

# THE ARCHITECTS' JOURNAL



## standard contents

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

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Wanted and Vacant

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

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1.	Sloane 3158/1601
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb.	Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 11, Gower Street, W.C.1.	Museum 9200
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary: Gontran Goulden, Building Centre, 26, Store Street, W.C.1.	Museum 5400
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Saville Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalt Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers, 10, Princes Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBR	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NSA	National Sawmilling Association. 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House, 3921
SIA	Structural Insulation Association. 14, Moorgate, London, E.C.2.	Central 4444
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 69, Cannon Street, E.C.4.	City 4444
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Mayfair 8866
WEDA	Welfare Equipment Development Association. 74, Victoria St., S.W.1.	Victoria 5783
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

No. 2999]

[Vol. 116

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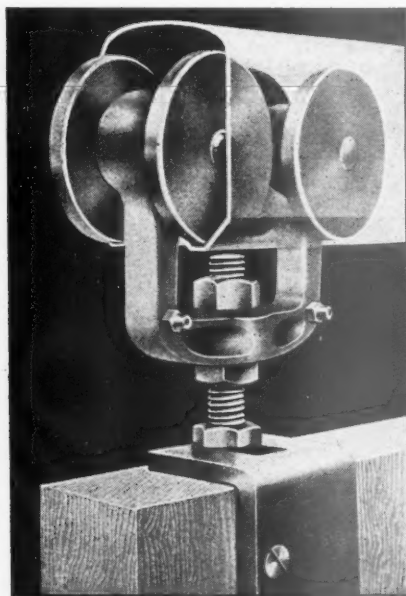
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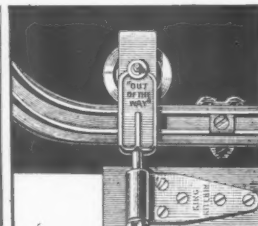
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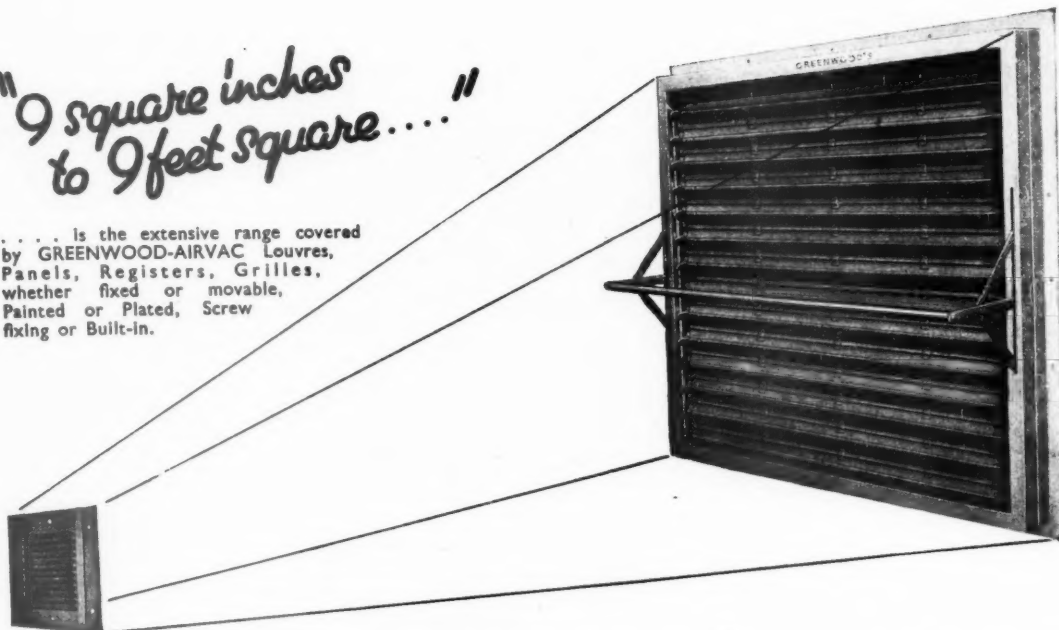
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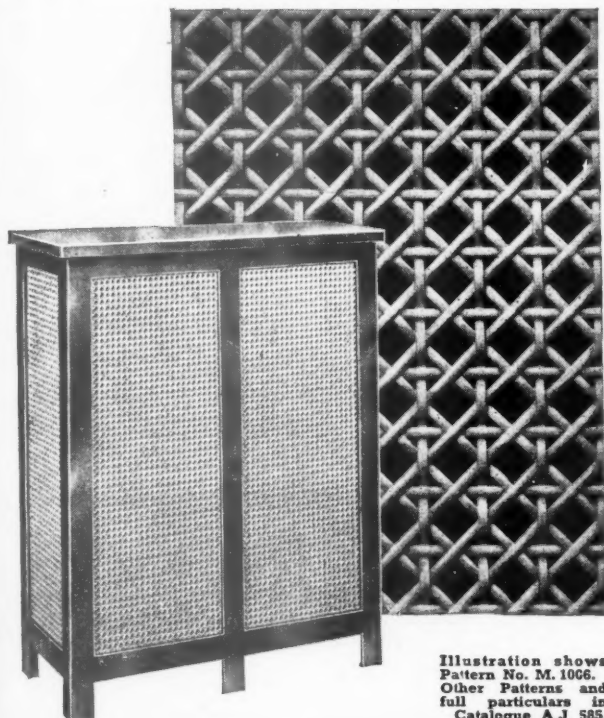


Illustration shows  
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Other Patterns and  
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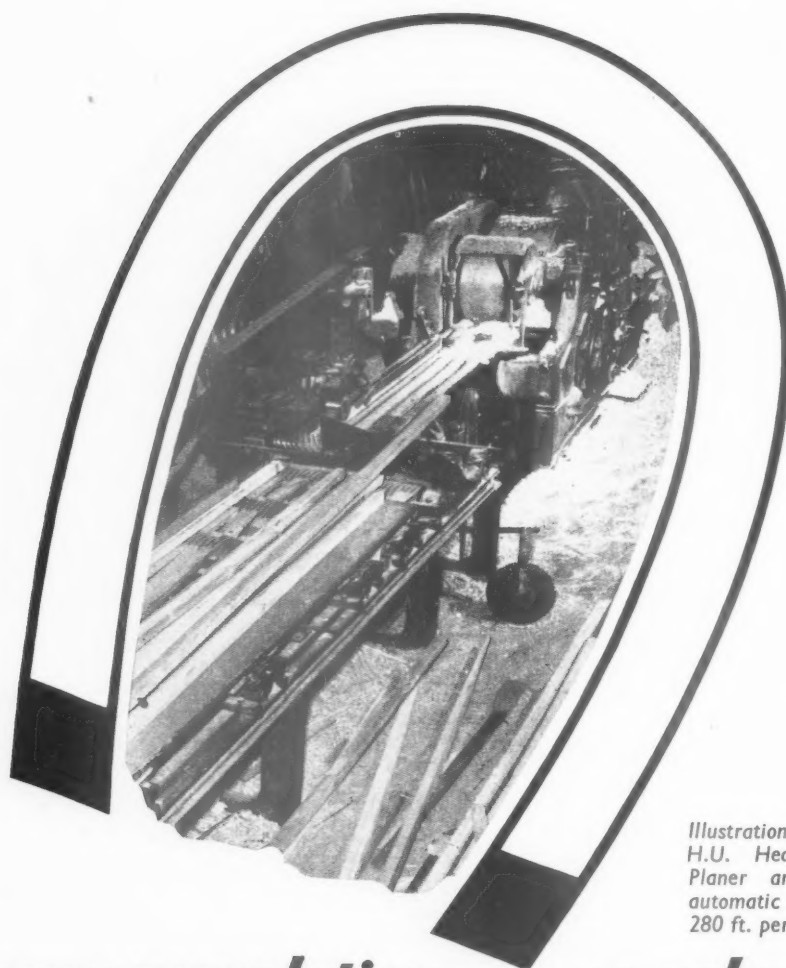


Illustration on left shows a H.U. Heavy Duty Faskut Planer and Moulder with automatic feed. (Capable of 280 ft. per minute.)

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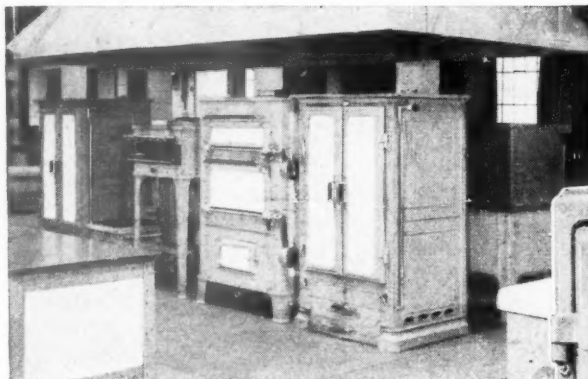
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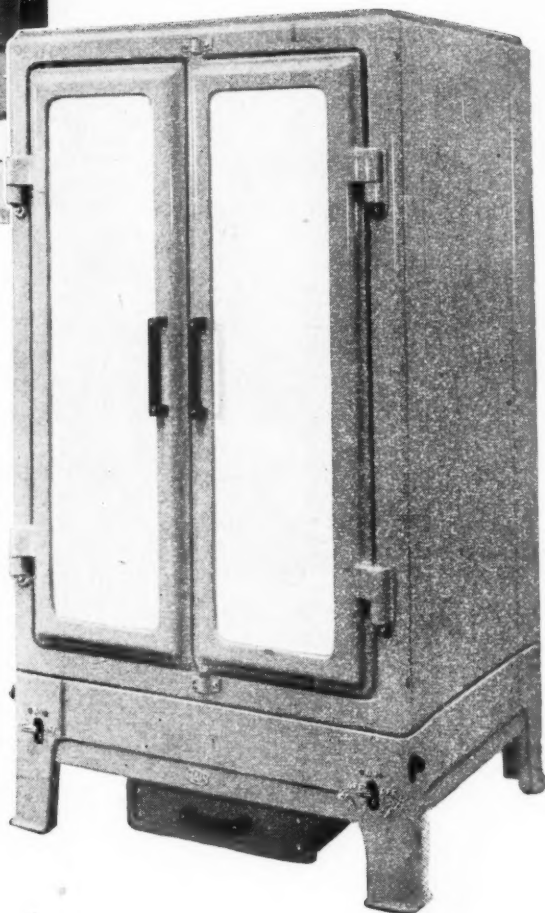


This Large Type **MAIN GAS ROASTING OVEN** is constructed generally of cast-iron and finished externally in Dapple Vitreous Enamel with white enamelled door panels, bakelite door handles and chromium-plated mountings.

The oven interior is 30" wide x 30" deep x 48" high. It has enamelled steel linings and is fitted with three grid shelves carried on removable side hangers. The heating is by two atmospheric gas burners.

The oven is mounted on enamelled cast-iron feet. The storage pan under the oven is of copper construction with an enamelled cast-iron front.

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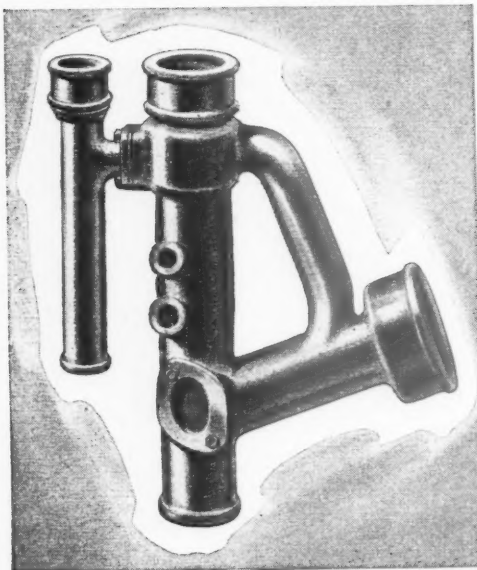
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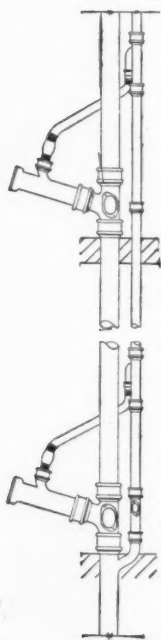
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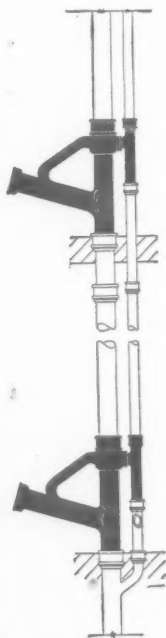
## Install the Finch 'Spruce-Thrower' Soil Unit and save labour and materials

The 'Spruce-Thrower' Soil Unit is your best choice for use in blocks of flats or offices, where closets are situated one above another and connected to the soil-pipe by a pan junction. The simplicity of layout compared with the orthodox system, clearly shown in accompanying diagrams, makes a great saving in labour and materials. Other outstanding advantages are:—

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Orthodox  
installation



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Snowcem has been used extensively on walls, ceilings and basement areas of many of the buildings forming an essential part of these vast sewage treatment works. The illustration above shows the maintenance workshops, one of a number of buildings with reinforced concrete barrel arch roofs. Snowcem has been used on the ceiling and walls above dado height for decoration and to give added light reflection.

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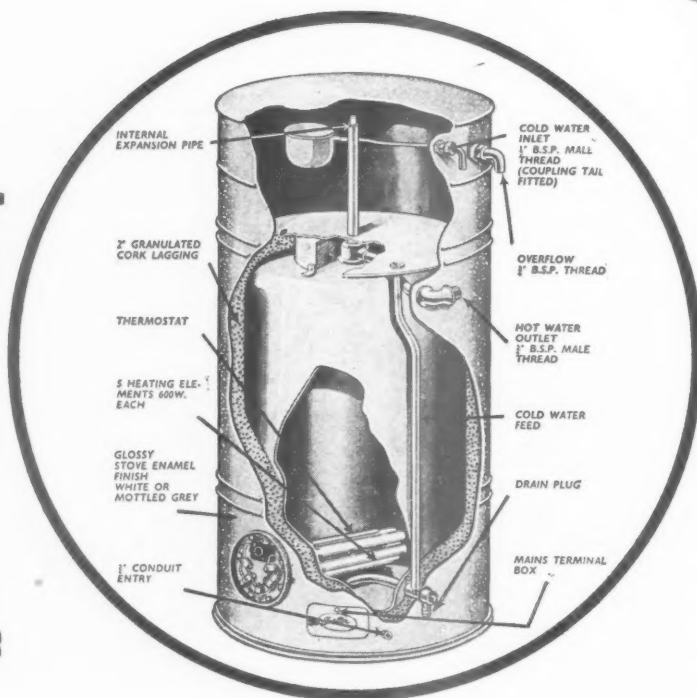


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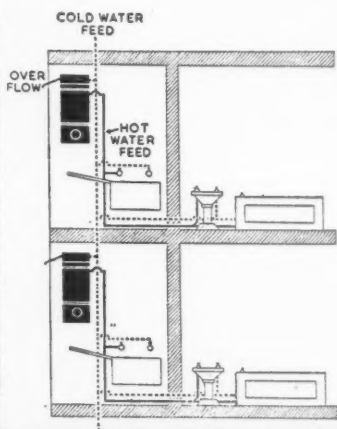
# CUT PLUMBING SIMPLIFY STRUCTURAL PROBLEMS

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- Item 1. Ball valve supply tank
- Item 2. Hot water storage tank
- Item 3. 3 KW bank of electric heating elements
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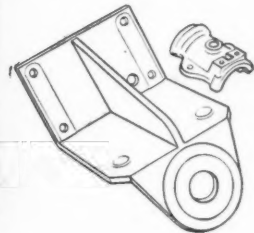
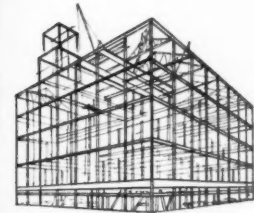
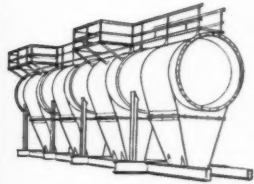
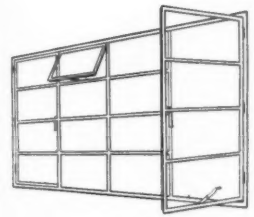
The simple plumbing for two flats is clearly shown in the sketch alongside, and it will be noted that a single cold water feed serves the heaters as well as the cold taps. This feed can be direct from the water mains or from a storage tank in the roof.

Without a doubt this is the hot water system for blocks of flats or conversions. It scores on every count—cost, ease of installation, and efficiency of operation. Write for full details now.

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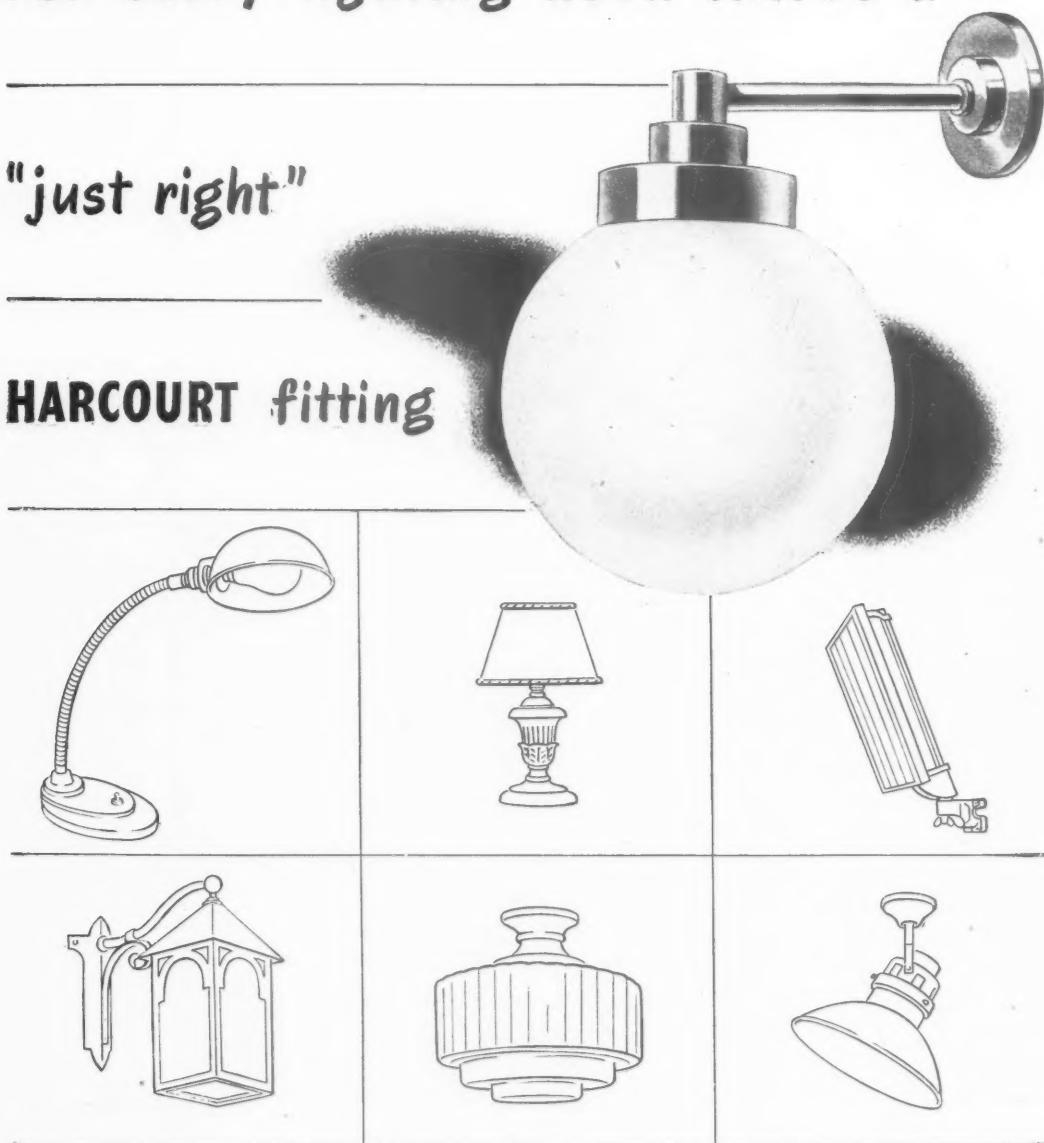
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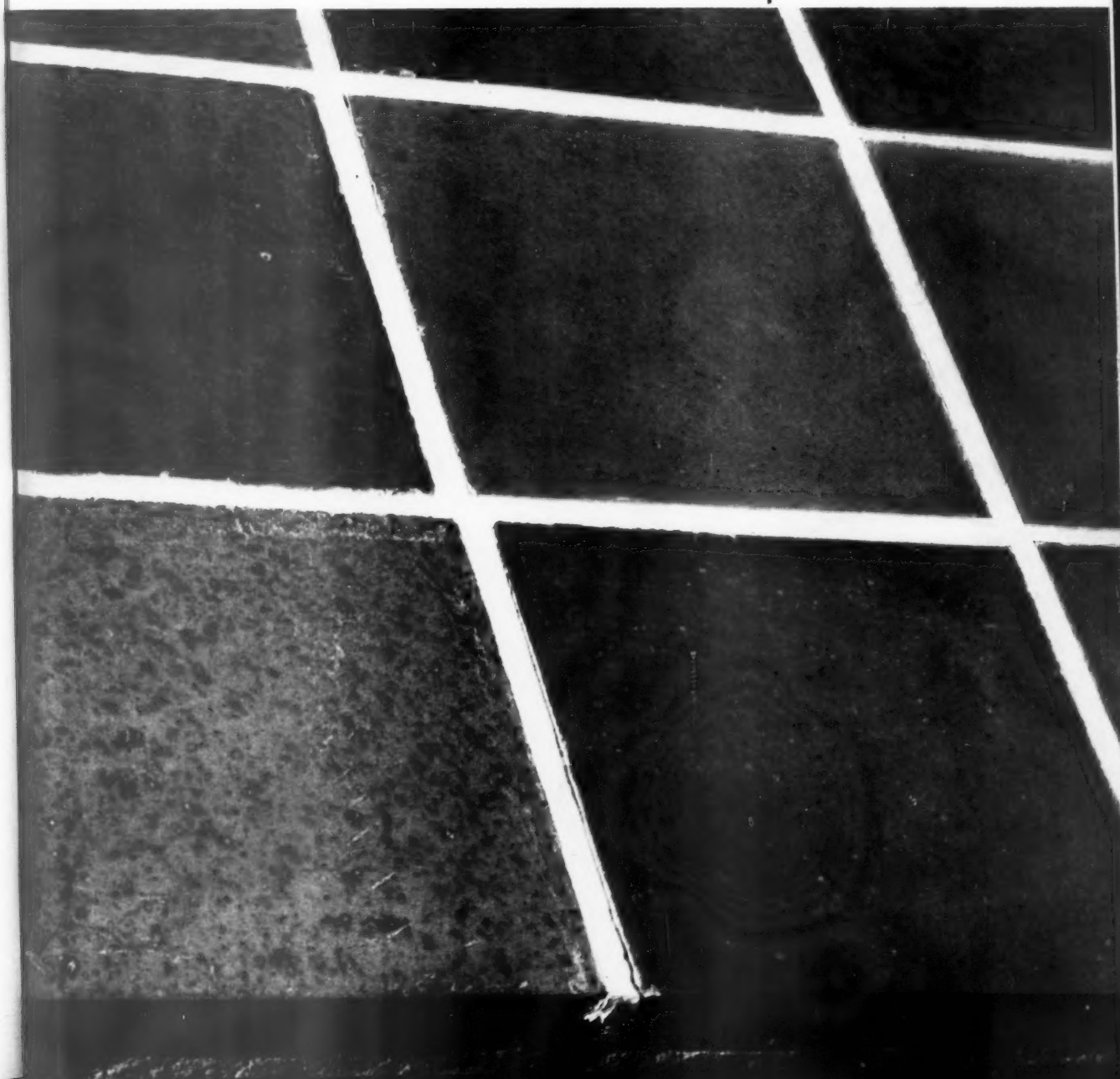
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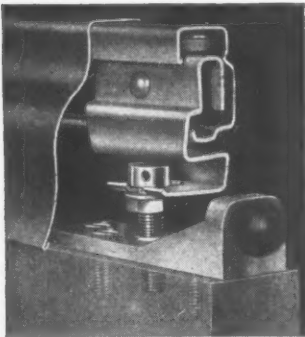
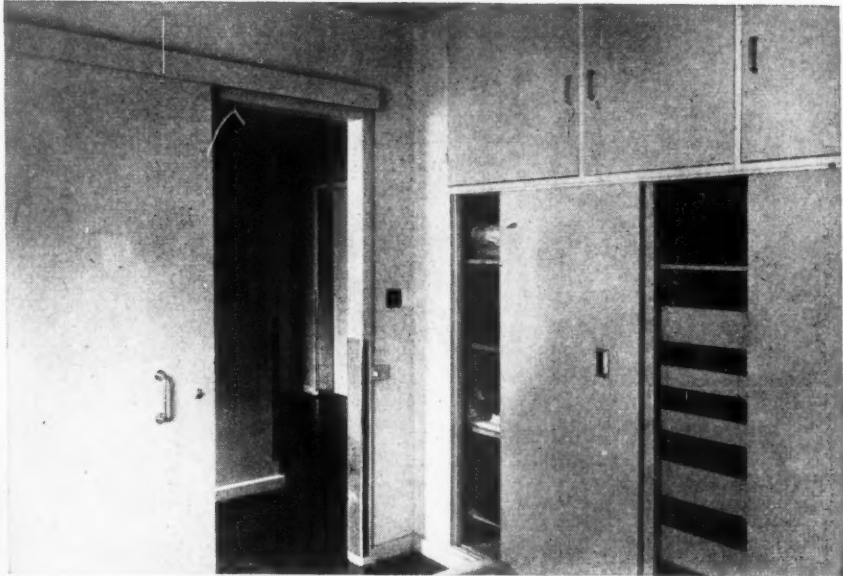




# ESTATE SLIDING DOOR GEAR

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At Cargo Fleet every phase of structural steelwork is effected within the resources of our own organisation. Four specialist departments contribute to the contract as a whole, but over all, there is top-level supervision which plans progress and ensures work goes smoothly. In this way handling costs are kept to a minimum, design is economical and steel gets to the site on time. If you consider "4 fold service" offers advantages, then contact Cargo Fleet for your next requirements in structural steel.



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Architects: James Cubitt & Partners*

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★ The accompanying photograph of the new South African Tourist Bureau shows how well WEATHERFOIL heat grilles fit into contemporary interior design.

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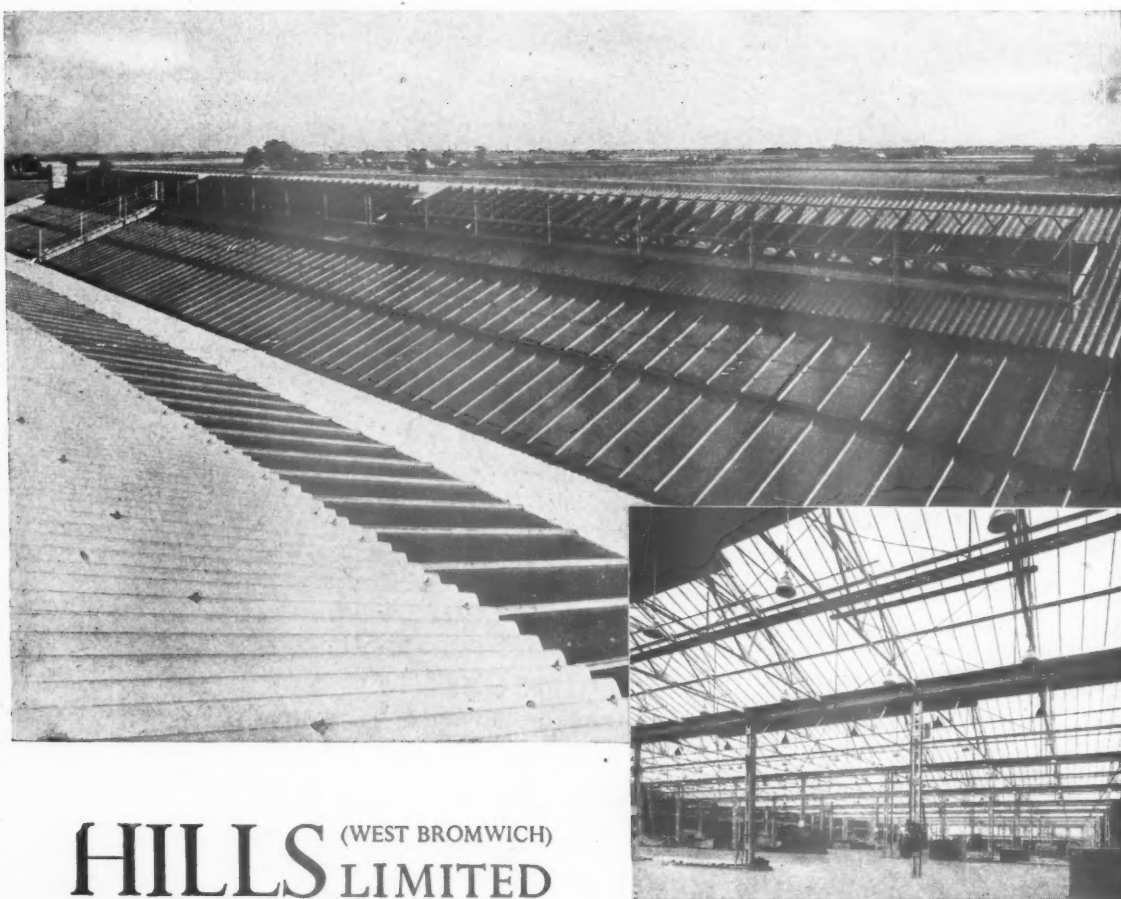
## *Clay* Roofing Tiles

"The Clay Tile Bulletin", published quarterly, post free on request.  
Issued by The National Federation of Clay Industries, Drayton House, W.C.1

# HILLS PATENT *Roof* GLAZING

Long stretches of HILLS Patent Roof Glazing, as shown in the photograph, offer the most effective method of providing natural lighting, so essential in promoting good working conditions. Three types of Glazing Bars are available:—(a) Lead clothed Steel Bars which have been tested and proved over many years. (b) Lightweight Aluminium Alloy Bars and (c) Galvanised Steel Bars—for exceptional economy. Efficient ventilation is also provided at this factory by the installation of HILLS Ventilating Shutters which, at the touch of a button, induce fresh air or expel fumes, smoke or hot atmosphere. Illustrated leaflets describing HILLS Patent Roof Glazing and Ventilating Shutters will be sent on request.

*The Eastfield Factory of Messrs. F. Perkins Ltd.,  
Diesel Engine Manufacturers, Peterborough*



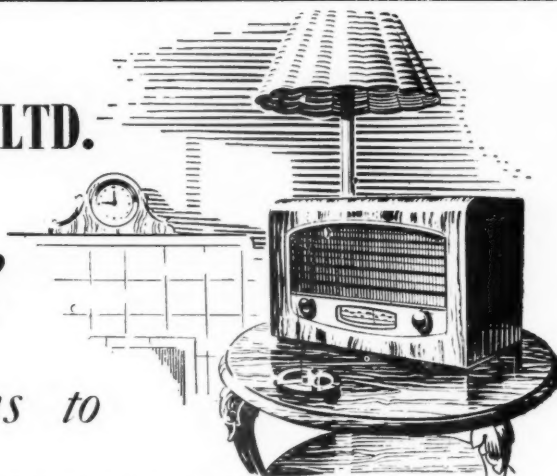
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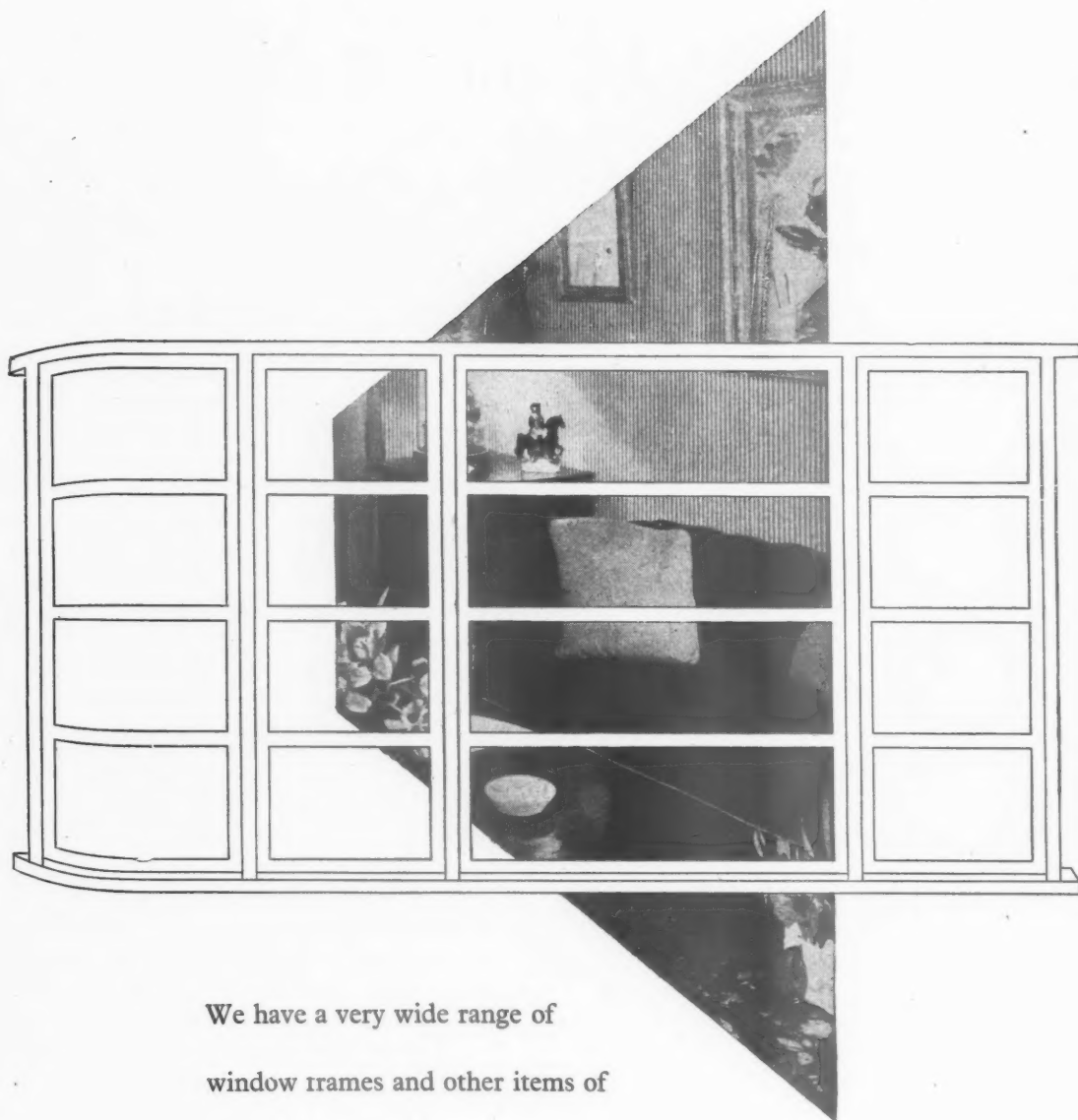
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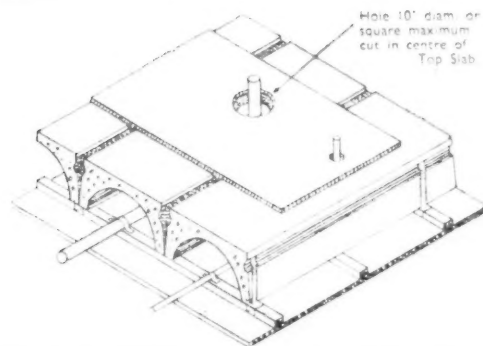
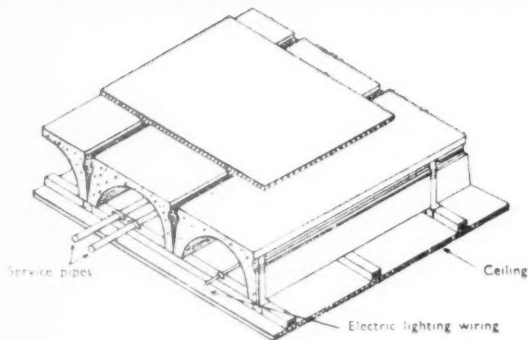
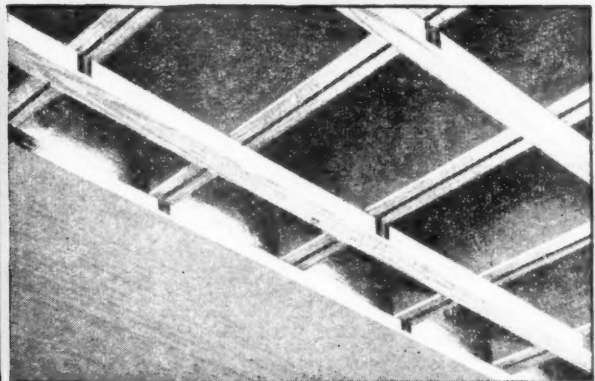
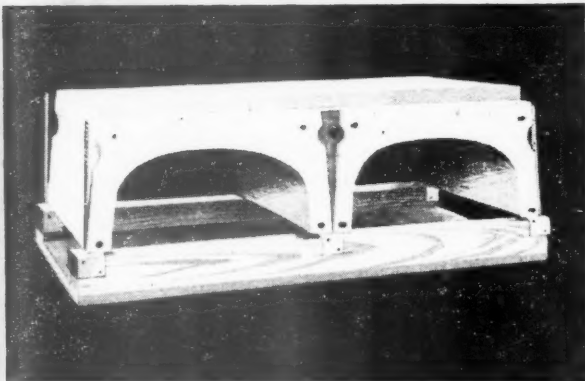
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# TRUSCON PRECAST FLOORS

provide a high degree of sound insulation in flats and houses

Sound insulation is of the utmost importance in dwellings, particularly in flats. Amongst the types of floor which the Building Research Station recommends for sound insulation in flats, is the ribbed concrete floor, a type to which the Truscon floor conforms. TRUSCON PRECAST FLOORS, with suspended or semi-suspended ceilings provide a satisfactory insulation against sound transmission.

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"The Times" 28/5/52

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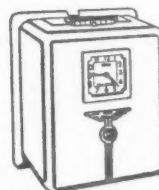
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These permanent non-traditional houses have factory-made interiors, brick walls and tiled roofs, and are indistinguishable from traditional houses. The Chevin "B" continuous burning open fire with Chevin Boiler Flue Set installed in the living rooms, completes the picture of traditional British homes warmed by radiant heat and supplied with constant hot water.

*The Chevin 'B' Inset Grate with Chevin Boiler Flue Set, installed in living room.*

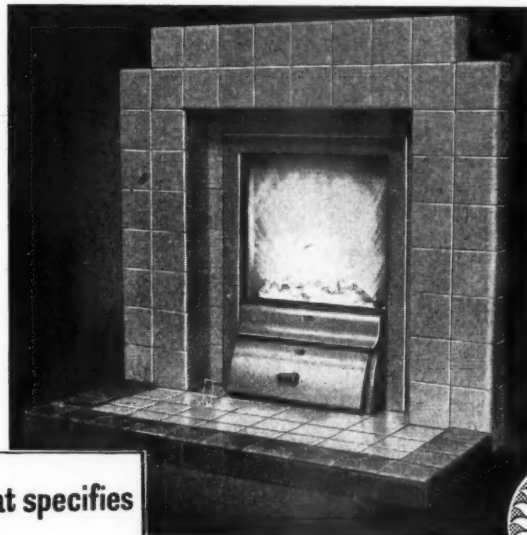
Suppliers: Messrs. Philsons Ltd., Wakefield.

## Chevin Boiler Flue Set

- ★ Simple installation.
- ★ Suitable for interior frame or tile opening 16" wide x 22" high.
- ★ Free access to boiler and main flue.
- ★ Boiler tappings either hand.
- ★ High-grade refractory fire bricks removable through fire opening to give easy access to boiler connections.

## Chevin Inset Grate

- ★ Model A for intermittent burning. Model B for 10 hours continuous burning without attention.
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- ★ Rate of combustion simply and accurately controlled by a turn of the lever.
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- ★ Built-in gas igniter (optional) for trouble-free lighting.
- ★ LEXOS porcelain enamel finishes in various colours.



The Chevin Boiler Flue Set and Chevin Grates are on the Ministry of Fuel and Power's List of Improved Appliances recommended to Local Authorities.

✓ Approved by the Ministry of Fuel & Power.

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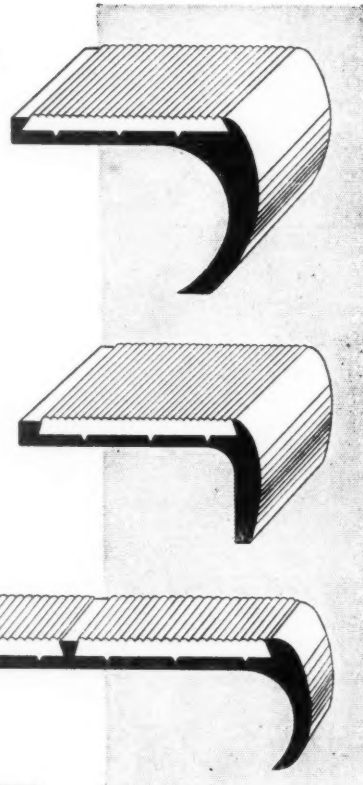
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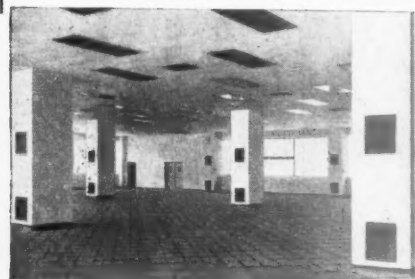
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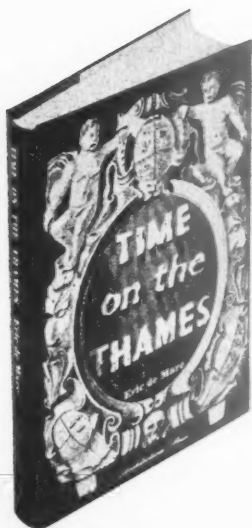
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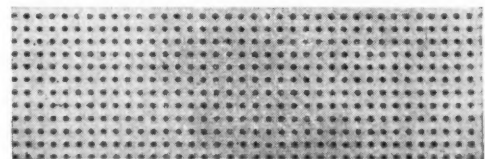


## ACOUSTIC GYPROC for SELECTIVE SOUND CONTROL and ACOUSTIC CORRECTION

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*Architect: Cyril A. Hughes, L.R.I.B.A., in association with B.B.C. specialists.*

*Contractors to B.B.C. (on completion of restoration by R. B. Burden Ltd. for Swansea Corporation): Bennett Brothers (Contractors) Ltd., Swansea.*



Acoustic Gyproc (illustrated above) is a fire-protective gypsum plasterboard panel containing small perforations of specific diameter and optimum centres, allowing the correct admission of sound waves to an absorbent backing. Acoustic Gyproc has an ivory surface for immediate decoration.

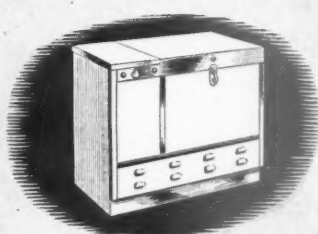
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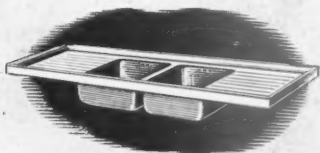
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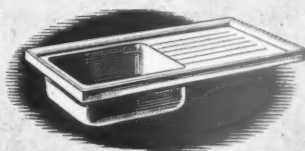




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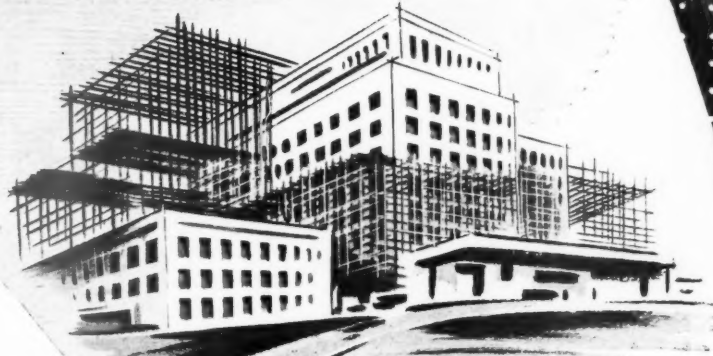
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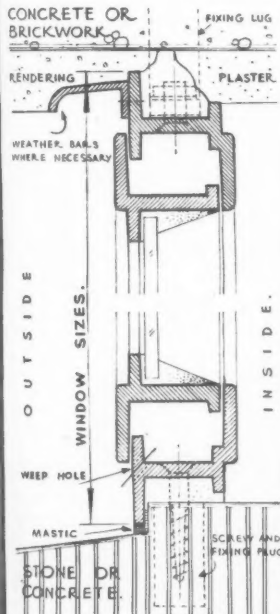
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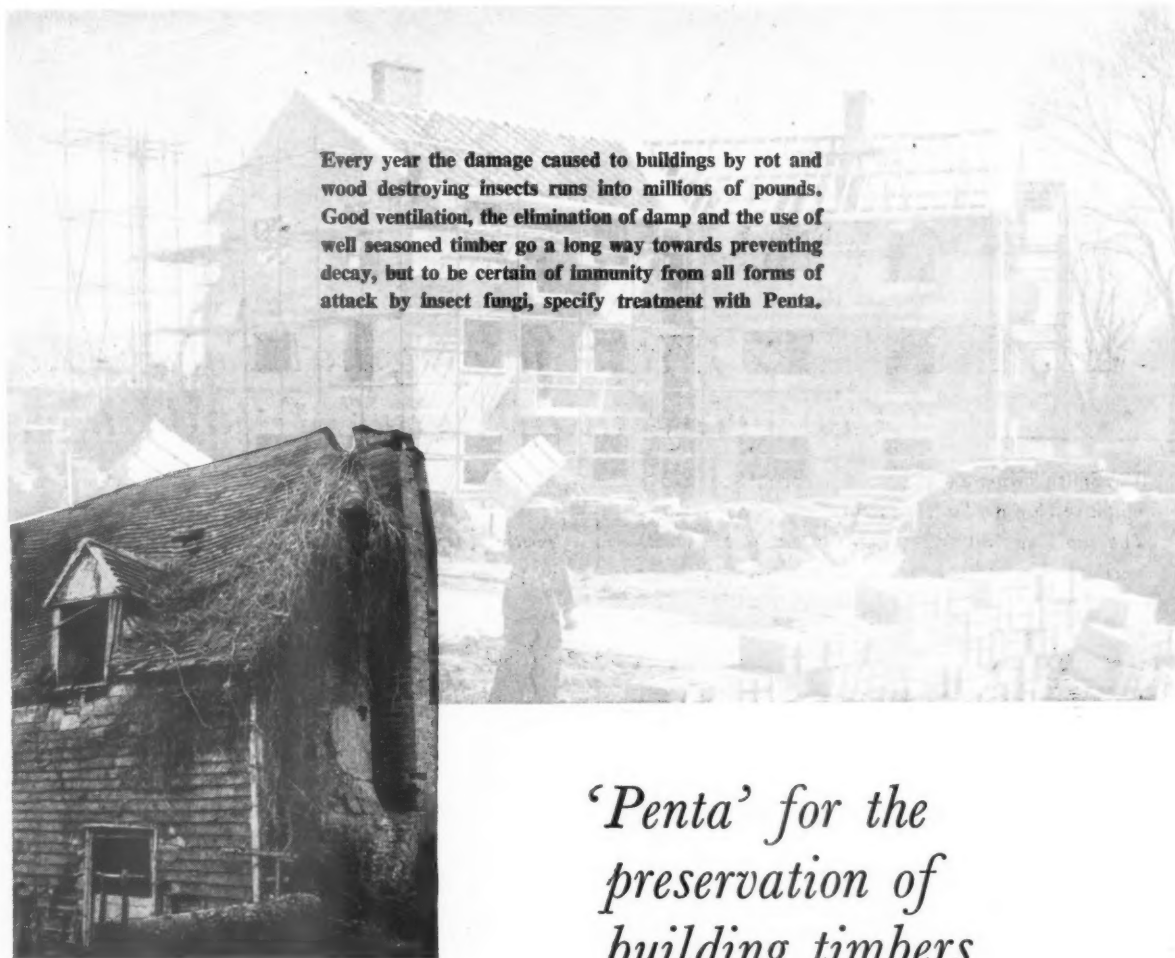
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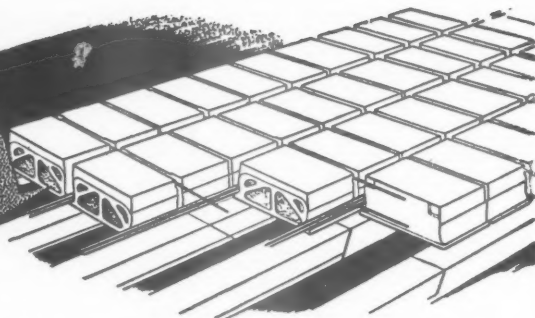
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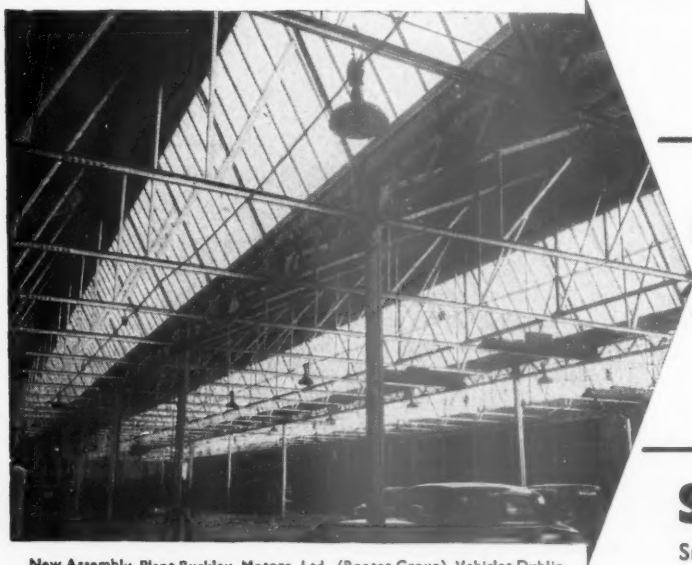
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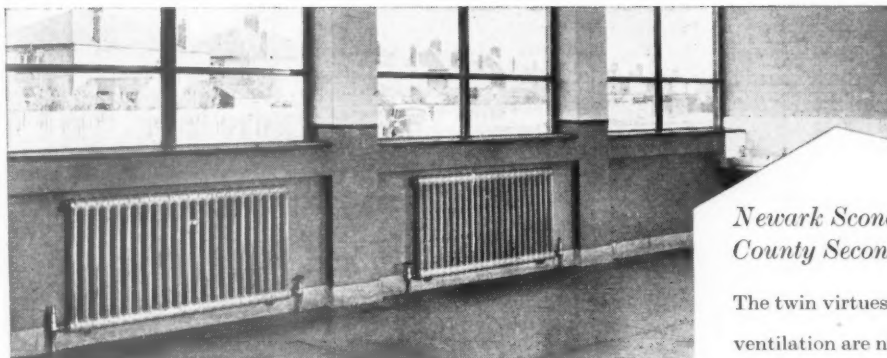
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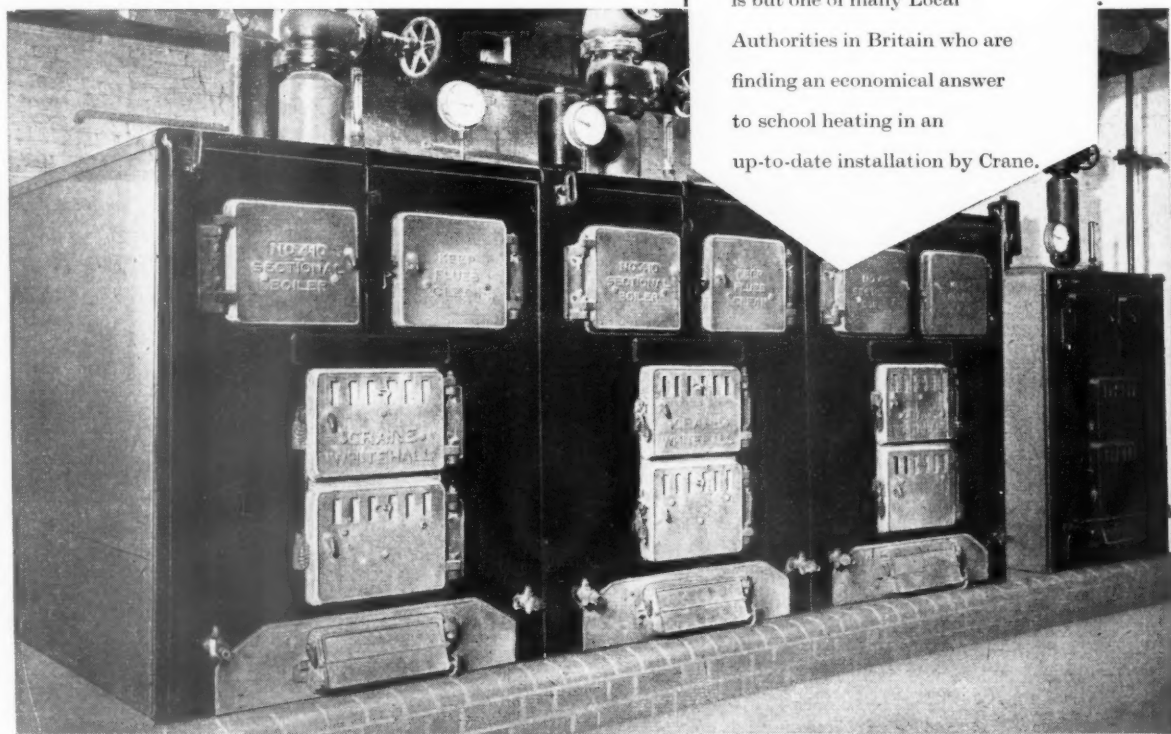
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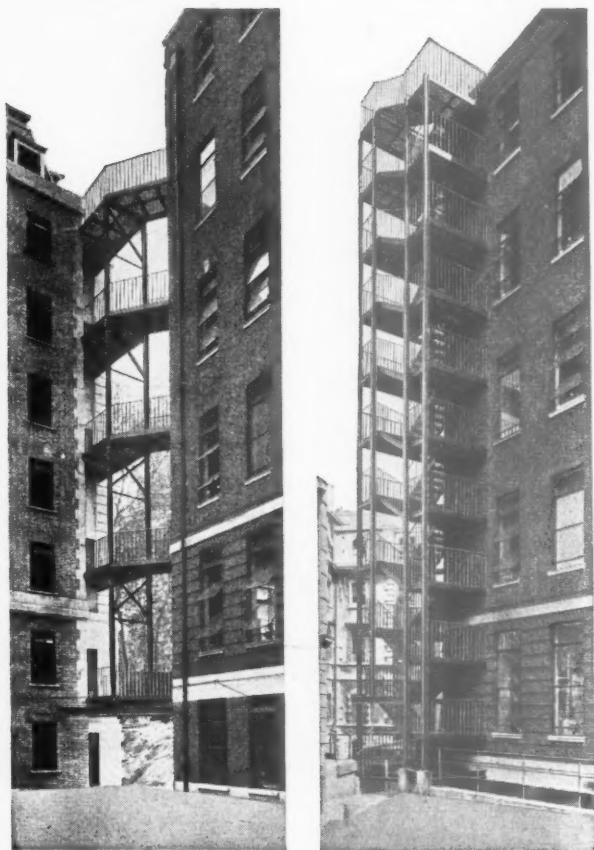
SCHOOL OWNERS: Nottinghamshire County Council ARCHITECT: E. W. Roberts, Esq., F.R.I.B.A., County Architect HEATING ENGINEERS: Messrs. Ashwell & Nesbit, Ltd.

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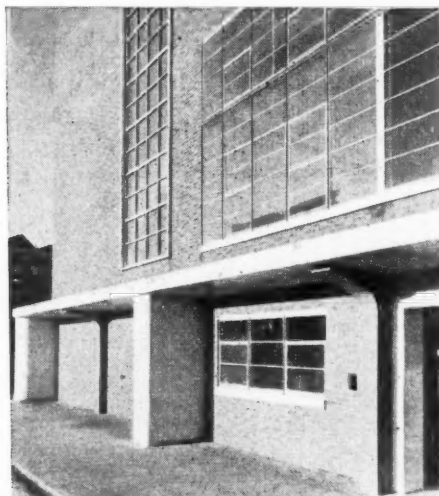


## FACTORY AT LUTON

designed by HOWARD, SOUSTER and PARTNERS

architect in charge: R. R. FAIRBAIRN

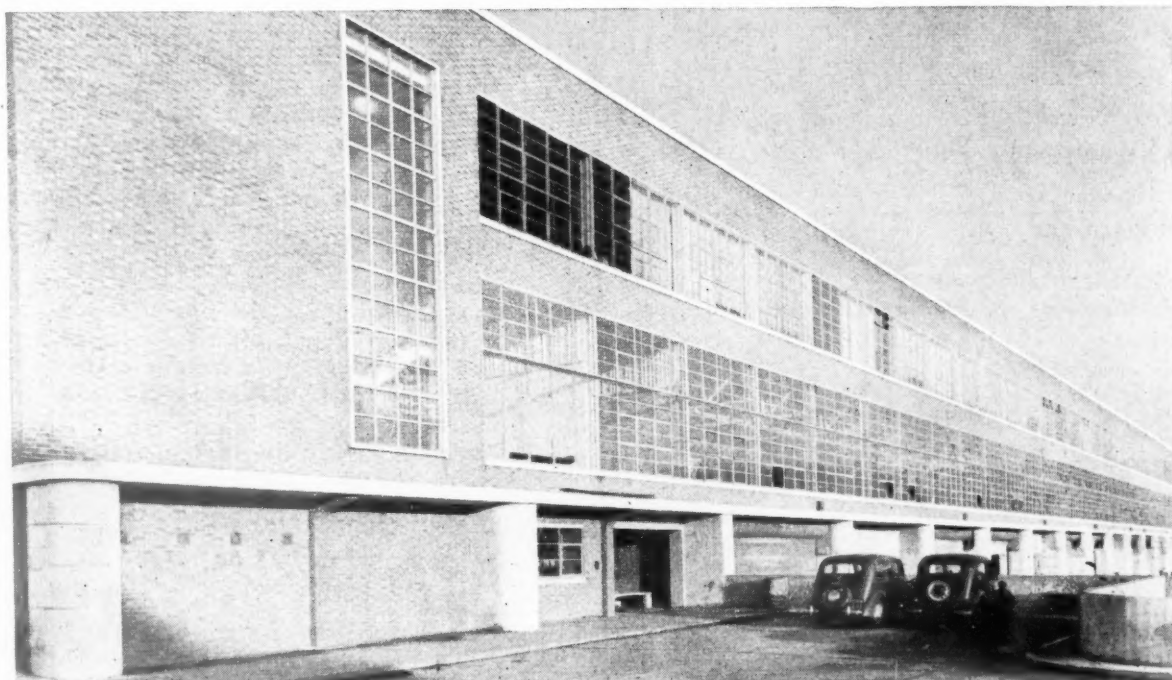
general contractor: GEORGE WIMPEY & CO. LTD.



To level the site for this building 1/2 million cubic yards of soil were excavated. The foundations commenced at the beginning of May, 1949, and the final taking over of the factory for production purposes was about the middle of August, 1950. The factory has a total floor area of 852,000 sq. ft., the bulk of this at ground floor level. At the Southern end there is a receiving basement for goods and a first-floor office block to accommodate the planning staff. The building is faced with "PHORPRES" RUSTICS, which blend happily with the local surroundings and are toning down well. In many instances "PHORPRES" RUSTICS have also been used internally; for instance, in the Canteen and Main Workmen's Entrances. In these cases special pointing was incorporated. The approximate number of bricks used for the job was 423,000 RUSTICS and 1,131,000 COMMONS.



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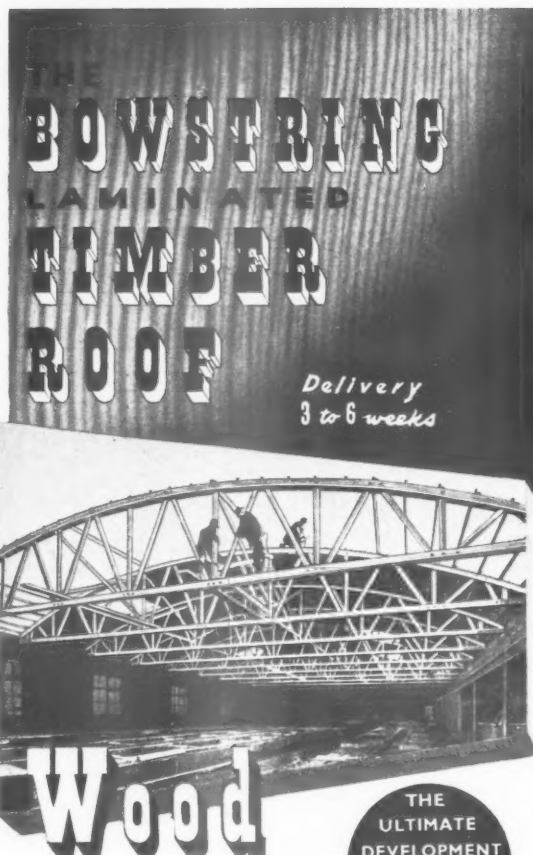
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(See pages 216-237)

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Royal West of England School for the Deaf, Exeter.  
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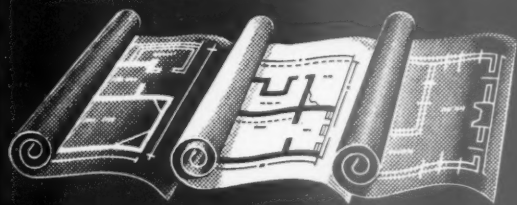
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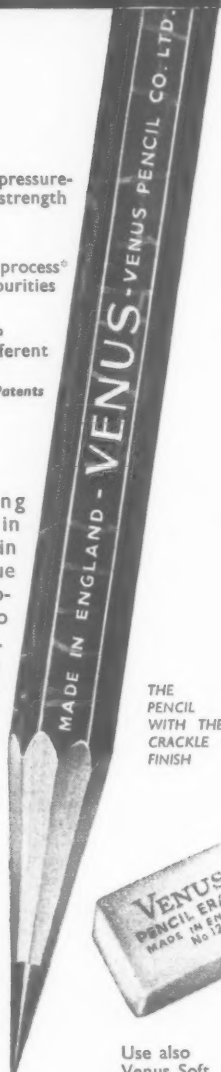
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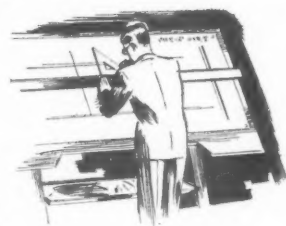


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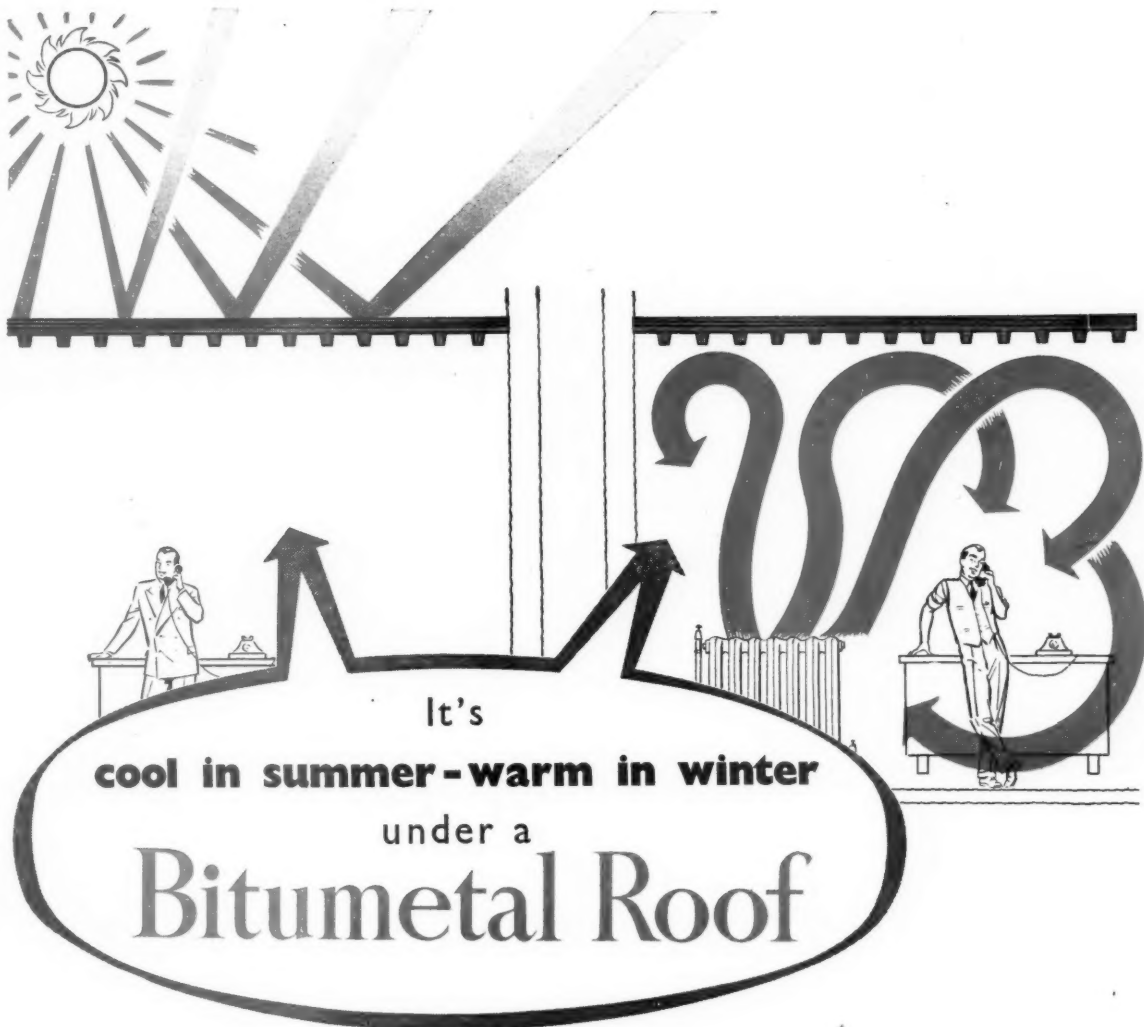
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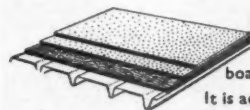
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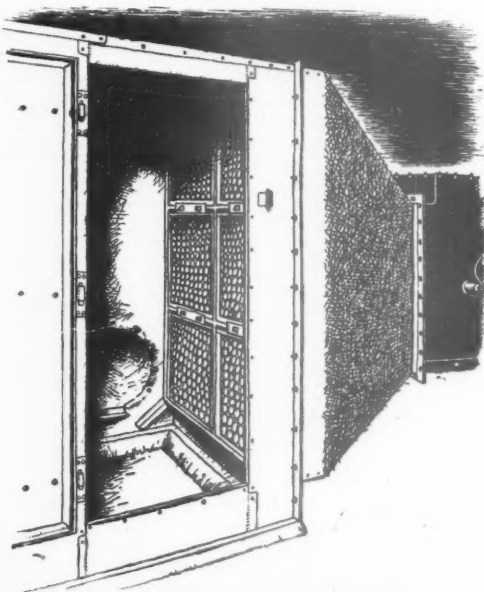
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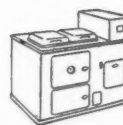
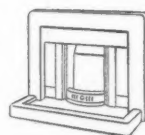
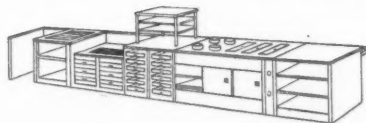
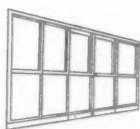
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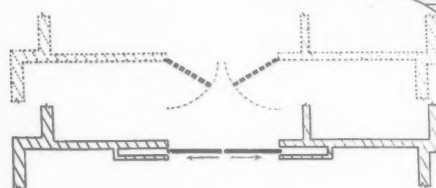
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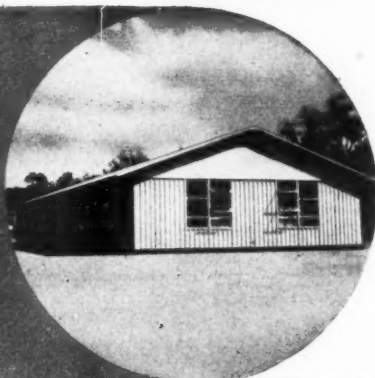


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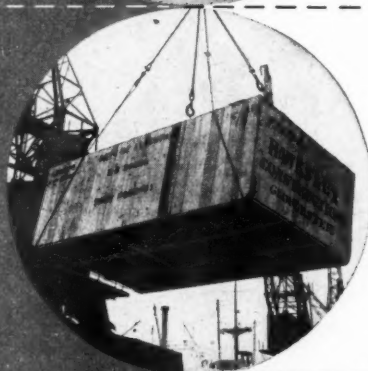
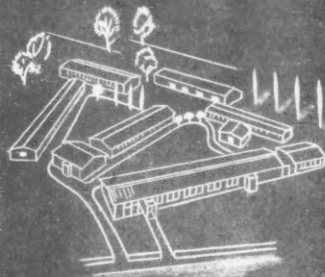
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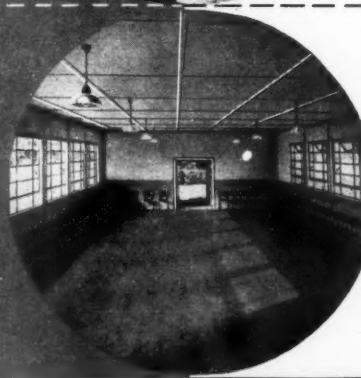
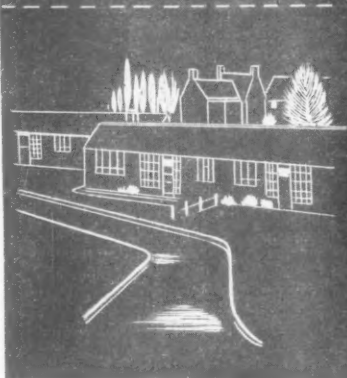
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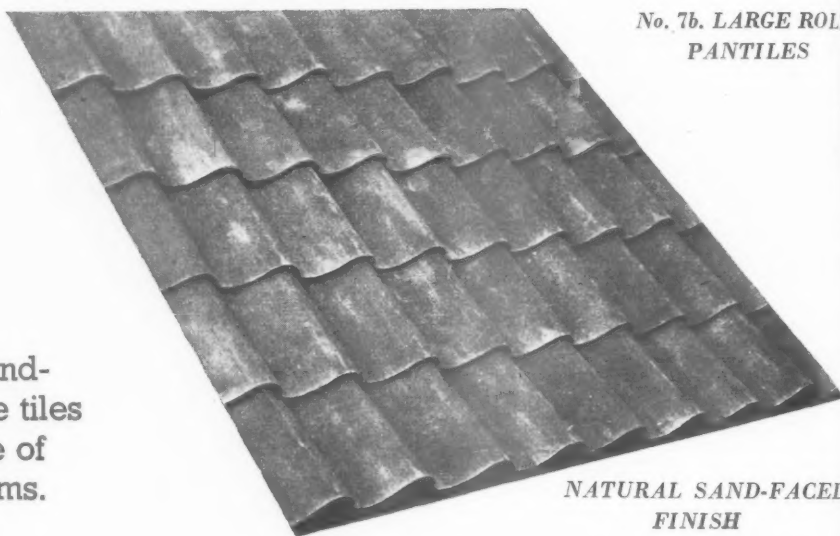
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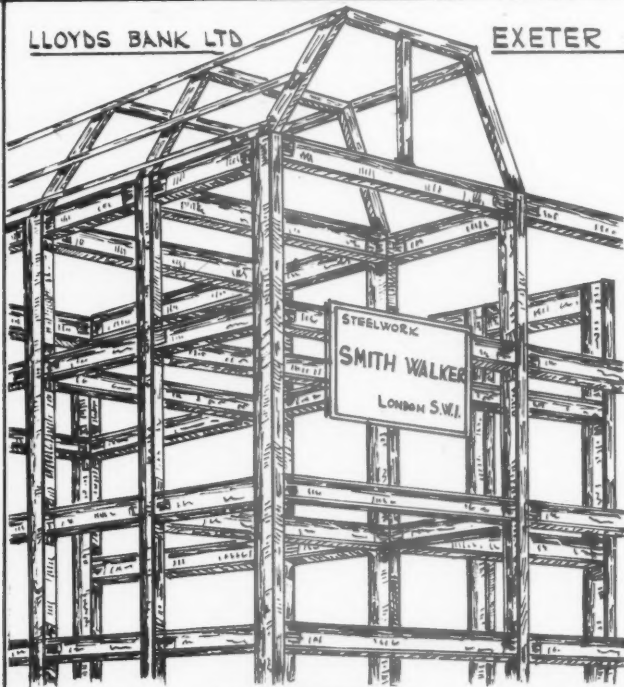
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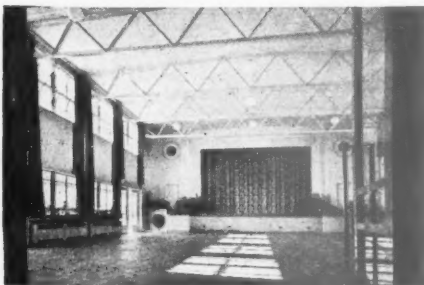
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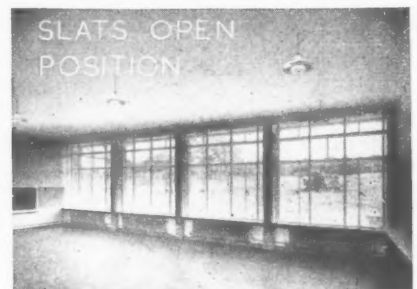
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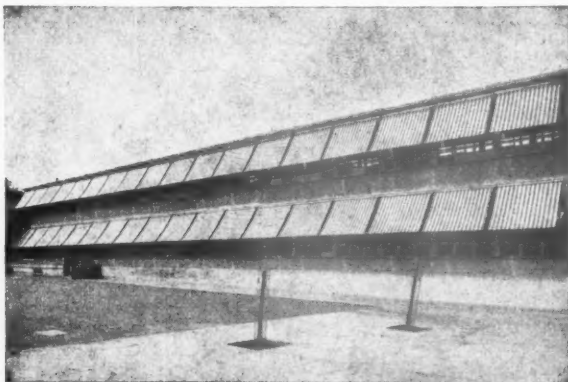


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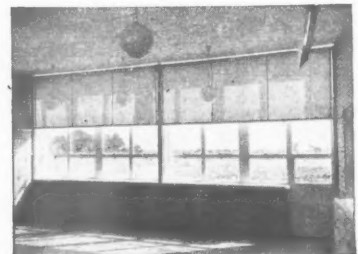
A typical School fitted with Avery's Heavy Duty Flexible Aluminium Venetian Blinds.

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"Don't talk to me about concrete," he shouted, "it's the living stone we want. As I was saying, we'll put a stretch of water and some dam' great Grecian pillars across the front to offset that clump of trees. Lovely. We'll insist upon marble—hundreds of tons of it. And we might plant a coniferous forest across the rear of the house to enrich that Palladian facade I've got on the board at the moment. What? What about windows? Williams & Williams, of course, but don't interrupt."

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Two new developments of Reeded glass, Narrow and Broad Reedlyte, offer greater obscuration and are more suitable where a high degree of privacy is necessary. Besides their normal architectural uses they are employed in lighting fittings, diffused lighting panels and decorative lighting schemes. Special lighting glasses such as Luminating (which has a very narrow reeded pattern) are also available.

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Light Transmission: 85 per cent.

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THE ARCHITECTS' JOURNAL

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#### SOLENT WEEK-END

Seaside holidaymakers can always find some consolation on stormy days in sampling the joys of beachcombing, a fascinating pursuit well adapted to the crouching windswept position demanded of the promenader in an English August.

A half-mile stroll last week-end by the shores of the Solent disclosed its customary harvest to ASTRAGAL's roving eye. Deaf to the noise of splintering spars, rattling halliards and agonized shouts from the sea—the normal background music to Cowes Week in a fresh south-wester—ASTRAGAL, well trained from the days of the Fifth Year Studio, picked over the flotsam with deft fingers, extricating a breakfast

menu from a Union-Castle liner; a burned-out flare (distress or regatta jollifications?); a fragmentary letter full of underlined adjectives, like those written, but (alas!) never read to the end, in the cause of Black Magic chocolates ("you know with those delicious . . ."); a gilt basket tied with a blue silk ribbon embroidered with "Bon Voyage"; hundreds of empty bottles—including the usual one with a message, written by a child and thrown over from the Cowes steamer the previous day; a tennis ball; at least twenty electric light bulbs which, with grape fruit rinds are always the most frequent and long-lived survivors of the sea; a pith helmet; more menu cards (again Union-Castle), and, finally, a great prize, a mahogany rudder in good condition.

After unloading this haul on to a pile of the previous week's takings (almost identical and certainly equally useless) ASTRAGAL put on his yellow oilskins—product of an hour's beachcombing in Aldgate—and attended the local yacht club regatta. Snug upon the sheltered patch of lawn in front of the clubhouse he watched the usual parade of minor disasters and kept his feet dry. Round him circulated knitted jerseys, pearls and sensible shoes.

"Cool beneath a garden awning  
Mrs. Fairclough sipping tea . . ."  
Remember?

Spaniels and corgies sniffed for crumbs of ginger cake and yelped miserably as the guns were fired. Flags slapped hysterically at the club mast-head. A scarlet, friendly face beneath a yachting cap was glimpsed through the kitchen hatch: "Been here since

dawn, old boy. Promised to get the primuses going for the old girls. They're frightened to death by them . . ." He straightened his reefer jacke. in answer to a query. "Heavens no, old boy! I don't go out sailing in this weather. But you've got to look the part on Regatta Day . . ." The yachting cap disappeared into a haze of steam.

"Evening light . . ." wrote Betjeman  
"will bring the water,  
Day-long sun will burst the bud,  
Clemency, the General's daughter,  
Will return upon the flood. . ."

ASTRAGAL, heavy with Swiss roll and the melancholy of middle-age at sunset, could not wait for Clemency. He weighed anchor and set course for Queen Anne's Gate, to see what the week's tides had thrown upon his desk. . .

#### STRESS DISTRESS

On top of the pile of flotsam that always accumulates when ASTRAGAL turns his back was an anguished letter which made him realize the advantage of the spoken word over the written word. If you mislead a few million people through a microphone someone can always step in and correct you promptly. If the BBC tells you to puff carbolic acid on your face to kill moths—or something of the kind—it can change its mind and tell you so within a few hours, as indeed it did recently. But if your columnist advises you wrongly you have to wait a week before getting a new set of orders. It saddens me to think that many readers—like my correspondent—have been led hopelessly astray by my reference on August 7 to the



# IMPORTANT CONTRACTS IN THE REBUILDING OF *The City of* EXETER

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recommended increase in reinforcing bar stresses from 10,000 lb. to 20,000 lb. per square inch. Those of you who have been trying in vain to double the first number should now take it away and replace it with the figure I first thought of—18,000. Sorry you've been troubled; you must blame the editors or my handwriting.

#### SEEING THE RED LIGHT

To hear unexpectedly that the RIBA is worried over the number of unemployed architects was such sensational news that the JOURNAL's representative who hotfooted to check the rumour had visions of long shuffling queues of penniless architects in the gutters of Portland Place. Such fears were groundless. It was with some relief that I learned that the number was 80, and that they were in the main students who had finished their school training this summer and were looking for office experience to complete their qualification. But this number was for the London area only. The figures for the provinces had not come in.

\*

However, the man who is unemployed couldn't care less whether there are eighty or eight thousand like him—he wants work, and quickly. Where can he get it? Can you, dear (I hope) reader help him? The snag is, of course, that these chaps have had no experience, and most private offices, seeing an architectural slump roaring towards them are, understandably, not anxious to take on more staff—least of all inexperienced staff—until the future outlook improves.

\*

This appeal is directed, therefore, to those eighty or so flourishing firms (we know they must be flourishing because their work is so rarely published) who can afford to be philanthropic enough to employ an architect for at least long enough to enable him to acquire the few months' practical experience he needs to qualify.

\*

It will be somewhat surprising to those who have come to look on the RIBA as an aloof, impersonal, body to learn of their very real concern in this matter. It is to be hoped that the profession will respond duly and adequately to this concern. However, if this unemployment is anything more than a purely seasonal matter, due to

*Top, a single storey block of offices in the village of Alington, on the outskirts of Exeter. Designed by the MOW for the Ministry of Agriculture. The plan is of the herringbone type with a central corridor and rows of offices set at right angles to it. Between the blocks of offices are narrow strips of rough grass which are virtually useless as gardens. Bottom, a general view of the new industrial estate at Exeter.*

(Note below.)



the sudden unloading on the market of the architectural schools' final years, it is also to be hoped that the RIBA will now attempt to make a close survey of the nation's need for architects, given present-day and future economic conditions (as far as they can be ascertained), and with a reasonable salary for a professional man in mind.

\*

Readers may care to refer back to the ominous articles written by Raglan Squire, of Arcon, in 1950: time is running short if his prophecies are to be avoided.

#### EXETER

This issue being largely devoted to the subject of the rebuilding of one of our blitzed cities, it is expecting too much for ASTRAGAL to refrain from sticking his oar in. Two of my illustrations this week are of buildings on the outskirts of Exeter. One is of an office block which has been designed by the MOW. Now this ministry is capable of very good design. How on earth, then, did they allow such a fatuous design to be built so close to the famous city? How can local standards be upheld if government bodies can get away with such mediocrity?

\*

The other illustration is of Exeter's industrial estate. The most charitable would have to admit that the appearance is a little bleak. The treatment of vacant land on such an estate is as tricky as the control of factory design. Good planting and landscaping would

help, no doubt, in the first instance, but cannot more be done to standardize design? Potentially the best new industrial estate I have seen is the one at Harlow. Can such standards only be achieved at a New Town?

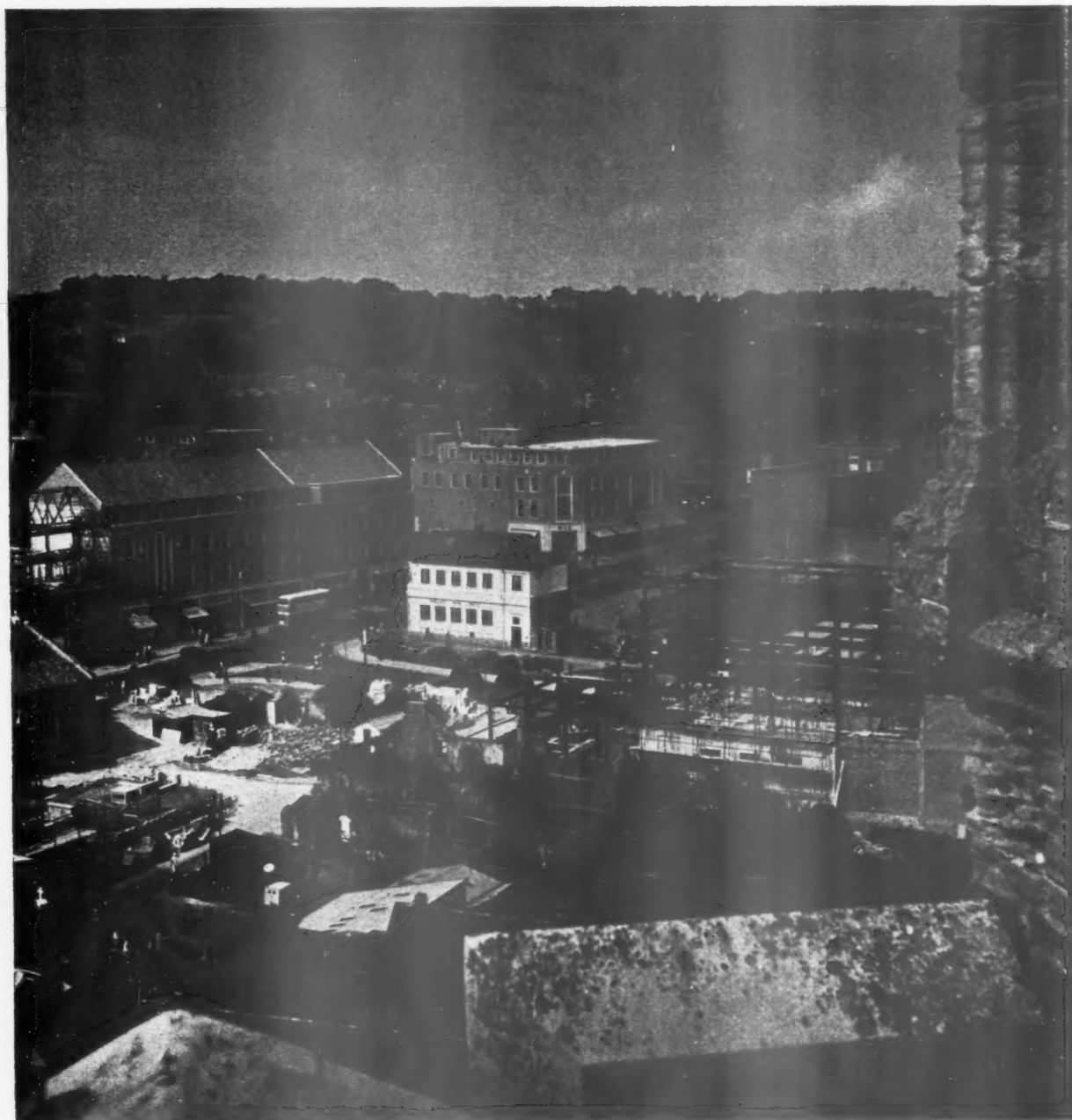
#### INCOMBUSTIBLE LUXURY

Twelve hours or so for a turn-round makes it very difficult to get more than a glance at the new *United States*, and so far ASTRAGAL has managed to have only a passing look at the quite impressive exterior. Inside, from monochrome photographs only, is a different story, for it seems that the emphasis is mainly on colour, and the need for structural economy and wartime safety has produced public rooms rather smaller than one would expect in a luxury liner. This is probably a good thing, for it is difficult to find an excuse for the floating palm courts extending up through three decks or so. In the *United States* you could very easily get the feeling you were in a ship—a nice change from most of our liners, excepting the Orient stars.

\*

What news is there, by the way, of other national efforts, the *Flandre* and *Maasdam*; and what have the French done with the inside of the *Liberté*? (ex reparations *Europa*, or was it *Bremen*?). Pre-1939 architects used to travel in liners and one could get first-hand information; now all the types with work abroad seem to live only in the waiting rooms of international airports. ASTRAGAL would like to know, please, which of the new jobs are worth seeing.

ASTRAGAL



## *Exeter Phoenix Starts to Fly*

This view of Exeter's new shopping centre, taken from the Cathedral tower, shows what is, for a small city of only 75,000 inhabitants, a solid building achievement. On the far side of the High Street, which runs diagonally across the page, are, from left to right, the insurance offices, with shops below, and the department store which are briefly illustrated on pages 223 to 225 of this issue. Opposite the latter can be seen the rear of another block of shops and offices, and just discernible on the extreme left, and in the centre right, are the steel frames of the bank buildings illustrated by sketches on page 225. In the foreground can be seen the jumbled roofs of the old houses which guard the privacy of the Cathedral Close. Perhaps the most interesting aspect of this view of Exeter's new High Street is the way it shows the extreme change in scale between the new town and the old. This change in scale is not merely one of height (the

buildings are only a few feet higher than the Georgian houses of nearby Southernhay East), but even more one of bulk. These shops and offices are the products of new building techniques, and, coming after the ramshackle mass of converted houses which provide so much of the office space in the remainder of the old High Street, are oddly disconcerting. Not, perhaps, because they are so different, but because they faintly recall a more traditional style of building and yet manage to achieve an effect of much greater mass. The question therefore arises: if the quantity of building which has been accomplished is satisfactory, is the quality of the architecture and town planning all that is desirable? This is discussed in this week's leading article on the opposite page and in the article by D. Rigby Childs and D. A. C. A. Boyne which commences this third survey in our series on the reconstruction of bombed cities.

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# NEWS

## "TIME-LIFE" OFFICE

### Artist and Sculptors Commissioned

Henry Moore has been commissioned to carve a stone screen for the Bond Street façade of the seven-storey office building now under construction on the corner of New Bond Street and Bruton Street, London, W.1. (This building, which will house the London headquarters of Time-Life International Ltd., was started in July, 1951, and is scheduled for completion later this year.)

The work is described as "a rhythmical combination of stone forms organized in a panel 26 ft. long and 10 ft. high," and will be the largest architectural piece yet done by Henry Moore. Maurice Lambert has been commissioned to execute an additional piece of sculpture to be placed over the main entrance, and Ben Nicholson has been commissioned to paint a large mural for the entrance hall.

The architect for the building is Michael Rosenauer; collaborating with him in designing the interior are Sir Hugh Casson and Misha Black. Contractors are Holland & Hannen & Cubitts Ltd.; quantity surveyors, O. Parratt & Partners.

## N. IRELAND

### Work of Housing Trust

It is estimated that one person in every 42 in Northern Ireland now lives in a house owned by the Northern Ireland Housing Trust. During the year which ended March 31, 1952, the Trust completed 1,868 houses. At that date, a further 3,152 were under contract and sites had been acquired for a total of 16,000 dwellings.

During the last three years, the Trust has been building houses at a rate of slightly over six houses per working day. Altogether it is engaged on work on 100 different sites and estates. In the Belfast area work has started on a large estate near Carmoney which will contain nearly 3,000 dwellings, to house 10,000 people.

## AUSTRALIA

### Competition for Olympic Games Stadium

Organising authorities for the 1956 Olympic Games to be held in Melbourne, Australia, have announced a competition to select an architect for the main games stadium. Architects registered in Australia have been invited to submit designs for a stadium to accommodate 125,000 people. The successful architect will be given the job of planning and constructing the stadium on the site of the Carlton Cricket Ground, on the northern approach to the city.

## DIARY

**Housing Medal Schemes, 1952.** Exhibition. (Plans and photographs.) At 13, Suffolk Street, S.W.1. (Sponsor: HC.) 9.30 a.m. to 5.30 p.m. Saturdays: 9.30 a.m. to 5.30 p.m. UNTIL SEPTEMBER 5

**International Exhibition of Architectural Studies.** At College of Art, Edinburgh. (Sponsor: Student Architects' Group.) 9.30 a.m. to 5 p.m. Saturdays: 9.30 a.m. to 12 p.m. UNTIL SEPTEMBER 6



## The Editors

### AN ARCHITECTURAL COMPROMISE

THERE is no doubt that many will exclaim in horror on seeing the photograph which forms this week's frontispiece. The *avant garde* will not find the open planning and the contemporary façades which were so frequently and plausibly advocated during and after the war years by followers of modern architecture. The traditionalists, remembering their Exeter as a city of lovely Georgian terraces, typified by the view of bomb-obliterated Bedford Circus, above, will not find the terraces rebuilt or the picturesque corners and the romantic details of a cathedral city, carefully recreated. But such extreme viewpoints cannot easily be reconciled. Exeter today is therefore acquiring a form of compromise architecture. Professional opinion differs as to the style to adopt and the city architect is not in a position to enforce his views. As a result designs tend to lack conviction and please few. There is no solution to this problem until public opinion has made up its mind on the kind of architecture it wants. The official planners, architects and engineers of Exeter deserve to be congratulated on the progress they have made in rebuilding their city. But it is this praiseworthy speed wherein lies the danger. The city is being rebuilt at an accelerated tempo, thanks to the blitz, which is much faster than the normal rate of decay, obsolescence and rebuilding. The local committees, functioning without the help of living in an age with a popular and accepted architectural style, as did the Georgians, are having to make sudden and irrevocable decisions. Much of the official architect's time is spent not in designing but in lengthy architectural negotiations with private architects who are required to present the diverse architectural opinions of their clients. The need is for architects to clarify their minds as to what is good modern architecture and then set about educating the public, and therefore the client, to appreciate it. There is also a need, as the Guest Editors pointed out last week, for more highly-qualified architectural staff in responsible positions who can lighten the very heavy load carried by the chief architect by tackling in great detail the many small but essential aspects of townscape which are otherwise neglected.





*The City of Exeter, following Canterbury and Plymouth, is the third city in a series of special articles to appear in the JOURNAL on the reconstruction and planning of our blitzed cities. The following seven pages describe the city's plan and contain illustrations of old, new and future Exeter. The photograph, left, is of the Higher Market. Such fine, if ponderous, architecture is an often neglected feature of a city which, though once famed for its mediaeval and Georgian buildings, cannot now afford to leave its minor treasures uncared for.*

# EXETER

A SURVEY BY D. RIGBY CHILDS AND D.A.C.A. BOYNE

THIS city—the capital of the west—has always ranked high in public opinion and enjoyed a status beyond its modest size. For first and foremost Exeter is a well-balanced city; although its balance has not by any means recovered from the onslaught of bombing in 1942.

It was in May, 1942—just over ten years ago—that Exeter joined the company of cities which were selected by the enemy for “Baedeker” raids. The result was “a city which has lost completely something like half the buildings which once gave it architectural distinction.” Indeed, its total loss besides halls, churches, schools and other public buildings was more than four hundred shops, nearly one hundred and fifty offices, over fifty warehouses and stores, and thirty-six clubs and pubs. Fifteen hundred houses were wholly destroyed, two thousand seven hundred seriously damaged, and the majority of the remaining sixteen thousand were damaged in some degree.

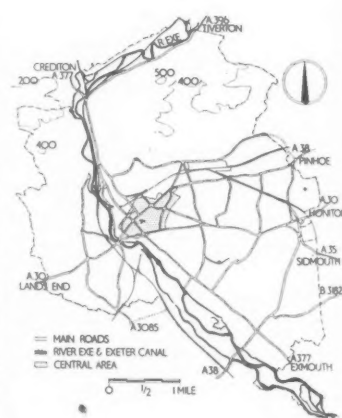
Once an initial recovery was made, Thomas Sharp was engaged as consultant by the City Council to prepare a reconstruction plan. His plan, published under the name *Exeter Phoenix*, consolidated a tradition in post-war planning begun with his *Cathedral City—Plan for Durham*—whose value lay in the consultant's own forthright diagnosis and prognosis conceived in planning and civic design terms alike and in the union of skills of author and publisher in producing a volume of unusually wide appeal.

Now we have the official 1951 development plan and survey. While it necessarily lacks the spark of the 1945 *Exeter Phoenix*, this current plan is a competent and workmanlike document. This is no more than might be expected, as the problems and opportunities which occur are not noticeably exceptional in the city generally; greater problems and opportunities are to be found in the central area. It will suffice to give a brief picture of the wider planning issues.

## a nodal point for communications

“Exeter, like most old-founded cities, exists because its site is the natural crossing place of communications. A good defensive position, at the head of the wide tidal estuary of the Exe, some ten miles from the open sea, with hilly country inland, it was inevitable that a network of roads should meet there. To this fact the city owes most of its prosperity—and many of its problems.” (Thomas Sharp.)

Exeter, as can be seen in the diagram, is a city divided into two unequal parts by the River Exe, which follows a crescent-shaped course from north-east to south-east. It was on the right bank from where the land rises at first fairly steeply for about one-third of a mile and then flattens off that the historical city with its Roman, Saxon, Norman, Tudor, Georgian and Regency phases flourished; on the left bank lay the suburb of St. Thomas's, now a part of the city. There are also one or two lesser valleys, more especially that of Old Longbrook, now “seered” by railway lines, platform roofs, sidings and goods sheds.” Almost into the city penetrates the typical Devonian “countryside of dumping hills,” especially to the north and west where the land is higher and more broken than to the east and south-east.



## a “desirable” city

As we have already suggested, socially and economically there is not a great deal to worry about in Exeter. The activities which flourish are many and the city fulfils a wide range of functions, the principal among them being: shopping centre for the immediate hinterland and an occasional shopping centre for a great part of the county; a commercial centre—the city is connected by the oldest canal in the country to the navigable part of the Exe; a business centre; the administrative centre for Devon and the local rural district; an educational centre—its university college alone amongst “provincial” universities is wholly residential; entertainment centre; and a tourist centre—as Dr. Sharp writes, “Exeter is probably the most important touring centre (as distinct from mere holiday-making centres) in the whole country”; lastly, Exeter is a good place to live in. Before the war the wealth of Exeter lay in these manifold activities and its possession within

the inner city of an urban landscape which combined "old worldliness" and "sophisticated urbanity." It was a city which had style. And modern development had not yet exceeded a reasonable limit, even if mid and late 19th century development had been wholly utilitarian and haphazard in its location.

### housing

The 1950 population was estimated to be about 77,000 and in twenty years' time it is expected that this figure will rise to about 90,000; of this probable 13,000 increase about 10,600 are likely to be immigrants.

Housing problems are not so serious as in less fortunately placed cities. There are only 77 known cases of statutory overcrowding, although there are probably quite as many not known. New housing development on the average will not be at a higher net density than 40 persons to the acre owing to the difficult contours. The present overall net density is 44 persons to the acre. Another factor is that it is not expected to undertake within the next five-year period of the plan any appreciable re-development of existing built-up areas. By 1971 the housing position shows that there will be a deficiency of accommodation within the city boundary for approximately 1,270 persons. In order to provide the accommodation shown on the plans land regarded as of agricultural value has been used.

The final point about population and housing in Exeter is that, as a regional centre, Exeter attracts residents and it appears that the limiting factor to the growth of the city will be the ability to provide accommodation.

### shortage of building land

The chief general planning problem is to reconcile the ordered and the economic development of the city, and the retention of valuable agricultural land in its present use. Of the land which is physically and economically capable of

development there are only some 240 acres which can be made available at any early date after due allowance has been made for the claims of agriculture.

The total area of land within the city boundary is 9,137 acres. Out of this total about 3,500 acres cannot be built upon: either because the land is classified as tidal and foreshore, or as in the south-west, it is marshland; again, in the north and west parts of the city are short steep valleys with the highest ground rising in isolated points to 500 feet above sea level. Similar areas also occur on the southern-eastern boundaries. At present, about 1,000 acres of medium to high quality land is farmed. The housing progress, nevertheless, is good. By August 9, 1,045 traditional, 364 non-traditional and permanent bungalows and 430 temporary bungalows had been erected by the Council. Private enterprise contributed 203 war-damage rebuilds and 231 built as private licences. The total dwellings built is therefore 2,273.

### building site heights

The city's water reservoirs cannot provide an efficient supply to land higher than 300 ft. A.O.D. It would be physically possible to supply water if a new reservoir could be built at 500 ft., provided an appropriate financial return could be ensured. The plan makes no provision for this, and if the plan is accepted the city will fortunately be spared the unsightly effect of siting ordinary domestic housing on its most prominent sky lines.

### industry

The industrial structure consists of a wide range of the lighter types of industry employing in general small numbers. The principal industrial zone is on the western side of the River Exe and grouped near the head of the Exeter Canal. This area is comparatively modern and is reasonably good except for the incursion of some recent residential development and pockets of older dwelling houses not yet obsolete.

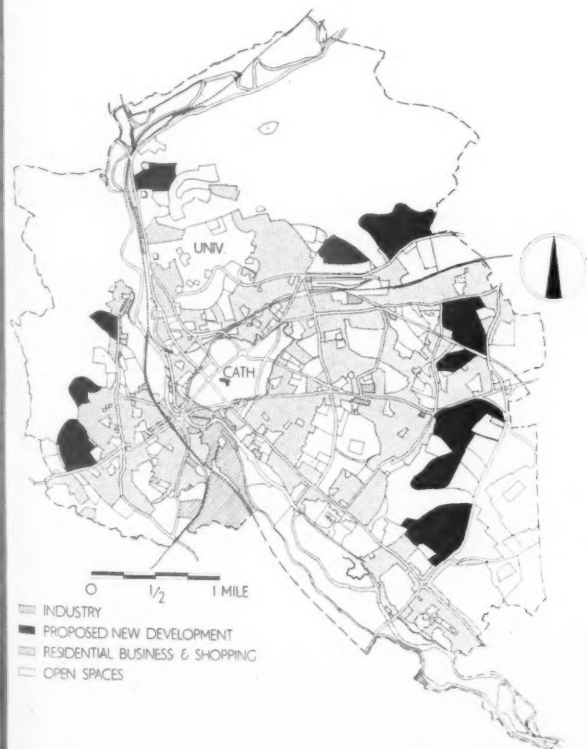
A second industrial zone lies on the eastern side of the river on both sides of Exe bridge. This is a much older area where the majority of buildings are old and uneconomic units and badly served by roads. Nothing short of complete re-development of the area carried out over a long period can solve the problems of zoning and obsolescence.

### service requirements

As a county town Exeter possesses two barracks: on the whole the Service requirements are reasonable, except that during the last war a large part of the Exeter golf club land was requisitioned by the Admiralty, and upon it was constructed a large camp. The storage sheds, as distinct from the living quarters, are still occupied by the Admiralty, and from the city's viewpoint the planning report rightly states that the restoration of this land to its original state is most desirable—the whole site at the moment is a disgraceful eyesore.

### university college of the south west

As already mentioned, University College is remarkable for being entirely a residential college—now of about 1,000 students. With an estate presented to it as a nucleus, the College is in the process of establishing itself on land north of the central area. In this area three new halls of residence, two teaching buildings and a college library have been built, a number of existing properties have been purchased and converted to halls of residence or for other university purposes. In the development plan the City Council has provided a large area of land as a university precinct. The area to be zoned includes dwelling houses and agricultural land not at present in College ownership, and the intention is that the College shall acquire the land as and when the opportunity occurs.



Town plan

(Continued on page 220)







*This aerial view from the north shows the centre of Exeter as it appeared soon after the war. The bombed sites had been cleared but no rebuilding had taken place. It is, so to speak, the half-sponged slate which the town planner has to correct and fill in again. Running vertically from the bottom of the picture is Longbrook Street which leads to the proposed square shown on page 222. Right from this point is the open site of the High Street, which has already partly been rebuilt as shown on pages 214 and 223 to 227. In the centre of the photograph is the secluded tree-hidden castle with the county hall (top, below) in the heart of it. Beyond the castle is the Cathedral in its close and to the left of the Cathedral is the circle of trees which marks the vacant site of Bedford Circus (see page 215). Beyond the trees is the wide and spacious Southernhay, of which part of the east side is shown below, centre. Within the curve of the river is contained the largely derelict and tumbledown industrial area, though with some charming and picturesque parts still remaining—as the Customs House at the bottom of the page.*







The pedestrian shopping precinct, designed by H. B. Rowe, the City Architect, is named Princesshay. It has its axis in line with the Cathedral towers (see page 226 for a photograph showing this view and the completed first portion). The width of the precinct will be 40 ft. except for a small square of 90 ft. square, part of which is shown above. There will be shops on ground and basement floors and offices over.



This is the rear elevation of the two insurance offices shown on pages 223-4 designed by Lucas Roberts & Brown. The design is markedly more contemporary in feeling than the main elevations which possibly reflects a greater freedom of choice for the architect and city architect rather than a client's preference.

Below, the restored south side of St. Peter's Cathedral which received a direct hit during the war. This work has been executed by the architect to the fabric, H. M. R. Drury.

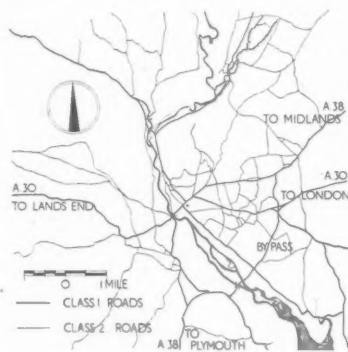


### playing fields

There are a large number of elderly people in Exeter; hence, playing fields are being planned on a basis of four acres per 1,000 population compared with six acres recommended by the National Playing Fields Association. By this standard of four acres there is a deficiency of 180 acres. About 72 acres can be found within the city, but it is unlikely that the balance of 108 acres can be found except by the public being the joint user of playing fields reserved for schools, and by the purchase of suitable land outside the present city boundary. The City Council has made a beginning in the latter direction, as it has bought some 20 acres just beyond the eastern boundary immediately adjoining a large open space.

### exe bridge

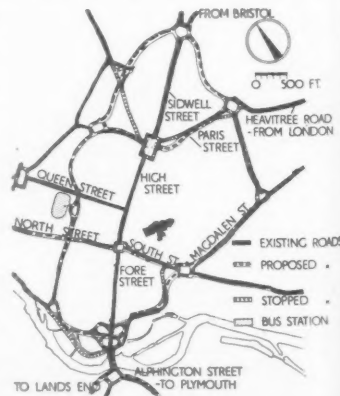
The key to the road system of circulation is the bridging of the Exe for traffic whose destination is the city, and this is the majority of traffic which has to approach the city. There are ten radial roads which enter the city; by far the most important ones are the London to Lands End road (A.30 route) and the main Bristol to Plymouth road (A.38 route). A by-pass was opened in 1938; while this had some effect, its full value will only be realized when the proposed extension is built (see Town Plan, p. 217). Even then traffic congestion in the centre is still likely to be severe, especially in view of the expected increase in volume. It is in the approach to providing a new inner relief road that the greatest difference lies between Thomas Sharp's plan and the current development plan.



crossing of four major routes which creates Exeter's traffic problems.

### consultant planner's solution

Thomas Sharp's solution was a bold one. He proposed a new relief road which would take traffic along the north side of the central area. The merit of this scheme was that he made clever use of local topography to construct a "freeway" along which traffic would pass from a roundabout at the end of Sidwell Street to Exe Bridge without any kind of interruption or impediment, including from intersections from other streets. The scheme also linked a new bus station with the Central Railway Station. The proposal provided for the eventual formation of a complete ring.



### city eng

The incorpo... completely... Sharp. The t... always... availabl... rely for... petrol r... collecte... The chosen junction Road Street; south-w... tion; m... blitized ground. Bridge. posed bus st... route. compar... amount... be de... most of... ing ob... fifths o... the rer... in the



These tr... increase

There... inasmu... is mai... side of... of any... that t... railway... for a

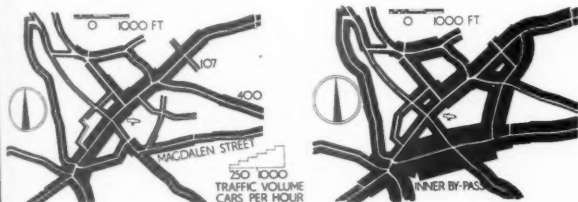
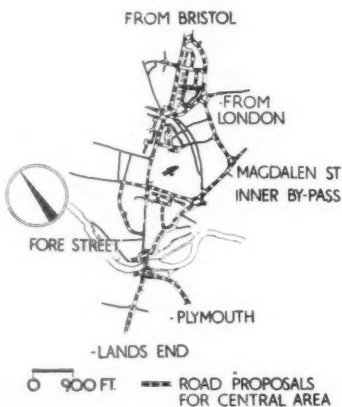
The E... ment o... archite... porary... Exeter... depend... other... sympat... modern... formed... an aggr... liable... formed... treatme

## city engineer's solution

The plan for an inner relief road which has been incorporated into the development plan follows a completely different line from that proposed earlier by Thomas Sharp.

The traffic problem in Exeter in broad outline has always been fairly clear. But there was insufficient data available about traffic flows prior to 1939 on which to rely for future design; and it was not until the end of petrol rationing in 1950 that the information could be collected.

The line ultimately chosen begins at the junction of Blackboy Road with Sidwell Street; and runs in a south-westerly direction; mainly across blitzed sites and open ground, to Exe Bridge. It is proposed to site a new bus station on this route. There is a comparatively small amount of property to be demolished and most of this is becoming obsolete. Three-fifths of its length will be entirely new construction and the remainder are roads which will have to be widened in the near future.



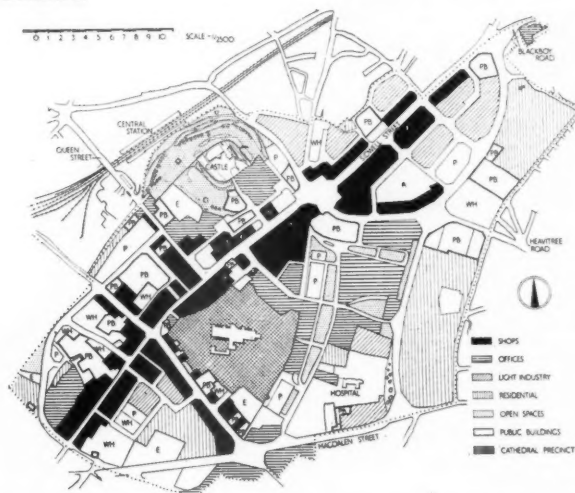
These two traffic density maps show the effect of an estimated 75% increase in traffic in 1980 over 1950 figures.

There is much to be said for a southern relief road inasmuch as the bulk of the traffic approaching the city is mainly from London and Bristol, i.e., from the southern side of the city. The omission from the planning scheme of any adequate new road to the northern side means that the area between the line of High Street and the railway in the former Longbrook Valley will probably stay for a very long time in its present humdrum state. A

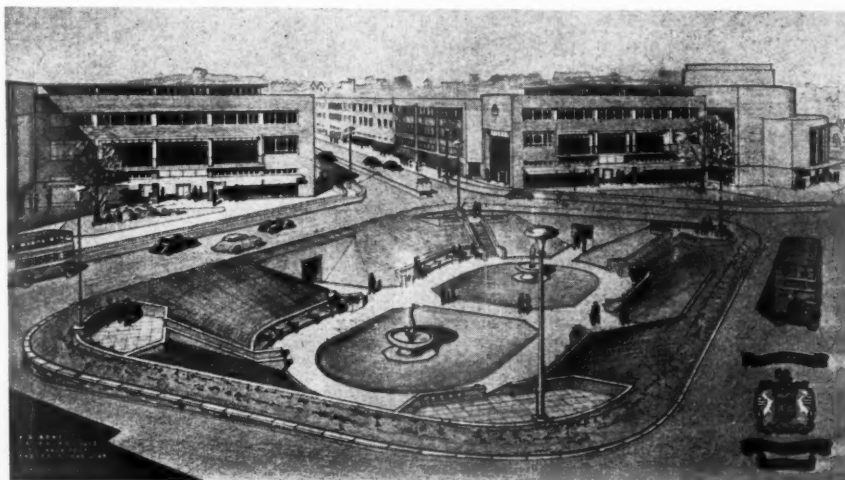
chance of creating something better than this may therefore be missed.

## central area

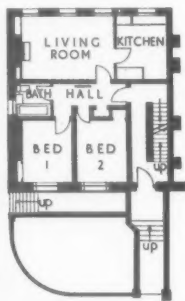
The plan below indicates roughly the proposed disposition of shops, offices and housing in the central area. The numbers one to nine just discernible in the centre indicate the positions of the buildings under construction or completed which are illustrated on pages 223-227. 1, shop for Burton's; 2, shop for W. H. Smith's; 3, Lloyds Bank; 4 and 5, the two insurance offices; 6, Marks & Spencer's store; 7, opposite 6, the premises of Ravenscroft Properties Ltd. (and, incidentally, the site of the pedestrian shopping precinct); 8, the Devon and Exeter Savings Bank and Martins Bank; 9, shops for Modelia, Wyman's, and Colson's.



In pre-war Exeter the inner city had six quarters: the most notable being the Cathedral precinct, the Castle, and Bedford Circus, apart, that is, from the commercial area. In the plan which has been made for the central area and which is now being considered by the MOHLG, the Cathedral will retain its seclusion and be almost as hidden as before; the Castle area will remain the backwater that it has for long been, and Bedford Circus has gone. In its place there will be Princesshay—a memorial to the tragic losses the city sustained in 1942, which will take the form of a pedestrian shopping way beginning near the top end of the High Street, and which will finish by the site of the former Bedford Circus. It is also the intention to make a narrow opening between properties south-west of Princesshay so that anyone standing in the new shopping way can enjoy a new view of the tower of St. Peter's



The Eastgate Square. The suggested treatment of the facades indicates the city architect's desire for a more contemporary appearance to this part of rebuilt Exeter. Whether it can be achieved will depend, as it has depended in the case of other buildings already erected, on the sympathy of the building owner towards modern design. The central square formed by the diagonal traffic circulation is an aggressive shape which will always be liable to upset the harmony of the square formed by the buildings. Its detail treatment is somewhat unimaginative.



*These flats at 30, Southernhay East, have been designed by Messrs. Lucas Roberts and Brown, a local firm of architects. The original building was a private house which has been rebuilt as flats after being gutted during the War. The building is of solid brick construction with patent pre-cast floors. All flats have*

*camphor-wood floors to living room and dining room; in all, five flats are provided (see typical plan, above). The elevation to Southernhay had to follow the original, which was one of a terrace of fine Georgian houses with circular headed sash windows on the ground floor, and gauged brick flat arches to the other floors. The sub-floors are covered with glass wool as sound insulation. The shutters to the front elevation are painted French grey. Windows are white and the entrance door is wine-coloured with a French grey frame. All other doors to flats are painted to match the entrance door and the stairs are grey tiles with red nosings.*

Cathedral. Around Princesshay is grouped the shopping, business and office area. Here the nucleus of modern Exeter is now being built. The proposal for the shopping centre was first outlined in *Exeter Phoenix*; that it was a proposal which met with general approval is apparent; had it not been rebuilding might have hardly begun.

The keeping of a watch upon the needs of developers and lessors for different kinds of accommodation in the central area is the responsibility of the local planning office. After making a careful survey of needs the office has produced a plan which provides in total a smaller floor area for shops than hitherto, *i.e.*, to pre-1942. Whether this is because less trade is expected or because a more efficient use of floor space will be made is not clear.

#### the city's future

Like other development plans, the Exeter Plan is based upon a programme for the next twenty years, and on the basis of the present building potential it has been calculated that it will probably be over 25 years before all the extensive blitzed areas can be rebuilt.

A very large part of Exeter's fame and prosperity is due to the city being a place which people want to visit and in which many want to live. The city has lost half of its former buildings of architectural or historic interest. It is bad enough that rebuilding must be at such a slow pace. While this is happening, Exeter to some extent is living on its past reputation and the question which we should like to ask is: will Exeter in the future be able to live on its architectural reputation for the past and the present?

#### compromise architecture

Compromise may be the key to successful political action in this country, but it is not the making of good architecture. This applies to Exeter just as it applies to probably every city in the country.

In designing a single or a group of buildings in a modern city centre the architect is influenced on every side. There are the practical difficulties: the administrative obstacles for instance—negotiations with lessees, licensing and planning authority; the economic troubles—building in the south-west today often means that elevations of brick and reconstructed stone are almost invariably built because the cost of building in the local stone is practically prohibitive. Then there are the aesthetic difficulties: a general feeling on the part of the public, and perhaps the client, that re-developed portions of the city should literally resemble the best in the old; the difficulty of deciding to what extent the appearance of buildings should be controlled; the varying opinion amongst architects as to what is "good architecture." Last but not least, the difficulties the architect may have in dealing with a forceful client of "I know what I like" type.

The root difficulty, however, may well be the attempt to get straight frontages to buildings which are on oddly shaped sites. A less restricted approach to the massing of a building would be an advantage.

#### eastgate square

Can the contemporary work in the central area be said to possess either the refinement of the eighteenth century Bedford Circus or the strength and masculinity of a virile design like Charles Fowler's Higher Market, Queen Street, built in the late 1830's and illustrated on page 216?

In our opinion the scheme for Eastgate Square sums up the impression which is forming of the quality of reconstruction in Exeter. Eastgate Square will be the focus of reconstructed Exeter. It will be the entrance through which the majority of traffic will pass. At the Square first impressions of the city will be formed.

Thomas Sharp proposed a square with axes in line with and at right angles to High Street. This plan has been modified in favour of a diagonally placed lay-out: there is improved traffic circulation for traffic and the scheme avoids demolition of the large modern building belonging to the Co-op.

Complete gyratory flow of traffic is provided: and there are under-passes for pedestrians. The planning is a sensible and practical proposition and no delay need occur in carrying this through. Care has been taken in the design of the enclosing buildings, though by their nature and uniform massing the buildings will tend to sink back and form an enclosing screen to the real centre of interest, which is the sunken garden within the square as shown in the drawing on page 221.

The scheme as it stands may be a good example of Municipal Civic design, but is it good enough to be the "rond point" of modern Exeter?

Is an opportunity being missed to create in the garden a focus of equal merit and equally memorable as a cathedral green, which is of the same size?

What is wanted is a completely urban atmosphere. The use of vertical stone retaining walls, instead of the dull-looking banks resting at the natural angle of repose, would help enormously. It is patently the hope that many people crossing the roads will use the sub-ways which lead into the sunken area. But an island group of small shops (as has been designed within the well-known traffic roundabout by the Old Town of Stockholm) might be an added attraction. If such is too elaborate, at least the whole of the area should be paved to make a courtyard—not a garden—leaving in the centre a space for a genius to come along sometime and create a low massive public sculpture, or a building—it must not be too high to avoid spoiling the line of vision for traffic—of a kind for which few have the talent today.

Eastgate Square is only a very small part of modern Exeter, but we have selected it as the subject of detailed criticism. But the essence of the charm of Exeter is that it is a compound of a score or more of good but small points.



## EXETER CITY CENTRE

city planning officer : H. GAYTON

city architect : HAROLD B. ROWE

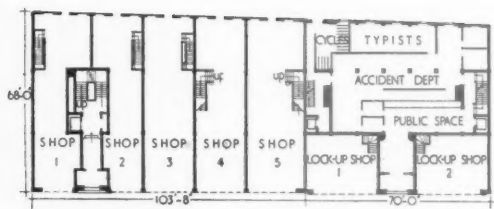
city engineer and surveyor : JOHN BRIERLEY

The following pages, up to page 228, show the major buildings which have been built, or are under construction, in Exeter High Street. On page 225, are illustrations of four projects of which two are in the High Street and the remainder close by in Bedford Street. All the designs are by private architectural firms. A full list of the general and sub-contractors concerned in all the buildings illustrated will be found on pages 239-240.

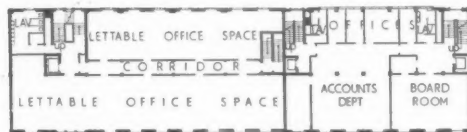
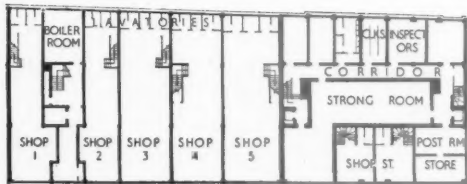
*The north side of the High Street, showing, from right to left : offices for the Commercial Union Assurance Co. ; offices for the Pearl Assurance Co. ; Lloyds Bank (under construction); and premises for Montague Burton, Ltd., now nearing completion.*



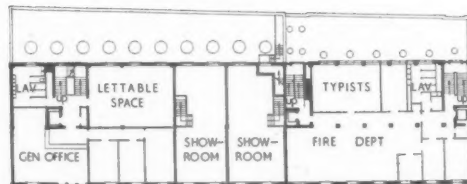




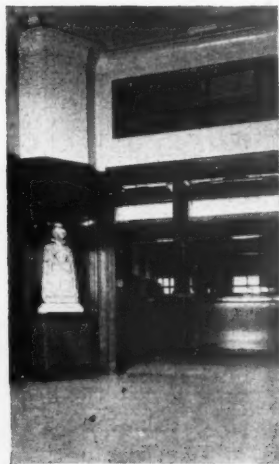
Ground floor plans

Second floor plans [Scale:  $\frac{1}{4}'' = 1' 0''$ ]

Basement plans of Pearl Assurance building, left, and Commercial Union Assurance building, right



First floor plans



architects: **LUCAS ROBERTS** and **BROWN**  
building: **OFFICES** and **SHOPS** for Pearl Assurance Co., Ltd.

There are five shops (typical shop front, top left) on the ground floor, each with a basement, and two of them have additional accommodation on the first floor. The Pearl Assurance Co. retain part of the remainder of the floor for their own use, and the second and third floors are let as offices. The roof space houses lift motors, hot water system and water tanks. There is a passenger lift for six people, and main and fire-escape staircases. The third floor is set back to the requirements of the City Architect and the main entrance and the feature window (see left) are placed so as to be seen from a new road opposite. *Construction*: Steel-framed, with patent precast floor units. The roof is pitched with steel frames and covered with red-brown pantiles. Main elevation: 2-in. hand-made bricks, red-grey in colour, and Portland stone dressings. *Finishes*: Entrance lobby: travertine; lift hall, (see left) botticino marble. Entrance doors, and balcony rails: bronze

architects: **LUCAS ROBERTS** and **BROWN**  
building: **OFFICES** and **SHOPS** for Commercial Union Assurance Co., Ltd.

The building is for the sole use of the Commercial Union except for two ground floor lock-up shops with basements. *Construction*: Similar to Pearl Assurance, above. *Finishes*: Entrance lobby walls (see left): travertine; entrance hall walls: walnut veneer; paving: travertine; entrance doors: bronze; balconies (see left): wrought iron. The statue in niche in the entrance is of Queen Elizabeth I from the bombed Church of St. Laurence, which previously occupied the site.



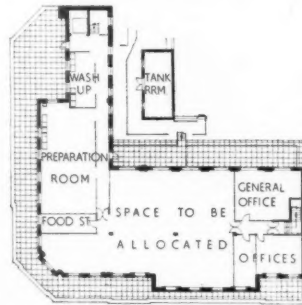
architects : **LEWIS and HICKEY**

building : **DEPARTMENT STORE** for Marks and Spencer, Ltd.

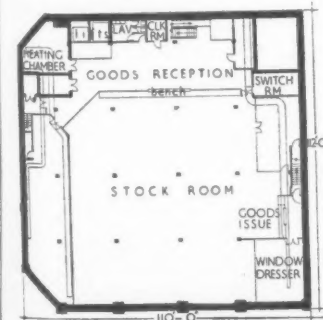
This five-storey building was opened last November. The main elevation to the High Street is shown above and four plans below. The second floor consists of administration and staff quarters (designer : James Gardner, see AJ, Feb. 28, 1952). *Construction* : Load-bearing brick walls and central frame of steel. *Floors* : Hollow tile, with terrazzo tiled finish on first and second floors. *Walls* : 2-in. hand-made golden-brown sand-faced bricks and reconstructed stone dressings. *Heating* : Automatic, low-pressure hot water with gas-fired boilers.



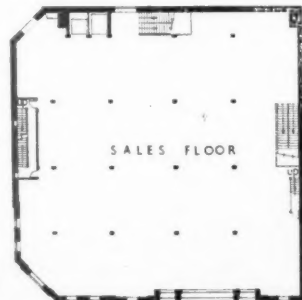
Ground floor plan



Third floor plan



Basement plan (Scale :  $\frac{1}{4}$ " = 1' 0")



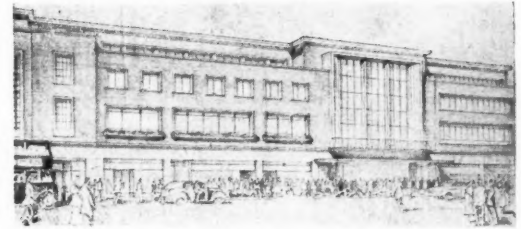
First floor plan



architect :  
**N. MARTIN**

building : **SHOP**  
for Montague  
Burton, Ltd.

Designed by  
Burton's staff  
architect this  
steel-framed,  
concrete floored  
shop is now  
nearing comple-  
tion.



associated architects : **E. A. STONE, TOMS & PARTNERS** and **LUCAS, ROBERTS & BROWN**

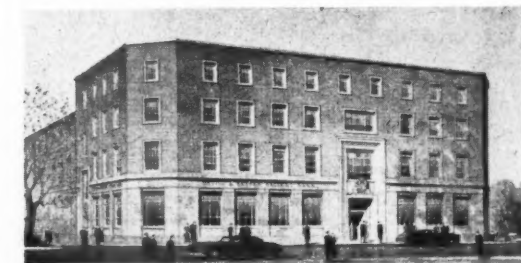
building : proposed **SHOP and OFFICES** for Mark  
Rowe, Ltd.



architects :

**LUCAS,  
ROBERTS  
& BROWN**

building : **BANK**  
for Martins Bank  
Ltd.



architects : **R. M. CHALLICE & SON**

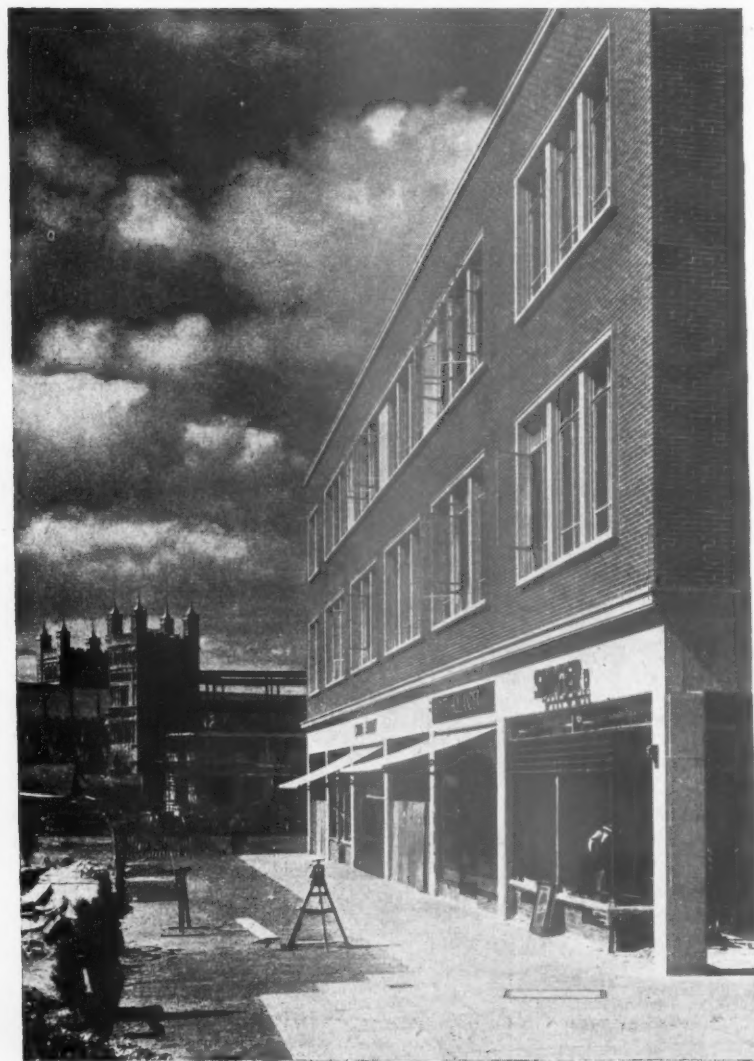
building : **BANK** for Devon & Exeter Savings Bank,  
Ltd.



architects :

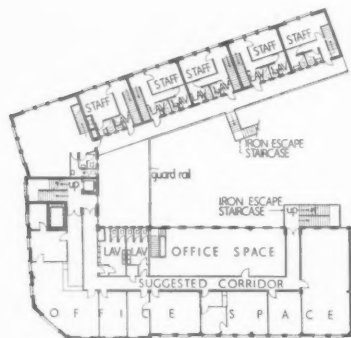
**CHARLES E.  
WARE & SON**

building : **BANK**  
for Lloyds Bank,  
Ltd.

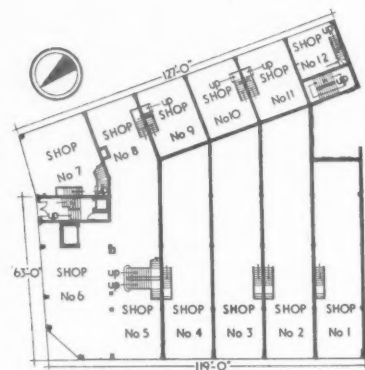


architects: **L. H. FEWSTER and PARTNERS**  
building: **OFFICES and SHOPS** for Messrs  
Ravenseft Properties, Ltd.

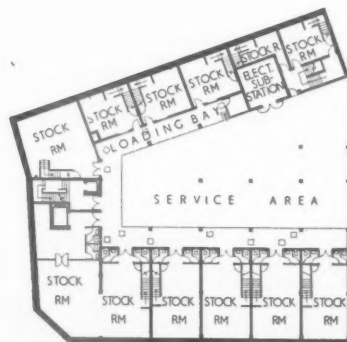
This building faces on to the south side of the High Street and on to the proposed pedestrian shopping centre of Princesshay. The basement is used as a vehicular service area. **Construction:** Steel frame, with concrete floors. **Walls:** Brick with stone dressings. **Windows:** Steel. **Finishes:** Walls, plastered; floors, plastic tiles (first floor showrooms, wood block). **Main staircase,** cream terrazzo, with walls of *in-situ* terrazzo dados divided into panels by ebonite strips. **Services:** There is mechanical ventilation in the basement to remove petrol fumes. **Heating:** low-pressure radiators.



Second floor plan



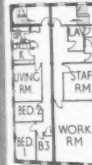
Ground floor plan



Basement plan [Scale: 1/8" = 1'-0"]



Fourth floor



Third floor

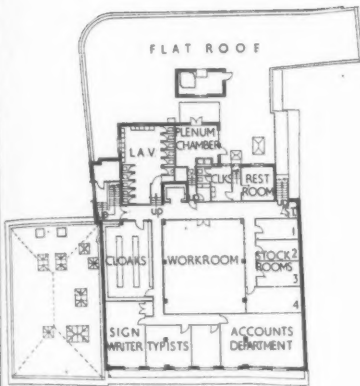


Second floor

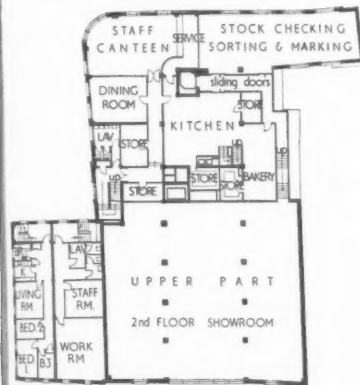


Ground floor





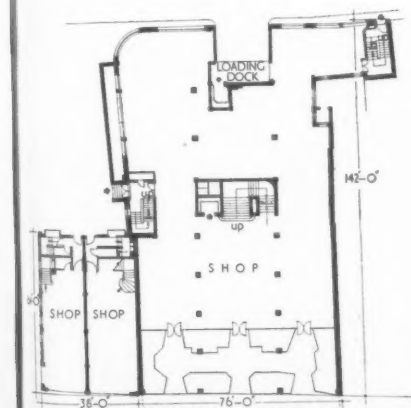
Fourth floor and roof plans



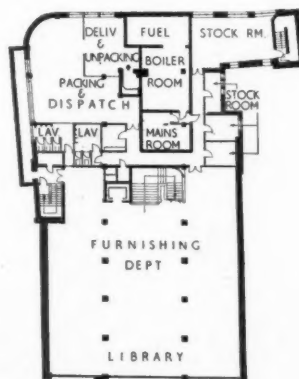
Third floor plan



Second floor plan (Scale: 1/4" = 1' 0")



Ground floor plan of Messrs. Wymans, Modelia Ltd., and Messrs. Colsons Ltd. (left to right)



Basement plan of Messrs. Colsons Ltd.



architects: **LUCAS ROBERTS and BROWN**  
(L. H. Fewster and Partners, consultants for Wymans)  
building: **SHOPS** for Messrs. Wymans and Modelia

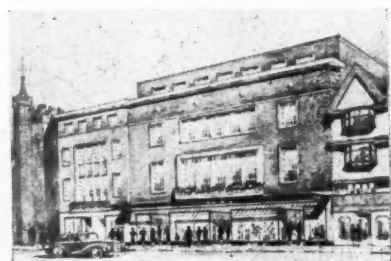
This building on the south side of the High Street was erected for two clients. The rear is shown left and the main front below. Accommodation is shown in the plans, left, which also show Messrs. Colsons' premises on the right and further illustrated below. The first floors are showrooms in each case with stores over. *Construction:* Steel frame, with patent precast concrete floor units and roof. Main elevations: 3-in. multi-coloured brick with Hartham Park stone dressings.



architects: **F. W. BEECH and E. CURNOW COOKE**

building: **STORE and RESTAURANT** for Messrs. Colsons Ltd.

The rebuilding of this store is being executed in a number of stages. The first part completed is shown on the right, above. Its final appearance is indicated by the perspective below.





## NEIGHBOURHOOD UNITS

designed by H. B. ROWE, city architect ; deputy city architect,  
E. B. REDFERN ; chief assistant architect, F. MOULD ; principal assistant,  
housing, G. G. GILPIN

The next six pages illustrate two of the major housing estates built since the war. The first, known as the Countess Wear estate, lies about three miles south-east of the centre of the city. It includes a school, illustrated on page 236, and a shopping centre shown on page 231. The other estate, illustrated on pages 232-233, is the Stoke Hill estate, which lies about a mile to the north-east of the city centre. It received a MOHLG Housing medal for 1952.

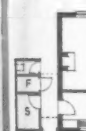
*A typical group of three-bedroom houses on the Countess Wear estate.*



The estate



First floor



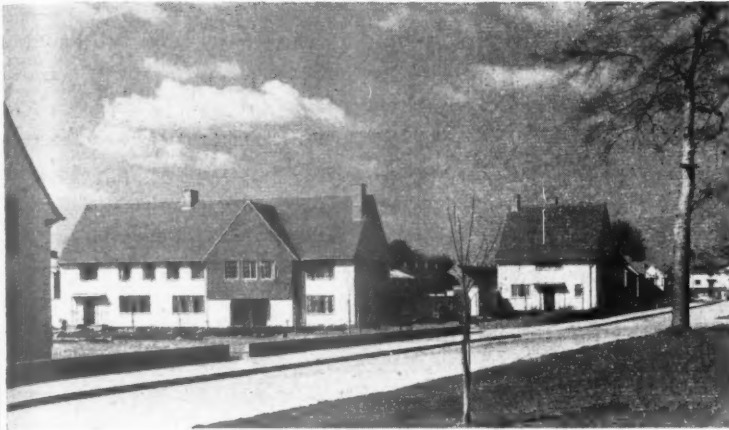
Ground  
bedroom



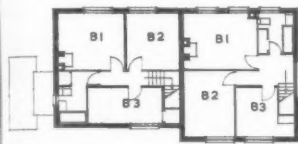
## HOUSING

at the COUNTESS WEAR ESTATE  
designed by the CITY ARCHITECT

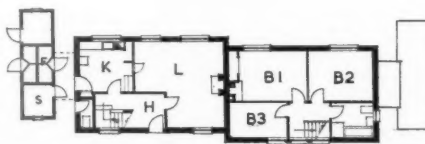
The present number of houses completed and occupied are as follows: Traditional, 356; non-traditional, 178; under construction, 7 shops with 10 flats and maisonettes; proposed, 24 two-storey corner dwellings for old people or young couples and 32 flats of 2, 3 and 4 person units in 2 four-storey blocks. Nett housing density is ten persons per acre. Construction: Walls 11-in. cavity brick, faced with selected common bricks, occasionally colour washed; or faced with cellular rustics.



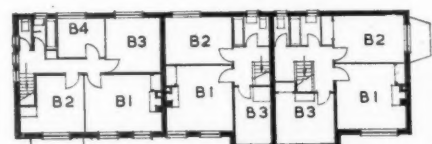
The estate from the east.



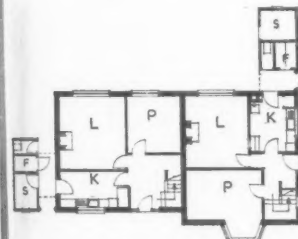
First floor plans (Scale: 1/8" = 1' 0")



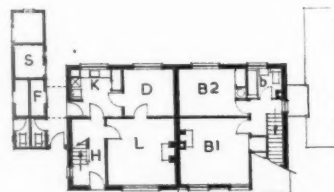
Ground and first floor plans of three-bedroom houses



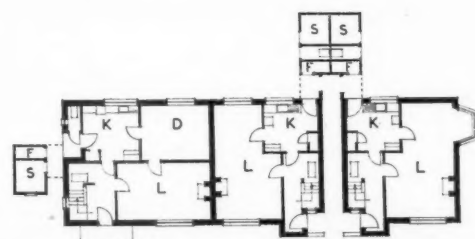
First floor plans



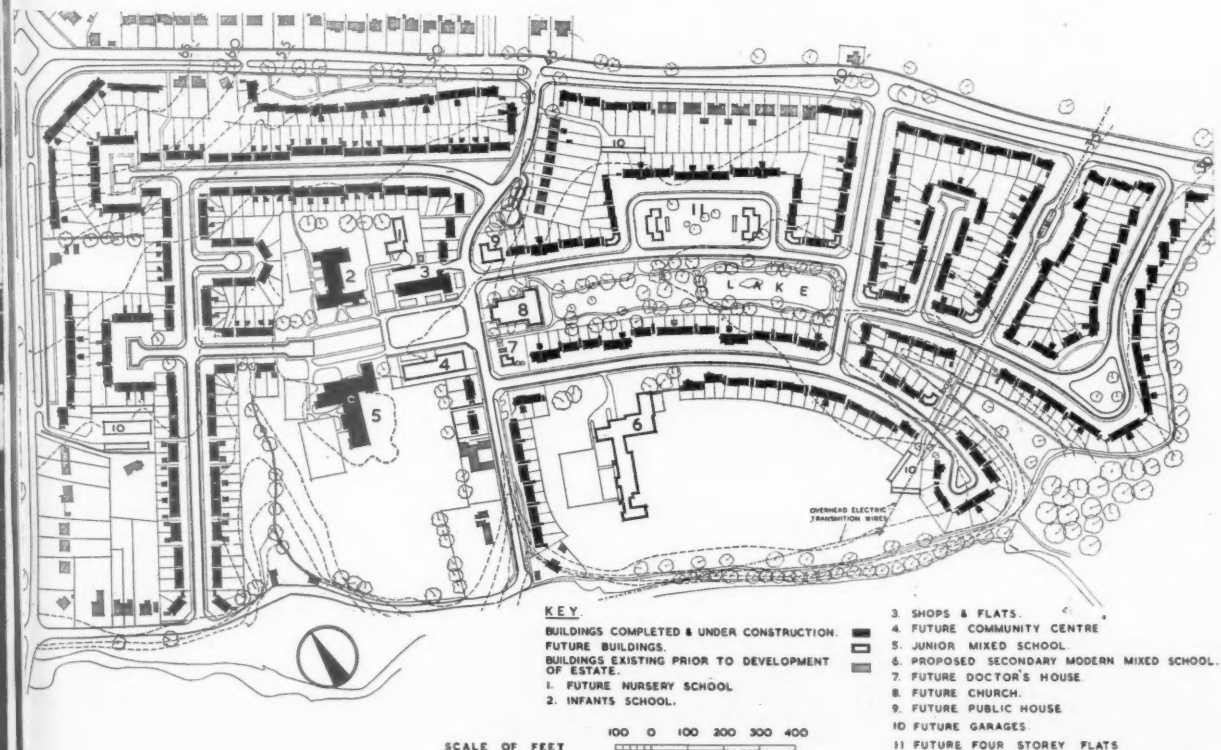
Ground floor plans of three-bedroom houses



Ground and first floor plans of two-bedroom houses



Ground floor plans of four and three-bedroom houses



Site plan



Above, doorway detail of four-bedroom house shown below. Right, typical terrace of colour-washed houses.



Internal partitions : 4½-in. brick, 3-in. concrete blocks. Party walls: 11-in. cavity brick. Ground floors are concrete, finished with pitchmastic generally, and with granolithic in the kitchens. First floors have wood joists and tongued and grooved boarding. Roofs are timber, felted and tiled with plain concrete or clay tiles. *Finishes* : Ceilings, plasterboard and skim ; walls, plaster ; windows, standard steel, with concrete surrounds. *Services* : Hot water supply, either multi-point heaters or back-boiler grate in living room, or domestic boiler in kitchen.

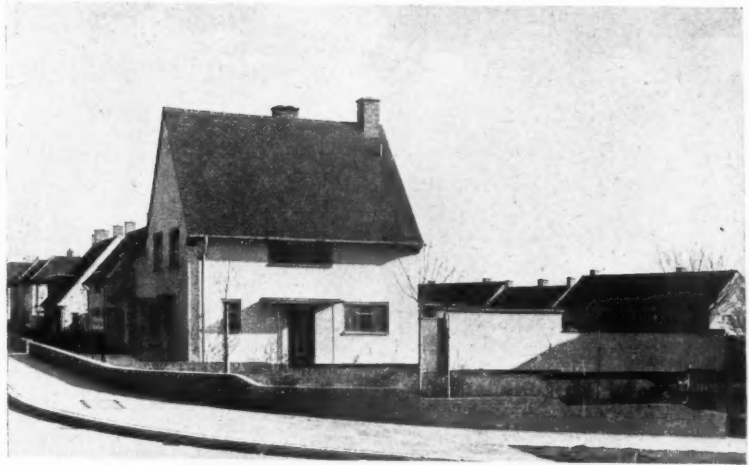
**SITE.**—The estate is bounded to the north by the main road leading to Exmouth, to the south by the River Exe, to the east by open parkland, and to the west by the main road to Torquay. The latter road fringes on to open playing fields. All the houses on the perimeter of the estate bounded by main roads are approached by service roads. The site has a gentle slope to the south having extensive views



of the river banks and of the hills in the distance. The estate is well wooded with tall trees of many varieties, the preservation of which has been carefully considered in the estate planning. In the centre of the estate in a copse of large trees is a natural pool with grassed banks. This feature is now being adapted into a safe paddling pool for children and the whole surrounding area formed into a public open space with paths and seats. Running east-west across the southern portion of the estate is a line of overhead high-tension electric transmission wires and all the houses have been sited to give the required safety distance from the swing of the cables. This necessitated a road on the axis of the overhead line, including an island for a pylon.

**NEIGHBOURHOOD CENTRE.**—Centrally situated is a group of communal buildings, comprising a block of shops with flats and maisonettes over

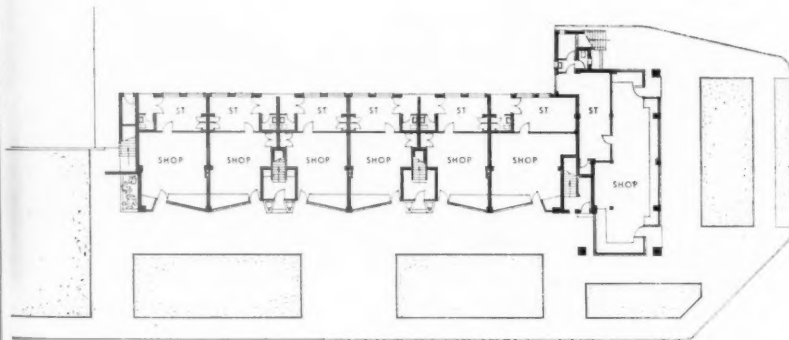
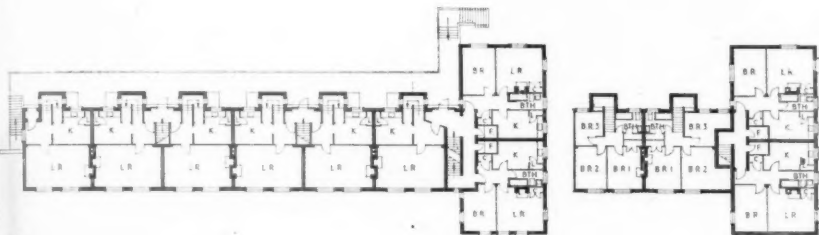
(see below), a proposed community centre, a junior mixed school (see page 236), an infants' school (commenced), and a proposed nursery school. This group forms the nucleus of the estate. These buildings are served by a loop road with a central open green, extended by a public open space, giving a pedestrian link to the north-east portion of the estate. On the axis of the green belt the vista will be closed by a proposed church sited within the wooded area. On the south-east portion of the estate is a site for a proposed secondary modern school with playing fields. Sites for a public house and a doctor's house are adjacent to the communal buildings.



*Typical paired three-bedroom house.*

## SHOPS

in the COUNTESS WEAR ESTATE  
designed by the CITY ARCHITECT



This block of shops below and, as finished, below left, forms part of the group of communal buildings which form the nucleus of the estate (see site plan on page 229). There are six shops for individual traders, and a larger one for a multiple provision and general store. Living accommodation: 6 three-bedroom maisonettes, and 4 one-bedroom flats, arranged so that they may be occupied by tenants of shops, or let separately to selected Council tenants. *Construction:* Part steel frame with reinforced concrete floor between the shops and flats, soundproofed with a floating screed in a glass silk quilt. Above the concrete slab the internal skin of walls, and internal partitions: clinker block. Party walls: 11-in. cavity. Roof: timber joists, 2-in. wood-wool slabs, finished with screed and three-layer bituminous felt roofing.

Ground, first, and part of second floor plans [Scale:  $\frac{1}{4}$ " = 1' 0"]



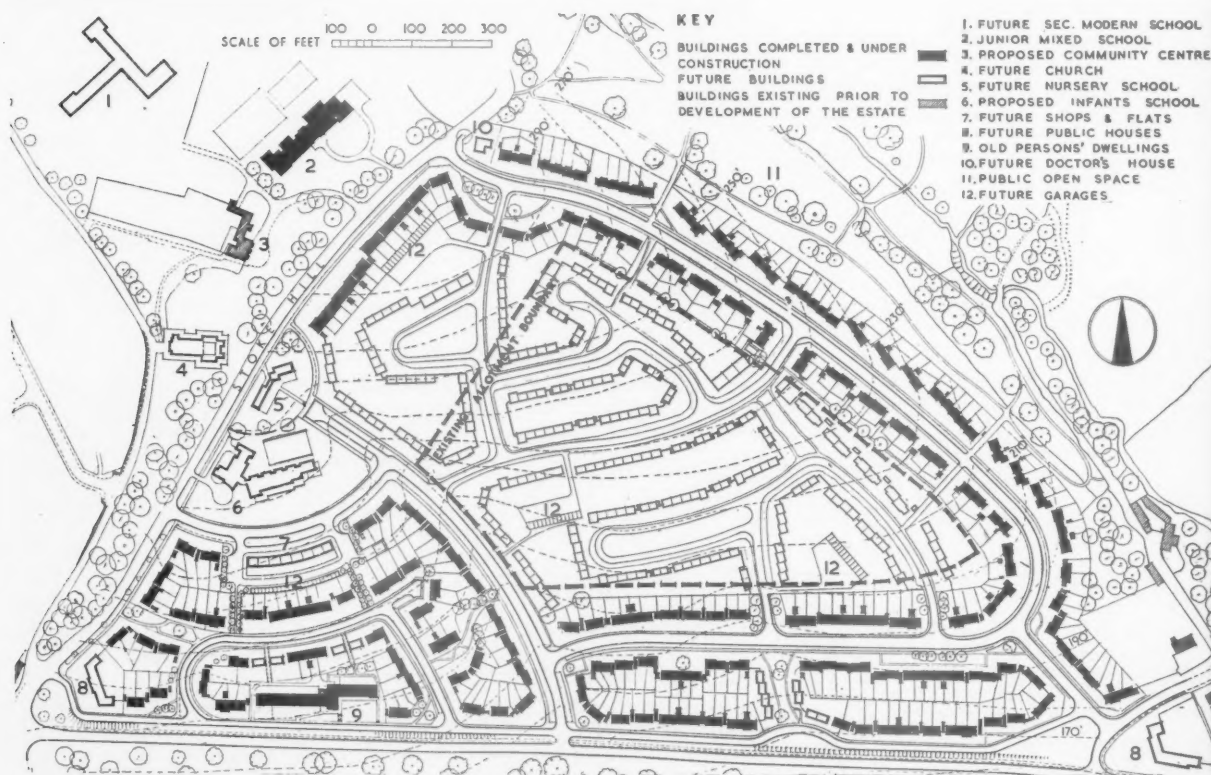


## HOUSING

at the STOKES HILL ESTATE  
designed by the CITY ARCHITECT



This estate is on hilly land to the north east of the city. The total area is approximately 60 acres (excluding land unsuitable for building to the north east, which will be preserved as a public open space). There is a slope towards the south of an average gradient of 1 in 12. The site is bounded on the south by railway property, and a permanent green belt has been planned between this railway property and the housing development. A main traffic road runs parallel with the southern boundary, planned to link the major city routes, and allowance has been made for dual carriageways. The actual housing estate commences with a service road lying immediately to the north of this main through road. In the centre of the estate, and taking up a large proportion of the whole (13 acres), is a triangular area of statutory allotments around which the first portion of the development had to be planned, allowing for future extensions over the allotment ground as and when these allotments can be replaced elsewhere. The whole estate is designed to link up with existing and future residential development lying to the west, so that Stokes Hill, on the north west boundary, might be considered the centre of the completed future neighbourhood development. It was possible to develop over a



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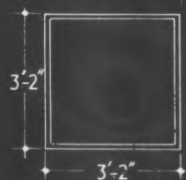
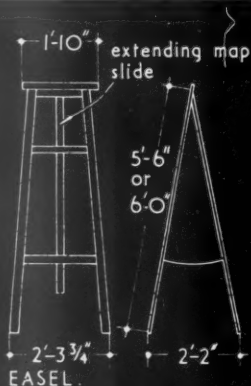


## DESIGN DATA | COMMON SIZES

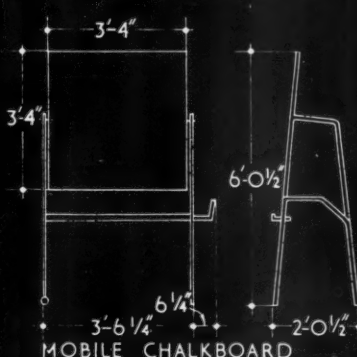
4.A13

The Architects' Journal Library of Information Sheets 377. Editor: Cotterell Butler, A.R.I.B.A.

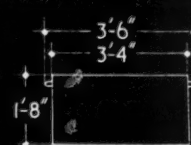
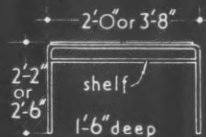
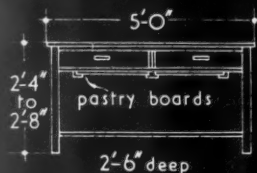
sliding boards are in  
sections 4'-0" wide  
3'-0" high

WALL MOUNTED  
CHALKBOARD.

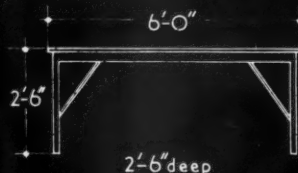
EASEL.



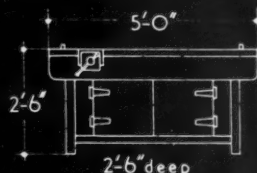
MOBILE CHALKBOARD

NESTING TABLE DESK:  
JUNIOR AND SECONDARY.NESTING TABLE  
DESK: JUNIOR AND  
SECONDARY.

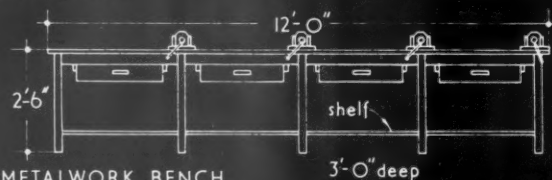
DOMESTIC SCIENCE TABLE.



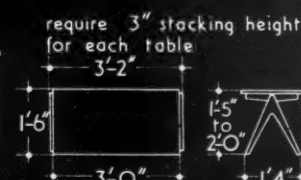
CUTTING-OUT TABLE.



WOODWORK BENCH.



METALWORK BENCH.

TRAPEZOIDAL TABLE:  
JUNIOR AND SECONDARY.

STACKING TABLE: INFANTS.

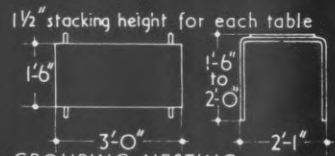
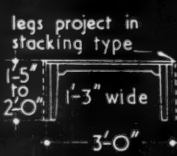
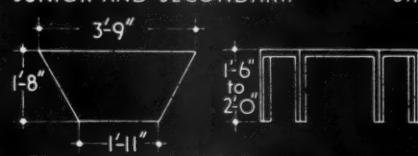
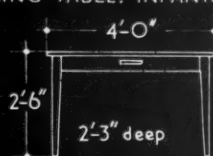
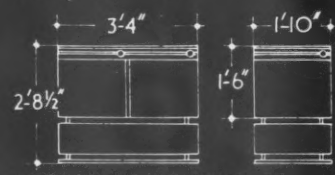
GROUPING NESTING  
TABLE: INFANTS.

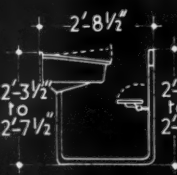
TABLE: INFANTS.

TRAPEZOIDAL TABLE:  
INFANTS.

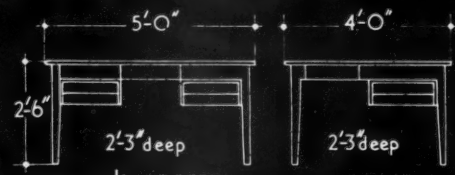
TEACHER'S TABLE.



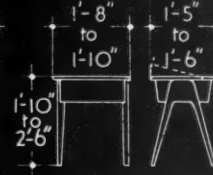
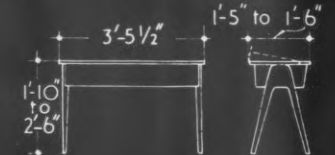
LOCKER DESKS WITH SEATS.



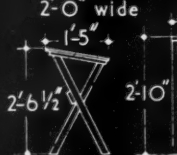
FOLDING DESK.



TEACHER'S DESKS.

SINGLE LOCKER  
DESK.

DOUBLE LOCKER DESK.

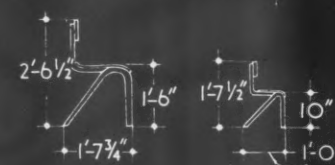


FOLDING DESK.



NESTING REST BED.

FOLDING REST BED.



NESTING CHAIRS.



TUBULAR METAL NESTING CHAIRS.

A	2'-5" to 2'-7"	2'-2 1/2"	2'-1 1/2"	2'-0"	1'-10 1/2"	1'-7 1/2"	1'-5 1/2"
B	1'-4" to 1'-6"	1'-3"	1'-2"	1'-1"	1'-0"	10"	8"
C	1'-4 1/2"	1'-1 3/4"	1'-1 1/2"	1'-1"	1'-0 1/2"	1'-0"	1'-0"
width	1'-4 1/2"	1'-2"	1'-2"	1'-2"	1'-2"	1'-1 3/4"	1'-1 3/4"



#### 4.A13 COMMON SIZES 4: FURNITURE FOR SCHOOLS

This Sheet is one of a group setting out common sizes and deals with furniture for schools.

Where one dimension only is given this is suggested as a typical average size.

Where a number of dimensions is given this suggests a generally accepted range of sizes.

Where limiting dimensions are given, e.g. 1 ft. 6 in. to 2 ft. this is intended to cover the typical minimum/maximum range.

The planning of rooms and general allocation of space are dealt with under the appropriate planning sections.

##### Wall Mounted Chalkboard

The drawing on the face of the Sheet illustrates a fixed wall mounted chalkboard. Sliding boards are in sections 4 ft. by 3 ft., and the overall height and length are increased by about 3 in. by the framing.

##### Easel

Chalkboards for easels usually measure 4 ft. by 3 ft. Easels are now largely replaced by wall mounted chalkboards and mobile chalkboards.

##### Mobile Chalkboard

A board measuring 3 ft. 10 in. by 3 ft. 4 in. is also available for the framework shown. With both sizes the board pivots horizontally.

##### Nesting Table Desk

Two types are illustrated, both with tubular metal frames. Wooden tables of similar sizes are also available.

##### Woodwork Bench

In addition to the sizes shown, the benches are available as small as 3 ft. 6 in. by 1 ft. 9 in. by 1 ft. 10 in. high. They are also made without cupboards and toolracks under.

##### Trapezoidal Table

Two types are illustrated, one for junior and secondary use, the other for infants. Both types are for grouping and nesting, the former with or without shelves under.

##### Grouping Nesting Table

An alternative type, in tubular steel, is available with the same size top and legs projecting at the ends; both may be made in metal or bent-wood.

##### Teacher's Table

In addition to the sizes shown there are tables up to 6 ft. by 3 ft. in size.

##### Locker Desks

Nesting types (single desks) of the same overall dimensions are also obtainable.

Locker desks with attached seats are now being superseded by desks or tables with separate chairs.

##### Folding Desks

Desks with tops measuring 1 ft. 10 in. by 1 ft. 5 in. and 2 ft. by 1 ft. 8 in. are also available. Some types are thicker when folded than that shown.

##### Rest Beds

Beds of the sizes shown are the most common: nesting beds are made up to 6 ft. 6 in. by 2 ft. (canvas sizes), 7 ft. 6 in. overall; when stacked each additional bed requires a further 2 in. in height. Folding beds are available from 3 ft. 6 in. by 1 ft. 8 in. to 6 ft. by 2 ft.

##### Nesting Chairs

Most types are made in a range of seat heights varying from 10 in. to 1 ft. 6 in., usually in increments of 1 in. According to type, nesting chairs, when stacked, require an additional 1½ in. to 2 in. in height for each additional chair.

##### Cupboards

A range (not illustrated) of cupboards, drawers, lockers and shelves for infants and junior schools is available, all measuring 3 ft. wide by 1 ft. 6 in. high and 1 ft. or 1 ft. 6 in. deep. They may be mounted on one another, on a 3-in. plinth or 6-in. legs.

Other Sheets in this Series cover chairs and tables generally, china, cutlery, kitchenware and miscellaneous items.





## PLANNING | T. AND C. P. | DEVELOPMENT

4.N2 N

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any requisite agricultural buildings on agricultural land exceeding 1 acre and comprised in an agricultural unit:

1. must be at least 80 feet from the metalled portion of a trunk or classified road
2. any new building must not exceed 10 feet in height if within 2 miles of the perimeter of an aerodrome
3. the agricultural structures must be designed as such

note: no building shall create an obstruction to the view of persons on any road used by vehicular traffic at or near any bend, corner, junction or intersection.

extension or alteration of industrial buildings:

1. must not exceed height of existing building
2. extension(s) must not exceed  $\frac{1}{10}$  of the cubic content of existing building nor aggregate floor space exceed 5000 square feet (extension may project beyond forwardmost part of the existing building, subject to the building line)

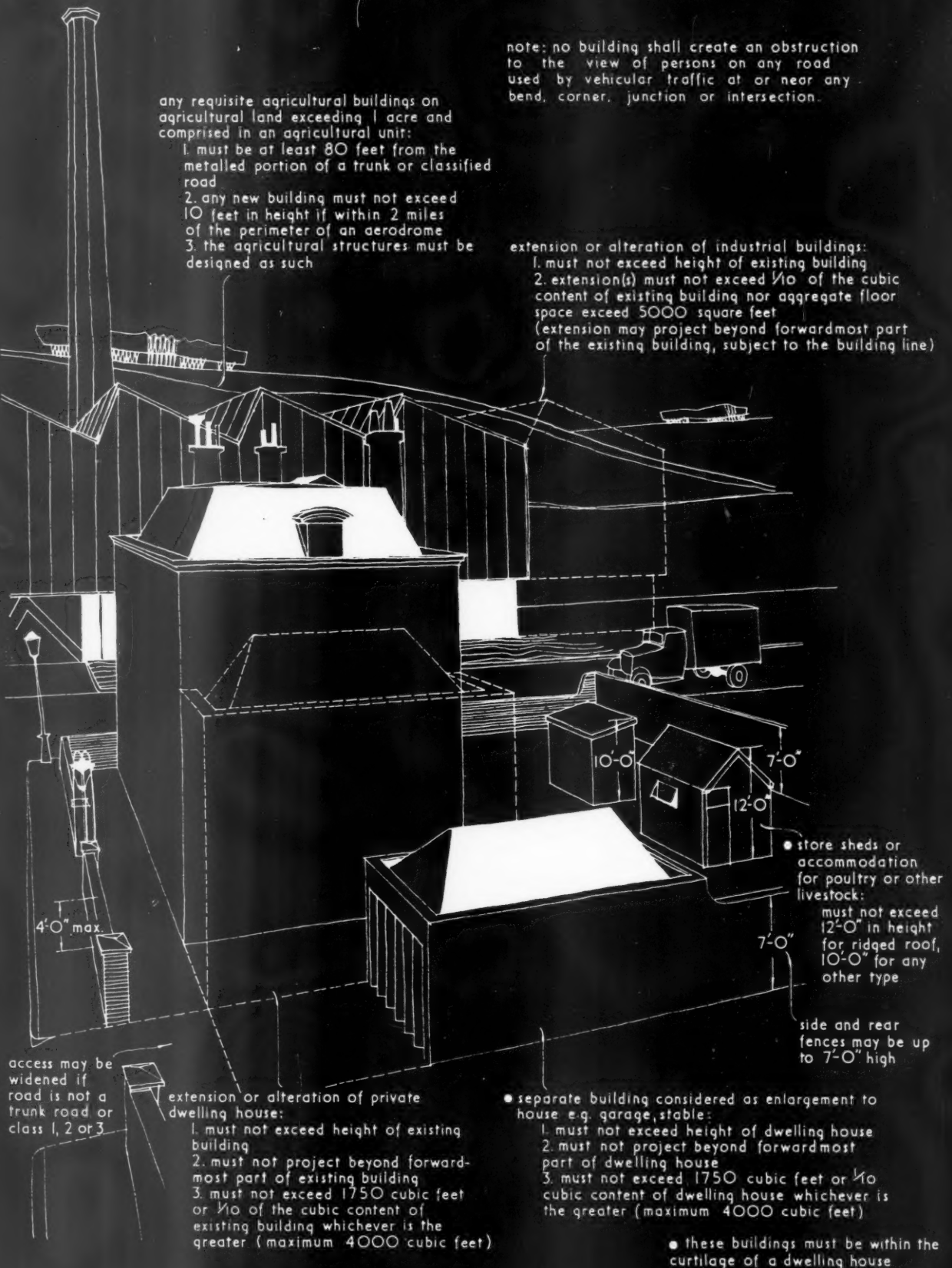


DIAGRAM SHOWING EXEMPTIONS FROM PLANNING DEVELOPMENT CONTROL ALLOWED BY GENERAL DEVELOPMENT ORDER 1950.

Compiled by L.A.E. Chaplin, A.M.I. Mun. E., A.M.T. P.I.



#### 4.N2 EXEMPTIONS FROM PLANNING CONTROL ALLOWED BY GENERAL DEVELOPMENT ORDER 1950

This Sheet shows the types of new building or extension to existing buildings that are exempted from planning control by the General Development Order 1950. This order, which came into operation on May 22, 1950, affects most agricultural buildings,

some domestic buildings and some industrial extensions. Bye-law consent will still be necessary for the erection of the buildings and it may also be necessary to obtain a building licence.

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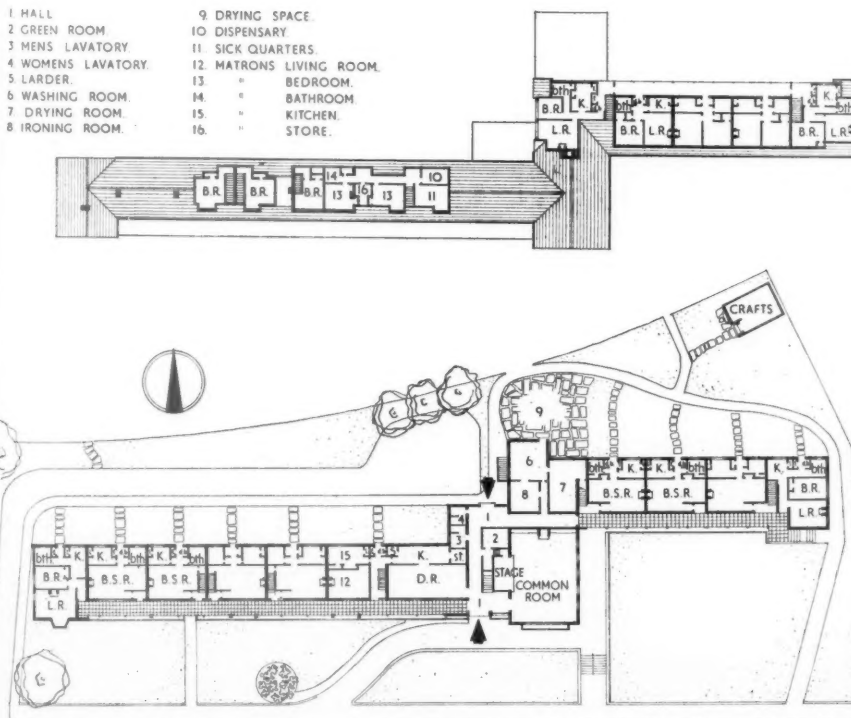
small portion of the allotment land, thereby allowing a road to be constructed up and through the natural valley on the estate; this road being planned to finally terminate with a vista on to a church, the site of which has been planned within a wooded area to the north west of Stoke Hill. For the disposition of schools, church, pubs, shops and community centre, see site plan on p. 232. The house plans are similar to those shown on page 229 and the houses are shown in the photographs on this and the preceding page.

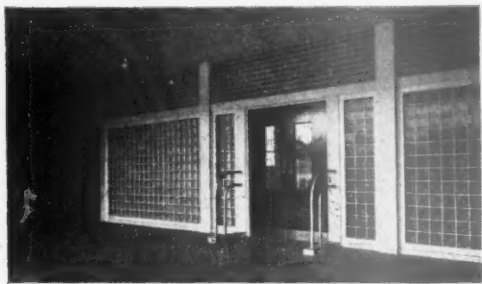
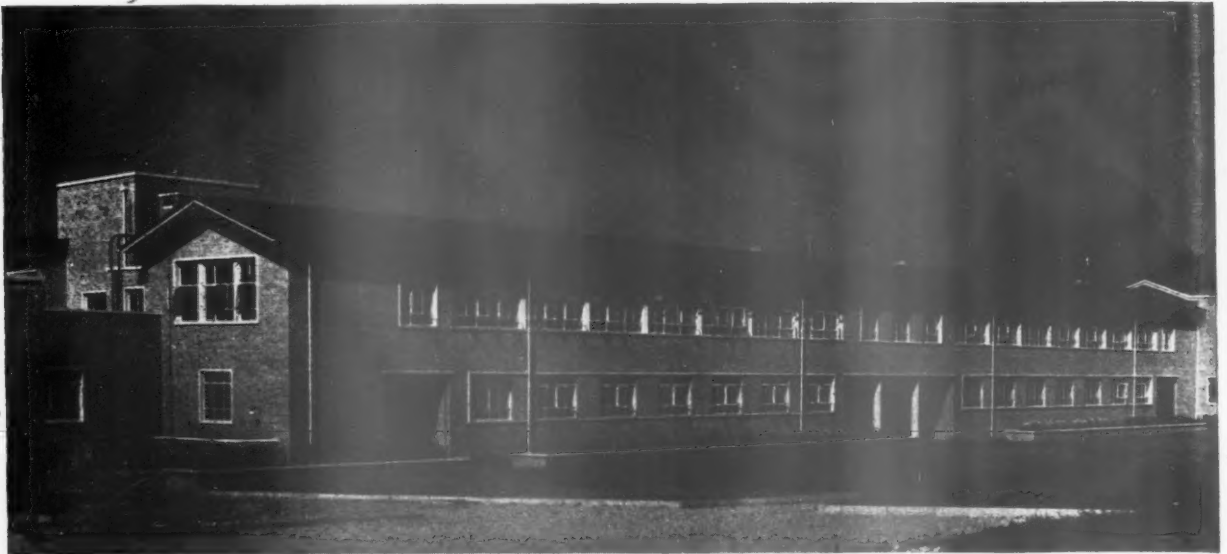


### OLD PEOPLE'S HOME

at the STOKES HILL ESTATE  
designed by the CITY ARCHITECT

These premises are now being erected under the Lord Mayor of London's National Air Raid Distress Fund scheme and are intended for the accommodation of bombed-out old people. There are fourteen flats having varying accommodation for single persons and married couples consisting of ground floor dwellings with a bed-recess, ground floor dwellings with a bed-recess and, in addition, a first floor bedroom, and ground and first floor dwellings with a separate double bedroom. A two-bedroom flat is provided for two resident staff: a matron/housekeeper and a cook. There is in addition a large common room with a small stage suitable for religious services and entertainment, and a small hobbies room, the latter being accommodated at the far end of the garden. Dining accommodation is provided for serving a mid-day meal. Communal clothes-washing facilities, together with indoor and outdoor drying, and an ironing room are also provided. There is one double bedroom, which can be used for visiting relations or as a sick room. *Construction:* Traditional, with tiled roof and sand-faced multi-coloured brickwork.



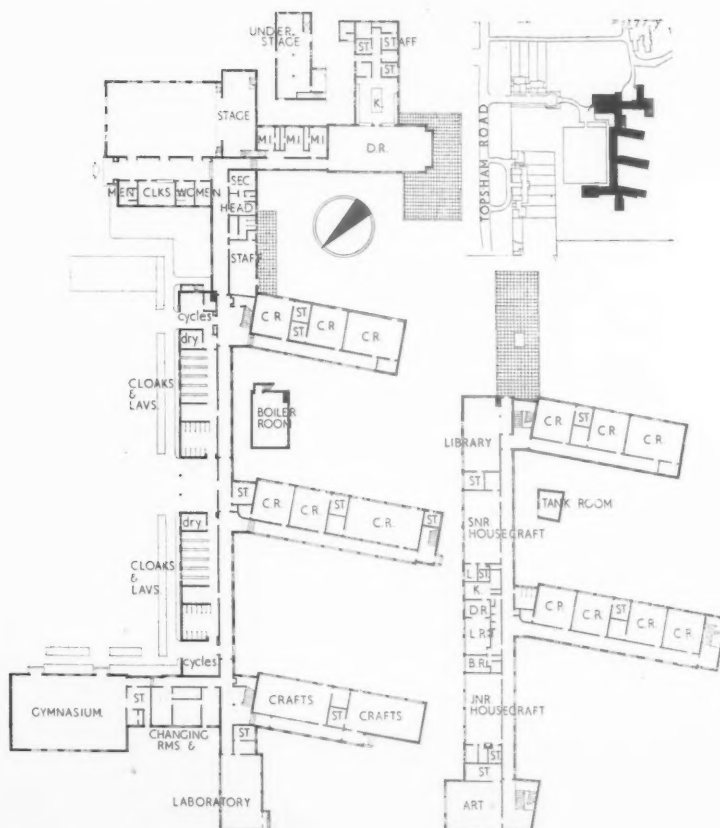


# SCHOOL

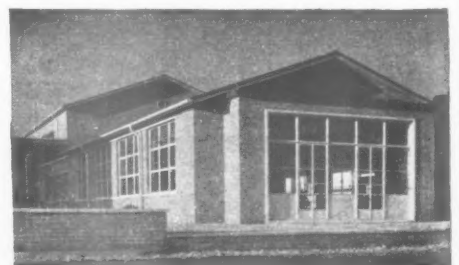
at TOPSHAM ROAD

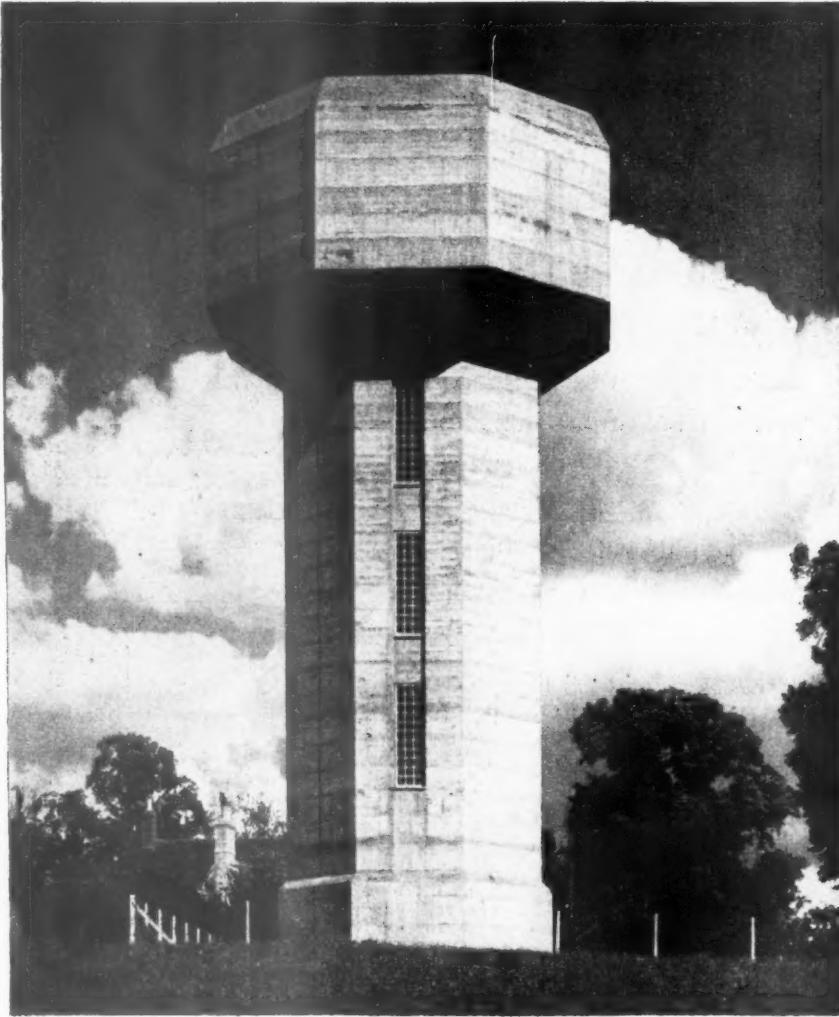
designed by the CITY ARCHITECT

This secondary modern school for girls is a short distance from the River Exe and about two miles from the city centre on the main Exmouth road. Top, the two-storey cloaks and craftroom block seen from the last. Above, left to right, the pupils' entrance from the playground, the main ground floor corridor, and the stair hall at the western end of the main block. Below, the dining room. *Construction:* In-situ concrete frame on bay unit of 10 ft. 7½ in. with 11-in. brick walls and copper on fibreboard pitched roofs. *Services:* Heating is by low-pressure hot water radiators fired by gas. The housecraft rooms are equipped with solid fuel, gas and electric cooking apparatus.



Ground and first floor plans [Scale: 1/8" = 1' 0"] and site plan





CIVIL ENGINEERS : Harvey, McGill & Hayes,  
CONTRACTORS : A. E. Farr Ltd., Westbury, Wilts.

reinforced concrete water tower, Rodbourne, Wilts,  
capacity 230,000 gallons — waterproofed with

# COLEMANOID

THE LIQUID WATERPROOFER & HARDENER  
THROUGHOUT THE CONCRETE MIX



THE ADAMITE COMPANY LTD., Manfield House, Strand, W.C.2

Temple Bar 6233/6





# Finlock forms the eaves and gutters

... and saves £15 per house! (says Mr. Lock)



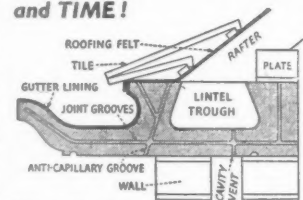
USING this system of Guttering shows a tremendous saving in cost, material and maintenance charges. Finlock Gutters are made with a fine waterproof concrete—simple in design, easy

to use and permanent.

On the illustration below "a" shows the trough in which lintels can be cast in situ if required, "b"

shows the large sectioned gutter channel which permits laying without fall. Strong enough to walk in and to withstand all building stresses. Completed by a bituminous lining after laying. "c" indicates the jointing grooves.

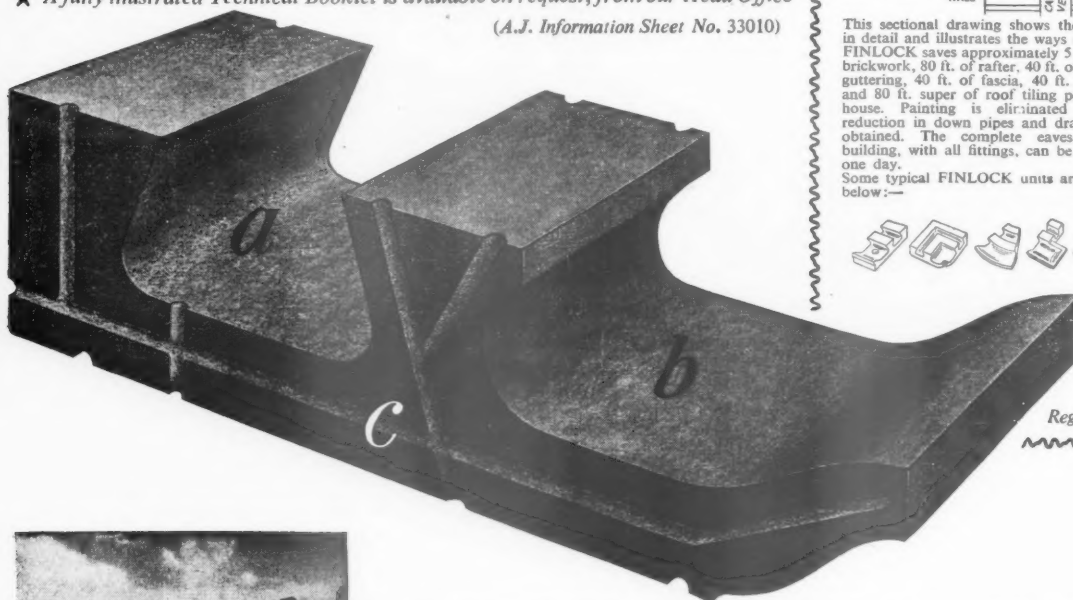
## HOW FINLOCK SAVES MONEY and TIME!



This sectional drawing shows the system in detail and illustrates the ways in which FINLOCK saves approximately 5 yards of brickwork, 80 ft. of rafter, 40 ft. of normal guttering, 40 ft. of fascia, 40 ft. of soffit and 80 ft. super of roof tiling per single house. Painting is eliminated and a reduction in down pipes and drainage is obtained. The complete eaves for a building, with all fittings, can be fixed in one day. Some typical FINLOCK units are shown below:—



★ A fully illustrated Technical Booklet is available on request, from our Head Office (A.J. Information Sheet No. 33010)



Regd. Pat.



Finlock Gutters are being used by the following County Councils: CAMBRIDGESHIRE, DERBYSHIRE, EAST SUSSEX, GLAMORGANSHIRE, GLOUCESTERSHIRE, KENT, LONDON, MIDDLESEX, NORFOLK, SURREY, STAFFORDSHIRE, WARWICKSHIRE, WORCESTERSHIRE.

Over 200 local authorities are now using Finlock.

The buildings shown are in accordance with the winning design in the £1,000 low cost housing competition organised by "THE BUILDER". By courtesy of J. L. Womersley, Esq., A.R.L.B.A., A.M.T.P.I., Borough Architect for Northampton.

# FINLOCK GUTTERS LIMITED

20 ST. JOHNS RD., TUNBRIDGE WELLS, KENT  
Telephone: Tunbridge Wells 20396/7/8

7 WORKS FOR SPEEDY DELIVERIES TO ANY PART OF GT. BRITAIN · BARNSTAPLE, DEVONSHIRE · LEEDS, YORKSHIRE · EDINBURGH, SCOTLAND · CWMBRAN, SOUTH WALES · SOUTHAM, WARWICKSHIRE · TUNBRIDGE WELLS, KENT · BELFAST, NORTHERN IRELAND

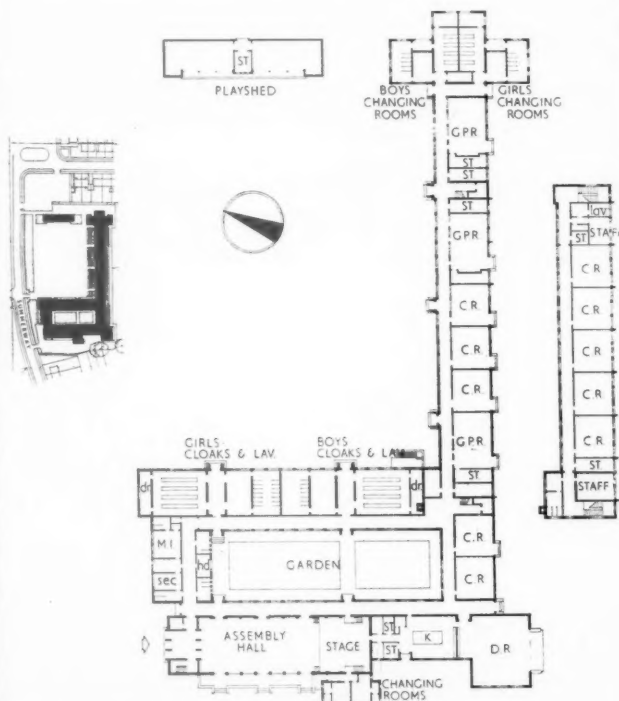
DHB

## SCHOOL

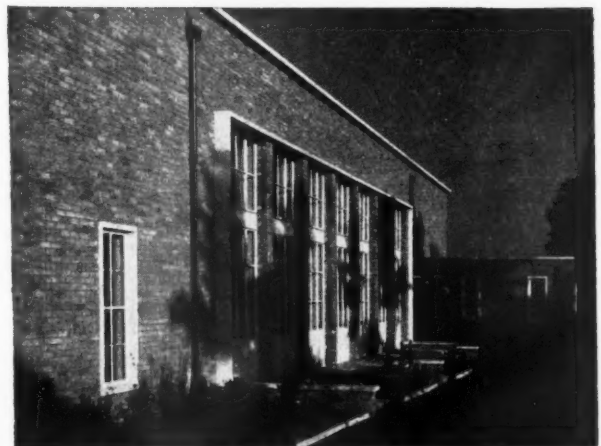
at SUMMERWAY

designed by the CITY ARCHITECT (F. R. STEELE, city architect 1944-46, and H. B. ROWE, city architect since 1946)

This primary school is situated on the new Pinhoe Road housing estate, approximately 2 miles from the city centre. Accommodation: 480 places for juniors of either sex. Site area: 7.2 acres. The land falls mainly in a southerly direction, and is somewhat undulating. The school was originally designed early in 1946. The photographs reading from top to bottom, show the south front of the main two-storey classroom block, the dining room and the assembly hall from the west. Each classroom faces south-east. A french door gives access from each of the ground floor classrooms to the open air. General purpose rooms are fitted with a sink and drainer, and are provided with cinematograph projection units. These are operated by back projection from the rear of the blackboard fittings. All teaching rooms are wired for broadcast reception (re-diffusion). The kitchen is planned in close proximity both to the dining room and to the assembly hall, thus enabling the service of refreshments in the hall if it is used for public purposes. The hall has changing rooms adjacent and is wired for broadcast reception. A projection room has been provided. The stage is fitted with curtains, footlights and top lighting. *Construction:* A steel frame forms a standard bay unit of 8 ft. 3 in. External walls: 11-in. brick of local sand-faced bricks. Suspended floors; precast concrete slabs. Roofs: channel reinforced wood-wool slabs covered with three layers of bituminous felt. Floors: teaching rooms,  $\frac{3}{16}$  in. thermoplastic tile; corridors, precast concrete block, forming duct covers; assembly hall, Muhuhu wood block; entrance hall, cork tiles. *Services:* low pressure hot-water radiators from solid fuel, mechanically stoked boilers. *Cost:* contract amount: £90,000; per place: £173, approx.



Site, ground floor and first floor plans





*Shown above is a reproduction of the certificate recently presented by the Council of Industrial Design to Concrete Limited to mark their participation in the Festival of Britain.*

## BISON AND THE FESTIVAL OF BRITAIN

*A model of a cantilevered Bison Prestressed floor, and a section of a Bison Unit were on show at the Exhibition of Industrial Power. Bison Floors and Roofs were specified for many of the Festival Buildings where the advantages of using complete sections (requiring no in-situ concrete except the grout) were particularly suitable.*

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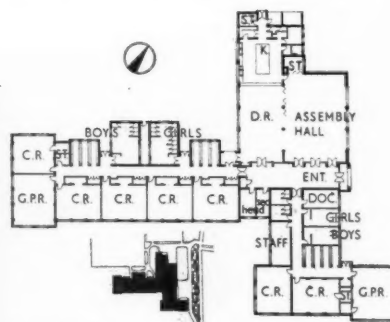


## SCHOOL

at RINGSWELL AVENUE

designed by the CITY ARCHITECT

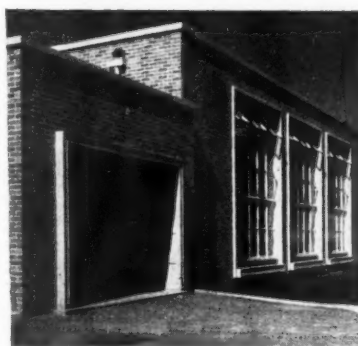
Three miles east of the city centre this school for 360 boys (eventually 450) was designed in 1948 and is now nearing completion. *Construction*: two-storey portions, reinforced concrete frame. Single storey blocks, load bearing brickwork. Roofs: part pitched with steel trusses and purlins and asbestos tiles, and part flat with reinforced concrete and hollow tiles covered with built-up felt roofing. Corridor roofs: asbestos cement decking with the troughs filled with concrete. Pitched roof insulated with glass wool over suspended  $\frac{1}{2}$ -in. insulation board ceilings. Floors: classroom composition block; corridors, cloakrooms and administration, thermoplastic tile; hall, Loliando wood blocks; gymnasium, Loliando wood strip on 2-in. by 2-in. battens on acoustic clips. Heating: low-pressure, solid fuel, automatic, boilers.



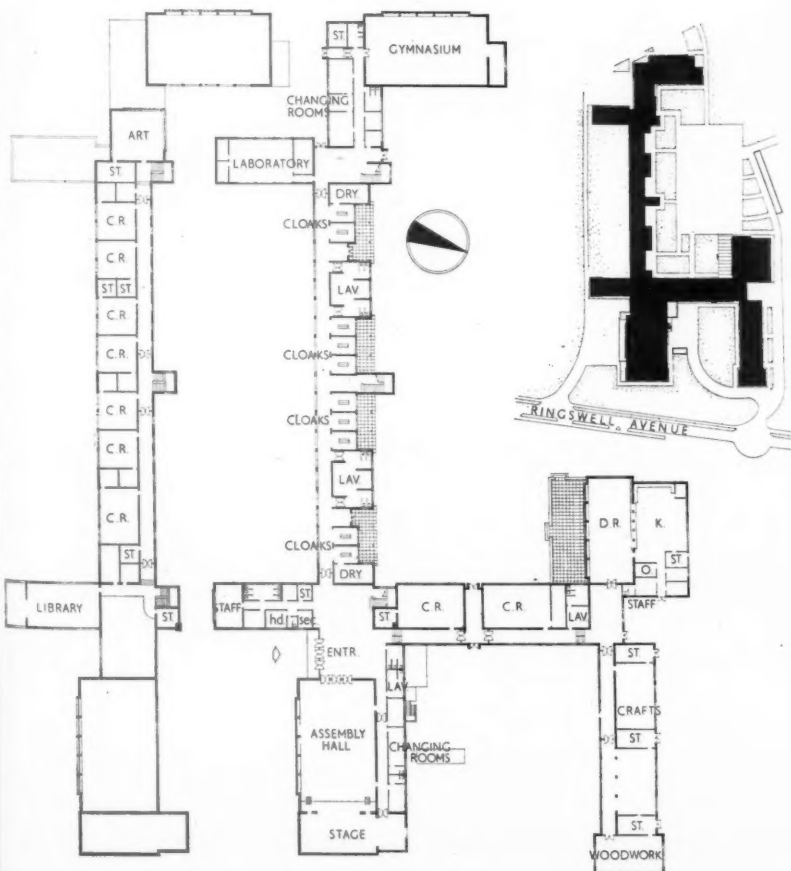
Ground floor and site plans

## SCHOOL

at the COUNTESS WEAR ESTATE  
designed by the CITY ARCHITECT



A junior mixed school of 360 places designed in 1950 and completed in April, 1952. Above, plan and general and detail views of the entrance. Below, a mural in the entrance hall. *Construction*: load bearing brick walls, and RC and hollow tile roofs with  $\frac{1}{2}$ -in. insulation board as ceiling finish and lightweight screed with 3 layers of felt and white chips above. *Cost*: contract £42,192; per place, £118 approx.



First floor, ground floor plans (Scale:  $\frac{1}{16}$ " = 1'0") and site plan





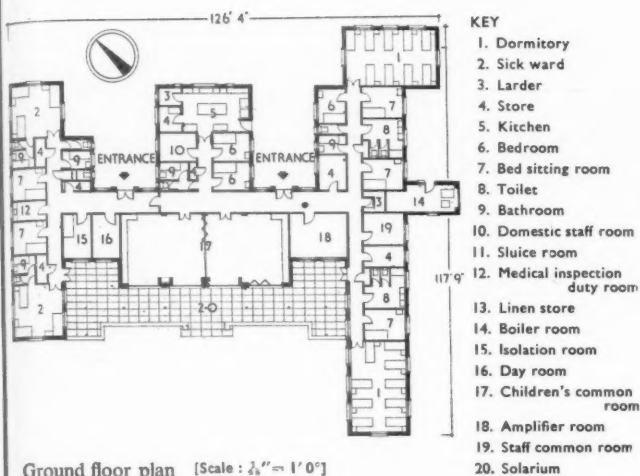
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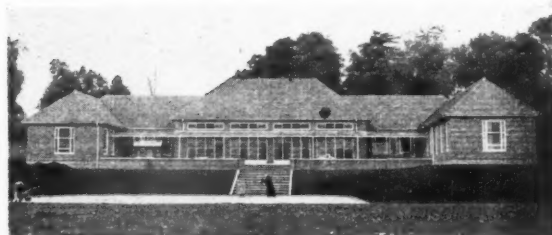
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Ground floor plan [Scale:  $\frac{1}{8}$ " = 1' 0"]



## NURSERY SCHOOL

for the ROYAL WEST OF ENGLAND RESIDENTIAL SCHOOL  
for the DEAF

designed by **JERMAN and RADFORD**

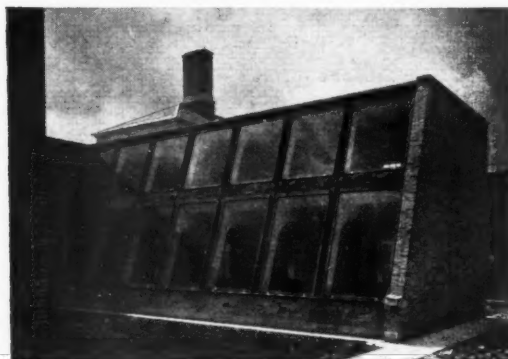
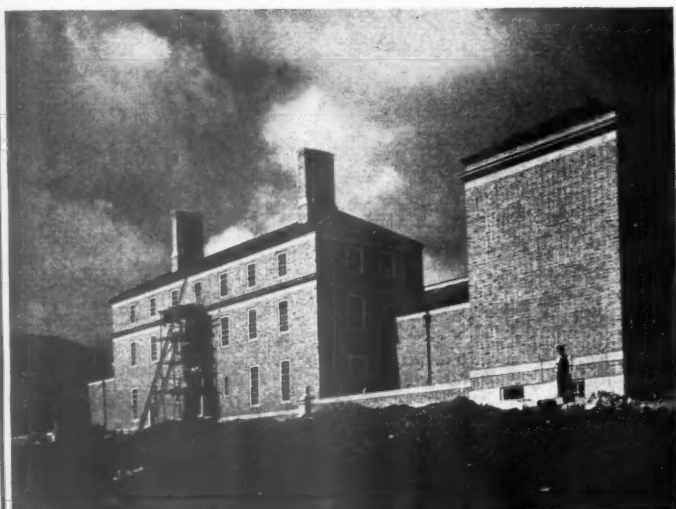
Early education for deaf children is vitally necessary. This school, of largely traditional construction, is adapted from original plans to provide a nursery junior department and sanatorium which economic conditions prevented being carried out. Cost: £20,000.

## BIOLOGICAL LABORATORIES

at HATHERLY

designed by **E. VINCENT HARRIS**

These laboratories for the University College of the South West are nearing completion. Left, the main front. Below, a typical laboratory block.

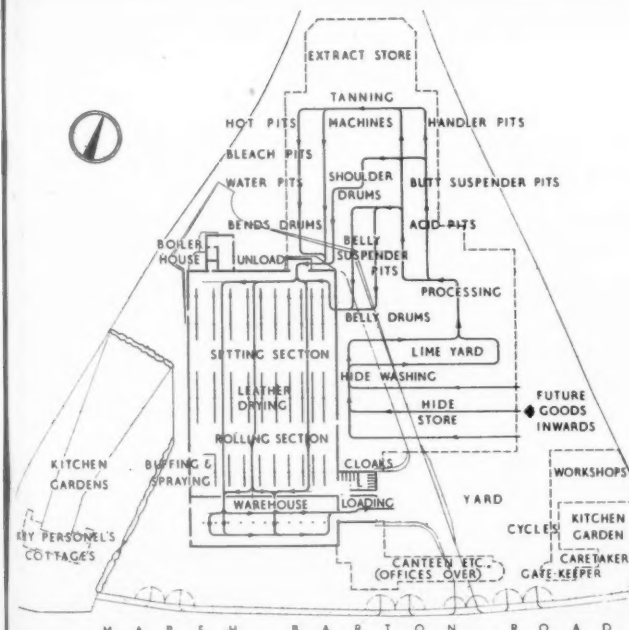


## FACTORY

at MARSH BARTON

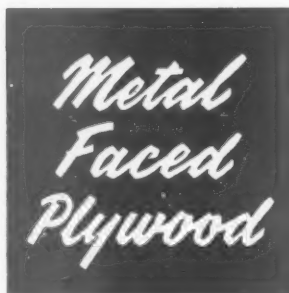
designed by **ADRIAN E. POWELL**

This factory has been erected to replace premises in the centre of the city, which were destroyed by fire. The portion of factory finished to date comprises only the "drying" section. The remainder of the 5-acre site has been planned for future development to enable the whole process of leather manufacture, from the procuring of the raw hide to its processing and drying, to be done on the one site. *Construction*: brick panels in reinforced concrete frame and precast roof units to avoid corrosion of steel by humidity and SO<sub>2</sub> fumes. All fixings of precast units are by aluminium alloy bolts and fixing cleats.



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AND TABLE TOPS  
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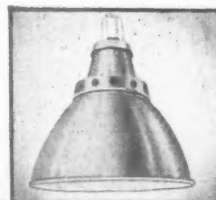


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*The Philips "Radley" fitting illustrated is used with Philips Mercury and Philips Tungsten Lamps to give blended light. Philips Standard Dispersive fittings are also suitable for tungsten or discharge lamps.*





The factory by Adrian E. Powell and illustrated on the previous page seen from the north west.

## Buildings Illustrated

**Flats at 30, Southernhay East, Exeter.** (Page 222.) Architects: Lucas, Roberts & Brown. General contractors: Sidney Pratt (Builders) Ltd. Sub-contractors: A. E. Watson (Exeter) Ltd.; floors, Concrete Ltd.; precast stone, Devon Concrete Co.; hot and cold water supplies, gas supplies and electrical installation, Woodland & Stephens Ltd.; flooring, Semtex Ltd.; wood block flooring, Hollis Bros Ltd.; ironmongery, Rowe Bros. & Co. Ltd.; metal windows, Crittall Metal Window Co. Ltd.; bricks, Western Counties Brick Co. Ltd.; grates (tiled), Rowe Bros. & Co. Ltd.; marathon grates, Allied Ironfounders Ltd.; sanitary fittings, Rowe Bros. & Co. Ltd.

**Offices and Shops for The Pearl Assurance Co. Ltd., High Street, Exeter.** (Pages 223-4.) Architects: Lucas, Roberts & Brown. General contractor: A. E. Eveleigh. Sub-contractors: joinery and panelling, J. Wippell & Co. Ltd.; structural steelwork and fire escape, A. E. Watson (Exeter) Ltd.; floors and flat roofs and "Hyrib" ceilings, Trussed Concrete Steel Co. Ltd.; terrazzo work, South-Western Flooring Co.; portland stonework, Bath & Portland Stone Firms Ltd.; marble and granite work, Walter Jenkins & Co. Ltd.; cold water supplies, Woodland & Stephens Ltd.; hot water supplies and heating and ventilating, Johnson & Baxter (Plymouth) Ltd.; electrical installation, Charles Lye; lift, Express Lift Co. Ltd.; ironmongery and bronze staircase balustrade, James Gibbons Ltd.; sanitary fittings, Walter Otton & Sons Ltd.; gas supplies, South-Western Gas Board; metal windows, Henry Hope & Sons Ltd.; bronze doors, H. H. Martyn & Co.; bronze canopy and fanlight, The Birmingham Guild Ltd.; asphalt tanking, Val de Travers Asphalt Co. Ltd.; "Korkoid" flooring, Korkoid Decorative Floors; dome roof lights, Pilkington Bros. Ltd.; wood block floors, Beach Bros. (Dover) Ltd.; fire resisting doors, Milners Safe Co. Ltd.; steel w.c. partitions, Rowe Bros. & Co. Ltd.; (Crittall & Co., Ltd.); fire apparatus, Pyrene Co. Ltd.

**Offices and Shops for The Commercial Union Assurance Co. Ltd., High Street, Exeter.** (Pages 223-4.) Architects: Lucas, Roberts & Brown. General contractors: The Exeter Building Contractors Ltd. Sub-contractors: vestibule doors, joinery, panelling, etc., Bath Cabinet and Artcraft Ltd.; joinery, J. Wippell & Co. Ltd.; wrought iron balconette, railings and staircase balustrade, Hancock Industries Ltd.; ironmongery, James Gibbons Ltd.; wood block floors, Beach Bros. (Dover) Ltd.; metal windows, Rustproof Metal Window Co. Ltd.; strong room doors and ventilators, Chubb & Sons, Lock & Safe Co. Ltd.; fire door (boiler room), Mather & Platt Ltd.; bronze doors, fanlight and letters, Woodrow Metals Ltd. (manufacturers—Chas. Benshaw & Co. Ltd.); bronze lanterns, George Parnall & Co. Ltd.; bronze coat of arms, Gardner & Co. Ltd.; lifts, Express Lift Co. Ltd.; sanitary plumbing, cold water supplies, electrical installation, Garton & King Ltd.; canteen kitchen equipment, Rowe Bros. & Co. Ltd.; marble and granite work, Walter Jenkins & Co. Ltd.; gas supplies, South-Western Gas Board; portland stonework, Bath & Portland Stone Firms Ltd.; sanitary and cloakroom fittings, Walter Otton & Sons Ltd.; reconstructed stonework, Wharf Lane Concrete Co. Ltd.; floors and flat roofs, Trussed Concrete Steel Co.; expanded metal ceilings, The Expanded Metal Co. Ltd.; dome lights to flat roof and glass panels to main staircase, Pilkington Bros. Ltd.; terrazzo work, South-Western Flooring Co. Ltd.; asphalt tank-

ing, Bright's Asphalt Co. Ltd.; heating and ventilating, G. N. Haden & Sons Ltd.; "Thermotile" flat roof finishes, D. Anderson & Son Ltd.; "Korkoid" flooring, Korkoid Decorative Floors; structural steelwork, A. E. Watson (Exeter) Ltd.; facing bricks, Proctor & Lavender Ltd.; J. & W. J. Saunders (Western Counties Brick Co. Ltd.); roofing tiles, John Browne & Co. (Bridgwater) Ltd.; lighting, Gordon Ford & Co. Ltd.; steel shelving, Sankey-Sheldon Ltd.; furniture, Bath Cabinet Makers Ltd.; J. Wippell & Co. Ltd.; board room furnishings, Lawrey Knight Ltd.; telephones, Dictograph Telephones Ltd.; G.P.O.; blinds, Venetian Vogue Ltd.

**Department Store for Marks & Spencer Ltd. at Exeter.** (Page 225.) Architects: Lewis & Hickey, F.A.R.I.B.A. Consultants: David W. James Carrington, n.s.c. steel structure and piled foundations; James Gardner, o.b.e., R.D.I. (interiors of staff lounge and dining room). Quantity surveyors: Gleeds, of London. Sub-contractors: piling, The Cementation Co. Ltd.; electrical work, Bower Engineering Works Ltd.; structural steel, Moreland Hayne & Co. Ltd.; heating, hot water system and ventilating, C. B. Jackson & Co. Ltd.; hollow tile floors and R.C. work, Diespeker & Co. Ltd.; plumbing, A. Scull & Son Ltd.; lifts, Wm. Wadsworth & Sons Ltd.; windows, Crittall Manufacturing Co. Ltd.; reconstructed stone, Empire Stone Co. Ltd.; asphalt, Rock Asphalt Co. Ltd.; waterproof rendering, Quikset Water Sealers Ltd.; terrazzo, Diespeker & Co. Ltd.; shopfront, Holtum & Green Ltd.; marble work, J. Whitehead & Sons Ltd.; fibrous plasterwork, Tomei & Sons Ltd.; plastering, H. G. Williams; plastic tile floors, Semtex Ltd.; wall and floor tiling, Carter & Co. Ltd.

**Shop for Montague Burton Ltd., High Street, Exeter.** (Page 225.) Architect: N. Martin, A.R.I.B.A., staff architect to Messrs. Burton Ltd. General contractors: M. Harrison & Co. (Leeds) Ltd. Sub-contractors: structural steelwork, Banister Walton & Co. Ltd.; reinforced concrete floors and roof, John Cook & Son (Huddersfield) Ltd.; wood block flooring, Vigers Bros. Ltd.; heating, Spily & Holman Ltd.; portland stone, The Bath & Portland Stone Firms Ltd.; passenger lift, Pickering's Ltd.; asphalt, Bright's Asphalt Co. Ltd.; steel windows, Henry Hope & Sons Ltd.; sanitary fittings, The Middleton Fireclay Co. Ltd.; plasterer, H. G. Williams; ironmongery, James Gibbons Ltd.; suspended shop ceiling, Gyprock Products Ltd.; painter and decorator, R. F. Nichols; ironfounders work, W. Shepherd & Son; shopfront, shopfittings and electric work, Montague Burton Ltd.; Shop Fitting and Electrical Department.

**Premises for Lloyds Bank, Exeter.** (Page 225.) Architects: Charles E. Ware & Son. Quantity surveyors: Banks, Wood & Partners. Consulting engineers: Leslie Turner & Partners. Heating, ventilating and electrical consultants: J. Rogers Preston & Partners. General contractors for excavation: Exeter Building Contractors Ltd. General contractors for R.C. foundations and basements M. T. Sleeman & Sons. General contractors for superstructure: W. T. Nicholls Ltd. Constructional engineers: Smith, Walker Ltd. Sub-contractors: precast floors, Concrete Ltd.; heating and ventilating engineers, Barret Wright Ltd.; electrical engineers, A. J. Record & Son Ltd.; stonework, Bath & Portland Stone Firms Ltd.; marble, W. W. Jenkins & Co.; lifts, Waygood Otis Ltd.; pneumatic tubes, Lamson Engineering Co. Ltd.; metal windows, C. E. Welstead Ltd.; Henry Hope & Sons Ltd.; lantern lights, Henry Hope & Sons Ltd.; metal office partitions, Rowe Bros. & Co. Ltd.; bronze entrance gates, The Birmingham Guild Ltd.

**Offices and Shops, High Street, Exeter, for Messrs. Ravensett Properties.** (Page 226.) Architects: Lionel H. Fewster & Partners. Quantity surveyor: Cyril Sweett. General contractors: Exeter Building Contractors Ltd. Sub-contractors: Steelwork, Redpath Brown & Co. Ltd.; suspended floors, Diespeker & Co. Ltd.; metal windows, Williams & Williams Ltd.; asphalt, Val de Travers Asphalt Paving Co. Ltd.; roof coverings, Permaite Ltd.; lift engineers, Keighley Lifts Ltd.; electrical installation, The Phenix Electrical Co. (London) Ltd.; gas installation, South-Western Gas Board; sanitary fittings, John Bolding & Sons Ltd.; fire doors and escape staircases, The General Constructional & Engineering Co. Ltd.; heating and ventilating installation, G. N. Haden & Sons Ltd.; staircase balustrading, etc., The Bromsgrove Guild Ltd.; wood block flooring, The National Flooring Co. Ltd.; plastic tile flooring, Semtex Ltd.; ironmongery, Adrian Stokes Ltd.

**Shops for Modelia & Messrs. Wymans Ltd., High Street, Exeter.** (Page 227.) Architects: Lucas, Roberts & Brown and Lionel H. Fewster & Partners (for Wymans). General contractors: Thomas Vanstone & Sons Ltd. Sub-contractors: structural steel, A. E. Watson (Exeter) Ltd.; floors and flat roofs and "Hyrib" ceiling, Trussed Concrete Steel Co. Ltd.; stonework, (Hartham Park) Bath & Portland Stone Firms Ltd.; cold water supply, hot water supply, Woodland & Stephens Ltd.; ventilating, Johnson & Baxter (Plymouth) Ltd.; electrical installation, Woodland & Stephens Ltd.; ironmongery and door furniture, James Gibbons Ltd.; gas supply, Harper Gas Radiation, South-Western Gas Board; metal windows, Henry Hope & Sons Ltd.; roof coverings, Ruberoid Roof Co. Ltd.; lantern light, Henry Hope & Son Ltd.; fire escape apparatus, Scholes & Wilson; floor finishes, Cellulose Flooring Co. Ltd.; balcony railings, V. E. Beer; staircase, Teign Valley Concrete Co. Ltd.; C.I. panels, Garton & King Ltd.; bricks, Western Counties Brick Co. Ltd.; shop fittings, (Modelia) Sharp & Law; shop fittings, (Wymans Ltd.) Stanley Jones.

**Shop, Restaurant and Offices for Messrs. Colson's Ltd., High Street, Exeter.** (Page 227.) Architects: F. W. Beech & E. Curnow Cooke, F.A.R.I.B.A. General contractors: M. T. Sleeman & Sons. Sub-contractors: structural steelwork, Matthew T. Shaw & Co. Ltd.; floors, Diespeker & Co. Ltd.; stonework, Bath & Portland Stone Firms Ltd.; bricks, Himley Brick Co. Ltd.; windows and lantern lights, Henry Hope & Sons Ltd.; asphalt, Val de Travers Asphalt Paving Co. Ltd.; sprinkler installation, Mather & Platt Ltd.; panel heating and domestic hot water, G. N. Haden & Sons Ltd.; cash tube system, Lamson Engineering Co. Ltd.; plumbing, Woodland & Stephens; plastering, A. E. G. Anderson & Sons; floor finishes, Chitenden & Simmons (Contracting) Ltd.; specialized decorative work, Clark & Fenn Ltd.; electrical work, Charles Lye; shop front and fittings, D. Drake & Sons Ltd.; lifts, Waygood-Otis Ltd.; ironmongery and sanitary fittings, Walter Otton & Sons Ltd.; paints, John Line & Sons Ltd.

**City architect: H. B. ROWE, F.R.I.B.A., A.M.I.STRUCT.E., Deputy City architect: R. B. REDFERN, A.R.I.B.A., A.M.T.P.I. Chief assistant architect: F. MOULD, A.R.I.B.A. Principal assistant, planning: R. D. FRASER, A.R.I.B.A., DIP.ARCH. (ABERDEEN). Principal assistant, housing: G. G. GILPIN, A.I.A.A. Principal assistant, education: R. J. LANE, A.R.I.B.A.**

**Senior Assistants associated with the buildings illustrated on pages 223-235: G. D. Gould, A.R.I.B.A., DIP.ARCH. (SHEFFIELD); S. C. Gould, A.R.I.B.A., A.R.I.C.S.; L. V. Halliwell, A.R.I.B.A., DIP.ARCH. (MANCHESTER); K. H. Harker, A.R.I.B.A., DIP.ARCH. (SHEFFIELD); A. C. Newland, A.R.I.B.A.; W. S. W. Riley, A.R.I.B.A.; S. J. Stone, A.R.I.B.A.; V. Uren, A.R.I.B.A.**

**Countess Wear and Stoke Hill Estates, Exeter.** (Pages 228-233.) Main building contractors responsible for the erection of both estates: Gee, Walker & Slater; Exeter Building Contractors Ltd.; Devon Contractors Ltd.; Woodman & Son (Builders) Ltd.; J. R. Cowley & Co. Ltd.; Soper & Ayers; Isca Building Contractors Ltd.; Wakeham & Tucker; M. T. Sleeman & Sons; F. Tuckett; A. W. Crawshaw; S. P. Clements; W. E. B. Howell; J. T. Tucker; Wilson Lovatt & Sons Ltd.; Holtby & Dudman Ltd.; Westcott, Austin & White Ltd.; W. R. Brealy; F. A. Bridges & Son; A. J. Adams; A. E. Gregory; E. Preston Ltd.; R. Packer & Son; H. N. White & Sons Ltd.; F. W. Davey Ltd.; Tuckett Brothers.

**Shops and Maisonnettes, Countess Wear Housing Estate, Exeter.** (Page 231.) Architects: City Architect's Department. General contractors: T. B. Keate & Co. Sub-contractors: structural steelwork, A. E. Watson (Exeter) Ltd.; facing bricks, Western Counties Brick Co. Ltd.; cellular concrete blocks, Broad & Co. Ltd.; electrical installation, H. W. Wrixon; built-up roofing, flat roof paving, F. McNeill & Co. Ltd.; precast concrete window surrounds, Bryco (Products) Ltd.; fireplace surrounds, Rowe Bros. & Co. Ltd.; "Era" fires, W. Otton & Sons Ltd.; metal windows, The Crittall Manufacturing Co. Ltd.; metal railings and fuel bin fittings, W. Brown & Sons; sanitary fittings and copper cylinders, Mitchell & Sons Ltd.; Wiggins Sankey Ltd.; Rowe Bros. & Co. Ltd.; T. Knapman & Co. Ltd.; glass dome light, T. W. Ide, Ltd.; gas installation, South-Western Gas Board.

**Old People's Homes, Stoke Hill Housing Estate, Exeter.** (Page 233.) Architects: City Architect's

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mps.  
(LD.212A)



Department. General contractors: Woodman & Son (Builders) Ltd. Sub-contractors: structural steelwork, A. E. Watson (Exeter) Ltd.; metal windows and doors, "Crittall," supplied by Rowe Bros. & Co. Ltd.; metal door frames, Henry Hope & Sons Ltd.; ironmongery, Walter Otton & Sons Ltd., Rowe Bros. & Co. Ltd., Wiggins Sankey Ltd., Lockerbie & Wilkinson Ltd.; sanitary fittings, Walter Otton & Sons Ltd., Rowe Bros. & Co. Ltd., Wiggins Sankey Ltd.; pitchmastic flooring, Brights Asphalte Contractors Ltd.; wood block flooring, Jewsons Ltd.; asphalt tanking to boiler house, Val de Travers Asphalte Co. Ltd.; precast structural flooring, "Bison," Concrete Ltd.; precast concrete window surrounds, cills and lintels, Bryco Products Ltd.; precast concrete steps, reconstructed stone, mantel shelf, Teign Valley Concrete Co. Ltd.; duct covers, handrails, fuel bin covers, W. Brown & Sons; suspended ceiling, Anderson Construction Co. Ltd.; slatted tile fireplace surrounds, Rowe Bros. & Co. Ltd.; mastic asphalt roofing, Brights Asphalte Contractors Ltd.; one-pipe plumbing, Wm. Dibben & Sons Ltd.; bitumen felt roofing, D. Anderson & Sons Ltd.

**Secondary Modern School for Girls, Exeter.** (Page 234.) Architects: City Architect's Department. General contractors: The Exeter Building Contractors Ltd. Sub-contractors: reinforced concrete frame, Part I, Trussed Concrete Steel Co. Ltd., Part II, Helical Bar & Engineering Co. Ltd.; metal windows, Rea Metal Casements Ltd.; heating and hot water, G. N. Haden & Sons Ltd.; electrical installation, Colston Electric Co. Ltd.; gas installation, South-Western Gas Board; steel roof trusses, A. E. Watson (Exeter) Ltd.; patent copper roofing, Broderick Insulated Structures Ltd.; suspended ceilings, Anderson Construction Co. Ltd.; composition block flooring, Granwood Flooring Co. Ltd.; felt roofing, Ruberoid Co. Ltd.; broadcast reception, Rediffusion Ltd.; lightning conductors, W. J. Furze & Co. Ltd.; "Accotile" flooring, Neuchatel Asphalte Co.; floor and wall tiling, A. E. G. Anderson; "Paropa" roof terrace, Frazzi Ltd.; playground surfacing, etc., E. Harris & Son; blinds, Avery & Co. Ltd., Hills (West Bromwich) Ltd.; terrazzo staircase, South-Western Flooring Co.; duct covers, W. Brown & Sons; ironmongery, W. Otton & Sons Ltd., Lockerbie & Wilkinson Ltd.

**Primary School, Exeter.** (Page 235.) Architects: City Architect's Department. General contractors: Devon Contractors Ltd. Sub-contractors: steelwork, A. E. Watson (Exeter) Ltd.; concrete floors, Concrete Ltd.; "Bison"; metal windows, Crittall Manufacturing Co. Ltd.; electrical installation, Colston Electric Co. Ltd.; hot water and heating, G. N. Haden & Sons Ltd.; broadcast reception, Rediffusion Ltd.; playgrounds

and pavings, W. & J. Glossop Ltd.; floors ("Accotile" and wood block), R. W. Brooke & Co. Ltd.; plastering, A. C. V. Telling Ltd.; gas installation, South-Western Gas Board; floor tiling, Carter & Co. Ltd.; stage curtains, etc., Lawrey Knight Ltd.; lightning conductors, W. J. Furze & Co. Ltd.; limpet asbestos spray, Turners Asbestos Manufacturing Co.; flush doors, ironmongery, Lockerbie & Wilkinson Ltd.; sanitary fittings, W. Otton & Sons Ltd.; felt roofing, D. Anderson & Sons Ltd.; facing bricks, Exeter Brick & Tile Co. Ltd.

**Junior Mixed School, Exeter.** (Page 236.) Architect: City Architect's Department. Exeter. General contractors: The Exeter Building Contractors Ltd. Sub-contractors: reinforced concrete, Helical Bar & Engineering Co. Ltd.; metal windows, Rowe Bros. (Messrs. Crittall); composition block flooring and under-floor heating, Granwood Flooring Co.; hot water and heating, Saunders & Biss Ltd.; electrical installation, Devon Electric & General Services Ltd.; automatic stokers, Ashwell & Nesbit Ltd.; venetian blinds, J. Avery & Co. Ltd.; felt roofing, Wm. Briggs & Son; folding and sliding doors, G. M. Hammer & Co.; broadcast reception, Rediffusion Ltd.; "Accotile" flooring, Neuchatel Asphalte Co.; plastering and vermiculite roof screedings, A. E. G. Anderson; plaster mural, Clark & Fenn Ltd.; facing bricks, Exeter Brick & Tile Co.; cloakroom fittings, Cloakroom Equipment Ltd.

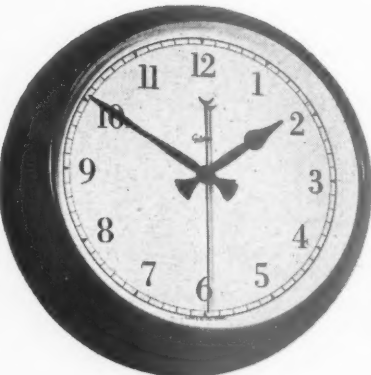
**Secondary Modern Boys' School, Exeter.** (Page 236.) Architects: City Architect's Department. General contractors: W. J. Channing & Sons Ltd. Sub-contractors: reinforced concrete frame, floors and roofs, The Helical Bar & Engineering Co. Ltd.; steel roof trusses, Fairfield Shipbuilding & Engineering Co. Ltd.; metal windows, Henry Hope & Sons Ltd.; fibre-board suspended ceilings, Hall & Co.; asbestos roofing, Universal Asbestos Manufacturing Co.; facing bricks, Iron & Marble Co. Ltd. (Bristol); glass and concrete windows to entrance hall, J. A. King & Co.; plaster ceilings to assembly hall, Clark & Fenn Ltd.; meta-mica plaster ceilings, Meta Mica Ltd.; hot water and heating installation, G. N. Haden & Sons Ltd.; electrical installation, Devon Electric & General Services Ltd.; broadcast reception, Rediffusion Ltd.; automatic stokers, Ashwell & Nesbit Ltd.; built-up roofing (felt), D. Anderson & Son Ltd.; sanitary fittings, Rowe Bros. & Co. Ltd., W. Otton & Sons Ltd.; ironmongery, Lockerbie & Wilkinson Ltd., W. Otton & Sons Ltd.; wood block and strip flooring, Vigers Bros. Ltd.; flush doors, The Adamite Co. Ltd.; "Emalux" glazed wall finishes, J. Ellis & Sons Ltd.; "Accotile" flooring, The Neuchatel Asphalte Co.; granwood flooring, Granwood Flooring Co. Ltd.

**School for the Deaf, Exeter.** (Page 237.) Architect: H. Alben Peters, B.Arch., Liverpool, A.R.I.B.A. General contractors: Stephens & Son (1941) Ltd. Sub-contractors: central heating, domestic hot and cold water supply and electrical installations, Woodland & Stephens; steel windows, Henry Hope & Sons Ltd.; terrazzo pavings and wall linings, South-Western Flooring Co. Ltd.; wood block flooring, Horsley Smith Ltd.; clay roofing tiles and "Ruftex" facing bricks, Exeter Brick & Tile Co.; sanitary fittings and ironmongery, Walter Otton & Sons Ltd.

**Biological Laboratories, Exeter, Devon.** (Page 237.) Architect: E. Vincent Harris, O.B.E., R.A., F.R.I.B.A. General contractors: Sleeman & Sons. Sub-contractors: revolving doors, Colman & Sons Ltd.; duct covers, Broads Manufacturing Co. Ltd.; sanitary equipment, Doulton & Co. Ltd.; inside blinds, H. J. Gray Ltd.; lightning conductors, J. W. Gray & Son Ltd.; electrical installation, Grierson Ltd.; heating, G. N. Haden & Sons Ltd.; laboratory refrigerator, Lightfoot Refrigeration Co. Ltd.; fire hose reels, Roberts McLean (London) Ltd.; steel windows, Luxfer Ltd.; linoleum, Maple & Co. Ltd.; tarmacadam, W. G. Northcott & Co. Ltd.; slating, Roberts Adlard & Co. Ltd.; ironmongery, Rowe Bros. & Co. Ltd.; manhole covers, Rowson, Drew & Clydesdale Ltd.; laboratory fittings and benching, J. Wippell & Co. Ltd., in conjunction with Sleeman & Sons; facing bricks, Stonehouse Brick & Tile Co. Ltd.; asphaltting, Val de Travers Asphalte Paving Co. Ltd.; balustrading, Luxfer Ltd. and J. Wippell & Co. Ltd.; gas, hot and cold water compressed air and plumbing, Arthur Scull & Son Ltd.; paving, Jos. Brooke & Sons and Beacon Pre-Cast Ltd.; masonry, Bath & Portland Stone Firms Ltd.

**Factory at Marsh Barton Road, Exeter.** (Page 237.) Architect: Adrian E. Powell, A.R.I.B.A., A.I.S.T.R.U.C.E. Quantity surveyor: Leonard H. Dark, A.I.A.S. General contractors: C. A. Hayes & Sons Ltd. Clerk of works: H. Solomon. Sub-contractors: bricks, J. & W. J. Saunders; reinforcement, The Square Grip Reinforcement Co. Ltd.; precast concrete work, Beacon Precast Ltd.; asbestos cement roofing, W. B. Davey & Sons; structural steel to boiler house and despatch bay, Gardiner Sons & Co. Ltd.; fireproof doors, Mather & Platt Ltd.; sliding doors, etc., E. J. Harris & Sons Ltd.; sliding door tracks, P. C. Henderson Ltd.; granolithic paving, Plastona Ltd.; ironmongery, The Metal Agencies Co. Ltd.; sanitary goods, Rowe Bros. & Co. Ltd.; metal windows, Henry Hope & Son Ltd.; precast copings, The Bristol Stone & Concrete Co. Ltd.; metal letters, Gardiner Sons & Co. Ltd.; paints, Tretol Ltd., E. Parsons & Sons Ltd.; electrical work, W. T. Porter & Co.; conveyors, Rowson, Drew & Clydesdale Ltd.

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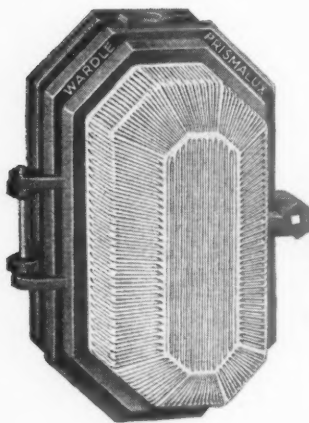
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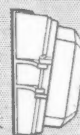
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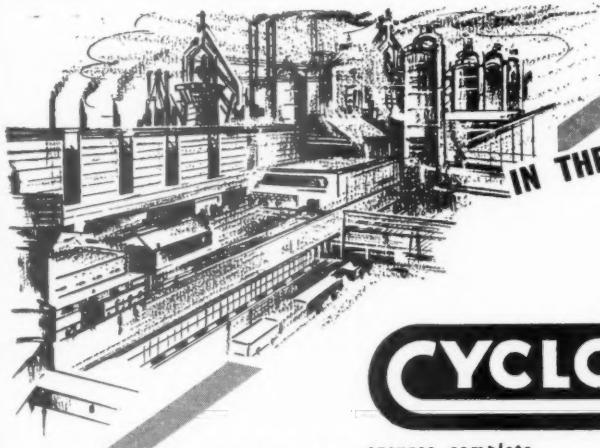
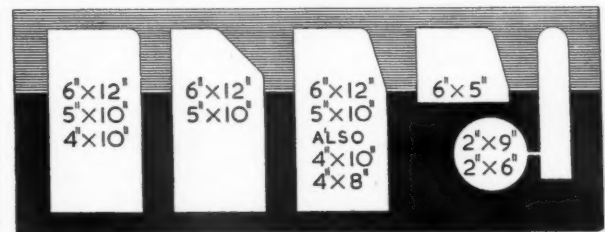
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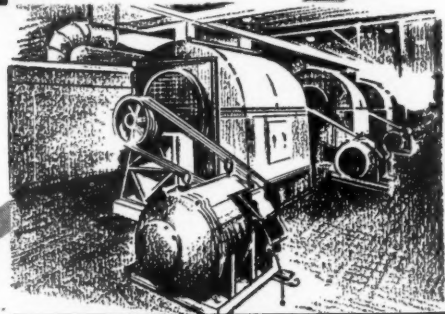


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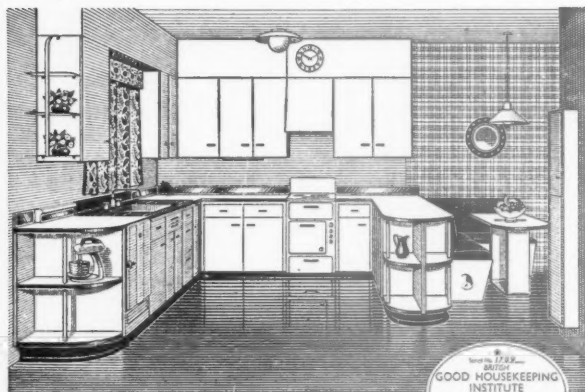
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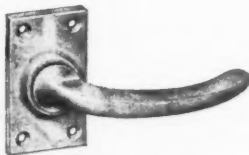
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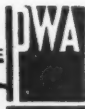


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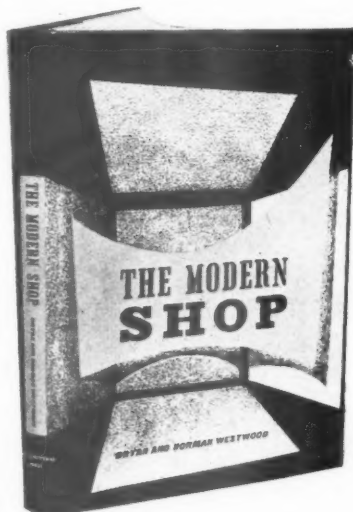
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Applications are invited for the post of HEAD OF THE DEPARTMENT OF ARCHITECTURE. The Diploma of the Department is recognised for exemption from the Final Examination for the Associateship of the R.I.B.A.

Salary: Burnham Technical Scale, Head of Department, Grade III, £1,190 by £25-£1,340.

Applications should be sent to the Registrar, College of Art, The Newark, Leicester, as soon as possible.

ELFED THOMAS,  
Director of Education. 7214

### LONDON ELECTRICITY BOARD. ENGINEERING DRAUGHTSMAN.

Applications are invited for the above position in the Southwark District of the Southern Sub-Area.

Candidates should have had a good general and technical education and be experienced in one or more of the following subjects: Building and Civil Engineering Design; Engineering Drawing; Plant Lay-out in Sub-stations; Lay-out and Site Plans of Mains Work; Electrical Diagrams.

The posts are graded under Schedule "D" of the National Joint Board agreement as Grade VI, £438 to £574 7s. per annum, inclusive of London allowance.

Application forms obtainable from Establishments Officer, 45, New Broad Street, E.C.2, to be returned by 25th August, 1952. Please enclose addressed foolscap envelope and quote ref. V.1488/A. on all correspondence. 7249

### ESTON URBAN DISTRICT COUNCIL. APPOINTMENT OF ARCHITECTURAL ASSISTANT, GRADE III, IV or V.

Applications are invited for the appointment of Architectural Assistant, at a salary in accordance with Grade A.P.T. III, IV or V of the National Scales, namely £520 to £570, £555 to £600, or £595 to £645, according to qualifications and experience.

Applicants should have had a good general training, with experience in housing work, and preference will be given to candidates with an Architectural qualification.

The conditions of service are those formulated by the National Joint Council, and the appointment is subject to the passing of a medical examination and the provisions of the Local Government Superannuation Act, 1937. Housing accommodation will be made available if required.

Applications, giving full details of training, qualifications, experience, and copies of two recent testimonials, should be sent to me by first post on Thursday, 28th August, 1952.

N. C. HARRISON, A.M.I.C.E.,  
M.I.Mun.E.,  
Engineer and Surveyor.

Engineer and Surveyor's Department,  
Normanby Road, South Bank, Middlesbrough.  
8th August, 1952. 7248

### DERBYSHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT. APPOINTMENT OF PLANNING ASSISTANT, A.P.T. GRADE V.

Applications are invited from those with experience of statutory planning or related work for a temporary appointment of Planning Assistant, A.P.T. Grade V, in the Headquarters Office at Derby. The appointment to be for a period of twelve months in the first instance.

Candidates should have passed the Intermediate Examination of the Town Planning Institute and/or the Royal Institute of British Architects, or have graduated in Architecture or Town Planning.

The appointment will be subject to medical examination, the Council's General Conditions of Service, and the Local Government Superannuation Act, 1937.

Canvassing, either directly or indirectly, will be deemed a disqualification, and candidates are required to disclose whether or not they are to their knowledge related to any member or senior official of the Council.

Applications, stating age, qualification and experience, accompanied by one recent testimonial and the names of two persons to whom reference can be made, should be addressed to and reach the County Planning Officer, 8a, Bold Lane, Derby, not later than 31st August.

Post excepted from Notification of Vacancies Order.

MAURICE J. HELLIER,  
County Planning Officer. 7250

### DERBYSHIRE COUNTY COUNCIL. DEVELOPMENT OF NEW TECHNIQUES IN THE CONSTRUCTION OF A MODERN SECONDARY SCHOOL IN DERBYSHIRE.

Two permanent SENIOR ASSISTANT ARCHITECTS (salary scales, £735-£810 and £645-£719 p.a. respectively) are required, to work for the first two years at the Ministry of Education in London on the above project. An additional allowance of up to £30 will be payable whilst working in London.

The County Council are collaborating with the Ministry in this matter, and the appointments offer excellent facilities for the study of the subject.

Experience in the design and construction of new schools desirable.

Appointments pensionable and subject to medical examination. Canvassing disqualifies. Application forms and further details from the undersigned. Closing date, 30th August, 1952.

F. H. CROSSLEY, Dipl.Arch. (Liverpool),  
F.R.I.B.A.,  
County Architect. 7256

St. Mary's Gate, Derby.

## LIVERPOOL REGIONAL HOSPITAL BOARD ERECTION OF NEW MENTAL DEFICIENCY HOSPITAL.

Applications are invited from suitably qualified persons for the following appointments to assist in the design and supervise the erection of a new hospital near Southport, to accommodate 1,000 mental deficiency patients. The persons appointed will be employed solely on the new scheme and will be responsible to the Regional Architect (T. N. Mitchell, B.Arch., A.R.I.B.A.):—

(a) SENIOR ASSISTANT ARCHITECT (£900-£950-£1,000 per annum). To supervise the preparation of drawings and the carrying out of the scheme. Applicants must be Associates of the R.I.B.A., and preferably with a University qualification, and must have had considerable experience in the planning and execution of large projects.

(b) ASSISTANT ARCHITECT (£520-£515 (2) £20-£570 per annum). Applicants must have passed the Intermediate Examination of the R.I.B.A. and have a good general experience in design and construction.

Some experience in Hospital work for both appointments would be an advantage, but is not essential.

The appointments will be of limited duration, extending to probably 4-6 years, and will be terminable at any time within the period stated by three calendar months' notice on either side in the case of appointment (a) and one calendar month in the case of appointment (b).

Applications, stating age, technical experience and qualifications, present and previous appointments with present salary, and clearly indicating the post in respect of which the application is submitted, together with the names and addresses of three referees, two of which must be technical, should be forwarded to reach the undersigned at 19, James Street, Liverpool, 2, not later than 19th September, 1952.

VINCENT COLLINGS,  
Secretary to the Board.

### WREXHAM RURAL DISTRICT COUNCIL. APPOINTMENT OF (a) ENGINEERING ASSISTANT, (b) ARCHITECTURAL ASSISTANT.

Applications are invited for the following appointments in the Engineer and Surveyor Department of the Council, namely:—

(a) Engineering Assistant, at a salary in accordance with Grade V of the A.P.T. Division of the National Scales of Salaries. Applicants must be Associate Members of the Institute of Municipal Engineers or of the Institute of Civil Engineers and must possess sound practical experience in Municipal Engineer's office, particularly in the design and construction of sewers and sewage disposal works and the development of housing estates.

(b) Architectural Assistant, at a salary in accordance with Grade III of the A.P.T. Division. Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects and must possess good general experience in a Municipal Engineer's office.

The Council will be prepared to consider the provision of housing accommodation in regard to appointment (a) if required.

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

Applications, stating age, qualifications, experience, present appointment and salary, together with copies of two recent testimonials, must be delivered to the undersigned not later than Monday, 1st September, 1952, in envelopes suitably endorsed.

Canvassing, either directly or indirectly, will be a disqualification, and relationship to any member or senior officer of the Council must be disclosed.

TREVOR L. WILLIAMS,  
Clerk and Solicitor.

Imperial Buildings, Regent Street, Wrexham.  
8th August, 1952. 725

### BOROUGH OF LUTON. QUANTITY SURVEYING ASSISTANT

Required in Borough Engineer's Department (A.P.T., Grade V, £570-£620 per annum, dependent on appropriate qualifications and experience). N.J.C. service conditions; post pensionable; medical examination; no house offered. Write, giving age, full particulars and two references, to Borough Engineer, Town Hall, Luton, by Friday, 29th August, 1952.

W. H. ROBINSON,  
Town Clerk. 726

### EAST SUFFOLK COUNTY COUNCIL. ARCHITECTURAL ASSISTANT.

Applications are invited for this appointment (A.P.T., Grades III-IV, £525-£600) in the County Architect's Department.

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects or equivalent examination, and should have a good general experience in the preparation of working drawings and writing of specifications.

The appointment, which is superannuable and subject to medical examination, will be subject to one month's notice on either side.

Applications, stating age, qualifications and previous experience, accompanied by copies of two recent testimonials, to the County Architect, E. J. Symcox, F.R.I.B.A., County Hall, Ipswich, by 6th September, 1952.

Canvassing, either directly or indirectly, will disqualify.

**BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT—POPULAR.**  
ARCHITECTURAL ASSISTANT, A.P.T. IV.  
Application forms from Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3.  
Closing date: first post Monday, 1st September, 1952. 7264

**MIDDLESEX COUNTY COUNCIL. EDUCATION COMMITTEE.**  
**TWICKENHAM TECHNICAL COLLEGE AND SCHOOL OF ART EGERTON ROAD, TWICKENHAM, MIDDLESEX.**  
Required, September, 1952, suitably qualified person as part-time TEACHER of Interior Design and Decoration, on Tuesday, Wednesday and Thursday mornings and afternoons.  
Salary in accordance with Middlesex County Council Approved Scales for Part-time Teachers in Further Education Establishments.  
Application forms (stamped addressed envelope) to the PRINCIPAL, to whom they should be returned within fourteen days from the appearance of this advertisement.  
C. E. GURR,  
Chief Education Officer. 7258

**WELWYN GARDEN CITY AND HATFIELD DEVELOPMENT CORPORATIONS. APPOINTMENT OF CLERK OF WORKS.**  
Applications are invited for the appointment of Clerk of Works at a salary of £625 per annum.  
Applicants should be practical tradesmen, with previous supervisory experience of all trades on substantial contracts, and be competent in setting out and levelling.  
The appointment is superannuable and terminable by one month's notice on either side.  
The successful applicant will be assisted in obtaining housing accommodation if required.  
Applications, giving age, qualifications and full details of present and past appointments, salaries and experience, together with the names of three persons to whom reference may be made, should be addressed to the General Manager, at 4, Wilmores South, Welwyn Garden City, Herts., and be received by Saturday, 6th September, 1952. 7273

**NATIONAL COAL BOARD—WEST MIDLANDS DIVISION. AMENDED ADVERTISEMENT.**  
Applications are invited for a vacancy for a QUANTITY SURVEYOR, Grade I, in the Division's Architect's Department, with headquarters at Himley Hall, Dudley, Worcs.  
Applicants should be Corporate Members of the Royal Institute of Chartered Surveyors (Quantities Division), with experience in the preparation of estimates, bills of quantities, measuring up, and adjustment of final accounts.

The appropriate salary scale is £900 to £1,200, but the starting salary will depend on experience and qualifications of the successful applicant, and the post is superannuable.

Applications, stating age, education, qualifications and experience, with dates in chronological order, should be made to the Divisional Establishment Officer, National Coal Board, West Midlands Division, Himley Hall, Dudley, Worcs. 7261

**CITY OF BIRMINGHAM EDUCATION COMMITTEE. APPOINTMENT OF DISTRICT BUILDING WORKS SUPERVISOR.**  
Applications are invited for the appointment of a District Building Works Supervisor in the Architect's Branch of the Birmingham Education Department (Architect to the Committee: Mr. J. R. Sheridan-Shedden).

Salary: A.P.T. IV (£555 to £15-£600).  
Applicants will be required to have a general knowledge of the building trade, and particularly of those branches required for the carrying out of repairs and alterations. They should be competent to inspect work, assess requirements, supervise labour and contractors, and hold a Higher National Certificate or its equivalent.  
Application forms, which may be obtained from the undersigned on receipt of a stamped, addressed envelope, must be returned not later than Saturday, 13th September, 1952.

E. L. RUSSELL,  
Chief Education Officer.  
The Education Office, Margaret Street, Birmingham, 5. 7268

**NEW ZEALAND MINISTRY OF WORKS.**  
Enquiries are invited from qualified TOWN PLANNING DRAUGHTSMEN to fill vacancies in the New Zealand Ministry of Works.

Salary up to £650 N.Z. per annum as merited.  
Applicants should be competent Draughtsmen of 25-30 years of age, and should have had at least three years' experience in a Town Planning Office, preferably with experience in the designing and layout of housing estates. Matriculation and the Intermediate Examination of the Town Planning Institute will be an advantage.

Application forms and conditions of appointment, etc., may be obtained from:  
**THE HIGH COMMISSIONER FOR NEW ZEALAND,**  
415, Strand, London, W.C.2,  
mentioning this paper, and quoting reference No. A.3/74/59.

Completed applications to be lodged as soon as possible, and in any case not later than 12th September, 1952. 7269

## Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.  
The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-54 inclusive or a woman, aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

**EAST AFRICA.—ASSISTANT ARCHITECTS** required. Must be A.R.I.B.A. and single. Salary, £1,000 p.a. to £1,200 p.a., according to experience. Send full particulars and photograph to H. G. Radford, A.R.I.B.A., & Partners, 18, Derwent Avenue, Allestree, Derby, England, with stamped addressed envelope for reply. Selected applicants will be interviewed in England. 7253

**JUNIOR ARCHITECTURAL ASSISTANT** required immediately by Fowler, Grove & Haggan, Chartered Architects, 140, Lodge Road, Southampton. 7254

**ASSISTANT** required in North London office during school holiday, for interesting work in connection with Architectural publication. Apply, stating experience and ability. Box 7263.

**ARCHITECTURAL ASSISTANT**, aged about 25, required for West End office of large British industrial concern. Salary according to age and experience. Pension fund. Please write, quoting No. 187, to Box No. 6113, c/o Charles Barker & Sons, Ltd., 31, Budge Row, London, E.C.4. 7265

**ARCHITECT** required full time to work in conjunction with Estate Developers and Surveyors, specialising in the planning of estates and the erection of new houses, etc. Office, equipment and all facilities provided. Remuneration by salary. Apply Box 7270.

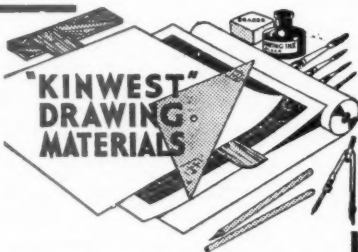
**ASSISTANT** required for private practice. Attitude for design and some experience desirable. Apply by letter, stating age, training, experience, and salary required, to C. W. Hutton, B.Arch., F.R.I.B.A., 56, Brook Green, W.6. 7274

## Architectural Appointments Wanted

**A.** R.I.B.A. (28), conscientious worker, with a few years' experience, including L.A. housing, wishing to extend experience seeks appointment with small London firm offering scope for imaginative, practical, and administrative ability. Box 525.

**A.** R.I.B.A. (24) desires position as JUNIOR or ASSISTANT in an office in either Glasgow or Dundee. Box 531.

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**STUDENT R.I.B.A.** wants post as ARCHITECT'S ASSISTANT. Age 23. No previous office experience. School trained to Intermediate. Taking night class course for final. London or Home Counties preferred. £5 a week. Box 521.

**ARCHITECTURAL ASSISTANT, A.R.I.B.A.**, Dip.Arch. (Distinction), age 29, single, with 3½ years' experience on flats construction, housing and schools, desires position at home or abroad with industrial concern or private Architect. Salary by arrangement. Box 527.

**ARCHITECTURAL ASSISTANT**, with 10 years' varied experience, seeks interesting position in London office. Used to taking complete responsibility, administration, office and site supervision. Box 528.

**ARCHITECT** (Registered only), age 46 years, 20 years' experience in private, public and commercial offices, requires position in any coastal area. Box 529.

**ARCHITECTURAL DRAUGHTSMAN** seeks appointment. Long experience of Exhibition design and construction. Good draughtsman. Box 530.

**ARCHITECTURAL ASSISTANT** seeks situation, London. Experienced flats, conversions, factory work, etc. Salary by arrangement. Box 533.

**ARCHITECTURAL DRAUGHTSMAN** requires temporary or permanent job in London office. Good standard of work on working drawings, details, surveys, etc. Box 534.

**A.R.I.B.A.** (39, single) requires responsible position overseas leading to partnership. 20 years' wide experience, including 3 years in West Africa. Phone Hillside 5313, or write Box 532.

**ARCHITECTURAL ASSISTANT** requires post in London office. Studying for Inter. R.I.B.A. 3 years' office experience. Box 535.

**YOUNG Woman**, aged 24, Inter. R.I.B.A., and over 18 months' drawing office experience, requires position, London or Surrey area. Box 537.

**ASSISTANT**, recently completed school course, wishes to add to his office experience immediately in London area. Box 517.

**A.R.I.B.A.** (35), now managing provincial office, desires responsible post with prospect of progress. Single. Car owner. South Coast preferred, but not essential. Box 536.

#### Other Appointments Vacant

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

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

**PROGRESSIVE** Firm of Cast Stone Manufacturers S.W. England, requires responsible Assistant for Contract Department. Preparation of working drawings from architect's originals. Good prospects. Architectural or building surveying experience advisable. Pension Scheme. Box 7251.

**A VACANCY** occurs on the technical staff of "The Architects' Journal" for someone with a keen interest in and a sound knowledge of building construction. Write, giving age and experience to the Technical Editor, "The Architects' Journal," 9, Queen Anne's Gate, London, S.W.1. 7169

**APPLICATIONS** are invited from suitably qualified persons for the appointment of **CLERK OF WORKS**, to supervise the erection of a multi-storey secondary school at Tulse Hill, London, S.W.2. The duration of the contract is likely to be approximately 2 years, and the appointment will be terminable by one month's notice on either side.

Applications should be made in writing to the Architects Messrs. Yorke, Rosenberg & Mardall, 2, Hyde Park Place, London, W.2, and should reach their office not later than Friday, 5th September.

Applicants are asked to state their qualifications and experience. Salary will be in accordance with the L.C.C. scale, class I. This scale is subject to 20 per cent. increase. 7271

#### Services Offered

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**A.R.I.B.A.**, with good all round experience, requires part time or free lance work to help his growing practice. MUSEUM 9108. 7205

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**RELIABLE** temporary assistance or part-time services offered by experienced ARCHITECT. Own office facilities. Fees reasonable. 69, Barkston Gardens, S.W.3. Tel.: FRO. 1363. 7272

**TECHNICAL REPRESENTATION**, Southern Counties, qualified Architect, some rep. experience, own car, offers services, whole/part-time. Box 7255.

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**"THE ARCHITECT IN PRACTICE"** by A. J. Willis and W. N. B. George. A R.I.B.A. recommended text-book. 13s. 9d., post free, from Mason & Hodges, Ltd., 6, Goring Road, Worthing, Sussex. 7262

#### Miscellaneous

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**R.I.B.A. and T.P.I. EXAMS.**—Stuart Stanlake (Tutor Sch. of Arch., Lon. Univ.) and G. A. Crockett, M.A./B.A., F./A.R.I.B.A., M./A.M.T.P.I. (Prof. Sir Patrick Abercrombie in assn.) prepare Students by correspondence tuition, 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4.

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Head of the School: JOHN S. WALKDEN, F.R.I.B.A.

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J. C. JONES,

Director of Education

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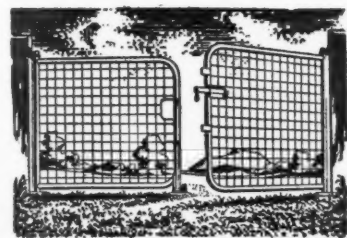
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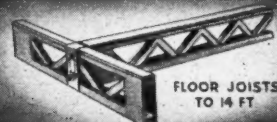
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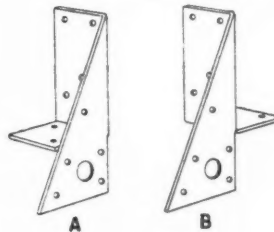
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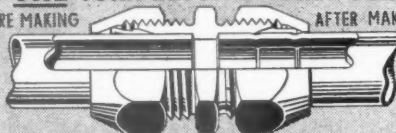


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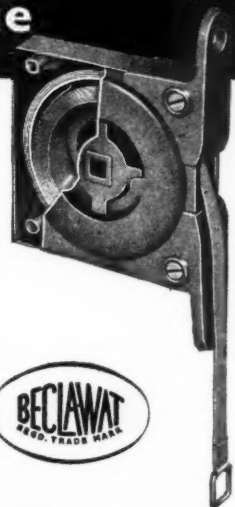
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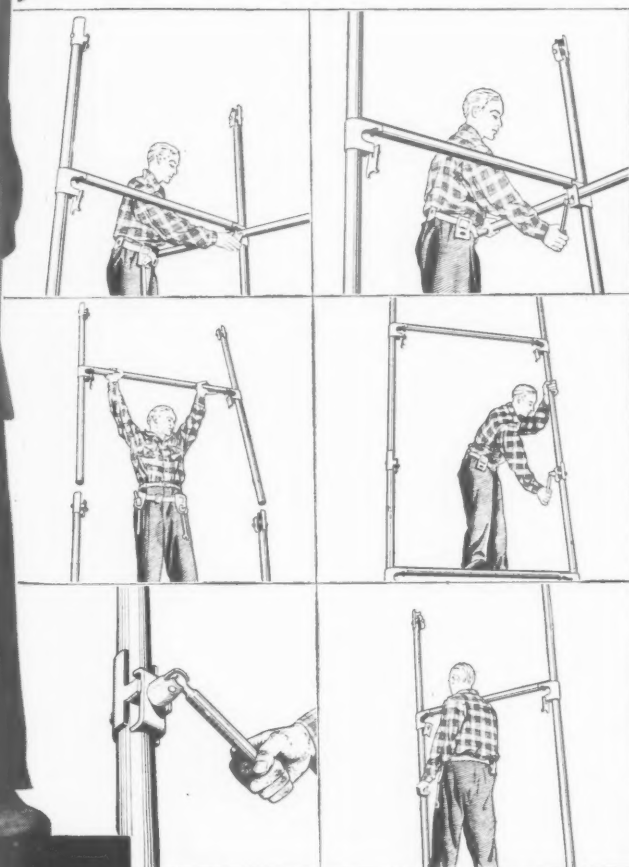
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