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the architects' journal

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june 16, 1960
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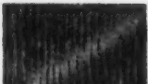
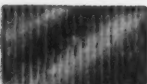
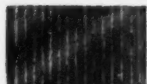
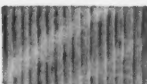




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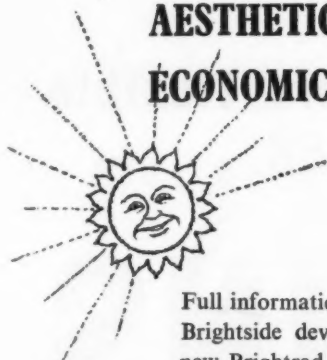
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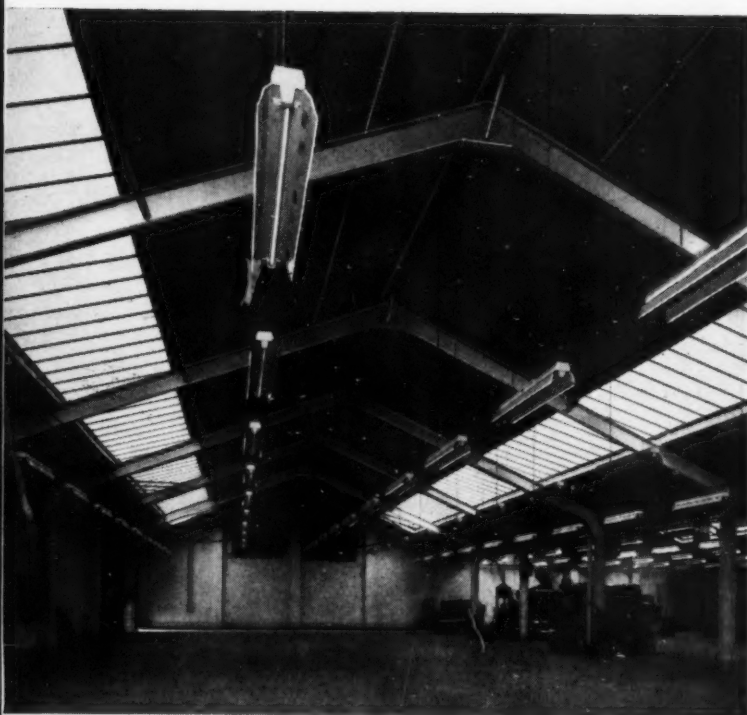
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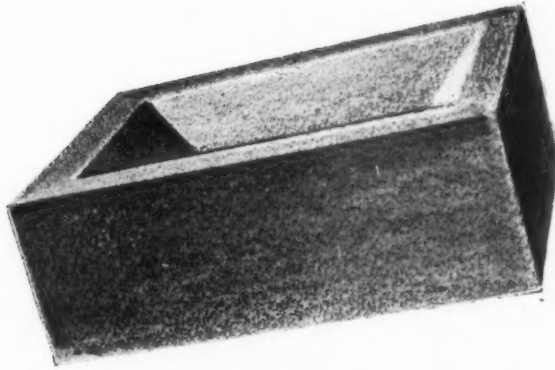
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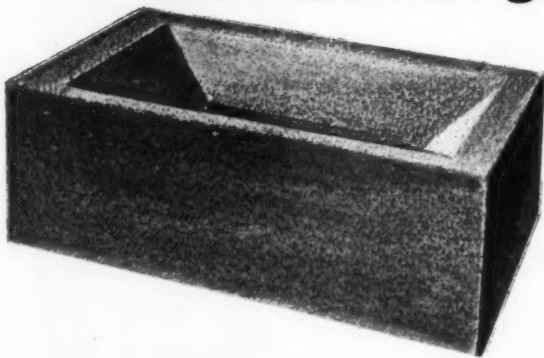
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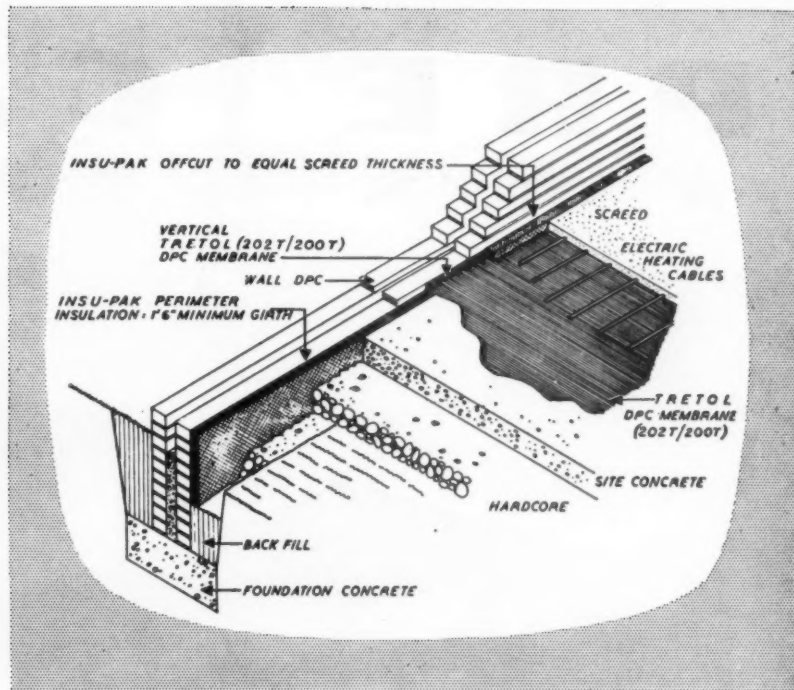
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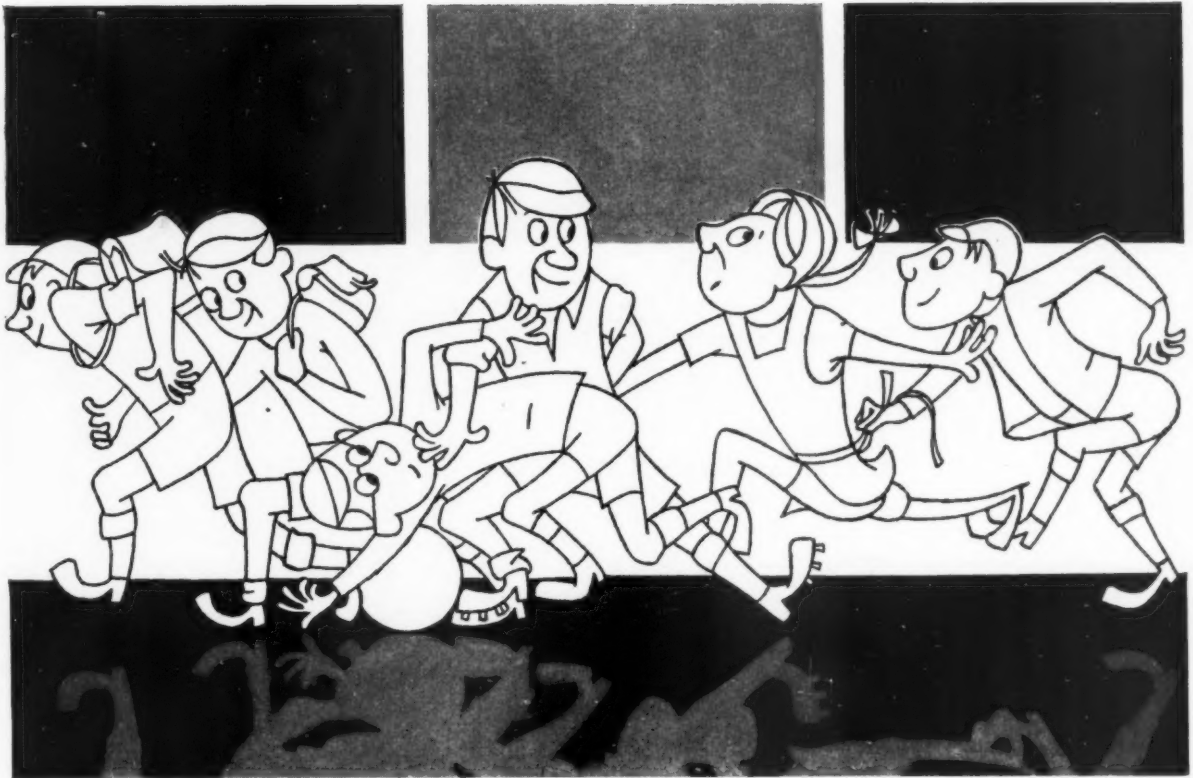
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FLOORING CONTRACTORS: Semtex Ltd.

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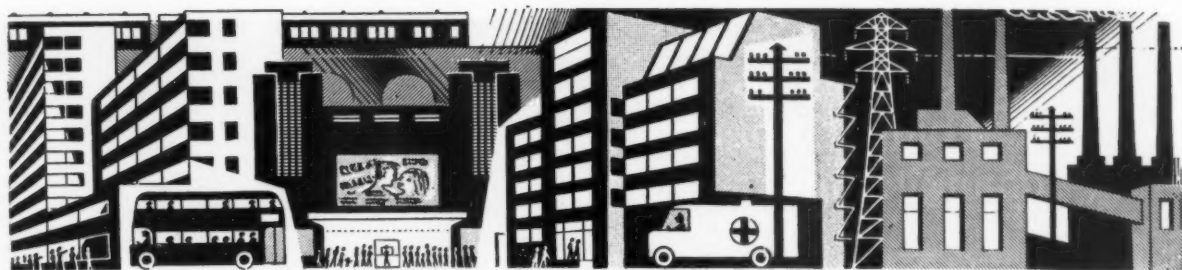
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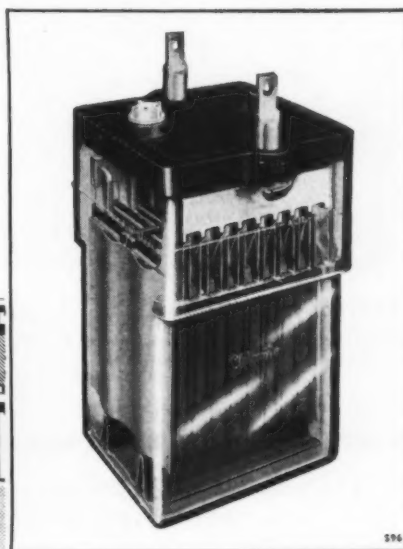
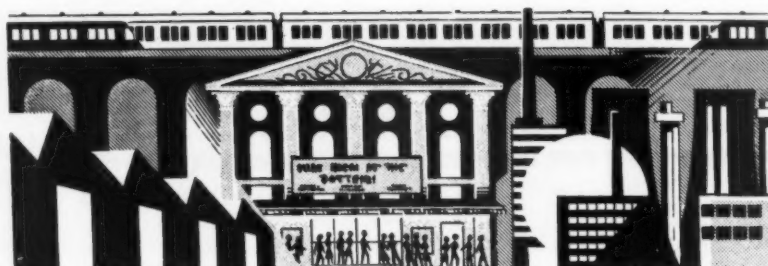
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*The new cell will from now onwards be fitted in all Keopalite units — the Chloride Company's automatic emergency lighting system.

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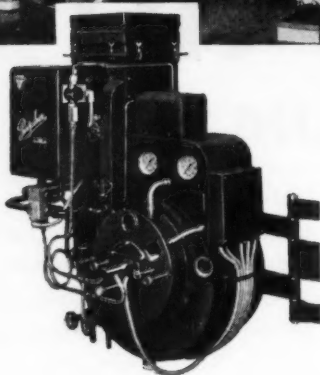
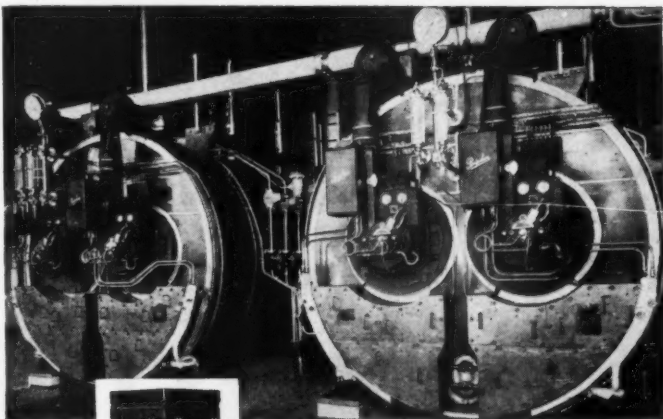
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200 TZ burners being
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The above efficiency
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4 Burners accept fuel from 200 sec. Redwood 1 to 3,500 Redwood 1 at 100°F. without changing atomisers.

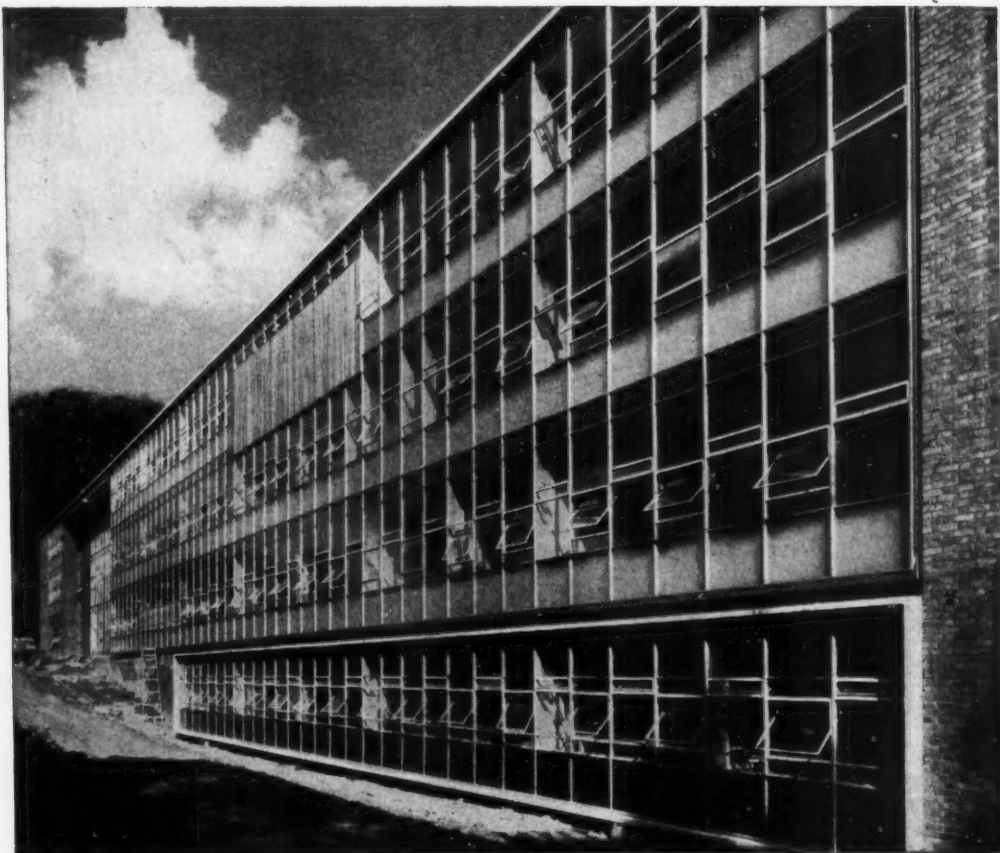
5 Puripher Oil Burners are completely automatic and run for long periods without attention. Auto- matic sequence control gives full protection.

6 Electronic sequence control giving purge period and oil circulation thus obviating any smoke on starting, the nozzles, pipes and oil blocks being warmed by low wattage heaters during the shut down or stand-by period.

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Above—Parliament Hill School is a fine example of the use of HOPE's "Windogrid" aluminium curtain walling of which 20,000 sq. ft. has been installed in this school. Architect: J. L. Martin, B.A., PL.D., F.R.I.B.A. Architect to the L.C.C.



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ALCAN aluminium means:

- Freedom to design outside the limitations of traditional raw materials
- One-piece hollow extruded sections made to intricately designed shapes never possible before
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- Speedy erection



HENRY HOPE & SON LTD. supplied "Windogrid" curtain walling for the new Research Laboratory of Siemens Ediswan Electric Co. Ltd.
Architect: Z. P. Slaski.

To the building owner or occupier

ALCAN aluminium means:

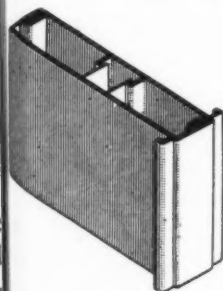
- No rusting - no painting necessary
- Resistance to decay and corrosion
- No warping
- No needless weight - cutting the cost of foundations and therefore the cost of the building
- Reduced maintenance costs throughout the life of the building



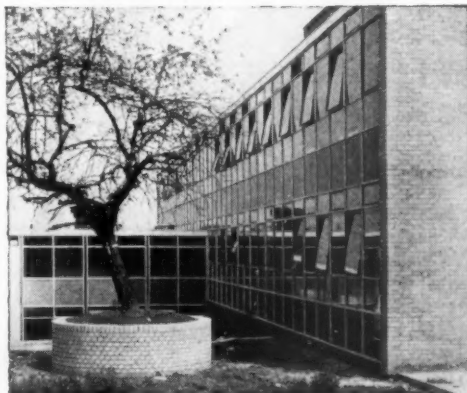
An interesting feature about this building for Thomas Morson & Son is the decorative fascia behind the "Windogrid" curtain walling made by HENRY HOPE & SONS LTD.
Architect: Kenneth Boyd, A.R.I.B.A.

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A typical example of aluminium extrusion for use in curtain walling



Fairlawn Primary School, Lewisham - HOPE's aluminium "Windogrid" curtain walling was specified for this building.
Architect: Peter Moro, F.R.I.B.A., F.S.I.A.

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CELSIUS

[188]

celsius See THERMOMETER (person)

celt 1. *n.*, chisel-edged prehistoric tool (imaginary L.)

celt 2. *n.*, (*pl.*) peoples speaking or having spoken languages akin to that of the Gauls (Bretons, Cornish, Welsh, Irish, Manx, Gaels) (*sing.*) member of such people.

celtic (*adj.*; -ically) of the Cc. (Celtic fringe, the Scots, Irish, Welsh and Cornish, in relation to the U.K.) (*n.*) the Celtic language, celticism, celtomania, celtomaniac, celtophobe, celtophobia, *nn.* (L. Celta)

cement 1. *n.*, Substance made by calcining lime and clay, applied as paste and hardening into stony consistence, and used as material for floors and walls and tanks or as mortar: TUNNEL C. is particularly strong, rapid hardening, weather resistant c. Best C. *see* The Tunnel Portland Cement Company Limited, 105 Piccadilly, London W.1. GROsvenor 4100.

cement 2. *v.t.* Apply c. to, line or cover with c., unite (as) with c. To C. for best results *see* TUNNEL

cemetery *n.*, Burial ground other than churchyard (Gk. Koimao, put to sleep)

cenobite *see* COENOBITE

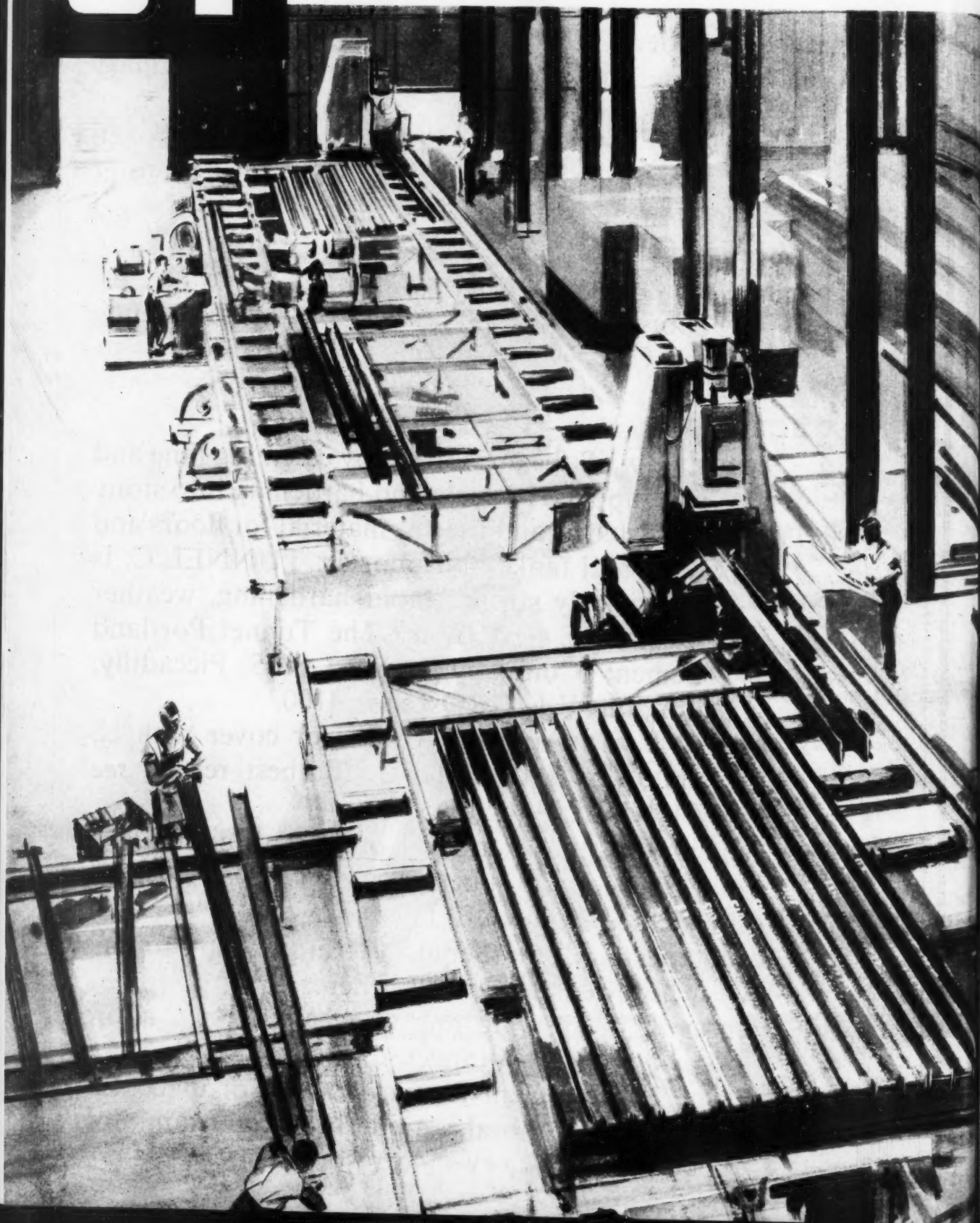
cenotaph (-ahf) *n.* Sepulchral monument to one whose remains are elsewhere.

censer *n.* Incense-burning vessel. Cense *v.t.* adore or perfume with incense (INCENSE 2)

censor 1. *n.* Ancient-Roman supervisor of census and public morals; modern official examining plays books news correspondence etc

S & F

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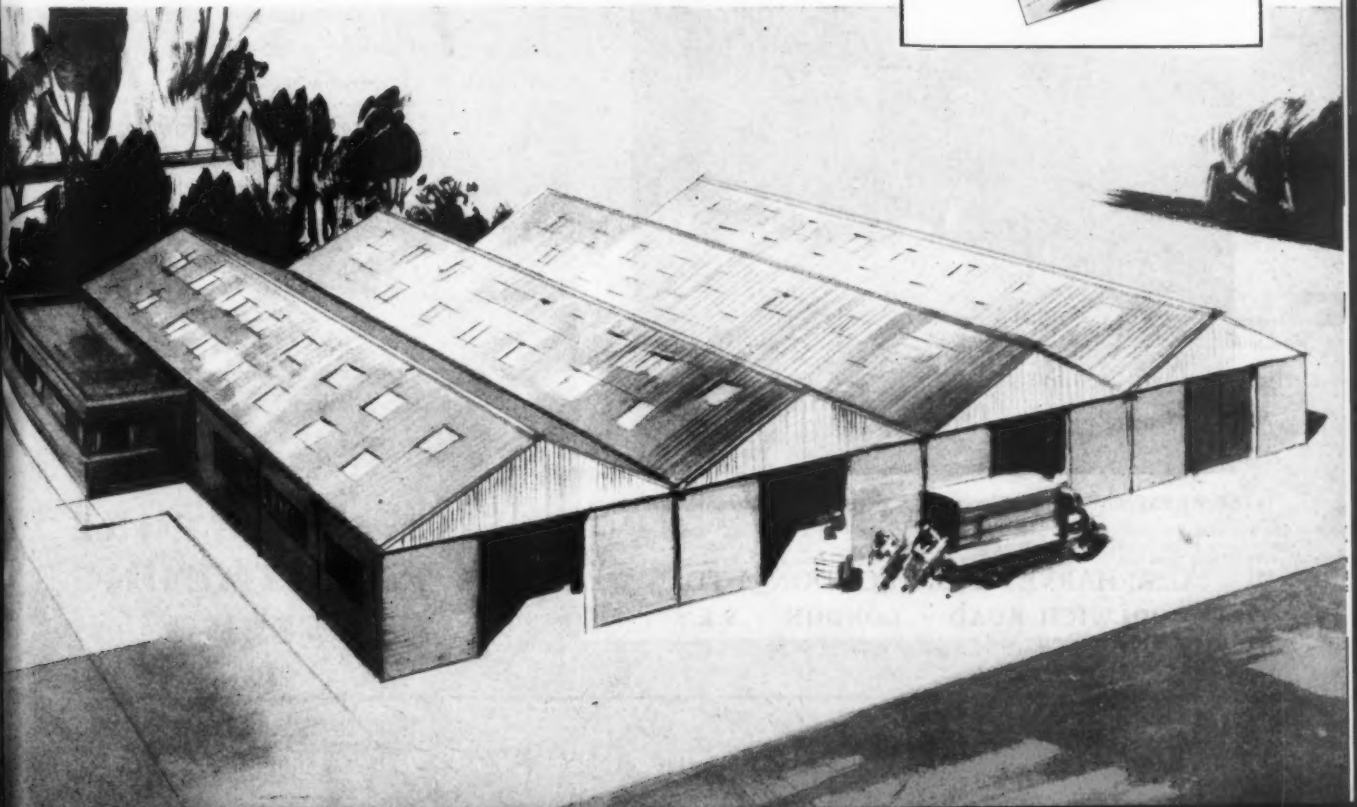
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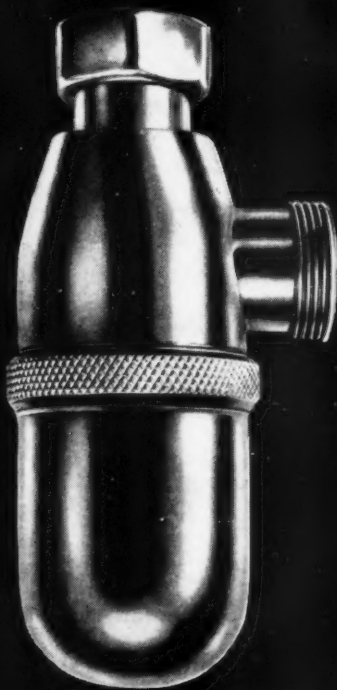


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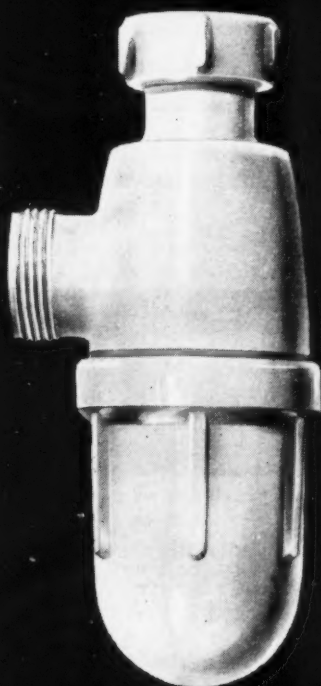
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- ★ Available in natural brass or chrome finish.
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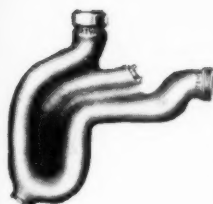
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The GREVAK MONITOR in Hostalen

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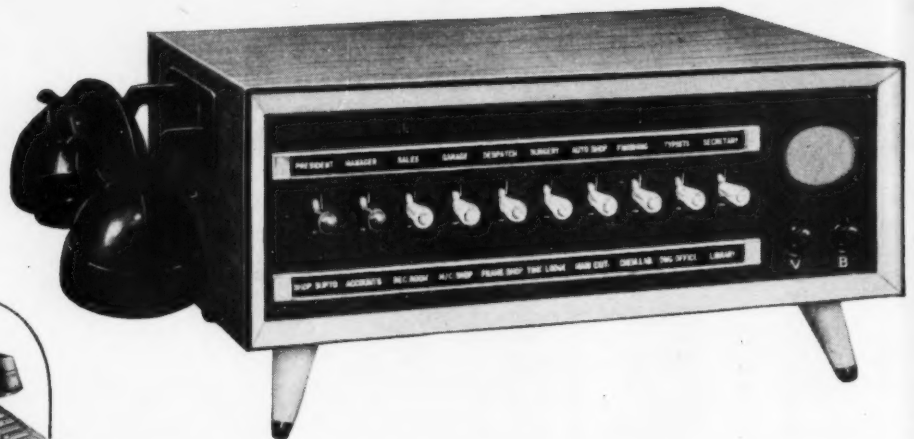
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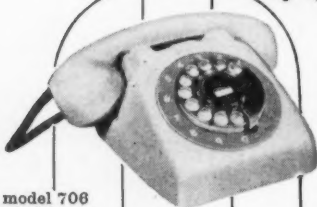


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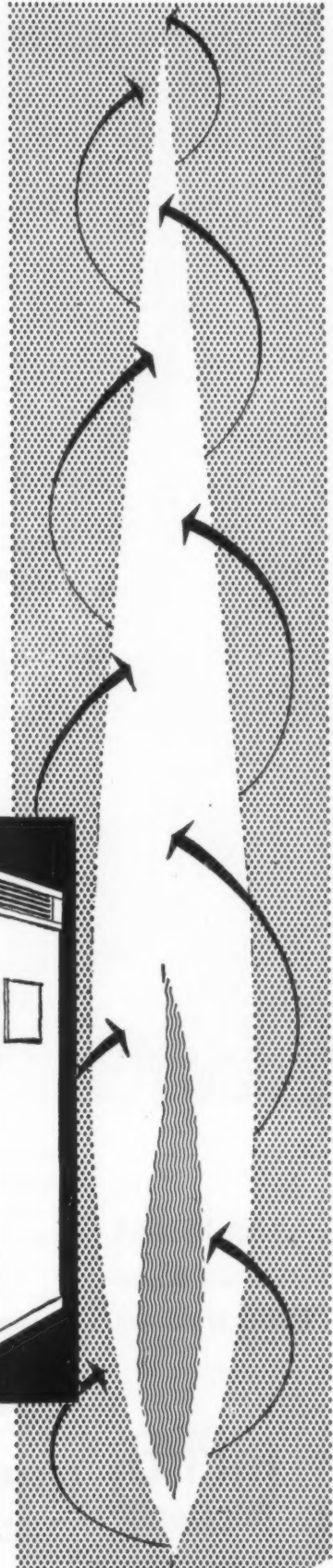
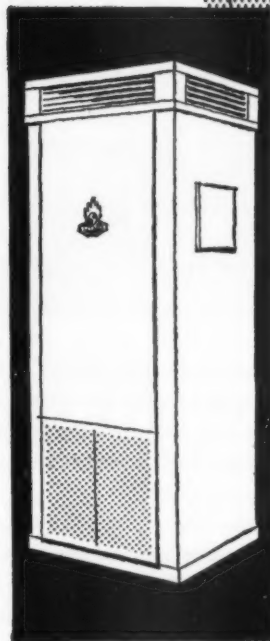
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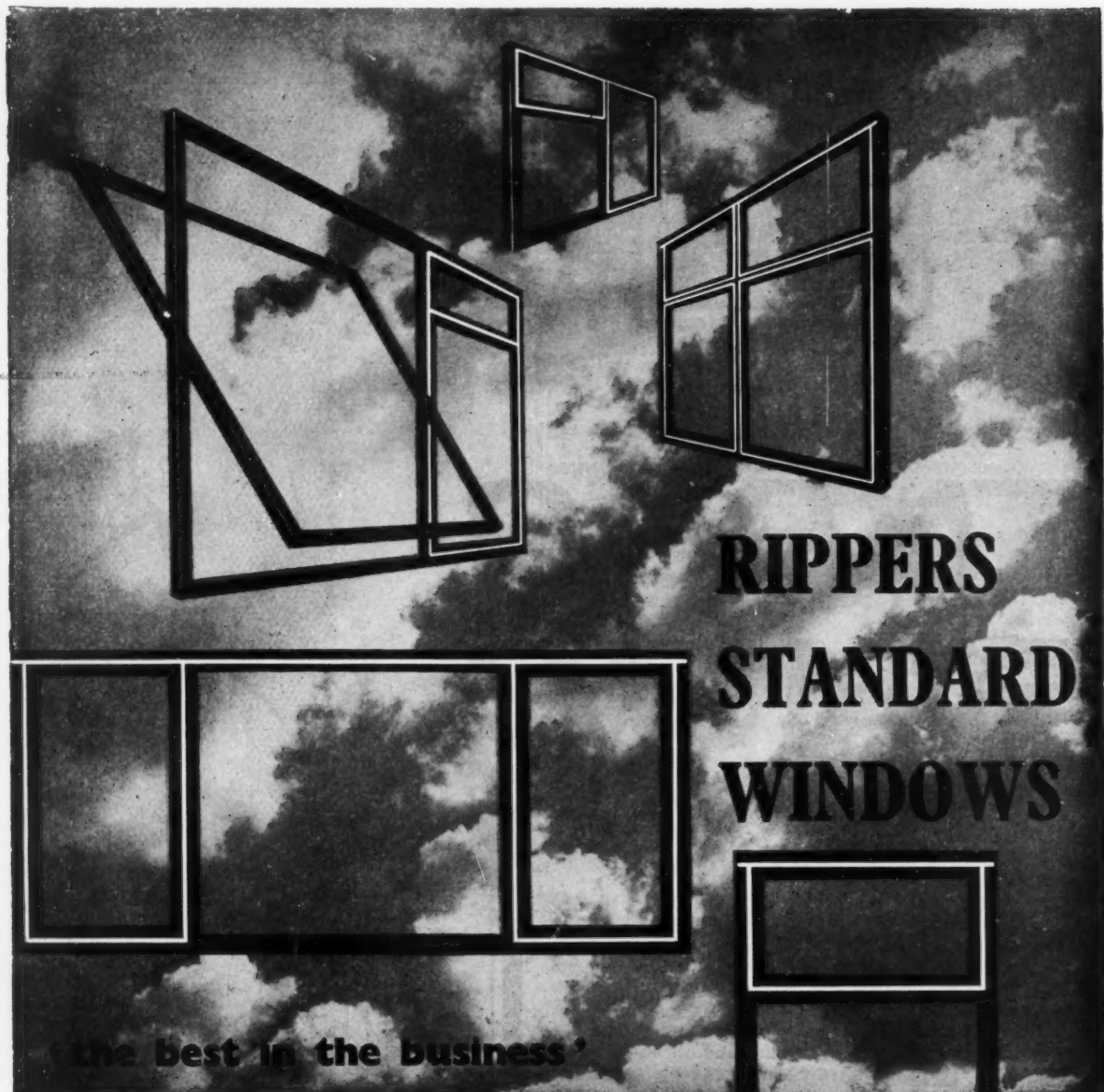
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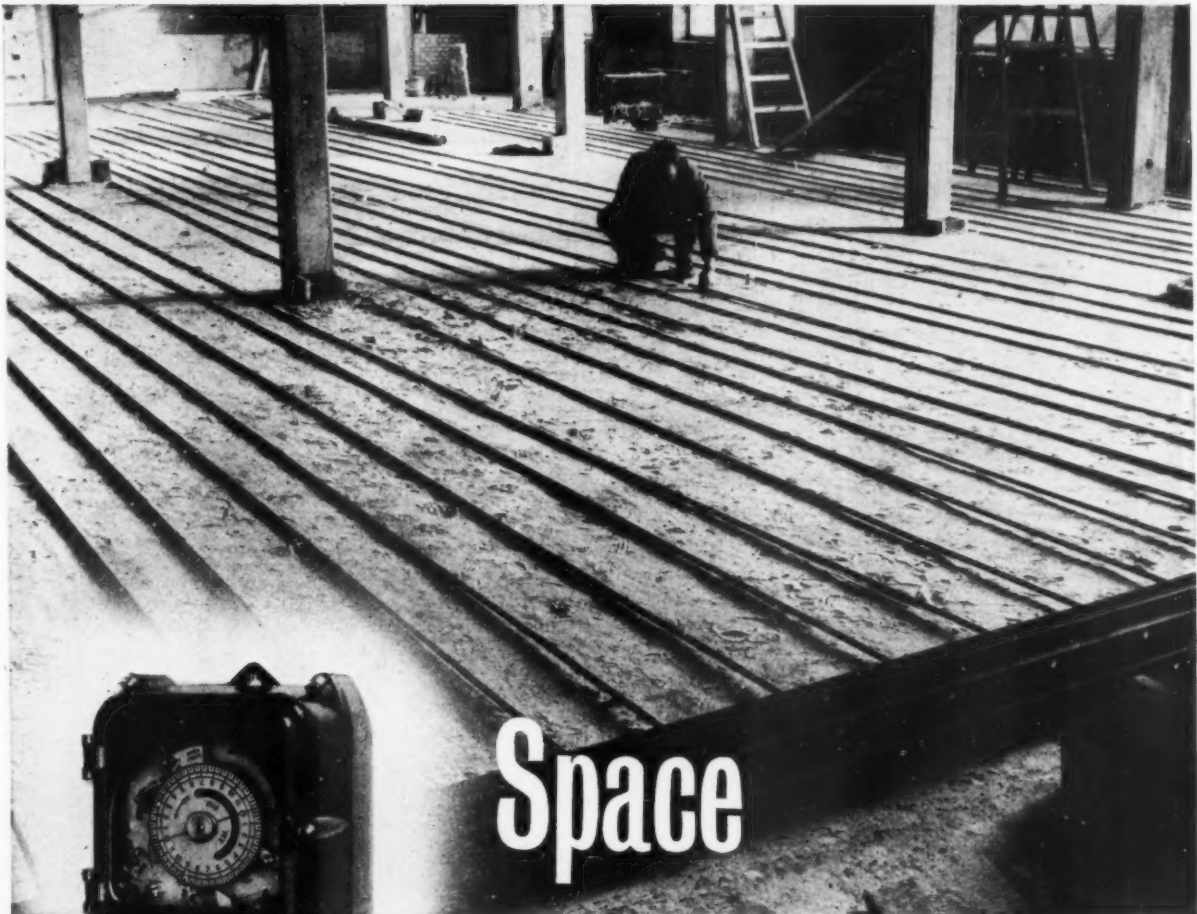
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Curtain Walling is quick
but this new WALLSPAN
beats the lot

FACTS

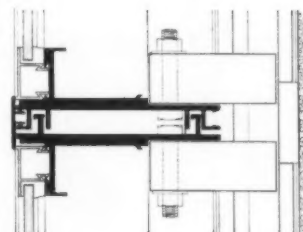
A new type of Wallspan makes its debut on the tower of Castrol House—a prefabricated Wallspan designed in collaboration with the architect that goes up more quickly than any curtain walling system yet devised. Williams & Williams developed it specially to fit in with a tight building schedule—18 months from start to finish.

The main feature of prefabricated Wallspan is that its mullion is split vertically in half. This allows it to be sup-

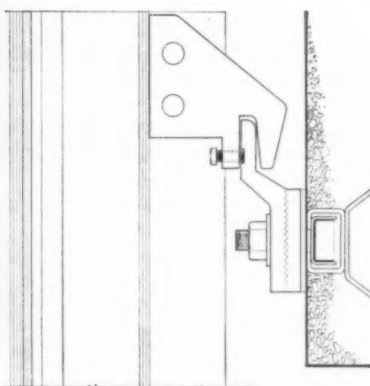
plied in complete prefabricated panels 2 floors high, with the double-hung windows already in place. Each panel is simply hung on to its fixing spigots, plumbed, then interlocked with its neighbour. The walls of the tower block were erected at the rate of 2 floors a week: the interior trades were able to move in and get on with their job fully protected while the floors above were still being clad.

The vertical section shows how the

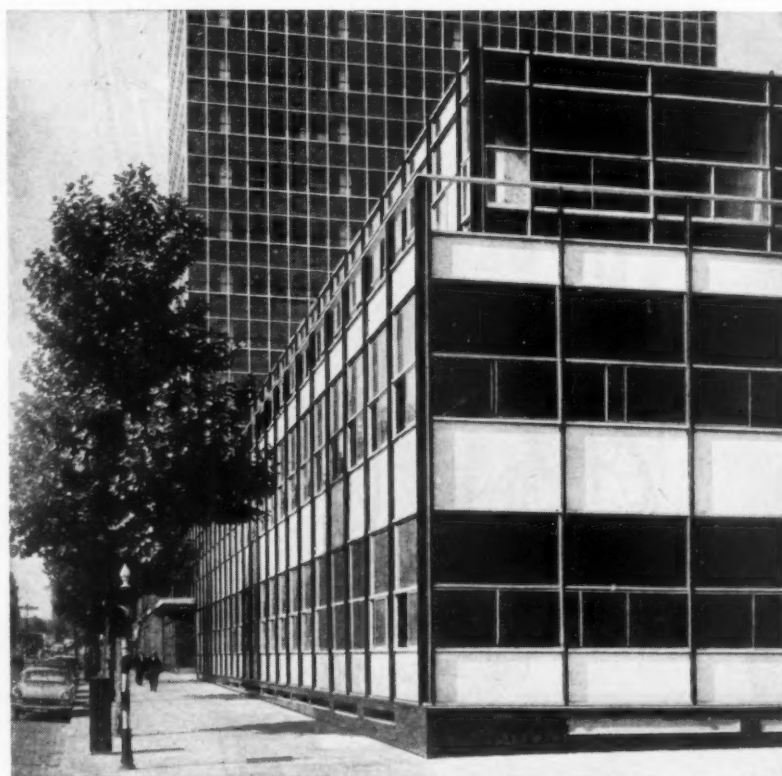
prefabricated Wallspan is literally *hung* on to the frame. It is curtain walling in the truest sense, and although designed in the first place specifically for Castrol House, the system is now generally available—a classic example of co-operation between the architect and the curtain walling specialists.



Horizontal section at infill level. Each half mullion forms the edge of a prefabricated panel. When the two panels are brought together, the joint is sealed with Thiokol mastic and an aluminium capping is then clipped on to seal the joint finally.



Vertical section showing fixing detail. As the floor slab is cast, bolts are built in ready to receive the fixing spigots. These are adjustable vertically and horizontally to allow for slight inaccuracies. Hooks on the Wallspan panels engage over the spigots and are kept firmly in place by compression bolts.



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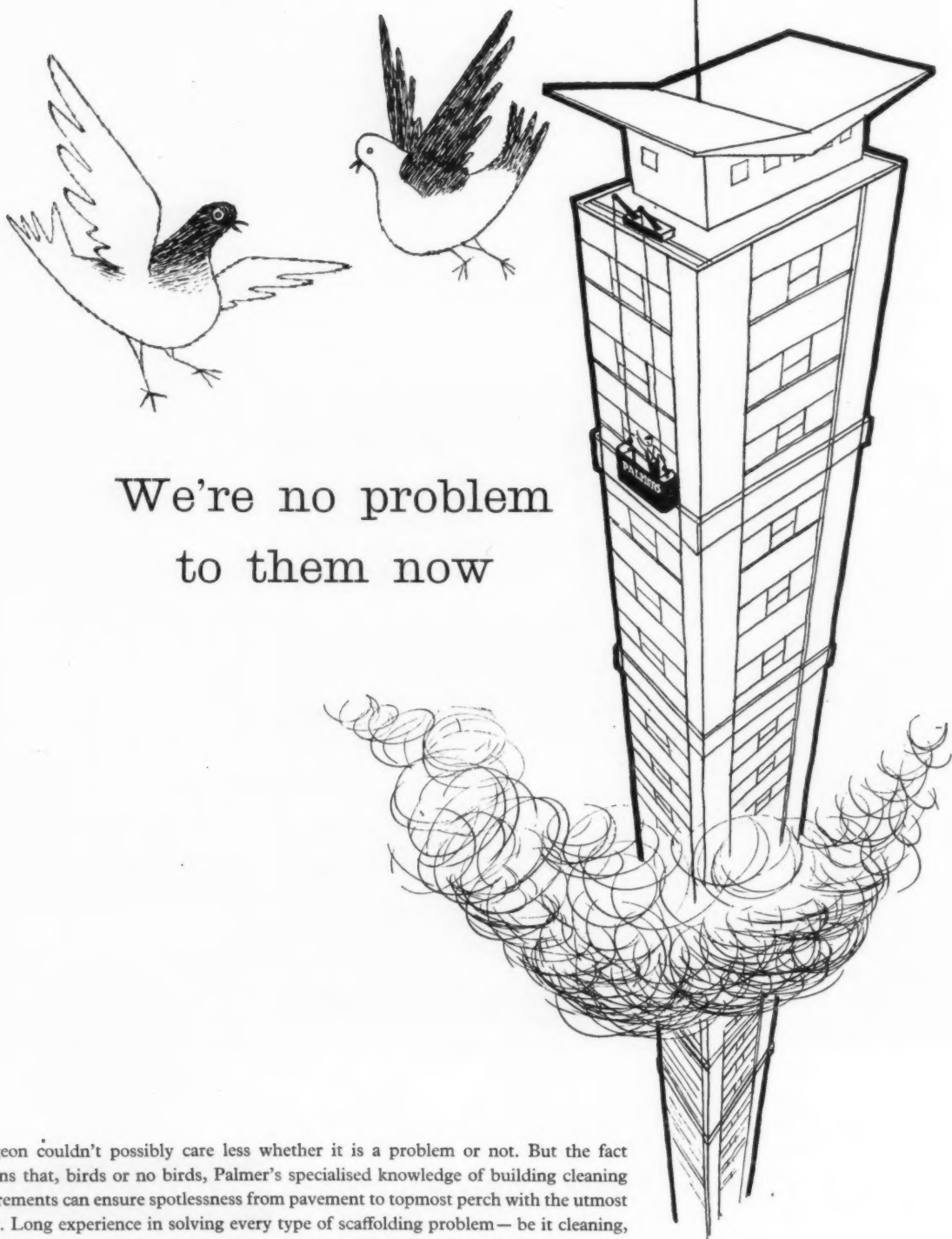
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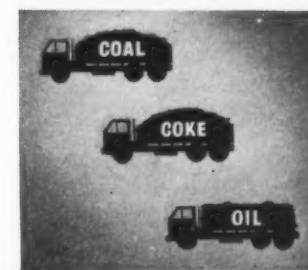
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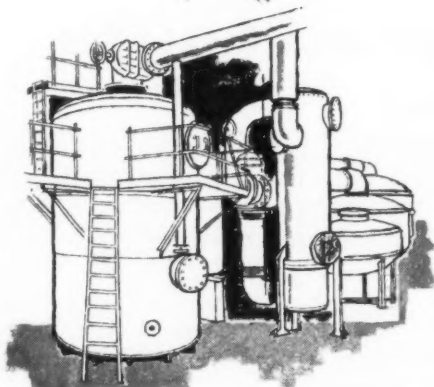
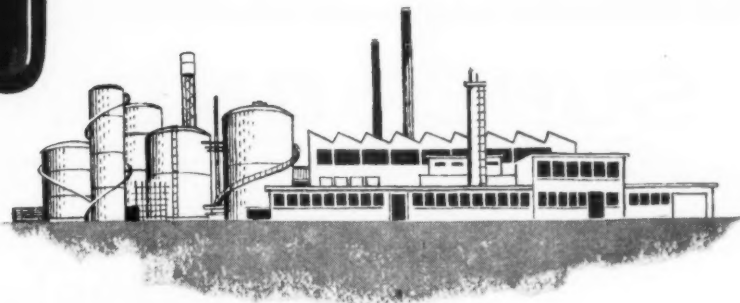
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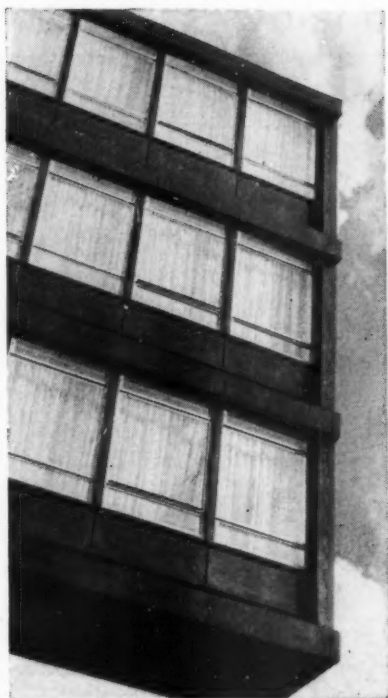


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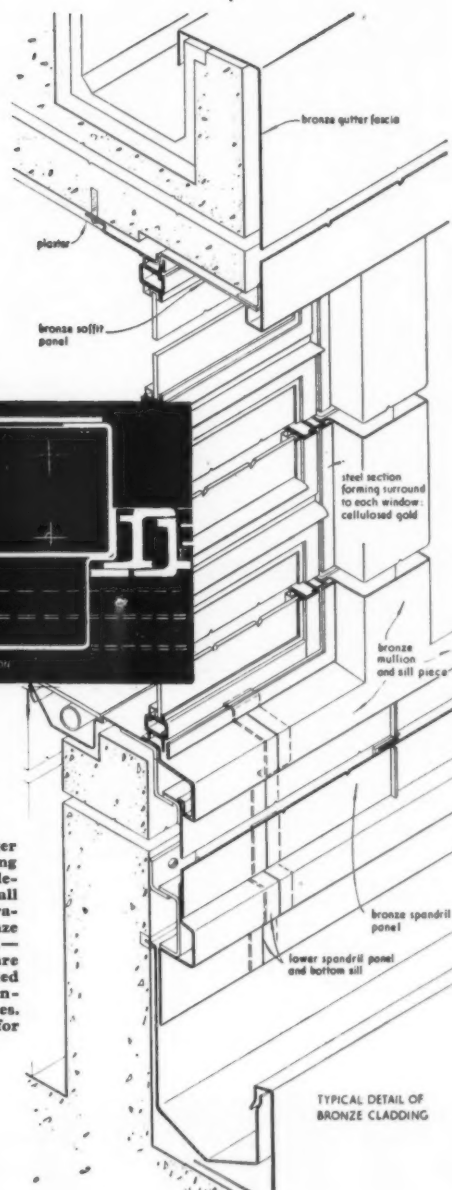
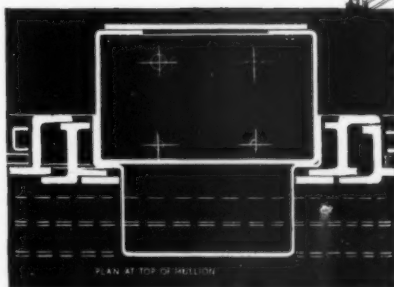
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Architects: Denys Lasdun & Partners

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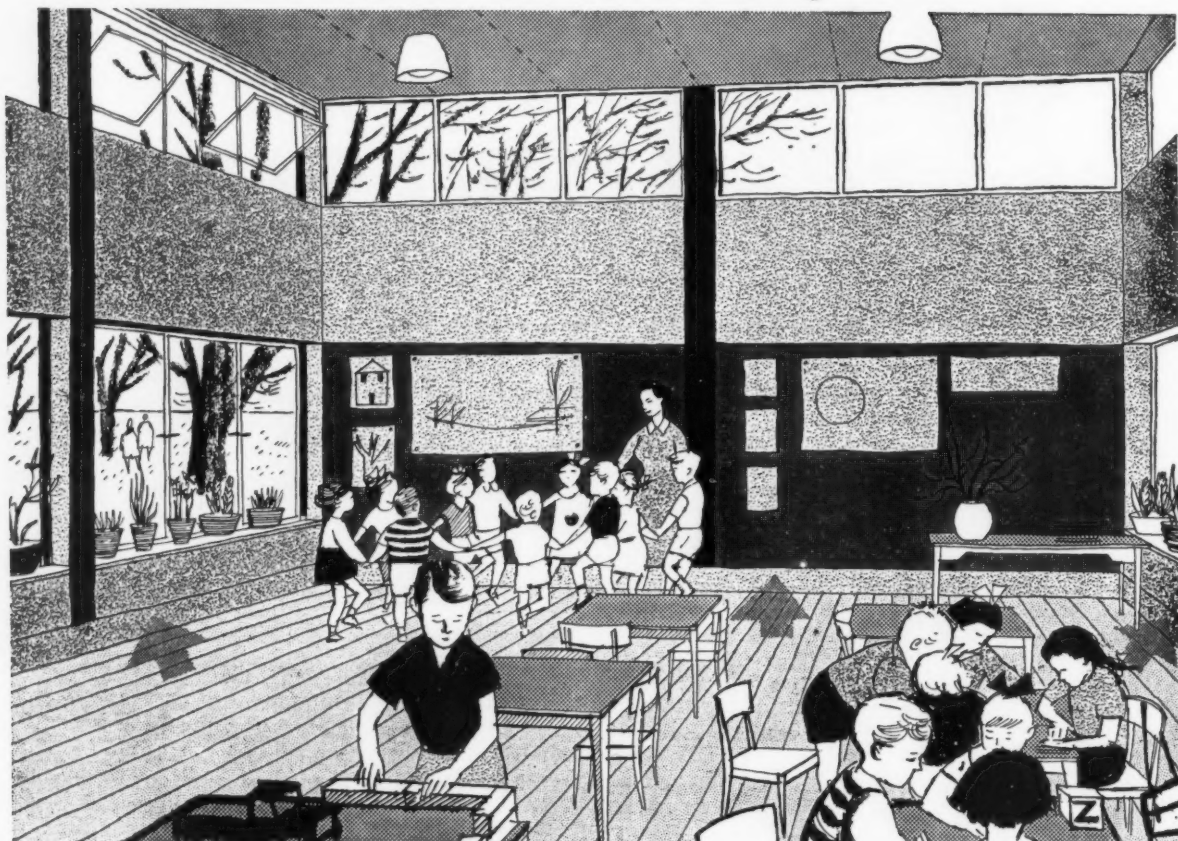
TYPICAL DETAIL OF BRONZE CLADDING

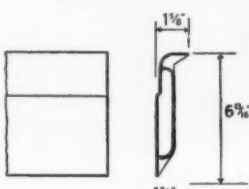
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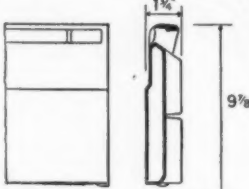


6-inch
Type R
(also
available
in 9-inch)

6"

1 1/2"

Floor line



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Type RC

9"

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Floor line

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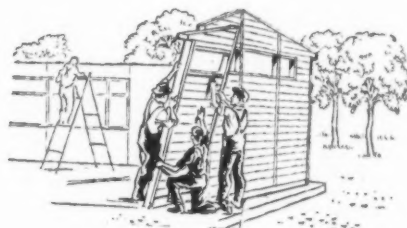
Crane Skirting Heating panels are made in two types. Used here is the 9-inch Type R (radiant) illustrated above which is also made in the 6-inch size for smaller heat requirements. Type RC (radiant-convector) is made only in the 9-inch size. All panels are in 2-ft. and 1-ft. lengths and are made of cast iron, which gives them considerable resistance to accidental damage. The operations of calculating heat requirements and designing the pipework are in principle no different from those for conventional radiator heating systems.

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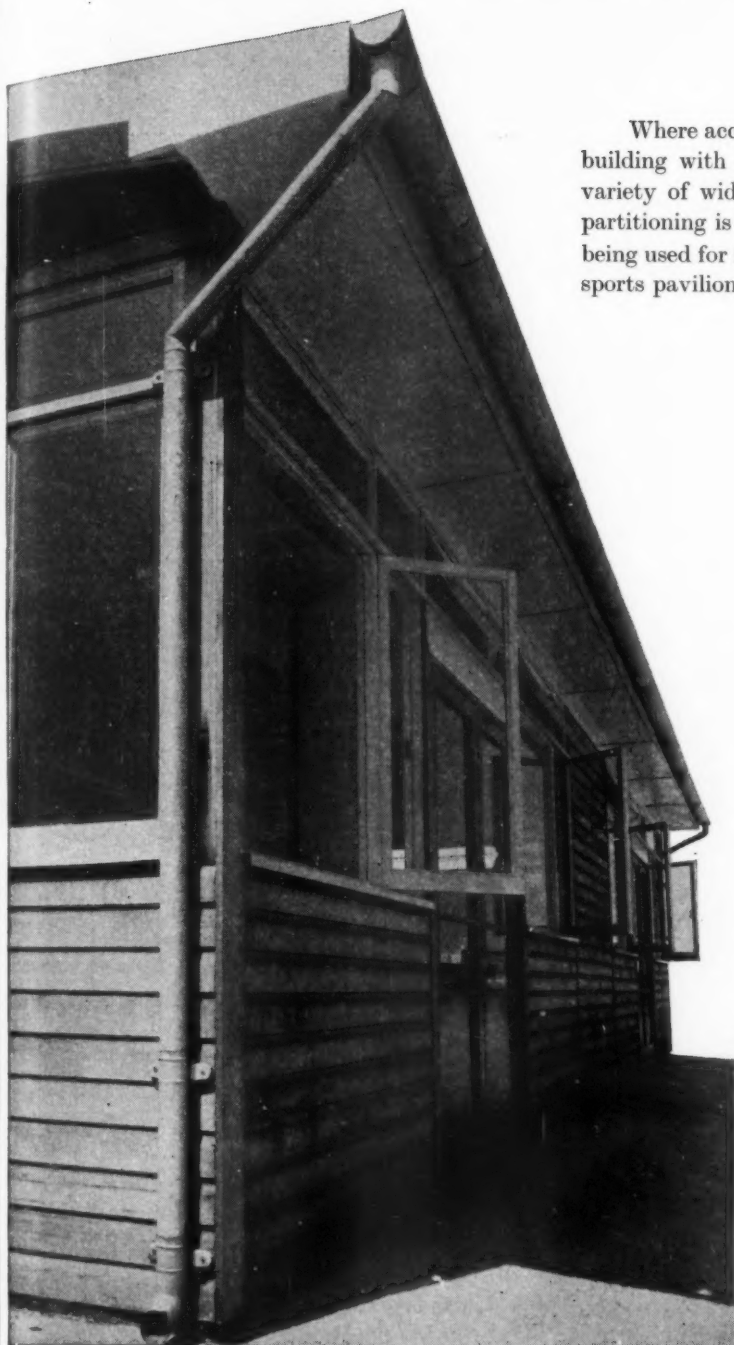


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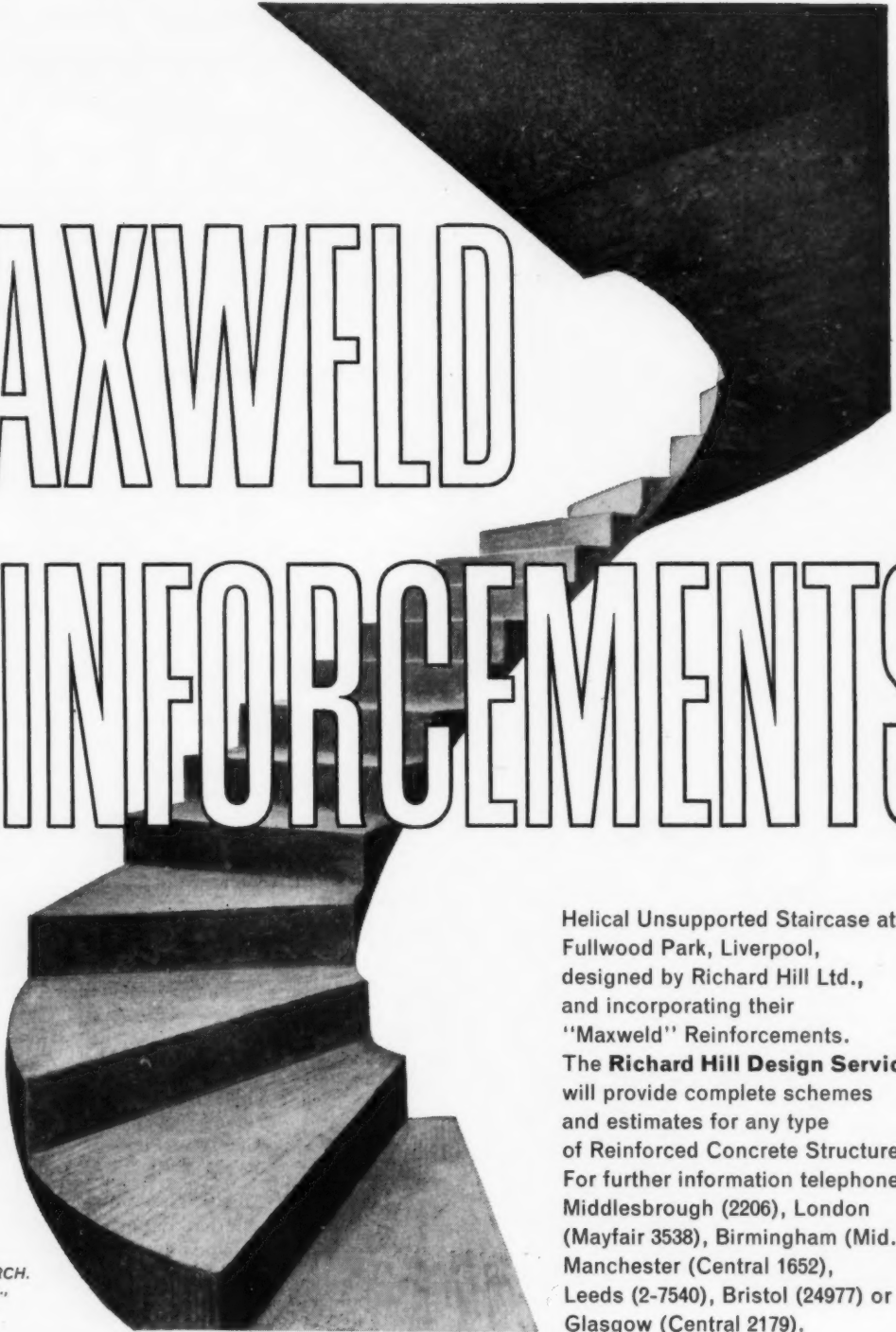
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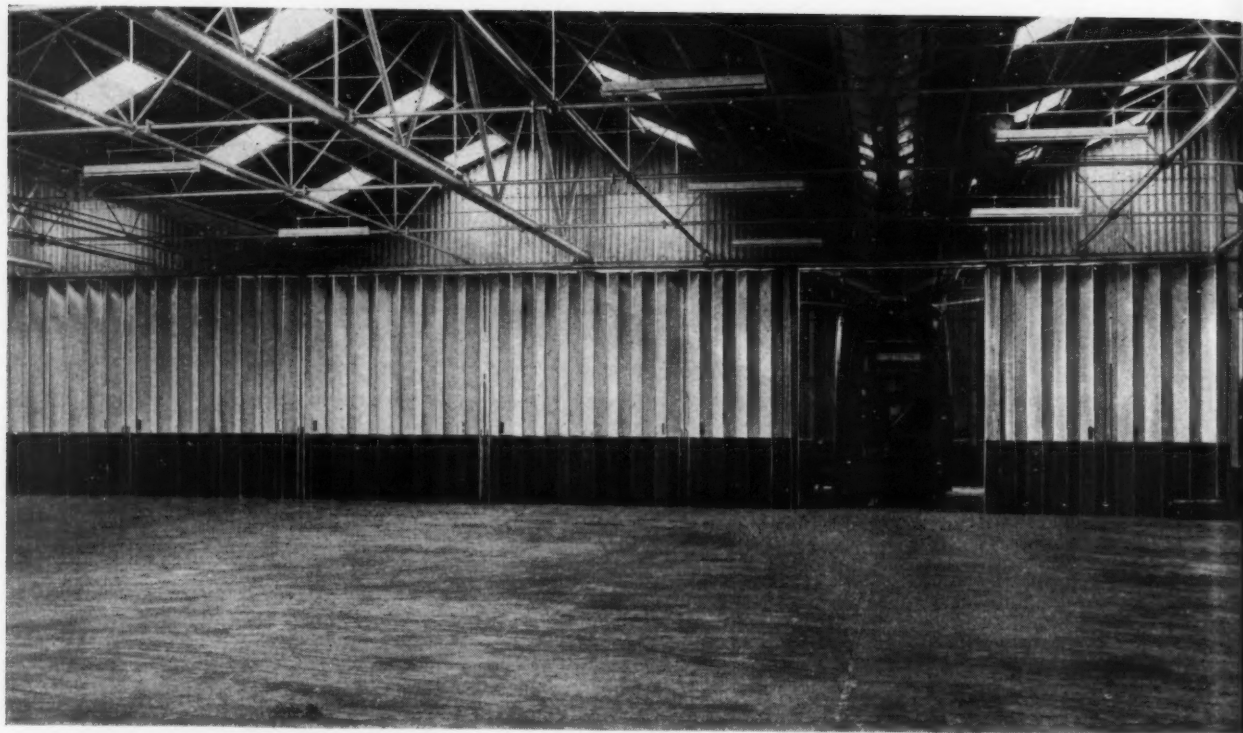
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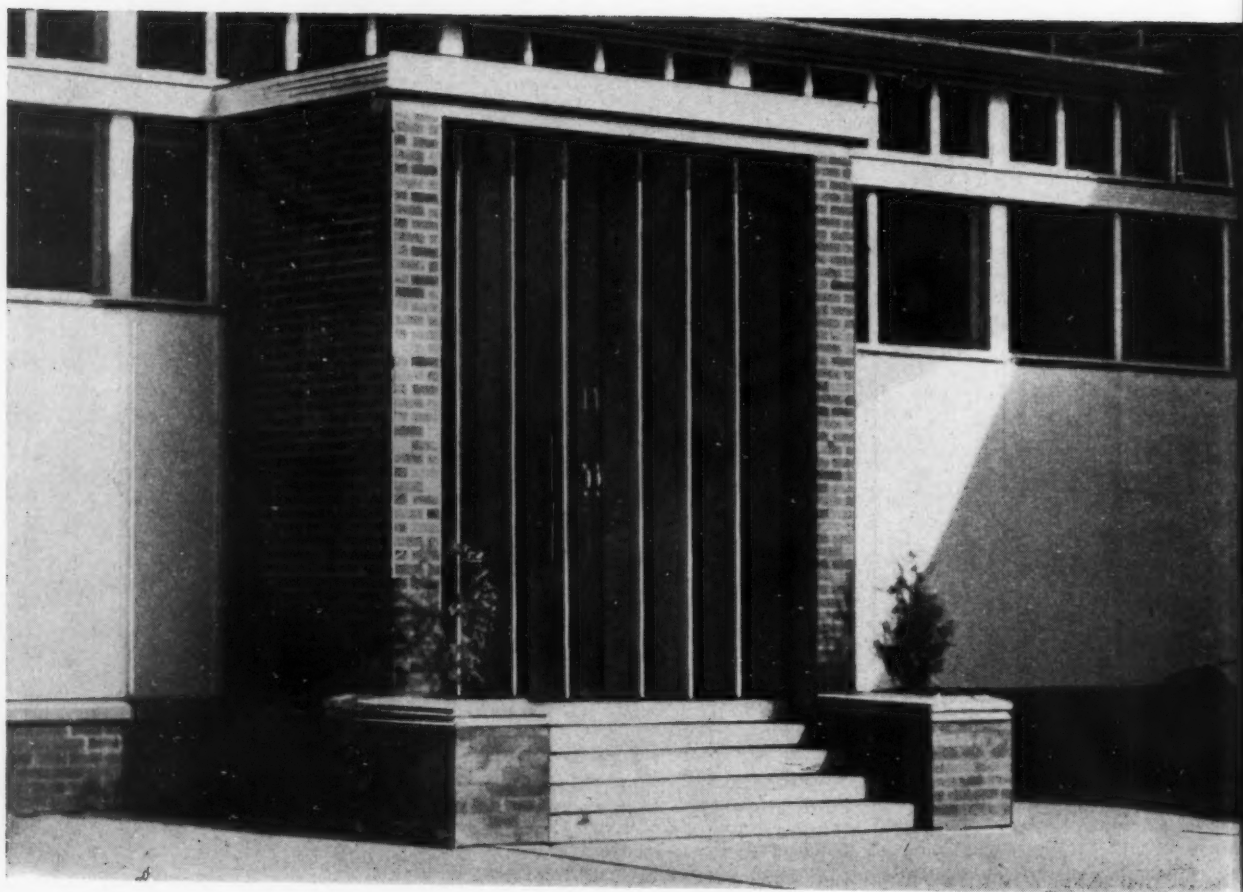
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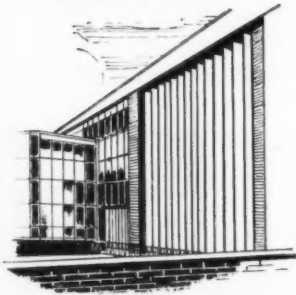


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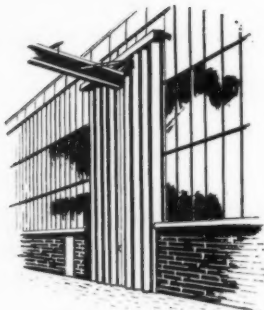


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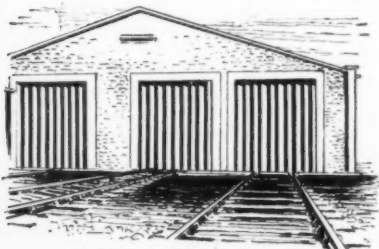


Bolton Shutter Doors at a large modern research centre.

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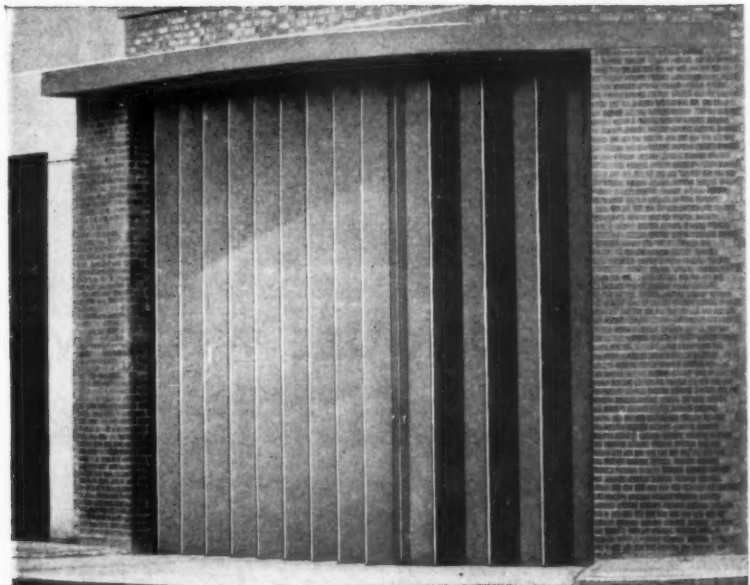


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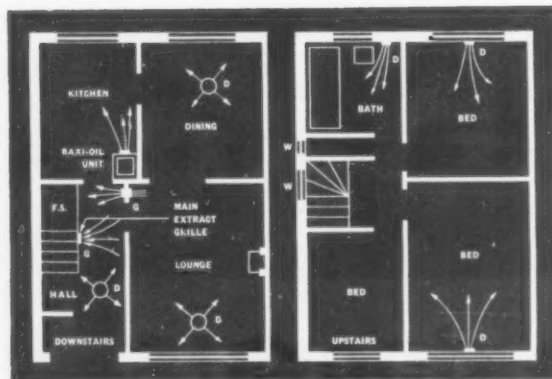
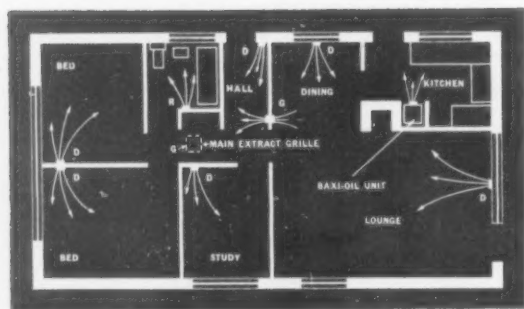
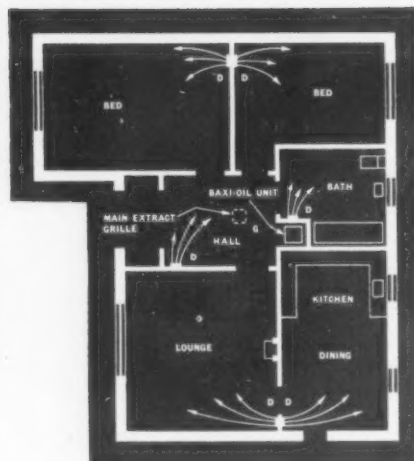
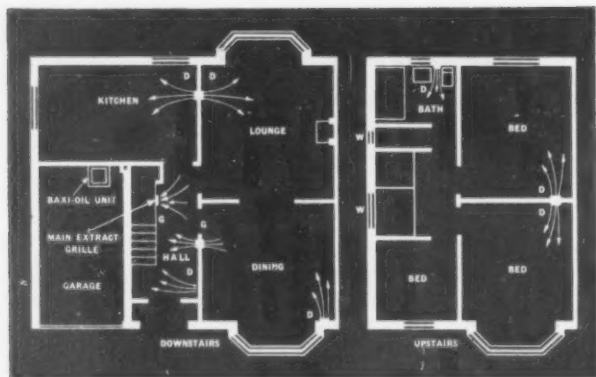


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quality in design—top hung on
ball bearings and with all leaves reinforced ;
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Study these illustrations showing
adaptability ; the view above is of a
Bolton patent Shutter Door in pair—
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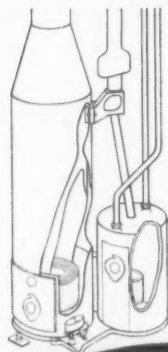
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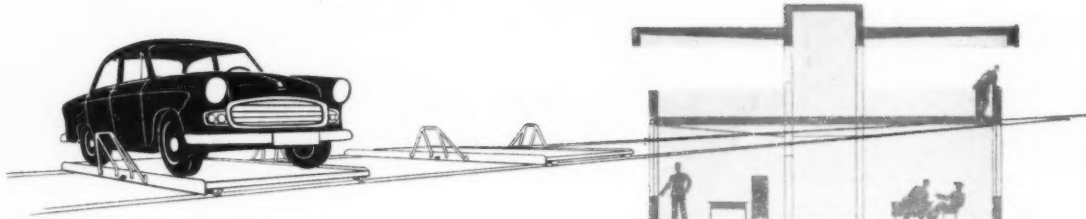
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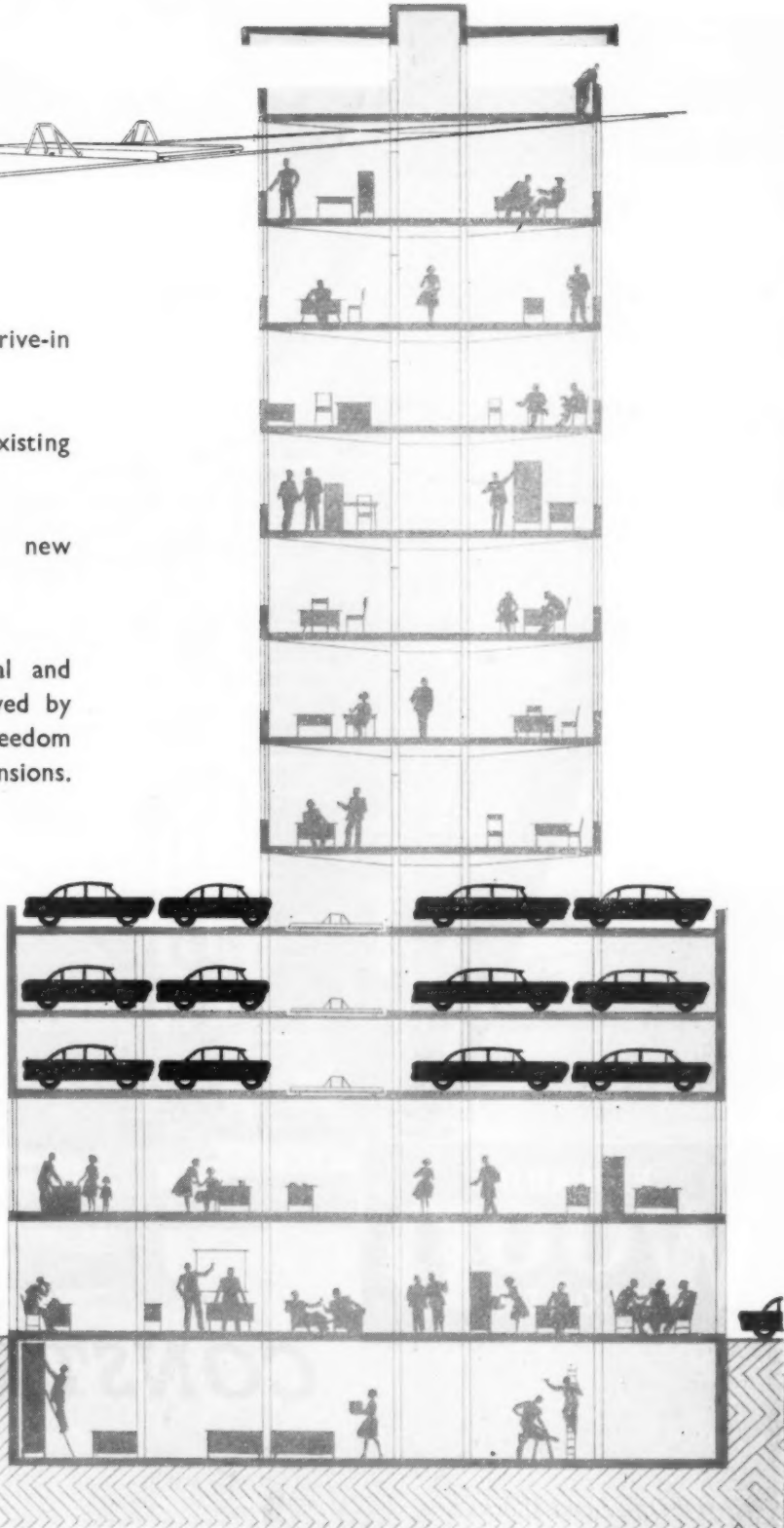


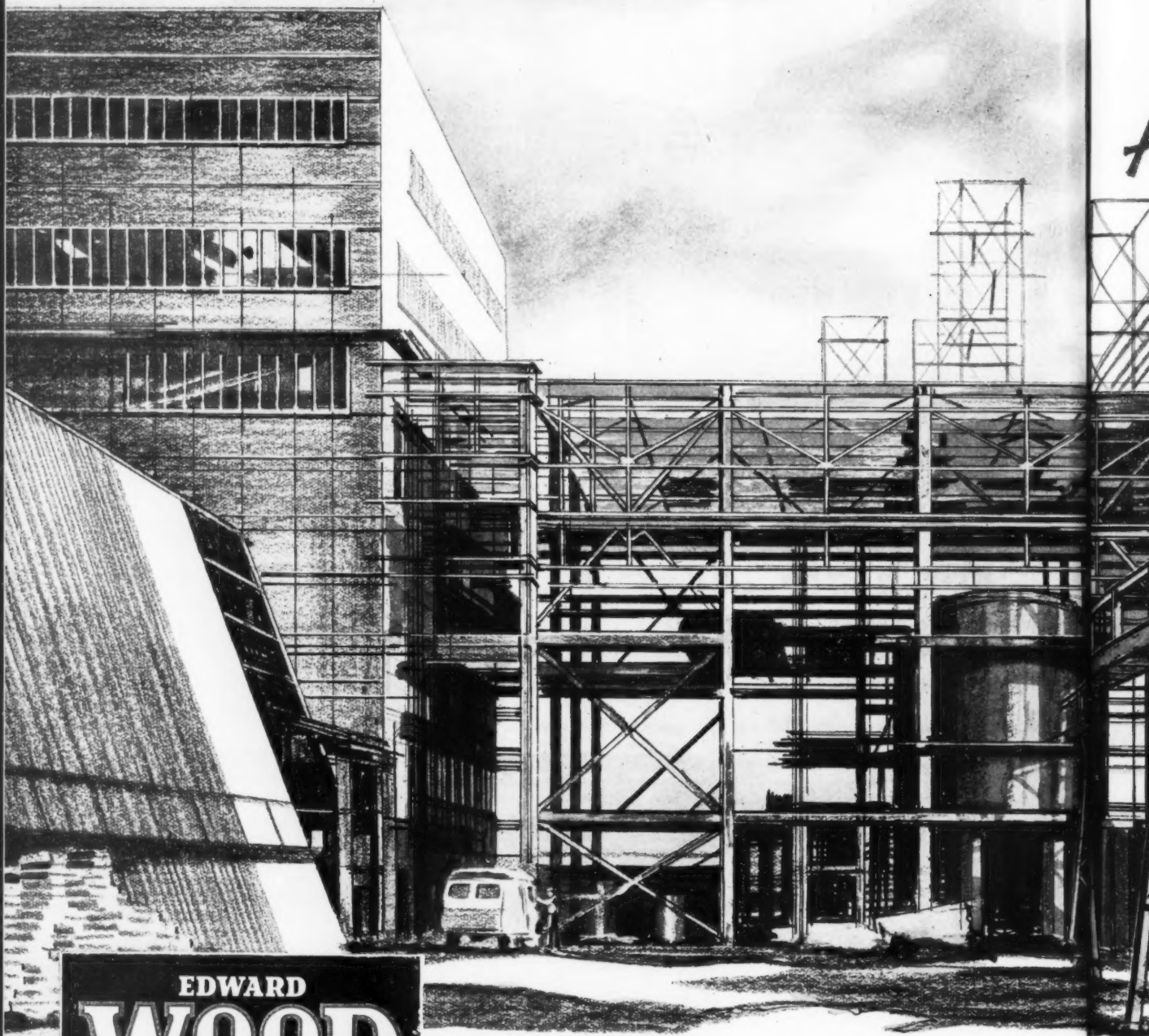
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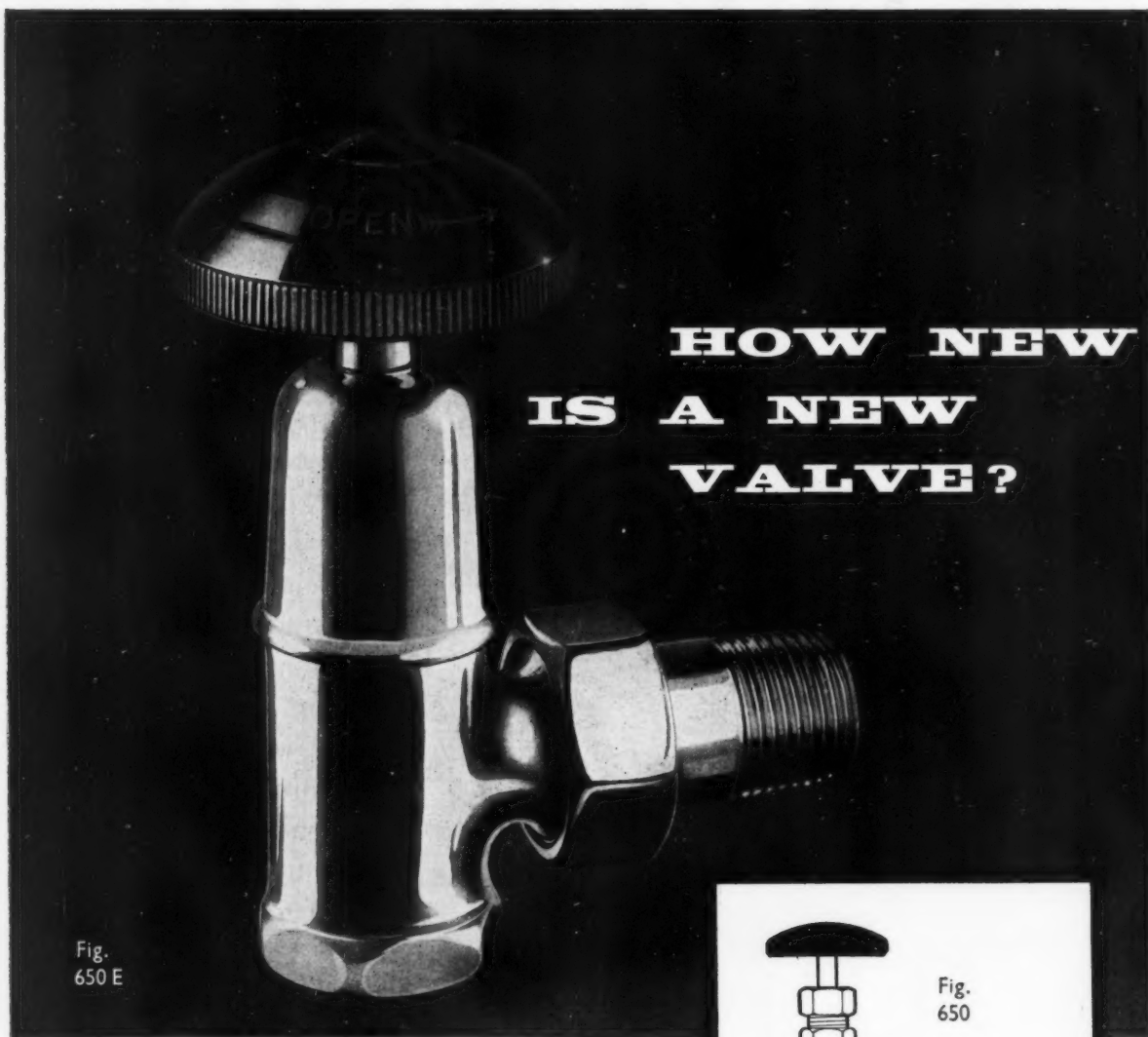


Fig.
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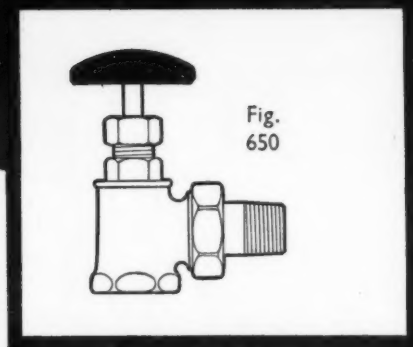


Fig.
650

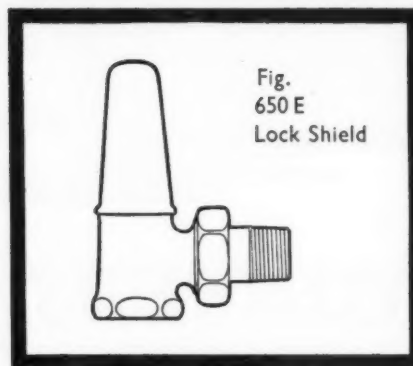


Fig.
650 E
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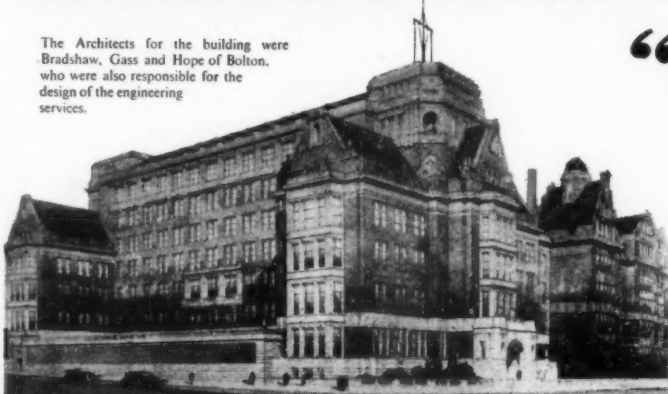
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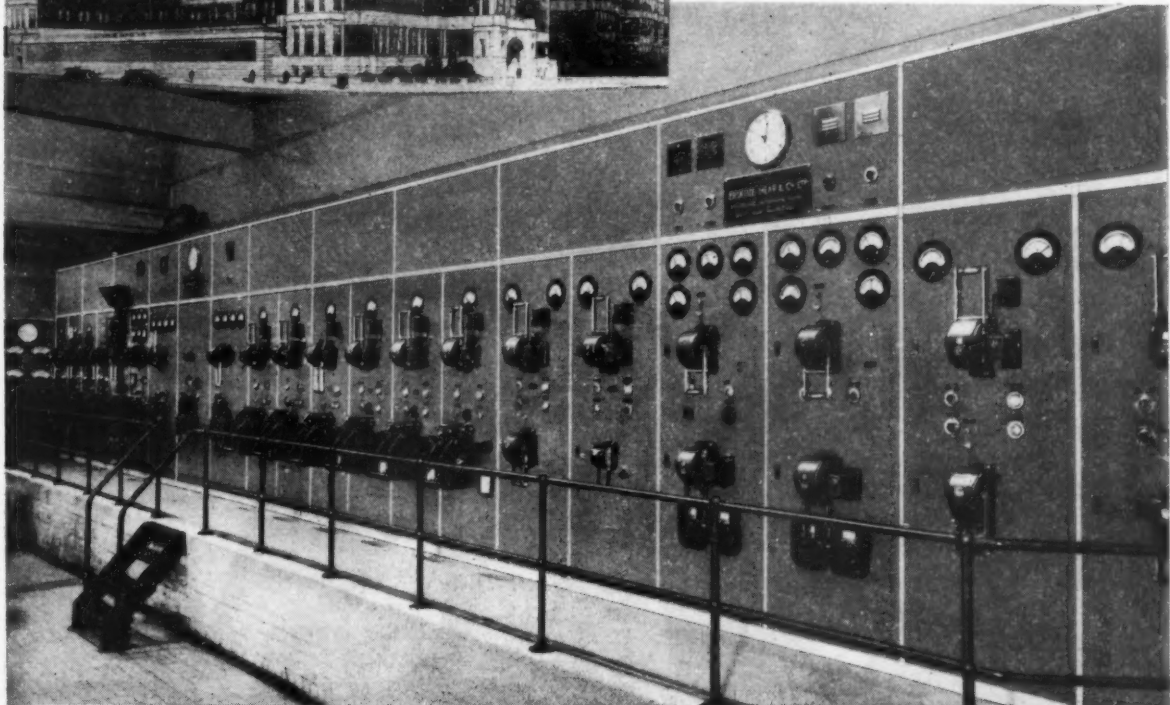
H. 10

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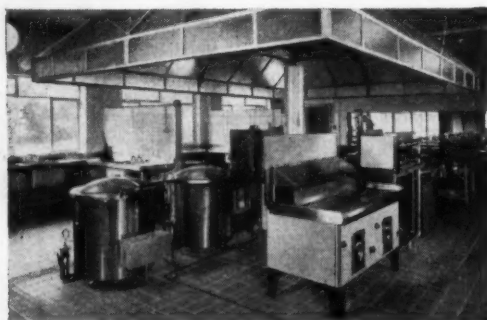
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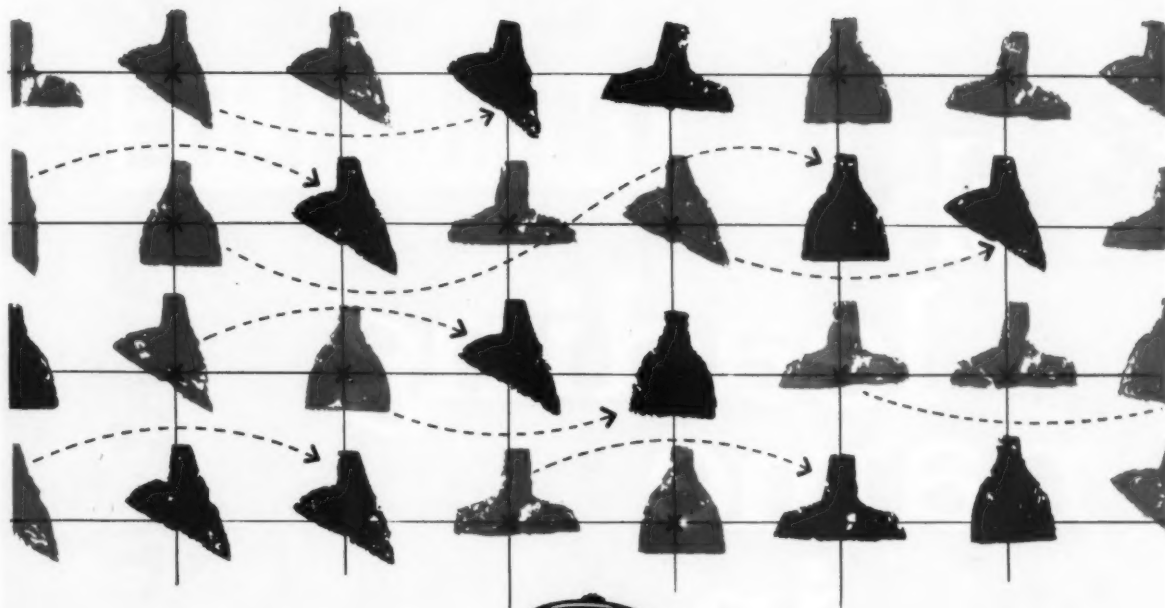
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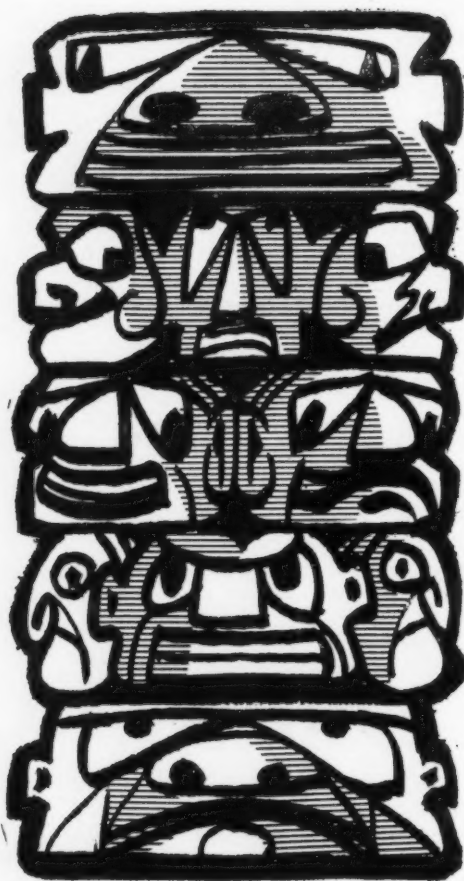
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POSITION

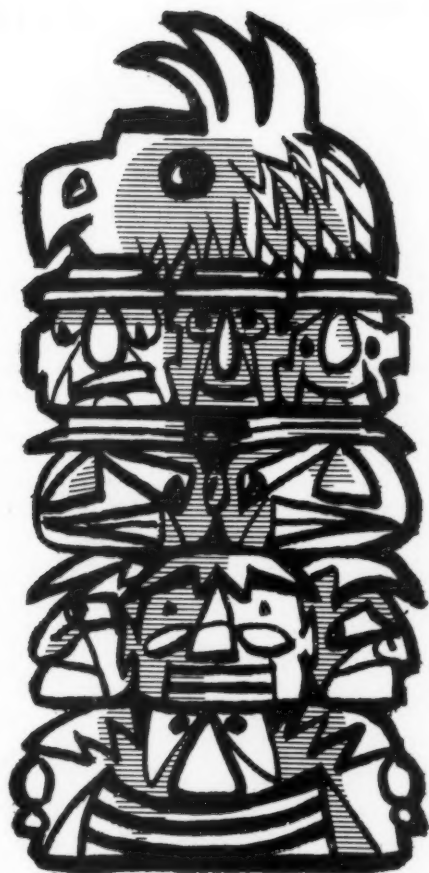
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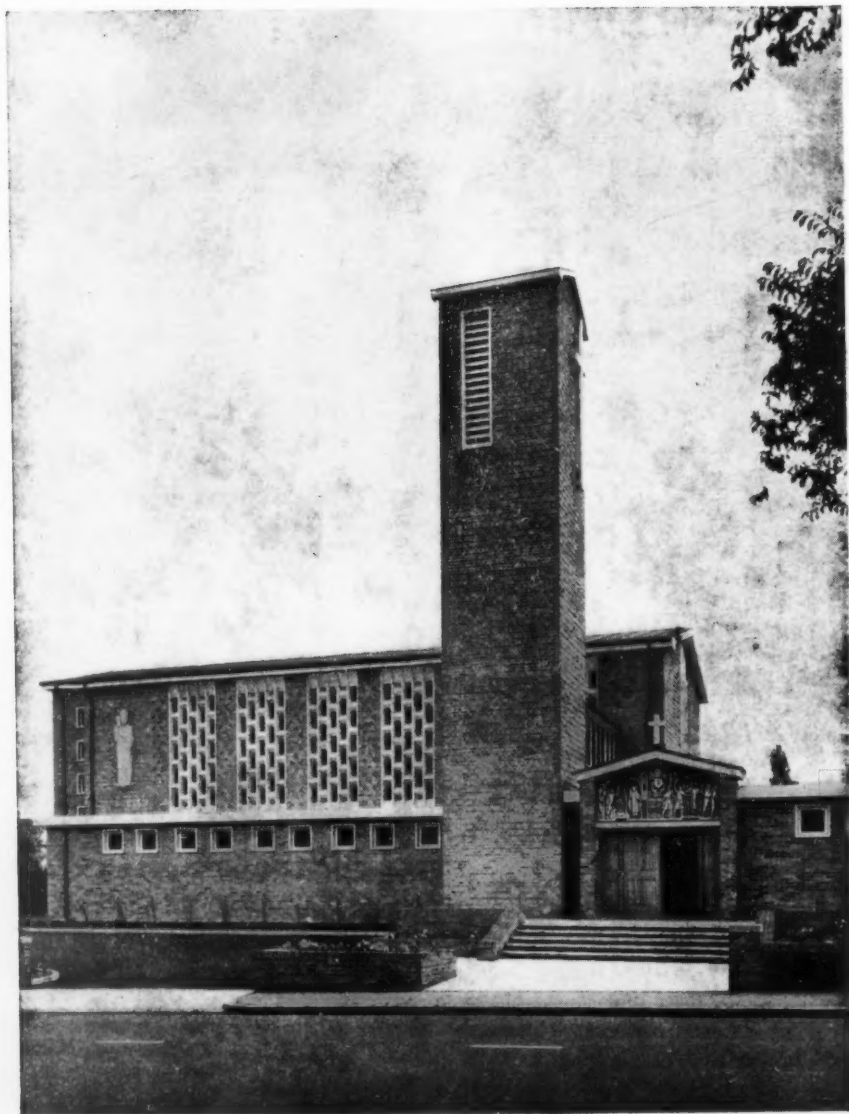
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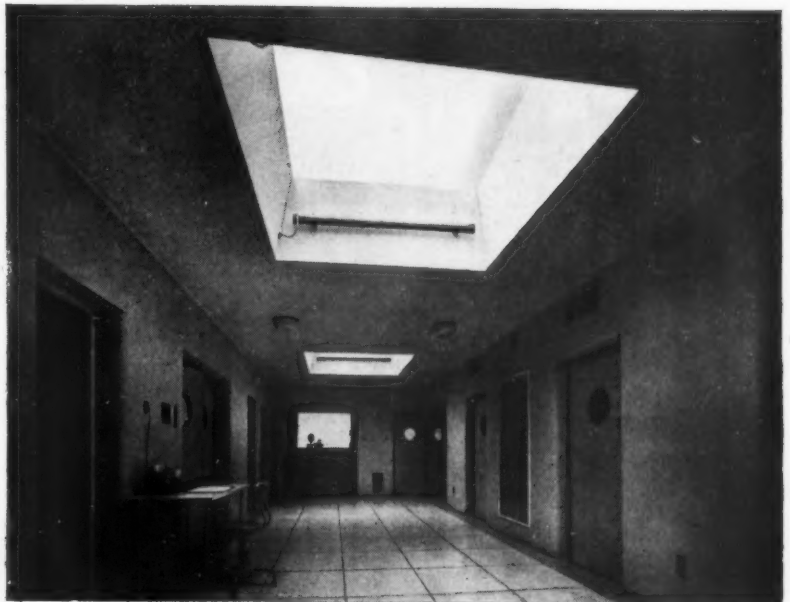
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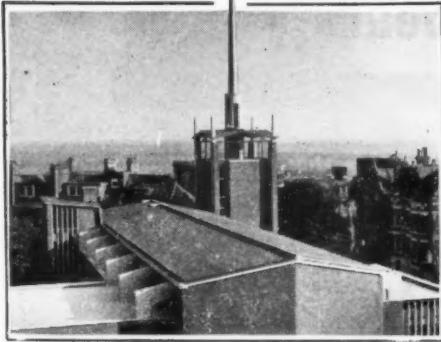
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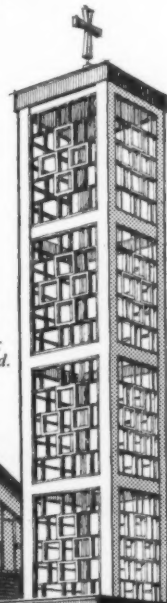


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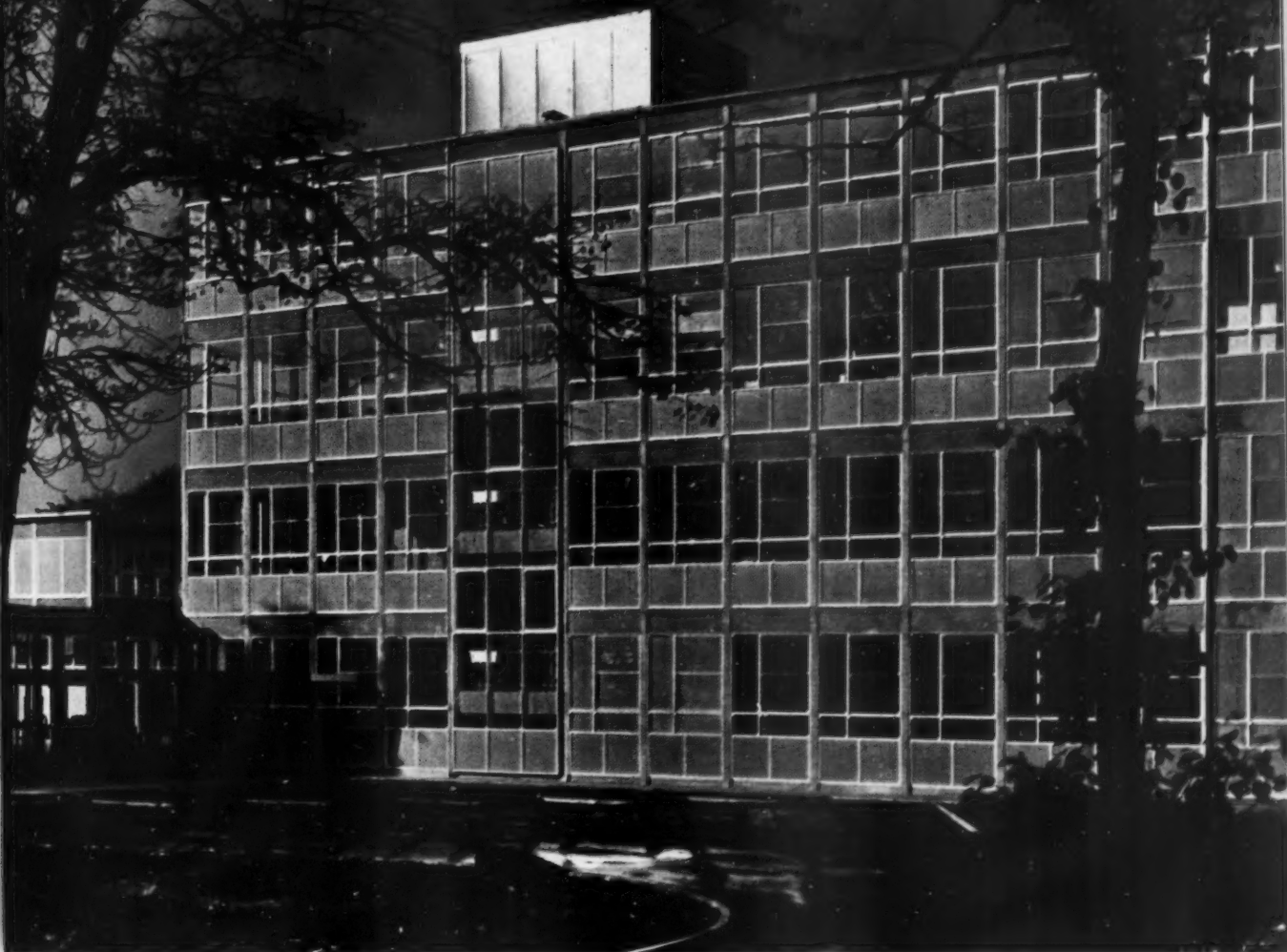
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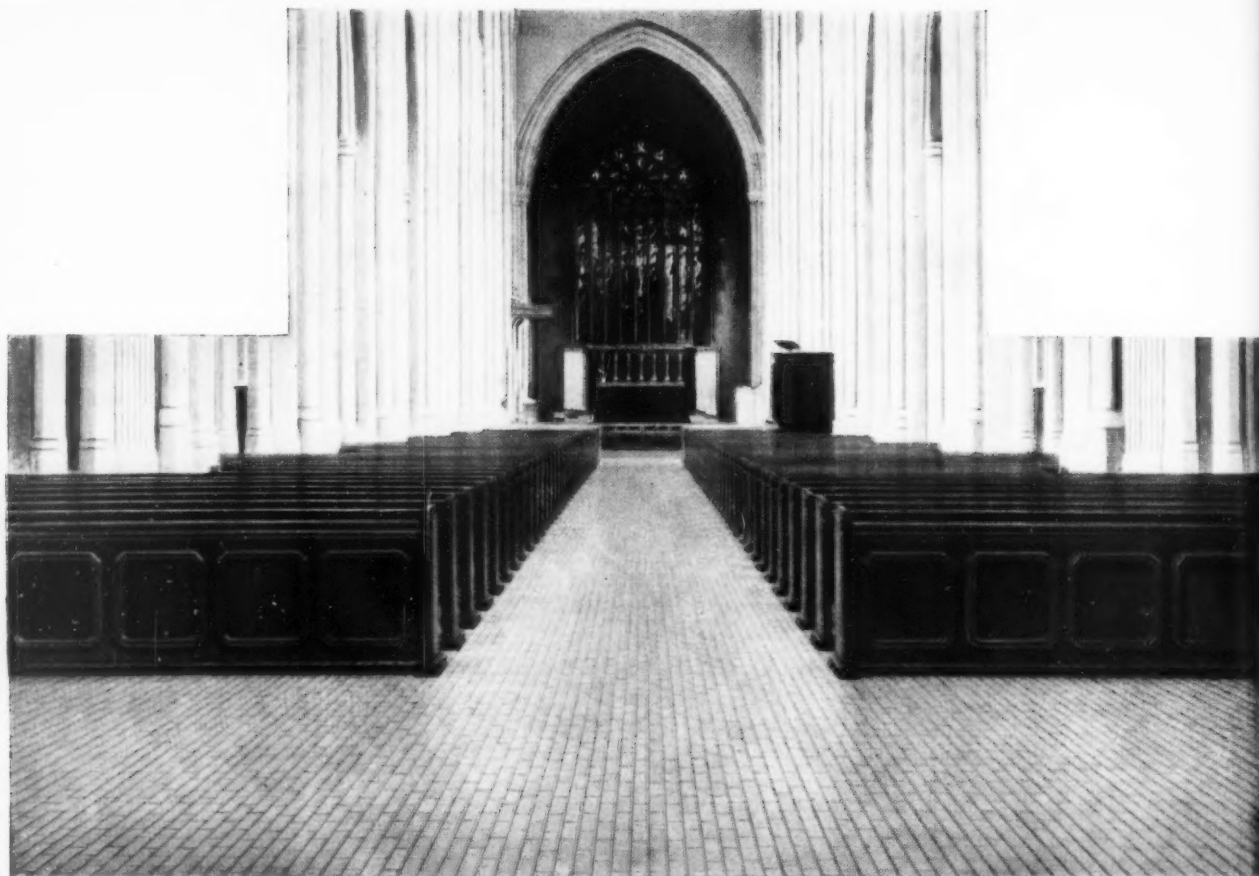
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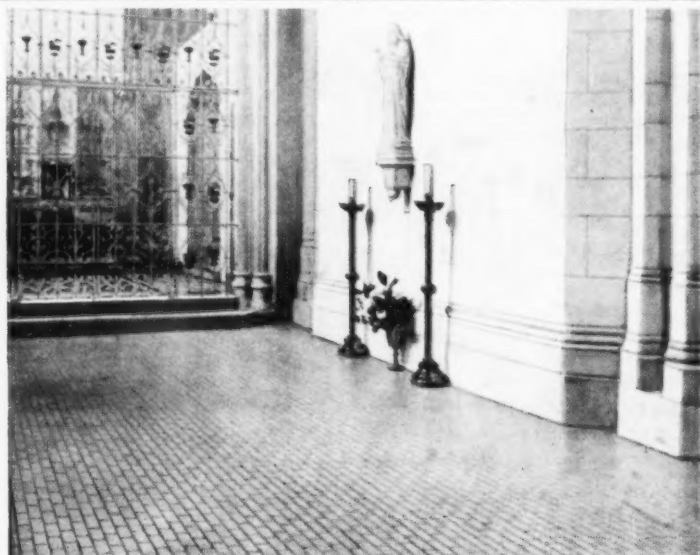
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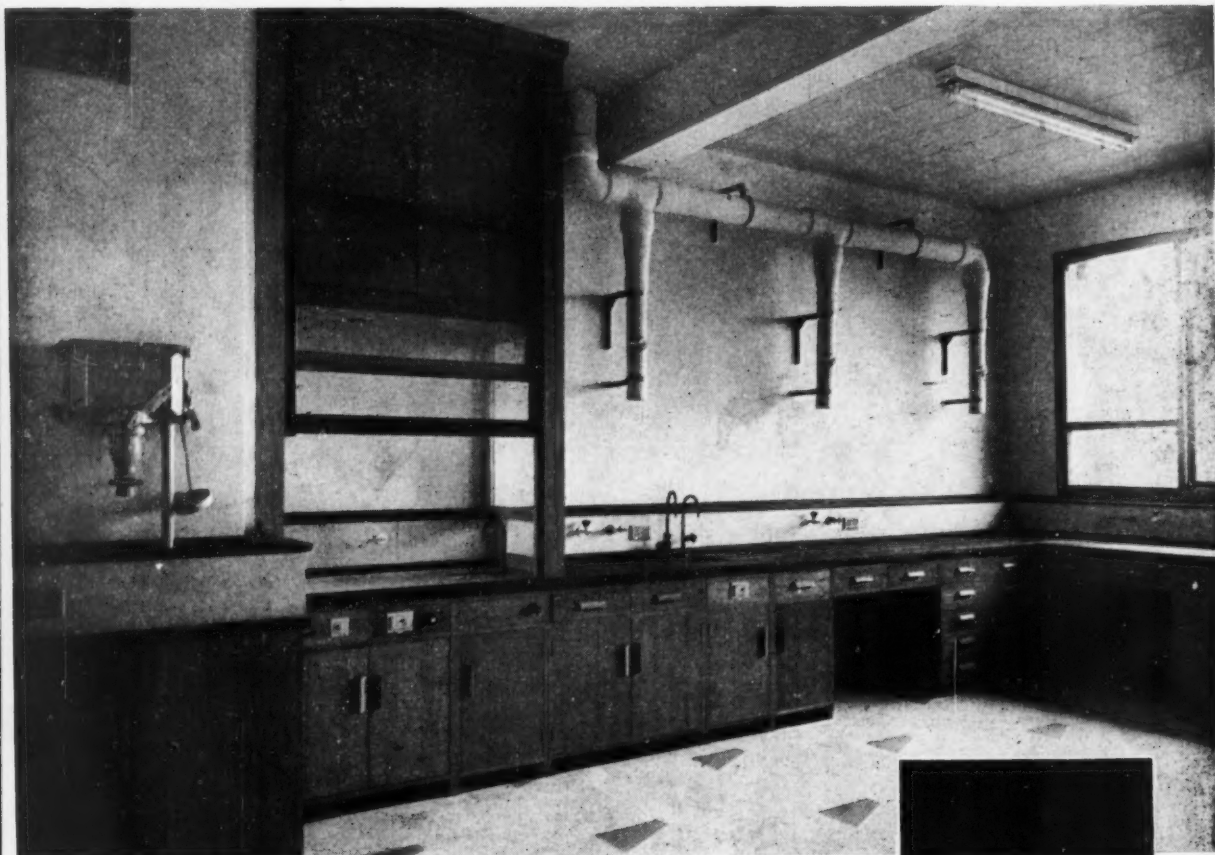
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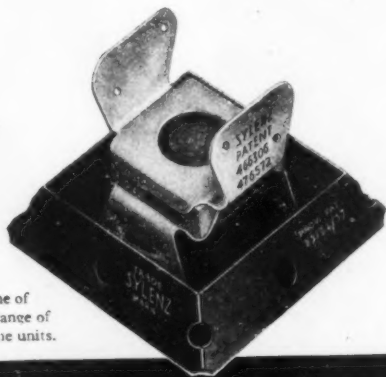
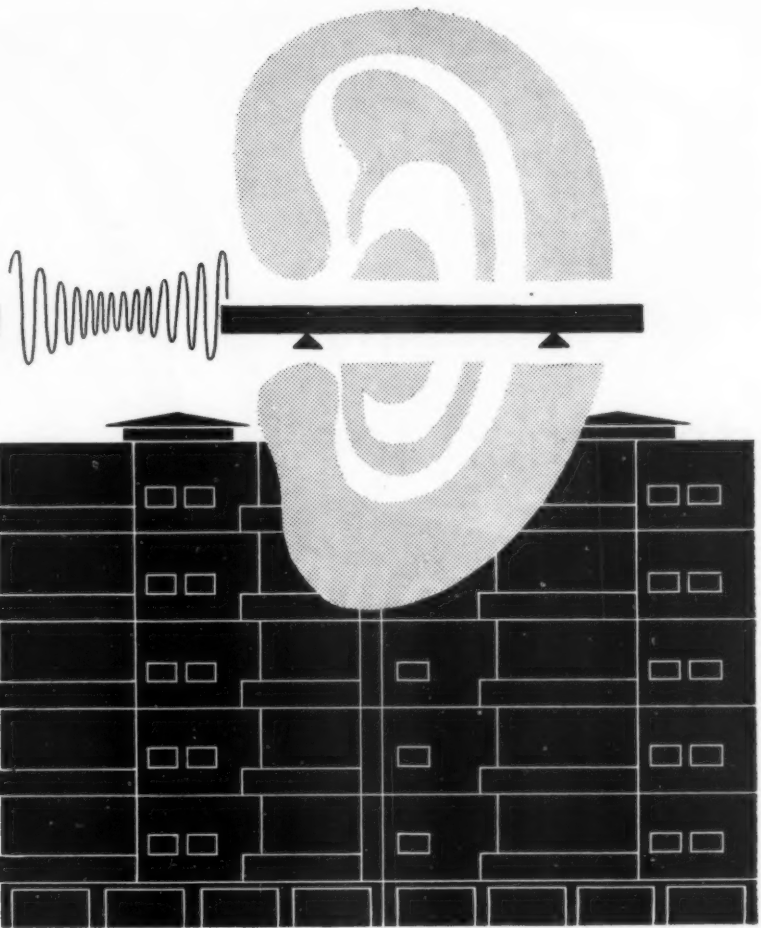


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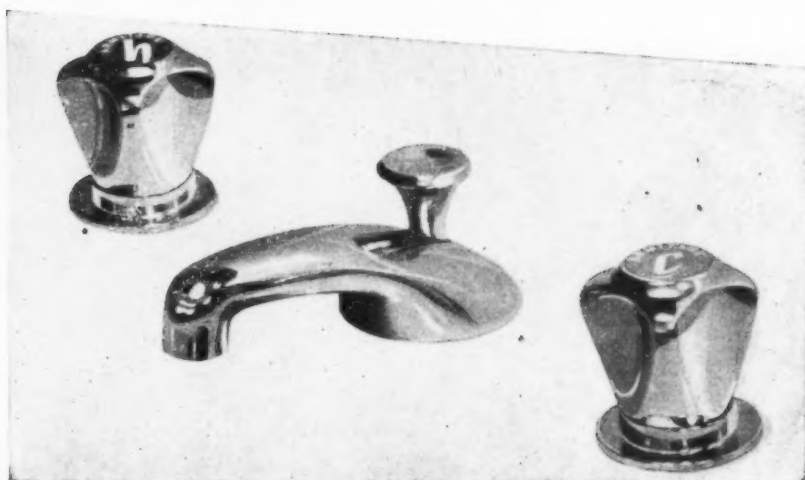
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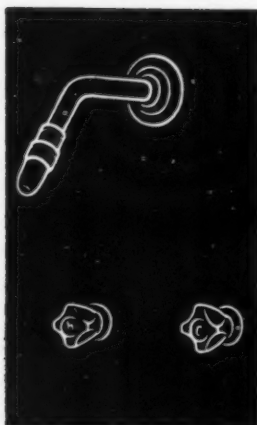
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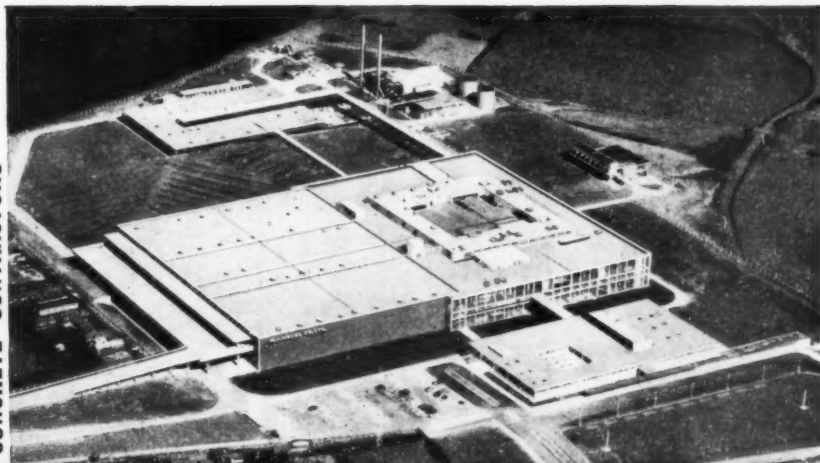
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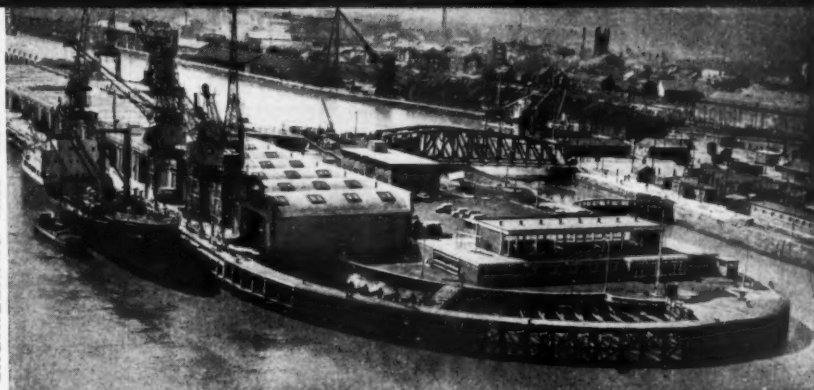
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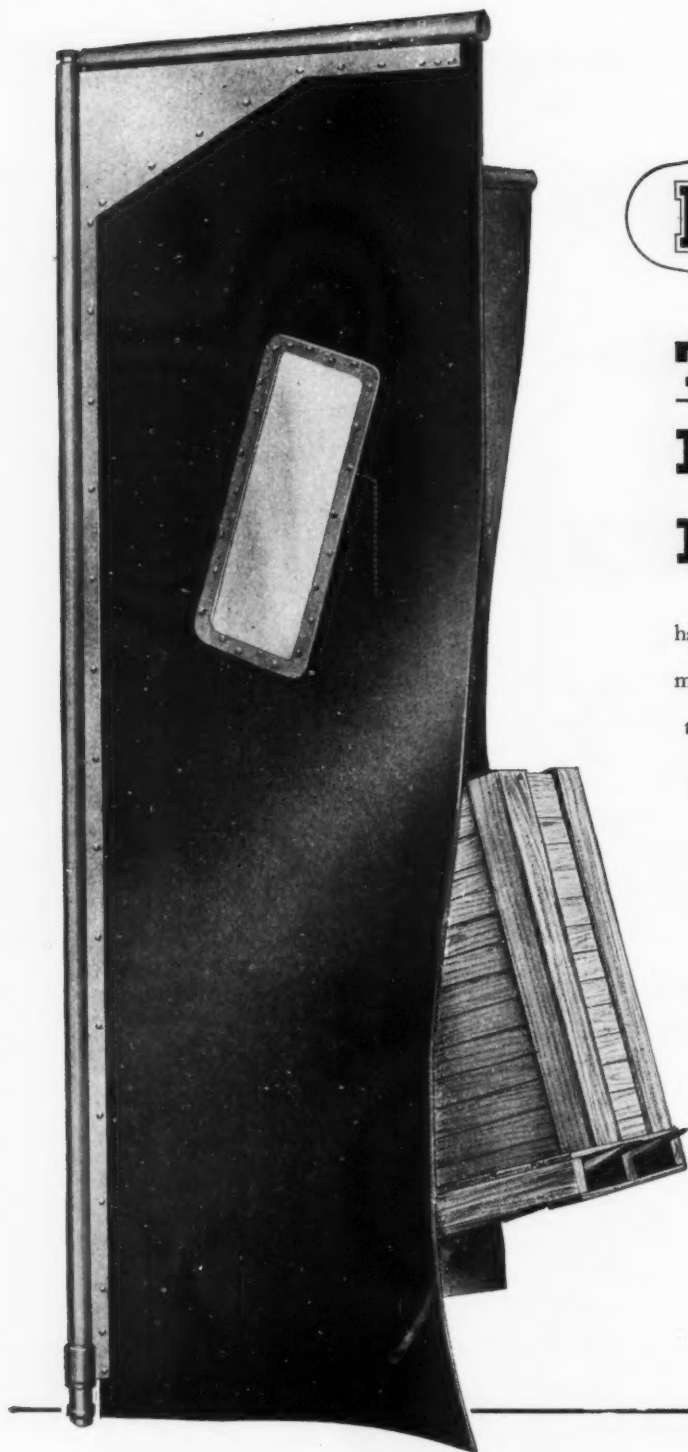
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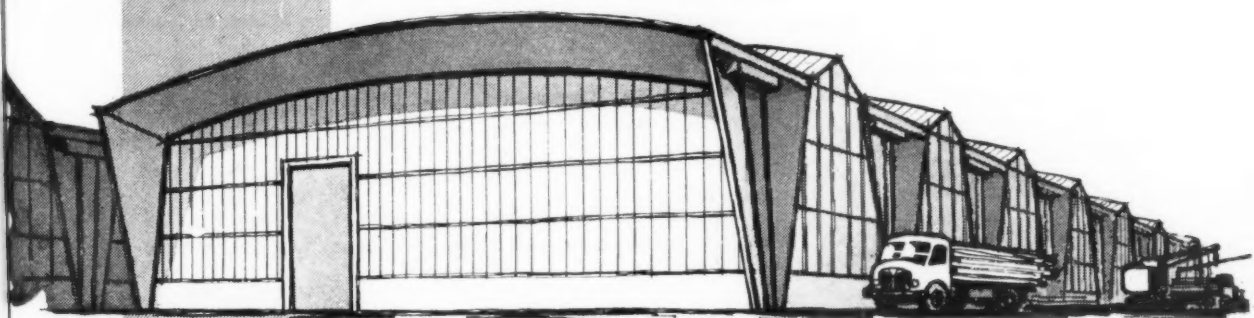
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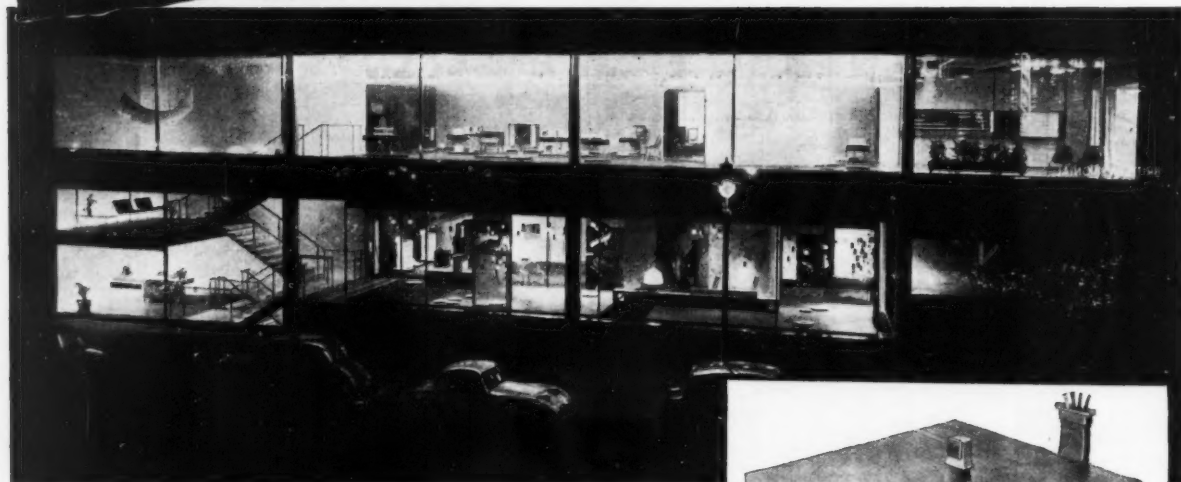
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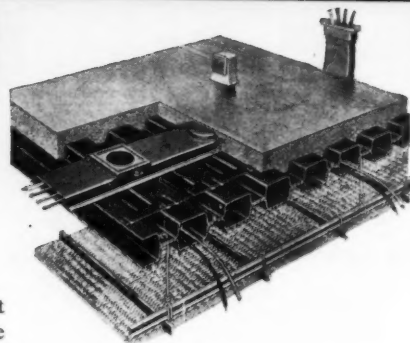


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Architects for Showroom:

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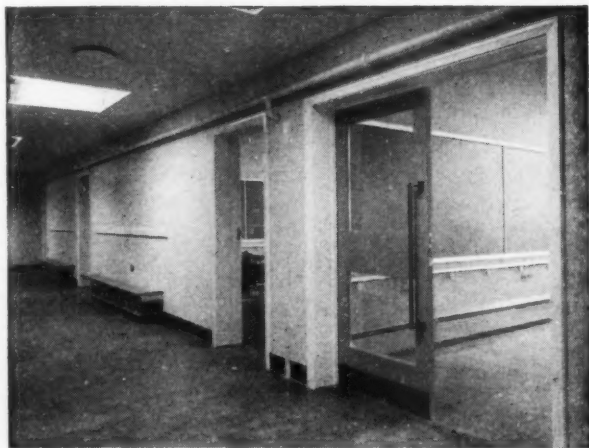
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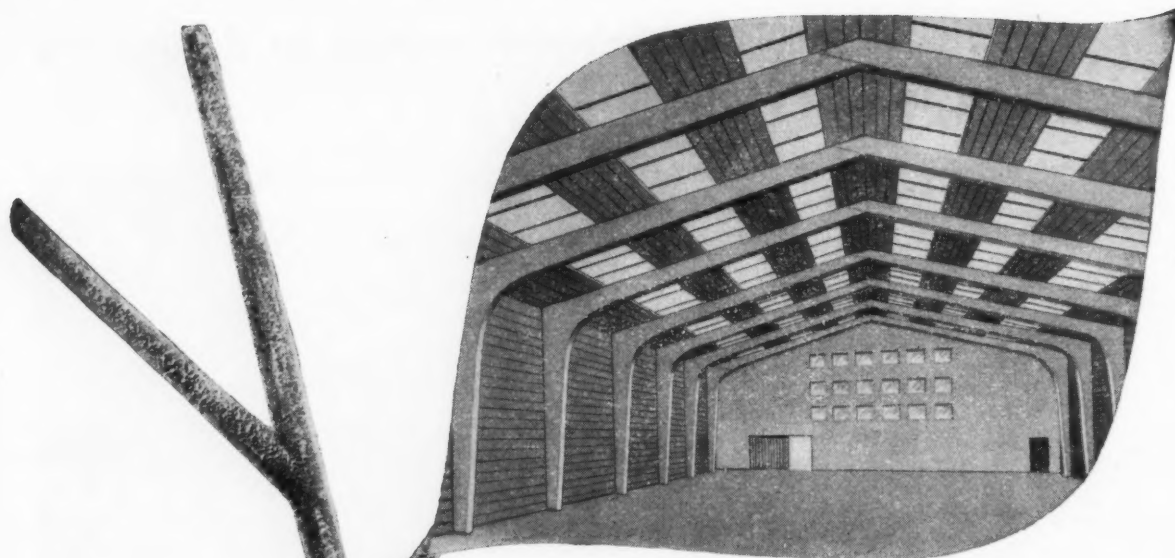
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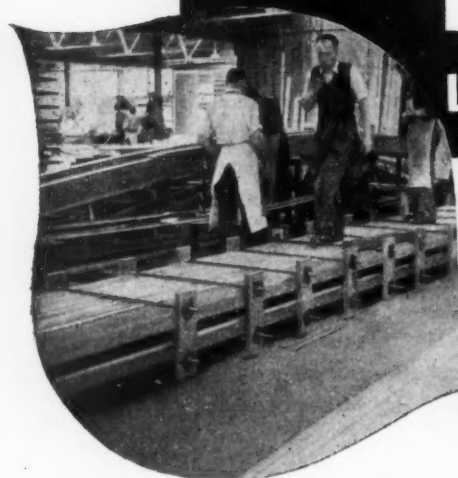
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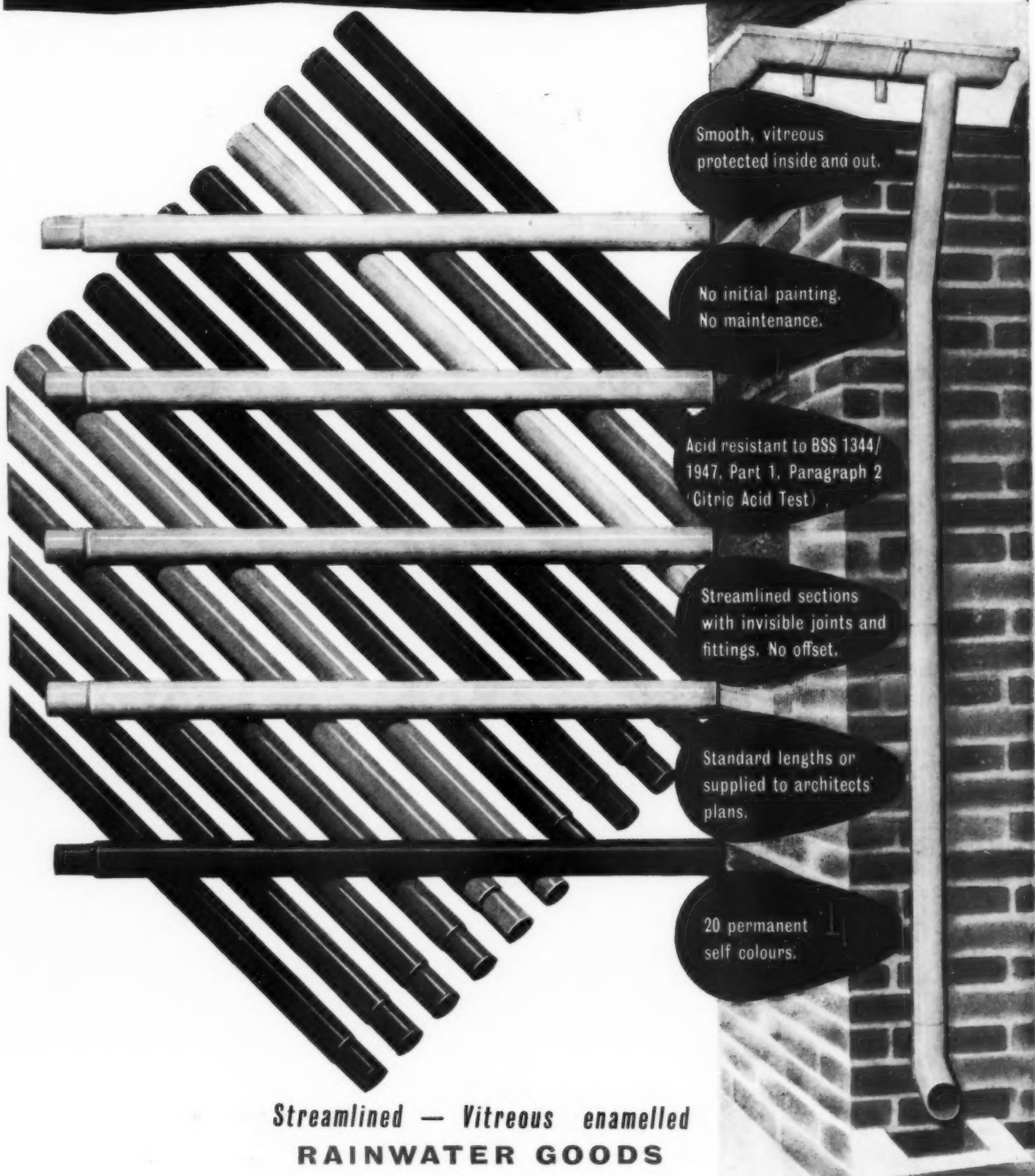
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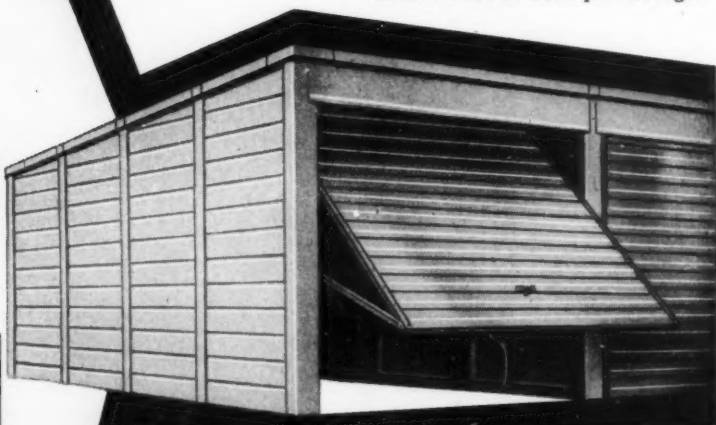
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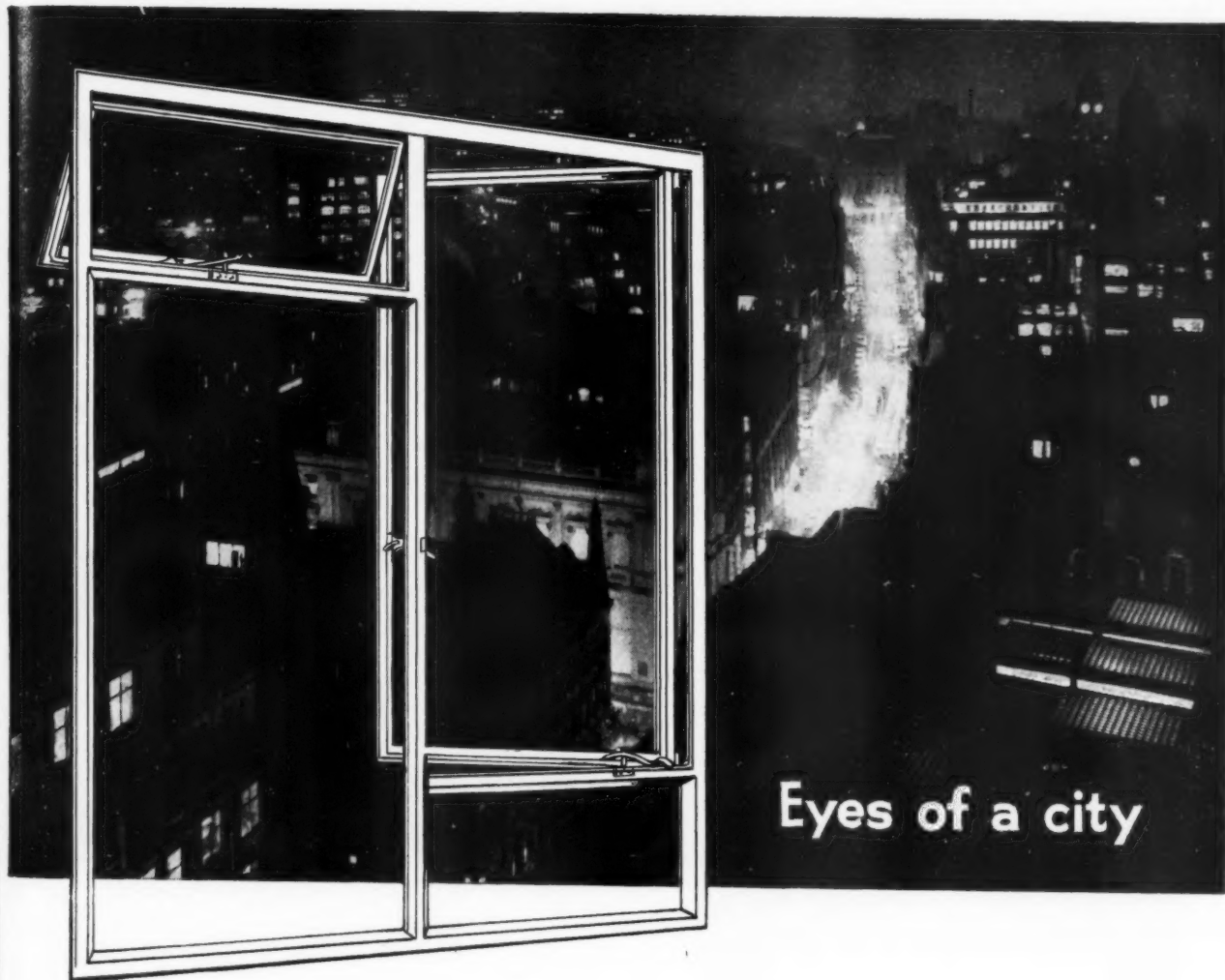


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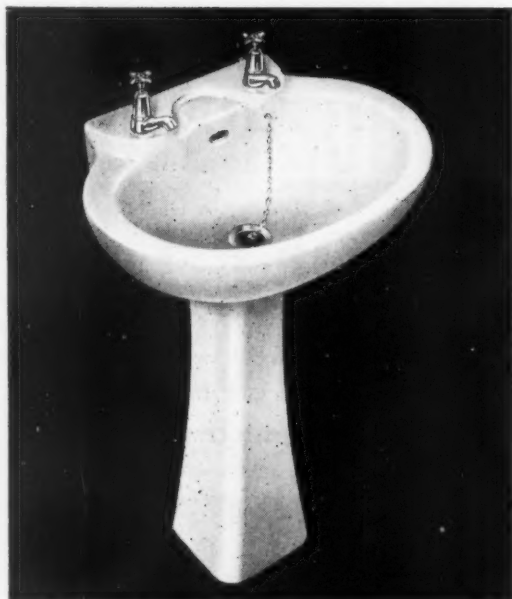
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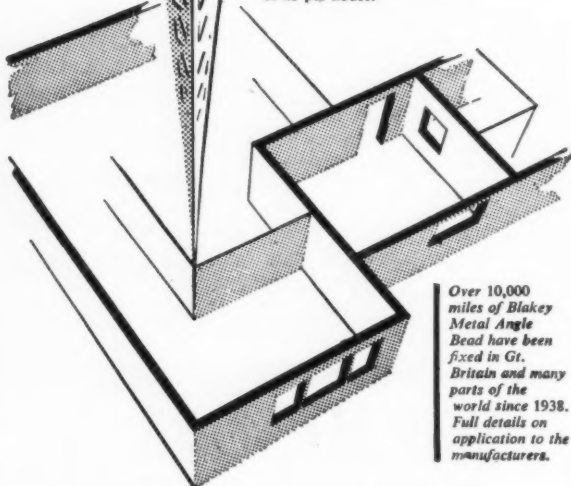
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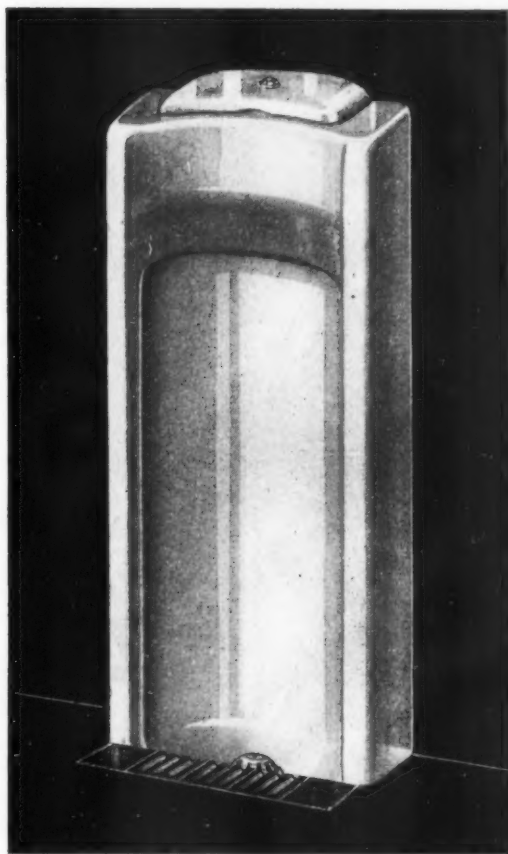
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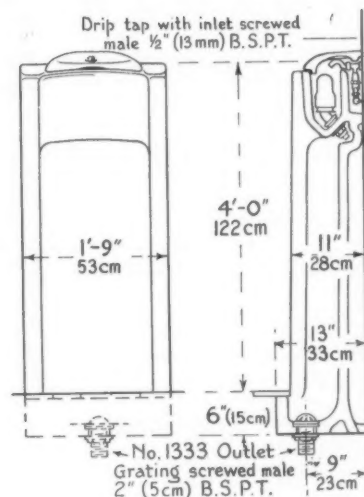
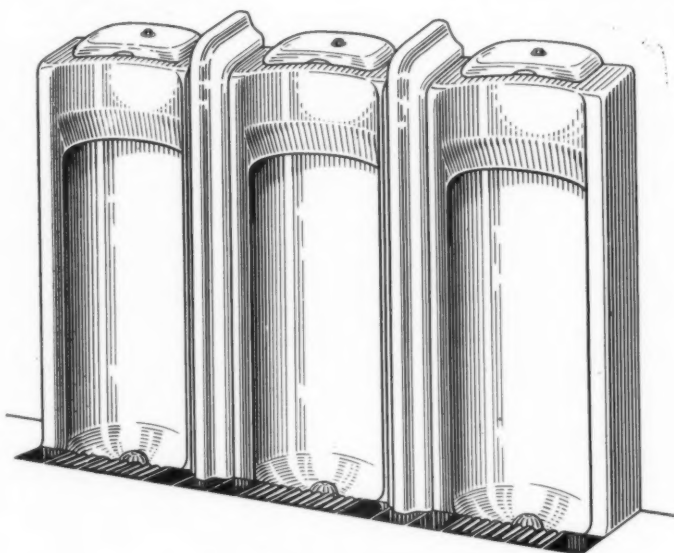
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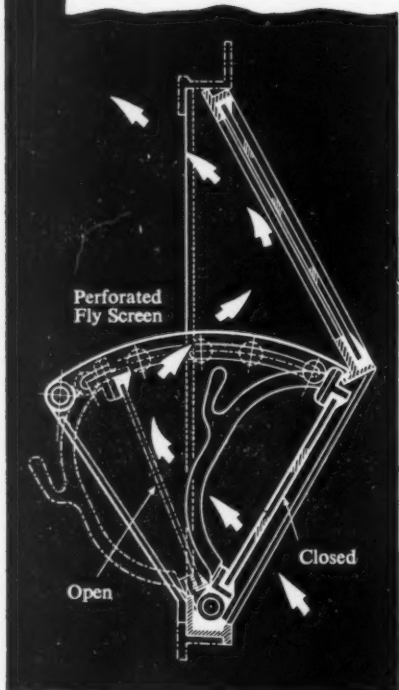


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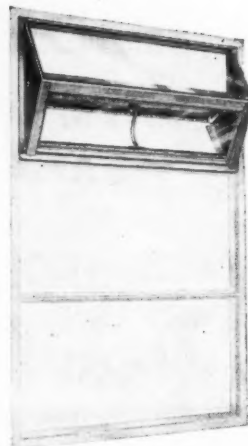
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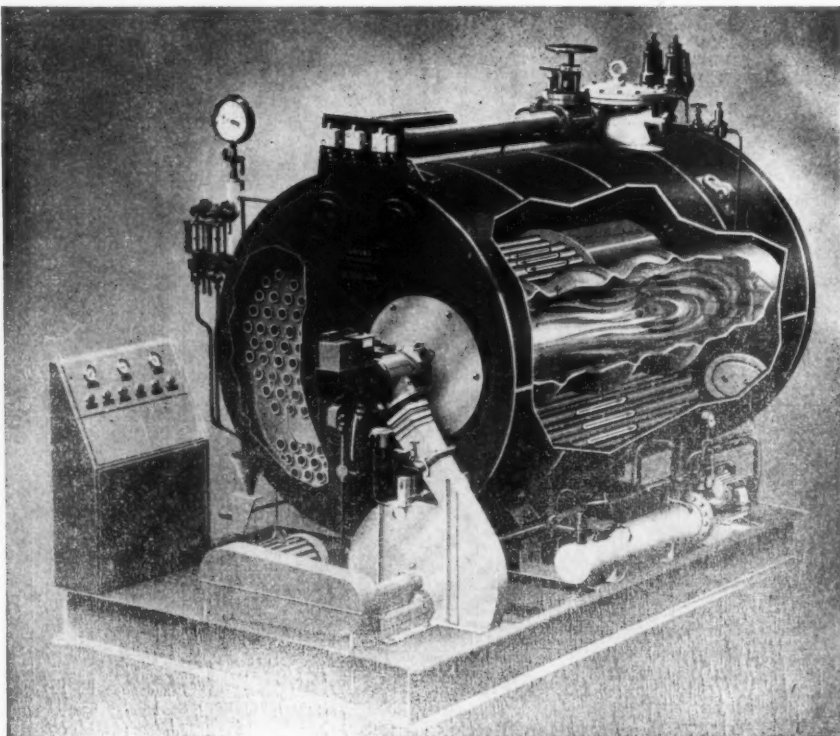
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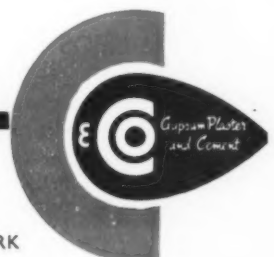
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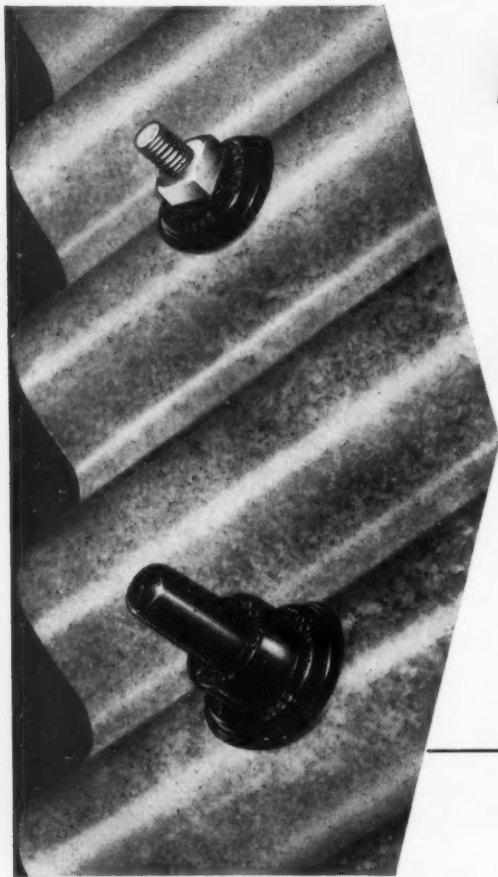
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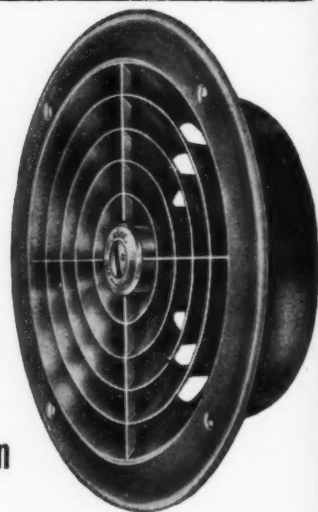
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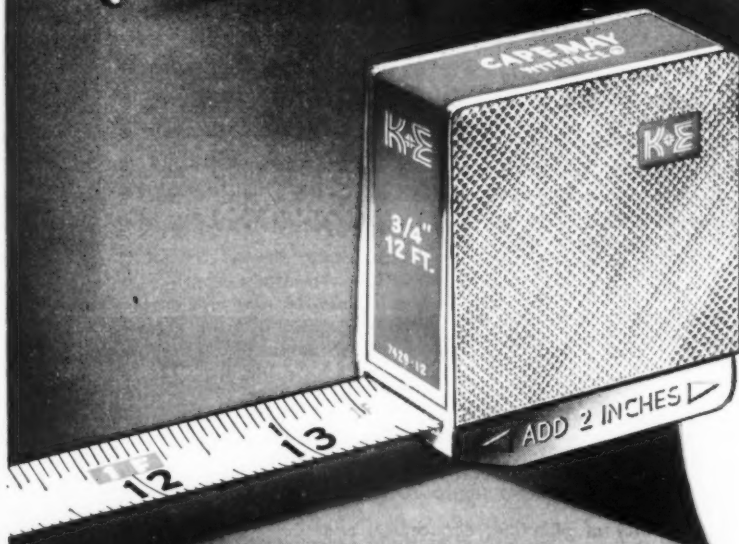
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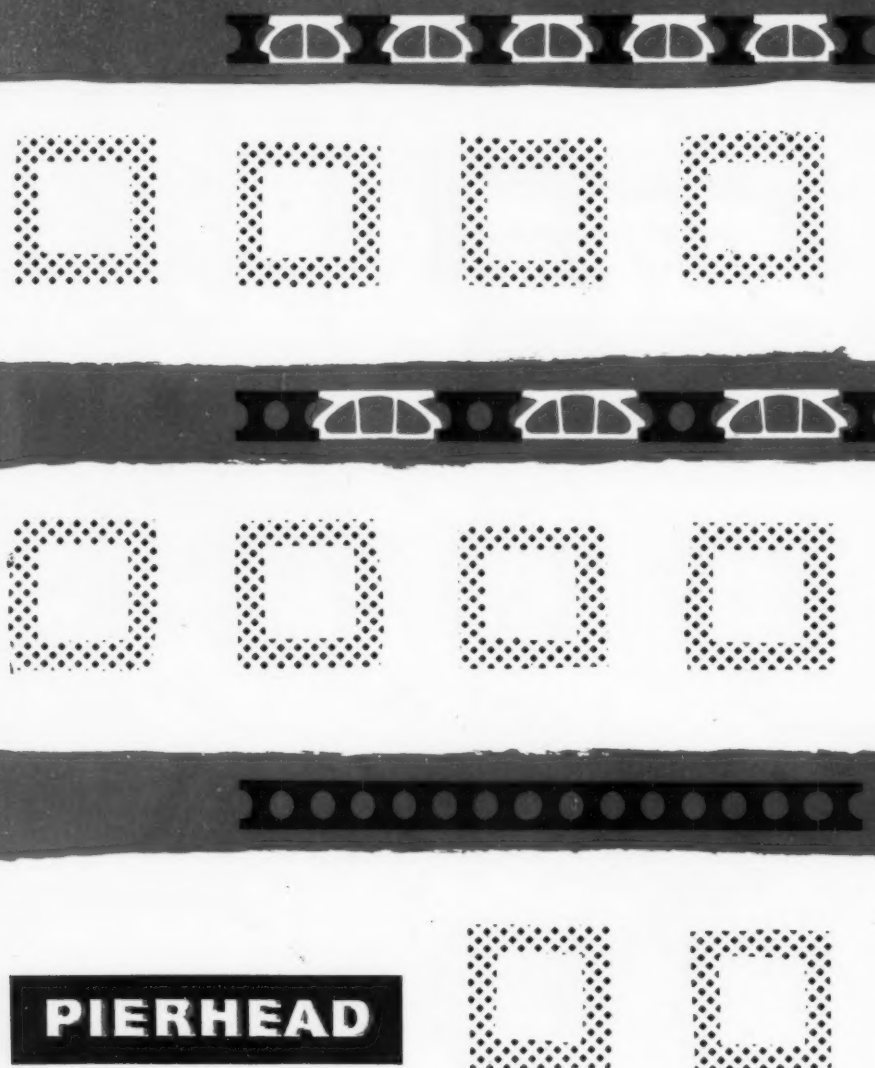
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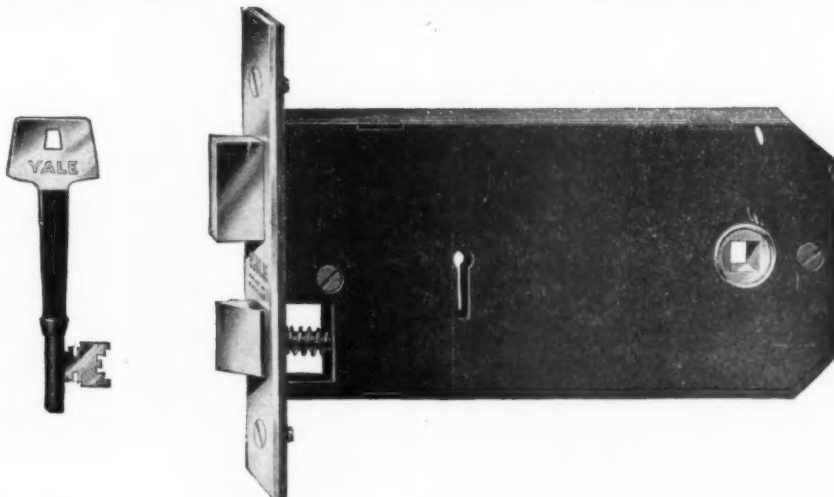
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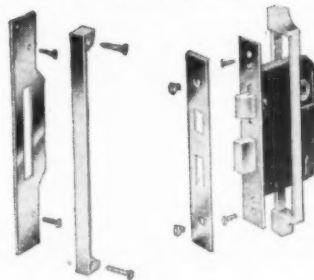


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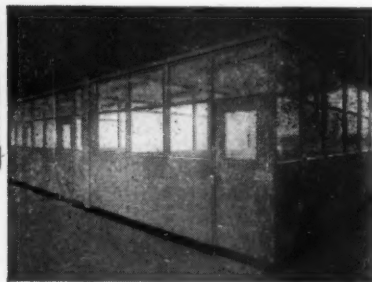
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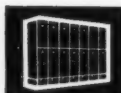
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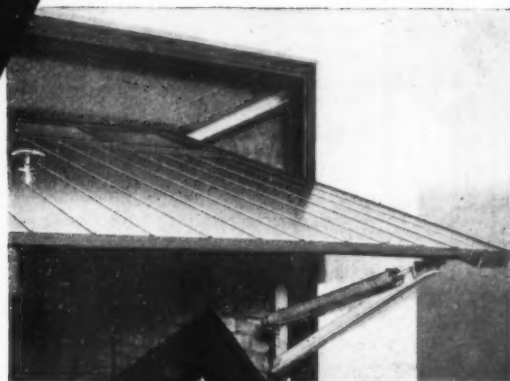
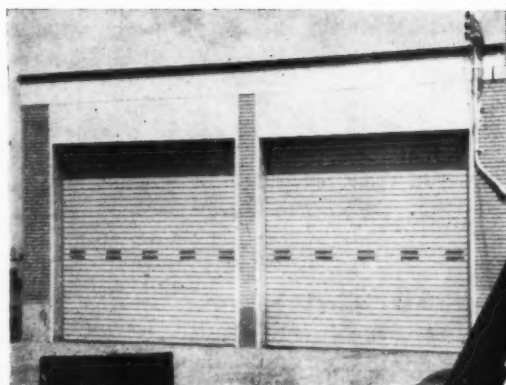
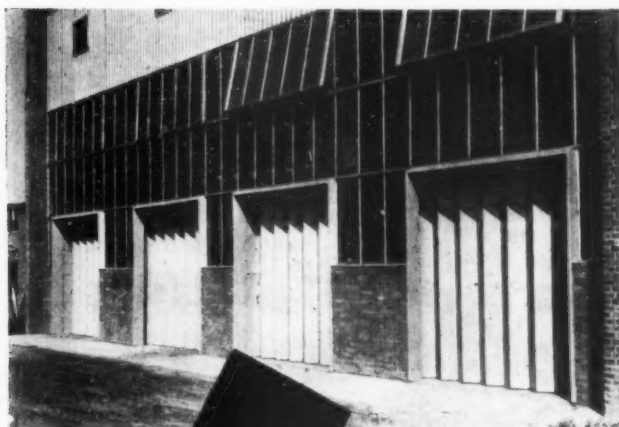


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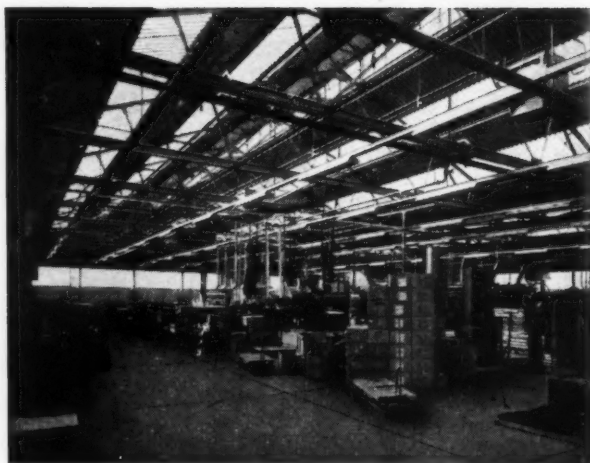
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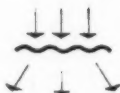
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Tests carried out to B.S. 476:1953 clearly establish that Corroglaze is the only corrugated roof lighting sheet which cannot in any way assist the spread of flame and it will not flash, smoulder or drip flaming particles. It may be specified without restriction. Corroglaze requires no glazing bars, fixing holes or flashings, there is no risk of leakage and it can be supplied ready-mitred if desired. Write for literature and a copy of A.J. Information Sheet No. 666.



Transmits more light

Corroglaze is unaffected by fumes, does not discolour and maintains its efficiency under the most adverse atmospheric conditions.



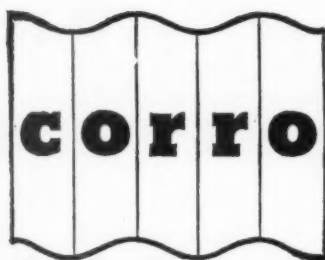
Better light spread

Scientifically designed prismatic type ribbing on Corroglaze eliminates harsh light and dull areas.



Eliminates fire hazard

Corroglaze is the only 100 per cent. non-combustible corrugated roof lighting sheet. It is pure glass, reinforced with 1in. square mesh.



the sheet that never burns



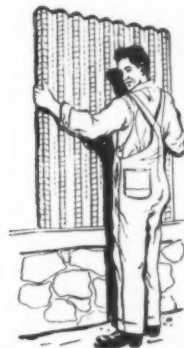
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decorated corroglaze

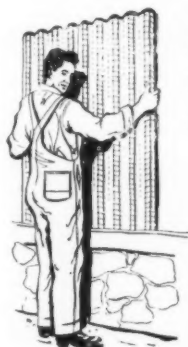
100% pure glass internal partitioning



Decorated Corroglaze sheets used to provide a corridor in a school.



Decorated Corroglaze represents an entirely new approach to the problem of partitioning and sub-division of larger areas. It enables the architect to escape from the rigid, uninteresting, conventional design imposed by the use of flat sheets of glass, hedged in by numerous shadow-forming steel or timber supports, and large areas of metal sheeting or masonry. It is 100% corrugated glass; one surface is smooth and the other stippled. The individual sheets are applied vertically, and are butt jointed by means of slender plastic or metal strips. The ONLY support required, irrespective of the length of run, is the outer framework. Decorated Corroglaze, when illuminated, gives a pleasing, slightly fluviate effect, the upward flowing lines of the corrugation impart both elegance and dignity.



- faster to install
- more light
- more efficient

technical advisory service

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SPECIFICATIONS:
LENGTHS: 59", 78½", 118".
WIDTH: standard —32½".
NET COVER: fixed—32½".
LIGHT TRANSMISSION: 85%
'U' VALUE: 1.20 B.T.U./hr./sq.ft./°F.
STABILITY: does not discolour, maintains light transmission coefficient indefinitely.

Prices on application.

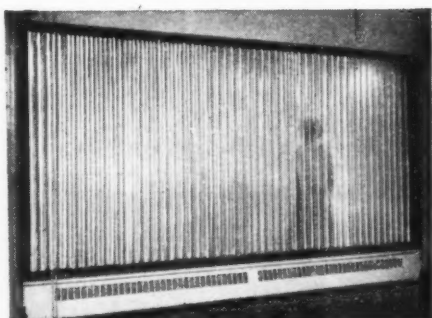
The smooth and stippled corrugated surfaces transmit and diffuse light, eliminating shadows and glare.



the sheet that never burns

can be used externally

without restriction. A centre supporting rail, suitably cushioned, to help resist heavy wind pressure is recommended.



Note how Corroglaze provides for both illumination and privacy in this office.

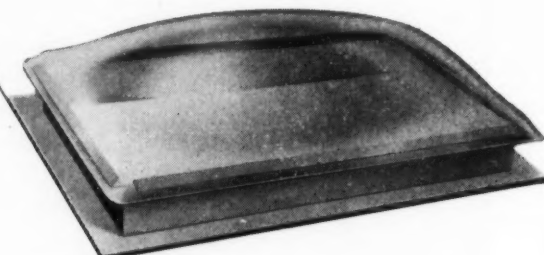
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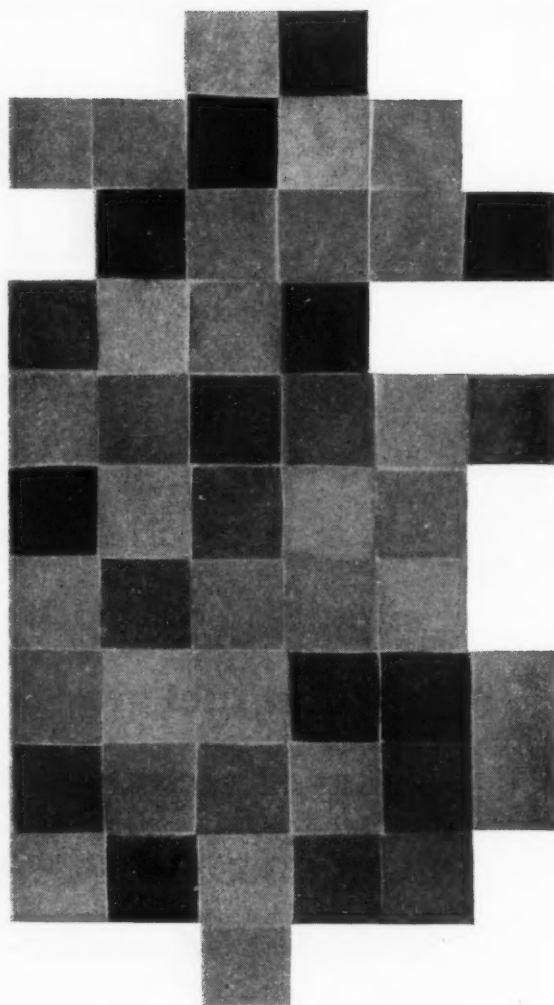
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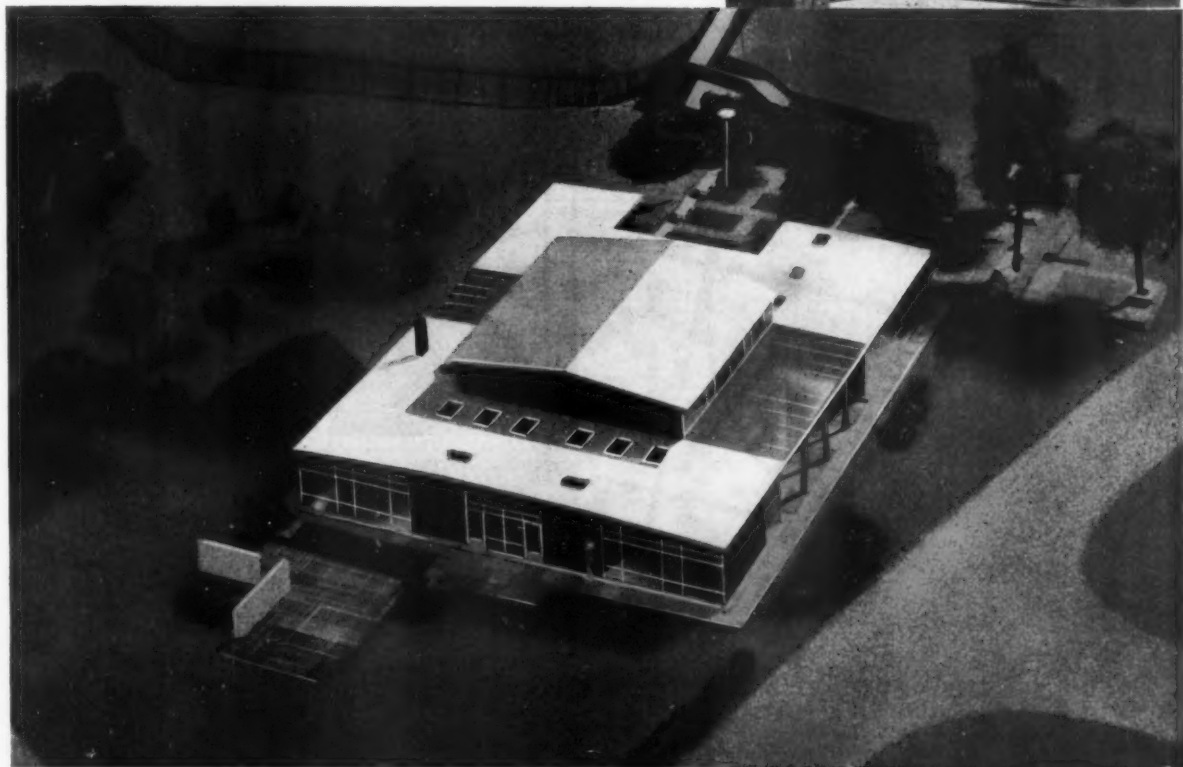
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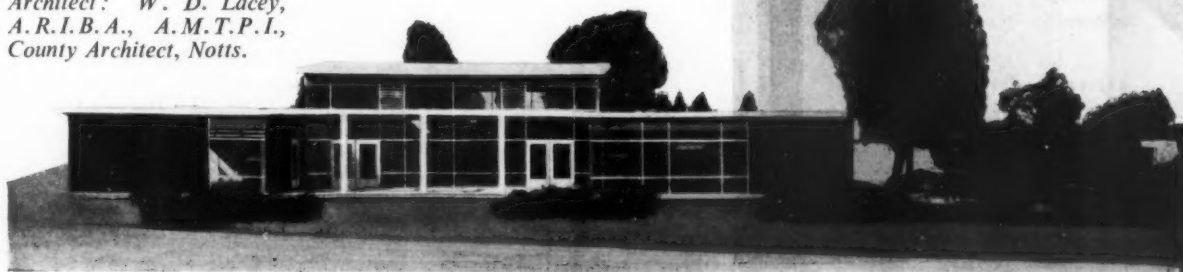
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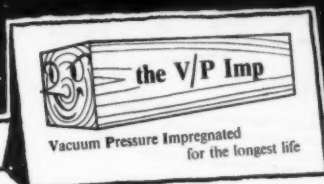
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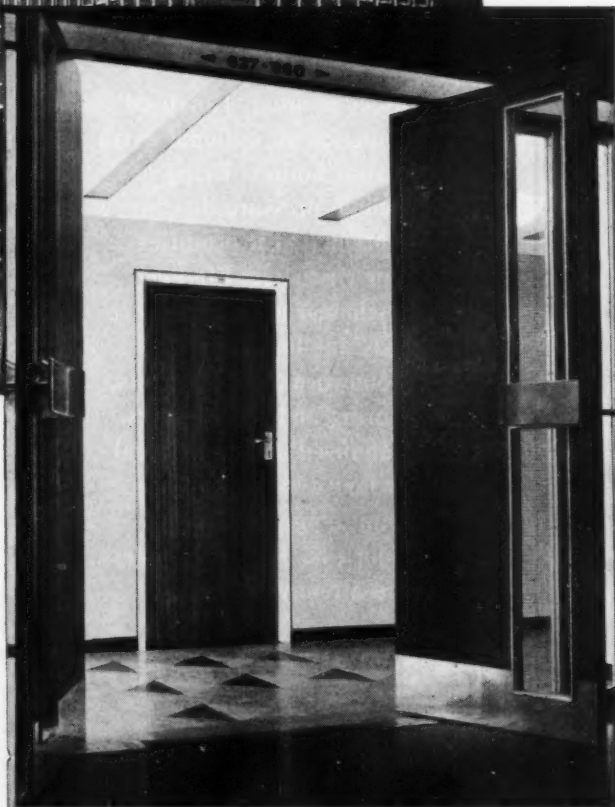
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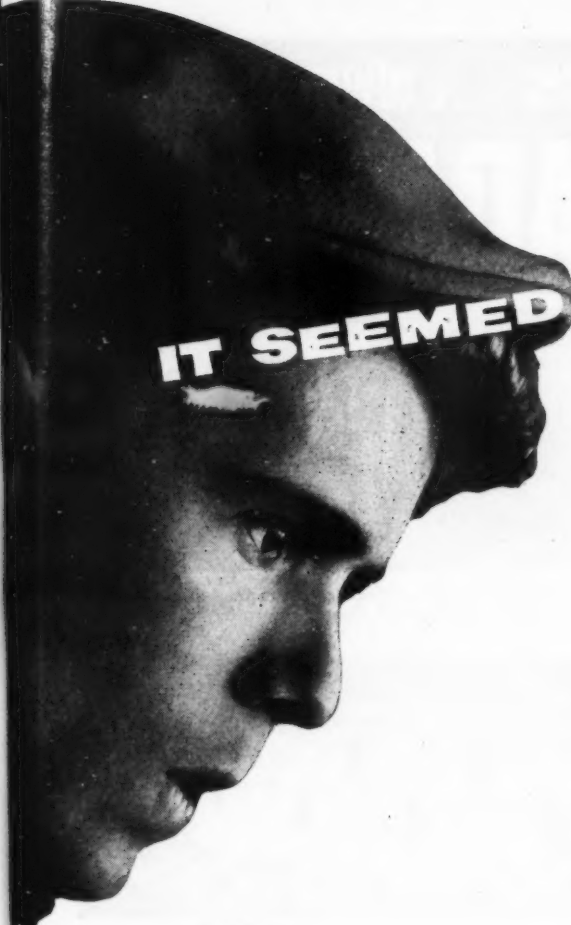
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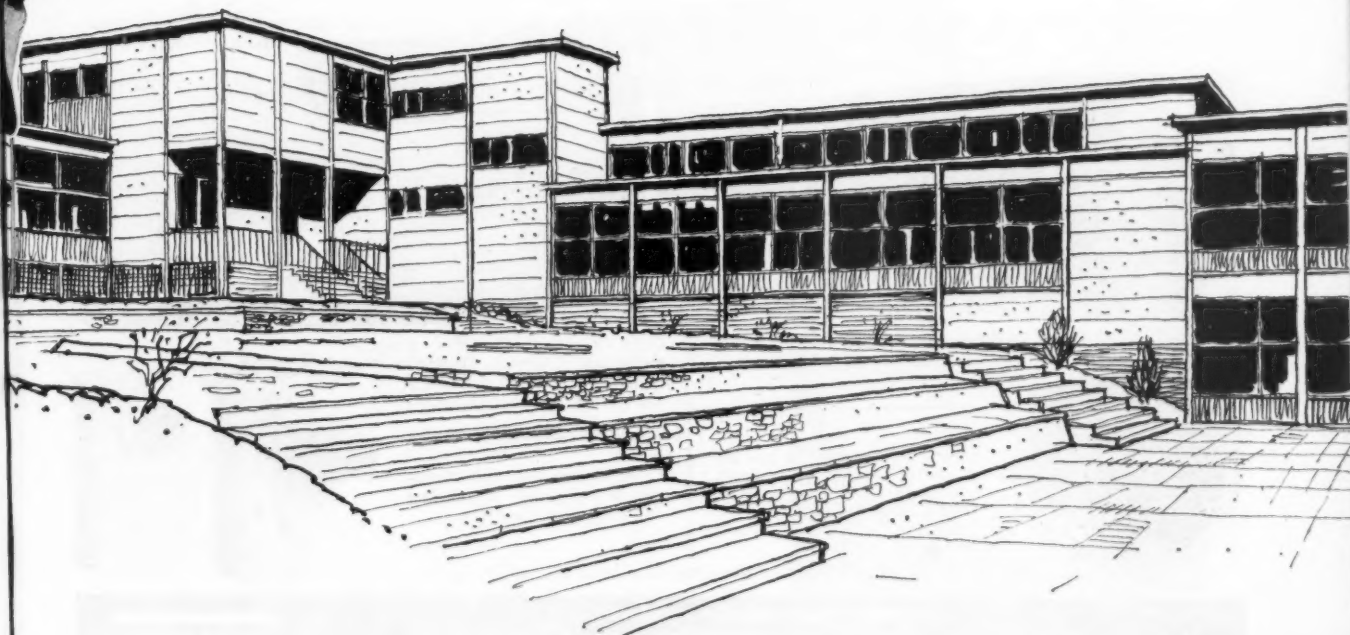


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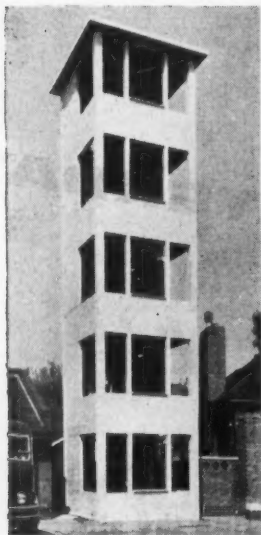
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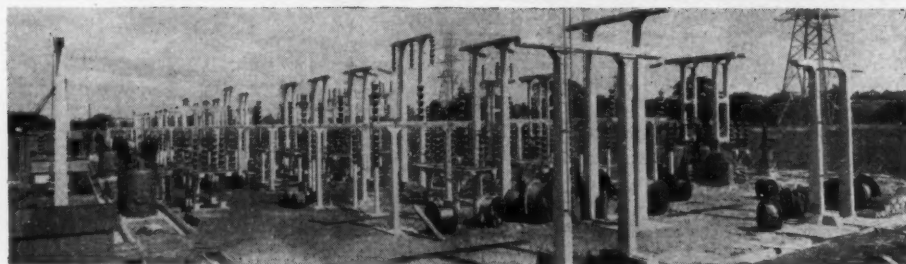
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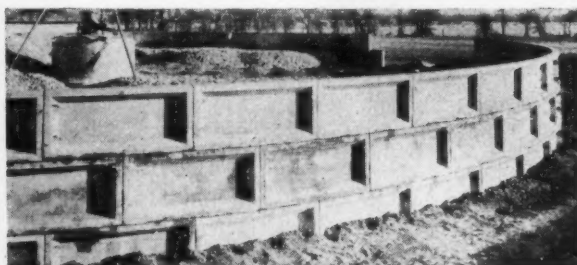
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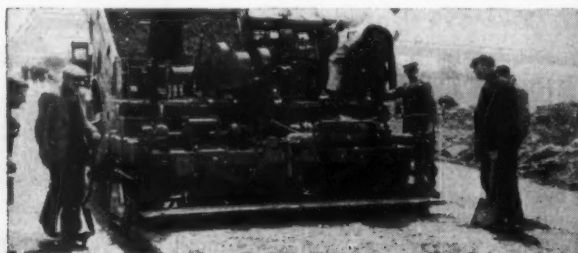
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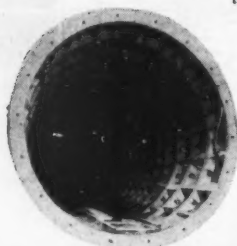
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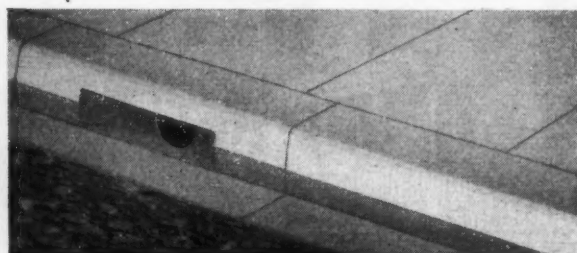


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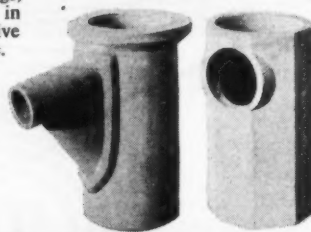


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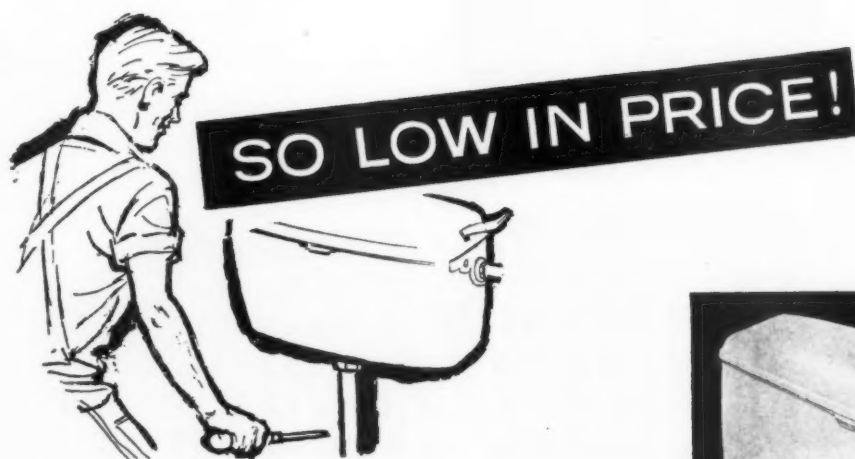
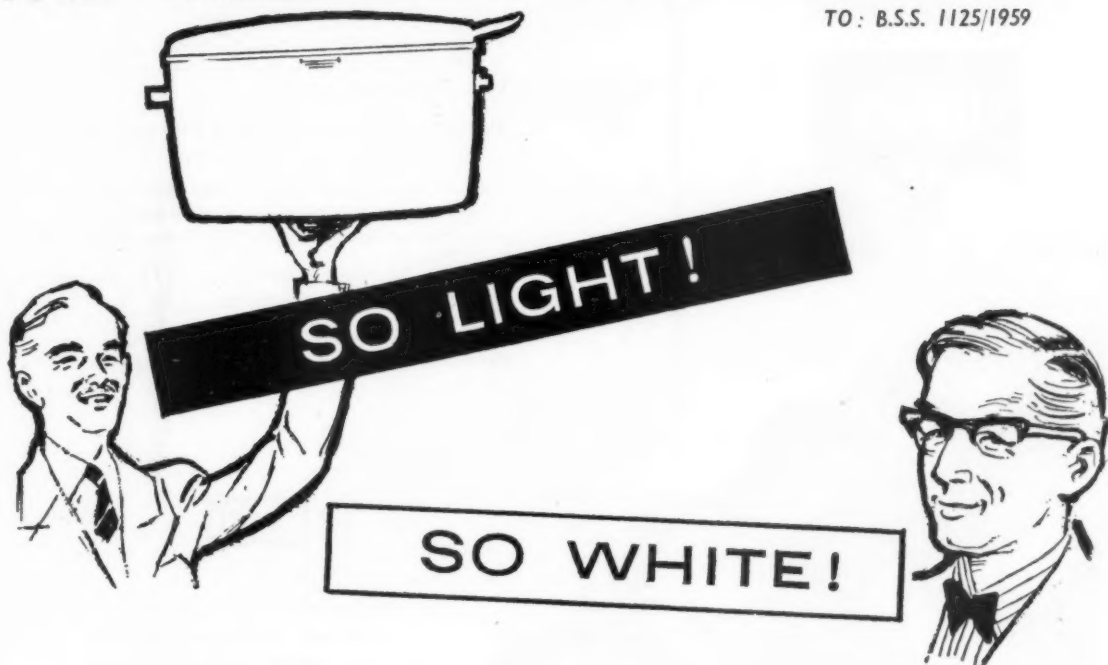
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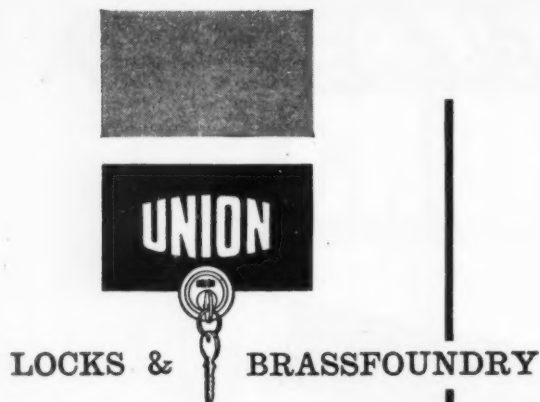
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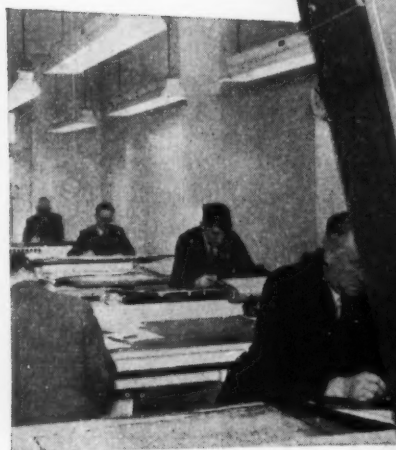
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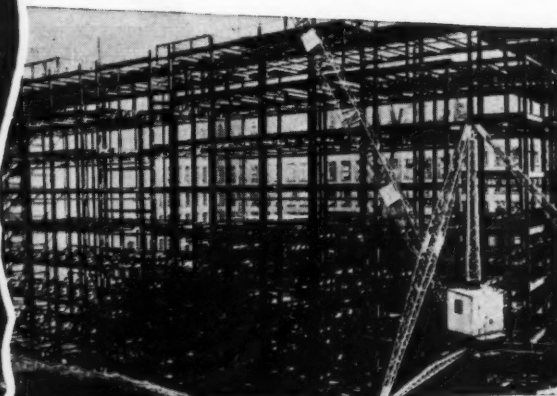
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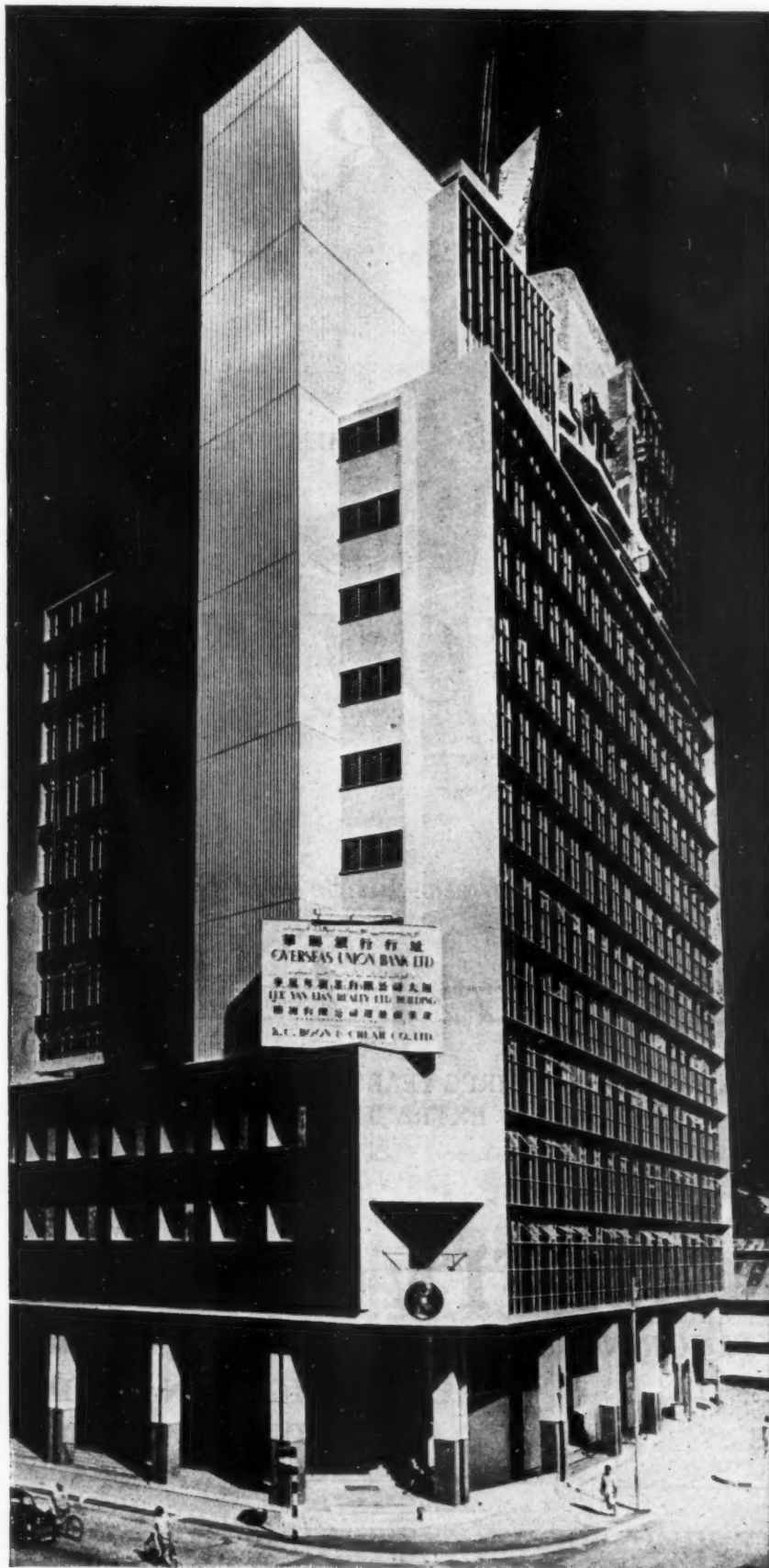
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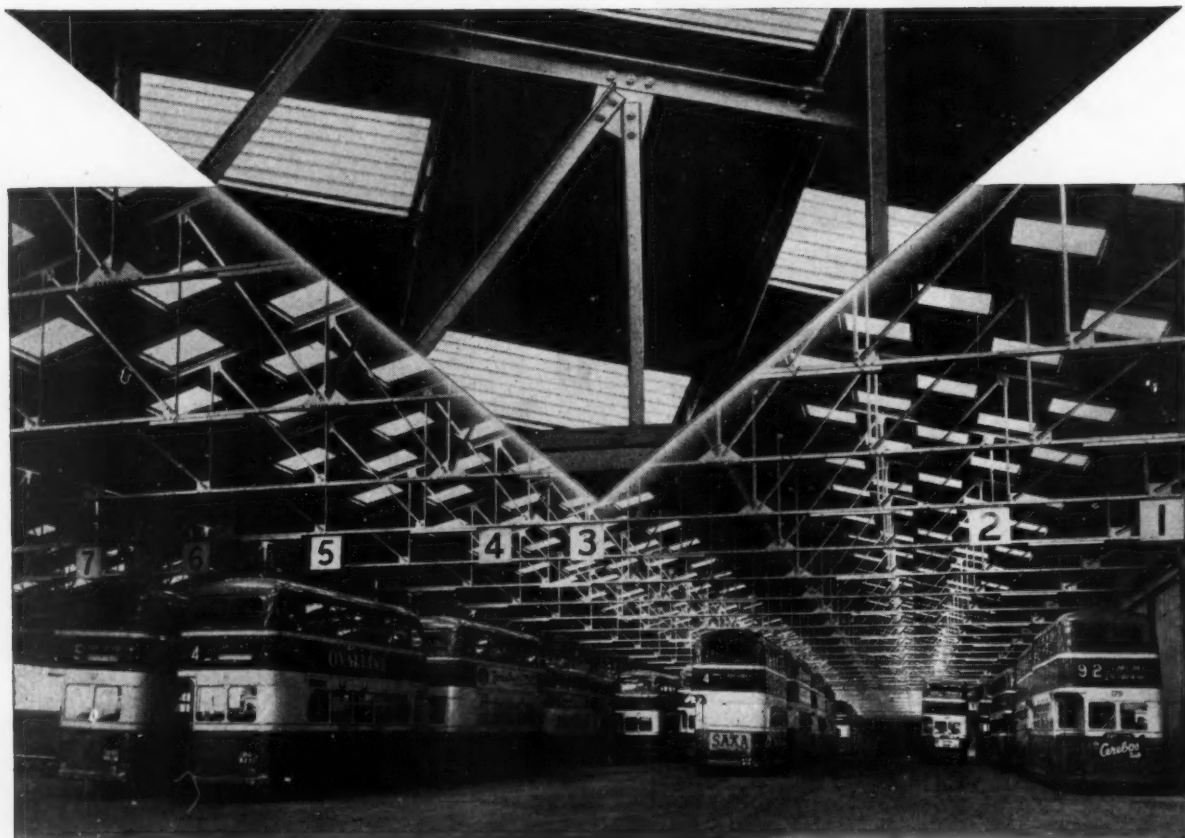
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heating and sanitary equipment by Ideal-Standard goes into Leeds flats



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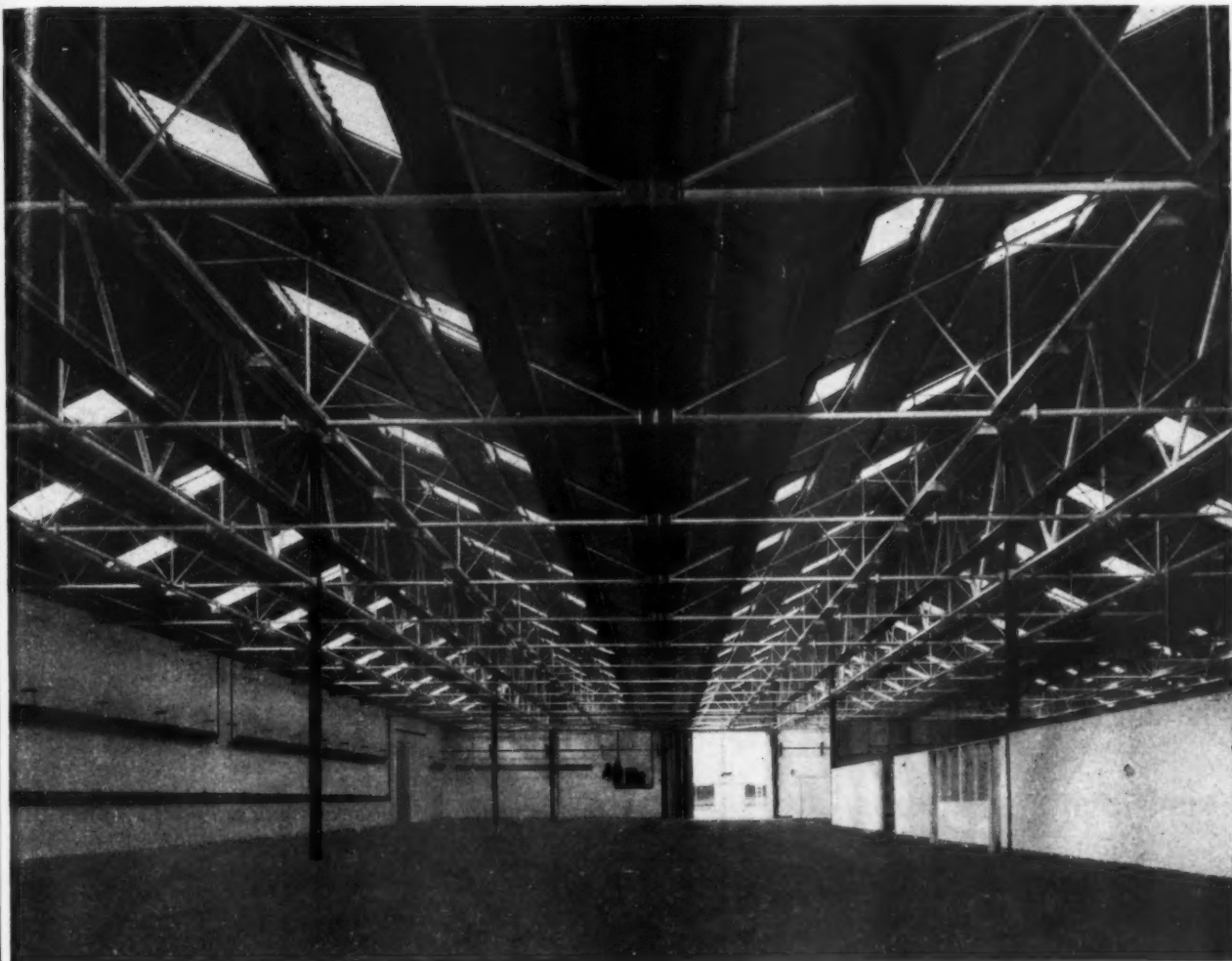
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BELOW
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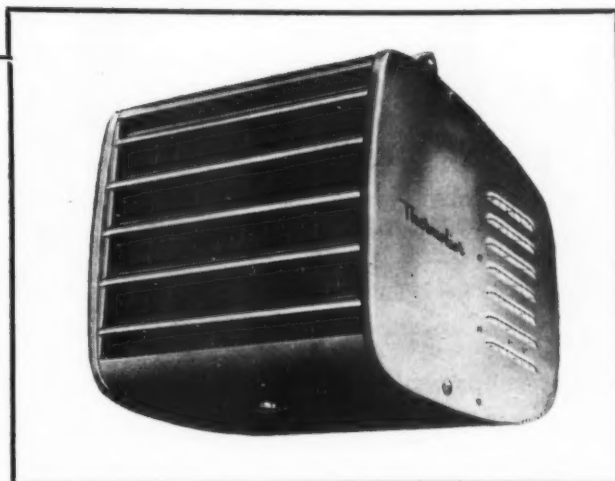
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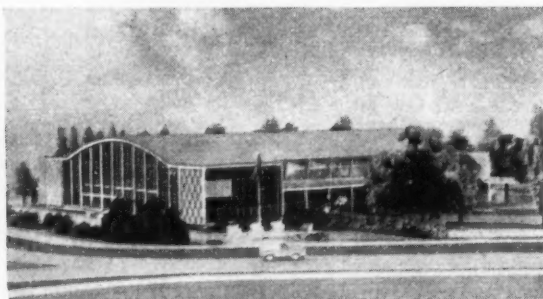
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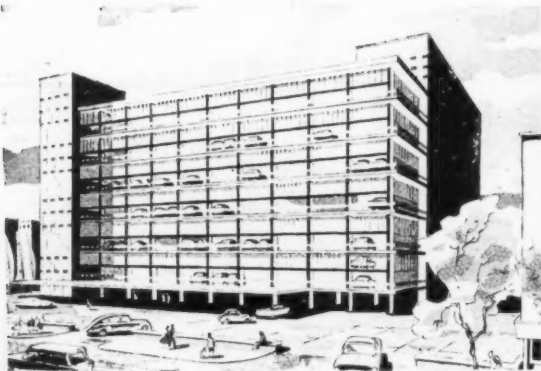
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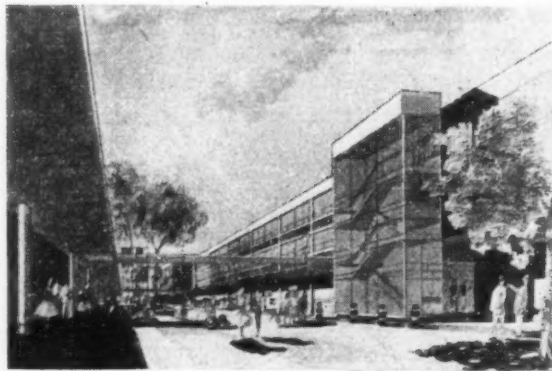
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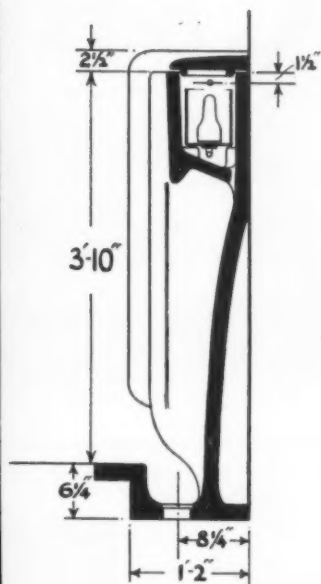
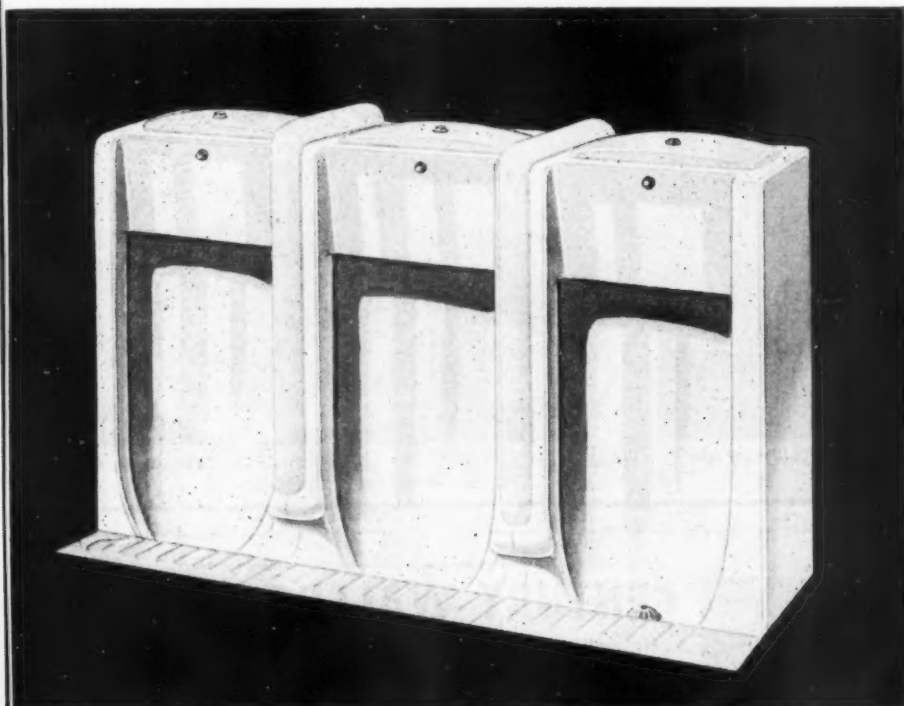
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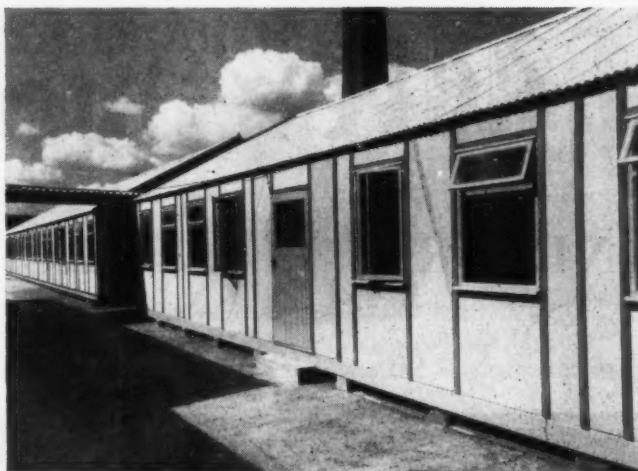
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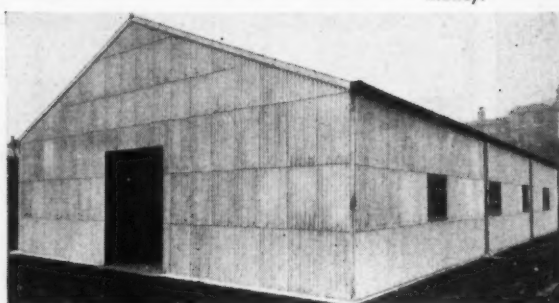
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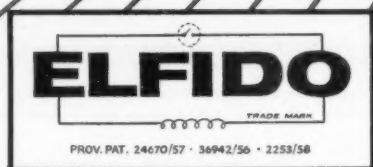
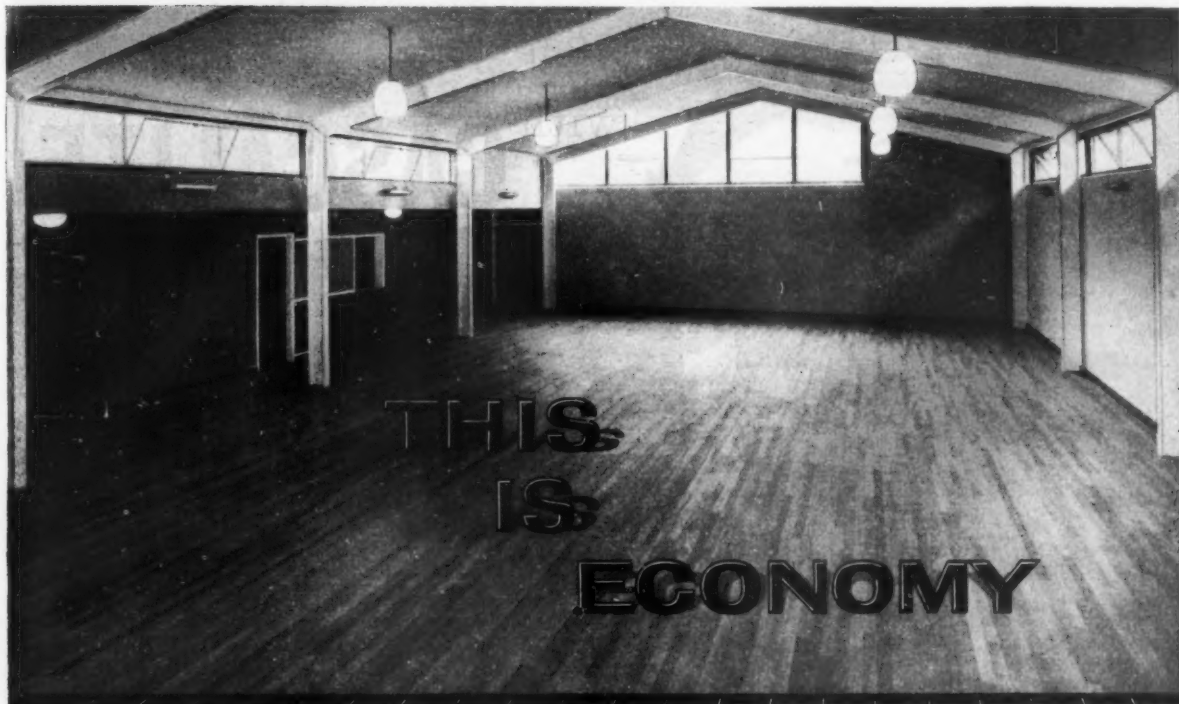
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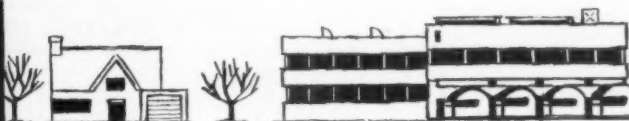
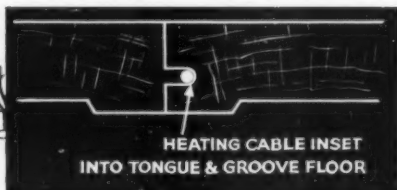
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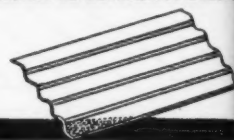
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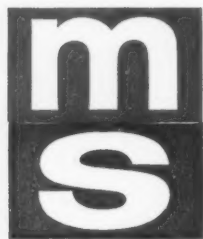


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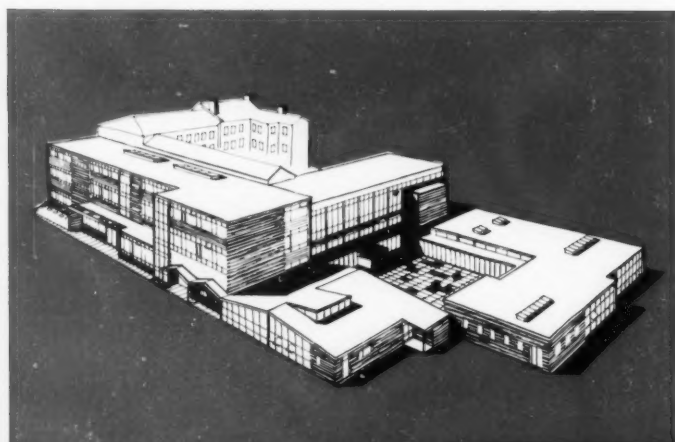
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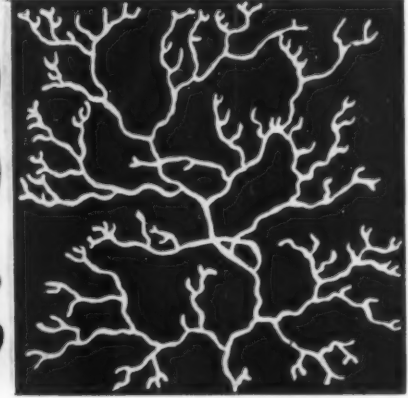
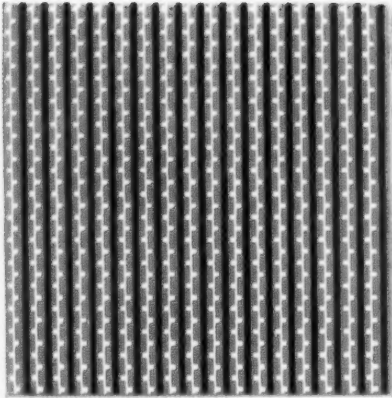
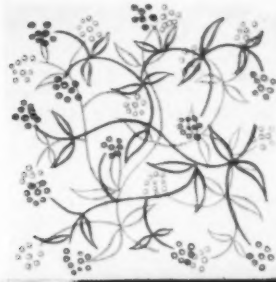
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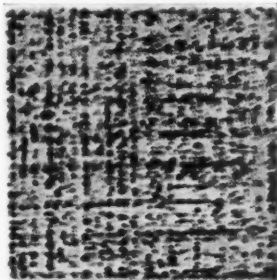
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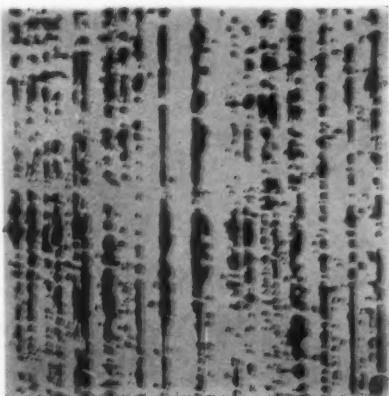
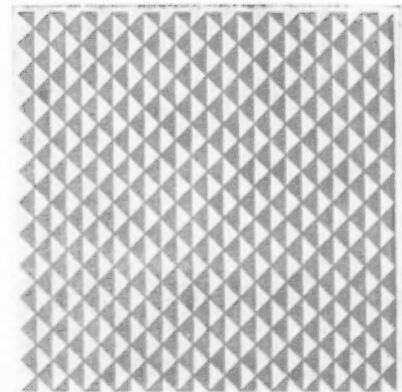
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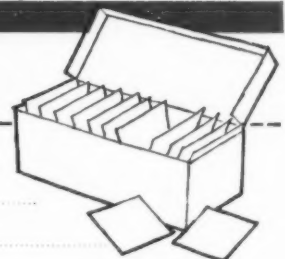
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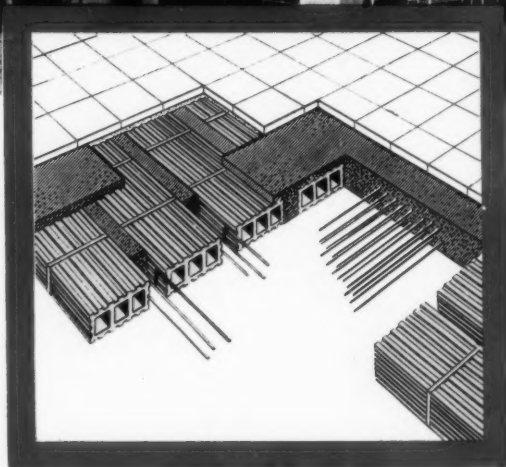
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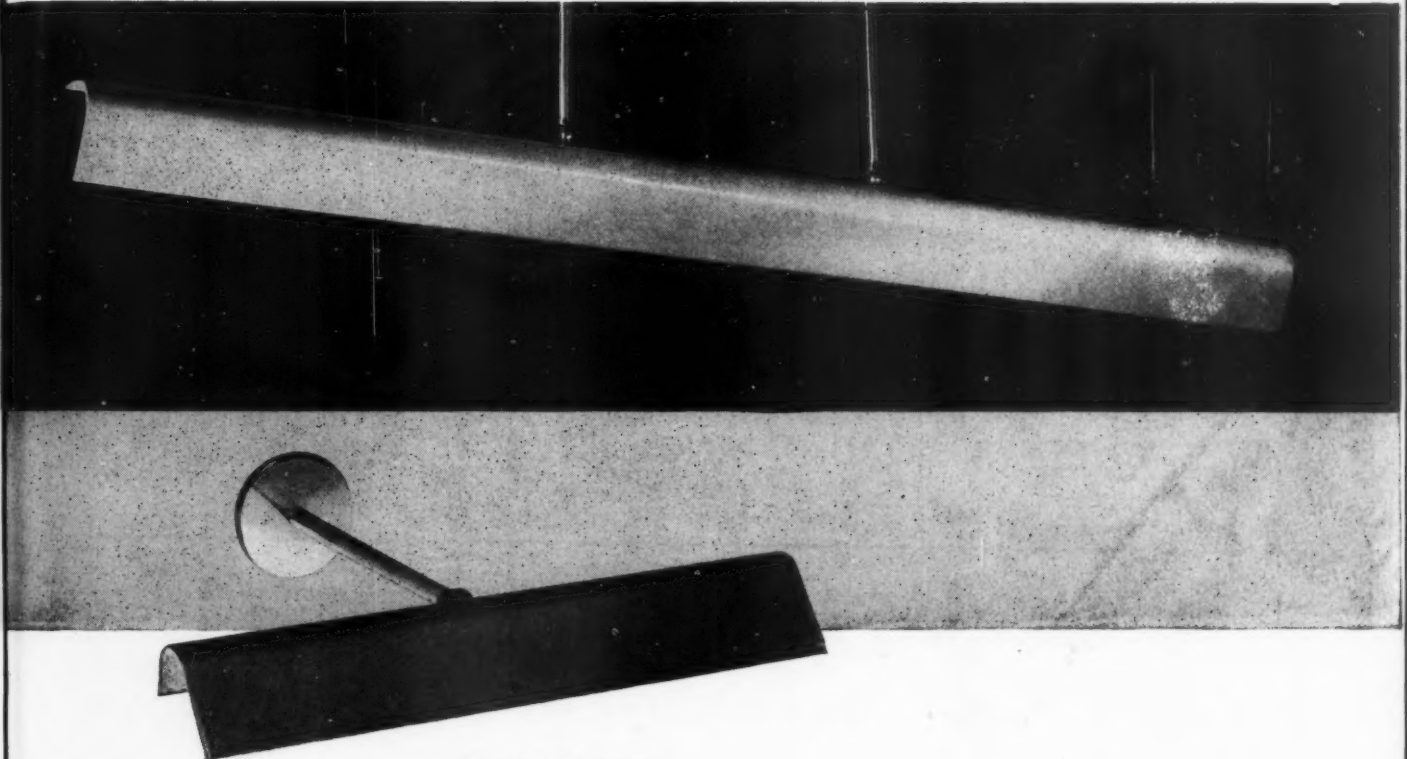
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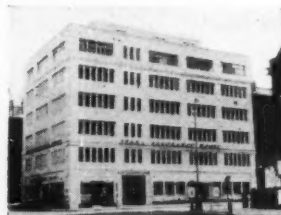
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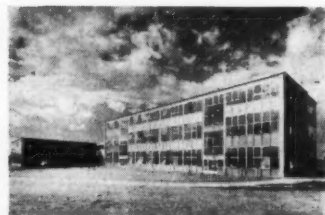
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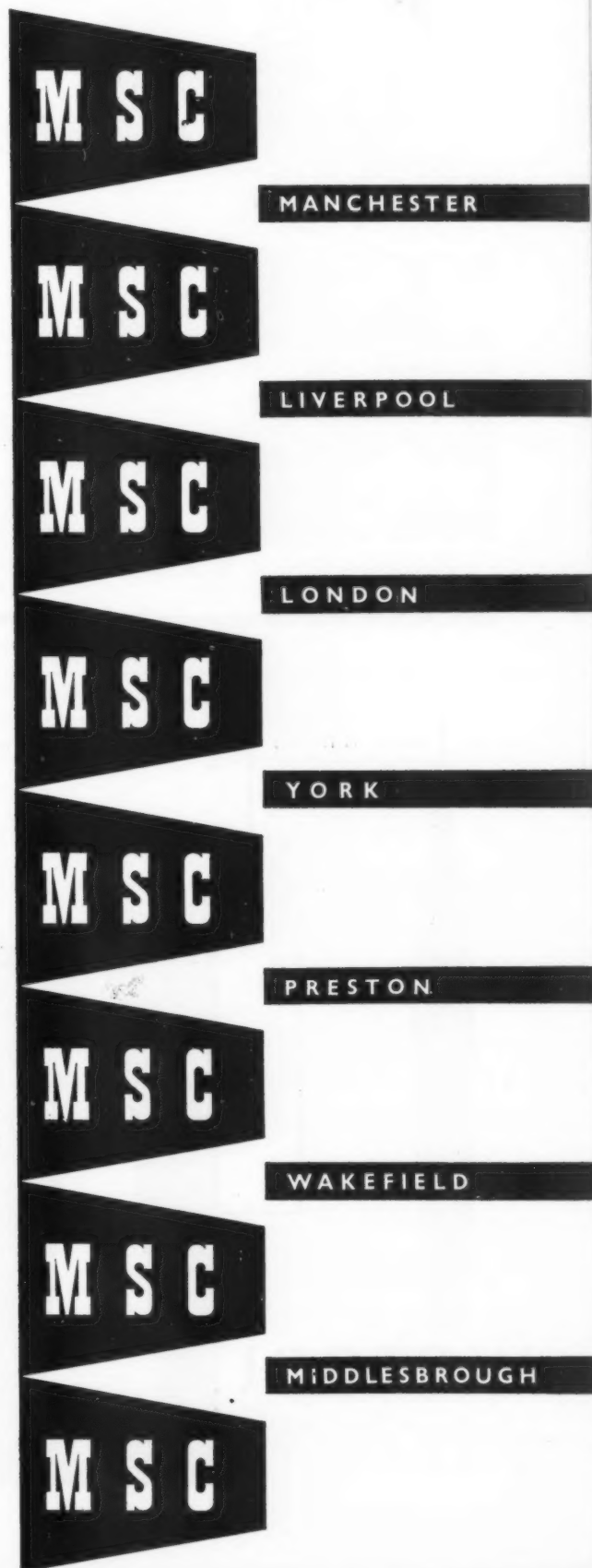
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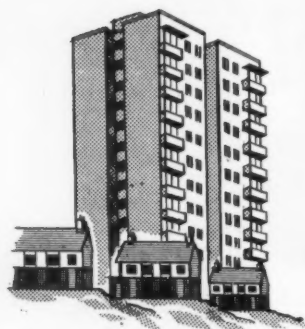
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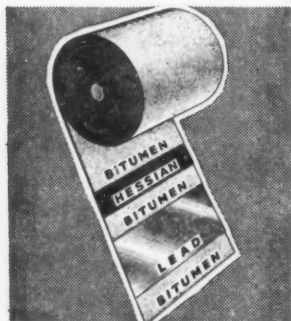




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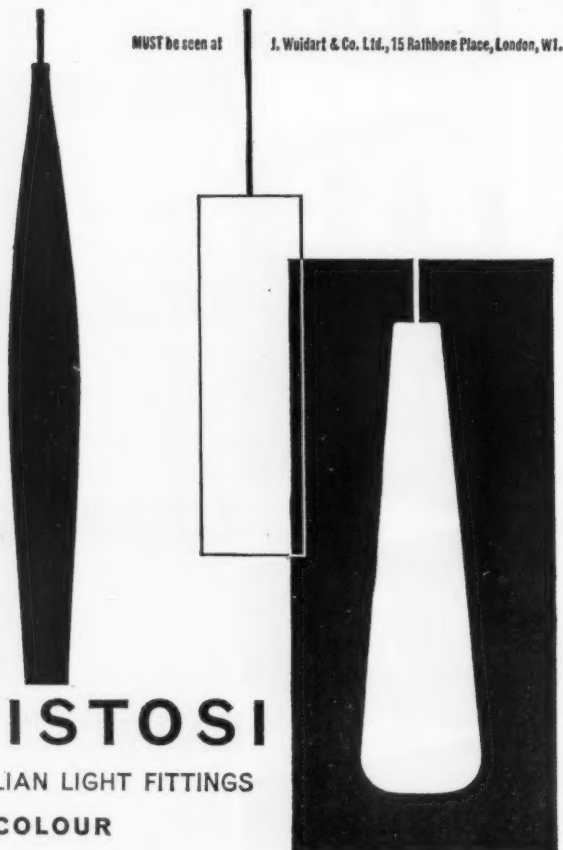


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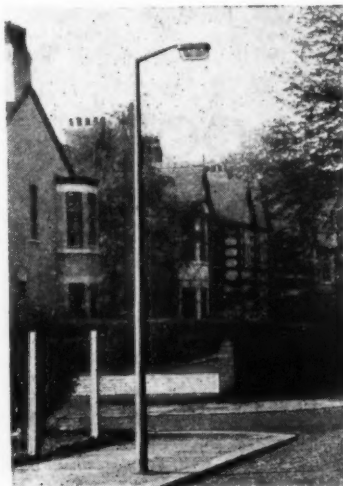
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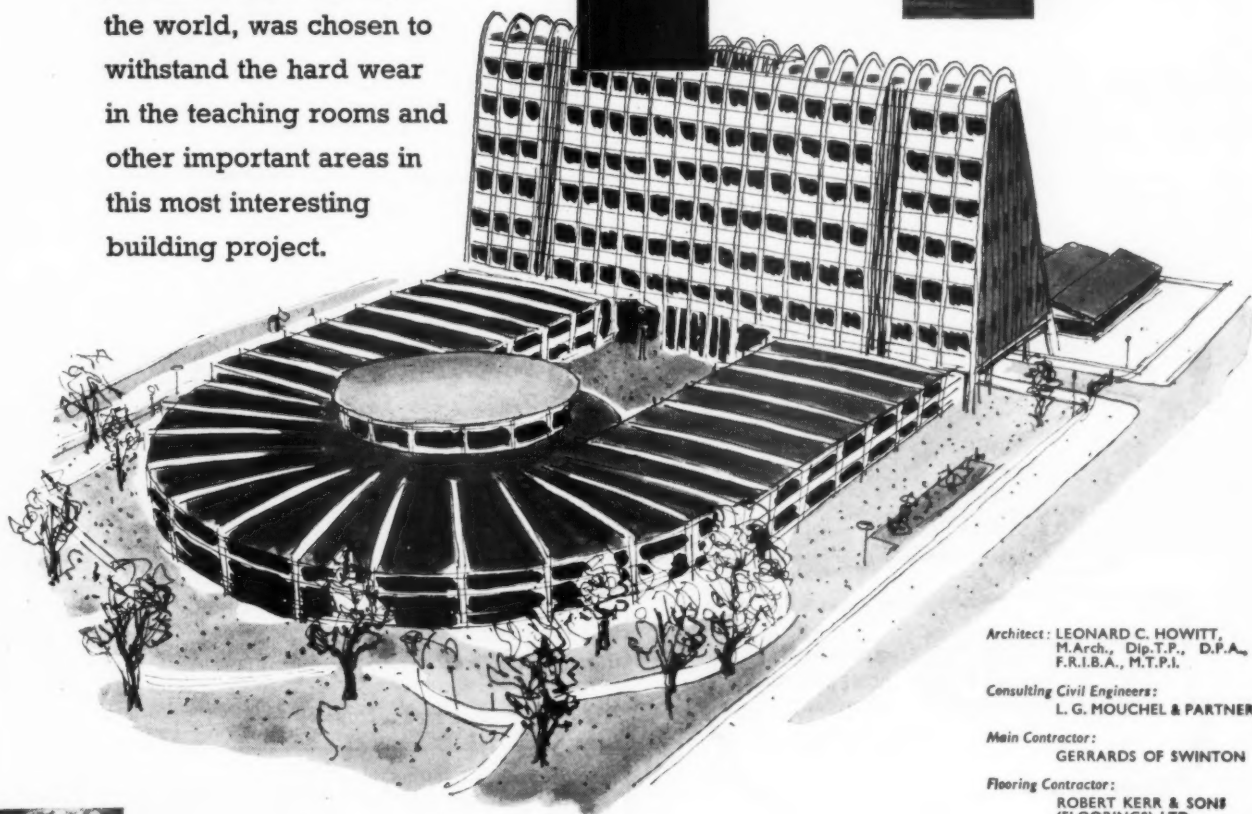
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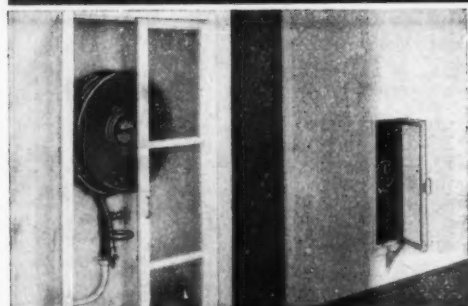
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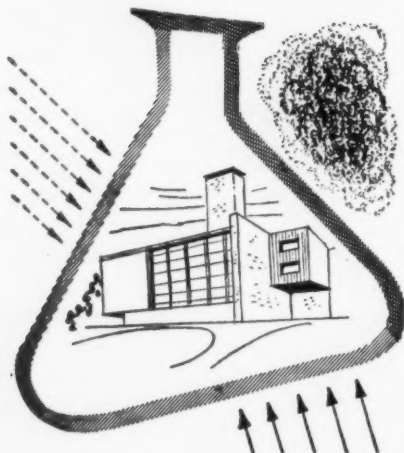
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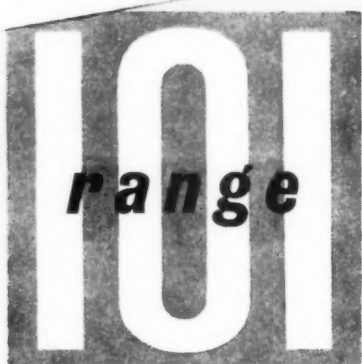
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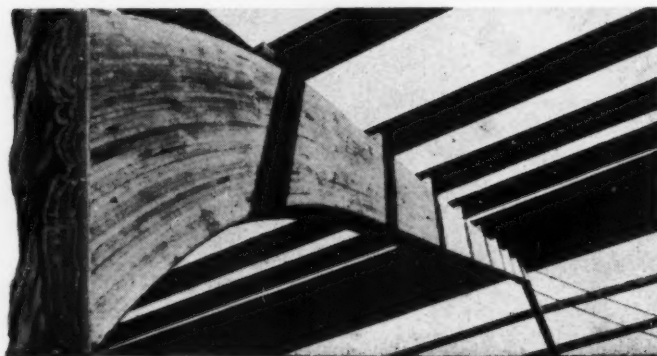


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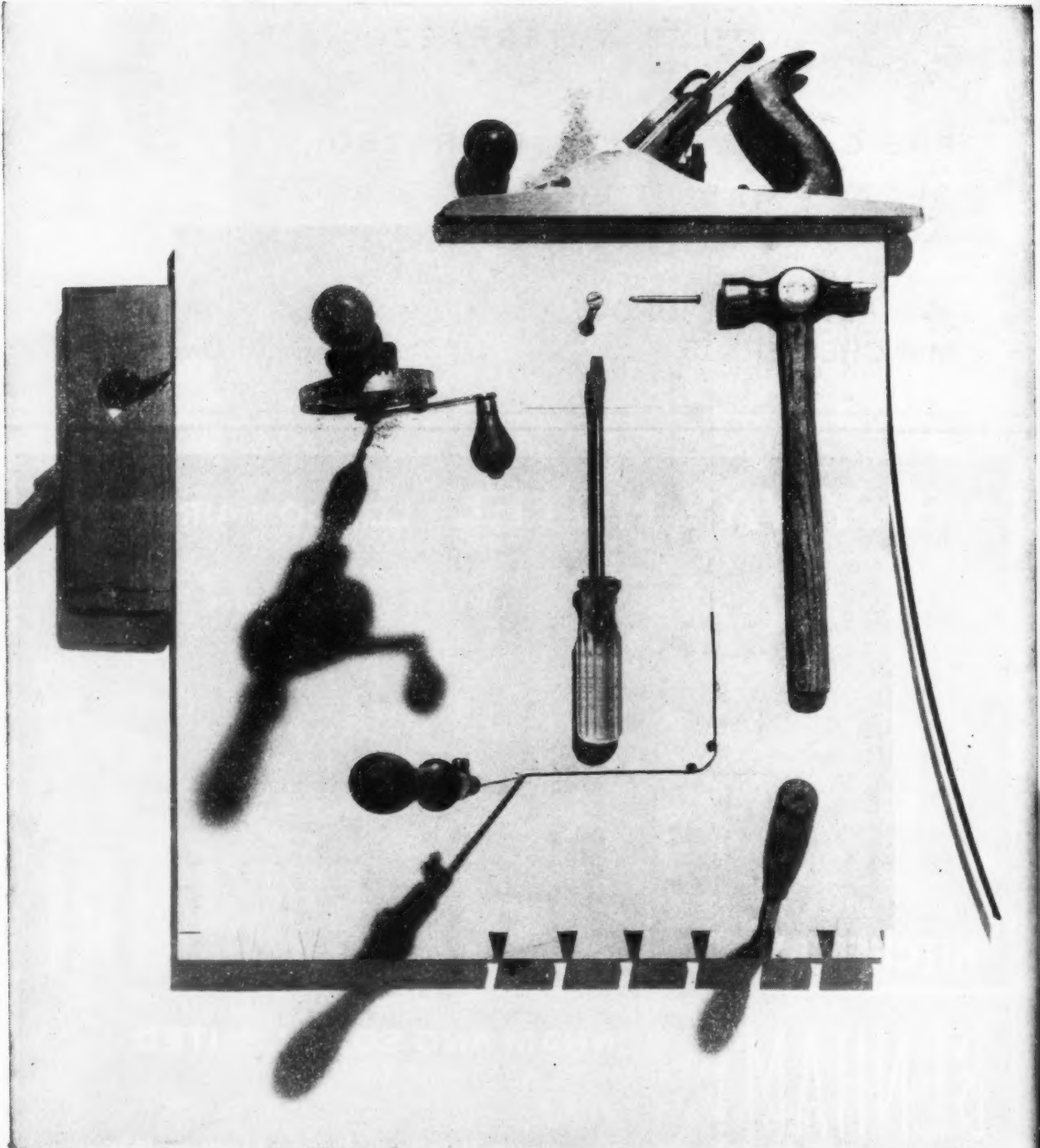
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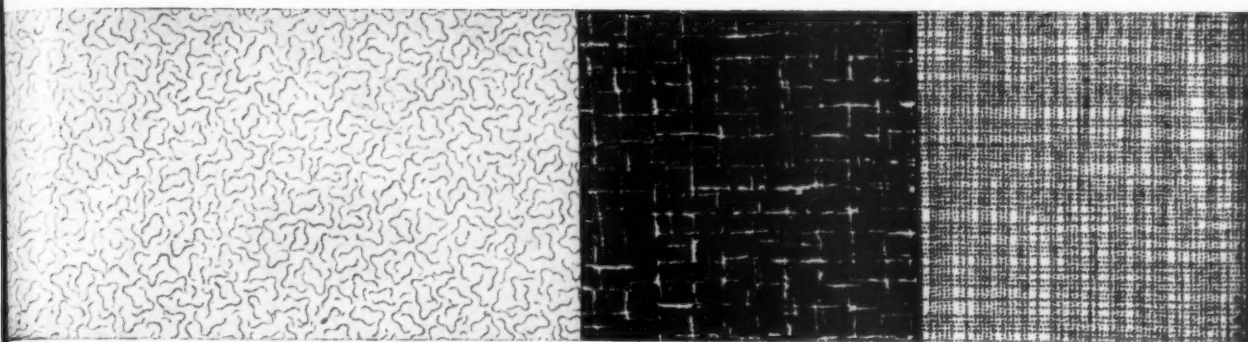
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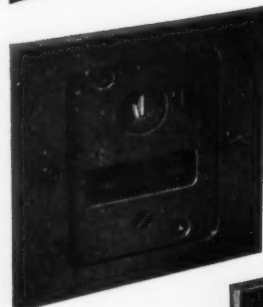
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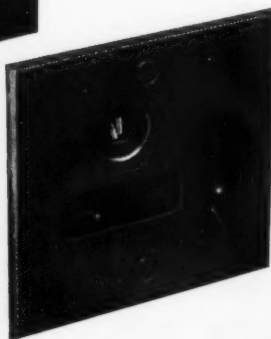
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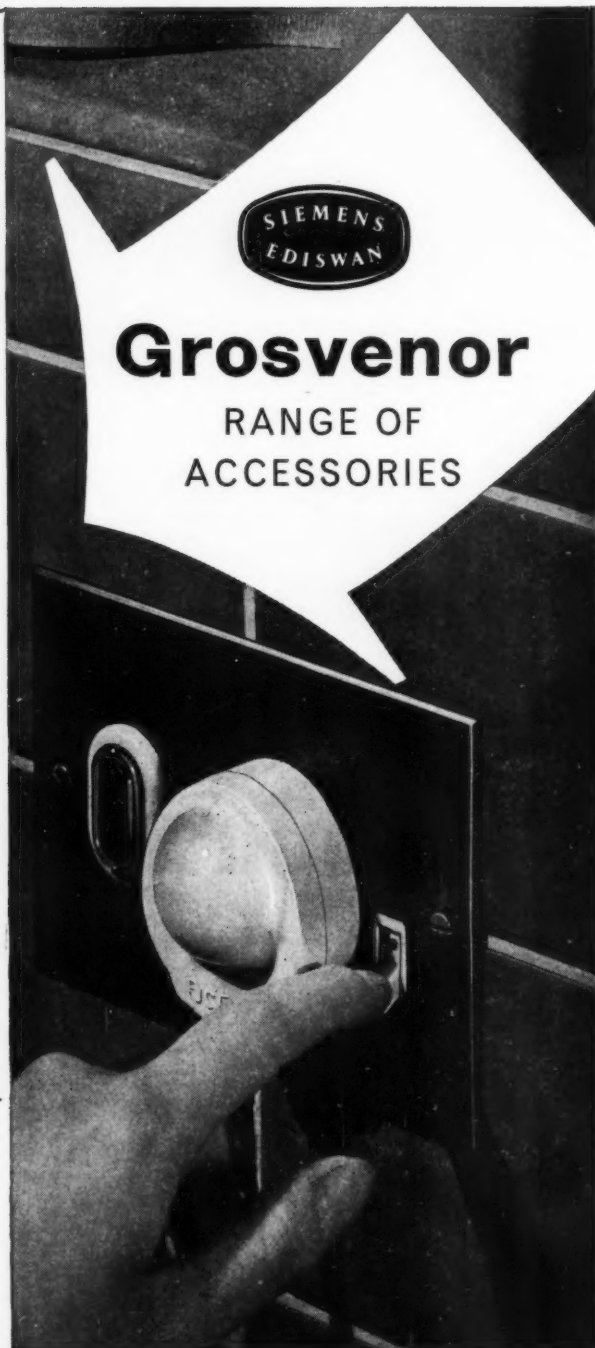
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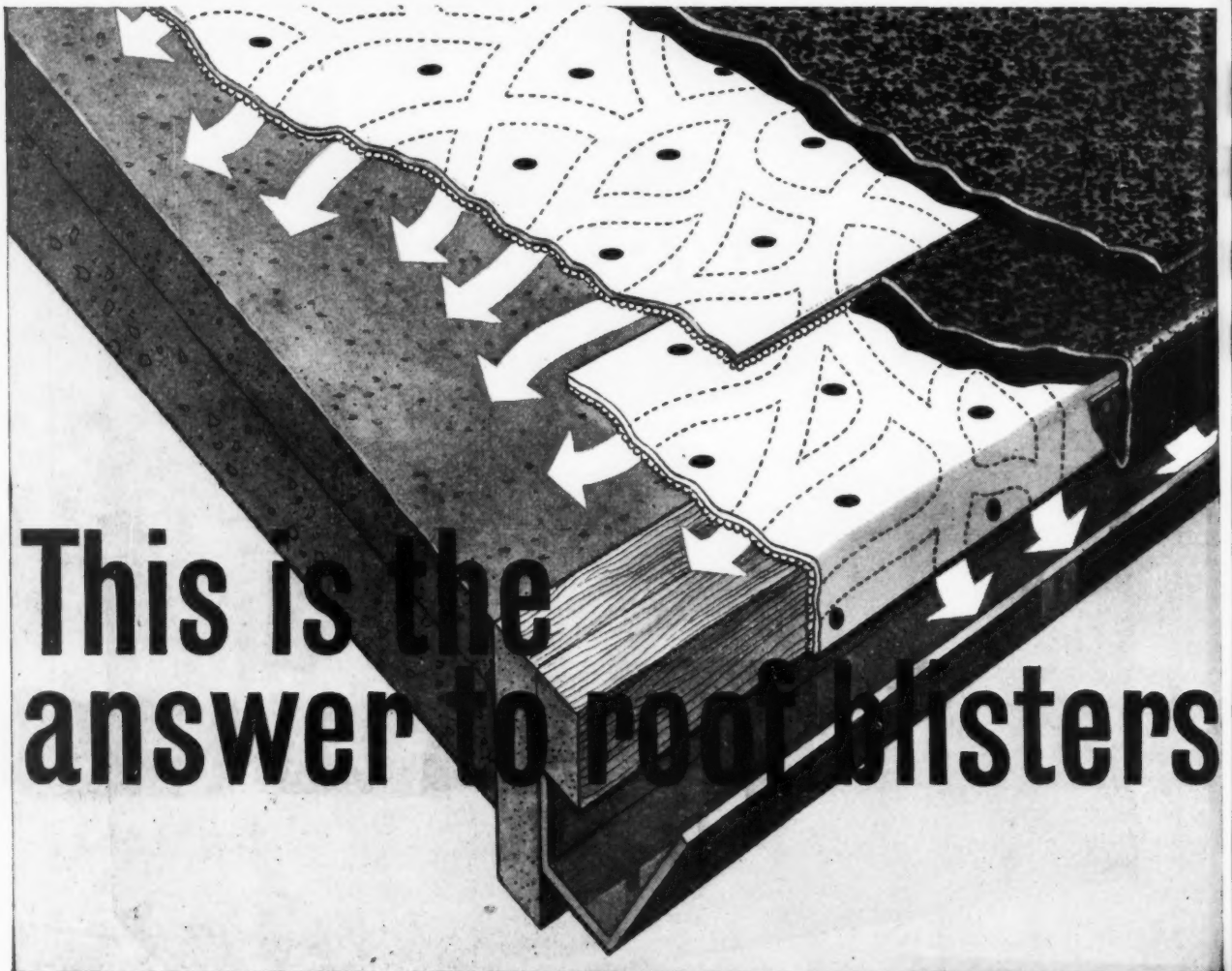
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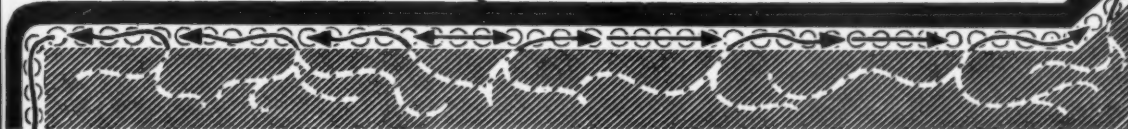
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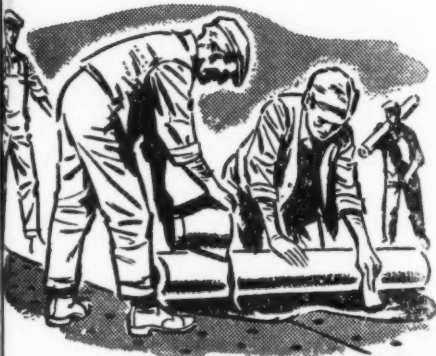
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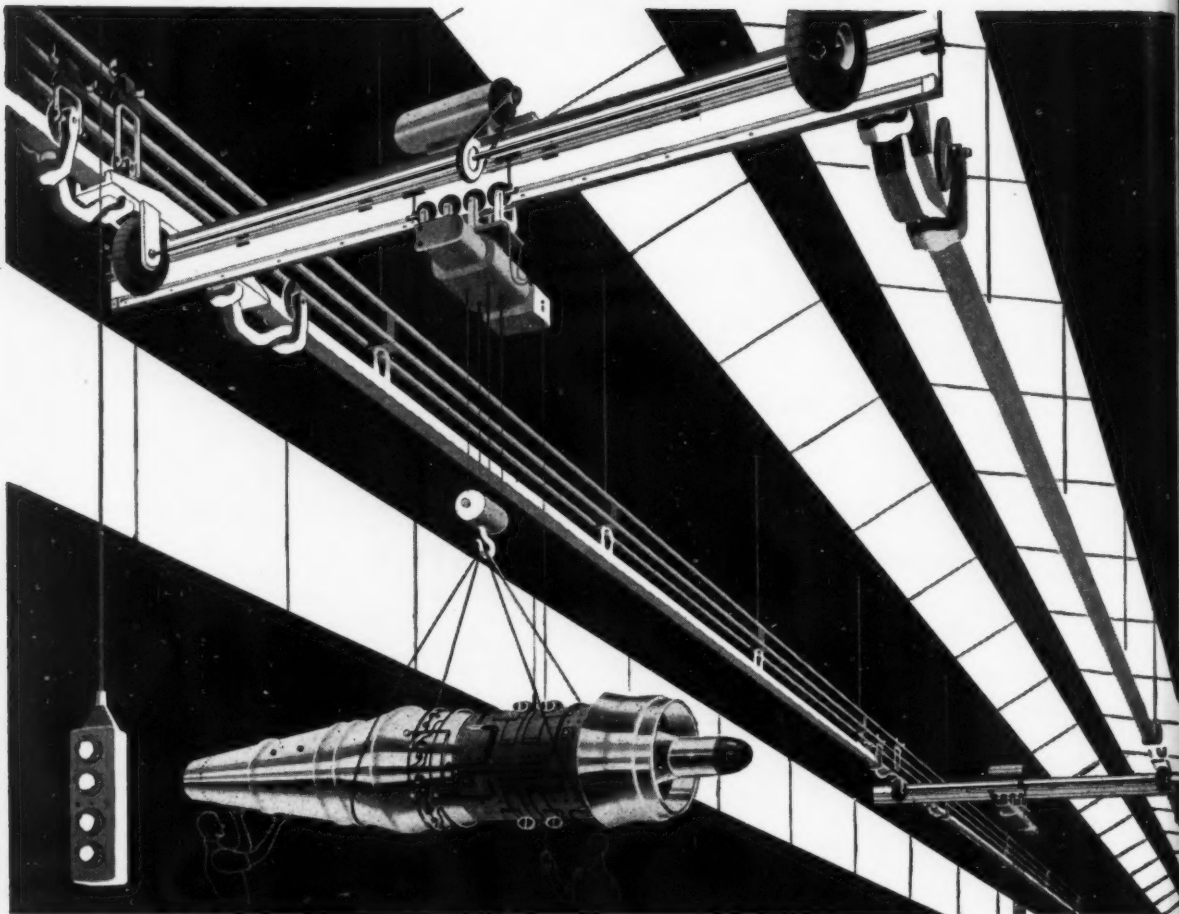
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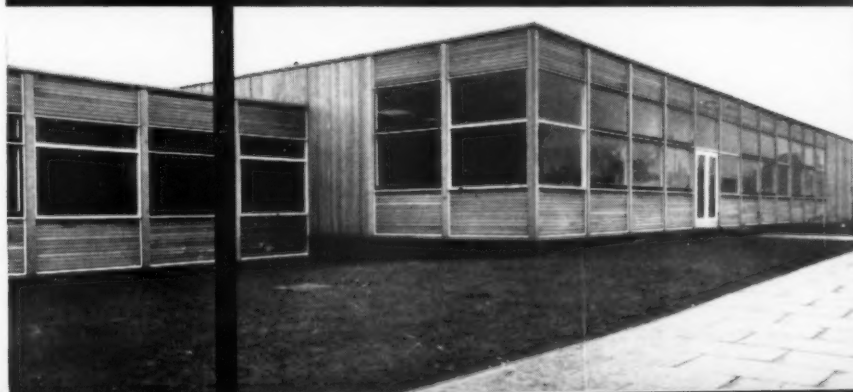
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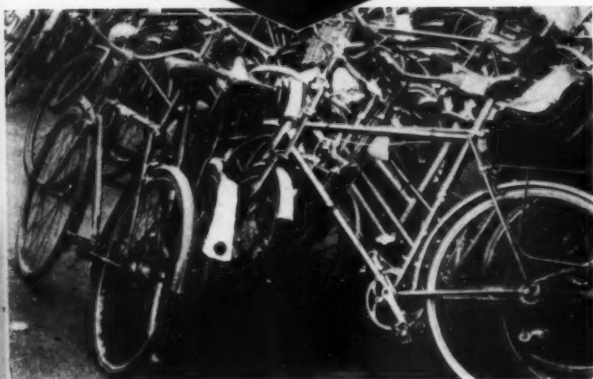
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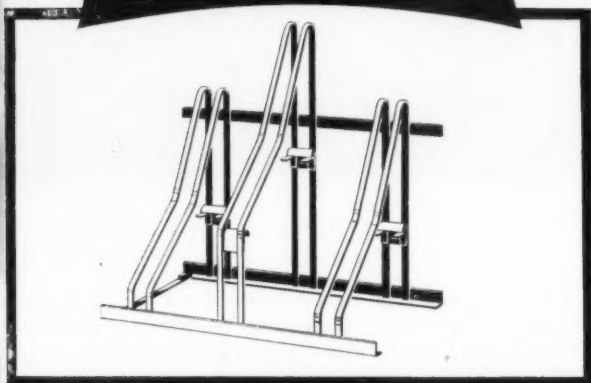
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The Architects' Journal

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BRITISH ARCHITECTS' CONFERENCE, MANCHESTER

The theme for this year's Conference is "Rebuilding our Cities." This week's Journal explores various aspects of the problem using the home of the Conference, Manchester, and the County of Lancashire, as the basis for study. The articles have been arranged and edited by Elisabeth Beazley, who also wrote the summary of current research into urban renewal and also the description of historical Manchester under the title: The Big City.

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Acknowledgements for photographs—Airviews, Manchester Airport: pages 905, 906, 907, 908, 911, 917 (bottom). Manchester Evening News: pages 910, 912 (left and right), 917 (bottom). Manchester Local History Library: page 912 (centre). Manchester Ship Canal Company: page 913. Ian Nairn: pages 892-897. J. T. Sheard: pages 909, 919.



LANCASHIRE PRELUDE by Ian Nairn

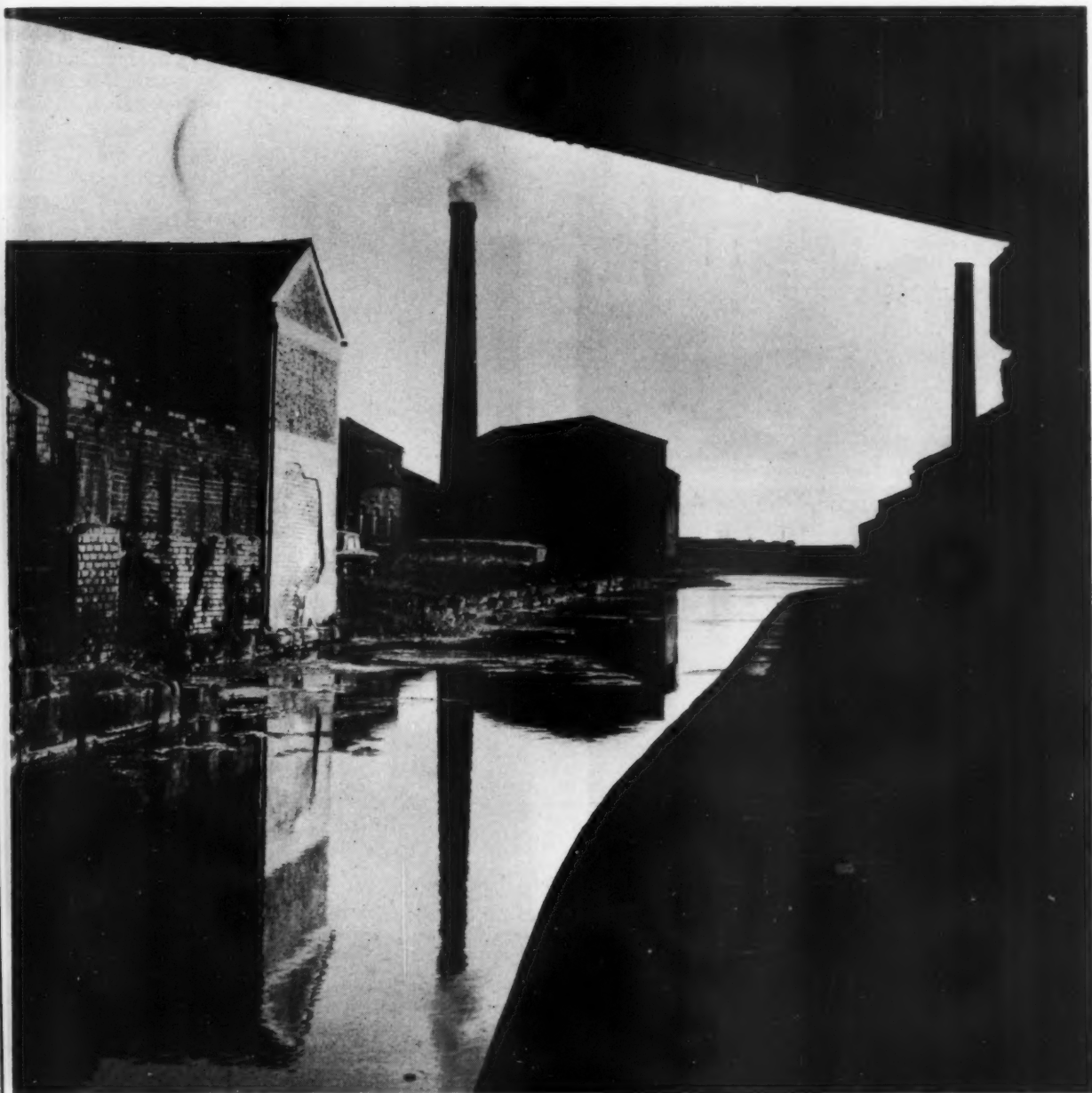


A long perspective of brick, clean front doors, polished door knockers, painted reveals. At the end a Paley and Austin church, a true nineteenth-century cathedral. All around, sooty sunlight, broad humour, heavy industry. This is south Lancashire—actually, near St. Saviour's, Bolton. It is not pretty, and it is not trying to be, but it *is* alive. Some of its particular qualities and patterns are suggested in the following article.

The Conference is on Urban Renewal and it is firmly based in Manchester, but I'm making no bones about asking you to look a bit further afield in Lancashire. If you like, all south Lancashire is one town, and a town from which almost every visitor recoils—houses, a field, a coal tip, houses, a cooling tower, two 275 kV. lines, houses, fish and chip shops, pubs like seaside hotels, decaying eighteenth-century lodges, houses: not many trees, and no gentility at all.

The recoil is understandable but wrong. There are industrial parts of Britain for which nothing at all can be said—Cannock Chase is my nomination for the booby prize—

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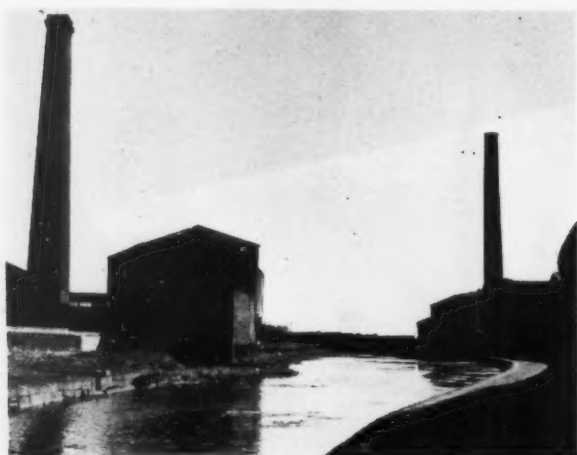
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based asking you like, which al tip, ish and teenth-entility but that is not true here. There is a pattern, though one we are rapidly eroding because we do not recognise it, and there is without any doubt a compelling quality of urban life. It may not be the sort you like to live with, just as you might not want to go to Blackpool every year for a holiday, but that does not make it invalid. In my father's house there are many mansions, and so there should be in Britain too.

South Lancs. is industrial countryside, like parts of Belgium and northern France, a pattern where industry and housing are always visible but where, also, the fields sweep up to the pithead, where two grimy but distinct little

towns may be separated by a mile of incredibly dark, strong countryside, all wind breaks and cinder path, where cooling towers, pylons, winding gear and canals are continually playing bizarre, exciting variations in the landscape. It is built up of recurrent complete contrasts, as taut as the molecular structure of a huge crystal—and the one thing that is essential if it is not to disintegrate is complete separation of categories. Town must stay town, and stop abruptly; fields must run right up to the industrial plant. Sharp transitions are essential, over-all blurring is disastrous.

The haunting traditional pattern of industrial landscape can be enjoyed at its richest beside the **Lancashire canals**.



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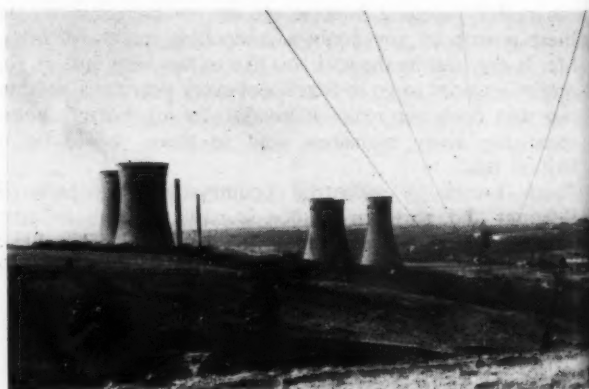
flows to the horizon. Everything in the view is dark and hard, rather like having a whole environment made up by Butterfield. It is not in the least like the Home Counties, but it is a worthwhile pattern in its own right. 5, the edge of a built-up area: **derelict land** and pasture hard up



1-3 were taken at Radcliffe, between Manchester and Bolton, 1 and 2 within a few yards of one another, 3 simply being the same view looking the other way. In a few yards, up- and down-sun, is a complete range of spatial and emotional effects: any canal will give them. 4, at Little

against the bricky mill and terraces: Backford Bridge, near Bury. Keep the division sharp and the astringent vigour will multiply, with each new industrial building giving an extra dimension of shock.

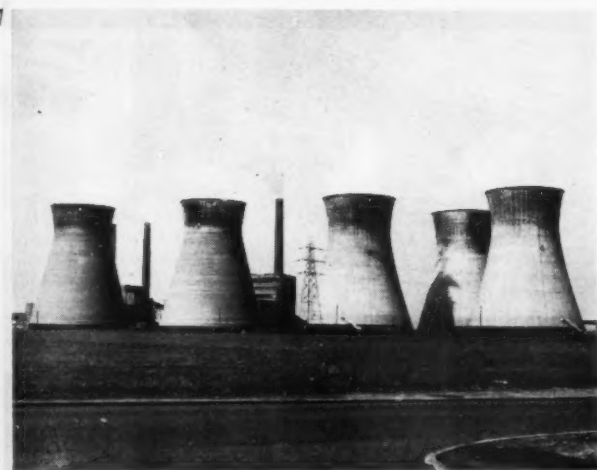
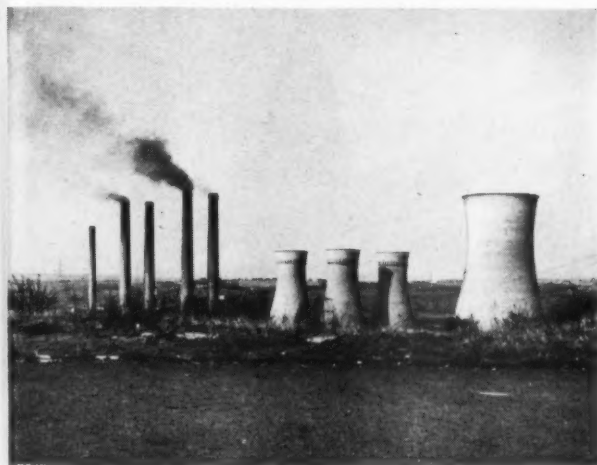
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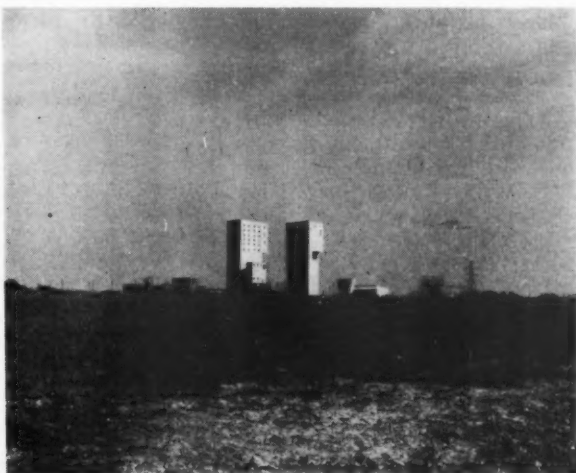
So far, this must sound a little like a plea for the nineteenth century. But in fact some of the most splendid of the industrial contrasts are post-war—if only one could say the same of the housing! South Lancashire is the spiritual home of **cooling towers**: there is always a set in the view,



sheer above flat hedgeless fields, **6**, or backed by the foothills of the Pennines, **7**, at Kearsley. A different view of the same power station, **8**, has creeping into the right-hand side the kind of thing which will kill off the landscape potentialities of the whole area unless it can be given another direction.

The most striking of all the new buildings is going to be the new **Parkside Colliery** at Newton-le-Willows, **10-11**,

10



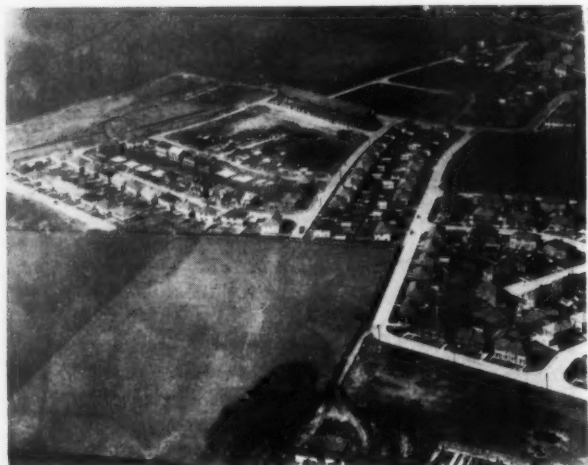
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where the simple apposition of 90 deg. of two similar concrete towers has created a classic skyline by the simplest of means. It is an object lesson in the art of not fussing too much which many British architects badly need.



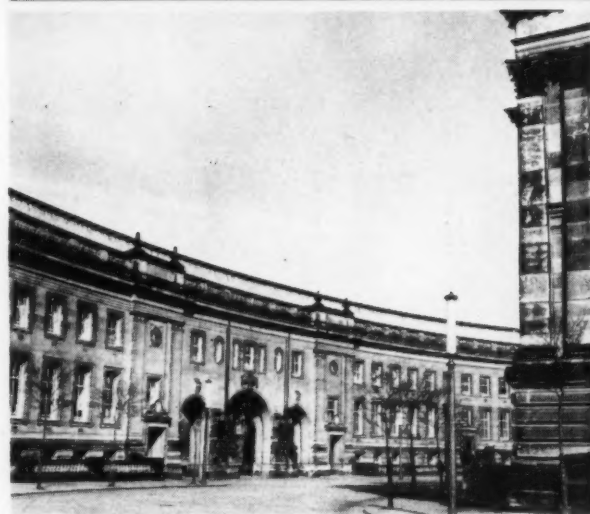
Council and speculative housing in Lancashire, as in the industrial North generally, is pretty fearful. It takes two main forms, understandable yet disastrous. The simplest thing is **peripheral extension, 12**, nibbling at the narrow



12

bands of countryside between one town and the next which are the basis on which this whole intricate pattern of Industry and Nature is built up. There may be only three or four fields, but they are vital, and replacement by the same amount of playing fields and public open space is no substitute for the intense sense of Here and There that comes when you step out of a long terrace of industrial houses straight into pasture or a cornfield. The other thing that is breaking up the pattern is ribbon development. Yet that, too, is natural enough: most of the ribbons were begun before the war, and what is going on is just infilling. In other circumstances it might be acceptable, but not here: industrial landscape demands a totally different scale and pattern from normal countryside. I think the only solution is nucleation, forming groups of fifty or a hundred houses, big enough to support a few shops and a pub, either attached to older hamlets or out by themselves on new sites. There is no question of urbanising rural views, for the whole view is urbanised already. The process would go on as a series of splitting-off of splinters from the bigger centres and could really continue over most of S.W. Lancashire.

There is plenty more to see in S. Lancs besides this exhilarating tension between cooling towers and green fields. The little towns are surprisingly urban, and most of the bigger ones have splendidly civic civic centres. For



dignified grandiloquence, the **municipal buildings at Bolton** would be hard to beat, **13** and **14**. The towered part is by William Hill, 1873—he did the same thing later at Portsmouth; as it was really Brodric's Leeds Town Hall slightly altered, Mr. Hill did quite well out of someone else's design. The curved block is by Bradshaw Gass and Hope and was opened not in 1900, as it looks, but in 1939, and no less impressive for that. Rochdale has a Town Hall by Crossland (of Holloway College fame) with a steep hill behind it which is potentially a magnificent site. And the

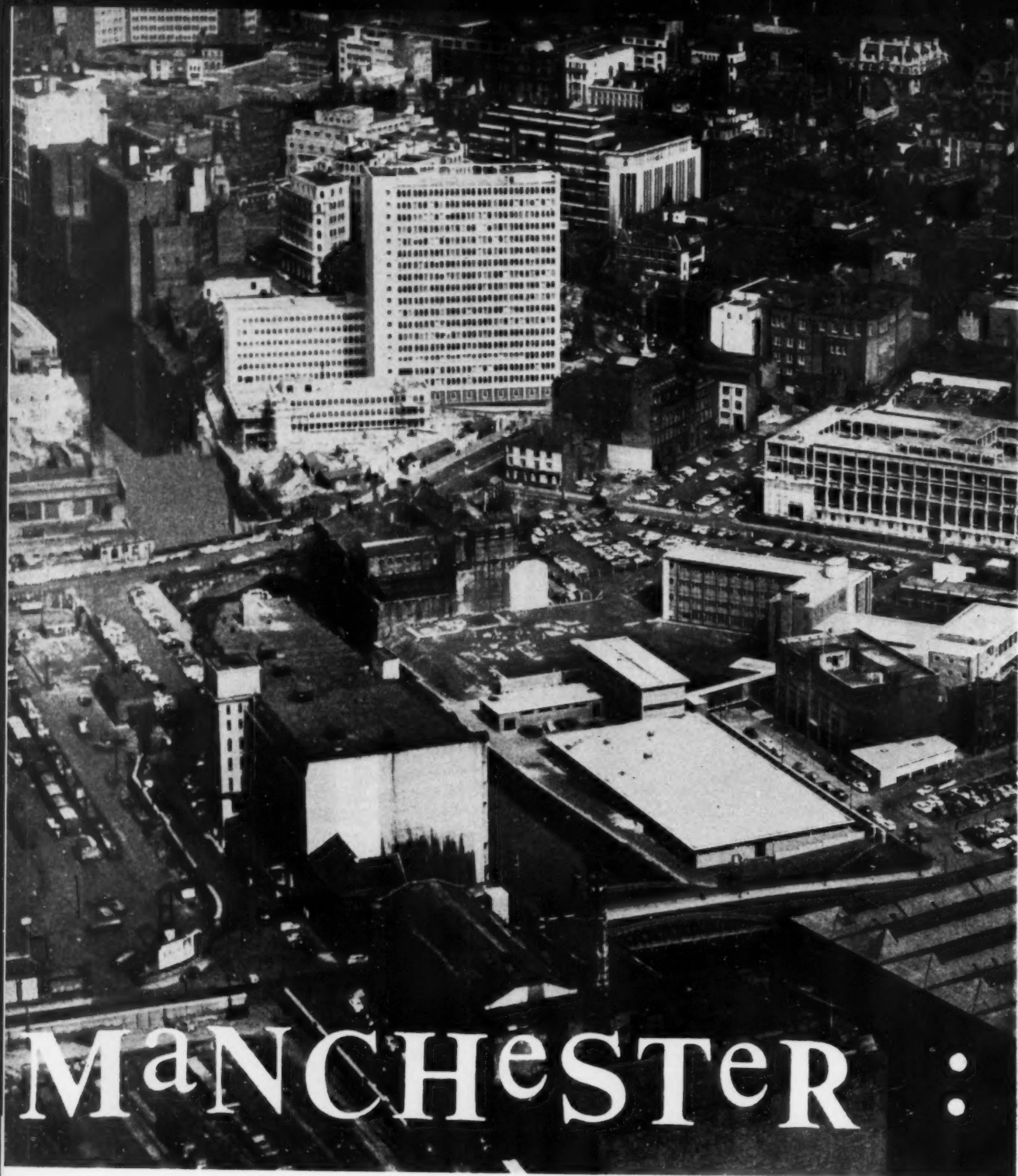
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elegance of 15, one of the most urbane civic squares in the country, is actually at Preston.



The life that goes on in the towns is worth looking at as well. There is a wonderful quality of pithy earthy realism, contempt for the pompous and self-inflated, contempt also for the falsely sentimental. In fact, given a little sunshine, the atmosphere of a market place of a town like Leigh is more like Flanders than anywhere else in Britain.

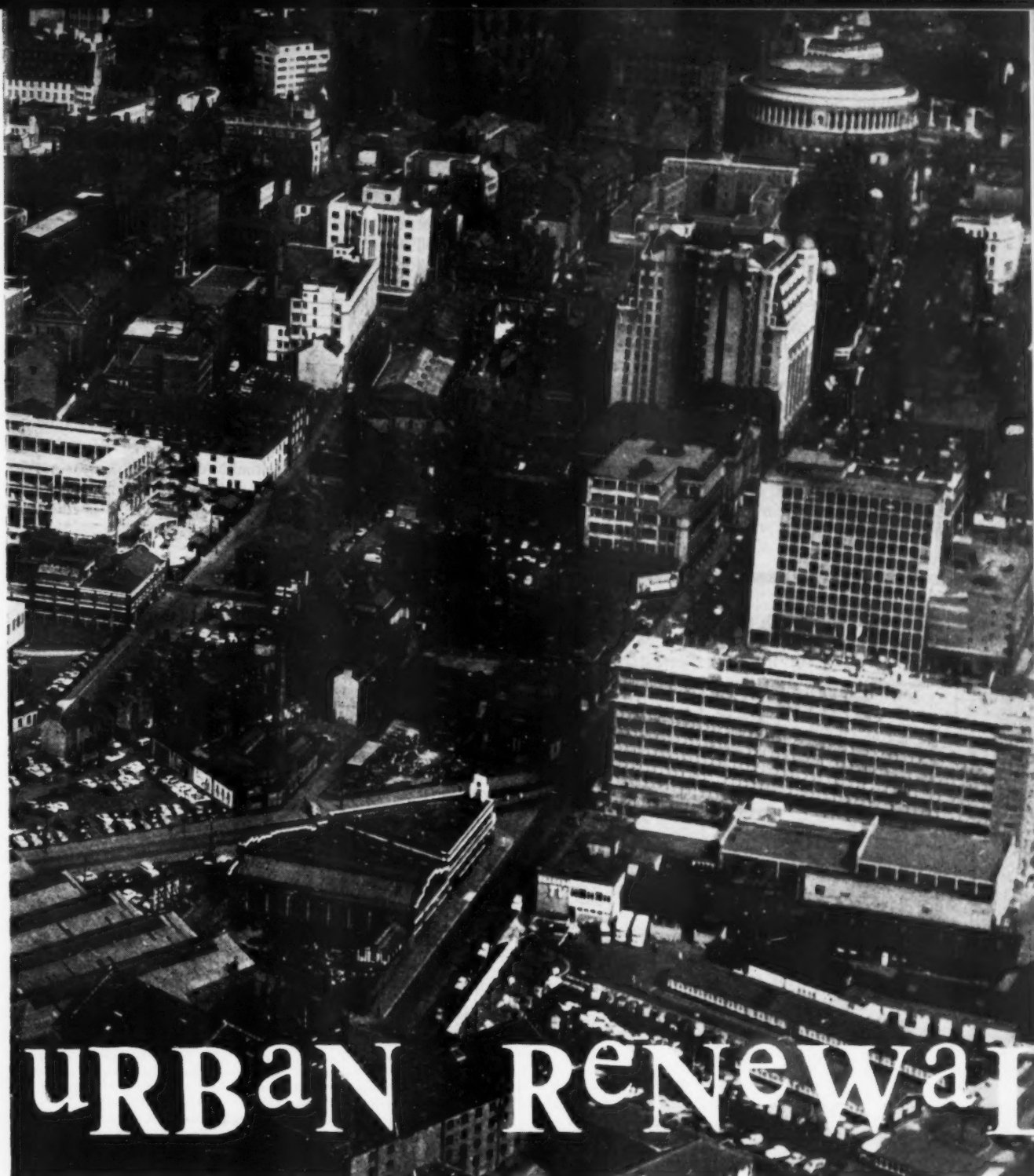


MANCHESTER :

The RIBA Conference theme—*Urban renewal: rebuilding our cities*—raises what is probably the most important domestic problem to be tackled in the country at the present moment. It is not only an extremely interesting topic for the conference chamber, but is a problem of vital importance to everyone, now. For, if we fail to solve it, what are the alternatives? We have not the land to spare simply to leave the worn-out, derelict urban areas and move on elsewhere, as our ancestors commonly did. Are we to exist like squatters in the remnants of sacked cities, while the stranglehold of the motor vehicle locks tighter, and scattered piecemeal development springs up haphazardly on the sites that become vacant in the out-

of-date grid pattern of nineteenth-century streets? A gradual seize-up of the entire machinery of city life, coupled with a speeding up of the insidious sprawl that still creeps across the country, seems the inevitable outcome of any *laissez-faire* attitude. The situation presents a challenge, not only to planners, architects and surveyors, but to administrators, economists, and the commercial world. We are thankful that the RIBA has given a lead by providing a platform for debate.

The scope of the conference is so wide that only a few outstanding aspects could be touched on in this issue of the AJ. A most important topic, new towns within cities, has had to be entirely ignored, but it is much hoped that it



URBAN RENEWAL

will be discussed in Manchester this week. Those who have been asked to contribute articles, have knowledge of the local problem within its regional and national setting. City centres cannot be considered outside this context. Manchester, the important capital of a vast industrial conurbation, presents questions that must be common to those of other cities; what is written in the pages that follow is a reflection of the problem, in a greater or lesser degree, which confronts all our cities.

In the first article, Myles Wright and Paul Brenikov examine the administrative framework, and some of the hidden forces that vitally affect urban renewal. Until machinery exists that can tackle the problem on a regional

basis, rather than within the ludicrous partitions that are created by borough and other boundaries, there seems to be little hope of a sane solution. The Regional Development Boards proposed here, provide much food for thought.

By lucid analysis of the reasons behind the siting of much of the region's post-war development, Derek Senior has underlined not only the absurdity of much of the statistical information, but also the extraordinary complications, financial and physical, created by many of the existing boundaries. What he has to tell of slum clearance may find an echo in other regions, but it will also make many realize how lucky they are not to have this dead

weight dragging on all redevelopment plans. Transport is a priority problem that must be tackled regionally before any detailed solution for a central area can be contemplated. This is one of those things we constantly say and write, but apparently do not yet really believe. G. F. Chadwick's general analysis of the problem, and particularly that of communications with the city centre, will find echoes elsewhere, as will his observations on car parking. The staggering figures given for parking requirements in the centre will come as no surprise to the readers of MOTROPOLIS, but they underline again the necessity for such calculations wherever redevelopment is contemplated. Generally speaking, research so far seems hopelessly inadequate. Like Derek Senior, D. F. Medhurst who writes on central areas in his article THE HUB, stresses the absolute necessity for comprehensive redevelopment, and the folly of the present piecemeal efforts. Cheeringly he tells us that it is not too late. Another point, of almost universal application in city centres, is necessity for the segregation of pedestrian and vehicular traffic. Are cities for men or machines?

TOWARDS

URBAN

RENEWAL

by Myles Wright
and Paul Brenikov

Urban renewal is an excellent choice of subject for this year's RIBA Conference. Large portions of the big British cities are worn out and need renewal very badly, but as this has been so for a long time it is other and newer events that make the theme opportune. The Government has concentrated housing subsidies upon slum clearance projects; the shortage of building sites in and near big cities has increased interest in redevelopment projects; and private enterprise has shown that it has plenty of money with which to rebuild if a scheme looks like paying its way. Moreover, architects rightly believe that they should take a major part in an extended urban redevelopment and are justly distressed that, when need and opportunity are both so great, so little that is worth while is

This number of the AJ therefore underlines four points:

1. The need to think regionally and to overhaul the administrative machinery to make this possible.
2. The need to develop land comprehensively in reasonably sized areas, not in the pathetic *ad hoc* manner that is now prevalent.
3. The need to consider the transport system of a region with all its implications, including the question of whether the motor vehicle has put paid to the idea that cities should continue to develop their radial systems of communication, and the absolute necessity of segregating the pedestrian and the motor vehicle.
4. The need for research into almost all aspects of the problem of urban renewal, *now*.

None of these ideas is new. We only hope to have re-focused attention upon them. It is very much hoped that they will be discussed this week in Manchester, both in and out of the conference hall. Pressure of time on the official sessions sometimes makes exchange of ideas easier over a drink in a pub or over a meal than in the conference hall itself. It matters little where we confer, provided ideas circulate.

Have we the right administrative machinery to tackle Urban Renewal? The authors, who have done considerable research into the problem, and who, as planners, have practical experience of the difficulties the present machinery engenders, doubt if we can work effectively until it is administratively possible to do so on a regional basis. This is obviously a matter of prime importance; it is useless to let the old machinery grind to a standstill; the cogs are already binding.

Myles Wright, architect, planner, and writer, has been Lever Professor of Civic Design at Liverpool University since 1954. He left private practice and assistant editorship of the ARCHITECTS' JOURNAL in 1943 to join the Research Division of the Ministry of Town and Country Planning. After the war he assisted Sir William Holford and Dr. Holden on the City of London Plan, and as partner to Sir William Holford he has worked on planning proposals for Cambridge and Corby. He was a member of the British Caribbean Federal Capital Commission in '56.

Paul Brenikov is now making a special study of the planning problems of British conurbations. Originally a geographer, he trained as a planner at Liverpool University where he returned as a lecturer in the department of Civic Design, after working with the Lancashire County Planning Department.

actually being done.

All these things will probably be said at the Conference, and as the RIBA is an influential body some of them will be reported in the national newspapers and may do some good. Much more good will be done if Conference discussions show architects to have a fair working knowledge of the wider forces and aims that govern urban renewal, and that it is not lack of architectural skill but lack of the necessary degree of comprehensiveness in planning and execution that blocks the way to big improvements in and near the big cities. It is in fact an administrative and not a technical failure.

This article tries to summarize the main forces that now determine the location and form of building development

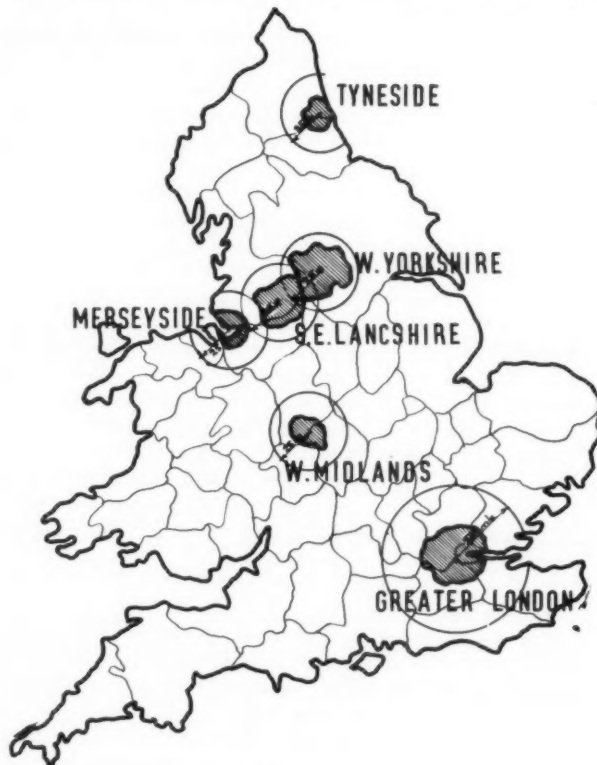
and redevelopment in the big provincial conurbations. London is not considered. London is unique and its problems have been well publicized. The provincial conurbations are less well known, and a Conference at Manchester is a suitable place at which to consider some of the needs and difficulties of the great northern cities. The contention of this article is that the major economic and political forces now at work are very relevant for the individual architect. They explain the difference between what he would like to do and what in practice he will be able to do. It is held that major development problems are inter-related—for example, urban renewal and overspill; that building of high quality is barred by lack of comprehensiveness and that unless this fault can be remedied regionally (with the help of architects) there is little hope of its being remedied locally—at the level where the architect would normally hope to come in.

Outside London the main concentrations of population and building activity are in and near the five conurbations, which are shown on the accompanying map. So far as future development and redevelopment are concerned the five urbanized regions are of key importance, for a large

whole) cleaner and pleasanter regions continues to grow. Unless we are prepared to accept a continued decline of the northern conurbations, special and more imaginative and vigorous efforts will have to be made in the northern cities, including the promotion of urban renewal on a grand scale.

The Conference might profitably give some consideration to ways by which special help could be given to the northern cities: simply, effectively and within a reasonably short period. One of the most promising means might be the establishment of Development Boards—one for each conurbation—under a full-time chairman and without overt connection with local authorities. The Board's responsibility would be to plan urban renewal and overspill and other major developments for the whole urban region, and it should have funds at its disposal with which to give substantial aid to particular projects.

A proposal of this kind would no doubt meet great opposition, locally and perhaps in ministries. But it has very strong arguments in its favour. The Board could make proposals on behalf of the whole urban region and its fringe land. This would be a great advance. Most big



The five English conurbations.

part of new building will take place in them. Their attractive power has already resulted in a shortage of building land and conflicts over development proposals are frequent and fierce.

There is however a big difference in the attractive power and therefore prosperity of the conurbations: between the favoured areas—London and the west Midlands—and the less favoured remainder. This division has been recognized ever since the 1929-33 depression and since the war a great deal has been said about redressing the balance, and a lot has been done in the provision of extra employment in the North. Nevertheless the favoured regions continue to attract the major share of investment and the prestige of the drier and sunnier and (on the



The south-east Lancashire conurbation.

planning problems in the conurbations are regional (notably the double problem of urban renewal and overspill) but no effective means of regional planning exists. This grave defect is having more and more lamentable results as motor cars multiply. As things are now, regional problems are regarded by each local planning authority almost entirely in the light of that authority's narrower interests, fears and ambitions. The central cities (the county boroughs) are not very keen to export population or employment. The outer districts (the counties) are willing to accept population that can pay its way but are naturally not anxious to accept rateable liabilities. The inner cities want to expand their boundaries, the counties resist; and the fact that city local authorities

have often a Labour majority and the counties a Conservative one, may add the bitterness of party politics to a struggle which, just at present, is bound to be specially intense. Architects may not be generally aware that a Local Government Commission is now reviewing the powers, boundaries and efficiency of the local government units of England, with a view to proposing desirable changes. It follows that this year and next regional problems will receive attention from major local authorities to the extent, and only to the extent, that they will provide arguments to lay before the Commission. Improvements on the regional scale that have no bearing on the interests of particular local authorities will continue to be disregarded.

Architects may wonder whether there is a direct connection between this city-county rivalry and urban renewal, and what useful contribution their Conference can make. It is argued here that general urban renewal in the northern conurbations—for which we all hope—cannot be planned on any rational basis unless there is an effective (not necessarily detailed) regional plan that will lay down the framework of development and preservation, new settlements and employment centres and green belts, for 15 or 20 miles around the central cities. Second, it is argued that the preparation of this plan for each urban region should be entrusted to a small non-political, non-local authority board. In our view, little money will become available for renewal of Liverpool or Manchester if there is a likelihood, as cars multiply and demand builds up, that large chunks of Cheshire and Lancashire will be given over to speculative housing at 4, 6 or 10 to the acre. Architects approach these great background problems without bias and with considerable influence at their command through a reinvigorated Institute. Their support for regional development boards independent of local authority rivalries may take us all nearer a worth-while urban renewal.

It is not possible in this article, and it probably will not be possible at the Conference, to consider the particular circumstances and needs of the various big cities. But it is possible to review briefly the four main scenes of new building that will take place in and near the provincial conurbations. These scenes or classes may be conveniently grouped under the headings of the fringe, the slums, the down-at-heel residential districts and the central area.

The Urban Fringe

The 10- to 20-mile belt around the built-up parts of a conurbation is the most obvious area of stress and land use dispute. Large-scale movements—planned and unplanned—into this belt have been taking place for a long time. Pressure of demand for land has recently become much greater and cannot for long be resisted. At present all the signs are that total demand is much underestimated in the receiving districts and land is being made available here and there, in bits and pieces that are mostly very small. Continued over 10 or 20 years the result of this process may be much the same as though there had been no public guidance of land use. Moreover this process is likely to result in architects making no contribution (save by the design of some individual buildings) to a class of development which they are specially fitted to guide both in the broad and in detail.

If the country continues to prosper it is probable that a third, or even half, of those now living in the inner districts of conurbations will want to move out. It follows that all land in the fringe is very precious. It should be fully used. Architects should exert their influence to ensure

that fringe land is disposed of for development in large units—of 100 and 200 acres and upwards—for which a detailed design has been prepared, and one which involves much closer spacing of dwellings than has hitherto been customary. If it is necessary, to ensure that land comes forward for development in suitable parcels, architects should give their support to the compulsory purchase of large portions of fringe land—preferably by the Regional Development Boards.

The Slums

Slum clearance is a clearout problem, its size is known within narrow limits and the agency to do the work is tried and proven. Only the local authority can clear statutory slums, and nearly all big cities have well-trying technical teams available. Slow progress and confusion of objectives (still far too common) arise almost wholly from one tightly tangled social-political-financial question: where do we put the overspill? We trust that there are now few architects who continue to believe that any large reduction of overspill can be achieved merely by building higher.

The Inner Suburbs

Despite their importance there is little detailed knowledge about the large areas of slightly down-at-heel inner suburbs that exist in every conurbation. In form the dwellings range from terrace houses with 6-ft. front gardens to stately urban mansions in an acre or two of grounds. Few up-and-coming people care to stay in such an environment, so the process of decline tends to accelerate, and backyard industries and problem families to increase. Local authority staffs will be fully occupied with statutory slums for some years to come, so urban renewal in the down-at-heel districts must be the job of the private developer and his architect, or no one's job. It is likely to be no one's job unless two things happen. The first is so severe a shortage of unbuilt-on land outside the city that it will create a sizeable demand for fairly central dwellings with garages but only "out-door room" gardens. This might happen in London and Birmingham and perhaps Manchester. The second requirement is a loan, or cleared site grant, that would encourage developers to undertake the considerable risks of the first renewal schemes.

Central Areas

Lastly we have the central areas themselves, the financially most valuable parts of the conurbations. Here urban renewal is certainly taking place, continuously and almost without subsidies—but with little regard for the motor vehicle. As traffic congestion becomes worse the convenience and therefore value of a central position declines. The technical solutions are known. In fragments here and there about the country they have all been applied. Except in new towns and in small areas of badly blitzed cities they have not been applied resolutely and steadily. The city authorities, especially in northern cities, are caught between two fears: that if they do not renew the centre offices and shops will move out, and that if they do they may not get a return on a great expenditure.

The Conference may be able to do something towards removing the second fear. A plan for the radical improvement of a central area should be so arranged that execution begins in less costly sites, and a Government that was genuinely anxious to redress the regional unbalance might well consider grants in aid of renewing the economic headquarters of the less favoured regions. (It can be argued that the Local Employment Act, 1960, already

gives power for such grants to be made by the Board of Trade.) They might also reconsider those clauses of the 1959 Act which appear to penalize good central area redevelopment by raising the market value of land that will be needed in the later stages of a comprehensive scheme.

Such, in our view, is the background to urban renewal in big cities of the North, the major forces that govern development and the four main divisions of new building and rebuilding.

Some architects may feel, and with justice, that they are not professionally concerned with these wider problems: that their work begins when the telephone rings and a client offers them a job. This view is only correct if architects are to confine their professional work solely to the

design of individual buildings. But it would be a great pity if the profession is not increasingly (and at length always) asked to take part in comprehensive development. Indeed, the theme of this year's Conference—urban renewal—suggests that the Institute takes this view and hopes that its members will seek to take a greater share in the responsibilities of large-scale redevelopment and new building. Their help is certainly greatly needed. It can be effective help only if architects have a good working knowledge of the influences that determine the location and forms of development—and if they use their considerable influence to ensure that land is always developed in sizeable units and in accordance with a design properly prepared beforehand.

MAN- CHESTER REDEVELOP- MENT

SOME OF THE
FACTORS THAT
GOVERN ITS
PRESENT SITING

by Derek Senior

Derek Senior, who from 1937 to 1960 has been "reporter, leader writer, critic, dogs-body, and latterly Planning and Local Government Correspondent of *The Guardian*," now free-lance and is predominantly engaged in writing for the Civic Trust. He is the author of "A Guide to the Cambridge Plan" and rewriter of "A Preliminary Plan for Lancashire," "The City of Manchester Plan," and associated regional and advisory publications.

Few writers can know the problems of the region as well as Derek Senior, nor are they as well equipped to analyse them and put them across clearly. This article represents much research and background knowledge. Some of the facts and figures given are

depressing in the extreme. They heavily underline the need to think of the area as a region. Several of the points in the previous article take new force, when considered in the context of the details given here.

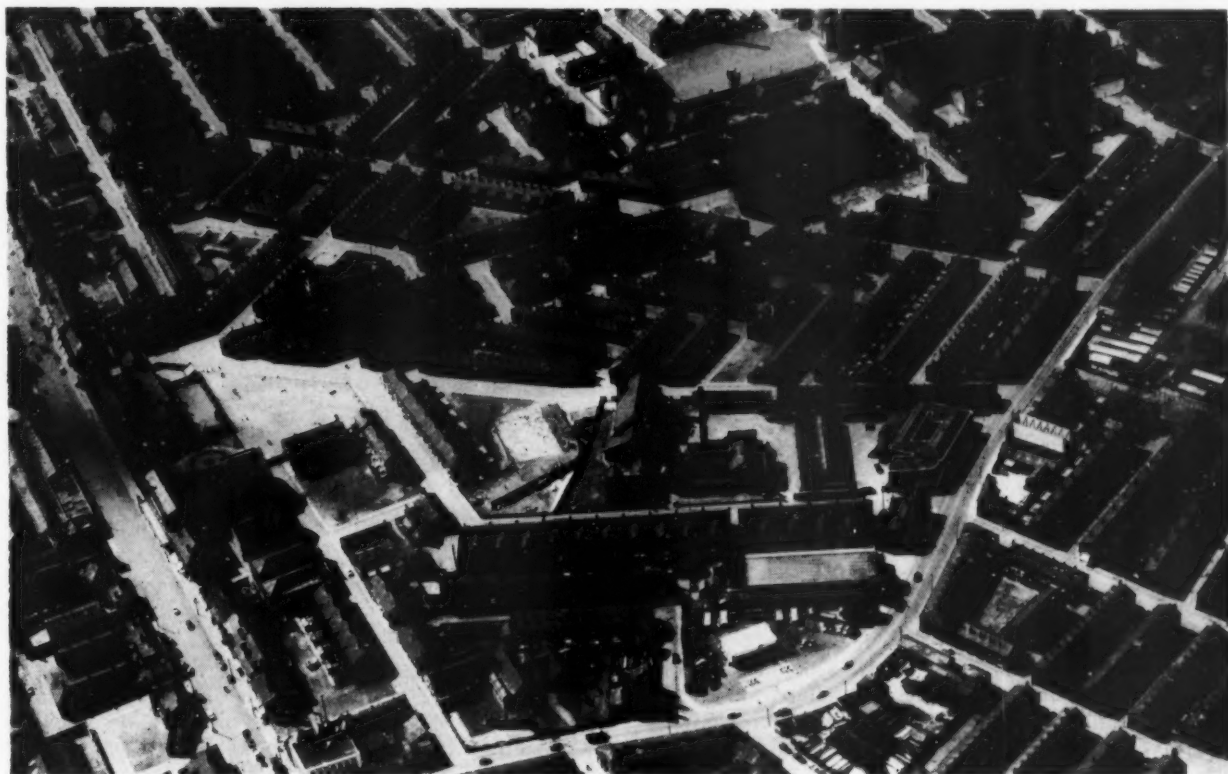
Forty years ago, as I remember it, the town of Manchester-Salford-Stretford was barely six miles across. Green belts from two to ten miles wide, sparsely sprinkled with mill villages, separated it from the ring of sizeable cotton, coal-mining and market towns lying five to fifteen miles away at every compass point except due south. Twenty years ago the built-up core of what was now a conurbation stretched twelve miles between the starfish points of its radial tram routes. It had engulfed the population centres of a score of urban districts and coalesced with the nearer of the surrounding towns to the north-east, east, and south-west. Since then, though the total population has been almost static, the route-free motor vehicle has filled

in the green wedges, leaving only pockets of peat, flood-land, moor and croft within the urban necklace and between its swelling beads, and has scattered dormitory settlement far and wide over the open country beyond. The conurbation has exploded into a metropolitan region, embracing over seventy local authorities.

It would, of course, have been a great deal better if this centrifugal post-war development had all been concentrated in industrially self-contained communities beyond an outer green belt: then redevelopment within the central core might gradually have withdrawn the tentacles of ribbon building from the interstitial spaces of the middle zone. But there were substantial physical difficulties in



The Manchester region.



Housing and industry : Bradford, Manchester.

the way of such a pattern, though the factors which determined the actual location of development were primarily administrative, political and financial rather than technical, social or economic.

From the north-west clockwise to the south-east the Manchester region is half encircled by the bleak, wet, steep-sided Anglezarke, Rossendale and Pennine moors, on which nobody would choose to live if he could get work elsewhere. To the west, south-west and south it is hemmed in by the instability of active coal-mines, peat mosses and brine-pumped salt beds. Sites capable of sustaining large-scale town development are few. Administratively, the region is grotesquely fragmented. It straddles the boundaries of three counties governed from distant centres. The county borough of Manchester itself is only a narrow section of the central core. Income-tax inspectors at their desks in Salford's tallest building set their watches by the clock on Manchester's town hall, barely a third of a mile away; but fitters living in Woodhouse Park, eight miles away, and working in Trafford Park, two miles away, are recorded as travelling out of Manchester to work in Stretford. Official statistics, in this administrative bedlam, are more than usually misleading.

The Ministry of Housing can tell you how many private houses have been built in any administrative area, but not where in that area they have been built. The broad picture, however, outside the county boroughs and the urban core, is that last year more private houses were completed in the 13 Cheshire county districts constituting the southern quadrant of the region than in the 40 Lancashire county districts to the west, north and east. In the last four years nearly 3,000 houses have been built by private enterprise in the Cheadle and Gatley Urban District alone—more

than half as many as the Manchester Corporation has managed to build on all its sites, internal and external, in the same period. Broadly speaking then, it may be taken that all the usable "white" land on the drier and more attractive Cheshire side of the region has been, or is being, filled up. On the municipal front the housing picture is clearer. Development has taken two forms: peripheral expansion of the individual towns, largely within their own boundaries, and overspill from Manchester and Salford. In a few cases the peripheral expansion has been technically overspill; in a few cases, too, the overspill has been technically town development; but in all cases, so far, both peripheral expansion and overspill have been essentially dormitory development of the region's middle zone. Since "overspill" is defined by reference to administrative boundaries, its meaning in this context is purely metaphysical.

The desperate post-war housing shortage found Manchester with some land to spare in Blackley, at its northern tip; with its 4,000-acre satellite town of Wythenshawe (an enlightened project in its day) still less than half completed; and with negotiations well advanced for an "out-county" estate at Middleton capable of housing over 4,000 families. In the mood of the moment—houses immediately, at all costs, wherever services were available—there was no possibility of pausing to consider whether these were ideal locations. Except in the unimaginative quality of their detailed layout and design, these schemes compare favourably enough with contemporary development elsewhere. They would be sufficiently justified if the respite they gave had resulted in the emergence of a good solution to the region's basic problem—the replacement of its slums.

The five air views on the next pages are a sequence, south from the centre, of Manchester housing patterns.

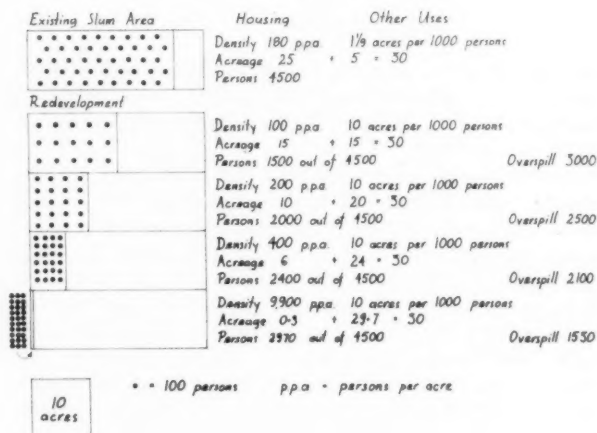


1 Hulme slums.

In this region, as in no other, the slum problem is overwhelmingly dominant. A quarter of a million Manchester people are still living in 60,000 houses that were declared incapable of being made fit for habitation twenty years ago. The worst 20,000 of these slums were all built before by-laws were invented, without foundations, at a minimum density of 45 two-storey houses to the acre; they are falling down at the rate of 700 a year. In twenty years' time, well over 20,000 more will have reached the same age. Most of the area within a couple of miles of Manchester's town hall is occupied by commerce, industry and railway yards. The 150,000 people who live in the Manchester part of this area share fewer than 60 acres of open space for all purposes—not much more than one-tenth of the statutory minimum allowance for school playing-fields alone. The Manchester City Council has been redeveloping residential districts in this area at a net density of 90 habitable rooms (just over 100 persons at the current occupancy rate) to the acre, starting where most of the houses have collapsed or been demolished. But it is now reaching the point where redevelopment must displace as many people as it rehous, even though its allowances for non-residential purposes are so minimal that secondary scholars have to travel six or eight miles to playing-fields on the outskirts of the city. From this point onwards, the pace of redevelopment must be governed by the pace at which the surplus population can be rehoused elsewhere.

The Manchester Corporation has been told *ad nauseam* to eliminate this surplus and the problems it generates by increasing its density standard. Manchester people are incorrigibly fond of gardens, and the city council objects on social grounds to the housing of young children—especially children brought up in slum conditions—in high flats. It cannot in any case build high flats on the six square miles to the north and east of the city centre which the Bradford Colliery is undermining. It is nevertheless putting one-third of the families to be rehoused on its latest 50-acre clearance area into eleven-storey blocks, and is about to build a seventeen-storey block on the site reserved in Wythenshawe for a cinema that has not been forthcoming. But it might well have been more willing to produce a varied skyline in the past if it had not been so persistently urged to do so for fallacious reasons.

What its critics seem unable to get into their heads is that the amount of space you need for non-residential purposes varies with the number of people you house, not with the acreage on which you house them. In consequence, given a fixed area for redevelopment, the higher you build your blocks of flats, the fewer the acres you can use for housing.



The hypothetical 30-acre clearance area at the top of the accompanying diagram is typical of conditions in the residential parts of the Beswick district, to the east of the central area, where some 35,000 people live at a net density of about 180 persons (45 houses) to the acre, with barely one acre per thousand persons for all other purposes. Suppose we make, on redevelopment, a conservative allowance of three acres per thousand people for schools, four acres for open space of all kinds, and three acres for public and commercial buildings, service industry, major roads and miscellaneous purposes—10 acres in all. The bottom four panels of the diagram show the effect of rehousing people on the site at different net densities, starting with the 100-persons-to-the-acre standard which makes it just possible to put all families with young children in ground-floor dwellings. At that figure half the clearance area can be used for housing, with the result that 1,500 of the 4,500

2 *Fallowfield council housing.*3 *Edwardian villas.*

inhabitants of the area can be rehoused on the site. Double the net density and you have to reduce the housing area by one-third, because the 2,000 people you can house on ten acres need twenty acres for other purposes, and thirty acres is all you have. The overspill is reduced, not by a half, but by one-sixth. Quadruple the net density, to an intolerable 400 persons to the acre: even then you have diminished the overspill by only 30 per cent. Be really bold: build one of Frank Lloyd Wright's mile-high towers, housing 2,970 people on less than one-third of an acre. They still need ten acres per thousand persons for other uses (29.7 acres) and you still have only 30 acres to play with. You have multiplied your net density by 99, but you still have not halved your overspill. Then what, asks Manchester, is the point of increasing net density at all? Every increase in net density above Manchester's redevelopment standard of 100 persons to the acre increases the number of children without garden playing-space. Strictly speaking, therefore, the public open space allowance should be increased, and not merely maintained, if the net density is raised. Manchester's allowance, as the Ministry of Housing has recognized, is minimal.

War damage in Manchester's slum belt was severe but scattered. The gaps it left are too small to be filled in advance of general redevelopment without perpetuating a close-set grid-iron street pattern that is wasteful of land as well as unsuited to modern traffic. In other parts of the city the corporation has scraped the barrel for bits and pieces of stable land. Sixteen of the sites now being developed can take fewer than ten houses apiece, and another 22 can take fewer than 50. Outside its boundary, sites for some 14,000 houses have been "made available" by neighbouring authorities, but nearly all have needed major sewage and water works, which those authorities (being mostly poor in financial and technical resources) are understandably slow to provide. So far, only 1,200 houses have been built in this way. There is no space here to recount the bitter tale of Manchester's twelve-year struggle to obtain a large, accessible site, within commuting range but capable of attracting industry, on which one or two big contractors could build up a completion rate of 3,000 houses a year in phase with a slum-clearance programme of 1,500. Four times the responsible Minister has ack-

nnowledged Manchester's crying need for at least one new town, but each time the project has been frustrated by a tenacious opposition, social, political and agricultural. "I must assume," declared the lay inspector after the last Lymm inquiry, "that to save or postpone the taking of good agricultural land for building is at least as important as the maintenance by Manchester of a steady and adequate rate of housebuilding."

The result has been that Manchester's housebuilding rate fell five years ago from a steady 2,500 to less than 1,500 a year, and has stayed at that level ever since: in other words, some 20,000 people who might by now have been decently housed are still stewing in the slums. There is ground for hope that the rate may rise next year, and large-scale development at Westthroughton may raise it further five years hence; but it needs to be much more than doubled if Manchester is to clear its existing slums, as well as house the families living in lodgings and park prefabs, by the end of this century. And it will take at least another generation after that to deal with the additional houses that will meanwhile have become uninhabitable, let alone meet the demands arising from the fragmentation of households. Taking the most favourable view of the present outlook, no person now living can hope to see the last of Manchester's slums.

Beyond the slum belt lies a less congested "twilight zone" of decayed but habitable dwellings whose redevelopment might yield a more than marginal housing surplus, though much of it must be pre-empted for the educational and other public uses that have had to be squeezed out of the centre and the slum belt. It would, of course, be humanly repugnant and politically impossible to postpone further slum clearance until land had been freed by the rehousing at higher densities of people already decently housed. A policy aimed at creating elbow-room in the "twilight zone," therefore, presupposes an even greater rise in the rate of housebuilding. Its adoption would shorten the duration of the overspill, and reduce its total size, but only at the cost of increasing its initial rate. More than one site of new town dimensions would be needed to make it practicable.

The same objects apply to the public redevelopment at higher densities of the city's outer zone of middle-class



4 Low density detached; large gardens.



5 Post-war council housing.

villas and inter-war council houses. Now that "white" land within the green belt is getting scarce, private enterprise is finding profitable scope in parts of this zone for the infilling of large gardens, the conversion of big houses into flats, and even for their demolition to make way for a more economical layout. But these operations can have little bearing on the slum problem. At a time when composite households can afford to indulge their fragmentary propensities, the "filtering-up" process soon peters out in a reduction of middle-class occupancy rates.

Manchester's last hope, in default of a Government willing to build more new towns, lies in the rapid and really large-scale expansion—by hundreds of thousands—of towns beyond commuting range, such as Crewe, Winsford and Macclesfield. This is the solution officially espoused by the Ministry of Housing, and it might work, in the long run, if that Ministry had its way. But it depends entirely on an equally rapid and large-scale industrial expansion of these towns, and it will benefit Manchester only in so far as the expanding industries employ people now living in Manchester's slums and council houses. Plenty of Midland and London firms are willing enough to do their expanding at Crewe or Winsford—or Wythenshawe, for that matter. But unless they can pretend (like Wilmot-Breedon) that they are really Manchester firms, the Board of Trade won't let them, on the ground that if it did, none of them would consider going to Merseyside.

Salford is a sector of the region's urban core which has its full share of slums and blight, but much less than its share of the rateably valuable commercial centre and outer residential fringe. Its problems are the same as Manchester's, but they are being tackled (if that is the word) differently. Salford doesn't like high flats any more than Manchester does, but its council is building them higher, and three years ago decided, for purely financial reasons, to build nothing else. It was paying £8 a year per nominated family rehoused under Lancashire's pioneering Worsley scheme—the prototype for the Town Development Act—and 7,000 Salford people had been thus overspilled in five years by 1957. But when the council found out that in the same five years 2,500 more Salford people had emigrated of their own accord—that it was, in fact, losing one per cent. of its population every year—and that every departing family represented a grant loss of £60, it took fright. The present

position seems to be that, for the privilege of continuing to pay this £60, the Treasury is having to pay a like amount per family retained in high-flat subsidy, and that Salford is frantically pleading for an increase in this subsidy to reduce the eightpenny rate which, in order to slow down the rise of its threepenny overspill rate, it has to levy to bring the rent of a high flat in Salford within the means of a family whose dearest wish is to get the hell out of Salford into a nice little house with a garden, and which, if it stays, will probably cost the city more in services than it pays in rates . . . But I never did understand really high municipal finance.

It was in pursuance of this policy that the Salford City Council surrendered in Manchester's favour its acknowledged claim on Westhoughton as a reception area for its overspill after Worsley is completed. It has not yet abandoned its claim to a smaller site at Irlam, for its high-flat-building can do no more than diminish the rate of its overspill. Meanwhile it may hope that the Local Government Commission will solve its financial problems, at Manchester's expense, by abolishing Salford. If that happens it will at least go out with a bang, for its £8 million scheme for the comprehensive redevelopment of the Broad Street area—a long, trunk-road shopping frontage backed by the meanest hovels in England—is in principle a model of its kind (AJ, May 12).

The palm for redevelopment, however, must to go to Wigan, whose council has committed itself to the phased reconstruction of 25 acres of commercial property—two-thirds of its central area—as a continuous operation by a single private developer. In relation to the size of the borough, this is the most ambitious scheme in the country: the purchase of the land alone would put five shillings on the rates if it were carried out in the ordinary way. But in the medium-sized towns of the industrial North, economics as well as aesthetics demand that any redevelopment that takes place should be undertaken on a really comprehensive scale. To make it financially practicable, Wigan is obliged to eschew the competitive tender in favour of negotiation with a selected developer, on the basis that the corporation will obtain compulsory purchase powers by defining a comprehensive development area, but will use them only as a last resort; the developer will seek to buy all the land by agreement, will transfer the freehold to the corporation

Housing behind the University. The backing terrace has been demolished: previously the alley was the width of the paved gutter.



in return for a 99-year lease at a nominal rent, and will immediately lease from the corporation for the same period any land it is obliged to buy compulsorily. The success of this scheme will, of course, depend on the quality of the three-dimensional design which the developer is now preparing, with Hattrell and Partners

as architects and Professor J. S. Allen, P.T.P.I., as planning consultant. The difficulty will be to wean Wigan from its addiction to the mock-Tudor half-timbering on which the former town clerk insisted as the only proper form for shop premises in a market town.



The centre of Wigan. The dotted line marks the 25 acres to be reconstructed by a private developer.

Schemes of this kind, possibly combined with "face-lifts" on the Norwich model for the surrounding areas, may well strengthen the drawing-power of the region's outlying towns, at the expense of Manchester's Oldham Street area, as everyday and week-end multiple-store shopping centres. But this trend may be to the benefit of the metropolitan region as a whole, and of its centre in particular, if it is accompanied by a substantial speeding up of intra-regional transport, and closely followed by a redevelopment of the centre that is specifically designed to favour the more specialized functions (commercial and other) that really need a central location. In so far as it may facilitate a general sorting-out of central-area uses within a regional context, and a radical solution of the traffic problem by the vertical segregation of vehicular from pedestrian circulation at the hub, the holding up of Manchester's own schemes of large-scale commercial redevelopment may well prove a blessing in disguise. As yet the Manchester Corporation has made no use of the comprehensive development area procedure in the central area, simply because it lacks the staff to get on with the job; but by stringent development control it has preserved its freedom of action. It has also acquired very substantial holdings through Section 19 purchase notices as well as by negotiation—90 per cent. of them at 1939 prices. The scale of the resulting profit from redevelopment cannot yet be disclosed, but it will certainly provide the corporation with a revolving fund sufficient to enable it to finance a succession of major schemes, and so to surmount that most intractable of obstacles to comprehensive redevelopment, the local authority's obligation to meet out of current revenue the initial deficits on what is by nature a long-term capital investment.



TRANSPORT: MANCHESTER REGION: G. F. Chadwick



Top: Journey to work: Northbound morning peak-hour traffic at a standstill in Oxford Road just south of the centre. The high proportion of buses is notable, many terminating unnecessarily in central bus stations, and most passing through Piccadilly. Bottom: Even absurdly long and bulky loads have to negotiate Manchester's streets, often on their way to or from Trafford Park or the docks.

The vitality and prosperity of a region depend ultimately on efficient communication and transport. G. F. Chadwick analyses here the traffic problems of Manchester and particularly the communication with the centre, an issue relevant to all

conurbations. He also proposes an urban motorway tangential to the city centre.

G. F. Chadwick, Lecturer in Town and Country Planning at Manchester University, also trained there as an engineer before qualifying as a planner. He is also a landscape architect. He worked on the City and Regional Manchester Plans of 1945. His particular interest is the whole problem of transport, and within this he has made a special study of road traffic. He was a finalist in the *New Ways for London* competition last year.



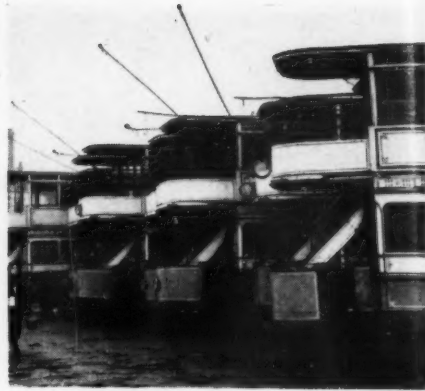
Air view of Eccles Bypass, now complete except for the new Barton High-Level Bridge.

The Network

Manchester, like many other towns, owes its original siting to the combined needs of defence and transport: a nucleus at the confluence of the Irwell and the Irk, protecting crossings of both rivers. From these bridgeheads roads radiated to the surrounding settlements, many on river crossings of their own at the foot of the hills to north and east, where, anciently, crossings of the moors were to be made:

the line of Roman roads can still be traced over Affetside, north-west of Bury, and on Blackstone Edge, north-east of Rochdale. The rivers, now foul and humiliated, are little seen as they pass through Manchester, or are even covered, as is the Mersey in Stockport, but their water is still important for much industrial processing as it was once for power and transport.

Water transport, in the form of the artificial canal or



Left: A Whitsuntide trip on the Bridgewater Canal at Stretford, c. 1910. Centre: Advertisement for Daily Express Service of Boats on the Rochdale Canal. Right: Trams in retirement. Manchester was once the focus of a comprehensive electric tramway system.

navigation quite independent of the line of natural waterways, was born in this country with James Brindley's canals for the Duke of Bridgewater, the first length being built to link the collieries on the Duke's estate of Worsley with Manchester in 1759, including the astonishing proposal to cross the Irwell at Barton by an aqueduct, then accounted an impossible feat. After successfully completing this ten-mile stretch Brindley extended the Bridgewater Canal westwards towards Liverpool, on the south side of the Mersey, where, near Runcorn, it was to join up with his Grand Trunk Canal: a national artery. Following this a network of canals grew up in the Manchester region: the Macclesfield, the Peak Forest, the Manchester and Ashton, the Rochdale, the Manchester, Bolton and Bury: with the Bridgewater forming a series of radial waterways, now almost entirely disused except for the last but once bustling with narrow boats and even passenger packets, and still bearing witness to considerable engineering skill. Unfortunately few of the canals which remain potentially navigable have any commercial value.

As with canals, so with railways: Manchester pioneered. George Stephenson's Liverpool and Manchester Railway opened a terminus at Water Street in 1830, whilst in 1840 twin terminals were opened at Store Street, very near the present site of London Road, for the Manchester, Sheffield and Lincolnshire, and the Manchester and Birmingham lines. In 1884 the Hunt's Bank terminal of the East Lancashire Railway was replaced by a combined station, Victoria, which afterwards became the headquarters of the Lancashire and Yorkshire Railway. London Road Station was opened in 1848, and extended in 1864, followed by Central in 1881, and Exchange, for the expanding L.N.W.R. services, in 1884; had railway promotion been nationally organized instead of being left to competing private companies, there is little doubt that the railway network of Manchester, in common with other cities, would be much less complicated with fewer termini. These termini, on the edges of the city centre, were the spearheads of fourteen radial lines converging on the city, with their attendant cross-links, goods yards, warehouses, carriage sidings, locomotive sheds, loops and avoiding lines: demolition due to railway construction caused severe housing shortages at several times in the mid-nineteenth century, and not a little distress in some areas. The electrification of the railways followed in the wake of the electric tramways which had extended their tentacles so far as to make it possible, it is said, to make the thirty-six-mile journey from Liverpool to Manchester entirely by tram, changing at the boundaries of each system—

and then carry on, by way of Rochdale and Todmorden, into a similarly complex system in the West Riding! Whether this is true or not, the tramways certainly promoted the spread of many suburban areas, as did the electrification of two local railway lines, that to Bury in 1915, followed by the Altrincham line in 1931. The Bury line (three-rail) was remarkable for some aluminium rolling stock of ponderous appearance and woven rushwork seating. By the outbreak of the recent war the electrification of the Sheffield route via Woodhead Tunnel had been started (overhead pick-up, like the Altrincham line), and is now complete.

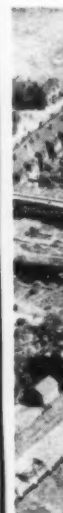
Meanwhile, in 1894, the Manchester Ship Canal had been opened, with extensive docks, making it possible for the unwary traveller to be surprised by the sight of an ocean-going cargo-liner apparently straying amidst the flat mosslands of south Lancashire. (Making it possible, too, for direct shipment from Manchester to Chicago now, via the St. Lawrence Seaway.) This was one of the final steps in a three-hundred-year-long campaign to link Manchester with the sea and provide an outlet for her manufactures, by river improvement, by narrow canal, by railway, by Ship Canal, and finally by arterial road. The development of the Trafford Park industrial area to the south of the Ship Canal and close to the Docks has been phenomenal, indeed its potential may be too great, and this is a problem which must be considered in relation to the Canal as a whole: there is a considerable probability that the whole of the area from Eastham Locks on the Mersey to Trafford Park will become a linear industrial belt over thirty miles long.

Manchester's present airport at Ringway was opened in 1938 and is at present being extended in terminal facilities, and probably in its runways. Although reasonably situated weatherwise, it is obviously too near the city's own housing satellite Wythenshawe, as the tragic crash of 1956 showed, and with the beginning of Boeing 707 operation at Ringway protests are mounting. The alternative use of Burtonwood, the former US air base near Warrington, already having 11,000-foot runways, as a combined regional airport for Manchester, Liverpool, and Leeds too, would seem to be eminently more sensible. Although the journey time to Burtonwood from central Manchester might be slightly longer, this is a small price for the few to pay for the good of the many.

It is heartening to see the railway modernization going apace in Manchester. The Crewe line electrification is well advanced, and Oxford Road Station, on the electric sub-

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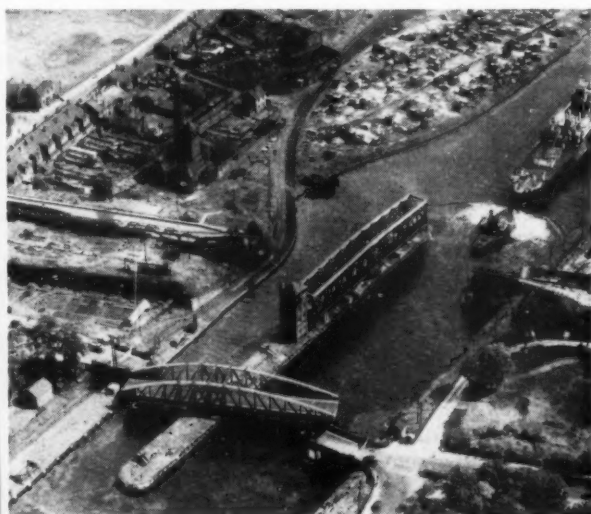
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urban line to Altrincham, serving also the modernized Wilmslow line, is nearing completion, with its imaginative use of timber. London Road terminus is also under reconstruction, and with the popularity of diesel railcars on some local lines (for instance, that to Rossendale to the north) railway transport seems likely to keep its place as the major element in the passenger transport of the region.

Journey to Work

Probably about half a million people work in the central core of the region: that is, in the city centre and in adjoining industrial areas. Like other information on transport exact figures are hard to come by, but something like upwards of a quarter of a million people travel into the centre itself every day from adjoining districts. Commuting of this kind takes place largely within a fifteen-mile radius of the centre, the pull being distorted to the south due to the greater attractiveness of conditions there (less smoke, less fog, less rain, more sun). Some three million people live within twenty miles of the centre, but due to the existence of other centres of a second order (Bolton, Bury, Rochdale, Oldham, Stockport) the commuting range is perhaps less than a comparison with London might suggest. Exceptions occur, chiefly due to the relative proximity of the Lancashire coast, from which business men's trains run.

Trafford Park is a powerful traffic generator of several kinds, for apart from the journey to work, heavy goods traffic by road and rail must be catered for: a particular difficulty here is the barrier presented by the Ship Canal (height clearance required, 80 feet). The existing swing bridges at Barton, alongside the second Bridgewater aqueduct, and at Trafford Bar, are responsible for many road traffic delays.



Manchester Ship Canal at Barton: the second Barton Aqueduct and the Barton Swing Bridge.

The Road Situation

Road transport in the Manchester region suffers from the usual difficulties of too much road surface in the wrong places and of the wrong characteristics to meet the demands placed upon it. And, too, in common with all large cities in this country, the basic information concerning traffic flow origin and destination simply does not exist, although a first survey is promised shortly. On such a foundation, the local surveys which have been carried out to justify particular proposals are necessarily inadequate. When

will Governments realize that research into all aspects of physical planning pays dividends in hard cash?

Certain road projects are at last moving towards construction, in part due to the pioneer work of Lancashire County Council in motorway construction. So far as they affect the Manchester Region these embrace:

1. *The London/Scotland Motorway*: crossing the Ship Canal between Warrington and Lymm, this links up with the extension of the Birmingham motorway northwards through Staffordshire, and with the Preston Bypass southwards;

2. *Princess Parkway extension, or the North Cheshire Motorway*: leaving the London Motorway just south of the Ship Canal crossing and passing south of Altrincham and turning northwards through Wythenshawe to the existing Princess Parkway, giving a direct motorway connection to the centre of the region. (Princess Parkway at present, although short, has well-handled planting, broad in scale, except at the roundabouts, which are stuffed with gladioli.)

3. *The Liverpool/Yorkshire Motorway*: this important route is in the Lancashire Development Plan. It extends from the pre-war East Lancashire Road near Worsley (ribbon development, no carriageway separation), passing north-eastwards of Besses o'th Barn and between Heywood and Middleton, making for the Moorland crossing north of Oldham. A new route to the West Riding of adequate width, curvature and gradient, designed to meet winter hazards, is badly needed, as witness the toll of abandoned vehicles on the Pennine roads every winter, and the pall of diesel fumes all the year round on the A62.

4. *The Eccles Bypass*: Now ready for use except for the new high-level bridge at Barton, this fourth major item runs from the East Lancs Road, west of Trafford Park, and joins the existing Chester Road A56 between Stretford and Sale, with a possible extension along the Mersey to meet Princess Parkway one day.

These major proposals seem likely to be all that may come Manchester's way for some time, things being what they are in the road business, except for one road inside the city which has aroused much interest largely because (a) part of it is to be elevated, (b) it will cost a lot of money (£6 million for 3,100 yards, although £1 million is for land which can be used for other development); having the mystic number 17/7 the fascination is complete. 17/7 has two apparent functions: as a distributor from the Princess Parkway route into the city, and as an east-west avoiding route to the Docks and to Trafford Park. It is elevated simply because it has rather too many intersections along its length for a ground level solution to be practicable ("Skyway," cry the newspapers!). It seems likely to be started in 1962 if the Parliamentary powers become available.

A Motorway Solution

This raises an important point in relation to Manchester transport as a whole. The railways all terminate on the outer edge of the centre, giving rise to complications for passengers crossing from one terminus to another, or making for the opposite side of the centre for work or shopping. Various solutions have been suggested, from the construction of an underground railway (luckily the presence of mining and other geological factors makes this more than usually uneconomic), to the construction of a new joint terminus near Exchange. Bus services also move radially and terminate in the centre, using expensive land needlessly, rather than moving from one suburban terminus to another and not halting in the centre,

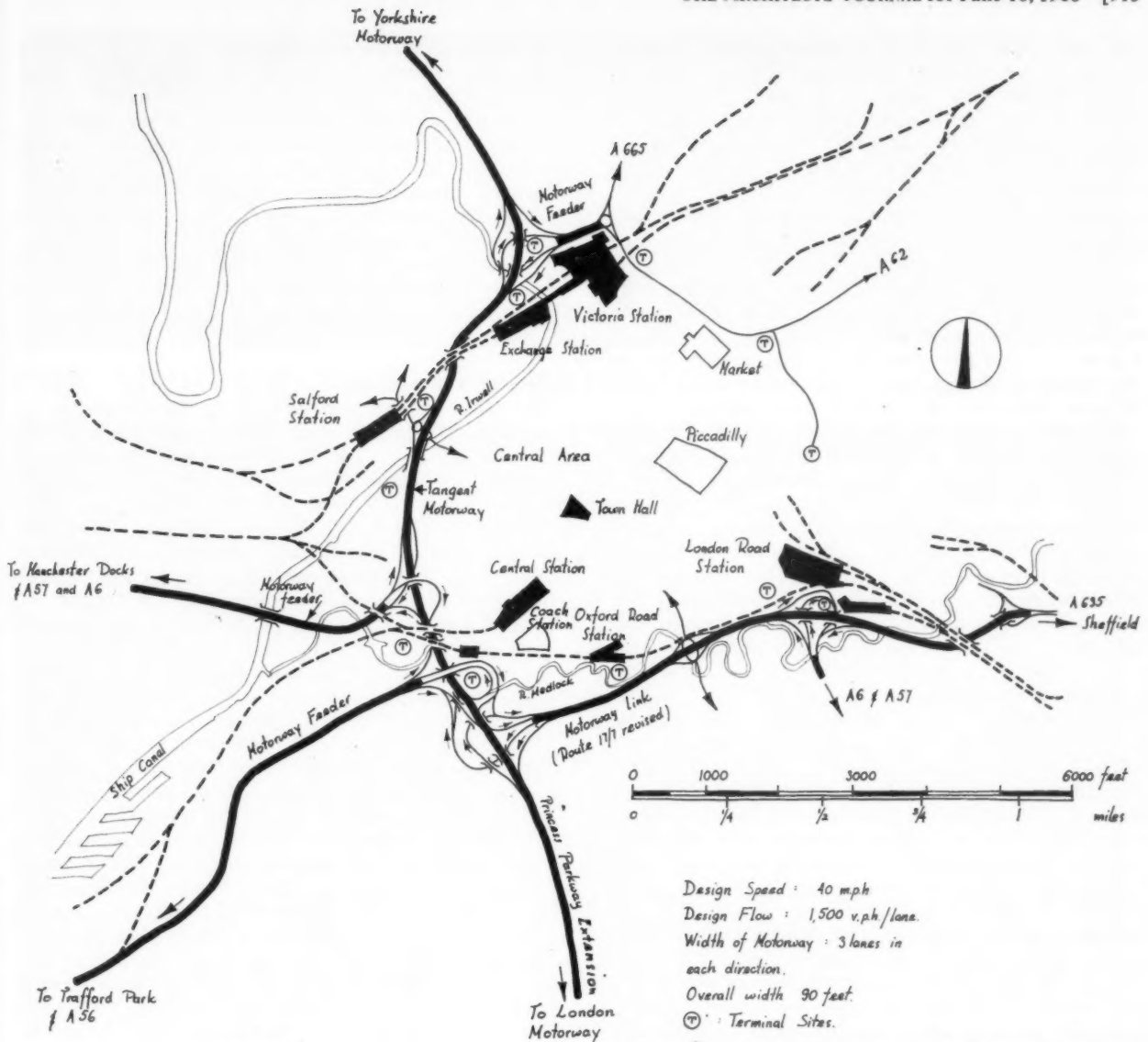


which is the London Transport practice; with exceptions, cross-centre journeys remain difficult. The development plan road proposals for Manchester generally are based on the radial and ring pattern, too, so that cross-centre journeys will still be circuitous. Accepting a primary basis of major regional links as being: (1) centre northwards and eastwards via Yorkshire motorway, (2) centres southwards and westwards via Princess Parkway extension and north/south motorway, (3) and (4) similar links from Trafford Park and the Docks, (5) centre to Docks and Trafford Park; it is seen that one major urban motorway running north-south immediately west of the centre will perform all these functions, granted suitable connections to east and west at the centre. In fact, the extension of Princess Parkway northwards should be this motorway, but being tangential to the centre, carrying traffic past the centre, rather than into it; only in this way is there hope of avoiding further central congestion with better roads inside the city. The Altrincham railway, with its convenient and well-used stations at Knott Mill and Oxford Road, illustrates already the value of such tangen-

Present main road proposals in the Manchester region. (The A6, top left, is incorrectly shown as a motorway.)

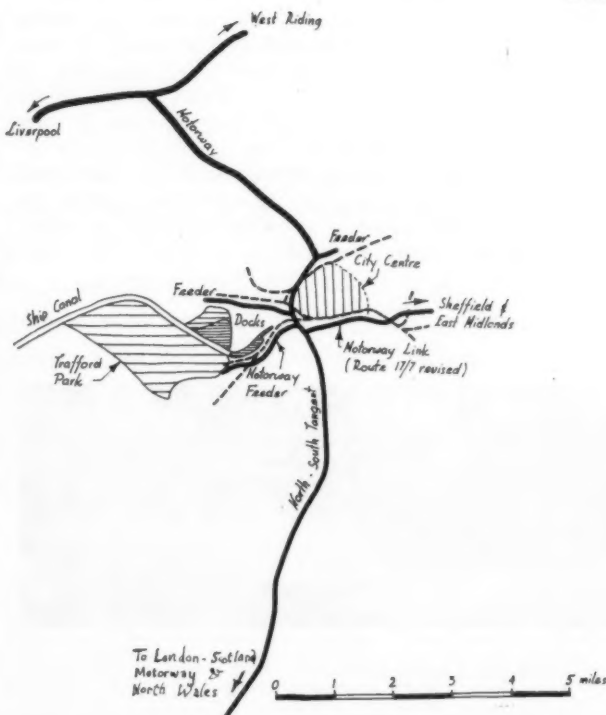
tial facilities, and an urban motorway, properly equipped with coach stopping points and major parking facilities, would have a similar utility, besides being less expensive than a series of new ring roads. Road 17/7 could well serve as a south-of-centre feed into this motorway if realigned a little nearer the centre.

In common with most cities, parking space in Manchester is inadequate to meet the demand, and congestion is evident everywhere in the centre. Does this presage the emergence of suburban shopping centres on the American pattern, with the continued sprawl, particularly into Cheshire? There is some evidence to support this view, the first swallow that may eventually make a summer being



Above: proposal for Manchester north/south tangent motorway. Left: position of proposed motorway relative to Trafford Park and the city centre.

The motorway passes close to, but not through, the centre, with links: (1) to west, north of Ship Canal, for Docks and present A57 and A6, (2) to west, south of Ship Canal, for Trafford Park and A56, (3) to east, north of centre, for A62, (4) to east, south of centre, for Sheffield and present A57 and A6 (this is a revision of the Road 17/7 proposal). There are thus four major intersections between the motorway and its feeders, and three intersections with the existing street pattern. The tangent is sited west of the centre, an area of railway yards, wharves and depots. With its feeders it links four main railway terminals and three other central area stations, together with the present regional coach terminal. Sites for vehicle terminals (see above) adjoin the motorway and are entered from it, using land between the motorway and railways or canals, or in intersection loops. The motorway system has four major railway crossings (underpasses) and three major river crossings: it is on viaduct except where it passes under the railways, but reaches ground level in the Irwell valley (to the north) and on reaching Princess Parkway (to the south). Intersections are less frequent as distance from the centre increases. Total length of motorway and feeders, from the Yorkshire motorway to Princess Parkway: 13 miles.



the move of Finnigan's department store to a suburban location in the existing centre of Wilmslow, some 12 miles out, and where other development is now taking place. (A pity that the opportunity was not taken to develop a pedestrian mall-type shopping centre here in depth, instead of stringing it along the main road: parking space is insufficient even now.) Cheshire has been approached by estate interests for sites for "out of town" shopping centres, too, but has turned them down. Is there really a valid reason for not having them? Unless the answer is to have a New Town at long last, with a really adequate centre to provide for the suburban-fringe, car-owning shopper as well as residents? Holmes Chapel is a good site, with the Crewe electric line on one side and the motorway on the other. The Jodrell Bank radio-telescope affects this area at the moment, and also Congleton, another possible site, but this should not be allowed to affect the solution of the much more serious demands of Manchester people for adequate housing conditions. So far as road transport is concerned, however, the basic factors from which Manchester's difficulties arise are doubtless a lack of up-to-date comprehensive information on traffic flow within the region, coupled with the lack of will on the part of the Government to go ahead with financial assistance to build roads really adequate to meet the needs of the second half of the twentieth century.

Car Parking in the Centre

The construction of urban motorways, however desirable for the movement of traffic, is only a part of a solution to the problem of urban congestion. Vehicles must enter the motorway and be discharged from it: at the centre they must not be delivered in greater volume and at fewer points than before into a street system already inadequate—as well may happen due to the ease of motorway travel. A necessary concomitant to the urban motorway is the provision of terminal facilities entered directly from the motorway itself without passing through the surrounding streets. At the terminal the motorist will park his car in comfort and then transfer to another medium for the rest of his journey: motorway coach, electric railway, ordinary bus on the street system, or even mono-rail, slung beneath the motorway viaduct; or, of course, he will become a pedestrian, free from the tyranny of the motor-car. Such terminals will be located adjoining, over, or even under, existing railway and bus stations, or at convenient points in relation to the circulation system generally; vertical circulation within terminals will be by lift and escalator. Junctions on to the motorway are arranged so that traffic approaching the centre will have to pass a terminal before the next exit off the motorway. Parking under motorway viaducts, with two decks for private cars, would also

supplement the terminal capacity.

A further necessity is that the car-parking policy within the centre plays its part. Kerbside parking would be banned in all through streets, and metered in others, whilst any off-street car parks provided within the centre would operate at full economic rates, or even higher; the terminal facilities might well be sub-economic in commercial terms to encourage their use and discourage parking within the centre. This economic control could be flexible and offer lower rates at periods of lower demand, or the differentials between terminal parking and central parking rates could be adjusted to meet particular situations, assuming that both facilities were under public control.

Parking in Manchester

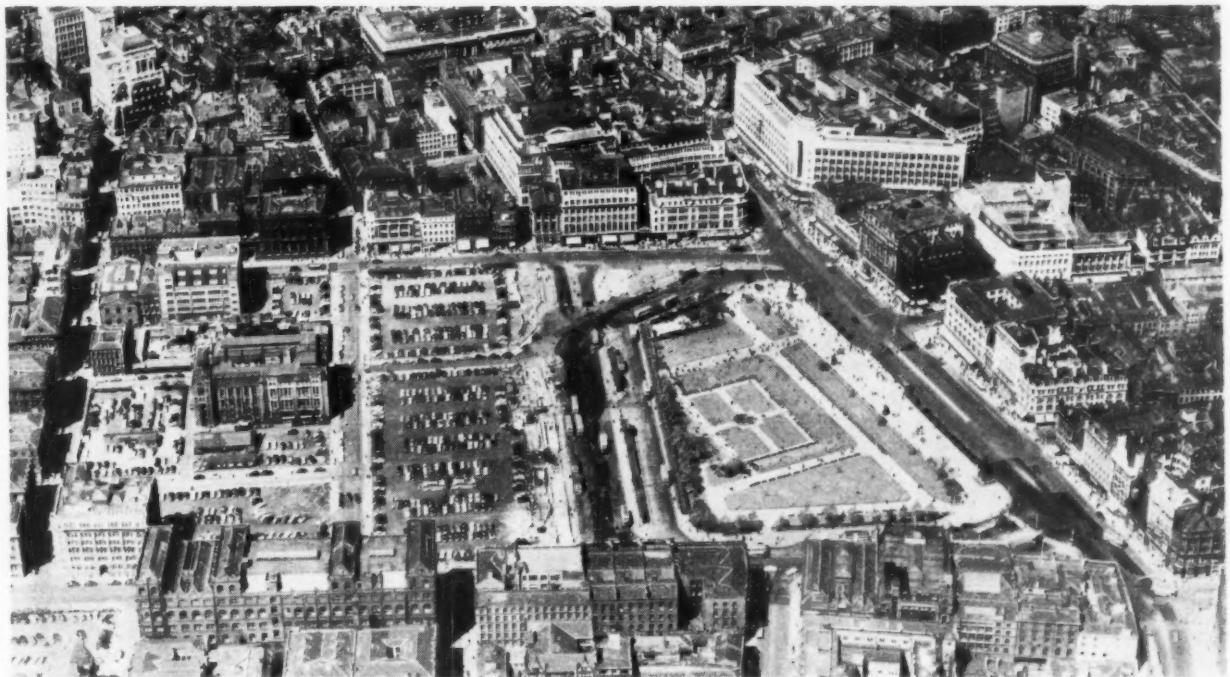
The future car parking demand in Manchester is, as everywhere, difficult to forecast, but some indication can be given on the basis of the Development Plan proposals for the City. The Plot Ratio maximum in the centre is $3\frac{1}{2}:1$, which is much higher than the present average which is probably nearer $2:1$ (development plan figures are given in terms of Floor Space Index, and allowance has to be made for street areas). The development control standards are one car space for every 2,000 sq. ft. of office space to be provided by developers, and one car space per 2,500 sq. ft. in the case of shopping space, with one car space for every three bedrooms for hotel development. Taking these standards, which, although low, are unlikely to be attained in rebuilding on an individual site basis, there would be a total requirement of about 10,000 car spaces needed. If higher standards—say one car space to every 10 office workers—were adopted, this figure might well be doubled, and in any case the demand for short-term parking, waiting, and loading has to be added, and no allowance has been made for the large area of warehousing, which is a goods traffic generator of considerable size. 10,000 cars would require 60 acres parked at ground level, or about as much as the net amount of shopping site space itself; 20,000 cars would take up half of the net office and warehousing site space, in other words, every other street block would be a car park. Even with multi-storey car parks in the centre there is still a decrease in the site area available for commercially profitable building, and any comprehensive provision of these facilities necessitates comprehensive redevelopment of large parts of the commercial centre. Whilst the City should still continue its efforts to secure parking space in new buildings, there is little doubt that an overall policy involving large-scale building of perimeter car parks and restriction of central parking is inevitable, unless the prosperity of the centre is to be drained away to other, less congested centres elsewhere.



Piccadilly given over to the motor car; parking on bombed sites behind the Sunley site.



THE HUB OF THE CONURBATION by Franklin Medhurst



Top: Piccadilly in flames. South side warehouses burning during the blitz of Christmas 1940, creating Manchester's largest area of devastation, and an opportunity that has waited for 20 years—now, perhaps, to be dissipated. Bottom: Piccadilly today, from the south-east.

Like many others, Manchester's centre is being developed piecemeal. The opportunities thus lost, and the possibilities that might be exploited, even at this late hour, by comprehensive redevelopment, are the gist of this article. But before diving in at the deep end, Franklin Medhurst gives us a careful analysis of the present situation.

Functions of the Centre

The development of the Manchester conurbation outwards from the nucleus on the Irwell has been due to two factors: the industrial potential of the central settlement and its regional functions in relation to the ring of surrounding towns. Manchester has been a manufacturing centre for textiles for 700 years, but because of its favourable location in the cotton district, it has acquired the functions of warehousing, wholesale selling, distribution and the accompanying financial activities. The superficial impression of the central area is one of fragmented industry mixed with commercial uses. In fact, the centre now excludes the major industrial areas, not because the older of these have changed their waterside location on the Irk or the Irwell but because the centre has grown away from its original nucleus; the dilapidated condition of storage warehouses and service yards is responsible for the effect of industrial gloom. The growth of the distributive and marketing activities has been accompanied during the last 100 years with the development of regional shopping, educational and cultural facilities, and those activities coming within the generic term of "service industries."

Franklin Medhurst studied architecture at Bristol and planning at E. A. A. Rowse's London school. He worked on the LCC's South Bank Scheme, Pembrokeshire's County Plan, and as Deputy County Planner to Co. Antrim, before joining the staff of the School of Planning at Manchester University. He has recently completed a thesis on the Milford Haven Region, and was a finalist in the *New Ways for London* competition, 1959.



Watts Warehouse, Portland Street: a splendid backcloth at the hub, deserving a different foreground.

Pattern of the Centre

The hub of the conurbation is an area bounded by the junctions of the three rivers; the Irwell, Irk, and Medlock. The river valleys, selected for the location of railways, reinforced the former boundaries so that on the north and south they are defined by viaducts, converging in the west to form two sides of a triangle. The eastern boundary is on the line of Great Ancoats Street; a line joining Victoria and London Road Stations. This triangle is the hub of the north-west textile manufacturing region.

The Cathedral and the few remaining medieval buildings around it form the original nucleus. From it expansion has taken two directions; south-westwards along Deansgate, a Roman road, and south-eastwards along Market Street to higher ground. These are the basis of the major shopping areas; the multiple departmental stores are located at the top of Market Street and around Piccadilly, whilst Deansgate exhibits expensive fashions and motor-cars. The shopping frontage to these streets forms a ribbon to a busy

interior or other commercial uses; the exception is in the area of the junction of Deansgate and Market Street for here there is shopping development in depth creating an interesting series of intercommunicating alleys and squares. Concentrations of offices are found in the Cross Street area, near the Royal Exchange, the Stock Exchange and the Corn Exchange. The warehouse areas are less central, forming a belt to the north behind Market Street and in the area immediately south of Piccadilly. Some of the warehouses have been converted to offices but the apparent levelling off in the demand for office accommodation has meant that new office buildings have been occupied at the expense of space in the older buildings. The converted warehouses may consequently become unlettable; a tendency which can already be seen in the profusion of "To Let" signs. By current standards these buildings provide inferior accommodation; the construction of new office blocks should not be criticized on the grounds that more than enough office space is already available, the problem




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Corner Princess Street/Portland Street: within the commercial centre domestic scale property is still to be found. The visual difficulties of piecemeal rebuilding are apparent.



-  Blitzed sites in Piccadilly area
-  Sunley site
-  Minimum comprehensive development area

buildings, regular in height and bulk, consistent in their blackness, lining straight streets in a basic grid pattern. It is only on closer inspection that one appreciates the few subtleties; the richness of some of the palazzo style warehouses, the Gothic or Jacobethan insurance houses, the sett paving and the few ginnels still available to the pedestrian. The uniformity of bulk and height enhances the skyline value of the exceptional towers, so that they form dramatic landmarks leading the upraised eye from, for instance, the drabness of Oxford Road to the contrasting styles of its masonry monuments.

Problems of the Centre

In common with other cities, the most serious problems which the hub faces are the result of the penetration of the motor-car. To analyse these in terms of the vehicles (how many and where in movement and at rest and so on) ignores the real function of a centre which is essentially one of personal contact between shopper and salesman, wholesaler and retailer, professional man and client, banker and business man, actor and audience. Looking at the hub of Manchester in terms of people rather than machines, it is obvious that planning is machine based rather than person based; there is no place for the pedestrian at all. Some hundreds of thousands of people use Market Street and Piccadilly on a Saturday near Christmas or at Sales time, and yet this street is part of A6, the London-Carlisle trunk road. The matter of human safety apart, the social concept of the city presupposes a positive approach to environment in favour of individual participation in its activities; a visible and sensitive contact with all the phenomena of urban society. Viewed in these terms there is a sad neglect of the pedestrian's domain; a lack of space for walking, sitting or just browsing, in shelter and in the open. There is no encouragement to live in the hub or indeed anywhere near it; the flight from the centre to Arcadia has long been accomplished, the only dwellers being those few compelled for economic reasons to remain. That city functions should defeat city living is by no means inevitable and the observations which follow are accordingly directed toward the revival of the hub for life in all its aspects.

is one of obsolete buildings which can no longer serve a useful purpose.

In terms of building height and bulk the hub is remarkably consistent; a height of four or five storeys is observed in most buildings together with a plot ratio of 2:1 or $2\frac{1}{2}$:1, except in the most recent development where the City Council allow up to $3\frac{1}{2}$:1. Daylighting considerations have resulted in some curious building forms in the past, but some recent blocks show the advantages of the use of control by daylighting indicators. In terms of age the buildings are predominantly late nineteenth century in origin, particularly in the warehouse districts. The prevailing impression of the stranger is that of a city of uniform

Comprehensive Renewal

From an examination of new building in the hub it is apparent that it is piecemeal; a replacement of individual buildings on individual sites. Two or three schemes involve the closing of streets, but nowhere is renewal truly comprehensive. The blitz of 1940 did not affect the centre of Manchester as it did the centre of Coventry or of Exeter, but it did provide the beginnings in the way of cleared sites, for a more comprehensive approach than has been taken. The Piccadilly development is an example, for although the City Council considers it has acquired a better scheme by waiting until now to build, the site leased to Sunleys is little over one-third of the blitzed land in the Piccadilly-Portland Street area. Of the remainder a small part on Portland Street is out to competitive design tender, some has been taken for the bus terminal while the future of the parts used for car parking is unknown. Piccadilly has become a vast traffic circus and its central sunken garden is used at one's peril, lacking as it does direct access from the crowded pavements of Market Street.

Here was an opportunity for a scheme of comprehensive improvement to design and to develop the Piccadilly area. The Mancunian is worthy of a centre of renown, his Leicester Square, his South Bank or Times Square; a place symbolizing the city and the citizen. Essentially a place for the pedestrian, serviced in depth from below rather than laterally, and giving both protection from the rain and the prospect of enjoying sunshine and blue skies. It would have been possible, indeed it still is, for the city to sponsor an international competition for a design for the redevelopment of the area. The possibilities of attracting capital could be canvassed in many quarters; Rotterdam is financing the development of its Europort from foreign sources, admittedly an industrial scheme, but could not Manchester put out part of its centre to design tender, retaining control of the land as the London County Council have done on the South Bank and leasing the site to developers willing to conform to the winning design? This particular opportunity has not yet gone, but each separate building which is erected in the area causes it to fade a little more. The Sunley development could be incorporated into a comprehensive scheme; it appears to have been modified to meet local traffic circulation but it would lend

itself to a system of vehicle and pedestrian segregation. The comprehensive area would need to be at least that bounded by Mosley Street, Portland Street, Princess Street and Piccadilly; preferably it should be more than twice this, extending southwards to Whitworth Street, taking in the now hidden Rochdale Canal as an open waterway expressive of the character of an inland port city.

The first traffic consideration should be to provide a trunk route outside the hub with feeder roads in, so eliminating the industrial traffic in the centre. The larger the area selected for comprehensive development the better could be the solution of the pedestrian and vehicle circulation system within the area and with the roads outside. The link between person and motor-car would be the parking terminal and the public transport service; the method of circulation by whatever means is a single problem to be solved in its general form at the outset of the design. That is why piecemeal redevelopment is no solution to Manchester's central area problems; at best it perpetuates the disease, more often increased traffic generation from new buildings gives rise to chronic symptoms. Even in Sunley's scheme where micro-segregation was at first anticipated, the second storey "pedestrian" podium has in fact an access for vehicles to drive up and on to it.

The visual character of the hub is not one that can be isolated from planning considerations. In order that the roads which will carry the traffic into and out of the centre do not form an unreasonable proportion of the available space, it will be necessary to control the location of buildings according to the amount of traffic they generate at certain times of the day. The general development of cities has been one where densities and plot ratios increase as the more valuable land in the city centre is approached. This makes for maximum congestion where there is least space for it, and a pyramidal visual section with the tallest buildings grouped together. Economic traffic dispersal suggests that the tall buildings should be evenly distributed over the hub to spread the traffic load over a wide area. The resulting visual character would therefore be in accord with Manchester's nineteenth-century development in which the now blackened towers are poised at intervals; commercial spires of an industrial city.



Model of the Sunley scheme, Piccadilly, Manchester, by Covell and Matthews.

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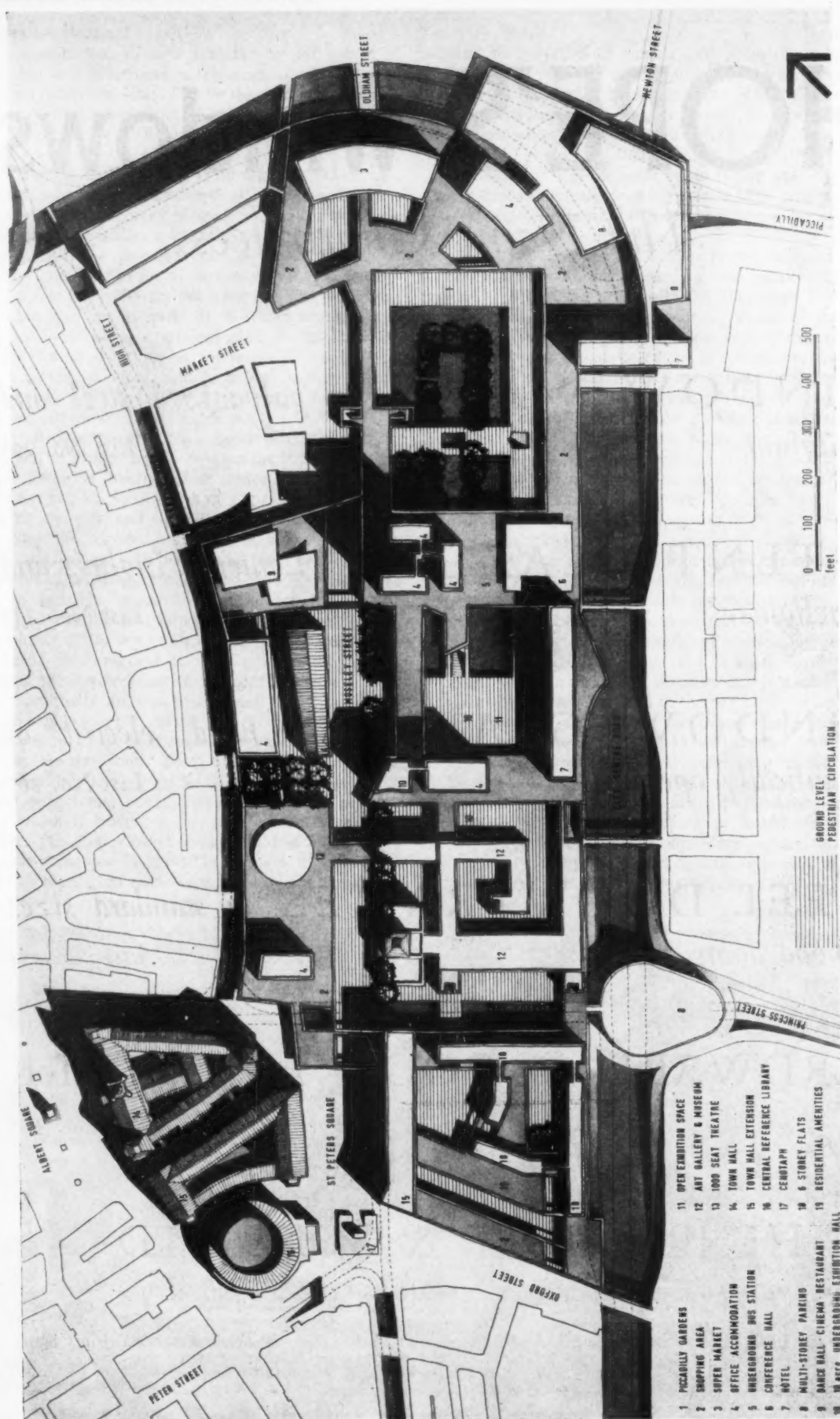
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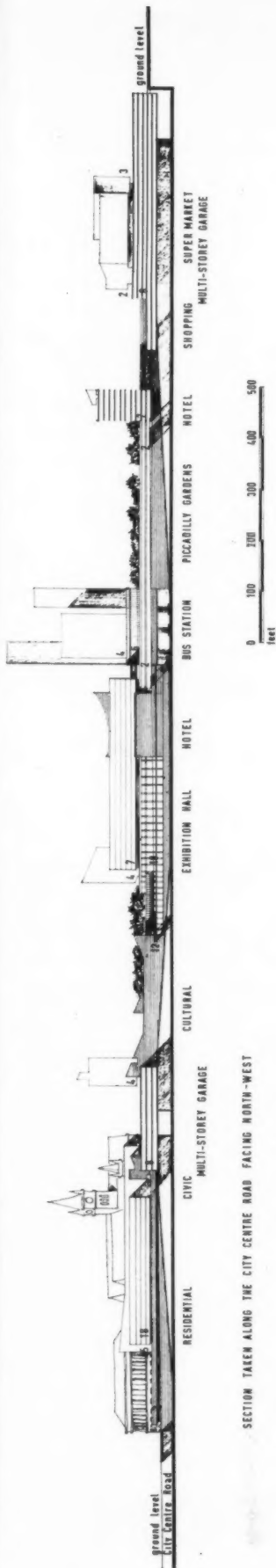
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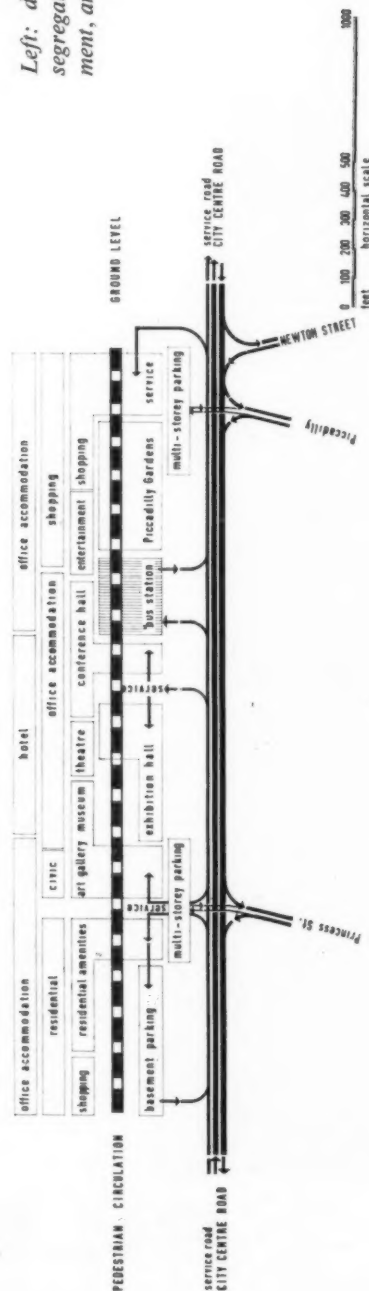
PICCADILLY REDEVELOPMENT PROPOSAL BY J. T. SHEARD





SECTION TAKEN ALONG THE CITY CENTRE ROAD FACING NORTH-WEST


Left: diagrammatic vertical section showing proposed segregation of vehicular traffic from pedestrian movement, and the vertical integration of land use.



This scheme illustrates a proposal for the comprehensive redevelopment of part of the central area of Manchester. It provides an answer to the chaotic congestion of pedestrian and vehicular traffic and the totally unrelated building programme which is being carried out at present. Only through a scheme of this nature can a renaissance of city life be possible. Vehicular and pedestrian circulation patterns have been clearly defined, allowing complete segregation between them and yet a full integration of the two at such places as the bus station. This has been achieved by utilizing the physical characteristics of the site for, as the land rises towards Piccadilly, the City Centre Road has been cut into it at a constant level. The resulting sunken road system serves buildings and the bus station below ground level. Multi-storey parking garage (8) is based on the warped floor system accessible only from the neces-

sarily large traffic junctions. Basement parking is also provided at various points and is served by the slow independent inner lane of the City Centre Road. The ground level is thus freed for pedestrian use (horizontal hatching) and allows the pedestrian to maintain his natural right to the city centre. The integrated building pattern governed by the over-all plan provides a secondary pedestrian circulation level on a two-storey podium (shaded on plan) which contains shopping facilities and small offices and forms the common basis for all the higher buildings. Through comprehensive redevelopment it has been possible to integrate land use both horizontally and vertically (see diagram). Piccadilly Gardens have been re-created as the centre of "the people's Manchester." This area is a climax to the city and, indeed, the conurbation. The bus station (5) provides the largest single

generating source of people in the city, and it is here that the major shopping (2 and 3) and entertainment facilities (9) have been provided. A group of three office towers (4), rises to a height of 300 ft. above the bus station, forming a physical climax which can be recognized from all parts of the city as its centre. Progressing towards St. Peter's Square the land use changes to quieter cultural activities. A large 10-acre exhibition hall (10), so sadly lacking in Manchester, has been ideally situated in association with the bus station, in the basements of the former warehouses. The Art Gallery extension (12), museum and small theatre (13) have been related in one cultural complex. At St. Peter's Square, the civic group is completed by a new town hall extension (15) to the south-east of which are planned some six-storey flats (18) which could form the core of a reintroduced residential life in the centre.



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RESEARCH AND URBAN RENEWAL

Again and again discussions on urban renewal lead to the same conclusions:

1. Little is actually *known* about it. Supposition has had to take the place of fact. An immense amount of research waits to be done. It can only be successfully carried through by full-time qualified workers, valuable as some part-time research certainly is.
2. The research that is being done is often in isolation. Few know what the others are up to. Valuable work is done "after hours" by those who see the need but have little time to spare. It may be duplicated. It would certainly be more fruitful if there was some co-ordination.

3. There is an unexpectedly large pool of lay public interest and goodwill that must be channelled and tapped before it evaporates in despair. This suggests that the research necessary before urban renewal can really get under way is even more urgent. Otherwise it will be too late. Schemes that might be received with enthusiasm in the next year or two may fall flat for want of support if apathy is allowed to take the place of this lay enthusiasm. This interest is something new. It is only in the last year that the words "urban renewal" have come into common usage—surprisingly enough, week-end colleges who run such courses as drama and archaeology now find that those they organise on different aspects of urban renewal are among the most popular. If urban renewal is to be a reality, public goodwill is indispensable.

Convinced that this demand for research exists, it was necessary to cast round to find out what was happening to alleviate it. It is hoped that some important work has been unintentionally overlooked, as in a brief survey of this sort it was obvious that it would only be possible to scratch the surface. However, the existence of the Town Planning Institute's Catalogue of Planning Research (see below) should be of immeasurable assistance to anyone requiring detailed information.

First the Ministry of Housing and Local Government:

It is strangely disquieting and hard to believe that there is as yet no report of a Research Unit within the Ministry. Urban Renewal must, without doubt, be about the most important and complex problem to be tackled. We look to the Ministry for leadership. Soon it may be too late.

Second the Universities:

Some work is going on, but much more in the way of organised post-graduate work is needed. The two principal exceptions are

1. THE CENTRE FOR URBAN STUDIES (AT UNIVERSITY COLLEGE, LONDON)

The director, Ruth Glass, has contributed this report on the work of the centre:

ESTABLISHED in January 1958, with a governing Committee whose members come from various universities and colleges and represent several different academic fields; supported by University College, London; financed by grants from the Ford Foundation and the Sir Halley Stewart Trust. (The Centre is the successor of a previous smaller research organisation—the Social Research Unit in the Department of Town Planning, University College, London.)

RESEARCH STAFF: Mrs. Ruth Glass (Director); two to three additional permanent research workers; part-time research workers; clerical and computing assistants; temporary research assistants engaged from time to time. In addition, several university teachers and research workers contribute regularly to the Centre's programme of research.

RECENT AND CURRENT RESEARCH: The Centre has a wide programme of research including the following studies relevant to town planning and urban development. Several of these studies have been completed; and some of the material has already been published.

- (1) *Socio-economic characteristics of British towns*: an extensive statistical analysis designed to provide a typology of British towns in terms of a wide range of social, economic and demographic data, drawn mainly from the 1951 Census and other recent sources. Nearly completed.

- (2) *Local government, with particular reference to Greater London*: evidence on certain features of local government in England and Wales, in general, and in Greater London in particular, was submitted to the Royal Commission on Local Government in Greater London. This included, among other aspects, analyses of participation in local elections, and of the composition of local councils and the social characteristics of their members.

- (3) *The growth and structure of Greater London*: an analysis of Census and other data for the individual local authority areas of Greater London, showing the growth of the conurbation, its subdivision into distinct socio-economic zones and the linkages, in terms of daily movements to work, between different areas. Results published in the evidence submitted to the Royal Commission on Local Government in Greater London. Earlier parts of this analysis were published in articles in *The Times* and in *The Town Planning Review*.

- (4) *Studies of two central housing estates*: a social survey of the Westminster City Council's Churchill Gardens estate in Pimlico; and an extension of an earlier survey of the Lansbury neighbourhood unit in Poplar. Completed but not yet published.

- (5) *A survey of West Indians in London*, of their geographical distribution, their employment position, housing problems and their reception and position in British society (to be published shortly).

- (6) This last study will be followed up by a detailed local social survey of North Kensington and a household sample enquiry in that area.

* An article on the original survey of Lansbury was published in the *Town Planning Review*.

2. EDINBURGH UNIVERSITY HOUSING RESEARCH UNIT under the direction of Robert H. Matthew is working on the sociological problems, those of vehicular and pedestrian access, and questions of construction, cost analysis, etc. Live projects are included in the programme of research. (See A.J. 25.2.60 for further details.)

The **Town Planning Institute** are to be congratulated on what sounds the most valuable contribution to co-ordinating information. W. Pearson (Hon. Editor) has given us this note on the:

TOWN PLANNING INSTITUTE CALENDAR OF PLANNING RESEARCH

The Town Planning Institute is compiling a record of research carried out in this country since 1948 on all aspects of town and country planning. Universities research institutions, local planning authorities, Government departments and other appropriate bodies have been asked to contribute details of relevant research projects and theses. Several hundred projects, either completed or in progress, have been reported so far and these have been recorded in a card index. The Editor, T. P. I., Calendar of Planning Research, 121 Kingshill Avenue, Kenton, Harrow, Middlesex, will be pleased to supply details of the work recorded on any topic. A full list of the topics covered is given in the *Journal of the Town Planning Institute*, May 1958, page 144.

It is the intention to maintain a cumulative record on cards and in addition to publish details of the research reported to the Calendar. The Calendar has already been used by the Research Committee of the Town Planning Institute, Government departments, and research workers.

Lastly SPUR (Society for the Promotion of Urban Renewal, Housing Centre, 13 Suffolk Street, S.W.1), whose membership consists of individuals who are deeply concerned with this problem, is providing a meeting ground for those who might otherwise be working in isolation. The Chairman, Lionel Brett, gives this progress report on SPUR's activities:

On its second birthday, SPUR, whose object in life is to look forward, looks momentarily back.

Two years ago the words URBAN RENEWAL were practically unknown in this country. Today, they are on the lips of city dwellers everywhere, and the demand for lectures and papers on the subject is insatiable. Three of the main planks in our original platform

the need to regard city traffic as a planning and not merely an engineering problem
the need for internal decentralisation ("New Towns within cities")

the need for full-scale pilot projects

are now under active consideration in the Government departments concerned. The original SPUR Exhibition, adapted for touring purposes, is now on the road under the auspices of the Civic Trust and has already visited a number of cities. Lectures, articles in the press, and television programmes have been promoted by the Action Group and others are on the way.

Within the Society, a series of valuable papers has been contributed to the Planning Group, each with the object of investigating and testing the validity of one of the original SPUR principles. By the autumn the present series should be complete and our policy should be more adequately documented. Meanwhile, one can begin to forecast the main conclusions.

1. Research is needed into the physical and financial implications of accommodating overspill populations in high-density sub-centres within the outer suburban area compared with New Towns. These sub-centres should normally be on existing radials (i.e. in interstices of new motorway network) and first stage would be renewal of existing swamped village centres.

2. Internal decentralisation particularly of office buildings is just as urgently necessary in provincial cities as in London, and Government financial incentives should be considered.

3. Full investigation is needed, possibly by a Royal Commission, into urban and suburban public transport systems, since improved public transport is the quickest remedy for congestion caused by private vehicles.

4. Reconstruction Committees with co-opted members still seem the best machinery by which local authorities can get a sense of urgency and initiate the necessary local studies, since existing committee structure is already overloaded and the problem is essentially inter-departmental. Existing Civic Societies should press for this.

The debate continues. Needless to say, SPUR could use more members in all departments, and particularly appeals for support from economists and laymen with interests in city development.

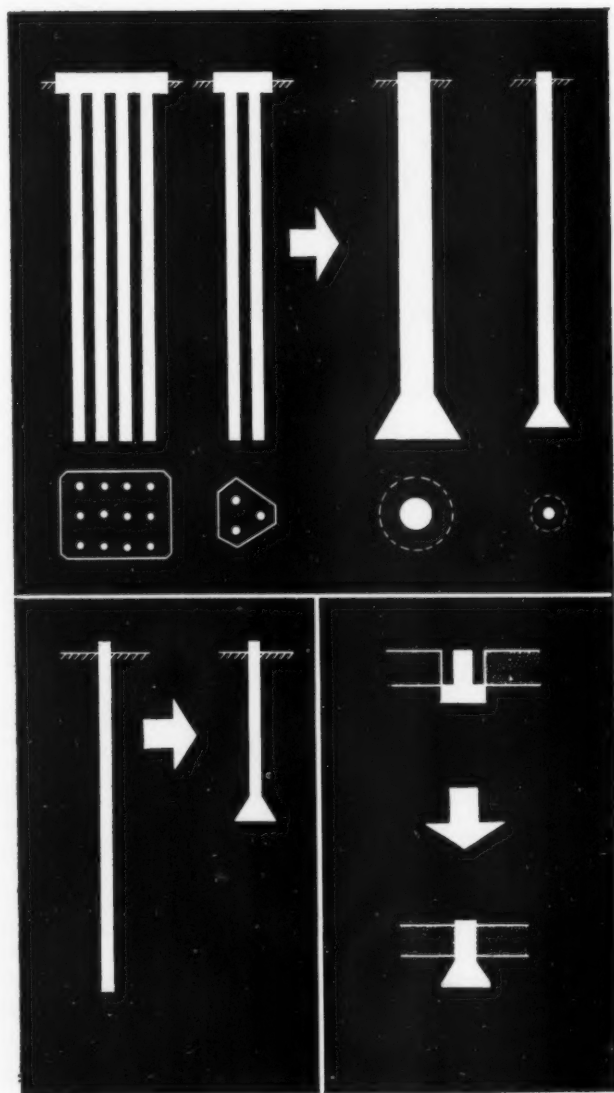


Albert Square: the Albert Memorial (1862), architect, Thomas Worthington, and the tower of the Town Hall (1868), architect, Alfred Waterhouse.

Tower'd cities please us then
And the busy hum of men

The Conference theme is "rebuilding our cities" and cities is the operative word in the notes which follow. The previous articles in this issue consider some of the vitally

important planning problems which must be solved before urban renewal can become a reality. They are the key to the situation. But here, for a few extraordinary moments, let it be assumed that all these problems are solved. What then do we expect of our cities? Does the name conjure up any-



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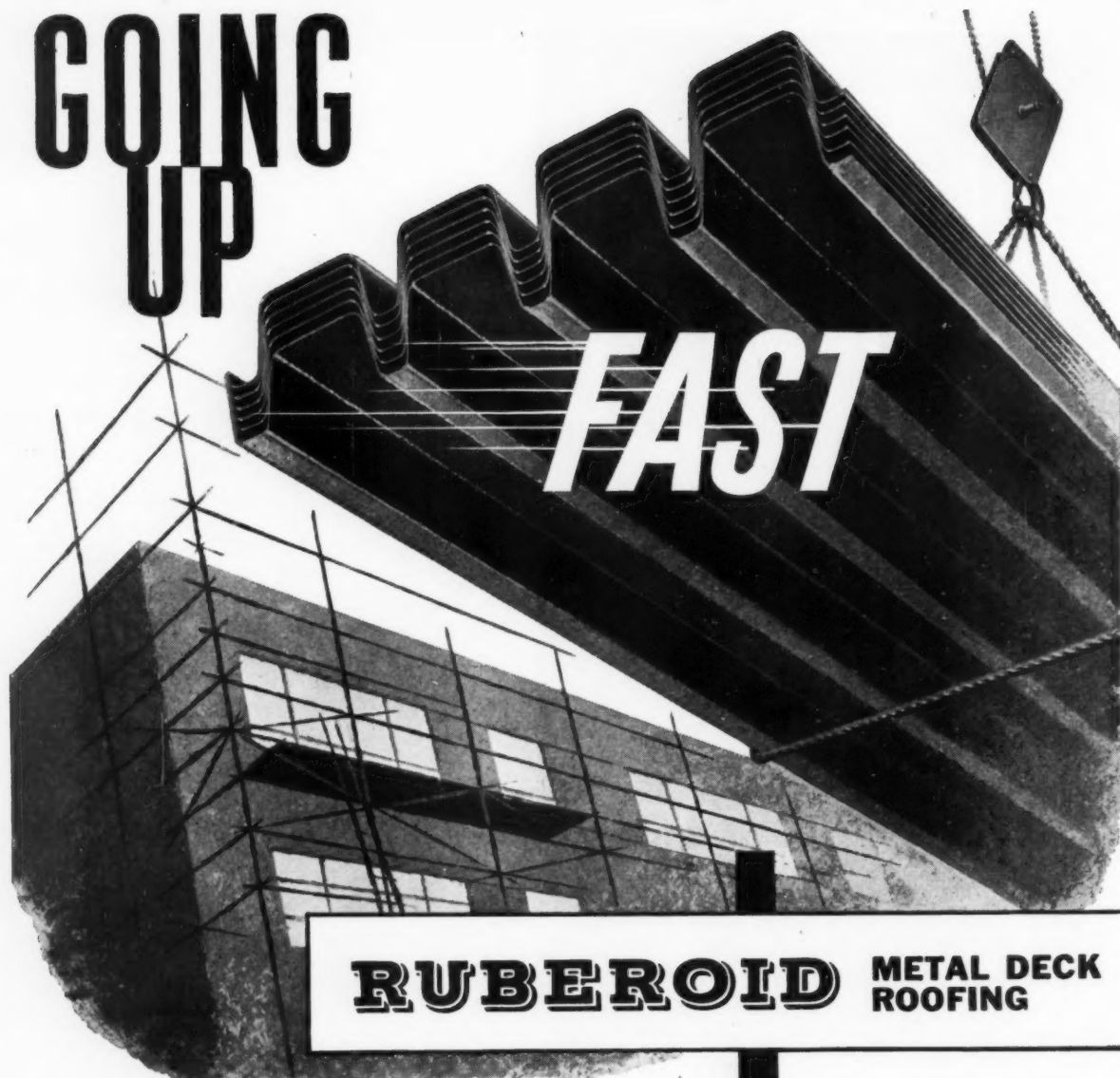
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thing that the word "town" omits? Here it is taken to mean a town which is the centre of a region. As such it is a local capital. To hundreds of thousands who seldom, if ever, go to London, it is their Metropolis. Its job is to provide something different to the towns in the surrounding region, both in terms of function and character. It would be utterly deadening if the future centres of, say, Liverpool or Manchester, were similar in scale and character to Lancaster or Chester. While Norwich, as the capital of East Anglia, may not be so very different from these latter, it still provides a marked contrast to the smaller market towns and villages which it serves. The centre of a great conurbation such as Manchester has to be of sterner stuff. Otherwise the sense of going up to the big city would be entirely lost, and with it a valuable ingredient of the contrast and excitement of ordinary life. Whether you go to the city every day with a brief-case, once a week to shop or to a show, or once a year to the circus or cup-tie, or once in a lifetime to the Assizes, it will be a lame let-down if the centre of this great metropolis turns out to be a more far-flung version of a local industrial or market town.

To southerners the idea of going to Manchester is murky in the extreme, and, surprisingly, it seems that even those who work there and know it well are only anxious to get out the second their jobs allow it. Seldom have I come across such an unloved city. On closer questioning the reasons for this became apparent; it is the surroundings, both atmospheric and physical, rather than the centre of the city itself, that oppress. (Naturally much of the centre depresses the planners and architects, but so, for that matter, does a great deal of London and our other big cities.) First, smoke pollution: a great stride forward has been made. Until the recent smoke abatement measures were enforced, the city spent much of its life under a heavy pall. No one could wish to live, let alone rear a family, under such conditions, so escape to the suburbs was vital. This is now changing dramatically. The second reason is the appalling slum situation, discussed in some detail in Derek Senior's article. With land so short, and housing so bad, it is hardly surprising that people move out.

But if one is allowed to forget for one moment the slums, and if the sun breaks through as it quite likely will, how does the centre of Manchester measure up to this idea of a

city? Supposing you arrived by night without any awareness of the immense conurbation through which you had travelled, and walked out into the streets without any idea what it was or where?

First, you would have absolutely no doubt that you were in a great city. The Victorians saw to that, and you are in an almost totally Victorian creation. As a planner you might think it unimaginative and in parts chaotic (unlike, say, the splendid central development of Newcastle upon Tyne); as an architect you would be impressed by only some of the buildings (but very, by some); as a stranger, seeing only a small fragment of the whole, you would know without a second's hesitation that this was not just a large town, but an important capital.

That much of its former glory has passed would be an understandable impression, and the vacant emptiness which expresses the climax of Piccadilly (perhaps this remark is already partially out of date) is typical of the way one often feels let down. But seldom have I been so suddenly surprised by scale. Monumental is the word for most of Manchester's buildings. Civic is perhaps another. Immense warehouses rear up like cliffs in the heart of the city. They are not of the Albert Dock-Functional Tradition variety. Buildings like the Watts warehouse, or those in Albert Square, have an utterly different character. They belong to the merchant princes not to the stern simplicity of the early industrial revolution. Offices, banks, and civic buildings are all of the same stamp. Classic or Gothic they stand black with soot as memorials to a hub of commerce and enterprise.

This is not to be a guide to Victorian Manchester. I am a day tripper only, and you have Cecil Stewart's delightful and erudite article in the *RIBA Journal* (May 1960) for that purpose. But when wearied by words in the Conference Hall, it may be stimulating to wander round and see with what assurance the tale is told by individual buildings of how to create a grand scale back-cloth to our less everyday lives.

But what is the use of a book thought Alice without pictures . . . ? and at this point it is high time the camera took over.



Williams Deacon's Bank, St. Ann's Street.



Entrance to Watts Warehouse.



Watts Warehouse, 1851. Architects, Travis and Mangall.



St. Ann's Church, completed 1701—architect unknown.

SPOUTCRAG (LANGDALE PIKES)

Light Sea Green Slate was chosen for this important contract because of its beautiful colour and unique natural bar markings.



The Market Street Development Bradford
Architects: Clyde Young & Bernard
Engle F.R.I.B.A., London
Contractors: John Laing and Son Ltd.

Approximately 6,000 sq. ft. of Spoutcrag naturally riven slate 1in. thick, was used as external cladding between the windows.

The Spoutcrag Quarries, in the Langdale Valley, Westmorland, are at least 200 years old and are now producing large quantities of excellent slate for Cladding, Cills, Copings, Flooring, etc., in a variety of beautiful finishes—naturally riven, frame sawn, sanded and polished.

Typical Specification: The Facing Slabs to be Spoutcrag (Langdale Pikes) Light Sea Green slate with sawn edges and naturally riven faces, 1in. nominal thickness, inclusive of circular drillings on the edges for the purpose of fixing, all in accordance with Supplier's details, and to be obtained from, The Broughton Moor Green Slate Quarries Limited, Coniston, Lancs.

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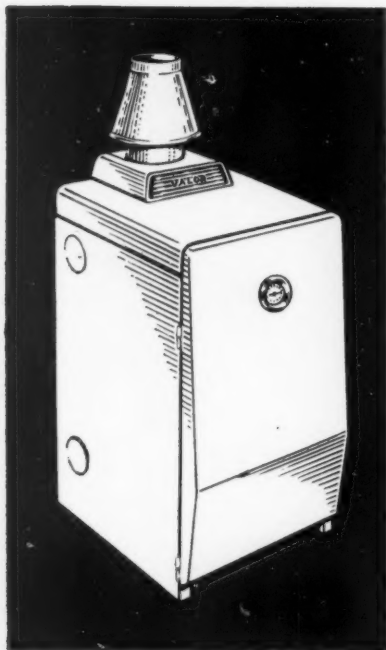
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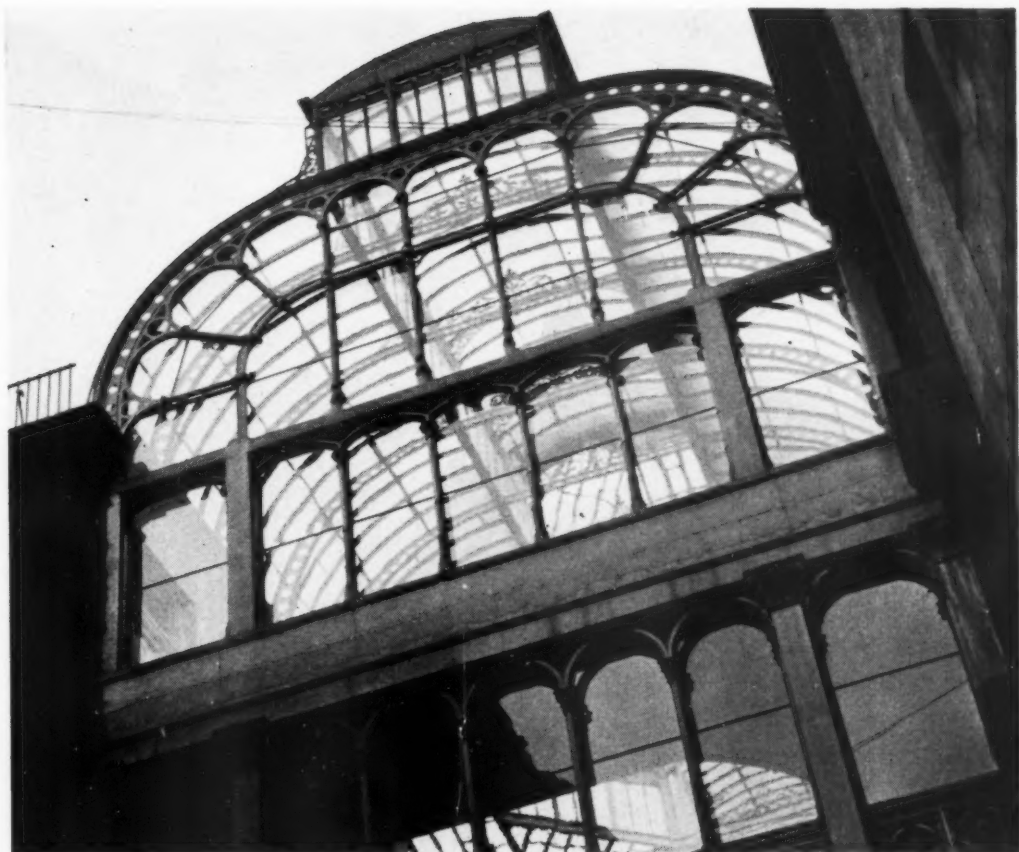


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The Barton Arcade: a group of offices approached by three storeys of galleries round a glazed well...



... is an unexpected example of a pedestrian precinct.



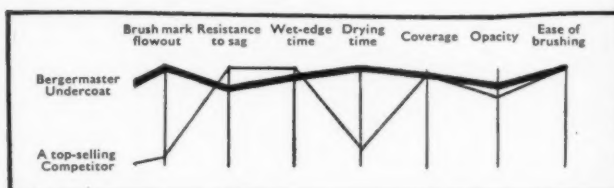
Royal Manchester Institution, Moseley Street, 1824. Architect, Sir Charles Barry. Now the City Art Gallery.



Free Trade Hall, Peter Street, 1853. Architect, Edward Walters.

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Better than the best of the rest. If that sounds like a facile bit of megalomaniac advertising chit-chat, look at the photos of undercoats and gloss alongside. These were arrived at during routine laboratory development tests against representative top-selling competitors. They weren't meant for publicity, but we'd be silly not to use them.



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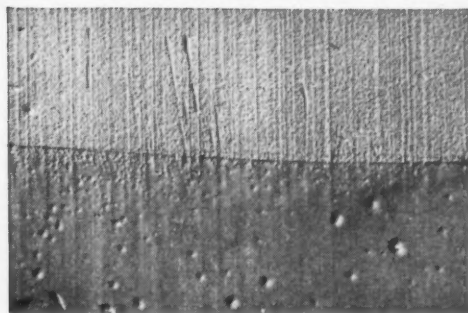
A good one, free consultation and assistance with specification to site. Architects who aim to mix white from two spare Bergermaster blacks can call the Architectural Service Department for a snap judgement on their prospects. Books of divisible colour specimens, specifications and the like are readily available. Supply is now fast and dependable.



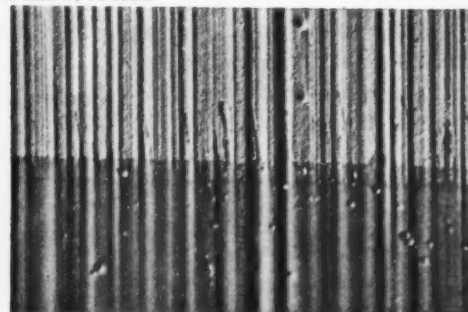
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PROOF BY PHOTOGRAPHY—these shots, highly magnified, are absolutely unretouched or rigged in any way. Random samples were painted onto identical test surfaces (vertical) with identical brushes under identical conditions. See how (above) Berger Undercoat goes on smoothly so that its top coat inherits no brushmarks, and neither coat suffers sagging. You get a first class finish, in contrast with, for example, that shown in the lower photo; a top-selling brand. Both show dust marks, inevitable when you magnify *without* retouching. Which we've done.



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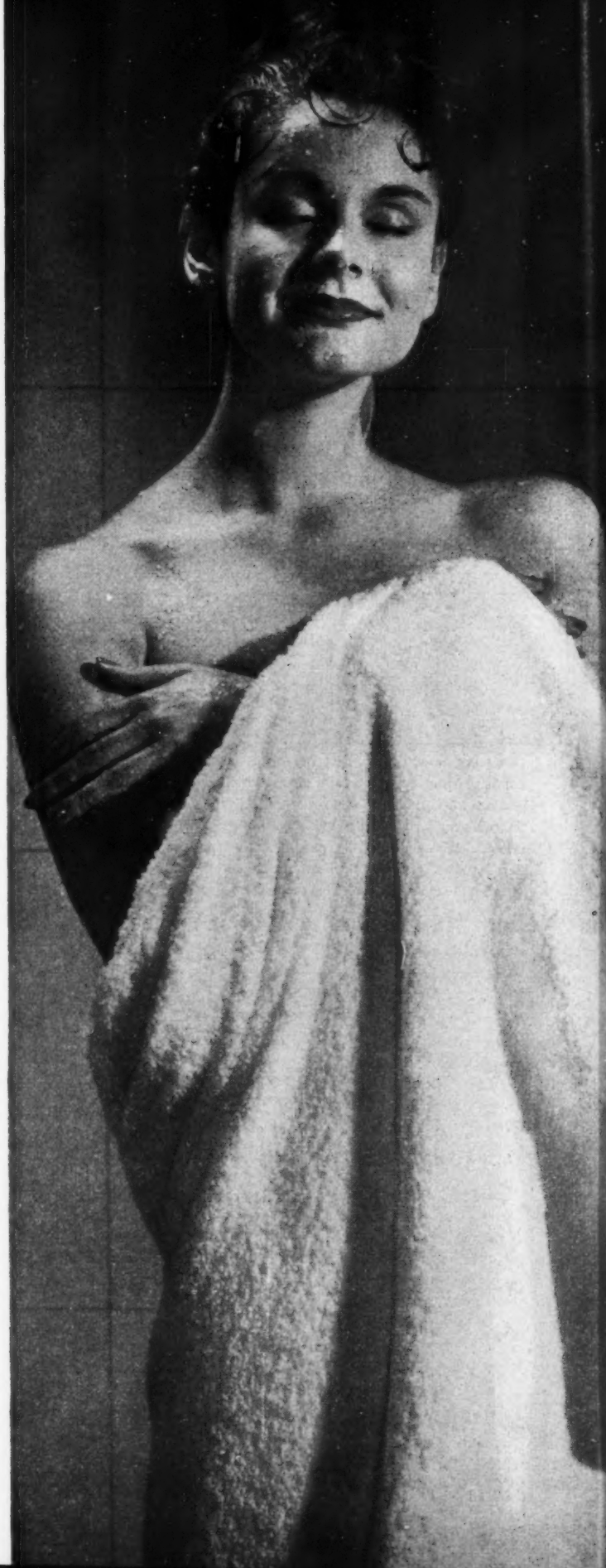
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Bank of England, King Street, 1845. Architect, C. R. Cockerell.



Victoria University Buildings, 1870. Architect, Alfred Waterhouse.



Refuge Assurance Building, Oxford Street. Architects, Alfred and Paul Waterhouse.



Rylands Library, Deansgate, 1890. Architect, Basil Champneys.



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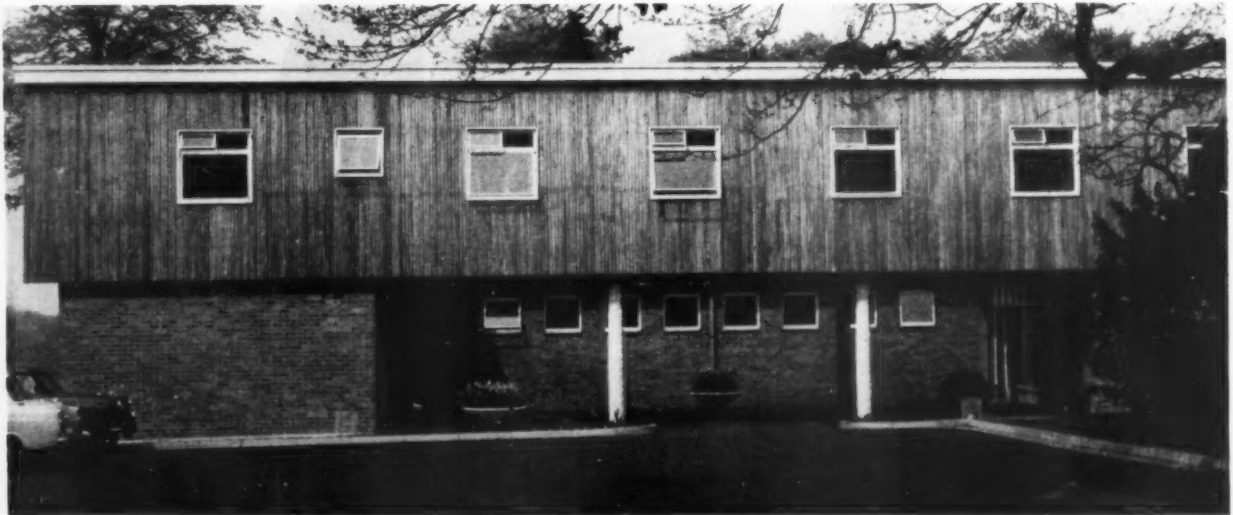
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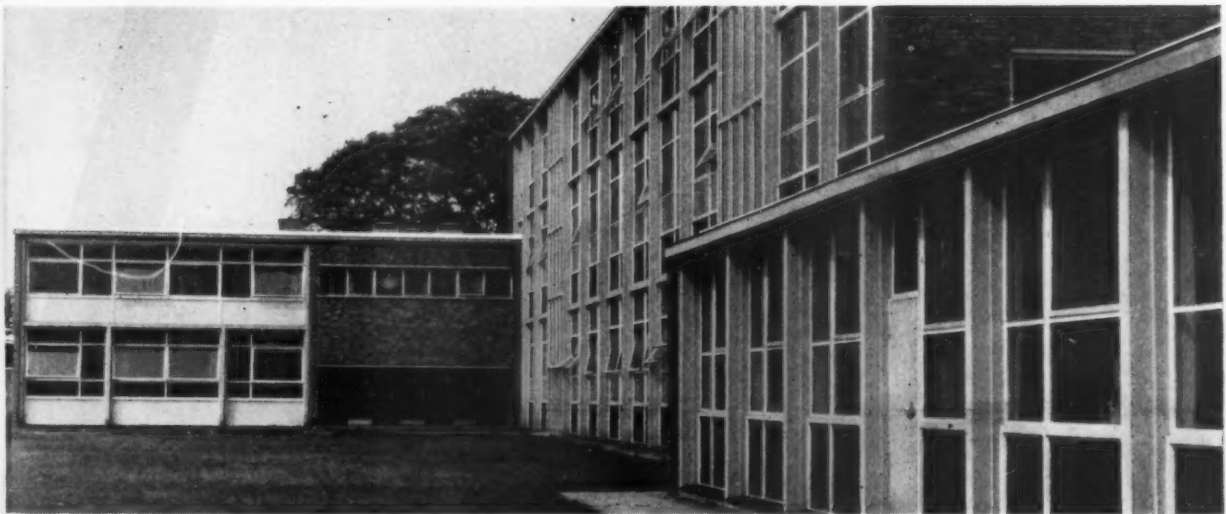
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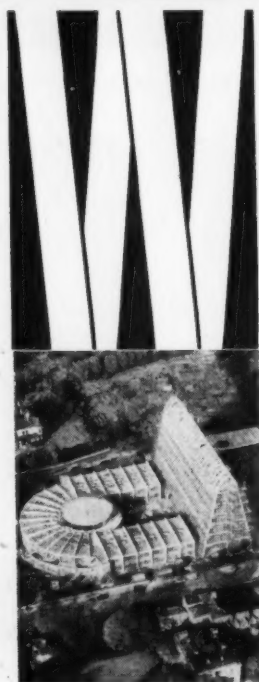
AND OF NEW BUILDINGS IN THE MANCHESTER REGION



The Margaret Barclay Special School, Moberley, Leonard C. Howitt, City Architect.



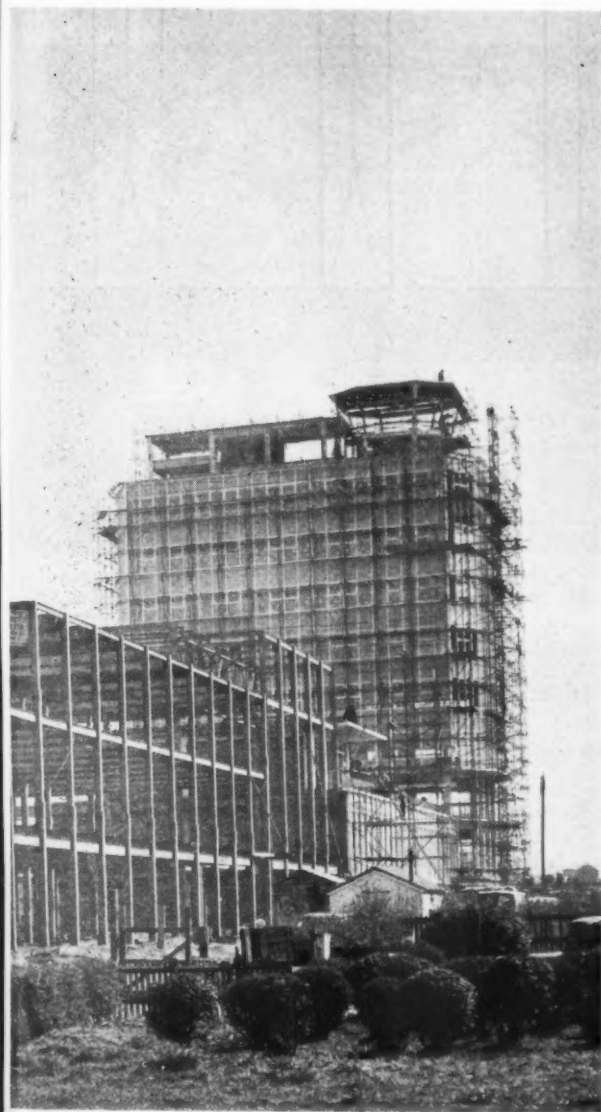
The Barlow Hall Secondary Modern School, Chorlton-cum-Hardy, by Leonard C. Howitt, City Architect.



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from 7 to 22 ins. wide,
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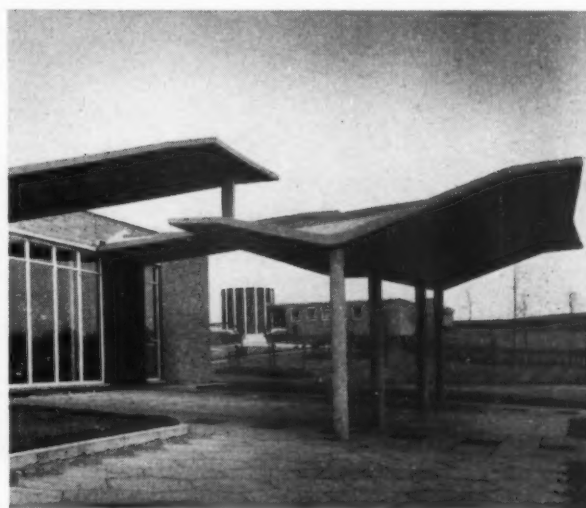
West Wythenshawe College of Further Education, designed by Leonard C. Howitt, City Architect.



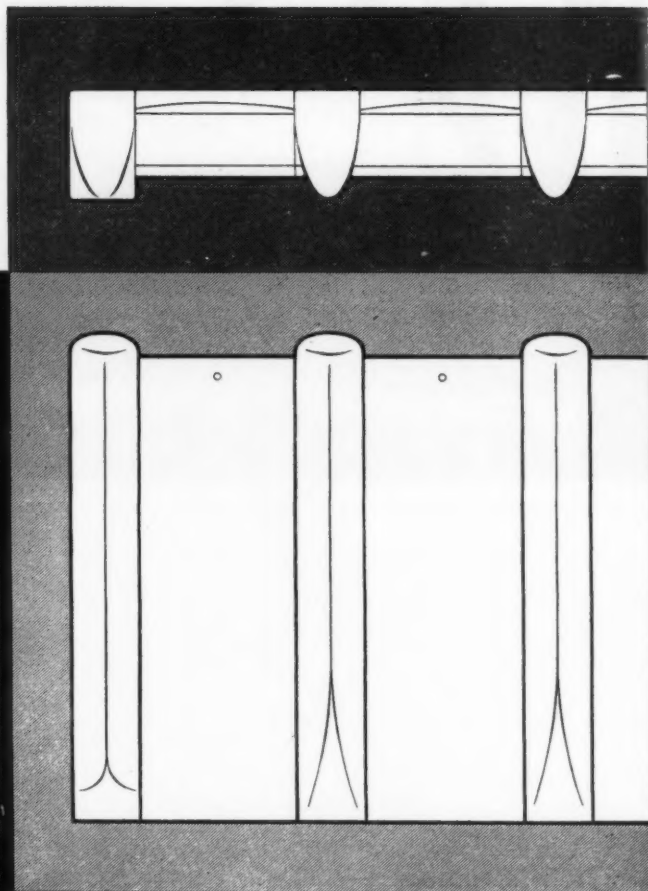
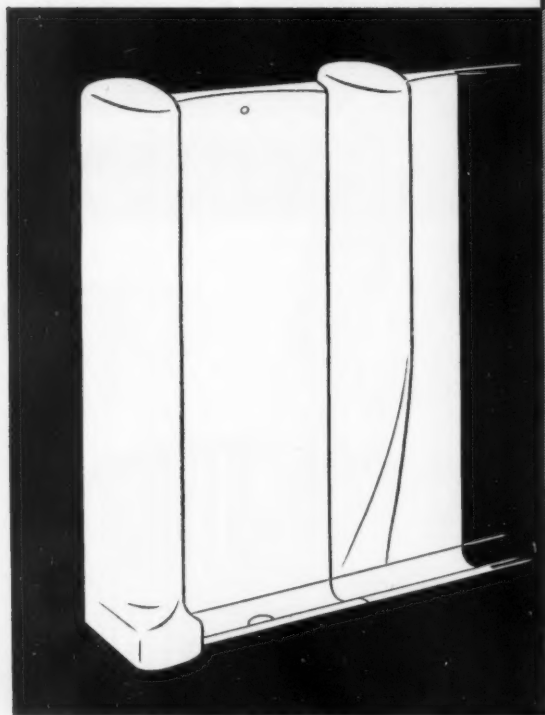
Part of the new terminal building for Manchester Airport under construction, designed by Leonard C. Howitt, City Architect.



Two views of Blackley Cemetery buildings: above, the crematorium and earth burial chapels. Below, the entrance canopies of the crematorium with the Registrar's block and mortuary chapel and chapel of remembrance in the distance. Designed by Leonard C. Howitt, City Architect.



design



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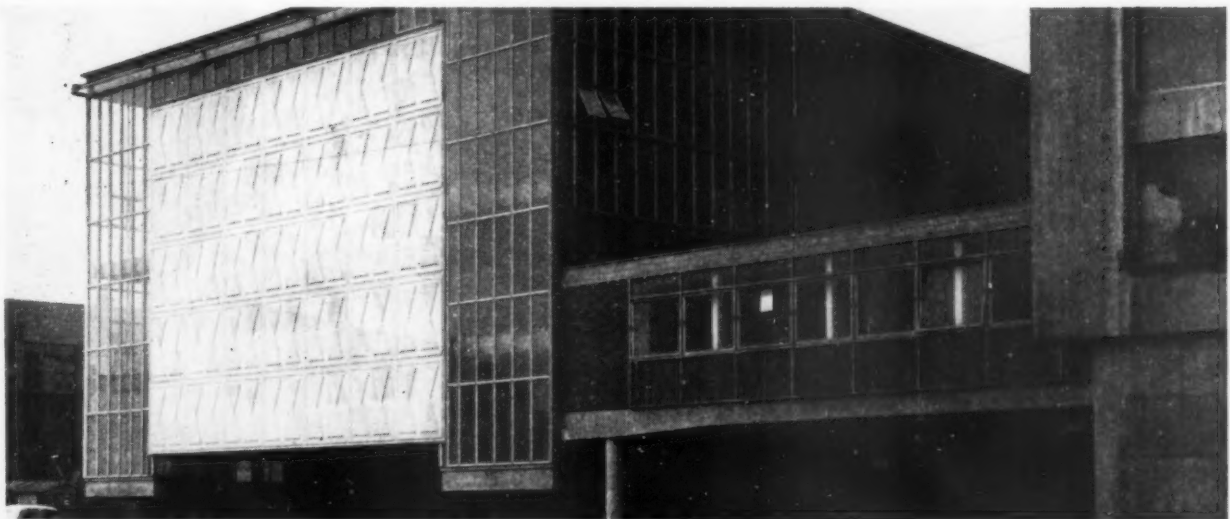
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Housing and single-persons' flats at Knutsford by J. Austen Bent, Director of Housing, Manchester.



Old people's dwellings at Didsbury, by J. Austen Bent, Director of Housing, Manchester.



Salford Royal Technical College, designed by the Lancashire County Architect's Department, County Architect: C. H. Simmons.



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Part of Albert Bridge House, an eighteen-storey block of offices for Government departments in Bridge Street, Manchester. Designed in the Chief Architect's Division of the Ministry of Works, senior architect in charge: E. H. Banks.



Alport House, Quay Street, Manchester, by Leach, Rhodes and Walker.



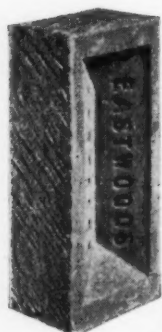
Offices and factory for Messrs. Matthews and Mumby at Denton, Architects: Taylor, Young and Partners.



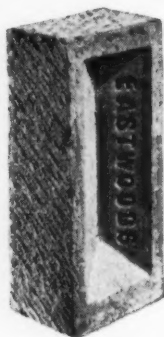
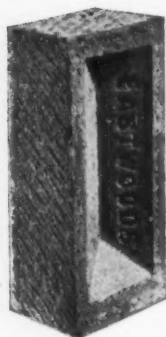


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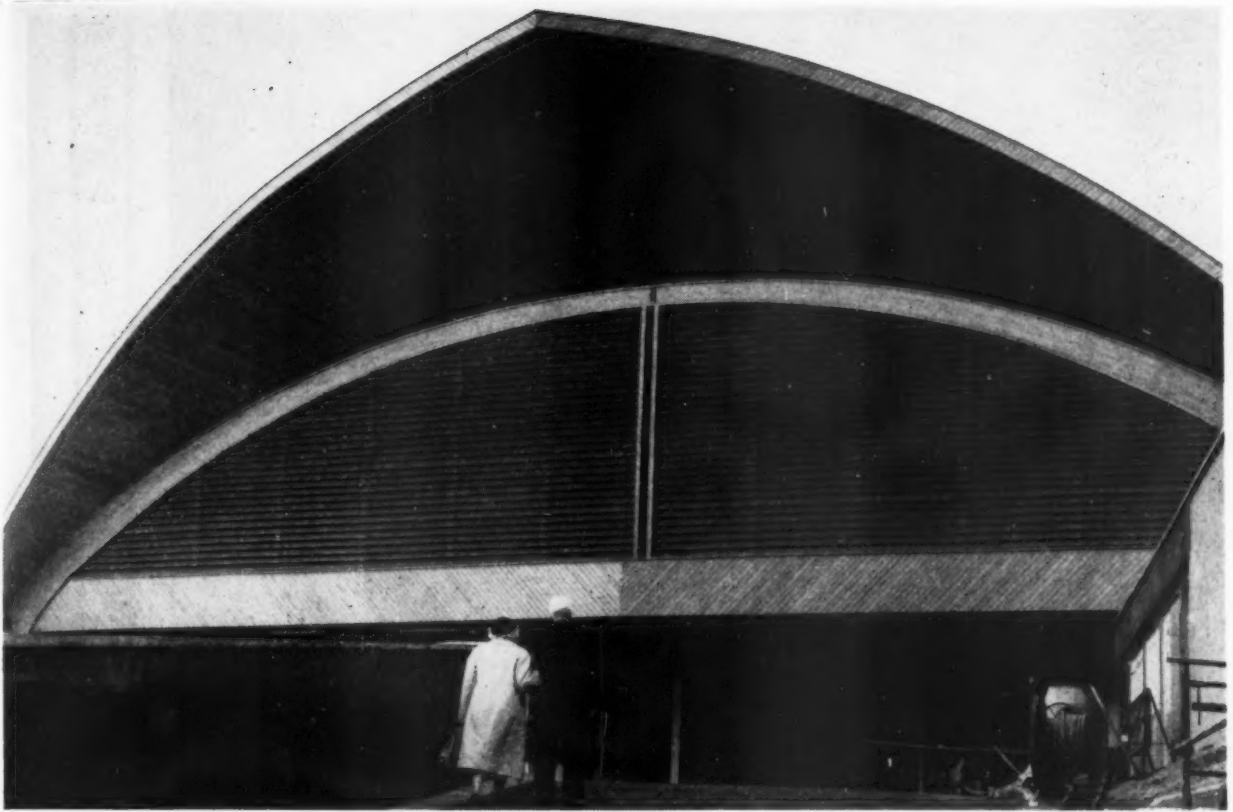
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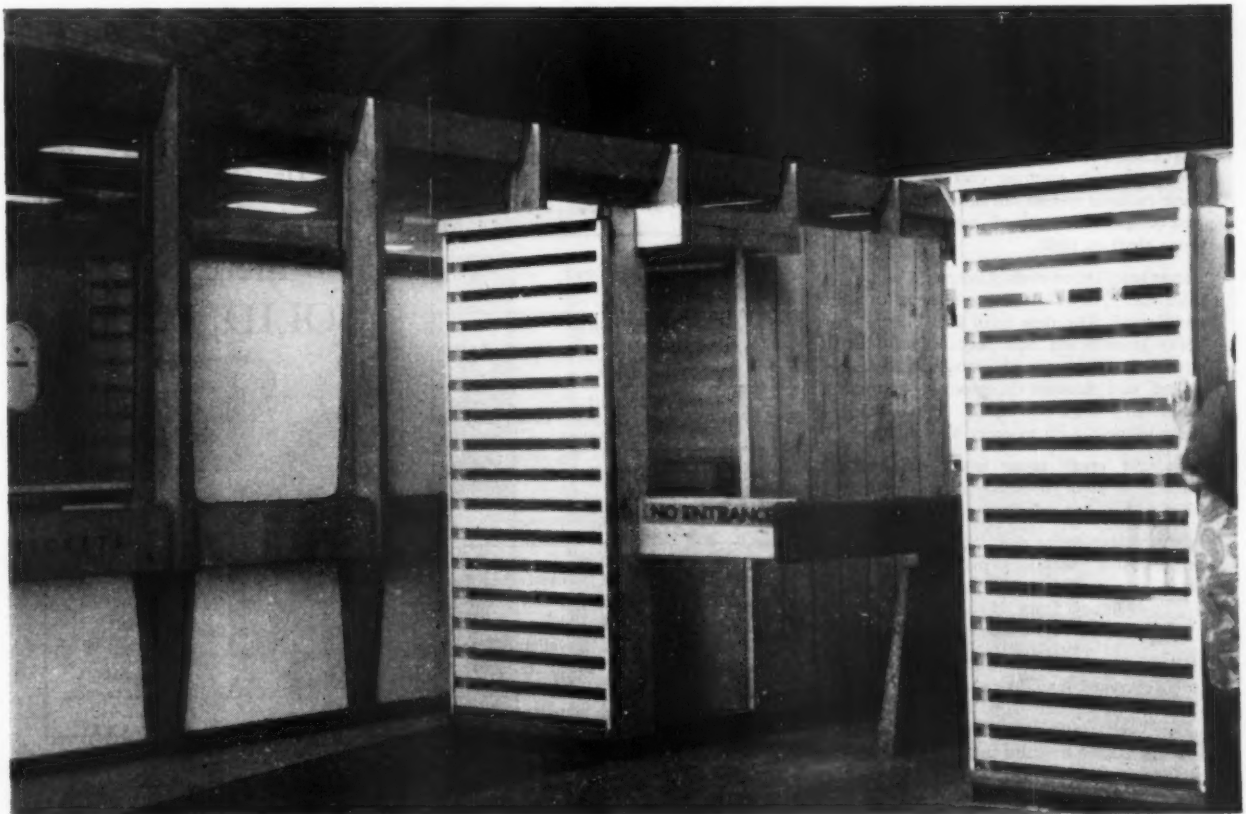
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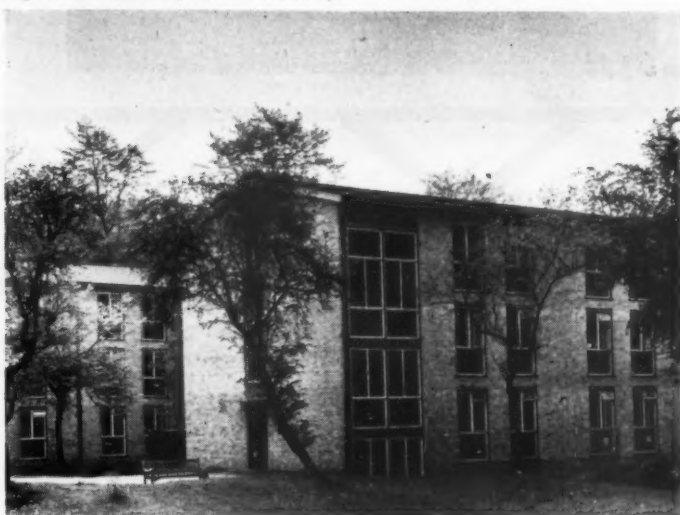




Offices and passenger concourse for London Road Station (to be renamed Piccadilly) by the Architect's office of the London Midland Region. Regional Architect, W. R. Headley.



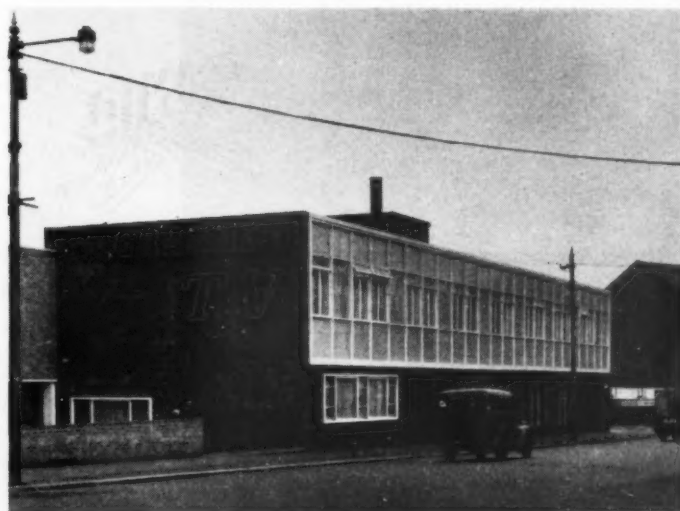
Premises for the Times Furnishing Co., Market Street, Manchester, designed by C. J. Epril and Associates.



Needham Hall, a hall of residence for Manchester University designed by Harry S. Fairhurst and Partners.



Peter House, a block of offices in St. Peter's Square, Manchester, by Amsell and Bailey.



Granada Television Centre, Manchester, by Ralph Tubbs.



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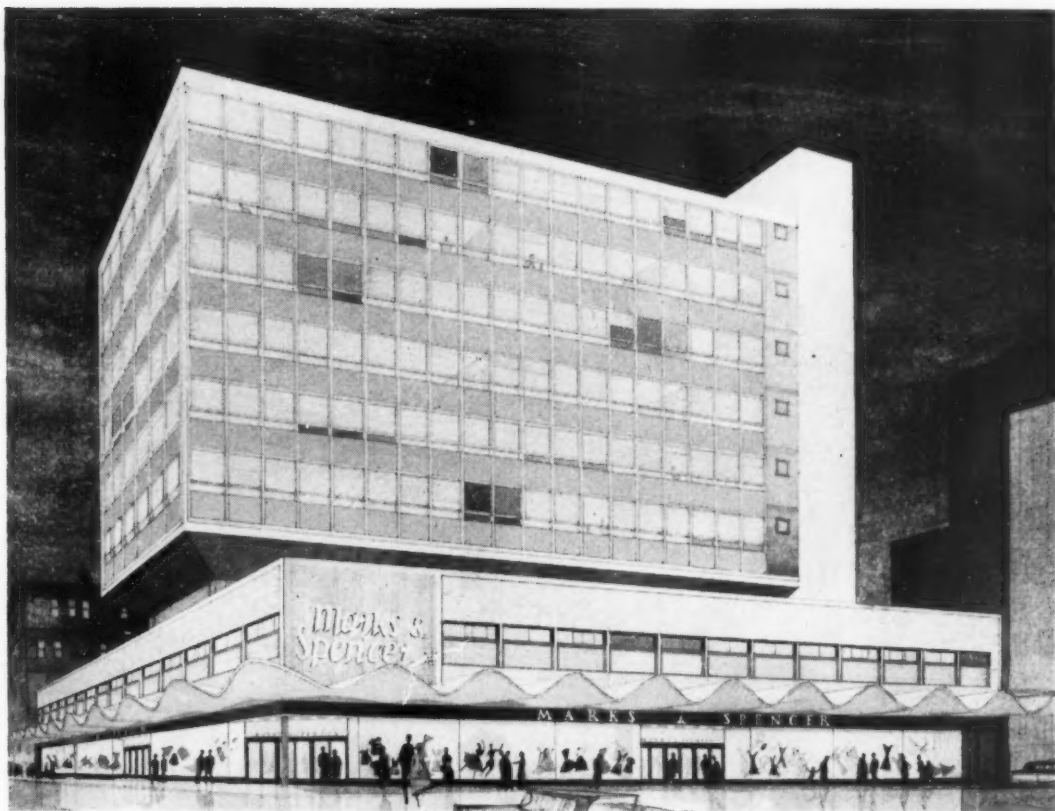
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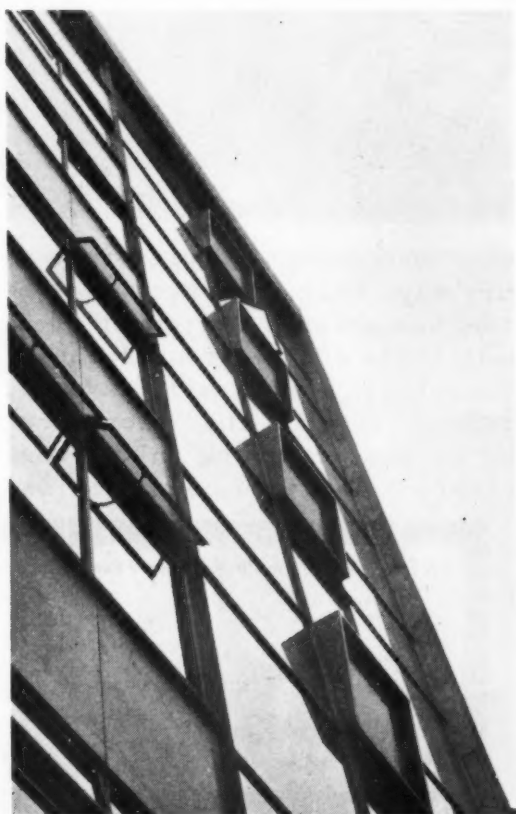
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Department store and offices in Market Street, Manchester; a project for Unicorn Property Corporation by Cruickshank and Seward.



A detail of Queen's House, Manchester, by Cruickshank and Seward.



Offices for the Automobile Association, Manchester, by Stephenson, Young and Partners.



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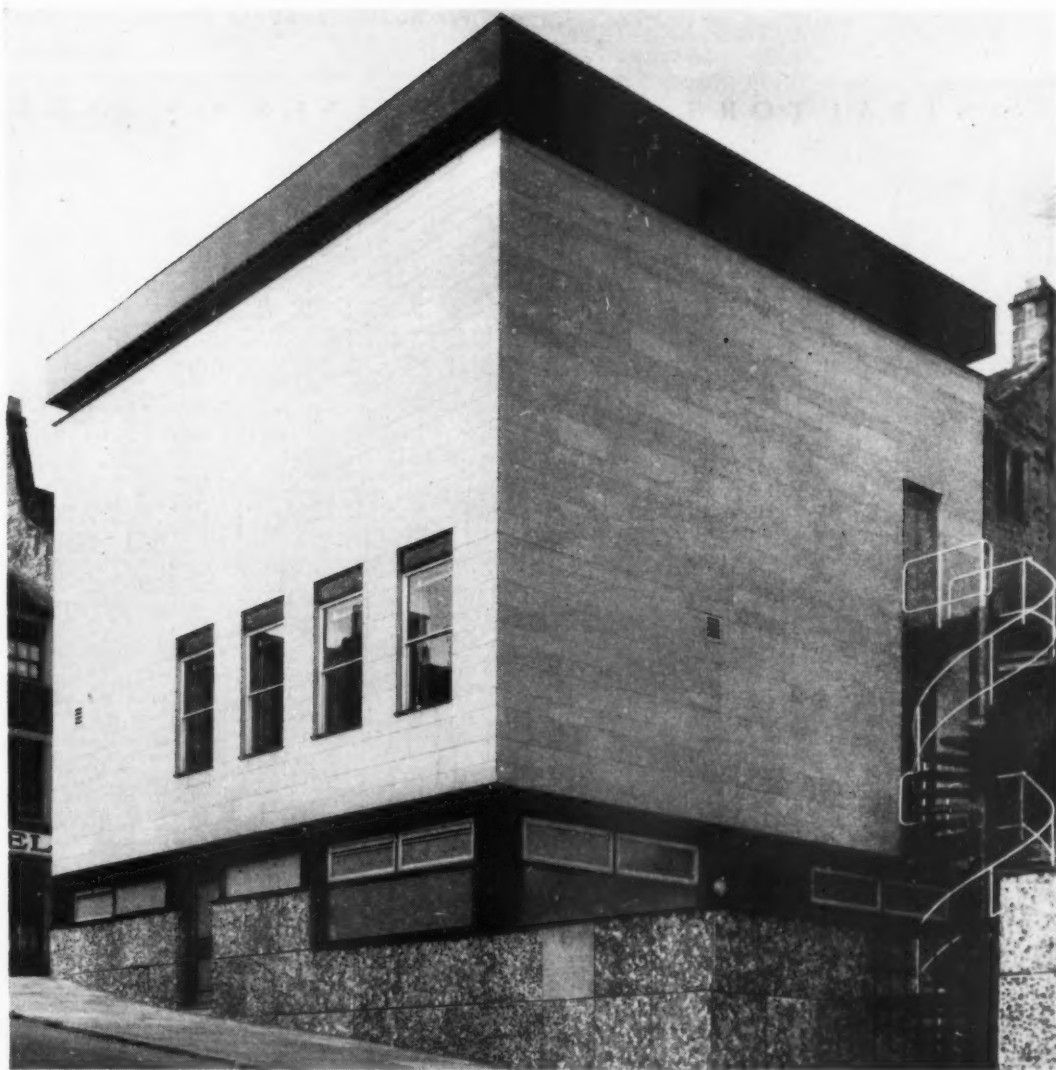
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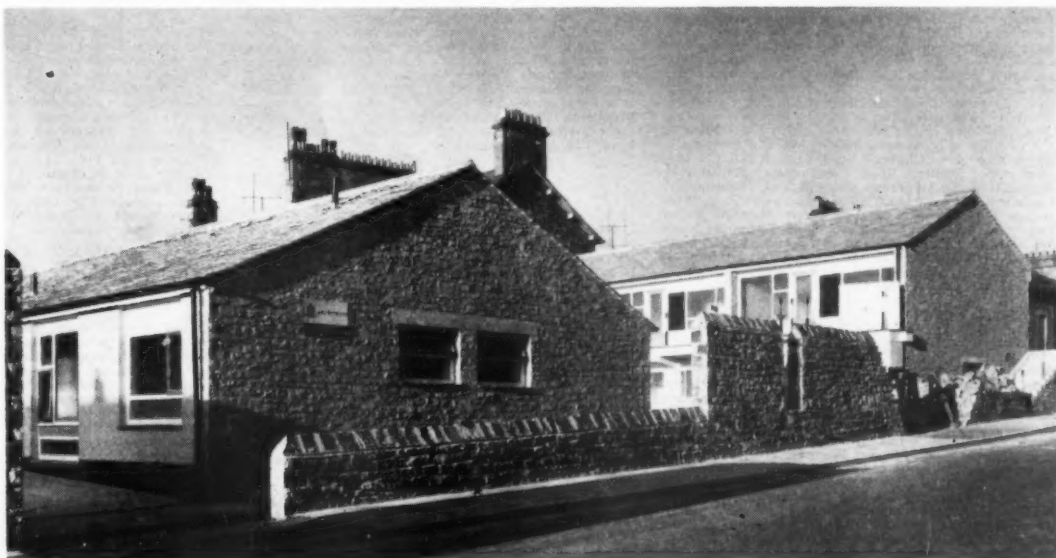
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Almshouses, Lancaster, by C. E. Pearson of C. B. Pearson and Son. Architect in charge, Jack Waterhouse, assistant architects, C. Michael Pearson and Cedric Price.

CONTRACTORS FOR BUILDINGS ON PAGES 931-40

The Margaret Barclay Special School, Moberley, by Leonard C. Howitt, City Architect. *General contractors:* Cooper Bros., and John Clayton Ltd., Macclesfield. *Reinforced concrete frame:* Matthew & Mumby, Manchester. *Bricks:* The London Brick Co. *Roofing:* Limmer & Trinidad Lake Asphalt Co. Ltd. *Windows:* George Wragge Ltd., Manchester. *Floor finishes:* Robert Kerr Ltd., Manchester. *Door furniture:* James Gibbons Ltd., Wolverhampton. *W.C. partitions:* Sars Ltd., Isle of Wight. *Wrought ironwork:* George Wragge Ltd., Manchester. *Heating:* Blackshaw (Park Lane) Ltd., Macclesfield. *Electrical work:* Broughton & Irlam Ltd. *Hydrotherapy bath:* Bell Bros., Denton; Shaws Glazed Brick Co. Ltd., Darwen, Lancs.

The Barlow Hall Secondary School, Chorlton-cum-Hardy, by Leonard C. Howitt, City Architect. *General contractors:* William Hall Ltd., Liverpool. *Reinforced concrete frame:* Concrete Ltd. *Bricks:* Ravenhead Brick Co. *Roofing:* Permanite, Windows: Crittall Ltd. *Floor finishes:* Granwood & Semtex. *Door furniture:* James Gibbons Ltd., Wolverhampton. *W.C. partitions:* Sars Ltd., Isle of Wight. *Wrought ironwork:* Brooks (Architectural Metalwork) Ltd., Manchester. *Heating:* Matthew Hall Ltd., London. *Electrical work:* Frank Wall Ltd., Oldham.

West Wythenshawe College for Further Education, designed by Leonard C. Howitt, City Architect. *General contractors:* Messrs. G. & J. Seddon Ltd., Little Hulton, nr. Manchester. *Bricks:* Ravenhead Brick Co. *Roofings:* General Contractors & Andersons Roofing Ltd. *Windows:* Stelwin Constructions Ltd., London. *Floor finishes:* May Ltd., Wigan; Limmer & Trinidad Lake Asphalt Co. Ltd.; Buckley Ltd.; Conways Ltd. *Door furniture:* Messrs. Dryad Ltd.; Laidlaw & Thompson; James Gibbons Ltd. *W.C. partitions:* Sars Ltd., Isle of Wight. *Wrought ironwork:* J. Howard Ltd., Walkden. *Heating:* G. N. Haden Ltd., London. *Electrical works:* Brown & Partners, London and Manchester.

Blackley Crematorium and Cemetery Chapels. *General contractors:* G. & J. Seddon Ltd. *Sub-contractors—Seating in main chapel and side chapels:* Hills of London Ltd. *Drapes in Chapels 1 and 2:* Lewis's Ltd. *Ironmongery:* James Gibbons Ltd. *Pulveriser:* Ellis Rose & Co. (M/c.) Ltd. *Dome lights:* Williams & Watson Ltd. *Glasscrete domes:* J. A. King & Co. Ltd. *Metal windows:* W. E. Coffey & Son Ltd. *Opening ceremony plaque:* J. & H. Patteson Ltd. *Catafalques in side chapels:* G. & J. Seddon Ltd. *Catafalques in main chapel:* G. & J. Seddon Ltd.; Wettern Bros. *Cross on main elevation:* Granolithic Concrete Co. Ltd. *Catafalque gates to side chapels:* Birmingham Guild Ltd. *Catafalque gates in main chapel:* Birmingham Guild Ltd.; Williams & Watson Ltd. *Twin cremator unit:* Dowson & Mason. *Lightning conductor:* W. J. Furze & Co. *Electronic organ:* John Compton Organ Co. Ltd. *Heating, hot water, gas and ventilation installations:* G. N. Haden & Sons Ltd. *Electrical installation:* Frank Hall & Co. Ltd. *Cast stone:* Wettern Bros. *Registrar's block—Aluminium doors:* James Gibbons Ltd. *Cycle racks:* Alfred A. Odeni & Co. Ltd. *Strong room metal shelving:* W. H. Preece & Co. *Strong room door:* Chubb & Sons, Lock & Safe Co. Ltd. *Cast stone:* Wettern Bros. *Dome lights:* Williams & Watson Ltd. *Locks:* James Gibbons Ltd. *Ironmongery:* Laidlaw & Thomson Ltd. *Sliding door gear:* P. C. Henderson Ltd. *Drying room equipment:* Matthew Swain Ltd. *Windows:* W. E. Coffey & Sons. *Glasscrete dome lights:* J. A. King & Co. Ltd. *Refrigeration equipment:* J. & E. Hall Ltd. *Electrical installation:* Engineering Services Ltd.; Installations Ltd. *Sprayed asbestos:* Turners Asbestos Cement Co. Ltd.

Salford Royal Technical College. *General contractor:* John Turner & Sons (Preston) Ltd., William Henry Street, Preston. *Sub-contractors:* Plasterer and pavior: R. H. Catterall & Co. Ltd.; Granwood Flooring Co. *Plumber, gas fitter and glazier:* R. Heyworth & Co. Ltd. *Painter:* A. Sharrock Ltd. *Structural steelwork:* Sherratt & Smith Ltd. *Piling—Pressure Piling Co. (Northern), Ltd.* *Terrazzo:* A. Quilgotti & Co. Ltd.; Conways (Tiles & Terrazzo) Ltd. *Ventilation:* R. Wood & Son (Bacup) Ltd.; Ellesmere Engineering Co. Ltd. *Laboratory fittings, etc.:* Waring & Gillow Ltd.; Baird & Tatlock Ltd.; Armstrongs (Hull) Ltd. *Central heating:* J. Mercer Ltd. *Metal windows and curtain walling:* Crittall Manufacturing Co. Ltd. *Asphalter:* J. Dickinson & Co. Ltd.; Val de Travers Ltd. *Electrician:* F. H. Wheeler & Co. Ltd. *Railings and gates:* J. Lythgoe (Walkden) Ltd. *Felt roofer:* D. Anderson & Co. Ltd.; Permanite Ltd. *Balustrading:* The Culford Art Metal Works; R. Farnworth & Co. Ltd. *Acid resisting floors:* Anconite Ltd. *Quartzite facing works:* J. Stubbs Ltd. *Lift installation:* Marryat & Scott. *Thermoplastic*

tile flooring: Marley Tile Co. Ltd. *Waterproof cement rendering:* W. J. Harries Ltd. *Faience tiling:* Shaws Glazed Brick Co. *Cold water storage tank installation:* Meshams Ltd. *Sliding door installation:* Bolton Gate Co. *Altro flooring:* Adamite & Co. Ltd. *Telephone system:* Post Office Telephones. *Industrial removal contractors:* Beck & Pollitzer Ltd. *Window cleaning:* The Provincial Window Cleaning Services. *Organ installation:* Rushworth & Draper Ltd. *Steel flooring and treads:* Stunsweld Engineering Co. Ltd. *Hose reels:* J. E. Mercer Ltd.

Albert Bridge House, Manchester. *Main contractor:* J. Gerrard & Sons Ltd. *Consulting engineers:* Messrs. Travers, Morgan & Partners. *Direct contractors for lifts:* Otis-Elevator Co. Ltd. *Direct contractors for boilers:* Bonellat Eng. Ltd. *Sub-contractors:* Ready-mixed concrete: Trumit Concrete Co. Ltd. *Portland stone:* South Western Stone Co. *Steelwork:* H. Peers & Co. Ltd. *Asphalt floors:* Davies Bros. Ltd. *Marble and slate work:* J. H. Patterson Ltd. *Felt roofing:* Limmer & Trinidad Lake Asphalt Co. *Reinforcement (fix only):* R. Smith (Horley) Ltd. *Wall tiling and terrazzo:* Hulme & Potts Ltd. *Metal windows:* Geo. Wragge Ltd. *Vitrolite panels and glazing:* Williams & Watson Ltd. *Plastering:* W. T. Roberts & Son Ltd. *Painting:* Wm. Winstanley & Co. Ltd. *Cold glaze:* Proderite Ltd. *Heating, hot and cold water:* G. Dawson & Sons Ltd. *Electrical installations:* Grierson Ltd. *Lightning protection:* W. J. Furze & Co. Ltd.

Matthews & Mumby's Factory at Denton. *General contractors:* Matthews & Mumby Ltd., Manchester. *Sub-contractors:* Plumbing: A. Longworth & Sons Ltd., Manchester. *Aluminium sheeting:* Northern Aluminium, Banbury, Oxfordshire. *Tiling:* Conways Ltd., Manchester. *Suspended ceilings:* J. W. Beaumont & Sons, Manchester. *Plasterers:* W. J. Roberts & Sons Ltd., Manchester. *Painting:* Charles Bell Ltd., Manchester.

Alport House, Quay Street, Manchester. *Reinforced concrete structure:* Matthews & Mumby Ltd., Manchester. *Brickwork:* J. Gerrard, Swinton, Manchester. *Mahogany double glazed windows:* Hide & Co., Squires Gate, Blackpool. *Varnishing:* D. Gosling & Co., Manchester. *Plumbing works:* Robert Heyworth & Co., Manchester. *Joinery work:* P. Hamer Ltd., Swinton, Manchester. *Electrical work:* E. Soper & Son, Cheadle Hulme, Stockport. *Electrical consultant:* W. A. Shaw & Co. Ltd., Stockport. *Plasterer and painter:* Messrs. James Glynn Ltd., Oldham. *Lift installation:* Express Lifts, Manchester. *Curtain walling:* Williams & Williams, Manchester. *Terrazzo (staircase):* J. & H. Patteson, Manchester. *Mosaic facing:* Dennis M. Williams, Kingston-on-Thames. *Roofing finish:* D. Anderson, Stretford, Manchester. *Barrel roofing and lights:* J. A. King & Co., London. *Shop fitting (entrance hall):* Wm. Mason's, Leeds. *Balustrade:* George Wragge, Salford. *Lighting conductor:* John Faulkner & Son, Manchester. *Sliding door:* Bolton Gate Co., Bolton. *Lift installation:* Express Lifts, Manchester. *Refuse chute:* Middleton Sheet Metal, Middleton, Lancs. *Concrete coping:* Hornsop Concrete Co., Kendal. *Neon sign:* Franco Signs, Manchester.

Oxford Road Station, Manchester. *Main contractors:* E. B. Jones & Rawlinson Ltd., Salford. *Sub-contractors and suppliers:* Bellmatic ticket units: Bell Punch Co. Ltd., London. *Metal shutters:* Potter Rex Ltd., London. *Domelights:* Allan Blunn Ltd., London. *Tile flooring:* Semtex Ltd., Middlesex. *Speaking panels:* Westinghouse Garrard Ticket Machines Ltd., Wilts. *Ironmongery:* Alfred G. Roberts, London. *Wall and floor tiling:* Conways Ltd., Manchester. *Sanitary fittings:* Sun Gratrix Ltd., London. *Adamant Ltd., Newcastle upon Tyne, Ltd.* *Waterproofing roofs:* Evode Ltd., Stafford. *Infilling panels:* Rustless Iron Co., Yorks. *Terrazzo:* Conways Ltd., Manchester. *Furniture:* Conran Furniture, London; Romeo Ltd., London; Pol Ltd., London. *Station signs:* Signcrafts Ltd., London. *Timber roof:* Evode Ltd., Stafford. *Rainwater pipes:* Templewood Hawksley Ltd., Slough, Bucks.

The Times Furnishing Co. Ltd., 86-88, Market Street, Manchester. *General contractor:* Bovis Ltd. *Sub-contractors:* Steelwork: Oxford & Cowley Structural floors: Concrete Ltd. *Electrical:* Troughton & Young. *Lift:* Marryat & Scott. *Mosaic and terrazzo:* Alpha Mosaic & Terrazzo Co. *Strip flooring:* Hollis Bros. *Heating:* Saunders & Taylor. *Balustrading:* Kingsmill Metal Co. *Shopfront:* Constructional Units Ltd. *Asphalt:* Val de

Travers. *Shutter doors:* Potter Rax. *Patent glazing:* Faulkner Green. *Partitioning:* Compactom. *Consulting Engineer:* John S. Tooke, A.M.I.Struct.E. *Quantity Surveyor:* Harris Rourke & Simpson.

Needham Hall, University of Manchester. *Main contractor:* Messrs. Cooper Bros. & John Clayton Ltd. *Sub-contractors:* Electrical installation: Messrs. F. L. Bampton & Co. Ltd. *Heating:* Messrs. Robert Heyworth & Co. Ltd. *Plumbing and copper roofing:* Messrs. W. J. Jaffery & Co. Ltd. *Painting and plastering:* Messrs. W. J. Roberts & Son Ltd. *Special plastering:* Messrs. Hindshaw & Co. *Cooking equipment:* Benham & Son Ltd. *Floor screeds:* Celcon Ltd. *Ironmongery:* Messrs. Parker, Winder & Achurch Ltd. *Metalwork:* Messrs. Brookes (1925) Ltd. *Metal windows:* The Crittall Manufacturing Co. Ltd. *Sanitary fittings:* Messrs. Morrison Ingram & Co. Ltd. *Fitted furniture:* Messrs. Armstrongs (Hull) Ltd. *Facing bricks:* The Himley Brick Co. Ltd. *Floor finishes:* Messrs. Rowan & Boden Ltd. *Tiling:* Messrs. J. Lowe (Manchester) Ltd. *Landscaping:* S. E. Matthews Ltd. *Quantity Surveyor:* Mr. W. G. Wood, Warrington. *Kitchen Consultant:* Mr. O. C. Waygood, O.B.E., Hoylake, Wirral.

Peter House, Manchester. *Main contractors:* Messrs. H. Fairweather & Co. Ltd., London. *Sub-contractors:* Reinforced concrete: The Fram Reinforced Concrete Co. Ltd., Manchester. *Heating, hot water and ventilation installations:* Hosser & Russell, London. *Metal windows, pavement and roof lights:* Luxfer Ltd., London. *Stone-work:* William Moss & Sons Ltd., Liverpool. *Lifts:* J. & E. Hall Ltd., London. *Fire protection:* Atlas Sprinkler Co. Ltd., Glamorgan. *Piling:* The Cementation Co. Ltd., London. *Electrical installation:* Troughton & Young, London. *Asphalt:* The General Asphalt Co. Ltd., London. *Terrazzo:* Conways (Tiles & Terrazzo) Ltd., Manchester. *Collapsible gate:* Roller Shutters Ltd., Birmingham. *Copper slots and cramps:* G. Harrison & Son Ltd., London. *Lightning conductors:* J. W. Gray & Son Ltd., London. *Artificial stone:* Girlings Ferro-Concrete Co. Ltd., Leeds. *Car turntables:* Francis Tankston (1933) Ltd., London. *Wrought iron work:* Brookes & Co. (1925) Ltd., Manchester; Guildford Art Metal Co., London. *Sanitary fittings:* John Bolding & Son Ltd., London. *Safetread flooring:* Allan Kennedy & Co. Ltd., Stockton-on-Tees. *Incinerators:* Wm. Hugg & Co. Ltd., London. *Ironmongery:* W. & R. Leggett Ltd., Manchester. *Thermoplastic floor tiling:* The Marley Tile Co., Cheshire. *Plastering and pointing:* W. J. Roberts & Son Ltd., Manchester. *Glazing:* Faulkner Greene & Co. Ltd., London. *Marblework:* John Stubbs (Marble & Quartzite) Ltd., Liverpool. *Ready mixed concrete:* Hilton Gravel Ltd., Manchester.

Queen's House, Manchester. *General contractors:* J. Gerrard & Sons Ltd., Swinton. *Sub-contractors:* Reinforced concrete: Matthews & Mumby Ltd., Manchester. *Heating and ventilating:* Couzens & Akers Ltd., Birmingham. *Electrical installation:* E. Lee & Co., Manchester. *Plumbing:* J. Glynn, Oldham. *Painting:* W. Winstanley & Co. Ltd., Warrington. *Aluminium windows:* Doods & Bain Ltd., Manchester. *Suspended ceiling:* Beaumonts (Manchester) Ltd., Manchester. *Terrazzo:* Terradura Flooring Co. Ltd., Manchester. *Marble and faience facings:* J. & H. Patteson Ltd., Manchester. *Asphalt roofing and thermoplastic flooring:* Limmer & Trinidad Lake Asphalt Co. Ltd., Manchester. *Main entrance doors:* Wright & Olfand, Manchester 15. *Lift:* Marryat & Scott Ltd., Manchester.

The Automobile Association's Farnham House, Manchester. *General contractors:* J. Gerrard & Sons Ltd., Manchester. *Sub-contractors:* Lifts: Evans Lifts Ltd., Leicester. *Lightning conductor:* John Faulkner & Sons Ltd., Manchester. *Partitioning:* Hall Engineering Ltd., Shrewsbury. *Plumbing:* Merseyside Plumbing Co. Ltd., Liverpool. *Fire extinguishers:* Minimax Ltd., Middlesex. *Terrazzo and tiling:* J. & H. Patteson Ltd., Manchester. *Heating:* David Peters Ltd., Manchester. *Sanitary fittings:* Rowe Bros. Ltd., Liverpool. *Granite facings:* John F. Shackleton & Son Ltd., York. *Sound insulation (see heated ceilings):* Stiltsound Insulation Ltd., Manchester. *Windows and curtain walling:* John Thompson Beacon Window Ltd., Manchester. *Curtain walling:* Holoplast Ltd., Kent. *Reinforced concrete:* Trussed Concrete Steel Co. Ltd., Harlow. *Electrical installation:* Winstanley & Lambert Ltd., Liverpool. *Glazing (Hillsuite):* Williams & Watson Ltd., Liverpool. *Shop fitters:* Griffiths & Jones, Birkenhead. *Heated ceilings:* Burgess Sulzer Ltd., London. *Flooring:* Rowen & Bowden, Liverpool 3; Korkoid Decorative Floors Ltd., Liverpool. *Venetian blinds:* D. Matthews & Sons Ltd., Dale Street, Liverpool. *Ironmongery:* Quiggin Bros. Ltd., Liverpool. *Lettering and carving:* H. Tyson Smith, Esq., M.A., Liverpool.

working detail

BOOK TROLLEY: CHILDREN'S LIBRARY IN LONDON, S.W.1.

Powell and Moya, architects

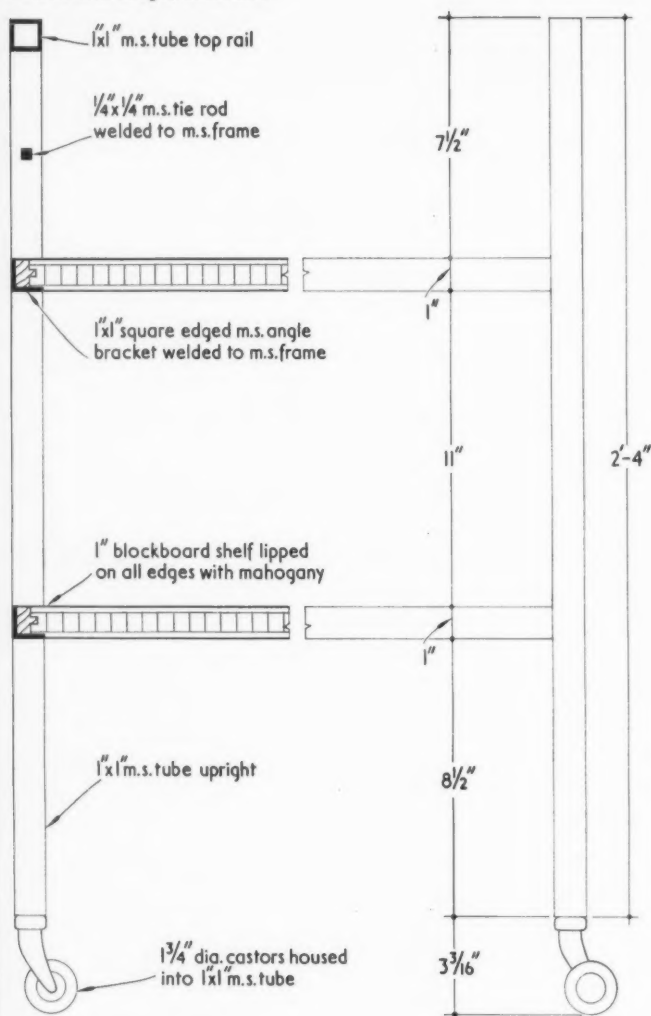


This detail illustrates the good architectural effect produced by furniture, the framing of which is formed from 1-in. square steel tube. All joints are welded and ground off flush and all steelwork is painted black

working detail

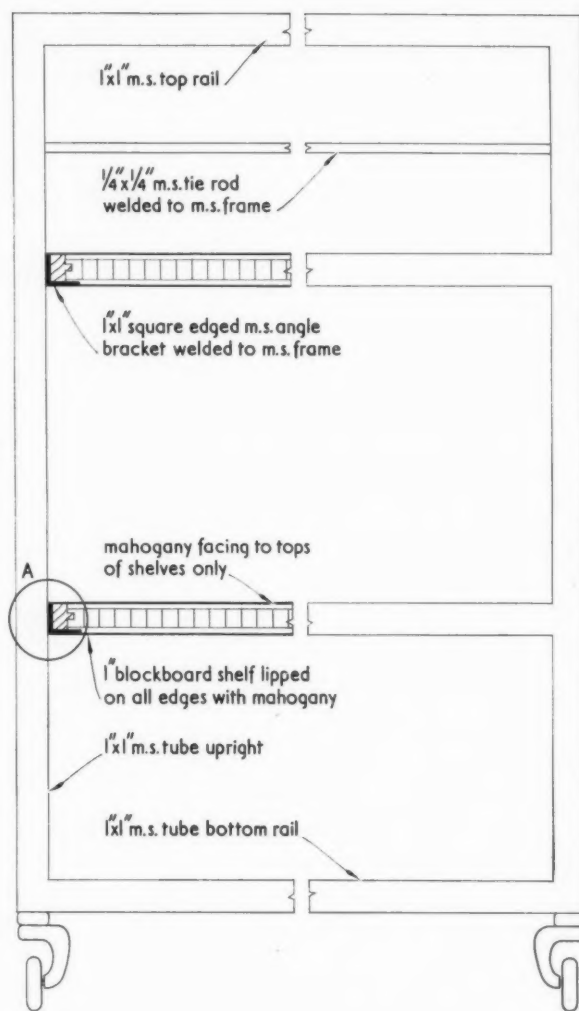
BOOK TROLLEY: CHILDREN'S LIBRARY IN LONDON, S.W.1.

Powell and Moya, architects

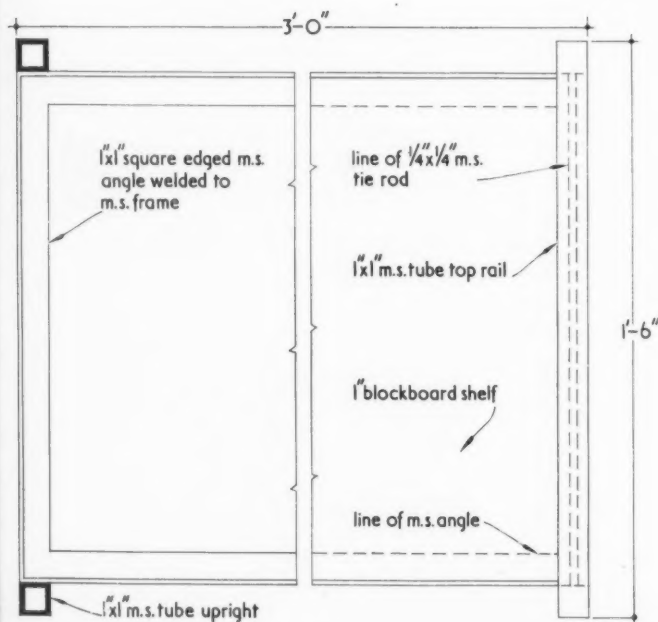


LONGITUDINAL SECTION.

FRONT ELEVATION.

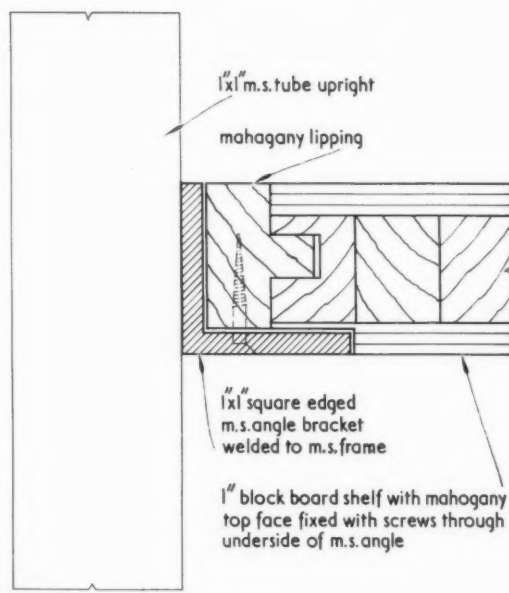
CROSS SECTION.
scale 3/16 full size

END ELEVATION.



SECTIONAL PLAN.

PLAN.



DETAIL AT A. scale full size

working detail

(8)
FURNITURE AND FITTINGS: 94

MOVABLE BOOKCASE: CHILDREN'S LIBRARY IN LONDON, S.W.1.

Powell and Moya, architects

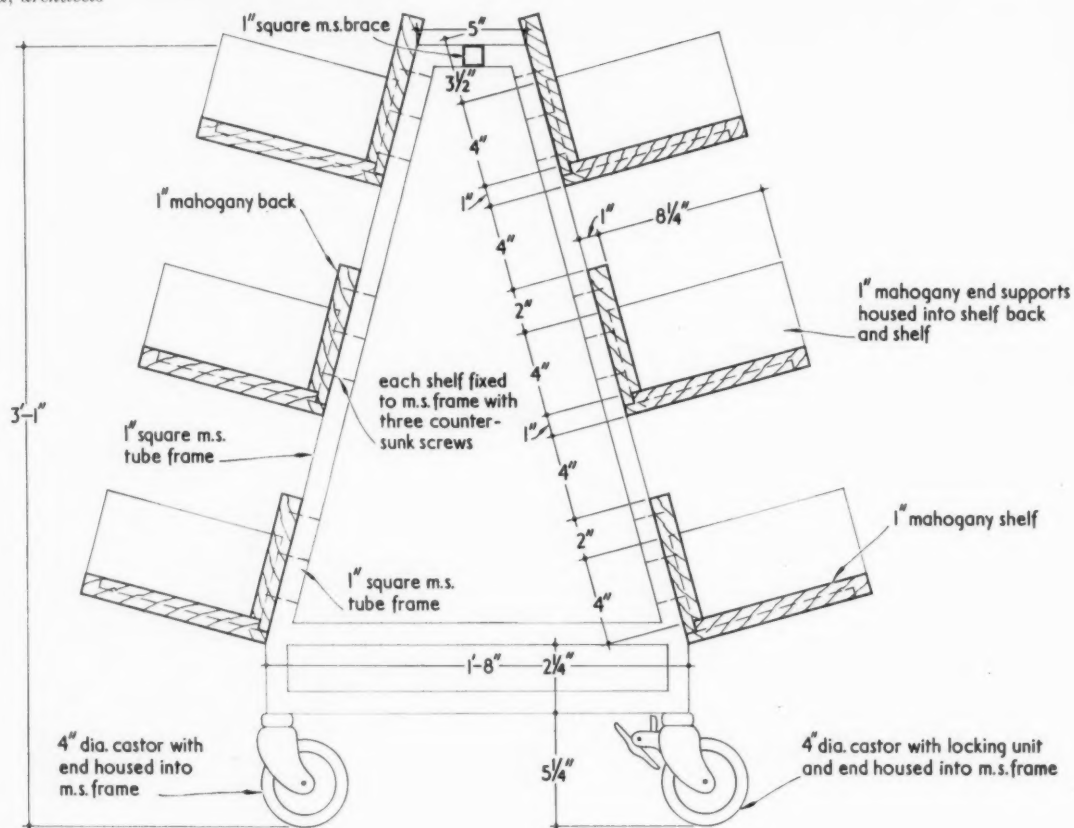


In this design the shelves are bracketed to the frame principally by the bookends which are housed securely into both shelf and back. Note that locks are provided on two of the castors at opposite corners so that the shelving can be immobilised at will.

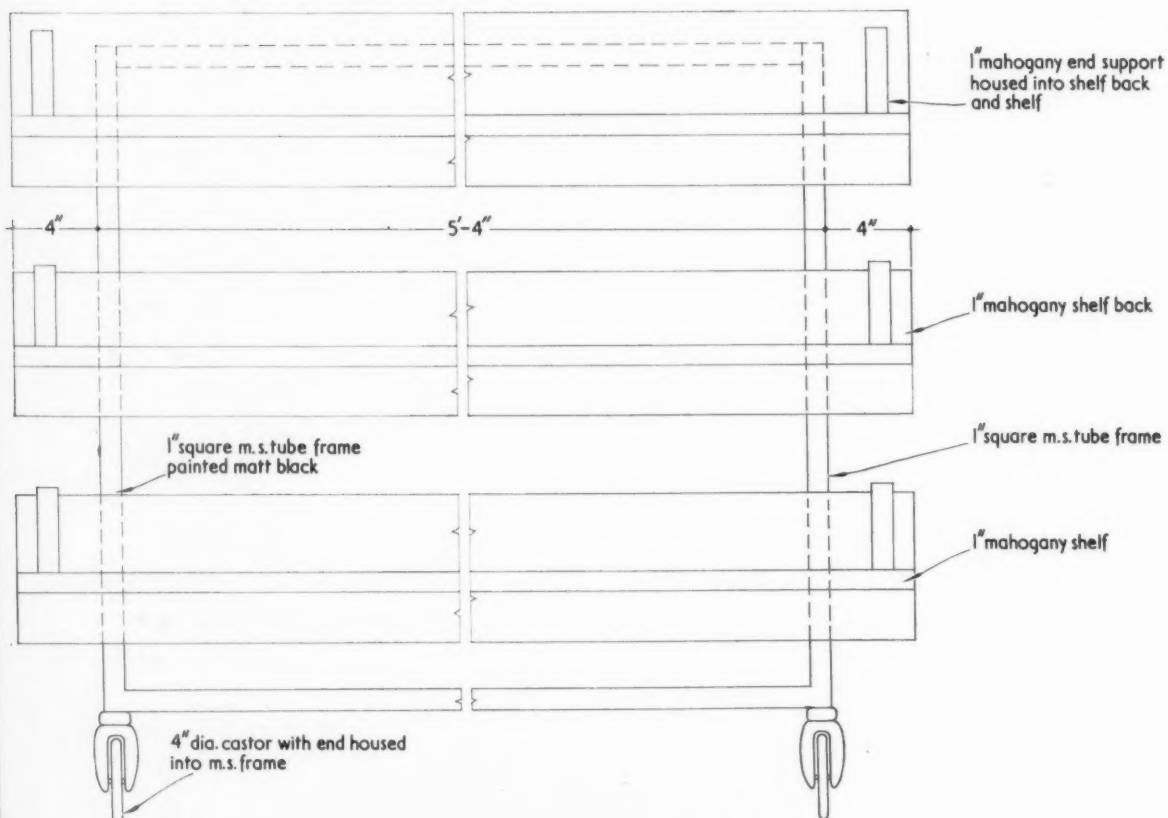
working detail

MOVABLE BOOKCASE: CHILDREN'S LIBRARY IN LONDON, S.W.1.

Powell and Moya, architects



CROSS SECTION. scale $\frac{1}{8}$ full size



FRONT ELEVATION. scale $\frac{1}{8}$ full size



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SPECIFY SOFONO BOILER FLUE SETS

SOFONO NORMAL DUTY FLUE SET

Materials, Finishes: One-piece cast-iron flue set, one-piece side cheek bricks in refractory. Fire in cast-iron, vitreous enamelled. Choice of 8 colours. Mild steel ashpan. Boiler in cast-iron, wrought-welded steel or copper. Cast-iron throat restrictor. **Space Heating:** Rooms up to 1,500 cu. ft. **Boiler Output:** Max. maintainable—12,000 B.T.U./Hr. **Domestic Hot Water:** 30 gallon storage cylinder. **Radiators only:** Heats 50 sq. ft. of radiators. **Fire:** Any 16" Sofono continuous fire suitable. Luminous gas ignition burner available. **Construction:** Self-contained boiler flue with removable cover for cleaning. Refractory cheek bricks, and scone brick to base of boiler flue. Cast-iron or wrought-welded steel boiler has hand hole and can be supplied bower-barffed. Drilled, tapped with 2-1" B.S.P. holes one side. **REVERSIBLE** for left or right hand connection. **Combustion Control:** Adjustable ashpit door to fire. **Installation:** Brickwork opening 22½" wide x 13½" deep x 25" to underside of lintel. **Fire Opening in Surround:** 16" wide x 22" or 24" high. **Tools, Accessories:** Ashpan and tool for combustion control, lifting ashpan, operating flue damper and restrictor.

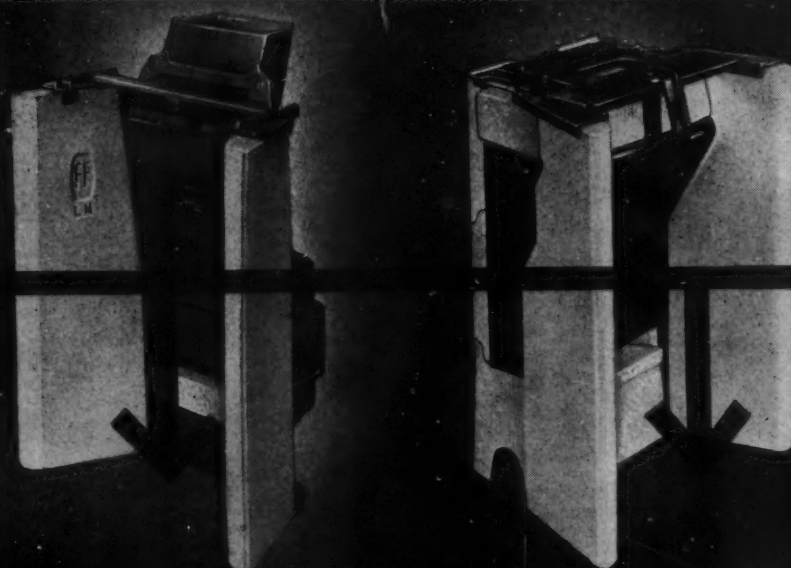
SOFONO HIGH DUTY FLUE SET

Materials, Finishes: Flue set in refractory bricks. Cast-iron boiler damper frame, sliding damper. Sofono Inset fire in cast-iron, vitreous enamelled in choice of 8 colours. Mild steel ashpan. Boiler in cast-iron, wrought-welded steel or copper. Cast-iron throat restrictor. **Space Heating:** Rooms up to 1,500 cu. ft. **Boiler:** Max. maintainable—18,000 B.T.U./Hr. **Domestic Hot Water:** Raises 18 gallons from 50° F. to 150° F. hourly. **Combined System:** Heats water through 30 gallon cylinder and heats 45 sq. ft. of radiators. **Radiators only:** Serves 80 sq. ft. **Fire:** Any 16" Sofono continuous fire suitable. Luminous gas ignition burner available. **Construction:** Stool for boiler; two-piece back brick to boiler flue; two cheek bricks. Cast-iron damper frame, sliding damper. Cast-iron or wrought-welded steel boiler has hand hole, and can be supplied bower-barffed. Two 1½" B.S.P. tapped holes both sides for flow and return. Plugged one side. **Combustion Control:** Adjustable ashpit door to fire. **Installation:** Brickwork opening 22½" wide x 13½" deep x 25" to underside of lintel. **Fire Opening in Surround:** 16" wide x 22" or 24" high. **Tools, Accessories:** Ashpan and tool for combustion control, lifting ashpan, operating flue damper and restrictor.

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NEWS

BIRTHDAY HONOURS

Knighthood for Basil Spence

President Basil Spence has received a Knighthood in the Queen's Birthday Honours List. F. M. Lea, Director of the Building Research Station has been made Companion of the Order of the Bath, and George Grenfell Baines has received the OBE. Other awards are:

GBE: John W. Halford, Baron Cottesloe, for services to the Arts.

Knight: G. B. B. M. Sutherland, Director of the National Physical Laboratory.

KCB: F. C. Francis, Director and Principal Librarian, British Museum.

CBE: Leslie Farrer-Brown, Director of the Nuffield Foundation. B. J. Collins, County Planning Officer, Middlesex. Ceri Richards, painter. H. G. Rushbury, artist, Keeper of the Royal Academy.

OBE: O. G. F. Brown, joint managing director, Leicester Galleries. Norman Davey, Senior Principal Scientific Officer, BRS. R. W. B. Howarth, Chief Information Officer, M.O.W. C. R. H. Ward, deputy director, Exhibition Division, Central Office of Information. Ian Small, Director, West African Building Research Institute. David W. Spreull, Government Town Planner, Jamaica.

MBE: R. E. Thallen, Head, Technical Information Service, MOW. H. E. Wilson, general secretary, Institute of Housing.

ISO: T. H. Pritchard, Deputy Director of Contracts, MOW.

MANCHESTER

Symposium on City Centre Redevelopment

Three leading town planners—one German and two British—were the principal speakers at a one-day symposium on city centre redevelopment held recently at the College of Science and Technology in Manchester. The guest speaker from Germany was Professor Rudolf Hillebrecht, City Architect of Hanover, whose plans for the rebuilding of Hanover were on exhibition in the College.

Hanover itself was badly damaged during the war. In 1945 nine-tenths of the central area lay in ruins. About one-half of the city as a whole had been destroyed and the population had shrunk from 417,000 to 217,000. The exhibition shows Professor Hillebrecht's plan for a reconstructed city of 600,000 inhabitants laid out in accordance with planning principles, which, it is claimed, is now more than half way to completion. This would be a remarkable achievement by any standards, but when it is recalled that this has been done with minimal planning legislation and using negotiation and agreement rather than compulsory powers, the results are a real tribute to the determination of the city council and the skill of their principal officer.

In his address describing the form and

nature of his plan, Professor Hillebrecht declared that many of the ideas he had used were adapted from those developed by British planners during and immediately after the war. Many of the principles employed were, in fact, very familiar. Hanover stands at a major junction of national and international routes and one of the main features of the plan, therefore, is a series of major traffic highways. The central area and the inner suburbs were badly congested, so a policy of decentralization was adopted and the redeveloped areas and new suburbs were laid out at lower densities on a neighbourhood principle with segregated traffic and generous open spaces. Hanover is also an important commercial centre, so particular importance was attached to the reconstruction of the central area. Redevelopment was planned on comprehensive lines; segregation of uses, limitation of the size of office blocks, parking spaces and building layout all receiving special attention. The results were a most convincing demonstration of the practical value and effectiveness of many of our standard planning principles. They work—if only they are applied in time, on the proper scale and with sufficient imagination.

Arthur Ling then examined some of the difficulties that British planners have experienced in their attempts to put these principles into practice here. Coventry is in some respects a British counterpart to Hanover and, outside the new towns, contains our largest scale attempt so far to carry out comprehensive central area redevelopment. He re-emphasized the fundamental im-

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portance of planning and executing redevelopment on the comprehensive scale used in Hanover rather than bit-by-bit, and the need to secure the interest and the support of the general public for the scheme. In the concluding address, Professor Sir William Holford discussed the very different approaches that are made to the problems of building and re-building a city in Britain, on the Continent and in the United States. These differences, he suggested, are mainly due to the very different ideas that exist in each of these places about the nature, function and importance of the city itself. Each had its own distinct urban ideal and each society varied in the lengths it was prepared to go to reach this ideal. In Britain, we had evolved an elaborate system designed to be scrupulously fair to all the multifarious interests involved. This was very democratic—but desperately slow. There was, in fact, a growing danger that this system would prove unable to keep pace with the very rapid changes now taking place in our urban areas.

PAUL BRONIKOV

COST PLANNING

Post-graduate Course

In response to growing interest a second post-graduate course on cost planning, sponsored by the Quantity Surveyors' Committee and the Cost Research Panel of the RICS and organized by the Brixton School of Building, was held at the TUC Memorial

Building from May 9 to 12.

The significant feature of this course was that though it was not intended exclusively for quantity surveyors their applications took precedence. The overwhelming popularity of the course drawing over 100 applicants for 30-odd places meant that, in fact, only quantity surveyors attended. The object of the course was not so much to convince the profession of the necessity for cost planning as to continue the process of spreading amongst members both the background and the mechanics of this technique. That most quantity surveyors have no doubts in their minds that cost planning is quite rightly here to stay can probably be accepted as fact. Although the ministries and local authorities were well represented, the majority of those attending were from private practice, large and small, a factor which played its part in the direction taken in subsequent discussion.

The structure of the course followed the well-tried pattern of previous courses of a similar nature, the early speakers being concerned to show the broad pattern of our economy and the part played in it by the building industry, leading logically to the place of cost planning in the industry. Thus, for example, Cyril H. Walker discussed "The Developer and Building Costs," J. W. Hughes "Value and Costs," and F. Michael Lee "Cost Research and Cost Planning."

Later speakers outlined the relationship between architect and quantity surveyor (one paper by J. O. Stevens and W. S. Frost, and a second by D. W. Nunn and

A. A. Bellamy) stressing that an early start to teamwork on any project was essential if the full fruits of cost planning were to be gathered. C. M. Nott and P. W. Grafton described cost planning techniques, and case histories were discussed.

Final discussion brought to light a number of points which clearly vex the quantity surveyor in private practice. C. A. Wales's paper "Cost Information" stimulated a good deal of discussion on the difficulties of obtaining reliable cost information and the problems involved in establishing and running a central library. Even the AJ cost analyses, published as part of *Buildings Illustrated*, came under fire, their usefulness to the quantity surveyor being questioned.

Other points discussed were the necessity for closer co-operation between architect and quantity surveyor, the difficulties encountered by quantity surveyors in making some architects cost conscious and persuading them to accept cost planning methods, lack of time on most projects for research and adequate preparation of cost data and difficulties of obtaining staff conversant with cost planning techniques (a problem made no easier by the fact that routine work still has to be done).

These problems and many others were well discussed and the mood of discussion left no doubt that solutions would have to be found. It was accepted by those present that cost planning already plays an important role in the work of both architects and quantity surveyors and the need to elevate it to the status of a compulsory subject in school syllabuses was fast becoming urgent.

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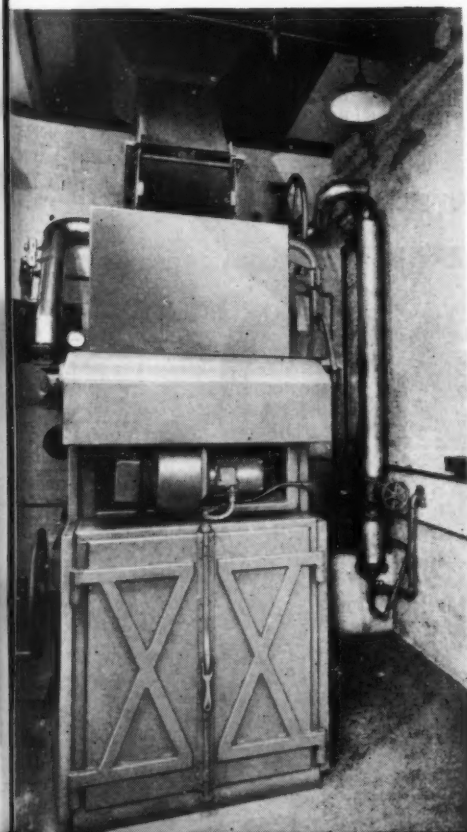
Telephone: Mansion House 6543



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by one compact**

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the world's most efficient coke-fired boiler



It hardly seems possible — until you know what the Redfyre Emma Boiler can do! This particular installation for the East Midland Gas Board Stores Depot, Sheffield produces 1,800,000 B.T.U./hr. And really slashes fuel costs. Redfyre's heating engineers will gladly show how the Redfyre Emma Boiler can revolutionize your heating arrangements. Or they'll plan and install complete layouts for you. Why not write for full technical details and proved performance figures.

- * *Very high efficiency — fully 85%*
- * *Burns any kind of coke up to 4"*
- * *Gravity feed*
- * *Automatic temperature control*
- * *Requires only a few minutes attention daily*
- * *Available in single or multiple units and from 1M to 8M B.T.U./hr.*
- * *Conforms to the requirements of The Clean Air Act and burns home produced fuels*

NEWTON CHAMBERS • ENGINEERS OF PROGRESS

ENGINEERING DIVISION: NEWTON CHAMBERS AND CO. LTD., THORNCLIFFE, SHEFFIELD



ISSUED BY THE NATIONAL COAL BOARD



IN 1887 TWELVE MEN in a small workshop in Raleigh Street, Nottingham, were making three bicycles a week. Today, the Raleigh plant and offices have a payroll of over 8,000 and turn out over 1,000,000 cycles and over 2,000,000 Sturmey-Archer hubs every year. Such is the proud record of this famous cycle company.

Obviously the shrewd men who control such a thriving concern have a flair for making long-term decisions that are both wise and profitable.

Raleigh use coal because all their experience has proved that coal gives them all the steam for both power and heat they need at the lowest possible cost. Raleigh are *expanding* on coal because they know that our coalfields contain all the coal that industry can use for many scores of years to come.

cycle at Raleigh

When it is your turn to cast a vote on fuel, remember Raleigh. Coal is the power that starts their wheels spinning so profitably. You can make *sure* that the wheels of your industry do the same for you when you stake your future power on the most reliable of all fuels—coal.

**PROGRESSIVE INDUSTRY
IS GOING FORWARD ON**

COAL

Policy into practice at Raleigh Industries

Mr. L. L. Roberts,
Director of Factories, comments:

"Coal is the fuel chosen for the whole of Raleigh's power-raising plant, including our newest installation which comprises four horizontal economic boilers. These operate on $\frac{1}{2}$ " washed smalls, and have a combined total rating of 74,400 lbs. of steam output per hour from and at 212°F.

An overall average efficiency of 72-75% can be easily maintained, although under test conditions we have recorded efficiencies of 80%.

All our coal handling plant is fully mechanised and apart from periodical trimming of the receiving bunkers, the fuel doesn't have to be touched at all by our boilermen anywhere from the delivery bays to the firebeds. After burning, the ash residue is automatically conveyed to overhead storage bunkers outside the boilerhouses, from where it is easily discharged into lorries for disposal.

Our emergency stocks of coal are relatively small. We prefer to operate on a direct supply basis from colliery to boilerhouse for more or less immediate use. This would not suit every firm, but in our special circumstances I am perfectly satisfied that deliveries are reliable enough to make this system dependable, and the possibility of an emergency arising out of failure of supply is very remote. We have operated this way for three years now without any trouble at all and will continue to do so in the future.

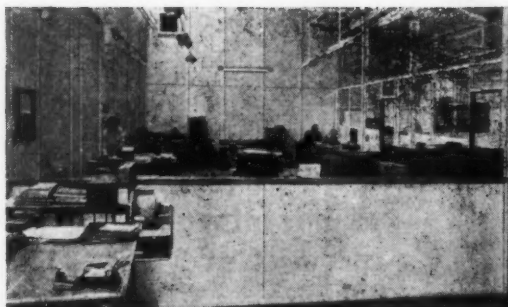
Raleigh's decision to use coal is based on economics. We want maximum reliability at the lowest possible cost—and I'm happy to say that with coal that's exactly what we get."

And here are some key facts and figures about the No.1 Boiler House (Orston Drive)

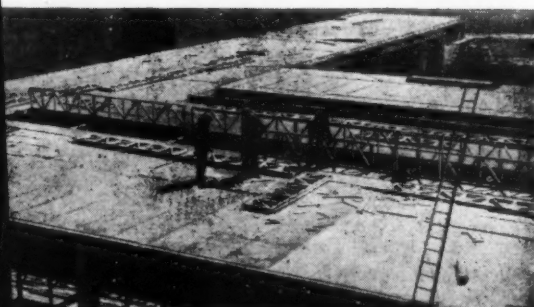
Boilers: 4 Horizontal Economic boilers
Total capacity: ... 74,400 lbs. of steam per hour
Method of firing: ... Chain grate stokers
Steam pressure: 80 lbs. p.s.i.
Steam temperature: 324°F.
Annual fuel consumption (all boilerhouses):
22,300 tons of coal



PLIMBER WOOD CHIPBOARD



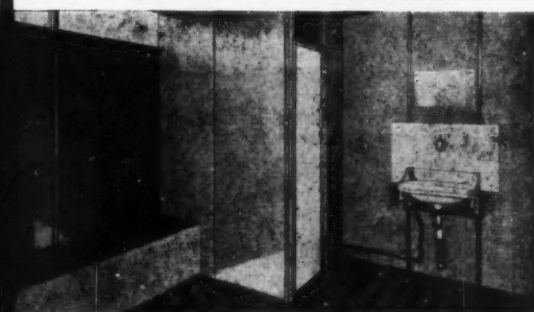
PLIMBER FOR COUNTERS & PARTITIONS



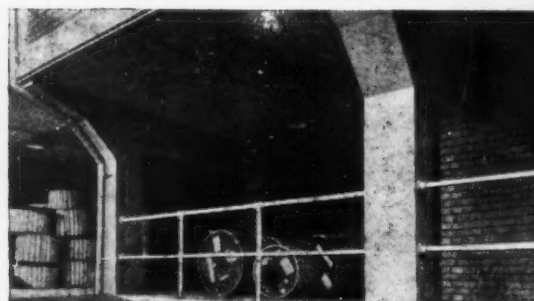
PLIMBER FOR ROOF DECKING



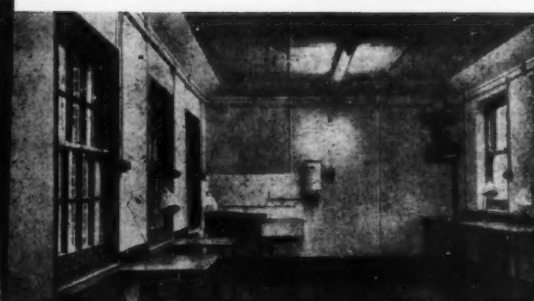
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With its increased strength, wear resistance, and water resistance, Plimber is a highly satisfactory sheet material for such heavy-duty uses as industrial flooring, racking for engineers' stores, concrete formwork above or below ground, and a great many other load-bearing purposes; equally it is ideal for making cupboards, fitments or furniture, as well as partitioning, lining and panelling.

PLIMBER WOOD CHIPBOARD

Standard size 8ft. x 4ft.

Maximum size 16ft. x 4ft.

PLIMBER WOOD CHIPBOARD

Thicknesses $\frac{1}{2}$ in. & $\frac{3}{4}$ in.

Density 45 lbs/cu. ft.

PLIMBER WOOD CHIPBOARD

Grades : Standard PLIMBER 45
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Rainham, Essex.

Telephone : Rainham 5262

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**It's
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per gallon
but
the cost per yard
that counts**

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Tricosal
is now available
in non-returnable
containers.

For 30 years or more Tricosal has been specified by leading Architects not only for waterproofing but for hardening cement and concrete and increasing their resistance to oils and acids. Send for Information Leaflet No. 1.

★ OSAL is the generic name for the products of A. A. Byrd & Co. Ltd.—“Florosal” for Surface Hardening and Protection of Concrete, Stone and Cement—“Neocosal” for Surface Waterproofing of Brick, Concrete and Stone, and “Tricosal.” Literature on each individual product is available from

A. A. BYRD & CO. LTD. (DEPT. A.2.), 210, TERMINAL HOUSE, GROSVENOR GARDENS, LONDON, S.W.1

Phone : SLOane 5236.

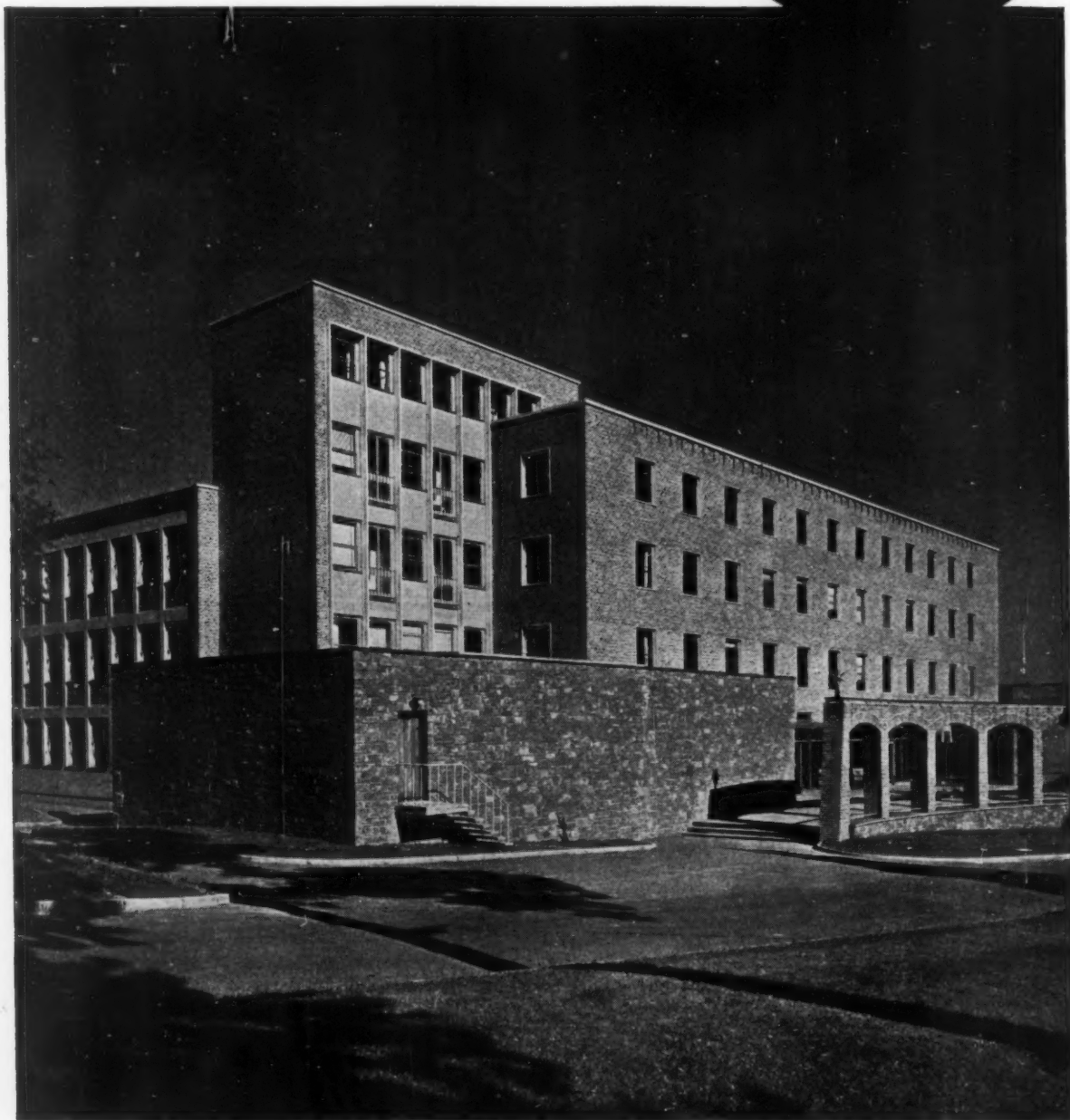
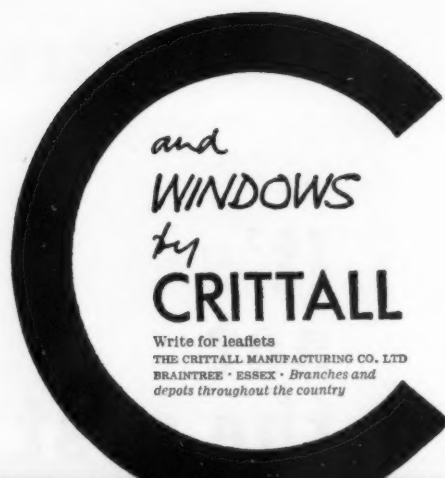
Grams : Byrdicom, Wesphone, London

Works : Basingstoke, Hants

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TBW/120



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AMTPI, City Architect & Director of
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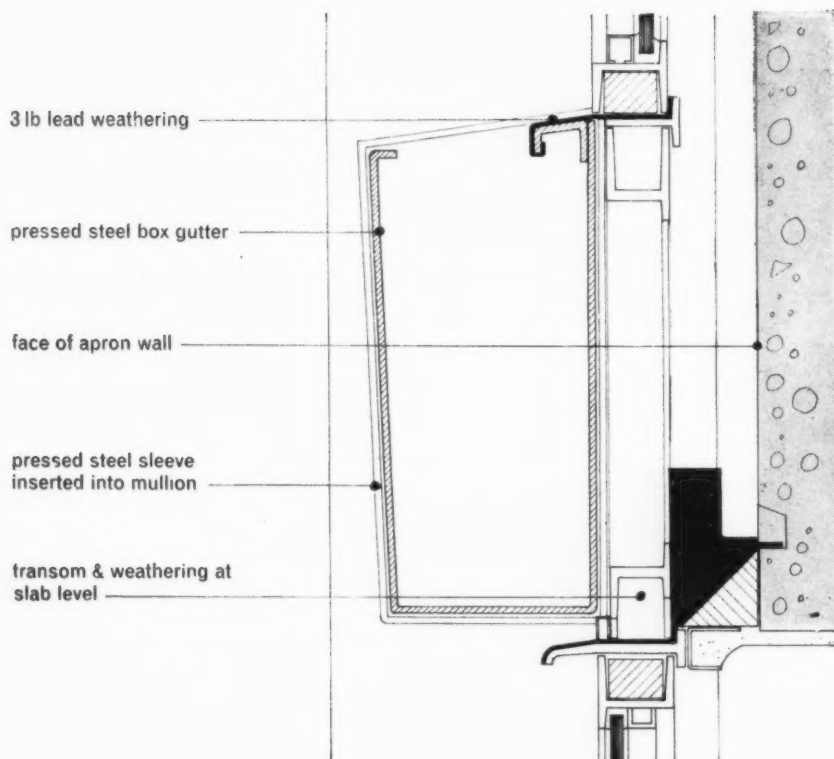


The Best Buildings

TODAY AS YESTERDAY: TOMORROW AS TODAY—

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Whenever detailing problems arise in applications of lead, such as those illustrated here, the Lead Sheet & Pipe Technical Information Bureau is available to give individual assistance. A series of Information Sheets which deal with most uses of lead sheet and pipe in building work is available for inclusion in office information files.



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FOURTH FLOOR**

LEAD DEVELOPMENT ASSOCIATION

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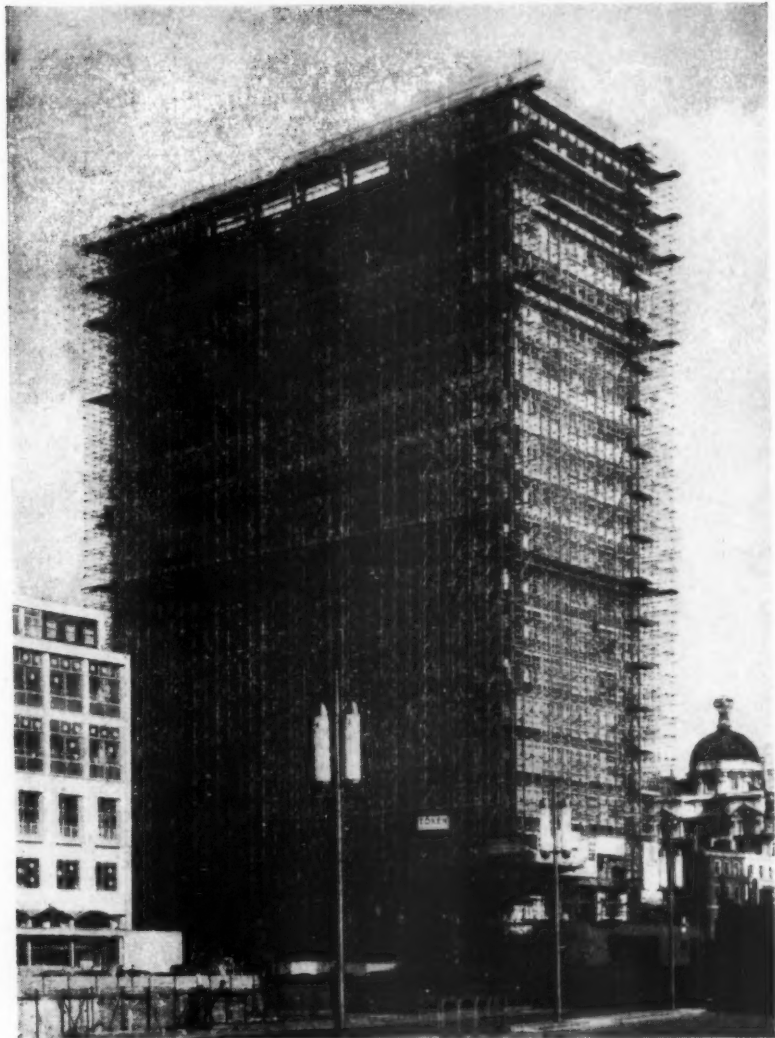
use LEAD

Some leadwork details in Moor House, London E.C.2

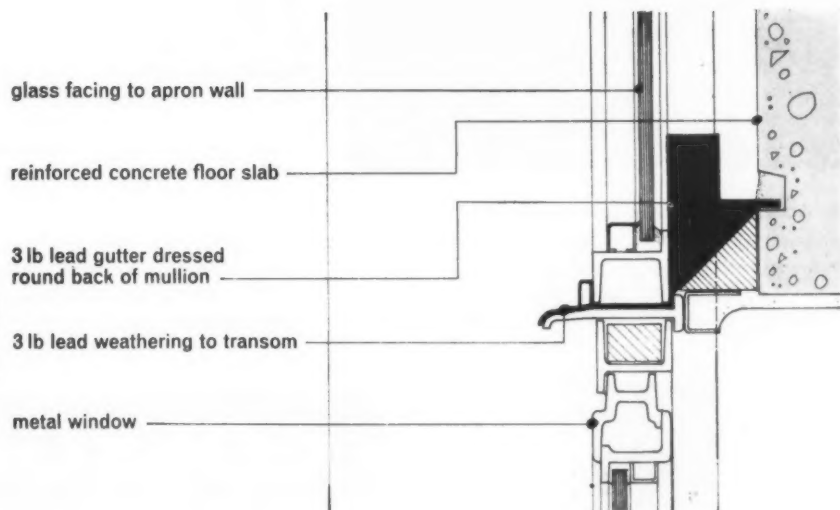
Architects:
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Main Contractors:
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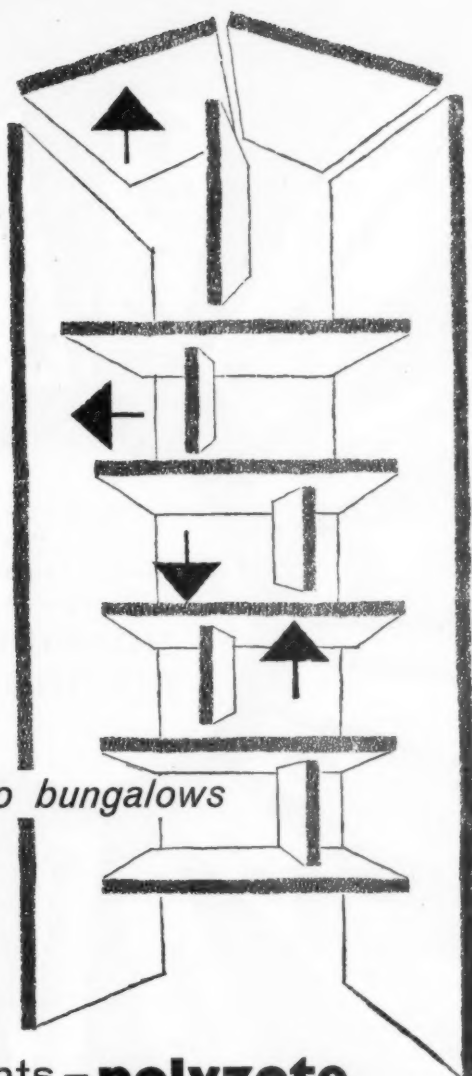
Roofs

Walls

Ceilings

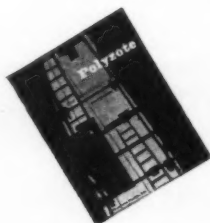
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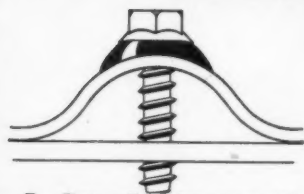
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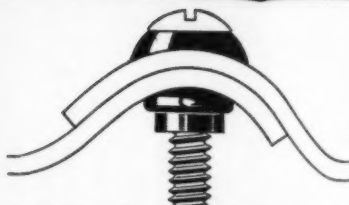
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PRICES These vary with size and quantity; kindly ask for a quotation.

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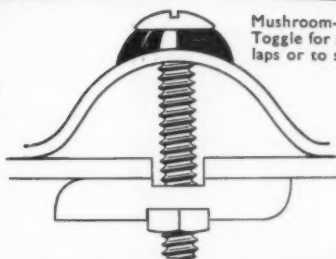
Z. Type self-tapping screw with selawasher for fastening sheeting to purlins, etc.



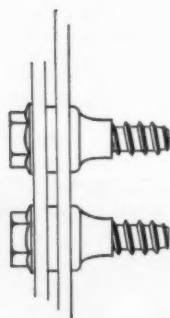
Mushroom-headed bolt, selawasher and Rawlnut for use with translucent plastic panels.



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Mushroom-headed bolt, selawasher and Toggle for asbestos cement roofing side laps or to support insulator lining.



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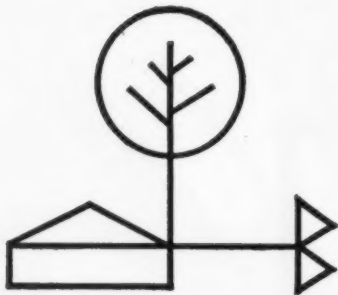
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British Screw Company Limited

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CVS-41

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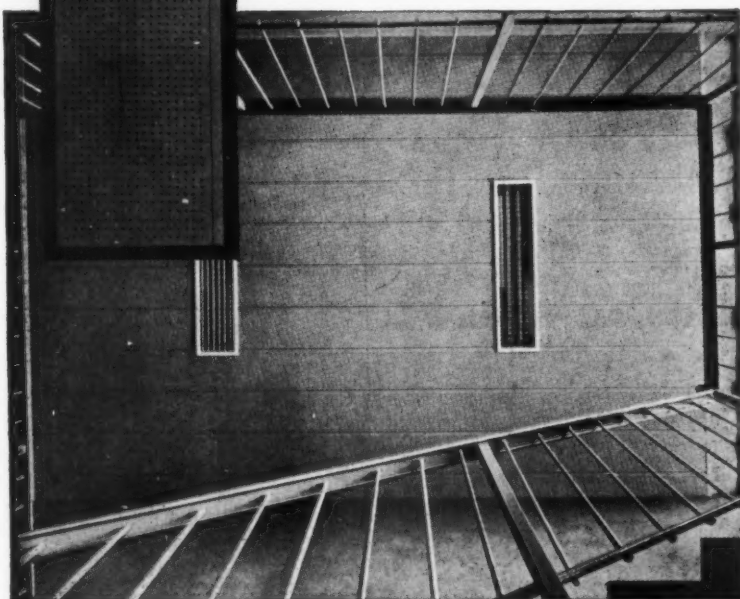


26 STORE STREET W.C.1

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$\frac{1}{2}$ " or $\frac{3}{4}$ " thick, are available in 12" or 16" widths and in lengths up to approx. 18'. Grooved and ship-lapped for easy fixing. (Also available unperforated as insulation "longboards").

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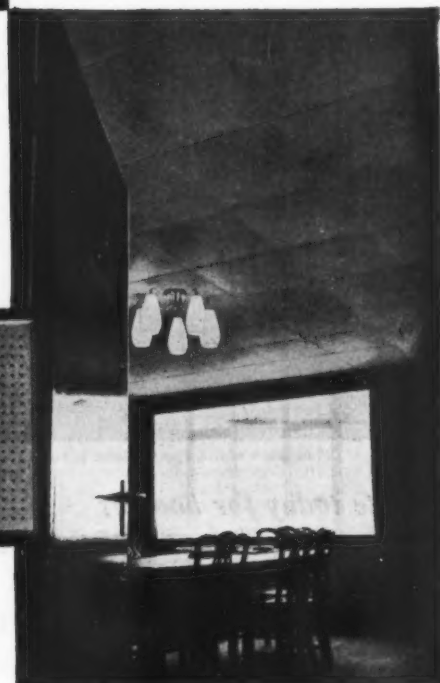
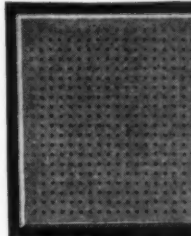
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- * **COST ONLY £235** (including installation) for boilers up to 1,000,000 B.Th.U., or £250 for larger boilers. They are available on hire purchase.
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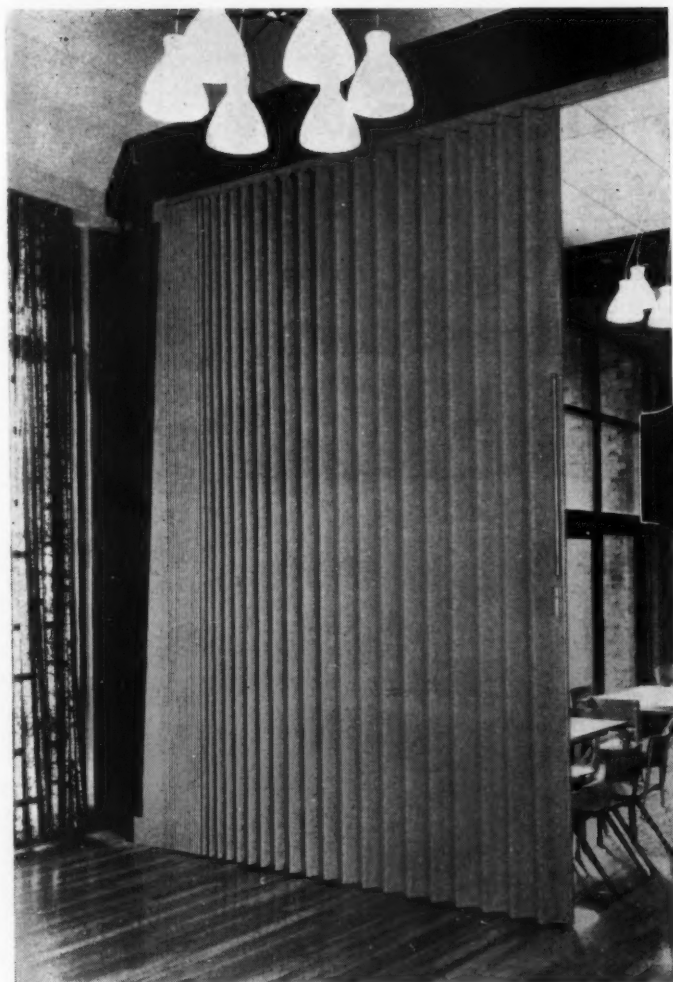
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Richard Turley & Associates, Gosforth East County Primary School, Newcastle on Tyne.

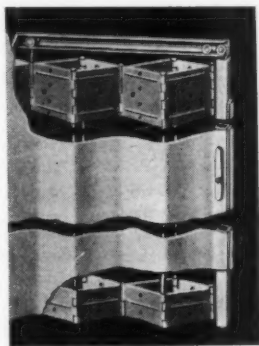
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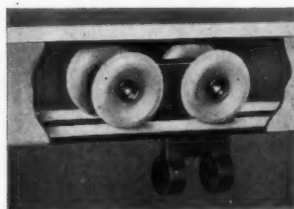
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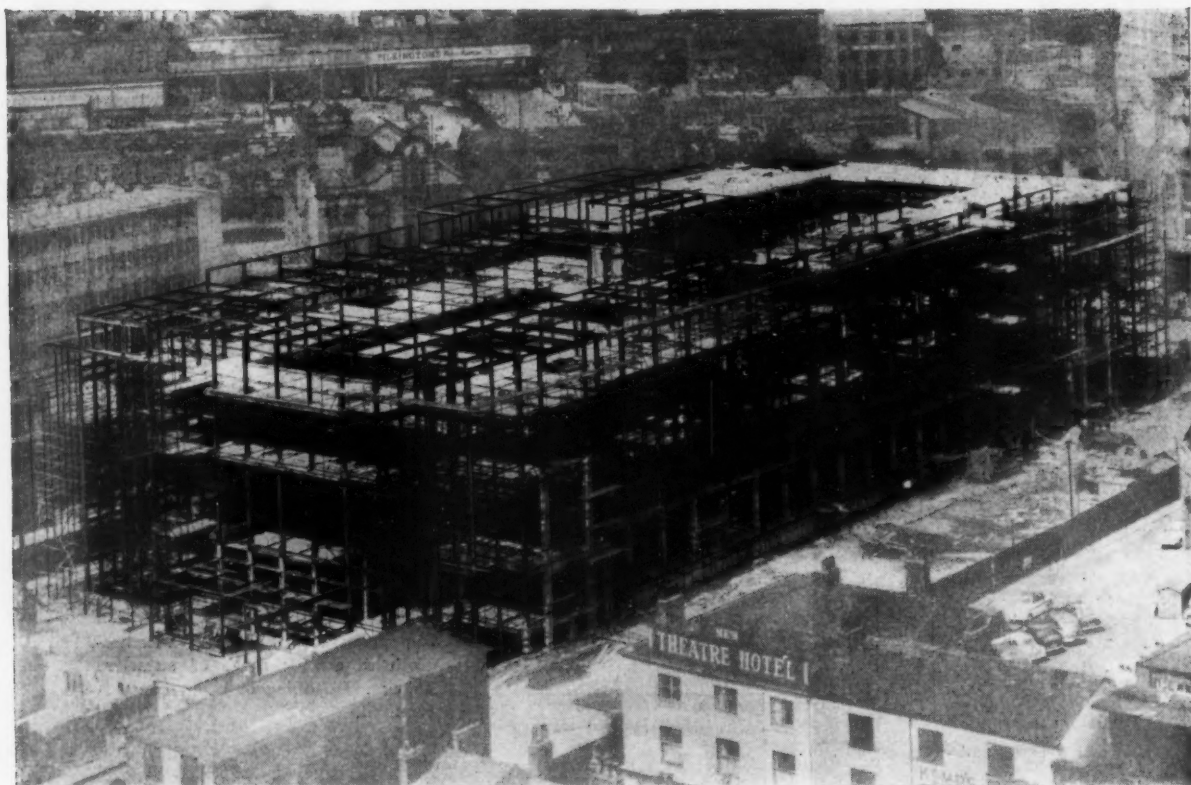
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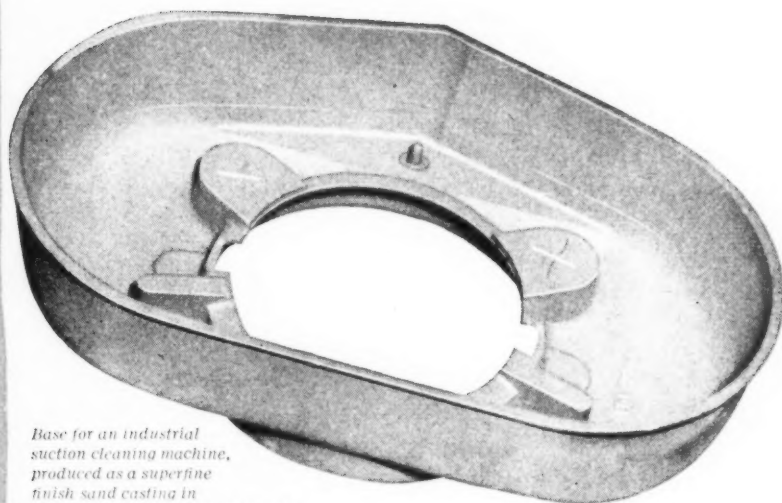


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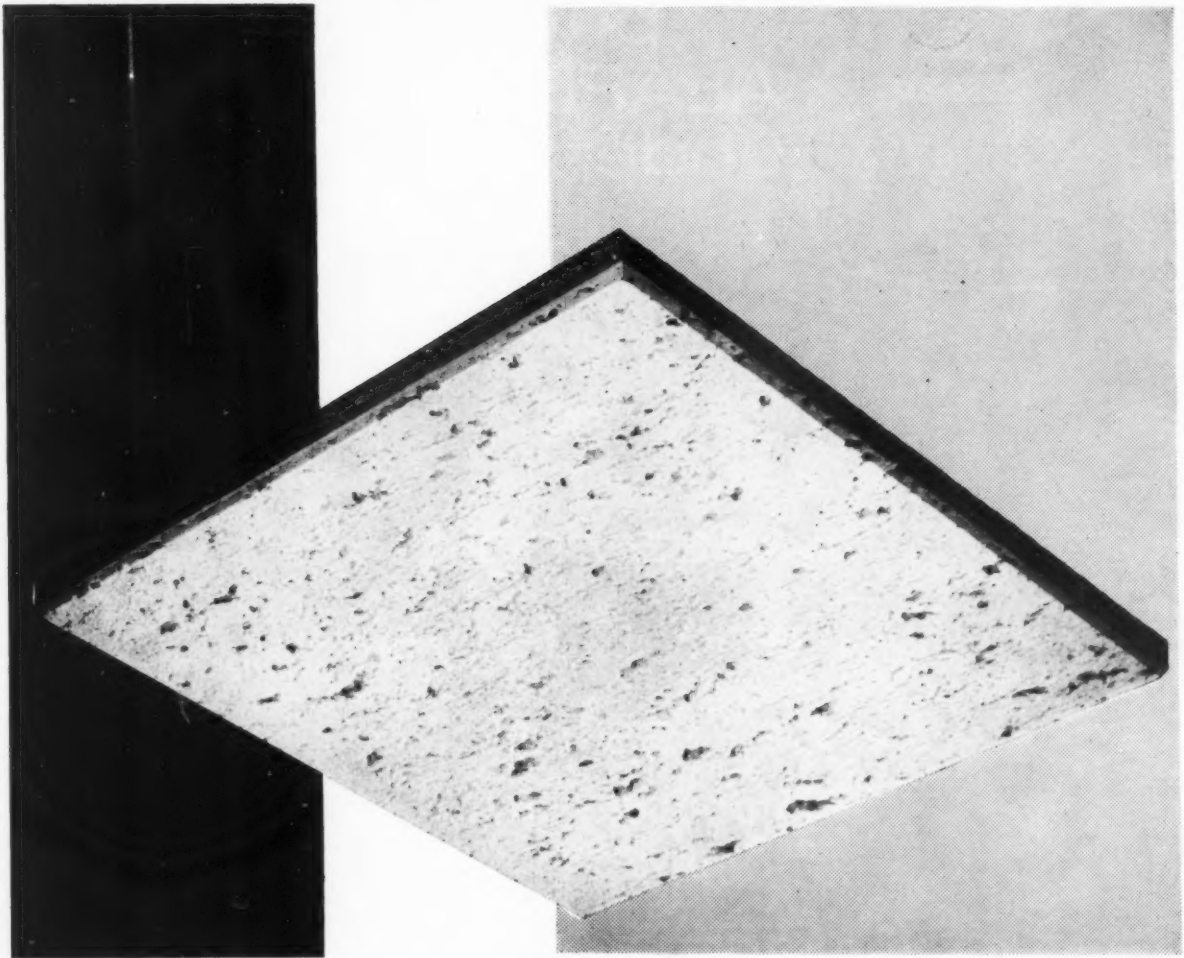
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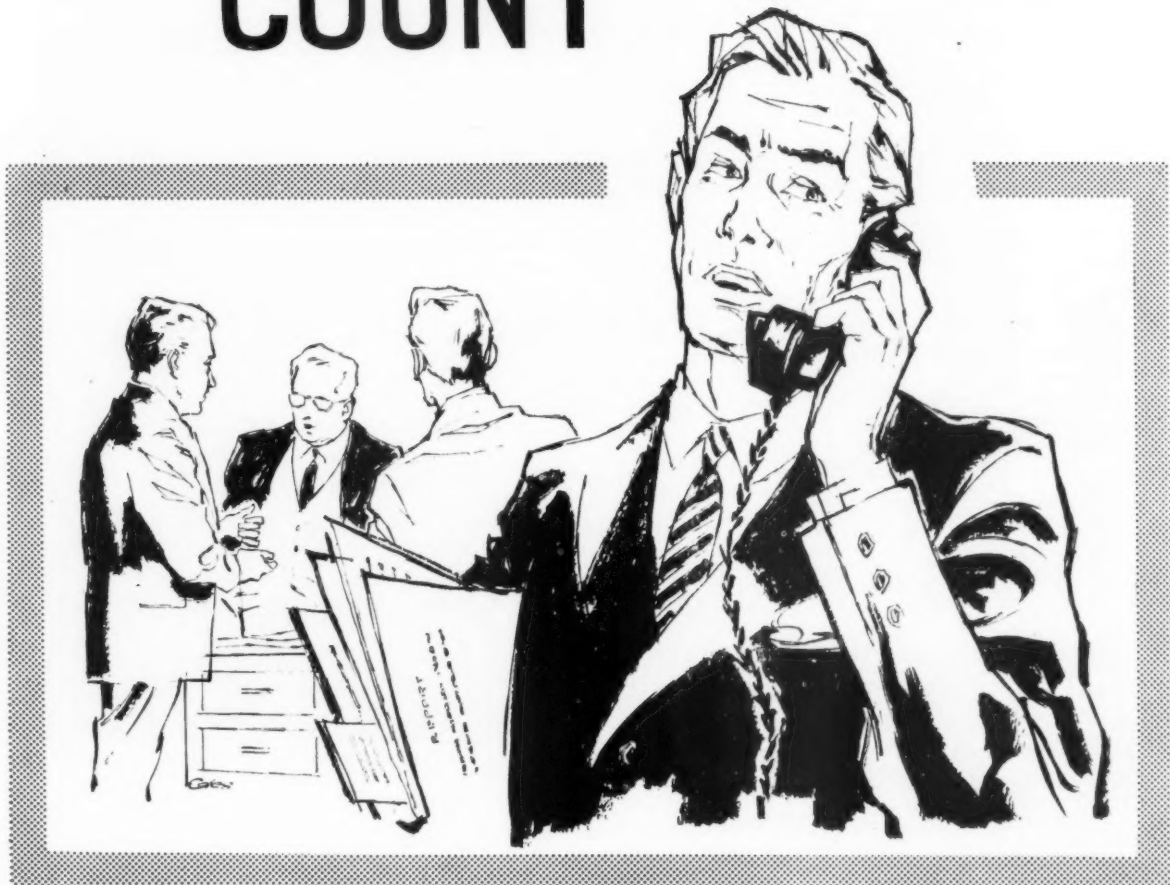
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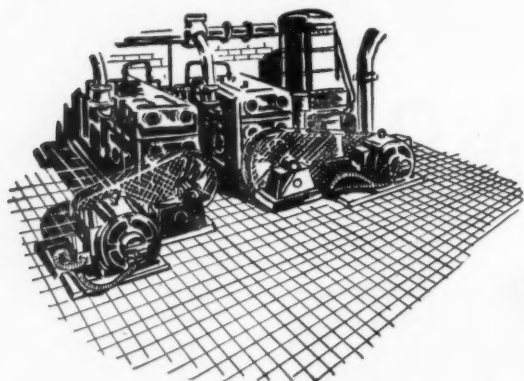
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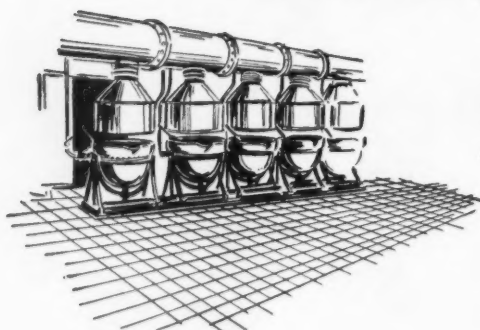
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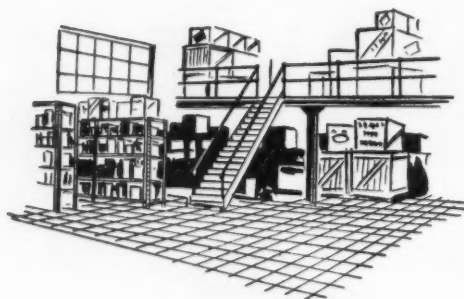
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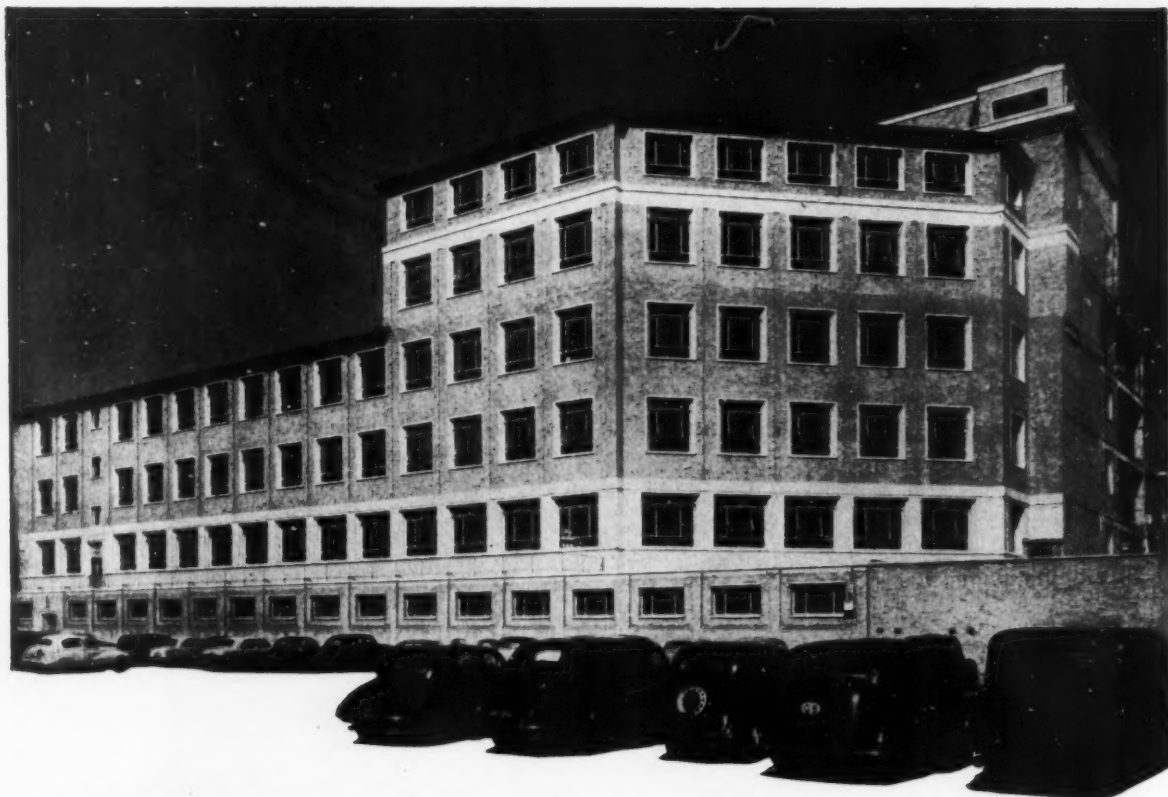
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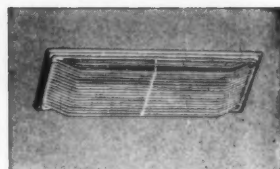
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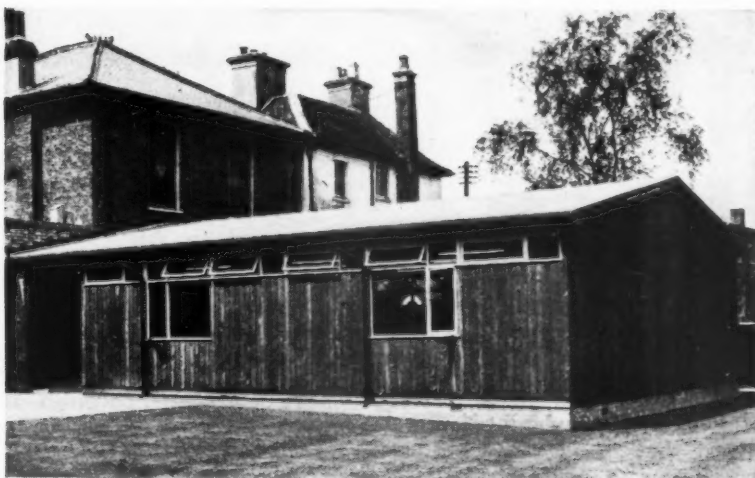
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Photograph by courtesy of The Chislehurst & Sidcup U.D.C.



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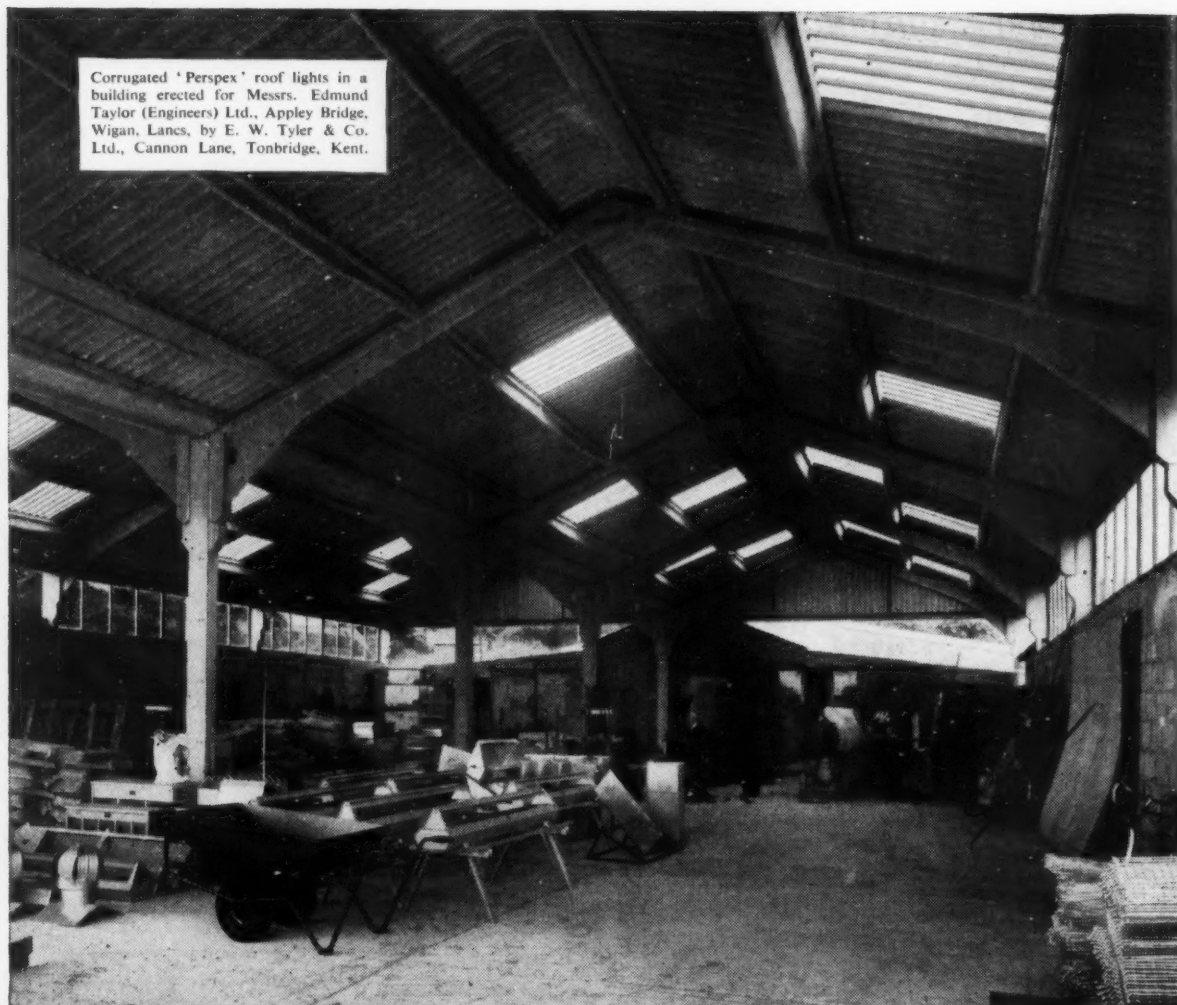
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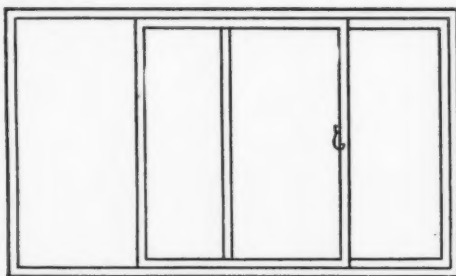


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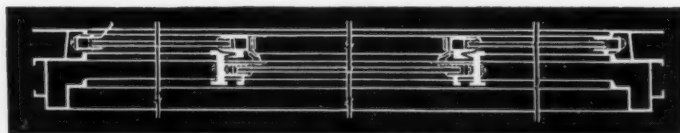
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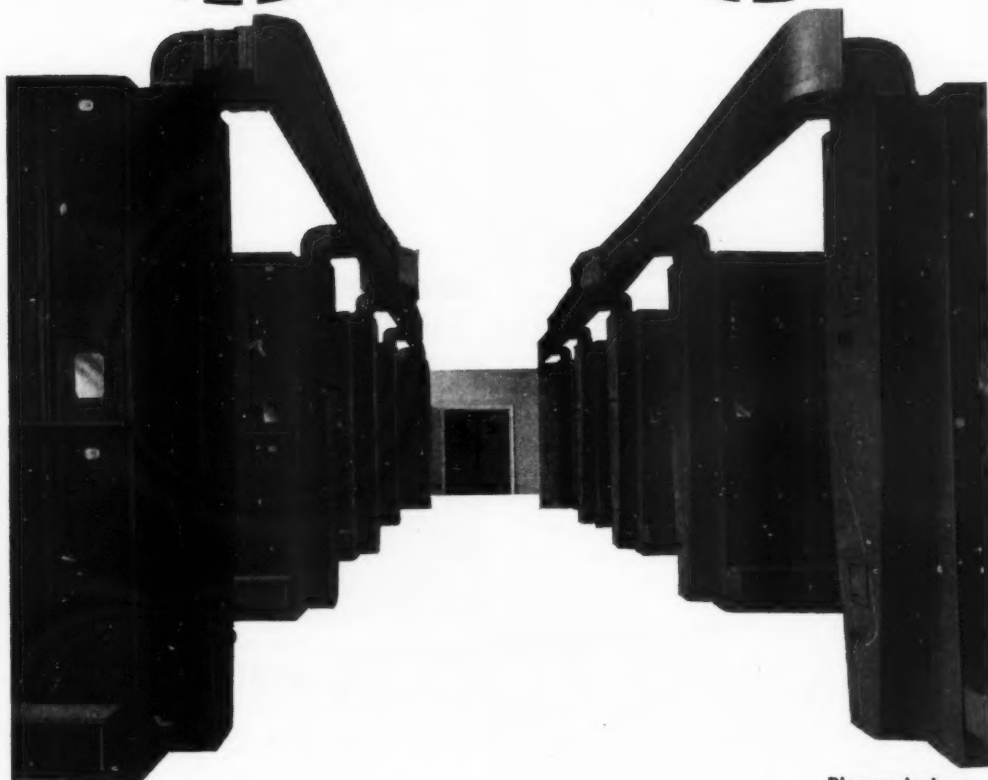
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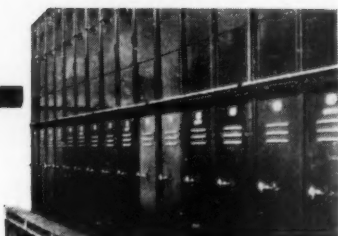
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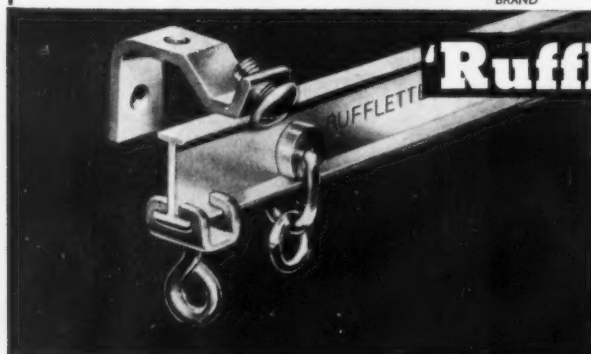
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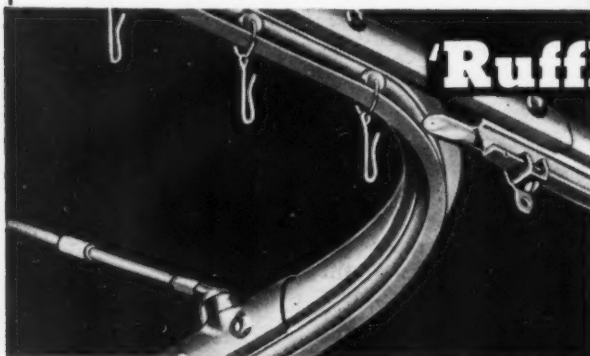
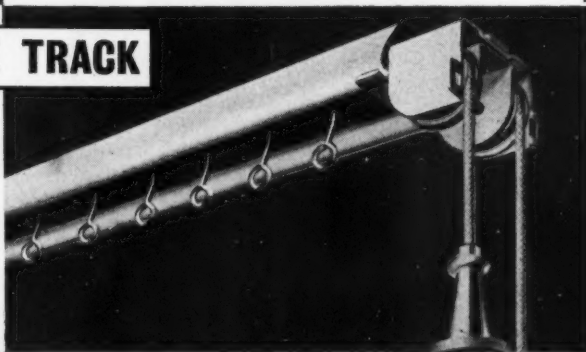


'Rufflette' CURTAIN TRACK

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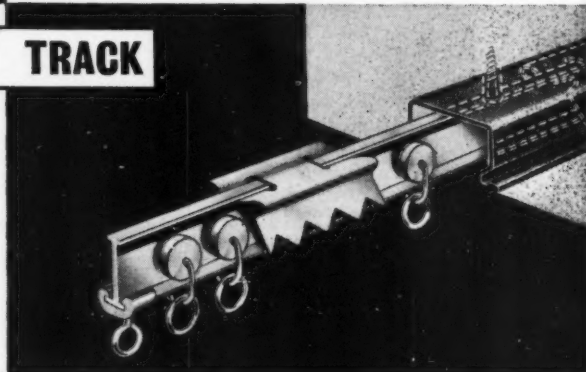
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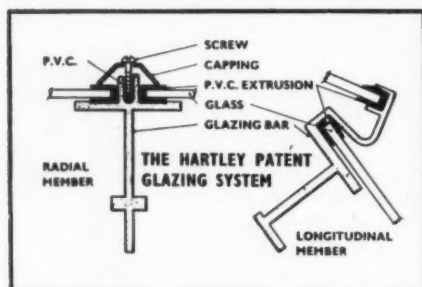
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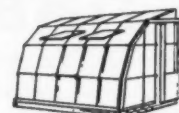


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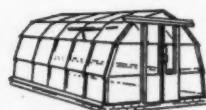
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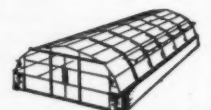
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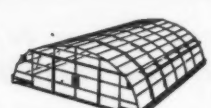
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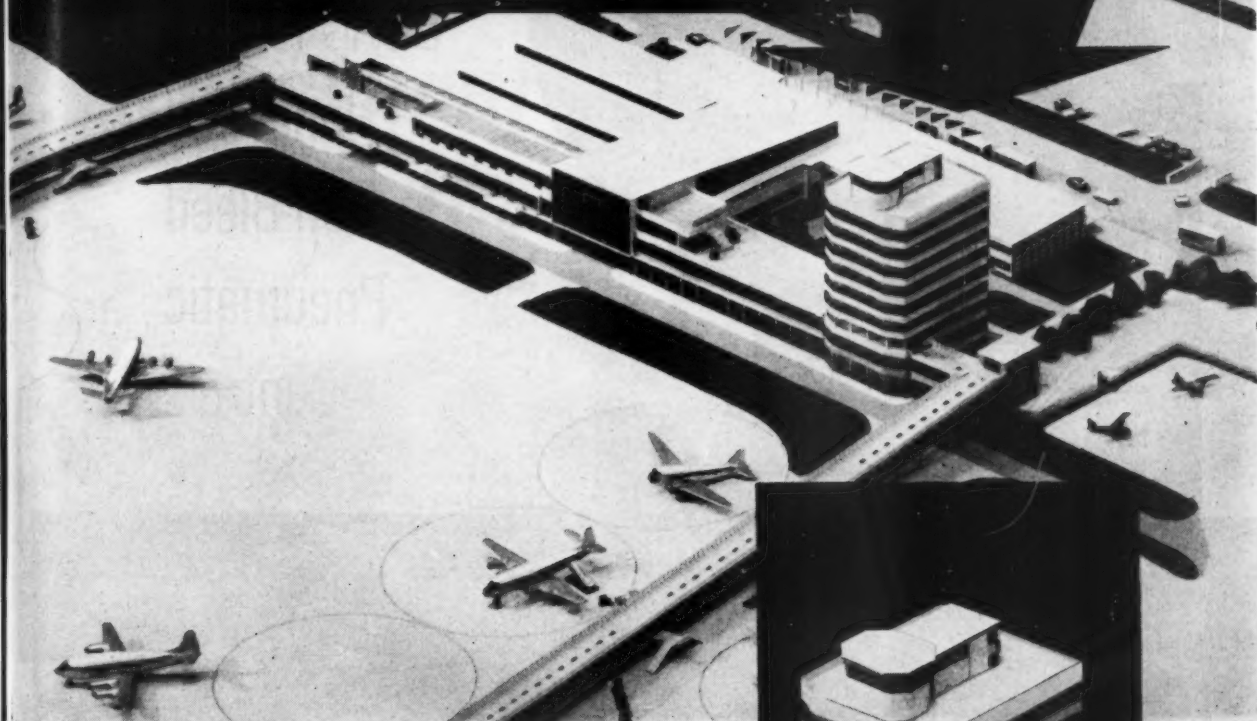


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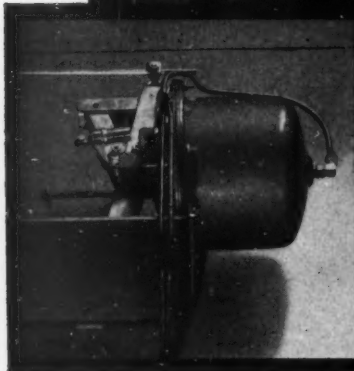
Model of the new Manchester Airport Terminal Building (photo by permission of the City Architect, LEONARD C. HOWITT, M.A.RCH., DIP. T.P., D.P.A., F.R.I.B.A., M.T.P.I.)



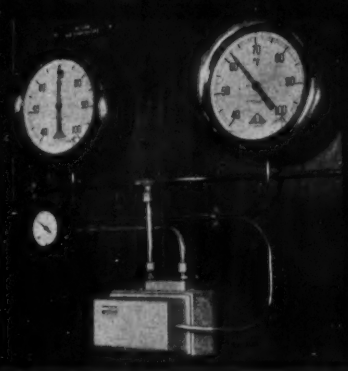
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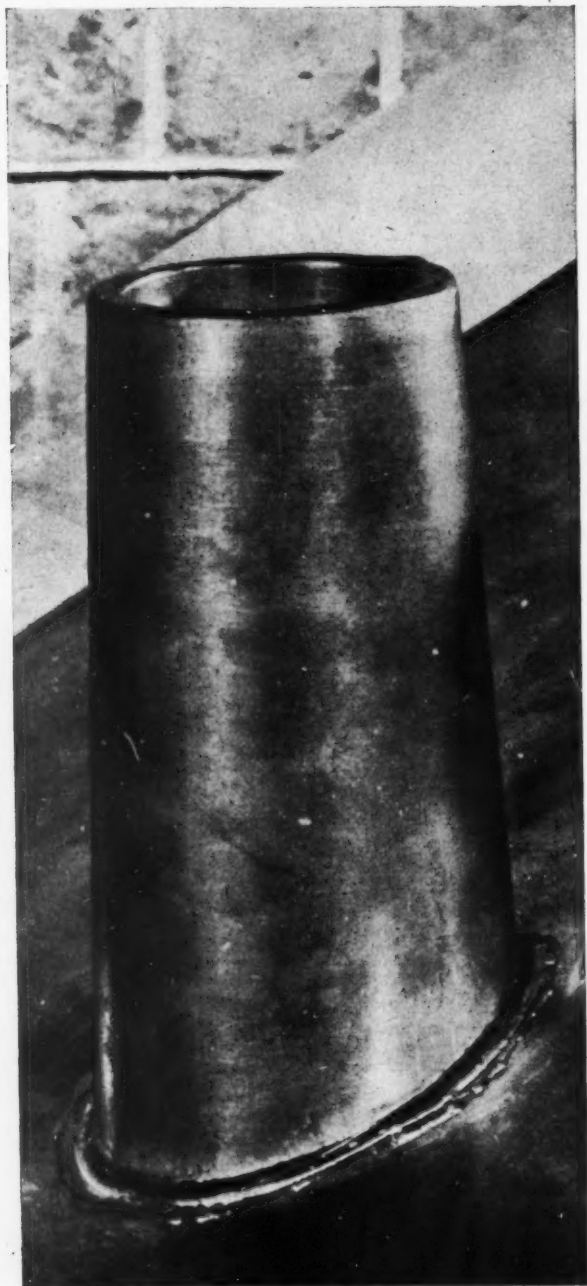
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Detail from 'The Age of Brass', Rodin, Bronze, 1896 © BY S.P.A.D.E.M., PARIS



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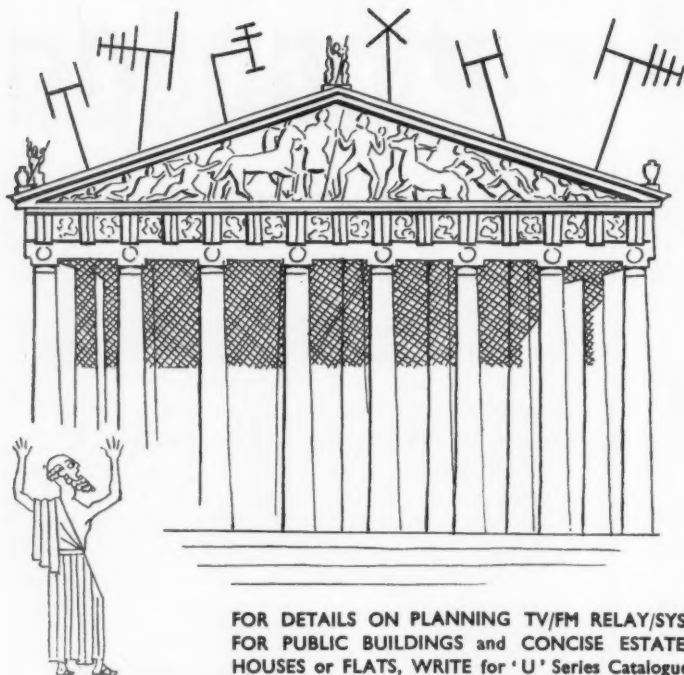
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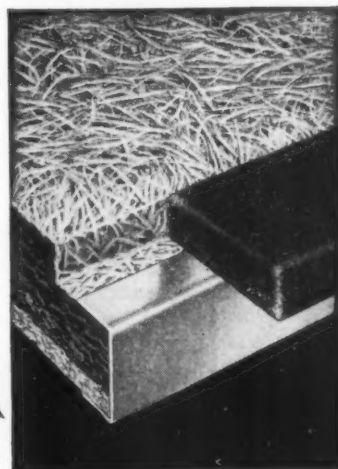
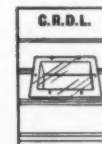
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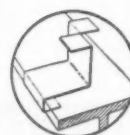
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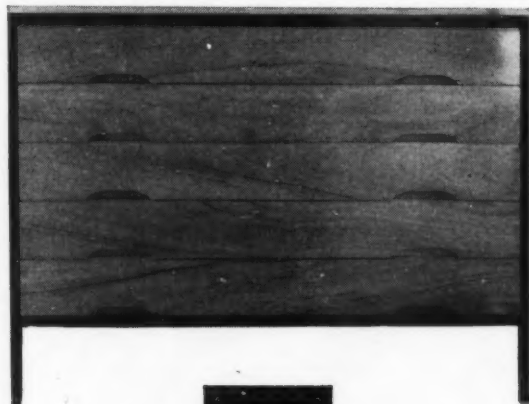
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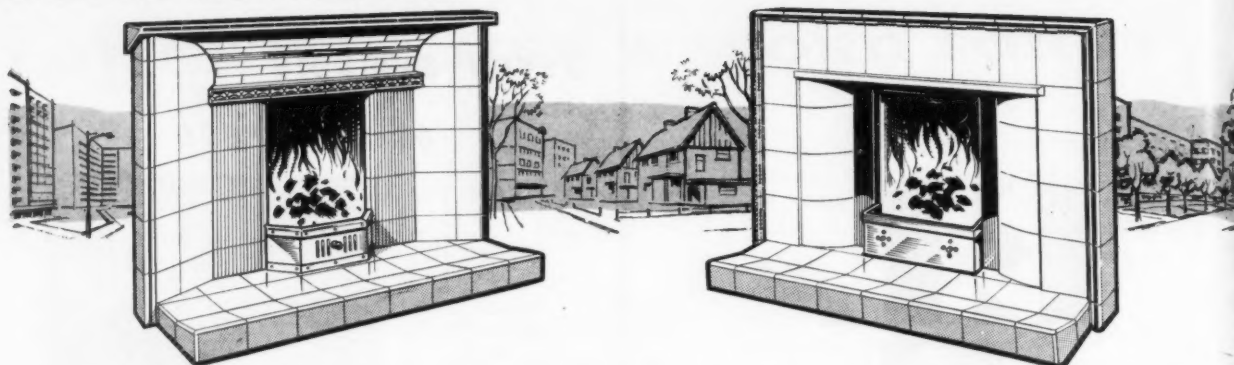
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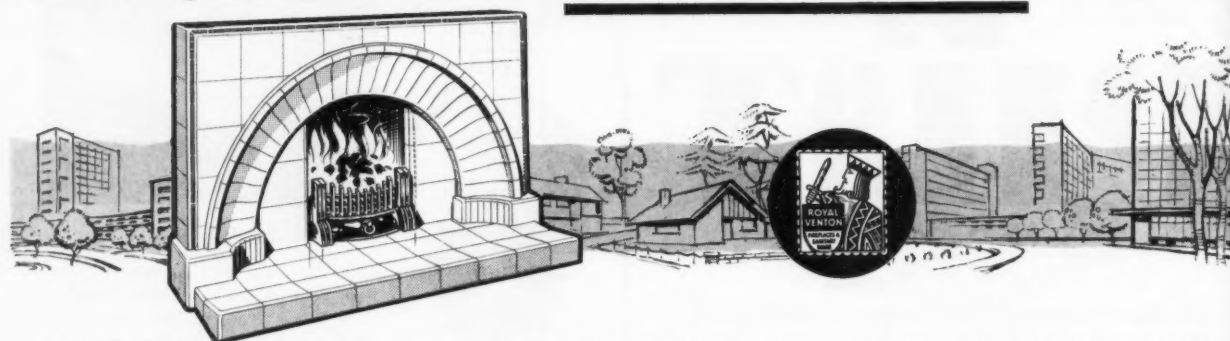
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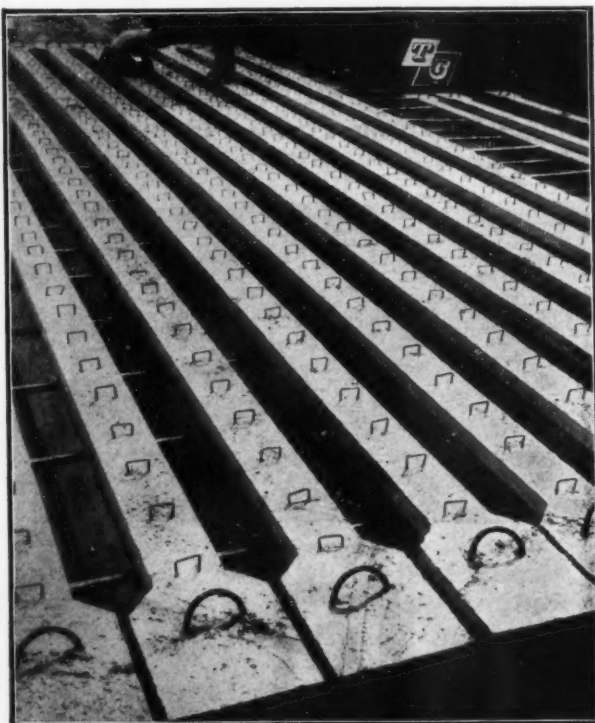
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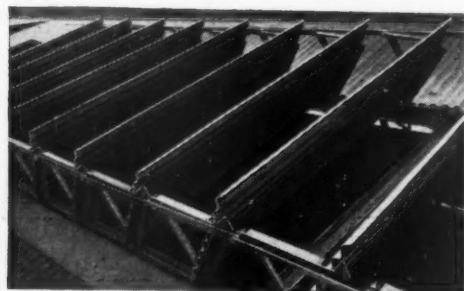
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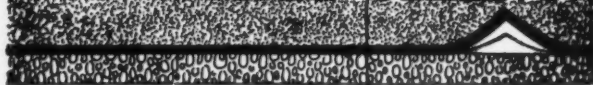
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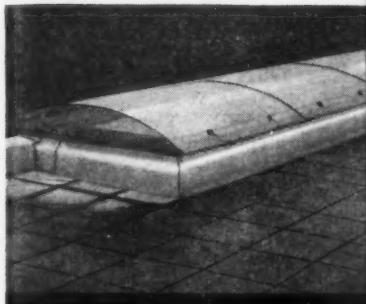
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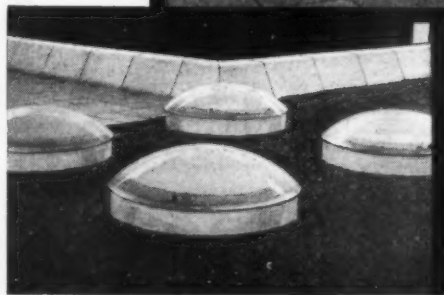
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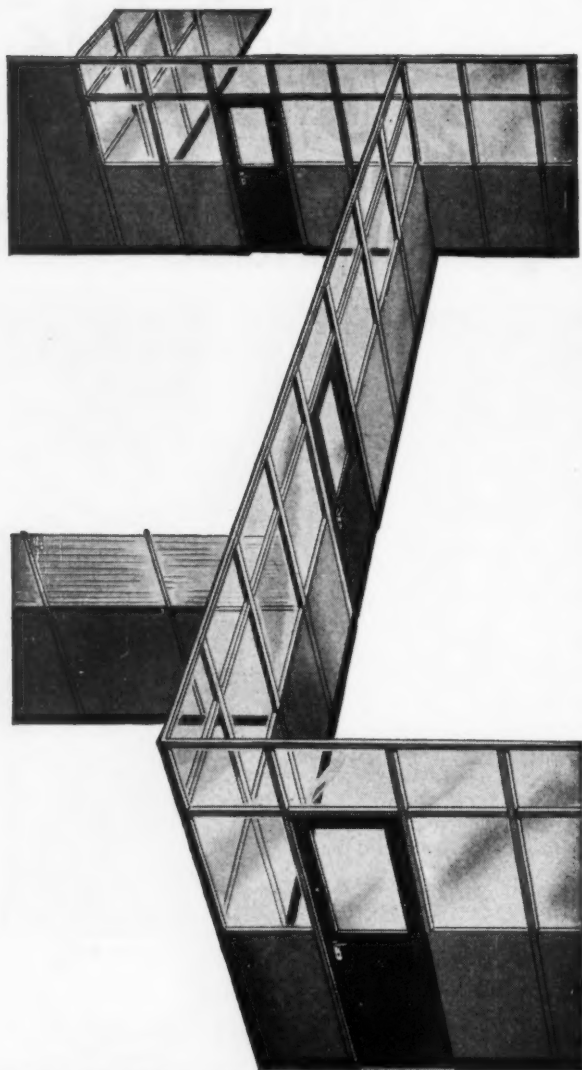


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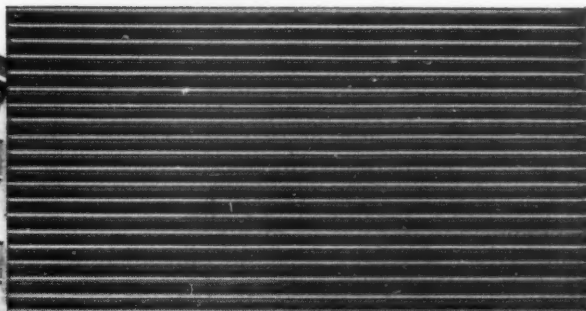
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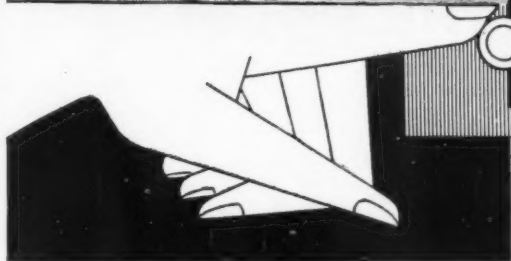
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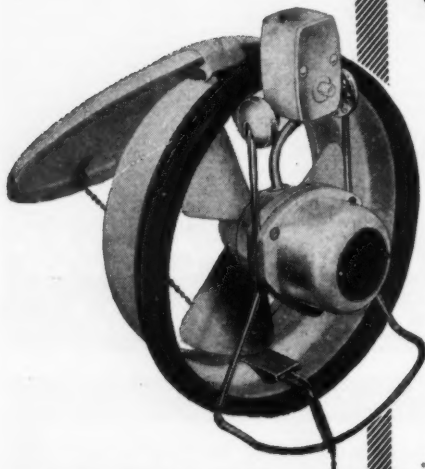


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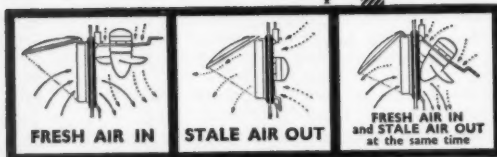
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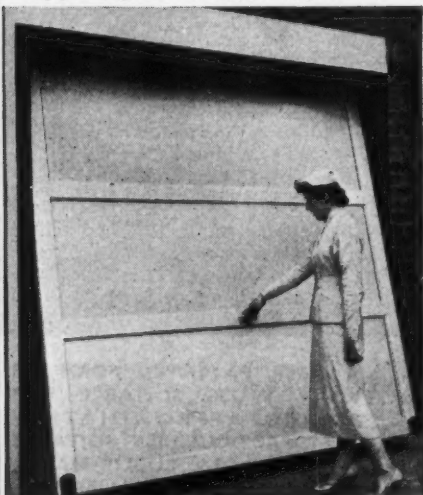


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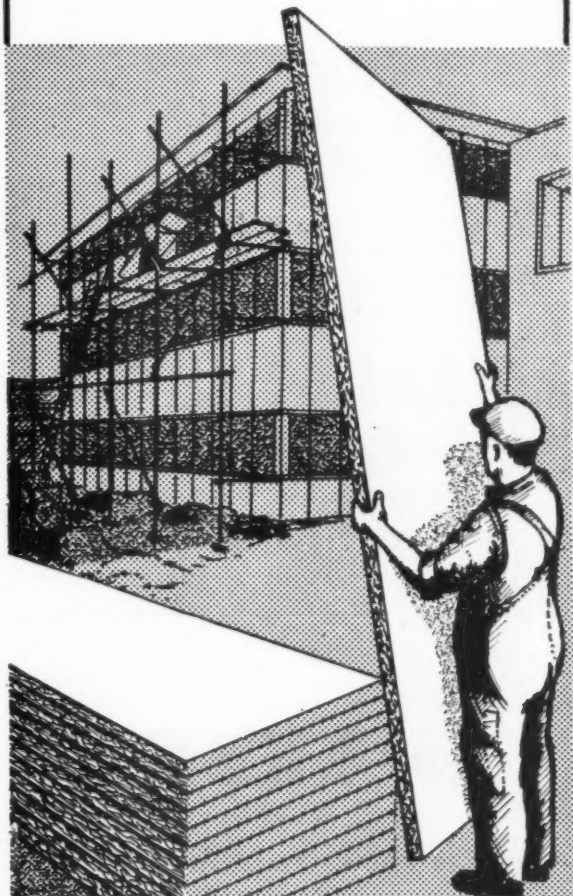
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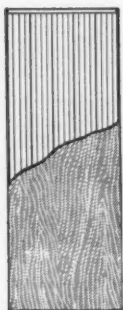
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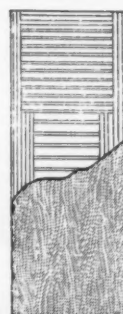
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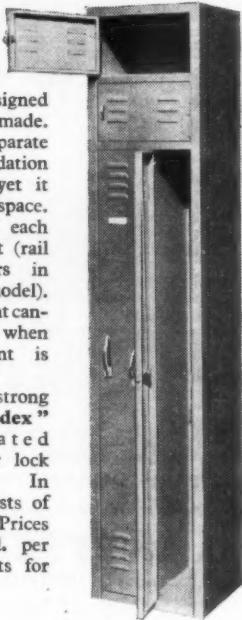
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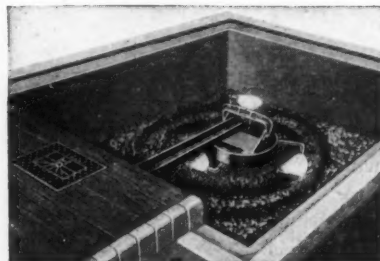
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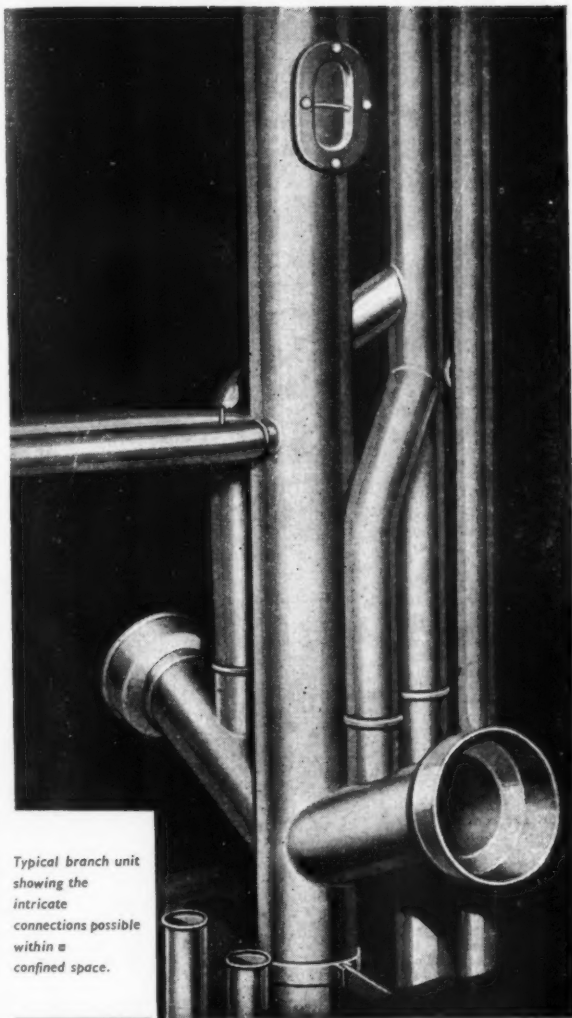
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CLASSIFIED ADVERTISEMENTS

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

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

AIR-MAIL SERVICE available on request. In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (i.e. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

Public and Official Announcements

36s. per inch; each additional line, 3s.

LONDON COUNTY COUNCIL

ARCHITECTS' DEPARTMENT

Unqualified ARCHITECTURAL ASSISTANTS required in Housing Division. Candidates must have drawing board experience in an architect's office. Preference to those proposing to qualify by evening study though others considered. Full programme of new work and opportunities for promotion. Starting salaries according to age and experience. Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/AJ/1359/58), County Hall, S.E.1.

1498

CITY AND COUNTY OF

NEWCASTLE UPON TYNE

CITY ARCHITECTS' DEPARTMENT

Consequent upon revisions to the Establishment of his Department, the City Architect is now able to offer vacancies in a number of additional senior posts in the Department, and will be pleased to hear from Architects who are keen to take part in an exciting and extensive programme of high quality architectural work.

Three PRINCIPAL ASSISTANT ARCHITECTS, J.N.C. "C" (General Education & Re-housing Sections), £1,385-£1,620 per annum.

One PRINCIPAL ASSISTANT ARCHITECT, J.N.C. "B" (Housing Section), £1,255-£1,485 per annum.

SENIOR ASSISTANT ARCHITECTS, A.P.T. V (All Sections), £1,220-£1,375 per annum.

SENIOR ASSISTANT ARCHITECTS, A.P.T. IV (General, New Town Hall & Housing Sections), £1,065-£1,220 per annum.

SENIOR ASSISTANT ARCHITECTS, A.P.T. III (Housing & Re-housing Sections), £880-£1,065 per annum.

ASSISTANT ARCHITECT, A.P.T. II (Re-housing Section), £765-£880 per annum.

ARCHITECTURAL ASSISTANTS, A.P.T. I (Education & Re-housing Sections), £610-£765 per annum.

Work has now commenced on the superstructure of the New Town Hall and there are interesting schemes in preparation for Colleges of Further Education, Multi-Storey Flats and other building works of a major nature. There is, too, the prospect of stimulating work in the near future on redevelopment of the City Centre.

Further details of the above posts and Forms of Application may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1. Applicants must state the Section of the Department and the post and grade applied for when requesting particulars.

Closing date for completed applications: Thursday, 30th June, 1960.

JOHN ATKINSON,

Town Clerk.

Town Hall,

Newcastle upon Tyne, 1.

May 27th, 1960.

1598

WEDNESFIELD URBAN DISTRICT COUNCIL

ASSISTANT ARCHITECT

Applications are invited for an experienced Architect for the above position at a salary in accordance with A.P.T. Grade IV (£1,065 to £1,220).

Wednesfield has a population of approximately 31,000, and is developing rapidly.

A large programme of varied schemes has to be undertaken, and the district is a reception area for overspill population.

The National Joint Council Conditions of Service will apply and the successful candidate will be required to contribute to a Superannuation Scheme and also undergo a medical examination.

Housing accommodation will be provided, if necessary, and reasonable removal expenses will be paid.

Applications stating age, qualifications, experience, with the names of two referees must be received by the undersigned by not later than 24th June, 1960.

J. HENWOOD JONES,

Clerk of the Council.

Council Offices,
Alfred Square Road,
Wednesfield,
Staffs.

1645

SHIPLEY URBAN DISTRICT COUNCIL

Applications are invited from appropriately qualified persons for the following appointment:—

ARCHITECTURAL ASSISTANT, Special Grade— (£785-£1,075).

The post is superannuable and subject to the provisions of the National Scheme of Conditions of Service. The commencing salary will be fixed according to experience and qualifications.

Housing accommodation will be provided if required.

Applications giving age, details of training, qualifications and experience, together with the names and addresses of two referees, to be sent to the Engineer and Surveyor, Town Hall, Shipley, Yorkshire, by Monday, 27th June, 1960.

ERNEST PEARS,

Clerk and Solicitor.

Town Hall,
Shipley,
Yorkshire.

1595

WEST SUSSEX COUNTY COUNCIL

PLANNING DEPARTMENT

Applications are invited for the undermentioned appointments:—

SENIOR PLANNING ASSISTANT (DEVELOPMENT PLAN)

Salary: Grade A.P.T. IV—£1,065 × £55 (1) × £50 (2)—£1,220. Applicants should have had experience gained preferably in a County Planning Department of the preparation of County, Town, C.D.A. and Village Maps and associated Reports and be capable of supervising staff engaged upon this work.

The post is equal in grading and responsibility with two other Senior Assistants, and is a new appointment.

Candidates should be Associate Members of the Town Planning Institute or hold other appropriate qualifications.

Fuller details of the duties of this post can be obtained on request.

PLANNING ASSISTANT.

In the Headquarters, Drawing Office of the Department at County Hall, Chichester.

Salary in accordance with A.P.T. I (£610-£765 p.a.).

Applicants should be experienced draughtsmen and should be capable of making surveys.

Application forms obtainable from the County Planning Officer, County Hall, Chichester, to be returned by the 30th June, 1960.

T. C. HAYWARD,

Clerk of the County Council.

1648

HAYES & HARLINGTON U.D.C.

Applications are invited for:—

(a) ASSISTANT ARCHITECT. Salary within Special Grade, i.e., £785-£1,070 p.a.

(b) ARCHITECTURAL ASSISTANTS (two). Salary within Grade A.P.T. II, i.e., £765-£880 p.a., plus appropriate London weight in all cases, 21-25 years, £25 p.a., 25 years and over £40 p.a.

Preference will be given to candidates for (a) who have passed the examination for Associateship of the R.I.B.A. and who must be capable of preparing sketch designs, full working drawings, specifications, supervision of building contracts, etc.

Applicants for (b) should have passed the Intermediate examination of the R.I.B.A. and must have good general architectural experience. Five-day week. Housing accommodation if required will be made available for (a) and for one of the appointments (b).

Further particulars and conditions of service and form of application obtainable from the undersigned, which when completed must be returned by 27th June, 1960.

GEORGE HOOPER,

Clerk and Solicitor.

Town Hall,

Hayes, Middlesex.

1660

CUMBERLAND COUNTY COUNCIL

CITY ARCHITECTS' DEPARTMENT

Applications are invited for the following appointments to the Architectural Staff, N.J.C. Service Conditions. Posts pensionable. Subject to medical examination. Possibility of housing accommodation in the near future. Appointments will be made within the scales shown according to ability and experience.

(a) ASSISTANT ARCHITECT. Special Grade.

£785-£1,070. Must be A.R.I.B.A.

(b) ASSISTANT ARCHITECT. Special Grade.

A.P.T. Grade IV. £785-£1,070-£1,220. Must be A.R.I.B.A., preferably with Schools experience.

(c) ASSISTANT ARCHITECT. A.P.T. Grade IV.

£1,065-£1,220. Must be A.R.I.B.A., with Schools experience and handling of large contracts.

Application forms and further particulars obtainable from A. Lumb, A.R.I.B.A., Deputy County Architect, 15, Portland Square, Carlisle, to whom completed applications should be returned not later than 4th July, 1960.

G. N. C. SWIFT,

Clerk of the County Council.

1649

HAMPSHIRE COUNTY COUNCIL

COUNTY ARCHITECT, commencing salary

within the scale £3,745 × £135-£4,150. Candidates must be Associates or Fellows of the R.I.B.A. The successful candidate will be required to take up his duties on or about 12th December, 1960, and will be prohibited from engaging in private practice.

Separation allowance and assistance with removal expenses in approved cases.

Applications stating age, education, past and present appointments, experience, and the names of two referees, should reach the Clerk of the County Council, The Castle, Winchester, by 30th June, 1960.

1579

NAVY, ARMY AND AIR FORCE INSTITUTES

Extensive commitments both at home and overseas necessitate the additional services of the following experienced staff based on our London Headquarters.

CLERK OF WORKS/WORKS

SUPERINTENDENT

ARCHITECTURAL ASSISTANTS

DRAUGHTSMEN AND TRACERS

TRAINEES

Young men under 21 years with an inclination towards professional work associated with buildings and prepared to supplement training with a course of study are also required on:—

QUANTITY SURVEYING

and as

ARCHITECTURAL ASSISTANTS

DRAUGHTSMEN AND TRACERS

Applications giving details of age, experience, etc., to Controller, Works & Buildings (A), NAAFI, Imperial Court, Kennington, S.E.11. 1664

BOROUGH OF HIGH WYCOMBE

ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of an Architectural Assistant in the Borough Engineer and Surveyor's Department within the salary scale A.P.T. III (£880 × £35 (3) × £40 (2)—£1,065).

Preference will be given to applicants who have passed the Intermediate Examination of the R.I.B.A.

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

Suitable housing accommodation will be provided if required.

Applications, together with the names of two referees, must be sent to J. A. Parkinson, M.A., A.M.I.C.E., Borough Engineer and Surveyor, Municipal Offices, High Wycombe, not later than Wednesday, June 29th, 1960.

J. A. PARKINSON,

M.A., A.M.I.C.E.,

Borough Engineer and Surveyor

1664

LONDON COUNTY COUNCIL

ARCHITECTS AND BUILDING SURVEYORS

Vacancies in the Architect's Department, L.C.C. for Architects or Building Surveyors experienced in surveying existing buildings, preparing sketch working drawings and specifications and supervising works in progress, for the complete internal modernisation of the older types of Council flats (Jobs up to £50,000), for the rehabilitation of dwellings acquired by the Council and for improvements, alterations and extensions to Council buildings (Jobs up to £20,000).

Applicants should have a real interest in this type of work and the ability to act on their own judgment since the maximum opportunity will be afforded to each to carry his own jobs through from survey to completion.

Salaries up to £1,135 according to qualifications and experience (salary scales at present under review—probable new maximum of grade £1,250).

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/AJ/1484/58), County Hall, S.E.1. 1676

BOROUGH OF SOLIHULL

APPOINTMENT OF QUANTITY SURVEYING

Applications are invited for Quantity Surveyors with appropriate qualifications and experience for the under-mentioned appointments in the Borough Surveyor's Department:—

(a) SENIOR ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade V (£1,220 to £1,375 per annum);

(b) ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade IV (£1,065 to £1,220 per annum);

(c) ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade III (£880 to £1,065 per annum).

In suitable cases the Council will assist in the provision of housing accommodation and half removal expenses will be paid. The appointments will be subject to satisfactory medical examinations, the usual Local Government Conditions of Service and to one month's notice on either side.

The Borough which has a population of approximately 90,000 has recently been recommended for County Borough status by the Local Government Commission for England. It is still expanding rapidly, is an excepted district for education and has a considerable programme of varied capital works undertaken in the very near future.

Applications giving full particulars as to age, qualifications and past and present appointments, together with the names and addresses of two referees should be submitted to the Borough Surveyor, 90, Station Road, Solihull, not later than Friday, 24th June, 1960.

W. MAURICE MELL,

Town Clerk.

1666

ALL-GAS HOUSE ARCHITECTURAL

COMPETITION

The Scottish Gas Board invite architects resident in the United Kingdom to submit designs for an All-Gas House which will exploit and demonstrate the possibilities of gas as a means of heating, cooking, water heating, refrigeration and home laundry.

Assessor: Professor Frank Fielden, M.A., F.R.I.B.A.

Premiums: £250 : £150 : £75.

Last day for submitting designs: 26th September, 1960.

Conditions may be obtained from: The Commercial Manager, The Scottish Gas Board, 1, Rothesay Terrace, Edinburgh, 3.

No deposit.

An applicant for the conditions must state his registration number.

1668

BOROUGH OF LEYTON
(in the County of Essex)
COMMITTEE FOR EDUCATION
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of Architectural Assistant, Grade A.P.T. II, £765-£880 per annum, plus London weighting. The successful applicant will be employed by the Essex County Council, and will work in the School Architect's Section of the Borough Engineer & Surveyor's Department, Town Hall, Leyton, E.10, five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 10 days from the appearance of this advertisement.

D. J. OSBORNE,
Town Clerk.

Town Hall, Leyton, E.10. 1655

WESTERN REGION HOUSING CORPORATION

IBADAN, WESTERN NIGERIA
APPOINTMENT OF ARCHITECT

Applications are invited from qualified candidates for the post of Architect in the above-named Corporation. Qualification: Candidates must possess one of the following:—

(i) Membership of Royal Institute of British Architects.

(ii) Recognised Degree or Diploma in Architecture.

(iii) Membership of any recognised Architectural Association within the Commonwealth.

Recent practical experience in tropical architecture and experience in Town Planning will be considered an advantage.

Salary. The salary scale attached to the post is £1,368 x £54-£1,584 x £56-£1,890.

Point of entry will be determined by qualifications and experience. Candidates will be required to join the Corporation's Provident Fund Scheme which is 10 per cent. equal contribution by the Corporation and the employee.

In the case of expatriates, appointment will be on contract for two years of 18 to 24 months residential service with paid leave for 7 days per month of residential service. Inducement allowance of £270 per annum for salaries between £1,117 and £1,476, and £300 for salaries between £1,477 and £1,860 will be paid to expatriate officers. Other conditions of service will generally be those applicable to Government expatriate officers on contract.

The successful candidate will be appointed to the Department of Architecture and Engineering and will be resident in Ibadan. The Corporation's works are carried out by contract and the duties of the post will comprise all phases of work from sketch design to preparation of final accounts including supervision of construction. The Corporation is engaged at present in extensive development of all types in a new neighbourhood in Ibadan and industrial and housing development project at Ikola near Lagos.

Applications stating age, academic and professional qualifications, previous experience, present appointment together with the names of two referees should be sent to reach the General Manager, P.O. Box 867, Ibadan, not later than 30th June, 1960. Overseas candidates will be interviewed in London at Western Nigerian Commissioner's Office, 178/202, Gt. Portland Street, London, W.1. 1661

BOROUGH OF MANSFIELD
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited from suitably qualified persons for the following vacancies in the Borough Engineer and Surveyor's Department (Architects Section).

(a) JUNIOR ARCHITECTURAL ASSISTANT, Grade A.P.T. I, £610-£765.

(b) QUANTITY SURVEYING ASSISTANT, Special Grade, £785-£1,070.

Applications stating age, training, qualifications, present and past appointments and experience and the names of three referees should be sent to the Borough Engineer and Surveyor, Carr Bank, Mansfield, appropriately endorsed to arrive not later than Tuesday, 28th June, 1960.

A. C. SHEPHERD,
Town Clerk.

BOROUGH OF TAUNTON
ARCHITECTS' DEPARTMENT

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

(a) ASSISTANT ARCHITECTS, Grade A.P.T. IV (£1,065-£1,220 p.a.).

(b) ASSISTANT ARCHITECTS, Special Grade (£785-£1,070 p.a.).

(c) ARCHITECTURAL ASSISTANT, Grade A.P.T. II-III (£765-£880-£1,065 p.a.).

(d) ARCHITECTURAL DRAUGHTSMAN, General Division (£210-£395 p.a.).

Superannuable posts subject to medical examination, and to National Conditions of Service. Applications stating age, present position and salary, qualifications, experience and names of two referees, to be sent to C. Bacon, F.R.I.B.A., Borough Architect, Ploek House, Station Road, Taunton, by Friday, 1st July, 1960.

K. A. HORNE,
Town Clerk.

1703

WEST SUSSEX COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointment:
ASSISTANT COUNTY ARCHITECT (STRUCTURAL) at a salary in accordance with Scale 9 (£1,265 rising, subject to satisfactory service, by four annual increments of £56 to a maximum of £1,485). Commencing salary according to experience.

Further particulars should be obtained from the County Architect, County Hall, Chichester, to whom all detailed applications must be submitted not later than 14th July, 1960.

T. C. HAYWARD,
Clerk of the County Council.

1647

BOROUGH OF DAGENHAM
SENIOR ASSISTANT ARCHITECT

Applications are invited for this post, Grade A.P.T. V (£1,220-£1,375 plus £45 London Weighting) in the Borough Engineer and Surveyor's Department.

Applicants must be Associates R.I.B.A. with good experience in the design and supervision of housing schemes, modern school buildings and general municipal work. The person appointed may be required to deputise for the Chief Architect.

Housing accommodation may be made available.

Application forms, etc., from the Borough Engineer and Surveyor to whom they must be returned by Thursday, 23rd June, 1960.

KEITH LAUDER,
Town Clerk.

Civic Centre, Dagenham. 1756

ARCHITECTS AND MAINTENANCE SURVEYORS. Pensionable posts for men and women at least 25 and under 35 on L.150 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Architect or Maintenance Surveyor).

Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts, have achieved Corporate membership of R.I.C.S. (Building Section), or have passed examinations necessary for attaining Corporate membership. Salary (men, London) £330-£1,125 according to age, rising to £1,300. Promotion prospects. Write Civil Service Commission, 17 North Audley Street, London, W.1. for application form quoting S/60-61. 1749

BOROUGH OF HENDON
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

SENIOR ASSISTANT ARCHITECT—GRADE A.P.T. IV

and
ASSISTANT ARCHITECT—GRADE A.P.T. III
Applications are invited for the above appointments at commencing salaries according to experience within Grade A.P.T. IV (£1,065 to £1,220) and Grade A.P.T. III (£880 to £1,065), respectively, plus London Weighting of £45.

Grade A.P.T. IV post. Applicants must be Associate Members of the Royal Institute of British Architects and should have had experience of either housing and redevelopment work, or schools and general building works, and be familiar with modern design and construction methods. The person appointed will have opportunities to work as a member of a group on major projects.

Grade A.P.T. III post. Applicants must have passed Parts I and II of the Royal Institute of British Architects final or special final examination, or their equivalent, and have had five years' experience, including the period spent on theoretical training. They will have opportunities to gain experience on housing and redevelopment work, schools and general building works, and modern design and construction methods.

Pensionable posts; subject to National Scheme and medical examination. The Council is prepared to consider assistance with housing.

Applications with full details and names and addresses of two referees must reach the Borough Engineer and Surveyor, Town Hall, Hendon, N.W.4, by 27th June, 1960.

R. H. WILLIAMS,
Town Clerk.

Town Hall, Hendon, N.W.4. 1790

CITY OF LEEDS EDUCATION COMMITTEE

LEEDS COLLEGE OF ART

Principal: E. TAYLOR, R.E., A.R.C.A.

SCHOOL OF ARCHITECTURE AND TOWN PLANNING

Head: F. CHAPMAN, F.R.I.B.A.

Senior Lecturer in Charge of Town Planning: W. K. SWIGGERS, ING. ARCH., M.P.P.T.

Certificate Course in Town Planning (three years part-time day and evening) exempting from the Intermediate Examination of the Town Planning Institute, open to candidates at least 17 years of age with requisite general education and

Diploma Course in Town Planning (three years evening and one year full-time followed by one year evening) exempting from the Final Examination of the Town Planning Institute, open to Architects, Engineers, Surveyors, Geographers, Economists and candidates who have passed the Intermediate Examination of the Town Planning Institute.

Applications are now being considered for the session 1960/61 beginning on the 19th September, 1960.

Further particulars can be obtained from the Clerk to the School, 43a, Woodhouse Lane, Leeds, 2. Telephone: Leeds 32491/2. 1681

WIDNES CORPORATION
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of **SENIOR ARCHITECT**, Grade A.P.T. V (£1,220-£1,375). The duties of the post will include work in connection with a varied Housing, Education and general programme, including a College of Further Education, Secondary Grammar and Modern Schools, Municipal Offices, and Civic Centre.

Five-day week; housing accommodation to rent or lodging allowance in lieu for married applicants; removal expenses in full; superannuation scheme. Candidates must be associate members of the R.I.B.A. and suitably experienced.

Applications, quoting two referees, by 4th July, 1960, to Borough Architect, Brendan House, Widnes.

FRANK HOWARTH,
Town Clerk.

Town Hall, Widnes. 1783

CITY OF CANTERBURY
ASSISTANT ARCHITECT £785-£1,220

Applications are invited for the above appointment in the City Architect and Planning Officer's Department.

Commencing salary according to ability and experience. The successful candidate will be engaged initially on housing projects and must have attained the necessary standard of professional qualification. Housing accommodation available if required.

Applications, with the names of two referees to the City Architect and Planning Officer, John L. Berbers, F.R.I.B.A., A.M.T.P.I., by Wednesday, 29th June, 1960.

Canvassing will disqualify.

J. BOYLE,
Town Clerk.

Municipal Buildings, Canterbury. 1784

BASILDON DEVELOPMENT CORPORATION
DEPARTMENT OF ARCHITECTURE AND PLANNING

(a) **ARCHITECTS** at salaries at present between £1,065-£1,485 are required to work in groups on housing neighbourhood, Town Centre, and factory projects which they will take through all stages.

(b) **ARCHITECT/PLANNERS** are required at salaries at present between £880-£1,375.

Basildon is less than half way towards its ultimate development as the largest New Town and the programme ahead involves planning and designing for major development and redevelopment.

A house or flat can be provided. The posts are superannuable.

Please apply immediately to the General Manager, Basildon Development Corporation, Gifford House, Basildon, Essex, stating age, training, qualifications and experience, and salary required. 1781

CANTERBURY EDUCATION AUTHORITY
COLLEGE OF ART
SCHOOL OF ARCHITECTURE

Applications are invited for the following posts, vacant in September, 1960:—

PART-TIME TEACHER OF DESIGN—One or two days per week.

FULL-TIME TEACHER OF CONSTRUCTIONAL DESIGN AND BUILDING SERVICES.

Applicants, who should be school trained and fully qualified either in Architecture or Engineering, and have had recent experience in practice, should write in the first instance to the Principal, College of Art, St. Peter's Street, Canterbury, by Monday 27th June, 1960.

N. POLMEAR,
Chief Education Officer.

78, London Road, Canterbury. 1728

CITY OF ROCHESTER
ARCHITECTURAL ASSISTANT
(Grade A.P.T. I, £610-£765)

Applications are invited for the appointment of Architectural Assistant in the City Surveyor's Department at a salary in accordance with Grade A.P.T. I (£610-£765).

Candidates should have a general experience, including the preparation of drawings and a knowledge of specifications, and should have passed the Intermediate Examination of the Royal Institute of British Architects or hold a qualification of equivalent standard. The commencing salary will be according to qualifications and experience.

In an appropriate case the City Council will provide the successful candidate with suitable housing accommodation and will be prepared to refund removal expenses after twelve months' service.

The appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, and a satisfactory medical examination. One month's notice is required on either side.

Applications, stating age, training, qualifications, present and previous appointments and experience, together with the names and addresses of two persons to whom reference may be made, should be delivered to J. A. Peel, A.M.I.C.E., M.I.Mun.E., City Surveyor, 66, Maidstone Road, Rochester, not later than Monday, 4th July, 1960.

PHILIP H. BARTLETT,
Town Clerk.

Guildhall, Rochester. 1726

**CITY OF SHEFFIELD EDUCATION
COMMITTEE
COLLEGE OF TECHNOLOGY
DEPARTMENT OF BUILDING AND CIVIL
ENGINEERING**

Applications are invited for the following posts in the Department of Building and Civil Engineering. These posts are created mainly by the development of full-time and sandwich courses.

(a) LECTURER in Building and Civil Engineering subjects. A knowledge of Administration and Management related to the industry would be an advantage.

Salary: £1,370 × £35—£1,550 per annum.

(b) ASSISTANT (GRADE B) to teach General Building or Civil Engineering subjects in the National Certificate or sandwich courses. Salary: £700 × £27 10s.—£1,150 per annum with appropriate additions for degree and training.

Candidates for these posts should be members of an appropriate professional body and have had satisfactory industrial and teaching experience.

Application forms, obtainable from the undersigned (s.a.e.) at P.O. Box 67, Sheffield, 1, should be returned within 14 days of the appearance of this advertisement.

T. H. TUNN,
Director of Education.
1725

**EAST LOTHIAN COUNTY COUNCIL
ASSISTANT ARCHITECTS**

Applications are invited from Qualified Architects for two posts of Assistant Architect in the Property and Works Department. Salary scale £795 to £1,075 per annum with appropriate placing. Superannuation. Persons appointed may reside in Edinburgh if desired or alternatively a house will be made available if required. Applications, stating age and experience, with names and addresses of two referees, to the undersigned by 30th June, 1960.

THOS. GIBB,
County Clerk.

County Buildings,
Haddington. 1706

**INDUSTRIAL ORTHOPAEDIC SOCIETY
THE MANOR HOUSE HOSPITAL
NORTH END ROAD
GOLDERS GREEN, N.W.11**

An experienced CLERK OF WORKS of proved ability required for extension project. Anticipated starting date June, 1960. Contract period about two years.

Write, giving full details of experience, salary required, availability and references, to: W. F. Pendrill, General Secretary, The Manor House Hospital, Golders Green, N.W.11. 1693

**CITY AND ROYAL BURGH OF
DUNFERMLINE**

SENIOR ASSISTANT ARCHITECT (£845—£1,125)

Applications are invited for the above post in the office of the Burgh Architect, 6 Abbot Street, Dunfermline. Placing according to age, qualifications and experience.

Applicants to be fully qualified with a minimum of three years' experience since qualification.

Programme includes Traditional Housing, Redevelopment, and Public Buildings.

Applications, stating age, experience, qualifications, and details of present appointment, together with copies of recent testimonials, to be submitted to the Burgh Architect, 6 Abbot Street, Dunfermline.

The post, which is superannuable, has been designated for priority housing.

J. DOUGLAS,
Town Clerk.

City Chambers,
Dunfermline.
3rd June, 1960. 1732

CITY BOROUGH OF NORTHAMPTON

Applications are invited for the following appointments in the Education and General Section:

SENIOR ASSISTANT ARCHITECT, A.P.T. IV (£1,065—£1,220).

ARCHITECTURAL ASSISTANTS, A.P.T. II (£765—£980).

Full particulars and application forms, returnable by 22nd June, from Borough Architect, Guildhall, Northampton.

C. E. VIVIAN ROWE,
Town Clerk.
1702

**BOROUGH OF TAMWORTH
ENGINEERING ASSISTANT**

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. Salary within A.P.T. Grade I. Applicants should have had a good general experience in a Municipal Engineer's office (housing experience would be an advantage). Preference will be given to applicants who have passed the Intermediate Examination of the Institution of Municipal Engineers or hold an equivalent qualification. Applications, stating age, qualifications and experience, together with names of two referees, should reach the undersigned not later than 20th June, 1960. Canvassing, directly or indirectly, will disqualify.

H. B. LEAKE,
Town Clerk.

Municipal Offices,
Tamworth, Staffs.
4th June, 1960. 1710

COUNTY BOROUGH OF GATESHEAD

Applications are invited from qualified and experienced persons for the following appointments:—

(a) SENIOR PLANNING ASSISTANT, A.P.T. IV-V (£1,065 to £1,375), who must be qualified by examination in Town Planning and preference will be given where a recognised qualification in Civil Engineering or Architecture is also held. Applicants must have had experience covering Central Area Redevelopment and Central Development Area procedure and current planning legislation.

(b) PLANNING ASSISTANTS, Special Scale—A.P.T. IV (£785 to £1,220), who must be qualified by examination in Town Planning and have had not less than three years' experience on Development Plan Surveys and Redevelopment Programmes.

All above posts, pensionable, subject to medical examination and one month's notice on either side.

Houses may be made available on pleasant post war estates.

Applications, on forms to be obtained from the Borough Surveyor, Swinburne Street, Gateshead, 8, must be returned to him not later than 1st July, 1960.

C. D. JACKSON,
Town Clerk.

Town Hall,
Gateshead, 8.
June, 1960. 1720

**SOUTH WEST METROPOLITAN REGIONAL
HOSPITAL BOARD**

REGIONAL ARCHITECT'S DEPARTMENT

Due to an expansion in the hospital building programme the undermentioned permanent appointments are being made:—

(i) ASSISTANT ARCHITECTS—£905 × £35 (1) × £45 (6) × £50 (2)—£1,310 p.a.

(ii) QUANTITY SURVEYING ASSISTANT—£625 × £30 (8) × £35 (1)—£900 p.a.

(iii) SURVEYOR'S CLERK—£500 × £25 (8)—£700 p.a.

London weighting allowance paid in addition.

Applicants for (i) must be Associate Members of the R.I.B.A., for (ii) must have passed the Intermediate examination of the R.I.C.S., and for (iii) must have had three years' technical experience in quantity surveying with a quantity surveyor or building contractor.

Application forms may be obtained from the undersigned at the Board's Headquarters at 40, Eastbourne Terrace, London, W.2. to whom they must be returned by 2nd July.

E. G. BRAITHWAITE,
Secretary.
1770

**STANDARD
ANODISED DOORS**

From **£23-0-0** ex stock

complete with five lever
cylinder lock and handles

★ ★ ★ ★

**ANODISED
SHOPFRONT
and
DOORFRAME
SECTIONS**

at half the cost of
conventional sections

with brackets and fittings
for own fabrication

For further details refer to your Shopfitter or direct to:—

AJAX ALUMINIUM LTD

AJAX ALUMINIUM LTD AJAX ALUMINIUM (EXPORTS) LIMITED AJAX ARCHITECTURAL PRODUCTS (OVERSEAS) LTD TUSCOL LTD
ALUMINIUM SHOPFRONTS LTD THE ARCHITECTURAL ANODISING CO. LTD THE UNIVERSAL SHOPFITTING CO. (LONDON) LTD

AJAX HOUSE · KANGLEY BRIDGE ROAD · LONDON S.E.26. SYD 7061/3



LINDSEY COUNTY COUNCIL

PLANNING DEPARTMENT

Applications are invited for the following appointments:—

(a) A.P.T. II (£765—£880) or SPECIAL GRADE (£785—£1,070). Car allowance. Applicants must have passed in Intermediate or Final Examination of the Town Planning Institute, or be University Graduates with at least two years' post graduate experience in a county planning department.

(b) MISCELLANEOUS GRADE III (£525—£590) or A.P.T. I (£610—£765). Applicants should have completed a three-year period of training or service in a planning, architect's, or surveyor's office or be University Graduates in geography, and must be competent draughtsmen and surveyors.

Grade on appointment and commencing salary in both cases will have regard to qualifications and experience. Superannuation and N.J.C. conditions of service as approved by the County Council. Canvassing will disqualify. Relationship to any member or senior officer of the Council to be disclosed in writing by applicants. Applications, with particulars of training, experience, and names of two referees, to County Planning Officer, County Offices, Newland, Lincoln, not later than 27th June, 1960. 1714

CAMBRIDGESHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

Appointment of:—

(a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. V (£1,220—£1,375).

(b) ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,065—£1,220).

(a) Applicants should be Associates of the Royal Institute of British Architects and have had extensive experience of the design and construction of Schools and other County Buildings, and should be capable of supervising assistant staff.

(b) Applicants should be Associates of the Royal Institute of British Architects and have had experience of the design and construction of Schools and other County Buildings.

In each case the commencing salary will be in accordance with experience. The appointments are subject to the Local Government Superannuation Acts 1937 to 1953, the National Scheme of Conditions of Service, a satisfactory Medical Examination, and terminable at one month's notice on either side.

Applications, stating age, present salary, present and previous appointments, details of training and experience, together with the names and addresses of two referees, should be submitted to the undersigned, not later than Tuesday, 5th July, 1960.

CHARLES PHYTHIAN,
Clerk of the County Council.

Shire Hall,
Cambridge.

1711

PERTH AND KINROSS JOINT COUNTY COUNCIL

Applications are invited for vacancies in the COUNTY ARCHITECT'S DEPARTMENT. Perth on salary scales (a) £795—£1,075 and (b) £735—£955. Applicants for (a) must be fully qualified A.R.I.B.A. or hold a Diploma in Architecture. Applicants for (b) should hold an Intermediate A.R.I.B.A. qualification or equivalent. Placing on either scale will be given according to experience. Particulars and forms of application from The County Clerk, P.O. Box 15, County Offices, York Place, Perth. Applications to be lodged by 4th July, 1960. 1704

LANCASHIRE COUNTY COUNCIL

ARCHITECTURAL ASSISTANT required at PRESTON, salary Special Scale (£785—£1,070).

Applicants should be qualified architects, planning experience is desirable but not essential. Duties include the design of housing layouts and central area redevelopment schemes, and the preparation of working drawings for houses, flats and shops.

Applications, giving age, qualifications, present appointment, experience, etc., and two referees, to the County Planning Officer, East Cliff County Offices, Preston, by the 28th June, 1960. 1685

BOROUGH OF EDMONTON

REDEVELOPMENT ASSISTANT

Applications are invited for this appointment from qualified Architects who have had considerable Planning experience for work in connection with the Town Centre and Housing Redevelopment Schemes. Salary Grade A.P.T. IV, £1,065—£1,220 plus London weighting.

Applications on forms obtainable from the Town Clerk, Town Hall, Edmonton, which must be delivered by 24th June, 1960. 1712

Applications are invited by Tyrone County Education Committee for the following appointment in the Department of the Chief Architect, P. M. Bone, Dip. Arch. (Leics.), A.R.I.B.A.

SECTION ARCHITECT. Salary up to £1,260 according to qualifications and experience.

Applicants should be capable of contemporary design of a high standard, and will be required to take complete charge of the design, working drawings and supervision of contracts. Possession of a car is essential and appropriate travelling expenses will be paid. Removal expenses may be granted to married applicants.

Applications on forms from Chief Education Officer, Education Offices, Omagh, should be lodged with him within two weeks of the appearance of this notice. 1769

BOROUGH OF SUTTON AND CHEAM

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, Grade A.P.T. I/II (£610—£880 per annum, plus £25—£40 London "weighting" per annum). Applicants should have had good general architectural experience and should be pursuing a course of study to obtain the R.I.B.A. qualification.

The commencing salary will be according to ability and experience. The appointment which is terminable by one month's notice in writing on either side, is on the permanent Staff of the Corporation, is subject to the provisions of the Local Government Superannuation Acts 1937-1953 and to the National Scheme of Conditions of Service.

The successful candidate will be required to pass a medical examination. Forms of application may be obtained from Mr. C. Needham, M.I.C.E., M.I.Mun.E., A.M.I.Struct.E., Borough Engineer and Surveyor, to whom they should be returned, accompanied by copies of two recent testimonials, not later than 28th June, 1960, endorsed "Architectural Assistant." Applicants must state whether they are related to any member or holder of any senior office under the Borough Council. Canvassing in any form will disqualify.

ARTHUR PRIESTLEY,
Town Clerk.

Municipal Offices,
Sutton, Surrey.

1700

LONDON COUNTY COUNCIL

HAMMERSMITH COLLEGE OF ART AND BUILDING

Required for newly created posts from 1st September, 1960, or as soon thereafter as possible:—

(1) SENIOR LECTURER to teach in and be responsible for part-time and evening courses. Some teaching experience desirable. Burnham F.E. salary £1,550 × £50 = £1,600.

(2) LECTURER for design and construction with special emphasis on construction materials and service. Burnham F.E. salary £1,370—£1,550.

(3) GRADE B ASSISTANT TEACHER for construction and studio instruction. Burnham F.E. salary £700—£1,150 plus possible additions for approved training and qualification.

Candidates for all posts should be members of the R.I.B.A. and preferably hold degree or diploma of a recognised school.

All posts carry a London allowance of £38 or £51 according to age.

Application forms and further particulars from Secretary at College (FE3a/AJ/1438/6), Lime Grove, W.12, to be returned within 14 days. 1699

NORTHAMPTONSHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

HEATING ENGINEERING ASSISTANT
A.P.T. II (£765—£880 per annum)

Applications are invited from candidates who have had experience in the design of schemes for the preparation of drawings and specifications for heating and hot and cold water supplies in schools and other large buildings.

A weekly sum of 25s. by way of temporary additional salary will be payable, subject to review quarterly, to a married officer unable to find a house locally.

Details, giving age, education, qualifications and experience, with a copy of a recent testimonial, should be sent in an envelope marked "Engineering Assistant" to the County Architect, County Hall, Northampton, by 7th July, 1960.

J. ALAN TURNER,
Clerk of the County Council.

County Hall,
Northampton.

1693

SURREY COUNTY COUNCIL

DEPUTY COUNTY PLANNING OFFICER

Applications invited for this post on Special Scale (£2,240 × £90—£2,510 per annum, being two-thirds of the County Planning Officer's salary scale) from persons with wide experience in Town and Country Planning, and good administrative and organising ability.

Applicants must be Corporate Members of the Town Planning Institute and preferably of one or more of the following:—

Royal Institute of British Architects
Institution of Civil Engineers
Institution of Municipal Engineers

Royal Institution of Chartered Surveyors.
Applications, stating age, qualifications and experience, with names and addresses of two referees, to the undersigned by the 1st July, 1960.

W. W. RUFF,
Clerk of the Council.

County Hall,
Kingston-upon-Thames.

1764

WOKING U.D.C.

ARCHITECTURAL ASSISTANT
(A.P.T. Grade Special: £785—£1,070)

Applicants for this appointment in Architectural Section of Engineer and Surveyor's Department should be A.R.I.B.A.

Appointment offers competent assistant excellent opportunity for work on variety of architectural projects in a town that has rapidly grown to 63,000 population.

Casual users' car allowance.

Forms of application from Engineer and Surveyor, Council Offices, Woking. Closing date 27th June, 1960. 1760

AYCLIFFE DEVELOPMENT CORPORATION

APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment at a salary within Grade A.P.T. III of the Whitley Council for New Towns Staff scale of salaries, according to qualifications and experience. The salary ranges from £880 p.a. to £1,065 p.a.

Appointment subject to N.J.C. Conditions, Superannuation, medical examination and to one month's notice, in writing, on either side.

Housing accommodation, if required. Applications, stating age, qualifications and experience, together with the names of two referees, to arrive not later than Saturday, 25th June, 1960.

A. V. WILLIAMS,
General Manager.

Churchill House,
Newton Aycliffe,
Nr. Darlington.

1762

BOROUGH OF BURY ST. EDMUNDS

APPOINTMENT OF ASSISTANT ARCHITECT
GRADE A.P.T. IV

Applications are invited from qualified Architects for the above supernumerable post in the Department of the Borough Engineer and Surveyor at a salary within Grade A.P.T. IV (£1,065—£1,220).

Duties will include the design of new houses and other buildings; and the maintenance and upkeep of other corporate property. Consideration will be given to the provision of housing.

Applications, endorsed "Assistant Architect" and stating age, whether married, qualifications and experience, together with the names of three referees, to be delivered to the Borough Engineer and Surveyor, Mr. G. S. Standley, A.M.I.C.E., M.I.Mun.E., Regd. Architect, at the address below not later than 27th June, 1960.

RICHARD R. HILES,
Town Clerk.

Borough Offices,
Bury St. Edmunds.

1759

COUNTY COUNCIL OF ESSEX

COUNTY PLANNING DEPARTMENT

Applications are invited for posts of DRAUGHTSMAN (£465—£550) at Broomfield, Epping or Romford. Candidates should be experienced cartographers or architectural draughtsmen. These posts offer a wide range of duties including field surveys of land use, revision of ordnance survey maps from aerial photographs and site inspections, perspectives, etc.

Day-release facilities; five-day week; medical examination; superannuation. Applications to County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, Essex, as soon as possible. 1761

NORTH RIDING COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

Applications are invited for a post of SENIOR ASSISTANT ARCHITECT from Associates of the R.I.B.A., by examination. Salary J.N.C. Grade B—£1,320 × £55 to £1,485. Experience with educational buildings required.

National Scheme of Conditions of Service and the Local Government Superannuation Acts apply, and medical examination required. Applications should state age, qualifications and experience, give particulars of previous and present appointments, and names of three persons to whom reference can be made, and be delivered to the undersigned not later than 2nd July, 1960. Canvassing, directly or indirectly, will disqualify and candidates should state whether they are related to any member of, or senior officer under, the Council.

R. A. WOTHERSPOON,
Clerk of the County Council.

County Hall,
Northallerton,
Yorkshire.

9th June, 1960. 1800

ARCHITECTURAL ASSISTANTS

REQUIRED BY
MINISTRY OF WORKS

For employment in London and Provinces. Keen and enthusiastic assistants of Intermediate R.I.B.A. standard are required for the design of interesting and varied types of buildings in all parts of the world.

The salary range is from £570 (at age 21) to £960 (London (slightly less elsewhere)). Starting pay according to age and experience.

Five-day week. 34 weeks leave annually. Good prospects of promotion and permanency. Permanent posts are pensionable and the pension scheme is non-contributory.

Apply, giving details of age, training and experience, to:—E. Bedford, Esq., C.B., C.V.O., A.R.I.B.A., Chief Architect, Ministry of Works, Abell House, Room 427, John Edin Street, London, S.W.1. Interviews will be held at the above address and at Regional offices where possible. 1255

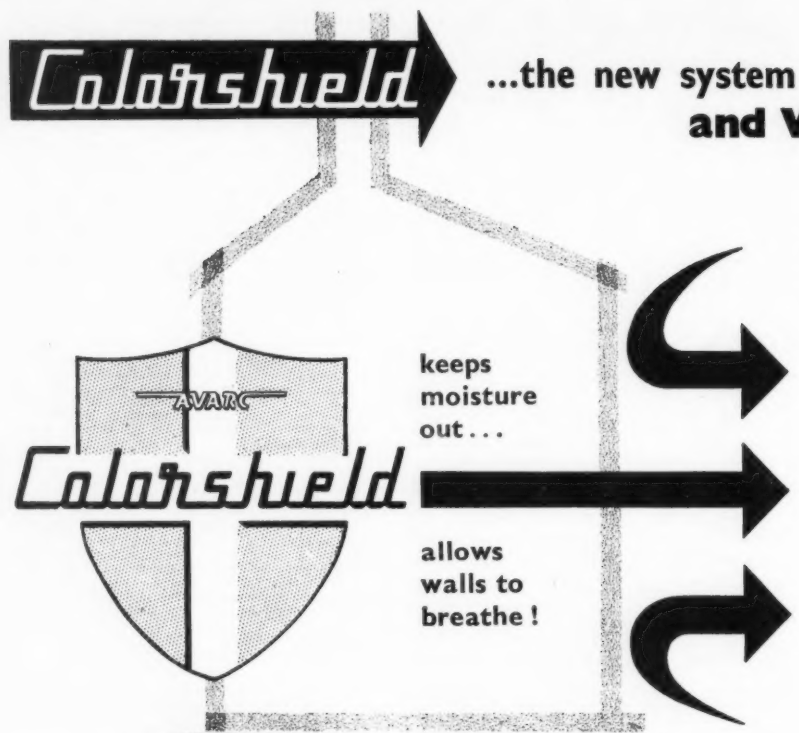
ADMINISTRATIVE COUNTY OF LEICESTER

SENIOR ASSISTANT ARCHITECT
£1,075—£1,220

Candidates must be chartered members of the R.I.B.A., have had considerable experience and be capable of taking charge of contracts from inception to completion.

Lodging allowance and removal expenses may be paid to a married man.

Apply to County Architect, 123, London Road, Leicester. 1763



Colorshield ...the new system of **DECORATING and WATERPROOFING ALL EXTERIOR MASONRY**

Colorshield, not based on cement or other porous materials, comprises two easily applied coatings, both ready mixed. Colorshield can be used on brick, stone, concrete, asbestos cement or any other exterior masonry. No priming is necessary.

Unaffected by alkaline salts in the building fabric, Colorshield consists of the high opacity matt Base Colour, obtainable in almost any colour, followed by a colourless Shield Coat incorporating silicone resins. This coat, whilst completely waterproofing the exterior, allows the walls to breathe and prevents moisture being trapped. Colorshield is the only exterior masonry PAINT which permits "one way traffic" to moisture.

This is but one of the advantages of "Colorshield" . . .

keeps moisture out . . .

allows walls to breathe !

from the makers of **AVARC TECHNICAL PRODUCTS** Full information is obtainable on request

C.R. AVERILL LTD., Alyn mills, CAERGWRLE, WREXHAM
Telephone: **CAERGWRLE 64**

Architects

A famous British Company with an expanding Architectural Department requires several qualified Architects to work on a variety of new and interesting projects. The opportunities for the exercise of creative imagination and skill in design should be especially attractive to promising young men who seek to broaden their experience. The company has an enviable reputation for its excellent staff relations and progressive policy. Starting salary: up to £1,500. Age: up to 30. Location: South Midlands.

Please reply in confidence, quoting reference 64, to:

Robert Clive (Consultants) Limited

Appointments Consultants

27, ALBEMARLE STREET, LONDON, W1.

London County Council ARCHITECT'S DEPARTMENT

1. INTERIOR DESIGNER
2. COLOUR DESIGNER

1. First class designer required to work in collaboration with architects on design of interiors, built-in furniture and fittings and free standing furniture.

Large programme of new buildings including schools, hostels, homes for aged and children. Experience in preparation of design and working drawings and specifications essential.

2. Designer is also required for the preparation of interior and exterior colour schemes for wide range of Council buildings.

Up to £1,250. Commencing in accordance with qualifications and experience. N.B.—Salary quoted is subject to a salaries settlement shortly to be confirmed.

Application form, returnable by 25 June, from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/AJ/1409/6), County Hall, S.E.1.

OXFORDSHIRE COUNTY COUNCIL
COUNTY ARCHITECT

Applications are invited for the post of County Architect. The salary will be £2,550 per annum, rising to £2,880 per annum by one annual increment of £115 and two annual increments of £110 to a maximum of £2,885 per annum. The appointment will be subject to three months' notice on either side and to the Conditions of Service of the Joint Negotiating Committee for Chief Officers of Local Authorities.

Candidates must be members of the Royal Institute of British Architects, and preference will be given to those having had appropriate local government experience.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937-55, and the successful candidate will be required to pass a medical examination.

Applications must include the names and addresses of not more than three persons who have knowledge of the applicant and his work and to whom reference can be made. They should be returned to the Clerk of the Council, County Hall, Oxford, so as to reach him not later than first post on Friday, 1st July.

GERALD GALE BURKITT,

Clerk of the Council.

County Hall,
Oxford.

15th June, 1960.

1796

CITY OF NORWICH

HEATING AND VENTILATING ENGINEERING ASSISTANT (permanent) required in City Architect's Department. Salary within A.P.T. III (£880-£1,065).

Application forms and particulars, obtainable from the City Architect, City Hall, Norwich, NOR 01A, must be returned by 30th June, 1960.

COUNTY COUNCIL OF THE WEST RIDING
OF YORKSHIRE

OFFICE OF THE COUNTY ARCHITECT
Applications are invited for the appointments of:

ARCHITECTURAL ASSISTANTS
BUILDING SURVEYORS
BUILDING SURVEYING / ESTIMATING ASSISTANT

to deal with maintenance, adaptation and minor capital works in the Wakefield Divisional Office in the following grades according to qualifications and experience:—

A.P.T. III (£880-£1,065) or

A.P.T. II (£765-£880).

Applications, stating age, qualifications, experience, present position, and giving names and addresses of two referees, to be sent to the undersigned not later than Tuesday, 28th June, 1960.

A. W. GLOVER, F.R.I.B.A.,

County Architect.

Bishopgarth,

Westfield Road,

Wakefield.

1794

GOVERNMENT OF JAMAICA
CHIEF ARCHITECT, PUBLIC WORKS
DEPARTMENT

Contract appointment for two years. Salary £2,100 a year. Gratuity of 20 per cent. of salary. Candidates must be A.R.I.B.A. with knowledge and experience of reinforced concrete, building construction methods in the field, specifications and contracts, and preferably special knowledge of tropical architecture. Write Director of Recruitment, Colonial Office, London, S.W.1, giving full names, age, qualifications and experience, quoting BCD 112/32/018/E2. 1774

DORSET COUNTY COUNCIL

TEMPORARY CLERK OF WORKS required to supervise the erection of various buildings. Weekly wage £13 17s. 6d., which may be increased in near future.

Applicants should have a good knowledge of all trades and experience in the duties of Clerk of Works.

Applications, stating age, qualifications, experience, past and present appointments, naming three referees, to the Clerk, County Hall, Dorchester, by 25th June. 1771

UNIVERSITY COLLEGE OF NORTH
STAFFORDSHIRE

ASSISTANT ARCHITECT

Scale: £765 × £25 (1) × £30 (3) = £880 p.a. Applications are invited for the post of Assistant Architect on Staff of Architect and Buildings Officer. Applicants should have passed Intermediate Examination of R.I.B.A. and be studying for Final. Good general experience in design and construction essential. Duties may include work on buildings for teaching and research, students' hostels, staff residences, and general purposes buildings and services. The post will be included in College Superannuation Scheme. Further particulars may be obtained from Architect and Buildings Officer, The College, Keele, Staffs., to whom three copies of application, giving full details of age, education, qualifications, experience, etc., and names of three referees, should be sent not later than June 30th, 1960. 1748

BRITISH RAILWAYS

ASSISTANT ARCHITECTS

Assistant Architects required for the Architect's Office of British Railways, 32, Elmbank Crescent, Glasgow. Good designing ability and A.R.I.B.A. qualifications essential. Commencing salary between £1,100 and £1,200 per annum.

Candidates should apply in writing to the Chief Civil Engineer, British Railways, St. Enoch Station, Glasgow, C.I. 1724

Applications are invited for the post of ARCHITECTURAL ASSISTANT, male or female, for duty at the Royal Infirmary of Edinburgh. Starting salary not exceeding £715 per annum, according to age and experience, and rising to £900 per annum. Applications, giving the names of two referees, to the Secretary and Treasurer, Royal Infirmary. 1696

BOROUGH OF ILKESTON

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT within the Grade A.P.T. IV (£1,065-£1,220).

Commencing salary to be according to qualifications and experience.

Housing accommodation available. Canvassing disqualifies.

Application forms and conditions of appointment obtainable from A. O. Marshall, Borough Surveyor & Water Engineer, Town Hall, Ilkeston, to whom they are to be returned by Thursday, 30th June, 1960.

J. YATES,

Town Clerk.

1751

BOROUGH OF MALDEN AND COOMBE

APPOINTMENT OF JUNIOR

ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment from persons who have passed the R.I.B.A. Intermediate Examination, or its equivalent. The salary will be in accordance with Grade A.P.T. II (£765-£880 per annum, plus London "weighting").

Applications on forms to be obtained from John Apse, A.M.I.C.E., Borough Engineer and Surveyor, Municipal Offices, New Malden, Surrey, should be returned by not later than 24th June, 1960.

HAROLD E. BARRETT,

Town Clerk.

1756

Municipal Offices,
New Malden,
Surrey.

ARCHITECTS

TOWN CENTRE AND INDUSTRIAL
PROJECTS

Glenrothes Development Corporation requires ARCHITECTS for a variety of work including the design of INDUSTRIAL, SHOPPING and COMMERCIAL Buildings. The Corporation is about to begin the First Stage of the NEW TOWN CENTRE and the vacancies offer excellent opportunities for architects with imagination and enthusiasm.

Salaries up to £1,375 per annum according to experience.

Houses to rent available.
Medical Examination under Superannuation Scheme.

Applications to Secretary and Legal Adviser, Glenrothes Development Corporation, Glenrothes, Fife. 1757

COUNTY BOROUGH OF WOLVERHAMPTON
CHIEF PLANNING ASSISTANT

Applications are invited for this appointment on the staff of the Borough Engineer and Planning Officer. Salary grade A.P.T. V. £1,220-£1,375 per annum.

Superannuable post, medical examination, N.J.C. conditions of service.

Housing accommodation may be provided.

Candidates should be Corporate Members of the Town Planning Institute and must have wide experience in all aspects of Town and Country Planning.

Particulars of the appointment may be obtained from the Borough Engineer, Town Hall, Wolverhampton, to whom applications should be submitted by Friday, June 24th. 1745

NORTHERN IRELAND HOUSING TRUST

The Trust invites applications for the following posts:—

(a) ARCHITECTURAL ASSISTANTS, Grade I (Scale £850-£1,050). Candidates should have a Degree or Diploma in Architecture with drawing office experience.

(b) ASSISTANT ARCHITECTS, Grade II (Scale £950-£1,050). Candidates must be suitably qualified Registered Architects.

The persons appointed will be required to contribute to a superannuation scheme which allows for the transfer of benefits in Local Government Schemes in suitable cases.

Housing accommodation may be arranged for married candidates.

Apply not later than 8th July, 1960, giving full details of age, education, qualifications and experience, including present post and salary, to the General Manager, Northern Ireland Housing Trust, 12, Hope Street, Belfast, 12.

For post (a) please mark envelope 33/81.

For post (b) please mark envelope 33/82. 1816

SOUTH-WEST ESSEX TECHNICAL COLLEGE

FOREST ROAD, WALTHAMSTOW, E.17

ASSISTANT, GRADE B, required to act as Studio Master in the Architecture section, to teach Building Construction and Builders' Quantities in all sections of the Department, and to take general studies with Craft Apprentices.

Salary within scale £700 rising to £1,150 per annum, plus allowances for approved training and/or qualifications. London Allowance £38 or £51 per annum. Commencing salary will have regard to previous experience.

Apply by letter only (no forms) to the Clerk to the Governors, giving details of qualifications, training and experience, together with three testimonials or the names and addresses of three referees. 1746

THE WEST OF SCOTLAND AGRICULTURAL
COLLEGE

Applications are invited for a post of DRAUGHTSMAN in the Farm Buildings Advisory Service. Candidates should have architectural, quantity surveying, or good general building trade training.

Salary scale £550 (age 21) rising to £875 with entry according to age up to 28.

Reply in writing within one week, giving full details to the Secretary, 6, Blythwood Square, Glasgow, C.2. 1740

CITY OF NOTTINGHAM EDUCATION

COMMITTEE

COLLEGE OF ART AND CRAFTS

Principal: ROBERT LYON, D.A. (GLAS.), F.R.S.A. Head of the School of Architecture: D. W. NOTLEY, B.Arch. (HONS.), L'Pool, A.R.I.B.A.

Applications are invited for the post of full-time STUDIO MASTER in the School of Architecture which is recognised for exemption from the R.I.B.A. Final Examination. Duties to commence on the 1st September, 1960, or nearest date possible thereafter. Candidates should be Architects, preferably holding the degree or diploma of a recognised School, and should have had a minimum of three years' practical architectural experience after registration. Salary to be in accordance with the Burnham Technical Scale for Grade B Assistants.

Application forms and further particulars from the Principal, College of Art and Crafts, Waverley Street, Nottingham, to whom the forms should be returned within 10 days of the publication of the advertisement.

W. G. JACKSON,

Director of Education.

Education Office,
Exchange Buildings,
Smithy Row,
Nottingham.

1747

THE CORPORATION OF THE CITY OF
GLASGOW

ARCHITECTURAL AND PLANNING DEPARTMENT

ASSISTANT ARCHITECTS

Vacancies exist for a number of qualified Assistant Architects in this Department, which has in hand a large and interesting programme of works including redevelopment involving multi-storey flats and school buildings. The work will provide scope for initiative in preparing designs and details for schemes on which construction work is intended to be started soon.

The salary scale is up to £1,385 with placing according to experience.

Form of application may be obtained from the Principal Administrative Officer, 20, Trongate, Glasgow, C.1.

A. G. JURY,

City Architect and Planning Officer.

1823

CHESHIRE COUNTY ARCHITECT'S DEPARTMENT

DISTRICT OFFICE AT WILMSLOW

Applications, on forms obtainable from the District Architect, "Remenham," Alderley Road, Wilmslow, are invited for the appointment of an ARCHITECTURAL ASSISTANT in Grade A.P.T. II (£765 per annum × 1 at £25 and 3 at £30 to £880 per annum). A five-day week is being worked.

EDGAR TABERNER, A.R.I.B.A.,

County Architect.

County Hall,

Chester.

10.6.60.

1808

PADDINGTON BOROUGH COUNCIL

BUILDING SURVEYING ASSISTANT

£650-£805 (A.P.T. I)

Starting salary according to qualifications and experience which should include repair, adaptation and conversion of civic and residential properties. Candidates should be capable of preparing plans, specifications, costs. Five-day week.

Applications, stating age, qualifications, present and past appointments, names of two referees, should reach me by 27th June, 1960 (quoting A.483).

W. H. BENTLEY,

Town Clerk.

Town Hall,

Paddington, W.2.

1809

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

TOWN PLANNING DIVISION

Applications invited from qualified town planners for three positions as under:
PRINCIPAL ASSISTANT (Professional).
Salary scale £1,700-£1,950. N.B. Salaries quoted are subject to a salary settlement shortly to be confirmed.

1. To lead a civic design team in one of the four area groups. Experienced A.R.I.B.A. required.

2. To lead a team dealing with development control in one of the four area groups. Experience of all types of planning applications essential.

3. To lead a team on planning research in the Policy and General Group. Ability to apply results of research and recommend policy in action essential.

For all posts candidates should have proved ability to lead and wide experience in a large urban area.

Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (FK/AJ/1566/6), County Hall, S.E.1, returnable by 10th July. 1807

UNIVERSITY OF HULL

Applications are invited for the post of ASSISTANT BUILDINGS OFFICER. Candidates with architectural or engineering qualifications and administrative experience preferred but graduates with appropriate experience will be considered. Salary scale £1,050-£1,550 p.a. with F.S.S.U. and children's allowances. Further particulars may be obtained from the undersigned to whom applications (five copies) and the names of three referees should be submitted not later than 30th June, 1960.

W. D. CRAIG,
Registrar.

10.6.60.

INVERNESS COUNTY COUNCIL invite applications for appointments in the County Architect's Department as follows:—

- (1) ONE FIRST ASSISTANT ARCHITECT—Salary Scale £1,040-£1,120 per annum.
 - (2) ONE SECOND ASSISTANT ARCHITECT—Salary Scale £795-£1,075 per annum.
- Applicants for both appointments must be fully qualified. Appropriate placing on salary scales will be given in accordance with qualifications and experience. Housing accommodation may be made available if required. Applications, together with the names and addresses of three referees, to the County Clerk, County Buildings, Inverness, by 27th June.

BOROUGH OF EALING

JUNIOR ARCHITECTURAL ASSISTANT. A.P.T. I (£610-£765 plus London weighting). Must have passed Intermediate R.I.B.A. or its equivalent.

TWO ARCHITECTURAL ASSISTANTS, within scale A.P.T. IV according to experience (£1,100-£1,265 inclusive). Must hold recognised architectural qualifications.

DRAUGHTSMAN, GENERAL DIVISION (£225-£695 inclusive according to age and experience) for Civil Engineering work.

PETROLEUM OFFICER, A.P.T. I (£650-£805 inclusive) for inspection and testing of petroleum installations, etc. Car allowance. Full particulars and form of application for these appointments obtainable from Borough Engineer and Surveyor, Town Hall, Ealing, W.5. Closing date: 30th June, 1960.

E. J. COPE-BROWN.

SHEFFIELD REGIONAL HOSPITAL BOARD HOSPITAL EXPANSION PROGRAMME. Appointment of ASSISTANT REGIONAL ARCHITECT. Salary Scale: £1,825-£2,175 per annum.

Applications are invited from Registered Architects who are corporate members of the R.I.B.A. for the above appointment on the Board's Headquarters staff.

Duties include the control of one or more of the Board's design teams responsible for major projects, i.e. value £250,000 to £4,000,000. Special aptitude for design with administrative and organizing ability and experience desirable. Hospital experience not essential.

Applications, stating age, qualifications, experience, together with the names of two referees, should be forwarded to the Secretary, Sheffield Regional Hospital Board, Fulwood House, Old Fulwood Road, Sheffield, 10. 1813

ARCHITECTS

FOR SCOTTISH DEPARTMENTS OF THE SECRETARY OF STATE

Architects are required in Edinburgh for the Chief Architect's Division which covers work on Hospitals, Housing, Schools, Colleges and other Institutions and which includes development work and research. Salary range £805-£1,260. Starting pay according to age and experience. Five-day week. Four weeks' annual leave. Candidates should be registered architects and preferably corporate members of the R.I.B.A. Write for application form to T. A. Jeffries, Esq., A.R.I.B.A., A.M.T.P.I., Chief Architect, Department of Health for Scotland (Room 30), St. Andrew's House, Edinburgh, 1. 1810

PUBLIC NOTICE

BOROUGH OF WOKINGHAM ARCHITECTURAL COMPETITION FOR NEW TOWN HALL

Registered Architects are invited to submit designs for the new Municipal Offices and Public Halls. The Assessor is Mr. Clifford Culpin, O.B.E., F.R.I.B.A., M.T.P.I.

Premiums are £1,000, £500 and £250. Conditions will be available from the 24th June, 1960, and applications for them will be received up to the 15th July, 1960.

Last day for submitting designs is the 17th October, 1960. Applications for Conditions, Schedules of Accommodation, Site Plan, etc., should be made to The Town Clerk, Town Hall, Wokingham, Berkshire, accompanied by a deposit of £2 2s.

L. GODDARD SMALLEY.

Town Hall, Wokingham, Berks. June 1st, 1960.

Architectural Appointments Vacant

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

ARCHITECTURAL ASSISTANT, about Intermediate standard, required for general practice in North Devon Office. Pension scheme. Box 9744.

ARCHITECTURAL ASSISTANTS required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 910, c/o 7, Coptic Street, W.C.1. 8815

LARGE SCALE Development in London and Industrial Buildings in Home Counties. High office blocks and residential flats. Four ASSISTANT ARCHITECTS required. Senior and Intermediate standard. West End Office. Five-day week. Good salaries and bonuses. Box 9086

ASSISTANT ARCHITECTS required by firm with offices in Middlesbrough and Billingham-on-Tees. The work is interesting and of considerable variety. Salary according to experience and ability. Elder and Lester, A/A.R.I.B.A., Grosvenor Buildings, 65, Albert Road, Middlesbrough. 8820

RONALD WARD & PARTNERS have immediate vacancy for ASSISTANT ARCHITECTS with initiative and some experience, for interesting, commercial, industrial and civic projects. Salaries commensurate with ability. Apply, 29, Chesham Place, S.W.1. BELgravia 3361. 5638

LEWIS SOLOMON, KAYE & PARTNERS, rapidly expanding practice require ARCHITECTS and ASSISTANTS with initiative and competence to work on major design projects in the London area. These projects include Comprehensive Development Schemes, Hotels, Schools, Offices, and Luxury Flats. Good salaries according to ability and experience, luncheon vouchers, five-day week, and excellent working conditions. Write 5, Holborn Circus, Tavies Inn House, E.C.1, or telephone CITY 8811, quoting SLB in both instances. 7700

£750-£1,000-KEEN YOUNG ARCHITECTS WANTED URGENTLY. Senior and Junior Assistants required to work on a variety of interesting contracts, including flats, hospitals, offices, hotels, shops and interiors, etc. Opportunities for modern design and control of contracts. Salaries as above or according to experience. R. Mountford Pigott & Partners, South Kensington. Tel. KENSington 1242. 9543

TWO ASSISTANTS required: one at Intermediate standard and one qualified with some years' office experience, for small busy office. Salary according to experience. Ring LANGHAM 1732 or write to F. G. Frizzell, A.R.I.B.A., 80, Portland Place, W.1. 8022

MONRO AND PARTNERS require ARCHITECTURAL ASSISTANTS of Intermediate/Final R.I.B.A. standard in their London, Watford, and Glasgow Offices for work on interesting industrial and commercial projects. Salary range £800-£1,000 p.a. Non-contributory Pension Scheme. Five-day week. Apply in writing to 32, Clarendon Road, Watford. 8699

SEELY & PAGET have immediate vacancy in their City office. Standard near Final R.I.B.A. with office experience. Holiday arrangements respected. Salary range £842 x £52 (4)-£1,050 plus luncheon vouchers. Write 41, Cloth Fair, E.C.1, or telephone MET 8511. 9155

TREHEARNE & NORMAN, PRESTON & PARTNERS have vacancies for ARCHITECTS and ASSISTANTS with imagination and designing ability to assist with important new developments in the London area. Apply in confidence to 83, Kingsway, London, W.C.2. (HOL. 4071.) 6429

£1,000/£2,000 p.a. will be paid to experienced competent ARCHITECTS by a private practice in the City of London. The work will be primarily on the drawing board on new and interesting projects of magnitude. A high standard of design and detailing ability is required. Please apply in writing to Box 9360.

ARCHITECTURAL STAFF, all grades, required for interesting work. Good salary, bonus, superannuation scheme. House Purchase Assistance Scheme. Excellent working conditions. five-day week. Please apply, giving details of qualifications, experience and salary required to: George Brown & Partners, A/A.R.I.B.A., F.I.A.S., and Eric Ross, F.R.I.B.A., Equity & Law Building, Baldwin Street, Bristol, 1. 9458

EXPANDING practice with varied work in different parts of the country require keen and capable Intermediate standard ASSISTANTS. Good salary and prospects for the right men. Holiday commitments honoured. Dalling and Partners, 14, Bloomsbury Square, W.C.1. CHANCERY 4725. 9469

ARCHITECTS and ASSISTANT ARCHITECTS required for interesting commercial, industrial and civic projects. Responsibility and initiative encouraged. Five-day week, good salary commensurate with ability and experience. Ronald Ward & Partners, 29, Chesham Place, S.W.1. BELgravia 3361. 9046

BUSY City Firm engaged in industrial and commercial work requires ASSISTANT of Final standard with several years' office experience. Five-day week. Luncheon vouchers. Salary by arrangement. Box 9227.

ARCHITECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. 728

ARCHITECTURAL ASSISTANTS, senior and junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Box 9143.

C. H. ELSOM & PARTNERS require ASSISTANTS for work on theatres, laboratories, shops, stores and town centre redevelopment, etc. Apply 10, Lower Grosvenor Place, S.W.1. VIC. 4304. 9084

ARCHITECTS, SENIOR ARCHITECTURAL ASSISTANTS required immediately for a wide variety of work. Application should be made in writing to Kenneth F. Masson, A.R.I.B.A., Chief Architect, S.C.W.S. Ltd., 76, Morrison Place, Glasgow, C.S. 9677

INTERMEDIATE to Final ASSISTANTS required immediately. Salary according to ability and experience. Theo. H. Birks, 21, Portland Place, London, W.1. LAN. 7236. 9728

BASIL SPENCE & PARTNERS require qualified and experienced ARCHITECTS to fill positions of responsibility on a major building programme. Write to 43, Queen Anne Street, W.1, stating experience and salary required. 9024

BRYAN & NORMAN WESTWOOD & PARTNERS require JUNIOR ASSISTANTS to work in their branch office in London. Please apply to 21, Suffolk Street, S.W.1. Trafalgar 4411. 9914

SENIOR and INTERMEDIATE ARCHITECTS required by busy City office; every opportunity for initiative and responsibility; varied practice. Five-day week. Salaries by arrangement and commensurate with experience. Kenneth Lindy, Joseph Hill & Partners, 24, St. Mary Axe, E.C.3. 1006

EXPERIENCED SENIOR ASSISTANT ARCHITECT required in Architect's Department of commercial firm in the West Riding of Yorkshire. Must be prepared to work on projects of varying size, also willing to travel throughout the country. Five-day week, Pension Scheme, canteen facilities. Salary by arrangement according to age and experience. Apply Box 1877.

JUNIOR and SENIOR ASSISTANTS required. Five-day week. Excellent prospects. Bernard Gold & Partners, 4/6, Savile Row, W.1. Phone REGENT 7551. 1240

DONALD BOWSWELL urgently requires capable ASSISTANTS of various grades for Croydon office. Salary by agreement. Holiday arrangements honoured. Apply with full details to 54, Friends Road, Croydon, or telephone CROYdon 4060. 186

ARCHITECTURAL ASSISTANTS required in busy West End office. Varied work, excellent salary and prospects. Apply to Maurice Sanders, F.R.I.B.A., 24, Harley Street, W.1. 1461

GRAVESEND and ROCHESTER—Opportunity in expanding offices—MALE or FEMALE ASSISTANTS required on wide variety of work. Pension Scheme. Salary up to £1,000 p.a. Evening interviews if required. Write or 'phone: George E. Clay & Partners, A/A.R.I.B.A., 196, Parrock Street, Gravesend. Tel. Gravesend 1401/2. 1574

W. S. HATTELL & PARTNERS COVENTRY

INVITE applications to fill the following vacancies:—

- (a) Fully qualified ARCHITECTS with some years' office experience to take charge of a wide range of contracts, including Television Studios, Schools, Church, Licensed Premises, Factories, Shops, etc. Applicants must have good design sense and first-class knowledge of construction and administration and be capable of controlling junior staff. Salary within the range £1,000-£1,500 depending on ability.

- (b) ASSISTANTS of Intermediate to Final standard, capable of preparing full working drawings, specifications, etc., under supervision and of taking responsibility for smaller contracts. Salary within the range £750-£1,000 depending on experience and ability.

Salaries reviewed annually. Pension Scheme. Five-day week. Travelling expenses paid to interviewed applicants. Replies to 1, Queens Road, Coventry. 1555

SENIOR ASSISTANTS required immediately. Salary by arrangement. Theo. H. Birks, 38, Portland Place, London, W.1. LAN 7235. 1486

ARCHITECTURAL ASSISTANT approaching intermediate standard with office experience. Interesting projects and opportunity for advancement. Salary according to ability. Write Norman Green, F.R.I.B.A., 12 Aconite Place, Bedford Square, W.C.1. 1534

SINGLER & RISDON require **TWO SENIOR ASSISTANTS** and **FOUR ASSISTANTS** to take over the design and construction of important comprehensive developments. Salary £800-£1,400. Holiday commitments recognised. Phone: CHA 2951. 1318

APPLICATIONS are invited to fill posts as **ASSISTANT ARCHITECTS**. Five-day week. Compulsory Superannuation Scheme. Salary range £730-£1,080 per annum according to age and experience. Apply: R. C. Steel, A.R.I.B.A., Chief Architect, C.W.S. Ltd., 99, Leman Street, London, E.1. 1534

AN INTERMEDIATE or JUNIOR ARCHITECTURAL ASSISTANT required for busy and varied practice. Apply: W. A. Cossford Ball, F.R.I.B.A., 205, Lavender Hill, S.W.11. Phone Battersea 2481. 1480

LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have immediate vacancies in their London Office for **SENIOR and JUNIOR ASSISTANTS**. Write stating age, salary and experience to the above at: 3, Park Square Mews, Upper Harley Street, N.W.1. 1492

LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have immediate vacancies in their Welwyn Garden City Office for **SENIOR and JUNIOR ASSISTANTS**. Write stating age, salary and experience to the above at: Midland Bank Chambers, Welwyn Garden City, Herts. 1493

ASSISTANTS, ASSISTANTS, ASSISTANTS. A share in the profits (if any). Salaries £500-£1,200 p.a. Stanley R. Nevell & Partners, ABBey 3971. 1605

ASSISTANT ARCHITECT required in combined practice of Architects and Engineers. Salary by arrangement. C. W. Glover & Partners, Francis House, Francis Street, Westminster. 1614

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required for Office in Norwich engaged in hospital, domestic, industrial and commercial work. Apply by letter to A. F. Scott and Sons, Architects, 23, Tombland, Norwich. 1616

SCOTT, BROWN, RIGG & TURNER require capable **ARCHITECTURAL ASSISTANTS** for work on varied and interesting projects in their London, Guildford and Woking offices. Write with particulars of experience and qualifications to 32, London Road, Guildford. 1521

FAVELL, BELLIS & ASSOCIATES have vacancies in Reading, Wrexham and Ruthin for **Junior, Intermediate and Final standard ARCHITECTURAL ASSISTANTS**. Apply, with full particulars, to 23, Well Street, Ruthin, North Wales. 1575

GOLLINS, MELVIN, WARD & PARTNERS require a **SENIOR ASSISTANT**, salary £1,000-£1,200 p.a. interested in the development of University and College projects. Five-day week, quarterly bonuses and pension scheme. Write: 281, Glossop Road, Sheffield, 10, or telephone Sheffield 29922, for an appointment. 1576

GOLLINS, MELVIN, WARD & PARTNERS require **ARCHITECTURAL ASSISTANTS** for their Sheffield Office to work on interesting University projects. Five-day week, quarterly bonuses and pension scheme. Write: 281, Glossop Road, Sheffield, 10, or telephone Sheffield 29922, for an appointment. 1577

ARCHITECTURAL ASSISTANT, Intermediate standard, required to work on interesting and varied projects in the Oldham Office. Box 1590. 1590

SCHOOL TRAINED ASSISTANTS required to take charge of variety of industrial and educational projects. Good opportunities for experience and responsibility without interference. Congenial Liverpool office. Salary £1,000-£1,500 according to experience. W. & J. B. Ellis, F.A.R.I.B.A., 26, Rodney Street, Liverpool, 1. 1578

BUSY Sussex practice requires **Intermediate standard ASSISTANT** with good design ability, for work on churches, schools, shops, houses. Salary by arrangement. Phone Uckfield 447, or write giving particulars to H. Bingham Towner, Hooke Hall, Uckfield. 1587

CHRISTOPHER WREN slept here! Hampton Court is about half-hour from Central London. Quiet, trees, river, birds, car-parking, 2 min. station, all modern conveniences, etc. Vacancies for **ASSISTANT ARCHITECT (Designer)** and **ARCHITECTURAL ASSISTANTS** (so-called Intermediate standard). The work of my small office is mainly concerned with domestic and educational buildings. Write or phone Molesey 7241. Eric Lyons, Mill House, Bridge Road, Hampton Court, Surrey. 1596

CATERHAM, Surrey. Salary £1,500-£2,000, with prospects. **SENIOR ARCHITECT** required. Must be creative designer, experienced and able to take charge of large contracts. Only those having had experience in advanced contemporary work need apply. Work in office includes Town Planning and Landscape Architecture. May be useful for Senior Architect to obtain experience in these allied professions. Apply: Derek Lovejoy, M.A., A.R.I.B.A., A.M.T.P.I., A.I.L.A., 1, Wellesley Parade, Godstone Road, Caterham. Telephone: Upper Warrington 2922. 1584

LEWELLYN SMITH & WATERS urgently require **ASSISTANTS** for their expanding programme of work, which includes Industrial, Commercial, Housing, Schools, Churches, etc. **DESIGNERS** wanted, to prepare and develop sketch designs for every type of work. Imagine time outlook and good sense of detail essential. £900-£1,250. 1584

JOB ORGANISERS required to take charge of jobs; able to control drawing office and site work and deal with Consultants and Specialists. £1,000-£1,250. 1584

ASSISTANTS wanted, interested in working on a wide range of projects. Good opportunities for young men of ability. £700-£1,000. 1584

JUNIORS required. Salary according to aptitude and experience. 1584

L.V.'s; Pension Scheme; holiday commitments for 1960 will be honoured. 1584

Kensington and Worcester. Write 103, Old Brompton Road, S.W.7, or telephone KEN 4477. 1677

EXCELLENT positions are now being offered by Lewis Solomon, Kaye & Partners. All grades are wanted from Intermediate standard to project senior, for work which includes London's newest hotel, a comprehensive development, schools, luxury flats and theatres. Positions are offered in all categories. Salaries offered will depend on individual qualifications or merits. Luncheon vouchers. Five-day week and excellent working conditions. City 8811. 1662

QUALIFIED, Intermediate and Final standard ASSISTANTS required for large office development and flats. Must be good draughtsmen conversant with modern construction and design. Congenial working conditions. Good salary will be paid to right men. A. Green, A.R.I.B.A., 23, Fitzroy Street, W.1. LAMham 5051. 1642

SENIOR and INTERMEDIATE ARCHITECTURAL ASSISTANTS required by expanding organisation in the North West dealing with contract work on a national scale. Work includes industrial development and commercial projects of interesting nature. The senior post requires a capable man, preferably an Associate of the Royal Institute of British Architects, to take charge of office administration and supervise staff. Salaries commensurate with ability, experience and qualifications are offered, an incentive bonus scheme and superannuation scheme being already operative. Please reply in writing, stating age, experience and qualifications, to: Box 1643. 1643

KEEN ARCHITECTURAL ASSISTANT. Intermediate standard, wanted immediately. Only good draughtsman with a sound knowledge of construction and details welcome. Site experience available, as well as drawing office. Five-day week. Details to Felix Walter, F.R.I.B.A., 4, Raymond Buildings, Gray's Inn, W.C.1, or phone HOLborn 0535. 1659

EXCELLENT opportunity for Senior and Intermediate **ASSISTANTS** in a permanent and progressive appointment with Midland firm of Architects who are working on large projects of an advanced type of design, including comprehensive development schemes, multi-storey office buildings, multi-storey flats, shopping centres, schools, banks, public houses and industrial projects. Accommodation provided in Georgian house. Apply Box 1588. 1641

BREWERY ARCHITECT'S DEPARTMENT has vacancy for qualified **SENIOR ASSISTANT**. Well remunerated, permanent, superannuated position to be filled. Apply with full particulars to Fergus H. Frost, A.R.I.B.A., The Birkenhead Brewery Co. Ltd., 73, Oxtow Road, Birkenhead. 1641

SIR JOHN BURNET, TAIT & PARTNERS require men who really enjoy working on the drawing board. Salaries from £1,000 to £1,500 per annum for **ASSISTANTS** who can initiate and develop their own sketch drawings to all scales. Luncheon vouchers, Pension and Medical schemes (non-contributory). Telephone for appointment: LAMham 3826. 1638

QUALIFIED CHIEF ASSISTANT and JUNIOR required in one of the most delightful Towns in the Country. Applicants should be genuinely interested in a varied Private practice, the work including Schools, Hospitals, Banks, Shops and Housing. Bonus and Pension Schemes in operation. Salary according to ability. Excellent prospects. Apply in confidence to Messrs F. J. Lenton & Partners, A/R.I.B.A., 16, Broad Street, Stamford, Lincs. 1624

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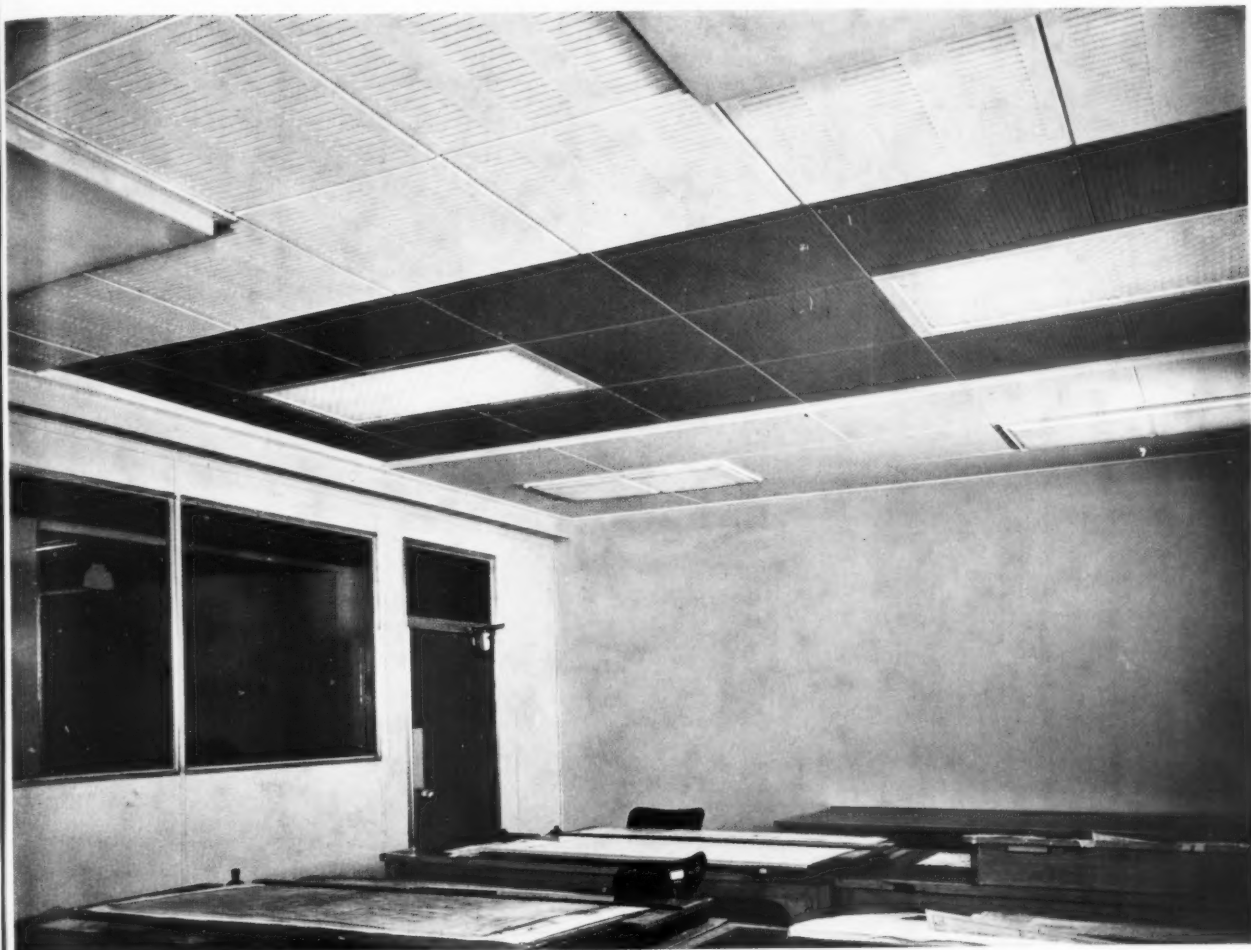
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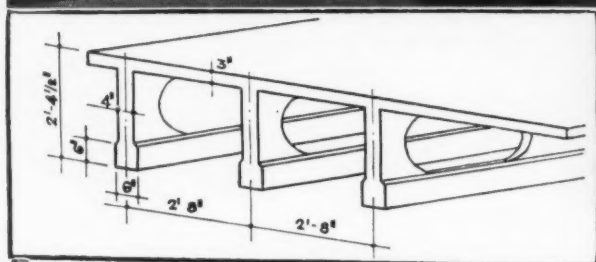
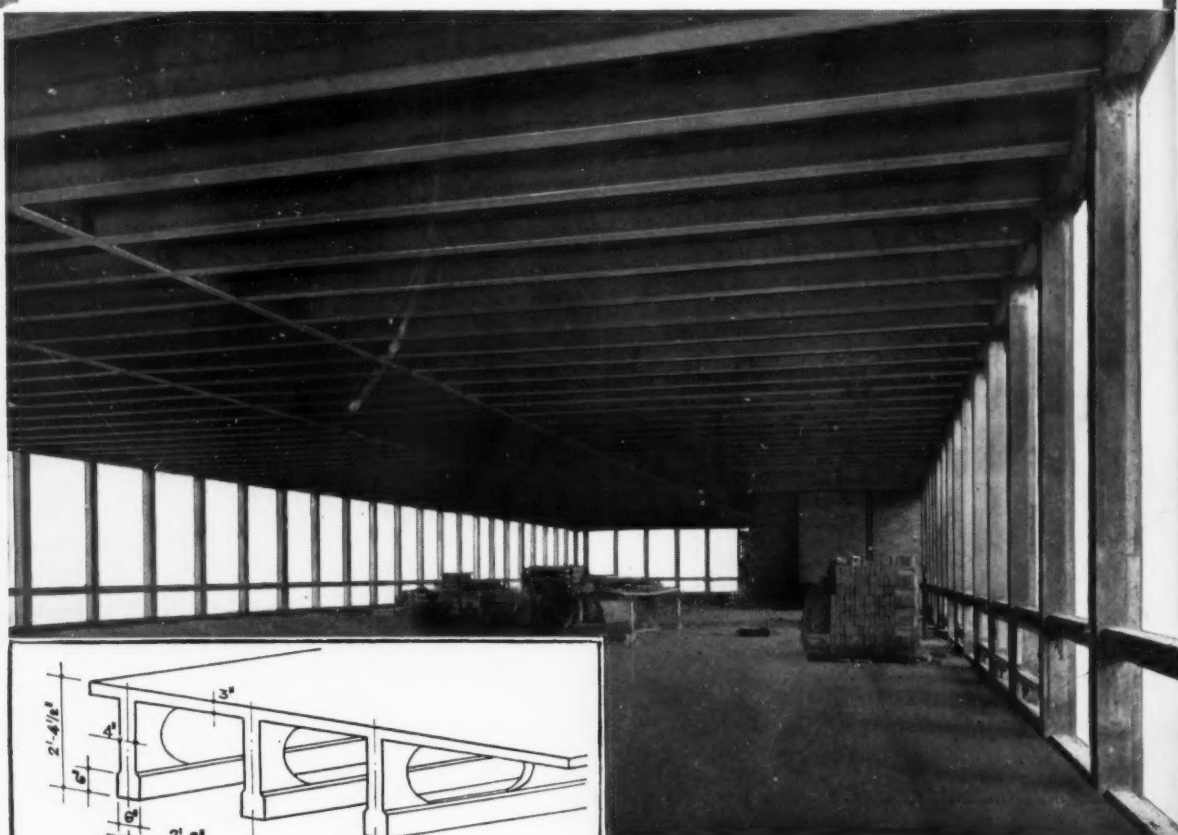
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