1-2
Planking and Struttin	9	
Planking and strutting to sides of surface or basement excavation not exceeding 5' 0"		
deep	per ft. super	-/6
Ditto not exceeding 10' 0" deep Planking and strutting to sides of surface	per ft. super	-/8
trenches not exceeding 5' 0" deep (both	nor ft arres	/13
sides measured) Ditto not exceeding 10' 0" deep (ditto)	per ft. super	$-/1\frac{3}{4}$ -/3
THE PROPERTY OF THE PROPERTY O	ber in suber	-10

Concrete (Basic Prices)

Ditto 1:2:4 with \$ coarse aggregate ditto per yard cube 59/
Add to Basic Prices for:—

Working around rod or mesh reinforcement per yard cube Being in beds less than 12'' thick (6''-12'') per yard cube Ditto less than 6'' thick $(4\frac{1}{2}''-6'')$ per yard cube

per yard cube 58/3

Portland cement concrete 1:3:6 with 1½ coarse aggregate in foundations and masses exceeding 12" thick

CONCRETOR—(continued)

Being in small quantities not exceeding 3'		
cube	per yard cube	13/5
Being in suspended floors and roofs	per yard cube	10/1
Being in walls not exceeding 6" thick	per yard cube	16/9
Ditto exceeding 6" but not exceeding 12"	1 0	
thick	per yard cube	11/9
Ditto exceeding 12" thick	per yard cube	8/41
Being in lintels, beams, etc., not exceeding		
72 sq. in. sectional area	per yard cube	25/2
Ditto exceeding 72 and not exceeding 144 sq.		,
in, sectional area	per yard cube	20/2
Ditto exceeding 144 sq. in. sectional area	per yard cube	16/9
Being in columns not exceeding 72 sq. in.		
sectional area	per yard cube	31/10
Ditto exceeding 72 and not exceeding 144 sq.		
in. sectional area	per yard cube	25/2
Ditto exceeding 144 sq. in. sectional area	per yard cube	20/2
Formwork		
Close boarded formwork and supports to soffites of floors not exceeding 12' high Ditto to vertical faces of walls (both sides	per yard super	15/3
measured)	per yard super	14/10
Ditto to sides and soffites of lintols and beams	per ft. super	2/3
Add to any of the above for wrot formwork	r r	-1-
and rubbing down concrete	per yard super	2/3
Reinforcement		
I" to l" diameter mild steel rod rein-		
forcement, hooked, bent and tied at		
intersections as required and fixing in		
concrete	per cwt.	38/6
1" diameter ditto	per cwt.	41/8
‡" diameter ditto	per owt.	53/4
Steel wire mesh fabric reinforcement to B.S. 1221, weighing 4.71 lb. per yard super,		
well lapped at joints and embedded in		
concrete Ditto weighing 9-32 lb. per yard super ditto	per yard super	2/8
Ditto weighing 9.32 lb. per yard super ditto	per yard super	5/1

BRICKLAYER

Common Br	ickwork		
Reduced brickwork one brick thick in cement-lime mortar (1:3:9) Add to the above:—	per yard super	Flettons 24/8	Rough stocks 30/-
If in cement mortar (1:3) If circular on plan to flat sweep	per yard super	4/1	-/3 4/5
Ditto to quick sweep Half brick wall in cement lime mortar (1:3:9)			8/8
Ditto built fair and pointed both sides with a neat flush joint			17/9

Rough stocks with a neat flush joint of the proper yeard super 1/2 34/4 Flettons and painted both sides with a neat flush joint per yeard super 29/2 34/4 Engineering Brickwork Lingfield Engineering 34/10 56/6 Engineering 34/10 56/6 Engineering 34/10 56/6 Extra for internal fair face and flush pointing and pointed and pointing per yeard super 20/7 32/3 60/8 Extra for internal fair face and flush pointing and pointing means and pointing and pinting pointing and pinting pointing in mastic one side each 10/10 10/10 10/10 10/10 10/10 Engineering Brickwork Lingfield Engineering 34/10 10/1	BRICKLAYER—(continued)			
both sides with a neat flush joint per yard super 12/9 34/6 1/6 hollow wall with 2" carrity and galvanized iron twisted ties per yard super 29/2 34/4 23/4			Fletton	
Engineering Brickwork Engineering Brickwork Lingfield Engineering Wirecuts Seduced brickwork one brick thick in coment mortar (1:3) per yard super 34/10 Self brick wall in cement mortar (1:3) per yard super 18/10 Sundries Sundries	both sides with a neat flush joint	per yard sup	er 29/2	34/6
Reduced brickwork one brick thick in cement mortar (1 : 3)	galvanized iron twisted ties	per yard sup	er 29/-	34/4
Reduced brickwork one brick thick in cement mortar (1 : 3)	Engineering	Brickwork		
Sundries Per yard super 1/- 1/- 1/- 1/- 1/- 1/- 1/- 1/	Reduced brickwork one brick thick in coment morter (1:3)	n . per yard sup) per yard sup	Engin- eering Wirecuts er 34/10 er 18/10	Blue Pressed bricks 56/6 29/11
Extra over common brickwork built with bricks p.c. 96!-M for facings and ditto open thollow partition blooks, keyed on both sides and ditto open per yard super 12/3 15/4½ 17/4 19/7 Facings Extra over common brickwork built with bricks p.c. 96!-M for facings as described, and pointis:— To solid wall in Flemish bond with snapped headers bond with snapped headers bond both sides one side with a neat weathered joint in facings built fair and pointed one side with a neat weathered joint both sides and pointing methods with snapped headers weathered joint fair and pointed one side with a neat weathered joint both sides pre yard super 12/3 14/- To solid wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint per yard super 12/3 19/9 with a neat weathered joint per yard super 11/0½ 13/6 Facings Extra over common brickwork built with bricks p.c. 96/-M for facings as described, and pointing with a neat weathered joint in Flemish bond with snapped headers held brick wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint per yard super 12/3 14/- Ditto pointed both sides per yard super 22/4 23/8 Ditto pointed both sides per yard super 22/4 23/8 Ditto pointed both sides per yard super 22/4 23/8 Ditto pointed both sides per yard super 42/7 45/2 Fashing To B.S. To B.S. To B.S. 79 88 1162	one brick wall built fair and ditto	. per yard sup	er 38/7	
pointing Ditto of hessian base bitumen well lapped at joints per foot super Fixing only metal window, size 1'8" x 4'0", including cutting and pinning lugs to brickwork, bedding frames and pointing in mastic one side each 10/10½ bitto, 3' 3" x 4'0" ditto each 10/10½ bitto, 3' 3" x 4'0" ditto each 10/10½ bitto, 3' 3" x 4'0" ditto each 10/10½ bitto, 5' 6" x 4'0" ditto each 10/10½ bitto, 6' 6" x 4'0" ditto each 10/10½ bitt	Extra for internal fair face and flush pointing Horizontal damp-proof course of two	per yard sup	er l	1-
lapped at joints	pointing	per foot sup	er 3	3/4
Ditto, 6' 6" × 4' 0" ditto	lapped at joints Fixing only metal window, size 1'8" × 4'0", including cutting and pinning lugs to brickwork, bedding frame	per foot sup		
Partitions Partitions Partitions Partitions Partition Partitions Partition	and pointing in mastic one side Ditto, $3' 3'' \times 4' 0''$ ditto			
Breeze concrete solid partition blocks to B.S. 492 and setting in coment mortar Hollow clay partition blocks to B.S. 1190, keyed on both sides and ditto per yard super 7/10 8/7½ 10/- 12/8 19/10½ 12/- 12/8 19/10½ 12/- 19/10	Ditto, 6' 6" × 4' 0" ditto	. еа		
Hollow clay partition blocks to B.S. 1190, keyed on both sides and ditto per yard super 7/10 8/7½ 9/10½ 12/— Moler hollow partition blocks, keyed on both sides and ditto per yard super 12/3 15/4½ 17/4 19/7 Facings White glazed facings p.c. 1,140/— M for stretchers 1,125/9-M for faoings as described, and pointing with a neat weathered joint:— To solid wall in Flemish bond with snapped headers per yard super 12/3 14/— 69/9 Per yard super 11/10½ 13/6 — Half brick wall in facings in stretcher bond but is fair and pointed one side with a neat weathered joint per yard super 11/10½ 13/6 — Per yard super 11/10½ 13/6 — Per yard super 22/4 23/8 — Per yard super 41/10 44/5 — Per yard super 42/7 45/2 — Per yard super 5/2 2/8 — Per yard super 5/3 25/9 ASPHALTER Tanking To B.S. To B.S. 1097 To B.S. To B.S. 988 1162	Breeze concrete solid parti- tion blocks to B.S. 492 and	2"		
both sides and ditto partition blocks, keyed on both sides and ditto per yard super 7/10 8/7½ 9/10½ 12/— Moler hollow partition blocks, keyed on both sides and ditto per yard super 12/3 15/4½ 17/4 19/7 Facings White glazed facings p.c. 1,140/— M for stretchers 1,125/9 M for facings as described, and pointing with a neat weathered joint:— To solid wall in Flemish bond To cavity wall in stretcher bond To ditto in Flemish bond with snapped headers.— Half brick wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint per yard super 10/— 11/4 55/10 Ditto pointed both sides per yard super 11/10½ 13/6 Ditto pointed both sides per yard super 22/4 23/8 per yard super 23/3 24/6 Ditto pointed both sides per yard super 42/7 45/2 per yard super 42/7 45/2 Brick on end flat arch in facings 14/* on soffite and 9" high and pointing per yard super 42/7 45/2 per yard super 10/— 11/4 55/10 ASPHALTER Tanking To B.S. To B.S. 1097 1418 Horizontal asphalt tanking in three thicknesses on brick or concrete per yard super 19/5 29/5 Roofing To B.S. To B.S. 1098 1162	Hollow clay partition blocks	d super 7/5	8/7½ 10/	- 12/8
Facings Facings White glazed facings p.c. 1,140/- M for stretchers 1,125/9-M Extra over common brickwork built with bricks p.c. 96/-M for facings as described, and pointing with a neat weathered joint:— To solid wall in Flemish bond To cavity wall in stretcher bond with snapped headers Half brick wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint Ditto pointed both sides Ditto pointed both sides Ditto pointed both sides Brick on end flat arch in facings 44 on soffite and 9 high and pointing Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle filets and pointing per foot run 4/5½ 4/7 ASPHALTER Tanking To B.S.	both sides and ditto per yar Moler hollow partition	d super 7/10	8/71 9/1	
White glazed facings p.c. 1,140/— M for stretchers built with bricks p.c. 96/—M for facings as described, and pointing with a neat weathered joint:— To solid wall in Flemish bond To cavity wall in stretcher bond with snapped headers — Half brick wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint — Ditto pointed both sides — per yard super 11/10½ 13/6 — Half ar and pointed one side with a neat weathered joint — per yard super 22/4 23/8 — per yard super 22/4 23/8 — per yard super 23/3 24/6 — Ditto pointed both sides — per yard super 42/7 45/2 — per yard super 42/7 45/2 — per yard super 42/7 45/2 — per foot run 2/7 2/8 — Per foot run 4/5½ 4/7 — ASPHALTER Tanking To B.S. To B.S. To B.S. 76 B.S. 76 B.S. 79 B.S. 76 B.S. 79 B.S. 76 B.S. 78 B.S. 76 B.S. 78 B.S. 76 B.S. 78 B.S. 76 B.S. 78 B	and ditto per yar		15/41 17/	
To solid wall in Flemish bond To cavity wall in stretcher bond	Extra over common brickwork built with bricks p.c. 96/-M for facings as described, and pointing with a neat weath-	Or fr p.c 209	s 1 rdinary fo acings, a . p.c. i	glazed cings p.c., 140/- M for tretchers ,125/9-M r headers and point- ing with white
To ditto in Flemish bond with snapped headers Half brick wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint per yard super 22/4 23/8 Ditto pointed both sides per yard super 23/3 24/6 Ditto pointed both sides per yard super 23/3 24/6 Ditto pointed both sides per yard super 42/7 45/2 Per foot run 2/7 2/8 Per foot run 2/7 2/8 Per foot run 4/5½ 4/7 Per foot run 4/5½ 4/7 ASPHALTER Tanking To B.S. To B.S. 1097 1418 Horizontal asphalt tanking in three thicknesses on brick or concrete per yard super 15/3 25/9 Per yard super 15/3 25/9 Per yard super 15/8 29/5 Roofing To B.S. To B.S. 1162	To solid wall in Flemish bond per y To cavity wall in stretcher	yard super 12/	3 14/-	
with snapped headers	To ditto in Flemish bond	yard super 10/	- 11/4	55/10
weathered joint per yard super 22/4 23/8 — Ditto pointed both sides per yard super 23/3 24/6 — One brick wall in facings built fair and pointed one side per yard super 41/10 44/5 — Ditto pointed both sides per yard super 41/10 44/5 — Brick on end flat arch in facings 4½ on soffite and 9° high and pointing per yard super 42/7 45/2 — Brick on edge coping to 9° wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing per foot run 4/5½ 4/7 — ASPHALTER Tanking To B.S. To B.S. 1097 1418 Horizontal asphalt tanking in three thicknesses on brick or concrete per yard super 15/3 25/9 Vertical ditto per yard super 22/4 23/8 — Per yard super 41/10 44/5 — Per yard super 42/7 45/2 — Brick on edge coping to 9° wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing per foot run 4/5½ 4/7 — ASPHALTER To B.S. To B.S. 1097 1418 To B.S. To B.S. 70 B.S. 1097 1418	with snapped headers per ; Half brick wall in facings in stretcher bond built fair and	yard super 11	101 13/6	-
fair and pointed one side per yard super 41/10 44/5 Brick on end flat arch in facings 4½" on soffite and 9" high and pointing per foot run 2/7 2/8 Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing per foot run 4/5½ 4/7	weathered joint per y Ditto pointed both sides per	yard super 22/ yard super 23/	4 23/8 3 24/6	=
pointing pointing per foot run 2/7 2/8 — Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing per foot run 4/5½ 4/7 — ASPHALTER Tanking To B.S. To B.S. 1097 1418 Horizontal asphalt tanking in three thicknesses on brick or concrete per yard super 15/3 25/9 Vertical ditto per yard super 15/3 29/5 Roofing To B.S. To B.S. 988 1162	fair and pointed one side per Ditto pointed both sides per Brick on end flat arch in facings	yard super 41/ yard super 42/	10 44/5 17 45/2	_
ASPHALTER Tanking To B.S. To B.S. 1097 1418 Horizontal asphalt tanking in three thicknesses on brick or concrete per yard super brick or concrete per yard super left 29/5 29/5 Roofing To B.S. To B.S. 70 B.S. 988 1162	pointing Brick on edge coping to 9" wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and			_
To B.S. To B.S. 1097 1418 Horizontal asphalt tanking in three thicknesses on brick or concrete per yard super thicknesses on brick or concrete per yard super thicknesses on brick or concrete per yard super thicknesses on the super thicknesses the super thicknesses on the super thicknesses the super th	ASPHALTER		-2 -1.	
Horizontal asphalt tanking in three thicknesses on brick or concrete per yard super 15/3 25/9 Vertical ditto per yard super 19/5 29/5 Roofing To B.S. To B.S. 988 1162	Tan	king		
To B.S. To B.S. 988 1162	thicknesses on brick or concrete .	per yard su	per 15/3	25/9
* asphalt flat in two thicknesses on			To B.S	To B.S.
				19/2

ASPHALTER—(continued)
To B.S. To B.S.
988 1162 2" asphalt skirting 6" high with angle
fillet at bottom and rounded top, turned into groove per foot run 1/11½ 2/5½ % asphalt fascia 6" high with solid
water check roll at top and under- cut drip at bottom per foot run 2/8½ 3/3
DRAINLAYER Trenches and Beds
N.B.—The following prices are applicable to hand excavation in heavy
soil, only requiring planking and strutting for depths of 3' or more. Excavate trenches for 4"-9" pipes, including planking and strutting, filling in and ram- ming, and wheeling and spreading surplus:—
For each 12" in depth, for trenches not exceeding 3' 0" deep per yard run 2/8
Ditto for trenches exceeding 3' 0" and not exceeding 5' 0" deep per yard run 4/-1
Ditto for trenches exceeding 5' 0" and not exceeding 10' 0" deep per yard run 6/5
6" concrete (1:3:6) bed and benching 4" 6"
for pipes per yard run 7/9 9/1 6" ditto, and surround per yard run 12/8 15/3
Drains 3" 4" 6"
Clayware butt-jointed land drains and laving in trench per foot run -/4 -/41 -/8
"Seconds" quality glazed stoneware socketed drains 4" 6" 9"
and laying and jointing in trench per foot run 1/10 2/61 4/3
trench
Extra on "Seconds" qual-
Ditto "British Standard"
Extra on "Seconds" quality
for single junction each 3/6 5/1½ 8/7 Ditto "British Standard"
quality ditto each 4/2 6/- 10/1 Cast iron socketed drains to
B.S. 437 and laying and jointing in trench per foot run 9/6 14/6 28/4
Extra for short radius bend (Fig. No. 4) each 19/- 37/7 105/9
Extra for single junction (Fig. No. 18) each 34/8 67/4 186/10
Fittings, etc. 4" 6"
Glazed stoneware trapped gulley with galvan- ized grating and outlet and setting in concrete each 19/3 31/6
Ditto with vertical inlet ditto each 22/11 35/2 Cast iron trapped gulley with high invert, grat-
ing, and 4° outlet and setting in concrete each 42/— — Ditto with vertical inlet ditto each 51/6 — Glazed stoneware intercepting trap with inspec-
tion arm, stopper and chain and fixing in manhole and jointing to drain each 69/- 78/6 Brown glazed stoneware half round straight
channels and bedding and jointing in cement mortar per foot run $1/7$ $2/5$ Ditto ordinary channel bend and ditto each $4/10$ $6/9\frac{1}{2}$
Cast iron coated single seal manhole cover and frame to B.S. 497 Grade C and setting frame 24"×18" 24"×24"
in cement and cover in grease each 39/7 55/- Galvanized ditto each 67/9 98/6
PAVIOR
Cement and sand (1:3) floated screed to receive pavings per yard super $\frac{3}{4}$ " 1" $1\frac{1}{4}$ " Ditto trowelled smooth to receive
linoleum per yard super 3/2 3/10 4/6 Cement and sand (1:3) paving trowelled hard and smooth per yard super 3/2 3/10 4/6
Granolithic paving $(1:2\frac{1}{2})$ laid on 1" $1\frac{1}{4}$ " $1\frac{1}{2}$ " concrete per 2/3 5/11 6/7\frac{1}{2} 4" Red composition paving to B.S. 776 laid on
prepared screed
aggregate) laid on prepared screed per yard super 34/1½ Extra for white or cream cement per yard super 5/3
$\frac{1}{4}$ " Rubber flooring in all colours, laid on prepared screed per yard super 48/10 $\frac{1}{4}$ " \times 12" \times 12" Rubber tile flooring ditto per yard super 38/3
\$ ~ 10 ~ 10 minutes and morning crease her laws only and



On July 5th ...

the De La Rue Exhibition opens. Unique in the scope of its interest, it will

tell the story of our organisation from the birth of the Founder in 1793. The exhibits—many of them are of great value—include early postage stamps and banknotes, rare packs of playing cards, books printed in gold. Their interest today ranges from some of the earliest fountain pens to modern gas appliances and the use of plastics in such widely different fields as cocktail bars, blood transfusion and the artificial insemination of cattle. Admission is by ticket only, and as we desire to make your visit both pleasant and memorable, we shall be glad if you will let us know which day and time is most convenient for you.

· · · De La Rue EXHIBITION

July 5th-July 19th, 10a.m. to 8p.m. 26 Conduit Street, London, W.1

Please send your application for tickets to:

THOMAS DE LA RUE & CO. LTD., 84/86 REGENT STREET, LONDON, W,1

B.S.

2/5}
3/3

heavy

2/8

4/-1 6/5

9/1 15/3 6"

-/8 9" 4/3

5/-7/2 8/9

8/7 10/1 28/4

05/9 86/10

6" 31/6 35/2

78/6

2/5 6/9½ "×24" 55/-

55/-98/6

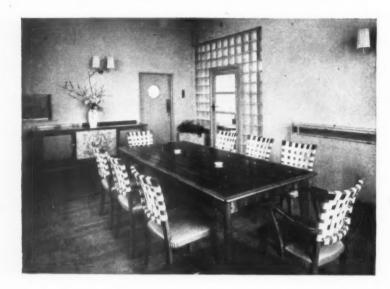
11" 4/2 4/6 1 4/61

1½" 6/7½ 15/9

34/11 5/3

48/10 38/3

STORY-DESIGNED CONTEMPORARY FURNITURE AND FURNISHINGS





We illustrate a Director's Dining Room and an ante-room with built-in drink cupboard at the recent extension of Mander Bros., Ltd., Heath Town, Wolverhampton.

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6" × 2½" (]

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Designed by the Story Design Group in collaboration with Architects: S. N. Cooke & Partner F.F. & A.R.I.B.A.

This furniture is made to the highest standards of workmanship to suit the requirements of the Architect and his Client — the wood used being Australian Blackwood and the door panels with an introduction of colour ful leathers.

Besides our series-produced furnitur, without purchase tax such as "Unad," "Hepple," etc., there is a large and continuous production of top grade furniture and complete interiors for Board Rooms, Directors' Offices, etc. made to Architects' designs or from designs submitted by us to suit the Architect's requirements.

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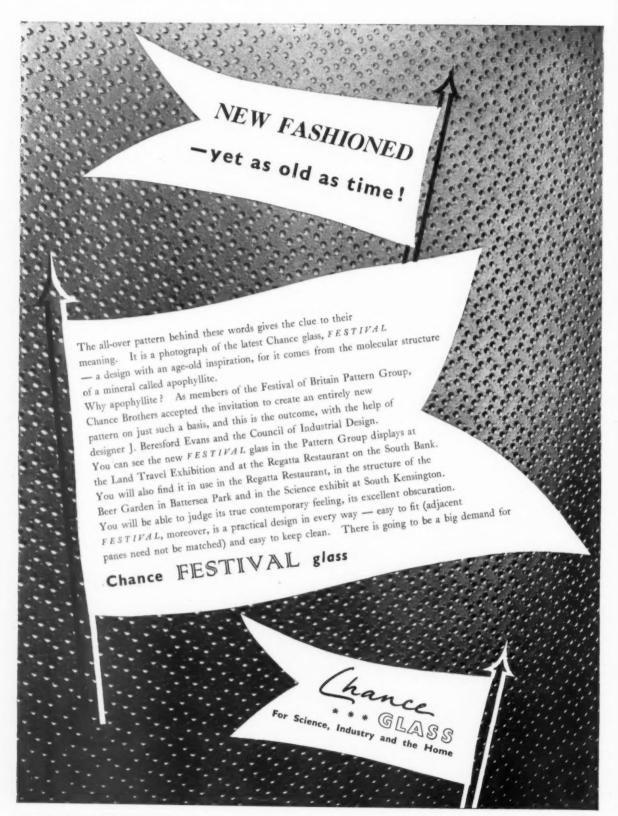
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825

PAVIOR—(continued)		- 1	CARPENTER—(continued)
" × 12" × 12" Cork tile flooring (bro shades) laid in mastic on prepared screen	eed,	40/0	Ditto and framing in ridge per foot cube 20/10 Ditto in hip and valley rafters including cutting
surfaced and polished Hard red paving bricks p.c. 309/6 per	M.		rafters to sizes per foot cube 22/10
laid flat on prepared bed in cement morta Ditto laid herringbone 8 Red quarry tile paving to B.S.	r per yard super per yard super	18/8 20/4	Battening and Boarding Roof Vertical
× 6" Red quarry tile paving to B.S. 1286 laid on prepared screed with	\$"	Z."	1" × 11" Battens nailed to softwood for slopes hanging
straight joints p	er yard super 19/7	21/101	$20'' \times 10''$ slates to $8\frac{1}{2}''$ gauge per square $29/11$ $31/6$ Ditto $16'' \times 10''$ slates to $6\frac{1}{2}''$ gauge per square $37/10$ $39/11$
× 6" Buff quarry tiles as last pe	er yard super 21/4	24/6	Ditto $10\frac{1}{2}'' \times 6''$ tiles to $4''$ gauge $(4\frac{1}{2}'')$ for vertical hanging) per square $60/4$ $57/9$
(Finished) Gravel path laid on pre- pared bed, well watered and rolled to cambers and falls pe	er yard super 2/-	. 1	Roof Slopes Mansards
MASON	er yaru super 2/	*	Ditto $14\frac{1}{4}$ " \times 10° pantiles to 12" gauge per square 21/- 21/6 Ditto 15 " \times 9" concrete interlocking
ortland stone and all labours in pilast	ters,		tiles to 12" gauge per square 21/- 21/6 Roof boarding in batten widths close
quoins, jambs, lintols, etc. hitto in arches, columns, cornices, etc. shlar av. 6½" on bed with plain dressed fac	per foot cube	47/6 19/6	jointed and fixed to flat or sloping roofs Ditto tongued and grooved and prepared for felt roofing including firring
Portland stone or artificial stone to	Port- land	Arti- ficial	to falls per square $181/6$ $217/9$ Sawn gang boarding fixed to joists in roof per foot super $1/4$ $1/9$
B.S. 1217:— $4^* \times 4^*$ Sill, sunk, weathered, throated			Wrot and crosstongued eaves soffite per foot super 2/- 2/5 6" Wrot and grooved eaves fascia
and grooved for water bar, set and jointed in cement mortar	per foot run 6/6	3/101	planted on per foot run -/10½ 1/1
$7^{\prime} \times 3^{\prime\prime}$ ditto	per foot run 7/7	5/6	Wall and Ceiling Boards
throated, set and jointed as last	per foot run 7/- per foot run 9/9	5/- 7/5	4" Fibre board to B.S. 1142 fixed with galvanized flat headed nails to soft-
5" × 12" Saddle back coping twice throated, set and jointed as last	per foot run 16/3	11/5	wood per yard super 5/7 6/3
6" × 12" Ditto	per foot run 17/10		B.S. 690 fixed as last per yard super 5/- 5/4 2" Ditto per yard super 6/- 6/4
SLATER, TILER AND ROOFI Slates	ER		
	$20'' \times 10''$	16"×8"	JOINER Floors and Skirtings
Best Bangor slates to B.S. 680 laid with 3" lap, each slate nailed with two			(All thicknesses stated are nominal)
stout copper nails Ditto hung vertically to dormer cheeks	per square 228/4	216/3	Plain edge softwood flooring in batten widths nailed to floor joists per square 152/- 170/- 206/3
and gables Tiles.	per square 236/3	226/9	Tongued and grooved ditto per square 168/- 180/3 218/- 1" Double grooved and tongued and grooved wood block floor
	Hand		laid herringbone with two-block border, set in hot mastic composition on prepared screed and wax polished:—
Best sand faced plain (nibbed) tiles to B.S. 402 , $10\frac{1}{2}'' \times 6''$ laid to a $4''$ gauge	made	made	Swedish softwood per vard super 26/3
with each tile in every fourth course nailed with galvanized nails	per square 155/5	147/-	European Beech per yard super 33/9 English Oak per yard super 46/3
Ditto hung vertically to dormer cheeks and gables to 4½" gauge with each tile	1		European Oak per yard super 41/- Burma Teak per vard super 46/9
nailed with galvanized nails		141/9	Burma Teak
Berkshire hand made sand faced red par $14\frac{1}{2}$ " \times 10" laid to $2\frac{1}{2}$ " head and $1\frac{1}{2}$ " side	laps,		sectional area) per foot run $-/2\frac{1}{2}$ $-/2\frac{1}{2}$ Extra for grounds plugged to brickwork per foot run $-/6$
each tile in every third course nailed galvanized nails Ditto to mansard slopes			
Ditto to mansard slopes Concrete plain (nibbed) tiles to B.S. 473.	101" per square	157/6	Windows in Softwood Rebated and molded softwood fanlights
Concrete plain (nibbed) tiles to B.S. 473, × 6" laid as before described for plain ti Ditto hung vertically to dormer cheeks,	les per square	89/3	and casement sashes divided into squares for glass per foot super $2/9$ $3/-$
gables, ditto	per square	91/10	Extra for hanging each 6/1 6/1
Concrete interlocking tiles 15" × 9" laid lap, each tile in every third course nailed	with	m 0/2	Cased frames with 6" × 3" Oak sill and 2" molded double hung sashes including
galvanized nails Ditto to mansard slopes ditto	per square		pulleys, line and weights per foot super — 9/9 N.B.—The above prices are for purpose made joinery. Standar
Asbestos Cemet 6" Corrugated asbestos cement sheeting	ent		pattern casement windows and double hung sashes and frames t B.S. 644 are cheaper.
to wood roofs with galvanized drive se	crows		Doors in Softwood
and washers with a side lap of 1½ corruga and an end lap of 6"	per square		Framed ledged and braced doors
6" Ditto but fixed vertically Add to both last if fixed to steel purli	per square	84/-	filled in with 1" T. & G. and V- jointed boarding and hanging per foot super $4/7$ $5/6$ $5/6$
sheeting rails with galvanized hook bol- Felt		2/11	Four-panel door, square both sides and hanging per foot super 3/5 4/1 4/1
Reinforced bituminous roofing felt laid w			Ditto molded one side per foot super 3/8 4/4 4/4
laps and nailed to rafters at 18" centres galvanized clout nails	per square		Ditto molded both sides per foot super 3/11½ 4/7 4/7 N.B.—The above prices are for purpose made doors. Standar
One-ply bitumen felt to B.S. 989 laid on concrete. Each layer bedded in hot	Two layer	layer	panelled doors to B.S. 459 are cheaper. 1½" Standard flush doors 2' $6'' \times 6'$ 6", internal pattern each 97 2" Ditto external pattern each 106
	per yard super 1/-	9/5	Linings, Frames, etc., in Softwood
bitumen			0.11
CARPENTER Carcassing			
CARPENTER Carcassing Softwood, sawn and fixed, in plates, sl	leeper	17/11	Window and door linings etc. (per inch in sectional area) per foot run -/3½ -/3
CARPENTER Carcassing	per foot cube	19/6	Window and door linings etc. (per inch Up to 6" 6" to 1:



JOIN 6" Wi

9" Dit

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CHANCE BROTHERS LIMITED, GLASSMAKERS SINCE 1824.

Head Office: Glass Works, Smethwick 40, Birmingham. Telephone: West Bromwich 1051. London Office: 28 St. James's Square, London, S.W.1. Telephone: Whitehall 1603. Branch Works at Glasgow, St. Helens and Malvern.

	THE ARCHITEC	ets' Jou	RNAL f
JOINER-(continued)			
6" Window boards with rounded nos-		Thickne	88
ings, tongued at back and including		Thicknet 1" 2/7	11,"
bearers	per foot run	$\frac{2}{7}$ $\frac{2}{11}$	2/10
		2/11	3/25
Shelving and Fitti Shelving of 2" slats spaced 1" apart or	ngs in Softwood	1"	1"
bearers (measured separately)		2/11	2/8
Shelving on ditto	per foot super	2/21	2/9
Crosstongued shelving on ditto	per foot super	2/9	3/41
Shelving 9" wide on ditto 2" Shelf bearers plugged to walls	Care Care A and a	1/9 -/11	$\frac{2}{1}$
The following in framed up cupboard		-/11	1/1
T. & G. & V-jointed back Crosstongued top, bottom shelf or	per foot super	2/-	2/5
Crosstongued top, bottom shelf or		0/10	0.1=
division 14" Flush cupboard doors	per foot super	2/10	3/5
ll' Flush cupboard doors Labour rebate or groove	per foot super	-/2	3
Ditto cross-grain	per foot run	-/4	
Labour rebate or groove Ditto cross-grain 1' × 2" Bearers screwed on N.R. The above prices are for	per foot run	-/5	<u>}</u>
N.B.—The above prices are for Standard pattern kitchen fittings to	pur pose-made cu	poblaru II	ttings.
beautiful passorii aisclion nonige so	D.15. 1180 are ence	aper.	
IRONMONGERY			
MOHMOHOEKI		Soft- I	Hard-
			wood
3' Steel butts (medium quality)	per pair	1/1	1/1
4' Ditto (ditto)	per pair	1/74	$1/7\frac{1}{2}$
Double action floor springs and top including filling boxes with oil P.0	COHECE	146/- 1	51/2
Overhead check action door aprings 1	P C 60/6 onch		79/6
6" Barrel bolts. P.C. 6/- Cupboard locks. P.C. 6/4	each	8/-	8/6
Cupboard looks. P.C. 6/4 Norfolk latches. P.C. 5/- Cylinder night latch. P.C. 13/3 Mortice latch. P.C. 7/9 Rim look. P.C. 8/4 Mortice look. P.C. 8/4	each	9/11	10/10
Cylinder night latch, P.C. 13/3	each		10/8 21/1
Cylinder night latch. P.C. 13/3 Mortice latch. P.C. 7/9	. each		13/9
Rim lock. P.C. 8/4	each	12/1	13/1
10.12/0			20/5
Deor furniture. P.C. 17/8 Sash fasteners. P.C. 6/11			20/9 9/9
Casement fasteners. P.C. 6/1	an al-		8/3
Casement stays. P.C. 8/10			11/3
The following prices are for Bas only. Prices for other sections vary of the steel ex mills—see "Curren R.S.J.—in steel framed structures he complete Riveted compound girders including rivets R.S. Stanchions including caps, base	ic sections (5" × roughly in proport Market Prices o sisted and fixed mp plates and	rtion to the f Materials £ er ton 48 er ton 53	e price s." s. d.
Riveted compound stanchions ditto Riveted roof trusses with flat and a plates, cleats, etc., 30' span	ngle members.	er ton 56	14 0
Ditto 40' span			14 0
Sund	-		
Simple wrot iron balustrades fi	xed complete		
(excluding mortices etc.) Bolts with heads, nuts and washers	pe	er cwt. 9	1 0
Bolts with heads, nuts and washers	and hxing pe	er cwt. 10	7 0
PLASTERER AND TILE I	FIXER		
24 gauge expanded metal lathing an	d fixing to		
softwood soffites	per ya	rd super	5/1
Lime and Gy	poum Plaster		
Three coat lime and two coat Similar Gypsum plaster:— On brick walls and partitions On concrete soffites including had On soffite of E.M.L. (measured	irapite or per yard sup- king per yard sup-	Lime S or 5/3 or 6/4	Sirapite 4/1 5/8
on and including wood laths, to so	mer yard sup offites per yard sup softwood	er 5/4 er 8/5	6/2
soffites, in accordance with man	ulacturer's		
instructions, scrimmed and fini setting coat of suitable plaster	shed with	rd super	6/2
Plaster moulded cornice or cove (per inch in	a super	0/2
girth) Cement I	per	foot run	$-/4\frac{1}{2}$
Rendering in Portland cement and			
and setting in Keenes cement on	brick walls		
Portland cement and sand (1:3)	per ya	ird super	5/1
trowelled smooth on ditto	piain face	rd super	4/8
Portland coment and sand (1:3)	screed for	-	2/6
	por ye	ar a parion,	2/0

PLASTERER AND TILE FIXER—(continued)

 $6'' \times 6'' \times \frac{3}{4}''$ Standard quality white glazed wall tiles set and jointed on prepared screed per yard super 36/9 Ditto eggshell matt or glossy glazed enamelled per yard super 46/6

EXTERNAL PLUMBER AND COPPERSMITH AND ZINCWORKER

ZINCWORRER		Flats	Gutters, flash- ings, etc.	flash-
Milled sheet lead and labour	per cwt.	226/-	226/-	234/-
24 S.W.G. sheet copper and labour	per foot super	4/10	5/1	5/4
23 S.W.G. sheet copper and labour	per foot super	5/1	5/6	5/9
14 gauge zinc and labour	per foot super	3/4	3/7	3/10

Rainwater Pines and Gutters

pes uni	a cri	utters			
		3	,	4	,
	1	holder-	nails	holder-	nails
r foot 1	run	4/8	3/9		
		24	G.	20	
foot r	un	3/3	2/8	4/6	3/10
			l.		
r foot 1	run	2/2	_	2/11	-
		4	,	6	W
		1"	18"	1"	16"
r foot 1	run	2/1	2/10	3/6	4/3
r foot 1	run	2/7	3/6	3/9	5/3
r foot r	run	2/3	3	3/	1
r foot 1	run	2/8	3	3/0	6
r foot r	enn	2/-		3/	1
	r foot	r foot run	With holder-bats r foot run 4/8 24 r foot run 3/3 r foot run 2/2 r foot run 2/1 r foot run 2/7 r foot run 2/8 r foot run 2/8 r foot run 2/8 r foot run 2/8	With With holder nails bats r foot run 4/8 3/9 24 G. r foot run 3/3 2/8 r foot run 2/2 4 r foot run 2/1 2/10	3" With With With holder-nails holder-bats bats r foot run 4/8 3/9 5/9 24 G. 26 r foot run 2/2 — 2/11 4" 6 r foot run 2/1 2/10 3/6 r foot run 2/7 3/6 3/9 r foot run 2/3 3/6 3/9 r foot run 2/3 3/6 r foot run 2/8 3/6

Soil and Ventilating Pipes

Lead soil, waste and ventilat- ing pipes (17 lb. per yard for 3" and 22 · 8 lb. per yard for 4" diameter) fixed to walls with	per foot rur	3 12/	r K	4	/3
lead tacks and brass screws	per root rur	1 12/	U		10
Medium or heavy section cast iron soil, waste and ventilat- ing pipes with caulked joints,		Heavy	ium	Heavy	ium
fixed to walls, with pipe nails and distance pieces	per foot run	4/10	4/5	$6/-\frac{1}{8}$	6/-

INTERNAL PLUMBER

Lead Pipes
Prices are based upon the following weights per yard.

				1"	3"	1"	11"
				ĨЬ.	ĨЪ.	lb.	lb.
Supply				7	11	16	21
Distributing		****		6	9	12.5	16
Flushing and overflow		****		3	5	7	9
Waste and ventilating		****		_		_	7
Supply pipe in trench (r	nen-			1"	3"	1"	11"
sured separately)		per foot	run	4/5	6/10	9/9	12/9
Ditto fixed to walls and ceil					7/3	10/6	14/-
Distributing pipe fixed to w	ralls	•					
and ceilings		per foot	run	4/3	6/3	8/6	11/1
Flushing and overflow pipe	ditto	per foot	run	3/-	3/11	5/4	7/2
Waste and ventilating pipe	ditto	per foot	run	-	-		5/10
Joints to fittings		. (each	5/8	6/10	7/2	8/5
Bends			ach	1/-1	1/-1	1/3	1/7
Branch joints		(ach	6/6	7/11	8/6	9/9

Steel Tu	ibes and Fittin	ngs			
Galvanised steel tubes to B.S. 1387 Class C with screwed joints in red lead as supply pipe laid in trench (meas- ured separately) Ditto Class B ditto fixed to	per foot run	1/81	2/1	2/2	2/11
walls and ceilings as supply, distributing, waste pipe, etc. Joints to fittings Bends Tee, equal or reducing	per foot run each each	$\frac{3}{8}$ $\frac{2}{2}$	2/1 4/6 2/6 2/8	2/2 5/3 3/4 3/2	2/9 6/3 5/- 3/4

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The Board Room, Glen Line Ltd., London, showing the furniture designed and made by Heal's Contracts Ltd. The table is Australian walnut and the chairs are covered in hide. The carpet is a green Wilton.

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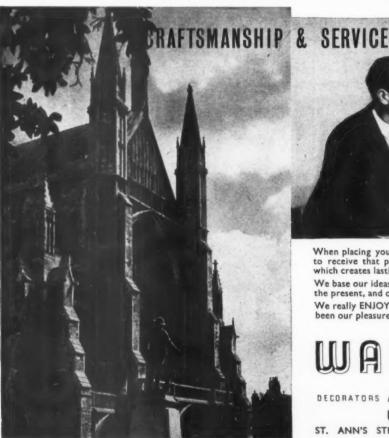
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1" Georgian wired polished plate and
ditto
1" Polished plate (glazing quality) and
ditto
PAINTER
Whitening, Distemper and I
Prepare and twice whiten plastered walls
Prepare and twice distemper with wash
Prepare and twice distemper with wash
distemper on plastered walls and ceiling
Ditto on brick or concrete
Prepare, prime, and paint two coats oil co
on plastered walls and ceilings
Paint on Meta
Prepare, prime, and paint one coat oil
Ditto balustrades one side p Ditto bars, etc., not exceeding 6" girth
Ditto small pipe
Ditto large pipe
Paint on Woo
1 41111 011 11 000
Knot, prime, stop and paint one coat
oil colour on general surfaces of wood-
work F
Ditto on skirtings, rails, frames, etc.,
not exceeding 3" girth
Ditto ditto for each additional 3" in girth
Ditto on sash squares one side
Ditto on large sash squares one side
Stain and Varnish of
Prepare, size, stain and twice varnish
general surfaces of woodwork
Ditto on skirtings, rails, frames, etc. not exc
ing 3" girth
Ditto ditto for each additional 3" in girth

	To	
1" Georgian wired polished plate and	wood	metal
ditto per foot super	4/10	4/11
I" Polished plate (glazing quality) and ditto per foot super	4/61	4/8
PAINTER		
Whitening, Distemper and Paint on Walls		
Prepare and twice whiten plastered walls and		
ceilings per yard Prepare and twice distemper with washable	super	1/-
distemper on plastered walls and ceilings per yard	super	1/6
Ditto on brick or concrete per yard	l super	2/-
Prepare, prime, and paint two coats oil colour on plastered walls and ceilings per yard Paint on Metal	l super	4/3
2 time on metal		Add for
	Basic	each ad-
	price	ditional
Prepare, prime, and paint one coat oil	a 10	coat
colour on general surfaces per yard super	2/9	$1/2\frac{1}{2}$
Ditto metal casements per yard super Ditto members of roof trusses per yard super Ditto balustrades one side per yard super Ditto bars, etc., not exceeding 6" girth per yard run	2/22	1/91
Ditto members of roof trusses per yard super	4/91	1/6 1/94
Ditto bars etc. not exceeding 6" girth per yard run	-/81	$-/3\frac{1}{8}$
Ditto small nine ner vard run	-/81	$-/3\frac{1}{2}$
Ditto small pipe per yard run Ditto large pipe per yard run Paint on Wood	1/5	$- 7\frac{1}{2}$
		Add for
	Basic	each ad
Knot, prime, stop and paint one coat oil colour on general surfaces of wood-	price	ditional
work per yard super Ditto on skirtings, rails, frames, etc.,	3/1	1/21
not exceeding 3" girth per yard run Ditto ditto for each additional 3" in girth per yard run	$-/4\frac{1}{2}$	-/12
Ditto ditto for each additional 3" in girth per yard run	-/4	$-/1\frac{1}{2}$
Ditto on sash squares one side per dozen Ditto on large sash squares one side per dozen	3/11	1/6
Ditto on large sash squares one side per dozen Stain and Varnish on Wood	7/-	$2/8\frac{1}{2}$
Prepare, size, stain and twice varnish on general surfaces of woodwork per yard	l super	3/1
Ditto on skirtings, rails, frames, etc. not exceed-	-d	15
ing 3" girth per ya	rd run	-/0

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.

INFORMATION CENTRE

8.26 surveying and specification ESTIMATING

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How to Estimate. John T. Rea. (1) Batsford Ltd., 1951, 11th edition, 21s.)

Eleventh edition, including cost adaptation tables and percentages from 1936 to 1950.

From 1902 until 1937 "How to Estimate" rightly enjoyed a very high reputation as a comprehensive work on the analysis of builders' prices, although, towards the end of this period, some of the illustrations, such as those of incandescent burners and speaking tubes, gave it a slightly old-fashioned air. Since then the prices have not been revised

and remain as at 1936/37.

In this, the eleventh edition, "important corrections" have been made to the first three introductory chapters but the correc-tions do not go so far as to bring the prices per ft. cube up to date. The main feature of this edition consists of cost adaptation tables and percentages, covering rates of

wages and the prices of about forty different

materials, from 1936 to 1950.

Despite the high reputation of the editor and the publishers, it is difficult to see how the very meagre amount of really up-to-date information can make the present volume worthy of the price asked.

10.83 design: building types

CHURCH DESIGN

Church Design. Alan G. Fudge. Epworth Press. 1950. 4s.)

Fifty pp. Architectural approach. Some plan requirements for church and ancillary buildings. Noise and acoustics.

The author is an architect and commences this small book with a brief discussion on architectural approach to new church building. This is clearly aimed at breaking down the attitude of negative conservatism encountered among some church building

committees.
On "planning" the author gives some useful information on dimensions of seating, The chapter dealing with Sunday school organization may not apply to all organizations but gives suggestions which may raise useful ideas for discussion between architect and clients

The chapters on noise and acoustics are of some value but hardly go far enough to be a complete study of the subjects and, in any case, quite adequate treatments are avail-

able in the recognized textbooks.

There is something for both architect and interested layman in this book but it leaves one with a slight impression that it falls between the two. However, the factual information forms a useful reference for the

12,49 materials: metal **ALUMINIUM SECTIONS**

Aluminium and Aluminium Alloy Sections. BS 1161:1951. (British Standards Institu-

per yard run -/41

Revision of 1944 Standard. Covers additional sizes. Does not include the large sizes which some manufacturers can supply.

13.68 materials : timber FLOORING

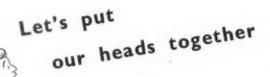
Resistance to Wear of Kwao as Flooring. F. H. Armstrong. (Wood. March, 1951.) First of series of articles giving result of FPRL tests on wearing properties of unfamiliar woods. Useful.

15.87 materials: finishes FLOOR FINISHES

Floor Finishes. F. C. Journal. March, 1951.) C. Harper. (RIBA

BRS work on floor finishes. Largely description of development of test methods.

Although not the kind of paper which gives immediate answers to the architect's many problems about floor finishes, this is a deproblems about floor finishes, this is a description of a most important aspect of research—the development of test methods. It deals especially with the difficulties encountered in finding a satisfactory method of testing floors for resistance to wear and it should be noted that with present test methods the convention results of the company of the methods the comparative results of the same method of test on different types of floor may be very misleading.



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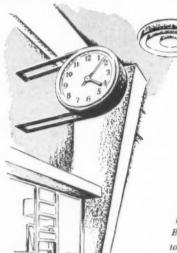
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The Gibson slave clock in the booking hall of the Festival underground station at Waterloo

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Gibson CLOCKS

24.148 lighting HISTORY OF LIGHTING ENGI-NEERING

The Early Years of Illuminating Engineering in Great Britain. J. W. T. Walsh. (Tr. IES. Vol. XVI. No. 3. 1951. p. 49.)

Review of development, chiefly from late 19th century. Interesting.

Count Rumford wrote what was probably the first book on illuminating engineering, but engineering practice really got under way when Trotter gave his paper on measure-ment at the Institution of Civil Engineers, in 1892. In its early years, illuminating engineering was concerned mainly with street

One of the early controversies centred around the question, should standards depend on the output of the source or the intensity on the object? The former was often favoured (e.g. two 16 candle-power lamps for a bedroom 15 ft. × 15 ft.).

The American IES was formed in 1905 and the English in 1909. Among the active early members was P. J. Waldram. At that time a well-known encyclopædia under "Illumination" merely gave the cryptic reference,

From 1909-14 glare was a preoccupation, and the idea of indirect lighting originated about this time in an effort to avoid it. The first lighting code came from this period, and there was a burst of studies of factory lighting in relation to the work of the government Factory Department. Gas lighting was still very common then, and illumination levels fell as low as 1/10 ft. candle.

Waldram published daylight studies as early as 1909 and he and his son J. M. Waldram published the well-known diagram in 1923. By this time the fundamental engineering idea of illumination had been established and the pioneering period came to an end

24.149 lighting DOWNLIGHTING

Characteristics of Downlighting. R. S. McCandless. (Architectural Record [USA] Feb., 1951. p. 142.)

Design of units, spacing, lighting levels, efficiency. Useful, well illustrated.

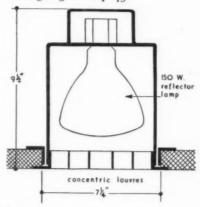
" Downlighting" is the American term for lighting vertically downward through ceiling This can only be used alone for certain purposes, and must be used carefully to avoid excessive contrasts. It can provide, on one hand, dim, dramatic lighting with low power, or, on the other, glittering brilliance. Church and shops are two types of building which the author suggests might have downlighting. Downlight units used in conjunc-tion with indirect or general light may have a wider application.

dozen types of units are described and illustrated, some with baffles, some with louvres, some using spotlight lamps, some using cross-beam reflectors, some with lenses some designed to control the shape of the beam. Ideally, the author says, downlights should be spaced so that at least ten lights give light to each point on the working place. This means having fairly close spacing, because the units must not spread spacing, because the units must not spread their light widely, or they will seem exces-sively bright, for the ceiling gets only reflected light and is, therefore, fairly dark. "Spread" is usually limited to a 90° arc.

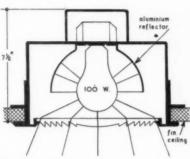
The efficiency of the units is usually low, not greater than 50-60 per cent., and commonly as low as 40 per cent, within the useful arc. The efficiency of optical and pin-spot types of unit is sometimes below 10 per cent.

Colour, access and control are mentioned but no important points are given.

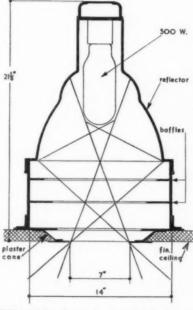
Downlighting-see 24.149.



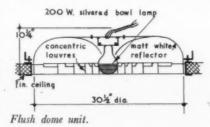
Louvred can.



Flush ceiling plate.



Ellipsoidal reflector in can with baffles.



26.87 services and equipment : miscellaneous FIRE EXTINGUISHING HYDRANTS

Hydrant Systems. Draft BS C of P 402.101: 1950. (British Standards Institution, 2s.)

Draft Code of Practice covering Fire Extinguishing Hydrants in and about buildings,

This Code of Practice will be of use to all who have to provide fixed fire protection equipment in and about buildings. are details of appliances and components (with reference to the appropriate BSS), recommendations as to water supplies and to the selection of the appropriate equipment for a given job, and testing and main-tenance. Reference is also made to the various authorities to whom reference should be made in the planning stage of a hydrant installation. No reference is made to hydrant installations other than for fire-



THE LIBRARY OF INFORMATION SHEETS

CANCELLATIONS

Sheet 28.H1 has been cancelled for revision and should be removed from collections. It will be republished. Sheets 43.E10 and 43.E11 have been cancelled and should be withdrawn from the Library.

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' (BLOCK LETTERS, and list in Yournal." alphabetical order of manufacturers names please).

Please	ask	manufacturers	80	send	further
particul	ars t	0:-			

NAME

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ADDRESS

A.J. 17.5.51

Announcements

Mr. Peter M. Bone, DIP. ARCH., A.R.I.B.A., has moved to Cranford, Portstewart, Co. Londonderry, Northern Ireland.

Messrs. Adamson, Gray and Adamson, M.INST.R.A./A., have moved to 11, Portman Street, Portman Square, W.1.

Mr. Aiden J. Kernan, A.R.I.C.S., will be glad to receive manufacturers' information sheets, catalogues & technical brochures at 15, College Green, Dublin, Eire.

The address of the Norwich district office of the Hotpoint Electric Appliance Com-pany Ltd. is now 22, St. Benedict's Street, Norwich. The telephone number is still Norwich 20863.

The MOW has authorized the following rice MOW has authorized the following price increases following rises in costs:—

Cement, 2s. per ton for Ordinary Portland and Rapid Hardening Cement; Cast Iron Baths, 2½ per cent. in maximum selling prices; Sanitary Fireclay Ware, 7½ per cent. in the overall maximum selling prices. in the overall maximum selling prices; Rooting Felts and Dampcourses, 5 per cent. in the maximum selling prices of roofing felts and dampcourses made to British Standard specifications by members of the Association of British Roofing Felt Manufacturers.

Mr. F. Bowen has been appointed to the board of Radiation Group Sales Ltd., and will be in charge of the Solid Fuel Division. He joined the Radiation organization in June, 1927, as secretary of the John Wright group of companies in Birmingham. In April, 1938, he transferred to the associated company at Leeds—Messrs. Wilsons & Mathiesons Ltd. of which he became managing director.

A new company, the Société des Revête-ments Cemetex, S.A., has been formed, with an issued share capital of 100,000,000 francs, by the Dunlop Rubber Co. Ltd. in con-

junction with the Société Anonyme des punction with the Société Anonyme des Pneumatiques Dunlop, France. The com-pany will operate in France under licence from Semtex Ltd., a Dunlop company, as flooring and decking contractors, and has already begun, at its factory at St. Maur des Fossés, near Paris, the manufacture of thermo-plastic tiles similar to the semastic decorative tiles of the English company. The managing director is M. R. Chevrot, general manager of the French Dunlop company, and the other directors are Mr. F. G. Motter-shaw, managing director of Semtex Ltd.; Mr. E. Holt, Dunlop's chief accountant; and MM. G. Lattard, M. Deglos and E. Gimon, all senior executives of the French Dunlop

Messrs. Culpin and Son, 3, Southampton Place, W.C.1, will now be known as Clifford Culpin and Partner. The partners will remain as at present, Mr. Clifford E. Culpin (F) and Mr. W. W. Ryder (A).

Walter Lilly & Co., Ltd., building contractors, of Westminster, have appointed Mr. Henry J. Scholey to the position of Contracts Manager. A Canadian by birth, Mr. Scholey has been engaged on many major projects throughout the United States major projects throughout the considerable and Canada, combined with a considerable experience of the construction industry in England during the war years. The firm have recently increased the telephone lines of head office, Abbey 4661, where there are now 10 lines, and their purchasing office, Pollards 5266, where there are now 4 lines.

Messrs. Thomas De La Rue & Co., Ltd., will be holding a private exhibition of their products at the galleries of the Royal Society of Painters in Water Colours, Conduit Street, WI, from July 2 to July 19. Exhibits of historical interest from the company's own museum will help to tell the story of the firm's development from early Victorian times, and among the articles shown will be several which were on display at the Great

Exhibition of 1851, when the business had already been in existence for nearly 40 years. Admission will be by invitation.

Messrs. Kelly's Directories Ltd., whose "Laxton's Builder's Price Book" was re-viewed recently in the Information Centre, announce that this book is now out of print. A new and revised edition will, how-ever, be available next year.

Battersea power station will get its fourth chimney as a result of work begun by Taylor Woodrow Construction Ltd., on November 27 last. Acting for the British Electricity Authority, the contractors are to finish the construction of the station which was delayed by the war. The civil engineering and building contract, which will be completed in 12 months, includes extensions to the switch house, boiler house and turbine house; a new office block and the new chimney, 350 feet Taylor Woodrow are also extending West Ham power station.

Messrs. C. S. Allott & Son, consulting engineers, of North Parade, St. Mary's Parsonage, Manchester 3, have taken into partnership Mr. Arnold Bailey, A.M.I.C.E., and Mr. Stanley Gleaves, M.I.STRUCT.E., both of whom have been concerned with the practice during a long period of years and have in more recent times acted as senior associates.

Mr. Rudolf Frankel, F.R.I.B.A., has been appointed Professor of Design for the final class at the Department of Architecture, School of Fine Arts, Miami University, Ohio. His London office address is still 120, Grove End Gardens, N.W.8

At a recent meeting of the Council of the English Joinery Manufacturers' Association (Incorporated), the president Mr. M. van Westerborg was in the chair; the following firms were elected members:—Woodworth Joinery Ltd., Ernest Slater Ltd., T. W. Bell Ltd., Cygnet Joinery Ltd.

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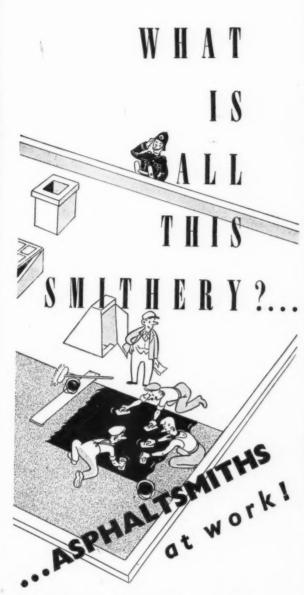
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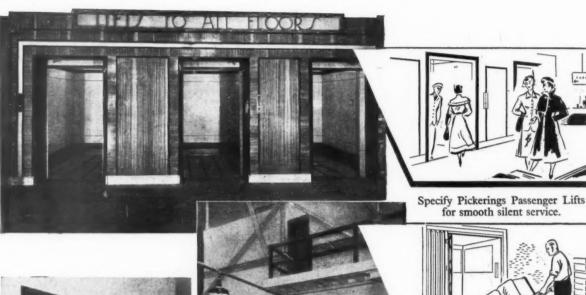
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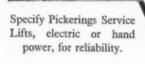


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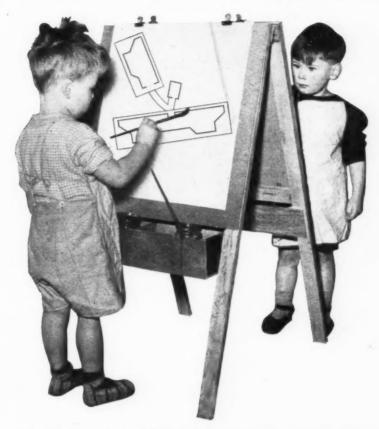
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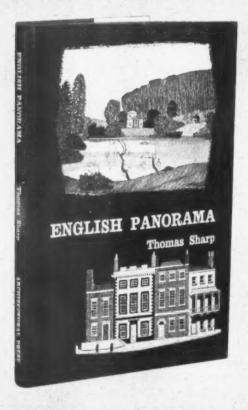






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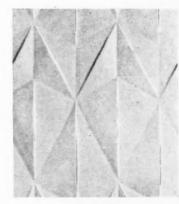
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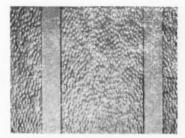


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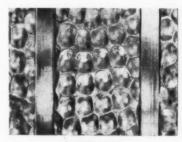




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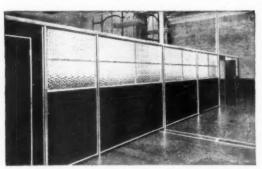
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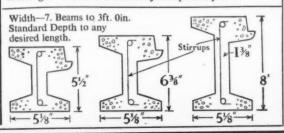
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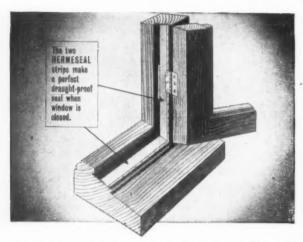
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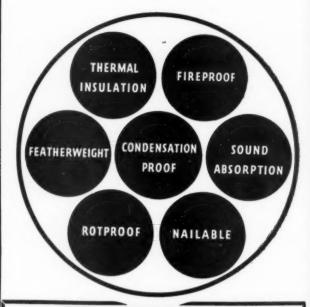
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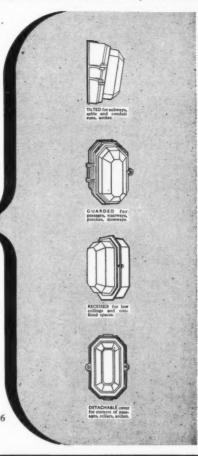
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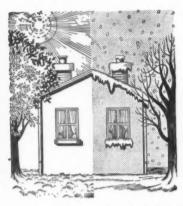
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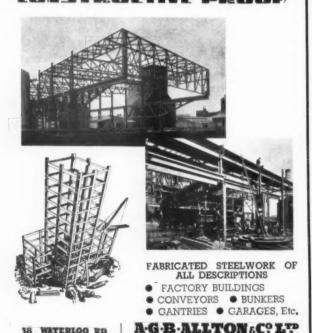
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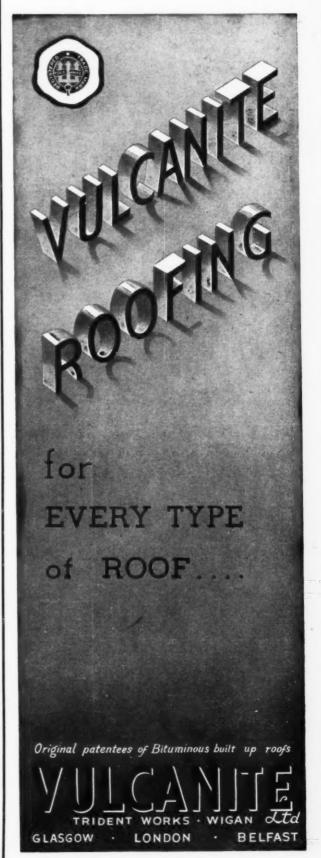
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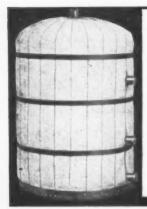
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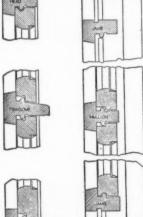
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25s. per inch; each additional line, 2s.

LONDON COUNTY COUNCIL.
Applicasions are invited for positions of ARthitbc7tURAL ASSIS*1ANT aniar es up to 5660 a year) in the Housing and Valuation Department. Commencing sularies will be determined according to qualifications and experience, Engagement will be subject to the Local Government Superamustion 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 assist a 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.

Forms of application may be obtained from the Director of Housing, The County Hall, Westmisster Bridge, S.E.1 (atamped addressed envelope required and quote reference A.A.1). Canvassing disqualifies. (S16) 4558

SOUTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.

Applications are invited for the following appointments on the Board's Architectural Staff.

Applications are invited for the following appointments on the Board's Architectural Staff:—

ASSISTANT ARCHITECT, A.P.T., Grade VIII, £685×£25-£760 p.a., plus London weighting allowance. Applicants must be Fellows or Associates of the Royal Institute of British Architects, and have had good general experience, including hospital design and construction, the control of contracts and specification writing.

JUNIOR ARCHITECTURAL ASSISTANT, A.P.T., Grade IV, £480×£15-£525 p.a., plus London weighting allowance. Applicants should have attained the Intermediate standard required by the Royal Institute of British Architects, have had good architectural training and general experience, and be capable of preparing working and detail drawings.

The appointments are subject to the National Health Service (Superannuation) Regulations, 1950, and to satisfactorily passing a medical examination.

Applications, stating age, qualifications, present and past appointments, experience and training, together with the names and addresses of three referees, should be forwarded to the Secretary (S.2), South-West Metropolitan Regional Hospital Board, Ila. Portland Place, London, W. 1, to be received by first rost on Saturday, 26th May, 1961, 2535

CITY AND COUNTY OF BRISTOL.
BRISTOL EDUCATION COMMITTEE.
COLLEGE OF TECHNOLOGY.
Principal: F. W. PARINGTON, B.Sc.
Required full-time ASSISTANT LECTURER for Building Construction. Draughtsmanship and General Building and Architectural Subjects.
Qualifications in Building, Architectural Subjects, Qualifications in Building, Architectural Subjects, gualifications in Building, Architectural Subjects, Subjects, Subjects, Considerations of the Company of the

addressed envelope to the Registrar, College of Technology, Bristol, 1.

G. H. SYLVESTER, Chief Education Officer.

Conncil House, College Green, Bristol, 1.

THE NORTH-WESTERN ELECTRICITY
BOARD,
NORTH-WESTERN ELECTRICITY
BOARD,
APPOINTMENT OF THIRD ASSISTANT
ENGINEER (BUILDING CONSTRUCTION).
Applications are invited for the appointment of Third Assistant Engineer (Building Construction), in the Construction Section of the Mains Engineer's Department, No. 1 Sub Area, Town Hall, Manchester.

The successful applicant will be required to give general assistance to the Sub-Area Building Construction Engineer in the control and operation of a sub-section composed of members of all trades in the Building Industry.

The work involves repair and maintenance of all premises within the Sub-Area, and the erection of new sub-stations, office blocks, etc.

Applicants must have had a wide experience in the direct control of labour, supervisice of contractors, estimating and costing, and practical experience in building design, will be considered an advantage.

The salary for the post will be in accordance with the National Joint Board Revised Agreement, Class M, Grade X, i.e., £727-£739-£751 per applications static and contractions.

annum.

The post is superannuable.

Applications, stating age, qualifications and experience, present post and salary, should be received by the Sub-Area Secretary, No. 1 Sub-Area, The North-Western Electricity Board, Town Hall, Manchester, 2, not later than Saturday, 26th May, 1951.

BOROUGH OF HESTON AND ISLEWORTH.

ENGINEER AND SURVEYOR'S

DEPARTMENT.

TECHNICAL STAFF.

Applications are invited for the undermentioned posts in the Borough Engineer and Surveyor's Department:

(a) GENERAL ENGINEERING ASSISTANT.

Grade A.P.T., II (£420-£465), plus London weighting.

Other things being equal, preference will be given to candidates who have passed the Intermediate Examination of the Institution of Municipal Engineers or other equivalent.

(b) GENERAL ENGINEERING ASSISTANT.

Grade A.P.T., IV (£480-£525), plus London weighting.

Grade A.P.T., IV (£480-£525), plus London weighting.

Candidates should have good Civil or Municipal engineering experience, and, other things being equal, preference will be given to candidates who have passed the examination qualifying for A.M.I.C.E. or A.M.I.Mun.B.

(c) JUNIOR ARCHITECTURAL ASSISTANT. Grade A.P.T., II (£420-£465), plus London weighting.

A.M.I.C.E. or A.M.I.Mun.E.

(c) JUNIOR ARCHITECTURAL ASSISTANT.

Grade A.P.T., II (£420-£465), plus London weighting.

Other things being equal, preference will be given to candidates who have passed the R.I.B.A. Intermediate Examination.

(d) GENERAL ARCHITECTURAL ASSISTANT. Grade A.P.T., III (£450-£495), plus London weighting.

Candidates should have good experience in an architectural office, and, other things being equal, preference will be given to candidates who have passed the R.I.B.A. Intermediate Examination.

have passed the BARDAL to assist the successful candidate with housing accommodation.

Applications, on forms to be obtained from the Borough Engineer and Surveyor, 88, Lampton Road, Hounslow, must be returned to him not later than noon on 28th May appropriately and control of the successful control of

HAROLD SWANN, Town Clerk.

COUNTY BOROUGH OF GREAT YARMOUTH.

APPOINTMENT OF CLERK OF WORKS.
Applications are invited for the appointment of Clerk of Works, to act under the direction of the Borough Engineer in the supervision of the rection of six-storey flats.

Applicants should have a thorough knowledge of the building trade, the erection of multi-storeyed flats, of steel-frame building and pile foundations. Membership of the Incorporated Clerk of Works' Association of Great Britain would be an advantage. The salary will be 212 per week. Housing accommodation will be provided if required.

Applications, stating age, qualifications and previous experience, together with the names of three persons to whom reference may be made, should be enclosed in an envelope, endorsed "Clerk of Works," and must be received by me not later than Friday, 25th May, 1951.

Candidates must disclose in writing whether they are related to any member or officer of the Council. Canvassing, either directly or indirectly, will disqualify.

FARBA CONWAY,

Town Clerk

FARRA CONWAY, Town Clerk.

Town Hall, Great Yarmouth.

3rd May, 1951.

There are vacancies in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS and LEADING ARCHITECTURAL ASSISTANTS with recognised training and fair experience. Successful candidates will be employed in London and elsewhere on a wide variety of Public Buildings, including Atomic Energy and other Research Establishments, Telephone Exchanges, and Housing.

Salary: Architectural Assistants, £340-£575 per annum; Leading Architectural Assistants, £570-£675 per annum. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a small deduction is made in the Provinces.

Although these are not established posts, some of them have long term possibilities, and competitions are held periodically to fill established vacancies.

Apply I writing, stating age, nationality, full

vacancies.

Apply in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, Ministry of Works, Abell House, John Islip Street, London, S.W.1, quoting reference WG10/BC.

ence WG10/BC. 2217

NORFOLK COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from Registered Architects for the appeintment of a SENIOR ASSISTANT ARCHITECT, Grade VI (£595-£660 per

TANT ARCHITECT, Grade VI (£595-£660 per annum).

Applications are also invited for the appointment of an ASSISTANT ARCHITECT, Grade V (£520-£570).

The above salaries do not include the increases recently recommended by the National Joint Council, which have not yet been considered by the County Council.

Applications, stating age, qualifications, present appointment and salary, full details of experience, and giving the name of three persons to whom reference may be made, should be sent to the County Architect, 27, Thorpe Road, Norwich, by not later than Monday, 28th May, 1951.

The appointments are on the permanent staff and are subject to National Conditions of Service.

H. OSWALD BROWN.

H. OSWALD BROWN,
Clerk of the Council.
County Offices, Thorpe Road, Norwich. 2527

WEST SUFFOLK COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of
JUNIOR QUANTITY SURVEYING ASSISTANT, on A.P.T., Grades I-II (2440-£515), of
the National Joint Council Salary Scales, position
on scale according to qualifications and experi-

on scale according to qualifications and experience.

Applicants should be Students of the Royal Institute of Chartered Surveyors studying for the Intermediate Examination and with not less than two years' office experience.

The appointment will be terminable by one month's notice in writing on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

Forms of application may be obtained from the undersigned, by whom applications, together with the names of two referees, should be received not later than 14 days after the date of publication of this advertisement.

L. G. H. MUNSEY.

L. G. H. MUNSEY,
Cerk of the County Council.
May, 1951.

Shire Hall, Bury St. Edmunds.

May, 1951.

DERBYSHIRE COUNTY COUNCIL, ARCHITECT'S DEPARTMENT.

Applications are invited for the undermentioned appointments, Conditions of service are in accordance with the National Scheme for Local Authorities, as adopted by the County Council:—QUANTITY SURVEYORS: (a) A.P.T., Grade VI; (b) A.P.T., Grade I. Applicants for (a) must be in possession of an appropriate professional qualification. The posts will be subject to the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination. Canvassing in any form will be a disqualification for appointment.

Applications to reach this office not later than 31st May, 1951, on forms which may be obtained from the undersigned.

F. H CROSSLEY, Dipl.Arch.(L'pool),

F. R.I.B.A..

F.R.I.B.A., County Architect,

St. Mary's Gate, Derby.

18th May, 1951.

BOROUGH OF WREXHAM.

Applications are invited for the following appointments in connection with Capital Works (Housing).

(a) ARCHITECTURAL ASSISTANT (A.P.T., Grade Va or VI, £550-£610, or £595-£660 per annum, according to qualifications and experience).

Grade Va or VI, £550-£610, or £595-£600 per annum, according to qualifications and experience).

(b) ASSISTANT QUANTITY SURVEYOR (A.P.T., Grade IV, £480-£525 per annum).

(c) CLERK OF WORKS (£405-£465 per annum).

Applicants for appointment:—

(a) Should be Associate Members of the R.I.B.A. or hold equivalent qualifications, and have a general architectural experience;

(b) should be suitably qualified and have had general experience in the preparation of Bills of Quantities, measuring and valuation for Interim Certificates and Final Accounts on various Building Construction and all branches of Building Trades, and should preferably have had previous experience as a Clerk of Works on such contracts.

The Council is prepared to offer housing accommodation to the successful applicants (if married) for appointments (a) and (b).

Forms of application and Conditions of Service for the appointments may be obtained from the Borough Engineer and Surveyor, 31, Chester Street, Wrexham, and returned in an envelope appropriately endorsed to the undersigned not later than first post on Friday, 8th June, 1951.

PHILIP J. WALTERS,

Guildhall, Wrexham.

2592

Guildhall, Wrexham. 9th May, 1961.

Guildhall, Wrexham.

9th May, 1951.

OUNDLE AND THRAPSTON RURAL
DISTRICT COUNCIL.

JUNIOR ARCHITECTURAL ASSISTANT.
Applications are invited for the appointment of
Junior Architectural Assistant, in the Architect's
Department of the above Authority, at a salary
within A.P.T., Grades I and II, of the National
Scale of Salaries. The point of entry into the
relevant salary Grades will depend on the experience of the successful applicant.

The poot, is permanent, and the appointment
will be subject to (a) the National Scheme of Conditions of Service, (b) the provisions of the Local
Government Superannuation Act, 1937, (c) the
satisfactory passing of a medical examination,
and (d) termination by one month's notice on
either side.
Applicants should be of R.I.B.A. Intermediate
Examination standard; have served Articles in an
Architect's office, and have had experience in the
preparation of Working Drawings, and making of
Surveys. Preference will be given to applicants
who have knowledge of Quantities.
Applications should be endorsed "Architectural
Assistant," stating age, qualifications, previous
and present appointment, and details of training
and experience, accompanied by copies of three
recent testimonials, should reach the undersigned
not later than Friday, 1st June, 1951.

H. H. HASSALL,
Clerk of the Council.

Council Offices, Midland Road,
Thrapston, Kettering.

LONDON ELECTRICITY BOARD.
NORTH-EASTERN SUB-AREA.
ications are invited for the following

positions:— ENGINEERING DRAUGHTSMAN (Ref. V.1231/A.), at Stratford, E.15. Candidates should possess a wide experience in design and modification of sub-stations and other buildings, and adulty to work on own initiative and deal with Architects and Surveyors. Salary from £500 per

Architests and Surveyors. Salary from £500 per annum inclusive.

DRA1CHTSMAN (Ref. V.1230/A.), at South Woodford, E.18. Applicants should be at least 21 years of age and have had a good general education and drawing office experience, preferably on Mains Records. Salary within range £300.2500 per annum inclusive.

The salaries are provisional, pending grading of the posts under the National agreement of the appropriate negotiating body, and the commencing salaries will be determined according to qualifications and experience.

Application forms obtainable from Establishments Officer, 46, New Broad Street, E.C.2, to be returned duly completed within 10 days, quoting clearly the reference number of the vacancy for which application is made. Please enclose addressed foolscap envelope and quote relevant reference on all correspondence.

LANCASHIRE COUNTY COUNCIL.

LANCASHIRE COUNTY COUNCIL.

DEPUTY COUNTY ARCHITECT.

Applications are invited from Fellows or Associates of the R.I.B.A. for the appointment of Deputy County Architect, at a salary of 21.700×275-22.000.

The establishment of the department is a large one and, in addition to high architectural ability, first-class administrative capacity will be necessary. The appointment will be terminable by three months notice.

Applications forms obtainable for C.

Applications forms, obtainable from G. Noel Hill, F.R.I.B.A., M.T.P.I., County Architect, County Hall, Preston, must be returned not later than 9th June, 1951.

BIRMINGHAM REGIONAL HOSPITAL BOARD.

Applications are invited for the following

Applications are invited for the following appointments:—

SENIOR ASSISTANT ARCHITECT.
Salary scale: A.P.T., VIII (£685-£760). Applicants must have the Final R.I.B.A. or possess recognised Diploma of Architecture, and should have considerable experience of design of buildings and building procedure. Experience in design of mental hospitals will be an advantage.

ARCHITECTURAL ASSISTANT.
Salary scale: A.P.T., III (£480 to £495). Applicants should be neat and expeditious draughtsmen, with experience of surveying buildings. preparing sketch designs, working drawings and details. Registration as student of R.I.B.A. will be an advantage.

details. Registration as student of R.I.B.A. be an advantage.
ASSISTANT QUANTITY SURVEYOB.
Salary scale: A.P.T., VII (2635-2710). Appears should have final of Royal Institute Chartered Surveyors, and be fully experien in taking off and preparation of Bills Quantities.

Quantities.

Appointments are subject to National Health Service (Superannuation) Regulations, 1950, and to one month's notice. Applications, stating age, qualifications, experience and present appointment, with details of two referees, should be submitted to the Secretary, Birmingham Regional Hospital Board, 10, Augustus Road, Birmingham, 15, not later than 4th June, 1951.

Is, not later than 4th June, 1951. 2560

METROPOLITAN BOROUGH OF POPLAR.
APPOINTMENT OF CHIEF ARCHITECTURAL.
ASSISTANT (GRADE A.P.T., VIII).
Applications are invited from suitably qualified persons for the permanent appointment of Chief Architectural Assistant in the Architect's Section of the Borough Engineer and Surveyor's Department. The applicant appointed will be under the direction of the Principal Assistant Architect, who is responsible for the section. The salary payable will be in accordance with Grade A.P.T., VIII, of the National Salary Scales, i.e., £685-£760 per annum, plus London "weighting."
Applicants should be experienced in the design of housing and multi-storey flats, and have a good knowledge of building construction, specification writing, and must be able to supervise a team of assistants.

Applicants should be experienced in the design of housing and multi-storey flats, and have a good knowledge of building construction, specification writing, and must be able to supervise a team of assistants.

Several schemes for the development of residential and neighbourhood units have been phased over a period of many years, in which will be involved interesting design and constructional problems. The applicant appointed will be engaged on the projects forming these areas.

Applicants should be Associates of the Royal Institute of British Architects.

Full details of the appointment and forms on which application must be made may be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3. to whom completed applications must be delivered not later than first post on Tuesday, 22nd May, 1951.

Foplar Town Hall, Bow Road, London, E.3.

26th April, 1951.

Applications are invited for positions of ARCHITECT, Grade III (£550-£700) and TECHNICAL ASSISTANT (up to £580) for architectural work on new housing, schools and other public buildings. The positions are superannuable, and the above rates are subject to an addition of 10 per cent. on the first £600 and 7½ per cent. on any remainders. Application forms from the Architect, The County Hall, S.E.1, enclosing stamped addressed foolscap envelope and quoting AR/BK/A. Canvassing disqualifies. (514) 3914

CITY OF BIRMINGHAM EDUCATION

COMMITTEE.

APPOINTMENT OF ASSISTANT QUANTITY
SURVEYOR.

Applications are invited for appointment as
Assistant Quantity Surveyor in the Architect's
Bronch of the Education Department. Salary:
A.P.T., II (£470×£15—£515).

Applicants should be thoroughly experienced in
"working up," and should have passed the Intermediate Examination of the Royal Institute of
Chartered Surveyors or its equivalent. Experience in the settlement of final accounts for minor
contracts will be an advantage. The appointment
will afford good experience for the keen worker
over the whole field of quantity surveying.

Forms of application may be obtained from the
undersigned, to whom they should be returned not
later than 8th June, 1951.

E, L. RUSSELL,

E. L. RUSSELL,

Education Office, General Purposes Branch,
Council House, Margaret Street,
Birmingham, 3. 2583

Education Office, General Purposes Branch,
Council House, Margaret Street,
Birmingham, 3.

EAST KILBRIDE DEVELOPMENT
CORPORATION.
ASSISTANT EXECUTIVE IN THE ARCHITECTURAL DEPARTMENT.
The Corporation invite applications for the post
of Assistant Executive in the Architectural Department. Candidates must have had substantial
experience in the control and organisation of
large scale building works carried out by contract
and in the running of a large architectural office.
It is desirable but not essential that applicants
should be qualified Architects. The salary scale
is £1,250×£50 to £1,500 per annum, with placing
according to experience, elc. The appointment is
subject to the Corporation's Conditions of Service
and Superannuation Agreement. The selected
candidate will be required to pass a medical examination. A house will be made available if
required. Application forms may be obtained
from the General Manager, Torrance House, East
Kilbride, to whom they should be returned not
later than 9th June, 1951.
Canvassing, directly or indirectly, of the
members of the Corporation will constitute an
absolute disqualification.

PETERLEE DEVELOPMENT CORPORATION.
APPOINTMENT OF QUANTITY SURVEYOR.
Applications are invited from Associate
Members of the Royal Institute of Chartered
Surveyors for the appointment of Quantity Surveyor, at a salary equivalent to A.P.T., Grade
VIII or IX, of the N.J.C. Salary Scales.
Applicants should have considerable experience
in preparation of Bills of Quantities and estimates
of all types, particularly for housing work, and
should be competent to carry out measurement
of work on site, issue certificates, and check final
accounts.

of work on site, issue certificates, and check find accounts.

The position is a superannuable one, and the successful applicant will be required to pass a medical examination. The appointment, which is subject to the Conditions of Service adopted by the Corporation, will be terminable by one month's notice in writing on either side.

Housing accommodation will be made available to the person appointed.

Applications, giving particulars of age, experience, qualifications, etc., together with the names of two referees, should be addressed to the undersigned, to arrive not later than 2nd June, 1951.

A. V. WILLIAMS, General Manager. Shotton Hall, Castle Eden, Co. Durham.
4th May, 1961.

STEVENAGE DEVELOPMENT
CORPORATION.
The Stevenage Development Corporation invite applications for the following posts in the Department of Architecture and Planning (Chief Architect and Planner, Clifford Holliday, M.Arch., P.R.I.B.A., M.T.P.I.):—
(1) ASSISTANT ARCHITECTS, Grade IV. Salary £580×£30—£750.
Applicants should be fully qualified Architects, with experience in housing and/or industrial buildings.

with experience buildings.

(2) JUNIOR ARCHITECTS. Grade

£530×£25—£570.

Candidates should either have completed a degree or diploma course at a recognised school of architecture or have passed the Final Examination of the R.I.B.A.

(3) ARCHITECTURAL ASSISTANT. Grade VI. Salary £350 at age 21, £379 at age 22, £400 at age 23.

**Anniidates must have reached the Intermediate P.I.B.A.

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(3) ARCHITECTURAL ASSISTANT. Grade VI. Salary £350 at age 22, £379 at age 22, £400 at age 23. Candidates must have reached the Intermediate standard of the R.I.B.A.

(4) TRACER. General Division. Scale (maximum), females £308, males £385. Initial salary according to age.

Initial salaries for posts (1) and (2) will be fixed according to qualifications and experience. Successful applicants will be required to contribute fo a Local Government Superannuation Fund or an Assurance Scheme.

The Corporation anticipates that, if so desired, it will be able in the near future to offer successful married candidates the tenancy of a Corporation house.

Canvassing, directly or indirectly, of members or staff of the Corporation will disquality.

Forms of application may be obtained from the Chief Administrative Officer, Slevenage Development Corporation, Aston House, near Stevenage, Herts., to whom completed forms should be returned not later than 28th May, 1951.

IXVI

BOROUGH OF WIDNES.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, at a salary in accordance with A.P.T., Grade IV, of the National Scale of Salaries, commencing at the minimum of the grade.

Applicants must be Student R.I.B.A., and have worked in an architectural office for at least two years subsequent to having passed the Intermediate Examination.

The appointment will be subject to the National Scheme of Conditions of Service as adopted by the Council, and to the Local Government Superannuation Act, October, 1937, and to the successful candidate passing a medical examination.

Applications, stating full particulars of age, experience and qualifications, etc., together with the names and addresses of two referees, to be sent to the Borough Architect, Brendan House, Widnes Road. Widnes, not later than Friday, 8th June, 1991.

Canvassing, directly or indirectly, will disqualify.

FRANK HOWARTH.

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FRANK HOWARTH, Town Clerk. Town Hall, Widnes. 7th May, 1951.

Tth May, 1951.

COUNTY BOROUGH OF READING.
BOROUGH ARCHITECT'S DEPARTMENT.
Applications are invited for the undermentoned appointments:—

(a) SENIOR ASSISTANT ARCHITECT, Grade VI (£595-£660 p.a.).
Applicants for this post must be Associates of the Royal Institute of British Architects.

(b) ARCHITECTURAL ASSISTANT, Grade I (£390-£430 p.a.).
Applications should be received by the Borough Architect, Town Hall, Reading, by Thursday, the 31st May, 1951. from whom the application forms can now be obtained.

G. F. DARLOW,

G. F. DARLOW, Town Clerk. Town Hall, Reading. 18th May, 1951.

CITY OF MANCHESTER.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of an ASSISTANT ARCHITECT on the permanent staff.

Salary: A.P.T., Grade V (£570 to £620 per

Salary: A.P.T., Grade V (£570 to £020 per annum).

Candidates must be Registered Architects; preference will be given to applicants who are Associates of the Royal Institute of British Architects and/or hold a Degree or Diploma of a recognised School of Architecture.

Persons who have the qualifications named above, but are not yet registered architects, are eligible to apply; the salary in such case would be A.P.T. Grade IV, commencing at £530 per annum, until registered.

Forms of application may be obtained from and returned to Leonard C. Howitt. B.Arch., F.R.I.B.A. City Architect., Town Hall. Manchester, 2, by the 1st June, 1951.

Canvassing is prohibited.

PHILIP B. DINGLE.

Town Hall. Manchester, 2.

Town Hall, Manchester, 2. May, 1951. Applications are invited for the following appointments in the Burgh Engineer's Depart-

ment, viz.:—
(a) ARCHITECTURAL ASSISTANTS. A.P.T.,

(b) PLANNING ASSISTANTS, A.P.T., V. Applicants for (a) should have experience of housing, preferably with a local authority, and be qualified by examination as A.R.I.B.A. or equivalent.

equivalent.

Applicants for (b) should have suitable experience in Town Planning, and be qualified by examination as A.M.T.P.I. or equivalent.

The above appointments will be on a permanent basis, subject to the successful applicants passing the prescribed medical examination, and may be determined by one month's notice on either side. The successful applicants will be required to contribute to the Superannuation Fund.

Applications, with names of two referees, should be sent to the undersigned to reach him on or before Monday, 28th May, 1951.

JOHN A. McGREGOR, Burgh Engineer. 14. Gilmour Street. Paisley.

HUDDERSFIELD TECHNICAL COLLEGE

Principal: Dn. W. E. Scott, M.B.E.
Applications are invited for the post of HEAD
OF THE DEPARTMENT OF BUILDING.
Candidates should hold suitable professional
qualifications in Building or Architecture, and
have had both teaching and industrial experience.
The Department is graded I in the Burnham
Scale for Establishments for Further Education.
Salary £900×225-£1,000. Duties to commence
on 1st September, 1951, or as soon afterwards as
possible.

on 1st September, 1951, or as soon afterwards as possible.

No forms of application are issued, but further particulars are obtainable from the Principal the Technical College, Queen Street South Huddersfield, to whom applications should be sent as soon as possible, accompanied by two testimonials and the names of three persons to whom reference can be made.

H. KAY, Chief Education Officer.

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CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:

(a) ASSISTANT ARCHITECTS. A.P.T., VI-VII.

Salary scale, £596-£710.

(b) ASSISTANT ARCHITECTS. A.P.T., VI.

Salary scale, £595-£660.

(c) ASSISTANT ARCHITECTS. A.P.T., V.

Salary scale, £500-£570.

Candidates must be Registered Architects.

(d) ARCHITECTURAL ASSISTANTS. A.P.T., V.

Salary scale, £480-£925.

(f) ARCHITECTURAL ASSISTANTS. A.P.T., III. Salary scale, £450-£946.

(g) ASSISTANT QUANTITY SURVEYOR.

A.P.T., VIII. Salary scale, £465-£965, £760 p.a.

Candidates must be Members of the Royal Institution of Chartered Surveyors, and must be competent and experienced in all branches of quantity surveying.

(h) ASSISTANT QUANTITY SURVEYOR.

ompetent and experienced in all branches of quantity surveying.

(h) ASSISTANT QUANTITY SURVEYOR.

A.P.T. V.VI. Salary scale, £522-£660.

Candidates should preferably have passed the final Examination of the Royal Institution of Chartered Surveyors.

In each case the payment of salary increments will be subject to satisfactory service, and will be granted normally with effect from the 1st April following the completion of 6 months' service.

service.

The appointments are subject to the Local Government Superannuation Act, 1977, and the successful applicants will be required to pass a examination.

medical examination may be obtained from the City Architect, Priestley House, Quarry Hill, Leeds, 9, to whom they should be returned, together with copies of three recent testimonials, by 10 a.m. on Friday, 25th May, 1951.

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

B. A. H. LIVETT, A.R.I.B.A..

City Architect.

R. A. H. LIVETT, A.R.I.B.A.

Priestley House, Leeds, 9.

4th May, 1951.

BOROUGH OF DEVIZES.

TECHNICAL ASSISTANT.

Applications are invited for the temporary appointment of Technical Assistant in the office of the Borough Surveyor and Water Engineer, to assist in the preparation of schemes for the Council's permanent housing programme, at a salary in accordance with Grade IV (A.P.T.) of the National Scale of Salaries (2480 p.a., rising by annual increments of £15 to £525).

Applicanta should have had good experience in the preparation of schemes of Municipal Housing, including Sewerage, Highways, and Water Supply. Preference will be given to applicants who have passed an examination of the Institution of Civil Engineers or the Royal Institute of British Architects.

Forms of application and any further particulars may be obtained from, and applications should be addressed to, the Borough Surveyor and Water Engineer, The Chequers, Devizes, Wilts.

All applications should be received in an

wills.

All applications should be received in an envelope endorsed "Technical Assistant" by not later than noon on Monday, 4th June, 1951.

The appointment will be subject to one month's notice on either side.

A. HODGE

A. HODGE,

A. HODGE,
Town Clerk.

3rd May, 1951.

UNIVERSITY COLLEGE, IBADAN.
The University College, Ibadan, Nigeria,
invites applications for the post of MAINTENANCE OFFICER, on salary of £950 a year.
Applications should reach the Registrar,
University College, Ibadan, Nigeria, not later
than 30th June, 1951, or the London Representative, University College, Ibadan, 1. Gorden
Square, London, W.C.2, not later than 15th
June, 1951. Further details may be obtained on
application to either of the above.

2596

COUNTY BOROUGH OF HALIFAX.
BOROUGH ENGINEER'S DEPARTMENT.
APPOINTMENT OF QUANTITY SURVEYOR.
Applications are invited for the above appointment, at a salary in accordance with Grade
A.P.T., VII (£685-£760).
Housing accommodation for the successful candidate will be provided if necessary.
Candidates should possess appropriate technical qualifications, and will be required to pass a medical examination. The appointment will be subject to the conditions of service adopted by the Corporation and to the Local Government Superannuation Act, 1937.
Candidates must disclose whether to their knowledge they are related to any member of or the holder of any senior office under the Council.
Applications, stating age, qualifications, present

Council.

Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, should be appropriately endorsed and delivered to the undersigned not later than Saturday, 26th May,

RICHARD DE Z. HALL, Town Clerk.

Town Hall, Halifax.

4th May, 1951.

2564

THE IMPERIAL WAR GRAVES COMMISSION invite applications from suitably qualified candidates for the uost of ASSISTANT TO ENGINEER, at their headquarters at Wooburn Green. Candidates must have had general engineering experience, a good education and technical training, and preferably be ex-Service. Experience with a Government or Local Authority or well established firm, including general office routine, would be an advantage. The appointment, which is on a temporary basis, carries salary on the scale £540-£645 per annum.

porary basis, carries satary on the scare 2502-2605 per annum. Applications should be addressed to the Appoint-ments Officer, Imperial War Graves Commission, Wooburn House, Wooburn Green, High Wycombe, Bucks., within 10 days of the appearance of this notice. 2570

COUNTY LONDONDERRY EDUCATION
COMMITTEE.
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acancies in the Committee's Architectural De-

Accumints in the Committee's Architectural Department:

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ARCHITECTURAL
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JUNIOR ARCHITECTURAL
Salary, £200×£15—£400.

The point of entry in the salary scales will be determined according to the qualifications and experience of the successful applicants.

A large number of new schools are at present in the sketch plan stage, and successful candidates will be engaged on the preparation of working drawings, details, models and specifications, and will be given scope to work on the designs of other new intermediate and primary schools and school residences, etc., according to the programme on hand.

Successful candidates will be required to study for the R.I.B.A, examinations, facilities for which are provided in the local Technical College.

Forms of application may be obtained from the Education Office, New Row, Coleraine, County Londonderry, and should be returned to the undersigned within two weeks of the appearance of this notice.

R. B. HUNTER,

R. B. HUNTER, Director of Education. 2594

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JUNIOR ARCHITECTURAL ASSISTANT required. Write, stating age, experience, and salary required, to Portess & Richardson, Lloyds Bank Chambers, Peterborough. 2518

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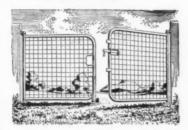
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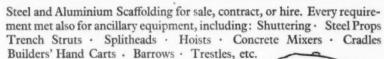
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