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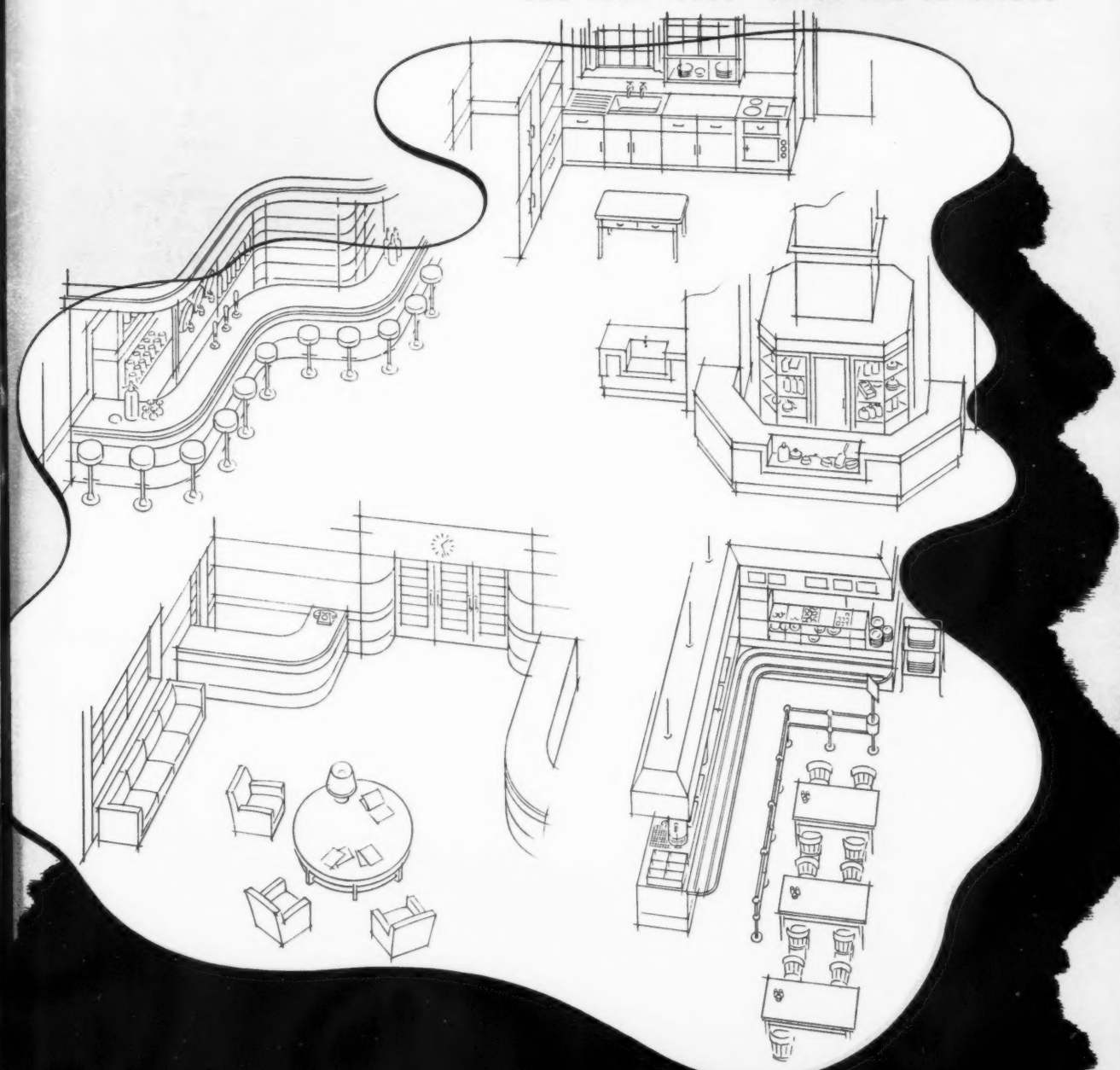
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THE ARCHITECTS'

Journal

NEW YEAR ISSUE • PRICE TWO SHILLINGS



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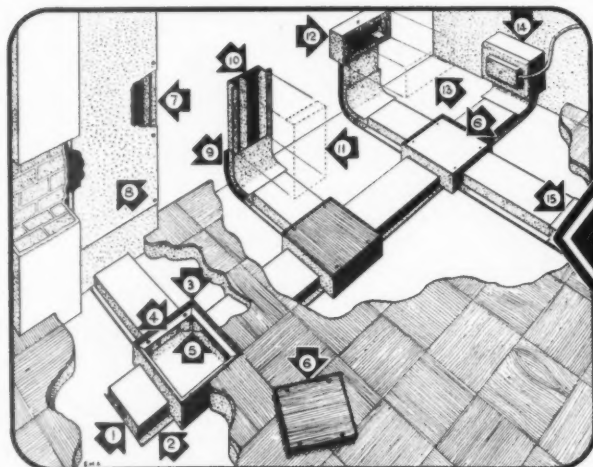
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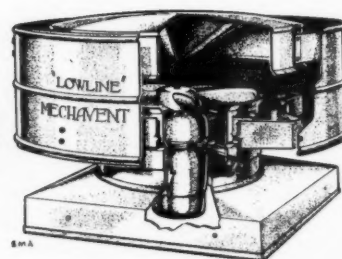


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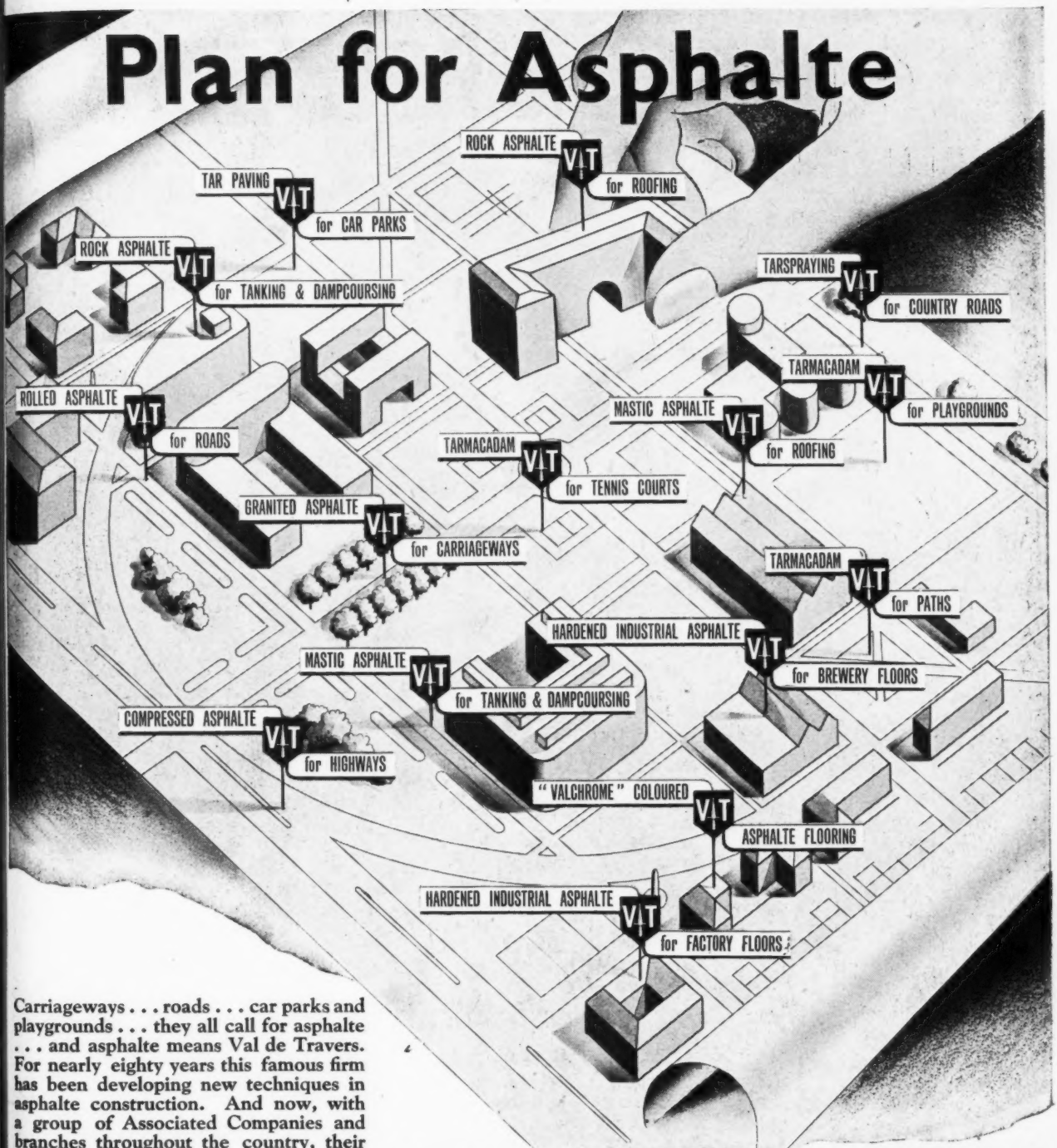
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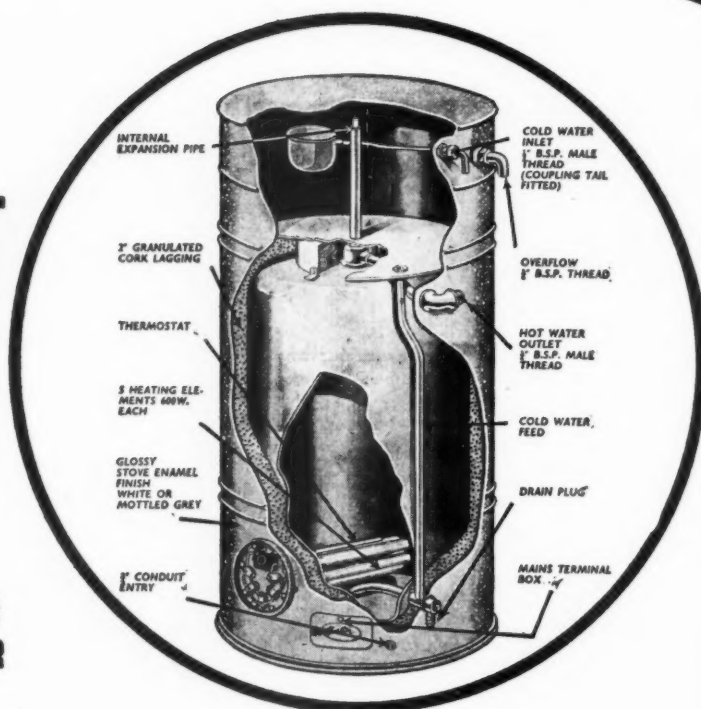
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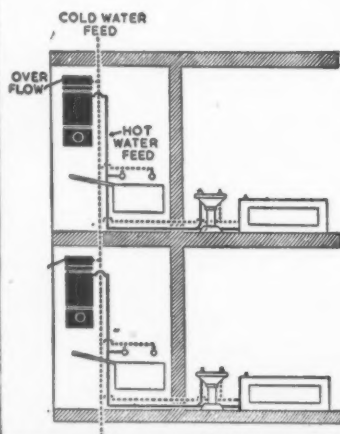
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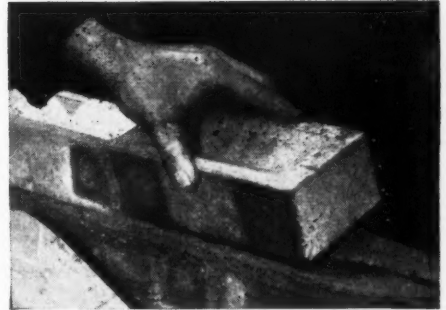
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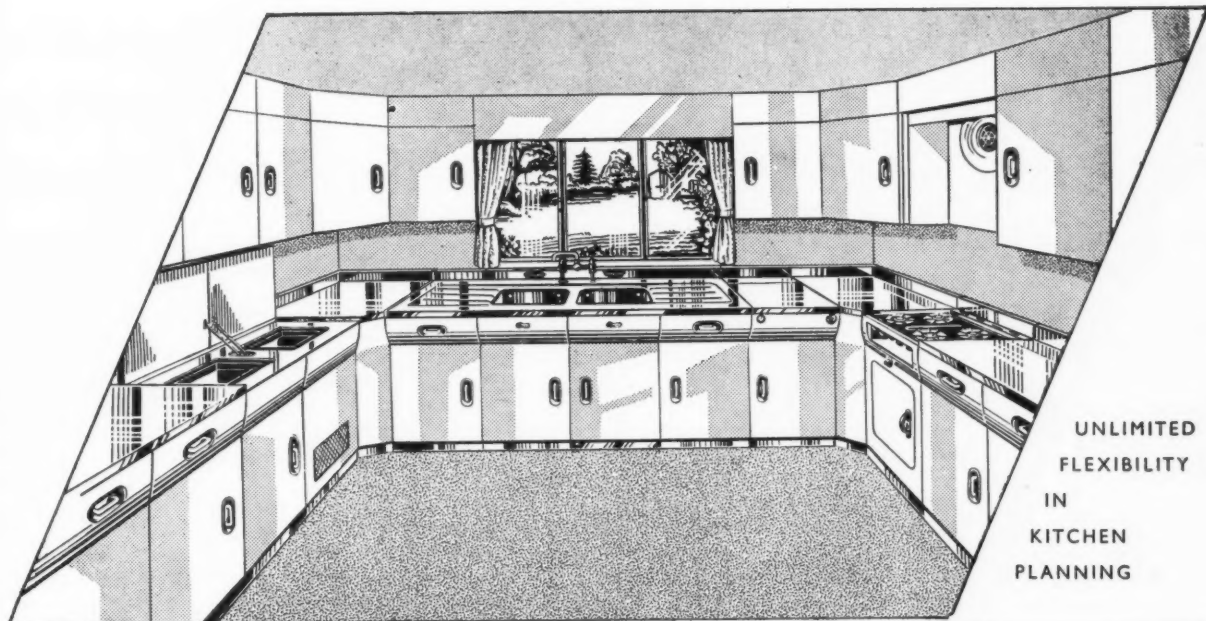
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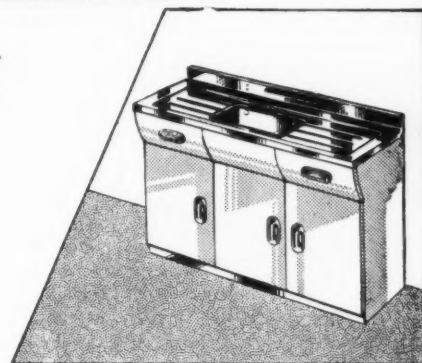
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The four walls of the sink are sound-deadened and are curved inwards at the top to form an anti-splash rim. In addition to the V.60 illustrated, there are the V.50 sink with single left or right hand drainer, and the V.70 with double sink and double drainer.

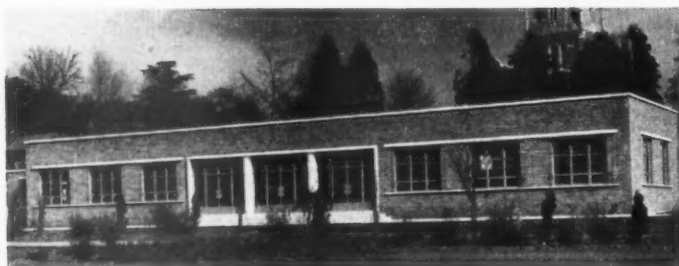
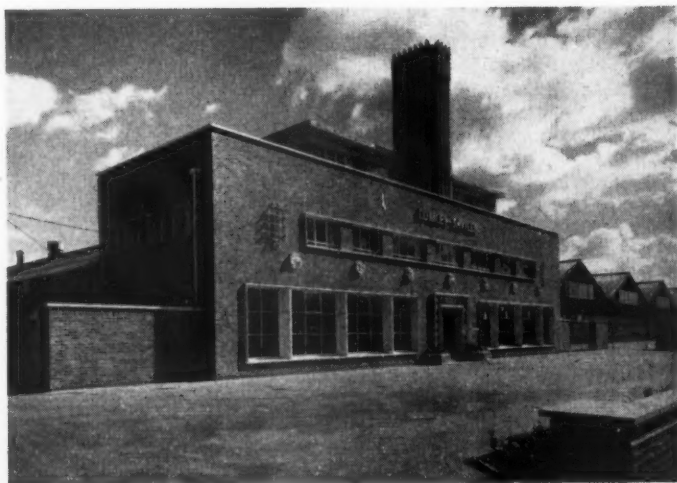


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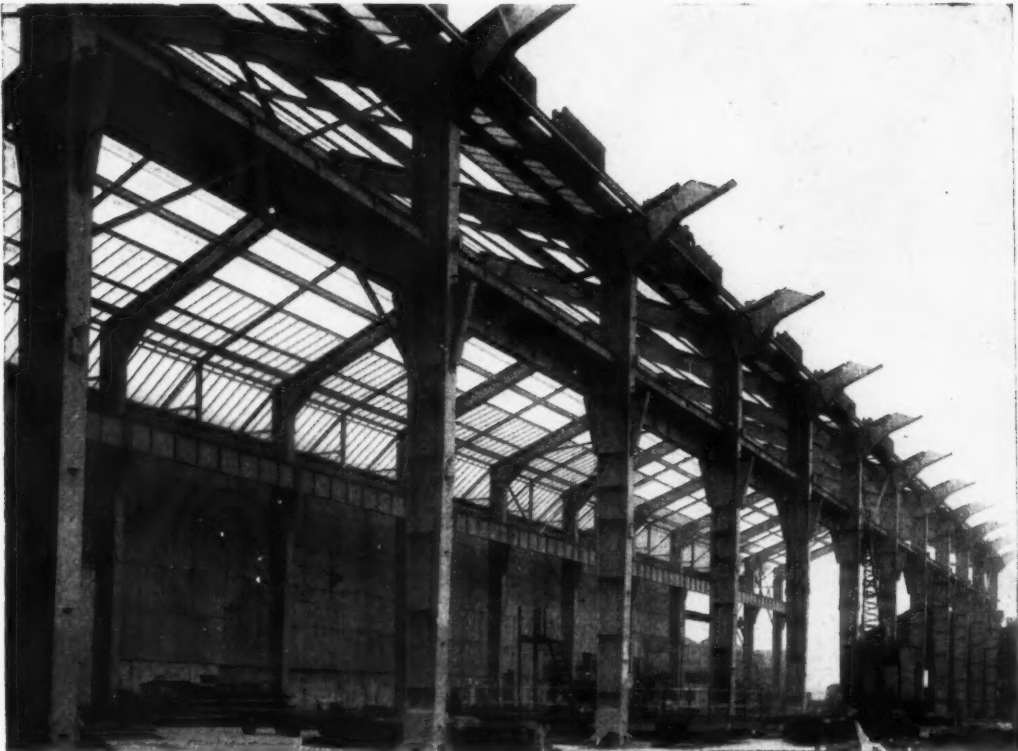


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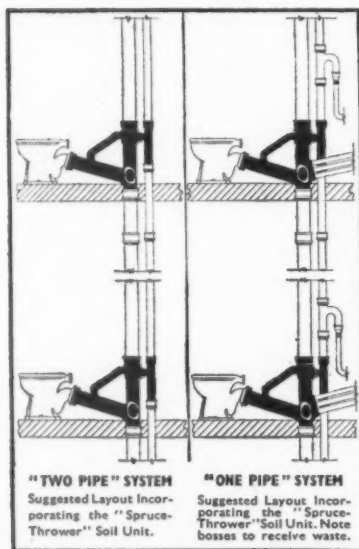
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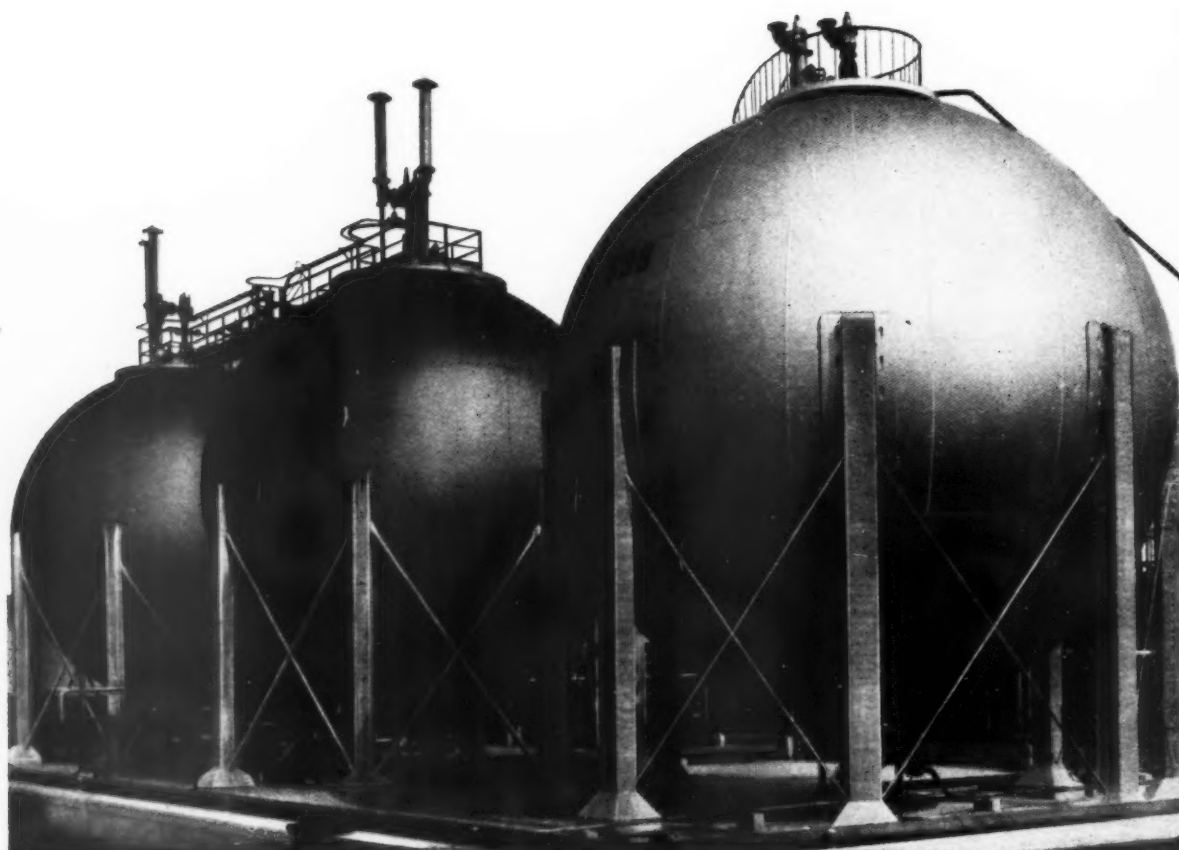


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The lower illustration shows some of the steelwork at the extensive new works of a nylon spinning company.



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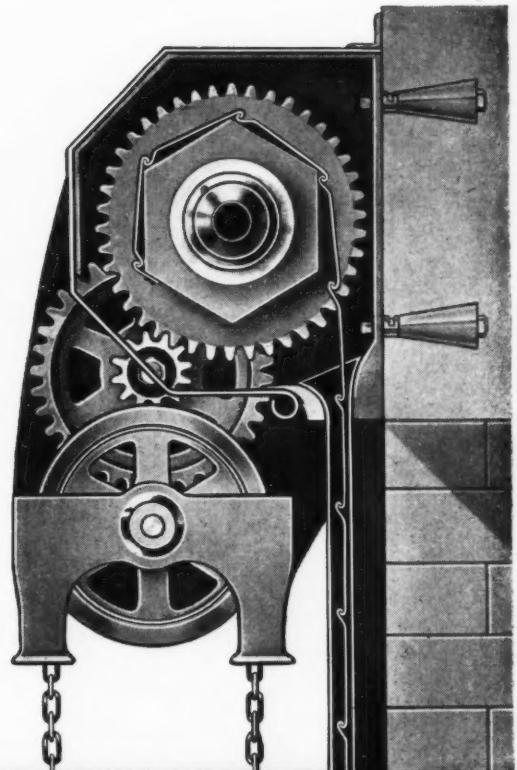


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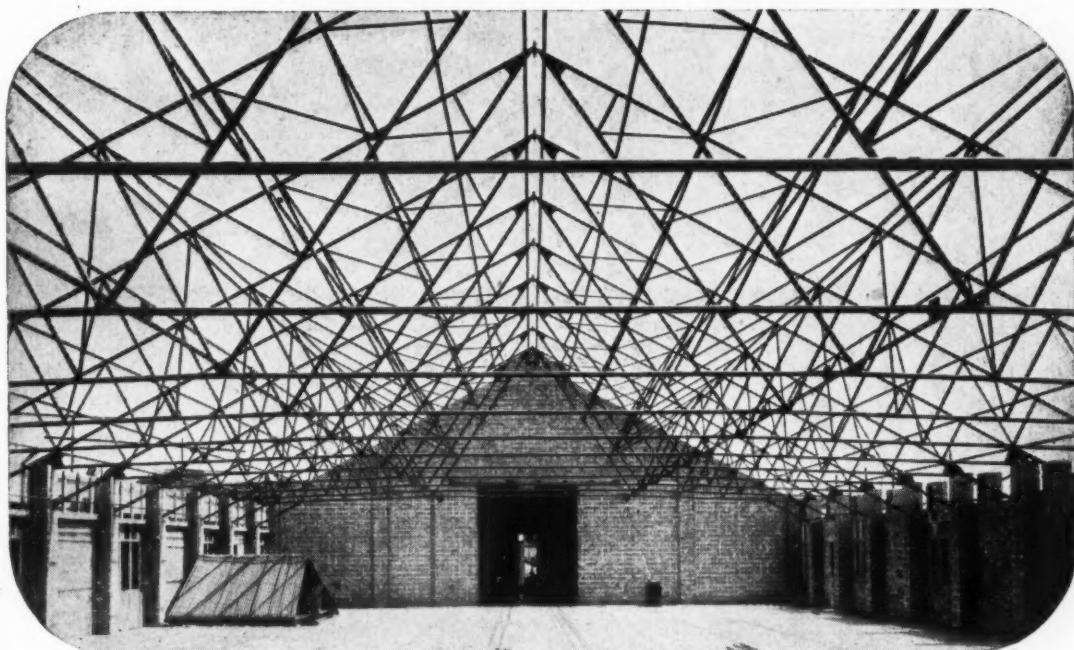
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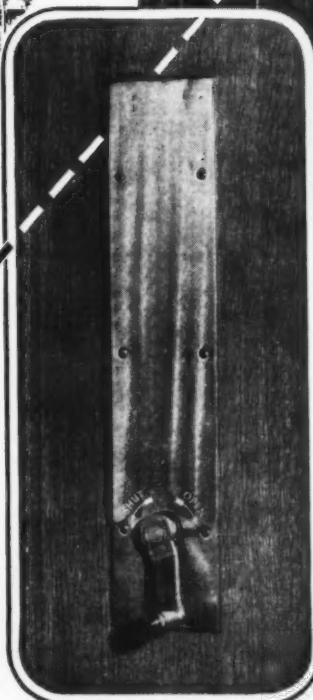
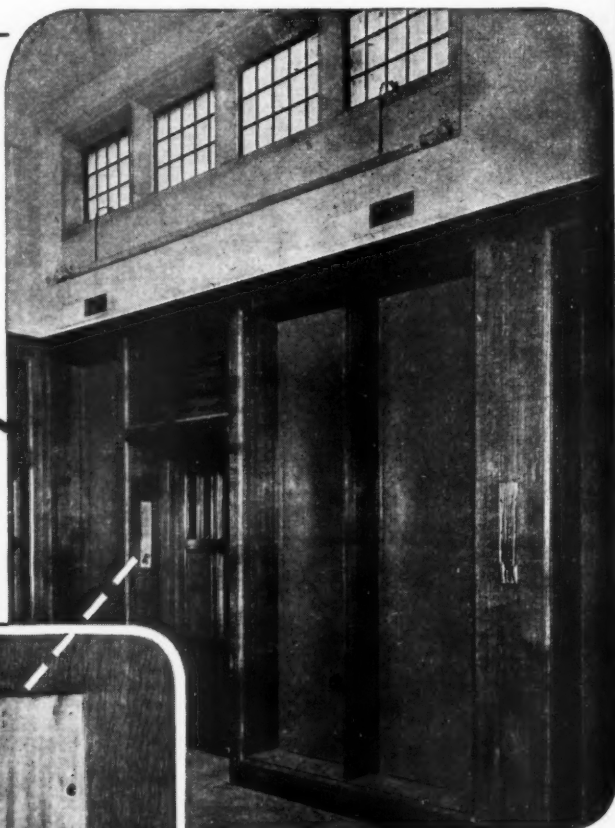
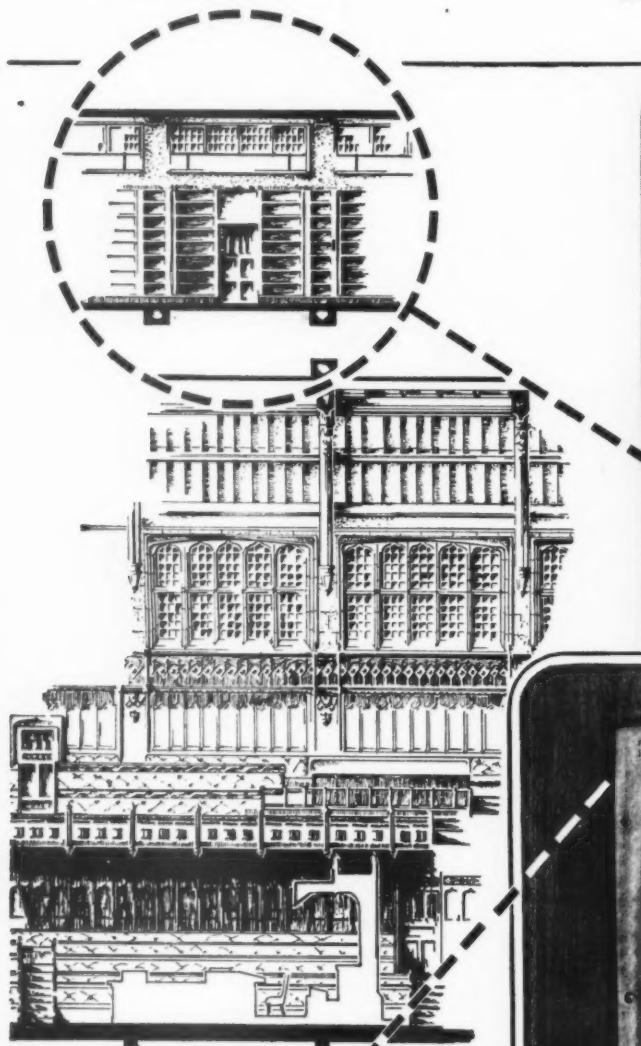
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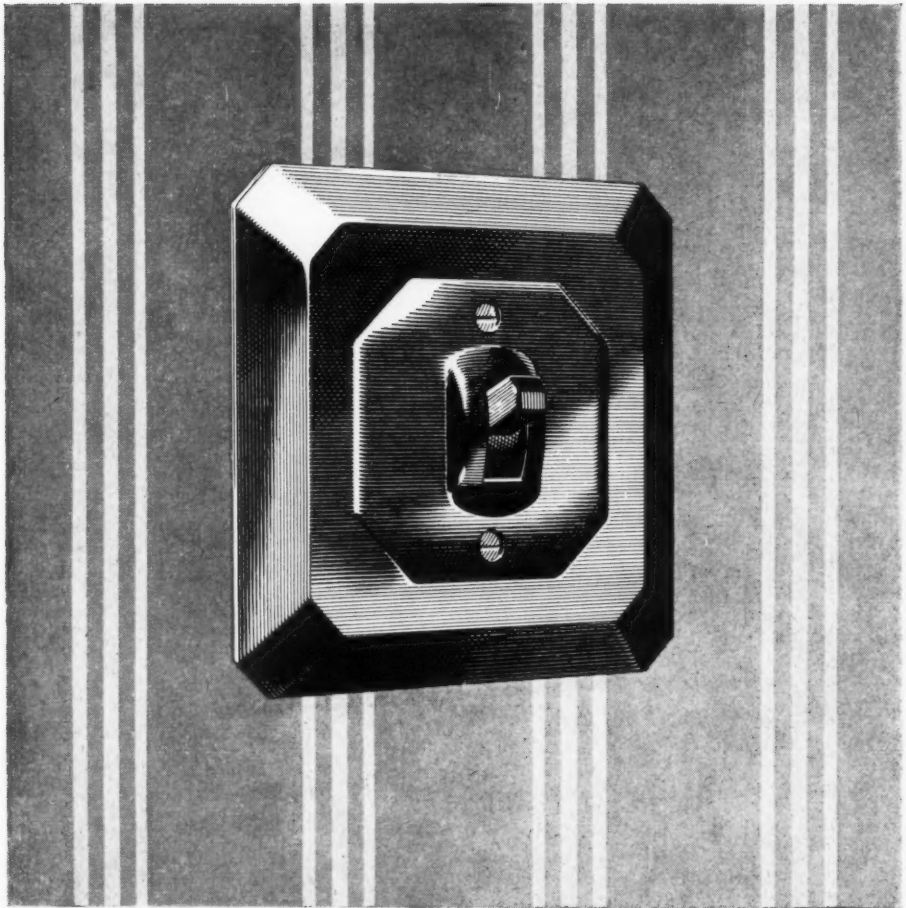
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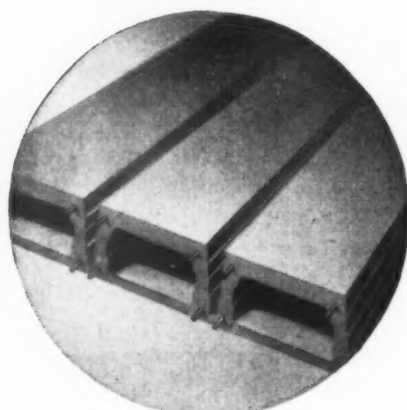
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From

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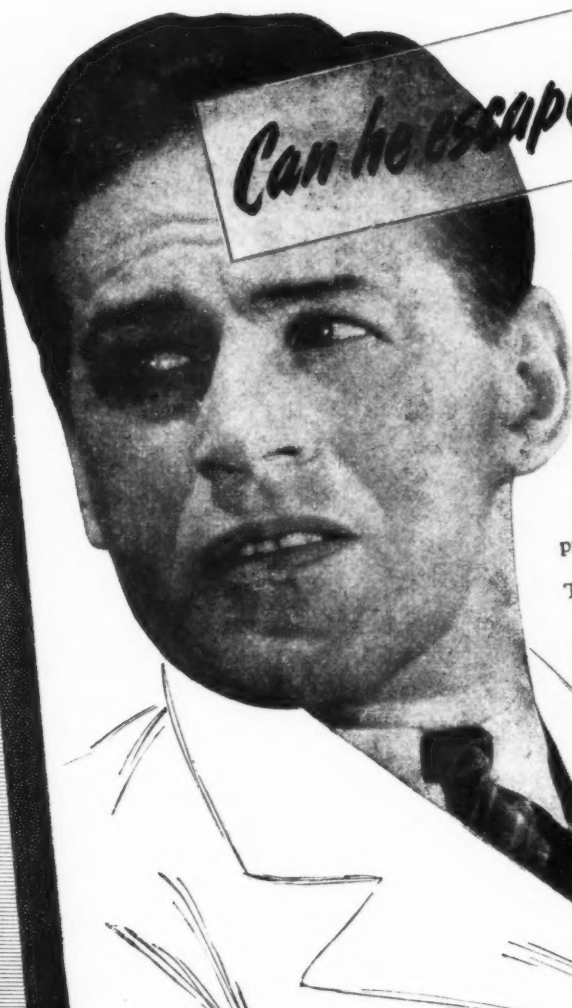
*The London Offices of the Company
will be*

DORLAND HOUSE
REGENT STREET
LONDON S.W.1

*Telephone:
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Can he escape NOISE-FATIGUE?

This factory worker is not the only one to suffer.

Recent medical investigation has produced convincing evidence about the effect of noise on health—the wearing down of the worker's nerves, and the undermining of his efficiency.

Employers know what this means in terms of production. Yet how can the worker escape from noise?

The answer is in Acousti-Celotex. Properly applied, Acousti-Celotex will absorb re-echoing noise in busy machine-rooms like blotting paper does ink.

Installation is simple and entails little interference with production. Practical experience has proved that desired results can be achieved.

Let us arrange an 'on the spot' analysis of your own noise problem.

Noise can be quieted with **ACOUSTI-CELOTEX**

CELOTEX LIMITED, NORTH CIRCULAR ROAD, STONEBRIDGE PARK, LONDON, N.W.10

The advertisement reproduced here is appearing in various Industrial Journals.

In most factories sound-conditioning is as essential as air conditioning. The best time to tackle this problem is at the planning stage in collaboration with an Acoustics specialist.



Photographs reproduced by courtesy of Ansells Brewery Ltd., Birmingham

Architects :
Hing & Jones, F.R.I.B.A.
Birmingham 3

Electrical Contractors :
Etna Lighting and Heating Co.,
Ltd., Birmingham 1



The Saracen's Head, Shirley, is situated on the main Birmingham to Stratford Road and is typical of many Public Houses which have been reconstructed and extended over recent years. That BRITMAC products have figured so prominently in such reconstruction and new building programmes is evidence of the fine quality and superior workmanship of every component and it is these characteristics, coupled with a prompt and personal service, which have influenced both Architects and Breweries alike to accept BRITMAC ELECTRICAL ACCESSORIES as standard.

BRITMAC are again producing large size switch units with engraved plates, similar to that illustrated opposite. Full details will be gladly given.



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SALES ORGANISATION OF C. H. PARSONS LTD.

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Glasgow Offices: 247a, ST. VINCENT ST. & 93, DOUGLAS ST., GLASGOW, C.2.

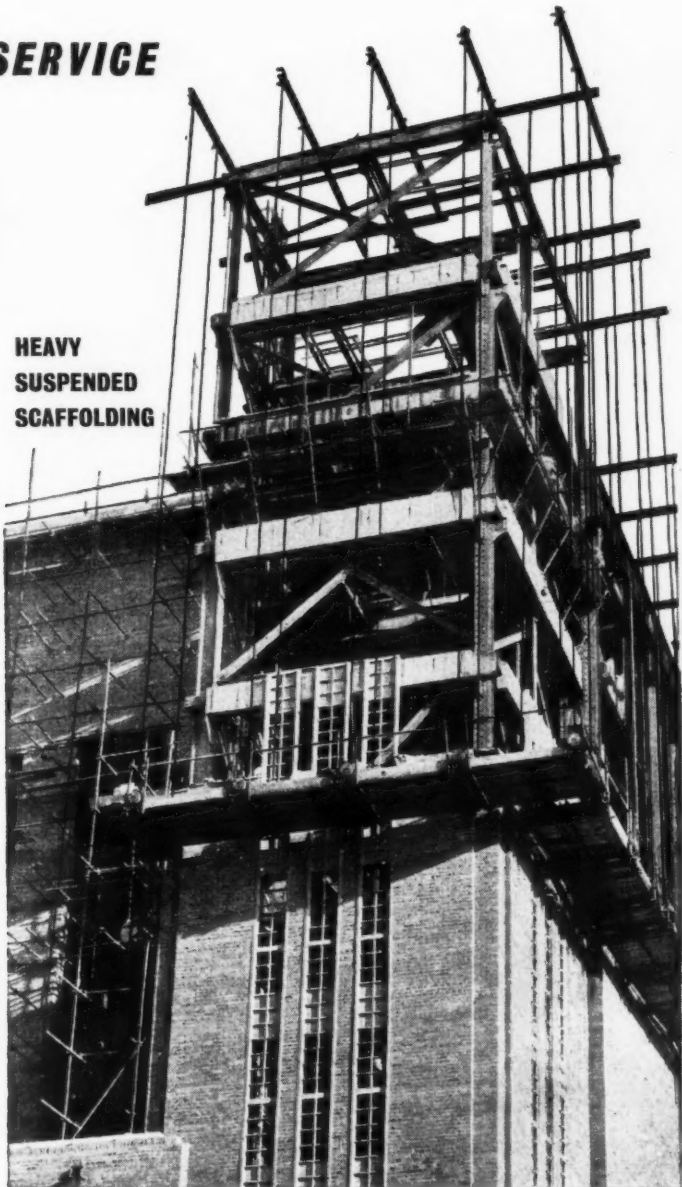
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Architects: Powell & Moya, A.A.R.I.B.A.

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NEW WALLS

Sprayed LIMPET ASBESTOS

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COUNCIL CHAMBER,
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The ceiling illustrated has been treated with Sprayed Limpet Asbestos to reduce reverberation, and shows the excellent finish which can be obtained by this method of acoustic treatment.

Sprayed Limpet Asbestos is used wherever a Sound Absorbent Surface is required, and because of its Fire-proof and Vermin-proof qualities, it is especially suitable for use in Hospitals, Offices, Swimming Baths, and in other places where reverberation is excessive.

Newalls Sprayed Limpet Asbestos is also widely used for Acoustic Correction in Cinemas, Churches, and other Auditoria.

Newalls Insulation Co. Ltd., maintain a fully equipped Sound Laboratory for the investigation of problems connected with the use of Acoustic materials.



NEW WALLS
Insulation Co. Ltd.

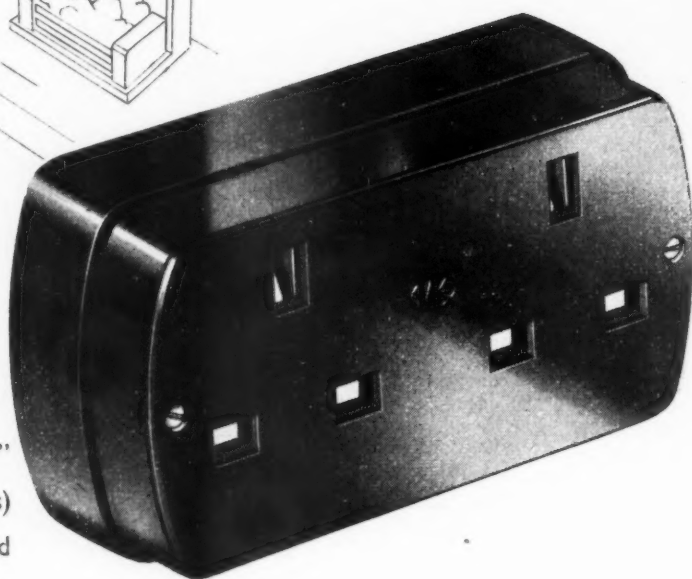
HEAD OFFICE: WASHINGTON, COUNTY DURHAM
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13 amp. Rectangular Pin



Rectangular pin "All purpose" 3 k.w. (13 amperes at 250 volts) fused plugs and shuttered socket-outlets are particularly designed for ring main circuits. For A.C. circuits up to 250 volts.

The obvious advantage of a two-gang outlet is to have two points in one. Installation costs are often no more than those of single unit outlets. Two points are frequently required and are most

desirable in positions such as near fire-places, when a point for a fire is required and also a second point for the use of either a standard lamp, radio or television. These two-gang units also obviate the use of an adaptor. Made in two types, surface and flush.



M.K. ELECTRIC LIMITED
WAKEFIELD STREET, EDMONTON, LONDON, N.18

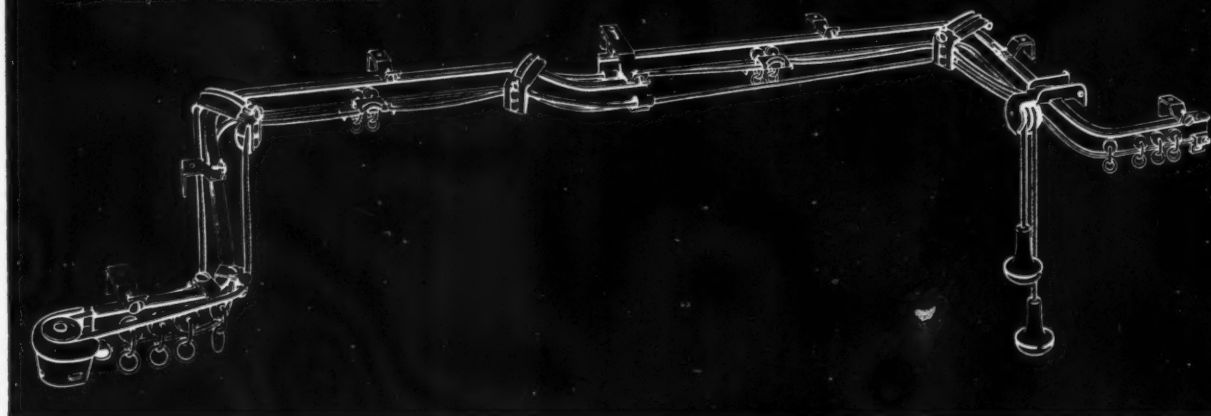
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a complete and specialised range of curtain suspension systems

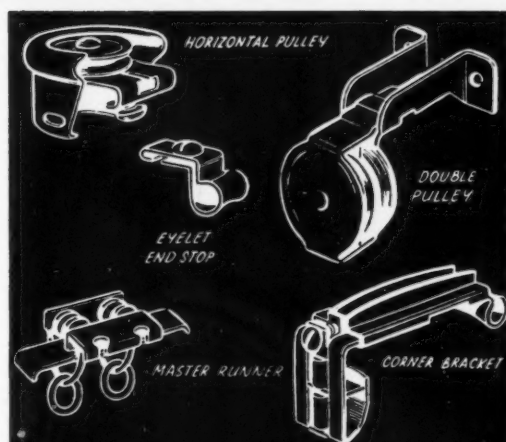
'RUFFLETTE' BRAND CORD-CONTROLLED RUNWAY FOR BAY WINDOWS



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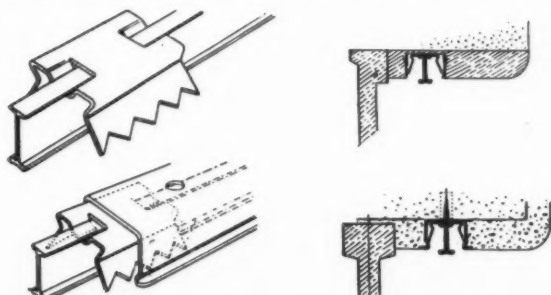


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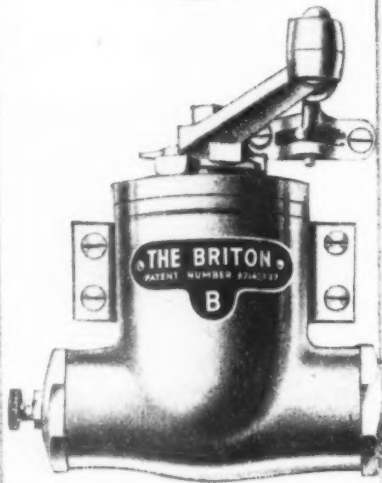
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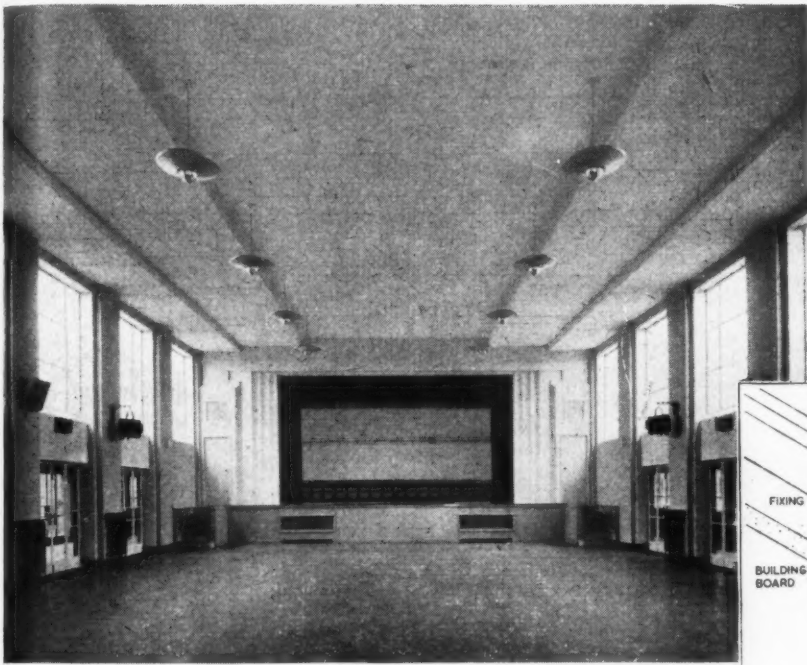
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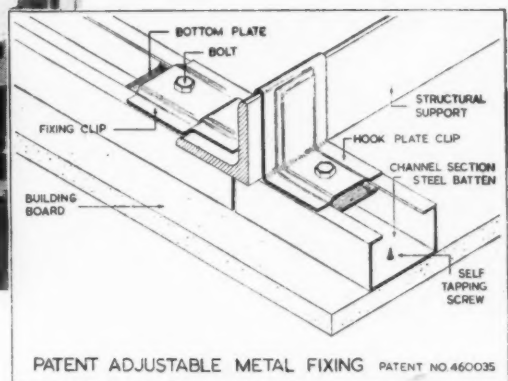
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Architect:—Arthur Hamilton, A.R.I.B.A., Borough Surveyor, Blackpool
Contractor:—R. Fielding & Son

*A ceiling in $\frac{1}{2}$ " Insulating Board
fixed by TenTesT Adjustable
Metal Fixing.*



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This excellent method is at YOUR disposal. It is tried and tested, and is reasonable in price because it makes a first class job of a FLAT (non-sag) ceiling with no strips showing.

May we send you full particulars or get our representative to call?

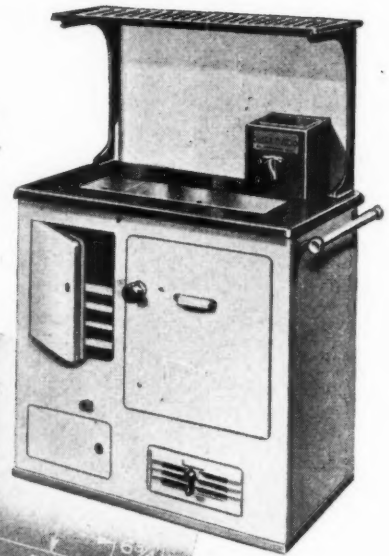
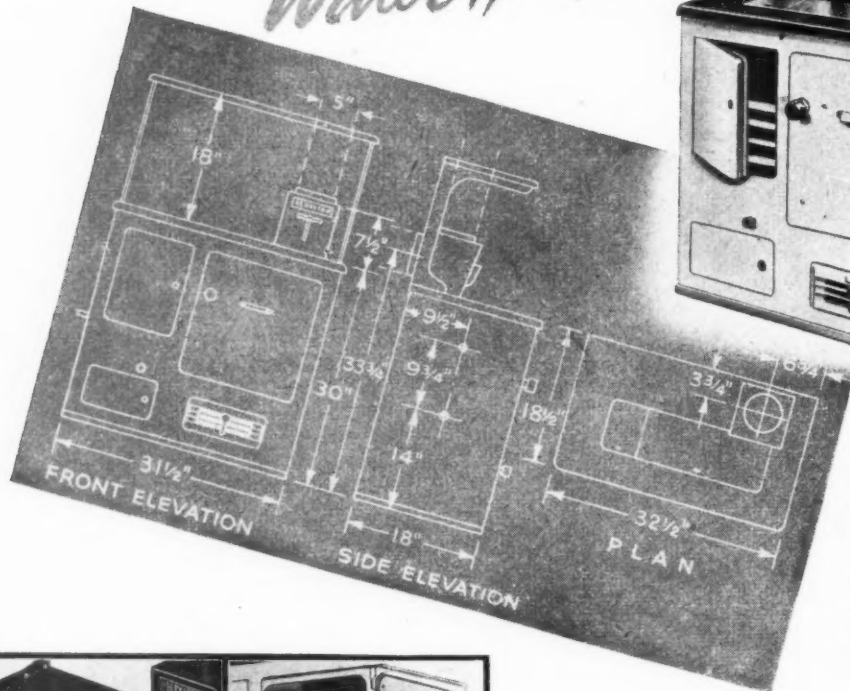


TENTEST FIBRE BOARD CO. LIMITED, SPECIALISED CONSTRUCTION DEPARTMENT
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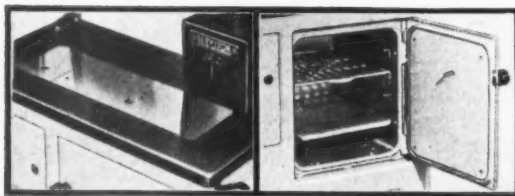
Telephone: BARnet 5501 (5 lines) Telegrams: Fiboard, Norphone, London

The SERVITOR

Cooker and Water Heater

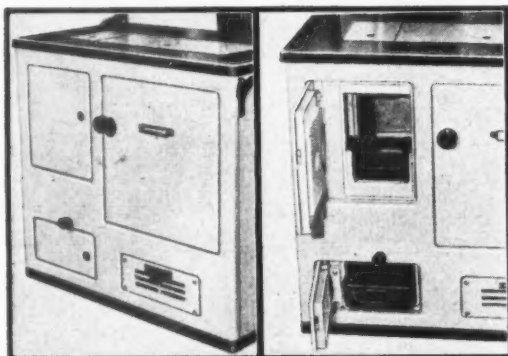


The "Servitor" fulfils the British Standard Specifications for Solid Fuel Cookers and is included in the List of Approved Appliances recommended to Local Authorities.



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The "Servitor" is the very latest free-standing insulated Cooker, incorporating many novel features and designed for use on any type of solid fuel. It operates continuously and economically, at high efficiency, and provides a full cooking service, and in addition gives a constant supply of hot water for baths and washing up.

Machine-faced hotplate. Mercury Thermometer. Machined doors for air-tightness. Large Oven. Simple Controls. Adaptable Flue Outlet for vertical or horizontal connection. Streamlined appearance.

Full details on request.



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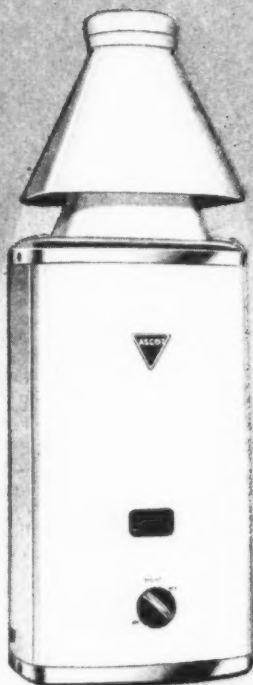
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OFFICES & TECHNICAL STAFF AT BELFAST, BIRMINGHAM, BRISTOL, CARDIFF, DUBLIN, GLASGOW, LEEPS,
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The new Ascot 709 Multipoint

A TECHNICALLY IMPROVED SUCCESSOR TO THE FAMOUS NEA 32/6

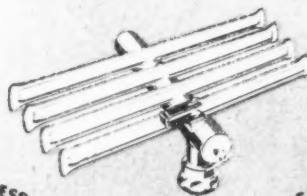
- ★ Built-in gas governor
- ★ Fitted with a completely new thin-flame stainless steel burner
- ★ Wider fin spacing on the new heat exchanger gives more generous flue-ways to obviate choking by deposits
- ★ A redesigned gas section has a single rotary gas control for main and pilot cocks instead of the two horizontal handles



The new stainless steel burner has positive advantages. It is highly resistant to corrosion, so that blockage due to this cause is practically eliminated. The period between essential servicing is thus greatly lengthened, and total expectation of life increased.

Stainless steel also gives greater rigidity and strength, which is enhanced in the thin-flame type of burner as there are fewer tubes of larger section.

LONGER SERVICE LIFE • LESS MAINTENANCE



THE STAINLESS STEEL BURNER IS EXCLUSIVE TO ASCOT

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Ascot makes the most of gas

THE WELLS HOUSE

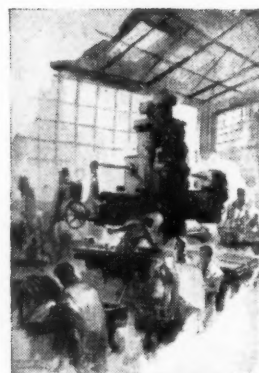


C. H. James, R.A., F.R.I.B.A., Archt.

This attractive block of flats has recently been completed for the Borough of Hampstead. The design of in-situ reinforced concrete and the supply of reinforcement thereto were carried out by Twisteel.

TWISTEEL
REINFORCEMENT LTD.

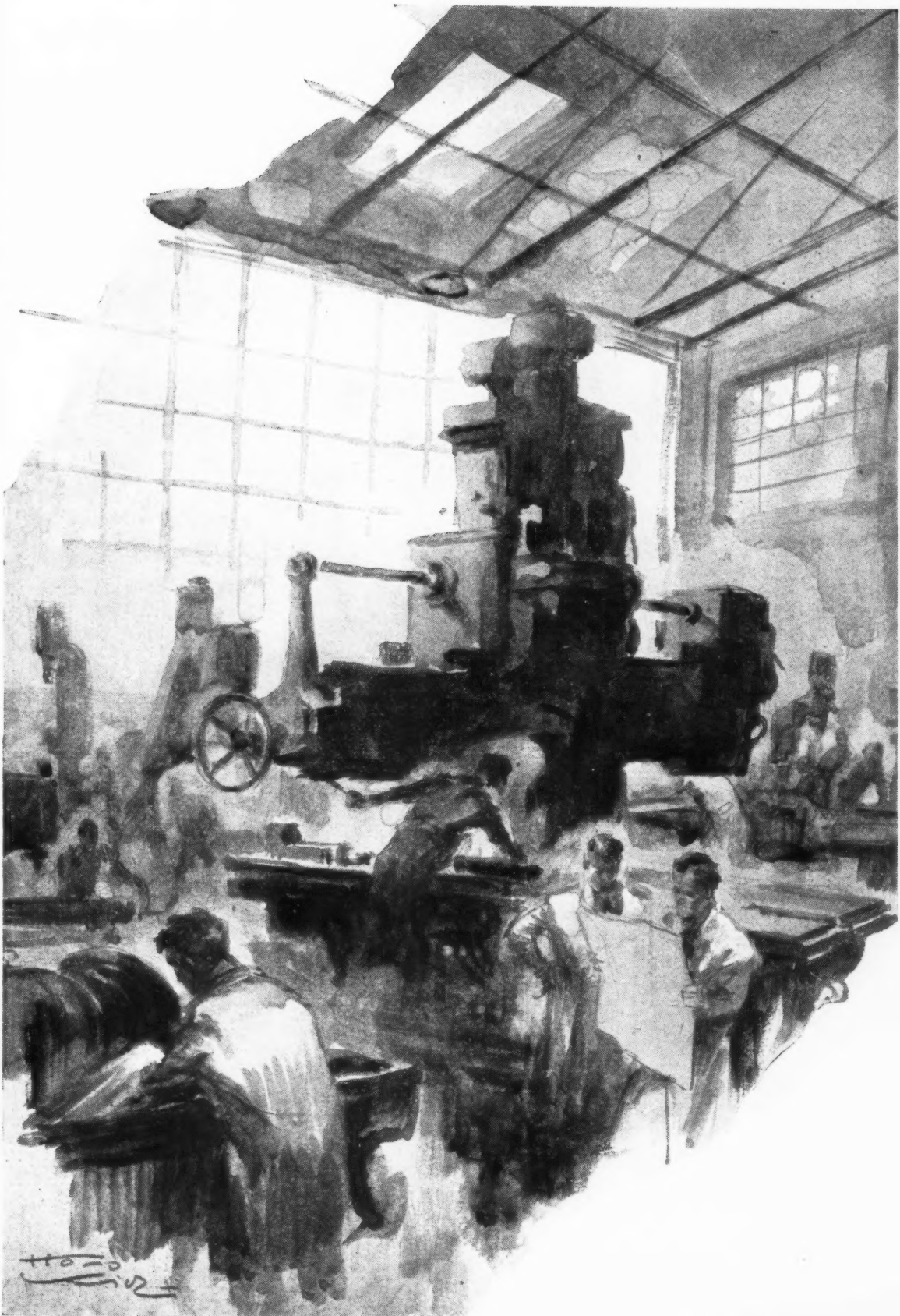
LONDON: 43 UPPER GROSVENOR ST., W.1. Telephone: GROsvenor 1216 · BIRMINGHAM: ALMA ST., SMETHWICK, STAFFS. Telephone: SMethwick 1991
MANCHESTER: 7 OXFORD RD., MANCHESTER, 1. Telephone: ARdwick 1691 · GLASGOW: JOHNSTONS & PATON LTD., 224 INGRAM ST., GLASGOW, C.1.
Telephone: City 7661.



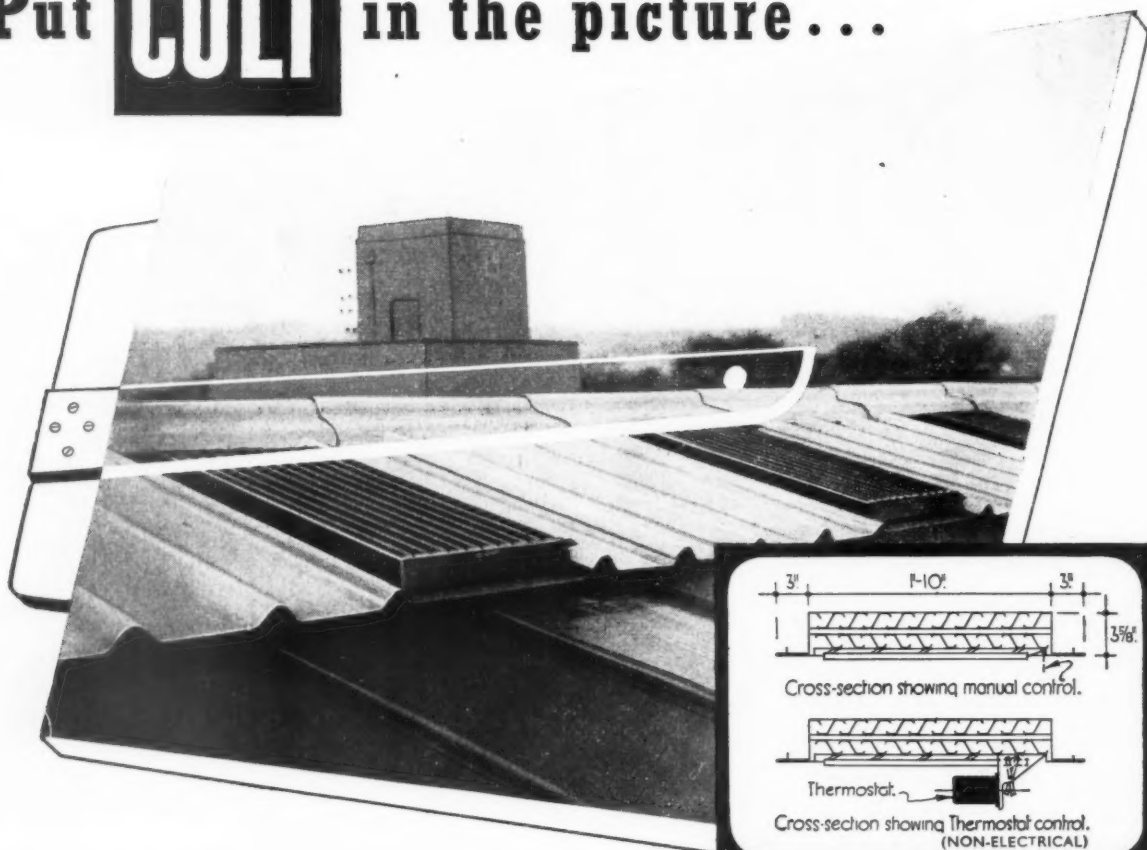
The artist Artur Horowicz recorded this impression of the tool-room at the Reliance Works, Chester for Williams & Williams Limited.

You can see them at eight o'clock in the morning entering the tool-room of the £1,000,000 window-making plant of Williams & Williams at Chester; they are the engineers whose job is to make good windows better. These men produce prototypes for new windows, make jigs and tools, gear their "know how" to all projects and plans to improve metal windows and window-making. They pass on to the building industry the benefits of every advance in the technique of window-making. Architects who specify Williams & Williams windows are faithfully served by these men.

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Metal Window and Door Manufacturers
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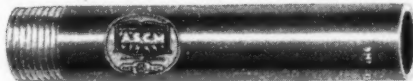
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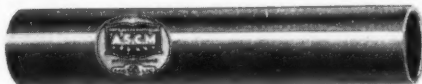
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Screwed and Socketed Gas Thread



Screwed and Socketed Conduit Thread



Light Gauge Tube

How often one hears that remark but how *true* it is when you are working with Metallic Conduit Tube and Fittings.

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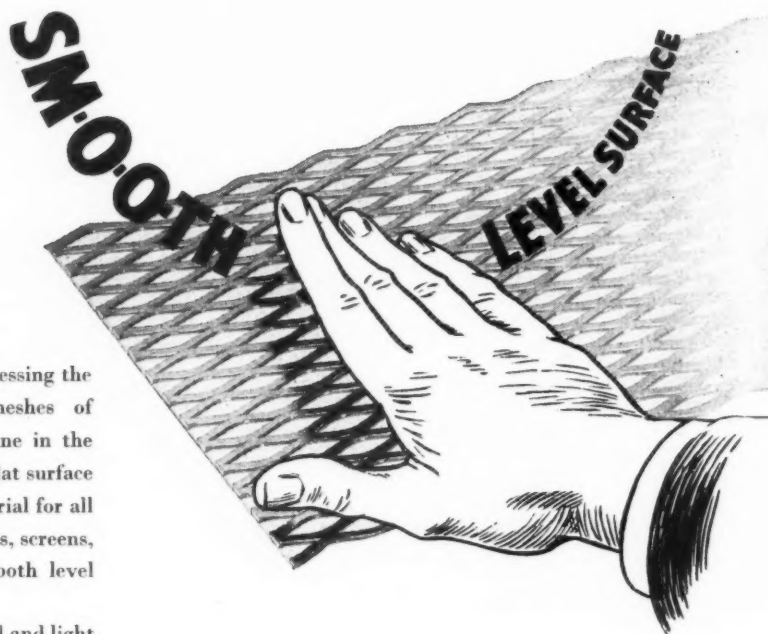
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Flattened 'Expamet' is made by pressing the strands and junctions of the meshes of Expanded Metal into the same plane in the sheet, so as to give a smooth, level, flat surface free from burrs. It is the ideal material for all kinds of shelving, racks, trays, guards, screens, openwork panels etc., where a smooth level surface is desirable.

Flattened 'Expamet' is strong, rigid and light in weight and has the unique, attractive appearance of the regular diamond-shaped pattern of Expanded Metal meshes.

Expanded Metal Products

'EXPAMET'

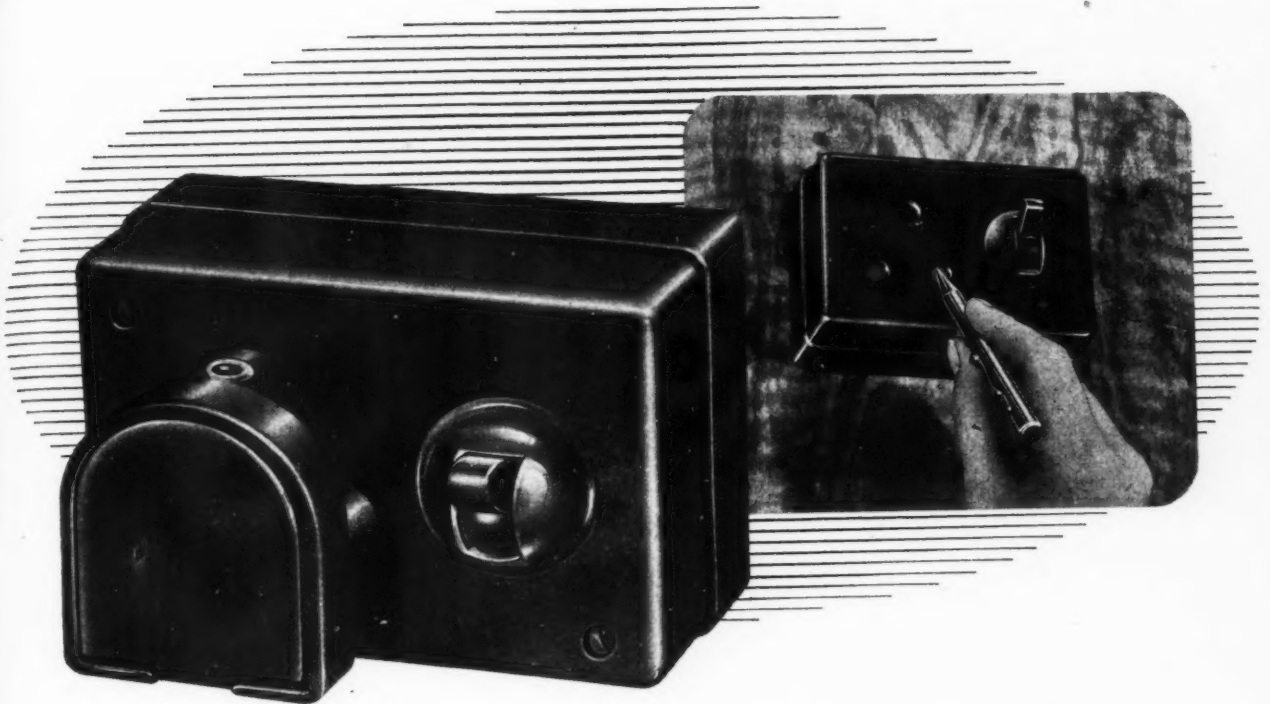
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Burwood House, Caxton Street, S.W.1 WHITEHALL 1736.

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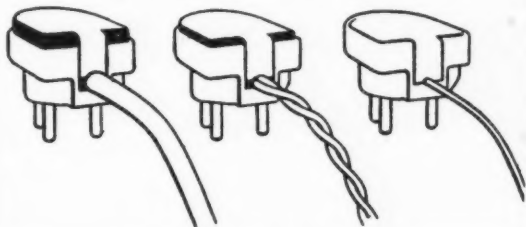
TEMCO switch sockets are available in surface and flush types, 5 amp., and 15 amp. brown and white. Suitable for use on A.C. or D.C.

They comply with B.S.S. 816 and B.S.S. 546.

Brief specification:—Porcelain base; quick make and break switch action; moulded dolly has no metal inserts; ringed contact tubes; recessed back with knock-outs.

*ANOTHER EXCLUSIVE TEMCO FEATURE...
the variable cord grip.*

TEMCO Plugs adjust themselves automatically to suit varying thicknesses of flex. There are no loose parts.



Write for **CATALOGUE Series 2 OF TEMCO ELECTRICAL WIRING ACCESSORIES**

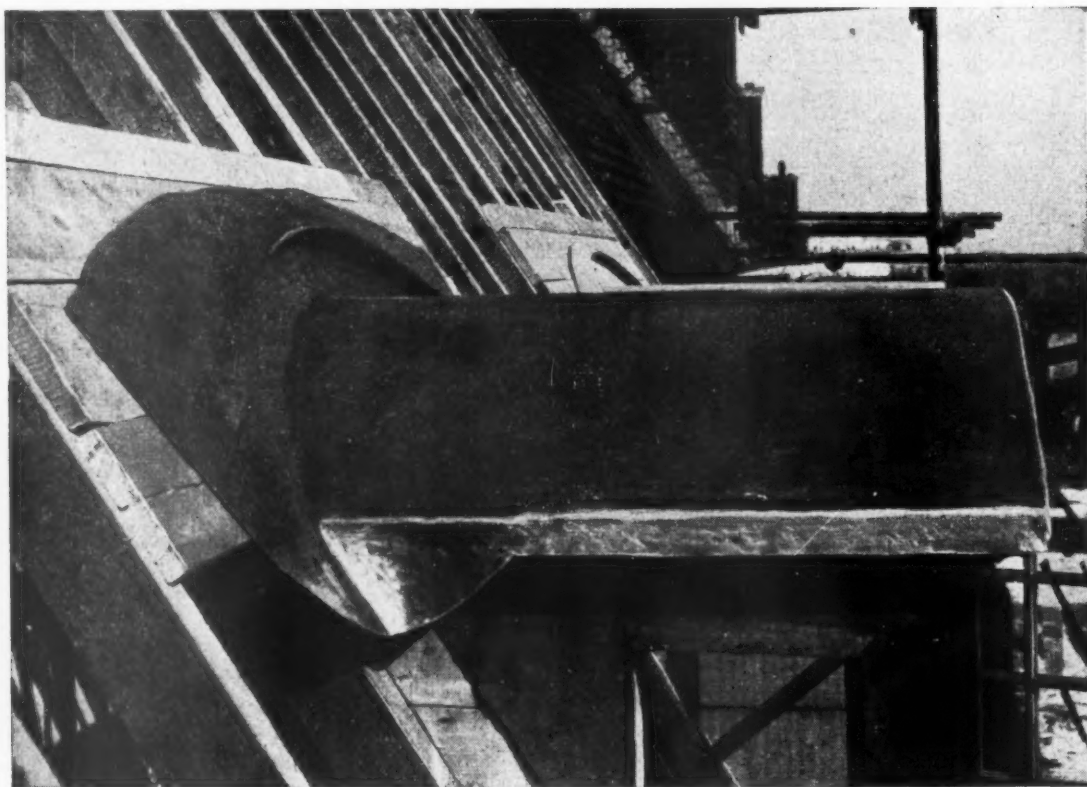
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Dormer Windows are a common feature of blocks of flats where the roof space of a fairly steeply pitched roof is used for habitable rooms. In the construction of dormer windows lead sheet plays an important part for roofs, cheeks and flashings. The illustrations show dormer windows in a block of flats now under construction in London. The rounded roof is covered with sheet lead worked — as only lead can be — up the roof slope, over the tilting fillet and also over the projecting edges. The cheeks are covered with lead and lead soakers are fitted at the roof intersection.



h

**THERE IS
NO SUBSTITUTE
FOR LEAD**

now in plentiful supply

LEAD

The Technical Information Bureau of the Lead Industries Development Council, which exists to give assistance on problems relating to the use of lead sheet and pipe in building work, will be pleased to give advice on any questions relating to the uses of the materials.

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TELEPHONE: SLOANE 0474

B59/2, 50



BALCONIES & BALUSTRADES BY **DAVIS**



Some fine examples of balcony and balustrading have been produced by the Davis Engineering Division and our wide experience and large resources are always at the disposal of architects requiring this class of work.

ILLUSTRATED
Wrought iron balustrade with extruded brass chromium plated handrail at Littlebrook Power Station, Dartford, Kent.

Architects :
Sir Alexander Gibb and Partners
Queen Anne's Lodge,
London, S.W.1.

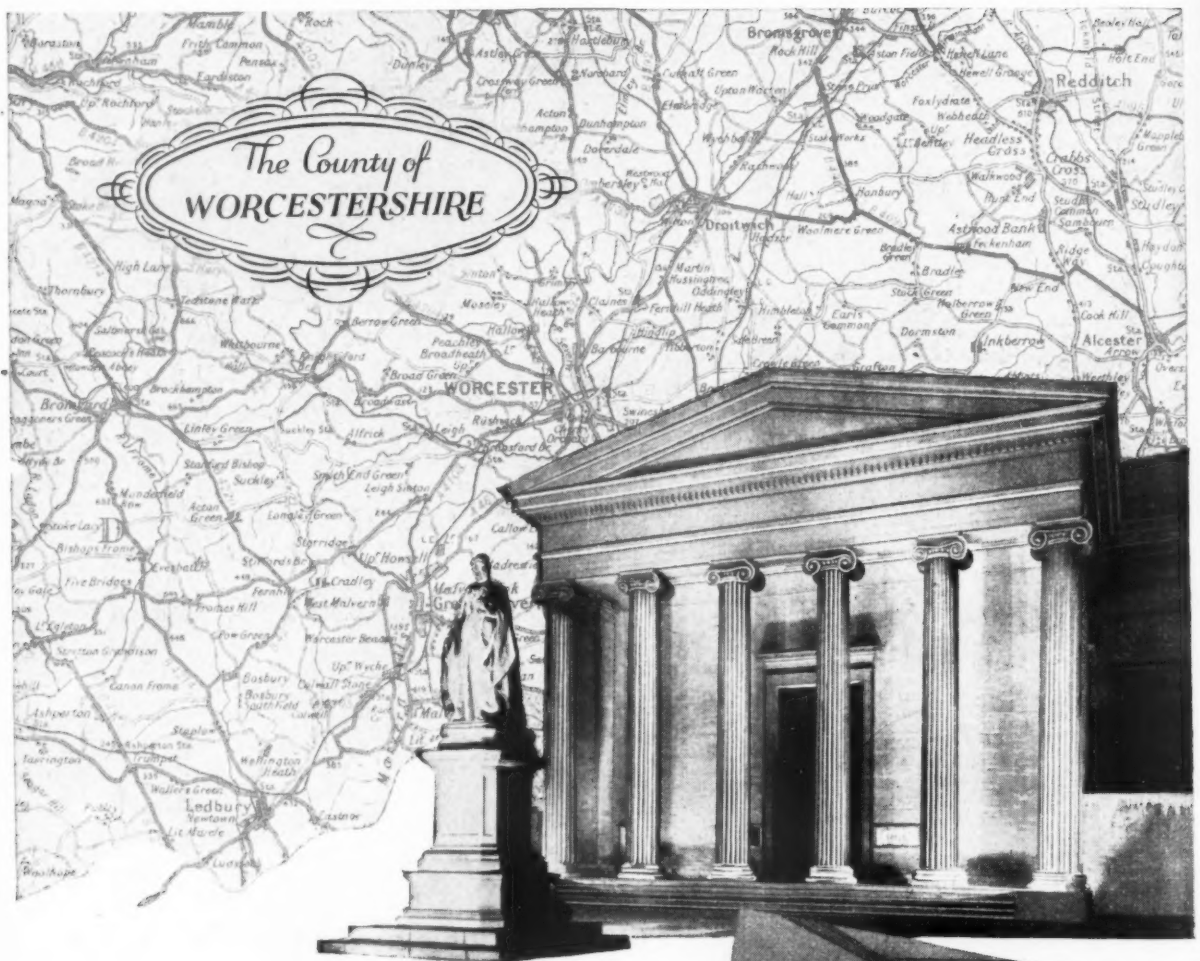
Builders :
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H. & C. DAVIS & CO. LTD.

1 THE PAVEMENT, CLAPHAM COMMON, LONDON, S.W.4.

Engineering Division, '59/69 Old Town, Clapham, S.W.4.

Telephone : MACaulay 4501 (Private Branch Exchange connecting all Departments)



Shirehall, WORCESTER.

The Crown Court

Stately Shirehall was recently rewired to the specification of L. C. Lomas, F.R.I.B.A., County Architect for Worcestershire.

Wiring for 446 Lighting, heating and power points was installed by the Contractors, Messrs. Abell & Smith's Electrical Co. Ltd., Angel Place, Worcester, who used BICC V.R.I. Taped, Braided and Compounded Cable throughout.



RUBBER INSULATED CABLES

BRITISH INSULATED CALLENDER'S CABLES LIMITED
NORFOLK HOUSE, NORFOLK STREET, LONDON, W.C.2



The Great Hall



Information and advice on GAS equipment

In order that architects, builders and others interested may keep abreast of the latest developments in gas services, a permanent exhibit is maintained at the London Building Centre. Here may be seen examples of the following types of appliances:—

DOMESTIC GAS COOKER

Various well-known cookers are exhibited, all of a high standard of design and performance.

CATERING EQUIPMENT

Included in this part of the exhibit is equipment for snack bar counters, refuse disposal, vegetable boiling, grilling, roasting and steaming.

CENTRAL AND WATER HEATING

Coke and gas-fired boilers are included, as well as hot water circulators, bath heaters, sink heaters, and multipoint heaters.

SPACE HEATERS

Appliances include coke fires with back boilers, gas radiators, panel fires, hearth fires, portable gas heaters, and overhead radiant heaters.

HOME LAUNDRY EQUIPMENT

Under this heading are exhibited appliances for drying and airing towels, clothes drying (both built-in and free-standing), and various types of clothes washing machines.

REFRIGERATORS

Both built-in and free-standing types are included.

A technical assistant is in attendance at the Building Centre to give information and advice. Literature dealing with the application of gas appliances to a great variety of problems may also be obtained from the Area Gas Boards or the Gas Council.

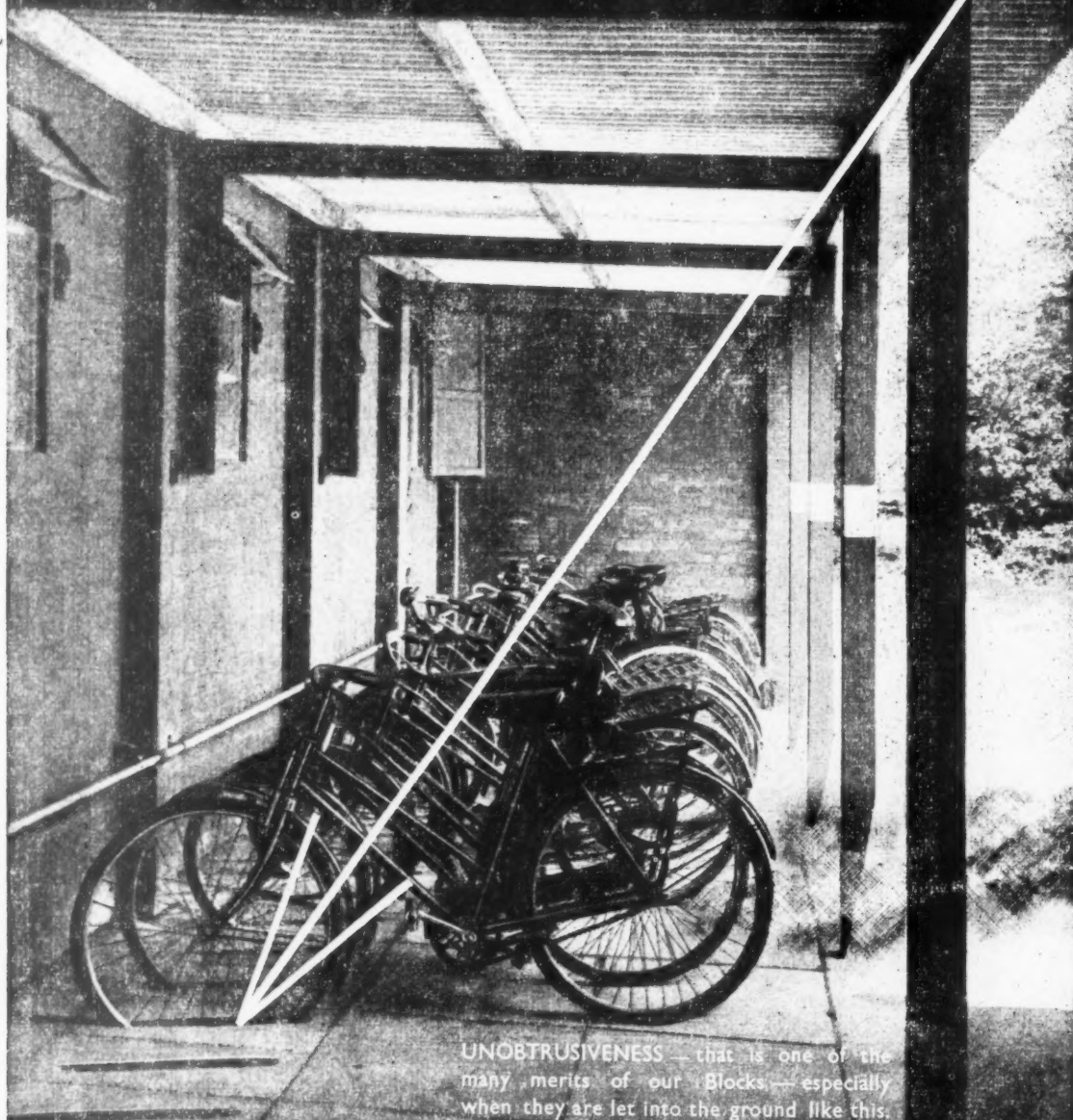
ISSUED BY THE GAS COUNCIL, 1 GROSVENOR PLACE, LONDON, S.W.1. Telephone: SLOANE 4554

GAS

Stelcon

BICYCLE PARKING BLOCKS

British Patent No. 425265

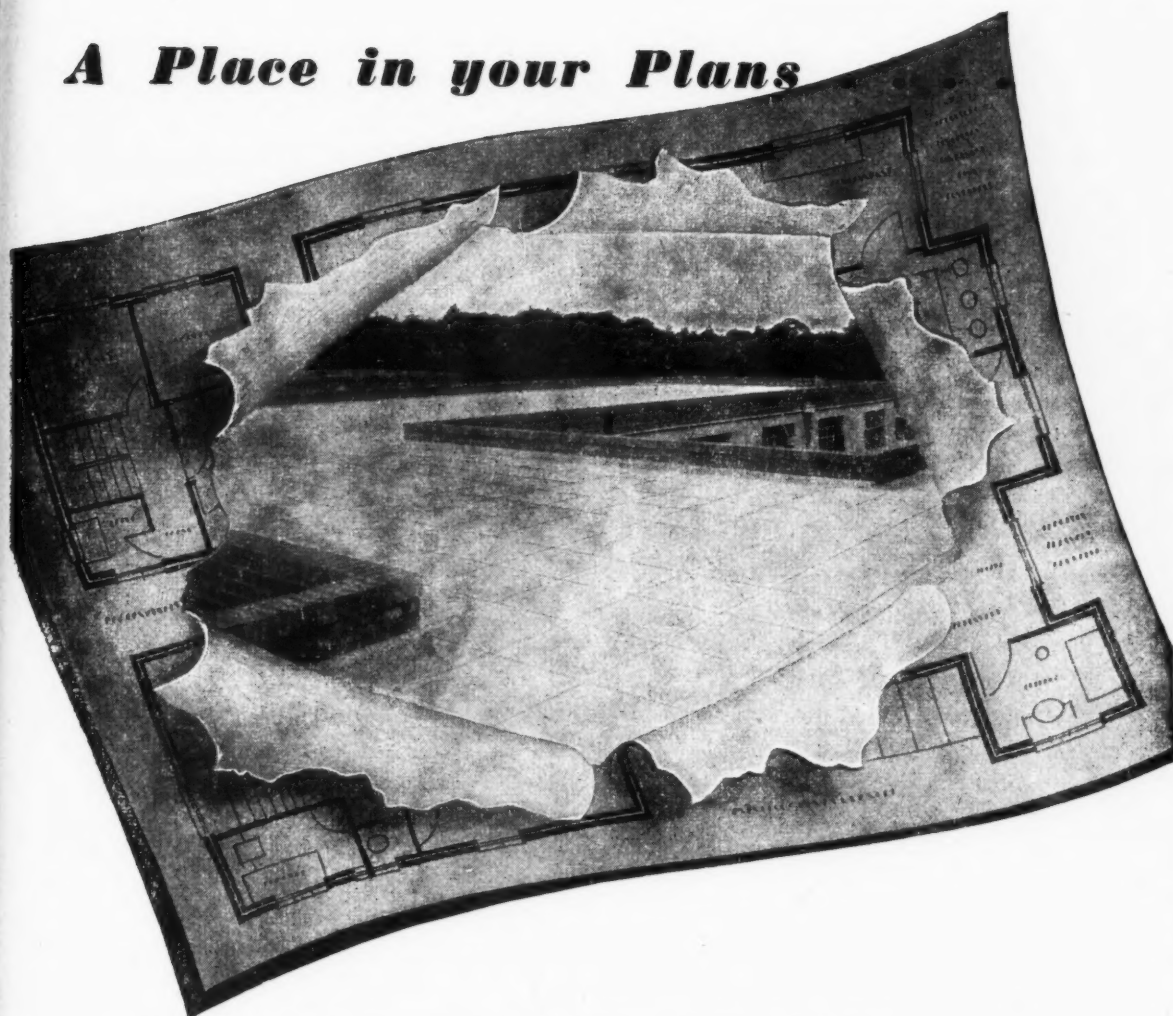


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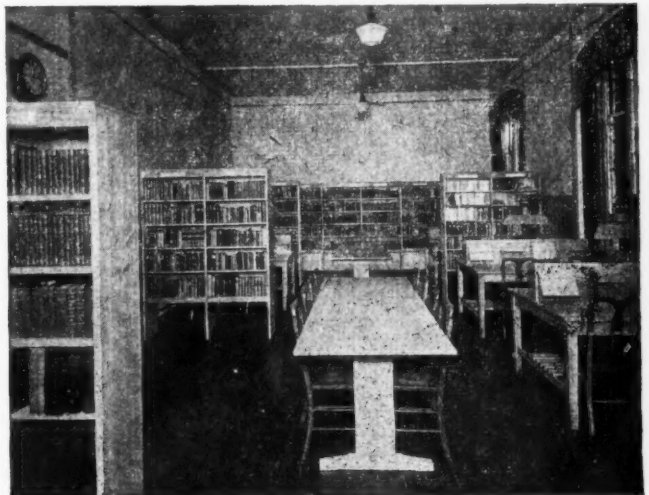
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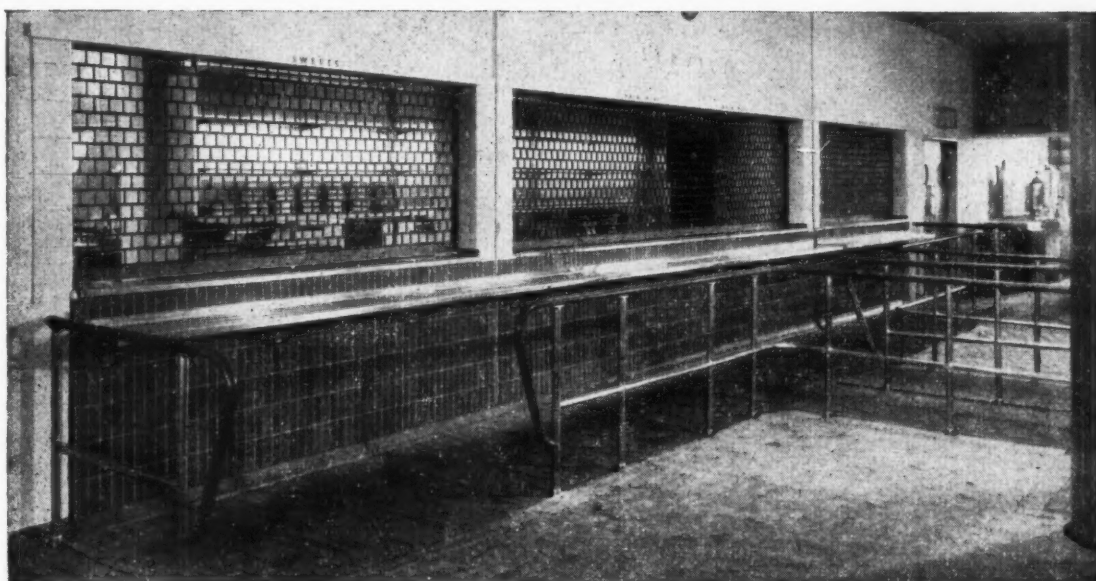
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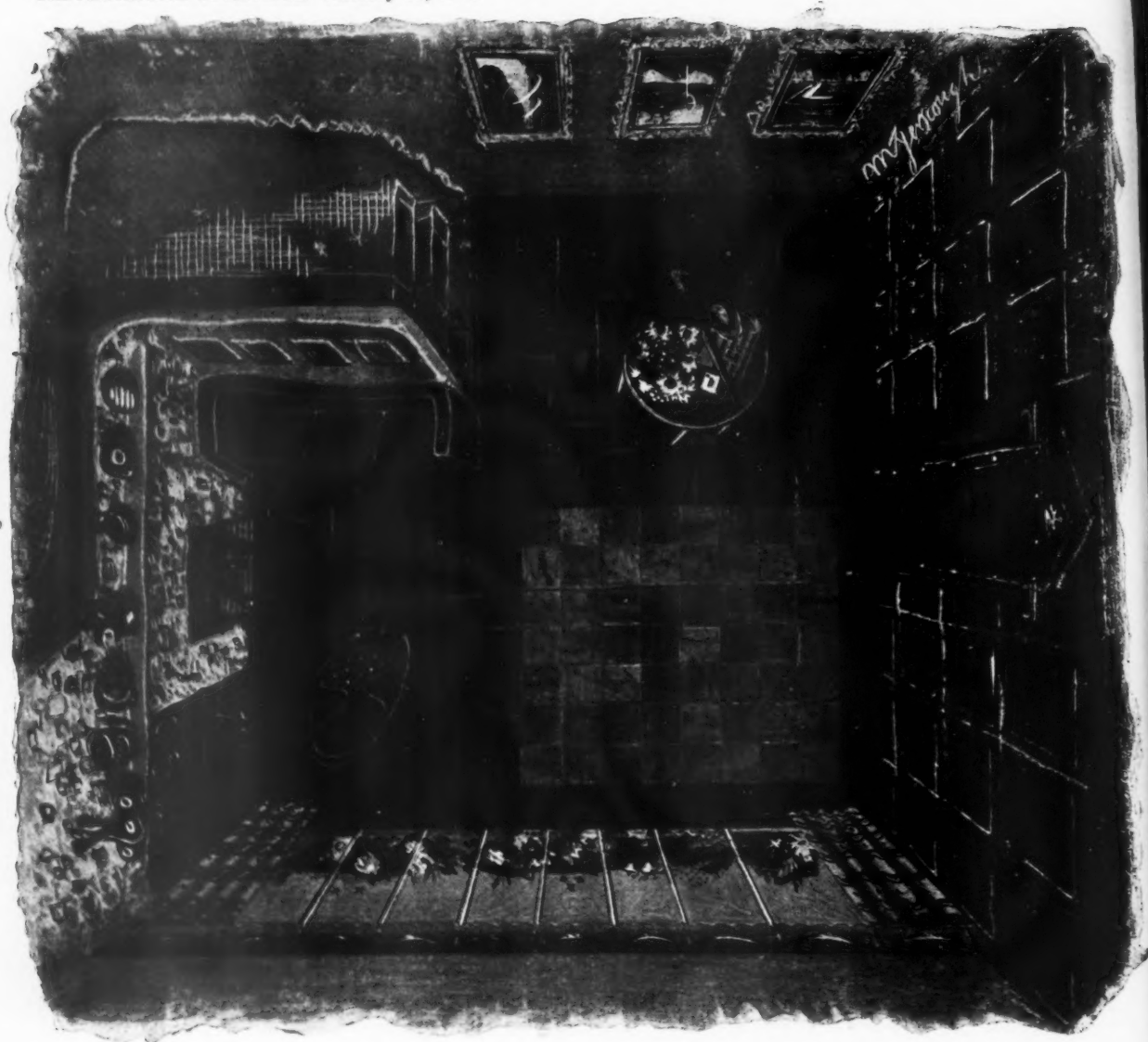
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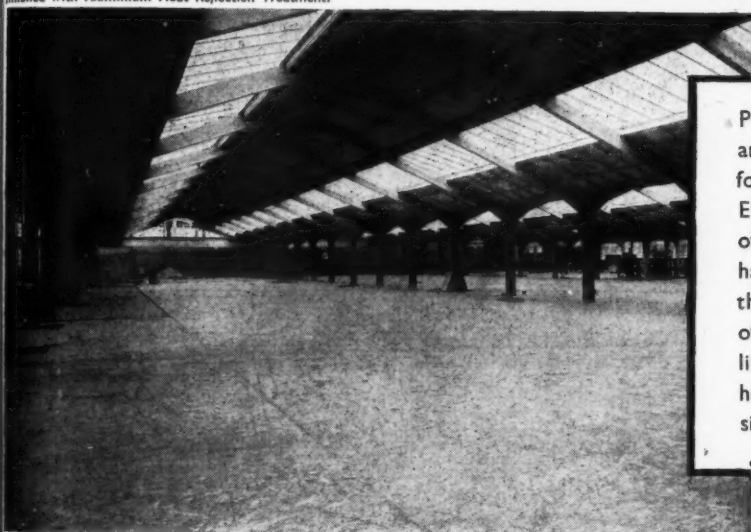
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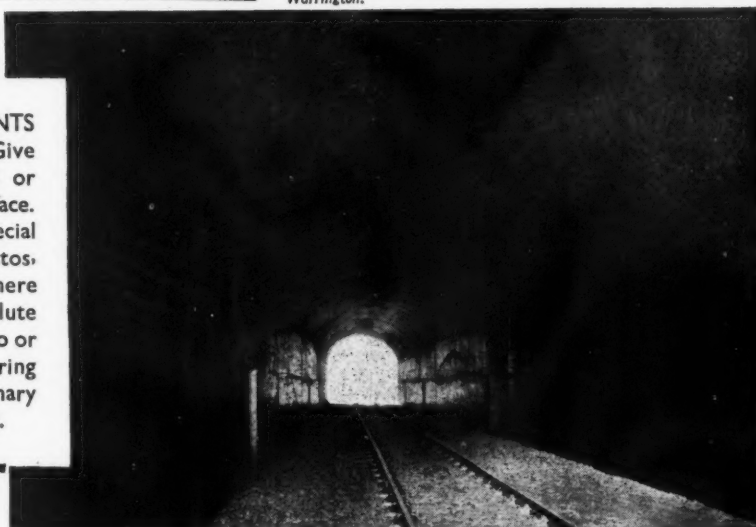
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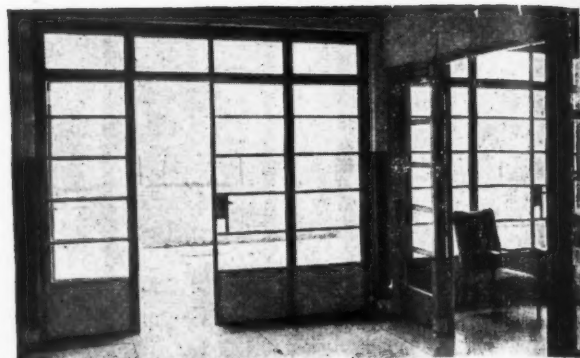
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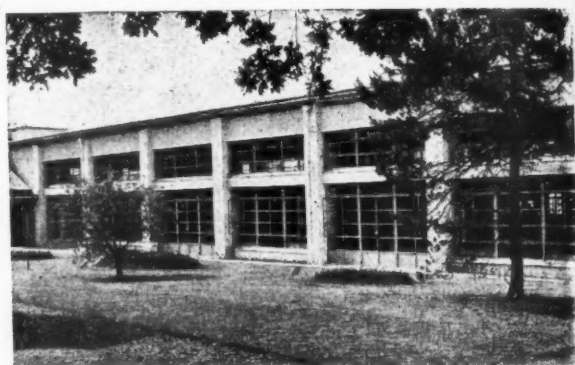
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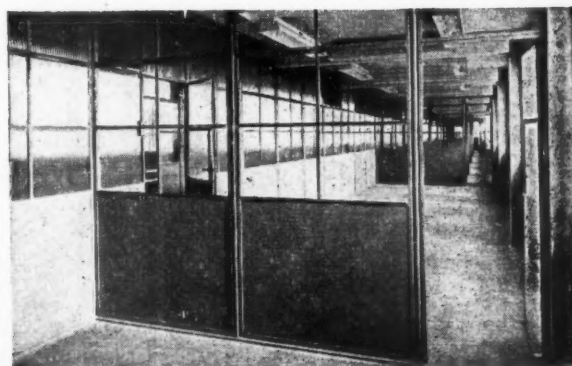
Steel Windows and Doors.

Peamount Sanatorium, Co. Dublin



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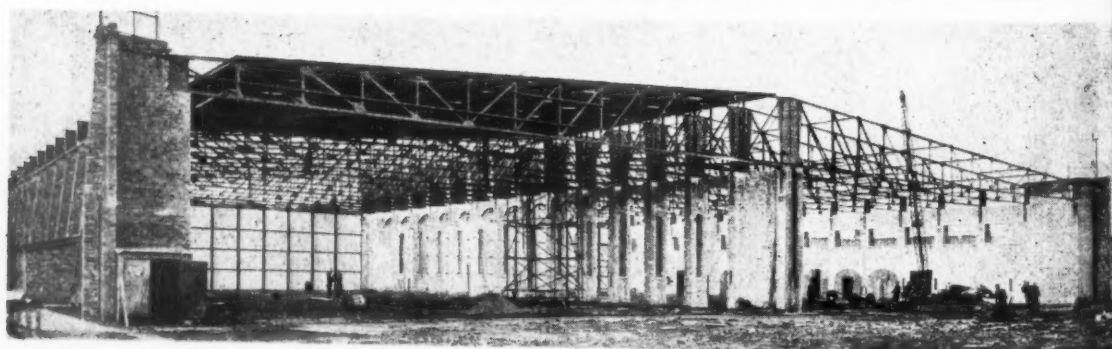


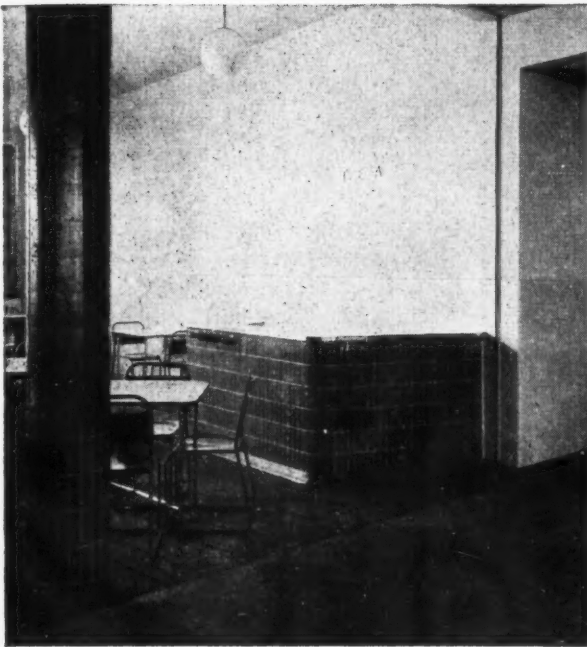
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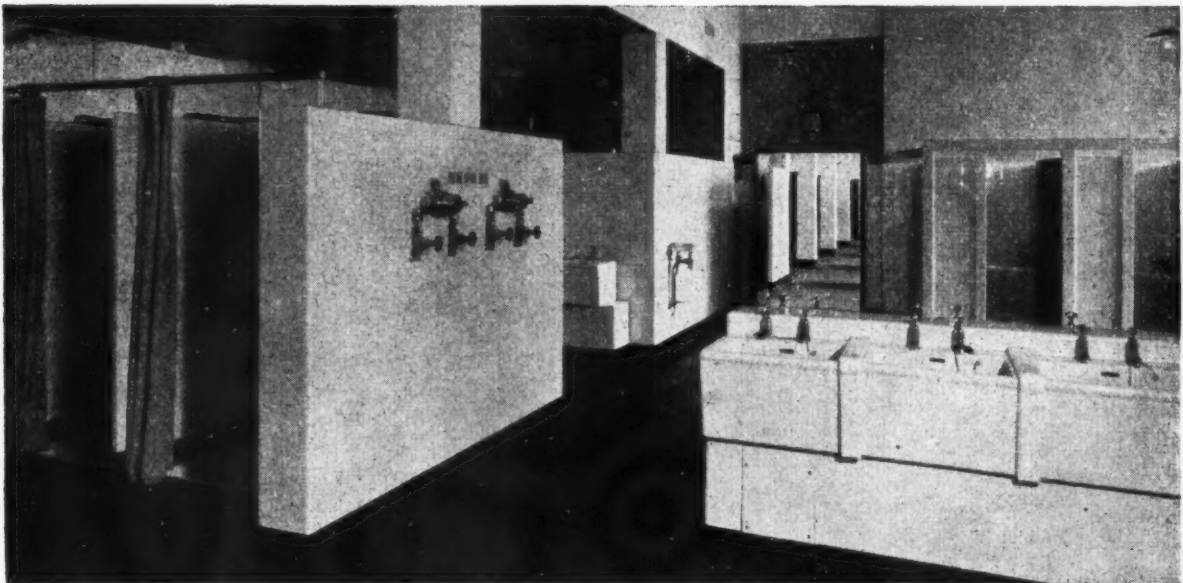


6" x 2" turquoise blue eggshell glazed tiles fixed to counter fronts, and similar tiles but made radiated on the circular columns in Main Canteen.



"Architects' Journal" photograph.

6" x 6" Dorset Red floor tiling, 6" x 6" cream glazed tiles to walls and column in Service area.



Tiling in Bath House in 6" x 6" cream earthenware glazed with black glossy skirting tiles. The intermediate shower partitions are formed in 1½" thick precast tile slabs. Similar slabs have been used to form W.C. partitions in the same building. The door frames and lintels to the bathroom cubicles are in cream terrazzo, precast at the works of Art Pavements and Decorations, Ltd., Camden Town.

(Note slabbed access covers to pipe ducts underneath wash basins.)

CARTER tiling at Welfare Centre, Beckton Products Works, East Ham

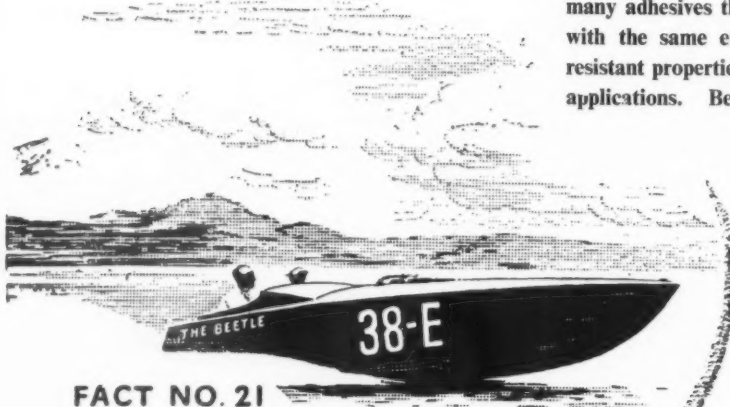
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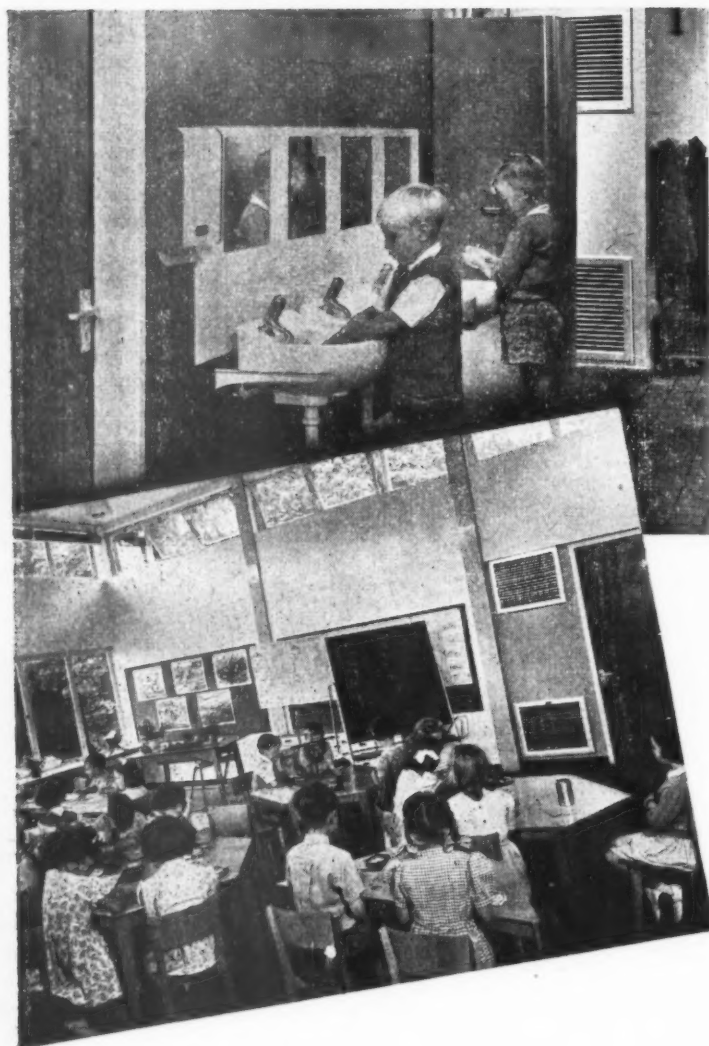
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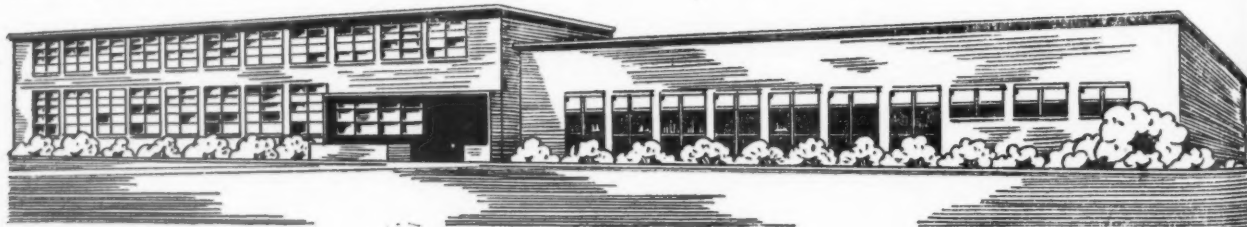


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WEATHERFOIL grilles in a cloakroom and, in a classroom.

Photographs by courtesy of C. H. Aslin, Esq., F.R.I.B.A., County Architect, Hertfordshire.



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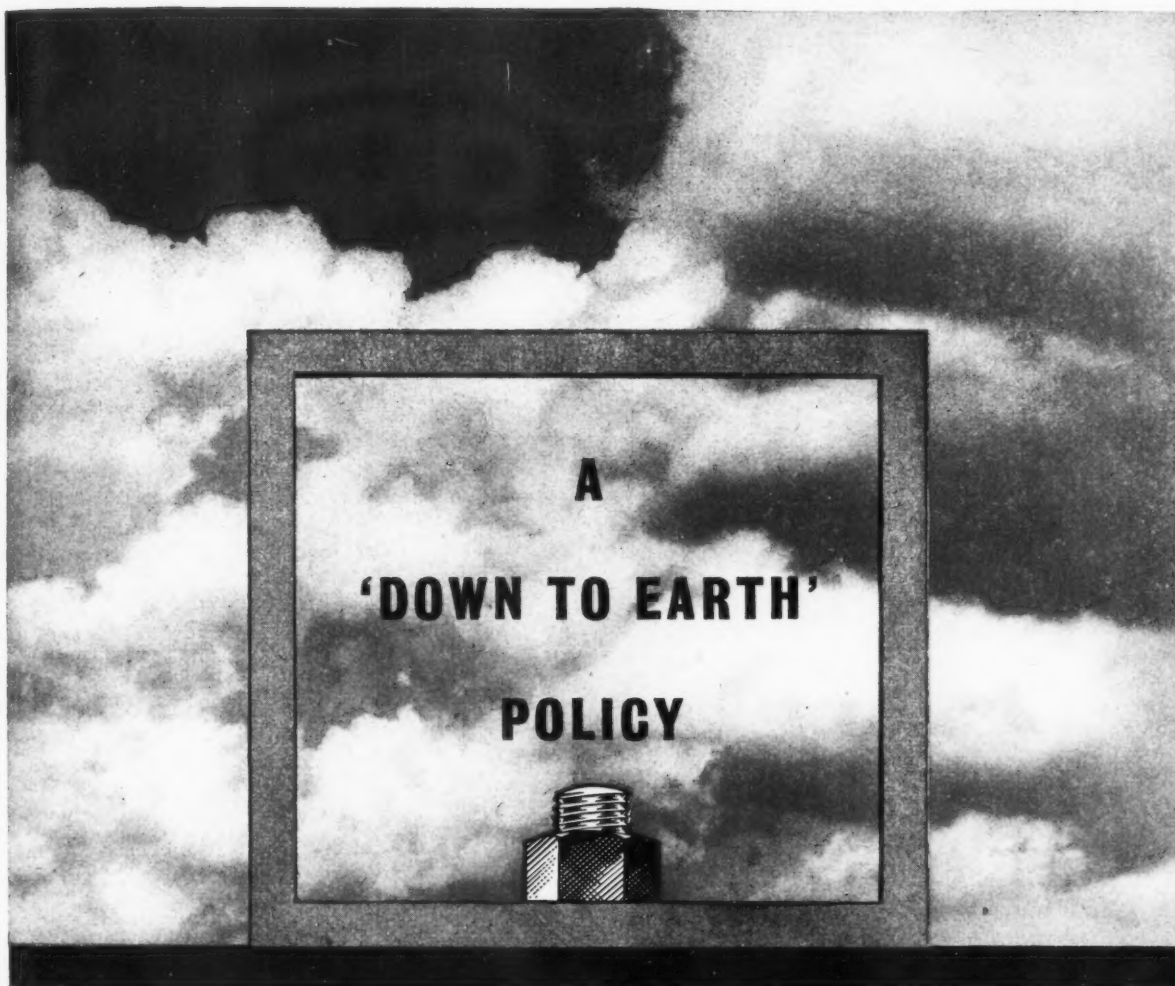
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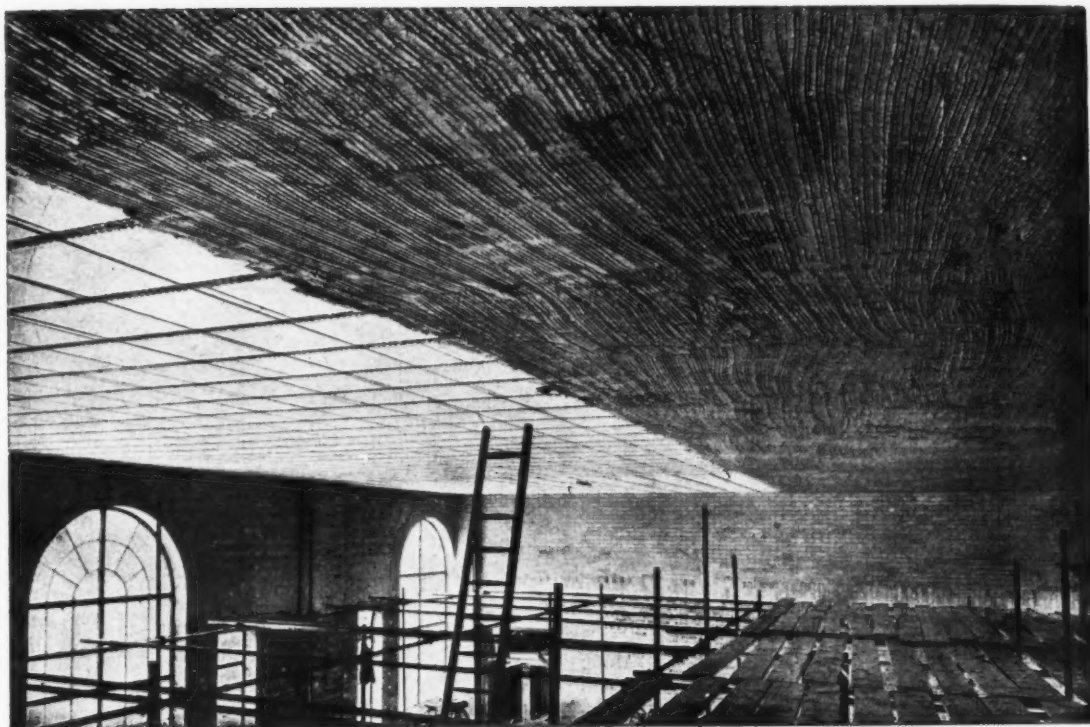


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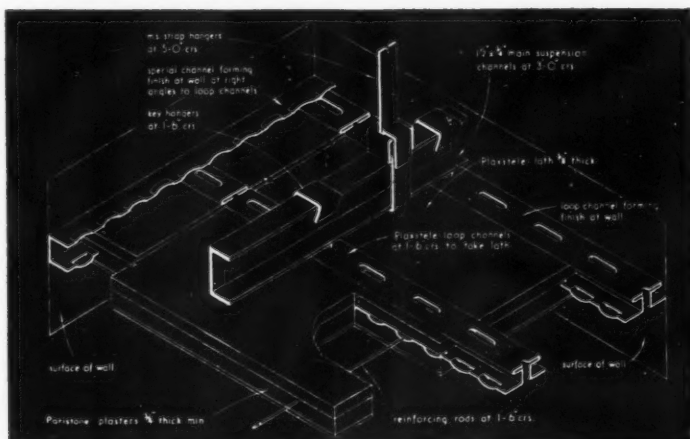
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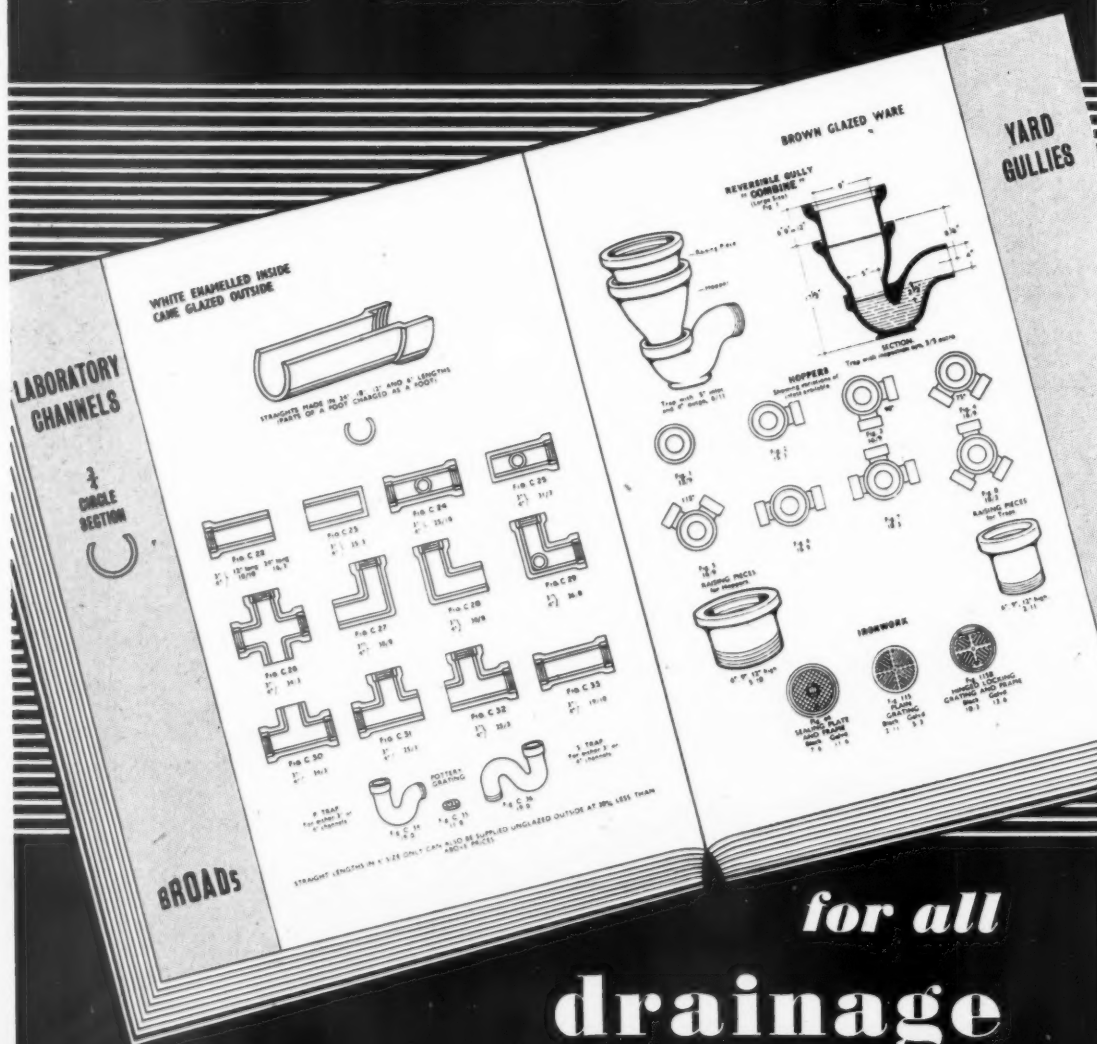
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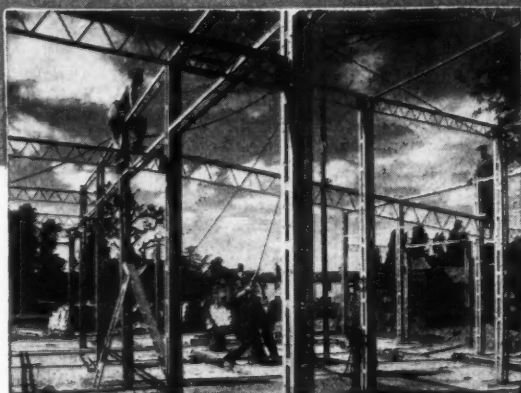
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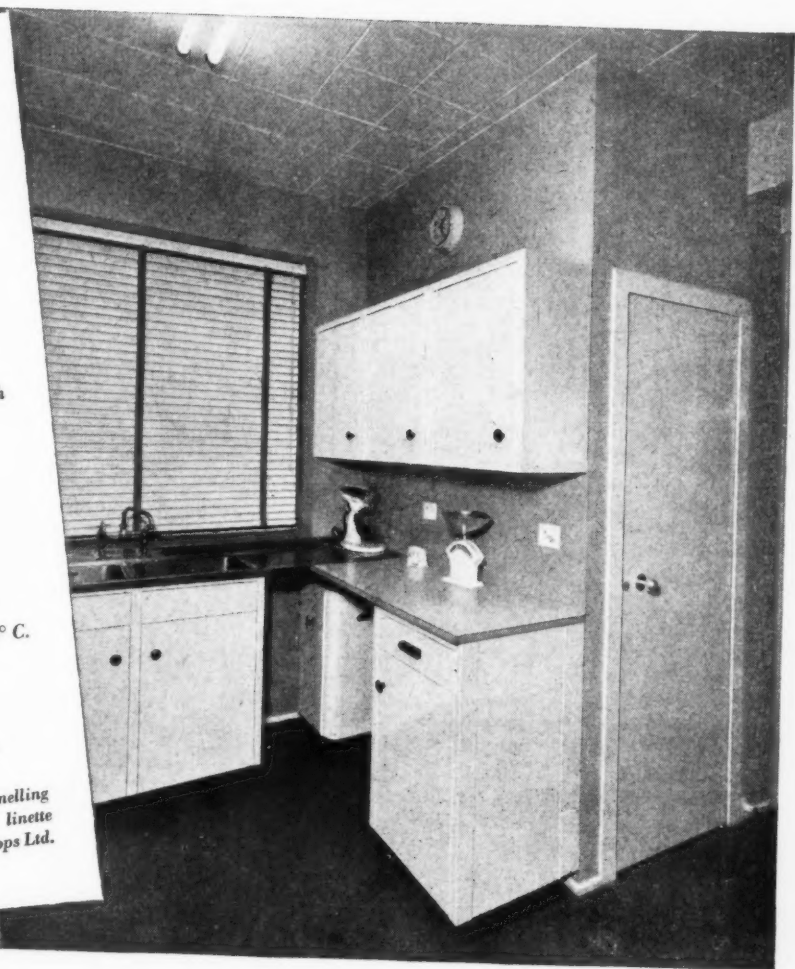
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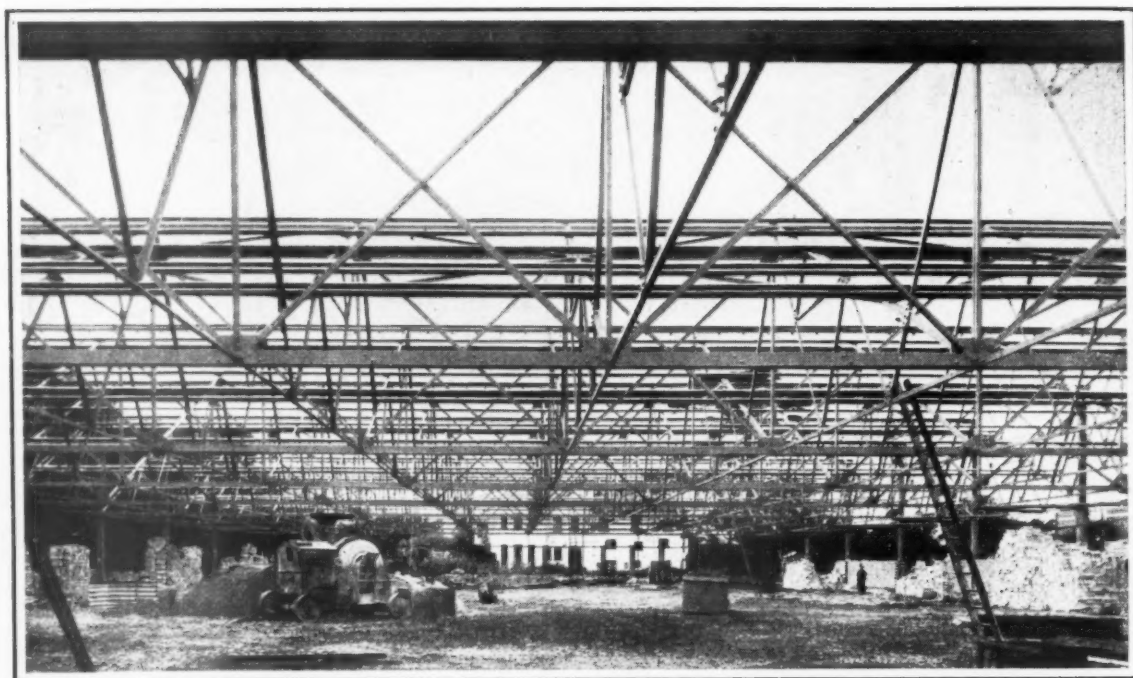
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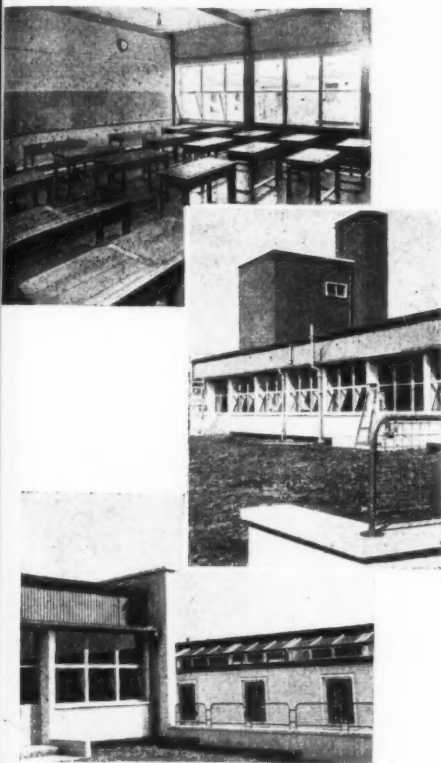


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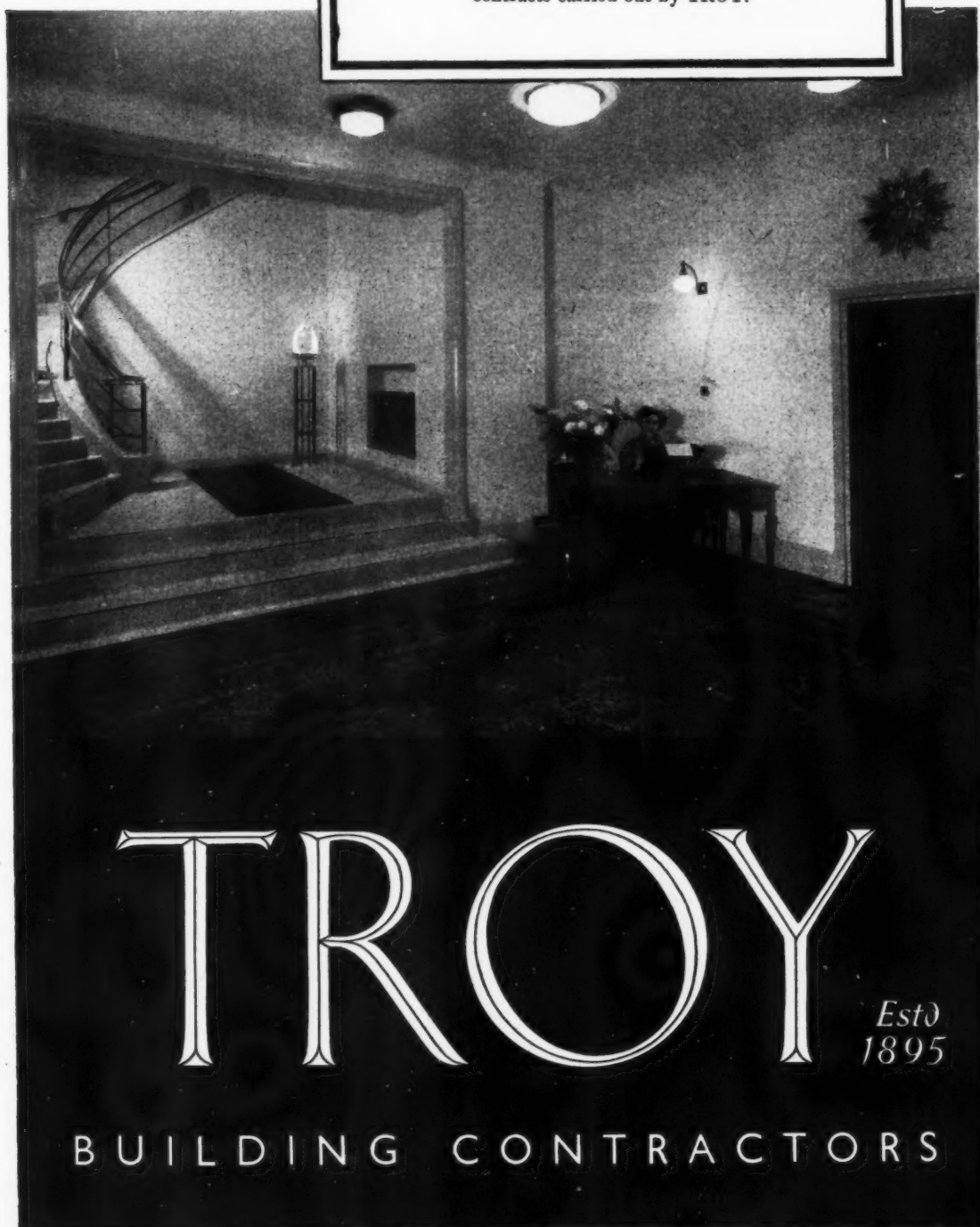
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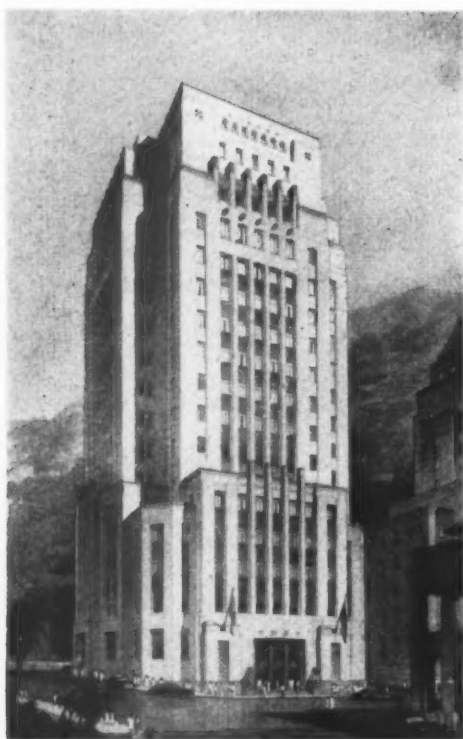
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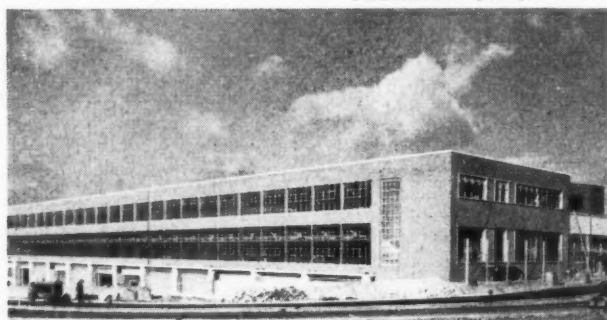
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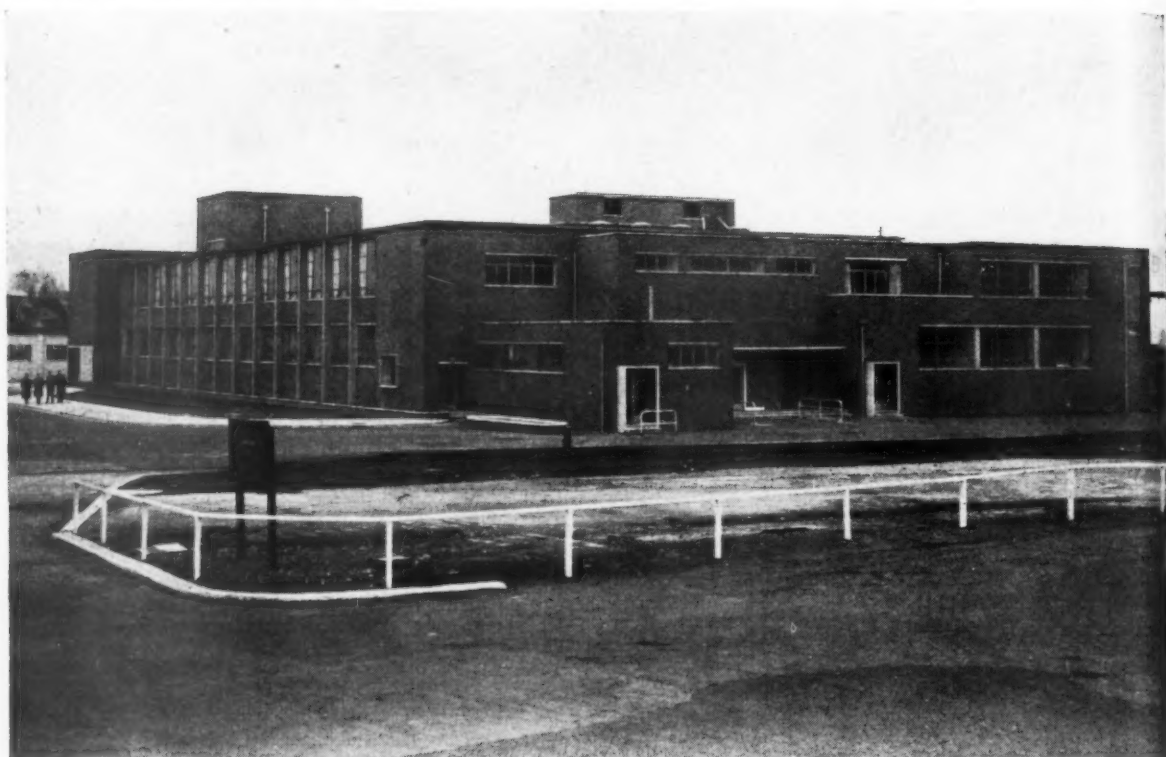
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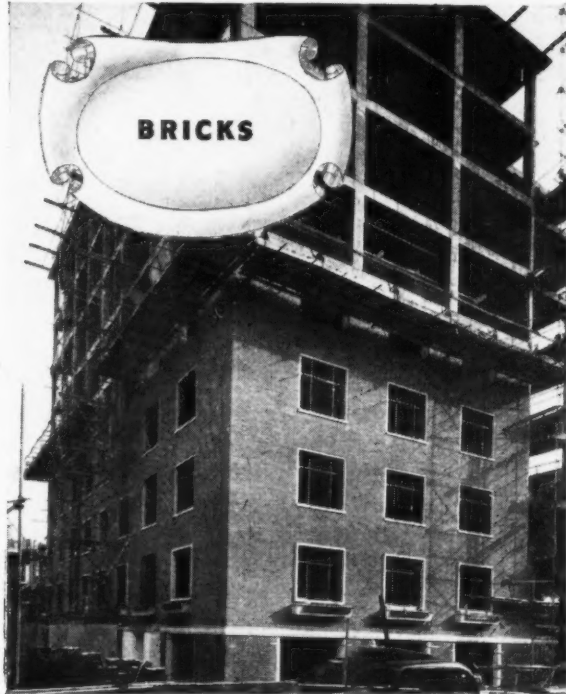
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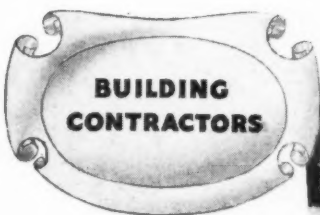


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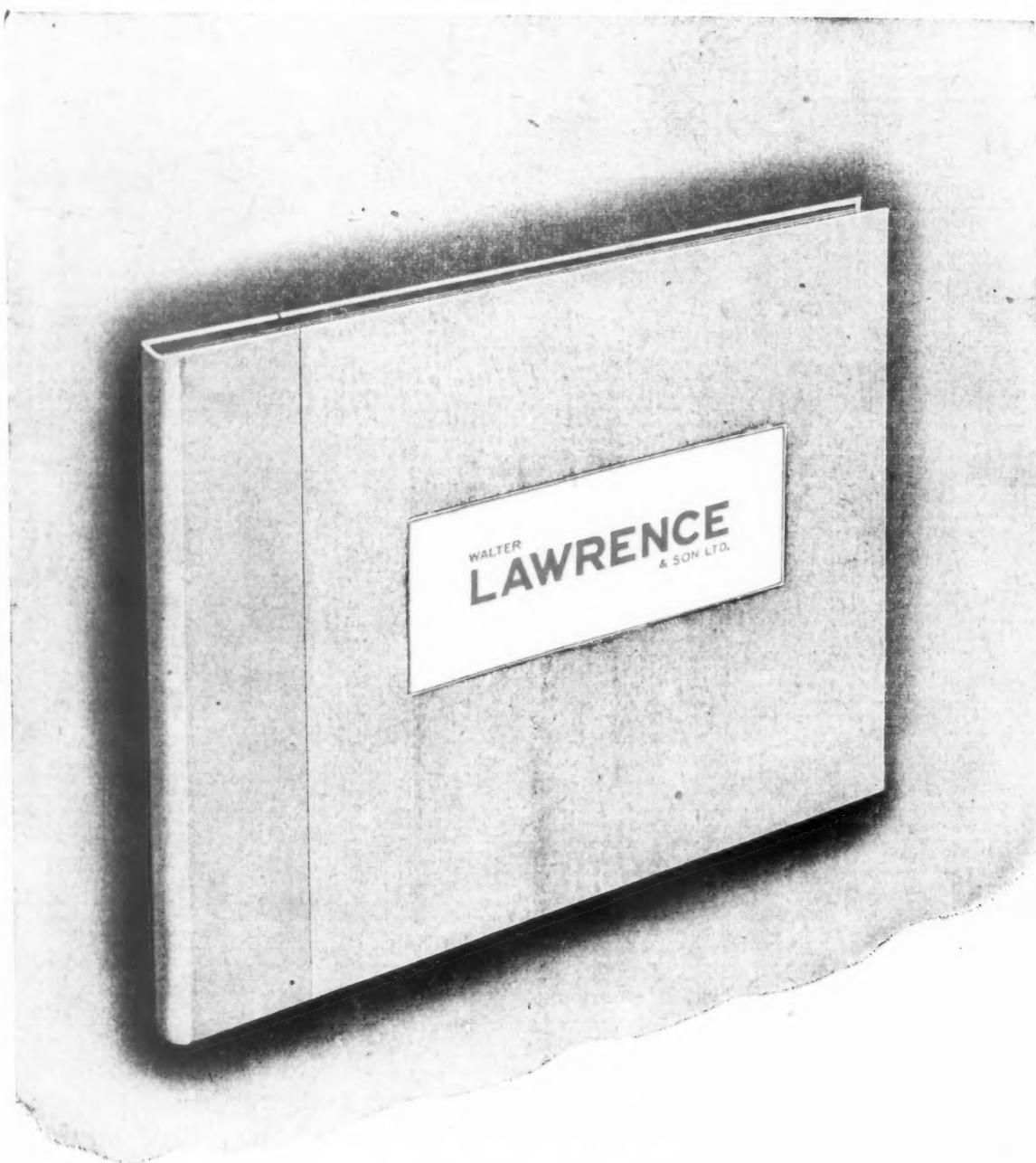
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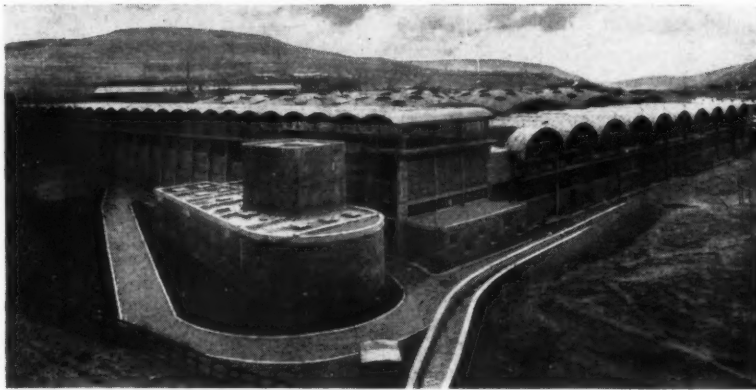
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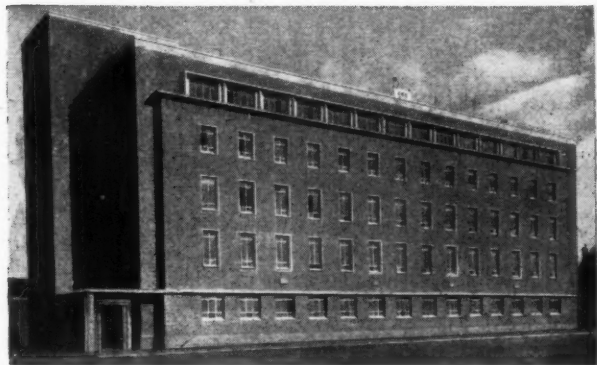
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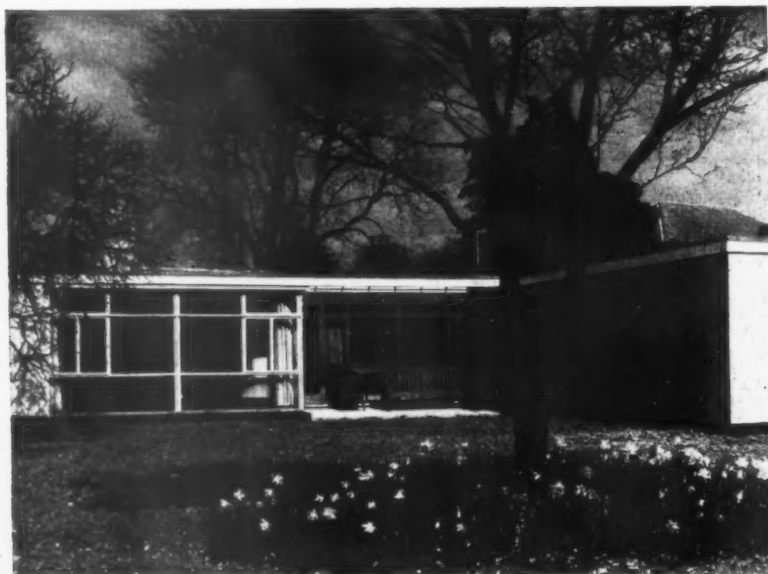
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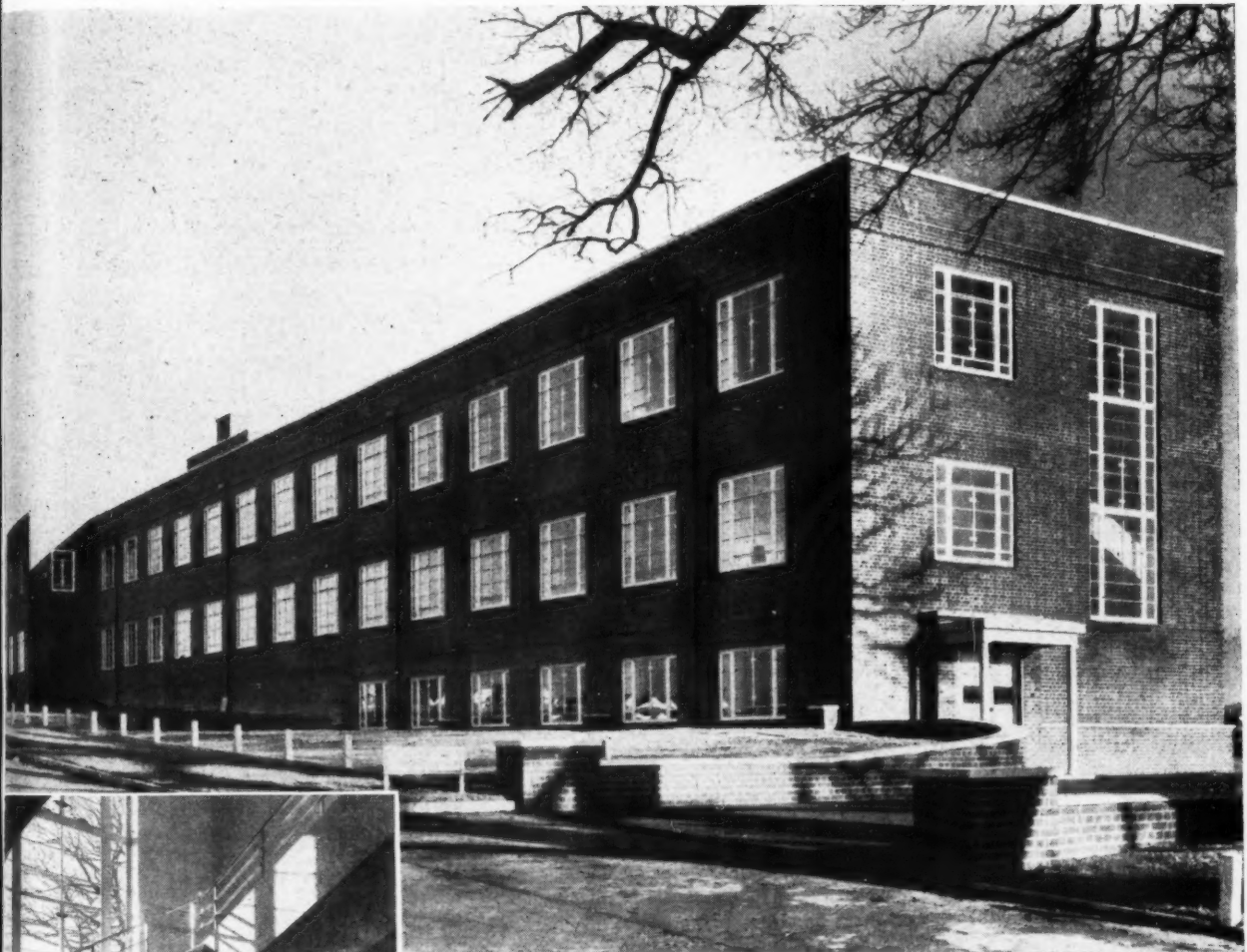
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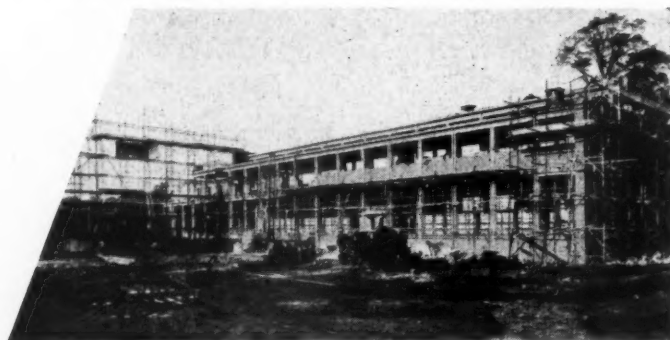
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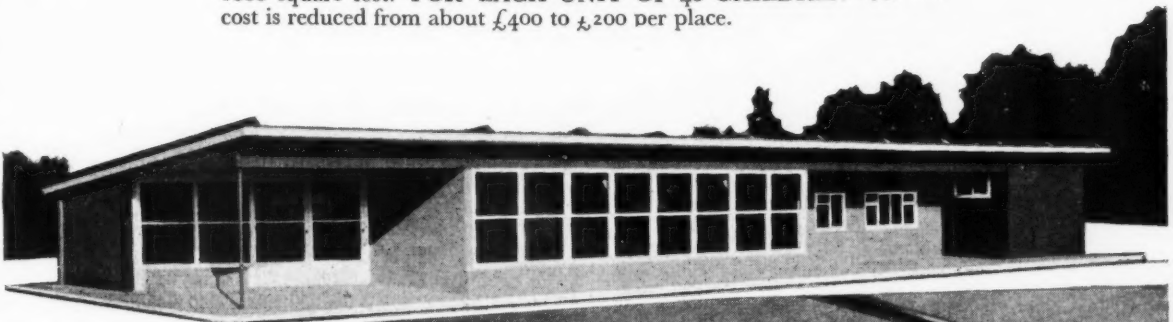
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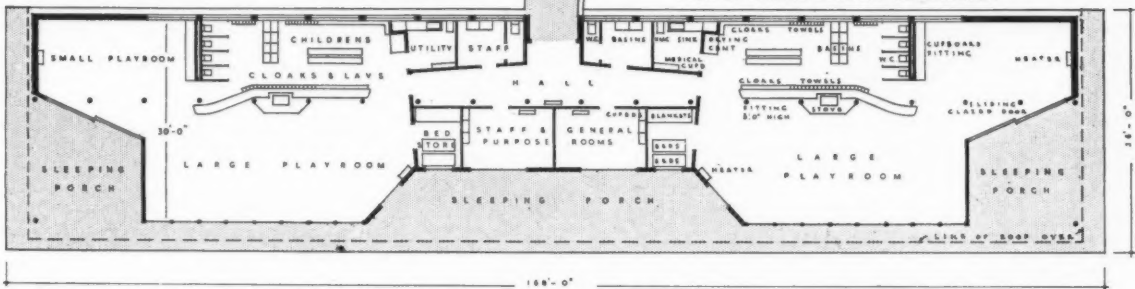
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1950

JANUARY

Many people followed the lead given by the less reliable newspapers and mistakenly entered a new half-century this month. James Thurber, contemplating the next fifty years, predicted that women would become stronger and more numerous, while Dr. Fisher, surveying the past few decades, wisely claimed that science had done little for Man in this era except to create for him fresh moral problems. Those who believe that the moral stability of a nation depends on the stability of its women's waist-lines were shocked by a Paris report that Spring silhouettes would be wedge-shaped. Where, they asked, would the thin edge of the wedge be found? However, this was not the most important matter in vogue. In the Far East the Chinese Communists were preparing ambitious plans. And fellow-travellers from the Near East made a minor demonstration at Liverpool Street when their engine driver brought them in from Southend three minutes ahead of schedule. If similar schemes had been put in train earlier, we reflected, British Railways might not have dropped £10½ m. in their receipts for 1949. But apart from this report of failure, the government had fairly cheerful news* to offer during the month. And as the election date had been given as February 23, some thought that by giving away more bacon the Socialists were trying to save their own. With the possibility of



relaxations of controls in the offing, architects were particularly interested in the coming election which, as *The Times* solemnly stated, would "decide whether, in the next stage of British recovery, the Government is to be Conservative or Labour." The most important event in the architectural world during this anxious period was the MOTCP's publication of details of financial assistance to be given to local authorities for reconstruction of war-damaged areas. One ambitious local council advertised at this time for an architect who could control rats, but showed reluctance to pay the piper. And in London most architects must have been impressed by the prize-winning vertical feature, designed by M. and P. Powell and H. Moya to point the way to the Festival of Britain site. This, we hoped, would be a pointer to success.

FEBRUARY

"A gay scarf," said *The Daily Telegraph*, "will catch the eye of the voter." *The Daily Express* tried hard too with: "Put Mr. Churchill back in power and you may expect cheaper cigarettes." But those who expected to hear pre-election Party statements about the building industry were disappointed. And in view of a noticeable general reaction against planning it was hoped that what-



ever government came into power would realize that the alternative to unsuccessful planning was not non-planning but better planning. However, before the excitement of election day, several other happenings captured the public's interest. A British pilot broke the London to Cairo record, the US broke its diplomatic relations with Bulgaria and heavy storms broke over England. There was, of course, the inevitable news of London police swooping, Hindus and Moslems clashing and Paris workers striking. Meanwhile, in Rome the Pope gave our foreign minister an audience and Ingrid Bergman gave her foreign audience a long-awaited "surprise." Equally romantic was the news that an Australian named Josephine wanted to marry her ideal—an architect. Most members of the profession found this difficult to believe but the Aussie kept her tale up and described the profession of her choice as one of home-lovers and citizens of some standing. Those who did not emigrate immediately had the chance of visiting the excellent exhibition at the RIBA, which contained some far from gloomy prints of Denmark and its architecture. Universal satisfaction was felt when the astronomical task of

For modern homes...

The PARKINSON RENOWN GAS COOKER

is again selected for installation in another of the many new housing schemes being erected throughout the country—in this instance by the Doncaster Undertaking of the East Midlands Gas Board.



EXCLUSIVE "BUILT-IN" FEATURES INCLUDE:

1. Automatic oven heat control.
2. Modern hotplate design.
3. Unique tap design.
4. Ample oven capacity.



● A typical example of the Parkinson Renown Gas Cooker installed as an integral part of a modern labour-saving kitchen.



THE PARKINSON STOVE CO. LTD. BIRMINGHAM 9

moving Greenwich observatory to Hurstmonceaux was given to an architect—Brian O'Rorke. The telescoping of Socialist votes at the end of the month brought a little hope to many of us. The election stalemate, it was thought, might lead the government to seek greater popularity by providing more homes and by giving private enterprise a larger percentage of building.

MARCH

Words, not deeds, were expected from the new government, which would obviously have no power to introduce any legislation. But March came in with a lion-hearted claim by Dr. Dalton, the Minister of Town and Country Planning, that he would speed up and simplify planning details. He also introduced us to the "Bye-way Code," which was being prepared to teach townsfolk how to behave in the country. Country dwellers, of course, already knew how to maintain order. At Dulverton, for instance, it was decided that Sunday cricket would be played "to stop boys whistling at girls." This gleaning of country matters must have interested those who hoped to take advantage of the MOTCP's latest recommendation. In an advisory memorandum the Ministry had said that a man should be allowed to build a house and live in isolation, provided he did not make unjustifiable demands on public utilities and agricultural land or disfigure the landscape. The landscape in London was being badly treated at this time, as J. M. Richards pointed out in the ARCHITECTS' JOURNAL, in which he criticized the numerous neo-Georgian office blocks being completed under the MOW's Lessor Scheme. The criticisms he made were not only of designs, but also of the government's folly in expecting an architect to produce a satisfactory building without knowing what type of department was to occupy it. But in spite of the dreary working conditions in preparation for civil servants, there were several moves afoot elsewhere to make life brighter. A hairdresser introduced an H-bomb hair style, which would "explode" from the nape of the neck, a trade paper suggested that street-sweeping should be revolutionized psychologically by the use of brightly coloured brooms, and scented rubber floor tiles came on to the market. The financial year ended with a surplus of more than £560 m. Aspro shares fell sharply.

APRIL

"Omnia aperit!" cried the Romans. They were referring, of course, to the fourth month of the year, and in their enthusiasm they gave it its name which, very roughly translated, means "opening time." What better month could have been chosen for *The Architectural Review's* public house exhibition at the V and A Museum? In the winning designs of the Review's competition, displayed here, could be found some of the best ingredients of the British pub tradition—a

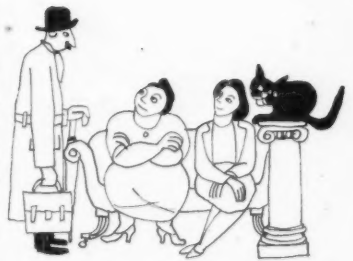


fact not properly appreciated by organizers of temperance societies, who apparently suspected a plot to sell more beer. Doubtless these good souls were delighted with the budget, which put ninepence on the gallon and took nothing off the pint. A sobering matter, but this was, in fact, a sober month, with little of that "uncertain glory" the poet mentioned. Fish rose, snow fell, dockers struck and the Bolivian peso dropped 43 per cent. Oh to be in England!—especially as 1½ m. Scottish Nationalists had just signed the Covenant.

MAY

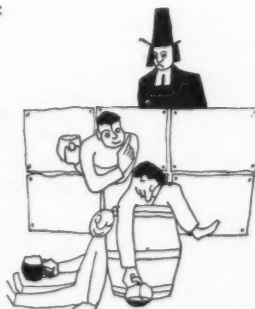
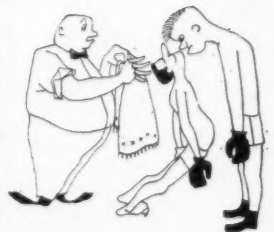
"And after April, when May follows"

What then? Points and petrol rationing ended, an ear was torn off at the Dean of Canterbury's peace gathering and phosphorescent underwear was on view in London. Amid the gaiety of these events, Dr. Dalton introduced what he described as "an act of liberation." It seemed doubtful whether he was wise in freeing small buildings from planning control. However, concern at this concession was overshadowed by the long overdue publication of the reports of the Anglo-American Productivity Team and the MOW Working Party. Also published at this time was the second report of the MOH committee of enquiry into house building. With all these to digest the reader may have missed the distressing prediction in *The Universe* that "there is no reason to believe there will be pianos in the next world." And he may also have overlooked the ruling of the judge who maintained that a woman who expected her husband, on coming home, to kiss first her, then her mother and then the cat was being unreasonable.



JUNE

Four thousand flags were lowered in London on June 2. A day of national mourning? Not quite. Simply a taxi-drivers' strike. One or two rank outsiders kept going, but most of them were driving a bargain off the roads until they had obtained an increase in fares. In the meantime the Royal Engineers dropped part of their Festival Bailey bridge into the Thames, a hotel keeper threatened legal action against the BBC for its "discouraging weather forecasts," and the nation, mopping its beady brow, found it difficult to keep its eye on the ball—even the one Gussie Moran was pursuing at Wimbledon. Heated discussions took place at the NFBTO conference on proposals for nationalization of building, (suggesting that all was not well in the trade). In the political world a dog showed intelligence by sinking its teeth into a Communist orator and licking the long arm of the law which came to investigate. And in the field of sport the "tone" of London boxing matches was said to have been improved by a ban on the wearing of braces by seconds.

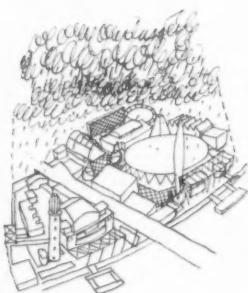
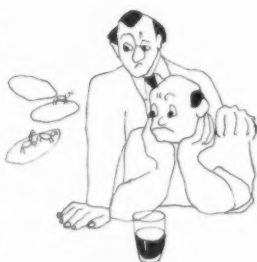


JULY

Once again people saw flying saucers in their cups and *The Sunday Dispatch* published a photograph of one of the invaders. Was another world watching us? We hoped not, for we were not at our best. A new dock terminal, which was opened by the Prime Minister at Southampton, was a poor example of contemporary building. And the Lessor block in Davies Street (a travesty of 18th century architecture), where the British Council set up its headquarters, was hardly a good advertisement for British art. This was all the more unfortunate because, apart from possible extra-terrestrial spectators, we were being watched by architects from other countries. Alva Aalto, Ernst May and Frank Lloyd Wright all paid us a visit. And Mr. Wright nearly deflated our pride in that remarkable building, the Royal Festival Hall, which was rapidly taking shape, by calling it "a gamble that might succeed." However, as the reader will not remember, this was a great time for white fish, which were recognised by the government as the nucleus of an industry. Flying sorcerers might have respected us for this truly national interest in dumb things. But we understood from Gerald Heard that they were more interested in America and the danger that atom bombs might explode the sun. If this was so, they were probably relieved by President Truman's statement that the bomb would not be used at present. So were those who had not prepared themselves by reading the published pamphlet on atom defence. How could we make such preparations with so many things to distract us? Exports and imports had established a new record, the Argentine had threatened to make us vegetarians and lovers of a mystery were brooding over the story of two dentures found under a seat in a Beckenham cinema after a performance of *Kiss in the Dark*.

AUGUST

These, as someone once said, were "the times that try men's souls." The Atomic Energy Commission published a report on the effects of atom bombing, the West Indies team won the fourth Test Match and for a time Paddington Pool was in danger of being overshadowed by flats. But in spite of these solemn matters, and the fact that the embarkation of British troops for Korea had brought the war in the east to our own doorstep, we sometimes allowed ourselves, like Tennyson's miller, to smile a slow wise smile. First, there was the open letter in *Soviet News*, which pointed out that architects had a special reason for wanting peace and asked the RIBA Council members to sign the Stockholm Appeal. Then there was the discovery that the South Bank exhibition site received twice as much atmospheric pollution each month as similar sites—a fact that the anti-Festival Press failed to exploit. And as usual the printed word provided a little unintentional amusement. *Cycling* pointed out that the service period was "the



perfect opportunity for eighteen months' serious cycling." And a national newspaper printed a curious story about a "Red plot against British footballers" when a football, inscribed with certain sportsmen's signatures, was said to have sailed from Southampton to Poland on a goodwill trip.

SEPTEMBER

There were few signs of Autumn nodding this month. The government soon announced its policy for a change over from civilian to war production and, in spite of a statement from Korëa that the worst was over, someone apparently decided it was time to call an official end to the war with Germany—just to avoid possible confusion. Mr. Acheson's request for a world security patrol was probably appreciated by Norfolk publicans, who had been insured against assault, and by the BBC, which had been grazed by a brick thrown by a charwoman. In contrast to this violence was the stoicism of the British public, which waited patiently for the government to pour cold water on its hopes of peace and plenty and was a little surprised at being offered more soap. This concession did not wash with many Londoners, who marched grimly to work on empty stomachs. (The absence of buses and gas pressure made Mr. Isaacs see Red plotting at work.) Not all can have been amused to hear, at such a time, that a panel of architects was to be appointed for the design of Festival bus shelters. Would these, many wondered, be convertible to coffee stalls during strikes? The question was rhetorical and went unanswered. And those who went on foot through Westminster and necessity had rewarding views of the north-west side of the Abbey and of the front of Rickard's Central Hall—views which had been opened up by the demolition of Westminster Hospital.



OCTOBER

One of the most important events for architects in October was the formation of the International Council for Building Documentation, an organization which, if successful, would enable members of the profession to make best use of their reading time. During this period there was little to read anyway, as a dispute in the London printing industry caused many weekly publications to be suspended or to be produced in ingenious but abbreviated forms. This gave us more opportunities to concentrate on the daily papers, many of which were running special articles giving the Truth About Russia, and all of which were grumbling about the impending rationing of newsprint. There were also criticisms of the increased rail and road fares in London—an innovation which transported few people with delight. The laugh of the month was provoked by the BBC, which banned a second relay of Val Gielgieud's innocuous play, *Party Manners*, because of its political implications. And there were many broad smiles at the opening of the new



neo-Gothic House of Commons, a building which aroused some controversy for its anarchical design, but which many dismissed as excusable because as an architectural freak it would be the only one of its kind in the country.

NOVEMBER

"Peace hath her victories," said the poet. But Dr. Hewlett Johnson made the point more strongly. "Woe betide any!" he cried, "who challenge a thousand million peace lovers to war." With this fearful threat as their motto and with olive branches unsheathed, members of the World Peace Conference, heading for Sheffield, were deviated to Warsaw by the British government. A London



newspaper, obviously affected by this clamour for peace, graciously apologized for calling the Russians "sub-human" and explained that it had meant "sub-British." But the world of art, as well as that of politics, experienced a minor sensation in November, when Salvador Dali revealed more secrets of his life. "My moustache is my antenna," he said: "It picks up vibrations from the air." Less fortunate people, who rely on mains or battery sets, heard of the Dutch Royal visit to England, MacArthur's vain "Home by Christmas" promise, and parliament's decision, made after an outcry from the Sunday Observance Society, that the Festival fun fair in Battersea Park would not be open on the Sabbath. Of great interest to the architect this month was the RIBA's publication of a report on the position of members of the profession in private practice. Shortly afterwards the JOURNAL printed the first of a series of discussions between its editors and the architect of an illustrated building—a move towards that freedom of criticism essential to the art of architecture.

DECEMBER

The time of goodwill was nearly upon us when William Faulkner claimed: "There are no longer problems of the spirit. There is only the question: 'When will I be blown up?'" Hardly an appropriate seasonal message. But it was not difficult to see his point: when President Truman spoke of the atom bomb and Mr. Attlee flew hurriedly to Washington. The Press attempted to talk us into a miserable Christmas by working out the cost of festive merriment. (*The Daily Worker's* survey was headed "Jolly Christmas—At £100 a Time.") And it was by no means easy to look forward with eagerness to the hoped for achievements, architectural and otherwise, of our Festival year. Looking back over 1950 we felt that the mass of documents on building matters contained a great deal of valuable advice which, if acted upon, could solve many of our architectural problems. But would we be able to put this advice into practice? Most of us felt more uneasy than ever when Russian starlings, with pink legs, landed in Birmingham. Were they, as J. B. Morton suggested, the tiny pilots of flying saucers? We tried to forget our uneasiness by laughing at Scotland Yard's decision to "leave no stone



unturned" in following up the Westminster Abbey theft. But the BBC reminded us that the subject was not funny and left us on the brink of a New Year with little gaiety. And then, if you remember, along came Miss Lengyel, of America, with the offer (at £50 a time) of making us magnetic men, each with a threat, a promise and an element of mystery. With these three things we ought to be able to face anything the year has in store. Let me know if you want the address.

PERSONALITIES

ASTRAGAL is pleased to raise his hat in congratulation to Andrew Graham Henderson, first president of the RIBA practising in Scotland; to H. J. Whitfield Lewis, holder of the new post of Principal Housing Architect to the LCC; to his Housing Division (formed last year) for its imaginatively designed estate at Wimbledon; to the MOH for awarding housing medals for schemes throughout the country, and to the MOE, for its bulletins on reduction of building costs.

Also to the Bristol Society of Architects, for its first century, to Messrs. Harrison and Sons (printers of the JOURNAL), for their second, and to Raglan Squire, who has just completed his twelve months as the JOURNAL's guest editor; to the latest Little theatre, *The Watergate*, and to water boy, Eric de Maré for his special *Review* number on the Thames; to Sir Laurence Olivier and Brian O'Rourke for their moving performances, the first in *Venus Observed* and the second at Greenwich observatory; to the masterly *Builder* survey of conditions in the Canadian building industry, and to the master builder, W. E. Rice, present mayor of Westminster; to Arthur Bryant, for giving us *The Age of Elegance*, and to the Georgian Group and the SPAB for trying to preserve some of it. Also to the film actor of the year, Alec Guinness, and to Powell and Moya for showing what two can do at Pimlico; to the RIBA for its enquiry into private practice which bore good fruit, and to its ex-publicity officer, George Marfell, who is now growing it; to J. M. Richards for his criticism of the Lessor scheme for office blocks, and to the government offices at Ealing Common, the least Lessor evil.

ASTRAGAL also commends the Gowers committee, defenders of splendour, and greets the Girdwood with praise. And finally, mention must be made of Graham Dawbarn, awarded the RIBA Distinction in Town Planning; Pierre Sonrel and Douglas Rowntree, designers of the Old Vic's new stage and auditorium; and the AA, for its International Summer School.

And now ASTRAGAL turns to the less pleasant task of listing those to whom he cannot even so much as touch his hat: The promoters of the Coventry Cathedral competition, who did not issue conditions until a day or two before the last date of entry; the allotments committee which will not give up its cabbage patch in front of the Royal Crescent, Bath; organizers of the RIBA's public exhibitions (as opposed to the excellent displays held in Portland Place); and those in favour of a monumental students' hostel being constructed on the north side of Mecklenburgh Square.

Finally, switching back from blame to praise, ASTRAGAL recalls that he always concludes his review by naming the architectural Personality of the Year. This year the award must undoubtedly go to Hugh Casson, Director of Architecture to the Festival of Britain, who is principally responsible for the architectural adventures now going on on the South Bank and elsewhere. He has carried a larger burden, and carried it more gracefully, than anyone in ASTRAGAL's experience.



A Site to be Visited in 1951

The South Bank exhibition site will not, of course, be the only feature of interest to architects visiting this country during the Festival period. The Poplar "live" architecture exhibition will be another attraction for them. But the South Bank site, shown above, with the main structures almost complete, will remain the focal point of this Festival year, not only to the average visitor but to architects all over the world, representing, as it does, the climax of British endeavour and enterprise. In the last New Year

number of the JOURNAL this section of the South Bank was shown as an empty site to be filled. Now, at the start of another year, the JOURNAL offers its congratulations to all the Festival architects, designers and builders who have accomplished so much over the past twelve months, and expresses the hope that all architects visiting the exhibition will profit not only from a study of the exhibits but from a study of the new structural techniques which so elegantly house them.

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*MESSAGE TO THE ARCHITECTS' JOURNAL FROM THE
MINISTER, THE RIGHT HONOURABLE R. R. STOKES, M.P.*

I am delighted to send my greetings for the New Year to all the readers of THE ARCHITECTS' JOURNAL. The problems of reconstruction after six years of war set the building industry and all those associated with it a tremendous task. Not only were there large areas that needed complete rebuilding but, in addition, many of the people who were to guide and plan that rebuilding had had their training cut short or had lost several years vital experience in the day-to-day duties of their profession. The magnitude of the task was a challenge. Now, on the threshold of 1951, we are beginning to see something of the response to that challenge. I am happy to find that there has been no drying up of that spring of ideas which is behind all that is best in our architecture. The factories, schools and houses that have been built since the war all show that in our modern buildings we have not lost the art of striking the delicate balance between good design and utility. Whether the example is a new power station or the new Chamber of the House of Commons there is in the design and craftsmanship that same blending of the imaginative and the practical that is so characteristic of our native genius.

But we must not rest on our laurels. Fresh and attractive ideas are ever emerging. I feel that for the future there is much to be learnt from the two important reports which were published during 1950 by the Building Working Party and the Anglo-American Productivity Team. I am particularly impressed by the possibilities of speeding up the whole operation of building without any loss of quality by means of "pre-planning." I know this means a big change of attitude on the part of the client, the building owner. The architect who will command the respect of the owner is in a strong position to bring about this change of mind. In this, as in so many other fields, organisation means efficiency, and I think that the campaign for "pre-planning," which I hope to see in full swing in 1951, will have the full support of you all. There is also the policy of practical experience on the site for all architects in course of their training.

These are but two of the recommendations in the reports ; there are many others well worth careful study and I am confidently expecting that they will be brought into operation in 1951. New techniques, new materials, new machines, all these can play their part in increasing productivity and reducing costs. I look especially to the architects to supply the initiative and the imagination which will ensure that we reap a full harvest.

Good luck to you all and a Happy New Year.



ROYAL GOLD MEDAL

RIBA Award to Vincent Harris

The King, on the recommendation of the RIBA, has awarded the 1951 Royal Gold Medal for architecture to E. Vincent Harris, O.B.E., R.A., F.R.I.B.A. Mr. Harris was elected a Fellow of the Institute in 1914, and became a Royal Academician in 1942. The late Professor Reilly once said that no other living architect has entered and been placed in so many competitions. Perhaps the most important competition which Vincent Harris won was that for a city library and extension to Manchester Town Hall in 1927. The buildings were completed in 1938. Amongst work now being completed are the new Government offices which lie between Whitehall and the Embankment.

RIBA

Recent News from the Council's Minutes

The following appointments have been made: *University of London Architectural Education Committee*: RIBA Representatives for year 1951-52: Kenneth M. B. Cross and Anthony Chitty, Chairman and Vice-Chairman of the RIBA Board of Architectural Education.

Building Research Congress, 1951: RIBA Delegates: Frederick Gibberd, Vice-President; and Lister P. Rees, Chairman of the Architectural Science Board.

Royal Sanitary Institute Health Congress, Southport, April 23-27, 1951: RIBA Delegate: Leonard Rigby, President of the Southport Architectural Society.

BSI Committee TIB/1—Grading of Timber: G. Newell in place of the late A. H. Barnes.

Ministry of Health Housing Medal, 1951.

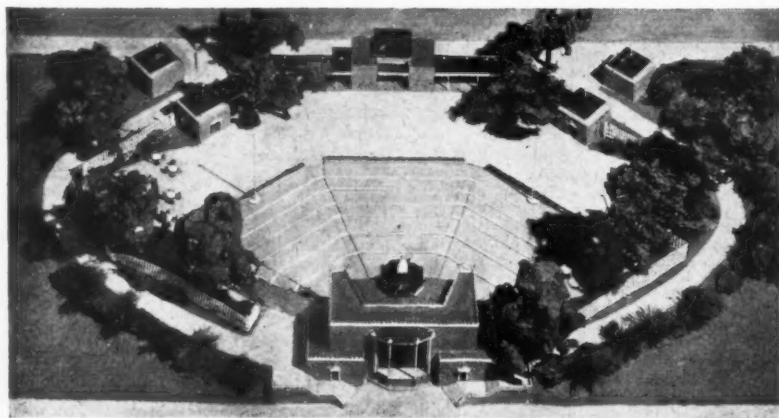
At the request of the Ministry of Health, the RIBA is again taking responsibility for the administration of the appointment of chairmen and architect-members of the regional awards committees. The Allied Societies have already been asked to nominate architect-members for the committees. The Council made the following appointments of chairmen:—

Region 1: Northern Headquarters, Newcastle: F. Austin Child. Region 2: East and West Riding Headquarters, Leeds: Hubert Bennett. Region 3: North Midlands Headquarters, Nottingham: T. N. Cartwright. Region 4: Eastern Headquarters, Cambridge: James Macgregor. Region 5: London: Sir Lancelot Keay. Region 6: Southern Headquarters, Reading: A. L. Roberts. Region

DESIGNS FOR THE '51 FESTIVAL



Above is an aerial view of part of Battersea Park, showing the preparations being made for the Festival Pleasure Gardens, designs for which have been prepared under James Gardner, the chief designer for the area. Below is a model of the open air theatre, designed by Dalglish and Pullen. This theatre, together with a riverside tea pavilion designed by the same architects, will become permanent features of the Park after the Festival has ended.

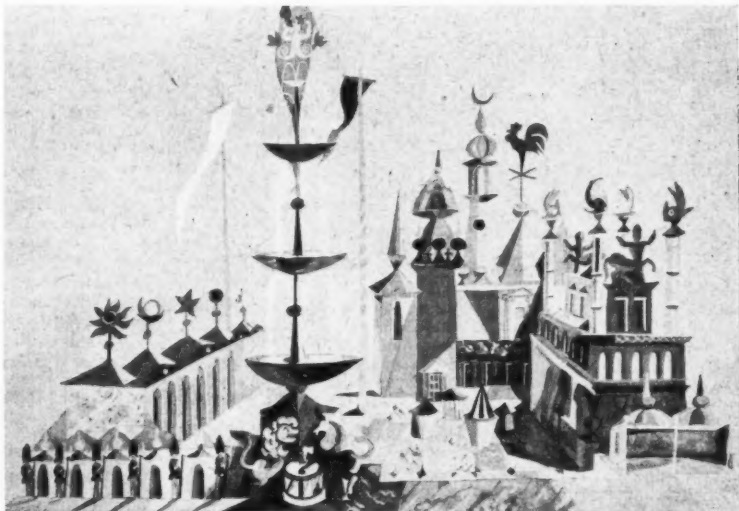
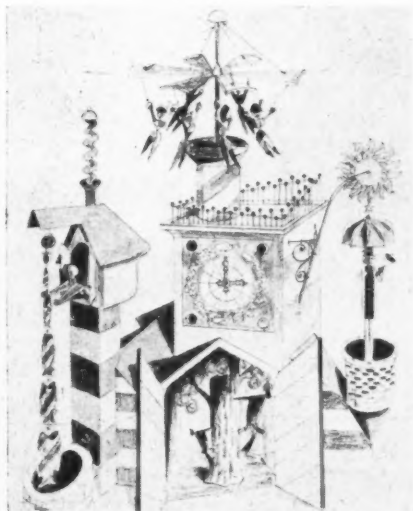


P L E A S U R E G A R D E N S , B A T T E R S E A P A R K



John Piper and Osbert Lancaster are seen above at work on a model of their designs for the main vista to the Festival Pleasure Gardens. This feature consists of a succession of pavilions and arcades, towers and pagodas, terraces and gardens, lakes and fountains, and stretches for about 250 yards across the gardens from the main carriageway. John Piper is responsible for most of the buildings in this main vista. The pavilions are an echo of eighteenth-century follies and of Regency Brighton; other parts are reminiscent of Gothic and Chinese styles. Osbert

Lancaster has designed the entrance to the main vista from the main carriageway and is responsible for all the ornamental lakes and fountain displays. Below, left, is the Festival clock (its new name replaces the less dignified, but more appropriate title, "crazy clock"), the work of Lewitt-Him, the mural painters. The entrance to the amusement park, below, right, has been designed by Hans Tisdall, the still-life and landscape painter, who is also responsible for the three buildings round the entrance courtyard. The 90-ft. fountain is by James Gardner.



7; South-Western Headquarters, Bristol: G. D. Gordon Hake. Region 8; Wales Headquarters, Cardiff: Sir Percy Thomas. Region 9; Midlands Headquarters, Birmingham: G. B. Cox. Region 10; North-Western Headquarters, Manchester: Professor R. A. Cordingley. Region 12; South-Eastern Headquarters, Tunbridge Wells: A. B. Knapp-Fisher.

In addition the Council appointed the following as architect-members for the awards committee for Region No. 5, London:—C. E. Culpin, A. W. Kenyon, Edward Maufe.

Allied societies have been asked to give effect to the desire of the Minister of Health to include a number of last year's medal winners as members of committees.

LCC

Steam Pressure for Central Heating Rejected

The LCC has heard a report from its Housing Committee listing the disadvantages of steam heating.

In all LCC housing schemes provided with central heating, either completed or in course of completion, low-pressure hot water is being used. But, on May 9, 1950, a motion was passed by the Council instructing the Housing Committee "to consider and report on the relative merits of employing low-pressure heating systems as compared with steam pressure."

The committee condemned steam heating on four grounds: safety, efficiency, economy and comfort. It stated that: (1) there are serious explosion risks inherent in a steam system, and serious burns can result from contact with the hot surfaces of steam apparatus; (2) although there is no difference in efficiency in the production of heat between steam and low-pressure hot water, with the former there is a loss of efficiency at night, due to condensation, and an extravagant consumption of fuel occurs early each morning; (3) upkeep and maintenance costs are higher, a steam installation has to be insured and constant attention by skilled stoking staff is required; (4) the high temperature of steam apparatus, usually over 200° F., tends to make the atmosphere of rooms oppressive, partly due to the heating of dust, and the blackening of wall surfaces is accentuated.

The committee concluded by saying that "in the light of experience we are satisfied that for the normal requirements of the Council's housing estates the low-pressure heating system is not only more suitable, but more economical and safer than the steam-pressure heating system."

NAIROBI

City Hall Competition Results

The following are the prizewinners in the competition for a city hall sponsored by the City Council of Nairobi:—

First: C. A. Levick, P. H. Connell and L. T. Croft of Durban, South Africa. Second: A. Ball of London. Third: R. S. Cobb, H. D. Archer and H. Q. Scammell of Nairobi, Kenya. Highly commended: R. Dickinson of Khartoum, S. Rowland Pierce of London. Commended: Eugene J. D. Anos of Cape Town, South Africa; Ferdinand Silvan of Sydney, Australia; H. Cullerne Pratt and Ronald P. Gray of London; J. O. P'unkett O'Callaghan of London.

The assessor, L. W. Thornton White, considered the fifty-nine designs submitted were of a high standard generally.

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

ERNEST WATKINS

The Architect and Current Affairs

Architects are not, as such, directly interested in the activities of the Rent Tribunals set up under the Landlord and Tenant (Rent Control) Act, 1949; none the less, their affairs, and those of their clients, are affected by the decisions given by these tribunals. Two recent cases cover a wide ground.

The first is from Birmingham. The owners of six badly damaged houses devised a plan to convert these houses into eighteen flats at a cost of £18,000, and they completed these arrangements to the extent of finding eighteen people who would take fourteen year leases of the flats when ready. They then entered into an agreement to which both the builders and the eighteen proposed tenants were parties. Under that agreement, of the £18,000 payable to the builders, half was found by the owners and half by the prospective tenants, at the rate of £500 each. That was in 1948. The work was done, the flats completed and the eighteen leases signed. Then the 1949 Act was passed. That prohibits the payments of a premium in consideration of the grant of a lease over premises to which the Act applies and empowers a tenant who has paid a premium to apply to his Rent Tribunal for an order which, in effect, allows him to offset any premium he has paid against future payments of rent under the lease. Some of the tenants who had paid their £500 applied to the Birmingham Rent Tribunal for such an order and the tribunal granted their application. The owners applied to the High Court to quash the order made by the tribunal.

The point the High Court had to consider was whether this payment of £500 by each prospective tenant was, in fact, a premium paid for the grant of a lease, and the Court came to the conclusion that it was not. It based its finding on the fact that the word "premium" has in law a particular and a restricted meaning. It is a payment made to a landlord on the grant of a lease and, while the payment need not be made to the landlord in person—it might, for instance, be paid to someone else in discharge of a liability owed by the landlord—the payment must ultimately go to the landlord's credit. In this case it did not. The landlord was liable to pay £9,000 to the builders, no more. The builders had been working for two sets of employers, the landlord and the eighteen prospective tenants, and neither was liable to the builder for the other's share. In that event, the money paid by each tenant to the builder could not, in the view of the High Court, be a premium paid to the landlord.

To the layman there may seem to be a certain element of hair-splitting in this conclusion. On that I would say nothing, but I would point out to those architects who have clients interested in conversion schemes and hitherto reluctant to risk the dangers of the 1949 Rent Control Act that here, in this decision, is evidence that there are alternative methods of carrying such a scheme through, some of which may walk through the 1949 Act as though it were an insubstantial spectre.

The other case came from Sidmouth. There, a former boarding house, with a rateable value of £70, had been converted into four flats. The one concerned in the case had been let at £200 a year and separately assessed at £80. The tenant applied to the tribunal for a reduction in his rent and obtained it. Objection was taken, on the grounds that, since the flat was assessed at £80, the tribunal had no jurisdiction (outside London, the upper limit of its jurisdiction is property assessed at £75). The reply of the other side was to claim that the original rateable value of the whole building governed the case; that was below £75, and so the tribunal had jurisdiction. The High Court ruled against that. This case is something of a special case, but it does illustrate the fact that the value of work done on a conversion scheme may take the property out of the jurisdiction of the rent tribunals through an increased assessment.

The third case I would like to mention this week affects another line of property owner's liability, his liability to people using the highway adjoining his building. In this case, *Mint v. Good*, a boy of 12 was walking past a house where the front garden of the house was separated from the road by a low wall. The wall collapsed and the boy was hurt. The owner was sued and he pleaded that the house was let on a weekly tenancy and it was for the tenant to repair the wall. I think the effect of the Court's decision (which was in favour of the injured boy) can well be shown by two quotations from the judgments in it. Lord Justice Denning: "I venture to doubt whether in these days a landlord can exempt himself from liability to passers-by by taking a covenant from a tenant to repair the structure adjoining the highway." Lord Justice Birkett: "It is at least some satisfaction to think that . . . an innocent member of the public injured on a highway through no fault of his own by a defect in premises may, by our law as now interpreted, be able to recover from the landlord."

And would not these views hold equally if the defect and the injury occurred while building work was in progress?

DIARY

The Arrangement of Large Orchestras and the Design of Concert Platforms. W. A. Allen and Hugh Creighton. At RIBA, 66, Portland Place W.C.1. (Sponsor, Acoustics Group of the Physical Society.) 5.30 p.m.

JAN. 18

The Plastics Industry. J. C. Swallow. (Three Cantor Lectures.) At RSA, John Adam Street, Adelphi, W.C.2. 6 p.m.

Until JAN. 22

Dry-rot in Timber. W. P. K. Findlay, of Forest Products Research Laboratory. At RSA, John Adam Street, W.C.2. 2.30 p.m.

JAN. 24

Housing and Planning Problems in Slough. P. W. Macfarlane. At 13, Suffolk Street, S.W.1. (Sponsor, HC.) 6 p.m.

JAN. 30

Thoughts on Architecture Today. Michael Waterhouse. At the University of London: Senate House. A course of two lectures. 5.30 p.m.

FEB. 8 AND 15

Five Years' Housing in a Country District. Mrs. Spurgin. At 13, Suffolk Street, S.W.1. (Sponsor, HC.) 1.15 p.m.

FEB. 13

The Architecture of Transport. Exhibition at the RIBA, 66, Portland Place, W.1, showing projects in this country and a selection of material from abroad. Weekdays 10 a.m. to 7 p.m. Saturdays 10 a.m. to 5 p.m.

FEB. 22 TO MAR. 22

A regular feature of the JOURNAL'S New Year issue is a selection of the best buildings of the year just ended, with a critical commentary on them. This feature was contributed for no fewer than twenty-two years by Prof. Sir Charles Reilly until his death in 1948. He established in it a tradition of outspoken criticism, which the JOURNAL has felt all the more encouraged to continue by the support readers have given, on several recent occasions, to the JOURNAL'S own plea for regular criticism of current architecture. In this particular article, since the buildings it deals with are, in the writer's view, the best buildings of the year, the critical comments can be set in each case against the compliment implied by the building's inclusion.

Right, flats in Pimlico for Westminster City Council, by Powell and Moya



BUILDINGS OF THE YEAR : 1950

Reviewed by J. M. RICHARDS

ONCE again, austerity dominates the year's architecture, through the necessity imposed on every architect to think of cost first, last and all the time and, in addition, through the limited types of building which, because of the national economic position, it is permitted to put up. It has often been said that the need to build cheaply does not necessarily produce worse architecture; that good design may indeed be fostered by the disciplines economy imposes. That is true as a principle, but in practice a point is soon reached, in an age as economy-ridden as our own, when preoccupation with cost becomes an inhibiting rather than a beneficial influence, making a virtue out of meagre finishes and restricting the freedom of the architect's choice of plan forms, structures and materials—to say nothing of the way it restricts his freedom of imagination.

That is the handicap under which contemporary architecture suffers and all critical comment must make allowances for it. On the other hand, it must not be forgotten that an architect's success in producing a cheaper solution to a given problem than any previously found may be a triumph professionally, but architecturally may even be a disaster. Architecture's other handicap—the limited types of building for which licences are granted—simply means that a review of the buildings of the year is confined, with very few exceptions, to a review of housing in its various forms, of industrial buildings and of schools.

To begin with housing: London has this year seen the completion of the first part of one really distinguished scheme—Powell and Moya's Pimlico flats, which have introduced a welcome breath of elegance and gaiety into a particularly dingy



Above, flats for Lewisham Borough Council, by Maxwell Fry, Drew and Partners; right, flats for Chelsea Borough Council, by Edward Armstrong.

FLATS



quarter of London. The street front of the first completed block, shown in the illustration, has the sort of modelling appropriate to a façade that will always be seen in oblique perspective rather than in elevation. The detailing is precise and inside the balconies and the glass-enclosed staircases at the back (which look very romantic when lit from within at night) there is a bold use of clear, strong colour.

Some of the wall surfaces around the entrances at the foot of these staircases have not worn well; they are shabby after only a few months. The problem of finishes to stand the hard usage of situations like this—especially in low-rent housing—has not yet been solved, but perhaps it cannot be solved until more money is available. A striking feature of the Pimlico scheme is the greenish glass-enclosed tower—a heat accumulator from which hot water, discharged as waste from Battersea Power

Station across the river, is distributed to the flats. The base of the tower is faced with granite road-setts, providing a splendid textural contrast to the materials used elsewhere and especially to the tile and glass engine-house alongside.

The only other scheme that approaches the distinction of the Pimlico one is that at Lewisham by Maxwell Fry, Drew and Partners. It, too, uses colour boldly—a clear yellow brick contrasted with white concrete balconies and window surrounds, and where (on the façade not shown in the photograph) windows are grouped within a concrete frame, the wall panels between them are brightly painted. The modelling is vigorous, as the illustration shows, appropriately expressing the box-frame construction used. The scheme is notable for the careful design of the lamp-posts and other exterior details.

In the planning, good use has been made of a not very promis-



Left, flats at Lambeth, by G. Grey Wornum; below, flats at Acton, by Arthur Kenyon.



ing site on a main traffic route. Different blocks are of different height, bringing a welcome degree of visual variety to the whole—a virtue that the Pimlico scheme will also have when finished. The next two schemes illustrated lack this advantage. The monotony of rows of parallel blocks of more or less identical height—producing a barrack-like effect even when the detailed design, as here, is above the average—is a common defect in high density urban housing, though often a defect imposed on the architect by circumstances. It is a hopeful sign that the recently published designs for LCC housing in the Putney-Wimbledon area (the first to come from the Architect since he took over from the Valuer) get right away from this practice and include in the same scheme buildings of different heights ranging from two to eleven storeys. At last the LCC is setting a lead to others, as an organization with its

resources should be able to do, and in a couple of years' time LCC flats will be qualifying for inclusion in this annual review—which they have not done since the war.

The two schemes—at Chelsea by Edward Armstrong and Lambeth by Grey Wornum—are included as being about the best of a number of good, workmanlike housing jobs that private architects have done for various Metropolitan borough councils—jobs that, without the enterprise and imagination shown in the first two schemes illustrated (which are also by private architects working for borough councils) and admitting the defect of their monotonous skylines, set a standard of design of which no borough need be ashamed. The Chelsea scheme has a higher density (256 to the acre) than I would consider wise, and than most people now regard as desirable, but both schemes have the dignity that specially belongs to



FLATS

Above, flats at Lincoln, by P. F. Burridge, City Architect; left, flats at Hull, by Andrew Rankine, City Architect.

well-massed brickwork; they are neatly detailed and thoughtful in their fenestration. To them is added, as the last London example, a job of decided character at Acton by A. W. Kenyon; again a workmanlike use of brick and well studied proportions.

One has become accustomed to associating well-designed flats only with London, plus occasional examples (see last year's article) from Coventry and Glasgow. It is encouraging this year to find some of the smaller provincial cities undertaking high density housing schemes as a change from the eternal cottage estate, thereby preserving an essentially urban character. Illustrated above are two exceptionally pleasantly designed examples from Lincoln and Hull. They are all the more welcome for coming from the City Architects' offices at these two places, from which good design can

spread its influence widely. The Lincoln scheme has a somewhat Swedish character, and much of the charm and humanity we associate with Sweden. They both show, incidentally, that it is not necessary to have a flat roof to be modern.

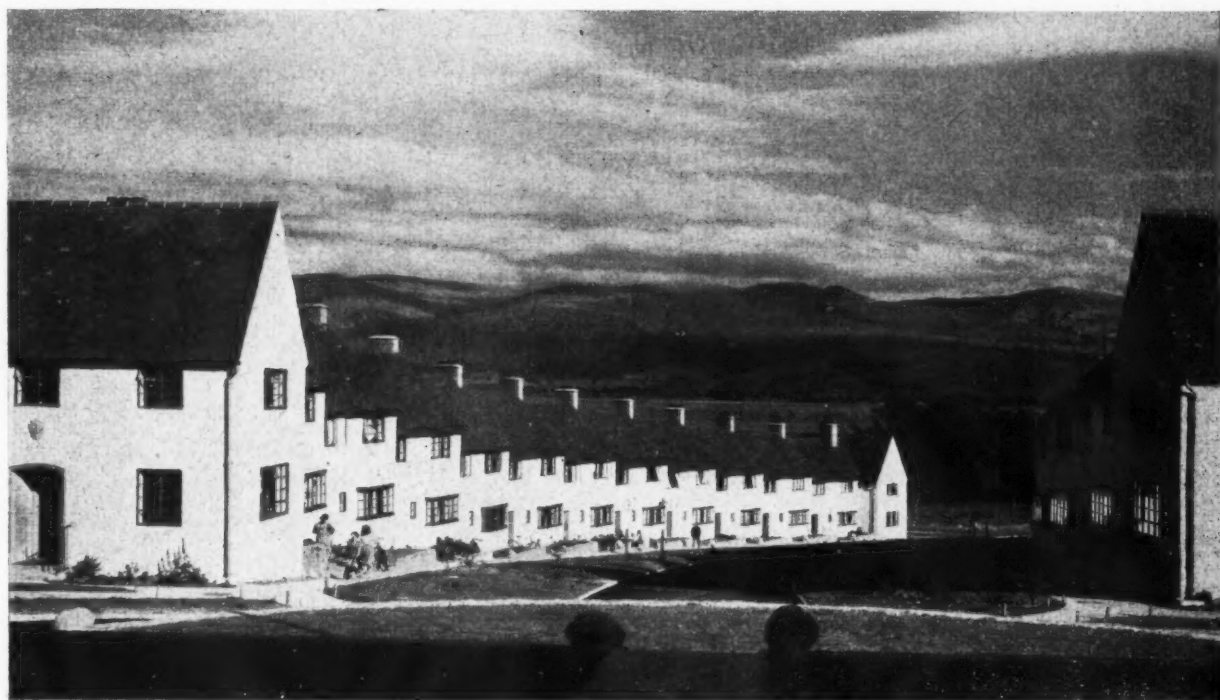
Every year more housing schemes seem to include maisonettes. They are economical to build to nearly the same density as flats and can yet provide some of the independent feeling of a separate house—of having one's own front door and going upstairs to bed. The maisonette block at Wandsworth, by Clifford E. Culpin (at the foot of the facing page), though somewhat skimpily detailed, has a pleasant domestic character and a scale that is properly midway between that of the block of flats and that of the row of houses.

Cottage housing, being so large in quantity, must be represented on these pages by no more than a couple of examples



HOUSING

Left, houses at King's Langley, by Yorke, Rosenberg and Mardall; below, housing at Beaumaris, Anglesey, by S. Colwyn Foulkes; bottom, maisonettes at Wandsworth, by Clifford E. Culpin.



of the best work that has been done. There are many other schemes that reach a decent standard and—thanks largely to the educational efforts of the Ministry of Health—that have paid regard to siting and grouping in ways unheard of in council housing before the war. The terrace houses at King's Langley (by Yorke, Rosenberg and Mardall) have in addition to pleasant proportions and scale, a compact urban character. The whole terrace is the architectural unit. The same is true of the scheme at Beaumaris by S. Colwyn Foulkes. It makes effective use of a rising site and introduces colour most successfully, the pebble-dash, cement-finished walls being alternately pink, white, blue and cream.

Many local authorities are now paying attention, in their housing plans, to the special needs of old people. The most approved practice is to incorporate small groups of old people's





HOUSING

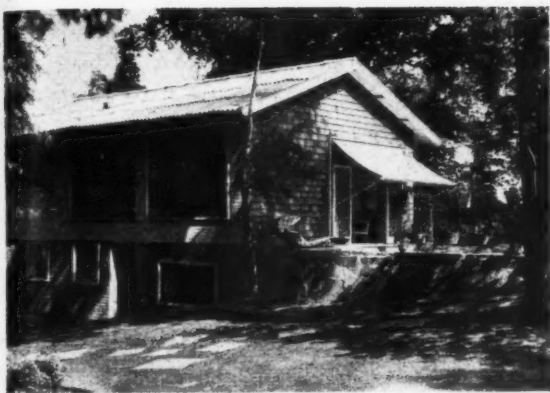
Above, houses for old people at Hull, by Andrew Rankine, City Architect; left, houses for disabled men at Kyles, by Norman and Dawbarn.

houses in the larger housing schemes so that the occupants do not feel cut off from everyday life; an alternative, which has obvious advantages in the way of quiet and the greater ease with which special communal services can be provided, is the quadrangle, following the old almshouse tradition. This plan has been employed in another pleasant job at Hull by the city architect, Andrew Rankine. The space enclosed by the quadrangle seems rather large for the scale of the one- and two-storey buildings—the same accommodation could perhaps have been grouped round a couple of smaller quadrangles—but there is an agreeable informality about the irregular skyline and an unsentimental homeliness about the detailing.

A bungalow housing colony of a rather different kind is that at Kyles, near Watford, by Norman and Dawbarn. The occupants are not old people but disabled soldiers who have been

paralysed from the waist down, but the problem is much the same. They move about in wheel-chairs—hence the bungalow planning—or in specially adapted cars—hence the garages attached to each bungalow. Instead of being arranged round a formal quadrangle, the bungalows are informally disposed in groups of two or three among trees and connected by a winding drive, the site being the park of a smallish Victorian mansion which serves as a community centre. The individual houses are simplicity itself, but a more complex design would have looked fussy on this miniature scale, and their very simplicity produces a pleasantly broad effect when they are looked at together.

Private houses are rare these days, and when they exist one feels it is in itself a triumph on the part of the architect if he has achieved any sense of space and any sort of architectural



PRIVATE HOUSES

*Left, house at Kingston, by Tayler and Green ;
below, house at Chichester by Powell and Moya.*



character in the face of the limitations of cost and floor area imposed on him. The two houses illustrated have, in addition, a real architectural interest. That at Kingston, by Tayler and Green, has been ingeniously designed for enlargement when the restrictions are lifted. Only the kitchen and bathroom, grouped in the centre of the house, occupy their final position and only the side walls are of solid construction, the end walls being a timber framework, allowing for extension without affecting the main structure. The house sits well in a pleasantly planted garden and makes use of the slope of the ground to provide entrances at three different levels. The windows of assorted sizes are not altogether happy from the outside, but are designed to make the best of the view from inside.

The house at Chichester, by Powell and Moya, also occupies

an old garden with good planting—or shares it, rather, with another house built by the same architects at the same time. They are both bungalows, which gives them complete privacy within the high-walled garden (although the site is near the centre of the city) and does not interfere with the outlook of the older houses round. The somewhat insubstantial look, common to most buildings of such relatively light construction, with large windows, is now readily accepted in other types of building—in many of the new schools, for example—and will no doubt be accepted in due course in houses, but the preference shown by many local authorities for traditionally constructed houses must be, at least in part, due to an instinctive liking for their evident solidity. When the pros and cons of the various methods of council house construction are being argued, this quite legitimate prejudice on the



SCHOOLS

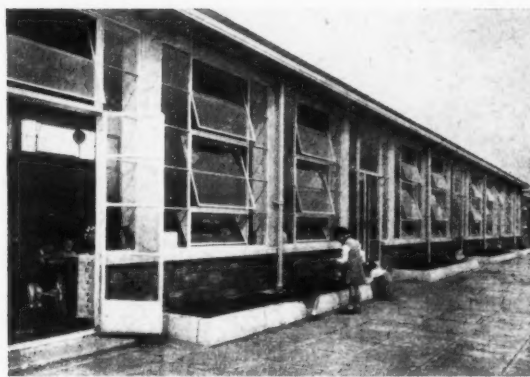
Top, primary school at Hertford, by C. H. Aslin, County Architect; bottom, junior and infants' school at Chingford, Essex, by H. Conolly, County Architect.

part of the ordinary man must not be left out of account; it can only be met by proving to him that a house whose walls *look* thick is not necessarily more comfortable than one where they do not. Meanwhile, private houses like these can serve a useful purpose in establishing good standards of design for non-orthodox construction. As well as being agreeably planned to make the most of the site, the Chichester houses have a precision and elegance that, if it was more frequently met with in non-traditional housing, would do much to conquer prejudice.

In school building Hertfordshire still seems to be holding the lead it established when it got off to such a brilliant start immediately after the war, under the leadership of C. H. Aslin, the County Architect, and his deputy S. Johnson-Marshall. But the average standard is now remarkably high, which is all the

more gratifying seeing that a high proportion of school work comes from public offices. The compelling need to produce a great number of schools quickly and as cheaply as possible has resulted in a refreshing disregard of prejudice and a willingness to experiment. Why the same spirit of enterprise has not been evident in the housing programme—where the same compelling needs exist—is due, I think, chiefly to the more deeply entrenched traditionalism of the house-building industry, and the large number of minor authorities on whom the initiative rests, and partly on the happy accident that the resumption of school building after the war coincided with new educational ideas and policies. When both the clients and the architects are willing to think afresh, anything can happen.

Two Hertfordshire schools are included in this survey. One, at Hertford (top of this page), is another of the series of

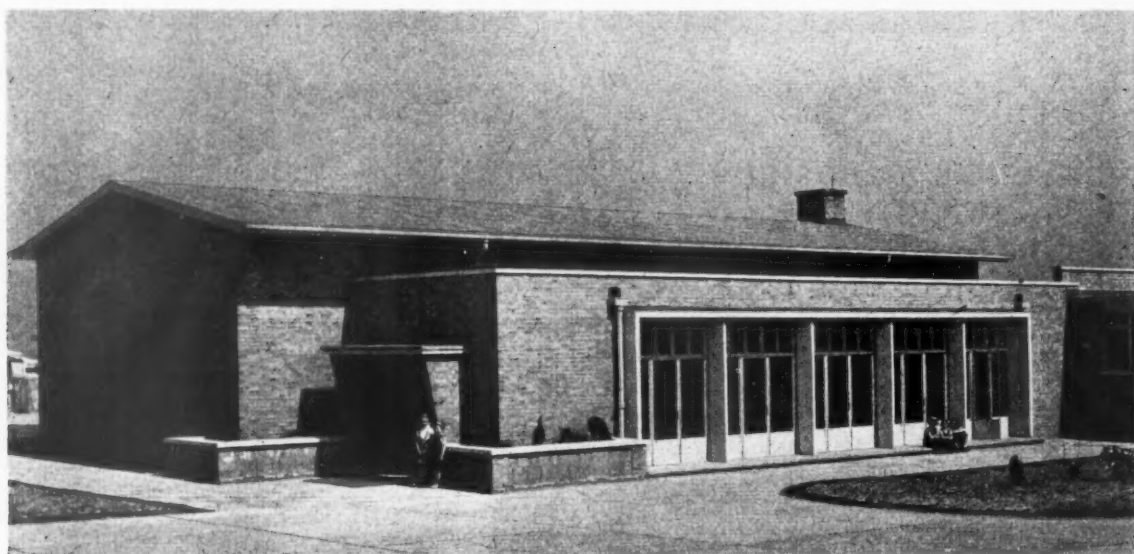
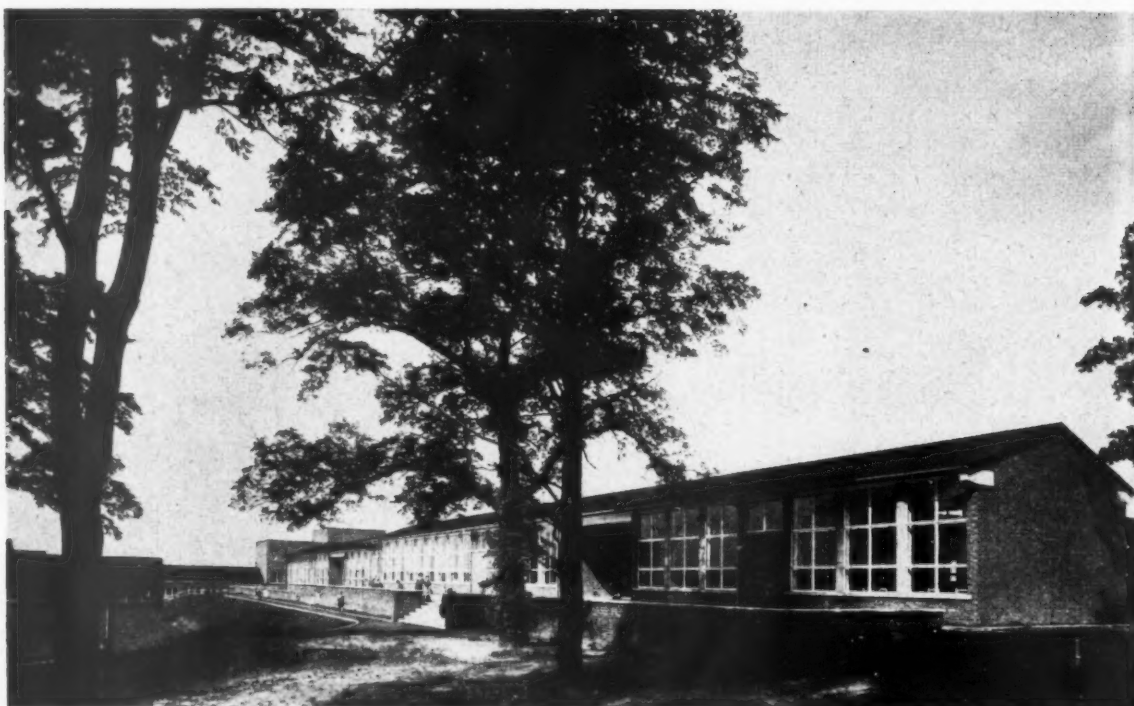


Top, prototype classrooms, school at Oxhey, Herts, by C. H. Aslin, County Architect ; above left, school at Ormesby, Yorks, by Denis Clarke-Hall ; above right, school at Moreton, Cheshire, by W. B. Clayton, Borough Architect.

buildings, based on a system of planning with standard structural components, which the County Architect's office has worked out over a long period, consistently refining the articulation and detail as the lessons of each example have been applied to the next. Their use of colour is a special virtue which a photograph cannot unfortunately show. The other Hertfordshire school (top of this page), at Oxhey, is even more experimental. So far only prototype classrooms have been built. It is the first of a number of two-storey schools, but the real experiment consists of eliminating finishing as a separate operation, the wall panels—aluminium extrusions and laminated plastic sheets—being themselves the finishes. It is an experiment in the right direction, though the architects, I imagine, would be the last to claim that, at Oxhey, any finality has been achieved as regards appearance. There is no logical

reason why an absence of surface modelling should be disagreeable, and the next stage, if the experiment is regarded as successful practically, must be to see what more expressive visual effects—what characteristic rhythms, especially—most naturally arise out of it. At the moment the rhythms seem to be both vertical and horizontal at the same time.

Essex has lately begun to rival Hertfordshire in the speed of her school output, demonstrating again the value of efficient organization and of laying down long-term production plans. The new Essex schools are structurally more traditional—mostly brick and reinforced concrete—but the County Architect, Harold Conolly, and his staff have worked out a straightforward unpretentious idiom in these materials. Though the detailing is sometimes a little heavy-handed, their freely-planned, one-storey type of school—like the one at Chingford



Top, primary school at Seacroft, Leeds, by R. A. H. Livett, City Architect; bottom, infants' school near Wigan, by Lancashire County Architect's Department.

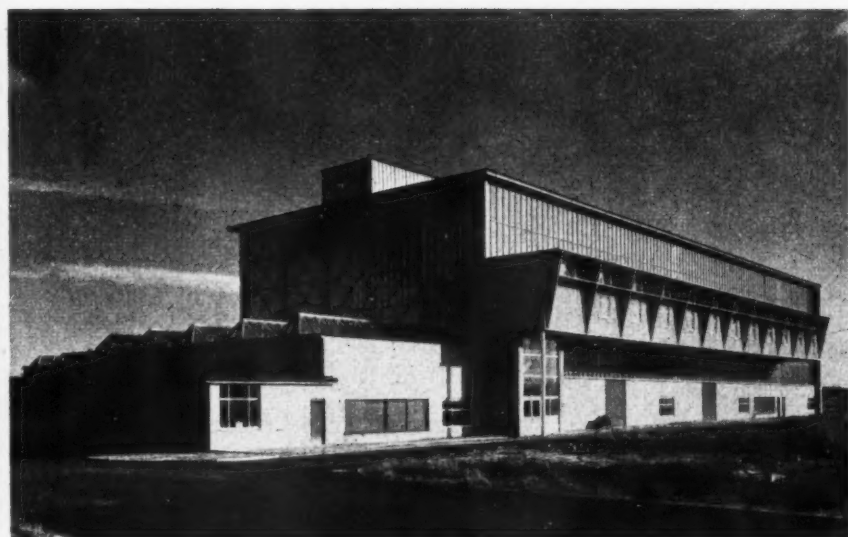
SCHOOLS

(page 78)—is generally articulated into a very pleasant group.

This type of informal planning—usually in one storey only—in contrast to the formal, closed courtyard type of planning previously favoured, has done a lot to liberate school buildings from architectural inhibitions and to give them the flexible open character that the fresh ideas coming into education require. The far closer co-operation now being established be-

tween architects and educationists promises even better progress in the future. One of the pioneers of this open type of school plan was Denis Clarke-Hall, whose winning design in the *News Chronicle* competition and whose subsequent Richmond (Yorkshire) school had a great influence. A more recent school by him—also in Yorkshire—carefully worked out on the same lines, is also illustrated on the previous page and is followed by three more, which show that an unpretentious, functionally conceived style of school architecture is not confined to the counties like Hertfordshire and Essex, or the architects like Clarke-Hall, who have set the pace. The last three are in Cheshire, Yorkshire and Lancashire and each comes from a public office. The school at Moreton by W. B. Clayton, the Borough Architect, is a little confused in the detailing compared with the others illustrated, but is con-

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INDUSTRIAL

Above, factory at Inchicore, Dublin, by Michael Scott; left, factory at Duxford, by Ove Arup.

ceived on the right lines. Those at Leeds (by R. A. H. Livett, the City Architect) and at Orrell Lamberhead Green, near Wigan (by G. Noel Hill, the Lancashire County Architect), both have the low-pitched roof which, when combined with brick gable ends, has become a recognized feature of the stylistic idiom used in the more modern-minded public offices—see also the two flat schemes on page 74. The Lancashire school, in rather the same unassuming utility style as the Essex County Architect's schools, suffers from some uncertainty about scale. If it was not for the two figures by the porch, it would be impossible to tell whether the row of windows was six feet high or sixty.

Industrial buildings are the third (housing and schools being the other two) of the three types of building to which present-day activity is largely restricted. There continue to be en-

couraging signs that industrialists are learning to value the contribution good planning and design can make to industrial efficiency. Industry naturally provides a special outlet for new structural and technical ideas, and the two most interesting factories of the year owe a lot to one of our most inventive engineers, Ove Arup. The top one on this page is in Ireland. It has an unusually grand scale, and its clear articulation and direct expression of structural character show close and intelligent collaboration between the architect, Michael Scott, and the engineer. The other, which is near Cambridge, is the work of the same engineer alone. Both buildings are functional in the best sense; that is, their architectural character comes from a kind of intensification of the structural systems used.

The other industrial buildings illustrated, on pages 82 and



INDUSTRIAL

Above, welfare centre, E. Ham, for the North Thames Gas Board, by Brian Colquhoun and Partners, Architect, A. H. Shearing; left, printing works at Liverpool, by Ernest Shennan.

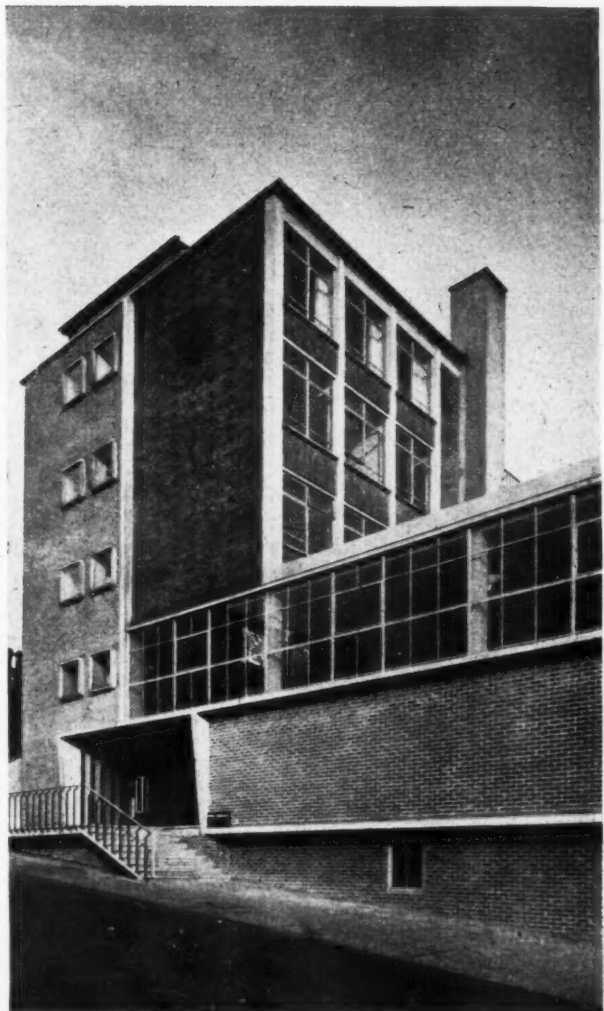
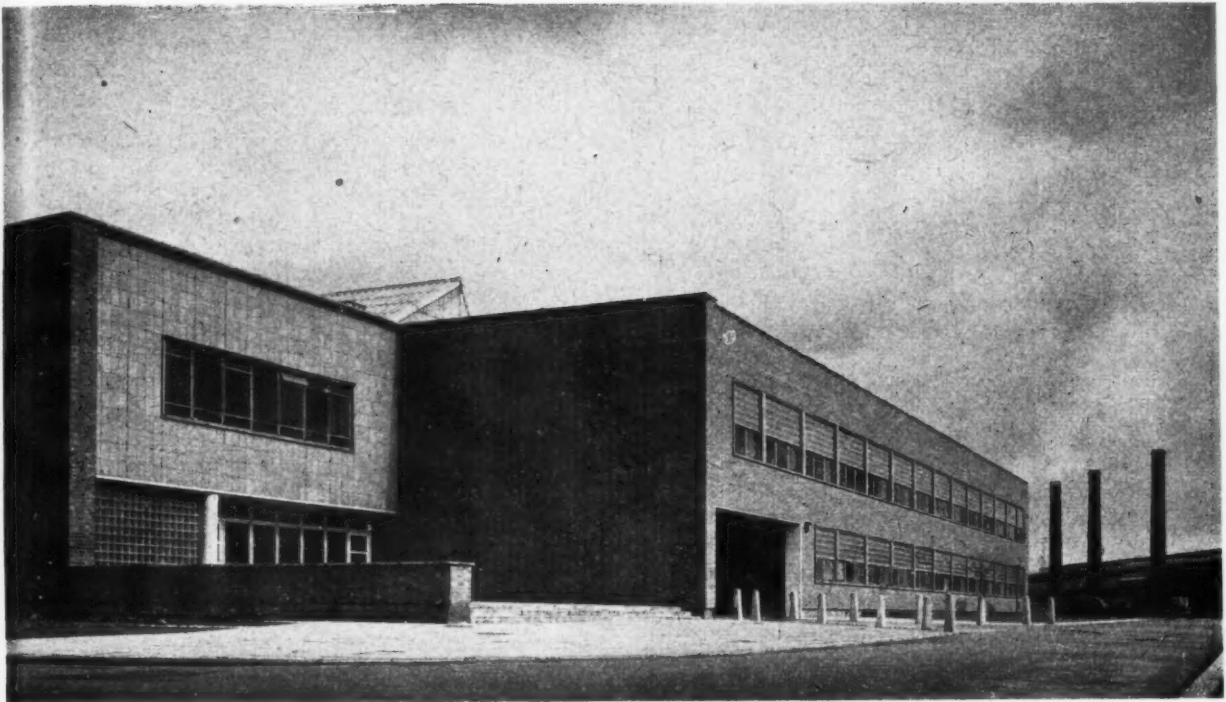
83, are more architectural in character in the sense that a well-balanced composition, whether of masses or of apertures in a wall, has been more obviously worked for. Ernest Shennan's Liverpool printing works suffers, perhaps, from the carefully designed pattern of solids and voids on the main elevation having too little relationship with the side elevation. It seems to have been conceived, that is to say, in two dimensions not three, whereas Richard Sheppard and Partners' Wallsend building gets much of its character from the intersection of planes in all three dimensions. It is an office, not a factory building, but it serves an industrial concern, and is in a part of the country where hitherto industrialization—not only the factories and offices, but the towns themselves—has been identified with grime and squalor. It thus represents a notable step forward, and in the same way Frederick Gibberd's

steel rolling mill is a particularly welcome example of civilized design invading territory hitherto given over to unsightliness of every kind. Finally, Brian Colquhoun and Partners' welfare building for the North Thames Gas Board is doubly welcome as evidence that a newly nationalized industry is trying to set a standard of decent design. It follows the tradition set by the rather similar buildings of the Miners' Welfare organization, but adds to a sensible use of materials—brick, concrete and aluminium—a free use of colour that must be quite new in buildings for the gas industry.

There are two more largish buildings in this year's selection that fit into none of the three categories just referred to: a students' hostel for an agricultural college in Kent—again by Richard Sheppard and Partners—and a nurses' home attached to a Jersey hospital—by Grayson and Le Sueur—photographs

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Top, steel mill at Scunthorpe, by Frederick Gibberd ;
above, foundry at Belper, by Cecil Howitt and Partners ;
right, offices at Wallsend, by Richard Sheppard and
Partners.

overleaf. The first is a sensitive design with a somewhat Scandinavian character. If one were to label some of the motifs used—the low pitched roof, the projecting window frames and the open cantilevered balconies—as being part of a now accepted contemporary formula, that would not be in order to suggest that they are employed without good reason and proper thought; only that in this building more than almost any other on these pages there is a suggestion (supported by the interesting decorative use of raised headers on the return brick wall) that a modern domestic idiom is beginning to evolve with a stylization—and therefore with decorative resources—that it can really call its own. The least successful feature of the Wye College hostel is the varying scale of the windows and the somewhat restless effect created in the closely spaced windows in the central portion, each of which



HOSTELS

*Top, hostel at Wye Agricultural College, by Richard Sheppard and J. Shufflebotham ;
above, nurses' home at St. Helier, Jersey, by Grayson and Le Sueur.*



S H O P S

Above, South African Travel offices, Piccadilly, by James Cubitt and Partners; left, shoe shop in Oxford Street, by Ellis E. Somake.

is given a vertical emphasis by its superimposed balconies. The nurses' home is an equally well thought-out composition and pleasantly refined in detail—in some places perhaps too refined; the window surrounds, for example, lack robustness in relation to the strong masses of walling in which they are set.

This review generally concerns itself with buildings rather than with furnishing and display, but shop-fitting must not therefore be excluded since nowadays it is about the only field (except exhibition work, which is too ephemeral to be included) in which architects find an outlet for decorative fancy and where they can legitimately seek effects of richness and luxury. One London shop, moreover—if shop it should be called—has this year made a major contribution to the art of display design. The South African travel bureau in Piccadilly,

by James Cubitt and Partners, is a delight and stimulation to the eye by day and by night. Its special contribution is that it treats the whole depth of the shop as one display window. To the spectator outside, the glazed front and various show-cases, furnishings and ingeniously displayed objects form a succession of receding, semi-transparent planes, making a three-dimensional pattern—often merely suggested rather than defined—of considerable complexity but charming clarity. The detail is elegant and the use of colour brilliant.

The other shops illustrated, though they cannot claim so much originality or imagination, are clean, workmanlike designs. In this kind of work—that is, in display architecture—it is legitimate to use tricks and devices of a kind that would soon become tiresome in ordinary architecture. The shoe shop in Oxford Street, by Ellis E. Somake, uses many of them



S H O P S



Top, Polonia Restaurant, Grosvenor Gardens, by James Cubitt and Partners; above, handbag shop in New Bond Street by Werner Heumann. Right, furniture shop at Watford, by Brian Peake.

with gaiety and sophistication. The high quality of this interior is especially to be welcomed because it belongs to a company with many branches; it is more usually the chain stores that are backward and the small privately owned shops that show enterprise in design.

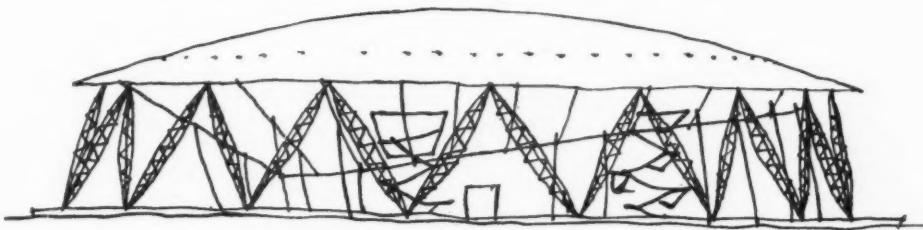
The Polish restaurant, by the same architects as the South African travel bureau, is an adaptation of an existing interior, and the designers' scope was therefore more restricted, but it, too, as this view from the street shows, treats the interior effectively as a picture defined as a succession of planes. With its graceful furniture and gay colour, it is a good example of the pleasant effect that a designer who knows where to lay his em-

phasis can obtain by very simple means. The handbag shop by Werner Heumann is another—though rather more obvious—instance of the present tendency to use the whole shop as the window. The actual façade is given the greatest possible transparency and the eye conducted beyond the display in the foreground to a series of further displays on different planes. The lighting is particularly well managed, and although the forms of the lettering are a little inelegant, the remaining detail is well contrived and suitably feminine in style. The last shop, by Brian Peake, designed for the display of furniture, is a pleasant example of the more architectural type of shop interior.

THE DOME OF DISCOVERY

PROPOSALS FOR ITS CONVERSION

On this and the following pages Gordon Cullen presents a Parliamentary debate which so far has not taken place and quite possibly never will. It is illustrated by drawings to which the same might apply. The only certain thing is the drawing of the Dome, below, as designed by Ralph Tubbs, and even this can best be described as approximate.



Parliament

THE DOME OF DISCOVERY

Proposals for its Conversion

HOUSE OF COMMONS

FRIDAY, NOV. 31

The Speaker took the Chair at half past eleven o'clock.

MR. DOWNDOM (South Bank, Right, Con.) asked the Lord President what steps were being taken, now that the Festival of Britain was over, to remove the Dome of Discovery from the valuable site which it now occupied. It had been made quite clear all along that the Festival buildings were only temporary structures and he, Mr. Downdom, was asking the Lord President if

there was any truth in the rumours that the building was to be kept and made permanent.

MR. UPDOM, the Lord President (South Bank, Central, Lab.), replying, said that conditions had changed. Although most of the Festival buildings were being demolished, it was now felt that the dome should stay, at least until it had outlived its usefulness. These were not days when valuable floor space could be thrown on one side.

Mr. Updom continued:—"In these circumstances the Government has asked for advice from the Royal Institute of British Architects as to the most suitable architect to be charged with the conversion."

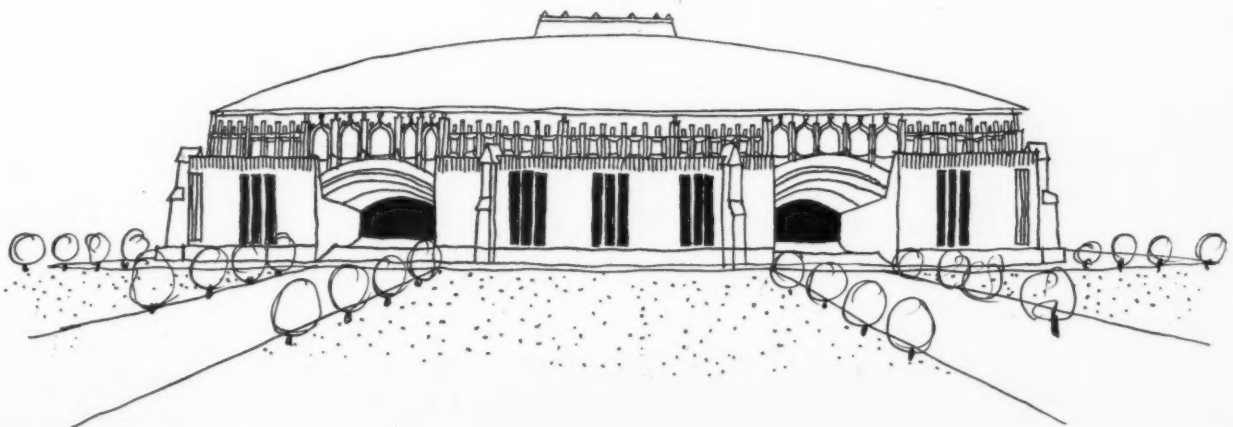
MR. PURDOM (Savoy and Petty France, Ind.):—"What is wrong with the building as it is?"

MR. UPDOM:—"As an exhibition building, nothing. But as a permanent

addition to the architecture of the South Bank, it is felt that a more dignified treatment is essential."

Continuing, Mr. Updom said that they had had considerable difficulty in arriving at a decision. The trouble was that this involved the question of architectural design about which opinions seemed to vary. He, Mr. Updom, was prepared to take advice but no one seemed to be able to give him any. They had even invited an American architect to submit a scheme.

However, the first scheme to be considered had been prepared by the House's own architect, Sir Giles Gilbert Scott. Members would remember seeing how the problem had been solved and he, Mr. Updom, would have liked this design to go forward. It was not, however, HM Government's policy to ignore the correspondence column in *The Times*.

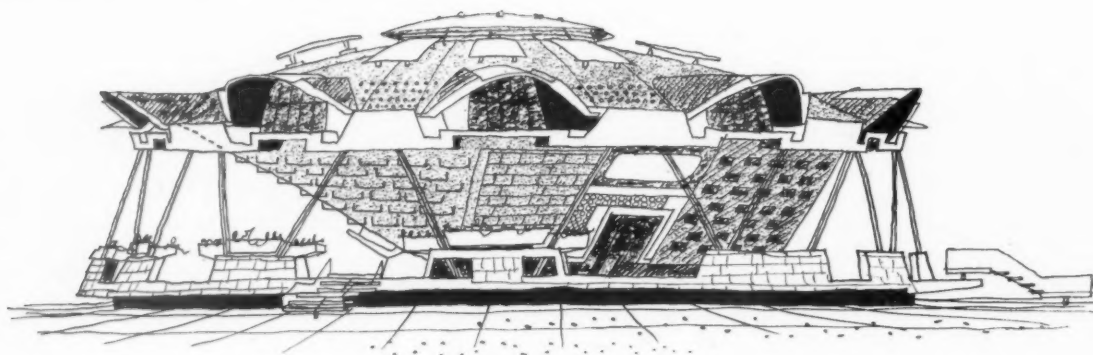
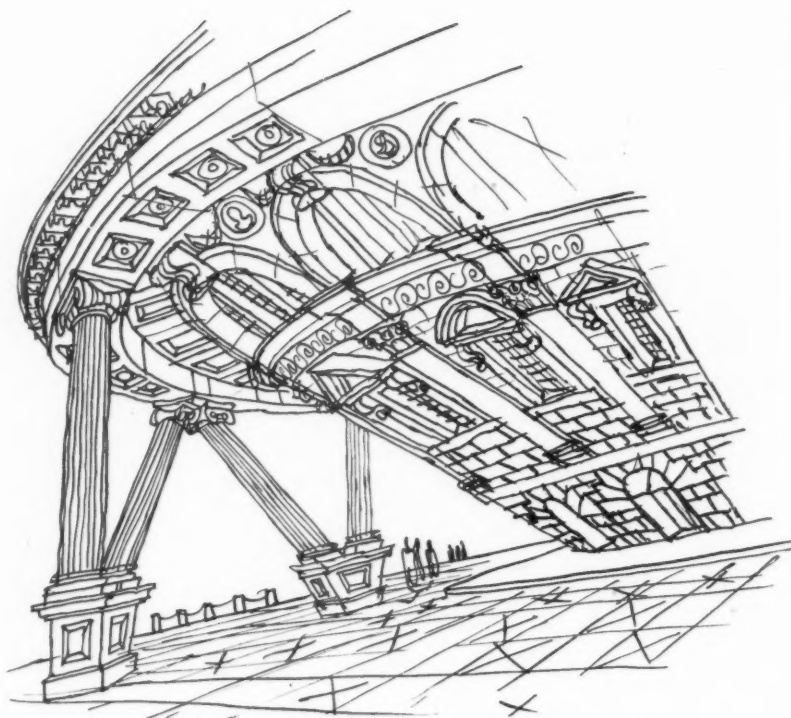


It was then decided to approach Mr. Vincent Harris who had recently designed the Government Offices which faced the Dome on the North Bank. This vigorous scheme must excite the admiration of members. He would say that such a building would be unique. The blending of modern and ancient forms was in line with the spirit of democracy and it was therefore with the greatest regret that this particular scheme had had to be abandoned on the advice of structural engineers who gave evidence that the extra load of masonry would entail completely new foundations.

MR. RANDOM (Rubble, Con.):—"Would it not have been simpler for the Lord President to have taken evening classes in architecture and designed it himself?"

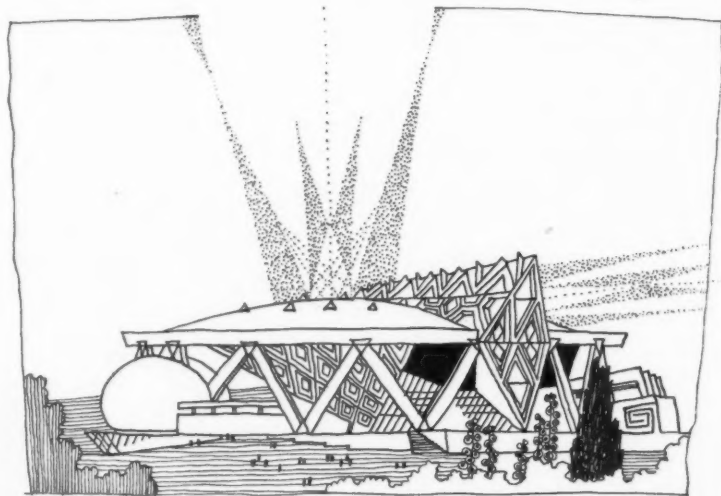
MR. UPDOM:—"No, sir, I have enough trouble with Orders in Council." (Laughter.)

Turning to the next scheme, Mr. Updom continued that it was decided to call upon the LCC architects responsible for the design of the Royal Festival Hall. This scheme had the advantage of being faced with stone but unfortunately there were so many holes in the structure that he, Mr. Updom, had been assured by an acoustics expert that in a high wind the building would play a

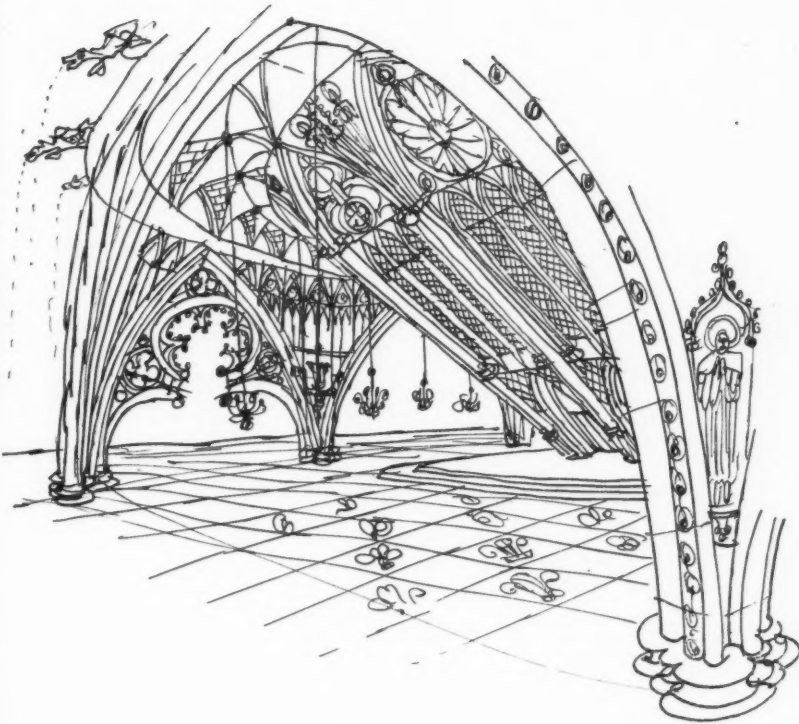


tune. Members might think this was not a bad thing in a concert hall but should the principle be applied to other structures?

Continuing, Mr. Updom said that they were very grateful to America for the next scheme. This had been prepared by that eminent architect, Mr. Frank Lloyd Wright. It was a great pity that the working drawings of the existing dome eventually supplied to Mr. Wright by the Festival office had no scale and consequently this scheme was, to use an architectural term, "out of scale." It did, however, serve the people and grew organically out of the South Bank. Consequently the scheme had been accepted (cries of "Oh!") but (cries of "Ah!") the Treasury (cries) could not see its way to provide dollars for the architect's fee.



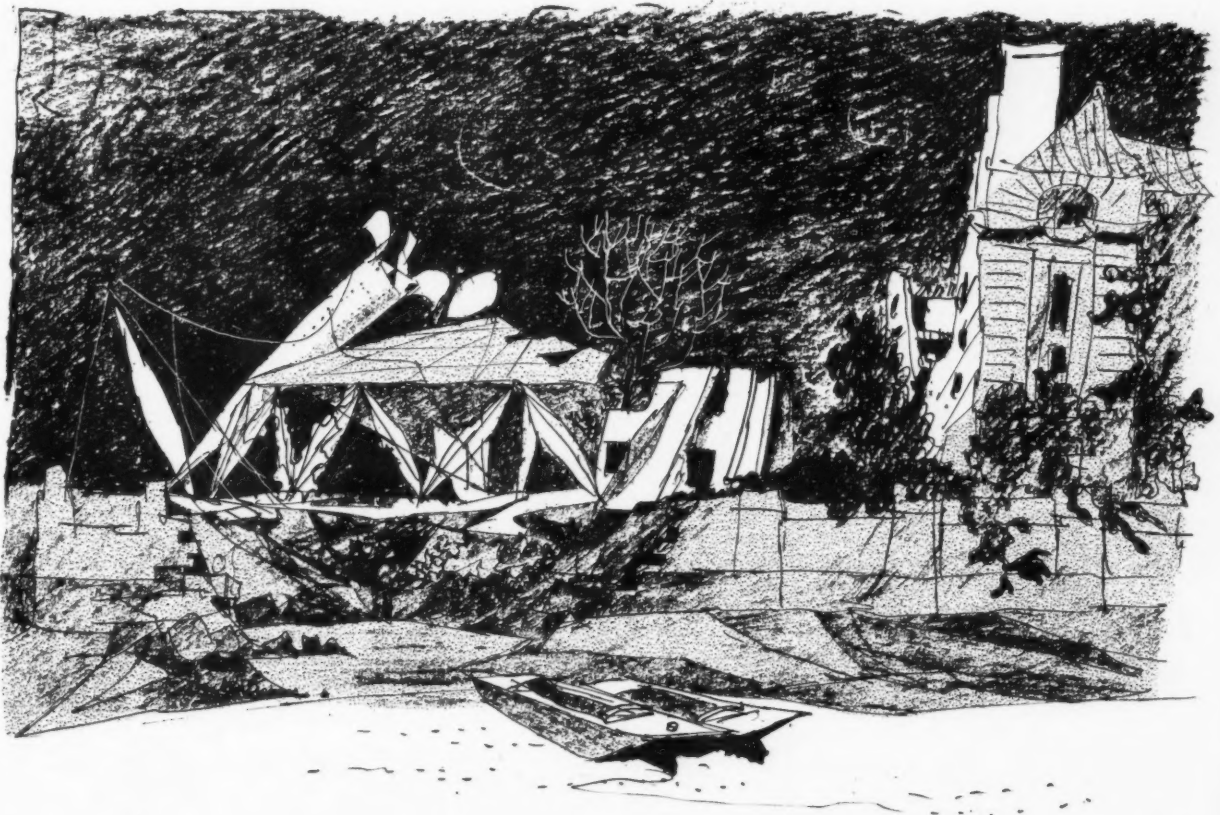
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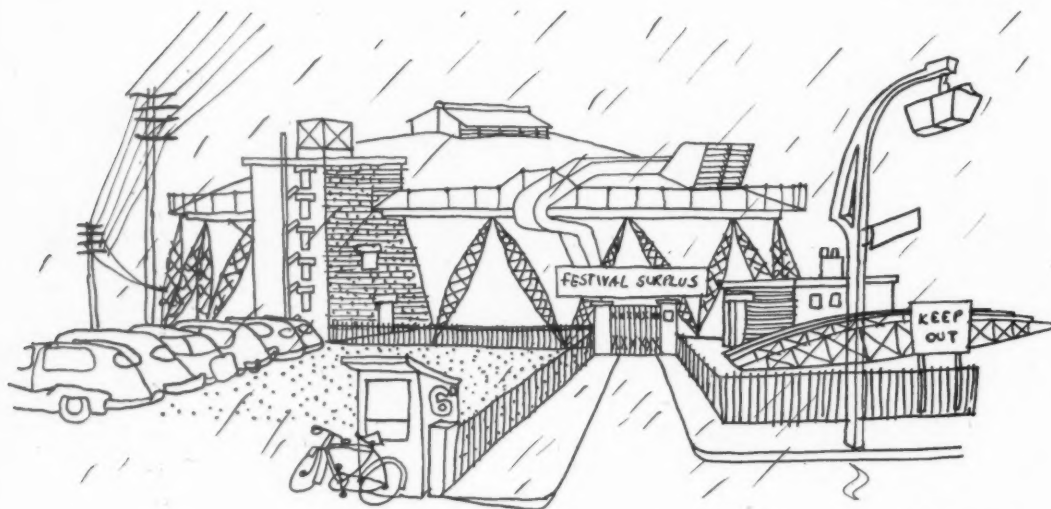
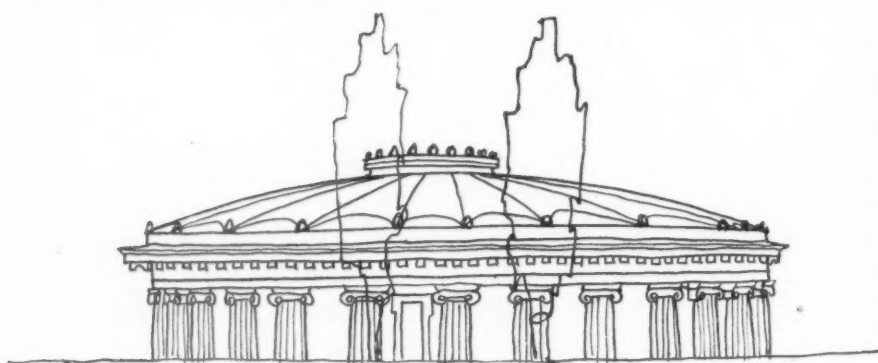


Mr. Updom continued that the Government had then approached Sir Ninian Comper who had produced a design which all members would respect even if they themselves could not personally approve. There was in this scheme an alertness and purity of

form which belied the taunt that Gothic was a dead style. He, Mr. Updom, could see no difference in erecting or decorating a building in the Gothic and decorating their own chamber in the same pattern. However, the Council of Industrial Design. . . (Uproar.)

Doubtless, continued Mr. Updom, members would have heard of that facet of architectural taste known as Pleasing Decay. He was not here concerned with an addition to a building but in allowing the building to fall into disrepair at no great cost to the taxpayer, and to encourage plants and creepers to do the work which so many architects had failed to do. As members would see from the drawing the scheme included part of County Hall and they had had several meetings with the LCC to determine at what point this Decay should stop. Proceedings had broken down since the Government maintained that this Decay should continue to the 45th window from the east end of the building whilst the LCC were only prepared to concede 28 or alternatively a diagonal line from the 40th to the 20th window, which line could start from the top storey and work down or alternatively it could start from the bottom and work up. The LCC further stipulated that any accidents, illness or inconvenience caused to the staff of the LCC by this Decay should be a charge on HM Government but that all birds' eggs, mushrooms, orchids, fossils, dolmens and Welsh ministers found or surprised in the building would be regarded as the sole property of the LCC to dispose of as they thought fit.





In the circumstances, continued Mr Updom, he had no alternative but to abandon this Decay. They had therefore gone to Nottingham. Just a matter of emphasis some members might think. Mr. Cecil Howitt had produced perhaps the most direct and brief scheme submitted. This was a dome and it had been treated as such. It was hardly Mr. Howitt's fault if the original building had been so strangely proportioned that the columns had to be truncated.

MR. BOREDOM (Sheer, Con.):—"What is truncation?"

MR. UPDOM:—"I believe it is something to do with Townscape."

MR. BOREDOM:—"And what is Townscape?"

MR. UPDOM:—"I need notice of that question." (Cries of "Answer!")

Continuing, Mr. Updom said that this last scheme from *The Architectural Review* was admittedly commissioned "in extremis." They had tried everything but the cost to the taxpayer of this scheme was not so heavy members might think. He asked them to observe the signature to the drawing. However, and this was the point, if cobbles are to be laid as a hazard so to warn traffic not to cross what better place could be found than the door itself where the whole question became academic. He did not wish to infer but that there was anything academic in the design.

MR. RANDOM:—"Would the Lord President say which of these schemes have been approved by the Royal Fine Arts Commission?"

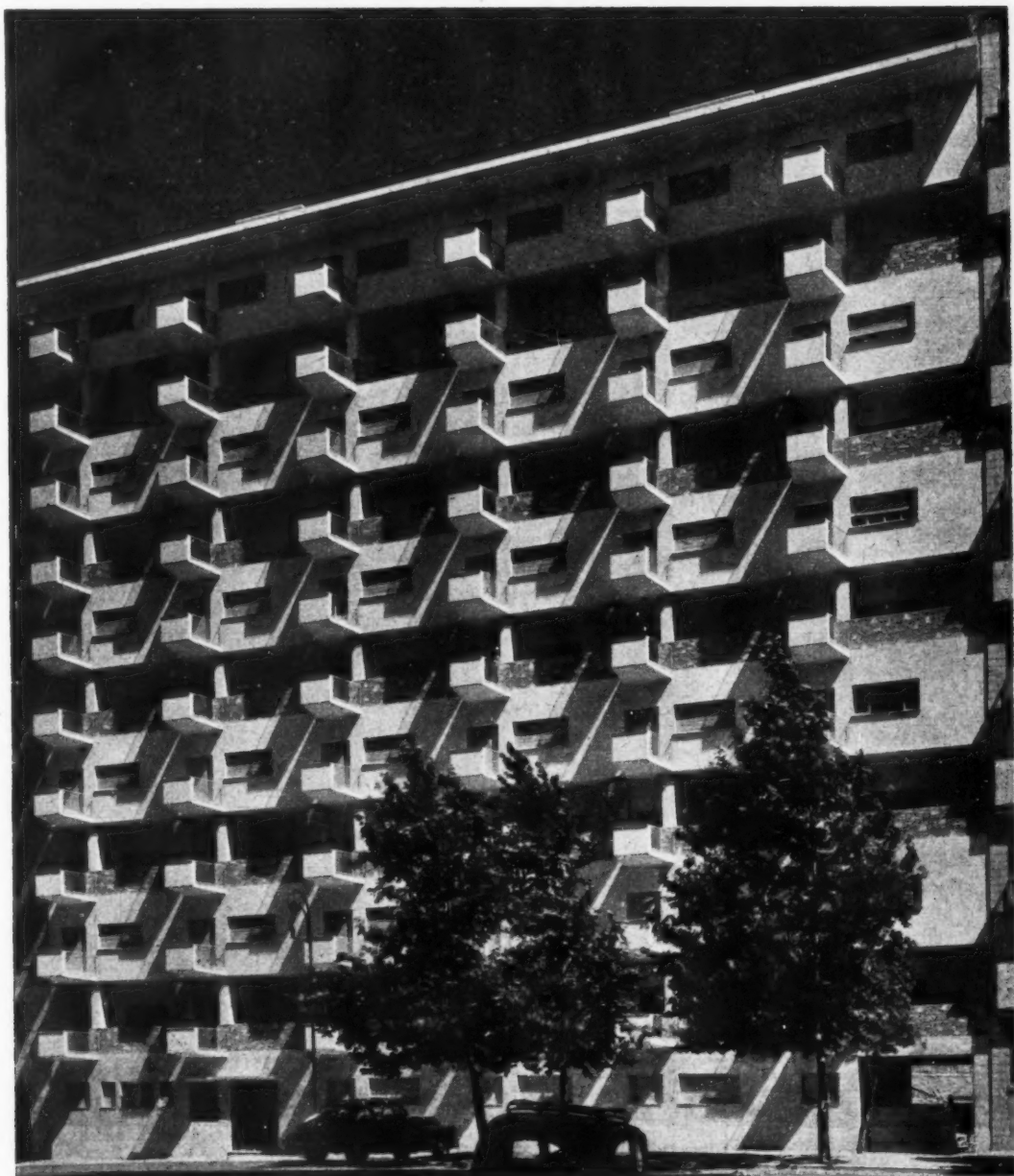
MR. UPDOM:—"The whole lot."

In closing the debate the Lord President intimated that the building had finally been handed over to the Ministry of Works.

The House rose at a quarter to three o'clock.

ARCHITECTURE ABROAD : 1950

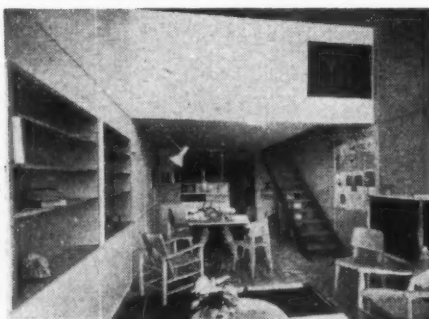
Some of the outstanding buildings constructed abroad in 1950 are illustrated on this and the following pages. Most of these are of exceptional interest, for very little post-war building work in this country has been carried out with such lavish use of materials and finishes. Some of the buildings shown, such as the cinemas at Zurich and Rotterdam, the private house at Santa Barbara and the Parliament House at Bonn, have no counterpart in this country worthy of comparison.



ITALY

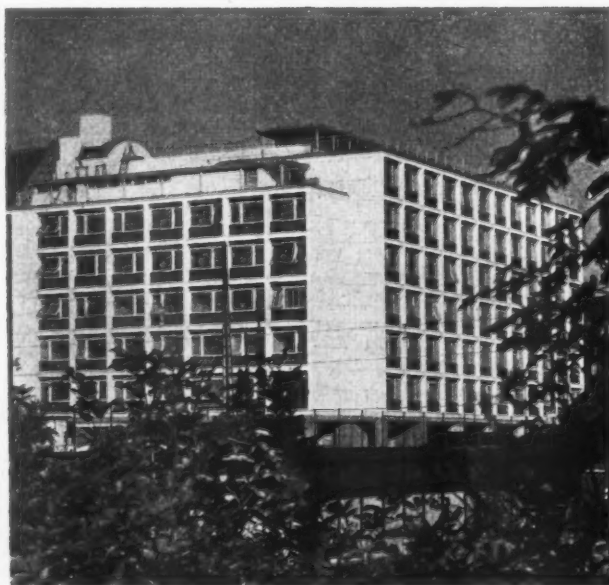
Flats in Rome designed by V. Luccichenti. An 11-storey block containing about 50 apartments of 2 or 3 rooms with complete floors of 2-room flats alternating with those of 3-room flats. The tapering balconies, which project nearly 5 ft., and the different facing materials used, give an interesting effect, while the deep loggias give protection against heat. The construction is of reinforced concrete frame.

FRANCE



The interior views of a flat in the new apartment building for 1,600 persons in Marseilles designed by Le Corbusier. The photographs show the living-dining room, with the staircase to the bedroom floor seen on the right and the balcony, with view of the park beyond, on the left.

DENMARK



Above, a one family house on the Sondergaardspark housing scheme at Bygherre, designed by Ernst Hoff and Bennet Windinge. The walls are of yellow brick, the roof covered with yellow tiles and the woodwork is painted white and dark brown. Left, new offices in Copenhagen for A/S Dansk Shell designed by Vilhelm Lauritzen.

S W E D E N

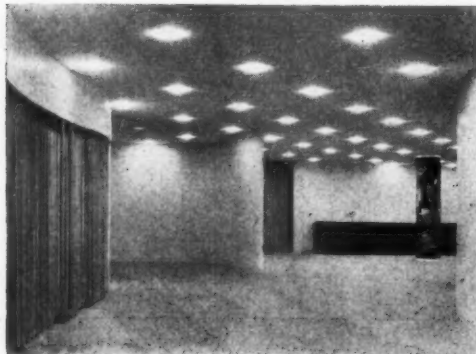
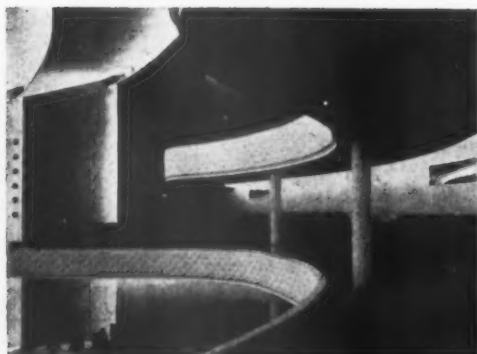
The flats at Grondal, Stockholm, right, are designed by Sven Backstrom and Leif Reinius as part of a scheme which includes an 11-storey block and a row of 2-storey houses. The 3-storey flats are staggered against the hillside in terraces. The house illustrated below is at Stocksund, near Stockholm, designed by Bengt Lindroos. The size of the building blocks, which are plastered thinly with coarse mortar on the exterior, are used as a unit of dimension. The joints are visible and pointed in the plaster coating. Roofs are slate covered except the living room wing (seen on the right) which is covered with copper.





The Parliament Building at Bonn designed by Hans Schwippert, provides accommodation for the first parliament of the Federal Republic of Germany and is an addition to the building originally erected in 1930 as part of Bonn University. Top, foyer of Lower House, originally a gymnasium; left, south terrace and above, view across the Rhine.

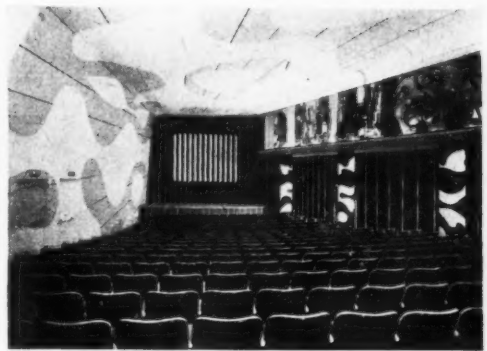
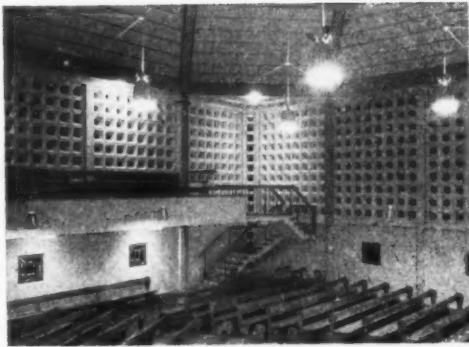
GERMANY



The National theatre at Weimar, designed by Werner Hartung, replaces the theatre built in 1907, and gutted in 1945. Extreme left, the auditorium which has staggered side walls covered with grey velvet. The main foyer, left, has coloured mosaic columns.

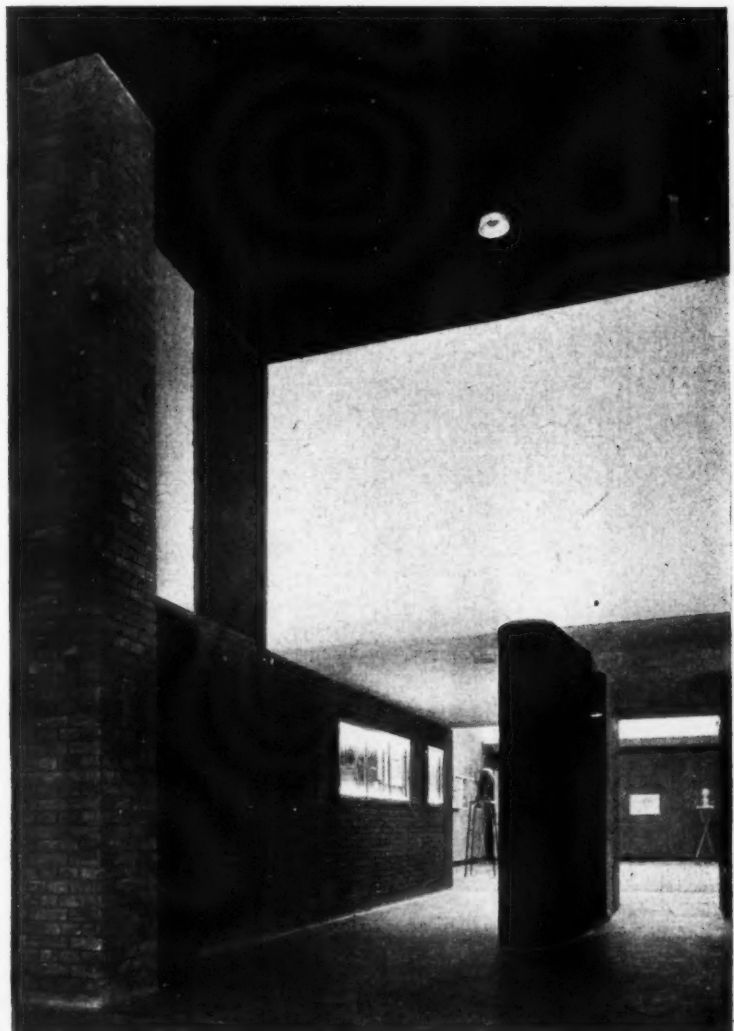
SWITZERLAND

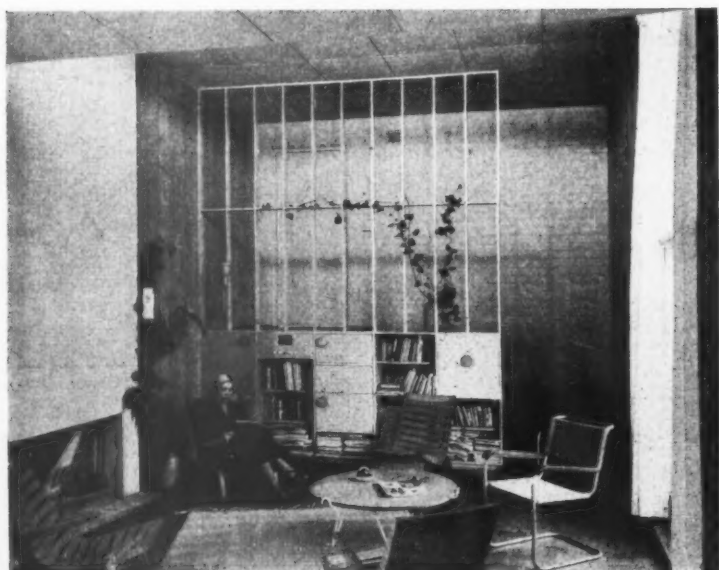
The cinema at Zurich (extreme right), designed by Werner Frey and Roman Clemens, has no curtain or proscenium arch and the screen is formed by rotating vertical stripes. Right, the new Apostolic Church, Geneva, designed by Hafeli, Moser and Steiger.



HOLLAND

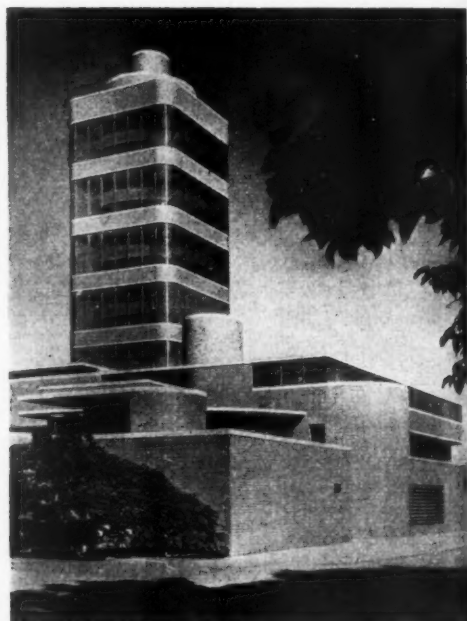
The cinemas at Rotterdam (below and right), designed by Bakema, Brinkman and Van der Broek, and at Zurich (above, right), both demonstrate the particular characteristics of the film as a separate medium of entertainment used as elements in the design. At Rotterdam, the sound apparatus is used as wall decoration when the screen is raised out of sight during intervals, and the panel motif of the screen is carried out into the street. Right, the entrance and below, the auditorium from the stage.





A U S T R A L I A

This house, near Melbourne, designed by Robin Boyd, has been built on a narrow site bounded on one side by a creek. Left, the house, which is 90 ft. long [foreshortened by the use of a telephoto lens]. Below, left, the living room, which is entered direct from the front door, seen behind the open screen. The brick walls are painted yellow green.



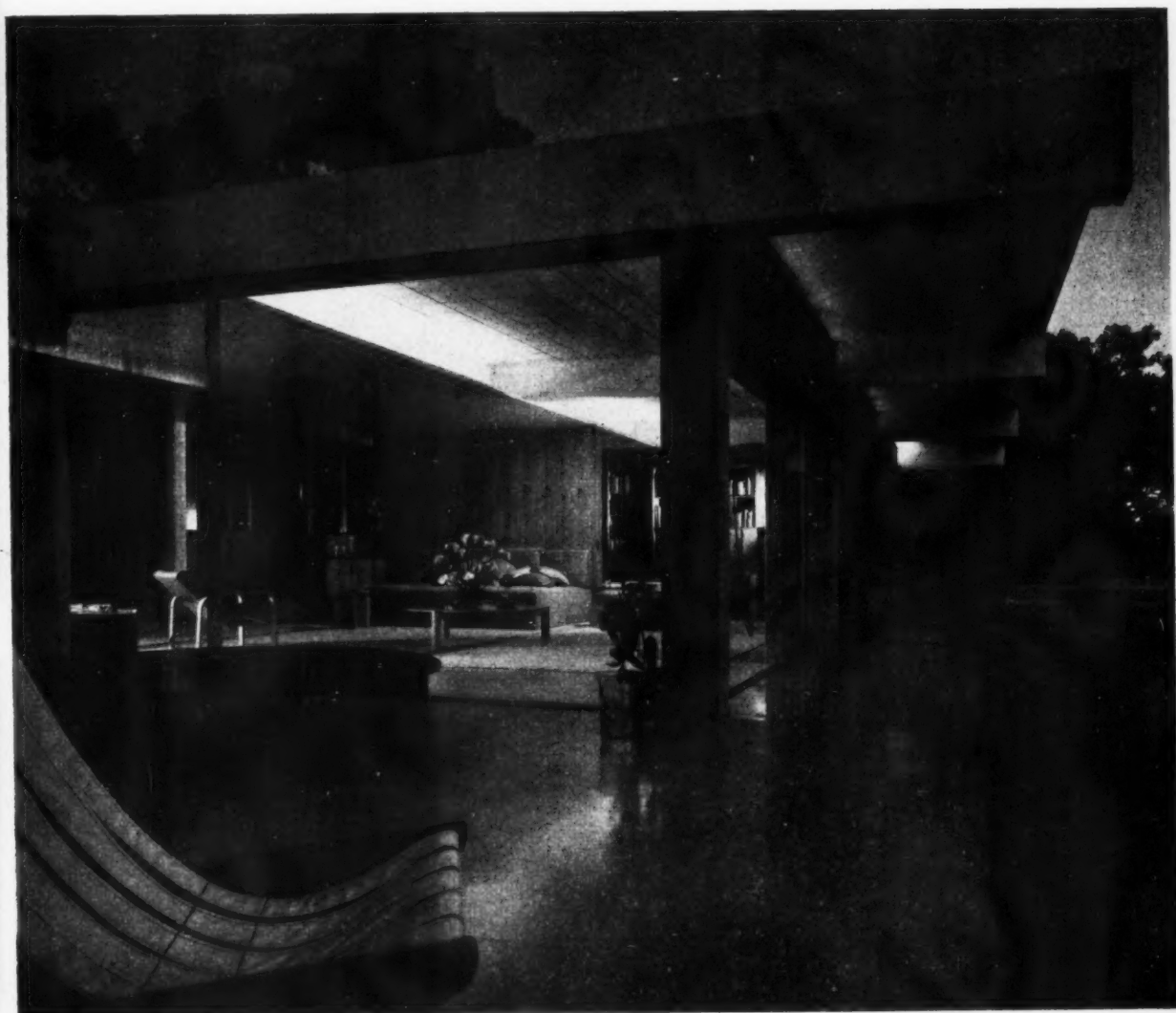
U S A

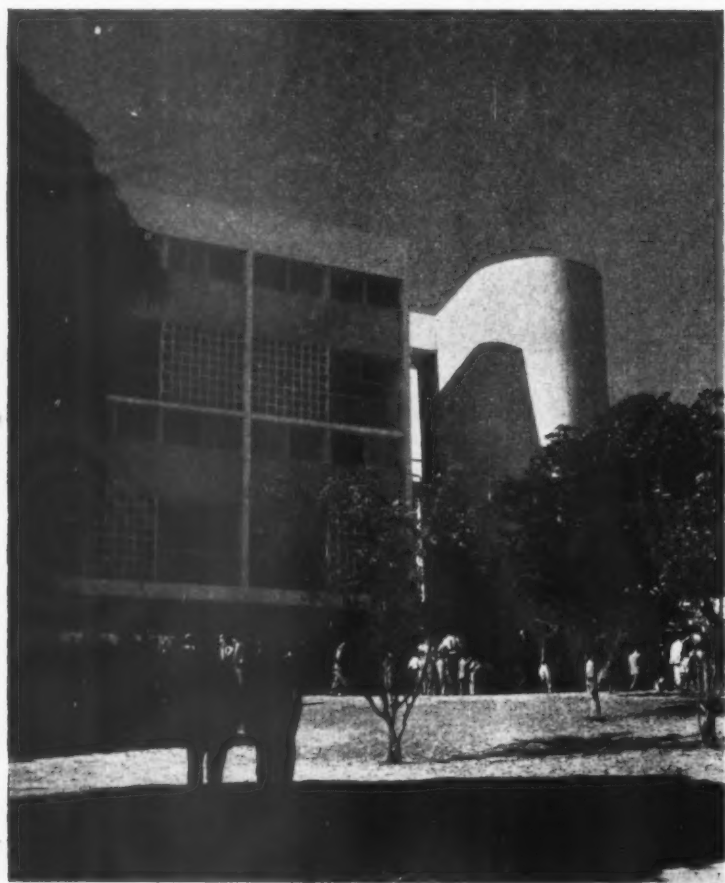
The new fifteen storey research tower at the Johnson Wax Company's factory at Racine, Wisconsin, designed by Frank Lloyd Wright, is built in alternate bands of red brick and glass. A corner of one of the laboratories, right, shows how light is diffused by the use of circular glass rods inside the windows.



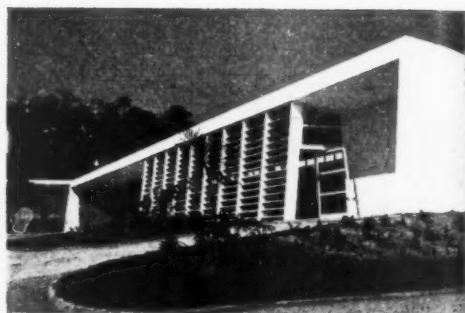
U S A

The site of this house by Richard J. Neutra at Santa Barbara is surrounded by thick woods and the threat of forest fires necessitated a reinforced concrete structure. The roof slab is detached from the frontal girders which span 16 ft. over the continuous walls, doors and windows. A heating system of floor radiation extends to outside terraces. Below is the living room seen beyond the living terrace. Right, the principal bedroom looking north-east.





BRAZIL



The new neighbourhood unit at Pedregulho, Rio de Janeiro, designed by Affonso Reidy, is the first instalment of an extensive programme of housing and town planning to provide accommodation for lower-paid municipal workers. The 12-acre site contains community and health centres, shops, primary school, etc., and 4 blocks of flats, one of which is seen left; the curved wall, right, contains the staircase. Above, the market, with brises-soleil slats painted blue. The technical training college for factory workers, also at Rio de Janeiro, designed by Marcelo, Milton and Mauricio Roberto has a capacity of 1,400 students in two daily shifts. Left, the north facade of the 4-storey classroom block, which is protected from the sun by vertical concrete louvres, with the staircase to the restaurant on the right. Below, the south facade of the classroom block with workshops on the right.



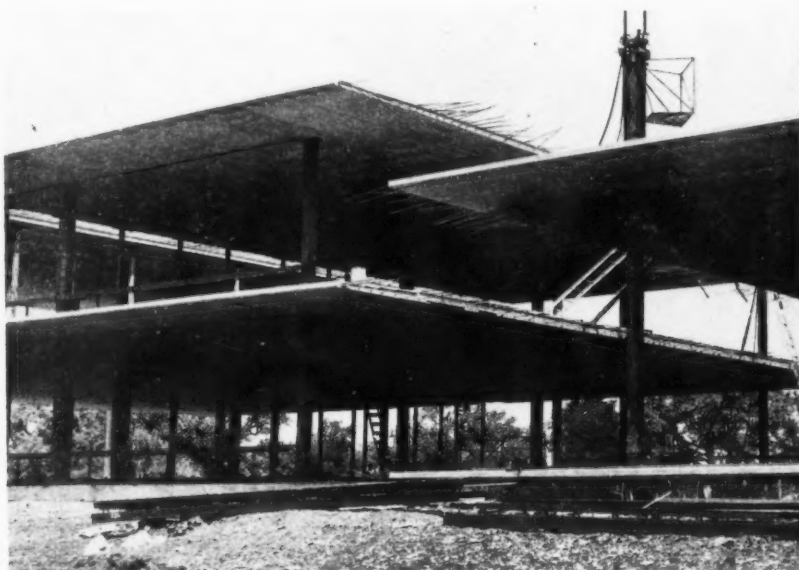
TECHNICAL REVIEW OF 1950

THE YEAR'S DEVELOPMENTS IN BUILDING

This section of the New Year issue is devoted to a review of the developments in building technique, science, organization and plant which took place in 1950. If fully applied, these developments could completely transform that strange conglomeration of professions, crafts, trades and other labour, which we call "The Building Industry." So far, however the application of new techniques has been, to say the least, uneven. For example, it is hard to believe that all the photographs on this page were taken in the same year. Surely, in no other era and in no other industry could such contrasting methods be found in use simultaneously? At this critical time, it is no exaggeration to say that the future of the building industry (and the logic of using that suffix) will depend very largely on the extent to which the developments of 1950 become absorbed into everyday practice in 1951.



Building workers, 1950.



The worker on the left is operating the controls for hydraulic lifting of floor and roof slabs. This method was employed on the building illustrated above (part of Trinity College, San Antonio, USA) with a 12 per cent. saving in cost. The method is fully described on page 102.



The first section of this Technical Review of 1950 deals briefly with the year's developments in structural technique, both in Great Britain and abroad. Several new building methods are described below, but one particularly unique system has been selected for more detailed treatment and is described, with illustrations, on page 102.

STRUCTURAL TECHNIQUES : 1950

The most important structural developments of 1950 have been in the theoretical field. New theories of static indeterminacy are beginning to revolutionize structural design, and engineers and mathematicians are busy developing formulae for the application of these theories to the actual design of buildings.

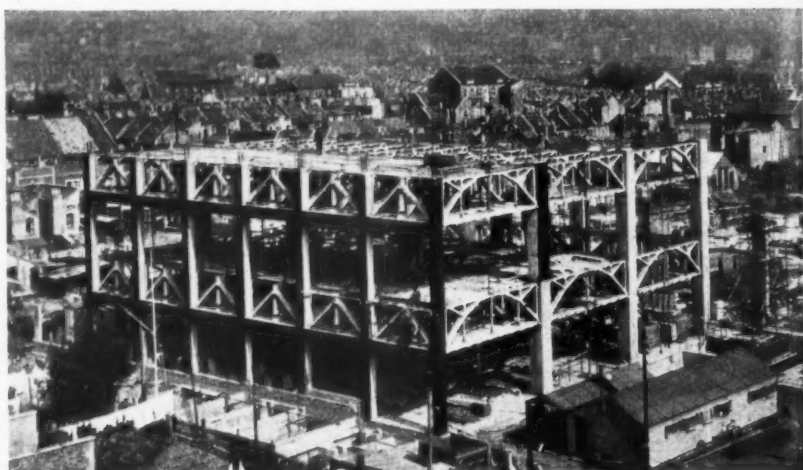
GREAT BRITAIN

With the possible exception of work on the South Bank, 1950 did not see any dramatic structural work in Great Britain. But the developments which did take place are particularly interesting in so far as they have arisen directly out of the shortages of post-war Britain. Whilst the Festival buildings are exciting in themselves, most of the constructional methods used seem to have little application to day-to-day building problems. One notable exception is the roof over the Fairway Café. This is constructed with a series of small (15 in. \times 3½ in.) precast, concrete ribs, each 7 ft. long, arranged to form a diagonal grid. High tensile steel wires are threaded through these ribs, stressed by the Freyssinet method, and grouted in, forming a homogeneous framework for the roof, which is economical in both labour and materials.

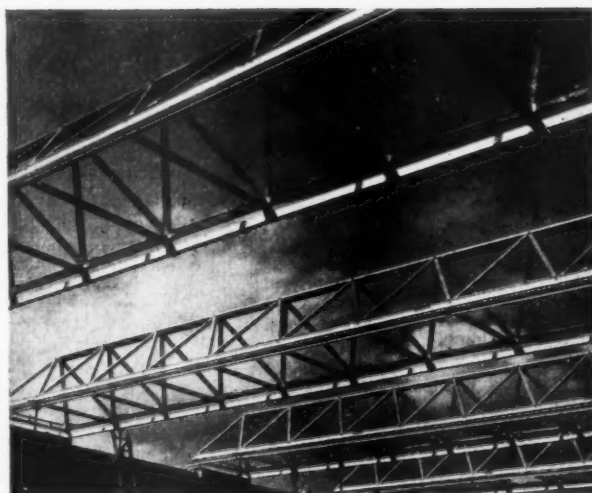
The shortage of building labour, particularly that of skilled craftsmen, has been reflected in the increasing use of prefabrication. The Clarendon Prototype classrooms at Oxhey, Herts, in spite of various shortcomings, which were discussed fully in the AJ of November 30, 1950, represent a great advance in prefabrication technique. The steel shortage has also had its effect on building technique. The use of prestressed concrete as a substitute for structural steelwork has become quite widespread. The first structural use of prestressed concrete in London took place at the extensions to Queen Mary College, Mile End (see AJ August 3, 1950), and the MOW has used it in the building for HMSO at Edinburgh, where superimposed floor loads of 3 cwt. per sq. ft. have to be carried. Some engineers, however, are criticizing such uses of prestressed concrete as unimaginative, and are suggesting that architects are failing to take full advantage of the potentialities of this technique.

The use of welding, instead of riveting, is another method of saving steel which has, at last, overcome most of the prejudice which held back its development. Also finding their way into current structural practice are tubular steel and aluminium. The former is very useful for single-storey buildings and standard prefabricated trusses are obtainable most economically as a result of the high degree of mechanization used in the factory fabrication. Aluminium, whilst basically expensive, can be competitive if full advantage is taken of its own peculiar properties, particularly its ability

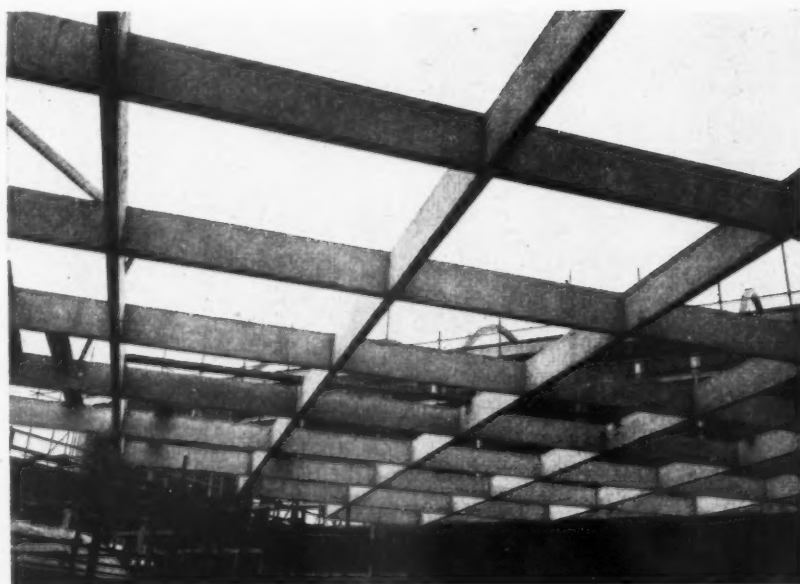
Below, factory at Malago, Bristol, where concrete is prestressed for tensile members only.



Right, aluminium "space frames" of the factory at Duxford.



Below, unique prestressed concrete roof of the Fairway Café on the South Bank.





WORKING DETAIL

DOORS : 2

GLAZED SLIDING DOORS TO SUNROOM: HOUSE IN FLORIDA

Ralph S. Twitchell and Paul Rudolph, architects



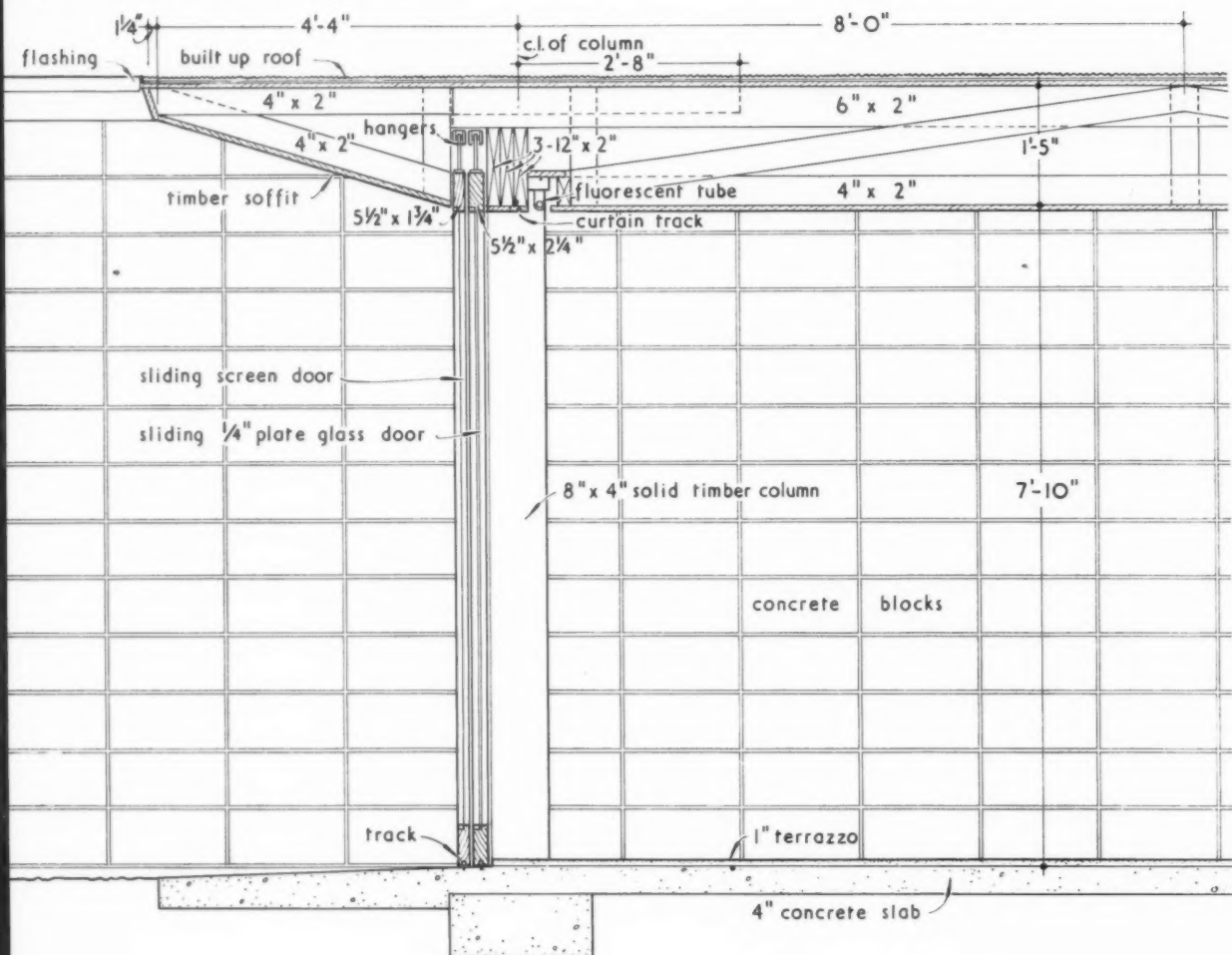
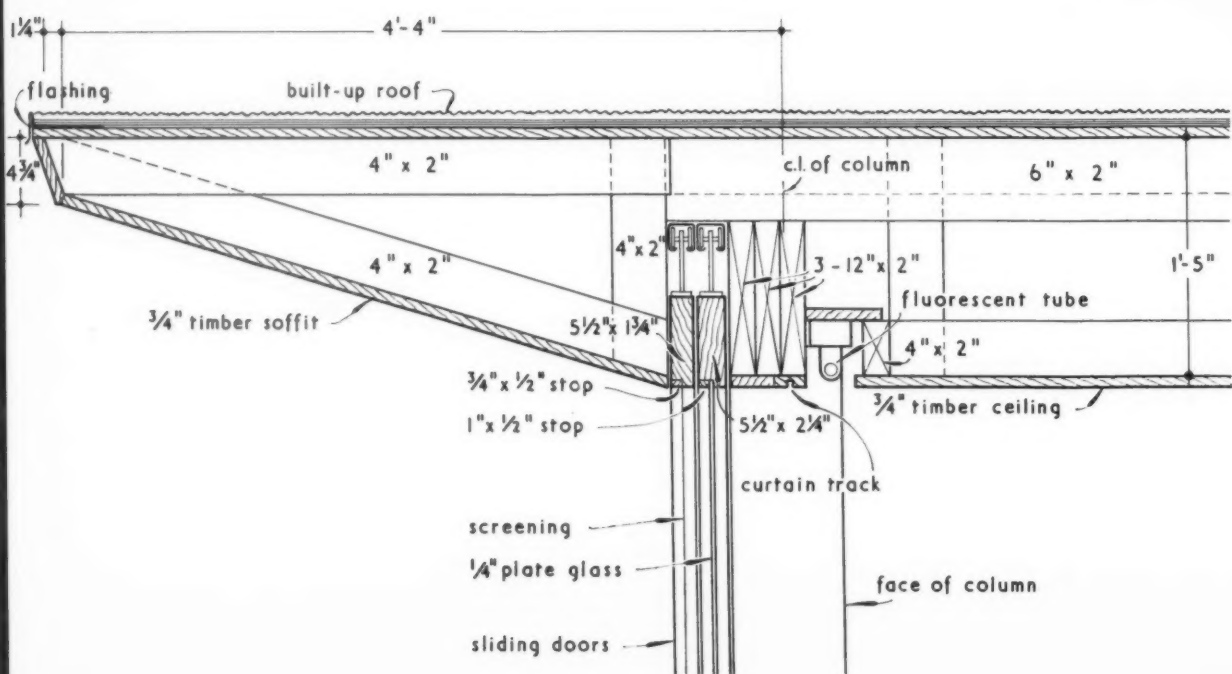
The sunroom measures approximately 41 ft. by 16 ft. and the glazed sliding doors are in each of the long sides covering openings of 20 ft.

WORKING DETAIL

DOORS: 2

GLAZED SLIDING DOORS TO SUNROOM: HOUSE IN FLORIDA

Ralph S. Twitchell and Paul Rudolph, architects

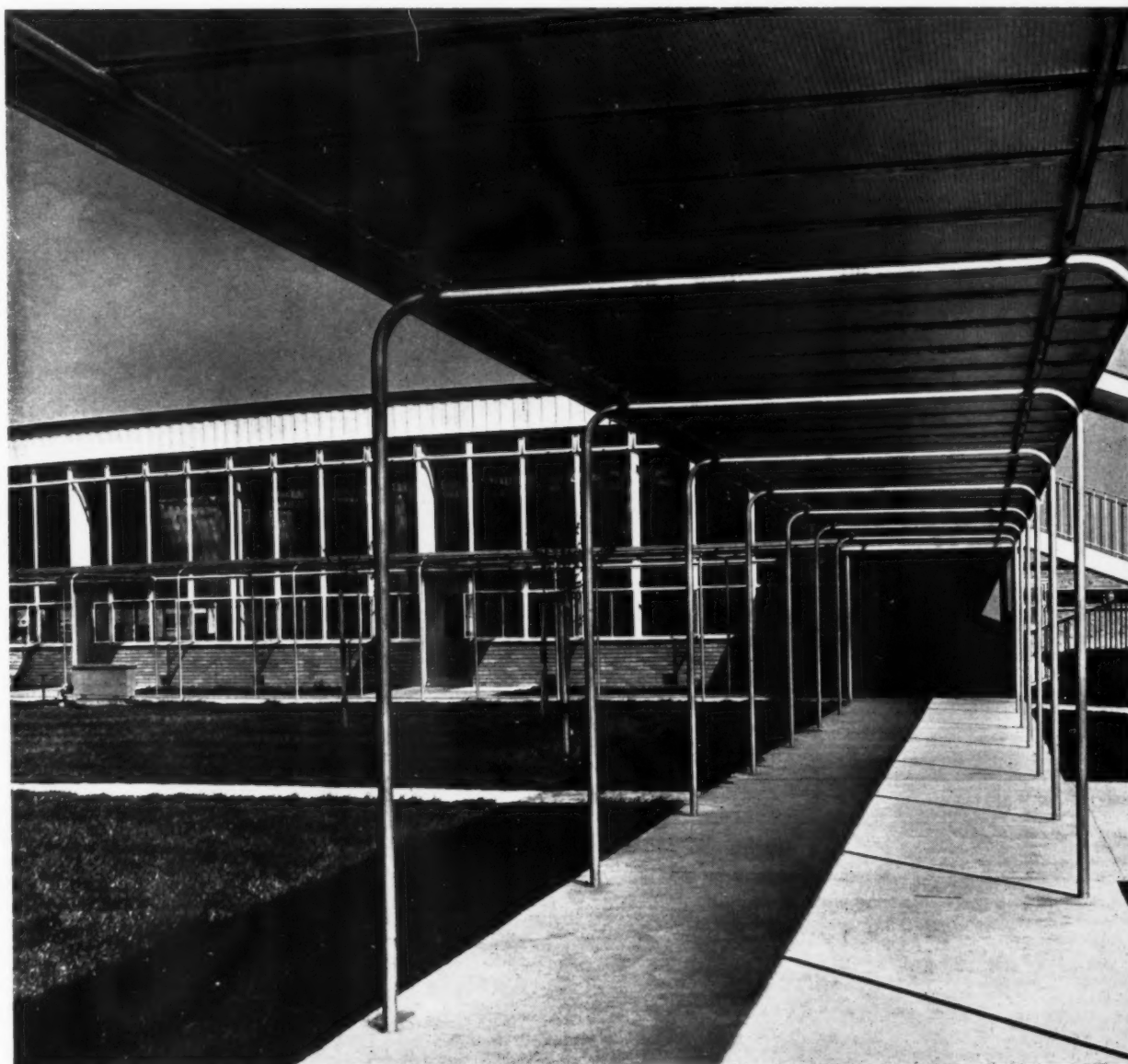
SECTION THROUGH SUNROOM LOOKING SOUTH. scale $\frac{1}{2}'' = 1'-0''$ DETAIL SECTION THROUGH SUNROOM EAVES. scale $1'' = 1'-0''$

WORKING DETAIL

COVERED WAYS AND CANOPIES : 1

COVERED WAY : AIRCRAFT BUILDINGS AT FILTON

Eric Ross, architect



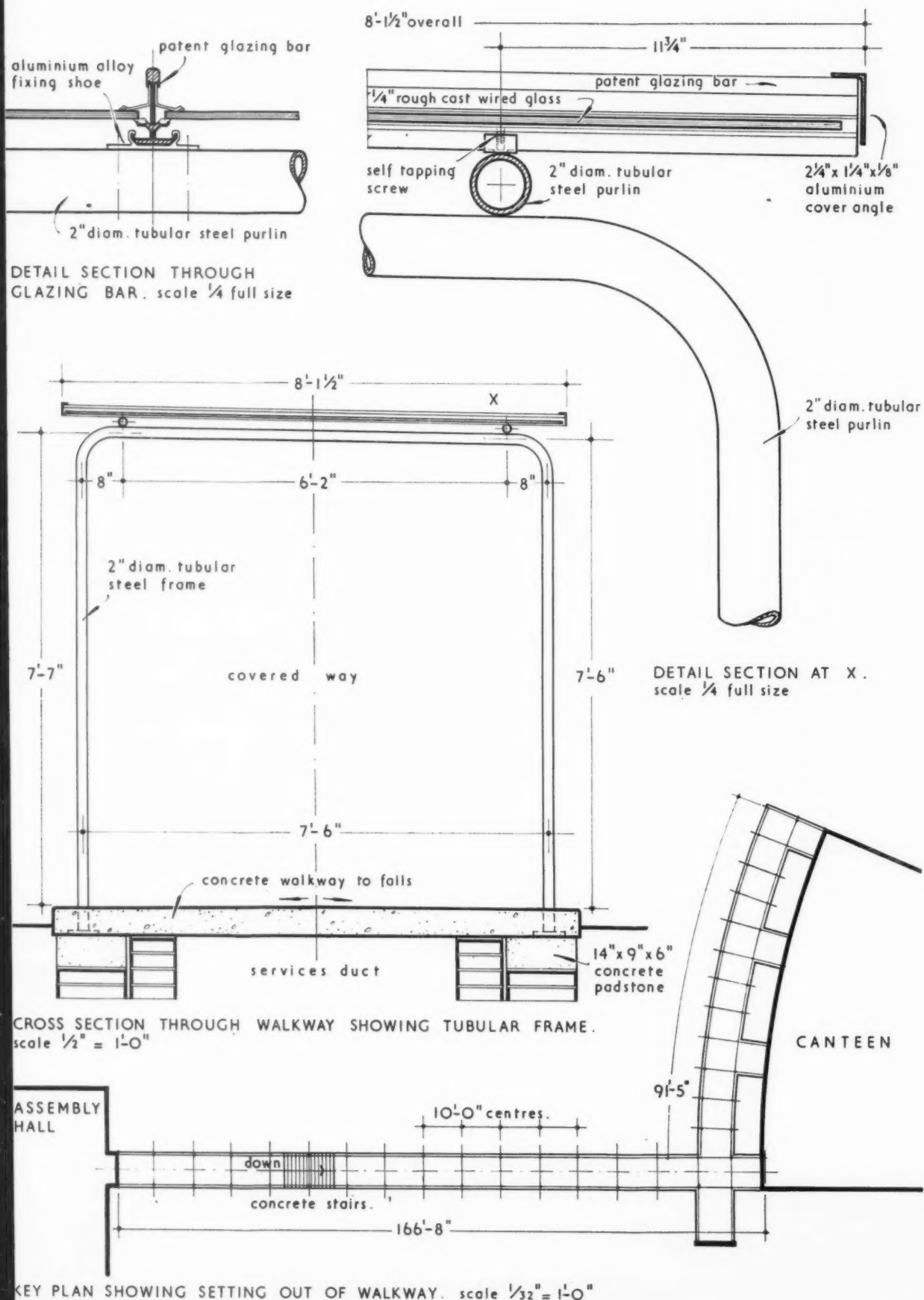
*Tubular steel frames and purlins
carry the roof which is of rough cast
concrete with aluminium alloy
glazing bars.*

WORKING DETAIL

COVERED WAYS AND CANOPIES: 1

COVERED WAY: AIRCRAFT BUILDINGS AT FILTON

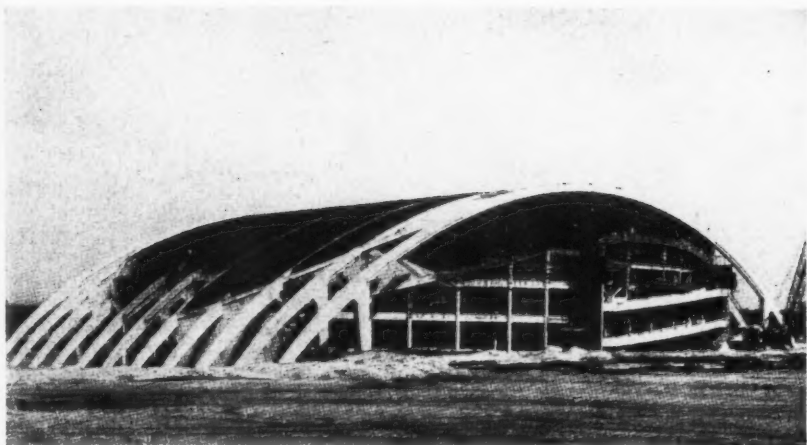
Eric Ross, architect



CROSS SECTION THROUGH WALKWAY SHOWING TUBULAR FRAME. scale 1/2" = 1'-0"

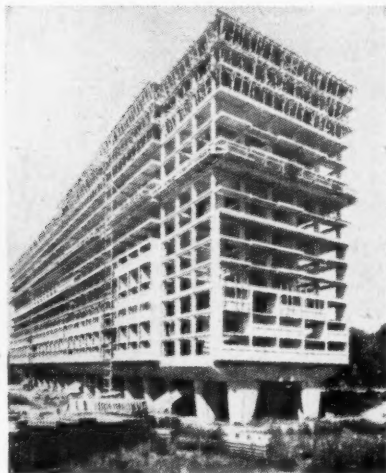
DETAIL SECTION AT X. scale 1/4 full size

KEY PLAN SHOWING SETTING OUT OF WALKWAY. scale 1/32" = 1'-0"



Above, the "Coliseum"—a sports stadium at Montgomery, USA.

Below, the structural frame of the flats at Marseilles by Le Corbusier.



ABROAD

America's building of the year is, doubtless, the secretariat block for UNO. Structurally, the most remarkable thing about this building is the speed at which it was erected. For once, this cannot be attributed to "pre-planning," for, at one stage, there was a danger of the contractors getting ahead of the draughtsmen.

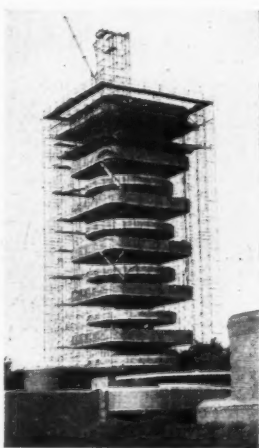
Frank Lloyd Wright has continued to prove to the world that, technically, there is little that cannot be done if we really want to do it. The research tower at Wisconsin, with its central stem, 156 ft. high, carrying the cantilevered floors, is a typical example.

The "Coliseum" at Montgomery, Alabama, attempts to rival our Dome of Discovery, having a diameter but 25 ft. less. It is, however, of a somewhat hybrid form of construction. Eleven reinforced concrete arched ribs support a concrete roof, which acts partly as a shell and partly as a simply-supported slab.

Like Britain, most of the rest of Europe suffers from a shortage of steel and the use of concrete, particularly when prestressed, predominates. Le Corbusier's flats at Marseilles have a concrete frame, but the main interest which they are arousing centres around the social experiment which they represent.

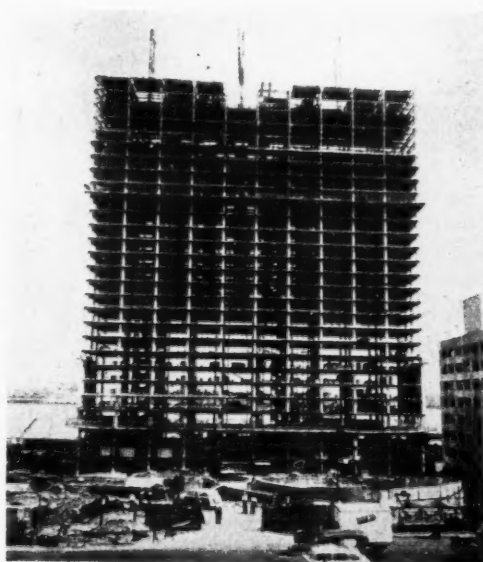
Probably the largest building under construction during 1950 is the new building for the University of Moscow. This is in complete contrast to the UN building. As with so many Soviet edifices, the crude symbolism of the massing and the neo-classic façades hide a structural framework of considerable interest. In this case, the frame is of steel but the detailing is most unorthodox. Most of the steelwork was fabricated many hundreds of miles from Moscow—in the Urals and the Ukraine—and a star shape was chosen for the stanchions, which apparently simplified shop fabrication and connections. The subsoil of Moscow, unlike that of New York, is of varying compressibility and therefore the foundations consist of a huge concrete caisson of great rigidity, whilst the 26-storey tower is generously braced.

One might have hoped to see a larger and better crop of buildings in this structural review of 1950, but from the structural point of view the year produced very few buildings (some engineers say "no buildings") of exceptional interest. Even those described above have aroused as much interest on account of their social or aesthetic virtues as they have on account of their structural merit. This would appear to confirm the conclusion, often stated in the JOURNAL, that, more important than new developments, is the application by architects of the many important, but neglected, developments already known.



Above, Frank Lloyd Wright's tower.

Right, the UN building.



New building for the University of Moscow. (A photograph of a model)

This is certainly the most exciting building technique of the year. If it is thoroughly developed in 1951 it may also prove to be the most important, especially as it is claimed to combine speed with economy.

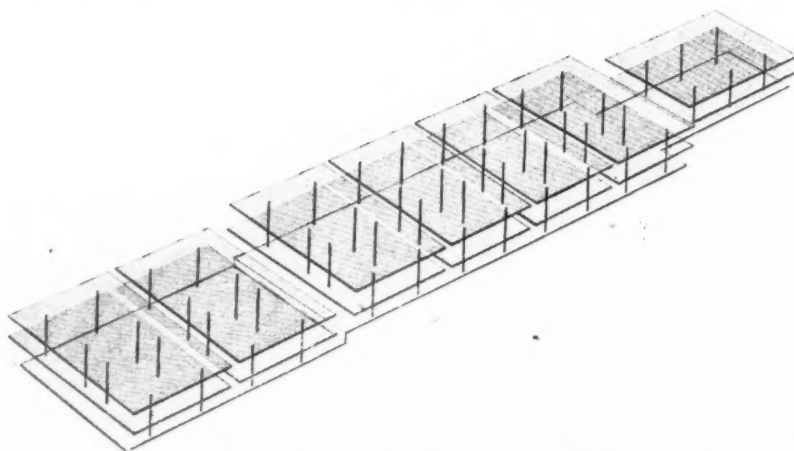
A NEW STRUCTURAL METHOD

The obvious advantage of this system is that it eliminates the hoisting of wet concrete and steel reinforcement and the use of elaborate steel or timber shuttering. O'Neil Ford, the architect of the building illustrated (the new classroom and administration block of Trinity University, San Antonio, USA), puts it like this: "Why build a wood building first to build a concrete building in?"

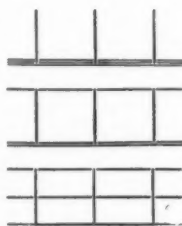
At San Antonio, the steel columns were erected first. They are formed by two angles, each 8 in. \times 8 in. \times $\frac{1}{2}$ in., welded together to form a square box. They were filled with concrete after the slabs had been hoisted into their final positions. The site concrete was laid and covered with sheets of paper; the reinforcing steel for the first floor slab was quickly placed at ground floor level and the first floor slab was poured and also covered with paper. The roof slab followed in a similar manner, with more steel placed and concrete poured. After a curing period of 10 days, hydraulic jacks, which were attached to the column tops, lifted the slabs, the heaviest of which weighed 175 tons, at the rate of 4 ft. per hr. The hoisting crew consisted of only three men—one of whom can be seen at work on page 99. Steel collars, with four tubular eyes each, were cast into the slabs for the hoisting machinery to grab. Once in position, steel blocks were welded to the collars and to the stanchions, to provide permanent seating. The columns are at 24-ft. centres, with the slabs cantilevering up to 8 ft.

The practical limit of span is estimated at 24-30 ft., or 40 ft. if the slabs are pre-stressed. Roof slabs can be raised slightly tilted. Apart from the rapidity of this form of construction, savings in cost up to 30 per cent. are hoped for. In the USA, this technique is known as the "Youtz-Slick" method, after its originators—Philip N. Youtz (a New York architect) and Tom Slick (a Texas business man and rancher) who conceived the technique independently of each other. It has been subjected to intensive research and test construction for two years and has recently been developed by the American Institute of Inventive Research, Texas. A ten-storey hotel is now being planned using the same technique, and although the project is still in an experimental stage, the Southwest Research Institute plans to license the method to builders soon.

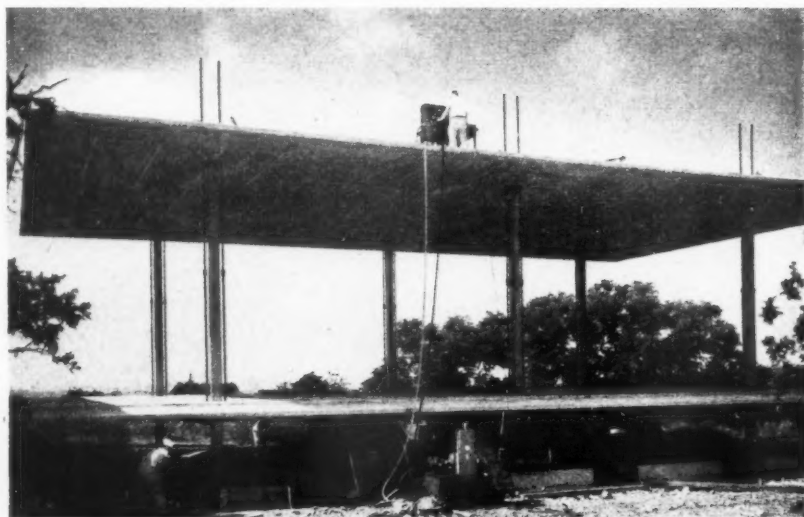
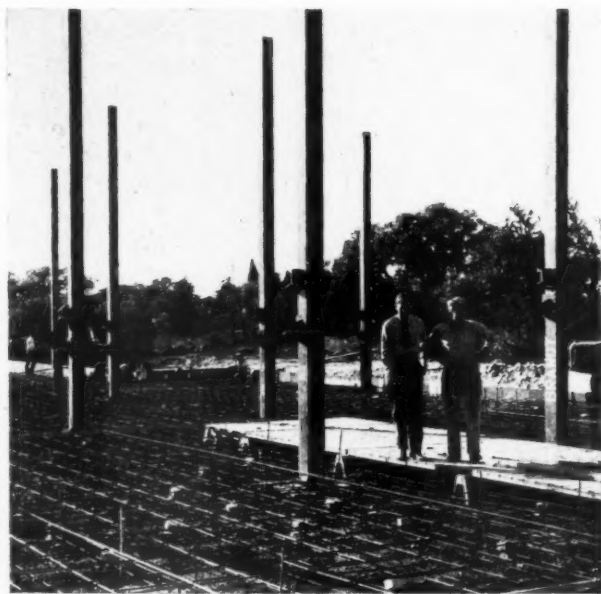
At the Porte St. Denis, Paris, a six-storey block of flats has recently been completed, using a similar technique. Certain difficulties were encountered with the hoisting, and the future success of this method will depend very largely on the efficiency and cost of the hoisting mechanism. Nevertheless, this is a good example of a revolutionary technique developed during 1950, the future of which architects should follow most carefully.



Above, diagrammatic "birds-eye" view of the new building for Trinity University, San Antonio, USA.

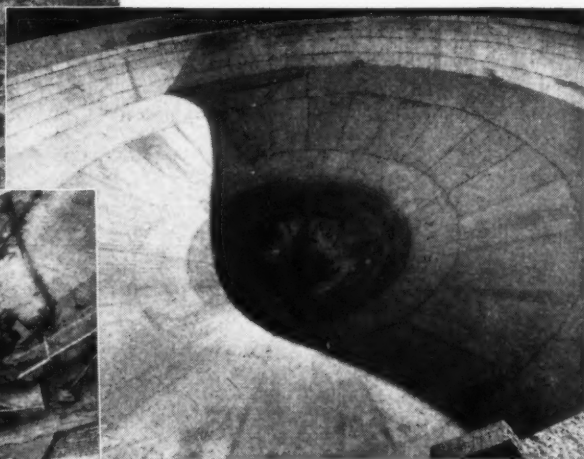
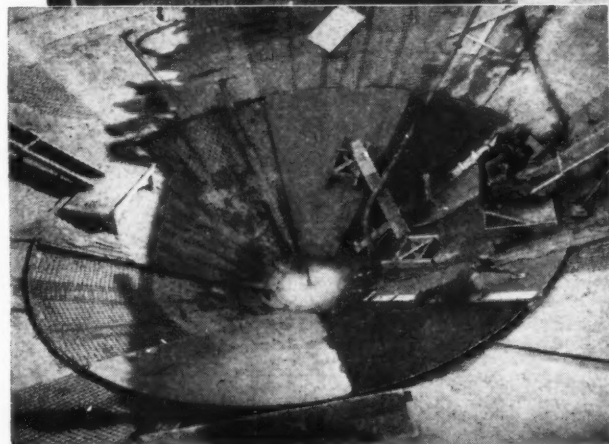


Above, diagram showing the sequence of the hoisting operations. Right, the columns have been erected and the reinforcement placed. Below, roof slab in position, first floor slab being hoisted.



WATERPROOFING FINAL SETTLEMENT TANKS AT THE COLNE VALLEY SEWAGE DISPOSAL WORKS

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Contractors :
Messrs. Hussey, Egan & Pickmere Ltd.
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THIS vast sewage disposal works serves a growing population of 500,000 people spread over 150 square miles and will deal with 20,000,000 gallons of sewage every 24 hours. The twelve final settlement tanks are surrounded by 11 feet of subsoil water and during abnormally wet seasons the depth of this water may rise to 14 feet. The main structure of each tank is formed of ordinary concrete, heavily reinforced, and a finishing lining 4 in. thick of 3 : 2 : 1 concrete made impervious by the addition of 14 lb. of 'PUDLO' Brand cement

waterproofer to each 560 lb. of the cement was relied upon to exclude the subsoil water which infiltrated under such heavy pressure. This water-proofed concrete was reinforced with B.R.C. Fabric and it says as much for the design, and the competence of the contractors, as it does for the merits of the waterproofer used, that, despite the difficult conditions, a completely satisfactory result has been achieved. Two tanks only were first dealt with as a trial the results of which justified the extension of the treatment to all twelve.

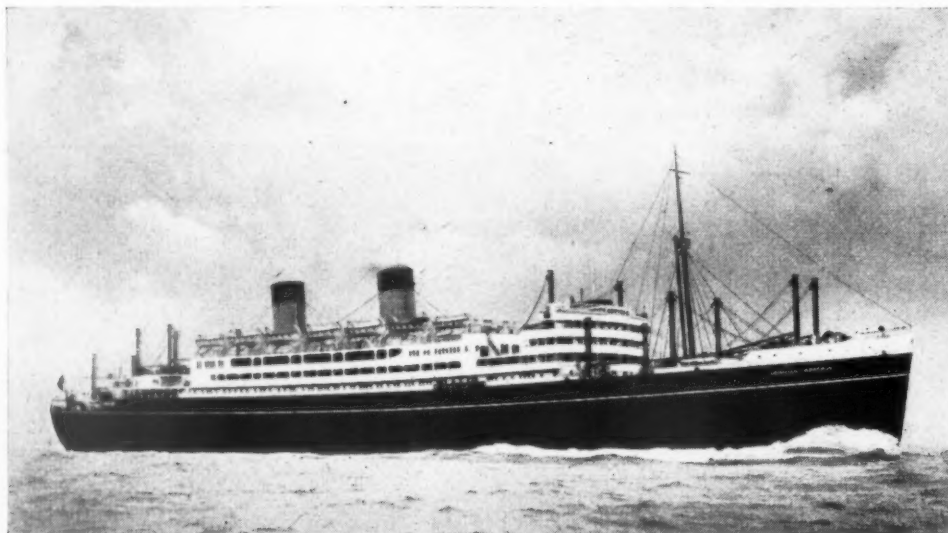
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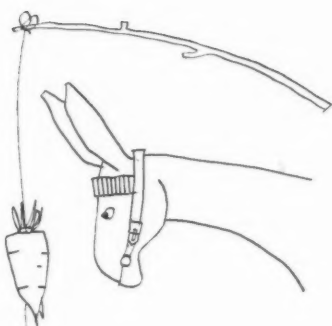
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WINDOWS
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OVERHAULED IN 1948 AFTER 8 YEARS' WAR SERVICE
THERE WAS NO RUST

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At its lowest, output per man dropped to $\frac{2}{3}$ of its prewar level. One method of counteracting this is the application of incentives to building work. Whilst difficulties inevitably arise they must be overcome if rising costs are to be halted.

INCENTIVES AND PRODUCTIVITY

Up to Oct., 1947, rates of wages in the trade had been determined by the National Joint Council for the Building Industry. As a result, relations between the builder and the operative during the past 27 years have been of a relatively cordial nature and there have been no major strikes or lock-outs during that period. But this Council fixed the rates only, i.e., without in any way giving consideration to the output which the operative was expected to perform for his hourly wage.

THE 1947 AGREEMENT

In October, 1947, it was agreed jointly to apply incentives by linking wages with output. The basic rate of output per hour, day or week, is fixed by the individual firm and agreed with the operative. When actual output exceeds the set rate, or target, the worker receives a share of the saving effected in addition to his normal earnings. Therefore, it has become possible for an operative to receive additional pay depending solely upon his skill and productive capacity. Certain general principles were laid down in the joint settlement:—

- (1) The builder alone decides if incentives are to apply to any of his contracts;
- (2) If incentives are applied, details have to be lodged at regional headquarters;
- (3) Schemes may operate for individuals or for gangs, and the basic output rates should be set at a level that will enable the average worker to earn an additional 20 per cent. above his normal rate of pay.

THE WORKING PARTY REPORT

"The Working Party Report on Building" and also "The Cost of House-Building" (Second Report) make very definite statements on the subject:—

- (1) That the application of "bonusing" schemes has increased production.
- (2) That the labour cost of a 1949 house is less than that of a 1947 house, although labour rates have advanced by 4½d. per hour (approximately 15 per cent.) since 1947.
- (3) That there is no evidence to show that bonused work is inferior in quality.
- (4) That it is clear that an appropriate system of incentive schemes is an impera-

tive requirement, if output in the industry is to be adequately increased, particularly now that all our political parties are pledged to a policy of full employment.

DIFFICULTIES

It must be realized that difficulties will, and do, arise with incentive schemes in the building trade, and that maintenance and jobbing work, particularly, is not easily bonused. But there is not the slightest doubt that during the past three years valuable experience has been gained. By its repetitive nature, the field of housing lends itself most readily to "payment by results" schemes and if, as a result of being paid on a measured output basis, the operatives increase their rate of production, the public will be more likely to obtain the urgently needed houses sooner and more cheaply. General contract work, other than housing, is not so readily adaptable, for there are no conveyor belts on a building site, and the majority of the work is performed by human hands. This problem, however, is not insurmountable, and incentives are being applied increasingly throughout the country to this type of work. Even variations, executed on a daywork basis, could be bonused if architects insisted.

Many of the better known contractors accepted the introduction of incentives with enthusiasm, although this has not been the case with most of the medium and small firms, mainly because they have little, if any, knowledge of how to implement a bonus scheme.

One of the current problems is that some builders fail to relate wages to output and therefore pay excessive incentive rates. This makes of incentive schemes a vicious circle and completely destroys their value to the community. Defence Regulation 56AB (now obsolete) prevented this practice during the war, but now some other means will have to be found to prevent this happening.

However, the NFBTE and many of the larger firms of contractors are pooling and divulging their knowledge in an endeavour to assist firms who seek information and guidance on this subject.

RESULTS SO FAR

The engineering industry has used incentives for over 70 years and, in spite of accusations of inefficiency, the building industry can be proud of the progress made during these last two years, for site conditions are variable and the limited practical use of machinery makes incentive schemes particularly difficult to organize. Nevertheless the LCC has applied a uniform system of bonusing on their housing estates, during the last two years, with such great success that labour costs per house are £45 to £60 less today than they were in 1947. Sufficient knowledge has now been achieved with "bonusing" on houses to suggest that each local authority could not only standardize incentive systems, but also the man-hours for each type of house, thus ensuring equitable treatment for employers and workers.

THE NEW AGREEMENT

The new agreement does not, in any way, alter the original agreement of 1947; the one important addition is that, whereas in the original agreement it was permissible for the builder to apply incentives or not, it would now appear that Regional Panels are to be set up for the guidance of both the employer and the employed. There is a clause which reads "where the operatives on a site are aggrieved because of the absence of a bonusing scheme and seek advice accordingly from the district organizer of their trade union, he may discuss with the employer the reasons for the absence of a scheme and if they are unable to agree about the possibilities of introducing a scheme, may report thereon to the appropriate Incentives Panel for that Region, which will ascertain the employer's position and give guidance accordingly." It seems likely, therefore, that there will be

some difficulties which will be brought before the Regional Panel, at any rate during the first few months, and it appears that this clause may give the workman a right to demand a bonusing system on the site, if his employer has not put forward a scheme.

There is also a suggestion that work given to the sub-contract "labour only" employer is to be minimized as much as possible, and that in any case, he must be a *bona fide* firm. This suggestion should meet with general approval.

The high cost of building affects directly or indirectly all other industries. For example, if our factories are expensive to build, this will be reflected in increased costs of their products, to the ultimate detriment of our export trade. There is ample work for the building trade for many years to come, but labour costs must be reduced. The application of incentives to all types of building should be encouraged wherever possible, for it is one of the major substitutes for the harsh measure of unemployment.

The end of 1950 sees us at the stage where there is general agreement to the application of incentives throughout the industry. At the end of 1951 we should be able to see what the result of this has been.



The reports of the Working Party and the Productivity Team are already beginning to have some effect. The MOW, the RIBA and the NFBTE all have a part to play in applying the many recommendations included in these reports.

BUILDING SITE ORGANIZATION

The Building Industry Working Party and the Anglo-American Productivity Team, whose reports were published early in 1950, stressed the need for increased efficiency in the organization of building projects as a means of improving productivity and lowering costs in the building industry. The Anglo-American Productivity Team, in particular, showed how, in the USA, the architect can make a vital contribution to high productivity by taking a larger measure of responsibility for the timing and the execution of the work without in any way derogating from his functions as an artist or his duties towards the building owner and contractor.

The MOW has just reviewed the main recommendations contained in these reports and the steps being taken to give effect to them; the principal points which affect organization of the work are those concerned with the professional training of the

architect; the pre-planning of the work; the management of building operations, including the costing, programming and progressing of the work in hand; and the use of mechanical aids.

PROFESSIONAL TRAINING

Clearly, as a long-term policy, the training of the architect should provide for practical experience on the site if he is to be in a position to deal with this task. The RIBA regards such training as of great importance and is working out a scheme for practical training in consultation with both sides of the industry.

PRE-PLANNING

The Institute is also taking measures, jointly with the NFBTE, to impress upon building owners the importance of deciding on their requirements at an early stage and avoiding variations while the contract is in progress. While, of course, the final responsibility for the programming and execution of the work lies with the contractor, the architect can help by pre-planning the project, even before the tender stage; by timing the execution of the work in the light of his general knowledge of labour and material supplies in the district in which the work is to be carried out; and by preparing, at an early stage, a clear plan of starting and completion dates to suit his client. In doing this, he will need to consider the preparation of drawings and quantities; the obtaining of building and timber licences; the arrangements for his specialist consultants and sub-contractors; and other matters of this nature.

PROGRAMMING AND PROGRESSING

Both the Building Industry Working Party and the Anglo-American Productivity Team reports emphasize the need for the greater use of pre-planning, programming and progressing of building projects. The Building Industry Working Party recommends that:

"Before starting work on a site the builder, with the full knowledge of the operation he is going to undertake, should draw up a programme of work. Site organization should then be carefully planned with regard to supplies of materials and tools, correct balance of operations and labour, and in all other respects; the progress of the work should be compared periodically with the programme and necessary adjustments made."

The Practice Committee of the RIBA has considered a suggestion that a programme chart might be included in contract documents, but concluded that it would not be practical or desirable. Nevertheless, many architects and certain government departments call upon the contractor to submit an overall programme in some detail, with a definite completion date. Since the war it has been difficult to enforce the penalty clause, owing to the unpredictable material and labour supplies; however, with the return to a better balance between material supplies and the building programme, this practice is returning.

Here, again, the architect can help by specifying those materials most easily obtainable in the district in which the work is to be carried out; and, indeed, by allowing a degree of elasticity in the specification, so that, in order to meet unforeseen shortages, alternative materials can be used. Moreover, the early agreement of a programme of construction should make it possible for the contractor to order his materials well ahead and enable him to foresee possible causes of delay, so that rearrangements of the general programme may be made without the danger of upsetting the efficiency of the organization or the terms of the contract.

COSTING

Realistic programming of the work is, of necessity, based on a knowledge of labour and plant output under varying conditions. Such knowledge is of equal importance in tendering for new contracts and the operation of incentive schemes based on increased output. Since the war there has been a dearth of representative information on this subject, which can only be remedied by the keeping of systematic records by the contractor, during the execution of his work. The importance of this subject has been stressed on many occasions and it is gratifying to know that the MOW is following up its previous publications and exhibitions on the subject by popular leaflets on costing, programming and progressing, and that the NFBTE are hoping to publish a booklet on costing in the near future.

Information on labour productivity and costs, which will be useful to the architect, can be on a very much broader basis than that needed by the contractor. (The AJ will publish an article in the near future which will show how the architect can obtain and use this sort of information in planning his work.)

MECHANICAL AIDS

The architect will do well to watch the steady increase in the mechanization of the industry, for machines can give him speedier and cheaper building (an article on "Mechanization" appeared in the AJ, Sept. 28). The use of mechanical plant (some of which is described on page 107 of this issue), particularly in the handling of materials and in concreting, can drastically affect the general organisation of the work. This may call for the collaboration of the architect and he may be asked by the contractor to agree to modifications of the building programme. For example: the use of a mobile crane, or mechanical trencher, may call for the completion of the foundations and drains together, at a much earlier stage in the job than is usual, in order that the plant may be used to the best advantage.

THE BUILDING PROGRAMME

The MOW's review has nothing to say on materials' supply in 1951, but it has been stated elsewhere that the home production of cement can be increased by as much as 500,000 tons this year and the production of bricks, which was substantially increased during 1950, will be helped by recruiting labour to the brick-making industry. This gives some hope to the building industry that the present position may be maintained and perhaps improved and thus provides the atmosphere in which joint planning by the architect and the contractor can be undertaken with reasonable hope of success. Any tendency, however, to overload the building industry, as was done in this and other countries in the early post-war years, would only bring the industry back to a position in which measures to improve efficiency were largely frustrated by continual delays in the supply of material and inadequate, or unbalanced, labour forces.

But the immense programme of reconstruction and re-armament facing the building industry means that for many years it will need to construct up to the limit of its capacity, both of men and materials supplies. This means that a building contractor must time the work on his various contracts so that his men and mechanical plant are kept continually employed. The architect can help by co-ordinating the requirements of the building owner with those of the contractor, thereby providing conditions under which best use can be made of the resources available and making possible more efficient and cheaper building.

LEGISLATION OF THE YEAR

By Ernest Watkins

What with a general election and other more various upsets to interfere in the legislative output of Parliament, the statutes for the year 1950 make up a small bag, in both senses. The harvest is poor and its quality of interest to the profession below average, all of which should cause sighs of relief. Here are those Acts of particular note:—

14 Geo. 6 cap. 8. Distribution of Industry Act, 1950 (passed 12th July, 1950). Extends the powers of the Board of Trade to foster the setting up in or removal of industries to the Development Areas. Most important aspect, those powers which allow the Board to give financial assistance to individual undertakings.

14 Geo. 6 cap. 23. Coal Mining (Subsidence) Act, 1950 (passed 28th July, 1950). Provides a new code to regulate claims for damages to property caused by subsidences resulting from underground coal workings. Important to all with interests in the coal mining areas.

14 Geo. 6 cap. 27. Arbitration Act, 1950 (passed 28th July, 1950). A consolidation statute. This Act contains the whole of the statute law governing arbitrations.

14 Geo. 6 cap. 28. Shops Act, 1950 (passed 28th July, 1950). Another consolidation statute. Contains the whole of the law relating to shops.

14 Geo. 6 cap. 34. Housing (Scotland) Act, 1950 (passed 26th October, 1950). A complete consolidation of the law relating to public housing and the law governing houses in private ownership in Scotland. Repeals all former Acts from 1925 onwards.

14 Geo. 6 cap. 39. Public Utilities Street Works Act, 1950 (passed 26th October, 1950). Provides a standard code to co-ordinate when and by whom street works may be carried out.

STATUTORY INSTRUMENTS

Serial No.	Title.
66	Rating and Valuation (Transitional) (London) Regulations.
88	Town and Country Planning (Grants) Regulations.
152	Town and Country Planning (New Towns Special Development) Order.
268	Land Tax (exemption) Regulations.
355	Central Land Board (Register of Dealings in Land) Regulations.
363	Housing Acts 1936-49 (Forms of Orders and Notices) (Amendment) Regulations.
513	Lands Tribunal (War Damage Appeals Jurisdiction) Order.
534	Town and Country Planning (Tree Preservation Order) Regulations.
565	Plant and Machinery (Valuation for Rating) (Amendment) Rules.
706	Town and Country Planning (Grants) Amendment Regulations.
728	Town and Country Planning General Development Order and Development Charge Application Regulations.
729	Town and Country Planning (Landscape Areas Special Development) Order.
792	Town and Country Planning (Churches, Places of Worship and Burial Grounds) Regulations.
968	Control of Building Operations (No. 15) Order.
1066	National Parks and Access to the Countryside Regulations.
1131	Town and Country Planning (Use Classes) Order.
1177	Town and Country Planning (Ironstone Areas Special Development) Order.
1763	Landlord and Tenant (Rent Control) Amendment Regulations.
1850	Special Roads (Procedure) Regulations.

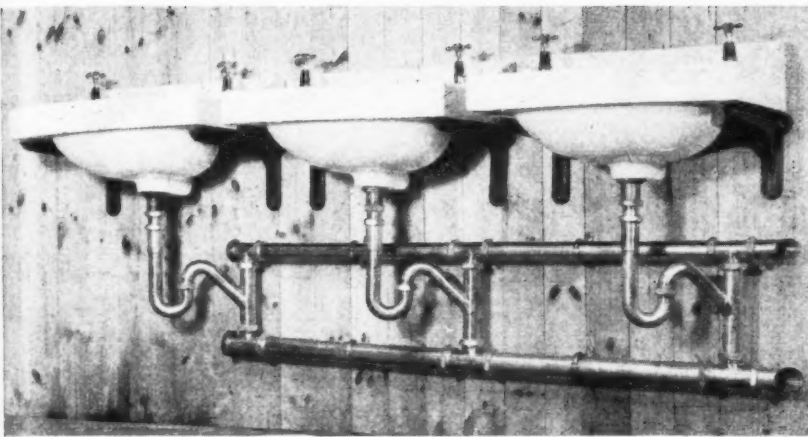


Illustration shows Econa Preformed Vented waste ranges to a Ministry of Works design.

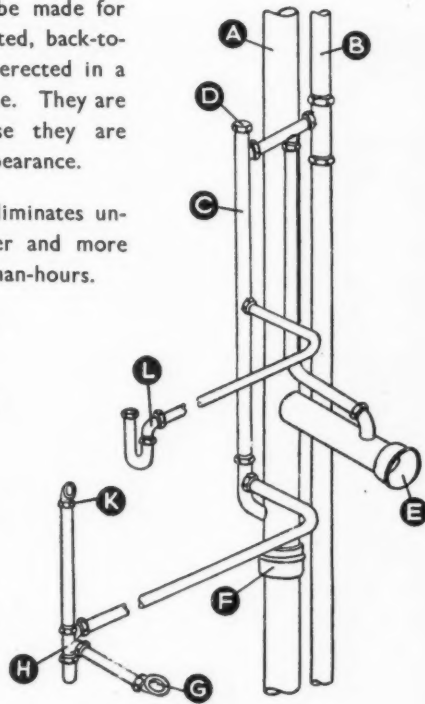
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- E. Sanitary socket to receive outlet of W.C. pedestal.
- F. Caulking socket.
- G. Bath waste elbow.
- H. Deep seal tubular copper Bath Trap.
- K. Overflow fitting.
- L. Deep seal lavatory basin trap.



Owing to lack of space it is not possible to show the sink and this has been omitted from the above illustration.

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Specimens of the Econa traps as used by the L.C.C.



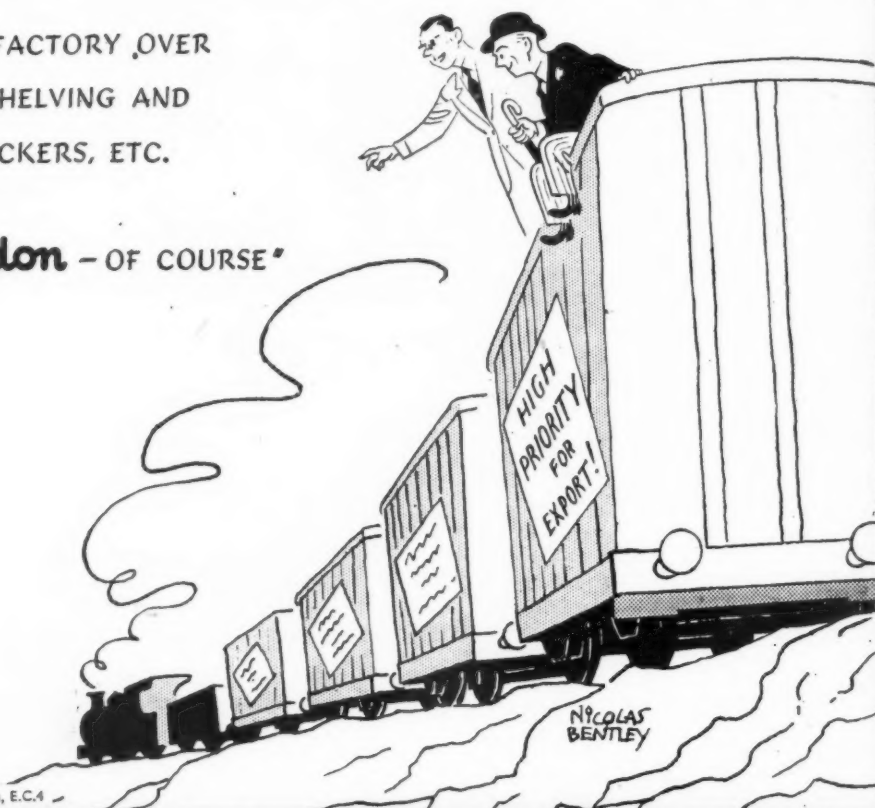
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Architect: Eric Ross, F.R.I.B.A.

Consulting Engineers:

Brian Colquhoun & Partners

THE
ESAVIAN
PRINCIPLE

British developments in sound insulation and lighting theory are leading the rest of the world. It is to be hoped that we do not allow the USA or any other country to steal this lead from us in 1951.

ACOUSTICS AND LIGHTING IN 1950

1950 was a year during which the acoustics people have been holding their breath; there have been no really important publications or practical achievements, but some are boiling up. Obviously, the outstanding event is the new concert hall, which is not only a major building in its own right, but represents also the most elaborate collaboration ever attained between acoustical consultants and the designers of a concert hall. The Festival Hall should tell us just how nearly they can now predict good acoustics for music, and the BRS studies of the completed building, and public opinion of its properties, will be awaited with equal interest.

SOUND INSULATION

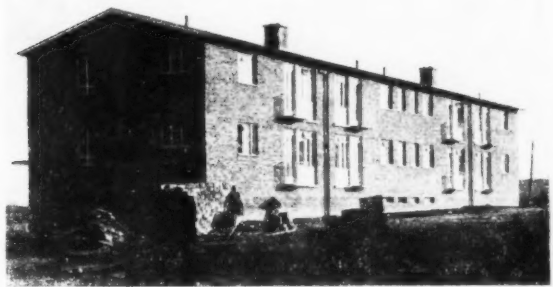
Another big item on the horizon is the BRS flats programme for sound insulation experiments. The Station has not released any details about these yet, though there is no secrecy about the work and it is known that two blocks, one of box-frame construction and one of traditional load-bearing brickwork design, are more or less finished on the Station's housing site and are receiving detailed study. An effort is being made to bring practical insulation treatments, for each type, up to the recommended standards, and the complete programme includes steel frame construction. This is the biggest and most useful study of sound insulation going on anywhere in the world and should bring this branch of building technology somewhere near finality for day-to-day purposes. One part of it, no doubt, can be considered almost complete already: floating floors of screeds and rafts on glass wool are now in wide use for flats, and the Press was invited to the Countess Road flats in Walthamstow to see examples of this. Eight acres of such floors were laid in the scheme.

Confirmation of the pre-eminence of British work in this field is given by the pattern of world publications. The Physical Society's Acoustics Group published the papers of a symposium on the subject which was the best collection of material thus far, while the USA's efforts in the architectural and technical press definitely show that neither their theoretical nor their practical work is yet recovering from its long neglect.

ACOUSTICS

On electro-acoustics, there has been a vital architectural advance based upon some German work by Haas, translated and published by BRS. Essentially, the advance consists of the discovery that if sound emanates from a source not less than 5 ft. and not more than 25 ft. further from the listener than the original, he will not be aware of the support no matter from what direction it comes, providing it is not excessively strong. In other words, complete realism can now be achieved with public address systems. In practice, intelligibility is usually improved also. The necessary delay can often be obtained simply by the placing of the loudspeakers, or it can be obtained by electrical delay techniques. It is understood these have been tried experi-

Block of 8 flats in load bearing brickwork for sound insulation trials at Abbots Langley. (Crown Copyright Reserved.)



mentally and are now under practical development. The most publicised public address system of the year, undoubtedly, is that in the House of Commons, with its hundreds of loudspeakers and complicated circuits. It is very important that we, as architects, should know how well this system is working and whether a similar system could be applied successfully to other debating chambers, but not an authentic word has been said of it in public since the opening. We must hope for a report soon; rumours are rife that it is not proving as useful as was hoped.

LIGHTING

Turning to lighting, 1950 saw one of those major advances in theory that only occurs once or twice in a generation and have an effect on all subsequent practice. Fortunately, it comes again from Britain, in the form of the work at BRS of Hopkinson and his colleagues, on the discomfort caused by glare.

Discomfort is important, partly because it is almost the only factor in lighting a person cannot ignore, and partly because it is said to cause tiredness. Of course, the phenomenon itself is not a new discovery, but there has never before been a set of rules about it—now there is. Discomfort occurs when the intensity of a source is excessive; that is to say, it can occur with a large source of low brightness, such as a view of sky through a large, high window, or a small source of high brightness, such as a bare fluorescent tube a few feet away. Discomfort also occurs when there are sharp contrasts between source and background, and a gradation between bright and dark areas relieves it.

There has been good American work in this field, but the results were not couched in rules for design of such obvious significance. However, one can well imagine that, in spite of this, the Americans may get ahead of our own manufacturers in putting these new ideas into practice, at least in the field of artificial lighting. At the meeting where the BRS work was described, some commercial lighting engineers saw "difficulties" in applying the new ideas. Fortunately, application to daylighting depends on architects, not on the manufacturers of light fittings, and in this

field we probably have a lead over other countries that we will maintain.

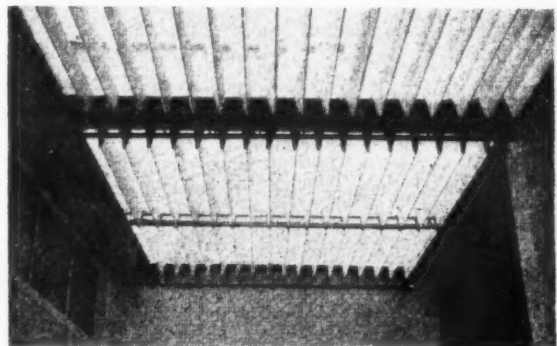
Schools are, of course, our chief preoccupation in natural lighting, and the problem of the year has been how to handle the lower ceiling heights (as low as 8 ft.), which are becoming popular in primary schools on grounds of economy. Obviously, it calls for some kind of top-light plus the side-light, and it is the top lights which are attracting interest. Middlesex and Hertfordshire both produced louvred centre lights, though both seemed somewhat elaborate for the job. We will probably hear a lot about top lighting in the future.

A big disappointment which revealed itself in 1950 was the MOW Lessor scheme. Here was a great opportunity to apply modern open planning methods, and modern window design to provide good working conditions, and—with two or three exceptions—we got the mixture as before. The office block opposite Olympia is, obviously, on good modern lines for both lighting and planning, and the building by Holborn viaduct also seems to be sound in these respects. But most of the rest are a needless disappointment.

The American literature on artificial lighting is vastly more voluminous than British, and it has quality as well as bulk. Several good articles appeared in 1950 in *Illuminating Engineering*, dealing with home lighting, bakeries, factories, libraries, etc. The British journal *Light and Lighting* is rapidly raising its own standards in this kind of material and, if it keeps up its improvement, it could become an important influence here.

The lighting of the House of Commons has had as much publicity as its public address system, but again one hears that it is not working as well as was hoped. No doubt, if this is so, it will be corrected, and we should expect a full report eventually. When a great effort is made to do a good job on a public building, we are entitled to learn every possible lesson from it. One is not encouraged by such a remark as appeared in a paper on the building given at the IES to the effect that the system is probably unique in the way efficiency was subordinated to artistic requirements. What are we to think when lighting engineers adopt such an attitude?

Top-lighting with adjustable louvres at the primary school in Morgans Road, Hertford.



Pending the development of the use of atomic energy, spectacular advances in the field of heating can hardly be expected, but 1950 has seen important experimental work, interesting new equipment and some advanced installations.

HEATING IN 1950

By H. G. Goddard

To begin with research, the BRS continued its full-scale heating experiment, the houses at Abbot's Langley being all occupied by normal council tenants. It is gratifying to learn that results during the "occupied" period are very well in agreement with those achieved in the "unoccupied" phase, when the ordinary actions of a household—in so far as they affect heating—were simulated by laboratory assistants. Where there is an appreciable discrepancy, it had already been foreseen by the scientists. Thus, those results already published (see *AJ* Information Centre 23.90, Feb. 3, 1949) may be taken as representing something very close to those which will be attained in practical use.

HEATING

An important line of research now being followed at the BRS is that concerned with intermittent heating. Many, it is thought, cannot afford to keep their houses fully heated when only a small part is in use at one time. By the use of inner linings of low thermal capacity, with suitable heating equipment, a room may be made to reach a comfortable temperature within a very short time of turning on the heating, with the possibility of large savings with small loss of comfort. A further piece of heating research, which has produced practical results, is the "Stanmore experiment" (See *AJ*, July 27, 1950). Readers will remember that here, two houses were built for full-scale research in warmed-air heating, a variety of alternative apparatus and systems being installed, including a downdraught, solid fuel "cabinet heater," and a gas-fired "chimney furnace" based on American



Control panel for heating and ventilation system at the House of Commons; engineer using periscope to see into the new chamber.

design. The solid fuel cabinet heater and a gas-fired version are now on the market. One result of the research was to show that very similar results, from the point of view of comfort, were achieved by circulating the warmed air in the floor cavities, to give low-temperature panel heating, and by circulating it through ductwork to the several rooms. This confirmed results shown by American research.

Nevertheless, the popularity of panel warming has prompted others to instal both warm-air and warm-water systems in this country during the past year—some of the latter have been of the type using small-bore soft copper tubing—and very satisfactory results are reported. No doubt the relatively small temperature rise ordinarily necessary in this country has helped their success. In America, one of the year's new products is an electronic control, using the principle of the Wheatstone bridge to integrate inside, outside, and water temperatures, and thus to provide the great sensitivity necessary for accurate control. Recent research in America has shown that, where floor heating is used, temperatures no greater than 75° F. should be employed if loss of vascular tone of the legs and feet is to be avoided. In this country, such a temperature has long been regarded as the maximum desirable for comfort.

The introduction of the new, thermostatically-controlled air heater has been matched during the year by that of a new boiler for low-pressure hot water heating and indirect hot water supply. This is a gravity-fired, natural draught unit, with electrical thermostatic control, following the general lines of an earlier type designed to burn small anthracite. The new one, however, burns coke, a fuel until recently much more readily available, and somewhat cheaper; very high efficiencies are attained.

In this country, district heating continues to be more talked about than used; but work on a fine example—that of the Pimlico flats and Dolphin Square—has proceeded during the year, and now nears completion. The hot water storage vessel, in its glazed enclosure, forms a new landmark on the Thames. From the architect's point of view, such a container is an awkward customer with which to deal, but here an admirable solution, both aesthetically and technically, seems to have been arrived at.

AIR CONDITIONING

But a short distance away a notable air-conditioning scheme has been put into operation—that of the new House of Commons (See 23.129, July 6, 1950). In this, all the knowledge derived of modern research, both physical and physiological, has been incorporated. It is the most advanced system yet installed in this or, perhaps, in any country. Not only is clean air, at the required humidity and temperature, supplied in the appropriate volume to all parts of the House, but such refinements as variation in the direction of flow, held by the physiologists to be stimulating, are incorporated.

Further down the river another new air-conditioning system, that of the Royal Festival Hall, is notable for the incorporation of a heat pump. This device, originally invented in this country, has received considerable theoretical, yet little practical, attention here, the only other large installation being the well-known one at Norwich. As the economics of the heat pump are a matter of some controversy, not only here, but also in the USA, where there are considerable numbers, the information to be derived from the new example will be anticipated with interest. The subject should not be left, however, without mention of the continued experimental work at the Electrical and Allied Trades Research Laboratories, where much valuable information has already been collected from a small installation of 9 h.p. In Sweden, also, research has been made into its application to farms.



Wind-driven electric generator.

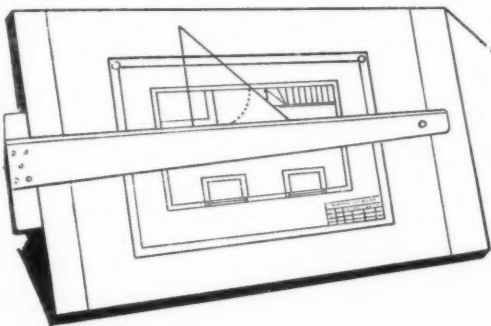
In one experimental installation there heat is recovered from the byre for housewarming. In this country the application of the air heat pump to crop drying is receiving attention.

MISCELLANEOUS

Another application of scientific principles to heating installations of a quite different kind, which has become available in this country during the year, is the electrolytic method of corrosion prevention in many kinds of steam and hot water apparatus. By passing a very small current through an aluminium anode in the system to be protected, corrosion and scale formation are prevented. In installations where the growth of algae is a problem, the introduction of an additional copper electrode ensures their elimination.

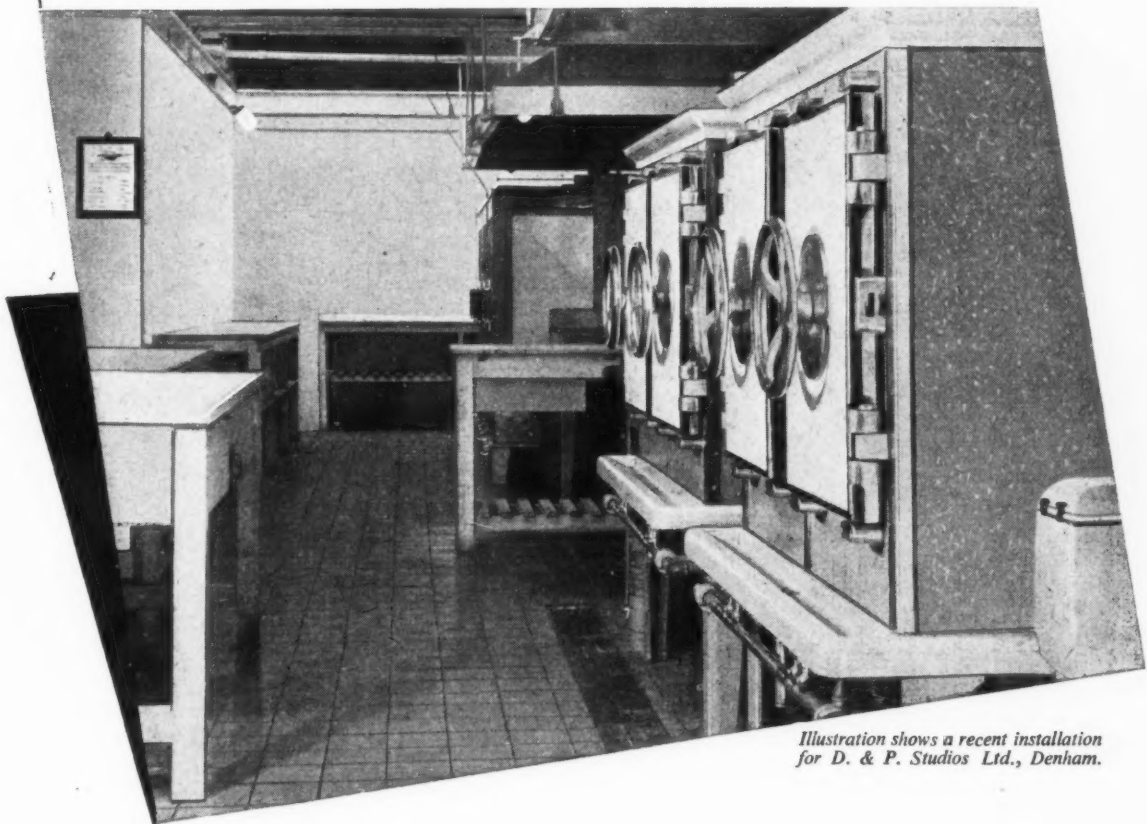
The problems of generating electricity without increasing coal consumption have continued to exercise the minds of the scientists; so indeed they must, for electrical consumption continues to increase unmatched by any increase in the production of coal. During the year the Electrical Research Association published its report on wind-driven generators. A number of suitable sites have been investigated; the building of machines of considerable size—1,500kW. or more—is shown to be a practical proposition. The aesthetic problems involved are not discussed. Groups of ten or more of these large machines, as envisaged in the report, might not be a welcome addition to some of the more remote and beautiful parts of our hills and coasts, and it would be unfortunate if a conflict of interests were to be the cause of such acrimonious argument as now proceeds on the subject of the Welsh hydro-electric schemes.

Now let us end this brief survey with a point which we should have liked to see during the year but did not. Much of the effort of research workers to produce heat more effectively and cheaply is set at naught if bad insulation permits it to escape easily. This applies especially to housing; although the BRS, as the result of their recent work, has suggested minimum standards, large numbers of the new houses are still to be seen in course of construction which fall considerably short of them. We hesitate to demand yet another regulation; but here, surely is one for which there would be real justification. No plans for building should be passed where the construction is likely to give lower standards than those suggested. Perhaps, by the end of 1951, this will be the case.



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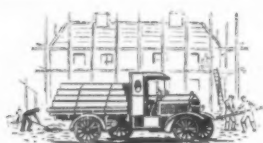
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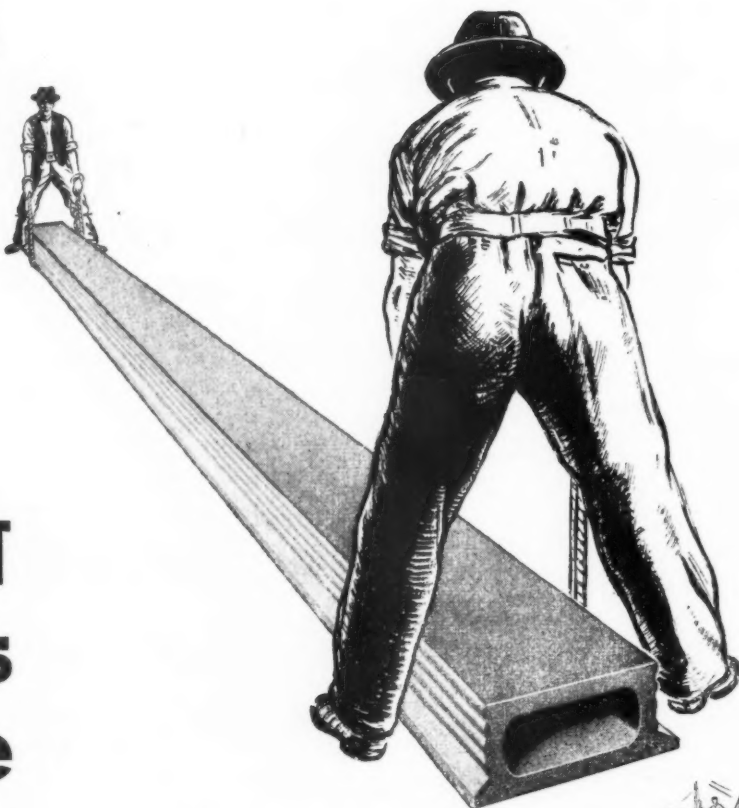
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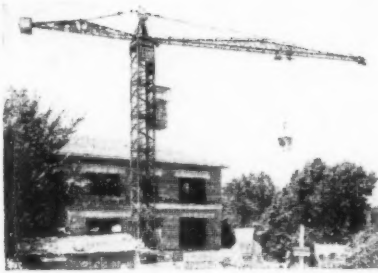
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The increasing use of mechanized equipment for building was strongly recommended by the Anglo-American Productivity team. It is largely the architect's responsibility to see that full advantage is taken of new building plant. The following summary should help to acquaint architects with some of the principal developments, which took place during 1950.

MACHINES FOR THE MODERN BUILDER

Steady progress was made during 1950 in the production of a wide range of building plant. Power barrows, mobile elevators and hoists, brick trucks, mono-rail transporters, swing weigh batchers, mobile saws and skip-dozers may be said to have established themselves alongside the materials mixers as part of the builders' plant stock in trade. British-made powered hand-tools also made great headway. Those of most use to the building industry, namely, the saw, the plane, the router and the belt sander are now in plentiful supply and great demand.

A small hydraulically-operated rising scaffold platform, which, when retracted, will pass through a 6 ft. 6 in. by 2 ft. 6 in. doorway, appeared on the market early in the year. It provides a useful working stage for external and internal repairs to buildings and for decorating, etc. Its working height is up to 23-ft. and it can be used for servicing street lighting systems.

An unusual power barrow was shown at the plant demonstrations at Leeds in September. This has a skip capacity of 4½ cubic feet, but has the added attraction (of interest to the sportsground contractor) that it can be used as a light roller and in conjunction with grass cutting equipment.

Boom transporters in steel and aluminium were introduced towards the end of the year. These transporters consist of a boom equipped with a 7-cu. ft. travelling skip for conveying concrete from mixer to foundations over a distance of 40-ft. radius.

The smallest machine in the excavator class so far produced, a tractor-operated shovel (Fig. 1), made its first appearance at the Public Works & Municipal Services Congress & Exhibition at Olympia in November. It can be used for general excavation work, including face work up to 14-ft. high and for cutting trenches 2-ft.

wide down to 9-ft. deep, and provides an economical solution to many problems which have troubled the builder in the past.

A post hole digger was shown at the plant demonstrations held on Warwick racecourse in June. This drills holes 9-in. and 12-in. dia., 3-ft. deep and is driven from the power-take-off of a tractor. It takes 30 seconds to bore a hole. The hole being circular in shape gives the optimum support to the base of the post (or pole).

A mobile earth auger (Fig. 2) which drills holes up to 2-ft. dia., 8-ft. deep has reached the production stage. This machine may be used in the preparation of piled foundations for structures down to the depth specified above.

A flexible reinforced rubber tube of special construction was put into production early in the year. Laid inflated in wet concrete it can be easily withdrawn by expelling the contained air after the concrete has set. It forms ducts or cells and has been largely used in post-tensioned prestressed concrete formation, and in the fabrication of lightweight precast concrete products, such as floor beams. Its extended use in the construction of continuous pipelines and conduits for surface water drainage, electric

supply and telephone cables, is in the course of development.

The year has also seen the development of an important new material, a cementitious slurry, which is applied to structural surfaces by means of a special spray gun from a self-contained portable mixing plant. Chemically inert, this offers a high resistance to fire, has strong adhesive and anti-condensation properties and gives good thermal insulation. It provides an attractive finish for external and internal walls, roofs and ceilings of all kinds of buildings.

A method of conveying materials which finds great favour in the USA is now also available in the UK. This consists of an excavator fitted with crane equipment—a 60-ft. boom and a 10-ft. cantilever. This device can solve many of the builder's horizontal and vertical handling problems.

No review of the year's developments would be complete without further reference to the long reach tower cranes described in the AJ, September 28, 1950 (see illustration at the top of this page). Several British manufacturers are known to have become interested in this type of crane and it seems probable that production will shortly commence over here.

Right, Fig. 2, patent auger for 18-in. × 4-ft. hole.



Below, Fig. 1, tractor-operated shovel and back acter.



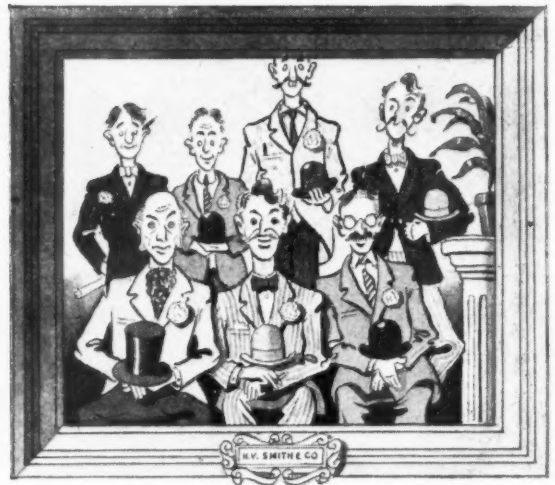
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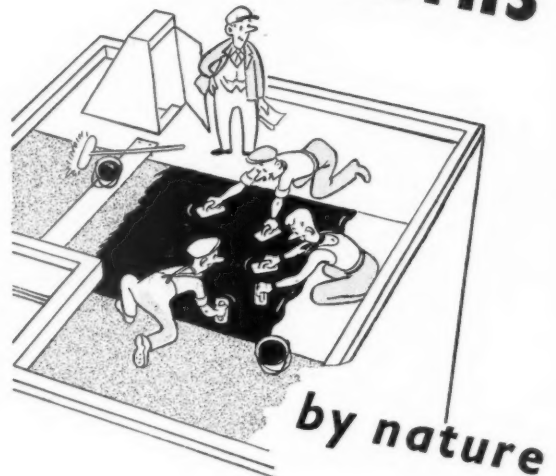
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By studying the trend of prices in 1950, it is possible to make some estimate of likely movements in 1951. In doing this, Prof. Bowen has not found it possible to paint a very optimistic picture.

PRICES IN 1950

By Ian Bowen

Building materials prices, as has been observed in an earlier article (AJ, Nov. 30, 1950), fell from the devaluation of the pound sterling in April, 1950, and then resumed their upward rise. Since then they have risen by about 6 per cent., and by the end of the year the figure may have reached 8 per cent. Have we any means of judging the strength of this renewed upward trend?

There are some recent precedents, which are worth studying. For, unfortunately, war rearmament situations are no longer unusual. The steepest rises in materials prices in recent years took place between May, 1940, and May, 1942, and again between August, 1946, and February, 1948. On both these occasions a great variety of inflationary forces were at work, including a growing Government demand for goods and services at home, and an American boom with all its repercussions on the world prices of raw materials. After 1942 the rapidity of the rise was checked by various measures of direct Government control, and after 1948 by more indirect controls, together with a slowing down of the increase in effective world demand. In each case a period of rapid advance was followed by a period of (relative) stabilization; in each case Government demand at home, and American demand abroad, were two of the most crucial factors.

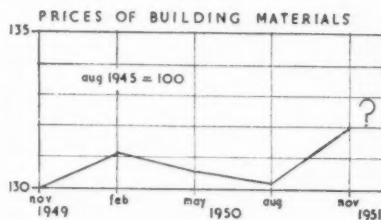
Thus American experience is directly relevant to our own. Moreover, there has been a distinct similarity between the rise of prices in America in 1950, and the earlier rise, which took place there, in 1941. (This applies to prices generally, of course, as well as to building materials' prices in particular.) In 1941 commodity prices (other than those of food and farm products) rose by about 11 per cent. (from January to December). In 1950 the rise did not begin until April. But this time, the index seems likely to have risen by at least 11 per cent. within 8 months of the commencement of the upward trend, and to exceed 11 per cent. by several points after twelve months. Certain specific raw materials (timber, lead and zinc, for example) are advancing in price even more steeply than this; although cement, paint, and bricks are not going up so fast. Building materials in the USA, as a whole, went up by some 9½ per cent. in the year October, 1949, to October, 1950. It is reasonable to suppose that our own index will have risen by a very similar percentage.

Building costs depend not only upon materials costs, but upon wages costs and the productivity of labour. Wages are, in turn, closely linked with movements in the cost of living index. In the USA, the cost of living rose by rather less than 10 per cent. in 1941, but this time it is not advancing quite so rapidly. However, steep rises in raw materials prices are bound (after a lag of a year or so) to affect the cost of living. Although the cost of living in the USA and Britain has only risen by about 4½ per cent. in the last twelve months, it would be unwise to assume that this rate of advance will not speed up. However, even supposing that wages follow suit, the net effect will be a *dampening* one for the next six months in comparison with

the rate of advance of materials prices. So, building costs should advance, on average, at a rate rather less than 10 per cent. per annum, probably at 7-8 per cent.

There remains, however, the important question of productivity. The most disheartening factor here is that shortages of some important building materials may develop.

It ought, perhaps, to be stressed, also, that rises in both wholesale and retail prices are to be expected during the next six months even if the trade unions continue to agree to wage-restraint. (Due to increases in raw materials, prices, and because of the inflationary effects on the economy of the export drive and the rearmament programme.) This does not mean that serious inflation will develop, but that there will be an increase in quotations, and in finished costs, from month to month. At some point an attempt at relative stabilization will have to be made. At that point, whenever it may come, the clamour for renewed controls will drown the clamour against them, and it will be essential to take more direct action to prevent any further rise in prices. But by then they may well have reached a ceiling 20 per cent. above the 1949 level, before successful restraints are imposed.



This special contribution, by Brian Grant, attempts to sum up the position of the building industry and the prospects and difficulties which 1951 may bring.

THE INDUSTRY 1950

By Brian Grant

The chief concern of the building industry during the past year has been over the shortage of materials and the general rise in prices, and, bearing in mind that the operatives have already lodged a claim for an overall wage increase of 6d. an hour, it seems difficult to avoid the conclusion that building costs will rise, in spite of the improved output which may be reasonably expected if incentive schemes are more widely adopted.

Two major events of the year were the publication in May of the report of the Working Party on Building Operations, which was immediately followed by the report of the productivity team which visited the USA in 1949. In general, the Working Party's verdict was a qualified approval of the industry as a whole, with sundry recommendations for improvements in detail. So far as we can discover, the Working Party also originated that deplorable word pre-planning, which seems intended to mean that the timing of any building project should be fully considered before work starts, a procedure which most architects and builders would be only too glad to carry out were it not that the multitudinous delays and variations often caused by Government departments frequently make such a method difficult in practice.

The report of the American Productivity Team, however, was in many of its implications more critical than that of the Working

Party. It dispelled the idea that building in the USA costs no more than it does here, but drew attention to the very considerably greater output of the American operative and underlined the wide use made of portable power tools and mechanical devices of all kinds. Some of the most interesting devices noted were the "guns" for shooting, with a small powder charge, studs and fixing devices of all kinds into material such as brick, concrete and steel. The saving in time is very considerable, and arrangements are now being made to manufacture at least one of these types in this country.

Both reports laid considerable stress on the education of the foreman grades and of those who are being groomed for managership. It is reassuring to remember that the more enlightened contractors were pressing for better educational facilities two years ago or more, and there are now nearly forty centres in London and the provinces where foremanship courses are available. But training courses in managership are still badly needed; young men with a university education do not regard contracting as a business in which they are likely to receive any great financial reward, and until reasonable success in the building industry can be achieved without the backing of capital or relatives there will continue to be a shortage of good managers.

So far as the output of the individual operative is concerned, incentive schemes have done a great deal towards restoring the pre-war figure, but output is inevitably dependent on material supplies. Timber is likely to be a little easier (though at a price), brick stocks are dwindling, and between Christmas and the New Year came the announcement, first of all of the acute zinc shortage and the resulting prohibition of this metal (even as a galvanized coating) and of copper, from practically all its building uses, except water pipes, and then of the rise of 4s. a ton in cement prices. Substitutes are available for most of the prohibited goods, but the majority of them are likely to be more expensive, and one can by no means be sure that they will be available in sufficient quantities to carry out the work now done, for example, in galvanized roofing sheet. Moreover, a material which is quite satisfactory when used for its proper purpose may easily become discredited if it is used merely as a substitute and for some unsuitable purpose. Reputable manufacturers will, one imagines, be somewhat chary of rushing into a market with untried and possibly expensive substitutes.

From the point of view of long-term developments in the industry, however, by far the most important event of the year is the decision by both employers and operatives to carry on with incentives payments. It will be remembered that the original incentives agreement was entered into (with some misgivings on both sides) for an experimental period; both sides have now agreed that this method of payment helps both the operative and the contractor, and many authorities, including the LCC, have reported a saving in overall building costs on sites where incentive schemes have been properly operated. It is estimated that about 40 per cent. of the operatives in the industry are now working under bonus schemes of one sort or another, and, with the new agreement which makes provision for regional incentives panels, it is certain that this figure will increase. There is some reason to hope that output may soon return to the pre-war figure, and it is therefore doubly unfortunate that the rising trend of output should be discouraged by material shortages.

In any consideration of incentives, there is always the danger that the standard of craftsmanship may deteriorate if the emphasis is always on output, and this was one of the major fears of both sides in the early discussions. This disadvantage has not so far arisen in practice, and, in any case, for the time being, the important thing is that output is actually increasing.

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Thorn Electrical Industries Ltd., of 105-109, Judd Street, W.C.1, are now operating a depot in Glasgow at Craigton Industrial Estate, Barfillan Drive, Paisley Road West, Glasgow, S.W.2. (Tel.: Glasgow—Half Way 4967.)

Mr. A. Beaumont Owles, A.R.I.B.A., who has been associated with Herbert S. Bostock, L.R.I.B.A., for several years, has acquired his practice at Southall. In future the practice will be known as Bostock & Partners, and will continue at Central Hall Buildings, Station Approach, Southall, Middlesex (telephone No.: Southall 3491/2), where he will be pleased to receive trade catalogues.

Messrs. Murray, Delves, Murray & Atkins (Colin Hay Murray, F.R.I.B.A., H. Kent Atkins, F.R.I.C.S., L.R.I.B.A., and R. Mercer Atkins, A.R.I.C.S.) have taken into partnership, with effect from January 1, 1951, Mr. Frank L. Southey, A.R.I.B.A. The practice will continue under the name of Messrs. Murray, Delves, Murray & Atkins at Halsey House, 13, Red Lion Square, London, W.C.1 (Tel.: Holborn 6284), and 13a, Enys Road, Eastbourne (Tel.: Eastbourne 3155).

At the AGM of the Building Alliance Golfing Society (formerly the Building and Allied Trades Golfing Association), the following officers were elected for the year

1951: Captain, V. V. Tatlock; Hon. Secretary, David Hill; members of the committee, Messrs. P. Roger, T. Reedy, H. H. Hill and R. Caira. Fixtures for the year have been arranged as follows: April 3, match against the RIBA Golfing Society on the Royal Wimbledon course. April 12, match against the Plastic Industries Golfing Society at St. George's Hill, Weybridge. May 1, spring meeting for the Dyke Cup at Sunningdale. July 17, summer meeting for the "Bunter" Griffith Memorial Trophy at Moor Park. September 27, autumn meeting for the "Builder" Trophy on the Berkshire course. On November 16 the society's annual dinner will be held at the Trocadero Restaurant; each member will be permitted to invite a maximum of two guests. Applications from new members will be welcomed. It should be noted that membership is confined to directors, partners and principal executives of firms, and nominations will require the signatures of a proposer and seconder. The annual subscription is £1 1s. All communications should be addressed to the hon. secretary of the society, Monument Station Buildings, King William Street, London, E.C.4. (Tel.: Mansion House 3714.)

Mr. Cyril P. Griggs has purchased the practice of Mr. H. H. Parsons, L.R.I.B.A., at 102, Sandgate Road, Folkestone, and requires trade catalogues.

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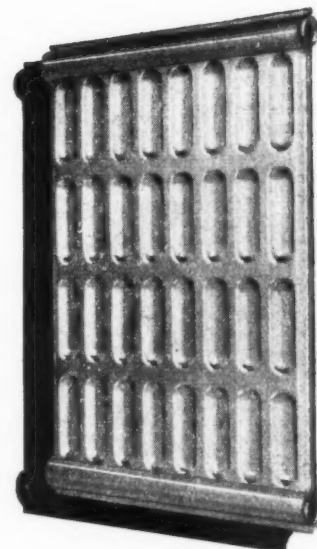
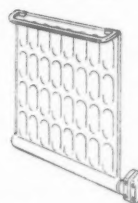
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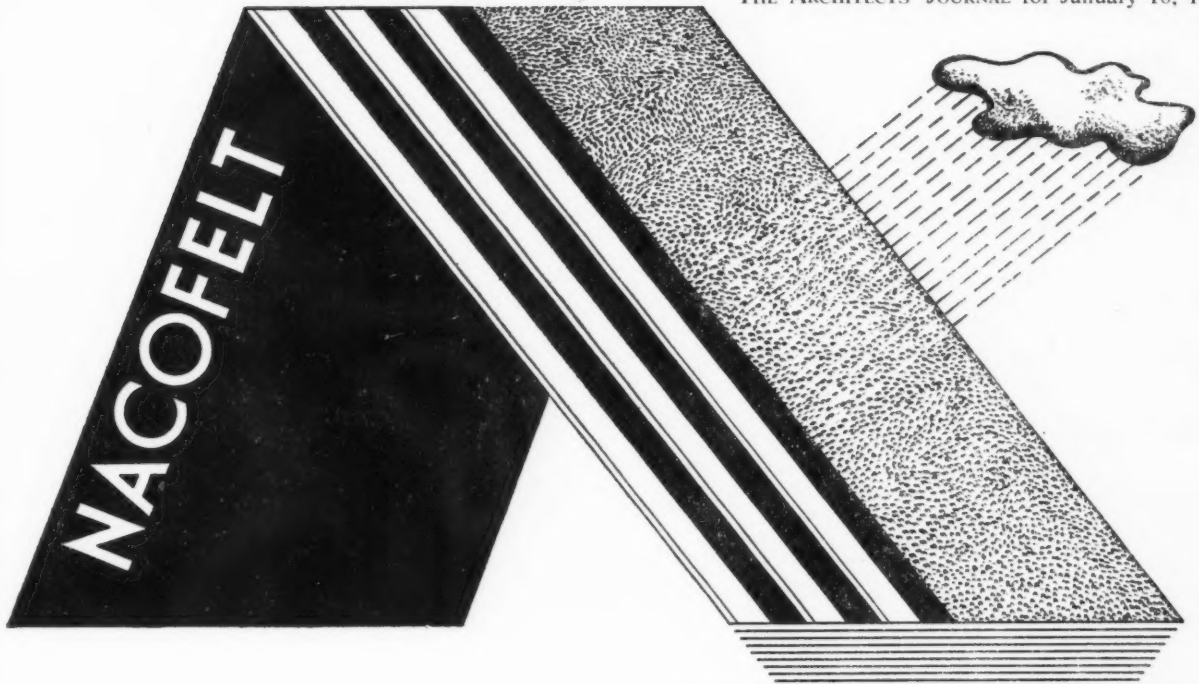
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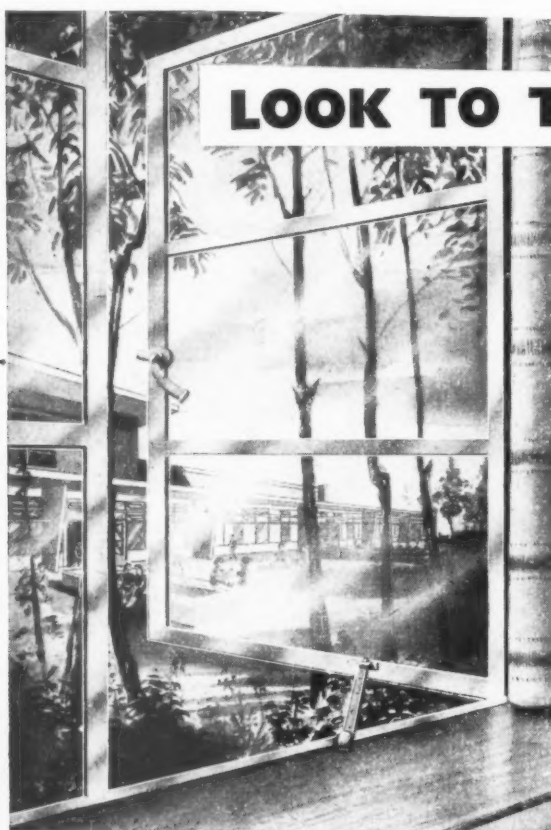


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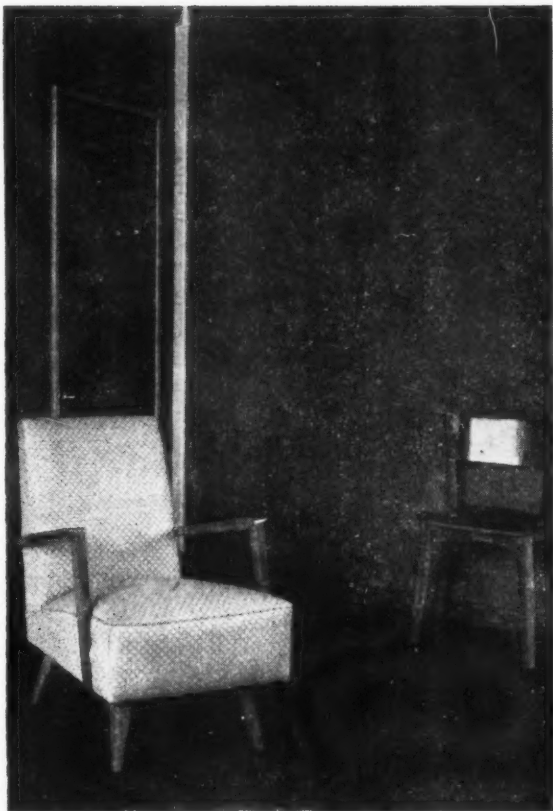
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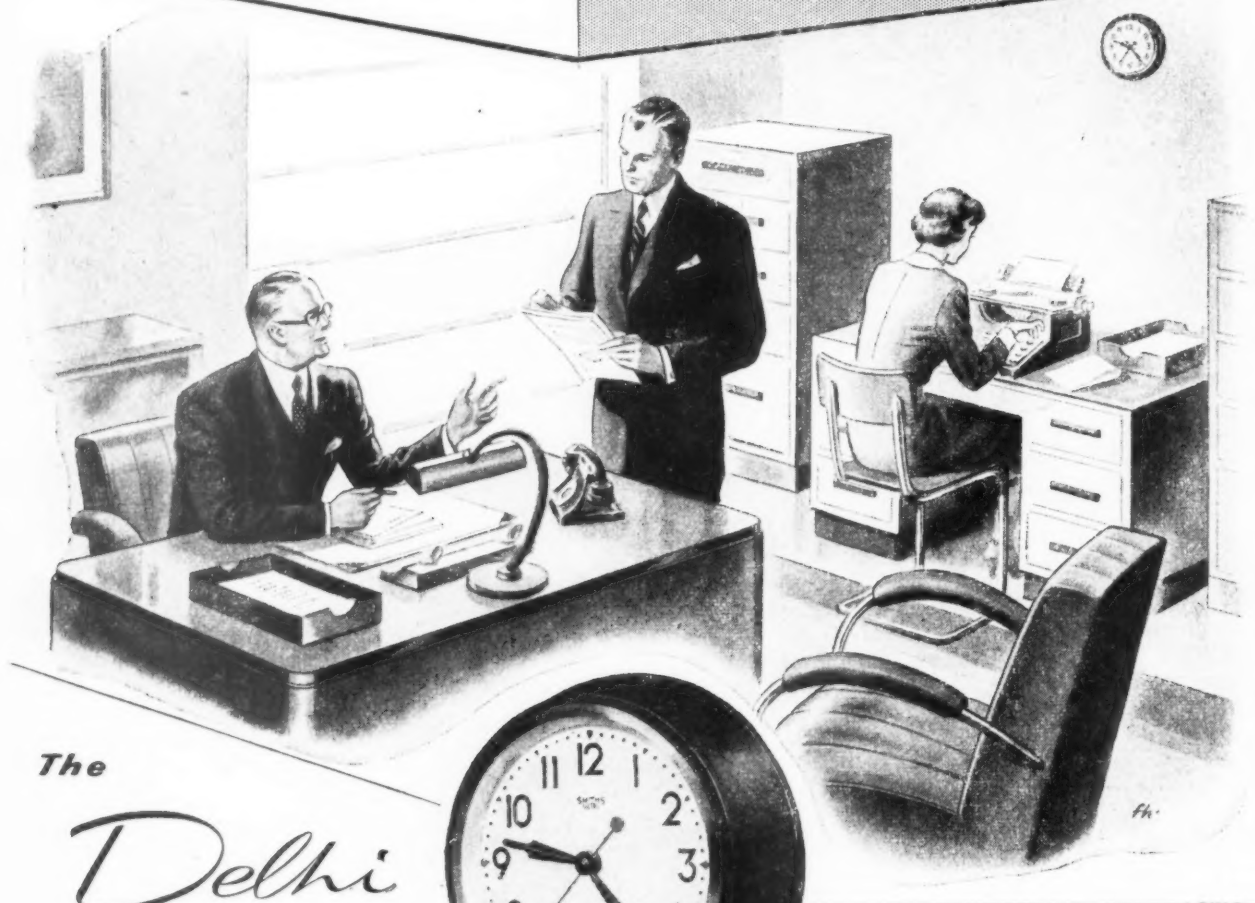
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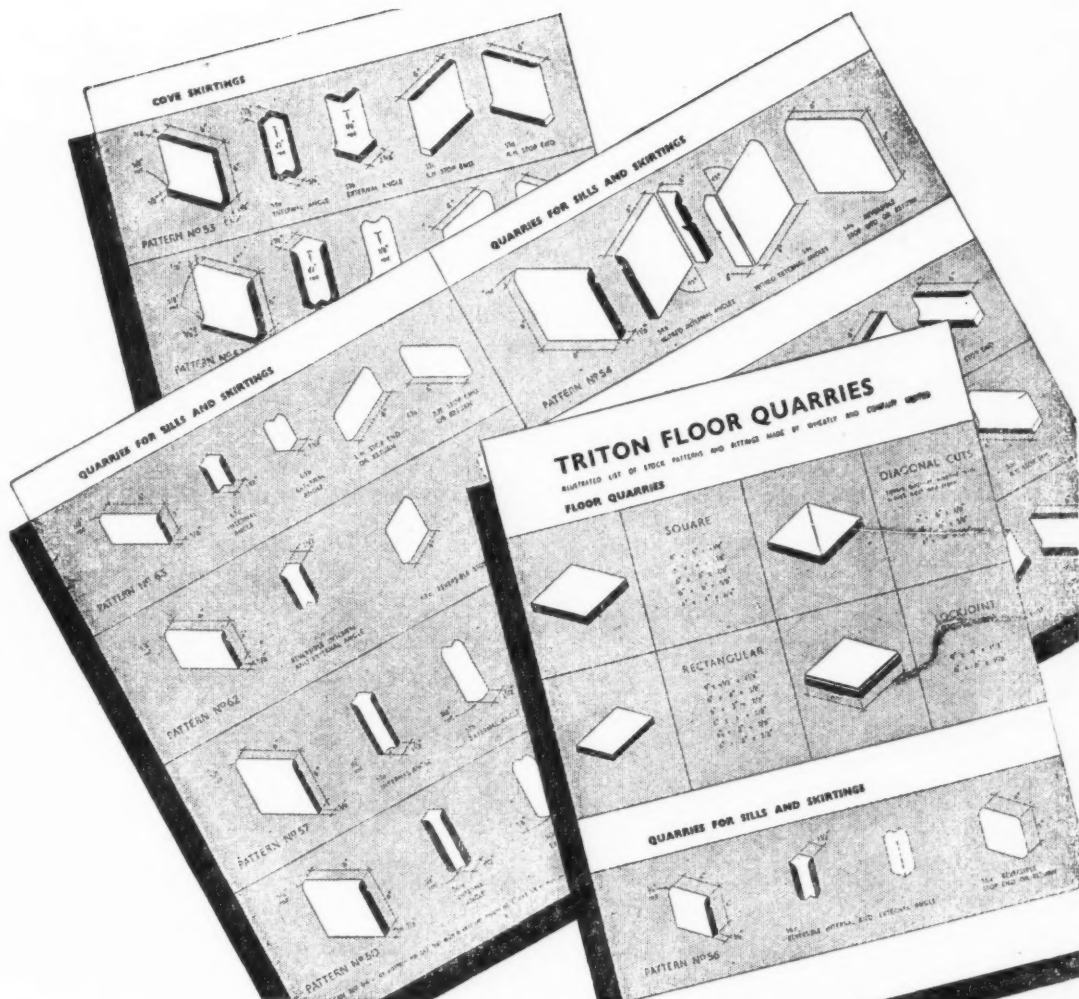
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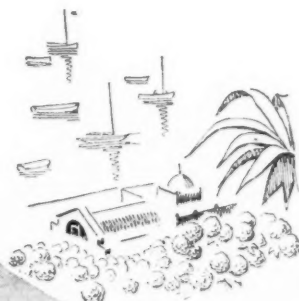
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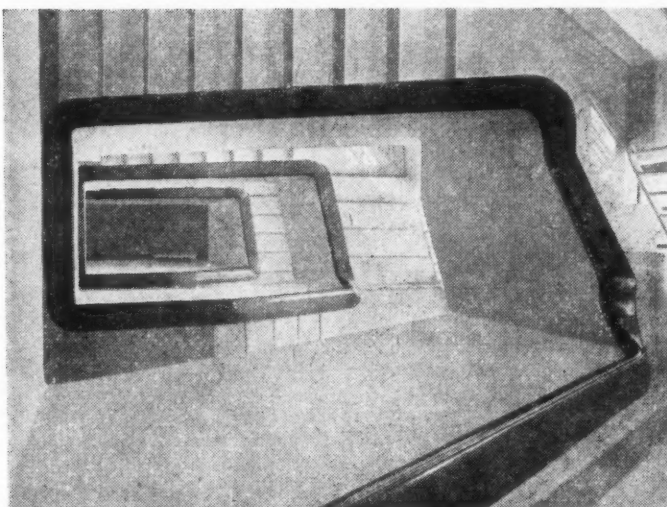
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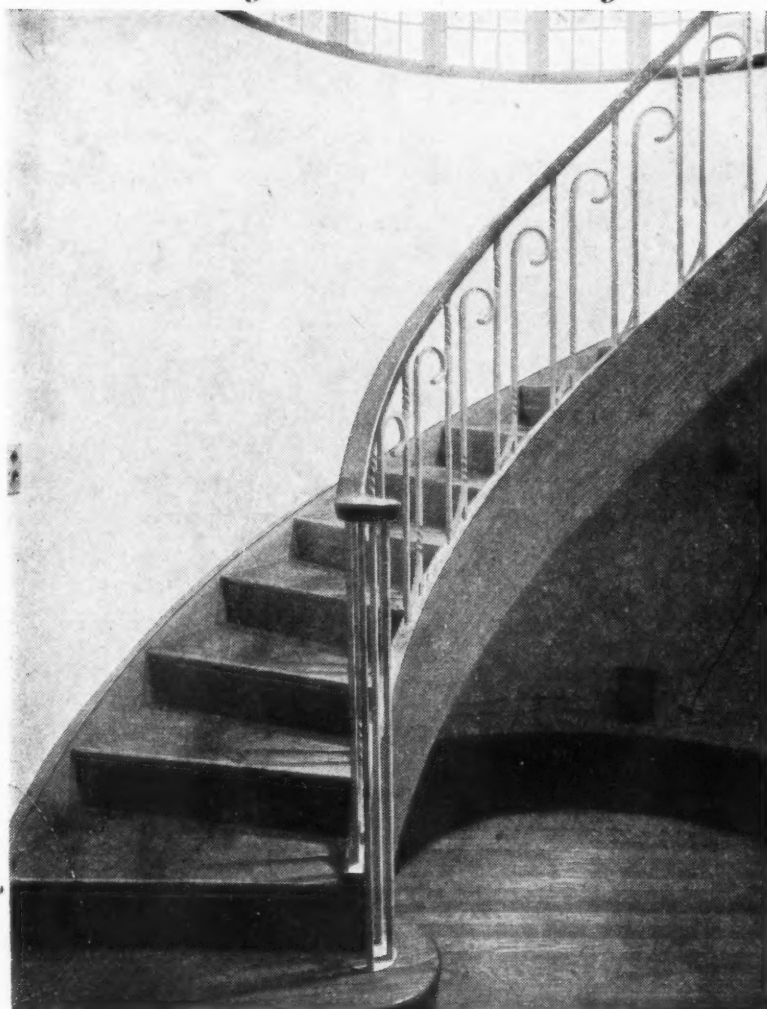
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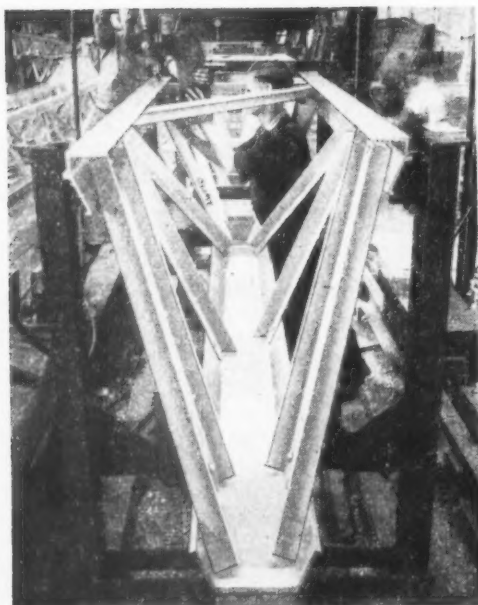
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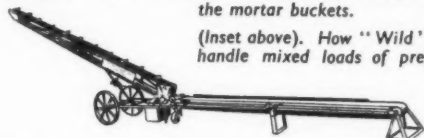
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Standard "Wild" Elevator in use at a housing site. Note the mortar buckets.

(Inset above). How "Wild" Elevators handle mixed loads of prefabricated units, etc.

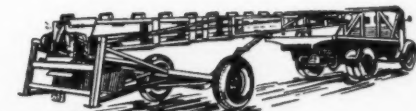


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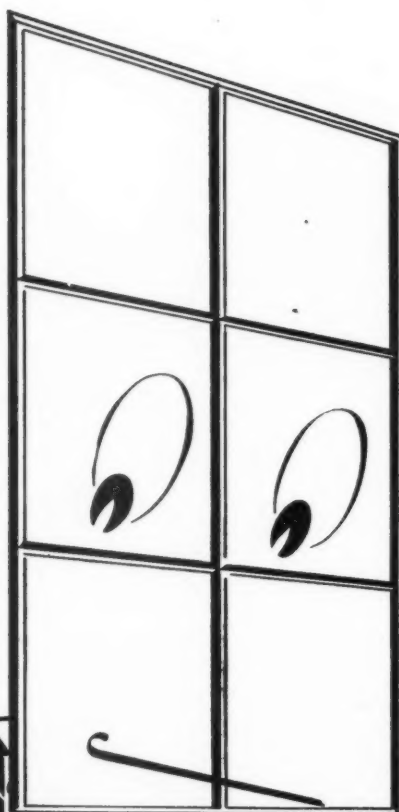


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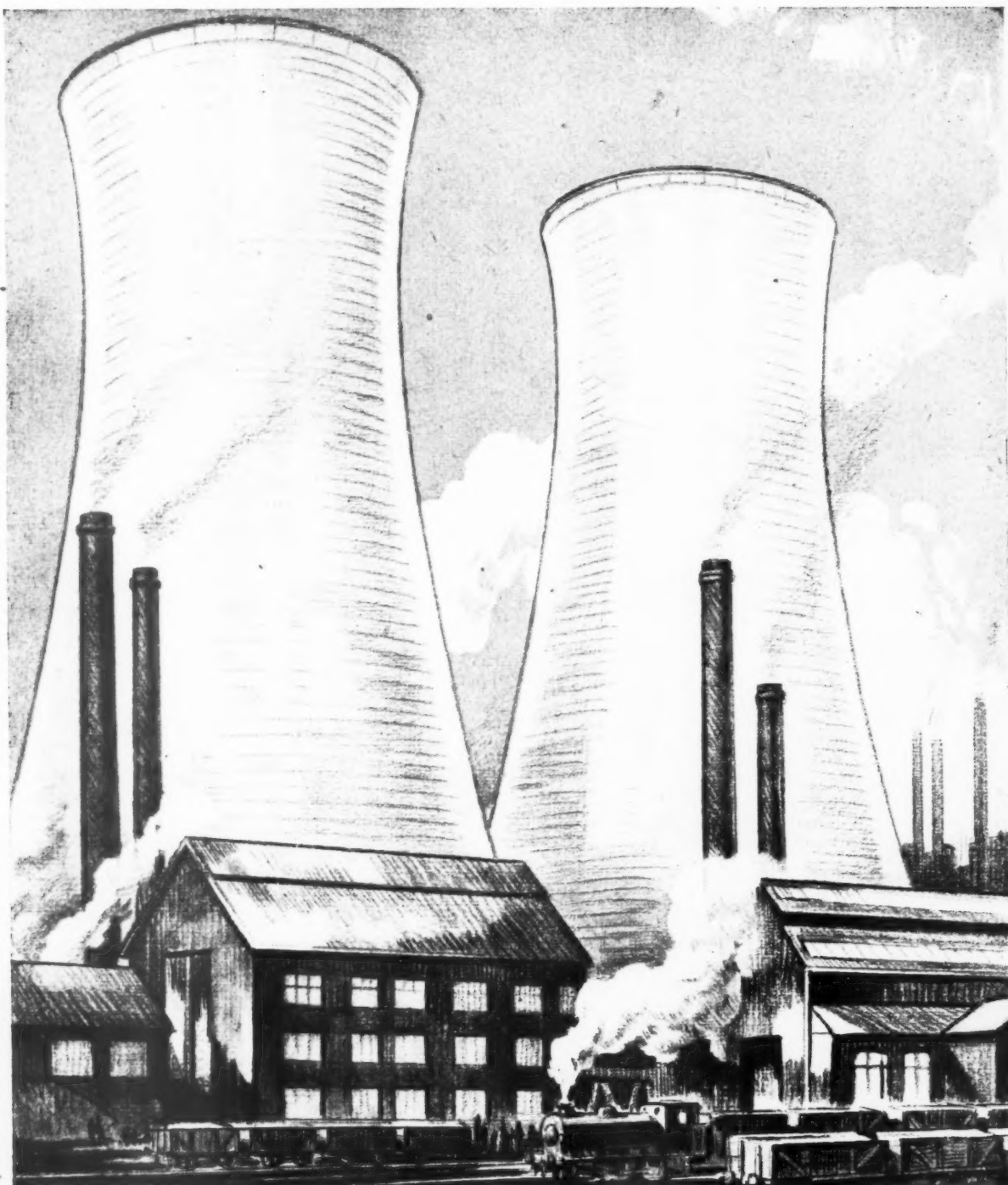
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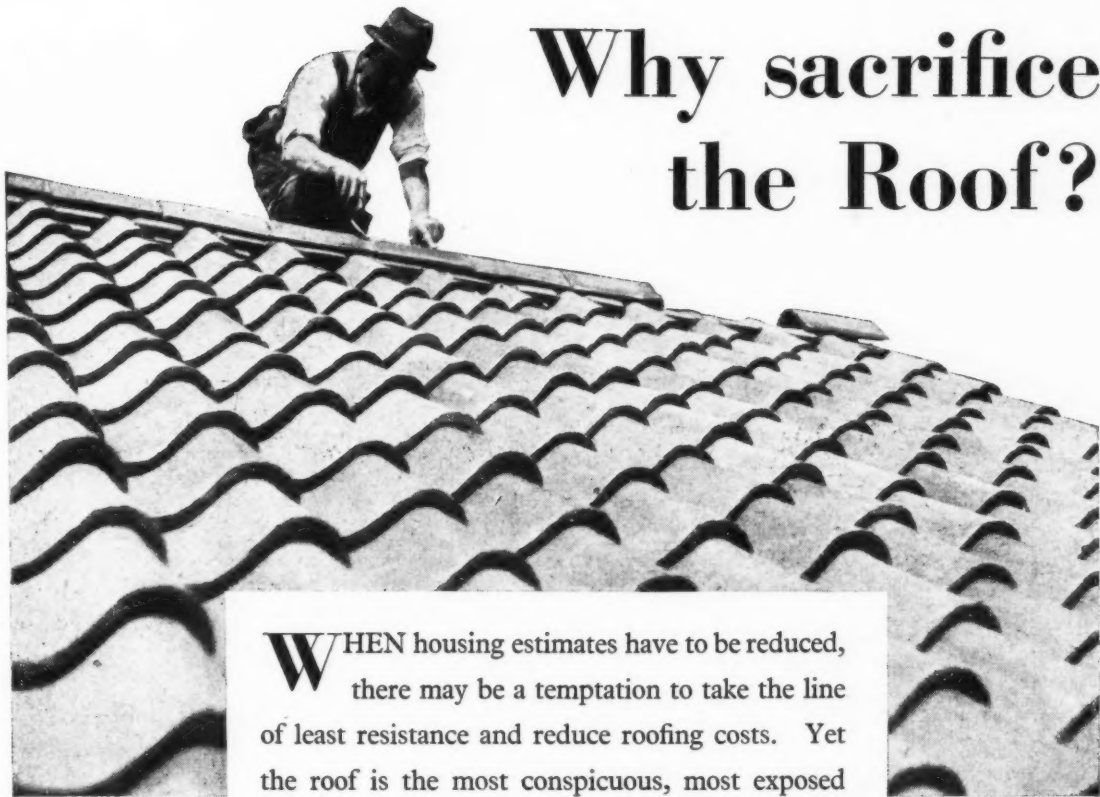
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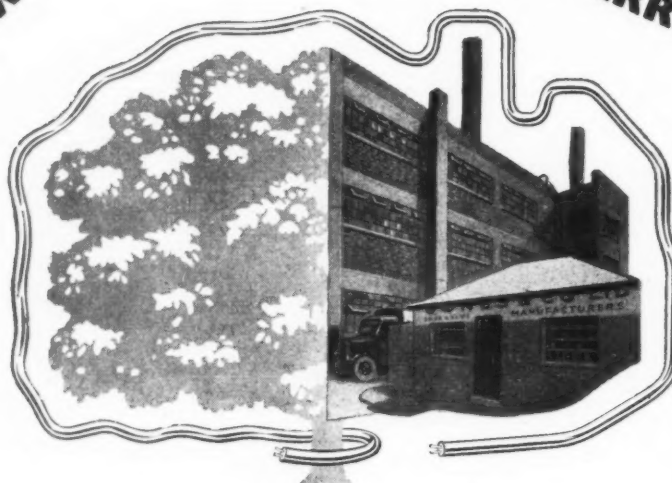
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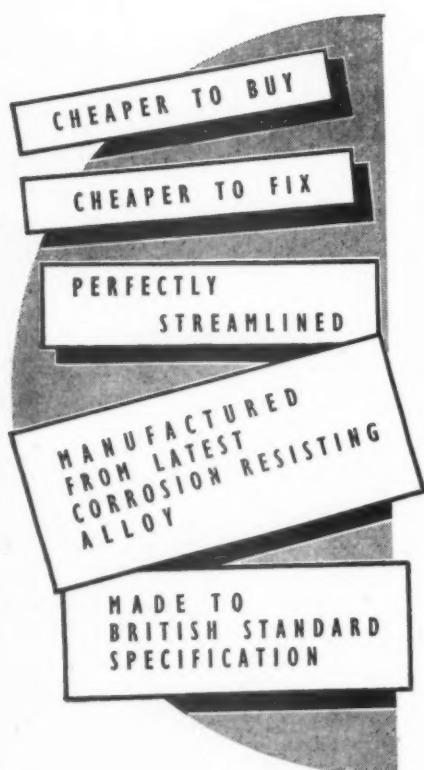
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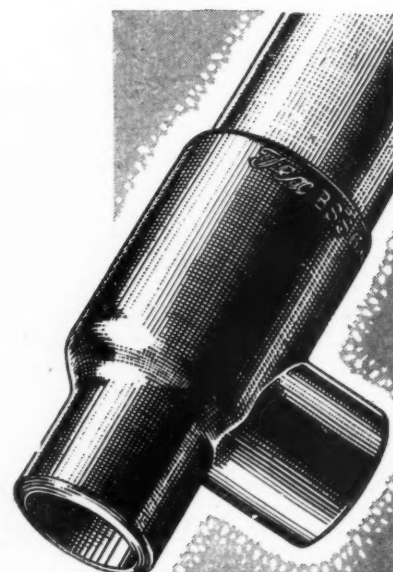
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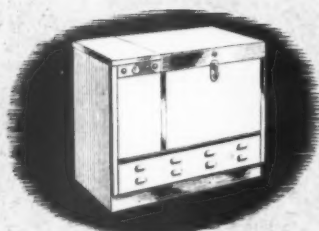
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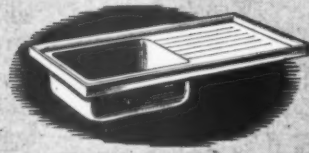
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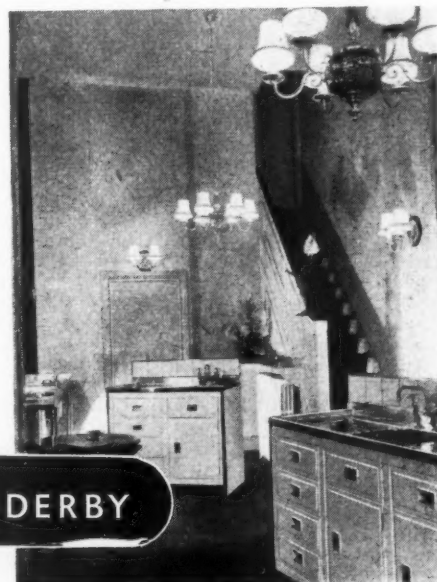
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Fig. 1. - Rig and Gear for applying impact tests.

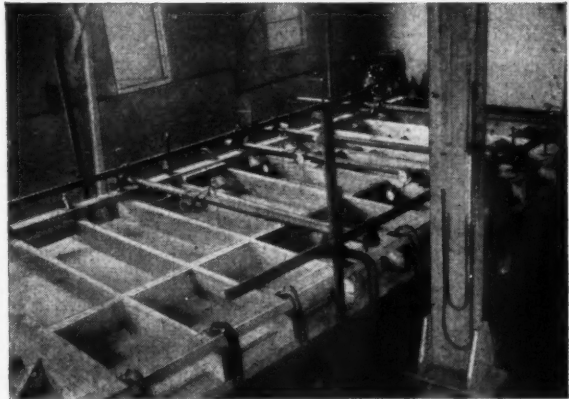


Fig. 2. - Rig for static loading tests. (Floor section is inverted, with captive airbag beneath for loading.)

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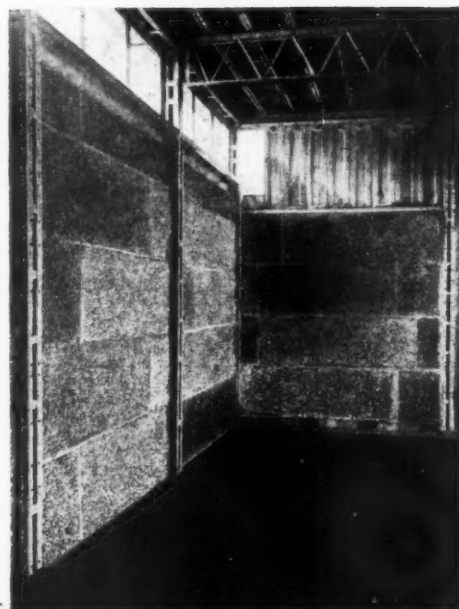
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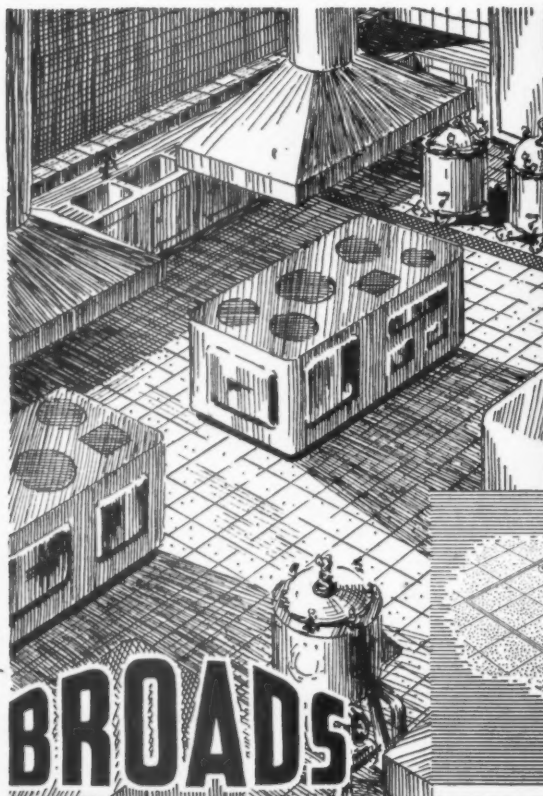
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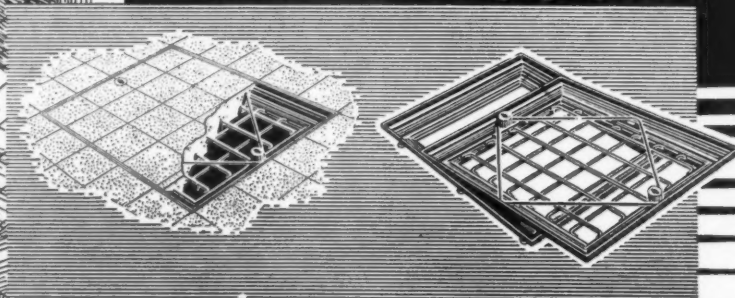
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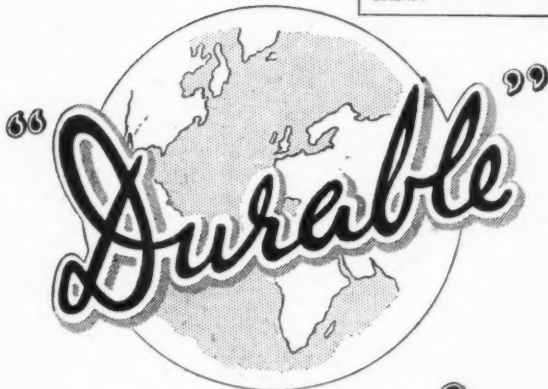
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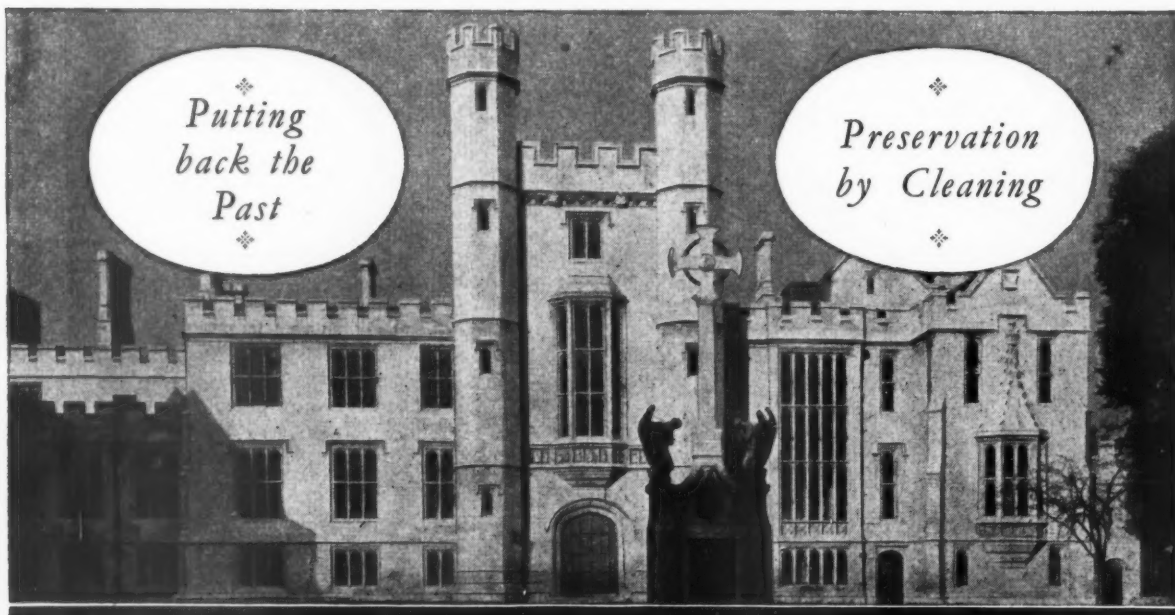
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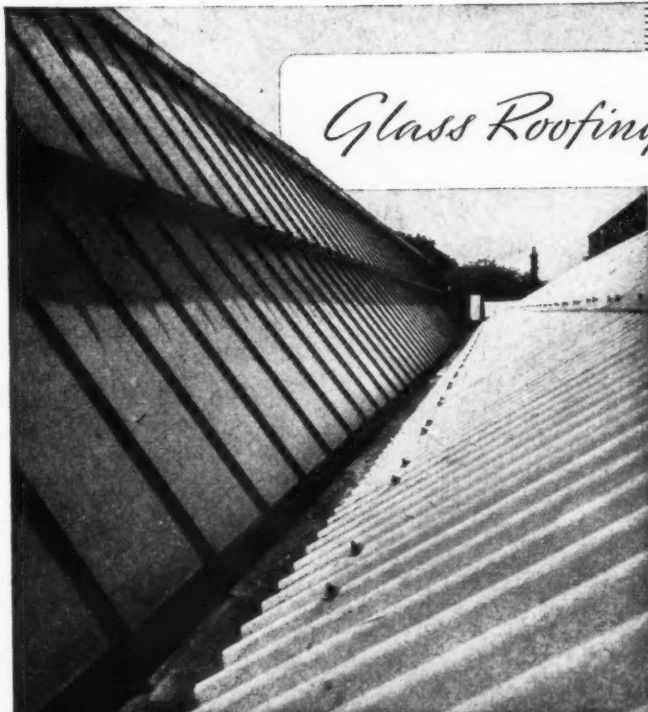
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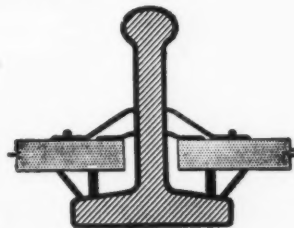
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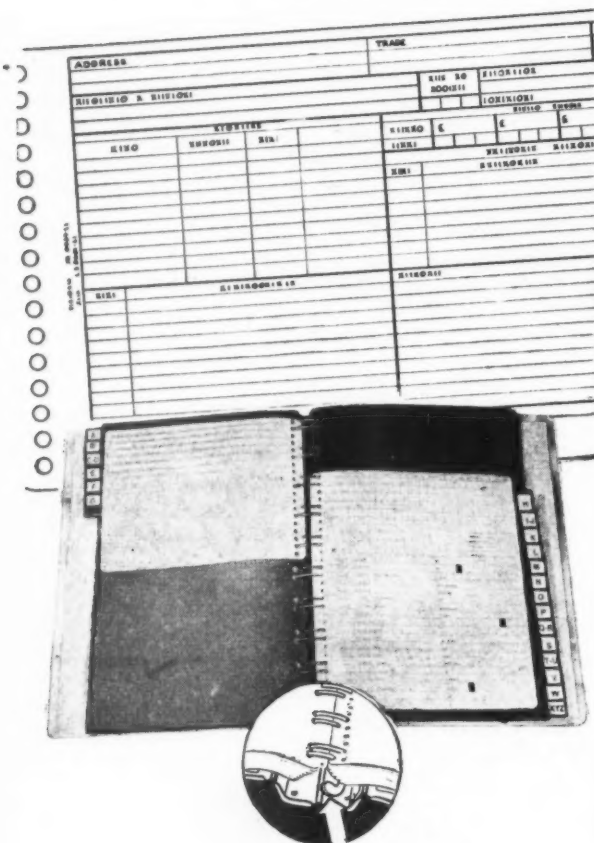
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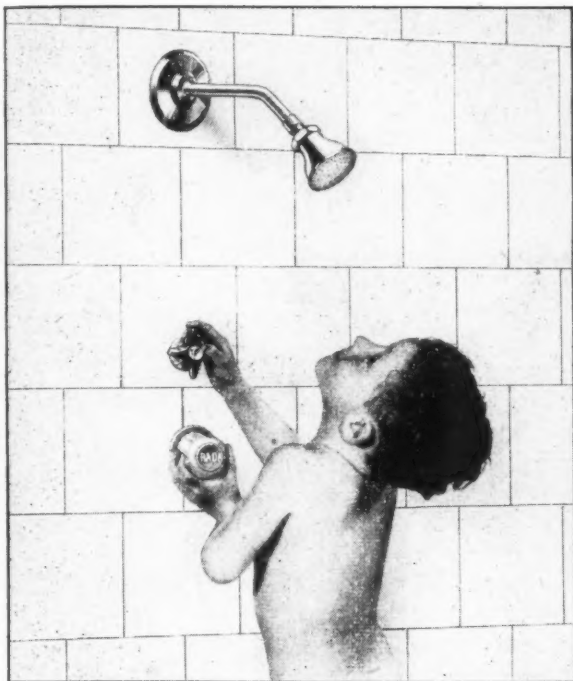
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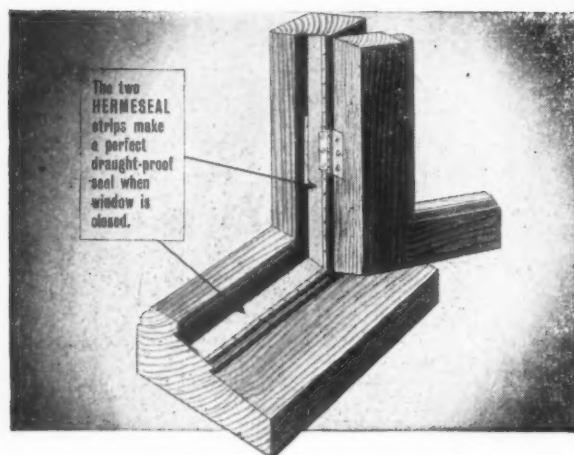
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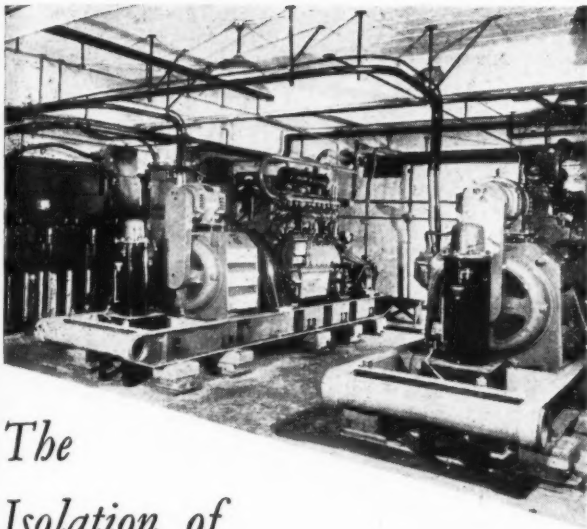
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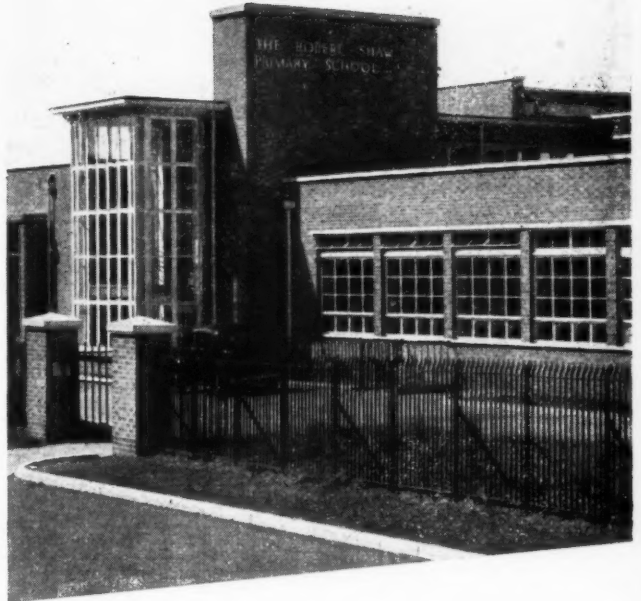
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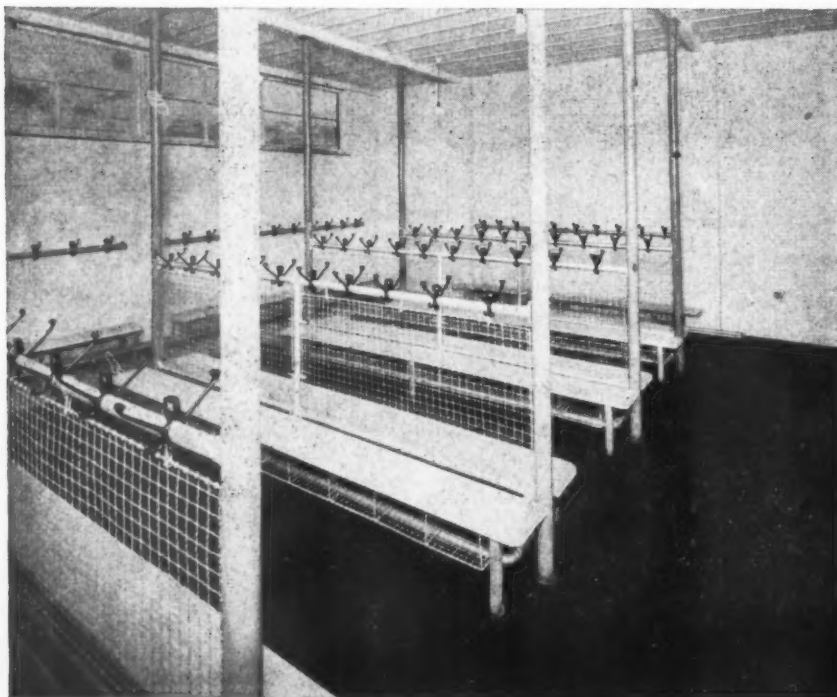


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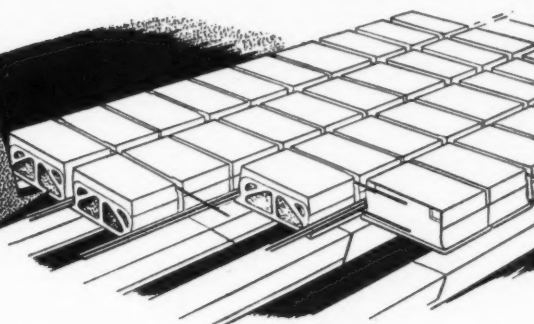


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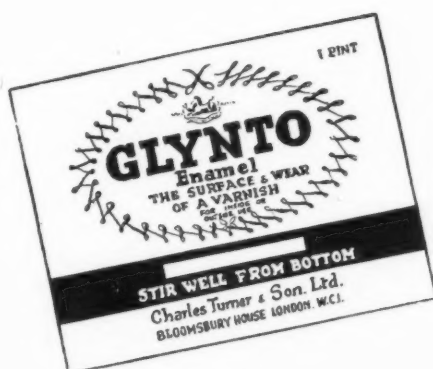
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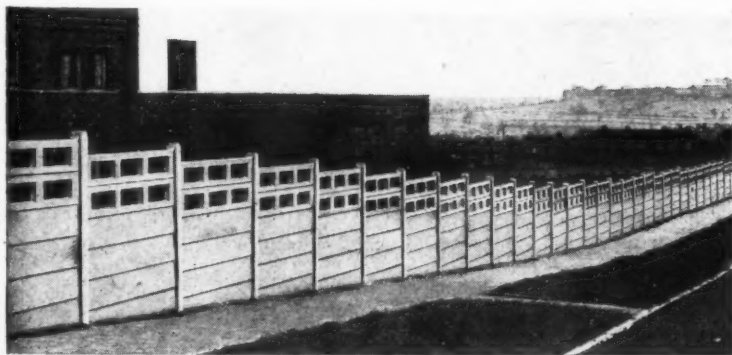
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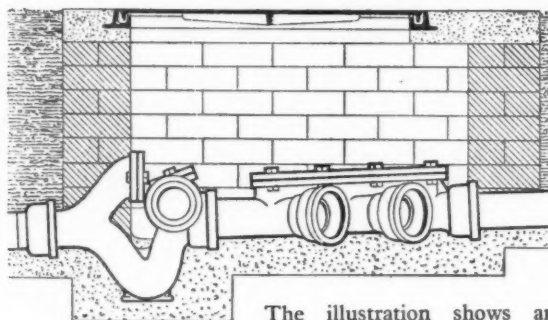


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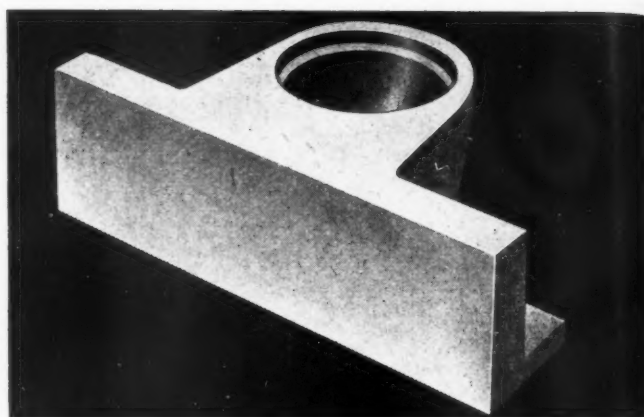
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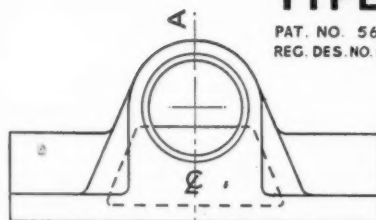
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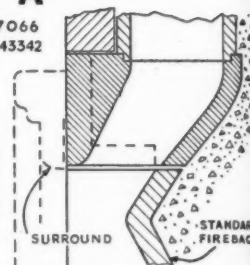


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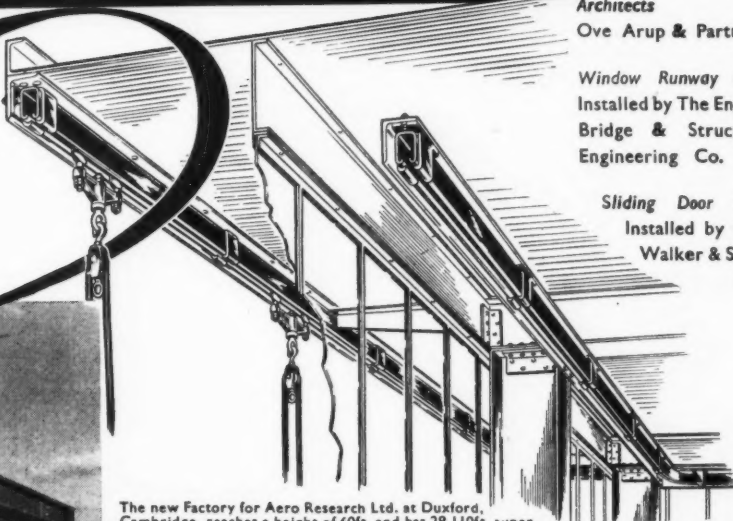
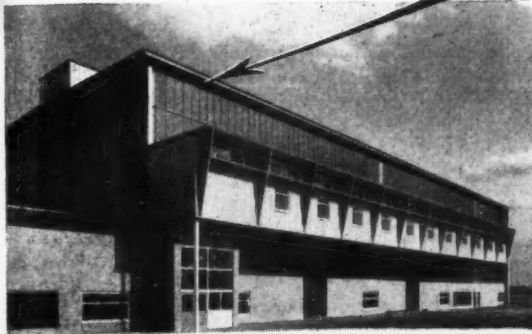
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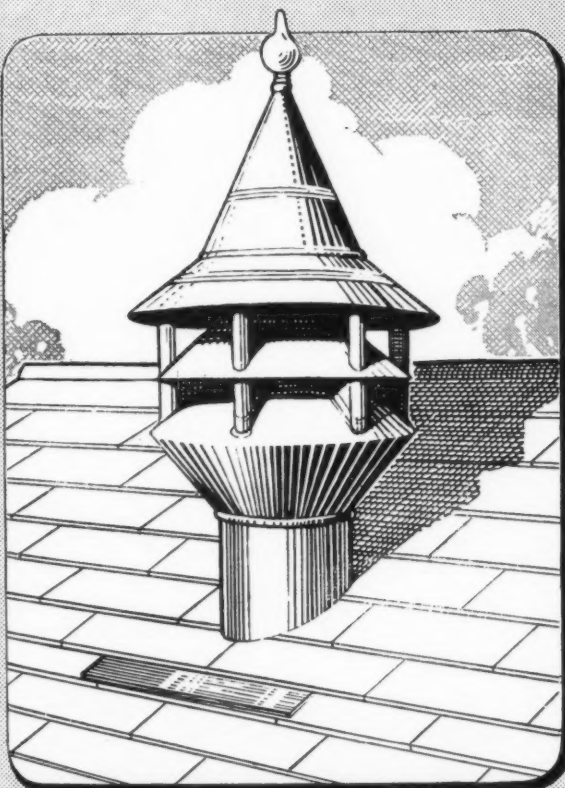
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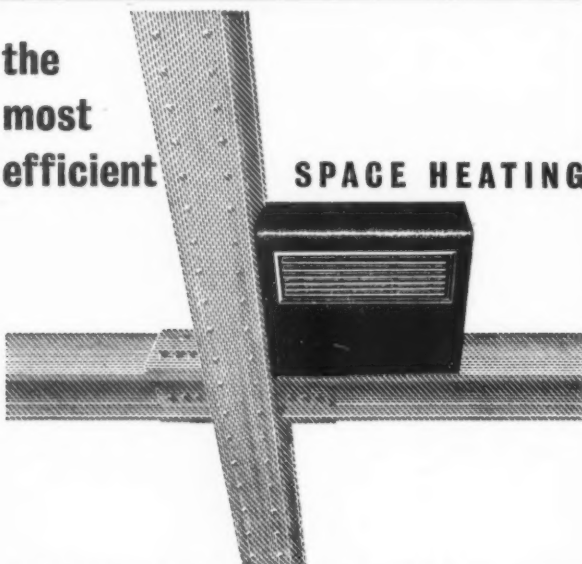
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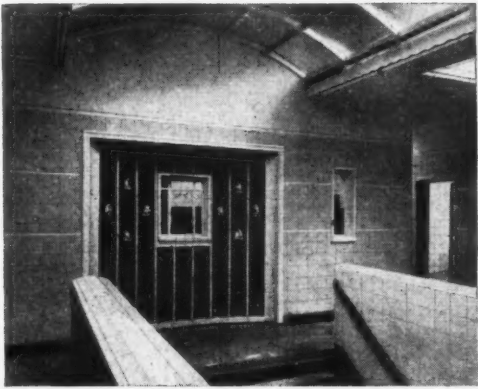
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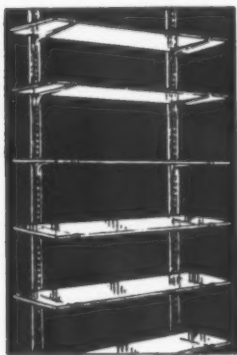
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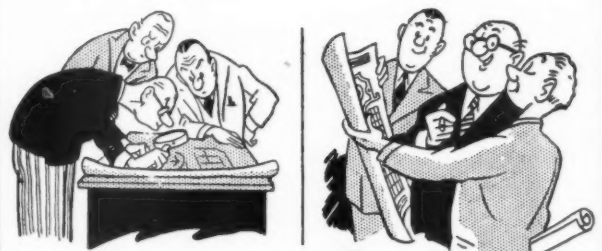
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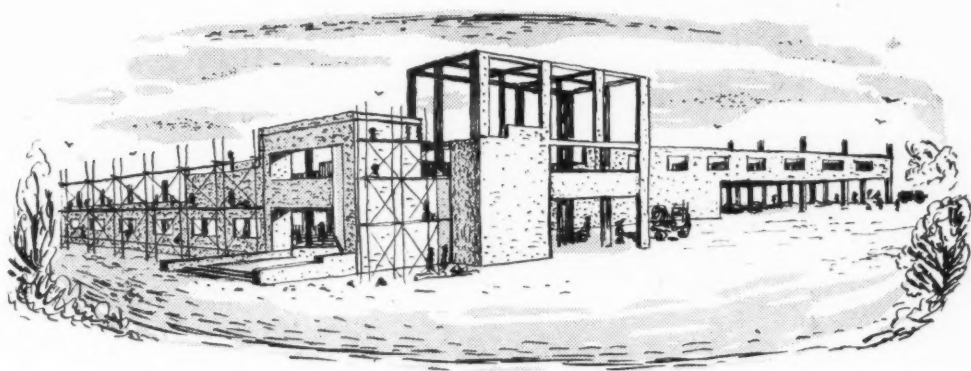
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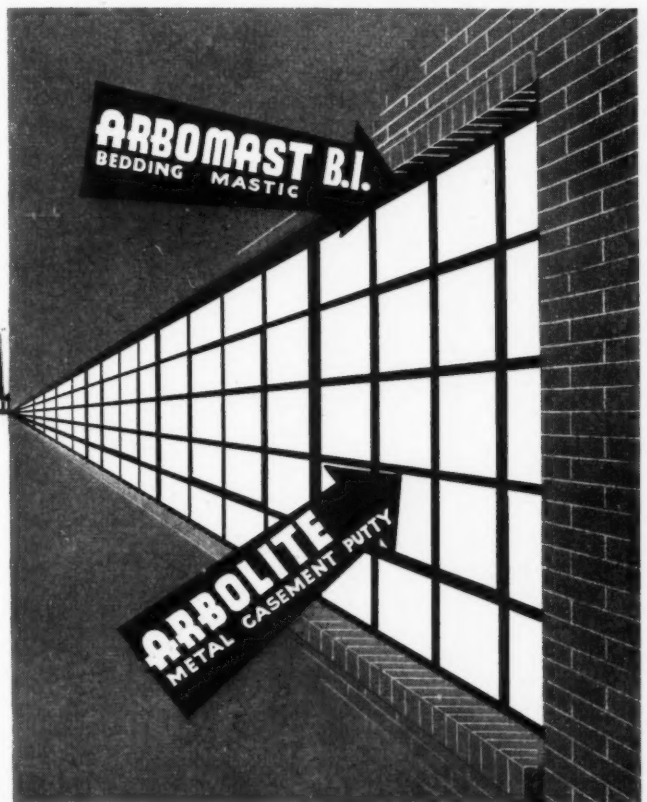
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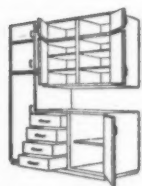
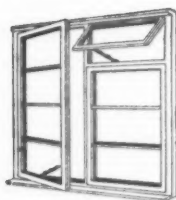


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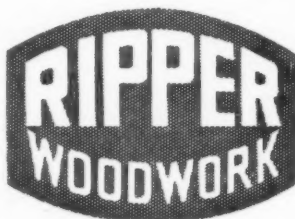
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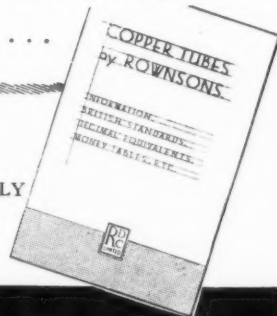
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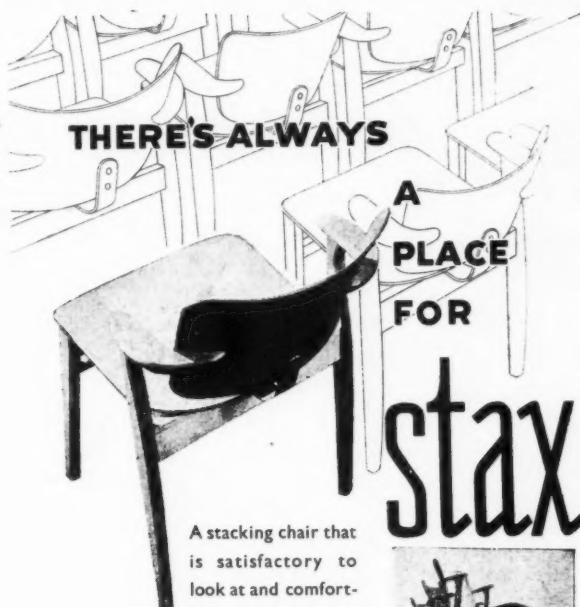
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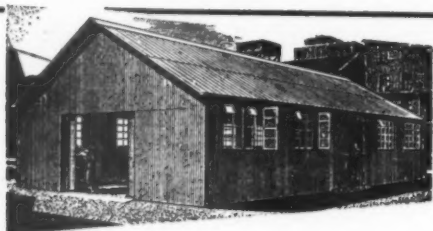
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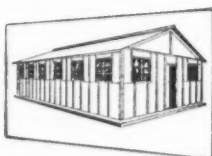


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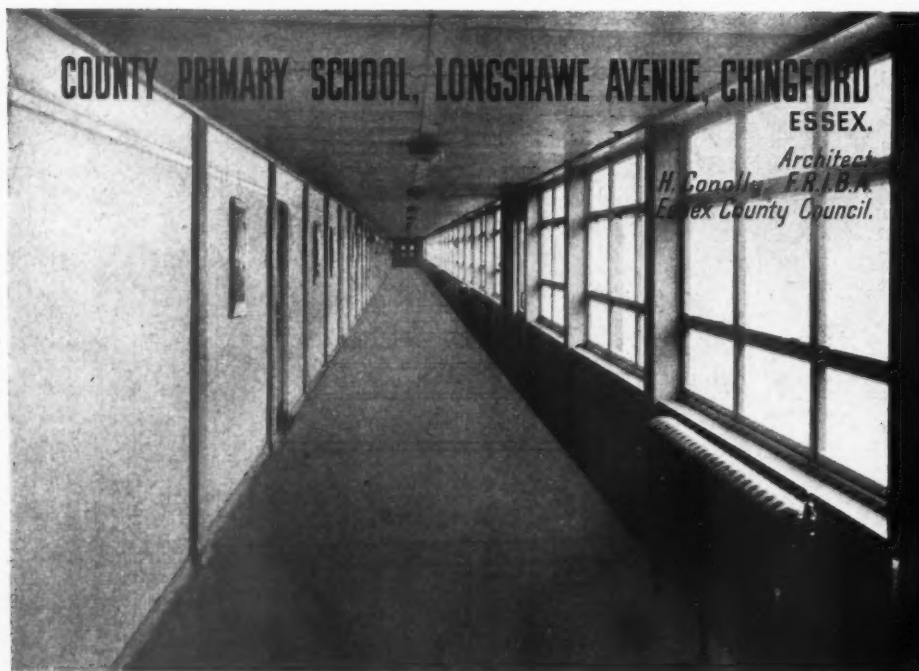
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The appointment is of a permanent nature, and pension arrangements will be discussed with short list candidates.

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1606-

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(1) The scheme of conditions of service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services.

(2) The Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

(3) One month's notice on either side.

Applications, stating age, qualifications and experience, together with the names and addresses of three persons to whom reference may be made, should be delivered to Lt.-Col. W. Law, M.I.C.E., City Surveyor, 66, Maidstone Road, Rochester, not later than 30th January, 1951.

Canvassing, directly or indirectly, will be deemed a disqualification, and applicants must state whether to their knowledge they are related to any member or senior officer of the Council.

JOHN L. PERCIVAL.

Town Clerk.

Guildhall, Rochester.
5th January, 1951.

1510

NEWMARKET URBAN DISTRICT COUNCIL. APPOINTMENT OF ARCHITECT.

Applications are invited for the above appointment at a commencing salary of £700 per annum, in accordance with the recommendations of the Joint Negotiating Committee for Chief Officers of Local Authorities.

Candidates should be Associate Members of the Royal Institute of British Architects (or equivalent examination) and have had local authority experience in house design, preparation of working drawings, specifications, quantities, supervision and settlement of contractors' final accounts.

The appointment will be terminable by three months' notice on either side and is subject to the Local Government Superannuation Act, 1937, and the Scheme of Conditions of Service recommended by the Joint Negotiating Committee for Chief Officers of Local Authorities.

Housing accommodation will, if necessary, be offered to the successful applicant.

Applications, stating age, present and previous appointments, qualifications and experience, with the names and addresses of three persons to whom reference can be made, should be addressed to the undersigned not later than Thursday, 25th January, 1951. Canvassing, directly or indirectly, will disqualify a candidate, and any relationship to a member or senior officer of the Council must be stated in the application.

JOHN CRABB,

Clerk of the Council.

Severals House, Newmarket.

2nd January, 1951.

1583

BOROUGH OF WEDNESBURY.**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of an Architectural Assistant, in the Borough Engineer and Surveyor's Department, at a salary in accordance with A.P.T., Grade VII (£635 to £710 per annum).

Applicants must be experienced in the design, erection and maintenance of houses, flats, and public buildings. Preference will be given to applicants who are Associates of the Royal Institute of British Architects.

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

Provision of housing accommodation to the successful candidate will be favourably considered if required.

Applications, stating age, qualifications and experience, and enclosing copies of two recent testimonials, are to be received by the Borough Engineer and Surveyor, Mr. C. G. Morrish, not later than 1st February, 1951.

G. F. THOMPSON,

Town Clerk.

Town Hall, Wednesbury, Staffs.

10th January, 1951.

1580

SPALDING URBAN DISTRICT COUNCIL.**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the above appointment in the Architect and Surveyor's Department, in accordance with Grade V of the National Joint Council's Grading Scheme (£520-£570 per annum).

The appointment is a permanent one and will be subject to the Local Government Superannuation Act, 1937, and to termination by one month's notice on either side.

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

Preference will be given to candidates who have passed the Intermediate Examination of the R.I.B.A. or hold an equivalent qualification, and have experience in Housing and General Architectural work.

Applications, endorsed "Architectural Assistant," stating age, qualifications and experience, together with copies of three recent testimonials, must reach the undersigned not later than the 27th January, 1951.

Housing accommodation will be provided for the successful applicant if desired.

RAYMOND W. HASTINGS,

Clerk of the Council.

11, Market Place, Spalding.

1574

COUNTY BOROUGH OF DONCASTER.**BOROUGH SURVEYOR AND WATER ENGINEER'S DEPARTMENT.**

Applications are invited for the following appointments in the above Department:-

(a) **ARCHITECTURAL ASSISTANT**, in accordance with Grade A.P.T. V (£520-£570), for which applicants must have had considerable experience in architectural design and be capable of preparing estimates and contracts for building works.

(b) **ARCHITECTURAL ASSISTANT**, in accordance with Grade A.P.T. IV (£480-£525), for which applicants must be capable of preparing working drawings and estimates for building works.

(c) **ENGINEERING ASSISTANT**, in accordance with Grade A.P.T. IV (£480-£525), for which applicants must have had a wide and varied experience in a Municipal Engineer's Department.

Applications, stating age, qualifications and experience, accompanied by copies of two recent testimonials, must be delivered to the Borough Surveyor and Water Engineer's Office, 2, Priory Place, Doncaster, not later than 10 a.m. on Tuesday, the 23rd January, 1951.

H. S. ESSENHIGH,

Town Clerk.

1, Priory Place, Doncaster.
5th January, 1951.

1609

COUNTY BOROUGH OF MERTHYR TYDFIL. BOROUGH ENGINEER'S SURVEYOR AND ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:-

(a) **SENIOR ARCHITECTURAL ASSISTANT**, Grade A.P.T. VI (£595-£660 p.a.).

(b) **ARCHITECTURAL ASSISTANT**, Grade A.P.T. IV (£480-£525 p.a.).

Candidates for (a) must have had considerable experience in the design and construction of houses, clinics, public buildings and general architectural work, in the preparation of specifications, bills of quantities and estimates in connection therewith. Applicants must be Associate Members of the Royal Institute of British Architects.

Candidates for (b) must have passed the Intermediate R.I.B.A. examination and have had at least two years' experience after attaining that qualification.

The appointments will be subject to:-

1. Scheme of Conditions of Service of the National Joint Council.

2. Provisions of the Local Government Superannuation Act, 1937.

3. The passing of a satisfactory medical examination.

4. One month's written notice on either side.

The Council will provide housing accommodation if required.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be delivered to the undersigned not later than Thursday, the 15th February, 1951.

Canvassing in any form will be deemed a disqualification.

T. S. EVANS,

Town Clerk.

Town Hall, Merthyr Tydfil.

3rd January, 1951.

1581

THE LONDON COUNTY COUNCIL invites applications from ARCHITECTS in private practice for inclusion in a panel with a view to acting in a professional capacity for (a) reconstruction work at the Council's educational buildings, and (b) the erection of new schools. The works are urgent and will require immediate attention.

Applications should be forwarded to the Clerk of the Council (E.1), The County Hall, Westminster Bridge, S.E.1, not later than 17th February, 1951, and should be accompanied by a stamped addressed envelope and brief particulars of qualifications and experience. (1645) 1563

MINISTRY OF WORKS.

ARCHITECTURAL ASSISTANTS urgently required. Qualifications: At least three years' Architectural training and, preferably, some experience in an Architect's office. Ability to carry out under supervision working drawings of smaller works from prepared sketch plans, and elevations. Knowledge of subsidiary duties common to an Architect's office. Some testimonials already accepted and/or in a position to sit for the Intermediate Examination of the Royal Institute of British Architects.

The commencing salary at age 21 years is £283 per annum, rising to a maximum of £495 per annum. Entering salary is increased by £20 per annum for each year of age above 21 years, subject to a maximum commencing salary of £420 per annum. The posts are in Cambridge. Although these posts are not established appointments, some of them have long term possibilities, and competitions are held periodically to fill established vacancies.

Apply to Ministry of Works (R.D.I. Establishment), Block "A", Brooklands Avenue, Cambridge. 1592

BOROUGH OF CROSBY.**APPOINTMENT OF ENGINEERING ASSISTANT.****APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the under-mentioned permanent appointments in the Borough Engineer and Surveyor's Department:-

(a) **Class I Engineering Assistant**, Grade A.P.T. V (£520-£570 p.a.). Applicants should have passed the Final Examination of a recognised professional institution and had at least 5 years' experience in a Municipal Engineer's office.

(b) **Architectural Assistant**, Grade A.P.T. IV (£480-£525 p.a.). Applicants should possess an appropriate architectural qualification and have had considerable experience in general architectural work, housing, the conversion of large houses into flats, and the preparation of working drawings and specifications.

Both appointments will be subject to the National Conditions of Service, the Local Government Superannuation Act, 1947, and one month's notice on either side.

Applications, stating age, present and past appointments, qualifications and experience, must be delivered to the undersigned not later than Saturday, 27th January, 1951.

Testimonials are not required, but applicants are required to submit the names of two referees. Candidates must state to the best of their knowledge whether or not they are related to any member or senior officer of the Council. Failure to disclose this information and canvassing, either directly or indirectly, will be a disqualification.

HAROLD O. ROBERTS,

Town Clerk.

Town Hall, Waterloo, Liverpool, 22.
19th December, 1950.

1568

NEWCASTLE-UPON-TYNE REGIONAL HOSPITAL BOARD ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent Headquarters Staff of the Board's Architect in Newcastle. The appointments relate to the section of the staff which is concerned with practical architectural work throughout the Region (which includes the Counties of Northumberland, Durham, Cumberland, and parts of Westmorland and Yorkshire). To architects who already are or who wish to become hospital specialists the appointments offer an excellent opportunity for doing good class work full of interest and variety and in a developing service.

The appointments are:—
CHIEF ASSISTANT ARCHITECT (Projects). (Special Grade, £800 to £900 per annum.) The successful applicant will be required to take complete charge of the Board's Architectural and Surveying Drawing Office in Newcastle, which has at present an establishment of nine assistants.

Candidates should be Members of the Royal Institute of British Architects, and have had extensive and responsible experience in the design and construction of large public buildings, including some experience of hospital and health-service buildings. They should be capable of carrying projects through all stages.

ARCHITECTURAL ASSISTANT (Grade A.P.T. V, £520 to £570 per annum).

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects and be studying for the Final Examination. Good general experience in design and construction are essential and a knowledge of hospital work is desirable.

Evening study facilities are available at the University of Durham, King's College, Newcastle-upon-Tyne.

GENERAL ARCHITECTURAL ASSISTANT (Grade A.P.T. III, £450 to £495 per annum).

Applicants must have served their articles of pupillage or have worked in an architectural office for a minimum period of three years, and have passed the Royal Institute of British Architects' Intermediate Examination or the equivalent at one of the recognised Schools of Architecture.

The appointments will be subject to the provisions of the National Health Service (Superannuation) Regulations, 1947. Successful candidates will be required to pass a medical examination.

Applicants should state: (1) Name and full address; (2) age and whether married; (3) degrees and professional qualifications; (4) experience; (5) present appointment and salary; (6) war service; (7) date available if appointed, and (8) names and addresses of three referees.
Applications are to be received not later than the 26th January, 1951, and are to be addressed to the Secretary to the Board, "Dunira," Osborne Road, Jesmond, Newcastle-upon-Tyne, 2.

E. B. JENKINS, Secretary.

"Dunira," Osborne Road, Jesmond, Newcastle-upon-Tyne, 2.
2nd January, 1951.

SURREY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of **ARCHITECTURAL ASSISTANT, Grade III**, at a commencing salary of £450 per annum, rising by annual increments of £15 to a maximum of £495 per annum, plus London allowance of up to £30, according to age.

Applicants must be of good general training and give full details in their applications, and preference will be given to applicants who have passed the Intermediate Examination of the Royal Institute of British Architects.

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

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 2nd February, 1951.

Canvassing, either directly or indirectly, will disqualify a candidate for consideration.
The Council will be unable to provide any housing accommodation, and the successful applicant will be required to make his own arrangements in this direction.

T. W. W. GOODERIDGE, Deputy Clerk of the Council.
County Hall, Kingston-upon-Thames.

METROPOLITAN BOROUGH OF POPLAR, BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited from suitably qualified persons for the under-mentioned established post:—

TECHNICAL ASSISTANT (Building). Grade A.P.T. III.
Commencing salary £450 per annum, rising to £495 per annum, plus £10 to £30 "weighting," according to age.

Full details of the appointment and forms of application may be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3, to whom completed applications must be delivered not later than first post on Monday, 29th January, 1951.

Poplar Town Hall, Bow Road, E.3.
8th January, 1951.

COUNTY BOROUGH OF BURY.
ARCHITECTURAL ASSISTANT required in the Borough Engineer's Department. Salary not exceeding A.P.T. III (£450-£495), according to qualifications and experience.

The appointment is subject to Superannuation and medical examination.

Applications, stating age, details of training, qualifications and experience, together with names and addresses of two persons to whom reference may be made, must reach me not later than 3rd February, 1951.

EDWARD S. SMITH, Town Clerk.

Town Hall, Bury.
10th January, 1951.

EAST RIDING OF YORKSHIRE COUNTY COUNCIL.

Applications are invited for the appointment of an **ASSISTANT ARCHITECT** on the permanent staff of the County Architect's Department, in accordance with Grades V to VI of the A.P.T. Division of the National Scales.

The salary range is £520 to £660, and the successful applicant will be appointed to the grade appropriate to his qualifications and experience.

Applicants should have had satisfactory experience in the design and construction of modern buildings, and preference will be given to those who have appropriate professional qualifications. The appointment, which is terminable by one month's notice of either side, is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, training, qualifications and experience, with particulars of past and present appointments, with salaries, and accompanied by copies of three recent testimonials, must be received by the County Architect, County Hall, Beverley, not later than Friday, 26th January, 1951. Applicants should disclose relationship to any member or senior officer of the Council, and canvassing will be a disqualification.

T. STEPHENSON, Clerk of the Council.
County Hall, Beverley.

COUNTY OF LINCOLN—PARTS OF KESTOVEN.

COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited from suitably qualified persons for the undermentioned appointments on the permanent staff:—

(a) **ARCHITECTURAL ASSISTANT.** Salary on A.P.T. Division, Grades V/VI, i.e., £520 × £15 × £20 × £25—£660 per annum.

(b) **JUNIOR ARCHITECTURAL ASSISTANT.** Salary on A.P.T. Division, Grade I, i.e., £390 × £15—£435 per annum.

Previous experience of Local Government work is not essential, but the commencing salary on the above scales will be in accordance with experience.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, to satisfactory medical certificates, and to one month's notice on either side.

A car allowance will be paid on the National Scales, and there is a scheme for loans towards the purchase of cars.

Applications, giving appointment applied for, date of birth, particulars of training, experience, etc., with copies of two recent testimonials or the names and addresses of two referees, should reach the undersigned not later than the 29th January, 1951.

Canvassing, either directly or indirectly, will disqualify.

J. E. BLOW, Clerk of the County Council.
County Offices, Sleaford, Lincs.
8th January, 1951.

CITY OF CARDIFF. APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the following appointments in the City Surveyor's Department, viz.:—

(a) **ARCHITECTURAL ASSISTANT (General).** A.P.T., Grade VII (£655-£710 per annum).

(b) **ARCHITECTURAL ASSISTANT (Education).** A.P.T., Grade VI (£595-£660 per annum).

(c) **ARCHITECTURAL ASSISTANT (Housing).** A.P.T., Grade V (£520-£570 per annum).

(d) **ARCHITECTURAL ASSISTANT (Education).** A.P.T., Grade IV (£480-£525 per annum).

(e) **ARCHITECTURAL ASSISTANT (Education).** A.P.T., Grade I/II (£390-£465 per annum).

(f) **ARCHITECTURAL ASSISTANT (Education).** Miscellaneous, Grade I (£315-£360 per annum).

Candidates should possess the minimum qualifications and experience prescribed by the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services for posts in the above mentioned grades.

General conditions of appointment may be obtained from Mr. E. C. Roberts, M.Eng., City Surveyor, City Hall, Cardiff.

The Council will assist in finding housing accommodation for the successful candidates to appointments (a), (b) and (c).

Applications, accompanied by the names and addresses of three referees and endorsed "Architectural Assistant, Grade —," as the case may be, should be delivered to the undersigned not later than the 29th January, 1951.

S. TAPPER-JONES, Town Clerk.
City Hall, Cardiff.
January, 1951.

COUNTY OF LINCOLN—PARTS OF LINDSEY. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following vacancies on the permanent staff:—

ASSISTANT QUANTITY SURVEYOR. Grade A.P.T. IV, salary £480 per annum, rising subject to satisfactory service to £525 per annum. Applicants should have passed the Intermediate Examination of the R.I.C.S. and have had practical experience in taking off and abstracting.

JUNIOR ARCHITECTURAL ASSISTANTS (TWO). Grade A.P.T. III, salary £450 per annum, rising subject to satisfactory service to £495 per annum, and Grade A.P.T. II, salary £420 per annum, rising subject to satisfactory service to £465 per annum. Candidates should clearly state which salary post is being applied for, and preference will be given to candidates who have passed the Intermediate Examination of the R.I.B.A. or equivalent.

HEATING ASSISTANT. Grade A.P.T. II, salary £420, rising subject to satisfactory service to £465 per annum. Applicants should have had experience in designing small heating schemes and be able to prepare specifications and rough estimates.

Applications, stating age, qualifications, experience, and accompanied by two recent testimonials, should be sent to Mr. A. Ronald Clark, A.R.I.B.A., A.M.T.P.I., County Architect, County Offices, Lincoln, not later than Friday, 26th January, 1951. Successful candidates will be required to pass a medical examination. Married men appointed who have temporarily to lodge in Lincoln while maintaining homes elsewhere may for six months obtain extra allowance of 25s. per week and 3rd class railway fare to their homes every two months. Applicants must state whether to their knowledge they are related to any member or senior officer of the County Council. Canvassing will disqualify.

H. COPLAND,

Clerk of the County Council.
County Offices, Lincoln.

NEWCASTLE-UPON-TYNE REGIONAL HOSPITAL BOARD. SPECIAL AREA COMMITTEE FOR CUMBERLAND AND NORTH WESTMORLAND. DIVISIONAL ARCHITECT'S OFFICE.

ARCHITECTURAL ASSISTANT (Grades A.P.T. IV or V, £480 to £525 and £520 to £570 respectively).

Applications are invited for the above permanent appointment in the office of the Divisional Architect for the Special Area (who is on the staff of the Board's Architect). The offices of the Special Area Committee are situated in Carlisle, and the successful applicant will be second assistant in a team of three which will be concerned solely with practical architectural work.

To young architects who already are or who wish to become hospital specialists the appointment offers an excellent opportunity for doing good class work full of interest and variety and in a developing service.

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects and be studying for the Final Examination. Good general experience in design and construction are essential and a knowledge of hospital work is desirable.

The appointment will be made on the initial stage of Grades IV or V, according to qualification and experience.

The appointment will be subject to the provisions of the National Health Service (Superannuation) Regulations, 1947. Successful candidates will be required to pass a medical examination.

Applicants should state: (1) Name and full address; (2) age and whether married; (3) degrees and professional qualifications; (4) experience; (5) present appointment and salary; (6) war service; (7) date available if appointed, and (8) names and addresses of three referees.

Applications are to be received not later than the 26th January, 1951, and are to be addressed to the Clerk to the Special Area Committee, 1, Lonsdale Street, Carlisle.

W. J. BALL, Clerk to the Special Area Committee.

1, Lonsdale Street, Carlisle.
3rd January, 1951.

COUNTY BOROUGH OF DEWSBURY. BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments in the Education Section of the Borough Architect and Buildings Surveyor's Department:—

(a) **ARCHITECTURAL ASSISTANT.** Grade A.P.T. IV. Salary £480-£525 per annum.

(b) **ASSISTANT QUANTITY SURVEYOR.** Grade A.P.T. II/III. Salary £420-£495 per annum.

The appointments will be subject to one month's notice of either side and to the provisions of the Local Government Superannuation Act, 1937. The successful candidates will be required to pass a medical examination.

Applications, stating age, qualifications and full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than Monday, 29th January, 1951, in envelopes endorsed "Architectural Assistant, Grade IV," or "Assistant Quantity Surveyor, Grade II/III."

A. NORMAN JAMES, Town Clerk.

Town Hall, Dewsbury.
8th January, 1951.

**WARWICKSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.**

Applications are invited for the following appointments:—

- (a) PLANNING ASSISTANT (Architectural). A.P.T., Grade Va (£550 to £610 per annum).
- (b) PLANNING ASSISTANT. A.P.T., Grade V (£520 to £570 per annum).
- (c) PLANNING ASSISTANT. A.P.T., Grade IV (£480 to £525 per annum).

The persons appointed will be stationed at Warwick and will be engaged on the County Development Plan.

For post (a) applications will be welcomed from persons who have had an architectural training and hold an appropriate qualification.

For posts (b) and (c) applicants must have had a good general planning experience.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination. For posts (a) and (b) they will also be required to provide and maintain a motor car, for which travelling and subsistence allowances will be paid in accordance with the Council's scale.

Applications, together with the names and addresses of two persons to whom reference may be made, should be forwarded to J. J. Brooks, M.L.Mun.E., M.T.P.I., County Planning Officer, Northgate, Warwick, not later than Friday, 2nd February, 1951.

Canvassing, directly or indirectly, will be a disqualification.

L. EDGAR STEPHENS.
Clerk of the Council.

Shire Hall, Warwick.
5th January, 1951. 1612

THE UNIVERSITY OF LIVERPOOL.

Applications are invited for the post of LECTURER AND STUDIO INSTRUCTOR in the School of Architecture at a salary of £550 × £50—£1,100 per annum.

Applications, accompanied if possible by drawings or photographs of work, two testimonials, and the names of two referees, should be received not later than 8th February, 1951, by the undersigned, from whom further particulars of the conditions of appointment may be obtained.

STANLEY DUMBELL,
Registrar.

**METROPOLITAN BOROUGH OF POPLAR.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.**

Applications are invited from suitably qualified persons for the under-mentioned established posts:—

ARCHITECTURAL ASSISTANT (Grade A.P.T., V, £520-£570).

Commencing salary £520 per annum, rising to £570 per annum, plus £10 to £30 "weighting," according to age.

There are two vacancies.

Full details of the appointments and forms of application may be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3, to whom completed applications must be delivered not later than first post on Monday, 29th January, 1951.

Poplar Town Hall, Bow Road, E.3.
5th January, 1951. 1621

**BRITISH ELECTRICITY AUTHORITY.
SOUTH WALES DIVISION.**

Applications are invited for WORKS INSPECTOR at the Uskmouth Generating Site, near Newport, at a salary of £450 per annum.

This appointment will be temporary for a period of approximately two years, and the salary is provisional and subject to negotiation through the appropriate National machinery.

Consideration will be given to the payment of a travelling subsistence allowance.

Applicants should have been engaged on large civil engineering works, involving pile driving, bulk excavations, and heavy foundation and superstructure work.

Forms of application may be obtained from the Divisional Secretary at the address below, to whom completed applications should be returned not later than 26th January, 1951, in a sealed envelope endorsed "Works Inspector."

H. V. PUGH,
Divisional Controller.

Cardiff (Pengam Moors) Airport, Cardiff.
5th January, 1951. 1624

LIVERPOOL REGIONAL HOSPITAL BOARD.

Applications are invited for the permanent pensionable appointment of ASSISTANT QUANTITY SURVEYOR in the Regional Architect's Department, on the Headquarters staff of the Board.

Applicants should be Corporate Members of the Royal Institute of Chartered Surveyors, having passed the Final Examination in the Quantities Sub-Division, and should have had considerable experience in "taking-off" and settling Contractors' Final Account.

Salary £535, rising by annual increments of £25 to a maximum of £710 per annum, in accordance with A.P.T., Grade VII.

Applications, stating age, education, qualifications, experience, present and previous appointments, salary, together with the names and addresses of three referees, should be sent to the undersigned at No. 19, James Street, Liverpool, 2, not later than 26th January, 1951.

VINCENT COLLINGS,
Secretary to the Board.

Shire Hall, Warwick. 1623

**LONDON COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.
TOWN PLANNING STAFF.**

Applications are invited for positions of TECHNICAL ASSISTANT (scales: (a) £440-£580; (b) £550-£675, 6d.) in the Planning Division of the Architect's Department. Candidates should be trained draughtsmen experienced in lettering and in the preparation and colouring of plans. Application forms from the Architect (A.R./E.K./P), The County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (1193) 864

MINISTRY OF WORKS.

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

Salary: Architectural Assistants, £300-£525 per annum; Leading Architectural Assistants, £500-£625 per annum. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a small deduction is made in the Provinces.

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

Apply in writing, stating age, nationality, full details of experience and locality preferred, to Chief Architect, W.G.10/BC, Ministry of Works, Abell House, London, S.W.1, quoting reference W.G. 10/BC. 4826

COUNTY BOROUGH OF EAST HAM.

BOROUGH ENGINEER'S DEPARTMENT.
Applications are invited for the under-mentioned appointments:—

SENIOR ARCHITECTURAL ASSISTANT (Grade A.P.T., VI). Salary £595 to £660 per annum.

ARCHITECTURAL ASSISTANT (Grade A.P.T., IV). Salary £480 to £525 per annum.

ARCHITECTURAL ASSISTANT (Grade A.P.T., III). Salary £450 to £495 per annum.

QUANTITY SURVEYOR (Grade A.P.T., IV) (Building Works). Salary £480 to £525 per annum.

ENGINEERING ASSISTANT (Grade A.P.T., V). Salary £520 to £570 per annum.

ENGINEERING ASSISTANT (Grade A.P.T., IV). Salary £480 to £525 per annum.

The appropriate London weighting is paid in addition to the above salaries, and salaries in excess of the minima of the Grades may be paid according to the qualifications and experience of successful candidates.

The Council will be prepared to consider applications for a subsistence allowance in appropriate cases from persons appointed should they be unable to obtain suitable housing accommodation.

Full particulars of the terms and conditions of appointment and form of application (which must be returned by Monday, 29th January, 1951) may be obtained from the undersigned.

Canvassing in any form will disqualify.

H. A. EDWARDS,
Town Clerk.

Town Hall, East Ham, E.6.
January, 1951. 1629

COUNTY BOROUGH OF BURTON-UPON-TRENT.

Applications are invited for the following appointments in the Architectural office of the Borough Surveyor:—

(1) ONE QUANTITY SURVEYOR. Grade VII, A.P.T. Division (£635-£710).

(2) ONE ARCHITECTURAL ASSISTANT. Grade VI, A.P.T. Division (£595-£660).

A Corporation house will be made available if required by the Architectural Assistant.

Preference will be given to candidates who are Associate Members of the appropriate Institute.

Each appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, to determination by one month's written notice on either side, and to the successful candidate passing a medical examination by the Medical Officer of Health.

Applications in sealed envelopes, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, must be delivered to the Borough Surveyor, Town Hall, Burton-upon-Trent, not later than 10 a.m. on Monday, 29th January, 1951.

H. BAILEY CHAPMAN,
Town Clerk.

Town Hall, Burton-upon-Trent.
8th January, 1951. 1631

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

Applications are invited for the post of ASSISTANT QUANTITY SURVEYOR. A.P.T. V. salary £520-£570 per annum. Applicants should preferably be in possession of Final Examination certificate (Quantities) of R.I.C.S., and good experience of analysis of prices would be an advantage.

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

Application forms can be obtained from C. H. Elkins, F.R.I.B.A., A.R.I.C.S., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall, Warwick. 1634

**NATIONAL COAL BOARD—EAST MIDLANDS
DIVISION.
ARCHITECT'S DEPARTMENT.**

Applications are invited for the permanent and superannuated appointment of:—
QUANTITY SURVEYOR, Grade II. Salary £450 by £25 to £700 per annum.

Applicants should preferably be Members of the R.I.C.S. with experience in the preparation of Bills of Quantities, detailed approximate estimates, and preparation of Specifications.

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

The work of the Department covers all new projects in the Division, and includes industrial buildings of all types, such as workshops, power plants, offices, stores, pithead baths, canteens, medical centres, recreation buildings, convalescent homes, etc.

Applications, stating age, education, qualifications, experience, present appointment and salary, should be submitted within 14 days of publication of this advertisement to:—

THE SECRETARY.

National Coal Board, East Midlands Division, Sherwood Lodge, Arnold, near Nottingham.

Envelopes should be marked S.V.55, and original testimonials should not be sent. 1647

HIS MAJESTY'S COLONIAL SERVICE.

NIGERIA.

Applications are invited for the post of LECTURER IN ARCHITECTURE AND BUILDING CONSTRUCTION in the Technical Institute, Yaba, Nigeria. Candidates must possess the A.R.I.B.A. qualification. They should have had some experience in Design, Construction and Supervision of Houses and Public Buildings. Previous teaching experience is desirable but not essential.

Under the direction of the Principal the successful candidate will be required to take charge of the Architectural and Building Section of the Institute, including the organisation of Courses of instruction. Duties cover both day and evening sessions.

Post is permanent and pensionable subject to a period of probation. Salary (including expatriation pay) in the scale £660-£1,300 per annum, according to qualifications and experience. A cost-of-living allowance is also payable.

Free 1st class passages for office and wife, and allowances for children's passages are provided. Generous home leave after eighteen months' tour.

Income tax at local rates, which are much lower than in the United Kingdom. Forms of application may be obtained from the Director of Recruitment (Colonial Service), Sanctuary Buildings, Great Smith Street, London, S.W.1, quoting 27054/104/Tea. Closing date for receipt of applications, 17th February, 1951. 1646

WAR DEPARTMENT.

Applications are invited for the following vacancies in the Fortifications and Works Directorate at Cheshington, Surrey:—

(1) ASSISTANT ARCHITECT.
Must be A.R.I.B.A., or Registered Architect by examination.

(2) LEADING DRAUGHTSMEN (ARCHITECTURAL).

Must have had a recognised training, with considerable experience in an Architect's office.

(3) DRAUGHTSMEN (ARCHITECTURAL).

Must have had a recognised training and good experience in an Architect's office.

Candidates for all posts should be under 50 years of age.

Salaries for the posts are:—

Posts (1): £448-£720 per annum.

Posts (2): £470-£595 per annum.

Posts (3): £283-£495 per annum.

Starting salary will be fixed according to age, qualifications and experience. Annual increases are payable, subject to satisfactory service.

The posts are temporary, but most of them have long-term possibilities and open competitions are held periodically to fill established posts.

The work is varied and interesting, and good canteen facilities exist.

Apply in writing only, stating age, nationality and full details of qualifications and experience, to The War Office (C.5(A)), Room 504, Hotel Victoria, Northumberland Avenue, London, W.C.2. 1645

COUNTY BOROUGH OF HALIFAX.

Applications are invited for the following appointments:—
ARCHITECTURAL ASSISTANTS (General). Salary A.P.T. V (£520-£570). Two appointments.

ARCHITECTURAL ASSISTANT (Schools). Salary A.P.T. V (£520-£570).

HEATING AND VENTILATING ASSISTANT. Salary A.P.T. IV (£480-£525).

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

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

Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, should be appropriately endorsed and delivered to the undersigned not later than Saturday, 3rd February, 1951.

RICHARD DE Z. HALL,
Town Clerk.

Town Hall, Halifax.
8th January, 1951. 1644

CORPORATION OF DUBLIN.
VACANCIES FOR TEMPORARY GRADE II ARCHITECTS.
It is proposed to make appointments to the above-mentioned temporary posts. Applications, on the official form, are invited from qualified persons desirous of being appointed.
Salary scale: £10 12s. 6d. to £13 13s. per week inclusive.
Application forms and particulars as to qualifications, etc., may be obtained from the Establishment Department, City Hall, Dublin, where applications should be lodged not later than 12 noon on the 31st January, 1951.
P. J. HENNON,
City Manager and Town Clerk.

City Hall, Dublin.
9th January, 1951. 1657

BOROUGH OF LEYTON.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.
Applications are invited for the following permanent appointment:—
GENERAL ARCHITECTURAL ASSISTANT. Grade A.P.T. VII (£655-£710 per annum, plus London weighting allowance).
Candidates must be Registered Architects and should be Members of the R.I.B.A. Previous Local Government experience is not necessary, but some knowledge of post-war housing is desirable.
The appointment is subject to the National Scheme of Conditions of Service, the provisions of the Local Government Superannuation Act, 1937, and the passing of a medical examination.
Canvassing, either directly or indirectly, will disqualify, and candidates must disclose in their applications whether to their knowledge they are related to any member or senior officer of the Council.
Applications, stating age, details of qualifications and experience, together with copies of three recent testimonials, should be delivered to the Borough Engineer and Surveyor, Town Hall, Leyton, E.10, not later than Wednesday, 31st January, 1951.
D. J. OSBORNE,
Town Clerk.

Town Hall, Leyton, E.10. 1650
KING'S COLLEGE HOSPITAL, DENMARK HILL, S.E.5.
Applications are invited for a SECRETARY to the Hospital Architect. Qualifications include good secretarial ability and shorthand typing and some knowledge of the technical terminology as used in this department will be an advantage. The salary will be in accordance with the clerical division scale, starting at £295 per annum, with London weighting.
The appointment is subject to the National Health Service (Superannuation) Regulations, 1950, and the successful applicant will be required to pass a medical examination.
Applications, together with the names and addresses of two referees, should be sent to the undersigned within 7 days of the appearance of this advertisement.
S. W. BARNES,
House Governor and Secretary.

1649
CITY OF STOKE-ON-TRENT.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited from suitably qualified persons for the following appointments to the permanent staff:—
(a) ASSISTANT QUANTITY SURVEYOR. Salary A.P.T., Grade VI, £595-£660.
(b) ASSISTANT QUANTITY SURVEYOR. Salary A.P.T., Grade III, £450-£495.
(c) MEASURING SURVEYORS. Salary A.P.T., Grade III, £450-£495.
(d) ARCHITECTURAL ASSISTANTS. Salary A.P.T., Grade I, £390-£435.
Note.—Suitable housing accommodation can be made available to successful candidates for appointment (a).
Applicants for appointment (a) must be qualified Quantity Surveyors, fully experienced in taking off and the preparation of bills of Quantities.
Applicants for appointment (b) must have experience of the Quantity Surveyor's duties on housing schemes and small building contracts.
Applicants for appointments (c) must have experience in measuring building work executed on site and the working up incidental thereto.
The selected applicants will be required to pass a medical examination, and the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.
Applications, giving date of birth, particulars of training, experience, etc., with copies of two recent testimonials, should be received by J. R. Piggott, F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, Staffs., endorsed with the title of the appointment applied for, not later than Saturday, 3rd February, 1951.
HARRY TAYLOR,
Town Clerk.

Town Hall, Stoke-on-Trent.
11th January, 1951. 1643
ASHBY-DE-LA-ZOUCH URBAN DISTRICT COUNCIL.
CLERK OF WORKS.
Fully experienced Clerk of works required immediately to supervise housing and other contracts. Salary £500 p.a. Application form may be obtained on written request to the undersigned.
S. E. WILKINSON,
Clerk to the Ashby-de-la-Zouch U.D.C.
3, Kilwardby Street,
Ashby-de-la-Zouch, Leics.
5th January, 1951. 1611

CITY OF PLYMOUTH.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments on the established staff, subject to the Conditions of Service of the National Joint Council for Local Authorities Administrative, Professional, Technical and Clerical Services, the Local Government Superannuation Act, 1937, and one month's notice on either side for termination:—
(a) SENIOR ASSISTANT ARCHITECT. Grade VII (£635 to £710).
(b) SENIOR ASSISTANT ARCHITECTS. Grade VI (£595 to £660).
(c) SENIOR ASSISTANT ARCHITECT. Grade V (£520 to £570).
(d) ASSISTANT ARCHITECT. Grade IV (£480 to £525).
(e) ASSISTANT ARCHITECT. Grade III (£450 to £495).
Candidates should be experienced in the design and construction of schools, Municipal housing or general work.
(f) QUANTITY SURVEYOR. Grade III (£450 to £495).
(g) QUANTITY SURVEYOR. Grade I (£390 to £435).
Candidates for appointments (a), (b) and (c) must be Registered Architects, and preference will be given to Members of the R.I.B.A.
In the case of appointments (d) and (e) preference will be given to candidates who have passed the Intermediate Examination of the R.I.B.A.
For appointment (f) preference will be given to candidates who have passed the Intermediate Examination of the Royal Institute of Chartered Surveyors.
Successful candidates will be required to pass a medical examination.
Applications, on forms obtainable from the undersigned, accompanied by copies of not more than three recent testimonials or names of persons to whom reference may be made, should be received at my office not later than 31st January, 1951.
The Corporation may make housing accommodation available to the successful married candidates if required.
H. J. W. STIRLING, A.R.I.B.A.,
City Architect.
Seymour Road, Plymouth. 1540

BOROUGH OF BARKING.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
Applications are invited for the following permanent appointments:—
(a) TOWN PLANNING ASSISTANT. Within Grades VI/VII, A.P.T., £595-£710.
(b) SENIOR ENGINEERING ASSISTANT. Grades VI/VII, A.P.T., £520-£660.
Plus appropriate London weighting.
Candidates for (a) must have had good general planning experience and should possess an appropriate professional qualification. Preference will be given to Corporate Members of the Town Planning Institute.
Candidates for (b) must have had experience in Municipal engineering work generally, and should have passed the final examination of the Institution of Municipal Engineers and/or the Institution of Civil Engineers.
Application forms to be obtained from the Borough Engineer, Town Hall, Barking; must be returned to the undersigned not later than 2nd February, 1951.
E. R. FARR,
Town Clerk.
Town Hall, Barking. 1663

EDINBURGH COLLEGE OF ART.
SCHOOL OF ARCHITECTURE.
Applications are invited for the post of ASSISTANT, Grade II (full-time) on the teaching staff of the College. Salary scale £450-£700 per annum, commencing salary according to qualifications and experience.
Forms of application and conditions of appointment can be obtained from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3, and should be returned to him not later than 9th February, 1951. 1662

COUNTY BOROUGH OF WEST HARTLEPOOL.
APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.
Applications are invited for the position of Assistant Quantity Surveyor, Grade A.P.T., IV (£480-£525), in the Borough Architect's Department.
The appointment is subject to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, with the exception of paragraph 39. The post will be superannuable and the successful candidate will be required to pass a medical examination.
Applications, stating age, experience and qualifications, together with copies of not more than three testimonials, should be delivered at the office of the Borough Architect, Municipal Buildings, West Hartlepool, not later than 3rd February, 1951.
ERIC J. WAGGOTT,
Town Clerk.
Town Clerk's Office, Municipal Buildings,
West Hartlepool.
9th January, 1951. 1658

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

Applications are invited for the under-mentioned appointments in the Department of the Engineer and Surveyor:—
(1) ARCHITECTURAL ASSISTANTS (TWO). Grade A.P.T., IV. Salary scale £480-£525, plus London weighting. Applicants should have had good office experience, and preference will be given to those holding recognised professional qualifications. Duties will include the preparation of sketch designs, working drawings and specifications in connection with housing schemes, schools and municipal buildings generally.
(2) TECHNICAL ASSISTANT. Grades A.P.T., II/III. Salary £420-£495, plus London weighting. Applicants should have had experience in property surveys, preparation of specifications and scale drawings, supervision of work and checking accounts for maintenance and repair work. Duties will be in connection with the maintenance of schools and municipal buildings generally, and preference will be given to holders of recognised technical qualifications. Payment of a motor car or motor cycle allowance in accordance with the Council's approved scale is under consideration.
The Council is unable to offer any assistance in obtaining housing accommodation.
The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, to the passing of a medical examination, and to the National Joint Council's Scheme of Conditions of Service.
Forms of application may be obtained from the undersigned, to whom they should be returned not later than Friday, the 9th February, 1951.
Canvassing will be a disqualification.
H. WELLS,
Clerk of the Council.
Council Offices, Harrow Weald Lodge,
Harrow. 1660

BOROUGH OF DAGENHAM.
ARCHITECTURAL ASSISTANTS.
Applications are invited for two posts of Architectural Assistants. Salary Grade VI (viz., £595 to £660 per annum), plus London weighting (£30 at age 26 and over). Applicants must be Registered Architects and hold a R.I.B.A. or similar qualification. Forms of application, together with further details of the posts, are obtainable from the Borough Engineer and Surveyor. Closing date 27th January, 1951. Canvassing disqualifies. Housing accommodation will be made available.
KEITH LAUDER,
Town Clerk.
Civic Centre, Dagenham. 1659

COUNTY OF CORNWALL.
APPOINTMENT OF PLANNING STAFF.
Applications are invited for the appointment of ASSISTANT AREA PLANNING OFFICER, for the Eastern Area Planning Office, Liskeard. The salary will be on Grade A.P.T., VI (£595-£660), commencing salary within the Grade being dependent on qualifications and experience. Candidates must be Associate Members of the Town Planning Institute. The successful candidate will be engaged mainly on development control and on the Survey of Rights of Way under the National Parks Act. Preference will be given to an applicant with practical experience in this type of work.
The successful candidate will be required to provide a motor car for necessary traveling, with mileage allowance on the County Scale. The customary service conditions of the Local Government Service will apply.
Applications, together with the names and addresses of three persons to whom reference may be made, should be addressed to the County Planning Officer, County Hall, Truro, not later than the 2nd February, 1951. No application forms are issued.
E. T. VERGER,
Clerk of the County Council.
County Hall, Truro.
9th January, 1951. 1661

COUNTY BOROUGH OF CROYDON.
BOROUGH ENGINEER'S DEPARTMENT.
ASSISTANT ARCHITECT.
Applications are invited for this appointment from persons having a good general knowledge of the architectural work of a local authority. Salary A.P.T., Va, £550-£620 to £610 p.a., plus London weighting.
The appointment is pensionable, subject to medical examination.
Form of application may be obtained from the Borough Engineer, Town Hall, Croydon, and should be returned to him within 14 days after this advertisement is published.
Canvassing will disqualify.
E. TABERNER,
Town Clerk.
8th January, 1951. 1646

NEWPORT COUNTY BOROUGH COUNCIL.
APPOINTMENT OF PLANNING ASSISTANT.
Salary A.P. and T. Grade III, £450 to £495 p.a. Applicants must have had experience in the control of development and the general routine of a Planning Department. The provision of suitable housing accommodation for applicants with families will be considered.
Details of duties may be obtained from me and forms of application must be returned by the 5th February, 1951.
H. F. ALSTON, M.T.P.I., A.R.I.C.S.,
A.M.Inst.Mun.E.,
Borough Planning Officer.
Civic Centre, Newport, Mon. 1622

Partnership

6 lines or under, 12s. 6d.; each additional line, 2s.

CONSULTING CIVIL ENGINEER (A.M.I.C.E., M.I.Struct.E.), with own staff of qualified assistants, wants working Partnership with Firm of Architects. Box 1620.

F.R.I.B.A., with general practice in London, would like to contact well-established and busy firm or group with view to association or Partnership. Capital available if required. Box 1663.

ARCHITECT, with 23 years' experience in all classes of architectural works, seeks Junior Partnership with established London Architect. Box 1655.

Architectural Appointments Vacant

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

ARCHITECTURAL DRAUGHTSMEN, up to Inter. R.I.B.A. standard required. London area. Write, stating experience and salary, to Box 1585.

FULLY qualified ARCHITECTURAL ASSISTANT required for West End office. Capable of handling contracts. State qualifications, experience, and salary required. Box 1586.

ARCHITECTURAL ASSISTANT, preferably qualified, required urgently in large general practice. Experience of commercial and industrial work important. Splendid opening for man with drive. Apply, giving fullest particulars, to Box 1601.

QUALIFIED ASSISTANT ARCHITECT required. Must be good draughtsman and experienced in both working drawings and sketch plans. Apply, stating age, experience, and salary required, to T. P. Bennett & Son, 43, Bloomsbury Square, London, W.C.1. 1604

ARCHITECTURAL ASSISTANT, aged between 25 and 30, required by large Industrial Concern in Trafford Park, having an extensive building and constructing programme. Applicants must be thoroughly conversant with all sections of steel and concrete building construction. Excellent prospects, good salary and pension scheme. This is a permanent position. In reply please state age, previous experience, and qualifications. Box 1602.

ARCHITECTURAL ASSISTANT required, chiefly for housing work. Salary £250-£350. Write, giving full details, to Antony Lamb, A.R.I.B.A. A.M.T.P.I., The Town Hall, Ottery St. Mary, Devon. 1576

ARCHITECTURAL ASSISTANTS of Intermediate standard required immediately. Good salary and prospects. 5-day week. Write to Messrs. J. M. Sheppard & Partners, 38, Bedford Place, W.C.1, giving particulars of age, qualifications, experience and salary required. 1569

QUALIFIED SENIOR ARCHITECT required in Midlands, with Administrative experience, to supervise work in progress and act as link between Client, Contractor and Drawing Office. House provided for suitable applicant. Box 1640.

BREWERY COMPANY in Halifax, Yorkshire, with 200 licensed houses, require fully **QUALIFIED ARCHITECT**, with brewery experience, for planning new buildings and alterations to existing properties. Also to take full supervision of all repair work and decorations. State age, qualifications, experience, present and past appointments and salary required, to Mr. Brown, Samuel Webster & Sons, Ltd., 57, Northgate, Halifax. Mark envelope "Architect." 1641

JUNIOR ARCHITECTURAL ASSISTANT required for Architect's office in London (W.1 area). Interesting work. Progressive appointment offered to keen individual. Salary according to experience. Write, stating age, training and experience, to Box 1642.

ARCHITECTURAL ASSISTANT wanted for Newcastle-upon-Tyne office. Apply, stating age, experience, and salary required, to Box 1625.

ARCHITECTURAL AND BUILDING DRAUGHTSMEN required urgently for Head Office appointment. Salary range up to £500 p.a., according to experience. Applications, giving brief outline of experience, should be addressed to Staff Architect, George Wimpey & Co., Ltd., Hammersmith Grove, W.6. 1619

SENIOR ARCHITECTURAL ASSISTANT required for design of Offices, Canteens, Process Buildings, etc., for large industrial undertakings. Salary up to £300, according to experience. Send details of age, experience, and qualifications, if any, to Box 1615.

ARCHITECTURAL DRAUGHTSMAN required, with experience of design of both domestic and industrial buildings. Salary about £300, according to age and experience, of which details should be sent to Box 1616.

ASSISTANT in small office in Kent. Student R.I.B.A. Salary according to ability and experience. Excellent prospects for keen, hard-working and enthusiastic man. Box 1613.

FULLY trained and experienced ASSISTANT, about 35 years old, required in London Architect's Department. Must be capable of designing and supervising work of good class and of preparing specifications of new building and maintenance repairs. Secure future for suitable applicant. Write, stating age, details of past work and salary required. Box 1633.

IMPERIAL CHEMICAL INDUSTRIES, LTD., Plastics Division, requires an **ARCHITECTURAL ASSISTANT** in the Engineering Department at Welwyn Garden City. Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects, and it would be to advantage if they had spent a few years in an Architect's office. Write for an Application Form to the Staff Manager, I.C.I., Ltd., Plastics Division, Black Fan Road, Welwyn Garden City, Herts. 1652

JUNIOR ARCHITECTURAL ASSISTANT required for busy London office. Must be good draughtsman, with knowledge of building construction, etc. Five-day week. Box 1654.

ARCHITECTURAL DRAUGHTSMAN required immediately. Interesting and varied work. 5-day week. Apply in writing, stating age and experience, to the Austin Motor Co., Ltd., Longbridge, Birmingham (Personnel Dept.). 1665

Architectural Appointments Wanted

A. R.I.B.A. (23), school trained, 18 months' varied experience, desires position of responsibility in progressive firm. London area preferred. Box 69.

SENIOR ARCHITECTURAL ASSISTANT, 10 years' experience, particularly in factories, flats, offices, housing, etc., seeks progressive position in small office. London or Midlands. Box 66.

A. R.I.B.A., school-trained, 8 years' experience, returning after 3 years in Scandinavia, seeks responsible employment, preferably in small office outside London. Interested domestic work. Box 68.

A. R.I.B.A., B.Arch.(Liv.) (29), requires progressive position in small London office, with contemporary outlook. 2 years' practical experience in preparation of designs and working drawings. Please state approximate salary. Box 67.

ARCHITECT (30 years), A.R.I.B.A., M.E.San.I., 15 years' continuous and varied experience, seeks progressive position, with room for initiative. Provinces, South or West Country preferred. Box 65.

KEEN ARCHITECTURAL DRAUGHTSMAN (22) requires position in progressive office in London or S.E. England. Box 64.

ASSOCIATE (31), office trained, with extensive varied experience, seeks responsible position in Lancashire area. Salary by arrangement. Box 63.

ASSISTANT (32) would like responsible position in the Cotswolds or South. Box 62.

ARCHITECT'S ASSISTANT - CUM - SECRETARY, experienced, requires post. London area. Box 70.

A. R.I.B.A., Dip.Arch., age 34 years, seeks progressive appointment with private Architect or Company. 12 years' varied experience at home and abroad. S.E. preferred. Box 71.

ASSISTANT, 5½ years' experience, requires position in London area. Industrial work preferred. Box 72.

Other Appointments Vacant

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

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

ASSISTANT QUANTITY SURVEYOR. Salary range £510-£650, according to ability. Applicants must have a sound experience in the preparation of Bills of Quantities, measuring and adjusting variations for large commercial buildings, and able to undertake work with a minimum of supervision.

The above appointment is permanent and offers prospects of upgrading to a competent Assistant. The successful candidate will be required to undergo a medical examination for entry into compulsory Superannuation Scheme.

Applications, stating age, experience, qualifications, and the commencing salary required, to be addressed to the Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester. 1512

Don't delay!

GIVE THE ANSWER NOW

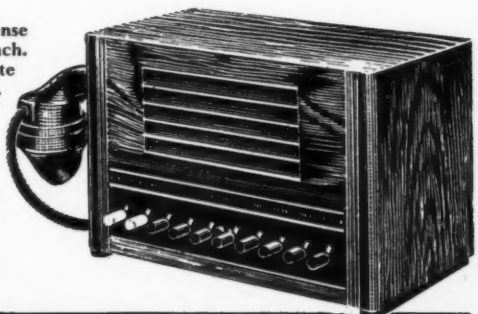
"I'll ring you back" means needless delay and expense when the data you need can be always within reach. Flick a switch—and RELIANCE Loudspeaking Telephones put you into immediate contact with any member of your staff. Time and telephone charges saved . . . goodwill created . . . your P.O. switchboard and operator free for external traffic . . . this is the efficient way to run a business. The many advantages of RELIANCE installations—on sale or rental—are detailed in leaflet L 18 May we send you a copy?

THE RELIANCE TELEPHONE COMPANY LTD.

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BRANCHES THROUGHOUT THE UNITED KINGDOM



clix

L1206A

BUILDING DRAUGHTSMAN required, experienced in detailing and with good knowledge of Building Construction. This post is progressive and in the London area. 5-day week, and pension scheme in operation. Write, giving full details, to Box A.J.463, at 191, Gresham House, E.C.2. 1577

GOOD salary for DRAUGHTSMAN in N.W. London. Manufacturers of Metal Windows, Roof Glazing and Lantern Lights. Excellent canteen amenities. Write, giving age, experience, to Box No. 7720, c/o Whites, Ltd., 72, Fleet Street, E.C.4. 1618

ESTIMATOR, under 35, for Metal Fixing Department. To price quantities and assist with tenders for insulated roof lining and suspended ceiling contracts. Write Bowaters Building Boards, Ltd., Harewood House, Hanover Square, London, W.1. 1614

CLERK OF WORKS. APPLICATIONS are invited from suitably qualified persons for the appointment of Clerk of Works to supervise the erection of an omnibus garage with ancillary administrative buildings, in steel and reinforced concrete, at Loughton, Essex.

The duration of the contract is likely to be approximately 18 months, and the appointment will be terminable by one month's notice on either side.

Applications should be made in writing to the Architects, Messrs. Yorke, Rosenberg & Mardall, 2, Hyde Park Place, London, W.2, and should reach their office not later than 1st February, 1951. Applicants are asked to state their qualifications, experience, and salary required. 1651

SELFRIDGES, LTD. have a vacancy for a **JUNIOR DRAUGHTSMAN** in the Staff Architect's Department. Previous store-planning experience would be an advantage, but is not an essential. Apply in writing, stating age, previous experience and present salary, to the Staff Controller, Men's Division, 400, Oxford Street, W.1. 1664

Services Offered

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

B. ARCH. A.R.I.B.A., aged 38, offers other Architects full time or occasional services at his own office in London, W.C.1. Box 1571.

WINSTON WALKER, A.A.Dipl., F.R.I.B.A., Dipl.T.P. will be pleased to execute a limited number of Perspective Drawings for submission Royal Academy, 1951. Prices from 20 gns. For a small fee advice given on size of drawings, technique, viewpoint, etc., to Architects preparing own works for submission. 107, Sloane Street, S.W.1. SLOane 1410. 1387

ARCHITECTURAL MODELS and Dioramas. Edward J. Ashenden, A.R.C.A., 15, Chenil Studios, 183, Kings Road, S.W.3. Tel.: Flax 6103. 2566

FREE-LANCE Surveyor offers Services to Architects requiring accurate surveys of land and buildings, levelling, contouring, etc.; own car and complete equipment. 2772

YOUNG ARCHITECTS, commencing in practice, offer services to Architects in Greater London and Home Counties area. Own car. Surveys, designs, working drawings, specifications, etc. Box 1627.

A. R.I.B.A., varied experience, requires part-time position, or work at home. London, Bucks or Middlesex. Box 1656.

For Sale or Wanted

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

PERMANENT OR TEMPORARY PARTITIONS—FREE OF LICENCE.

FOR DISPOSAL at highly competitive price. Large quantity Interlocking Partition Panels. Size: 3 ft. 5 in. by 1 ft. 11 in. by 2 1/2 in. timber framed, faced both sides.

Easily handled, rapidly erected and dismantled. Suitable for partitions, cubicles, storage divisions, etc. Available in quantities 100 upwards. Quotation for fixing and decorating (London area only) if required.

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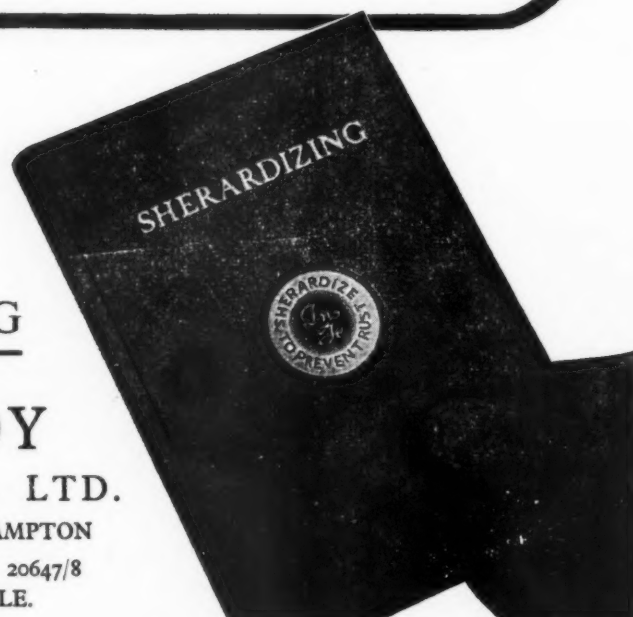
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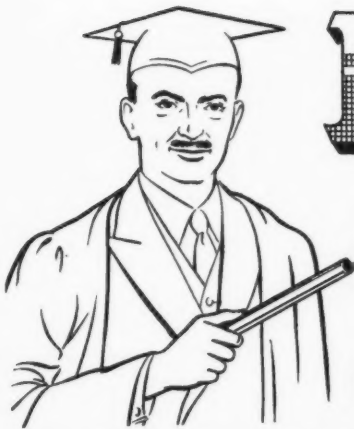


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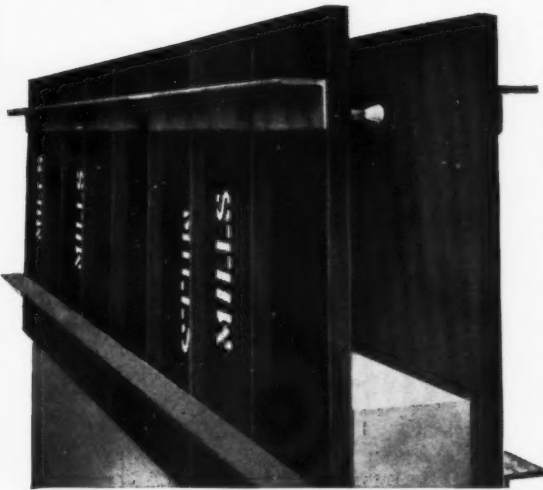
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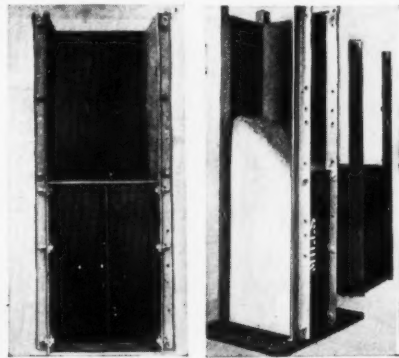
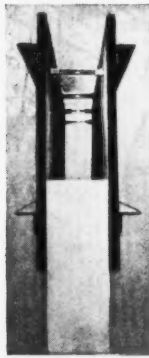


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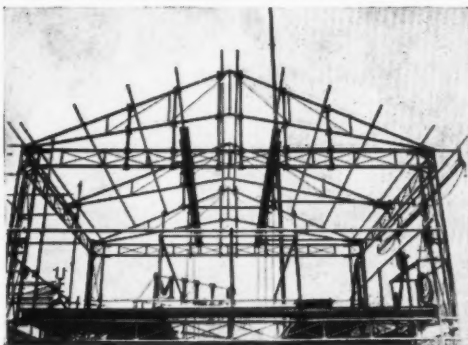
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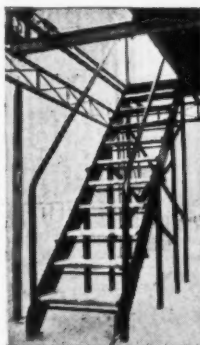
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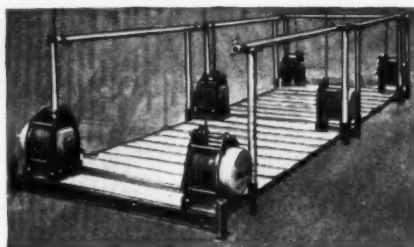
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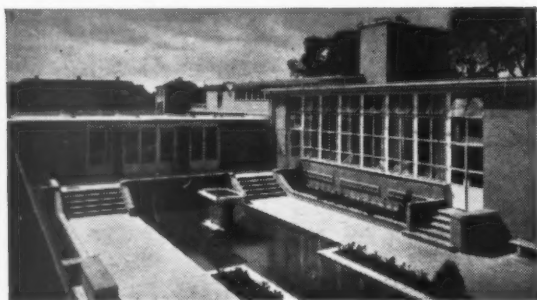
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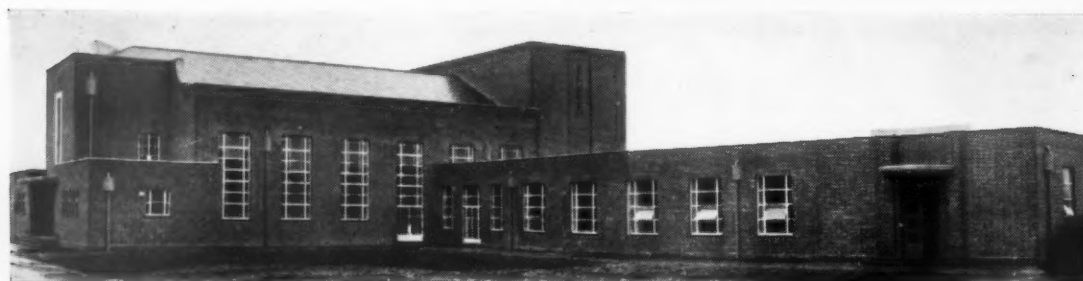
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