The Architects' JOURNAL for AUGUST 27, 1959

ARCHITE OURNA



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 Ii one week, Il to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

standard

contents

BIA

BID

BOT

BRS

BSA RSI CABAS

CAS

CCA CDA

COID CPRE

CUC

CVE

EJMA

EPNS

FAS

FBI

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FLD **FMB**

FDMA

FRHB

ICA ICE

FASS

FBBDO

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

and COMMENT NEWS

Astragal's Notes and Topics

Letters

News

Diary

Criticism

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Working Details

Ouestions and Answers

Prices

The Industry

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Major Buildings described:

Details of Planning, Construction,

Finishes and Costs

Buildings in the News

Building Costs Analysed

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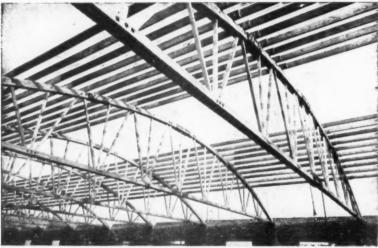
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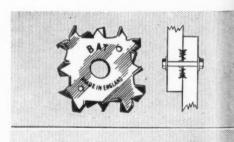
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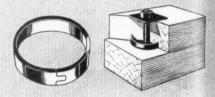
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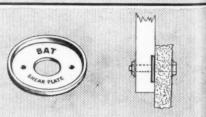


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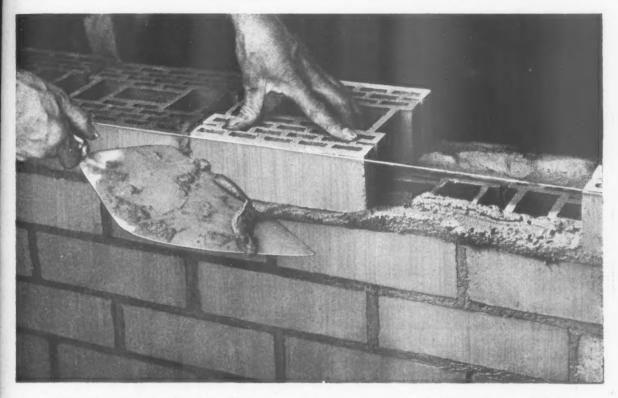
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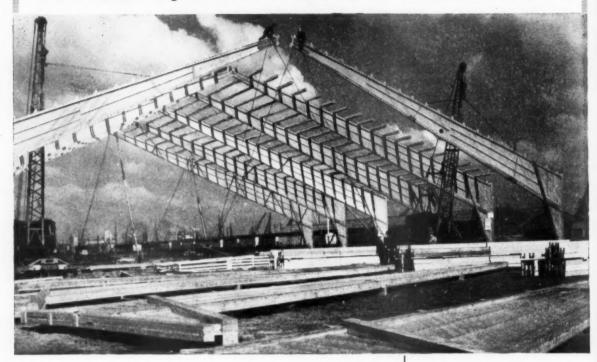
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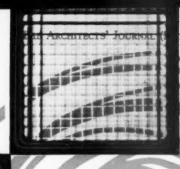
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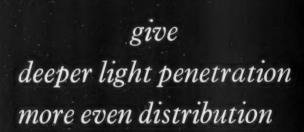
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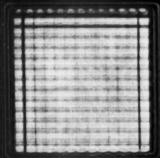
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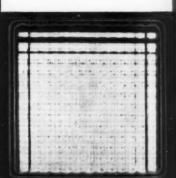
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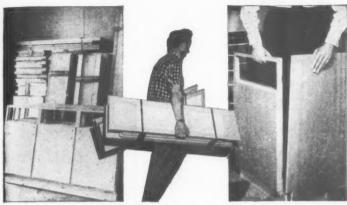
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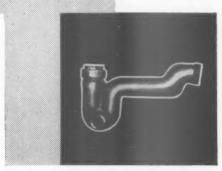
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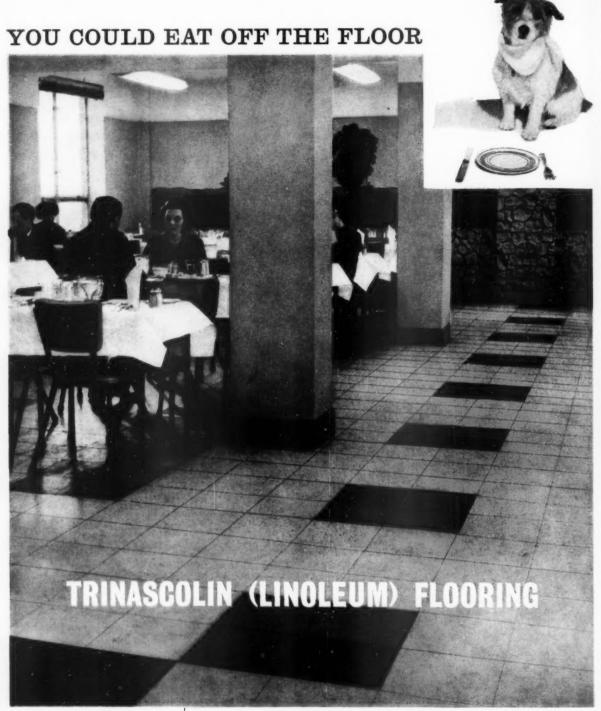


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Here is another example of TRINASCOLIN Linoleum Flooring, laid by craftsmen of the Limmer & Trinidad Group of Companies, who are specialists in all types of Decorative and Industrial Surfaces. Descriptive leaflets are available.

Staff Restaurant, Decca House, Albert Embankment, S.E. Reproduction by Courtesy of Decca Record Co. Ltd.

THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD.,

Trinidad Lake House, 232-242, Vauxhall Bridge Road, London, S.W.1. Telephone: TATe Gallery 4388

THE WESTERN TRINIDAD LAKE ASPHALT CO. LTD., Asphalt House, St. Mary Street, Cardiff. Cardiff 24731

THE TRINIDAD LAKE ASPHALT CO. (NORTH WESTERN) LTD., India Buildings, Water Street, Liverpool, 2. Central 8591

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THE REVOLUTIONARY NEW HARDBOARD THAT REQUIRES NO PRIMING

FOR FASTER, EASIER DECORATING WITH BRUSH OR SPRAY

A great step forward in manufacturing technique perfected in Svenska Cellulosa Aktiebolaget's Laboratories has produced ESCABOARD the hardboard that guarantees a unique surface requiring NO filling, priming or undercoat.

- No sealing or priming
- 30% less paint
- 50% less time

Manufactured by:

SVENSKA CELLULOSA AKTIEBOLAGET SUNDSVALL, SWEDEN

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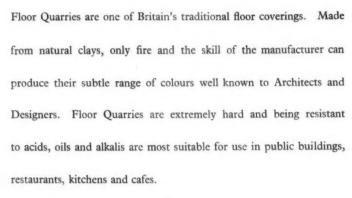
TRY THIS TEST FOR YOURSELF!

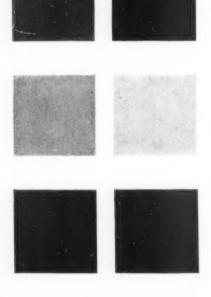
Take a strip of Escaboard and a strip of ordinary hardboard. Give each a coat of paint, or any standard finish and see the astounding difference!













Floor Quarries are produced in a range of shades of which the examples above are typical.

Our illustration suggests a typical use for Floor Quarries attractively set in a wide-jointed pattern. For detailed information on the uses and costs of this inexpensive floor covering, please contact your Builders' Merchant or Fixing Specialist.

QUARRY Accociation

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ANOTHER SCHOOL COMPLETED ON TIME

Phase 1 of Fairham Comprehensive School, Nottingham (94,000 sq.ft.) was completed within the agreed contract programme.

Abnormal site conditions were met and overcome.

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Over the past five years twenty schools' Authorities have commissioned more than fifty INTERGRID* projects. Whenever

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Send for publication FP/106.

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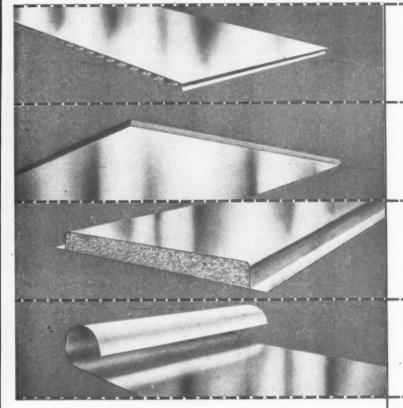
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F.H.P. Motors Department, Bradford

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Air spaces formed by heat-reflecting surfaces of Aluminium Foil.

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Aluminium Foil laminated to one side.

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Aluminium Foil enclosing, and providing heat-reflecting surfaces to, fibroustype insulation.

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The most efficient forms of Thermal Insulation now incorporate
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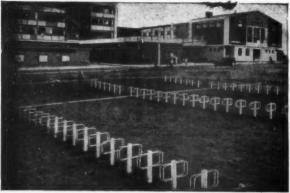
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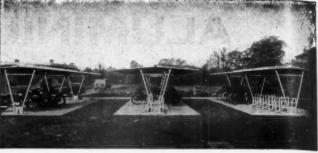
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FISHER'S FOILS LIMITED, Sales Development Dept., EXHIBITION GROUNDS, WEMBLEY, MIDDLESEX TELEPHONE: WEMBLEY 6011 CABLES AND GRAMS: LIOFNIT, WEMBLEY (ABC CODE 6TH EDITION)



By permission of Harlow Development Corporation, Essex



By permission of The Chief Education Officer, Norfolk Education Committee

the versatile VelopA

soives all bicycle parking and storage problems is made from heavy section steel tubing and bar is hot dip galvanised after manufacture requires no maintenance is virtually indestructible has no moving parts grips tyre only has symmetry, simplicity and style



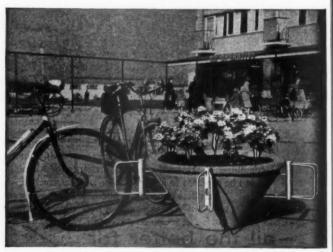
VelopA bicycle holders



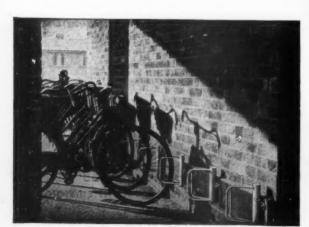
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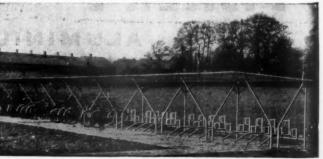
City Wall House, 129 Finsbury Pavement, London, E.C.2
Telephone: MONarch 8822 Telegrams: Lebasco, Avenue, London
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By permission of L. G. Vincent, Chief Architect, Stevenage Development Corporation, Herb



By permission of The Chief Education Officer, County Borough of Ipswich, Suffelk



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A Dual Role for Plasterboard at Bryant & May's.

At Bryant & May's new, ultra-modern match factory, Insulating Gypsum Plasterboard has been chosen for an important dual role as a roof lining material:

First for its inherent fire-resistant properties—essential for a factory of this kind.

Secondly for its value as an insulating material which fully satisfies current regulations to

limit heat loss from industrial buildings.

Bryant & May Ltd. Empire Works, Maryhill, Glasgow.

How much is FIRE RESISTANCE worth?

Gypsum Plasterboard is a thoroughly safe lining material, which does not require additional treatment to either face to be rated under B.S.476 as Class 1 Surfaces of very low flame spread. It only costs about 4d. per square foot, and in addition very low fire insurance premiums can be obtained for building linings in this class.

Insulating Gypsum Plasterboard, which is faced on one side with aluminium foil, costs approximately 5d. per square foot. It provides excellent thermal insulation, and has the same qualities of fire resistance as plain plasterboard. Plasterboard of either type is readily available and is easy to handle, erect and decorate.

IT'S THE CORE THAT COUNTS

All plasterboard has an incombustible core of Gypsum, which contains 20% combined water. During a fire this water is gradually released in the form of vapour, which provides an effective barrier to the fire's progress.



FACTS AND DIAGRAMS

concerning fire resistance and thermal insulation are contained in our free illustrated brochure.

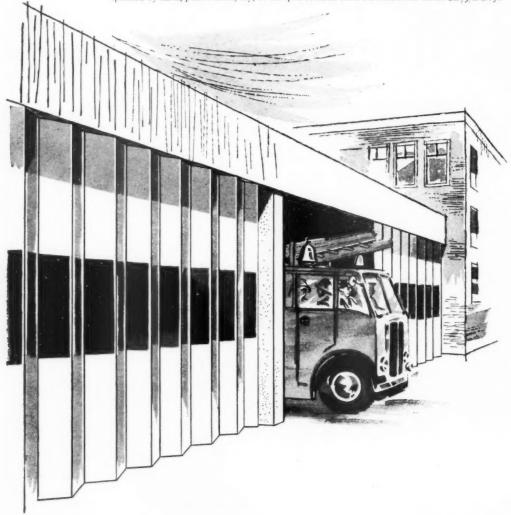
Write today to:

THE GYPSUM PLASTERBOARD DEVELOPMENT ASSOCIATION, G.P.O. BOX 321, LONDON WI

go on duty

The alarm sounds, the great doors slide smoothly back, and in seconds the gleaming appliances are on their way to deal with yet another outbreak of fire It is their constant, instant response to the demands made upon them, that makes Brady Sliding Shutter Doors the regular specification for fire stations, police garages, aerodromes, and all types of public, commercial and industrial buildings. Made in steel or aluminium to proved designs, their robust reliability ensures years of service. They are

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BRADY FOR EVERY OPENING: BRADY ROLLING DOORS IN STEEL, WOOD AND ALUMINIUM SLIDING SHUTTER DOORS . GRILLES IN STEEL, ALUMINIUM OR NYLON . UP AND OVER DOORS . FIREPROOF DOORS . COLLAPSIBLE GATES . SLIDING DOOR GEAR



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THE DOORS COMMANDING THE WORLD'S LARGEST SALE— London, Birmingham, Glasgow, Montreal, Port Credit, Hong Kong. CASE RECORDS FROM THORNS' FILES . . . I



This client wanted a club-house building erected at very short notice. THORNS were able to match his requirements closely from their range of standard designs.

Manufacture began at once from existing drawings. By the time the site was ready, an erection team was on hand with the prefabricated sections. Plumbing and electrical services were co-ordinated with the structural work.

In less than two months from the receipt of the order, the building was in use.

The approximate price is available to bona fide enquirers.

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THORNS' prefabricated buildings, as used at Hart's Holiday Club, are available in basic widths of 10ft., 12ft., 15ft., 20ft., 25ft., 30ft. and 40ft., in any length, and in traditional or modern designs.

THORNS will undertake the complete job, including all sitework; or will erect buildings on a prepared site; or, if desired, will supply the buildings for erection by the client's own labour, with or without Thorns' supervision.

Catalogue of designs and prices on request.

Ask THORNS to quote on your job.

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The new library of the Honourable Society of Grays Inn is a typical instance where low noise-level is an essential factor in basic design.

On a growing number of similar projects Sprayed 'Limpet' Asbestos by Newalls has proved the ideal treatment for high acoustic efficiency.

Sprayed 'Limpet' Asbestos by



NEWALLS INSULATION COMPANY LIMITED

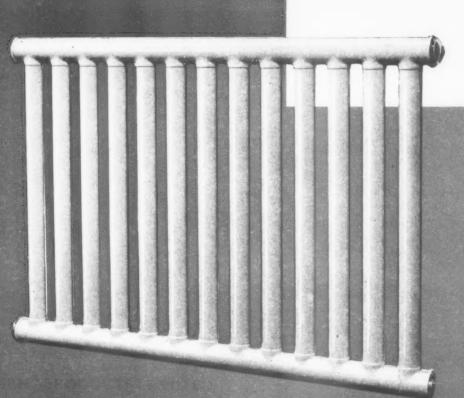
Head Office: Washington, Co. Durham, England. A member of the TURNER & NEWALL ORGANISATION

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Now you can cut labour and material costs on every paint job with Novotan. Novotan is a three-ply laminate with smooth matt ready-to-paint surfaces that eliminate the need for costly and time consuming priming, filling and sanding. Manufactured from resin bonded wood particles into the strongest and most durable board form it can be screwed, rebated and mortised like ordinary wood. Available with single- or double-faced 'built-on' surfaces.

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the better board for painting



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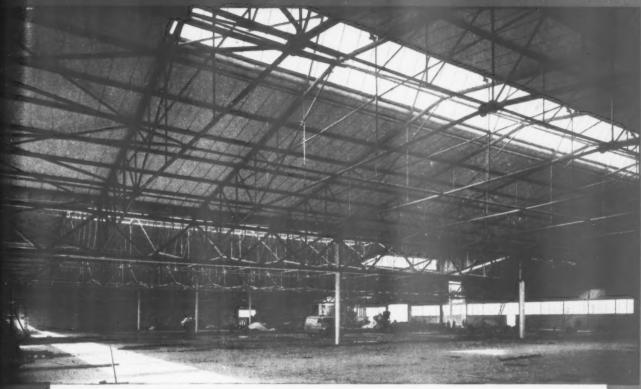
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Interior of building showing tubular steel roof structure.



Above and below:
Two external views of the building.



TUBEWRIGHTS'
Tubular Steelwork
for speed of
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Tubewrights' welded tubular steel structures are strong, economical in cost and quickly erected. The factory illustrated is typical of many industrial buildings—large and small—now in use, in which the advantages of Tubewrights' technique have been employed. This South Shields structure for Formica Ltd. was fabricated

by Tubewrights' for John Laing Ltd.



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The Consulting Engineers were Thomas Bedford & Partners.

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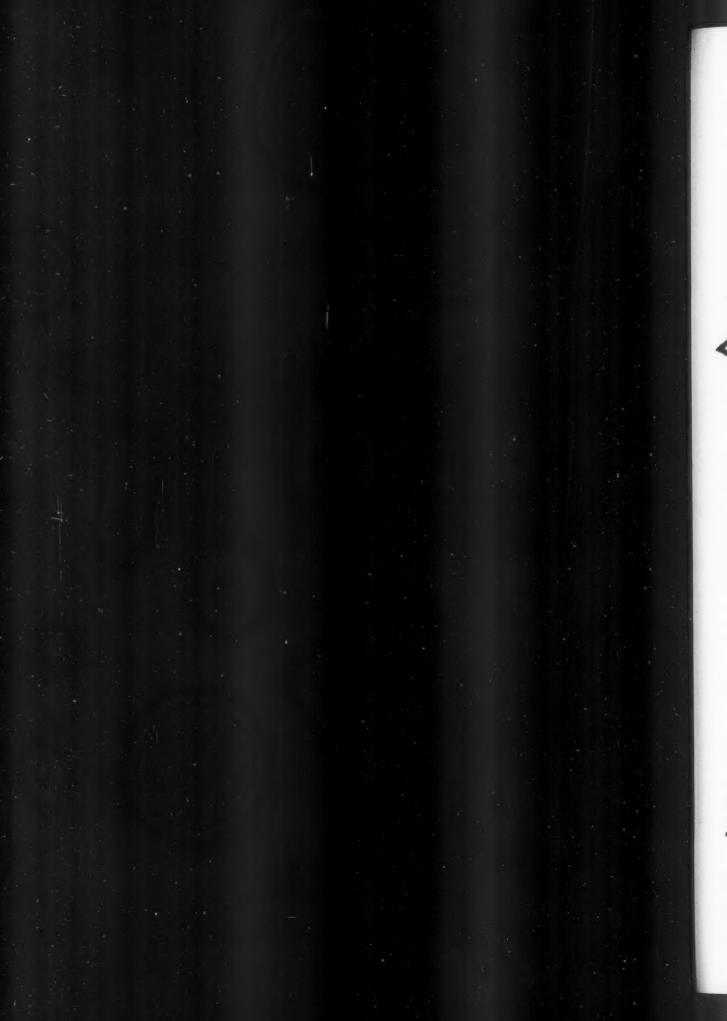
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For ALL-OVER heating...

the Kalorite circulator

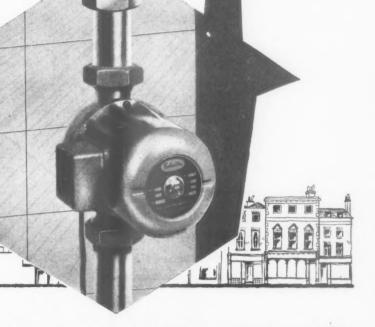
Forced circulation with the

'Kalorite' means cheaper, neater and more efficient central heating. WRITE FOR FURTHER DETAILS

HARLAND OFFER A COMPLETE RANGE OF KALORITE CIRCULATORS FOR HOT WATER HEATING SYSTEMS

- * PLEASING APPEARANCE finished in white, its compact, neat body blends with any surroundings.
- * NOISELESS quietly efficient - designed to work in
- complete silence. * TROUBLE-FREE - the 'Kalorite will operate for years without maintenance; no greasing or oiling, no glands to leak or main-
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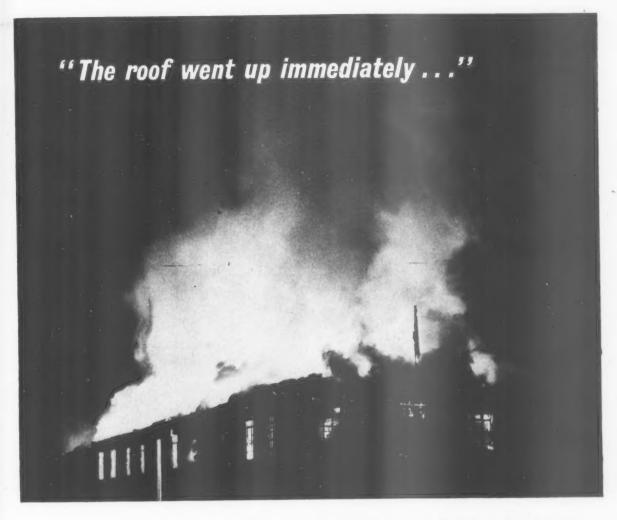
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BRADFORDS

FOR HOLLOW-BLOCK FLOORING

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- said an eye-witness of a recent disastrous factory fire

According to newspaper reports, the fire was spread over a very extensive area by burning material falling from the roof into premises below.



REPORT F.R.O. S.I. No.989 issued by the Fire Research Station, Boreham Wood, describes the test and gives details of the 2-hour classification given to the Thermacoust construction. Copies of this report, which we reproduce by permission of the Department of Scientific and Industrial Research, may be obtained free on application only from

THERMACOUST Channel Reinforced Roofing Slabs possess exceptional fire resistance. A roof constructed according to our recommendations possesses thermal insulating qualities of a very high order, and is also able to contain an internal fire for a considerable period of time. A complete construction including ½" cement and sand screed and three layers of bituminous roofing felt was subjected to a test* normally applied to floors specified in B.S.476, Part 1, 1953, to prove its ability to contain an internal fire.

THERMACOUST

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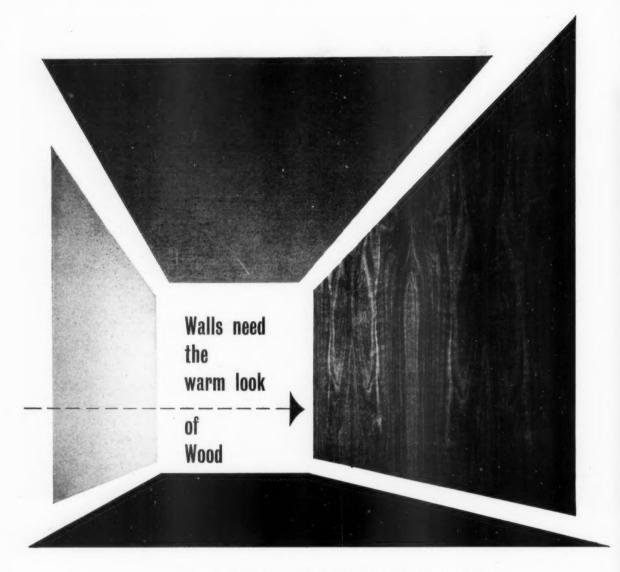
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THERMACOUST ROOFING SLABS ARE TESTED FOR FIRE RESISTANCE



With Venesta Veneered Plywood any surface can be made to delight the eye and give a warm, natural, friendly look. From the calm dignity of complete panelling, to the dramatic effect of a single wall—wood veneer is one of our most versatile decorative materials.

Its colour, grain and figure can be used to great effect in almost every type of interior and nowhere can you find a wider choice and more consistent high quality than in the Venesta range of Veneered Plywoods.

...the practical good looks of Venesta

and the perfect complement

VENESTA FLUSH DOORS

These are available either veneered or suitable for painting—to fit any scheme of decoration. They're built for hard wear too, solid core, lipped edges, flat and sound resistant.

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AIR CONDITIONING with

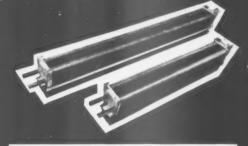
SULZER

INDUCTION TYPE

AIR CONDITIONING CONVECTORS



Reduces diameters of air ducts by 70%



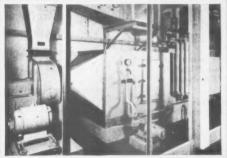
Low level convectors require minimum space



Illustrated above is a multi-story office block and a hotel equipped with Sulzer air conditioning convectors

Further advantages:-

Convectors work as normal radiators in off periods.
Sulzer convector system is practically noiseless in operation.
Ideal for individual regulation of sections or single rooms.



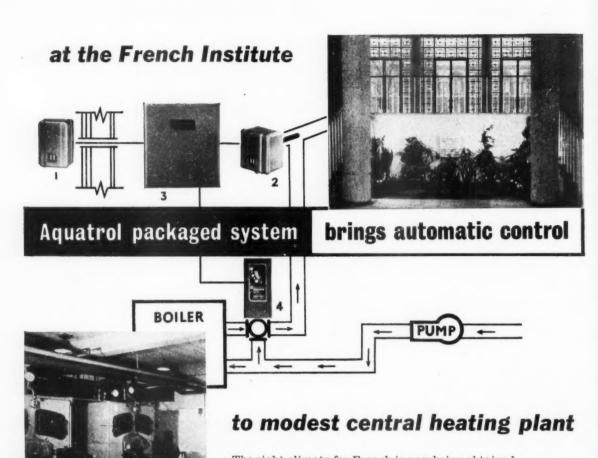
Requires air treatment plant half the size of conventional plant

Write for information to:-

SULZER BROS. (LONDON) LTD.

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Heating and Ventilating Engineers: Benham & Sons Ltd. Associate Architects: J. A. Laurent, D.P.L.G., and Hector O. Corfiato & Partners, F.R.I.S.A.

IMPORTANT Electronic systems are certified intrinsically safe to British Standard 1259-1943.

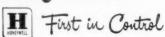
Ruislip	tion to Honeywell Controls Limited, Road East, Greenford, Middlesex. ne: WAXlow 2333.
	i like to know more about the Aquatro red system of heating controls.
NAME .	
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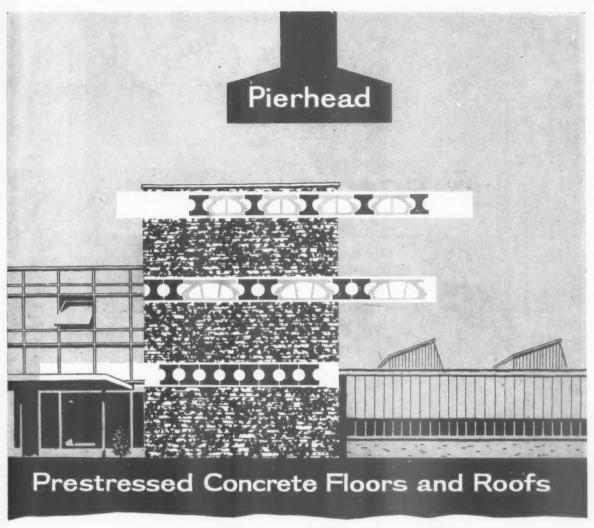
The right climate for French is now being obtained at the French Institute's new school, South Kensington, by a packaged system of Honeywell controls.

The AQUATROL system caters for small- as well as large-scale central heating plant. It consists simply of (1) an electronic thermostat fitted on an outside wall (2) an immersion thermostat on the mixed water pipe (3) a control panel to co-ordinate thermostat signals and actuate (4) a motorised valve.

Honeywell's Aquatrol system is inexpensive . . .
is outstandingly easy to install in offices, churches,
schools, factories, homes. Absence of moving parts means
low maintenance. This versatile sensitive system brings
maximum economy to many kinds of central heating plant.

Honeywell





Recent contracts for Pierhead Concrete Floors and Roofs for Schools and Factories include:—

Allerton Grange Comprehensive School, Leeds.

Architects. Weightman & Bullen, Architects, in association with R. A. H. Livett, O.B.E., A.R.I.B.A., Leeds City Architect.

Can Factory Main Production building and Employees' Service building at the new factory for MESSRS. H. J. HEINZ & CO. LTD., KITT GREEN, WIGAN.

Architects. J. Douglass Mathews & Partners, in association with Skidmore, Owing & Merrill, New York, U.S.A.

Main Contractors. Messrs. A. Monk & Co. Ltd., Padgate, Warrington.

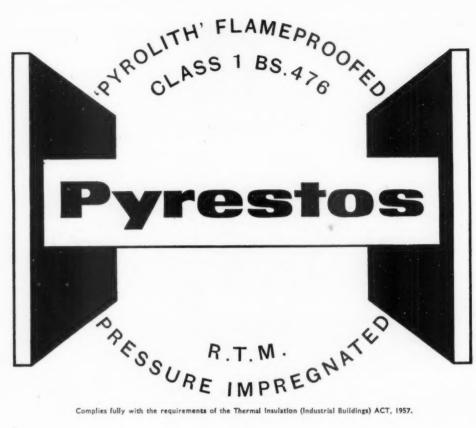
Leonard Fairclough office block.

Architects. Hermon Crook & Williams, A.R.I.B.A., Chartered Architects, Surveyors and Valuers, Incorporated Arbitrators.

NORTH. PIERHEAD LTD. Speke Boulevard, Liverpool 24. Telephone: Hunts Cross 1311-2-3.

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FIRE PROTECTION

is Standard Insulation Board Pressure "PYRESTOS" Impregnated to render it non-inflammable.

"PYRESTOS" can be cut or machined in any way without impairing the fire resistant properties.

"PYRESTOS" provides thermal and sound insulation coupled with an assurance against fire.

More than a million square feet of "PYRESTOS" has been produced on a pilot plant since 1957 and has gone into usage. We are pleased to announce that the first plant for mass production to be installed anywhere in the world, is nearly complete at West Drayton, and the increased quantities from this plant will be available shortly.

A board for every purpose



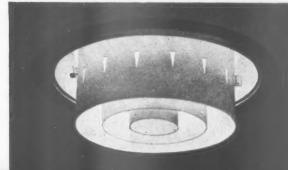
B.S.476/53 Surface spread of flame test

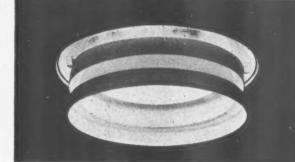
Pyrestos was awarded Class I, and was certified "No spread of flame"

C.V. CREFFIELD & CO. LTD., Leyborne Wharf, Horton Bridge Rd., West Drayton, Middx.

Phone: West Drayton (W.E.3) 4021

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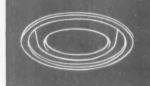




LIGHTING

AND RECESSED



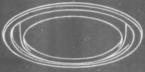


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Three new semi-recessed fittings to take 100 or 150 Watt BC lamps have been added to the wide range of Troughton & Young recessed fittings. A 9 inch hole is required for the new fittings, which are designed to give a degree of decoration as well as spill some light on to the ceiling surface. Please ask for leaflet TYL 18.

TROUGHTON & YOUNG

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RFW37

FLEXAIRE CONSOLE CONVECTOR...

- 1 Interchangeable Grille and End Panels
- 2 Heating Coil
- 3 'Mute' Variable Speed Motor and Fan
- A Speed Control with 'Off' Position
- 5 Acoustic Internal Lining



...IS A VERY

ADAPTABLE UNIT!

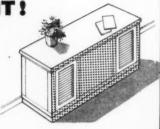
Forming part of work-bench in laboratories, etc.

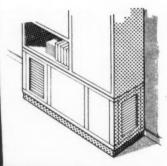
Free standing in halls, public lounges, etc.

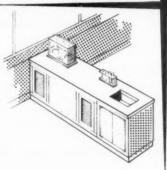
Built in to cupboard and shelf fixture in class-rooms, libraries, etc.

Serving two rooms.

Apply for illustrated leaflet.









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Maximum output with minimum input

Riley Oil Burning Equipment

Type HL Burner HIGH/LOW/OFF OPERATION

For capacities above 10 gallons per hour using 220 secs and 950 secs oil. Gives clean combustion and 13% CO2 at variable firing loads. Incorporates one small and one large air register, each with its own atomiser. On low load only the small burner is alight, at high load both are working at optimum efficiency. Large burner has tip shut off. arranged for hot oil circulation to start and self cooling on shut down.

Type F Burner ON/OFF OPERATION

Available in capacities from 20 lbs. to 90 lbs. per hour, using 220 secs oil. Air/Oil ratios and pressures are factory set to give suspended intense flame with 13% CO2, and do not require further adjustment on site.

Type G Burner ON/OFF OPERATION

Generally similar to type F burner, but designed for use with 40 secs oil.

Type M Burner FOR HORIZONTAL SHELL BOILERS

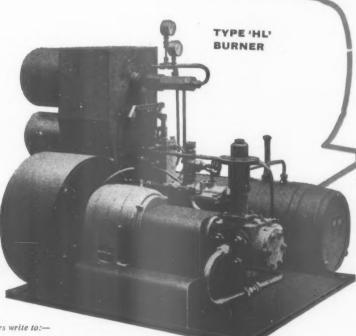
Spill return type atomiser with output range of 3 to 1. Specially developed air register to give clean narrow flame without impingement. Hot oil circulation to start and self cooling on shut down. Suitable for light and heavy fuel oils.

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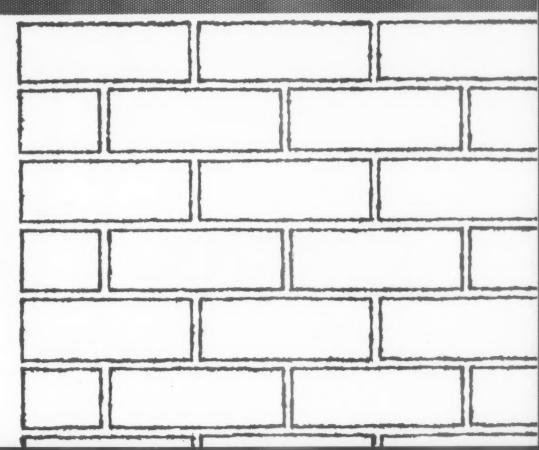
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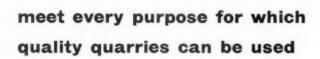
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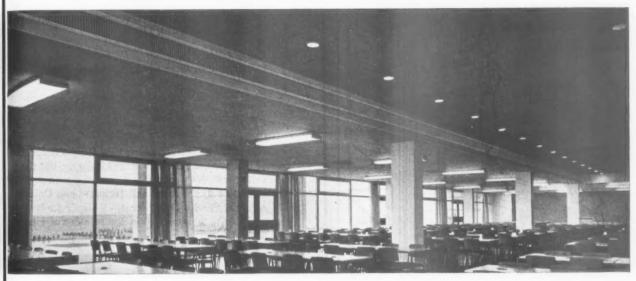
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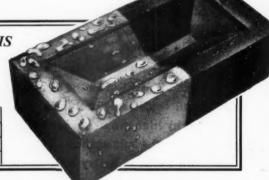
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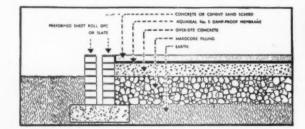
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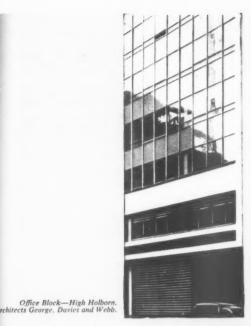
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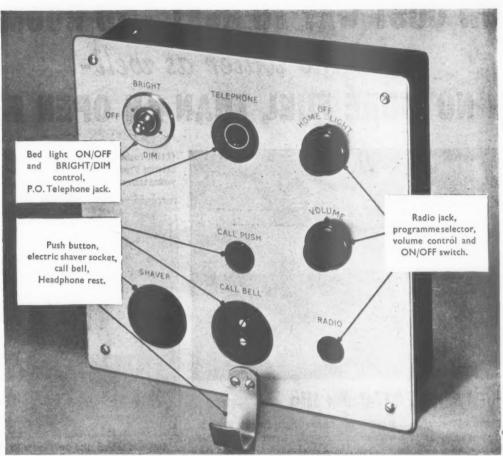


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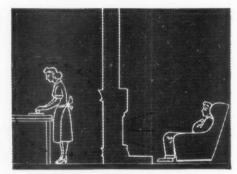
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(Left). Installed with Chevin C Inset Fire and Interior Frame No. 37 (used only when convected warm air is returned to the same room).



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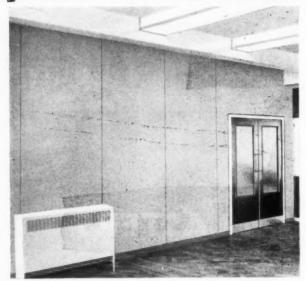
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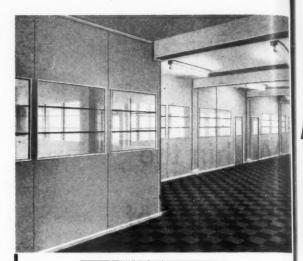
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When using the plastic faced or factory finished assemblies, bi-yearly painting costs disappear. Cleaning done with ordinary soap and water.

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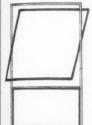
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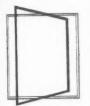


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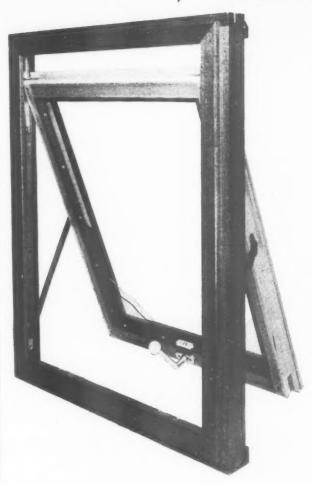
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Includes four-point perimeter locking and adjustable friction pivot hinges and stays.

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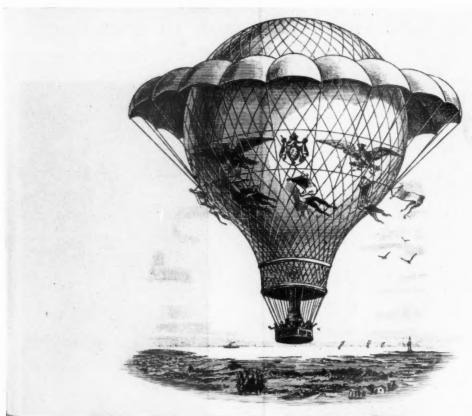
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Hot air balloon 1864: Eugene Godard Hulton Picture Library

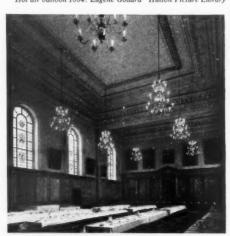
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This beautiful hall is lighted by ten heavy chandeliers which are serviced by means of L.E.F. Raising and Lowering Gear. L.E.F. were consulted at an early stage during building by the Architects (Sir Hubert Worthington, R.A., and T. W. Sutcliffe Esq., A.R.I.B.A.,) and the Contractors (Bower Engineering Works Ltd.) with the result that they were able to supply equipment "built in" to the ceiling.



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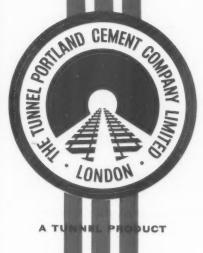
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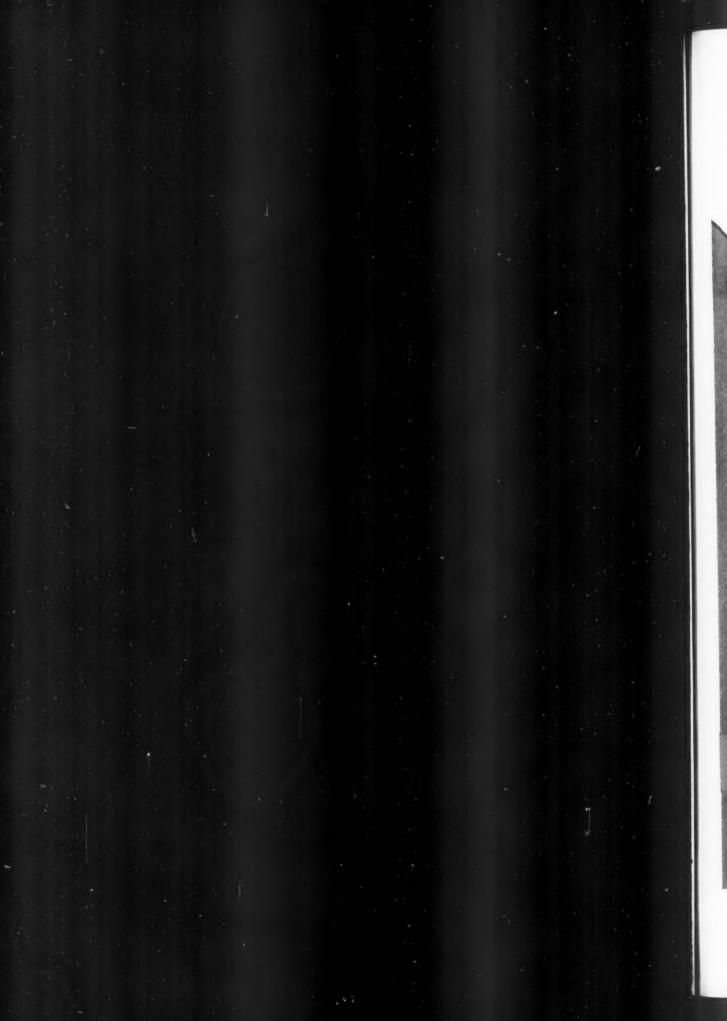
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build in stee

The eggs are in fewer baskets

TWELVE MONTHS AGO, when building operations were curtailed and bricks were very plentiful, the brick industry presented "The Case for the Local Brick". It concluded with the following:—

"Any large-scale closing of brickworks at the present time would not only seriously curtail future supplies; it might well place the building industry in a difficult position, both as to supply and prices of bricks when the present building restrictions are removed."

The supply position now developing as a result of greater activity in the building industry provides early justification for this warning. Since it was issued, a number of brickworks have been compelled to close down. Meanwhile, builders who were attracted further afield by lower prices are finding that even the largest sources of supply are not inexhaustible.

It is illogical to ignore the local brickworks when there is a glut of cheap bricks and expect to find them still ready to execute orders when the supply position gets difficult.

The brick industry is one of the first to suffer when building is curtailed. It takes time to step-up production, and "the eggs" are now in fewer "baskets".

Give preference to your local brickworks when they need your orders, and they will be there to serve cu when you really need them.





Some recent installations which demonstrate the versatility and range of Strand lighting and lighting control equipment

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Architects DEVEREUX & DAVIES F/F.R.I.B.A.
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Architect & Building News

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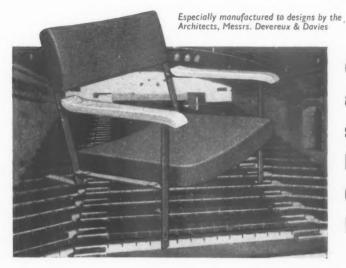
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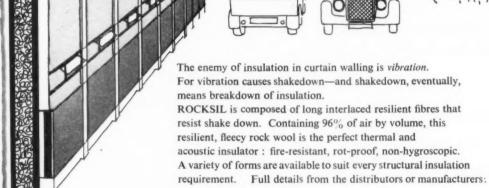
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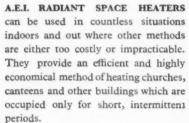
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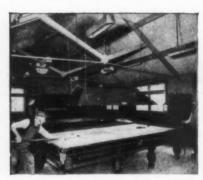
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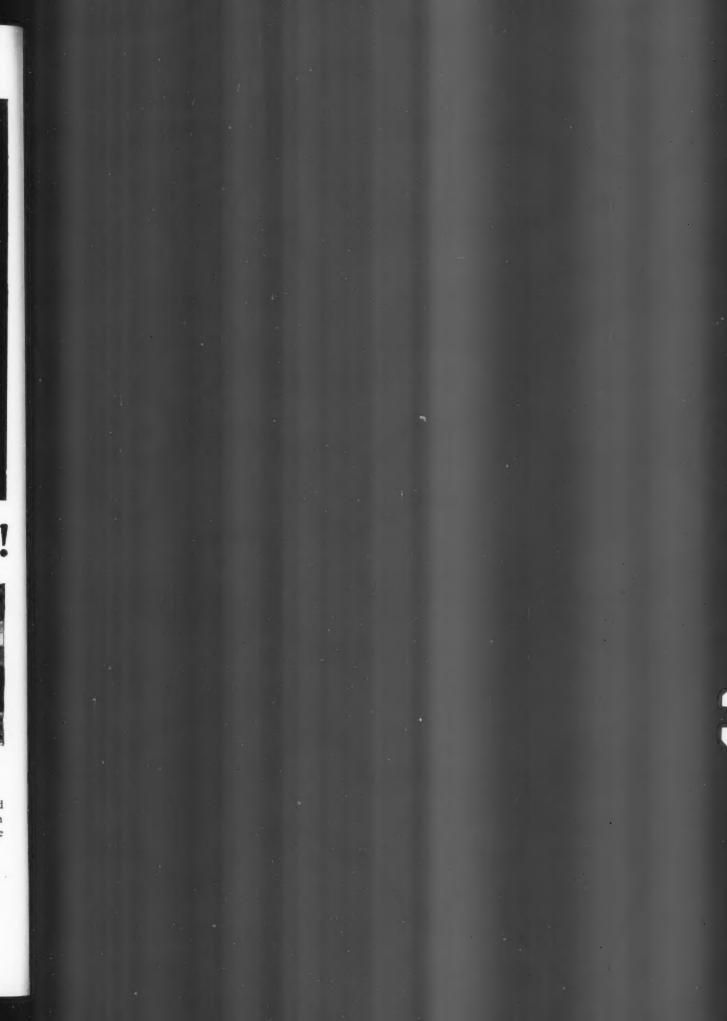


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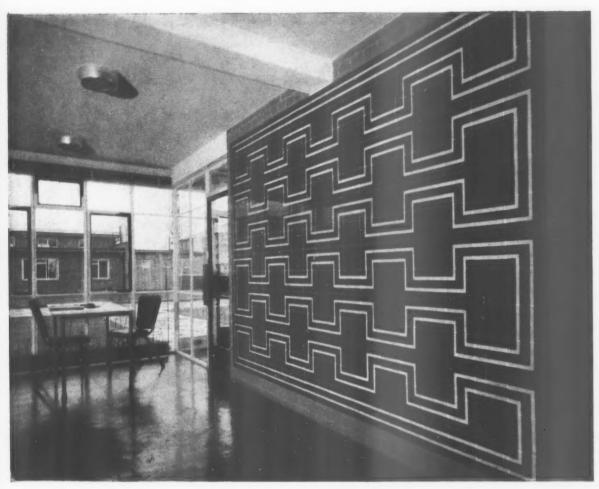






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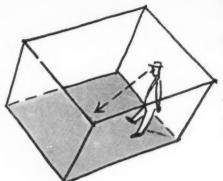
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USING LINOLEUM ADVENTUROUSLY

This is the first in a series of articles produced by MICHAEL NAIRN & CO. LTD. for the information and interest of architects. We asked the designer,

James Gardner, for his views on the use of colour and design in linoleum flooring, and we give below his comments and sketches.

MOST OF OUR LIFE is spent in a box, and so the treatment of the bottom of the box, the floor, deserves some consideration. This is not a new conception when we think of the technical knowledge and effort that must have been involved in producing the Roman tessellated pavements, Persian carpets and the parquetry of the French renaissance.

We should, I think, be somewhat ashamed that we have applied the colours and patterns of modern flooring materials to so little effect, floor surface design usually being treated as a rather unrewarding exercise.

Linoleum, while satisfying the requirement for an easily-cleaned dustfree resilient material, also has an uninterrupted smooth surface. And very often we have miles of it.

How not to be negative, but to relieve this monotony by actively exploiting colour, tone and pattern to give interest to the large floor-scapes now common in public buildings, office blocks and schools, is the problem. How to set about it?

The unobtrusive and practical tile counterchange, using such quiet and 'safe' colours as Dove Grey and Buff (which is called White in the catalogue) is generally dull and boring and often leads to uncomfortable diagonal perspectives as one sees the tile repeat running off at 45 degrees.



The alternative of applying some novel abstract design, which is usually devised on the drawing board as one would execute a design for a decorated tea tray, results in a floor which relates to nothing that will be standing on it—walls, people or furniture.

It is obvious that the floor must first be visualized as it will be seen from eye level in relation to walls and ceiling. A decision must then be made on the effect required, the character we wish to give the place.



A Non-commital and negative



B Dignity and efficiency



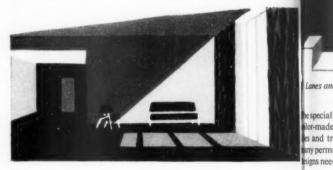
C Brave, bold and rich

With a simple tile or strip layout we can, by selection of colours and tones, get an effect of cool uncompromising efficiency, or warmth and richness. Or we can dramatize the area with unexpected and bold tonal changes.

Though not often conscious of the fact, people all the time react emotionally to the colour and space shapes around them, and so whether the architect considers the matter seriously or not, he will be producing an atmosphere—even maybe a negative one.

We must consider whether people are to feel welcome, select a spot to sit and rest for a moment, or whether they are here for a long time—perhaps eight hours a day for the rest of their lives. Are they to be impressed during a short consultation, or are they just passing through?

To visualize floor treatments in general terms is not very fruitful, as every floorspace sets a special problem. It is in designing to such limitations that ideas develop, and these sketches are intended to suggest an approach to the problem.



D

For example, in Northern climates sunlight is associated with pleasant mood, and a rather dull foyer with a north or obstructed window, which leaves the interior like a cold aquarium, can be given a friendly atmosphere by a floor design which simulates a patch of sunlight. The wall colours, should, of course, be decorated to develop this effect.



E Pattern expresses purpose

In administrative buildings, those long rectangular pipes with office doors down one side can be given an effect of logical progression by identifying the doors with a similar repeat pattern on the floor.

A large are with carpets alk-way as some floor while I do not pattern tivity which agards so mas where

For a rest a rive colo n interestin ok into, hich mak atement.

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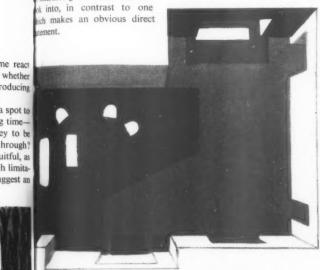
erior wh

by cost

large area, which it would be desirable but impracticable to relieve carpets, can be broken up into zones of different character such as a way across, a quiet zone, a lively zone, by different treatments on one floorspace.

while I do not believe it possible to direct circulation in a large area by pattern, it is nevertheless sensible to relate the floor treatment to the wity which takes place in different zones, and to define steps and other ards so that they are quickly recognized, particularly at night or in is where there will be a low level of luminosity.

or a rest area we can lay out a subtle, non-repeating interchange of four five colours of approximately the same tonal value, and so achieve interesting floor that one can



Lanes and areas of different interest (Plan view of Entrance Hall)

especial treatment of linoleum floors is often written off as requiring lor-made inlay to some elaborate key drawings, but by use of standard s and triangular half tiles, in conjunction with unbroken areas, so my permutations of colour, pattern and tone are made possible that cut signs need only be introduced when very special effects are required.



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Simple cuts to make lively designs. (Details of die-cutting and handtting techniques will appear in the second article of this series.)









ertheless, there are such exciting possibilities in this direction that ould surely be worth the architect's while to appoint reputed artists to eriment with designs, just as he would appoint outside specialists to ute sculpture or a mural decoration. A floor can, after all, be a vith office dium for the expression of ideas. It can give character to a utilitarian ression by erior where decorative embellishment of other surfaces would be ruled by cost.

Details of linoleum used in each illustration listed

- A Plain linoleum, cut. White and Dove Grey.
- B Standard tiles. Charcoal, Black, with Arctic White, cut to strips one-sixth width of tile.
- C Cardinal Red Marbled, and Oxford Blue and Yellow Plain, cut to strips.
- D Plain-Brown R, Yellow and Black.
- E Marbled-Black, Cardinal Red, Peacock Blue.
- F Black and Brown R. Plain, and Peacock and Cardinal Red Marhled

NAIRN DESIGN BOOK

A full-colour book illustrating new directions in floor design will soon be available to all interested architects. If you would like to receive a free copy immediately upon publication, please write to: Michael Nairn & Company Limited, P.O. Box 1, Kirkcaldy, Scotland.

NAIRN MELOTONE LINOLEUM

The new range of Nairn Melotone Linoleum, consisting of 8 muted colours with softly blended marking, is illustrated on the right-hand edge of this page, together with a selection of colours from the plain and marble ranges in 4.50 mm gauge. A large selection is also available in 6.70 mm gauge. Please write for information to one of the addresses below or consult your technical representative.

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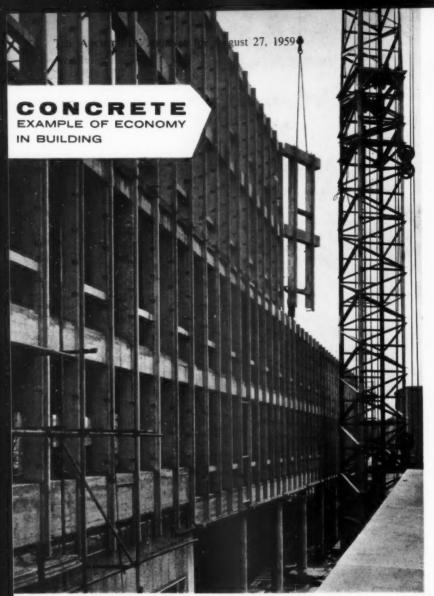












Coventry College of Art and Technology

The precast concrete frame of this building was constructed at much less than usual cost. This was achieved by early consultation and close liaison between architect, consulting structural engineers and the Bison organisation and the use of single and double H-frame construction, spine beams and spine columns.

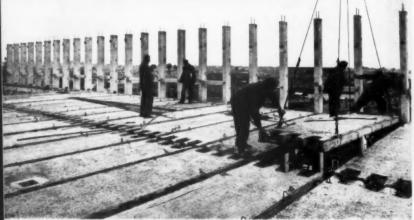
The main block is 180ft. long and 40ft. wide, with fair-faced round-nosed exposed mullions at 4ft. centres. Constructional stiffness is provided by means of the two end walls and the precast lift and staircase wells. Each suspended floor acts as a horizontal wind girder, construction consisting of 3ft. 6in. wide Bison hollow prestressed units with 6in. wide insitu concrete joints between, these being aligned with the mullions. Stirrups, projecting from the precast floor slabs, transmit the horizontal wind shear. Horizontal steel is used to tie the H-frames together and also to tie them into the insitu joints.

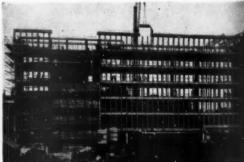
The mullions are integral with the H-frame, thus avoiding the use of artificial mullions. One result of the architect-engineer co-operation was establishment of practicable mullion shapes and tolerances, these being designed exactly to produce the desired architectural features.

By using a slightly tapered, instead of square mullion nose, it became possible to employ permanent steel moulds during precasting. This development rendered possible exact repetition of every H-frame and gave an almost perfect line through the 6-storey elevation of each mullion. Two moulds were found to be necessary for production of the 120 H-frames employed in construction, thereby enabling unit costs to be vastly reduced.

Almost complete absence of scaffolding for the east and west elevations was another factor in low overall cost, as was efficient progress and erection organisation which resulted in erection of precast units on the day of delivery.

Architect: Arthur Ling, B.A., F.R.I.B.A., Coventry City Architect
Consulting Structural Engineers: Husband & Co.
Contractors: W. H. Jones & Sons.





TOP LEFT: Typical two-storey H-frame being lifted into position, sho repeti.ion along main elevation.

ABOVE: General layout of precast concrete H-frame between first floor roof.

LEFT: Precast prestressed concrete floor slabs being fixed, showing projestirrups, About 400 floor slabs of this type were used.



BISON floors, beams and concrete frame structures

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in a nutshell....

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The Architects' Journal

No. 3358 Vol. 130. August 27, 1959

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NOT QUITE ARCHITECTURE

The Descent of F3

Opinions differ on what is killing Formula Three—public indifference, too much of one chassis (Cooper) or one engine (twin-cam Norton), hostility of race organizers, drivers migrating to bigger and louder machinery—but there is no doubt that it is fading so fast that there will soon be a Society to Preserve it. Never mind, in a stormy ten years it has altered the face of British car-racing for the better (that's certain) and for ever (let's hope).

No tears to be shed here—racing formulæ and their regulations obsolesce as fast as the machinery built to them. Five years is a good age for a formula, ten begins to smell of embalming fluid, twenty (e.g., the US Championships formula) and you begin to get monsters as anachronistic as the Horse Guards. F 3 has had its day and done its job.

That job was not, as the auto-pundits keep telling us, to breed drivers for bigger cars. In view of the crowd that have driven in F 3, it's astonishing how few have gone Big-Time. Yes, I know all about Stirl. and Peter Collins and Ivor the Driver, but what about the whole host of others, from Ken Wharton and Fearless Jack Fairman, through Mike Hawthorn and Tony Brooks, to Cliff Allison and Graham Hill, who arrived by quite different routes.

F 3 was never a prep school for boy racers for a very good reason. Though hopefully conceived as a poor man's formula, it rapidly became a grey-flannel formula, run on, or near, the expense account, by middle aged professional bodies like Curly Dryden, a hotel proprietor, George (C'est si Bon) Wicken, the flying milkman, or Don Parker, the midget garage proprietor from Battersea.



Test Case on Highway Design

The Newcastle-on-Tyne City Council's plan to construct a roundabout (below)

Road (where it enters the City at Pilgrim Street) and a proposed inner at the junction between the Great North ring road, is a classic example of out-

dated highway engineering that ignores town planning and architectural considerations. It confirms the worst fears expressed by the RIBA when it learned that architects were not being included in urban road study groups. The inquiry into the application for a compulsory purchase order was to have been held by an inspector of the Ministry of Transport. It was only after spirited intervention by the Northern Architectural Association that the inquiry was taken jointly by inspectors of the Ministry of Housing and Local Government and of the MOT. The NAA rejected the roundabout solution and argued that, because the area of land covered by the CPO was so small that no satisfactory buildings could be built on the plots of land left over, the roundabout would become "a circle of visual squalor unparalleled outside the USA." Professor Jack Napper appeared at the inquiry for the NAA and presented their tentative alternative plan (above) for a two level interchange to secure unrestricted traffic flow, that uses less land, and makes possible a far superior architectural solution in which the area is planned as a whole with highway and buildings visually interrelated. A report of the public inquiry, the result of which is still awaited, is on page 78.

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This expec mote and the d only to pa disap for th Kieft and us th These were the men who made Formula Three, and they tended to stay there and go on making it, for the simple reason that they were too old, or too tangled in domesticity or business, to use it as a nursery slope for Grand Prix racing.

The job of Formula Three was quite otherwise, a point that struck me very forcibly at the Crystal Palace earlier this season. Turning to my neighbour with a wild gesture at the Formula Three machines gleaming like a Valspar colour-card through a haze of Castrol fumes as they waited to start, I declared "Crummy and tatty as they may be nowadays, they still look like real motorracing."

And that's it. With its large fields of evenlymatched machines and drivers, Formula Three introduced the Great British Public to motor racing as a competitive sport, and a spectacle. Before the war you may remember, British motor racing consisted of ageing but under-developed automobiles entangled in a Brooklands handicapping system that made most restrictive practices look like Liberty Hall. This tedious exercise in higher mathematics took place in virtual secrecy anyhow, in accordance with Brooklands' well-remembered motto, "The right crowd and no crowding."

The great British Public simply didn't see any motor racing until after 1945, when the physical dismemberment of Brooklands, a short wave of democracy and the advent of F3 did three things: took motor racing to the people, on tracks all over the country: produced a proliferation of cars sufficiently alike to make handicapping unnecessary, and let in a crowd of men who, having won a war by all means permitted under the Geneva Convention, applied equally total tactics to motor racing. Victory now went to the canny, the iron-nerved and the diligent, not to the flanneled fool with the latest snob-job from Italy. Cars raced on the limit, wheel-to-wheel for laps on end, each driver relying absolutely on the skill and sense of the others, for in conditions like that, one boob would make salami of a dozen men.

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This is the standard we spectators now expect in every race. Fortunately for promoters there are just enough good drivers and cars to provide it in most classes, so the disappearance of F 3 won't rob us of the only kind of motor racing we are prepared to pay good money for. But when it has disappeared, spare a thought occasionally for the greying bourgeoisie in their Coopers, Kiefts, Starides, Emerysons, Martins, Arnotts and do-it-yourself specials, who first taught us that car racing could be so good.

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The Editors

A STANDARD RANGE OF COLOURS

Tt is now nearly five years since the first publication of BS 2660: 1955 colours for building and decorative paints. The idea of a standard range of colours (as distinct from the standard colours of the old BS) was a bold one and the fact that it has excited so little controversy among architects themselves is perhaps a sign that the profession is chiefly absorbed by other matters. What a fuss there would have been if BS2660 had been published in the '20s or '30s! The significance of BS2660 for architects is twofold: in the first place, by its adoption of the Munsell system of classification, it has encouraged an analytical method of thinking about colour. In the second, it has provided a useful tool for the many architects who either have no convictions about colour of their own or who share those of the framers of the standard. The real practical meaning of the standard only

emerges, however, when the interest shifts from paint for application on the site, to paint as applied in the factory. Today's architect, if he is resolute, can always control site paintwork; but he can exert very little control over paintwork (or perhaps we should say pigmentation) which is carried

out in the factory.

If he is not to involve his client in great expense, he must allow Messrs. X's wall tiles, Messrs. Y's floor covering and Messrs. Z's office furniture to come on to the site in colours which have no relationship to one another. To help get over this difficulty the Industry Liaison Sub-Committee of the RIBA's Science Committee has been trying to get manufacturers to design their colour ranges with BS2660 in mind. This does not necessarily mean matching BS2660 colours, for this may not always be feasible; but it does mean harmonising with them. What is the response? Rather tentative, if a meeting held with manufacturers recently* is anything to go by. It is hard for those used to sell colour by competition to visualize the effect on their business of a move towards conformity. Yet, in our view, the need for this measure of co-ordination is as pressing as the need for the co-ordination of dimensions and we prophesy nothing but good of it.

REYNER BANHAM * See news report on page 79.



THE THAW SPREADS

After all the fuss about the Dane at sacred Oxford it is humiliating to learn that Russia has invited Swedes to plan a new town south of holy Moscow. The Swedish Architects Association (SAR) have collaborated with their engineering counterpart (SKIF) on a complete scheme covering housing and hospitals, schools and sewers and are shortly submitting it to the Soviet authorities.

It will be interesting to see if the detachment of fresh minds can cut through by-laws and other local inhibitions, which seem to be as restrictive in Russia as anywhere. If they can, our own new towns might benefit from the example. Some day the thaw might even melt the ICE into collaboration with the RIBA.

TAUNT DANS LA MAISON

Jacques Tati's latest film, Mon Oncle,* is a must. This tragic comedy about the battle sanity is losing to sanitation has an architectural background. Indeed, the architecture is as essential as Tati himself, and is a biting comment on the debasement of the concept of the machine à habitert. This is no crude burlesquet: it is too near the truth and architects will find it unnerving.

READY FOR URANIUM DAY

Incidentally. I've just come across some rather macabre last words by Lloyd Wright-about Guggenheim Museum, that remarkable spiral that has caused so much controversy in New York. The building is built like a giant spring and the ramp is one continuous piece from top to bottom. "When the first atomic bomb lands on New York," said FLW, " it will not be destroyed. It may be blown a few miles up in the air, but when it comes down it will bounce."

BACKS TO THE WALL

Chelsea's recently installed lamp standards are fairly reasonable as these things go. And the Borough are to be congratulated on its proposal to substitute wall brackets for standards where this is appropriate. But the design-well, here it is, sullying our pages. A prominent citizen informs us that "before the bracket was decided upon, the opinion of a very eminent architect, who is a Royal Academician, a Vice-president of the RIBA, Royal Gold Medallist and past member of the Royal Fine Art Commission, was sought and the design amended to conform with his observations."-Any guesses? If, as one hopes, there are to be fewer lamp standards and more wall brackets I hope the COID will encourage manufacturers to produce some decent brackets-although until there is a demand, no one is likely to take a chance.

EPSTEIN'S BUST OF SPENCE

The unexpected death of Sir Jacob Epstein, to whom George Pace pays a tribute on another page, has inevitably meant that a number of his works have been left unfinished. But happily Sir Jacob had finished his bust of Basil Spence, and the RIBA will be enriched by one of the last works of a very great sculptor.

FILIAL PIETY

Not quite what you would expect from a work entitled Six Great Architects.* is the best way to describe Robert Lutyen's new book in Hamish Hamilton's Six Great series. For one thing, it should read nine great architects, since " one " of them is the Adam Brothers. For another, it beats against the current tide of art-historical opinion, by speak-

* Hamish Hamilton 12s. 6d.

ing (for instance) of "Palladian extravagance," by abusing Hawksmoor for "the indescribably ugly church of St. Mary Woolnoth" (I was so shaken by this one that I went to have a look at it. and couldn't disagree more violently). by saying that Adam was primarily a decorator, and in persistently using some very odd spellings of proper names.

But the basic deviation from what you would expect is in the chosen six themselves-Inigo Jones, Wren, Vanbrugh, Adam, Nash (what, no Soane?) and Sir Edwin Lutyens. This last, a piece of filial piety if ever there was, is both the key to the whole curious book, and, I think, its justification, and you will probably get the best out of it by reading the introductory chapters first, which are about Classicism and the English tradition, and then skipping on to the last two, which are about Lutvens and his times. These give you the premises and prejudices on which the whole work is based; you can read through the other chapters some other time, in the light of what is, effectively, the best compact, inside, account of the man who built New Delhi that we are likely ever to have.

STADT BUT NOT STATIC

Something that may get overlooked in the post-Strike confusion if I don't record it here, was the world première of a film in the lecture hall of the AA. This was not a Wardour Street gimmick, the venue was entirely appro-Chelsea's new lamp brackets. See " Backs to the Wall."

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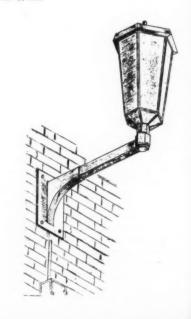
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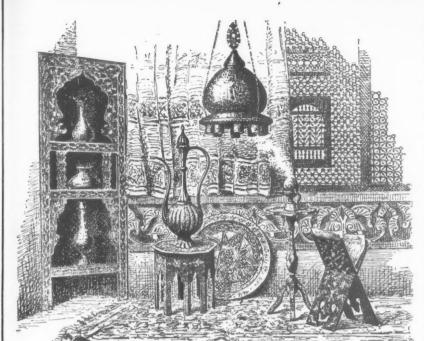
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A Liberty's catalogue (late 19th century) described this as "an Arab, often called Moorish, interior adapted in Western taste". See "Who is 'H. J.'?"

priate since the film, entitled Hauptstadt Berlin, had been made by John McHale on the basis of the Smithsons' prizewinning entry in the competition for Berlin city centre.

In fact, it is about London, which McHale has photographed as a city in motion, seen from cars, from escalators, from pavement level, and from the top of the Monument. All this, like the very smart modern jazz soundtrack by Frank Cordell, is supposed to explain and expound the theories on circulation that the Smithsons put to work in their project, which appears from time to time, well photographed in detail and usually in motion too. It does explain it, but visually it rather swamps it-real people in motion will always be more interesting than people in rendered perspectives, I suppose. On the other hand, it undoubtedly makes the Smithsons' point that one of the things you do in cities is move about, and that one of the planners' tasks is to make moving about enjoy-

NOT ONLY SAFE, BUT EXPENSIVE

From various reports, including one from the Select Committee on Estimates, it seems that atomic power stations aren't, after all, going to be cheaper than coal. This is largely because there's no longer a military demand for the enriched plutonium by-product. Another reason is that there are to be more safety devices because of the Windscale accident. So during the grand free-for-all between coal, oil, coal gas and liquid methane, the taxpayer goes on paying for atomic stations while pits are being closed down and millions of tons of unsaleable coal are being stockpiled. And every few months yet another remote piece of coast is scheduled for a new station and the public is handed another bromide-" All atomic stations are completely safe, but, just in case, we think they ought to be at least 10 miles from any major population centre." As I've said before, it won't take us very long to run out of 20 mile coastal stretches. When will the public get tired of it? Presumably when they realise that atomic stations don't turn out cheaper electricity after

WHO IS "H. J."?

James Laver's amusing little history of Liberty's shows that the firm has been an unusually enlightened patron of contemporary design since its foundation in 1875. Between the

wars the firm was laughed at for its Tudorbethan stockbrokery in Great Marlborough Street-the building that fooled Frank Sinatra, who thought it was old without an e. Mr. Laver, who says that the present directors wouldn't do this sort of thing nowadays, is mischievous enough to quote an "ecstatic writer" in a 1924 ARCHI-TECTS' JOURNAL. "Under such projecting stories Shakespeare himself must have walked. It was in the streets of such buildings that Marlowe and Green ran riot, that the watchman called the hour, and curfew was rung. And what a place for a shopman! What a setting for his goods! In what other English building could one see the silks to better advantage or handle the brocades from France and Italy, Japan and Shantung?" The article was by "H. J.," better known to you as-no, it wouldn't be fair to tell you. Incidentally, there was no querulous old ASTRAGAL in those days.

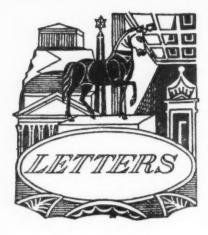
ASTRAGAL UP THE WRONG TREE

I owe a profound apology to N. C. Williams, the winner of the Berkshire county sign competition. My copy, written from a holiday retreat, did not get into print as it was written, with the result that my comments (" Berks Up The Wrong Tree ") on the first and second prize-winning designs got mixed up, and the caption erroneously attributed to Mr. Williams the design actually placed second. To clear up the confusion let me say that Mr. Williams' rectangular design, which was placed first, was in my view "fairly inoffensive," but the 12-ft. column of the design placed second was "aggressively unpleasant." The real object of my remarks, however, was to ask why every town and county now thinks it necessary to proliferate these signs on every road.

ASTRAGAL

Mr. N. C. Williams' winning design in the Berkshire county sign competition. See "ASTRAGAL up the Wrong Tree."





John Radford, A.R.I.B.A. President, Devon and Cornwall Society of Architects.

Derrick Woolf, Student R.I.B.A. D. A. Howells, M.A., A.M.I.C.E.

Not Revolting

SIR: As a member of the Committee of Presidents of Architects of Allied Societies who submitted the memoranda on the second interim report of the Constitutional Committee to which reference was made in the JOURNAL of August 13. I feel that I should point out that the headline which you had chosen "Allied Societies Revolt" is misleading and could at this time be dangerous.

It is misleading in that it suggests that the Allied Societies are in revolt against the new constitution, which they are not. The implications of the interim report are very far reaching, and for some Societies, raise serious domestic difficulties. The Presidents have quite rightly sent in a memoranda to the Committee drawing attention to these difficulties and asking that fuller consideration should be given to them. This is not a revolt, it is simply a right and logical part of the process of recasting the constitution of the RIBA.

I believe the headline to be dangerous in that it might ferment the wrong sort of controversy within the profession at a time when crucial decisions are being made and unbiased and cool thinking is necessary. I hope that in your forthcoming issue you will try to correct any misconceptions to which your headline may have given rise.

JOHN RADFORD

Exeter

Churchill College

SIR: The gloom engendered by your Editorial last week is equalled only by that of the Assessors' Report: A design " of exceptional merit . . . distinctive, imaginative and completely consistent" is rejected in favour of a design which "seems to . . . meet all (the) requirements."

What are the requirements of a college building? If I were one of the members, amongst generations of others, who might be expected to belong to the college designed by Howell, Killick and Partridge I would answer something like this. To walk under vaulted cloisters to the lake; to sit on the steps in front of the Bracken Room with the roof lantern of the Hall rising up on my left; to gather under the pilotis of the centre block and see into both courts with their curving, enclosing arms beyond. In short, to experience the humanism, expressed in tangible form through the architecture, of having both identity as an individual (bay window, free view) and the sense of community (cloister and court) in a modern and not medieval scale.

The architect alone, being a creative human being and not a mechanical computer, can do this. That is why, having recognized this fact, the decision of the Assessors, including three distinguished architects, can only give rise to disappointment to all to whom value of living is something more and different to value for money.

DERRICK WOOLF

Kingston.

The Editors write: We shall return to this subject next week when we publish, necessarily briefly, the remaining designs for Churchill College.

The Engineers

SIR: I have read with the greatest interest the leading article "Light on Heating" and the report of Mr. Varming's Yerbury Foundation Lecture, both of which appear in the Journal of May 28. I assure you that we engineers are very much troubled over the fragmentary nature of the organizations of our profession.

As things are anyone may call himself an engineer whether or not he is competent to pass the examinations laid down by established institutions. Similarly anyone may found an institution, though here there exists the device of the Royal Charter to indicate whether an institution has established itself satisfactorily or not. One cure for this state of affairs would be unity imposed by law. But the freedom which exists today should not be discarded lightly. To deprive a man of the right to call himself an engineer and earn his living by his trade because he does not see eye to eye with some big institution would be unjust. And it is precisely those who have something new to contribute who find it difficult to conform. Similarly institutions need the freedom to grow and justify themselves and perhaps replace those which decline and decay. This freedom means however that those who use the services of engineers have less legal protection and a greater responsibility in making their choice.

One great contribution could be made to unity if the smaller specialized institutions were to follow the example of the Institution of Water Engineers, which insists that candidates for membership must first be members of a senior and less specialized

organization. Likewise the Institution of Heating and Ventilating Engineers would do more to raise the status of its branch of the profession if it were to insist that all candidates should first be members of. for example, the Institution of Mechanical Engineers, than it would by pressing for a Royal Charter. It would at the same time be helping to unite the engineering profes-

A valuable contribution which the profession has made to unity is the founding by the senior institutions working together of a permanent conference, the British Nuclear Energy Conference, to serve the needs of the nuclear power industry and of the members of the various institutions working in that industry. A similar conference to serve the needs of the building industry is badly needed. This is preferable to a distortion of the natural shape of professional and intellectual disciplines to serve the needs of a particular industry.

In contrast to the anarchy of the professional institutions the universities and thesystem of engineering education in general are a great power for unity. All engineers of whatever future specialism are educated in one faculty. But this unity has lately been upset by the foundation in some universities of faculties of building which will train some specialized engineers. This splitting of some branches of engineering from the main body is something whichmost engineers will view with misgiving: and their interest in the new developments. will be an uneasy one.

D. A. HOWELLS

London.



CIVIC DESIGN

Newcastle's Roundabout

A correspondent writes:

With the recent resurgence of interest in Urban Renewal, an inquiry of particular interest and importance to town development has recently taken place in Newcastle. The purpose of the inquiry was to consider the Corporation's proposal to acquire by compulsory purchase a large area of land at the north end of the Tyne Bridge, for a roundabout in an attempt to solve the problem of a very heavily congested and out-

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dated road intersection point on the Great North Road. This trunk road runs slap through the main shopping area which, it is proposed, should be by-passed by an inner ring road: the roundabout is the initial

Newcastle's central area is a particularly fine example of early Victorian City Planning conceived comprehensively over a century ago by the initiative and co-operation of John Dobson, the architect, Richard Grainger, a builder, and the City Council. Under the murk and grime of smoky Newcastle, mutilated in parts by excessive commercialism, lies a somewhat monumental but nevertheless dignified and interesting City centre. It was city planning par excel-

Here, astride the entrance to this great city, the regional capital of the North East, lay the opportunity for the City Fathers to emulate their predecessors by creating a fine example of civic design. Such was the hope of the members of the Northern Architectural Association who, on hearing of the proposed compulsory purchase order, asked the Town Clerk for details of the proposed scheme. None at first was forthcoming; ultimately a small block plan indicating a roundabout and the area to be acquired was obtained. Hopes were shattered; buildings were to be demolished; there was no attempt to recreate; only a vast expanse of roundabout amongst shabbiness to be revealed. Now apprehensive, the Northern Architectural Association made further enquiries and their worst fears were confirmed when the Town Clerk indicated that the compulsory purchase order was a Ministry of Transport matter only, and the recreation of the surrounding areas was irrelevant to the Corporation's proposal.

Stung into action, the Association decided to appear at the inquiry and requested the Minister of Transport to consider the appearance of an Inspector from the Ministry of Housing and Local Government, so that the wider but interrelated planning and architectural implications could receive proper consideration along with the highway problems involved. This request was

The inquiry, under the ægis of a Chairman and two Inspectors (one Ministry of Transport and one Ministry of Housing and Local Government), opened on Tuesday, June 9. The Corporation batted first and stated their case through the Town Clerk and City Engineer. It was quite evident that the Corporation had viewed the whole matter as a highway problem only. This was confirmed by the City Engineer in cross examination. During the proceedings and before the Association stated their case, the Town Clerk intimated that architectural matters (apart from the demolition of existing buildings) were outside the scope of the inquiry. The Chairman concurred. One wondered, then, what brief was given to this Triumvirate?

Nevertheless, the Association continued to press their case, and their President, Professor J. H. Napper, was duly heard on the fourth day after traffic experts on preceding days had presented, dissected, and analysed almost every kind of road and vehicle statistic, assumed this and that, and come to conclusion that there was a lot of traffic congestion, that a lot of traffic went north to south and vice versa, and that a further lot crossed in both directions. Vehicles were sent here, there, and everywhere and thus there was, as expected, no agreement as to how the problem should be solved. Each protagonist had his own particular hobbyhorse to ride: nevertheless, some very salient points were made.

It was noteworthy that during the first three days no-one, Corporation and objector alike, viewed the problem as a whole. On the fourth day greater clarity appeared when Professor Napper indicated that here was a complex problem which should be reviewed comprehensively, and that the highway, planning, architectural, and other visual matters were all interrelated. He reminded the Inquiry of the views expressed by Henry Brooke as recently as May 22, that piecemeal planning will not do, that comprehensive planning was needed, and that more attention should be paid to threedimensional planning. Further, Professor Napper reiterated the desire of Mr. Watkinson, the Minister of Transport, to foster the co-operation of architects and engineers in solving the visual problem of the motorway in our urban areas. One thought, here indeed was a test case to see whether the two Ministers concerned meant what they said. The Association contended that the Corporation's roundabout scheme was purely an attempt at a traffic solution in a vacuum, that the pieces of land left over were incapable of beneficial development, that the gateway to the City would have a slum-like appearance-how typical this is of so many of our cities-and that the area of the CPO should be related to a much larger one. Further, was not a mere roundabout rather antiquated when a more imaginative freeway system of under and over-pass might be more appropriate, not only from the functional point of view in relation to the existing and future road pattern, but from the visual standpoint, as the area was one of changing levels adjoining a huge railway viaduct?

The Association further contended that whatever solution to the traffic congestion is accepted, the final result must be a high visual standard in accordance with a prominent and important position, and sufficient land must be made available to ensure that this essential requirement can be achieved. Finally, the Association-by a great amount of voluntary work-prepared as a preliminary study, drawings, photographs, and a model, to illustrate and to justify their theme that the problem was, in essence, one of comprehensive development. and only by such measures could a completely satisfactory solution be achieved. A comparison of the æsthetic qualities of this preliminary study with the scheme prepared by the Corporation is illustrative of a very wide difference of thought.

Will this lone cry in the wilderness of the Northern Architectural Association, with whom was associated the Civic Trust, bring about the desired result-really creative civic design? Or will their cry re-echo and mock them for their initiative, their faith, jand their hope? Will the entrance to Newcastle upon Tyne prove to be a magnificent monument to Civic Design-or its graveyard? These questions remain to be

RIBA

Industry Liaison Subcommittee on colour

The Industry Liaison Sub-Committee of the Science Committee held a meeting recently for manufacturers at which H. L. Gloag presented a paper on the application of the colour range given in BS 2660 (i.e., for paints) to ranges of manufactured components. This meeting and the work which led up to it arose from the difficulty experienced by architects in obtaining standard articles (e.g., for floor and wall coverings, external claddings, office and kitchen furniture, etc.) which match, or at least harmonize with, each other and with the colours given in BS 2660. The substance of Mr. Gloag's paper is given in a new RIBA publication comprising a single sheet (to A4 size) described as an "RIBA Industry Note," this one being entitled "Co-ordinated Colour Ranges for Buildings."* Mr. Gloag described the Munsell system of classification†, pointing out its value both as a means of obtaining an objective standard in colour and also as a tool to help people to think analytically about colour and to learn to break down colours into their three "components" of lightness, hue and chroma. He made a plea to manufacturers to consider carefully the function their coloured surfaces have to play in each of these respects; and, in making their final choice, to have a special regard to the 101 colours standardized in BS 2660, matching them exactly where feasible and choosing colours which would at least harmonize with them where an exact match was not to be got. Finally he described-perhaps too succinctly to be easily followed-how the thinking engendered by BS 2660 was actually applied to a range of tiles. The discussion which followed showed that manufacturers experience difficulty in seeing how these principles are to be followed and feel apprehensive of their effect on customary trade practices. In general, it seems probable that the RIBA's campaign has already borne fruit with those who deal mainly with the architect, but little with those whose main clientele is elsewhere. William Allen was in the chair.

DIARY

Mixed Company. Independent Art Exhibition at RBSA Galleries, 69a, New Street, Birmingham.

AUGUST 29 TO SEPTEMBER 12

Small House Design Exhibition. Organized by the RIBA and the Ideal Home magazine at the Building Centre, 26, Store Street, W.C.1. SEPTEMBER 2 TO 26

^{*} See Information Centre, page 97. † See AJ, February 16, 1956.

SIR JACOB EPSTEIN

"A Great Sculptor and a Great Man"

The death of Sir Jacob Epstein on August 19 at the age of 78 is an incalculable loss to sculpture. Sir Jacob was by far the greatest portrait sculptor of his time. He was the only major sculptor of this century able to create great religious works—Adam, Ecco Homo. the Cavendish Square Madonna and Child, and above all, the Llandaff Majestas. No sculptor was ever less compromising in his religious sculpture; the sentunentality, the insincerity and the bathos, which now seem inescapable in religious sculpture and painting, had no place in his works.

Sir Jacob was the link between two worlds; as a romantic he has been compared with Rembrandt: as one of this age he subjected himself for an experimental period to the influences of cubism and futurism-in his own words "a flirtation not a marriage." Although too great an individualist and too dynamic a person to be a cog in any movement-"I am interested in humanity and sculpture form and not in the abstract "he was always ready to help and encourage young sculptors. The catalogue of Henry Moore's first exhibition in 1931 has a prefatory note by Epstein. The Nigerian sculptor Ben Enwonwu was profoundly influenced and encouraged (and had his work purchased) by Sir Jacob.

Integrity

Epstein once wrote "It takes courage to remain a sculptor." How true this was of his life. His reaction to the often hysterical abuse of his works was sometimes gentle -" rest silent in my work "-sometimes brutally outspoken, but at all times by the shining integrity of his sculpture and in himself he achieved a triumphant vindication for sculpture in this age. The freedom in which sculptors are now able to work is largely due to the battle Sir Jacob fought alone and undismayed. The misunderstandings, the hostility, the stupid prejudice and the heartless bigotry to which he was subjected for so many years, did not leave him bitter. In recent years belated recognition as a great sculptor made no difference to his innate simplicity which made lovable his greatness.

Jacob Epstein was born in Hester Street, East Side, New York, in 1880 of Russian-Polish parents. During 1888-1900 he made drawings of New York life and Jewish types to illustrate Hutchin Hapgood's *The Spirit of the Ghetto*. He also began sculpture at night classes under George Grey Barnard. In 1902 the fees for his illustrations of Hapgood's book enabled him to go to Paris, where he studied at the Ecole des Beaux Arts and at Julian's. He moved to a Camden Town studio in 1905. After a

visit to New York he returned to a studio at Fulham and took British nationality. Whilst in Paris superintending the erection of his Oscar Wilde tomb in the Père Lachaise cemetery he met Picasso, Modigliani and Paul Guillaume. On his return to England he settled at Pett Level. Sussex. In 1913 he was an original member of the London Group and had his first one-man show at the Twenty One Gallery, Adelphi, London. For years he worked in Epping Forest—Rima, The Visitation, a series of drawings for the Old Testament, water colours of Epping Forest and a series of flower paintings.

In recent years, either in his London studio or in a borrowed studio at the Royal College of Art, he worked on the marquettes and the full-size figures of many of his greatest works-The Madonna and Child, Cavendish Square, The Smuts Memorial, The Llandaff Majestas, The Coventry St. Michael. In his restless vitality Sir Jacob recently turned his head to stained glass, making cartoons for 12 hexagonal windows for a church at Plymouth. In his later years he received some measure of public recognition-an Art Council Exhibition at the Tate and a Doctorate at Oxford. He was created a KBE in 1954. To the last he was pursued by controversy. Since being exhibited in 1935 Ecce Homo had remained in his studio. For some years he had been concerned as to the final resting place for this his own greatly loved work. Last year he had been able wholeheartedly to approve a site in Selby Abbey and had made a gift of Ecce Homo to the Abbey. Objections of the usual sort followed and after a Consistory Court the Chancellor of the Diocese of York gave judgment, last July, in favour of the objectors.

Sir Jacob's art had a dual nature. He was outstandingly a portraitist of exceptional psychological insight into the character of his sitters and a modeller of great power and dramatic expression with a masterly and ever evolving technique. There has been universal acceptance and appreciation of his bronze heads. But he was also a carver in stone and marble of great vitality and integrity. In his early and mid periods there was often an unresolved tension between the modeller and the carver, but in the great works of his last period this tension had been resolved.

Sir Jacob has often worked with architects. At the age of 27 he completed, in the astonishingly short time of 14 months, the 18 over-life sized granite statues for the BMA building in the Strand. The architect of this building was Dr. Holden. Both architect and sculptor were enthusiastically supported by Sir Muirhead Bone. These

fine statues, showing Epstein's regard for the works of Rodin, were magnificently architectural in themselves and part of the architect's architecture too. Later, for Dr. Holden, Epstein carved Night and Day on 55. Broadway. Although architectural in conception, Oscar Wilde's tomb and Rima were part of the sculptor's output of monumental works to which he was addicted for many years; the majority having to be carved solely for his own satisfaction. At long last this disgraceful waste of that rarity-a great architectural and monumentai sculptor-ceased. Lazarus was placed in the ante-chapel at New College, Oxford. The Madonna and Child in Cavendish Square was the result of collaboration with the Convent's architect, Louis Osman.

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Then followed the Llandaff Majestas. Sir Jacob considered this commission to be the greatest opportunity of his life and the resultant figure his greatest work. Llandaff is one of the oldest cathedral sites still in use in Great Britain. The cathedral is small and has had a very checkered history. Just over a century ago it was part ruin and part classical temple, but was restored by John Prichard. Its interior was more like a parish church than a cathedral. In 1941 a landmine once again made a ruin of the building. In the rebuilding, which is still under way, the aim is to make Llandaff a cathedral in every sense of the word.

An important element in a cathedral interior is the pulpitum. For present day use Llandaff is too small a building to have a solid pulpitum, so the architect had to evolve an entirely new conception of a pulpitum. It took him several years to do this. Whilst working on the design it became clear to the architect that only one sculptor could give to the cathedral the Christ in Majesty which was essential liturgically and aesthetically. Many will have heard various reports of the momentous talk between the then Dean and the architect, which resulted in Sir Jacob being commissioned.

The architect explained to Sir Jacob all he had in mind for the pulpitum and the interior of the Cathedral. Then sculptor and architect sat silent in the still unrestored Nave. Within a matter of months Sir Jacob had made the marquette, so absolutely right that the full size plaster cast was under way and the casting in aluminium completed in a very short time. The Majestas rested in a huge box until it was placed in position on the pulpitum (1956). On that day sculptor and architect again sat side by side in rapt silence in the then restored Nave. It was an unforgettable experience. During the later phases of the Llandaff Majestas Sir Jacob was also working on his vast statue in David du R. Aberdeen's new TUC Building, and on the St. Michael for Basil Spence's Coventry Cathedral.

Sir Jacob was a broad shouldered, sturdy man, warm, vital, immensely egotistical as all great artists must be, utterly unselfish and of great courage. We have lost not only a great sculptor but a great man.

PROPOSED OFFICES, SHOPS AND SHOWROOM AT WATFORD



Planning approval has been given by the Hertfordshire County Council to Erno Goldfinger's revised design, above, for a building in St. Alban's Road, Watford, for S. Hille & Co. Ltd. It will contain new offices and a showroom, six shops for letting, and six lock-up garages. St. Alban's Road is a nondescript piece of ribbon development, a mixture of shops, houses, offices and garages, with irregular frontages and a miscellany of bad buildings, through which pours an endless stream of heavy traffic. Many of the higgledy-piggledy buildings have been erected since the war, under town planning control. Yet the planning application was held up from last August until this spring in part by the aesthetic objections of the Planning Department and of the Architects' Advisory Panel of the Hertfordshire Chapter of Architects. The Divisional Planning Officer, Herts C.C. at first objected that the elevation "has little interest." One wonders what his comment was on the Lex garage (top right) 100 yards away, which has just been completed. Then he expressed concern about the relationship of the new block to the existing buildings (see street picture, centre right, taken from the other side of the road) and particularly to the adjoining neo-georgian Post Office (bottom right). The Advisory Panel, which ultimately approved the design in principle, described the accentuation of the



structural frame as "unsatisfactory" and asked the architect to think about it again. It would be interesting to know what views the panel expressed on another modern building in St. Alban's Road, the Eustace Watkins garage (left) which enlivens the scene but could be faulted for its jazzy eclecticism.







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"Whilst the best of the work submitted is of a reasonably high standard of design, none of the entries was considered of outstanding merit...some of the submissions are of a poor standard of design or manufacture." These words described the assessors' reaction to the entries for the Timber Development Association's two-stage office furniture competition. From the architectural profession's point of view, however, the results were encouraging, as one of the winners of the shared prize of £500 for a suite of furniture was an architect, Brian

Henderson, of Yorke, Rosenberg and Mardall, and one of the joint winners of a £100 prize for a desk was architect J. D. Tetlow. A desk by Grenfell Baines and Hargreaves was commended. And architect Norman Plastow shared a prize of £100 for an office chair. Whether this result shows that architects are better at furniture design than industrial designers, or merely that the latter are afraid of risking their reputations by losing a competition, is hard to judge. Certainly there were few entries from top-ranking



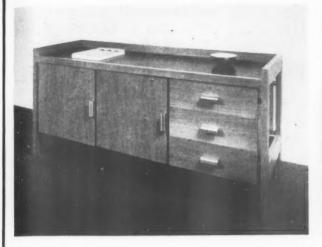
designers. There were also few entries which did not attempt to depart from the appalling standard which is normal in the wooden office furniture trade, and the winners were far above average. The Conran Design Group shared with Brian Henderson the prize of £500 for the suite of office furniture (below), of African walnut. Tops are occasionally of linoleum, and legs are of steel. The assessors described the furniture as being "of a somewhat flimsy construction." The heights are unadjustable. Brian Hender-



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ARCHITECT PRIZEWINNERS





son's design, beautifully made by Bath Cabinet Makers, is shown in the three photographs above. There are five basic desk units which combine with six storage units (not all are shown). A moulded plaster tray holds pens, clips, ribbons, rubbers etc. Filing drawers, typewriter and dictaphone slides are fitted with metal extension runners. Tops are of woodchip board, covered with linoleum and a compensating veneer below. The wood is Abara. The handles are satin chrome. The assessors criticised the

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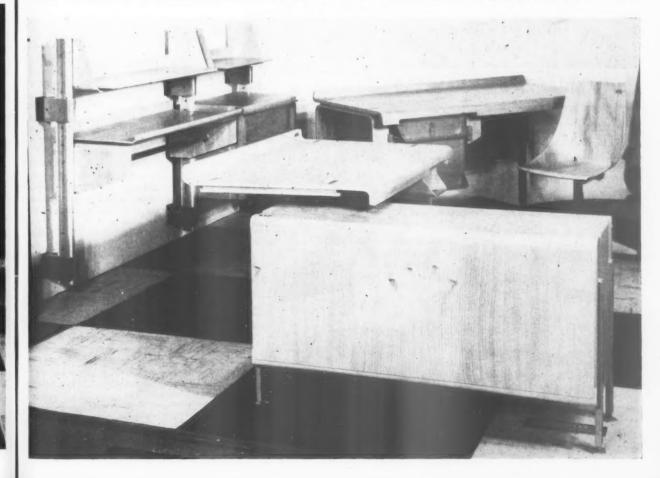
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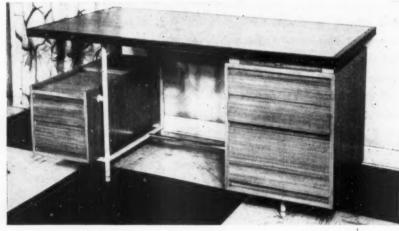
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design for inadequate attention to the storage of stationery and for weak tongue mitre joints in the storage units, but praised its robustness and sound workmanship. (Prices: £10 10s. to £17 10s. for desks; storage: £8 15s. to £17 15s.). Martin Grierson and Keith Townend were awarded a special prize of £100 for their attempt to further the use of plywood in the manner of Aalto (below). The assessors felt that the design had not been developed to the stage where it was truly efficient. The £100 prize for a desk for senior







grades was shared between W. A. Challis for the all wood item shown top, and J. D. Tetlow for the steel framed desk above. The latter was described as having "fussy detailing," the former was considered expensive (f.102). The entry for chairs for general office use was small, W. A. Challis (below left) and Norman Plastow (below right) each received £50. The assessors were: Professor Robert H. Matthew; Professor R. W. Gooden of the RCA; O. G. Pickard of the Office Management Association; B. McGeoghegan of the COID; D. A. C. A. Boyne, editor, THE ARCHITECTS' JOURNAL; S. N. Abbott, Office Appliance and Business Equipment Trades Association; and E. Levin, of the TDA. The designs were exhibited at the Building Centre.





continued | BOOK REVIEWS

Si Monumentum . . .

A Testament. By Frank Lloyd Wright. Architectural Press. 70s.

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Ten years have passed since Frank Lloyd Wright published a book, and now appears his last, called, by strange coincidence, A Testament. This alone will cause it to be taken by many as an important document, the accumulation of a lifetime's thoughts, a legacy of wisdom to the future—a sort of De Re Aedificatoria of our times.

I suspect that those who seek these things will be disappointed; not because they are absent but because they are not easily found. Wright was never given to the clear precise statement. His style was discursive, elliptic and rambling, and any understanding of most of his writings, requires considerable knowledge of their background. They contain a great many private thoughts and jokes and read, like his lectures, as rambling off-the-cuff monologues, while lacking the magnetism of his presence. I suspect, though I have no reason to do so, that they were dictated or recorded straight; their author refusing to edit or be edited.

On the whole the story of Wright's architecture is better told by others. Lacking respect for dates and facts he was wont to introduce his biographer, Grant Manson, as "the man who knows more about me than I do." Yet if one has patience, some knowledge of his life and times and a few of his other books as well as H. R. Hitchcock's In the Nature of Materials, this "Testament" will prove very rewarding.

It is reflective rather than propagandistrecording the thoughts of a great man, who knows he has achieved greatness, at the end of his days. Looking back he is kinder to rivals, more tolerant of lesser men and more hopeful for the future than we could expect. There is, need one add, no proper index and only the vaguest list of contents (some day someone will edit Wright and make sense out of all his writings) and much of it has been written before in his Autobiography. There are endless lists of names-immortal (Jesus, Shakespeare, Angelo (sic), etc.) and local (Richard Morris Hunt, Walter Burley Griffin, Dan-make-no-little-plans-Burnham, "he would have been equally great in the hat, cap or shoe business").

There is a great deal of rather tedious homespun philosophy: "the motor car is yet a wagon trying to digest four wheels when ruts no longer exist, etc. But Ruskin and Morris are now 'once upon a time.' Going and gone also are the ites and all isms of the modernistic. The rational is no longer inimical to art and architecture or the reverse "

Yet again there are those flashes of insight-"Art can be no restatement"-"the habit of seeing into and seeing from within "-"The proper use of the machine (is) as a tool and only as a tool "-" If one would get the essential character of an organic building it could not be by camera inasmuch as it is wholly a matter of experience—the people in it gain the same distinction they would gain by being well dresed."

Then there are Frank Lloyd Wright's obser-

vations about his contemporaries.

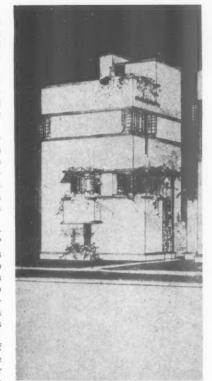
H. H. Richardson: "though an artist and giving signs of emerging as modern was just what America deserved most and should have had least, a powerful romantic eclec-

McKim, Mead & White: "their eclecticism was of another more elegant order. Whenever they found the buildings they admired they copied them, enlarging the details by lantern slide."

Mies Van der Rohe (the only living architect he gives space to): "I seconded his appointment (as director of architecture Armour Institute later IIT) with what influence I had." "Mies feeling himself a stranger did not want to go (to the AIA dinner in his honour) unless I went with

The admiration he felt for Mies was reciprocated to the point of adulation. "Frank," said Dr. Schevill, "Mies Van der Rohe's speech throughout was a splendid tribute to you. This was not what these AIA Sponsors wanted or expected." Later, in a tribute to his master, Mies wrote "In his undiminishing power he resembles a great tree in a wide landscape which year after year attains a more noble crown."

One has only to glance through the chief glory of this book, the illustrations, here more clearly shown than they have ever been before, to understand Professor Mies Van der Rohe's adulation. For among the drawings and photographs my eye has been caught again and again by the small and beautiful ideographic plans on their white pages and seen in them the Barcelona pavilion, the Resor and Farnsworth houses. Indeed were it only for the illustrations this book would be worth while, for here is Wright's own selection of his works as he would have them seen. Here is the drawing he showed Sullivan when applying for a job over seventy years ago. Here are the contemporary photographs of the great Oak Park houses. Here, too, is the exterior for a motion picture house designed in 1897 (surely one of the earliest and-it must be said-the grandfather of every Odeon).



1912. Project for a small town house.

Here, too, are those wonderful house plans, the implication of which is even now not fully realized, for as James Fitch has written, "In leaving us he has bequeathed an architecture as much enriched and deepened as the English language upon the death of Shakespeare. Whether we know it or not we are, all of us, his debtors."

FELLO ATKINSON

Unity Temple, Oak Park, Illinois. "So far as I know the first concrete monolith to come from the forms as architecture completely finished. The work was cast in wooden forms or boxes—and the forms bear the impress of that technique. The plan first began the destruction of the box, and the emphasis of interior space as the reality of the building subsequently carried on. The entrance is between the temple and the secular rooms. Here electric lighting took visible form in wiring and became a decorative feature of the structure."



Central European Baroque

Baroque Churches of Central Europe. By John Bourke. Faber & Faber. 36s.

Mr. Bourke makes every effort to reassure us. He himself, he tells us twice, did not fall for the Baroque and Rococo churches of Central Europe until, in Wies church, he heard the familiar strains of Handel's Messiah. He introduces us to his subject very gradually, telling us about the English puritan spirit, about the rational spirit of the age of Pope and Addison, informing us in a footnote (in a book almost devoid of footnotes) that Palladio wrote I quattro libri, and not failing to supply us with an outline account of the decline of the Middle Ages. the rise of the Reformation and the Counter Reformation. By this time he has quite deadened our sense of guilt at opening a book devoted to papist monuments, but he still finds it necessary to make a lengthy apologia for the word "Baroque" and to explain why the English have fought shy of the art it describes. There follows a brief history of Italian architecture from the High Renaissance to Borromini (not to Guarini). and some general descriptive comments on the churches to be discussed. It is no use looking here, or anywhere in this book, for mention of any of the general and fundamental questions which the subject raises: to what extent do these buildings represent a revival of popular religious enthusiasm? to what extent are they products of the Roman Counter Reformation? to what extent and how are they different from the Baroque churches of Italy? what contribution did the indigenous late-Gothic style make? where do you draw the line between Baroque and Rococo? and so forth.

The greater part of the book is given to a church-by-church survey: the South German churches are grouped according to their architects, the Austrian by districts, the Swiss under a variety of headings. The information gathered here is easily come by in monographs and guides-indeed for the German section there are excellent architectural guide books-so we must judge the book by how it is used. There are quite a number of unnecessary mistakes which it would be tedious to list here; mistakes of a factual sort are easily made and can be corrected. What I found most disturbing was Mr. Bourke's attempts at architectural criticism, suggesting a deep unfamiliarity with architecture in general. His praise can be as illjudged as his adverse criticism and when he analyses impartially he clearly lacks method. Such charges must be supported by evidence, in so far as space permits. Mr. Bourke is rightly suspicious of German enthusiasm for things German, but this leads him to underrate what are by general consent (and by my own experience) outstanding buildings, Wies and Vierzehnheiligen. Moreover, it is difficult to take seriously the opinions of a writer who describes the interior of Vierzehnheiligen as "fantastic," " artificial " and " dislocated " without stopping to justify these epithets. His own ethu-

Continued on page 87

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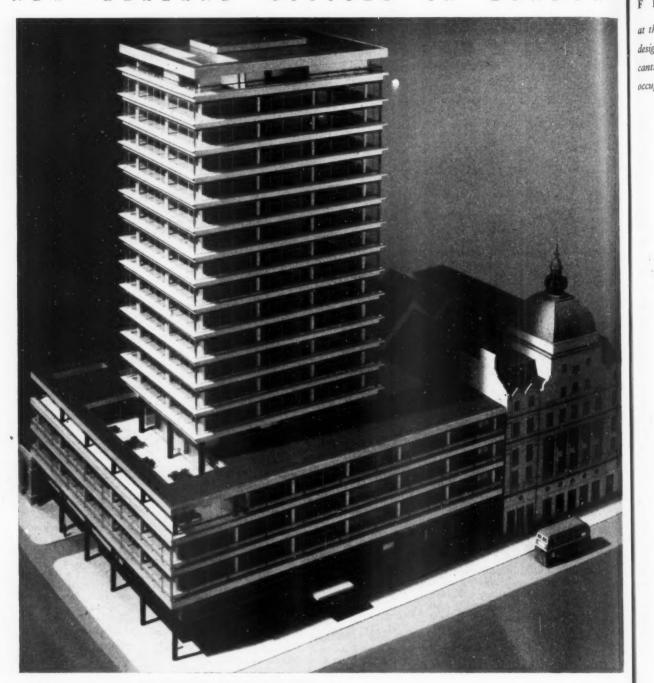
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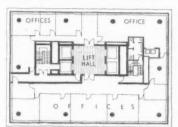




Left is the first published design by Robert Matthew and Johnson-Marshall of the proposed New Zealand Government offices on the corner of Haymarket and Pall Mall. The model has been set into an aerial view of the site. Above is the final stage of the design, for which the contract was recently given to Holland and Hannen and Cubitts. The base still consists of four storeys, but the elevational treatment has been changed, the formal framing of the void with solid having been abandoned. The columns are now recessed, behind an outer skin of 18-ft. by 9-ft. sheets of glass, and an inner skin of glass which has a window seat and radiators

FINAL STAGE

at the bottom. This double glazing reduces the noise of traffic. The tower has a similar design treatment, but has only single glazing. There are low sills to the windows, which cantilever out 2 ft., the intention being to avoid any sense of vertigo on the part of occupants by having a comfortingly large barrier cutting off steep views to the street below



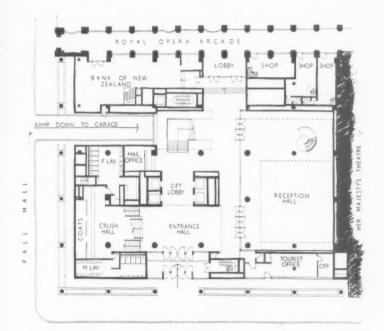
Typical floor plan, tower block

from the 225-ft. high block. There are now two more storeys on the tower block. There will be airconditioning throughout.

Cost: £1\frac{1}{4}\text{ million. Completion date: March, 1961}



Third floor plan



Ground floor plan

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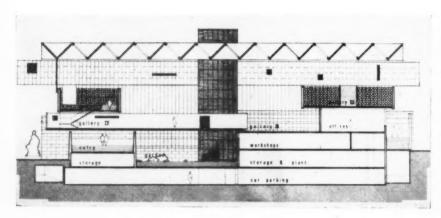
Book reviews continued from page 85

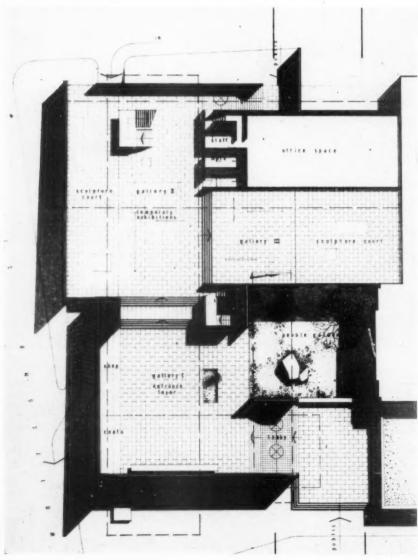
siasm for the decorations of the churches is boundless, and a secular work. Zick's fresco in the Gartensaal of Würzburg Residenz, a brash effort to say the least, is dragged in for special praise. The Karlskirche in Vienna is discussed as Fischer von Erlach's masterpiece, but there is no mention of the important and entirely detrimental alterations to the architect's designs made by his son. Similarly the fundamental alterations made to Hildebrandt's Vienna churches in his own time are not noted. The truncated dome of Weltenburg Abbey church is described quite ludicrously as "surely a reminiscence of the Pantheon in Rome," as though there were any similarity between them and no other truncated domes were to be found in the history of architecture. Balthasar Neumann was one of the finest architects of the period, but several of his churches are left out, one of them on the grounds that Trier is "outside our area," whatever that means in a section vaguely headed "Southern Germany." Mr. Bourke tells us twice that Czechoslovakia is inaccessible (the Dientzenhofer churches in and near Prague are an essential part of German architectural history) but I know this not to be true. The exceedingly interesting work of Santini Aichel is not even mentioned. J. M. Fischer's church at Diessen is described as his "first major independent work" although it is well known that all except the choir is built on foundations laid out by others. Part of the description of another Fischer church, Berg am Laim, is as follows: "The feeling of centrality is inescapable, the nave octagon dominates, the high altar seems nearer than in fact it is. Yet the sense of length is equally unmistakable, the high altar is also sufficiently 'remote'." In another place Mr. Bourke states that Fischer von Erlach's work is concerned with qualities of line and plane and not with plastic effects, which is quite wrong.

This is the first book in English to deal with the Baroque architecture of Central Europe, and, taking the churches as his subject, Mr. Bourke has bagged the best of that architecture; even the finest secular buildings, say Würzburg Residenz, or the Palais Batthyany in Vienna, or even the Vienna Hofbibliothek, cannot compare with the churches of J. M. Fischer, Neumann and Zimmermann. Perhaps this unsatisfactory book will succeed in drawing attention to these inventive and subtle buildings-succeed, that is, where Giedion appears to have failed when he pointed to Neumann's Vierzehnheiligen as the climax of that development which goes from Borromini through Guarini and the Dientzenhofers, and which is concerned with the negation of the wall as mass and structure and with the affirmation of architecture as the art of space. expressing itself through the modulation of space. But of the artistic importance of these churches neither the text nor the illustrations (mediocre half-tone plates and only six small plans) give any hint.

NORBERT LYNTON

NATIONAL GALLERY COMPETITION





The recent printing dispute delayed publication of this report on the National Gallery Competition. The fact that the competition was promoted by the "Sunday Times" to elicit ideas for the development of the island site occupied by the National Gallery and the National Portrait Gallery in general, and of the Hampton site in particular, promised well for some highly imaginative designs. Gallery layout and lighting, subjects on which strong and, often conflicting views are aired by experts from time to time, present a real challenge to the architect. In the following pages an attempt is made to assess the impact, if any, made by the competition on this important field of design. The first prize-winning design was published on June 18.

The aim of this competition, as stated in the conditions, was "to elicit as many interesting ideas as possible for the development of this site. . . It is a competition of ideas, rather than for a solution to a programme of specific requirements. . . The problem is nevertheless a real one. . . "The main purpose of this review is to assess how far the competition has succeeded in this objective, not only by examining the prizewinning entries, but also some of the 50 odd other designs (out of a total entry of about 250) that the assessors considered worthy of exhibition in the Building Centre

Assessors and conditions

It is a truism to state that the key to the results of any architectural competition lies first in the choice of assessors and second in the framing of the conditions. In this case, with regard to assessors one can but congratulate the Sunday Times on their appointment of a strong and well-balanced team in Sir William Holford (specialist brief on town planning aspects), Peter Chamberlin (previous competition winner) and William Allen (research background in lighting and other aspects of gallery design).

The conditions are a slightly more controversial matter. Since this was to be, rather

Left: long section and ground floor plan of the first prize-winning design by Barrie Dewhurst.

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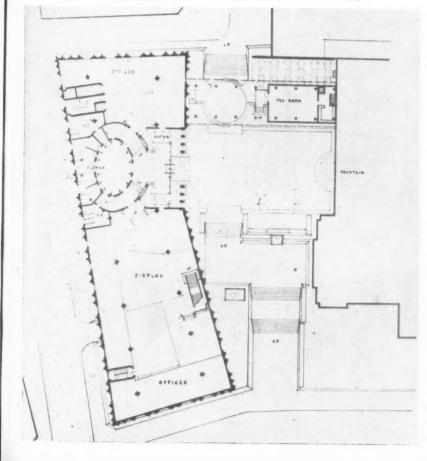
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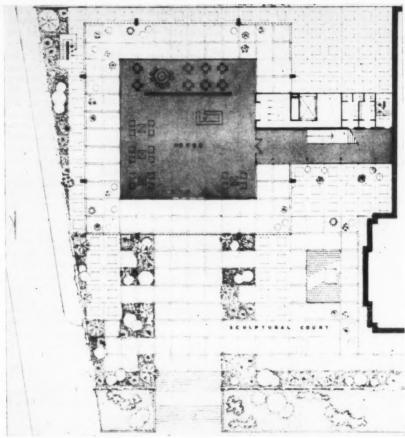
unusually, a competition for ideas and not for an actual commission, it was obviously desirable to keep the conditions to the absolute minimum, and merely to suggest various ways in which the design might be tackled. This method was, indeed, followed to a degree in their framing, for instance with regard to pedestrian access onto the site and into the building, and to the manner in which the development would take place, whether all at the same time or in a series of stages. Equally it was only suggested that such facilities as rest areas, sculpture courts, terraces overlooking Trafalgar Square, and a restaurant be provided.

A schedule of accommodation mandatory to all competitors was, however, included in the conditions. This was presumably done to provide some common basis for the comparative assessment of the entries, or because it was considered that this schedule was a reasonably close approximation to what, in fact, the extension to the National Gallery will have to provide, or possibly even for both reasons. In addition to 10,000 sq. ft. of storage and workshop space, between 10,000 and 15,000 sq. ft. of flexible space for offices, workrooms or display, and covered parking space for 120 cars, the competitor was required to provide on the Hampton site "at least 15,000 sq. ft. of gallery space, all to be air conditioned and lighted both naturally and artificially . . . while the natural light should be mainly from the top, some side-lighting can be accepted in appropriate circumstances."

It is this last condition which seems to have bedevilled so many of the competitors. The total area to be provided on the Hampton site made a multi-storey building inevitable. Because of this requirement that the gallery space be mainly daylit from above, it had to be placed on top. At the same time the floor level of the main galleries in the existing building is about 25 ft, above pavement level, so that if the competitor decided to link old and new at roughly the same level, this was a further argument in favour of jacking the principal public area well above the pavement. As a result the major internal planning problem, which most competitors seemed unable to solve convincingly, was how to lead the public up to this high level. As the assessors say in their report, one method of overcoming this problem is by . . . "progression by easy stages, each with its own interest, and each rewarded by something to see or do at that level. Of this type of approach the design placed first is a model. Each change of level upward or down is in some way unique. . . Interesting inward or outward views would be seen frequently on the journey, and the route itself would be clear, easy and coherent." In addition, although the assessors do not quite say so, the winning design (No. 158, Barrie Dewhurst) is, in purely abstract spatial terms, undoubtedly the most distinguished and richly developed design of any which were on exhibition at the Building Centre.

Alternatively, the assessors have accepted clear and direct circulation such as in the

Left: main gallery floor and ground floor plans of the third prize-winning design by I. H. & R. P. Marshall.

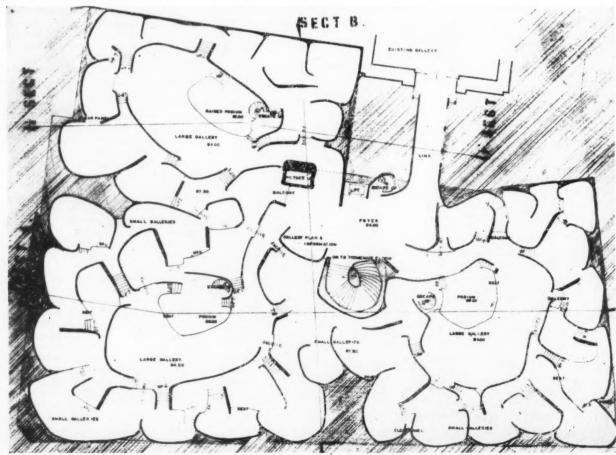


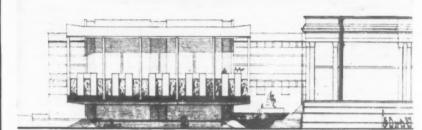
design placed second (No. 212, Boissevain & Osmond) or in a more exotic form, as with the third prize (No. 22, I. H. & R. P. Marshall). This latter design, and some other entries, such as No. 85 (Stephen Osgood) have small changes of level within the main gallery space with one or two steps only at a time. With large crowds this can be the cause of much stumbling and even serious accidents, as everyone, for instance, who visited the Spanish Pavilion at Brussels last summer under such conditions will probably be only too familiar.

The general difficulties experienced with this problem of gently leading the public up some 25 to 30 ft. above the pavement does stimulate the query as to whether the mandatory schedule of accommodation represents in principle the best method for developing the Hampton site. If, for instance, it were accepted that good viewing conditions could be provided by artificial lighting alone, the problem of vertical circulation would no longer exist. At the same time the amount of gallery space that the Hampton site could provide, space which London so desperately needs, would be

Left: ground floor plan of the second prize-winning design by Boissevain & Osmond.

Below: ground floor plan of the design by Stephen Osgood.





vastly increased. Competitors were not, of course, allowed to consider such a method. To rely on artificial lighting for the display of the nation's top art treasures may at first sight seem an appalling idea. Technically, however, there is nowadays no difficulty in providing excellent conditions, particularly with regard to the rendering of colours. At the same time, with the British climate, it is necessary in any case to rely on artificial lighting for a considerable proportion of the opening hours, more especially in winter. There has been considerable popular success in some galleries abroad with opening them one or more evenings a week after dark, and this would appear to be further evidence that such a technique might well be considered for the actual building.

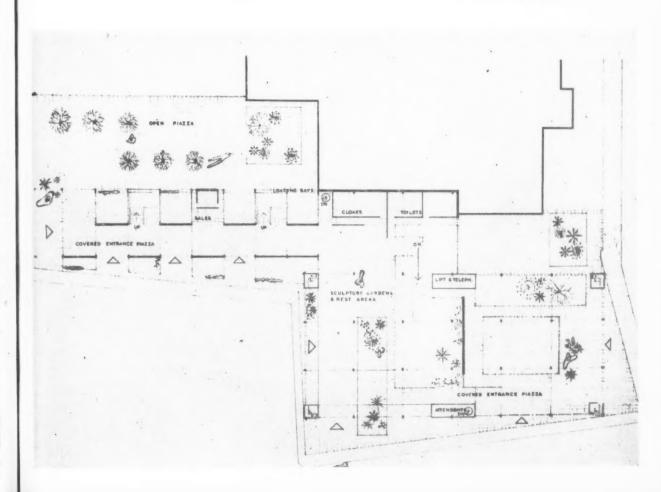
Types of gallery

The entries showed a very wide diversity in the type of individual gallery they provide. Although, perhaps, the bulk tend to be of roughly conventional size and proportion,

Top left: design by Peter Carter.

Left: main elevation of William Crabtree's design.

Below: ground floor plan of H. P. Trenton's design, which is shown with Pall Mall East on the right and Whitcomb Street at the foot of the sheet.



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Perspective of William Ryder's design.

such as with the winning design, the range goes as far in one direction as the minute biological cellular pattern of No. 85, and in the other to a single Mies-type space such as No. 14 (Peter Carter, highly commended) or No. 26 (Richard Padovan), with fixed or movable screens. Very small galleries would not seem to offer much scope for

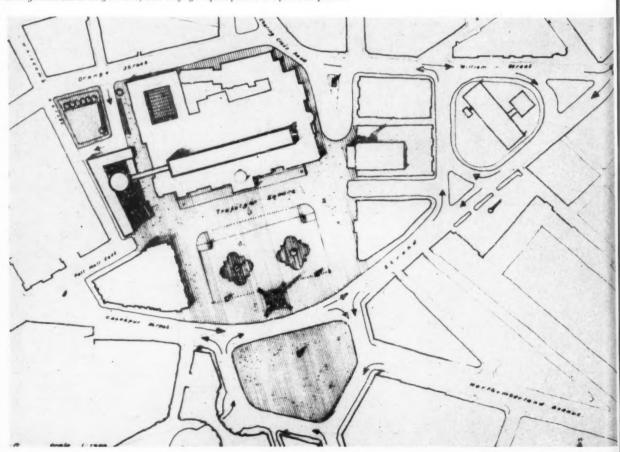
variety of display, and curved walls, as the assessors point out, are in practice undesirable. Their statement, however, that division of a large space by flexible screens "is easily overrated,... could prove dull" and "the layout may be incoherent or dull," does seem to dismiss in a slightly summary fashion a method which has proved success-

ful in one or two galleries abroad, and in display in other fields in this country. Certainly there would seem to be room for experiment in this direction. The fact that such designs, from a purely architectural point of view, tend to be excessively dull in comparison with, say, the spatial complex of the winning entry is bound inevitably to weigh heavily against them in the judging, It is only that one must have some slight reservation as to whether the more or less conventional series of galleries have to be perpetuated. This point cannot, however, be resolved by a competition. It requires longterm study and development of the design brief for galleries by close collaboration between client and architect in a parallel way to, say, the MOE or Notts. method for schools.

Public facilities

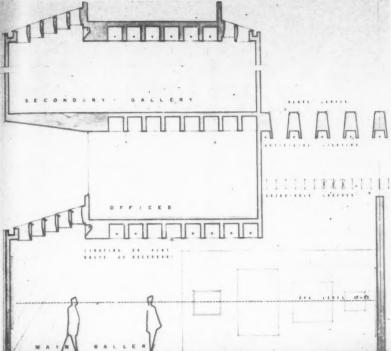
Equally, such a brief could help to resolve the question of how far the facilities provided for the public should be widened beyond the mere provision of galleries to include a restaurant, courts for sculpture, rest areas, and so on. By suggesting in the conditions that such facilities might be provided, it was obviously hoped that the competition might provide new ideas as to how they might be integrated with the galleries proper. The response to this by the competitors has on the whole been disappointing. Why should one not, within the building, be able to pause from looking at

R. S. Johnson and A. Ling's scheme, with Trafalgar Square planned as a pedestrian precinct.



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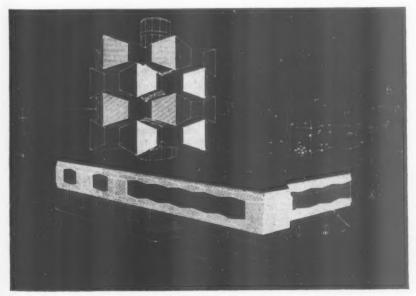


Detail section through gallery of Westwood, Son and Partners design.

pictures to have a drink or a smoke in the open air and enjoy the view? One design (No. 139, William Crabtree, fourth equal) is particularly happy in this respect, and this is partly why it has been placed despite its rather mishandled elevations. The winning design is one of the few in which the idea of external courts for sculpture was richly developed.

Another is No. 109 (H. P. Trenton), which in many respects has the most delightful scale both internally and externally. This design was also one of the few which provides no link with the existing galleries,

Perspective of R. Mountford Pigott's scheme.



a feature which would seem, as the assessors point out, illogical.

Exteriors

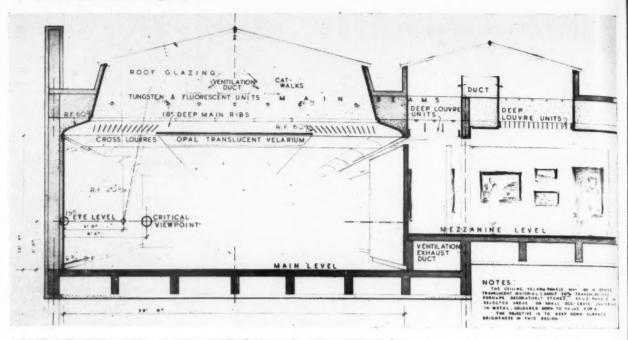
In their report the assessors say that they considered it "important that the form of the new buildings proposed for the Hampton site should contrast-but not conflictwith the existing National Gallery." It is particularly interesting to note that with the exception of No. 139 all the major prize-winners have designs which match both in height and scale the existing building. Due to the fact that the conditions required part of the side elevation of the National Gallery to be left untouched, these designs all present highly similar profiles onto Pall Mall.

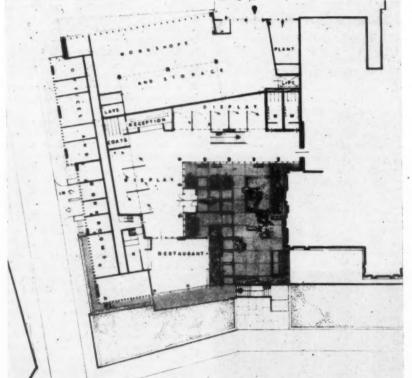
The assessors also evidently favoured structural or other devices which in some way echoed the façade of the existing building. This is clearly the case with No. 139 (fourth equal) which they say "has freshness and gaiety and is nicely related to the National Gallery façades." A design incorporating tower block (No. 234, William Ryder), being one of a number of such schemes submitted. has nevertheless been highly commended. The assessors did, however, tend to reject entries where the massing was partly or completely indeterminate with regard to the existing building.

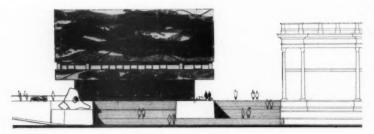
One or two competitors reviewed and suggested fundamental changes to the road pattern surrounding the site, such as No. 70 (R. S. Johnson and A. Ling), which showed Trafalgar Square replanned as a pedestrian precinct. This entry also proposed that a slab block be poised over and astride the existing gallery building; to increase the plot ratio, and to act as a backdrop to the existing skyline, which, as the authors point out, will in time in any case be disrupted by tall buildings to the north. The scheme as actually proposed appears slightly impractical, but the principle is one that is definitely capable of development.

Lighting

One of the required drawings was "a longitudinal and cross section of one of the principal top-lit display areas, showing clearly the arrangements for both natural and artificial lighting in relation to the displays." Next to the problem of vertical circulation, this drawing, and for that matter the general lighting problem, caused the greatest difficulties to the competitors. In all too many cases superficially competent drawings did not bear close examination, daylight arriving onto the pictures by defying practically all the known laws of physics. No new or original methods of lighting were proposed, and in this respect the entries have been disappointing. In view of the generally indifferent standard of lighting design, the assessors have evidently preferred those schemes which could be "tuned up" into a workable answer without radical alteration to the design as a whole. The winning entry is an example of this, it having northlights which do not, because of their directional characteristics, give the type of distribution required. Some alternative system could, however, easily be used in its







Above: detail section through gallery of John Bickerdike's design. Left: ground floor plan.

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place without involving any further change to the design. On the other hand, such schemes as No. 172 (Westwood, Son and Partners, highly commended) the method of bending back the daylight, so as to permit a tower of galleries is virtually unworkable, and therefore the whole basis of the design is shaky on technical grounds, however valid it may be in other respects. No. 75 (R. Mountford Pigott) is another similar case. One scheme, however, provides a highly workmanlike solution to the lighting (No. 67, John Bickerdike). Some of the internal planning, particularly on the ground floor, would seem to be capable of refinement, however, in this design.

Disqualified entry

No. 176 was originally placed amongst the major award winners by the assessors. Unfortunately it was discovered subsequently that the author, Antoni Czeremski, a Polish architect working in London, is not yet registered in this country. He was thus ineligible and his entry disqualified. It is one of the few entries which uncompromisingly cuts itself off from the existing gallery, there being no direct communication whatsoever. Also it employs the idea of placing the car park, services and workshops in a two level basement, the roof of which forms a vast terrace on top of which is placed a bold, rectangular block containing offices, workshops and gallery. The terrace is thus the link between old and new and, as well as providing access to the new gallery block and public circulation space is a good place for open-air exhibitions. This principle was applied by several entries, but

Left: main elevation of Antoni Czeremski's design.

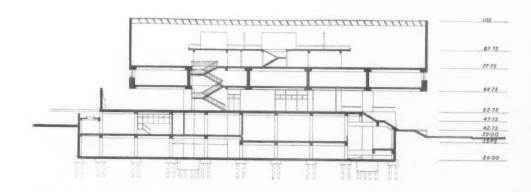
in none is the solution so simple, straightforward and visually satisfying. The gallery arrangement is of the type which provides, not a collection of interconnected cells, but a large open space plus a mezzanine in which there is complete freedom for the arrangement of exhibitions.

The lighting method used in this scheme is not a practical one but, just as with the winning entry it could readily be refined to a workable solution.

General

The winning entries for this competition and the other 48 designs put on display in the Building Centre show a wide and highly imaginative diversity of ideas for the development of this most important site. Many different techniques have been aired and tested, and this review has only been able to touch upon a few of the essentials, and upon some of the factors which guided the assessors in their choice of the winning designs. The Sunday Times are to be congratulated on sponsoring this unusual and highly successful form of competition, and the assessors upon producing a clear and forthright report, as well upon their choice of a highly distinguished winning design from an almost bewildering array of alternatives. The result will inevitably be bound to influence the actual design on the site; it cannot

Ground floor plan (left), main gallery floor plan (below), BY SALES WAY and long section (bottom) of Antoni Czeremski's design. reef eccess 0 +390 0 tote: //oor ores /4 990 mm /1



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THE INDUSTRY

Brian Grant describes a new boiler. a mixing valve, plastic rainwater goods and decorated tiles.

New Small Boiler

Readers will probably remember the boiler designed by Neville Conder for Tayco. This has now been followed by a further model, the Thermatic 25, produced by the same designer, in collaboration, of course, with the company's technical staff. The new model has an adjustable thermostat and can heat a 30-gallon cylinder plus a further 20 sq. ft. of heating surface. Dimensions are $17\frac{1}{2}$ in. by $17\frac{5}{8}$ in. with a height of 24½ in., and the boiler has a shaker and dumper grate with a deep ashpan. There are five standard colours and the price is £25 4s. 0d. (Robert Taylor & Co. (Ironfounders Sales) Ltd., 170/172, Victoria Street, London, S.W.1.)

Small Mixing Valve

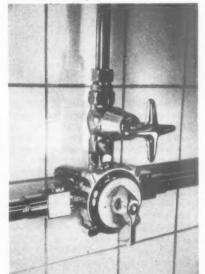
The illustration on the right shows the new Leonard 621 mixing valve, which is a redesigned version of the Leonard Minor and is intended for the newer types of shower head or spray bib taps, which need water flows of up to 1½ gallons a minute. The valve is very compact, and the thermostat assembly can be replaced in a matter of minutes, using only a screwdriver. In normal conditions the mixed water temperature is maintained within 2 deg. F. (Walker, Crossweller & Co. Ltd., Cheltenham, Glos.)

Plastic Rainwater Goods

Plastics are coming more and more into the building industry, latest developments being in fields normally dominated by traditional materials. A new range of plastic rainwater goods, known as Osma, includes guttering, downpipes and all accessories such as gutter brackets and outlet sockets. The guttering is moulded in Cellobond polyester resin and fibre glass and the downpipe is extruded in rigid p.v.c. Gutter brackets are in the same material as the guttering. They are fixed by screwing to the fascia and the gutter is simply snapped into the bracket which then clamps it fast, there being no other fixing. The guttering is made in standard 6-ft. lengths and the downpipe in 12-ft. lengths, but this may be cut easily with a hacksaw. The materials are light and easy to handle and have considerable resistance to impact damage. The makers claim resistance to corrosion and the material has the virtue of requiring no maintenance as it is self coloured. Standard colours are black, light blue, green, yellow and grey. The gutter is made in a half round section 4½ in, wide and the downpipe 21 in, diameter. The cost is comparable with cast iron painted. (G. H. Osborn Building Products Ltd., 4, Gollis Park, Finchley, N.3.)

Decorative Tiling

A recent list (RT 93) illustrates Richards Uni-Tiles, which seem to have almost endless possibilities in both design and colour. The decoration is available on white and cream glazes and on a range of pastel shades, and the patterns can be carried out in a comprehensive range of colours. The list shows a number of designs in various colours as well as suggested room and fireplace treatments. While the majority of the tiles are geometrical or abstract patterns there is also quite a large range of pictorial tiles, with subjects varying from vintage cars to London landmarks. (Richards Tiles Ltd., Tunstall, Staffs.)





Above: plastic guttering and downpipe by G. H. Osborn Building products Ltd. Below left: the Leonard 621 mixing valve. Below right: the Thermatic 23 boiler, designed by Neville Conder.

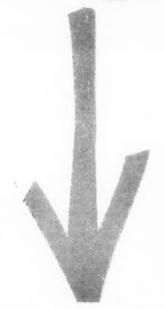


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Approved Domestic Solid Fuel Appliances, Warmer Homes with Solid Fuel, Fuel Stores for Houses and Flats, Building for Warmth—all free; and for 1/6—Correct. Fixing of Domestic Solid Fuel Appliances.



Gompare the Running Costs! This table shows typical comparative costs for different fuels. These have been calculated for a 3 bedroom house of some 1000—1,200 square feet and are those of an average week's heating and hot water supply during the 30-week heating season. Fuel prices vary, of course, and local costs can easily be calculated from those given. If you would like the data on which these figures are based, write to the Coal Utilisation Council, 3 Upper Belgrave Street, London, S.W.1.

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COKE Sectional Boiler	£9 ton	21/-
ANTHRACITE Gravity Feed Boiler	£12 ton	20/-
GAS	1/5d therm	33/1d
ELECTRICITY	1d unit	45/7d
OIL Sectional Boiler Conversion	1/5d gallon	31/5d

*Gas and Electricity costs exclude Standing Charge 17.117
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17.117 construction: general

TEXTBOOK

Mitchell's Elementary Building Construction. Revised by Raymond Moxley, A.R.I.B.A. B. T. Batsford Ltd. 18s.

Unlike so many so-called revisions, this is a re-thinking and not merely a removing of the more grossly out-of-date and an interlarding with new examples. To prevent the work from being unduly coloured by traditional crafts, the author has wisely instituted an appendix called "obsolete construction," where are to be found our old friends the king post truss, the mansard roof and panelled door linings, Throughout, the author has had a regard for putting materials and methods into the sort of perspective in which they will be found on the average building site. Usually, also, the economics of alternative choices are at least hinted at. These criteria are important, for much damage has been done in the past by a dead pan treatment in textbooks of methods and materials which are a rare and unlikely choice. The only case where this revision might be faulted for this sort of unreality is in the pride of place given to lead in flat roof coverings. To give 171 pages to this without suggesting at any point that lead might sometimes prove rather expensive; and, at the same time, to omit all mention of super purity aluminium or of "economy" copper roofing, is, surely, to start the beginner off on the wrong foot. To re-make the drawings was certainly

a wise decision. Nothing is more abhorent to the young architectural student than the flavour of the last generation's draughtsmanship. The drawings have a good, though not always a distinguished, quality. Their only fault from the practical point of view is that they do not always take into account the effects of reduction, with the result that sometimes (but not often) vital detailing is blurred. A case in point is "felt details" page 270, in which the layers of felt, drawn in section, run into an inextricable mêlée.

But this is a good straightforward book and will be found very useful.

19.218 construction: details CONCRETE CONSTRUCTION

Concrete Practice: Vol. One. R. H. Elvery (Contractors Record Ltd. London, 1958.

This book is a text book on good concrete practice intended primarily for beginners in the building and civil engineering industry. The subject matter is based on the syllabus for grade I course of the City and Guilds in Concrete Practice, a syllabus designed to train charge hands and junior foremen.

At this level almost every aspect of concrete construction is discussed with just sufficient explanation of the theory of design to show where the reinforcement should be placed, design of formwork, the reasons for testing.

It is proposed to publish a second volume designed to cover the more advanced aspects of the subject.

19,219 construction: details

NAILING HARDBOARD

Practice Note No. 1-Nails and Nailing. Published by FIDOR. Free.

This is a note based on tests carried out by BRS. Nails should be round in section and rust resisting (hot spelter galvanized is good enough). Sizes as follow:

	Length	Gauge
i-in. hardboard	∄ in.	17
½-in insulating board	14 or 14 in	. 16
}-in. insulating board	2 in.	16

Those which hold best are the round-headed type known in the trade as "gimp pins." They should be driven in straight, not in the skew. Note also gives spacing of nails and fixing grounds.

19.220 construction, details FLOORING

Tile Flooring and Slab Flooring. BS Code of Practice, CP 202 (1959), General Series.

This is a revision of the Code first published in 1951. The most obvious change is one of layout which is a considerable improvement on the original Code and reflects BSI policy of gradually eliminating sub-codes within codes. The previous division into three subcodes has disappeared and the new Code is neatly treated in six sections, entitled General, Materials, Design Considerations, Laying Technique, Inspection and Testing, and Maintenance.

From the practical viewpoint the new Code is more emphatic in its recommendations, two good examples being the recommendation of a separating layer between the base and the bedded finish to overcome adhesion failure due to variable stresses between the two, and an alternative laying mix incorporating hydrated lime in the proportions of one part Portland cement, half part hydrated lime and four to five parts sand by volume.

20.238 construction: complete structures PREFABRICATED BUILDING

Pre-Fabricated Buildings. A Survey of Some European Systems. Published by OEEC. Available from HMSO, 12s. 6d.

The object of the book is set out in the foreword by Monsieur R. Gregoire, the director of EPA:

"In recent years the building technique known as pre-fabrication has made a great deal of headway in most European countries and the EPA considered that a report on the subject would provide a valuable exchange of experiences at European level . . . not as a comprehensive survey according to country, but as a general outline"

The various systems described are classified according to the main constructional material, that is, wooden systems, steel systems, aluminium systems, and so on, and types are included from various countries in each group. As well as systems the book also contains a section about prefabricated component parts.

Under its initial classification, each system is vaguely and often unintelligibly described without any particular common denominator or simple organized catalogue of elements. There is no physical definition between descriptions, and one system tails off casually into the next. This process is not helped by the juxtaposition and layout of the many photographs around which the text is written, and there is often an uncomfortable feeling of not knowing what belongs to what. Photographs vary between the finished job, constructional details and component parts, and although it is obvious that they were intended to amplify the descriptions, this they rarely do because they were not taken for this specific purpose, but are an odd collection culled from the various manufacturers. Drawings of really important technical details are virtually nonexistent; for example, in the section about complete systems (approx, two-third of the book) there is one small reproduced drawing and five small thumbnail perspective sketches. The section about component parts is rather better illustrated. Cost is not considered, and admittedly this would be difficult; however, occasional mention is made of erection time in man hours of a particular dwelling, and at the end of the book there are case studies on a time basis for three of the systems. There is a very complete bibliography, probably the most useful part of an otherwise ill-conceived publication.

28.24 miscellaneous

COLOUR

Co-ordinated Colour Ranges for Buildings. RIBA Industry Note 2. Free.

This is the first to appear of a new series of RIBA sheets (Industry Note 1, which is on paper sizes, has not yet been published). It is intended more for manufacturers than for architects, describes the Munsell reference system and the value of this system as an aid to systematic thinking about colour, and advocates the use of the 101 colours given in BS 2660 as a means of securing matching (or at least harmonizing) between different manufactured components. It gives an example showing how, by using the Munsell concepts of lightness, hue and strength (chroma), you can bring functional principles to bear on the reduction of the colours of any given range to a minimum. The description of how these were applied to a floor tile range is slightly mystifying.



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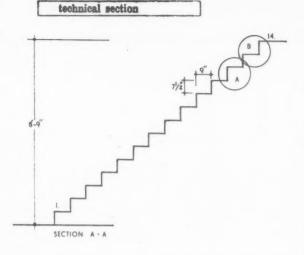


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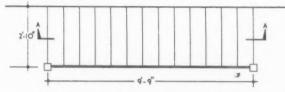


Fig. 1. Straight flight stair and section. Details at A and B are on page 99.

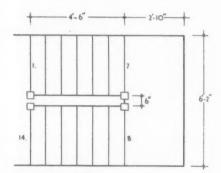


Fig. 2. Dog leg stair.

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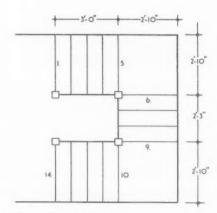


Fig. 3. Open well stair.

8 SURVEYING AND SPECIFICATION

cost variations in common building items, 4 domestic stairs

In earlier articles in this series the authors, Messrs. Handisyde and Taylor and Arthur J. Willis and Thompson, considered in turn wood windows (April 23, 1959), internal doors (May 28) and internal door frames and linings (June 18). This week they turn their attention to domestic stairs and, taking the traditional closed string as their norm, they estimate the cost effect of different plans, of using hardwood in place of softwood, of using open treads and of varying the balustrade.

Since stairs occur in all houses and many other small scale buildings where a full cost analysis may not be possible, they seem an obvious choice of subject for one of these articles.

To a considerable extent the stair is dictated by the general plan requirements, but nevertheless it is as well to know roughly what effect the plan shape of the stair may have on cost. Once the plan shape is determined, a number of other things are decided more or less at the whim of the designer and this article examines the effect on cost of using hardwood and softwood, of using an open tread type of "contemporary" design compared to the traditional tread and riser type; and, finally, the effect of different types of balustrade.

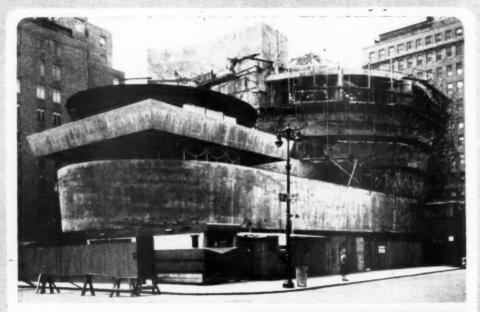
A straight flight stair in softwood, with a traditional type closed string and simple balustrade is taken as the basis with which the alternatives are compared. Handrails are taken as hardwood in all examples.

Comparison of stairs of various designs in softwood and hardwood

The following figures exclude the cost of balustrades or aprons to upper floor landings. Hardwood prices are based on timber at 30s, per foot cube. Basic plans are shown in Figs. 1-4, and construction details in Figs. 5-7.

Softwood %	Hardwood %
3	
100	212
127	264
123	262
. 156	303
	%

HOPE'S WINDOWS



The SOLOMON R. GUGGENHEIM MUSEUM, New York

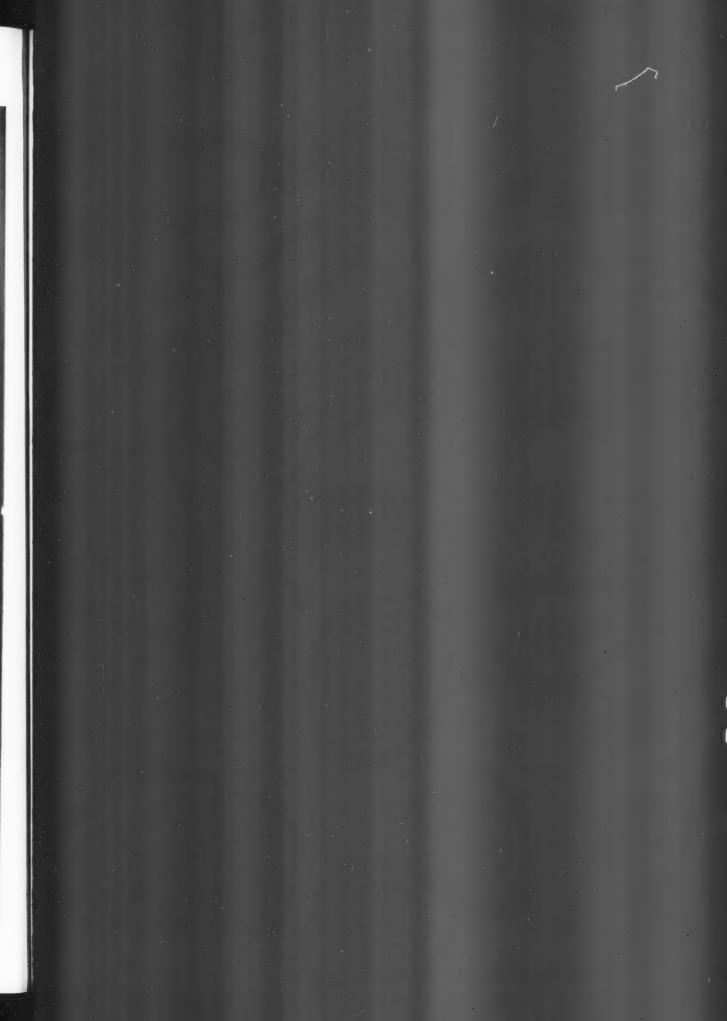
Frank Lloyd Wright
Architect



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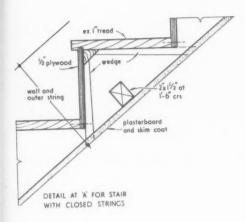
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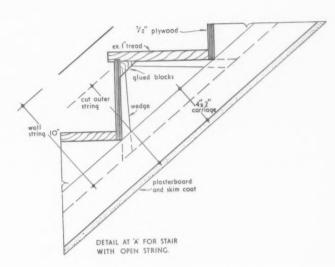


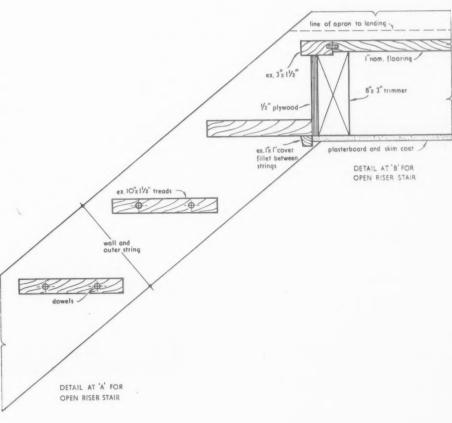


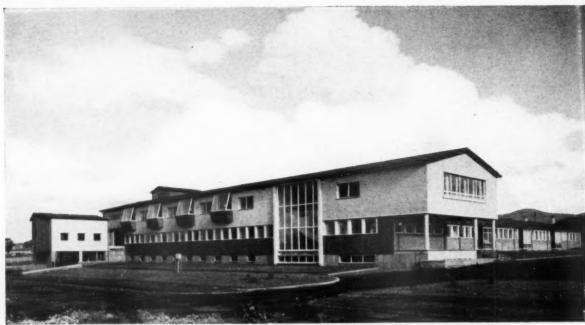
technical section 2.10" 2-10" 14. circular portion of wall and outer strings to be laminated 2.3" PART CIRCULAR STAIR

Fig. 4 (left) part circular stair. Fig. 5 (below left) closed string stair. Fig. 6 (below) open string stair. Fig. 7 (bottom) open riser stair.









SIGHTHILL HEALTH CENTRE — designed by the Department of Health for Scotland.

Electric floor warming at the Sighthill Health Centre

Fully controlled warmth

Loadings

A variety of floor finishes tested

Results

Sighthill was designed as an Experimental Centre under the National Health Service Act. The building forms a hollow square round a central courtyard. The north wing holds administrative departments on the ground floor and dental theatres on the first floor. The south wing houses the joint services departments. The east wing comprises child welfare services and the west wing is divided into six medical suites.

The building is heated by electric low temperature underfloor radiant heating. This is thermostatically controlled and designed to maintain against an outside temperature of 25°F. the following inside temperatures: surgeries, recovery and X-ray rooms 70°F.; passages and lavatories 60°F.; kitchen 52°F.; other rooms 65°F. Electrical intake is "off peak" and available between 7 p.m. and 7 a.m., and 11 a.m. and 3 p.m.

Total loading amounts to 262 kW and is designed for off-peak operation. This load comprises 232 kW embedded in the concrete floors and 30 kW in concealed wall panels. The total floor area of the building is 35,000 sq. ft.

Floor finishes laid were: wood block, cork tile, thermoplastic, mastic asphalt, Caithness stone slabs and terrazzo. All these have given very satisfactory service under heated floor conditions.

The installation has been running for over five years and the average annual consumption for floor warming purposes is 418,960 units costing £1,400.

Thermograph records were taken during the winter 1955/56. These show that when, in February 1956, the mean daily outside temperature was 22.6°F., the maximum drop in inside temperature during the cut-off period was only 2.6°F. Even under these extreme conditions the internal air temperature did not fall below 60°F.



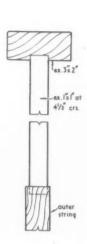
Issued by the Electrical Development Association, 2 Savoy Hill, London, W.C.2. Telephone: TEMple Bar 9434.

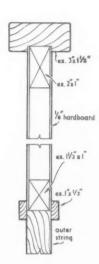
technical section

Figs 8–10 show details of three types of balustrade, Fig. 8 (below left) type (a); Fig. 9 (below right) type (b); Fig. 10 (bottom) type (c).

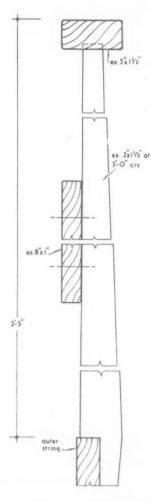
Comparison of various types of balustrade on closed string, open string and open tread stairs

The following table shows the effect of variations in types of construction and balustrades in respect of a straight flight staircase.





		Percentage compared with basic staircase	
Construction	Balustrade	Softwood %	Hardwood %
Closed string	Type (a)	100	212
	Type (b)	103	229
	Type (c)	95	211
Open string	Type (a)	104	212
	Type (c)	98	205
Open riser	Type (a)	95	168
	Type (c)	90	166



Conclusions

This analysis of stair costs does not bring out any very surprising facts. Anything, other than a simple straight stair, will add something like 25 per cent. to the cost. In a private house this, expressed as a percentage of the total cost of the job, is unlikely to be a serious matter as the cash value of 100 per cent. in the above is about £44. In low cost housing, it could be important. Introducing circular work would obviously increase costs, but, in the example given, the rise is not enormous and again probably not sufficient to outweigh other considerations in a good class private house.

The open tread stair should, if of simple design, cost rather less than a corresponding traditional type and this trend is emphasised if construction is changed to hardwood when the traditional stair would be rather over double the cost of softwood, while in the open riser design the change to hardwood raises the cost by about 75 per cent.

Varying the type of string and balustrade, within reasonable limits, has little effect on overall cost, so the designer can have his fun here with a fairly clear conscience.



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FIRE TESTING BUILDING FOR THE DSIR AT BOREHAM WOOD



This building has recently been completed for the Department of Scientific and Industrial Research for testing the fire resistance of larger building components than it has hitherto been possible to test in this country, such as full-size and near full-size beams and other structural members. The building is 135 ft. long by 52 ft. wide and 38 ft. high.

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The soil on which the building was constructed was brown clay of medium strength, and spread foundations were used to a maximum bearing pressure of $2\frac{1}{2}$ tons per sq. ft.

The main framework is of *in-situ* concrete portal frames prestressed with high tensile bars. Reinforced concrete tie beams were provided to the prestressed frames both at eaves height and

at a lower level. The concrete for the frames has a minimum 28 day cube strength of 6,500 lb. per sq. in.

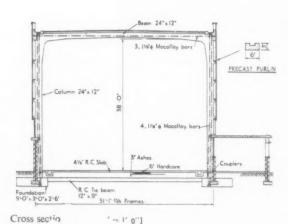
The roof is of hollow tile construction the *in-situ* concrete topping being cast in one with the beams of the portal frames. The roof has a 3-in. lightweight screed and a finish of 3-ply roofing felt.

Both ends of the building are fully glazed, with frames of light gauge steel. Special features designed to adapt the building to its purpose—burning operations which produce extremely high temperatures—include an expansion joint across the centre, and a sliding roof over the centre portion which can be opened to allow escape of heat. The building is also fully equipped with fire quenching apparatus.

The total cost of the structure was £44,000.

Offices, pumproom and tank are provided in an extension to one side of the building.

The building was designed by the Directorate of Works, Ministry of Works, architect-in-charge H. A. Snow, to whom Donovan H. Lee, M.I.C.E., acted as consultant for the structural design in collaboration with the Chief Structural Engineer's Branch of the Ministry. The general contractors were Tersons Ltd.





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critical study

THE MERMAID THEATRE, PUDDLE DOCK, LONDON, E.C.4



Above: the Mermaid Theatre seen from under Blackfriars railway bridge.

Below: the entrance in Lower Thames Street.



The task before the architects, Devereux and Davies, was to design a theatre to seat 500 at minimum cost. With no certainty of how much money would eventually be available for the building, they chose a simple and straightforward solution, eliminating what was inessential. The 4-ft. thick brick walls of the bombed warehouse were levelled off at a height of 15 ft. The auditorium part of the site was then roofed with a reinforcedconcrete barrel vault, 140 ft. long and 49 ft. clear span, supported at each end by two reinforced-concrete beams. At the crown the vault is 21 in. thick, at the eaves, 6 in. The radius is 60 ft. The roof is covered with three-layer felt on an insulating screed and on the inside is fairfaced and painted blue. Entering the Mermaid Theatre from Thames Street, the visitor passes through the original cast iron Doric columns into the new foyer. At first it was the architects' intention to have an open courtyard between the columns and the auditorium but this space has now been roofed over to form the foyer in which two refreshment bars have been included, and cut off from the main space by brick partitions. This area lacks the simplicity and unity that are so impressive when one reaches the auditorium. This is not altogether the fault of the architect: the brick partitions to the bars were a requirement of the local authority, and the whole area suffers from the generosity of a multitude of suppliers of building materials, which are in too great variety. There are too many lights, of too many patterns, and whereas the effect could have been alleviated by a more subtle colour scheme, too many colours have been used, apparently quite arbitrarily and without any coherent idea. Symmetrical staircases with rather institutional balustrades lead up from the foyer to the back of the auditorium.

These criticisms are perhaps a little carping. Any real criticism should be on the question of whether or not the foyer works. It does. One of the points that had to be considered was that, although the theatre only holds five hundred in the audience, there would be times, for example between the early and late performances, when there would be nearly a thousand people in the foyer. The coffee room and the bar which lie on either side of the entrance doors could therefore not be left open to the main concourse and are enclosed, as there would have been considerable confusion at times with some people trying to get a drink before or after the performance and others trying to get in or out of the theatre. This does not apply to the other bar at the far end of the foyer, which is

LONDON'S FIRST POST-WAR THEATRE: THE



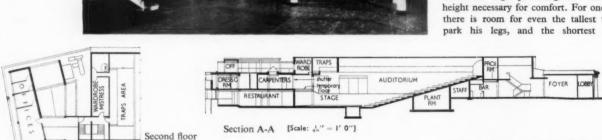
Above: the main entrance from Queen Victoria Street.

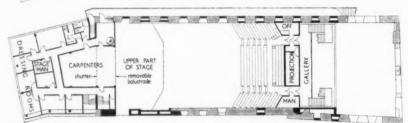
Below: inside the foyer looking towards the bar.



sufficiently out of the way. An unusual thing about this theatre is that the bars are open to the public during the day, as is the restaurant, and are not only in use during performances; a feature aimed at popularising the theatre as a local institution.

Having left his hat and coat at the cloakroom, the visitor can turn straight to one of the two staircases which are arranged symmetrically, and go up to the auditorium. Up to the present the summer weather has prevented the capacity of the cloakrooms from being tested to their full extent but some scepticism must exist as to their adequacy to cater for a fully overcoated audience. This is of rather special significance because when the theatregoer reaches his place he will find no private cloakroom under his seat. This is the first of the two minor nuisances inherent in a seating arrangement that is otherwise excellent. The second is that the seats are not staggered and are placed directly behind one another. They are, however, sufficiently steeply banked to make this obstacle to a good view of little inconvenience. The seating is on a fairly steeply raked bank without tiers, galleries or boxes. Instead of normal height seats being put at the backs of the steps the seats have very short legs and are placed on the edges, the short legs providing the extra height necessary for comfort. For once there is room for even the tallest to park his legs, and the shortest is





First floor plan



Ground floor plan [Scale: 4" = 1' 0"]

prevented from ruining her shoes and stockings on rough concrete by the smooth asbestos facing that has been applied to the risers.

Once seated in the auditorium one gets a far greater feeling of unity than was evident in the foyer.

The roof is painted blue but the walls, although patched as necessary, have been left as they were, a light coloured brick. This does not matter. In fact, in an extraordinary way, in conjunction with the general principle that no attempt was to be made to hide the mechanics of staging, this enhances the feeling of unity. Auditorium and stage are one space; there is no proscenium, no curtain and no orchestra pit. There is not even the customary raised stage to put a barrier between audience and players. Lack of funds is not the whole reason for the Mermaid taking the form it does. It was, however, a good excuse for actor Bernard Miles to create a form of theatrical presenta-

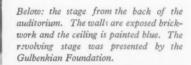
E.C.4 continued THEATRE, PUDDLE DOCK, MERMAID



Left: inside the foyer, looking towards the main entrance lobby and the box office.



Left: the auditorium seen from the stage. The seats are fixed directly on to the tiered banking.





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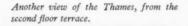
THE MERMAID THEATRE, PUDDLE DOCK, LONDON, E.C.4 continued

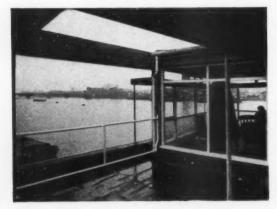


One of the dressing rooms on the first floor.



The restaurant on the ground floor, looking out over the River Thames.





tion for which he has hoped for years. His idea has been to admit that the theatre cannot compete with the cinema or television in realistic presentation and to play on the almost ritual communication between players and audience that can only be achieved in the live theatre, and to conjure up deas and emotions and not a mere mechanical illusion.

There is no problem of a balcony restricting the view and hearing at the back of the stalls and the complication of escape stairs is avoided. For a house of such small capacity the back row is rather far from the stage (70 ft.), but there is a good view and although at first glance the vault may not look promising for acoustics, acoustic tests gave a favourable result, which a visit to the theatre confirms. The centre of the curve of the vault lies well below the floor level of the auditorium and there is no trouble from sound focusing.

Besides excavation and tanking under the stage being an expensive proposition, it was a matter of policy that there should not be the usual musical moat between audience and players. There is a small trap in the centre of the stage, reached by a tunnel. One luxury piece of machinery, a present from the Gulbenkian Foundation, has been provided: the large revolving stage, 20 ft. in diameter, which is hand operated in full view of the audience. There is no understage space for this to interfere with.

As the budget did not allow for the great expanse of a full flying system and the tower to house it, a small hanging system, sufficient for the occasional "deus ex machina" has been installed over the rear of the stage. The auditorium and stage being in one unit, raised a problem with regard to fire precautions. Normally a safety curtain would be necessary to comply with the regulations, but permission for its omission was obtained here, partly on the ground of the small seating capacity of the theatre, and partly because the risk of fire is considerably lessened by there being no fly tower. This waiver was only granted however on condition that scenery must be fireproof. This means that timber used must be hardwood and as far as possible asbestos covered, and canvas and gauzes may not be used, and smoking is prohibited in the auditorium. The only other fire precaution provided is normal fire extinguishers. At the back of the stage a brick wall

At the back of the stage a brick wall screens an assembly space and staircases to the dressing rooms on the first floor. There is an opening in this wall at this level which can be used as an acting space or a musicians' gallery. The floor of this space can be removed, as it is in the current production. The stage lighting is a 54-way saturated reactor system,

operated by a control panel in a projection room at the back of the auditorium. Spotlights and floods hang unmasked from the ceiling and side walls The projection room will eventually house cinema projectors for film shows and the theatre is equipped for stereophonic sound.

The architects' original intention was to have the area behind the stage, which is now the restaurant, screened by a shutter, which could be opened during the interval, to let in the view of the river. and to enable the audience to walk right through the stage area. This was to be another blow at the "trespassers will be prosecuted" attitude of stage to audience, and for some purposes, for instance, lunchtime concerts, the background view of the river would have been magnificent. This plan could not be realised however, owing to the decision to include in the general scheme a restaurant that could be used independently and during the performance. This, together with the three bars. should provide a good source of income to the theatre. It would have been exciting to have a riverside theatre which really exploited its position. As things are, the design of the Mermaid has provided a view of it for the theatre's offices and dressing rooms and for the limited number of diners in the restaurant who are sitting on the stools by the window. People in the main part of the restaurant get no view at all, and the audience in general have no means of getting down to the river during the interval. This state of affairs is particularly irritating in summer, but perhaps the separation of the audience from the river will be appreciated on wintry evenings.

The dressing rooms can accommodate 50 or 60 actors. Their equipment is simple but adequate.

It is easy to quibble about quite a lot of things at the Mermaid, but well to remember how it was built: only by goodwill was it possible for the contractor to keep men on the site while waiting for money to be available from one stage of construction to the next. Uncertainty as to what could and could not be done must have hampered the architects as well as the builders: the astonishing thing is that a building erected under such conditions has achieved such a high degree of vitality.

The general contractors were Marshall Andrew; for sub-contractors see page

LAUNDRY TROLLEY: FLATS IN LONDON, S.W.1

Powell and Moya, architects



This trolley is part of the equipment of the communal laundries and is used by tenants to carry their washing from the washing machine to the spin drier and from this to the drying cupboard. The frame is constructed in mild steel rod, stove-enamelled black. The basin is in stainless steel and may be lifted out for draining.

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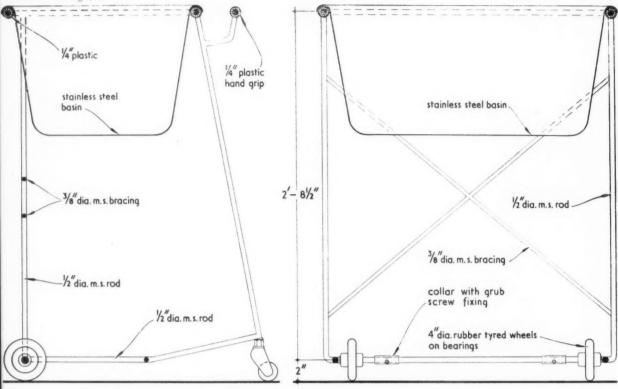
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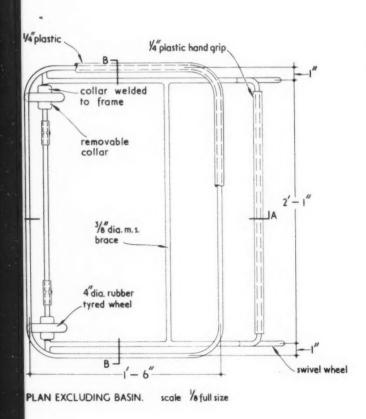
LAUNDRY TROLLEY: FLATS IN LONDON, S.W.1

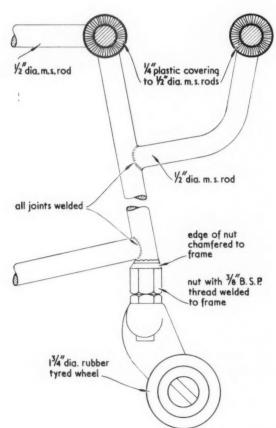
Powell and Moya, architects



SECTION A - A. scale /8 full size

SECTION B - B. scale % full size





DETAIL SECTION. scale 1/2 full size

REFUSE CHUTE: FLATS IN LONDON, S.W.1

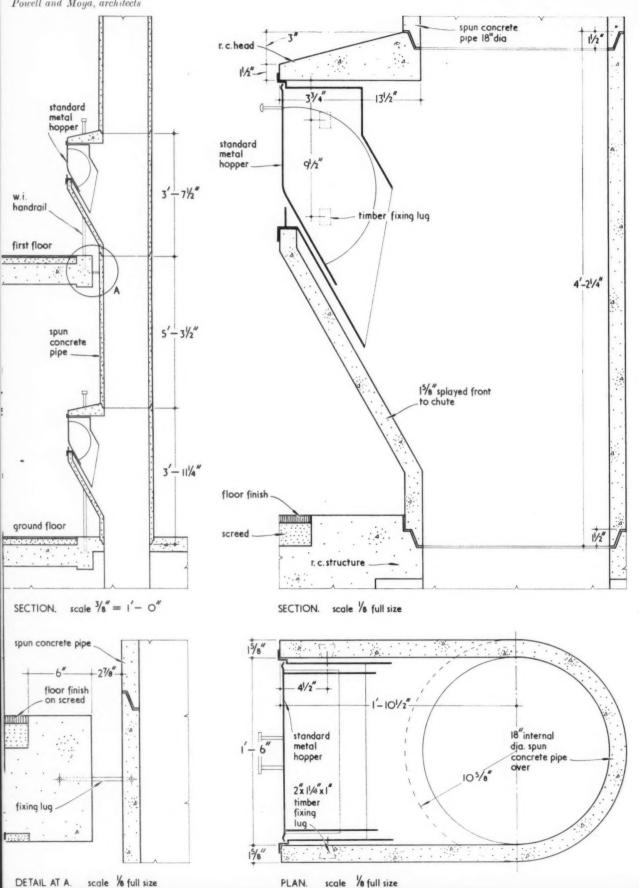
Powell and Moya, architects



The refuse chute comprises two basic units. The receiving unit at each floor level is precast concrete, purpose-made, into which the standard cast-iron hopper and frame is built. Connecting these units between floors is a standard precast concrete drain-pipe section.

REFUSE CHUTE: FLATS IN LONDON, S.W.1

Powell and Moya, architects





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A COLLIERY WINDER TOWER

This winder tower is about 150 ft. high with columns at 60 ft. by 52 ft. centres.

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The scotch derrick on the left is part of the contractor's erection tackle.

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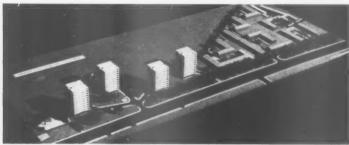
BIRMIN

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PROPOSED LCC HOUSING FOR GREENWICH

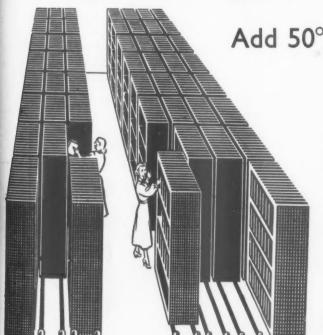


This is a new LCC housing development planned for a 9\frac{3}{4}-acre site between Shooters Hill Road and Hornfair Park. The scheme is intended to take advantage of the adjoining park, to reduce noise of traffic in Shooters Hill Road



and to provide a high percentage of private gardens. There are four elevenstorey blocks of flats on the narrower (western) part of the site where a number
of existing trees are retained. All the development on the eastern side is in two
storeys arranged in straight L-shaped terraces enclosing open spaces. One of
the blocks will contain accommodation for old people. The development,
designed by the LCC Architects' Department provides 272 dwellings,
46 garages, 46 parking spaces and 2 toddlers playgrounds. At the western end
of the site an existing dogs' cemetery is redesigned as a quiet informal garden.
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Mermaid Theatre, Puddle Dock, London, E.C.4 (pages 103-106). Architects: Devereux & Davies, F./F.R.I.B.A. Partner-in-charge: E. L. W. Davies, Dipl. Arch. (U.C.L.), Davies, Dipl. Arch. (U.C.L.), General contractors: Marshall F.R.I.B.A. Joinery: Boorman & Perkins Ltd. Andrew. Andrew. Joinery: Bootman & Ferkins Ltd. Steelwork to foyer and asbestos roof: Croggan Ltd. Hardwood flooring for stage: M. A. Morris Ltd. Revolving stage: The Lift and Engineering Co. Ltd. Laying hardwood flooring: Phillips Flooring Co. Ltd. Heating and ventilation: Smeaton & Sons Ltd. Felt roof on barrel vault: The Essex Flexible Flat Roofing Co. Electrical work: Johnson Pearce & Co. Ltd. Plumbing: Richard Whit-Pearce & Co. Ltd. Plumbing: Richard Whit-tington & Co. Ltd. Metal windows and iron-work: Crittall Manufacturing Co. Ltd. Design for shell roof and reinforced con-crete work: GKN Reinforcement Ltd. Carpeting: Thomas Tapling & Co. Ltd. Seating: G. B. Kalee Ltd. Stage lighting: Strand Electric & Engineering Co. Thermoplastic tile floor in foyer: The Marley Tile Co. Ltd. Balustrades, cat ladders and incidental iron-work: Safety Tread Ltd. Acoustic material and advice: John Dale Ltd. Cork insets to steps to auditorium: The Armstrong Cork steps to auattorium: The Afmstrong Cork Co. Ltd. Scaffolding: Flay (Services) Ltd. Supplying special blue paint: John Hall & Sons (Bristol & London) Ltd. Other paints: Blundell Spence & Co. Ltd. Sanitary fittings: Adamsez Ltd. Finishing to columns, beams and ceiling of restaurant: Glamorock Ltd. Lamp fittings for fover and forecourt: Ltd. Lamp fittings for foyer and forecourt: AEI Lamp and Lighting Co. Ltd. Spectra-AEI Lamp and Lighting Co. Ltd. Spectra-glaze blocks for offices: Atlas Stone Co. Ltd. Timber: F. Austin (Leyton) Ltd. Glass, mirrors and roof glazing: Aygee Ltd. Iron-mongery: A. J. Binns Ltd. Asbestos roofing and suspended ceiling: The Boddy Roofing Co. Ltd. Sliding and folding doors: Bolton Gate Co. Bars: Charrington & Co. Ltd.; Whitbread & Co. Ltd. Roof ventilators: Colt Ventilation Ltd. Skirting heaters: Copperad Ltd. Ironmongery: H. & C. Davis & Co. Ltd. Bricks and cement: Eastwood Ltd. Internal telephone: English Telephone Co. Ltd. Restaurant furniture: Ercol Lion Furniture Industries. Coffee bar equipment: Express Dairy Co. Cementone front of barrell vault: Joseph Freeman Sons & Co. Ltd. Pavement lights over carpenter's shop: Haywards Ltd. Refrigerator: J. & E. Hall Ltd. Iron balustrades in auditorium: Mott & Partners Ltd. Firefiphing equipment: Pyrene Co. Ltd. Ironwork and balustrading: The Safety Tread Ltd. Concrete chimney: True Flue Ltd. Second floor office r.c.: The Rom River Co. Ltd. Asbestos cement: Turners Asbestos Cement Co. Ltd. W.c.s: Venesta Ltd. Fans: Woods of Colchester Ltd. Stage lighting system: Strand Electric and Engineering Co. Ltd.

Announcements

Lesslie K. Watson & Harold J. Coates, F./F.R.I.B.A., have moved their office to 3, Raymond Buildings, Gray's Inn, London, W.C.I. The telephone number remains as before, Holborn 4623/4.

Laurence Oliver, M.I.H.V.E., M.INST.F., M.R.S.H., has given up his position as Senior Engineer, Ministry of Education, to start a private practice of heating and electrical services, practising from 23/25, Maddox Street, London, W.1 (telephone Mayfair 4651).

F. W. Charity, Thirtle & Duke, Chartered Architects, have now changed their address to 342/346, Grand Buildings, Trafalgar Square, London, W.C.2.

Wm. & T. R. Milburn, Chartered Architects, Surveyors and Valuers, have now moved to 4, Grange Terrace, Stockton Road, Sunderland (telephone Sunderland 3687/8), where they will be pleased to receive trade catalogues.

Burrough & Hannam, F./F.R.I.B.A., Chartered Architects, have now moved to Bedford House, 23, Richmond Hill, Bristol, 8 (telephone 3-0217/8).

Alan Reiach, F.R.I.B.A., A.M.T.P.I., has taken into partnership George A. Macnab, A.R.I.B.A., A.M.T.P.I., and Stuart Renton, A.R.I.B.A. The firm will practise under the name of Alan Reiach & Partners, 22, Ainslie Place, Edinburgh, 3.

We are informed by the daughter of the late George Howard Herring, F.R.I.B.A., 21, Milton Road, Harpenden, Herts, that trade literature is still being received, and calls from manufacturers' representatives. Should his name still be on any manufacturers' mailing lists, they are asked to delete it immediately.

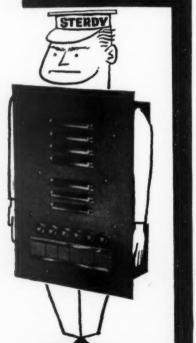


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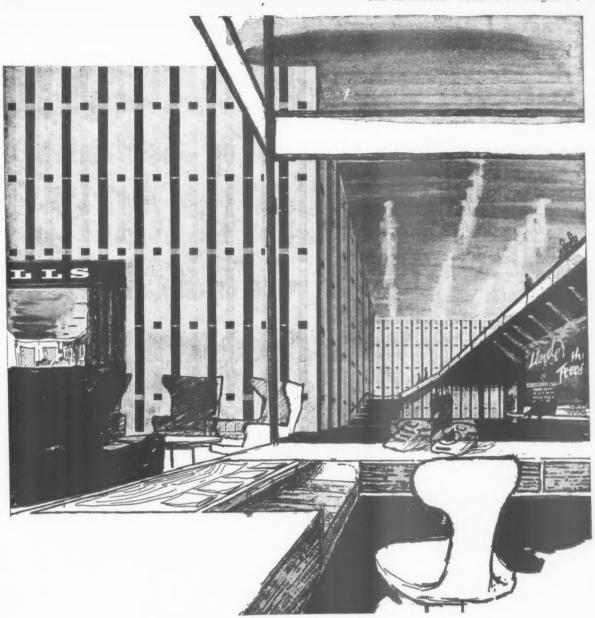
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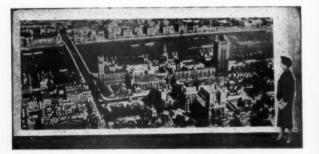
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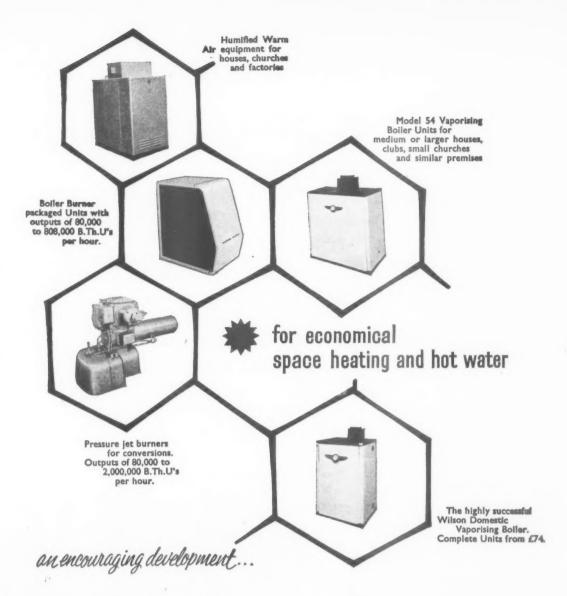
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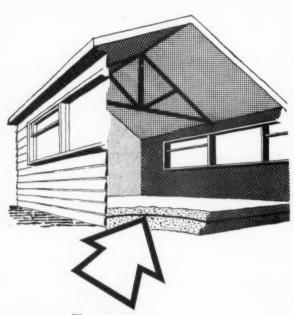
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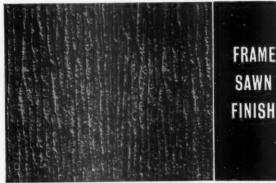
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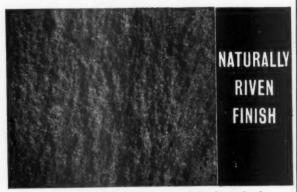
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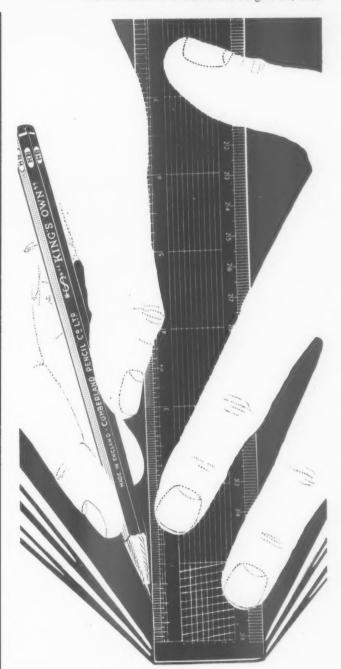
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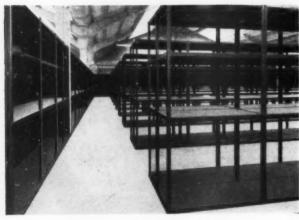
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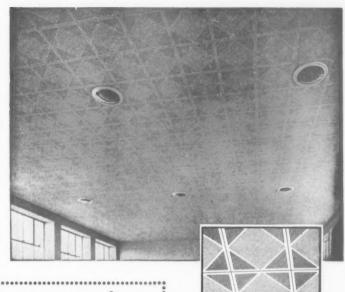
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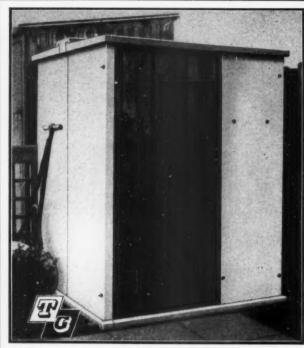
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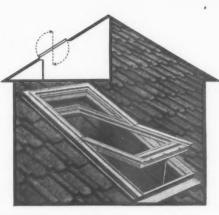
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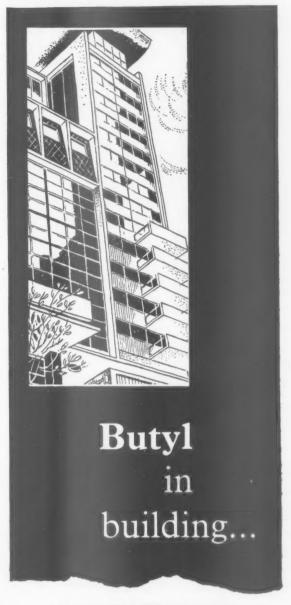
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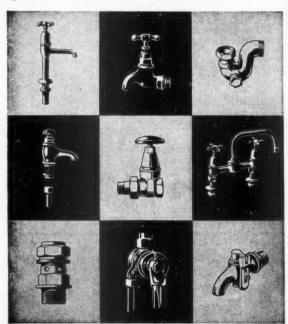
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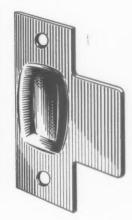
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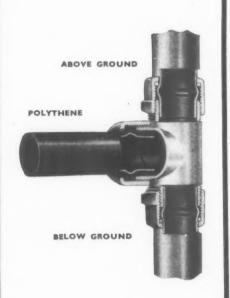




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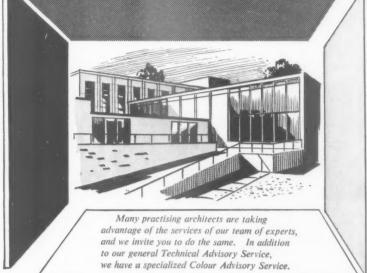
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NORWICH

Manufacturers of: Electric Water Heaters: Oil Heaters: Immersion Heaters: Urns: Towel Rails: Airing Cupboard Heaters Flameproof Heating Apparatus: Breakfast Cookers: Electric Fires: Food Trolleys: Warming Plates: Air Heaters, etc.

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Size 1

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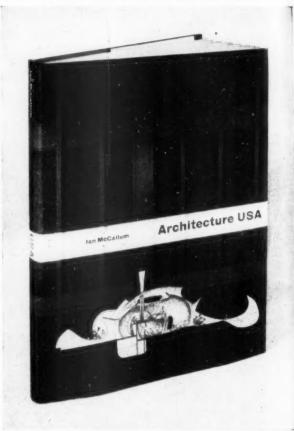
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Advertisements should be addressed to the Advt. Manayer. "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's

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Replies to Box Numbers should be addressed tere of "The Architects' Journal," at the address

given above.

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subscribers for air-mail delivery of Public and
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METROPOLITAN POLICE
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RECEIVER'S

QUANTITY SURVEYING ASSISTANTS, GRADE III, required by AIR MINISTRY in the PROVINCES. Duties include abstracting and billing, site measurement and preparation of estimates. Commencing salary according to age, qualifications and experience. Salary ranges from £68a age 26 rising to £850. Candidates must hold O.M.C. (Building or Builders' Quantities) or equivalent and have good experience under Quantity Surveyor or Building Contractor. Knowledge W.D. Schedule an advantage. Promotion and pension prospects. Fiveday week, three weeks three days leave a year initially. Appointments carry liability for service anywhere U.K. or overseas. Applicants normally should be natural born British subjects. Write stating age, qualifications and previous appointments, including type of work done, 20 Manager, P.E. 105, Professional and Executive Register. Ministry of Labour and National Service, Atlantic House, Farringdon Street, E.C.4. No original testimonials should be sent. Only applicants selected for interview will be advised.

COUNTY BOROUGH OF DUDLEY

COUNTY BOROUGH OF DUDLEY
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OCHIEF QUANTITY SURVEYOR, A.P.T.
Grade V. £1,220-£1,375.
ASSISTANT QUANTITY SURVEYOR, A.P.T.
Grade J. £510-£755.

(b) ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade I, 2610—2765.
(c) JUNIOR ARCHITECTURAL ASSISTANT, Higher General Division.
Applicants for (a) must be Associates of the Royal Institution of Chartered Surveyors, Quantities Section, and the successful candidate will be responsible for the preparation of Bills of Quantities, interim measurements, certificates and the settlement of Final accounts for schools, houses, public buildings, etc. Housing accommodation will be offered, if required.
Applicants for (b) should have assed the Intermediate examination of the R.I.C.S. and should have a thorough knowledge of taking off, preparing Bills of Quantities and site measurement.
Applicants for (c) should be prohationers of

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ment.
Applicants for (c) should be probationers of
the R.I.B.A. and should have a knowledge of
basic building construction.
Applications stating age, qualifications, and
experience, with the names and addresses of two
referees must be received by me by the 7th
September, 1959.

P. D. WADSWORTH, Town Clerk.

The Council House, Dudley. 6th August, 1959.

6th August, 1959.

STEVENAGE DEVELOPMENT CORPORATION CHIEF ARCHITECT'S DEPARTMENT Applications are invited for the appointment as PLANNING ASSISTANT in the Chief Architect's Department on New Town Salary Grade A.P.T. III £880-1,065 according to experience and qualifications.

The work consists of general and neighboundly planning in the new town and dealing with statutory planning applications.

Applications giving full details and games of two referees to Chief Administrative Officer, Aston House, Stevenage, Herts, not later than the 8th September, 1959.

JUNIOR ARCHITECTURAL DRAUGHTSMAN required by HAYES & HARLINGTON U.D.C. Salary within Grade A.P.T. I. i.e., £610-£765 per annum, plus appropriate London weighting, up to 20 years £10 per annum, 21-25 years £20 per annum, 26 years and over £30 per annum. Preference will be given to Probationers of the Royal Institute of British Architects. The Council is unable to assist with the provision of housing accommodation. Five-day week. Further particulars of duties, conditions of service and form of application obtainable from the undersigned which when completed must be returned by 7th September, 1959.

GEORGE HOOPER, Clerk and Solicitor.

Town Hall, Hayes, Middlesex.

LONDON COUNTY COUNCIL

ARCHITECTURAL ASSISTANTS required up
to £895. Fall and interesting programme of
houses, flats, schools and general buildings.
Application form and particulars from Hubert
Bennett, F.B.I.B.A., Architect to Council,
AR/EK/43/59, County Hall, S.E.I. (923.) 5052

AR/EK/43/59, County Hall, S.E.1. (923.) 5052
COUNTY BOROUGH OF PRESTON
APPOINTMENT OF ASSISTANT ARCHITECTS
(A.P.T., Grade IV. £1,065-£1,220)
(Special Grade, £785-£1,070)
Applications are invited for the above-mentioned appointments in the Borough Surveyor's Department.
Candidates must be Registered Architects and Corporate members of the R.I.B.A. The programme of works is large and varied and appointments afford opportunities for good experience.

appointments anote opportunitions of Service and Local Superannuation Acts apply, and the successful applicants will be required to pass a medical examination.

Forms of application can be obtained from the undersigned to whom they must be returned, completed, not later than 14th September. 1959.

W. E. E. LOCKLEY, Town Clerk.

Municipal Building,

Preston. 5255

Applications are invited for the post of ARCHITECTURAL ASSISTANT in the City Engineer's office (C. C. Steptoe, A.R.I.B.A., Chief Assistant Architect). It is essential that the applicant should be a neat and accurate draughteman and have had previous experience in an architect's office and have passed the Intermediate examination of the R.I.B.A. Salary, according to experience, will be within Grade I of the National Scales, and the appointment is subject to the Local Government Superannuation Act.

Applications, stating age and details of experience, together with the names and addressed of two referees, should be addressed to the City Engineer, Guildhall, Winchester, and should reach his office not later than Monday, 'th September, 1959.

his office not later than Monday, 7th September, 1959. Canvassing, either directly or indirectly, will disqualify.

R. H. McCALL, Town Clerk.

Guildhall, Winchester. 11th August. 1959.

SURREY COUNTY COUNCIL
KINGSTON SCHOOL OF ART
Knights Park, Kingston-don-Thames
Applications are invited for the post of parttime LECTURER in the Department of Architecture, to commence with the new session 1959/60.
The person appointed will be required to
instruct in the basic principles of general design
and to assist with the supervision of the general
architectural studies of the pre-Intermediate
students.
Applicants must be qualified professionally,
have had varied practical experience and be
actively engaged in their profession. Previous
teaching experience will be an additional advantage.

The vacancy is for three full days per week. The salary is in accordance with the Surrey Education Committee's rates of pay.

Applications should be forwarded to the Registrar, Kingston School of Art. 5251

Applications should be forwarded to the Registrar, Kingston School of Art.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE
OFFICE OF THE COUNTY ARCHITECT
The Council require SENIOR ARCHITECT
The Council of the Council o

"Bishopgarth," Westfield Road, Wakefield.

CWMBRAN DEVELOPMENT CORPORATION APPOINTMENT OF ASSISTANT ARCHITECT A.P.T. III/IV

Applications are invited for the above superannuable post in my department in the Salary Bange 2880—21,220 with a commencing salary according to qualifications and experience.

Candidates should be Associates of the R.I.B.A. with suitable office experience and should have had good experience in shop design construction and layout and Town Centre development.

Housing accommodation will be made available to the successful applicant if needed. Applications stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees must reach the undersigned by first post on Monday, 7th September, 1989.

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

Victoria Street, Cwmbran, Mon.

READING
ARCHITECTURAL ASSISTANTS required by
Ministry of Works (Home Counties Region).
Should be of Intermediate R.I.B.A. standard with
keen, modern outlook for work of widely varying
and interesting nature. Salary range £530 (age
21) to £850 per annum. Starting pay according to
age and qualifications. Prospects of promotion
and permanency. 5-day week. Applications
stating age, training and experience to R. P.
Mills, A.R.I.B.A., Superintending Architect,
Ministry of Works, Whiteknights, Reading
(reference RD1/AJ2/AA).

(reference RD1/AJ2/AA).

BIRMINGHAM REGIONAL HOSPITAL BOARD ARCHITECT'S DEPARTMENT

(a) ASSISTANT ARCHITECTS. 2730 × 25 (2) × 30 (2) × 35 (5) × 40 (1)—21,065—according to age and experience. Applicants must be registered architects having passed equisitie examinations, Experience of cospial plushes and construction an advantage and construction an advantage in the construction and superince of a construction and superince of a construction and superince in the construction and superince examinations. Surveying and specifications essential.

(b) ARCHITECTURAL ASSISTANTS, Salary scale 2546 (at age 21 years of ever) × 20 (3) × 25 (4) × 30 (2)—2765. Doin of entry according to experience. Intermediate RIBA essential. All appointments superannuable. 5-day week. Apply stating age and experience to Secretary.

10, Augustus Road, Birmingham 15, by 14th September.

CAMBORNE-REDRUTH URBAN DISTRICT

CAMBORNE-REDRUTH URBAN DISTRICT

APPOINTMENT OF SENIOR ASSISTANT

ARCHITECT/SURVEYOR (A.P.T. IV)
Applications are invited for the above appointment in the Engineer & Surveyor's Department at a salary in accordance with Grade A.P.T. IV (£1,065—£1,220).

Applicants must be Registered Architects or Chartered Surveyors, and have had considerable experience in housing and general building works, including supervising erection, both by contract and direct labour.

The appointment is subject to the provisions of the Local Government Superannuation Acts, 1937-55, to the National Joint Council's Scheme of Conditions of Service, and is terminable upon the expiration of one month's notice in writing by either side.

Consideration will be given to the provision of housing accommodation, if required.

Applications, on forms to be obtained from the Engineer & Surveyor, should be received by the undersigned not later than 12th September, 1959.

The successful applicant will be required to pass a medical examination to be carried out by this Council's Medical Officer of Health. Canvassing, either directly or indirectly, will be a disqualification, and applicants must disclose their relationship to any member or senior officer of the Council.

S. C. WILSON, Clerk of the Council.

S. C. WILSON, Clerk of the Council.

Council Offices, Camborne, Cornwall. 10th August, 1959.

BBW VALE URBAN DISTRICT COUNCIL APPOINTMENT OF TEMPORARY ASSISTANT Applications are invited from Registered Architects. preferably Corporate Members of the R.I.B.A., for the above appointment in the Architect's Department.

The salary will be in accordance with the Special Grade, £765—£1,070 commencing at a point within the grade in accordance with the experience of the successful applicant.

The person appointed will be engaged mainly upon duties in connection with the scheme for the development of the new Civic Centre for a minimum period of three years.

The appointment will be subject to three months' notice in writing on either side and to the successful candidate passing a medical examination.

The Council will provide housing accommodation if required.

Further details and forms of application must be returned so as to reach him not later than the 27th August, 1959.

HOWARD J. WILLIAMS, Clerk of the Council.

Council Offices, Ebbw Vale, Mon. 11th August, 1959.

THE ARCHITECTS' JOURNAL for August 27, 1959

BOROUGH OF BEXLEY
ARCHITECTURAL APPOINTMENTS
Applications are invited for the following poste
the Borough Engineer and Surveyor's Depart-

ment.
(a) ARCHITECTURAL ASSISTANT.
(b) ARCHITECTURAL DRAUGHTSMAN.
The salary for each of these posts is within Grade A.P.T. I (2610—2765 per annum) plus London weighting. Preference will be given to candidates with experience of housing and school predicts.

candidates with experience of nousing one absolutions projects.

Forms of application and conditions of appointment are obtainable from the Borough Engineer, West Lodge, Broadway, Bexleyheath, Kent, to whom completed applications must be returned by the 7th September, 1959.

The Council may be prepared to assist in the provision of housing accommodation. Canvassing will disqualify.

ARTHUR GOLDFINCH.

Town Clerk.

BOROUGH OF SOUTHGATE
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT
ARCHITECTURAL ASSISTANT
Applications are invited for the following
appointment in the Department of the Borough
Engineer and Surveyor:—
A.P.T. Special Grade, £785—£1,070 plus London
weighting.

A.P.T. Special Grade, £785—£1,070 plus London weighting.
The post is permanent and superannuated and the starting salary will be fixed in accordance with qualifications and experience. Applicante must be Associates of the Royal Institute of British Architects.
Forms of application may be obtained from the Borough Engineer and Surveyor and should be returned to the undersigned not later than 12 noon on Monday, 31st August, 1959.
Canvassing, directly or indirectly, will be a disqualification.

GORDON H. TAYLOB.

GORDON H. TAYLOR, Town Clerk.

Town Hall, Palmers Green, N.13. August, 1959.

CORPORATION OF THE CITY OF
TOWN PLANNING DEPARTMENT
SENIOR ASSISTANT (DEVELOPMENT
CONTROL)
Salary Grade £1,050-£1,200 per Annum
Applications are invited for the above post.
Further particulars are obtainable from the
irector of Town Planning, 5 Bon-Accord
rescent, Aberdeen, with whom applications
hould be lodged on or before Monday, 7th Sepmider, 1959.

J. C. RENNIE, Town Clerk.

Town House, Aberdeen. August, 1959.

5282

METROPOLITAN BOROUGH OF
CAMBERWELL
ASSISTANT ARCHITECTS
(Borough Architect's Department)
Vacancies for Assistant Architecte within a
salary range of £795 to £1,405. Grade and commencing salary according to qualifications and
experience. The work of the Department includes
design and construction of public buildings,
housing estates, including multi-storey construction.
One appairs meat in the

one appointment is the head of a section responsible for the design and erection of public buildings. The salary for this post is at present £1,170 by four increments of £55 to £1,390 (lettered Grade "A" of the Chief Officers Scales) but consideration will be given to its regrading to lettered Grade "B" (£1,265-£1,485).

Application form from Town Clerk, Town Hall, S.E.S. Closing date 14th September, 1959.

COUNTY BOROUGH OF WEST HAM BOROUGH ARCHITECT AND PLANNING OFFICER'S DEPARTMENT

Vacancies on permanent staff as follows:

(a) CHIEF ASSISTANT PLANNING OFFICER,
JNC Scale B (Max. £1,485),

(b) SENIOR ASSISTANT PLANNING OFFI-

CER, £1,220—£1,375. ASSISTANT PLANNING OFFICER, £785—

£1,070.
PLANNING ASSISTANT, £785—£1,070.
DEPUTY GROUP ARCHITECT, £785—£1,070.
ARCHITECTURAL ASSISTANT (2 poets).

ARCHITECTURE 25 ACCEPT 1070.

Plus London allowance, except post (a). Comencing salary according to qualifications and

Pius London allowance, except poet (a). Commencing salary according to qualifications and experience.

Applications, giving full details, to Thomas E. North, 70, West Ham Lane, E.15.

BOROUGH OF SLOUGH

TWO ASSISTANT ARCHITECTS required for housing and redevelopment and general building works. Applicants should have good experience in design and supervision. Knowledge of multistorey flat construction an advantage. Salary in accordance with the "Special Classes" Grade (£785-£1,070). Must be A.R.I.B.A. Housing provided for married candidates.

Applications, giving names of two referees, age, qualifications and experience to Borough Engineer, Town Hall, Slough, Bucks, by Tuesday, 15th September, 1959.

DEVON COUNTY COUNCIL require SENIOR ARCHITECT on A.P.T. IV (£1,065-£1,220), SENIOR ARCHITECT on N.J.C. Special Scale (£785-£1,070) and JUNIOR ASSISTANT on A.P.T. I. (£610-£785), Full and interesting programmes of Schools and other County Buildings. In approved cases, loans for house purchase and removal expenses are available—also lodging allowance for married officers while seeking accommodation.

Particulars and Application Form, returnable

and removal expenses are available allowance for married officers while seeking accommodation.

Particulars and Application Form, returnable by 11th September, 1959, from County Architect, 97, Heavitree Road, Exeter.

L.C.C. BRIXTON SCHOOL OF BUILDING FULL TIME COURSES in Architecture, Building Decorating and Painting, Structural Engineering and Surveying.
Sandwich courses in Structural Engineering and for Higher National Diploma in Building cover six months' study at the College and six months' experience in industry each year, for a period of four years

experience in industry each year, for a period of four years.

PART TIME AND EVENING COURSES:
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Town Planning Institute, Royal Institution of Chartered Surveyors, Institution of Builders,
Institution of Civil Engineers, Institution of Structural Engineers, Institution of Pulbic Health
Engineers, and Institute of Plumbing; also for
National Diploma of Design and Incorporated
Institute of British Decorators and Interior
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ADULT AND POST ADVANCED COURSES
in Building Administration and Higher Technology.

nology.

ENROLMENT—14th-18th September, 1959 (full-time and part-time day courses). 21st-25th September, 1959 (part-time evening courses). (5107)

THE UNIVERSITY OF SHEFFIELD

Applications are invited for a newly created CHAIR of BUILDING SCIENCE in the Department of Architecture, to begin duties as soon as possible.

In seeking a Professor of Building Science the University is looking for a candidate who has been trained in some branch of science and has subsequently had experience in a relevant field relating to building, such as for example, Building Materials, Building Services or the Physics of Environment. Alternatively, he might be an Architect with special interest in an experience of scientific aspects of the subject.

Sciancy £2,450 a year, with F.S.S.U. provision and family allowance.

Further particulars should be obtained from the Registrar to whom applications (20 copies—one only from overseas candidates) should be sent by 17th October, 1999.

Tith October, 1959.

ST. GERMANS RURAL DISTRICT COUNCIL APPOINTMENT OF ARCHITECTURAL
APPOINTMENT OF ARCHITECTURAL
ASSISTANT
Applications are invited for the appointment of an Architectural Assistant at a salary in accordance with A.P.T. II of the National Scales of Salaries, viz. 2765 rising to £380 per annum. Applicants should be qualified in accordance with the Scheme of Conditions of Service. The appointment is superannuable and subject to one month's notice on either side.

Applications together with a copy of one testimonial and the names of two referees should reach the Clerk of the Council, Lower Port View, Saltash, Cornwall, by the 1st September, 1959.

LEYLAND SLIDING PLATE GLASS WINDOWS

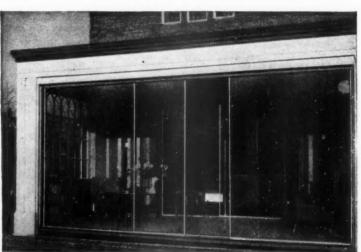
THE MOVABLE PICTURE WINDOWS WHICH GLIDE SMOOTHLY ON NON-CORRODIBLE BEARINGS.

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FOR MODERN HOUSES, FLATS, SHOPS, LOGGIA ENCLOSURES. WINDOW WALLING, SCHOOLS, HOTELS, OFFICES, SCREENS, PARTITIONS, DOUBLE WINDOWS, SHOWCASES, DISPLAYS, ETC.

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- SUN LOUNGE AT COLWYN BAY. ARCHITECTS: DAVIES & BOWEN, A./A.R.I.B.A.

LEYLAND & SONS LTD

TALBOT RD., STRETFORD MANCHESTER & YORK RD., COLWYN BAY, NORTH WALES Phones: Longford 3211. Colwyn Bay 2075 Applica TECTS construct program Perma £1,375). Previous Applic P.O. Be reference

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LANCASHIRE COUNTY COUNCIL Applications are invited from qualified ARCHI-TECTS of initiative, keen on design and modern constructional methods, for a large and varied

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constructional methods, for a large and varied programme. Permanent posts in A.P.T. Grade V (£1,220-£1,375). Starting point according to experience. Previous applicants should not re-apply. Application Forms from the County Architect, P.O. Box 26. County Hall, Preston, quoting reference A/A.J.

EAST SUSSEX COUNTY COUNCIL Applications are invited for the following appointments on the permanent staff of the Architect's Department:—
(a) Assistant Architect—Special Grade £785-£1,070.
(b) Engineering Assistant—Grade A.P.T. II £765-£880.

(b) Engineering Assistant—Grade A.P.T. II 27652880.
Candidates for appointment (a) must have passed the final examination of the R.I.B.A.
Candidates for appointment (b) must be able to assist in the preparation of schemes for electrical, heating and allied services.
Applications giving the names of two persons to whom reference may be made to be sent to the County Architect, County Hall, Lewes, within two weeks of this advertisement.

5314

we weeks of this advertisement. 5314

ARCHITECT'S DEPARTMENT SALOP COUNTY COUNCIL

There are vacancies on the permanent staff for qualified ASSISTANT ARCHITECTS. Salary within Special Grade, £785 to £1,070 p.a., commencing point depending on ability and experience. N.J.C. Conditions. A disturbance allowance or weekly separation allowance may be paid to married men taking up these appointments. Conditions of service and application forms obtainable from Ralph Crowe, A.A.Dinl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London Road, Shrewsbury. Closing date 9th September, 1959.

AMT.P.I., County Architect, Column House, London Road. Shrewsbury. Closing date 9th September, 1959.

CITY OF LIVERPOOL EDUCATION COMMITTEE COLLEGE OF BUILDING Principal: T. E. HALL, Dip.Arch, A.R.I.B.A. The Governing Body invites applications for the following appointments (full-time) duties to commence as soon as possible after September, 1959. (1) ASSISTANT (GRADE "B") to teach general building subjects, chiefly Building Construction, in full-time and part-time professional gualification in Surveying, a qualification of the Institute of Builders or other suitable qualification in burveying, a qualification of the Institute of Builders or other suitable qualification in burveying, a qualification of the Institute of Builders or other suitable qualification in burveying, a qualification of the Institute of Builders or other suitable qualification in Architecture. Should hold a decree in Architecture and/or Associateship of the R.I.B.A. The person appointed will be required to teach selected subjects up to the standard of the Final B.I.B.A. examinations in part-time day release courses or a newly established sandwich course. (3) ASSISTANT (GRADE "A") to teach mainly the subjects of calculations, science and drawing in gas fitting and other building installations and craft courses up to C.G.L.I. Final Certificate level. Must nossess good technical qualifications in some field of general building or building installations work and have had experience in industry. The bost offers great ecope for initiative in integrating ancillary subjects with building installations practice.

For these appointments professional or industrial experience is essential and teaching experience is desirable.

Salaries in accordance with the 1956 Burnham Technical Report as follows, plus 5 per cent:—(Revision pending), (1) and (2) men: £475 × £25 to £7.025 per annum.

To these scales additional graduate and training allowances, where applicable, will be paid. Increments up to a maximum of twelve may be allowed for professional or war s

GOVERNMENT OF ZANZIBAR
TOWN PLANNING OFFICER.
TOWN PLANNING DEPARTMENT
To be responsible for the implementation of statutory planning schemes including development control and the preparation of detailed schemes, advising Government generally on planning matters.
Contract annointment. Salary range £1.560 to £1.863. Gratuity. Free passages. Rented quarters.
Candidates must be A.M.T.P.I. with at least five years post qualification experience.
Write Director of Recruitment. Colonial Office.
London, S.W.1, giving full names, age, qualifications and experience, quoting BCD.62/10/01/E2.

BOROUGH OF SCUNTHORPE
BOROUGH SURVEYOR'S DEPARTMENT
Scunthorpe Borough Council have vacancies in
the Surveyor's Department for :—
2—ASSISTANT ARCHITECTS, Special Grade
(£785-£1.070 D.a.).
1—QUANTITY SURVEYING ASSISTANT,
A.F.T.I. (£510-£765 D.a.).
Housing accommodation is available. Applications giving experience and qualifications, together with names of two referees should be submitted to the Town Clerk, 34, High Street.
Scunthorpe, not later than Tuesday, 1st
September, 1959.

BOROUGH OF ROWLEY REGIS
APPOINTMENT OF CHIEF ARCHITECTURAL
ASSISTANT
Applications are invited from suitably qualified persons for the above appointment in the Building Department, at a salary within A.P.T. Special Grade (£780-£1,070).
Applicants should be experienced in housing and other architectural works normally undertaken by a Local Authority, and experience of a direct labour building organisation would be an advantage.
The appointment will be subject to the provisions of the Council's Conditions of Service and Local Government Superannuation Acts.
Housing accommodation will be offered, if required.

Housing accommodation and required.

Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than Monday, the 31st August, 1959.

JOHN HILTON, Town Clerk.

Municipal Buildings, Old Hill, Staffs.

Stars.

COUNCIL OF THE COUNTY OF ABERDEEN
Applications are invited for appointments (2) as
ARCHITECTURAL ASSISTANT in the County
Architect's Department. Salary 2:760 × 2:55-2:0,400
per annum. Applicants must be Associates of the
Royal Institute of British Architects. The
appointments are superannuable. Application
forms may be obtained from the undersigned.
Closing date—4th September, 1959.

JAMES L. CRAIG.

County Clerk.

County Buildings, 22, Union Terrace, Aberdeen.

Aberdeen.

SHEFFIELD REGIONAL HOSPITAL BOARD Applications are invited for the following posts in the Architectural Division of the Board's Head-quarters Staff:—

SENIOR ASSISTANT QUANTITY SURVEYOR. Candidates must hold Corporate Membership of the Royal Institution of Chartered Surveyors. Commencing salary £1,050 × £30(3) × £35(3)-£1,245 per annum.

TWO ASSISTANT ARCHITECTS. Candidates must be Registered Architects and have passed the requisite examinations. Salary according to age and experience within the scale £730-£1,055 per annum.

Appointment is subject to the Whitley Council terms and conditions of service, to the National Health Service (Superannuation) Regulations, and to one month's notice on either side. Applications, together with the names of three referees, should be sent to the Secretary to the Board, Fulwood House, Old Fulwood Road, Sheffield, 10, not later than the 11th September, 1959.

BEDLINGTONSHIRE URBAN DISTRICT
COUNCIL
ARCHITECTURAL ASSISTANT
Applications are invited for the under-mentioned appointment in the Surveyor's Department.
ARCHITECTURAL ASSISTANT, salary in accordance with Special Grade—2785-4.070, commencing at 2785, Applicants must have nassed the Intermediate Examination of the Royal Institute of British Architects, or its equivalent, and have had considerable experience in architectural work, particularly housing and shop redevelopment. Housing accommodation will be made available in approved circumstances.
Applications accompanied by names of three referees to be delivered to the undersigned not later than Friday, 4th Sentember 1989.

Council Offices,

Council Offices, Bedlington. Northumberland. 14th August. 1959.

14th August. 1959.

BOROUGH OF EALING

(a) Erection of a Public Convenience, Shelter,
Tool Shed. Works Compound and Entrance
Gates in Montpelier Park, Montpelier Road,
W.5.

(b) Erection of a Shelter with Tool Shed in
Fielding Walk. Northcroft Road. W.13.
Tender documents obtainable from the Borough
Surveyor, Town Hall. Ealing, W.5, upon payment
of £5 returnable on receipt of a bona fide tender.
Tender must be delivered to the Town Clerk.
Town Hall. Ealing, W.5, not later than 9.30
a.m. on 30th September. 1959.

E. J. COPE-BROWN.
Town Clerk.
5564

TWO ARCHITECTURAL ASSISTANTS
Applications are invited for the above posts which are unestablished but likely to be for a period of at least two years. Salary up to 21.070 according to qualifications, ability and experience. Appointments are subject to the National Conditions of Service, the Local Government Superannation Acts and to medical examination. Applications to reach the undersigned with details of age, qualifications and experience together with the names of two referees, by 4th September, 1989.

W. B. MURGATROYD

W. B. MURGATROYD.
Town Clerk.

38. St. Peter's Street, ST. ALBANS.

ARCHITECTS: MINISTRY OF HEALTH.

Pensionable posts (1 Senior, 2 Main Grade) in an active and expanding design and development unit in London for registered Architects (men and women) who have experience of client—architect briefing, collaboration with engineers, manufacturers, or research organisations in the development of new techniques or specialist services, and of design cost data. Experience of hospital building an advantage. Duties include collation of experience in design, construction and building costs of hospitals, etc., with a view both to the publication of bulletins and to building prototypes to illustrate the latest advances in medical and structural techniques. Men's salary £1,840.£2,120 (Senior post) or £1,325.£1,780 (Main Grade posts). Starting Salary may be above minimum in each case. Write Civil Service Commission, 17 North Audley Street, London, W.1 for application form quoting \$5019/59. Closing data 17th September, 1959 5363

S5019/59. Closing date 17th September, 1959

MIDDLESEX COUNTY COUNCIL
Required initially at Westminster Office:—
(1) ASSISTANT AREA PLANNING OFFICER
A.P.T. IV: Salary £1,095-1,250 (if over 26). Must
have professional qualification and suitable
experience. Car allowance normally granted.
(2) SENIOR TOWN PLANNING ASSISTANTS
(Special scale: Salary £315-1,100. Appointments
may be made above min. in this case). The
work will be on Development Plan & Research.
Planning experience and appropriate qualification
necessary.

Planning experience and appropriate qualification necessary.

(3) TOWN PLANNING ASSISTANTS (A.P.T. II: Salary £795-910 if over 26) for either (a) Survey and analytical work, or (b) Development Control. Preference for professional qualification or good honours degree in appropriate subject. Application forms from County Planning Officer, 10, Great George Street, S.W.l., returnable by the 19th September, 1959. Prescribed conditions. (Quote B.29 A.J.).

Guote B.29 A.J.).

SOUTH WALES ELECTRICITY BOARD
SENIOR ARCHITECTURAL DRAUGHTSMAN
Our Architectural Section does a large, varied
and interesting range of work.
It is situated in a locality which is rural, yet
only five miles from te City of Cardiff.
To help maintain our standard in servicing over
600,000 consumers, we need a SENIOR ARCHITECTURAL DRAUGHTSMAN who has obtained
or is studying for membership of the R.I.B.A.
The salary will be 2790/8390 and applications to
the Secretary at St. Mellons, Cardiff, will receive
careful and prompt consideration.
(Closing date for application, Saturday, 12th
Sectember, 1959. Envelopes should be marked
"Senior Architectural Draughtsman—46/59").

5375

NATIONAL COAL BOARD

SOUTH-WESTERN DIVISION
Applications are invited for the following posts:
(a) ARCHITECT GRADE 2—The successful applicant will be responsible for the preparation of sketch plans and working drawings of a variety of buildings, together with some duties of an executive nature. Applicants must be Associates of the Royal Institute of British Architects. Salary scale: £815 × £30—£1,25 per annum. Please quote Staff Vacancy No. 169/40.
(b) ARCHITECTURAL ASSISTANT GRADE 1. Applicants should have passed the Intermediate examination of the R.I.B.A., and have not less than 3 years' subsequent experience, or have based the appropriate Final examination, and have had not less than 1 year's subsequent experience. Salary scale: (Male) £715 × £25—£350 per annum. Applicants of exceptional ability and experience may in special circumstances be given and experience may in special circumstances be given the first of the Divisional Production Department, Cambrian Buildings, Mount Stuart Square, Cardiff.
Application forms which can be obtained from the Divisional Chief Staff Officer, National Coal Scott Production Department, Application forms which can be obtained from the Divisional Chief Staff Officer, National Coal Scott Production Department, Application forms which can be obtained from the Divisional Chief Staff Officer, National Coal Scott Production Department, Application forms which can be obtained from the Divisional Chief Staff Officer, National Coal Scott Production Department, Application forms which can be obtained from the Divisional Chief Staff Officer, National Coal Scott Production Department, Application forms which can be obtained from the Divisional Chief Staff Officer, National Coal Scott Production Department, Application forms which can be obtained from the Divisional Chief Staff Officer, National Coal Scott Production Department, Application decompleted and returned by 2nd department.

METROPOLITAN BOROUGH OF

SHOREDITCH
Applications are invited for the appointment of ARCHITECTURAL ASSISTANTS. Salary within Grade A.P.T. III £910—£1.095 p.a. according to experience and qualifications. Subject to medical examination. Council's Superannuation Scheme and N.J.C. conditions
Applications stating age, training and experience and giving the names of two referees to reach Boronech Architect, Town Hall, Old Street, E.C.1, by 9th September, 1959.

E.C.1, by 9th September, 1959.

SOUTHERN ELECTRICITY BOARD
ENGINEERING DRAUGHTSMAN
Sub-Area Engineer's Department of No. 4
(Bournemouth) Sub-Area. Salary N.J.B. Schedule
"D." Grade 6 (2620 × 220-2740 per annum).
N.J.B. Conditions of Service.
Applicants should be fully qualified Draughtsmen and be able to undertake under supervision, the preparation and final layout of building and civil engineering drawings. A sound knowledge of building construction is essential.
The successful candidate will be required to contribute to the Electricity Supply (Staff) Superannation Scheme, if eligible,
Applications on forms obtainable from the Sub-Area Secretary, 1, Priory Road, Bournemouth, and returned to him. quoting Z.1076, not later than September 7, 1959.

THURROCK U.D.C.

(Engineer & Surveyor's Dept.)

require ARCHITECTURAL ASSISTANT under Architect to the Council. Salary—A.P.T. I/II: £610-£880 p.a. Good architectural experience necessary. Applicants must be capable of preparing working drawings in all categories and should have passed the Intermediate Examination of the R.I.B.A. The Council have interesting projects in hand, including an Indoor Swimming Bath. Appointment pensionable. Applications, stating age, qualifications, and experience, and quoting three referees, to Clerk of the Council. Council Offices, Grays, Essex, by 3th September, 1959. Canvassing disquafifies. Relationship with Members or Senior Officers of the Council must be disclosed. 5556

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE NEW TOWN HALL
The City Council invites Building Contractors possessing substantial organisation who are willing to submit a firm price tender for the construction of the New Town Hall, and who wish to be considered for inclusion in a selected list of Tenderers, to apply in writing in the first instance to the City Architect, 18, Cloth Market, Newcastle-upon-Tyne, I, for particulars of the scope and magnitude of the work to be carried out.

Scope and magnitude of the scope and magnitude of the scope and magnitude of the scope and requisite organisation, together with adequate financial and material reserves, to carry out the work expeditiously and satisfactorily.

Initial applications for more detailed information as to the work to be carried out should reach the City Architect not later than Wednesday the 16th September, 1959.

JOHN ATKINSON.

Town Clerk.

Town Hall, Newcastle-upon-Tyne, 1.

CITY AND COUNTY OF LICHFIELD CITY AND COUNTY OF LICHFIELD CITY ENGINEER & SURVEYOR'S DEPARTMENT APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT A.P.T. GRADE I (£610-£765 per annum). Applications are invited for the above Appointment in the City Engineer and Surveyor's Department. The appointment which is permanent offers an opportunity to participate in interesting architectural work in connection with Overspill and Town Centre Redevelopment Schemes. Applicants should have had suitable training and experience appropriate to the Appointment. The Appointment will be subject to the Scheme of Conditions of Service and the provisions of the Local Government Superannuation Acts. Further particulars may be obtained from Mr. D. Oglesby, M.I.Mune. City Engineer & Surveyor, Meredith House, 62, Wade Street, Lichfield.

Applications stating previous appointments, qualifications and details of experience together with the names and addresses of two referees must be received by the undersigned in a plain sealed envelope endorsed "Architectural Assistant" not later than noon on Friday, 4th September, 1959.

HENRY J. CALLENDER, Town Clerk. 5382

Guildhall. Lichfield. 5382

COUNTY BOROUGH OF EAST HAM BOROUGH ENGINEER'S DEPARTMENT Applications are invited for the following temporary appointments—SENIOR ASSISTANT ARCHITECT. ARCHITECTURAL ASSISTANT. GRADE IV. £1,065—£1,220 ARCHITECTURAL ASSISTANT. GRADE II. £765—£880 London Weighting is paid in addition, and salaries in excess of the minima may be paid according to qualifications and experience. The appointments are for work on a new Technical College and are expected to be for a period of not less than three years.

appointments are for work on a new reculindar.
College and are expected to be for a period of
not less than three years.
Further details and application forms returnable by 18th September. 1959. from the Town
Clerk, Town Hall, East Ham, E.6.

COUNTY BOROUGH OF EAST HAM
PRINCIPAL ASSISTANT
PRIANTING OFFICER
GRADE A.P.T.III: 2830—21,065
Vacancy in Borough Engineer's Department.
London Weighting paid in addition. Salary above minimum paid according to qualifications and experience.
Subsistence allowance may be paid over a reasonable period to person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.
Details and application form from Town Clerk, E.6.

Closing date 4th September, 1959.

COUNTY BOROUGH OF EASTBOURNE APPOINTMENT OF ASSISTANT ARCHITECT Q.A. Grade: £785/£1,070 p.a. Applications are invited for the above post; commencing salary within the grade according to experience. Housing available. Applications, giving details of qualifications and experience, together with the names of two referees, to be sent to the undersigned by the 7th September, 1959.

59. R. WILLIAMS, B.Sc., Borough Engineer & Surveyor, 5333 2 4. Saffrons Road.

ARCHITECTS

Architects of progressive outlook and interested a contemporary design in the hospital field are wited to apply for the following posts.

(a) PRINCIPAL ASSISTANT ARCHITECT cale II. Salary £1,195-£1,420 p.a. (temporary pointment).

appointment).

(b) ASSISTANT ARCHITECT. Salary in the scale £730—£1,055 (permanent appointment).

Both posts are in the Regional Architect's office, (a) being mainly concerned with a large extension to Borocourt Mental Deficiency Hospital, and (b) with general hospital development. Further details may be obtained from the Regional Architect.

tect.

Applications, stating the post applied for, and quoting the names of two referees, should be received by the Secretary, Oxford Regional Hospital Board, 43, Banbury Road, Oxford, by 19th September, 1959.

19th September, 1959.

WARWICKSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT
Applications are invited for the following appointments:—

1. DEPUTY GROUP ARCHITECT, GRADE A.P.T. IV.—V (£1,065—£1,375). Applicants must be members of the Royal Institute of British Architects and be competent designers and have a good knowledge of modern methods of construction. They must be capable of handling large building projects from sketch plan to completion.
2. SENIOR ASSISTANT ARCHITECTS.
GRADE A.P.T. III.—IV (£380—£1,220). Applicants must be members of the Royal Institute of British Architects and be competent designers with a good knowledge of modern methods of construction.

with a good knowledge of modern methods of construction.

3. ASSISTANT ARCHITECTS. SPECIAL GRADE (£785-£1,070). Applicants must have passed Parts I and II of the R.I.B.A. final or special examinations or their equivalent at one of the recognized schools of architecture. The successful applicants will work in teams on large projects, but opportunity will be given to men with enthusiasm and ability to design and carry out smaller projects under a Group Architect.

4. ASSISTANT HEATING ENGINEER, GRADE A.P.T. III (£880-£1.051). Applicants should have had some years in the design of heating and water supplies.

The commencing salary can be within the grade according to ability and experience. Application forms and other conditions applicable to the appointments can be obtained from G. R. RARNSLEY, F.R.I.B.A.. County Architect, Shire Hall, Warwick.

Store Hall. Warwick.

Shire Hall. Warwick,

WEST SUSSEX COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
Applications are invited for the following

Applications are invited for the following appointments:

(a) ASSISTANT ARCHITECT, at a salary in accordance with the Special Grade of the National Scales of Salaries (£785-£1,70). Commencing salary according to experience.

(b) ARCHITECTURAL ASSISTANT, at a salary in accordance with Grade I of the National Scales of Salaries (£610-£765). Commencing salary according to experience.

Further particulars should be obtained from the County Architect, County Hall, Chichester, to whom all detailed applications must be submitted not later than 11th September, 1959.

T. C. HAYWARD.

Clerk of the County Council.

County Hall, Chichester.

EAST SUFFOLK COUNTY COUNCIL

EAST SUFFOLK COUNTY COUNCIL VACANCIES FOR ARCHITECTS and ASSISTANTS
Vacancies exist in the County Architect's Department for:—

(a) ARCHITECTS on A.P.T. Grade IV (£1,065—[1920])

(a) ARCHITECTS on A.P.T. Grade IV (£1,050-£1,220).

(b) ARCHITECTURAL ASSISTANTS on A.P.T. Grade II (£765-£880).

Applicants for (a) must be qualified architects with good general experience in design and construction, capable of taking charge of large projects with the minimum of supervision.

Applicants for (b) must be good draughtsmen of R.I.B.A. intermediate standard, who are capable of producing accurate working drawings and specifications, to work as assistants to senior architects.

The posts advertised offer interesting and responsible work in connection with the Council's extensive programme of school and other building.

cxtensive programme of school and other bunding.

The starting salary in each case will be fixed according to qualifications and experience; removal expenses will be paid in approved cases. The appointments are subject to the provisions of the Superannuation Acts and the selected candidates will be required to pass a medical examination.

Applications stating age, qualifications, experience and present employment, together with copies of two recent testimonials, must be delivered to the County Architect, Mr. E. J. Cundilfic, A.R.I.B.A., County Hall, Ipswich, by Tuesday, the 15th September, 1959.

CITY OF BIRMINGHAM

city of Birmingham

CITY OF BIRMINGHAM

CITY ARCHITECT'S DEPARTMENT

DRAUGHTSMAN OR DRAUGHTSWOMAN
required, with experience in Architecture or
Constructional Engineering.
Commencing salary, according to capabilities
and experience, will be within Grade A.P.T. I
(£550/£785) for applicants possessing the Ordinary
National Certificate, or Miscellaneous Grades IV,
V or VI (£610/£795) for unqualified applicants
with suitable practical experience.
Pension scheme. Five-day week. Medical
examination.
Applications, stating age, present post and

examination.

Applications, stating age, present post and salary, qualifications, experience and two referees, to the undersigned by 11th September, 1959.

A. G. SHEPPARD FIDLER, City Architect.

Civic Centre. Birmingham, 1.

Birmingham. 1.

BUCKS COUNTY COUNCIL
Applications are invited for the appointment of an ASSISTANT ARCHITECT in the County Architect's Department on the Architects' Special Scale, £785—£1,070 p.a.
The appointment is superannuable and subject to medical examination.
A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.
Applications, on forms provided, must be returned by 5th September, 1959.

F. R. POOLEY.
County Offices.

County Offices, Aylesbury.

PAVE THE WAY

FOR HARDER WEAR

For factory and other floors exposed to heavy traffic, impact and corrosion, Accrington 'Nori' Paving Bricks may be specified with the utmost confidence. Made from the same material as the famous Accrington Engineering Bricks. Samples on request. THE ACCRINGTON BRICK & TILE CO. LTD., ACCRINGTON

Telephone: Accrington 2684

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CITY ARCHITECTS OFFICE,
MANCHESTER.
Applications invited for appointment of ASSISTANT ARCHITECT/ARCHITECTFRAL ASSISTANT. Salary special scale £785/£1,070 (commencing salary will be fixed according to qualifications and experience). Five-day week, removal
repenses allowed. Housing accommodation for
a limited period may be provided. Forms of
application from City Architect, P.O. Box 488,
Town Hall. Returnable by 7th September. 5386

BRACKNELL DEVELOPMENT CORPORATION Applications are invited for the post of JUNIOR RCHITECTURAL ASSISTANT in the Chief Architect's Department. The salary will be in the General Division (£210-595). Commencing salary will be determined according to experience. Superannuation Scheme, medical examination. Housing available. Apply by 15th September, 1599, giving age, education and qualifications, experience and appointments held (with dates and salaries), with names of two referees to General Manager (J.A.A.), Bracknell, Berks. 5390

CITY AND ROYAL BURGH OF

CITY AND ROYAL BURGH OF

DUNFERMLINE
BURGH ARCHITECT'S DEPARTMENT
Applications are invited for the post of FIRST
ASSISTANT ARCHITECT on salary scale 279521,075 with placing according to age, qualifications, and experience. The post is superannuable, and subject to medical examination.

Applicants must be Associate Members of the Royal Institute of British Architects, and must have had, since qualification, at least three years local authority experience.

Applications, stating age, experience, qualifications and details of present appointment, together with copies of two recent testimonials, should be addressed to the Burgh Architect, 6, Abbot Street, Dunfermline, not later than 9th September.

The post has been designated by the Town Cuncil, and canvassing, either directly or indirectly, will be a disqualification.

J. DOUGLAS,

Town Clerk.

J. DOUGLAS, Town Clerk.

City Chambers, DUNFERMLINE. 18th August, 1959.

CITY OF COVENTRY
DEPUTY CITY ARCHITECT AND PLANNING OFFICER, within the scale £1,990—£2,280

NING OFFICER, within the scale solutions are invited from architects of creative, technical and organising ability. The Deputy would take charge of development work and the information service, and be responsible for office management and the programming and co-ordination of architectural and planning work. Direct responsibility would be given for certain other sections of the Department.

Application forms and conditions from City Architect, Bull Yard, Coventry, to be returned by 21st September.

SONAL ROBOLIGH OF

ROYAL BOROUGH OF
KINGSTON-UPON-THAMES
Applications are invited for the following
permanent appointments—
(a) SECOND ARCHITECTURAL ASSISTANT
(E) SECOND ARCHI

(Special Scale), commencing 2705 10010, 21,070.

(b) ARCHITECTURAL ASSISTANT (Grade A.P.T. I), £610 to £765.

both exclusive of London Weighting.
Details and application forms from Borough Surveyor, Guildhall, Kingston-upon-Thames.

Closing date Monday, 7th September, 1959,

A. B. ROGERS,

Town Clerk.

Guildhall, Kingston-upon-Thames.

DUNGANNON RURAL DISTRICT COUNCIL APPOINTMENT OF ARCHITECTURAL ASSISTANT
Applications are invited for the post of Architectural Assistant in the Office of the Council's Architect, F. M. W. Schofield, A.R.I.B.A., Dip. T.P.
Applicants should have passed the Intermediate examination of the R.I.B.A. or be of equivalent standard.

Applicants should have passed the analysis adapt.

Applicants should have passed the analysis and and the preparation of working drawings, Specifications, etc., and in supervision of works in progress.

Salary will be in accordance with the recommendations of the Northern Ireland Joint Advisory Board, A car allowance will be paid at an appropriate Scale.

The appointment will be subject to the terms of the Local Government (Superannuation) Act (Northern Ireland) 1950, and preference will be given to ex-service candidates, all other things being equal.

Applications, stating age, qualifications and experience and giving details of general education and professional training, should be sent to the undersigned together with the names of two persons to whom reference may be made, not later than Wednesday 9th September, 1959.

Rural Council Offices.

Rural Council Offices.
Dungannon,
C Tyrone,
N. Ireland.

UNIVERSITY COLLEGE OF NORTH
STAFFORDSHIRE
BUILDING PROGRAMME 1959-65
CLERK OF WORKS
Applications are invited from suitably qualified persons for the above appointment. Applicants must have had considerable experience in supervision of building work and have sound knowledge of reinforced concrete and all trades, including setting out and measuring of work on site. Dulies will mainly cover supervision of Students' Residential Halls, Housing, and ancillary works.
Salary grade £610 × 30 (4) × 35 (1) to £765 per annum. Applications, in triplicate, together with names of two referees, should be sent to Architect and Buildings Officer, The College, Keele, Staffs, from whom further particulars may be obtained, within 14 days of publication of this advertisement.

MIDLOTHIAN COUNTY COUNCIL

MIDLOTHIAN COUNTY ARCHITECT
Applications for appointment as Colleague and, subject to satisfactory service, successor within 2 years to the County Architect, are invited from qualified Architects who have had experience of organising and controlling the work of a large Architectural department, preferably of a local or other public authority, and who will not have attained the age of 50 years on 1st December, 1959.

1959. The salary applicable to the post is £1,953 per

attained the age of 50 years on 1st December, 1959.

The salary applicable to the post is £1,953 per annum.

Canvassing direct or indirect disqualifies, Application form and further particulars may be obtained from the County Clerk. County Buildings, George IV Bridge, Edinburgh, with whom applications should be lodged by Monday, 7th September, 1959.

COUNTY BOROUGH OF HUDDERSFIELD BOROUGH ARCHITECT AND PLANNING OFFICER'S DEPARTMENT Applications are invited for the following appointments:—

(a) QUANTITY SURVEYOR—A.P.T. Special Grade—£185-£1.00.

(b) ASSISTANT ARCHITECT—Grade A.P.T. II—£516-£265.

For post (a) preference will be given to applicants who have passed the Intermediate Examination of the Royal Institute of Chartered Surveyors, for post (b) to applicants who have passed the Intermediate Examination of the Royal Institute of British Architects, and for post (c) to applicants who have based the Intermediate Examination of the Royal Institute of British Architects, and for post (c) to applicants who have based the Intermediate Examination of the Royal Institute of Service, as adopted by the Council, and to medical examination.

Housing accommodation will be provided, if required.

Applications with the names of two referees should reach Borough Architect and Planning Officer, High Street Buildings, Huddersfield, not later than Monday 14th September, 1959.

Canvassing, directly or indirectly, will disqualify.

HARRY BANN.

Town Hall Huddersfield.

HARRY BANN, Town Clerk,

HARRY BANN.
Town Clerk.
August, 1959.

BEESTON AND STAPLEFORD URBAN
DISTRICT COUNCIL
SENIOR ARCHITECTURAL ASSISTANT
Applications are invited for the above appointment at a salary according to experience in Special Grade (£785—£1,070).
Housing accommodation will be provided if necessary. Candidates must be A.R.I.B.A., with preferably some experience of Municipal Housing.

Applications, stating age, qualifications, with details of training and experience, accompanied by the names of two referees must be received by the Housing Architect. Town Hall, Beeston, Nottingham, not later than the 11th September, 1959.

H. D. JEFFRIES, Clerk of the Council.

R. D. JEFFRIES,
Clerk of the Council.
Beeston,
Nottingham.

CITY OF LEICESTER EDUCATION
COMMITTEE
LEICESTER COLLEGE OF ART
Principal: E. E. Pullee, A.R.C.A., F.S.A.E.
Applications are invited from holders of a Degree or Diploma of a recognised School of Architecture, or from Associate Members of the R.I.B.A. for a POST-GRADUATE RESEARCH
FELLOWSHIP IN ARCHITECTURE tenable at the School of Architecture for advanced work in Architecture. The holder of the Fellowship, which is for a period of up to three years, will be paid on the Burnham scale, Grade "B."
Further details may be obtained from the Registrar, College of Art, The Newarke, Leicester.

PRESERVATION AND RESTORATION OF

PRESERVATION AND RESTORATION OF
HISTORICAL BUILDINGS
The Certificate Course will start in October
1959 and is open to qualified architects and to
students who have passed the R.I.B.A. Intermediate or its equivalent. It comprises parttime evening study for one session, followed by
practical work. In addition a Short Course of
visits and lectures will be held from Wednesday
30 December, 1959 to Friday, I January, 1960;
fee £3 10s, Particulars from the Secretary,
Bartlett School of Arthitecture, University College
London, Gower St., W.C.1.

ARCHITECT'S COMMITTEE

Applications invited for following permanent
Staff appointments:

(a) SENIOR ASSISTANT ARCHITECT—Grade
A.P.T. IV. (£1,065 × 55(1) × 50-£1,220 p.a.).

(b) SENIOR ASSISTANT ARCHITECT—Special
Scale. (£785 × 40(3) × 45 × 40(3)-£1,070 p.a.).

(c) ASSISTANT ARCHITECTS—Grade A.P.T. I.
(£610 × 30(4) × 35-£765).

(d) ASSISTANT QUANTITY SURVEYOR—
Grade A.P.T. I. (£610 × 30(4) × 35-£765).

Appointments will be appropriate to professional experience and qualifications. Applicants for (a) must be Associates of the R.I.B.A. and have had considerable experience in design, construction and contract administration, preferably with a large Local Authority.

Applicants for (b) must have passed Parts and II of the R.I.B.A. Final Examination.

Applicants for (d) should have passed R.I.C.S. Intermediate Examination or equivalent and have had experience in abstracting and billing and general duties in a Quantity Surveyor's office.

Housing accommodation available, if necessary, at economic tent.

Details and application forms (returnable by the September) from City Architect, Council House, Bristol, 1. 5534

Details and the second process of the september of the second process of the second proc

Town Hall, Widnes. 15th August, 1959.

BOROUGH OF COLNE

Applications are invited for this whole-time appointment in the Borough Engineer and Surveyor's Department. Salary within A.P.T.II (£765-£880) commencing according to qualifications and experience. Medical examination. Applicants must be experienced in preparation of plans, specifications and quantities, with particular reference to housing development, and have had a thorough training in design and building construction. Previous municipal experience not essential. Preference to holders of recognised examination qualifications. Applications encorsed "Architectural Assistant," stating age, qualifications, experience, and names of two referees, to reach me by 10th September. Canvassing disqualifies.

T. RUTTER, Town Clerk. 5353

Architectural Appointments Vacant
4 lines or under, 9s. 6d.; each additional line, 2s. 6d.
Bos Number, including forwarding replies, 2s. estra

Bos Number, including forwarding replies, 2s. estra Two Architectural Assistants, intermediate standard, required for very large scheme. West find Office. Excellent salary, bonus and luncheon vouchers. Box 4523.

CROYDON.—ASSISTANT of Intermediate standard required in Architect's office. Varied work and good prospects. Apply in writing, giving all particulars to George Lowe & Partner, 4. High Street, Croydon.

LEWELLYN SMITH AND WATERS require Senior and Junior ASSISTANTS for a widely varied programme of work. Salary according to experience. Please write stating qualifications, experience and age to 103, Old Brompton Road, S.W.7.

S.W.T.

SSISTANT of Intermediate/Final standard
required in Croydon office. Varied and
interesting work. Five-day week, holiday this
year. Apply by letter to Hugh Macintosh &
Partners, 33/35. High Street, Croydon.

RCHITECTURAL STAFF, all grades, reQuired, Ronald Ward & Partners, 29,
Chesham Place, S.W.I. Belgravis 3361. 4806

RCHITECTURAL ASSISTANTS required,
Intermediate standard, for large practice
in London. Full details of experience, etc., to
Box 4760.

NYONE between the

A NYONE between the ages of 25-33 years with strictly Gothic outlook willing to work for practically no salary in ill lit, underheated, rat infested attic, 50 miles North of London, with bad tempered principal on deadly dull work, should apply, giving full details of their experience and salary required (if any), to Box 4791.

Box 4791.

ARCHITECTURAL ASSISTANTS for Univerthe sity and Hospital work. Good salary,
dependent on experience. Non-contributory
Pension Scheme in being after probationary
period. Three weeks holiday a year and five-day
week. Reply, stating age, experience, etc., to:
Thomas Worthington & Sons, 178, Oxford Read,
Manchester, 13.

BUILDING
Due to expansion and re-organisation, a
National firm of Building and Civil Engineering
Contractors based in London require the following staff in their Development Section.
(A) ARCHITECTURAL STAFF
1. ARCHITECT to lead a section for the
design of blocks of flats and offices, etc. Applicants must have a sound technical background
and be conversant with the London Building
Acts. Commencing salary about £1,000 per
annum.

Acts. Commencing sainty about annum.

2. ARCHITECTURAL ASSISTANT for the above. Applicants must be experienced in flat design and be able to work with a minimum of supervision. Commencing salary, about £800

oer annum.

5. ARCHITECTURAL DRAUGHTSMAN. For the preparation of finished drawings, with supervision. Commencing salary, about £600 per annum.

supervision.

By ENGINEERING STAFF

1. ENGINEER & SURVEYOR to lead section covering a group of housing estates, for the preparation of layout plans, Road and Sewer sections and to carry out all necessary negotiations. A local Authority background will be an advantage. Commencing salary, about £900 per annum.

annum.

2. ENGINEERING DRAUGHTSMEN (TWO)
to assist above in the preparation of finished
layout plans and sections, etc., with supervision. Commencing salary about £600 per

layout plains and sections, etc., will supervision. Commencing salary about £500 per annum.

(C) LAND BUYER
A LAND BUYER is required for the location and purchase of sites suitable for development with flats and houses, in the London area and Southern England. Applicants must have a cound knowledge of land and property values, and development possibilities. Commencing salary about £1,000 per annum, plus commission on results.

The appointments are permanent and a Pension scheme is available. A Bonus is paid each half year based on results. Existing holiday arrangements will be honoured. There is ample opportunity for promotion.

Applicants should apply, in writing, giving full details to: Development Manager. DL 6034, c/o White's, 72, Fleet Street, London, E.C.4. 5284

ASSISTANTS required within the salary range of £600-£1,000 to work in pleasant cheerful office on full and varied programme. Must be capable of good contemporary design. Good holidays and working conditions. Holiday commitments honoured. Deacon & Laing, 65. Goldington Road, Bedford.

A RCHITECTURAL ASSISTANT required in Wembley. Experience in design and construction of industrial buildings and office blocks. Write stating age, experience and salary required to Box 5002.

A RCHITECTS wanted for large and interest-ing contemporary developments. Holidays respected. State salary and experience. Box 4789.

UALIFIED SENIOR ASSISTANT required by City Firm of Building Surveyors for Staff Architects Department, Industrial and Commercial Buildings, Salary 2800—£1,100. Suitable applicant could be engaged at once or start in September, depending on holiday commitments. Apply 40: Chamberlain & Willows, 23, Moorgate, London, E.C.2.

ADAMS, HOLDEN & PEARSON require
SENIOR ARCHITECTURAL ASSISTANTS, and ASSISTANTS not less than R.I.B.A. Intermediate standard. The work includes Hospitals, Commercial Buildings and Laboratories. Apply giving age, qualifications, experience and salary required to 38, Gordon Square, W.C.I. 4886
WATKINS & PARK require ASSISTANT ARCHITECT at Basildon. Salary 2600 to £800 by agreement. Variety of contracts. Good experience and plenty of scope for advance for a man interested and willing to take opportunity. Write 27 Rockleigh Avenue, Leigh on Sea, Essex.

SENIOR ARCHITECTURAL ASSISTANT required. Capable of taking full control of interesting proposals. Write with full particulars including salary to: R. H. Gallannaugh, f. R. I. B. A., 54 Queen Anne Street, London, W. I.

KEEN young ASSISTANT required, West End office. Must be good draughtsman and have sound knowledge of building construction. Salary 2750 to 2850. Apply William Byder, 2, Bruton Street. Berkeley Square, W.1.

SSISTANT required, Maidstone. Capable of preparing working drawings and details. Write stating experience, qualifications, age, and when available. Box 5059.

A SSISTANT of R.I.B.A. Intermediate or Final standard. Write stating age, experience, and salary required to Gunton & Gunton F./F.R.I.B.A. F.R.I.C.S., Empire House, St. Martin's le Grand, E.C.1.

LEICESTER progressive office requires keen ARCHITECTURAL ASSISTANTS, all grades, permanent. Apply in writing to C. Edmund Wilford & Son. 2 Hastings Street. Leicester.

ENIOR and INTERMEDIATE grade ASSIS.

TANTS required in busy office in the Midlands. Group system of organisation calling for
initiative and responsibility. Interesting range
of work. Holiday arrangements respected. Write
giving experience and salary required to Box 5027. of work. Available of the control of ARCH

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BRIGHTON & HOVE. Experienced SENIOR and JUNIOR ASSISTANTS required for small office. Salaries up to £800 per annum. 4964

MOIR & BATEMAN, F.A.R.I.B.A., require young ARCHITECTURAL ASSISTANTS in their Rochdale Office for interesting contemporary work on hospital, industrial and commercial projects. Apply in writing stating experience, age and salary required to Moir & Bateman, Prudential Buildings, Rochdale.

A SSISTANTS of Intermediate and Final standard are required in the office of Architects practising in the West End, London. Excellent opportunities occur for those wishing to improve their positions. Applicants should be capable of preparing working drawings and details, largely on their own initiative. Five-day week, salary with bonus according to capabilities. Write Box 4947.

Write Box 4947.

PIRMINGHAM. Clifford Tee & Gale.
F.F.R.I.B.A., require an experienced SENIOE ASSISTANT and an experienced Intermediate standard ASSISTANT for interesting industrial and commercial work in a congenial atmosphere. Five-day week. Holiday commitments will be met. Bonus additional to salary. Please apply to Mr. B. G. Cox, F.R.I.B.A., 43, Frederick Road, Birmingham, 15. Tel. Edgbaston 3676.

OLLINS, MELVIN, WARD & PARTNERS

have vacancies for staff experienced and interested in supervision. Five-day week, quarterly bonuses, pension scheme. Bing Welbeck 9991 for appointment.

TOT APPOINTMENT. 4976

COLLINS, MELVIN, WARD & PARTNERS
of hospital, University and Office projects. Age
and experience are less important than enthusiasm
and interest in architecture. Five-day week,
quarterly bonuses, pension scheme. Ring Welbeck
9991 for appointment.

MSL have been retained to advise on the appointment of a

GENERAL MANGER [Passenger and goods lifts]

for a British engineering company with assets exceeding £20 million. The company has recently secured exclusive U.K. selling and manufacturing rights for high quality lifts from a well-known overseas manufacturer, and is about to enter the British market.

A man is required to lead the marketing effort and, if successful, to become Managing Director of a new company within two years. He will then be responsible for all aspects of the business, including sales, co-ordination of manufacture by associate companies, erection and maintenance.

Candidates should preferably have experience of negotiating the sale of lifts. Enquiries will also be considered from engineers with sales management experience which includes the sale of capital goods through architects. Preferred age 35 to 48

Starting salary about £2,500/£3,000: pension: location London.

Please send brief details in confidence, quoting reference YT.1801, to R. A. Denerley. In no circumstances will a candidate's identity be disclosed to our client unless he gives permission after a confidential interview at which he will be given full details of the appointment.

> MANAGEMENT SELECTION LIMITED 17, Stratton Street, London, W.1

ADMINISTRATIVE COUNTY OF LEICESTER

Architects

to form special group?

NEW COUNTY OFFICES are to be built approximately 3 miles from the City of Leicester. Responsibility for design and execution has been entrusted to the County Architect, T. A. Collins, F.R.I.B.A., and a special group within his department will be formed for the purpose. The project affords exciting possibilities to architects of more than average ability and applications are invited for the following posts:-

(a) Principal Assistant Architect £1,385-£1,620

(b) Senior Assistant Architect £1,220—£1,375

£785-£1,070 (c) Assistant Architect

Candidates for (a) must be Chartered Members of the Royal Institute of British Architects, have a flair for design, be capable of undertaking research and have proven organising ability; for (b) must be A.R.I.B.A. and have had considerable office experience, preferably on large contracts; for (c) have passed Parts I and II of the R.I.B.A. examination and be capable of executing working drawings.

Further particulars and forms of application may be obtained from the County Architect, 123 London Road, Leicester, to whom they should be returned not later than September 18th, 1959. The appointments are temporary but are likely to be for not less than a period of five years.

.

Removal expenses and lodging allowance may be paid to a married man.

ARCHITECTURAL DRAUGHTSMAN required for work on large scale housing development. Work will include the preparation of detailed drawings and preference will be given to applicants who have had previous experience in this type of work. Holiday commitments recognised. Good salary. Pension scheme. Canteen. Apply Personnel Manager, Taylor Woodrow Homes Ltd., Ruislip Road, Southall, Middlesex.

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A BCHITECTS (Qualified) required immediately by progresive company in Tunbridge Wells dealing with varying industrial projects. Applicants must be keen, have had industrial experience and be aged around 30. Please give full particulars of training, experience and salary required to Box No. 5261.

THE THE PROPERTY OF THE PROPER

QUALIFIED and Intermediate ARCHITECT'S ASSISTANTS required for work on a large office development in Morden and on Flats. Fireday week. Salary according to experience and capability. Ring MUSeum 0298 for appointment, or write to A. Green, A.R.I.B.A. 23, Fistroy Street, W.1.

Age 25-35. Full qualifications not as sesential as experience in an architect's office and ability to produce working drawings. Apply in writing, stating qualifications, to Oliver Law & Partners, F/F.R.I.B.A., 36, Ebury Street, RW.I.

RCHITECTURAL ASSISTANT, Intermediate, required by progressive firm of Birmingham Architects. Work involves preparation of designs, working drawings, site supervision, etc., on numerous types of work. Salary by arrangement. Box 5150.

SENIOR ARCHITECTURAL ASSISTANT practical experience, good draughtsman; excelent prospects for anyone keen, efficient and quick. Salary £1,000 upwards according to age and ability, with annual bonus. Domestic and commercial work. London offices, light and spacious with own pleasant office. Write full details of experience, age and when available to Box 5169.

ASSISTANT of Intermediate standard required

details of experience, age and when available to Box 5169.

A SSISTANT of Intermediate standard required in London Architect's office; must be good draughtsman and have reasonable knowledge of construction. Starting salary 2650 upwards and ability recognised by advancement. Write age and experience to Box 5170.

A RCHITECTURAL ASSISTANT, Intermediate stage, for assisting in the developing and detailing of educational and other types of contracts; must be good draughtsman. Apply: A. B. DANNATT & SON, F./F.B.I.B.A., 654, Duke Street, Chelmsford. Telephone 3857. 5159

A ECHITECTURAL ASSISTANT required to work on a varied programme of development. Write, giving details of experience, salary required, to Walker (Tooting), Ltd., Hackbridge Boad. Hackbridge, Wallington, Surrey.

A RCHITECTURAL ASSISTANT, Intermediate standard, with contemporary outlook, required for busy Architect's Office, West End. Apply Huckle & Durkin, 30, Queen Anne Street, London, W.I. LANgham 4091.

A RCHITECTURAL ASSISTANT required to A RCHITECTURAL ASSISTANT required to purkin, 30, Queen Anne Street, London, W.I. LANgham 4091.

A RCHITECTURAL ASSISTANT required to manage smaller contracts in busy country practice. Must be car driver. Write G. C. Beech & Partners, Deanery Offices, Wells, Somerset. 5168

ERIC FIRMIN & PARTNERS required to English the Competence. Please apply 5, Holborn Circus. CITY 8811.

EAGRE firm of Architects in Wellington. New Zealand. Specialising in hospital properties.

A LARGE firm of Architects in Wellington.

New Zealand. specialising in hospital work, has vacancies for ARCHITECTS with R.I.B.A. and a minimum of two years' post graduate experience. Salary 41.200 to £1.800. depending on experience. Fare paid under bond of two years' engagement. Reply in first instance to Mr. S. T. Townsend, c/o 38, Gordon Square, London, W.C.1.

SIR ALFRED McALPINE & SON LIMITED require additional ARCHITECTURAL ASSISTANTS in their DESIGN DEPARTMENT

Applicants should be of Intermediate R.I.B.A. standard and be capable of rapidly producing accurate working drawings and details, and also be able to prepare presentation drawings

for projects.

Contributory Pensions Scheme in operation.

Apply in writing to Head Office, Hooton, Wirral,
Cheshire.

5268

Cheshire. 5268

ARCHITECT'S SENIOR ASSISTANT required, preferably qualified but must be experienced and capable of taking charge of projects to completion. Good prospects and salary. Office in Dartford, Reply in detail to Rox 5264. Box

DOX 5264.

LONDON Bank Architect's Office has vacancies for TWO ASSISTANTS experienced in preparation of working drawings and specifications. Commencing salary £750/£850 with good prospects of advancement. Reply in writing, stating age, experience and salary required.

Box 5121.

ENIOR ASSISTANT required, preferably qualified, interested in contemporary design, wide variety of work. Alternate Saturdays, salary by arrangement. Mather & Nutler, A/A.R.I.B.A., 3, Chepstow Street, Manchester, 1.

A RCHITEOTURAL SENIOR ASSISTANT reestablished London firm. Early prospect of
Junior Partnership or position as Associate
Architect. Age 28-45. Must be qualified, good
draughtsman, and have had reasonable experience
in private practice. Varied and interesting work
now and for future. Good salary, light offices
and excellent working conditions. Full details
to Box 5123.

ARCHIPECTURAL ASSISTANT required for interesting work in Brewery Architect's Department. Final or Intermediate standard. Write, stating age, qualifications and experience, to: Chief Architect, Benskin's Watford Brewery Ltd., P.O. Box 105. Watford, Herts. 5124

ROBERT MATTHEW & JOHNSON-BORNER AND MARSHALL have vacancies in their Edinburgh and Dundee Offices for experienced ASSISTANTS; wide variety of University, Hospital and Housing projects. Applications should be marked "Confidential," and addressed to 31. Regent Terrace, Edinburgh, 7. 5131

PARTNERS have vacancies for ARCHITECTS and ASSISTANTS with imagination and designing ability to assist with imagination and confidence to 85, Kingsway, W.C.2. (HOL. 4071.) 5134

INTERMEDIATE standard ASSISTANT required with interest in contemporary design and construction. Wide variety of work and opportunities to obtain site experience on minor schemes. Alternate Saturdays, salary by arrangement. Mather & Nutter, A/A.E.I.B.A., 3, Chepstow Street, Manchester, 1. 5114

RECHITECTS Office with varied, interesting work, requires JUNIOR and SENIOR ASSISTANTS. Must have progressive outlook. Apply, stating age, experience and salary required, to F. Fotter, F.E.I.B.A., 3, Vicarage Road, Edgbaston, Birmingham, 15.

A BCHITECTUBAL ASSISTANTS, Junior and Senior, required for interesting work in London and the Provinces. Apply, in writing, stating experience, age and salary required, to Westmore & Partners, 121, Cheapside, E.C.2. 5141

A RCHITECTURAL ASSISTANTS, qualified or unqualified, required for varied work in busy and congenial City office. Good opportunities for working on own initiative. Salary by arrangement. Seely and Paget, 41, Cloth Fair, EC1 MET 8511 arrangement. Seel E.C.1. MET. 8511.

ASSISTANT ARCHITECT (Associate) required by Leonard J. Multon & Parkners, of 6, Greenfield Crescent, Edghaston, Birmingham. The position offers scope for advancement in an expanding office engaged on muti-storey housing, industrial, commercial and hospital projects. Working conditions are exceptionally good in a recently built Studio Office. Please apply in writing, stating experience and salary required.

SENIOR ENIOR ARCHITECTURAL ASSISTANT required urgently—must have good standard of design ability and at least five years' sound experience in Architect's Office.
Intermediate ARCHITECTURAL ASSISTANT also required. Good training and office experience.

ence.
Please apply Leach, Rhodes & Walker, 90,
Deansgate, Manchester, 3, giving all details and
salary required.
5175

A RCHITECTS' CO-PARTNERSHIP requires an ARCHITECTURAL ASSISTANT for interior design and detail work for West End store. Please write to 44, Charlotte Street, W.1, or phone Langham 5791.

A RCHITECTS.—Vacancies exist for Architects with at least two years' office experience. Applications should be sent to Eric W. Hall & Partners, Rock House, Calton Hill, Edinburgh.

A RCHITECTURAL JUNIOR DRAUGHTS-development, by Sir Lindsay Parkinson & Co., Ltd., 6, Lambeth Road, London, S.E.I. Must be well trained. Write stating age and salary required.

ROBERT POTTER AND BICHARD HARE, qualified ASSISTANT ARCHITECUT to work on interesting University and Civic projects. Fiveday week. Existing holiday arrangements will be honoured. Write, giving details of qualifications, experience and salary required, to De Vaux House, Salisbury.

DEPUTY STAFF ARCHITECT required by City firm. Responsible duties delegated particularly for design of industrial, commercial and office buildings, Good salary will be paid. Start September. Box 5202.

Start September. Box 5202.

HELL-MEX AND B.P. LIMITED require for their London Office an ARCHITECTURAL DRAUGHTSMAN for work on various commercial projects. Applicants should have a sound knowledge of building construction, Salary according to experience. Excellent working conditions, staff restaurant, sports club, etc. Apply in writing, giving full details of age, qualifications and experience, to the Staff Manager (Ref. 29/179). Shell-Mex and B.P. Ltd., Shell-Mex House, Strand, London, W.C.2. Second applications cannot be considered.

A RCHITECTURAL ASSISTANTS required for

tions cannot be considered. 5206

ARCHITECTURAL ASSISTANTS required for industrial practice in Victoria, S.W.I. area. Intermediate R.I.B.A. standard. Salary 2600—2900 according to qualifications and experience. Reply, giving details of age, experience and salary required, to Box 5222.

OLIVINS, MELVIN, WARD & PARTNERS require TWO ARCHITECTURAL ASSISTANTS for their Sheffield office. Write: 281, Glossop Road, Sheffield, 10, or telephone Sheffield 29922 for an appointment. 5227

ARCHITECTURAL ASSISTANT (SENIOR).

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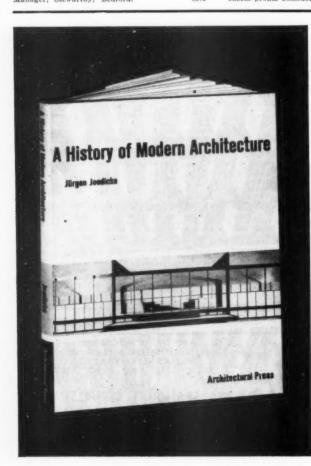
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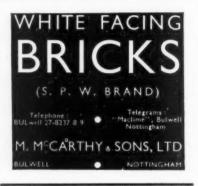
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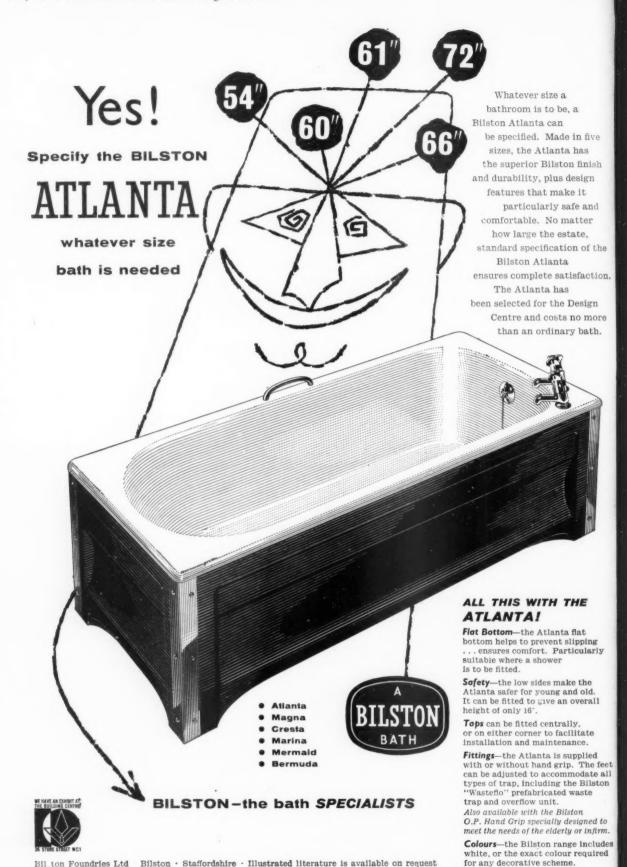


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