



WALTHAMSTOW CIVIC CENTRE

Hugh Bourne, M.I.E.E., M.I.H.V.E.
Consulting Engineer.

P. D. Hepworth, F.R.I.B.A.
Architect.

AIR-CONDITIONING & PANEL HEATING

By

MATTHEW HALL

& CO., LTD.

26-28 DORSET SQUARE, LONDON. N.W.1.

Paddington 3458 (20 lines).

GLASGOW · LIVERPOOL · BELFAST · BRISTOL · NEWCASTLE · LEICESTER · CARDIFF
Central Office for Portsmouth, Bournemouth, Southampton:—ALTON, HANTS



Galvanized Mild Steel GUTTERS

in any Size, Gauge or Section

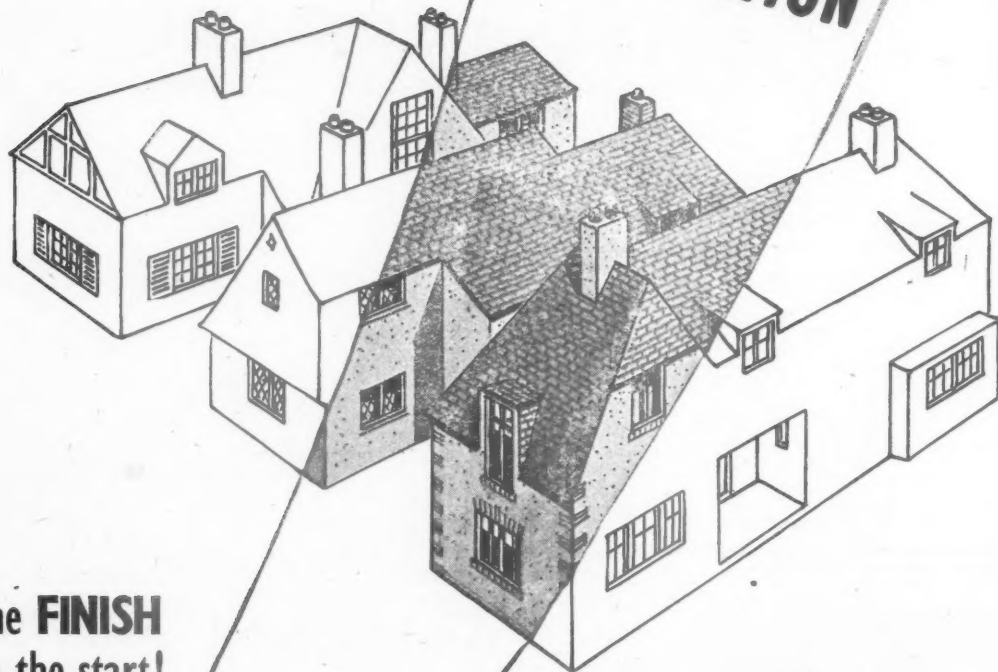
"HARCO" Mild Steel Gutters, up to and including $\frac{1}{4}$ -in. plate, are supplied as standard with pressed socket ends, as shown; thicker than $\frac{1}{4}$ -in. plate riveted or welded butt straps are supplied.

"HARCO" PRODUCTS

Although supplies are restricted they are still available for essential purposes.

G. A. HARVEY & CO. (LONDON) LTD. **WOOLWICH RD.**
LONDON S.E.7.

PROTECTIVE DECORATION



Plan the **FINISH**
from the start!

Construction or reconstruction, peace or war, the wise architect starts with the finish in mind. Upon the finish specified depend not only the speed and thoroughness of application, but the preservation of fittings, the cost of maintenance and, to some extent, the life of the building itself.

Shortage of essential ingredients has reduced the output of Cerrux, and has necessitated the limitation of the remaining output to those jobs in which Cerrux plays a vital part in the preservation of life or the prosecution of the war. Once the special Cerrux ingredients are released Cerrux Synthetic Finishes will again be available for decoration and protection in the building and other trades.

In the meantime, although ingredients are controlled, experience is not. The brains behind Cerrux are making the best of the ingredients available today.

We shall be glad to give advance details of post-war Cerrux Finishes to all who are interested.

Cerrux

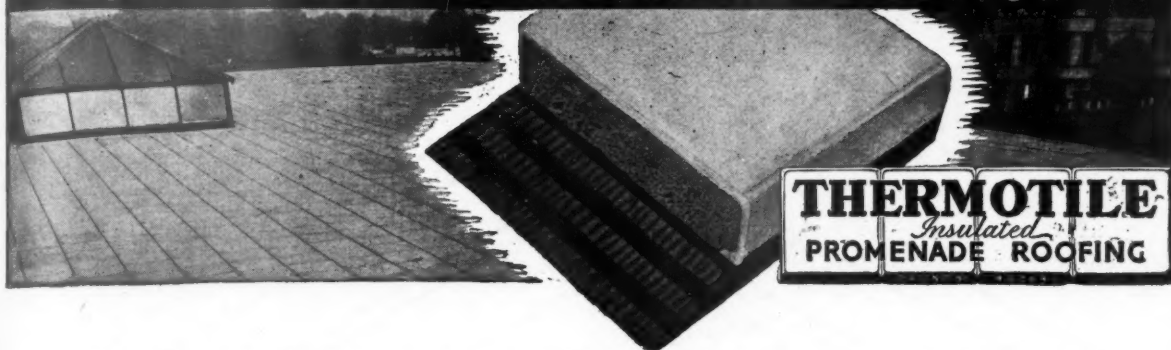
PROTECTIVE DECORATION

CELLON LTD., KINGSTON-ON-THAMES

TELEPHONE: KINGSTON 1234 (5 LINES)

The
LAST WORD
in
specifications

CONTRIBUTION TO MODERN ARCHITECTURE



The utility of the Thermotile roof cannot be matched by any other type; the solar insulation is of the highest standard—and today the ease with which a building can be kept at an even temperature is a major consideration; initial costs are no higher than any other type of first class roof, and, if maintenance is taken into consideration, the general costs are much lower than those of other types of roof. But the claims of Thermotile Promenade Roofing are carried past all stages of debate by the fact that this system has been used on many of our greatest buildings, proving the confidence of leading architects.

D. ANDERSON & SON LTD. STRETFORD. MANCHESTER
AND AT LONDON • BELFAST • BIRMINGHAM • GLASGOW



RED HAND
ROOFING

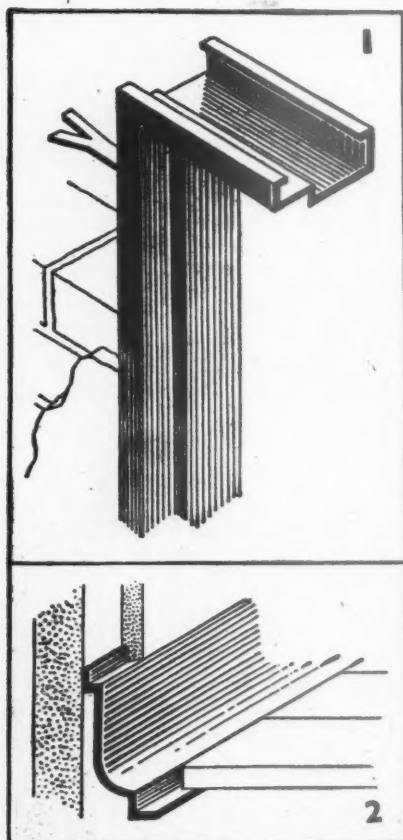
Sales of Roofing Felt, etc., are governed by the regulations imposed by the Director of Roofing, Ministry of Works.



Architect: C. LOVETT GILL, Esq., F.R.I.B.A. Builders: MULLEN & LUMSDEN LTD.

STEEL INSTEAD OF WOOD

Sankey METAL TRIM

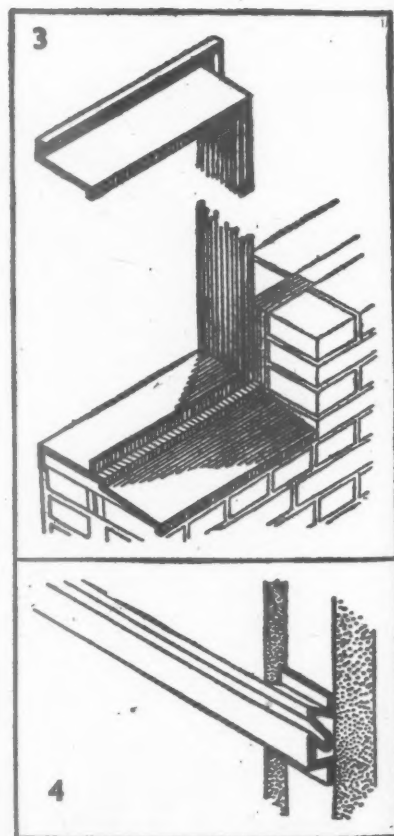


1
Pressed Steel Door Frame.
Corners Welded and Complete.
with Hinges, Strike Plate and Lugs
for fixing.

2
Coved Skirting.
Stock lengths 10ft. or cut accurately
to size. Corners may be Mitred
or Special Corner Pieces used.

3
Lining for Interior Window Reveal
and External Cill. All Sections
Purpose Made and Rust Proofed
if desired.

4
Flush Picture Rail fixed by Nailing
and Corners Mitred in the usual
way. Stock lengths 10ft.

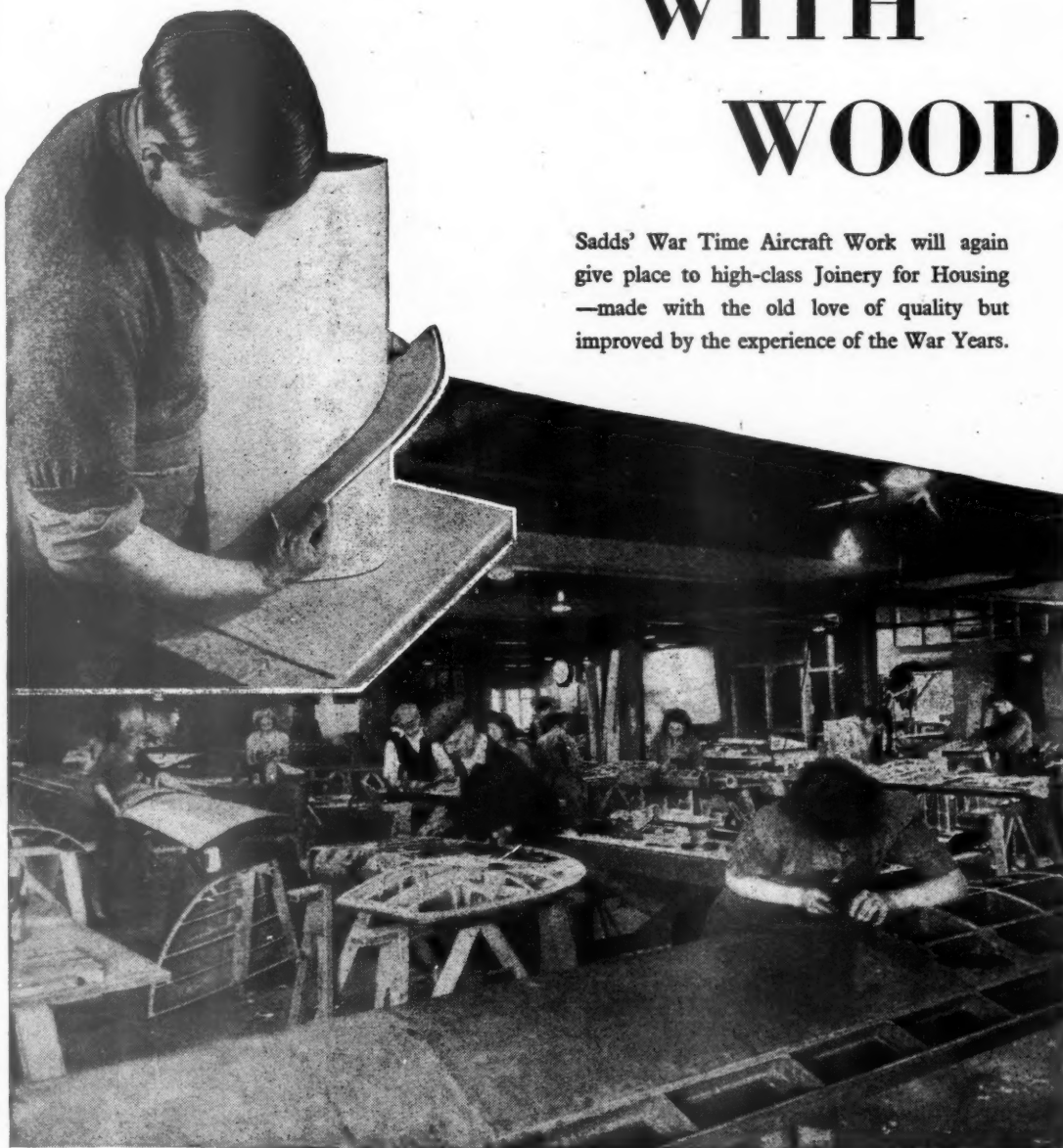


Metal Trim will undoubtedly play an important part in post war reconstruction, and those interested are welcome to a copy of our catalogue. For the time being, of course, we are only able to execute orders carrying Government permits.

JOSEPH SANKEY & SONS, LTD., WELLINGTON, SHROPSHIRE. London Office: 168, REGENT ST., W.1.

ADAPTABILITY WITH WOOD

Sadd's War Time Aircraft Work will again give place to high-class Joinery for Housing —made with the old love of quality but improved by the experience of the War Years.



JOHN SADD & SONS, LTD.

HIGH-CLASS JOINERY

Windows, Doors, Mouldings, Staircases, Dressers, Kitchen Units

MALDON

ESSEX

Telephone: Maldon 131.

London Office: ALDWYCH HOUSE, W.C.2.

Telephone: Holborn 7225

Stoneham & Kirk

POWER SUPERSEDES HUMAN EFFORT



IN olden times, the public scribe laboriously committed communications and information to a parchment: then scientific advancement brought forth the printing press, the telephone, the wireless. These speedier methods of making known could not have been so efficiently accomplished without

the use of the equipment perfected by the electrical industry.

In this, BRUSH has played its part as one of the Industry's pioneers—the name is known throughout the world for **QUALITY ELECTRICAL POWER EQUIPMENT.**

THE
BRUSH

ELECTRICAL ENGINEERING CO. LTD.
LOUGHBOROUGH · ENGLAND

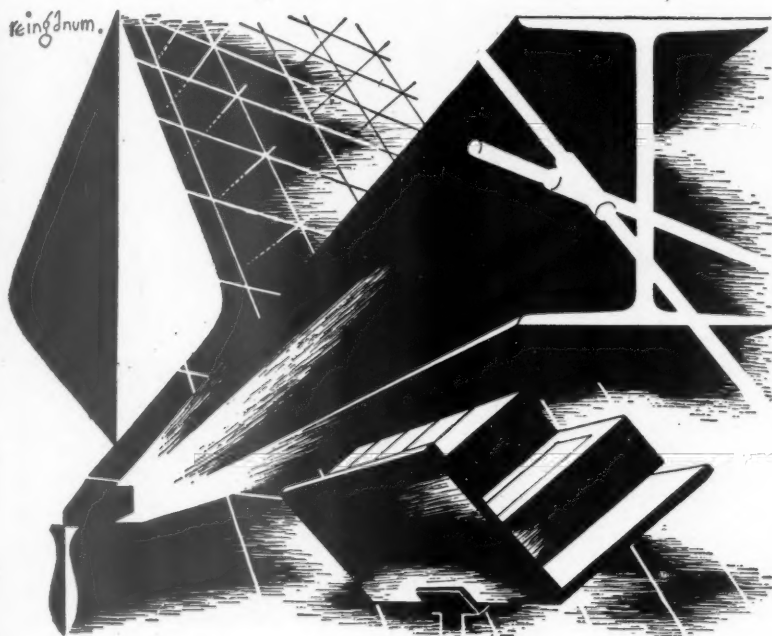
TURBO-GENERATORS, TRANSFORMERS, E.H.T. and M.T. SWITCHGEAR, A.C. and D.C. MOTORS and GENERATORS, BATTERY ELECTRIC VEHICLES and TRUCKS, TRACTION EQUIPMENT, BUS and COACH BODIES

BRANCHES: LONDON, BIRMINGHAM, CARDIFF, BATH, MANCHESTER, LEEDS, NEWCASTLE, GLASGOW, BELFAST, DUBLIN

NON-FERROUS METALS FOR BUILDING

There is now no restriction on lead, or copper and zinc and their alloys for use in the United Kingdom.

This relaxation of necessary wartime controls makes available the following I.C.I. non-ferrous building equipment :—



EXTRUDED SECTIONS FOR ALL ARCHITECTURAL PURPOSES,

COPPER TUBES FOR WATER AND GAS SERVICES,

COPPER ROOFING SHEETS,

COPPER EXPANSION JOINTS,

COPPER DAMP PROOF COURSES,

LEAD SHEET AND PIPE,

AND OTHER BUILDING EQUIPMENT.

I.C.I. invite enquiries from architects, builders and contractors for these materials, and offer the full resources of their exceptional manufacturing and research experience in the solution of building problems.

IMPERIAL CHEMICAL INDUSTRIES LTD. LONDON S.W.1



M.61



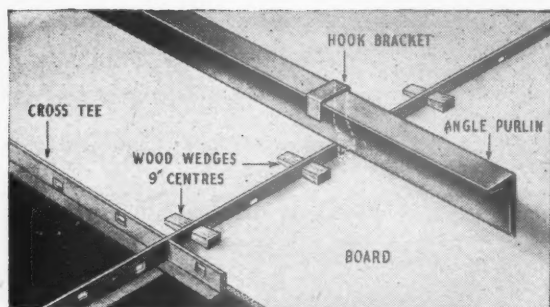
Patent No. 519406

FOR APPLYING ANY TYPE OF BOARD TO CEILING & WALLS

The Wallboard is secured to sherardised, pressed steel, slotted T-section by wedges. Below are shown the methods of attaching the support to various forms of purlin.



Escalator Tunnel of St. John's Wood Underground Station. Architect: S. A. Heape.



8 POINTS TO BE NOTED

1. Fixed to **UNDERSIDE** of purlins—steel or wood—covering unsightly hook bolts, clips, etc.
2. Assures the insulating value of air-space between roof and underside of purlins. No dust or dirt.
3. Can be fixed to steel or wood purlins of roofs and joists of flat ceiling.
4. No unsightly nail heads showing.
5. Can be applied to new or old buildings of any construction independently of the roofing contractor,
6. who proceeds with his work ahead of the AnD Wedge Method.
7. Any thickness of board can be used, from $\frac{1}{8}$ " to $\frac{1}{2}$ ".
8. This method can be used for applying linings to exterior walls.
9. The simplicity of application is such that any contractor can apply the AnD Wedge Method, and the materials making up this method can be purchased by the contractor.

Full particulars, specification and a typical layout will be sent on request

C. F. ANDERSON & SON, LTD.

Wallboards for Government Work

HARRIS WHARF, GRAHAM STREET, LONDON, N.1.

TELEPHONE: CLERKENWELL 4582

"TURNALL" *Asbestos Spray*...



**THE PENICILLIN OF THE
CONSTRUCTIVE WORLD**

IN SERVICE SINCE 1932 FOR

**HEAT INSULATION
CONDENSATION
ABSORPTION
FIRE PROTECTION
SOUND ABSORPTION**

**THERMAL INSULATION
K = 0.4**

**SOUND ABSORPTION
 $\frac{1}{2}$ " = 0.4**

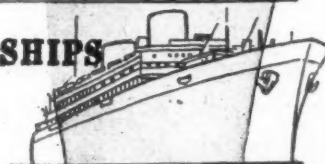
**FIRE PROTECTION
B.R.S. Test Grade 4 hrs.
CONDENSATION ABSORPTION
6 times its own weight
LIGHT WEIGHT : 12 lbs. per cu. ft.
QUICK DRYING : normally 8 hrs.**

Write for Special Booklet Section 23/A

ENGINES



SHIPS



CINEMAS

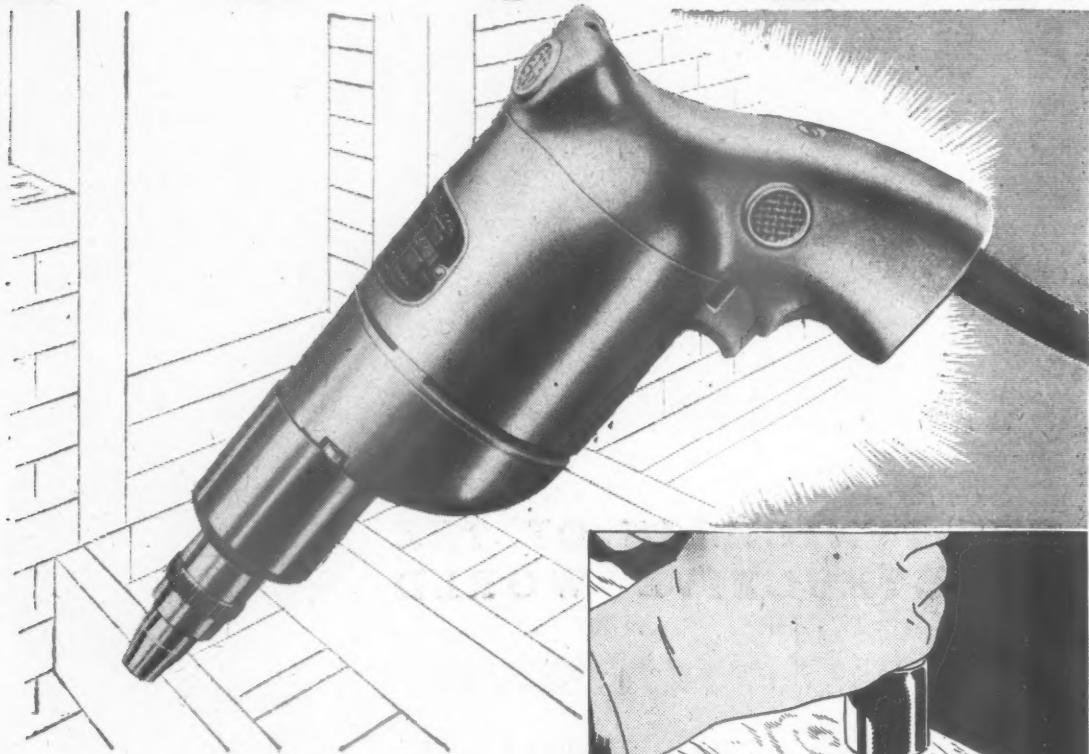


*now
released*
FOR APPLICATION TO
**INDUSTRIAL
and
DOMESTIC
BUILDINGS**

TURNERS ASBESTOS CEMENT CO. LTD.

TRAFFORD PARK MANCHESTER 17

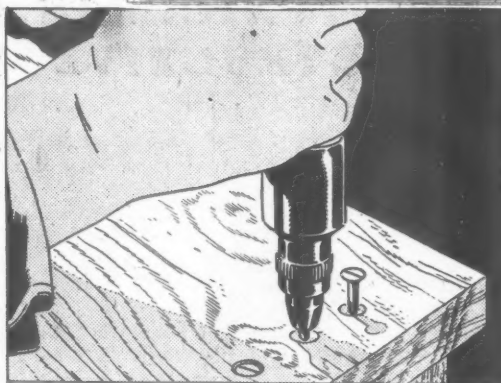
POWER



TO YOUR ELBOW!

... and faster, effortless screwdriving with a Van Dorn Positive Clutch Screwdriver. This compact, light, easy-to-handle tool will save hours of time and labour on the many laborious screwdriving jobs in modern house construction.

The 8" Screwdriver is one of the wide range of Van Dorn Portable Electric Tools ready to speed up Building reconstruction and maintenance work.



For repetition screwdriving the Van Dorn Electric Screwdriver will solve your labour problems.

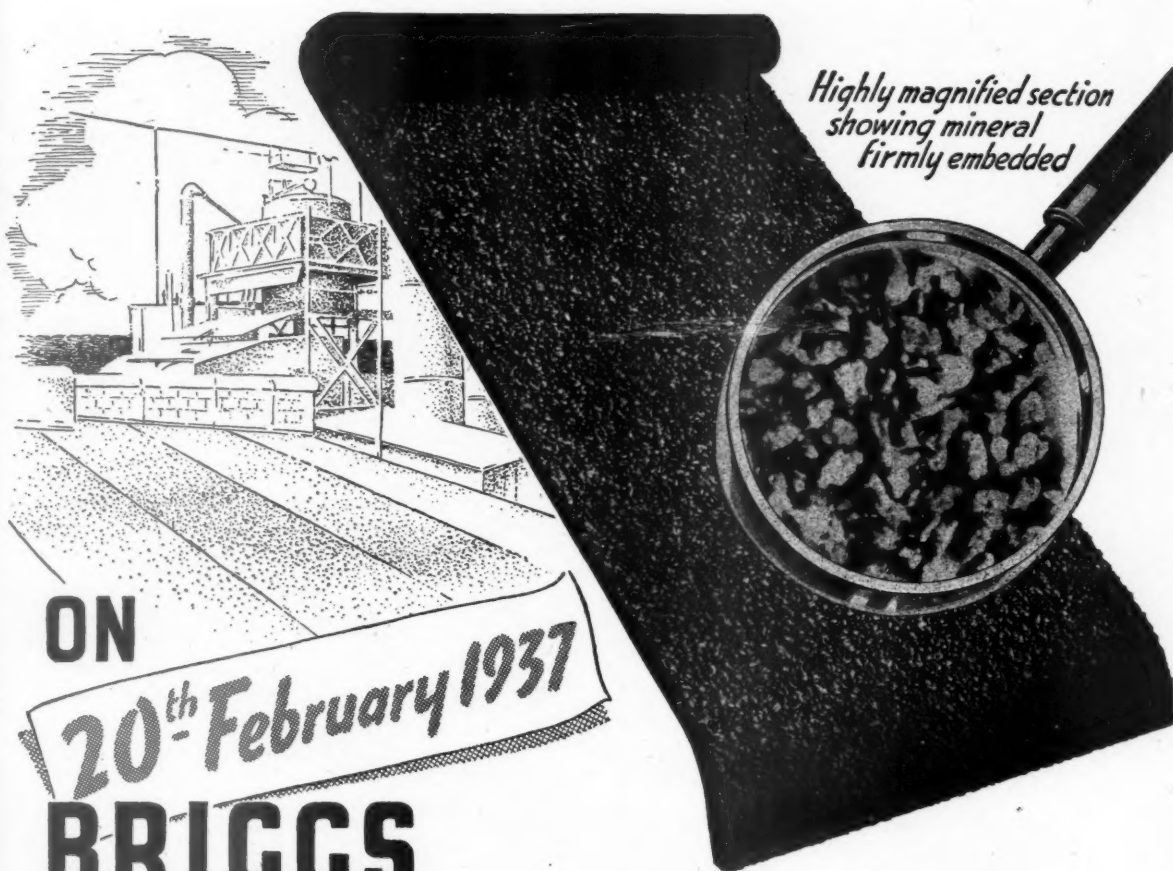
"Van Dorn"

PORTABLE ELECTRIC TOOLS

VAN DORN ELECTRIC TOOLS • HARMONDSWORTH • MIDDLESEX

'PHONE : WEST DRAYTON 2681/6

BRANCH SERVICE STATIONS : LONDON, BIRMINGHAM, BRISTOL, GLASGOW, LEEDS, MANCHESTER, NOTTINGHAM



ON

20th February 1937

BRIGGS

MINERAL SURFACED ROOFING ★

was laid on one of the testing roofs at our Roofing Research Station, Arbroath, Angus.

Recently it was examined and the mineral surface was found still firmly embedded and the Roofing unaffected after eight years exposure.

If you wish to examine an actual specimen of this roofing, our Area Manager at any of the undernoted centres will be glad to call and show it to you.

WILLIAM BRIGGS & SONS, LTD.

DUNDEE & LONDON: VAUXHALL GROVE, S.W. 8.

ABERDEEN
Bedford Rd.
Kittybrewster

EDINBURGH
Murrayfield,
L.M.S. Station

GLASGOW
200, Old
Dumbarton Rd.

LEICESTER
33, Bowling
Green Street

LIVERPOOL
1, Copy Lane

NORWICH
Trowse
Millgate

Used as a cap
sheet for BRIGGS
MULTI-LAYER
ROOFING or for
single layer work.

TOUGH OPPOSITION



It may be a stiff fight, but the elephant can take it, for, like the CROMALIN finish, the elephant's hide offers tough opposition.

No plating process can provide more stubborn resistance to wear and tear than CROMALIN—the finish that writes “finish” to frequent replating costs.

CROMALIN is unique in that it can be applied not only to Steel, Brass and Zinc Alloys, but also to Aluminium and its alloys.

Write to us NOW, and let us tell you more about it.



CROMALIN

U N T A R N I S H A B L E

METAL FINISHES LTD., CROMALIN WORKS, NEW SPRING ST., BIRMINGHAM, 18

Siegwart System

*is helpful to
other trades*



The precast units for Siegwart floors are delivered to the job fully matured.

They may, if required, be used by other trades as soon as they are laid on their bearings and before being grouted together.

The illustrations above show that this advantage is fully realised and made use of to speed up the general progress of the job.

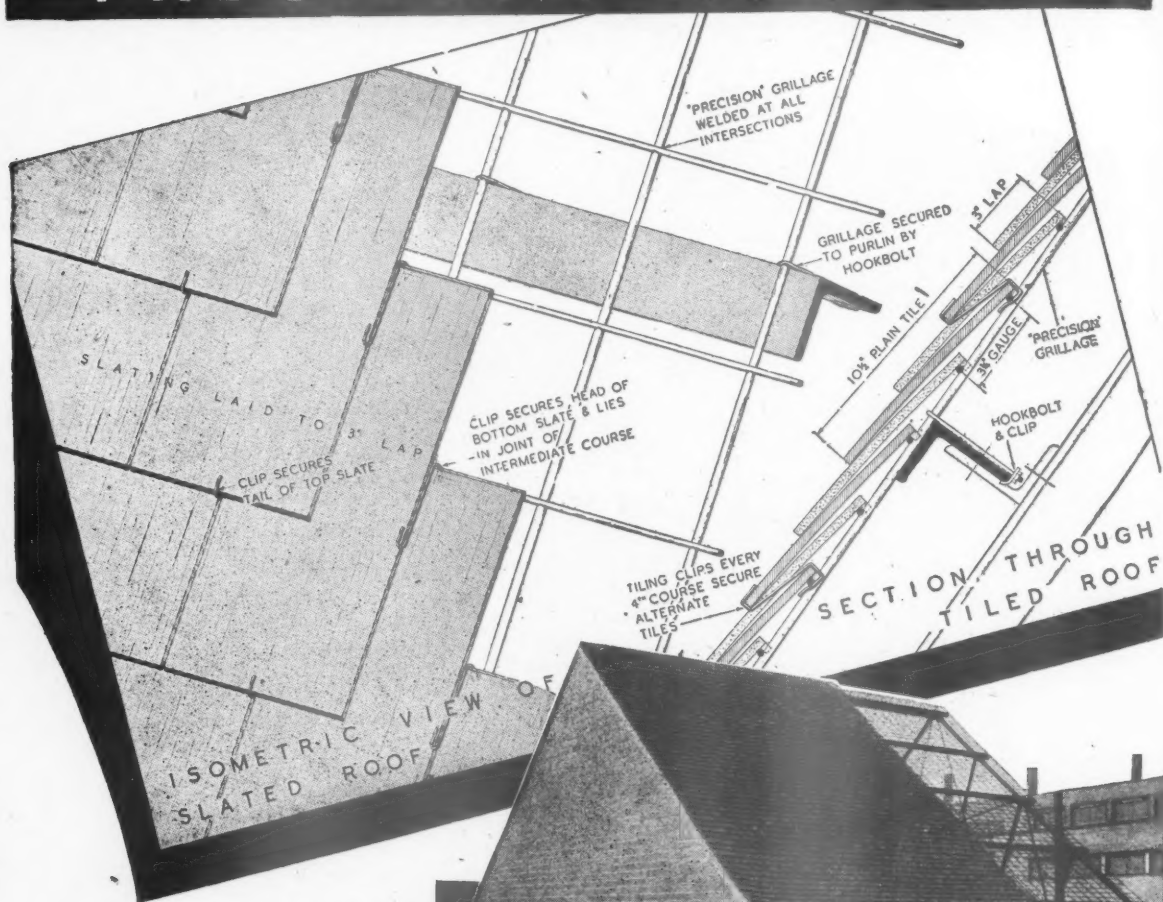
SIEGWART **PRECAST FLOORS**

★ The New Siegwart housing booklet is still available to all interested on receipt of a 1d. stamp.

SIEGWART FIREPROOF FLOOR CO. LTD.
CROXLEY GREEN, RICKMANSWORTH. HERTS. Tel.: RICKmansworth 2268

Branch Offices at Birmingham, Manchester and Glasgow.

PRECISION ROOFING



Tiled roof under construction.

WORKS-CONSTRUCTED TO CONFORM TO MODERN BUILDING METHODS

Here is a new form of roofing which can be speedily erected with a minimum of labour.

The roofing is works-produced in the form of a standardised steel grillage, spaced according to the type of covering to be used. Slates or tiles are secured to the horizontal bars of the grillage by specially designed rustless steel clips.

Precision Roofing is light, easily erected with a minimum of labour, and adapted to any type of span roof. Send for a booklet.



Close up of roof tiling.

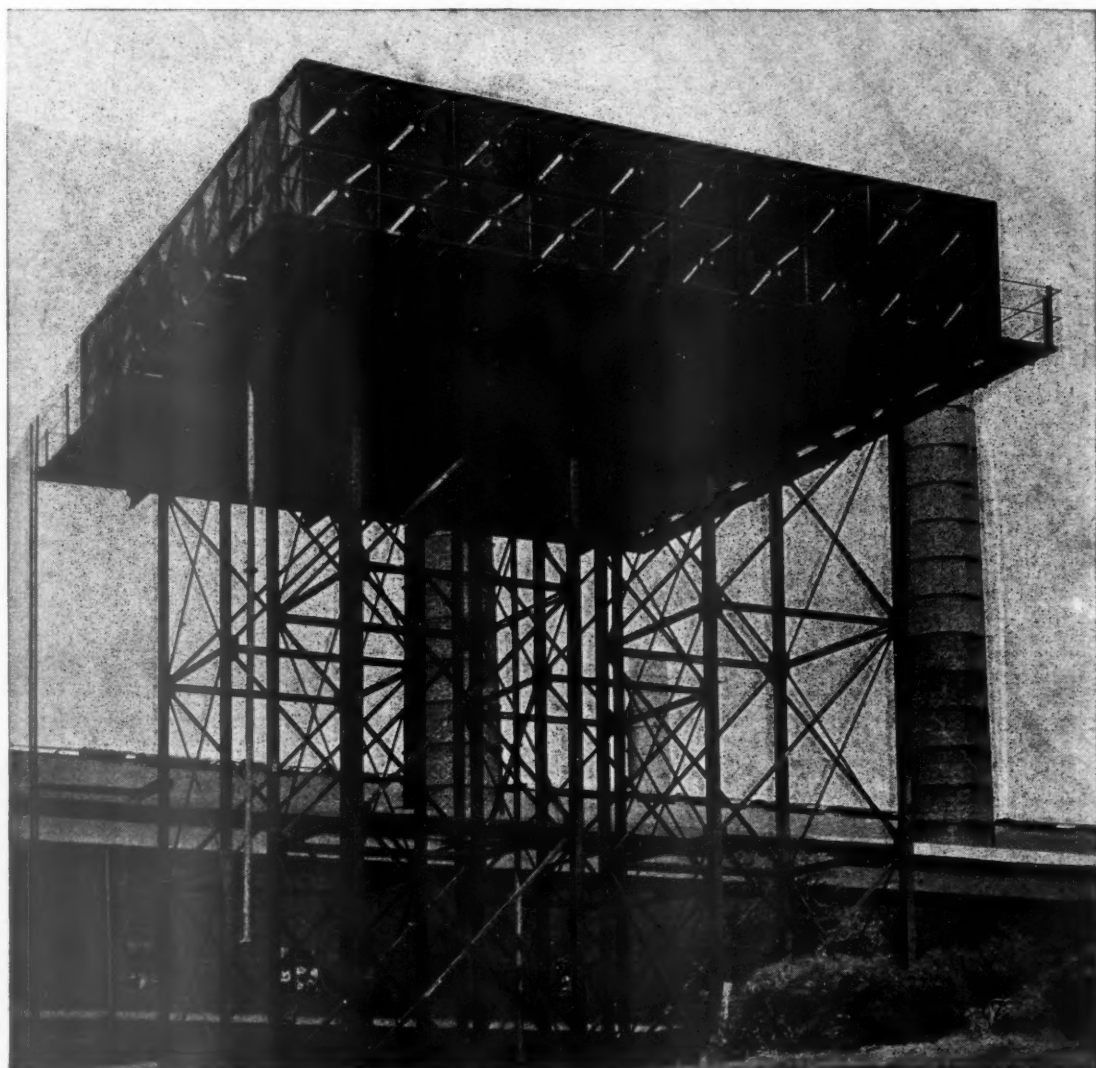


PRECISION ROOFS LIMITED · TEMPLEBOROUGH SHEFFIELD

Telephone: ROTHERHAM 1517.

London Office: 10 Grosvenor Gardens, S.W.1.
Associated with McALL & CO. (SHEFFIELD) LTD., TEMPLEBOROUGH, SHEFFIELD.

PRESSED STEEL TANKS



BRAITHWAITE & CO
ENGINEERS LTD



Temporary London Office:

Telephone: WHItchall 3993

KINGS HOUSE HAYMARKET LONDON S.W.1

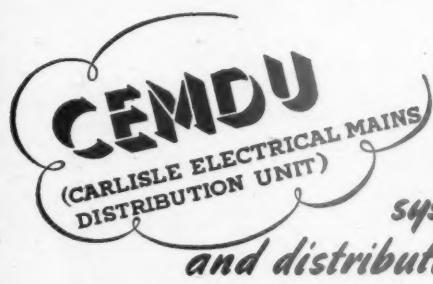
Gazes

BUILDING & CIVIL ENGINEERING
— CONTRACTORS —



*At the Service — for the Service
of Architects*

W.H. GAZE & SONS LTD., 40, CONDUIT STREET, LONDON, W.I. — KINGSTON-ON-THAMES — SURBITON — WALTON — BATH



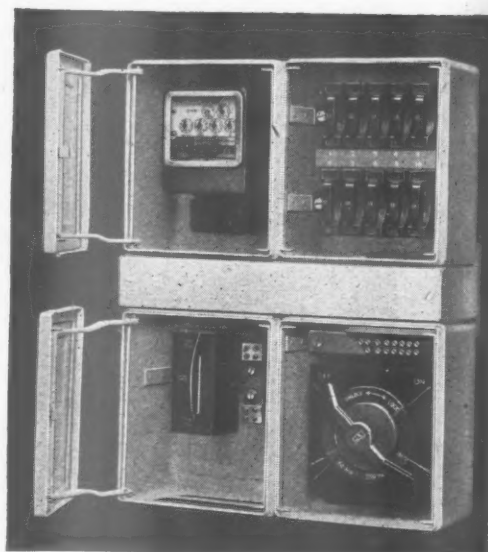
*A NEW, compact
and expandable
system for the intake
and distribution of electricity—*

With its many outstanding advantages over the old system for the intake and distribution of electricity the "CEMDU" is bound to be incorporated in plans for the requirements of both large and small buildings. Neater and more compact, it is simple to instal, easily extended and can be fitted in any position.

Get to know more about the "CEMDU"—write for full particulars

CARLISLE
ELECTRICAL
MANUFACTURING CO. LTD.
Bentcliffe Works, Eccles, Lancs.

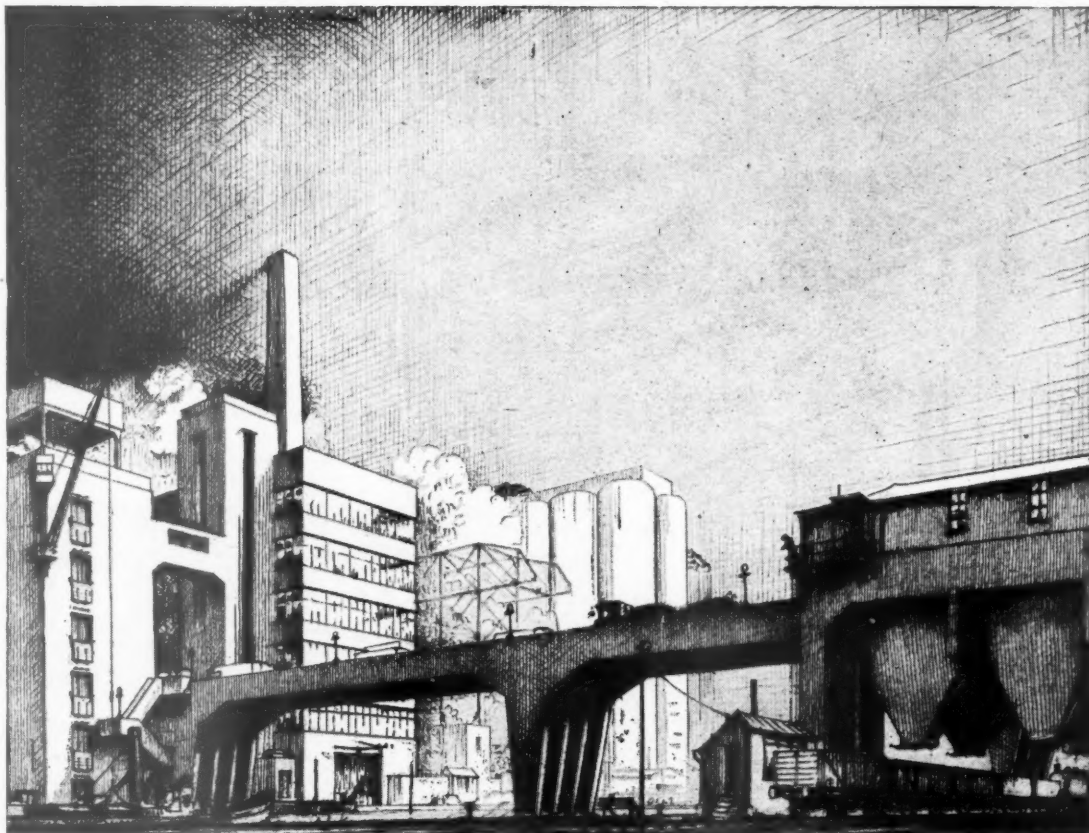
Telephones : Eccles 1691/2/3/4 Telegrams : "Carlectric," Eccles



All equipment is enclosed in sheet metal boxes of uniform size. Wiring and interconnecting cables are also contained in sheet metal trunking.

Entirely new Rotary Pattern Main Switch of liberal rating.

New and novel Carlisle Electrical "Latralok" Distribution Fuses which are rewirable.



Reproduced from an etching by J. M. G. Forsyth.

The massed grandeur of industrial structures, the very shape of which symbolise their purpose in industry, has been dramatised by many artists in the various mediums at their command. The appeal is stimulated by the sense of vigour expressed in the line and character of such buildings, which features are determined by balanced design consistent with the magnitude and flow of stresses developed in a structure by the function it performs.

TRUSCON

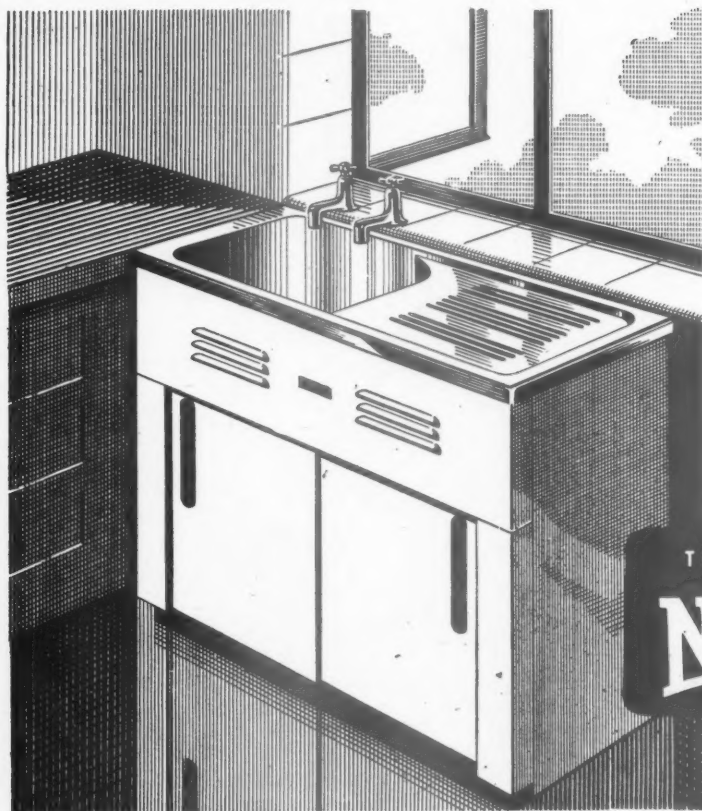
Specialists since 1905 in the design, development and application of improved structural processes

THE TRUSSED CONCRETE STEEL COMPANY LIMITED
Structural Engineers

6, COLLINGHAM GARDENS, EARLS COURT, LONDON, S.W.5. TELEPHONE: FROBISHER 8141

Also at Manchester, Newcastle-on-Tyne, Birmingham, Glasgow, Cardiff, Taunton.

4-563



Toil Lightening

Under to-day's conditions, with domestic help at a premium, surely every modern labour-saving device should be brought to the housewife's aid. If we but knew, the very sight of the old-fashioned, ugly and insanitary sink made her spirits droop. Lighten her toil then, reduce her fatigue, eliminate that drudgery-at-the-sink!

The NEVASTANE SINK is gleaming stainless steel throughout. It is sanitary; it is a joy to look upon; it has been scientifically designed to reduce the housewife's toil almost to vanishing point. What more could she ask?

THE FIRST NAME IN SINKS

NEVASTANE

STAINLESS STEEL SINKS

Manufacturers and Patentees

BENHAM AND SONS LIMITED

66, WIGMORE STREET, LONDON, W.1

Phone: Welbeck 9253 Grams: Benham, Wesdo, London

The World's Best

STRUCTUREX



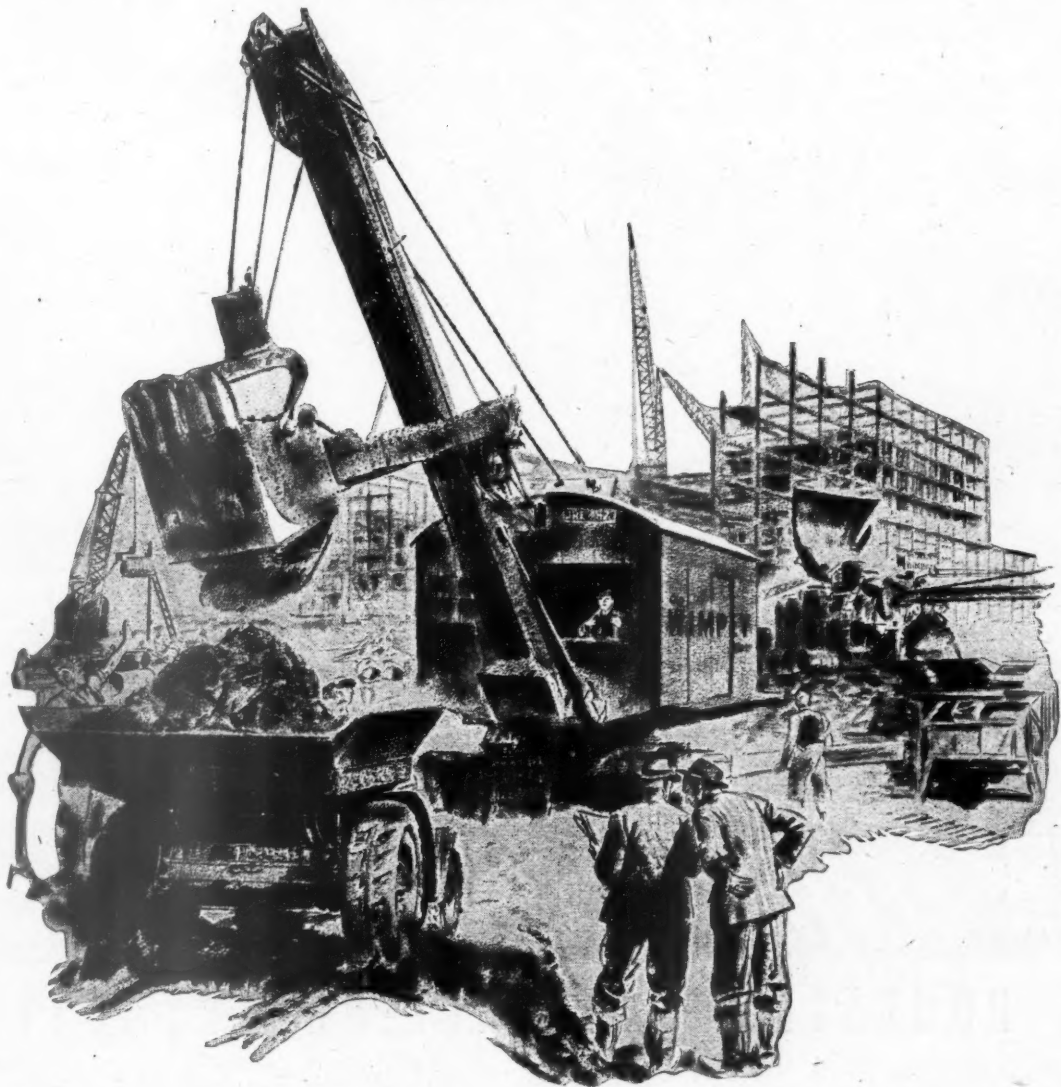
Compression Joint

Improved Fittings
for Copper Tubes

Regd. Office: Gylemuir Works Corstorphine
Tel. Add: "Solderless" Edinburgh 12.

WIMPEYS AT WORK

The use of plant in planned building construction



PLANT IS PART OF THE PLAN

The progress chart which is the invariable groundwork of every Wimpey job is passed for action only when the needs and resources of all departments interlock. The chart must obviously cover not only men, materials and transport . . . but also plant.

When Wimpeys start a job on site, the job is already in chart form, detailed and complete. And among the main factors which enable staff on site to work to exact schedule is their certain knowledge that the right plant will reach them. That

whenever and wherever the job demands this type of crane or that size of excavator — it will be there on time.

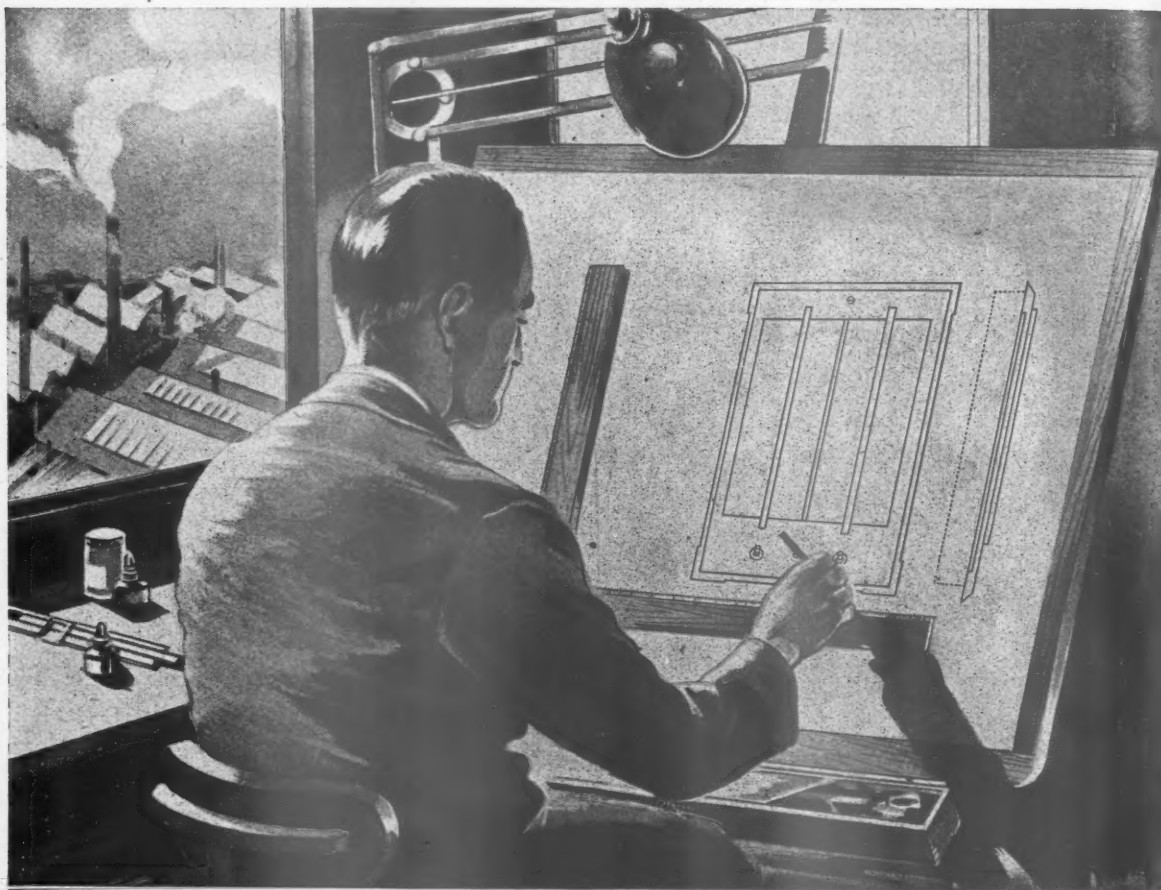
The smooth working of this system is ensured by two other important advantages of Wimpeys' organisation. Wimpeys have a huge pool of up-to-date plant on which to draw. And the plant is kept in first-class order by a network of Wimpey maintenance depots: 7 acres near London, 10 acres at Glasgow, large depots at Cardiff, Birming-

ham, Manchester, Nottingham and Newcastle, and mechanical engineers all over the country.

This planned use of a vast range of modern plant is built on Wimpeys' experience during sixty years of steady growth.

WIMPEY

GEORGE WIMPEY AND COMPANY LIMITED
TILEHOUSE LANE DENHAM MIDDLESEX



English Electric

DOMESTIC · APPLIANCE · DEPARTMENT

MESSAGE FOR SEPTEMBER



SINCE 1940, the resources of 'English Electric' have been devoted mainly to the manufacture of heavy-duty electrical equipment for Industrial Canteens, British Restaurants and other communal centres.

These war-time activities have provided our engineers with a wealth of practical experience which is now being utilised in the development of new-type domestic appliances, including Cookers, Fires, Water-heating systems, Washing Machines and other units for the post-war home.

Whilst your plans are still fluid it will be an advantage to discuss them with one of our Development Engineers. In the first instance, you are invited to write to the Domestic Appliance Dept., Queen's House, Kingsway, W.C.2.

The ENGLISH ELECTRIC COMPANY LIMITED

ENLIST THE EXPERIENCE OF ENGLISH ELECTRIC

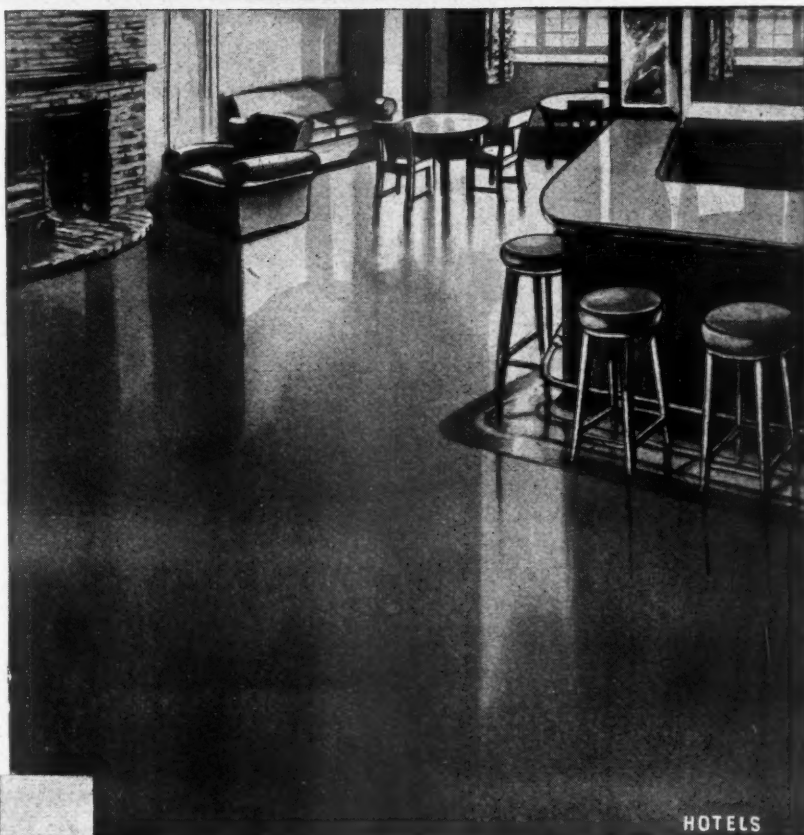
There's a FLEXIMER Floor for every Building need...

New fleximer treatments, ranging from the strictly utilitarian to the ultra-decorative, are available to meet the needs of hotel, business house and institution planning everywhere.

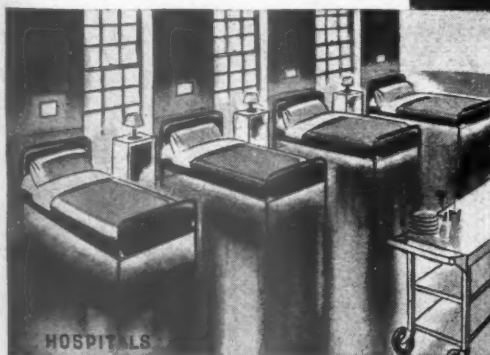
Applied cold on the spot, Semtex fleximer floorings form an integral part of the building itself. They are silent, resilient, hygienic, damp-proof, vermin-proof, slip-proof, and are virtually indestructible.

Fleximers provide complete flooring treatments for the home, the office, the library, the cinema, the concert hall and the theatre.

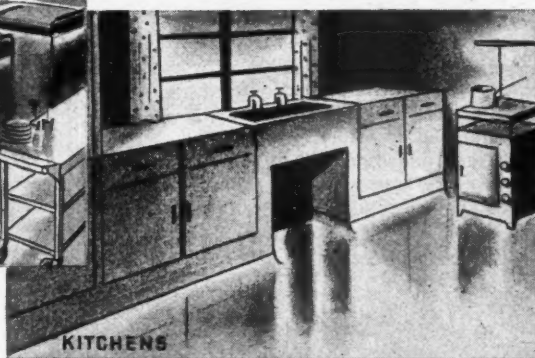
Semtex fleximer floorings may also be used as a protective, resistant base to receive other applied floorings of a decorative character.



HOTELS



HOSPITALS



KITCHENS

● In the public house and hotel, fleximers provide a complete flooring treatment, from the "tanked" service bar, impervious to beer and spirit stains, to the most modern lounge.

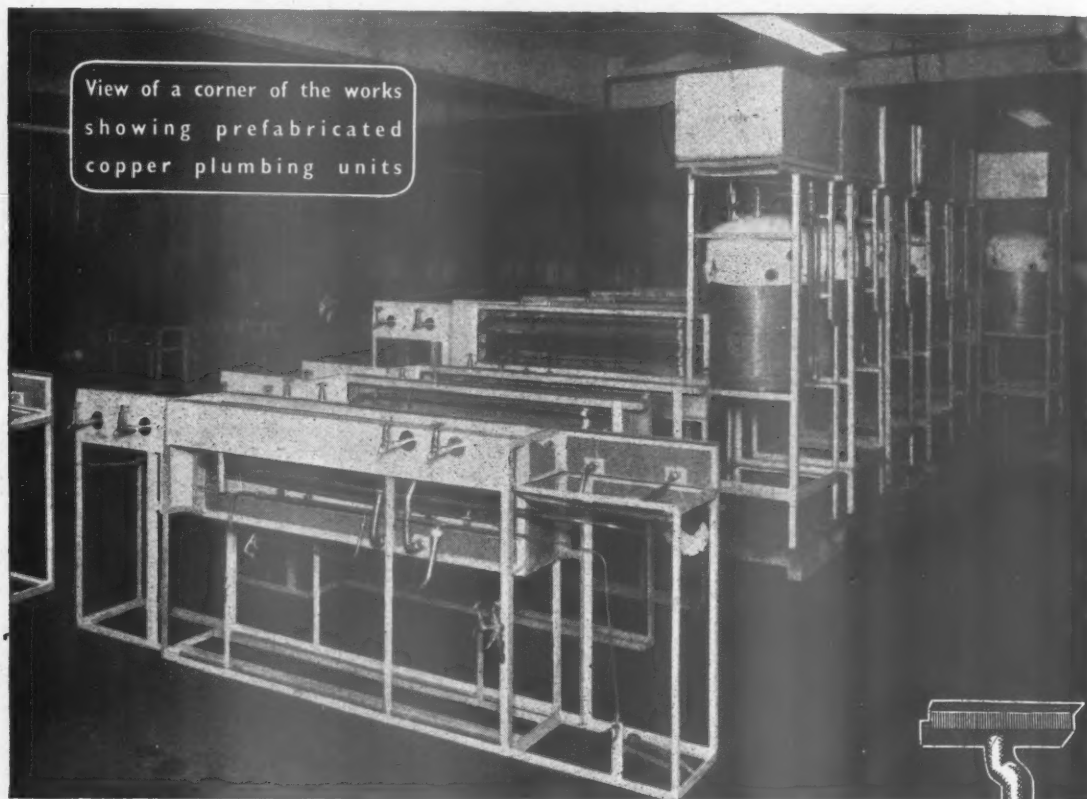


FLEXIMER FLOORS

BY SEMTEX LTD.

SEMTEX LIMITED · SALES DIVISION · 91 REGENT STREET · LONDON · W-1

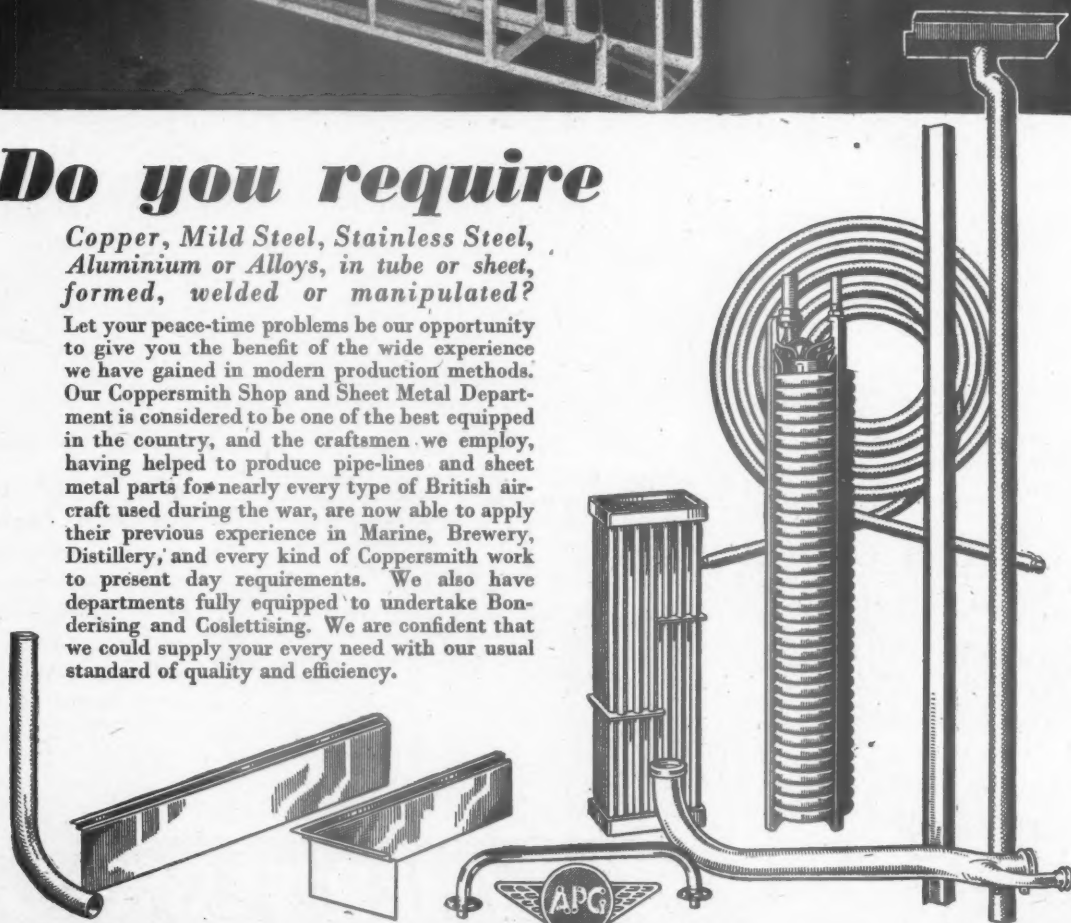
SSM/103



Do you require

Copper, Mild Steel, Stainless Steel, Aluminium or Alloys, in tube or sheet, formed, welded or manipulated?

Let your peace-time problems be our opportunity to give you the benefit of the wide experience we have gained in modern production methods. Our Coppersmith Shop and Sheet Metal Department is considered to be one of the best equipped in the country, and the craftsmen we employ, having helped to produce pipe-lines and sheet metal parts for nearly every type of British aircraft used during the war, are now able to apply their previous experience in Marine, Brewery, Distillery, and every kind of Coppersmith work to present day requirements. We also have departments fully equipped to undertake Bonderising and Coslettising. We are confident that we could supply your every need with our usual standard of quality and efficiency.

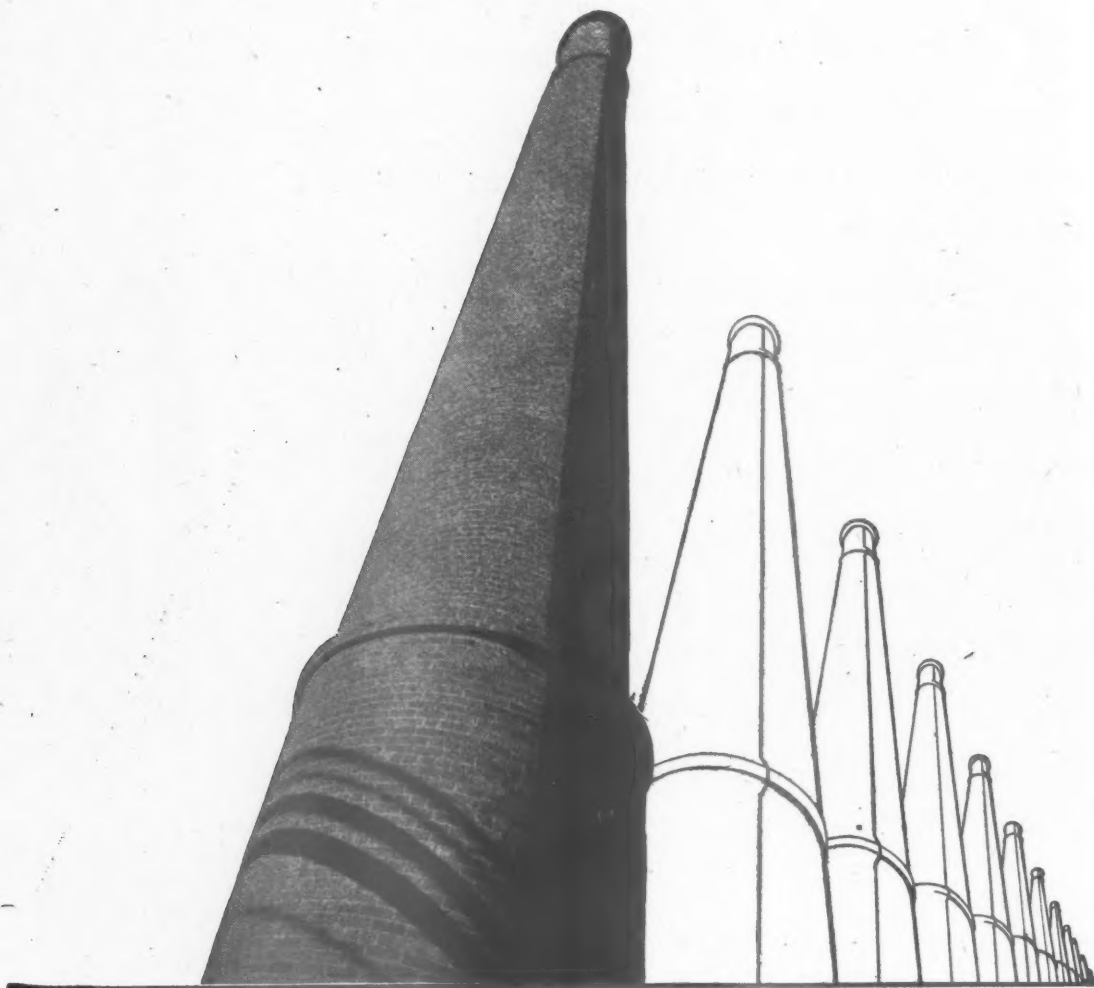


AERO PIPE & GLASS CO. LTD., GENERAL ENGINEERS & COPPERSMITHS
A.P.G. HOUSE, HARLESDEN ROAD, WILLESDEN GREEN, LONDON, N.W.10

Important detail! . . . In the vast programme that lies before Britain's building and construction trades, many a job will be better done, more quickly done, done with less labour and expense, because of IBECO . . . The fact is that IBECO, the only *integrally* waterproofed kraft paper, is "just what the doctor ordered" for many an awkward building problem. Developed originally as an underlay for concrete laid on a porous subsoil to prevent loss of water from the mix, its use is extending rapidly in other directions—for sarking, for lining walls and roofs of wooden buildings, as a damp-proof underlay to parquet and wood-block floors, as a mould-liner for pre-cast concrete units, as an interleaving in concrete and asphalt roof work . . . The proofing bitumen in IBECO is part of the paper itself; it cannot harden and crack, or soften and flow under extremes of temperature. It cannot sweat out, it does not 'perish' in store. If you don't know IBECO already, write for samples to C. Davidson and Sons Ltd. (Dept. K.42): Mugie Moss, Aberdeen.



WATERPROOF KRAFT PAPER



Chimney after chimney . . . built with PHORPRES bricks..

For many years now the leading firms of industrial chimney specialists have preferred PHORPRES bricks, and one firm alone (Chimneys Limited) has built 259 industrial chimneys using PHORPRES bricks. This type of structure imposes more severe and fluctuating loads than any other. From footings to cap, a standard of performance must be maintained far in excess of that required in any ordinary building.



PHORPRES

LONDON BRICK COMPANY LIMITED

HEAD OFFICE: STEWARTBY, BEDFORD, BEDS.

BIRMINGHAM OFFICE: PRUDENTIAL BUILDINGS, ST. PHILIP'S PLACE, BIRMINGHAM, 3.

BRISTOL DEPOT: ASHLEY HILL GOODS DEPOT (G.W.R.) ASHLEY HILL.

Telephone: KEMPSTON 3131

Telephone: COLMORE 4141

Telephone: BRISTOL 46572

Stainless steel is still in great demand for priority purposes, but the position is gradually easing. Before the end of the year, in co-operation with our associate company, The Taylor Rustless Fittings Co. Ltd., we hope to commence small but increasing deliveries of stainless steel sinks and stainless architectural fittings.

PLAND
PRODUCTS

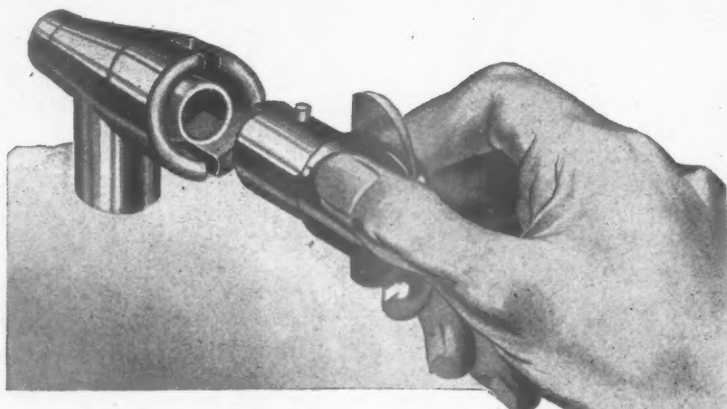
★ Our associate Company, The Taylor Rustless Fittings Co., Ltd., specialises in a comprehensive range of stainless steel architectural fittings, in hospital equipment and in the fabrication of large stainless steel tanks and vessels.

THE STAINLESS STEEL SINK COMPANY LIMITED
RING ROAD, LOWER WORTLEY, LEEDS 12. Also at 14 GT. PETER STREET, WESTMINSTER, S.W.1

Tel: Leeds 38711

Tel: Abbey 1975

Plug in to GAS



WHEREVER gas is installed, in the home or in the factory, EDGAR FLEXIBLE PLUGS AND SOCKETS are indispensable, since only by this method is it possible for any portable gas appliance to be removed from room to room, plugged in and be instantaneously ready for use where needed.

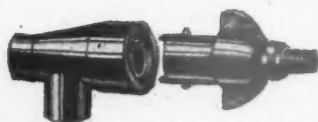
Merely by inserting the plug into the socket and giving it a quarter-turn, the appliance (whether it be gas fire, poker, iron or copper) is connected and the gas automatically turned on.

ANY OTHER
PORTABLE
GAS APPLI-
ANCE.

In all new buildings specify

EDGAR

FLEXIBLE PLUGS & SOCKETS

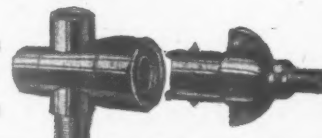


"ORDINARY" TYPE
No. 1. Mk. II.

Socket screwed $\frac{1}{2}$ in. B.S.P.
Nose piece of plug screwed
 $\frac{1}{2}$ in. B.S.P.

"THROUGH" TYPE No. 5
Mk. II.

Socket screwed $\frac{1}{2}$ in. B.S.P.
M. & F. Threads.
Nose piece of plug screwed
 $\frac{1}{2}$ in. B.S.P.



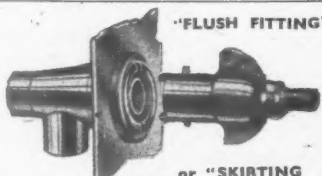
"PEDESTAL" TYPE
No. 2. Mk. II.

With Flange for floor fixing.
Socket screwed $\frac{1}{2}$ in. B.S.P.
Nose piece of plug screwed $\frac{1}{2}$ in. B.S.P.



"PEDESTAL" TYPE
with stem cock.
No. 3. Mk. II.

This only differs from No. 2 in that
the stem cock is added.



"FLUSH FITTING"
or "SKIRTING
BOARD" TYPE No. 4. Mk. II

This type has heavy brass plate 4ins. long and
3ins. wide with holes in corners for fixing screws.
Socket screwed $\frac{1}{2}$ in. B.S.P.
Nose piece of plug screwed $\frac{1}{2}$ in. B.S.P.



WM. EDGAR & SON LTD., BLENHEIM WORKS, HAMMERSMITH, LONDON, W.6

Telephone No.: RIVERSIDE 3486

HIGGS^{AND} HILL
LIMITED

LONDON

LEEDS

COVENTRY

OPEN THE SECOND FRONT NOW



Remember the time when some people kept clamouring for a second front without asking themselves how we were to put ashore vast quantities of tanks and heavy equipment for which you'd normally require a port and harbour facilities? The answer, of course, was the now famous Mulberry Harbour for which we constructed the reinforced concrete pontoons which carried the ten miles of floating pier. Made from concrete panels only $1\frac{1}{2}$ ins. thick, every pontoon had over 1,400 feet of joint between precast and *in situ* concrete, every inch of which had to be watertight. The pontoons were in fact the floating foundation of a great combined operation which made sense of—"Open the second front now!" We're always willing to collaborate with Architects and Designing Engineers who are thinking in terms of another important front—the front of reconstruction.

WATES LTD · BUILDING AND CIVIL ENGINEERING CONTRACTORS

1258-1260 LONDON ROAD, LONDON, S.W.16

TELEPHONE: POLLARDS 4401 (15 LINES)

WATES BUILD



IS THE ESTIMATED
COST OF FIRES
DURING THE WAR
NOT CAUSED BY
ENEMY ACTION...

FOR THE PROTECTION OF
RE-CONSTRUCTED BRITAIN'S
NEW BUILDINGS AGAINST
FIRE RISKS, ARCHITECTS
ARE INVITED TO CONSULT



DREADNOUGHT

FIREPROOF DOORS (1930) LTD.

26 VICTORIA STREET,

WESTMINSTER, S.W.1

Post-war supplies of LEATHERCLOTH

Cotton is an essential raw material in the production of leathercloth. Cotton fabrics are, however, in short supply, and any improvement will only be on a gradual scale. Meantime we shall continue to supply leathercloth to customers under quotas, this having been found to be the fairest method of distribution.

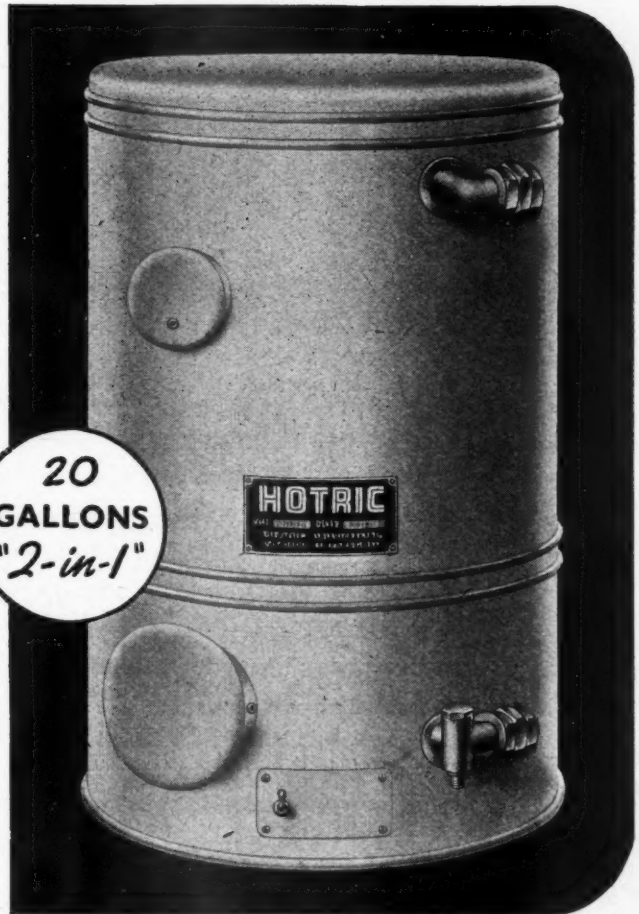
Where firms have, or can acquire, suitable base fabrics, we shall be pleased to quote for its processing into leathercloth. A sample of the fabric should be submitted. Dyed, printed, and combined cotton fabrics, linen and other materials can be considered.



IMPERIAL CHEMICAL INDUSTRIES LIMITED
LEATHERCLOTH DIVISION HYDE, CHESHIRE

HOTRIC

Electric **THERMAL
STORAGE
HEATERS**



The 20-gallon capacity Hotric 2-in-1 Thermal Storage Heater solves the water heating problem of Architects and Builders engaged in reconstruction. Fitted with two sets of thermostatically controlled heating elements, one permanently connected and used for normal needs, and the other used when larger supplies, such as baths, are required. Odourless, fumeless, fitted anywhere, not requiring flues, and easily linked to alternative solid fuel systems, the Hotric 2-in-1 requires minimum maintenance, and fits well into pre-fabricated plumbing units. Where ordinary kitchen requirements only have to be met, the Hotric 1 1/2-gallon Sink Heater can provide constant supplies of scalding hot water at low cost. Write or telephone for full information.

HOTRIC LIMITED

Head Office: Hotric Works, Broxburn, West Lothian, Scotland

Sales Office: 198, Fore Street, Edmonton, N.18



*Which way
will it jump?*

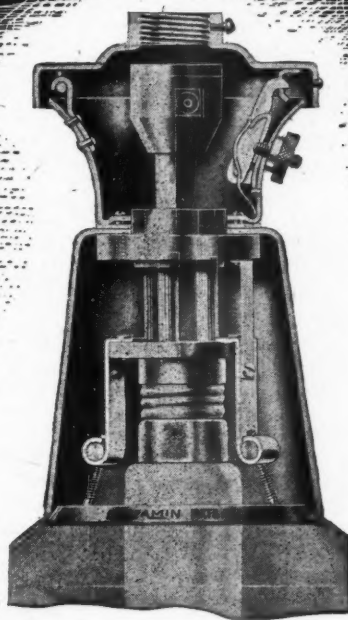
It is through no lack of initiative that this Company is waiting to see how the future of the joinery industry will shape before making any categorical announcement of policy; but it does mean that — regrettably — large orders cannot be filled for the time being. In making this statement we seek only to spare our clients the trouble of writing, and ourselves the sad duty of declining, orders for our Standard Joinery. But as soon as the cat has jumped we shall lose no opportunity to advise the trade of our plans.

Midland Woodworking

COMPANY LIMITED • MELTON MOWBRAY

Craftsmen in Domestic Joinery

SAAFLUX CONSTRUCTION



The construction of lighting fittings involves a number of considerations. Besides the need for suitable distribution of light, which implies the provision of a range of reflectors, care must be taken that lamp caps and incoming cables are protected from excessive temperature due to the heat from the lamp, wiring must be easy, maintenance facilitated and provision made for cleaning. At the same time electrical and mechanical safety must be assured.

Saaflux construction ensure all these features. They dissipate heat so that wiring and lamp cap temperatures are not too great, they are removable complete with lamp for cleaning or service. When wiring, only a 3-oz. terminal block has to be handled. An inner supplementary reflector adds to the light output and prevents danger from touching lamp caps. A range of reflectors is available covering all types of light distribution.

Benjamin Illuminating Engineering Service
will advise you on your lighting problems.

BENJAMIN

The Benjamin Electric Ltd., Brantwood Works, Tottenham, London, N.17

Telegrams : "Benjalect, Southtot, London."

Telephone : Tottenham 5252 (5 lines)

Onwards after Victory

WHEN the National effort has been crowned with overwhelming success in WAR production British factories must swing back to no less intensive production for the rehabilitation of the Nation and the World.

Electrical cables, essential for war, are no less essential for the arts of PEACE, and the lessons learned in war call urgently for development and application by the best brains in the industry.

Users of C.M.A. Cables can rest assured that they are served by unsurpassed products of Research and Engineering.

Be safe and use
C.M.A.
CABLES



Regd.
Trade Mark
Nos. 505, 506 & 507

MEMBERS OF THE C.M.A.

The Anchor Cable Co. Ltd.	The India Rubber, Gutta-Percha & Telegraph Works Co. Ltd. (The Silvertown Co.)
British Insulated Cables Ltd.	Liverpool Electric Cable Co. Ltd.
Callender's Cable & Construction Co. Ltd.	The London Electric Wire Co. and Smiths Ltd.
Connollys (Blackley) Ltd.	The Macintosh Cable Co. Ltd.
The Craigpark Electric Cable Co. Ltd.	The Metropolitan Electric Cable & Construction Co. Ltd.
Crompton Parkinson Ltd. (Derby Cables Ltd.)	Pirelli-General Cable Works Ltd. (General Electric Co. Ltd.)
Enfield Cables Ltd.	St. Helens Cable & Rubber Co. Ltd.
Edison Swan Cables Ltd.	Siemens Brothers & Co. Ltd. (Siemens Electric Lamps and Supplies Ltd.)
W. T. Glover & Co. Ltd.	Standard Telephones & Cables Ltd.
Greengate & Irwell Rubber Co. Ltd.	Union Cable Co. Ltd.
W. T. Henley's Telegraph Works Co. Ltd.	
Johnson & Phillips Ltd.	

In common with every other periodical this JOURNAL is rationed to a small part of its peace-time needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order."

NEWS

THURSDAY, SEPTEMBER 13, 1945
No. 2642. VOL. 102

News	181
Architect to the GWR	182
This Week's Leading Article ..	183
Astragal's Notes and Topics ..	184
Letters from Readers	185
U S A Commerce Centre Will Have Internal Road	186
Physical Planning Supplement: Sir Charles Reilly Discusses the Plan for Plymouth	187
Two Houses of Timber in Canada: Designed by Peter Thornton	191
Information Centre	196
Societies and Institutions ..	197

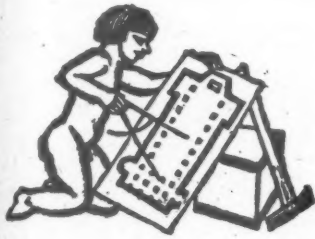
Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

★ means spare a second for this, it will probably be worth it.

★★ means important news, for reasons which may or may not be obvious. Any feature marked with more than two stars is very big building news indeed.

A deputation from the Wandsworth Borough Council to the Ministry of Health has protested against the compulsory acquisition of BOMBED OUT SITES FOR TEMPORARY HOUSES.

The Minister of Health, Mr. Aneurin Bevan, received a deputation from the Wandsworth Borough Council consisting of the Mayor (Alderman Bonney), the Chairman of the Housing and Repairs Committee (Councillor Willison), and Councillors Castle, Campbell, Alexander and Symondson, together with the Town Clerk and Chief Housing Officer. Mr. David Robertson, M.P., and Capt. Adams, M.P., were also present. The deputation discussed with the Minister a Resolution passed by the Council "strongly opposing the compulsory acquisition by the Government, and the LCC or any authority, of the sites of bombed premises in order to erect Portal-type houses." The Council expressed the view that the use of such sites for Portal-type houses would retard rather than expedite the ultimate rehousing of homeless persons, as a greater number of persons could be rehoused in permanent dwellings than would be possible by the erection of temporary houses. The Minister explained that the provision of temporary houses was supplementary to the permanent house programme and would not continue beyond the point where large numbers of permanent houses could be brought into production. The essence of the matter was speed in alleviating the present acute shortage, but this would not be allowed, to prejudice the building of permanent houses.



DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by their initials as given in the glossary of abbreviations on the front cover.

BIRMINGHAM. *Modern Building Tools Exhibition.* At Big Top Site, New Street, (Sponsor, MOW.) OCT. 9-13

BRENTWOOD. *Country Life and Country Needs Exhibition.* At Brentwood School. (Sponsor, BIAE.) SEPT. 17-29

BRISTOL. *Town and Country Planning Summer School.* At Bristol University. (Sponsor, TPI.) SEPT. 18-25
Modern Building Tools Exhibition. At Black Boy's Hill. (Sponsor, MOW.) OCT. 23-27

FINSBURY. *NALGO Exhibition.* At the Town Hall. (Sponsor, BIAE.) SEPT. 24-OCT. 1

GLASGOW. *Association of Public Lighting Engineers' Exhibition.* SEPT. 13-14

GRAVESEND. *NALGO Exhibition.* SEPT. 13-29

HOMERTON. *NALGO Exhibition.* At Homerton College. (Sponsor, BIAE.) SEPT. 24-OCT. 8

ILKLEY. *NALGO Exhibition.* At the Grammar School. (Sponsor, BIAE.) OCT. 1-8

LIVERPOOL. *Modern Building Tools Exhibition.* (Sponsor, MOW.) SEPT. 13-15

LONDON. *NALGO Exhibition.* At the YWCA. (Sponsor, BIAE.) OCT. 6-13
NALGO Exhibition. At the Geffrye Museum, Kingsland Road, E. (Sponsor, BIAE.) DEC. 3-15

John Summerson. *Russian Architecture: The Historical Background.* First of a series of introductory lectures to the study of Soviet architecture. At the RIBA, 66, Portland Place, W.1. Chairman, Percy Thomas, P.R.I.B.A. Tickets from SCR Architecture Group, 98, Gower Street, W.C.1. Admission free to members of the group, non-members 1s. 6d. 6.30 p.m. SEPT. 25

Dr. F. Klingender. *Socialist Realism: The Aesthetics of Soviet Architecture.* Second of a series of introductory lectures to the study of Soviet architecture. At the RIBA, 66, Portland Place, W.1. Chairman, E. J. Carter. Tickets from SCR Architecture Group, 98, Gower Street, W.C.1. Admission free to members of the Group, non-members 1s. 6d. 6.30 p.m. OCT. 22

Dr. E. G. West. *Aluminium.* Second of three lectures on *Materials.* At the Royal Society, Burlington House, W.1. Chairman, Hon. Geoffrey Cunliffe. Buffet lunch 12.45 p.m. Lecture 1 p.m. (Sponsor, DIA.) OCT. 4

Greater London Plan Exhibition. At the Institution of Civil Engineers, Great George Street, S.W.1. SEPT. 13-16

Arthur Ling. *Town Planning in Action: The Moscow Plan.* Fourth and last of a series of introductory lectures to the study of Soviet architecture. At the RIBA, 66, Portland Place, W.1. Tickets from SCR Architecture Group, 98, Gower Street, W.C.1. Admission free to members of the Group, non-members 1s. 6d. 6.30 p.m. DEC. 11

Nikolaus Pevsner. *Visual Planning and The City of London.* At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m. Nov. 27

MANCHESTER. *Modern Building Tools Exhibition.* (Sponsor, MOW.) SEPT. 25-29

PONTYPRIDD. *NALGO Exhibition.* (Sponsor, BIAE.) SEPT. 13-14

REDFIELD. *NALGO Exhibition.* At the Youth Centre. (Sponsor, BIAE.) SEPT. 13-16

REYDON. *Country Life and Country Needs Exhibition.* (Sponsor, BIAE.) SEPT. 19-26

RUGBY. *NALGO Exhibition.* (Sponsor, BIAE.) OCT. 20-Nov. 3

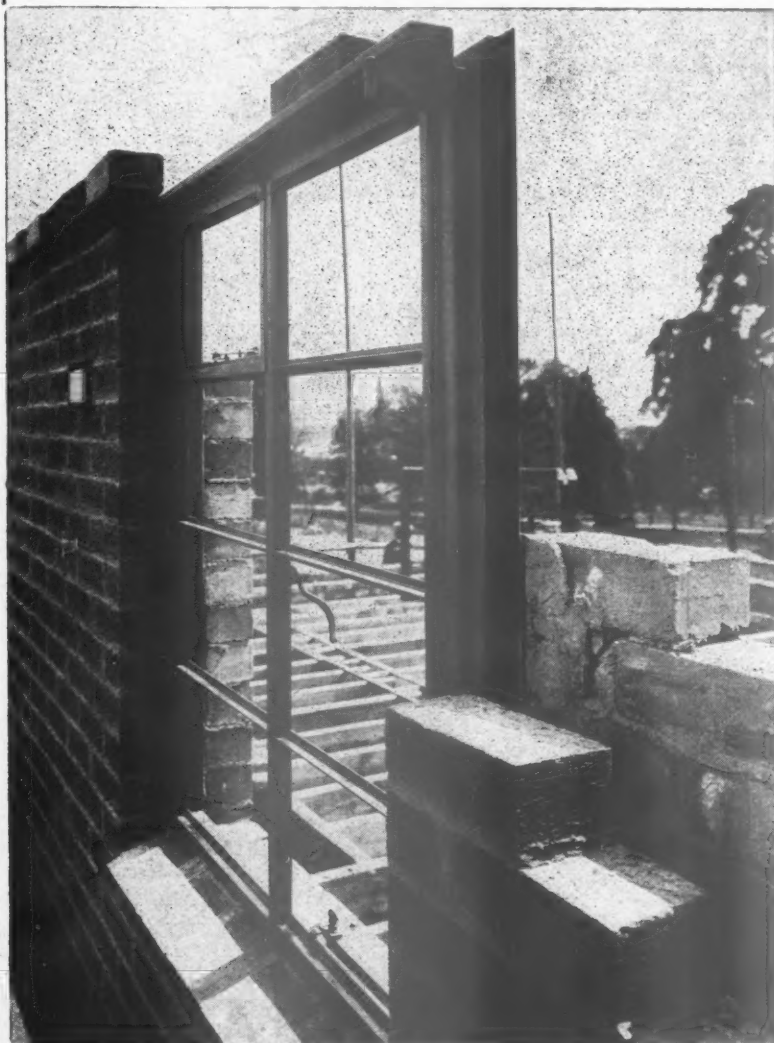
SALISBURY. *Homes to Live In Exhibition.* (Sponsor, BIAE.) OCT. 1-20

SOUTH KIRBY. *NALGO Exhibition.* At Station House. (Sponsor, BIAE.) SEPT. 14-25

VENTNOR. *The Future of British Resorts. Planning Our Holiday Areas.* Town and Country Planning Association Conference at The Winter Gardens Pavilion, Ventnor, Isle of Wight. The conference will be opened on October 6 by the Rt. Hon. Ernest Bevin and end on October 9. Among those taking part in the discussions will be Sir Patrick Abercrombie, representatives of all the main resort towns, of the travel and holiday organizations, of the hotel, catering and resort industries, and by interested members of the public. The conference will be preceded by a holiday week, from September 29 to October 6, at the Wellington Hotel, Ventnor. The Holiday Week has been designed primarily as a holiday meeting of town and country planners, members of the Association and their friends. Excursions and a limited number of lectures on subjects related to town and country planning are being arranged. (Sponsor, TCPA.) SEPT. 29-OCT. 9

YORK. *NALGO Exhibition.* At Holgate Hill Settlement. (Sponsor, BIAE.) FEB. 10-23

REBUILDING BRITAIN



HOPE'S "CAVITY" SUB-FRAMES

Patent No. 429359/33

SERVE AS A TEMPLATE
FOR WINDOW OPENINGS

SEAL THE CAVITY
KEEP OUT THE WET

PLASTER AND WINDOW
BOARDS ARE ACCOMMO-
DATED WITHOUT LOOSE
BEADS TO COVER
SHRINKAGE

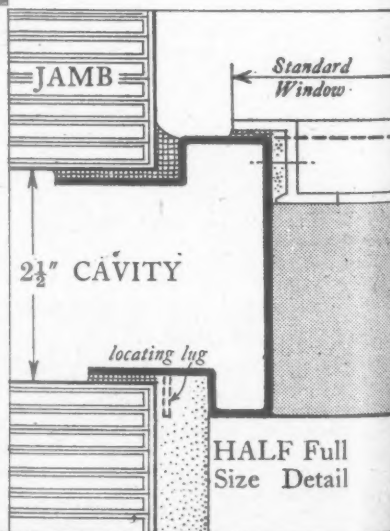
A STEEL WINDOW-BOARD
CAN BE SUPPLIED

NO FIXING LUGS OR
HORNS—NO CUTTING OF
BRICKWORK

HENRY HOPE & SONS LTD.
Smethwick, Birmingham

HOPE'S "Cavity" SUB-FRAMES

THEY WILL BE RUSTPROOFED



From AN ARCHITECT'S Commonplace Book

SIR BANISTER'S ORIGINALS RECOVER FROM THE COLIC. [*From A Village in Piccadilly, by Robert Henrey (J. M. Dent and Sons).*] The charter and by-laws of the Lorimers' Company were in a strong-room in the cellars of Carpenters' Hall when that building was destroyed by fire. Owing to the dangerous condition of the walls it was not until six months after the fire that anybody was allowed to search the ruins and remove the contents of the safe. By this time the historic documents were soaked and covered with mildew. . . . This was by no means the worst of such cases. Sir Banister Fletcher's original drawings for his *History of Architecture* were dripping wet, with the sheets stuck fast together, when they were finally retrieved from the Chancery Lane Safe Deposit, three months after the dreadful fire that destroyed half the famous street. The drawings in a thoroughly sodden state smelt so appallingly bad that the workmen were tempted to use their gas masks while handling them. The drawings were repaired with such cunning, however, that future generations will never realize how near they were to destruction.

The Penfold Gold Medal and the Driver, Wainwright, John Gilchrist and Cawter Prizes of the Chartered Surveyors' Institution have been WON BY DONALD CLARK HANNAH of Dumfries, Scotland.

Other prize winners are:—Penfold Silver Medal and Robert Irwin Barr Prize, Samuel Martin Smith, Stepps, near Glasgow; Institution Prize and Galsworthy Prize, Ronald Maycock, Doncaster; Special Prize, Thomas Laird MacArthur, Greenock, Scotland; Quantities Prize, William Arthur Curley, Wylam, Northumberland; Constructive and Working Drawings Prize, Andrew Sim, Edinburgh; Beadel Prize and Mellersh Prize, Robert Watt Edgar, Kirkcaldy, Fife; Hyman Marks Prize, Clive Desmond Browning, Bristol; Julian Rogers Prize, William Hawthorne Lochhead, Beith, Ayrshire.

★

Parliamentary Powers are to be sought for the construction of the SEVERN BRIDGE, TO COST SEVERAL MILLION POUNDS.

Plans for the new bridge were considered by Parliament before the war, but the Government decided not to go ahead because of the demands of the defence programme. The scheme provides for a bridge over two and one-eighth miles long, with a span of about 1,400 ft. over the navigation channel of the river, which would save 54 miles between Bristol, Southampton, and Cardiff.

A Deputation to the Ministry of Health from the Brighton Town Council requested that powers should be given to REQUISITION ANY UNOCCUPIED PROPERTY suitable for housing, and any large houses not fully occupied.

The Minister of Health, Mr. Aneurin Bevan, received a deputation from Brighton, consisting of the Mayor (Councillor Nicholls), the Chairman of the Housing Committee (Councillor Davey), and Councillors Field, Knowles, Lux, Rostance and Sherrott, together with the Deputy Town Clerk and the Borough Surveyor. The deputation requested that powers should be given to requisition any unoccupied prop-

erty suitable for housing and any large houses not fully occupied. They stressed that the situation this winter could only be met by increased drastic powers, that procedure should be cut down to the minimum and pointed out that progress with the housing problem was entirely dependent on the release of labour and technical staff to plan the work. The Minister undertook to give consideration to these submissions and in particular to see what more could be done in regard to the staffing difficulties, and the simplification of procedure.

Dr. Percy Dunsheath has been elected PRESIDENT OF THE INSTITUTION OF ELECTRICAL ENGINEERS.

Dr. Dunsheath has twice held office as member of the Council of the Institution, serving as Chairman of the Transmission Section 1936-7, and as vice-president 1940-3. He was appointed chairman of the Research Committee, an office he still holds, in 1942, and was re-appointed vice-president in 1945. He has been awarded the Kelvin Premium, the John Hopkinson Premium and various extra premiums. After serving in France in the Great War as a Captain in the R.E.'s, being twice mentioned in despatches and awarded the O.B.E. (Military), he joined W. T. Henley's Telegraph Works Company in 1919 to re-organize the research department, became research and technical manager in 1929 and chief engineer in 1934. He was elected a director of the company and of its subsidiaries, Henley's Tyre and Rubber Company and the Holborn Construction Company in 1937.



Dr. Percy Dunsheath, President of the Institution of Electrical Engineers. See News item above.

★★
The Royal Society of Arts is organizing a COMPETITION FOR A DESIGN FOR A CATHEDRAL at Colombo.

The Colombo New Cathedral Committee, in association with the Standing Committee of the Diocesan Council of the Church of Ceylon, invites architects who are qualified Members of the RIBA or allied bodies, to submit in competition designs for the proposed Cathedral of the Holy Cross, together with Bishop's House, Divinity School, Diocesan Hall and Offices, in Colombo, on a site adjoining Buller's Road in that city. The competition is being organized by the Royal Society of Arts, London, on behalf of the Colombo New Cathedral Committee. Premiums, £500, £200 and £100. Last day for submitting designs, December 31, 1946. Last day for questions, February 28, 1946. Assessor, Sir Giles Gilbert Scott, O.M., R.A. Conditions of Competition may be obtained on application to the Secretary, The Royal Society of Arts, 6, John Adam Street, Adelphi, London, W.C.2. Deposit £1.

★★★

In a statement last week Mr. George Tomlinson, Minister of Works, said: THE ROLE OF THE MINISTRY OF WORKS in relation to housing has been somewhat altered as compared with the position before the General Election.

It will no longer be concerned with housing policy, he continued, but as the Ministry responsible for dealing with the problems of the Building Industry as a whole. It will be charged with the task of seeing that there is an organised plan for the production of all materials needed for the industry and for housing in particular. In that capacity it will remain responsible for the production and erection of temporary houses as the housing authorities may deduction of such prefabricated permanent houses as the Housing Authorities may decide should be made available. It is particularly in the realm of scientific development, and in the dissemination of the results of this kind of work, that the Ministry should be able to render real service to the Building and Civil Engineering Industry. The Ministry is being reorganised on the normal Government Department lines under the Permanent Secretary, and the need for the Ministry of Works Council Organisation has ceased. Most valuable work has been done by Sir Hugh Beaver and General Pile, but the change in the functions of the Ministry has afforded an opportunity for reorganising it on a normal peace-time basis with permanent officials in the key posts.



A r c h i t e c t t o t h e G W R

Mr. Brian Bannatyne Lewis, M.A., B.Arch., F.R.I.B.A., the newly appointed architect to the Great Western Railway Company, was on active service with a Field Company of the Royal Australian Engineers from 1940 until 1943, when he was released on the application of the Ministry of War Transport to return to the GWR, which he had joined in 1930. Born in Tasmania in 1906 he was educated at Melbourne University where he became a Bachelor of Architecture, and at Liverpool University, where he became M.A. (Architecture). He won the RIBA Victory Scholarship in

1931, the Honan Scholarship of the Liverpool Architectural Society and the War Memorial Scholarship of the Victorian Institute of Architects. He has had office experience in Melbourne, Singapore and London, and has studied in Spain and in Scandinavia. In partnership with his wife, Hilary Bannatyne Lewis, B.Arch., A.R.I.B.A., he carried out domestic works mainly in Westmorland and exhibited his own drawings of these in the Royal Academy in 1938-39-40. He volunteered in the Australian Imperial Forces in 1940, and served in North Africa, Syria and the Pacific.

At Bradford-on-Avon, Wiltshire, the Urban District Council's decision to build ten temporary houses on a prehistoric burial ground has been CRITICIZED BUT APPROVED.

The houses are to be built on the prehistoric Budbury site, and some of them will be in the centre of the ancient mound, now dated by experts at 2,000 B.C. Councillor Guy Underwood, who made the discovery of the circle, protested that they would be destroying something of priceless value. Mr. B. H. St. O'Neil, inspector of ancient monuments, says *The Times*, wrote to the council: I am glad to hear your council has agreed to arrange the proposed temporary houses on this area, and that the minimum of damage will be done on the ancient site. Naturally I would still prefer that none of the houses should be placed within the earth bank, but in all the circumstances I am not in a position to press that point. We can now definitely say that the round mound is a barrow or burial mound such as was constructed in the bronze age, second millennium B.C. It does not seem that sufficient work has been done to show that the site generally is of considerable importance, and will merit careful scientific investigation later on when paid labour is available.

★

The Minister of Works has decided to strengthen the existing Regional Organisation of the Ministry by the APPOINTMENT of REGIONAL DIRECTORS who will be generally responsible for all aspects of the Ministry's work in their Region. A number of appointments to these posts will shortly be announced.

M. Jacques Greber, Inspector General of City Planning in Paris, has been invited by the Canadian Government to prepare plans for the extension of OTTAWA AS A WAR MEMORIAL.

This has been disclosed by Mr. Mackenzie King, the Prime Minister, who said: The proposal is to extend the capital to the north bank of the Ottawa river in conformity with the scheme which M. Greber partly developed on the south bank after the last war. General de Gaulle has indicated that M. Greber will be made available for the task. According to *The Times* correspondent Mr. Mackenzie King envisaged an Ottawa developed along lines similar to what has been done in Washington, and power has already been given to the Federal District Commission to consult with municipal authorities for the development of a large area in the neighbourhood of Ottawa, including stretches of the Gatineau valley. The scheme will imply city planning improvements in Hull, a community on the Quebec side of the river, where new Government departments may in due course be established. It will also be linked with national park developments in the Gatineau valley. The project is one that has long interested the Prime Minister, and he regards its fulfilment as a fitting national memorial to those who have died in this war.

PRECISION OR AVERAGE?

IN the 'thirties the vanguard of architectural advance was dedicated to architectural precision. The word occurs again and again in Le Corbusier's writings and the quality of precision was characteristic of his buildings and those of the advanced minority of architects in all countries. The outstanding buildings were exactly designed to each particular set of circumstances, to a nicely considered scale of values, with studied architectural effect. Important discoveries in architectural form were the result of this period of concentration, of closely reasoned analysis and finely adjusted sensibility, applied to a restricted number of buildings.

Nowadays the situation has changed. Two very different factors claim attention. The immensity of the task of reconstruction postulates architecture designed in the mass—average architecture rather than the architecture of precision. The upheaval of wartime changes reminds us that architecture too must provide for change, that the precise solution of one generation may become a white elephant in the next.

In the field of average architecture we have already scored successes, particularly in some of the prefabricated houses in which the speculative builder's standard plan has been married to some of the discoveries of the architecture of precision. Average architecture is a matter of standardizing the best (and only the best) of established ideas.

The architecture of change is more difficult. Here there is no question of standardization: we are as yet in the early stages of discovery. The need for combating obsolescence by adaptability is acute, although the demand is not yet clearly formulated. It takes the shape of complaints against cast-off buildings, and requests for specially designed accommodation with a margin for development.

This is the line adopted in a pamphlet upon *Industrial and Welfare Accommodation* that we have received from the Post Office Engineering Union. As we must now look to the community at large as our client, we should take notice when an important group commits requirements to paper. It is clear that we who have never really mastered the art of persuading the individual client or small committee to present us with clear and practicable instructions, are now confronted with the larger task of explaining to our fellow-citizens in the mass what architecture can do for them, and what it cannot. The Post Office Engineers demand that their buildings shall in future be precisely adapted to function, that they shall not be forced to accept architectural cast-offs from other industries. On the other hand they remark that theirs is a developing industry, susceptible to sudden changes in technique, and they ask for a margin of accommodation for future needs. They conclude by foreseeing the need to review their recommendations at a future date.

The inconsistency of this argument is masked by the apparent reasonableness of the individual assertions. But a building precisely adapted to present functions is by definition not one

with a margin of accommodation for future needs: and it is just because theirs, and everyone else's, is a developing industry that somebody must accept architectural cast-offs or cramped quarters or departments overflowing into each other, *unless* . . . (and here, with greater insight, the Post Office Engineers might have formulated the appropriate instruction for architects) . . . unless buildings are made adaptable to change. Several methods for achieving adaptability are already being examined. Box Frame Construction is one. Similar is the permanent post-and-slab with light-weight adaptable walls and partitions. Another line is some kind of prefabricated demountable unit design that allows buildings to be added to or rearranged or removed, according to changing needs. Architects are ready to tackle this problem, but a clear public demand would be of great assistance.



The Architects' Journal

War Address: 45, The Avenue, Cheam, Surrey

Telephone: Vigilant 0087-9

N O T E S

&

T O P I C S

FULL STEEN AHEAD

"Mrs. Jones lives in a new house in a new road in a new suburb surrounded by a Green Belt. The suburb includes housing zone, shopping area and social centre; free library and lecture hall, cinema, tennis courts, children's playground, lido and paddling pool. There is a secondary school with kindergarten; several churches of varying denominations; of course, a pub. . . ."

"The perambulator rolls smoothly along an admirable concrete sidewalk, bordered, at punctual intervals, by small trees; nice, fresh, green-looking. No grimy bricks and mortar for lucky Mrs. Jones. Along the middle of the

road bowls a certain amount of traffic by-passed from the main. . . ."

"Mrs. Jones sets out as usual next morning. She finds herself counting. There are 22 trees between her gate and the first of the shops; 22 trees there and 22 trees back—she verifies it on the return journey. Sixty-four gates in couples, representing 64 houses, distinguishable only by the variety of the curtains; with 64 front doors, 64 side sheds, containing 64 perambulators, bicycles, scooters—what have you. Sixty-four paths, 64 front gardens."

"How many steps does it take, each morning, to get past those 22 trees, 64 gates? . . . She begins to count. Counting has become a habit. . . . She comes home, goes to bed, and, while Mr. Jones snores, lies awake, dreaming of worlds beyond her own; miserable with tiny resentments and envies. To-morrow will be Sunday. The next day Monday. She dreads another week. She begins quietly to cry. . . ."

"Mrs. Jones—foolish, petty, empty-headed, whatever you like to call her—is to be pitied, not censured. She is the product of some busybody's idea of 'healthy housing conditions for the worker'; of a penal settlement for housewives, specially planned and standardised so that no good excuse offers itself for Mrs. Jones to go beyond her immediate environment and no scope exists for the exercise of her invention or originality. . . ."

"This is what town-planning in the past has brought us to; this is where it may bring us again, unless we resist it. . . ."

These quotations are from an article by novelist Marguerite Steen which appeared recently in the *Evening News*. "Compare," she says, "the life of town-planned Mrs. Jones with that of wholesome village life where there is always a centre of interest—such as the harvest—to draw the community together. One is stagnant, unhealthy. The other quick with a healthy interdependent spirit."

Before you dismiss this as superficial and ill-informed, remember the potential dangers in its tiny kernel of truth. Of course, it was neuroses, neuroses all the way in many of our pre-war suburbs. We have all read our Mumford and our Auden. We know about Mecropolis, the idiot in Leicester Square, and the community spirit at Watling. But four-fifths of Englishmen are townsmen, and there's no harvest to discuss in Burnt Oak and they don't hawk homely goods in Shepherds Market any more. How then can urban life regain its structure and dignity?

The catchword—and how it's been caught, not a butterfingers anywhere except in the City of London—is the neighbourhood unit—the panacea. This is what's at the bottom of Miss Steen's sip at the Pierian spring. Most intelligent people—and they include a few town-planners—are well aware that neighbourhoods can't be built or circumscribed. All you can do is to provide the best possible physical background against which a neighbourhood can grow and flourish.

But no. The general impression—and if the *Evening News* has it, it's general—is that after the war we are all going to live in fenced-in neighbourhood units, and only leave them in a hearse on the way to the cemetery which we share with the next N.U. The best way of stopping this misconception perhaps is to drop the catchword.

POETS' CORNER

THE SPEC BUILDER SPEAKS—II*

Thatched roof
(Fire-Proof).
Leaded panes,
Sunken bath,
Crazy path,
Ditto drains,
Parquet floor,
Gothic door,
Chinese knocker.
The garage
(Not too large)
Is baroque
Walls of brick
—not too thick.
Lovely view—
In a part
Quite unscarred
Hitherto.
Highest class,
Stained Glass
In the closet.
Don't delay,
Write to-day
(Small deposit).

H. J. RYAN

CORRUGATED PERSPEX

Much is to be expected in new developments from the application to peace-time usages of materials and processes evolved and proved during the war. As an earnest of what will come, and of interest especially to those interested in lighting, comes the announcement that Perspex, the transparent plastic material designed and

manufactured by ICI and used in every kind of aircraft throughout the war, is now available in corrugated sheet form for purposes of roof and wall lighting.

The corrugated sheets are made up to fit existing standards of corrugated iron and asbestos cement, and can be fitted to the roof or wall in exactly the same way as normal corrugated sheets, with standard hook bolts or wood screws and washers.

There are some obvious advantages in having a transparent material in this form. Not only can the corrugated Perspex sheets be fitted by anyone having experience of ordinary corrugated sheeting, thus dispensing with the need of separate glazier, but the sheets, requiring no frames or lead flashings, can easily be moved from one position to another should alterations in the floor lay-out make this desirable. Moreover, by interspersing the corrugated sheets in a chequer-board pattern upon the roofing, a shadow-free disposition of light can be obtained upon the floor below.

Corrugated Perspex roof lights are said to have a high safety factor and under normal conditions will not crack or splinter when subjected to shocks or vibrations. There is therefore no danger of workers receiving injuries through falling fragments, nor, incidentally, do the sheets need to be wired as a protection from such a danger.

The material weathers well, they say, and is not affected by atmospheric contamination. Normal maintenance is therefore reduced to mere cleaning. The lightness in weight of the material—0.9 lb. per square foot—renders it not only peculiarly easy to handle and fix in position, but simplifies roof construction.

There is still a serious disadvantage in Perspex, however, which, it is to be hoped, the experts will soon overcome. It abrades far too easily. And I should like to be assured that the sun's heat would not gradually mould a sag in the roof sheets.

ASTRAGAL



LETTERS

J. Blackburn,

A.R.I.B.A., A.M.T.P.I.

C. Barker

Cocoanut Matting

SIR.—I have just received a shipment of the old Journal, an event to which we architects and even engineers always look forward to out here. Many times in the past I have thought of writing to you about many things, but always the date on the Journal and the knowledge that my letter would be out of date by the time it reached you, has put me off.

However, the system proposed by Mr. J. H. Waller for Emergency Housing has stimulated my lethargy for the following reasons.

I have been carrying out many experiments with cocoanut matting and cement rendering, and some 18 months ago, whilst working on an outstation, I ran out of tiles. Necessity is the mother of invention, and I tried the rendered matting on the roof with rafters at 3 ft. 0 in. centres. The result was a beautiful corrugated pitched roof, which I must admit was purely accidental, since I had not anticipated so much sagging. However, I was quick to realize the possibilities of this form of construction, as cocoanut matting is a staple village industry out here, and the next logical thing to do was to put on a curved corrugated roof with removable centering. This I did on a small building 9 ft. 0 in. wide by 13 ft. 0 in. long, and much to the amazement of everyone concerned it is still standing.

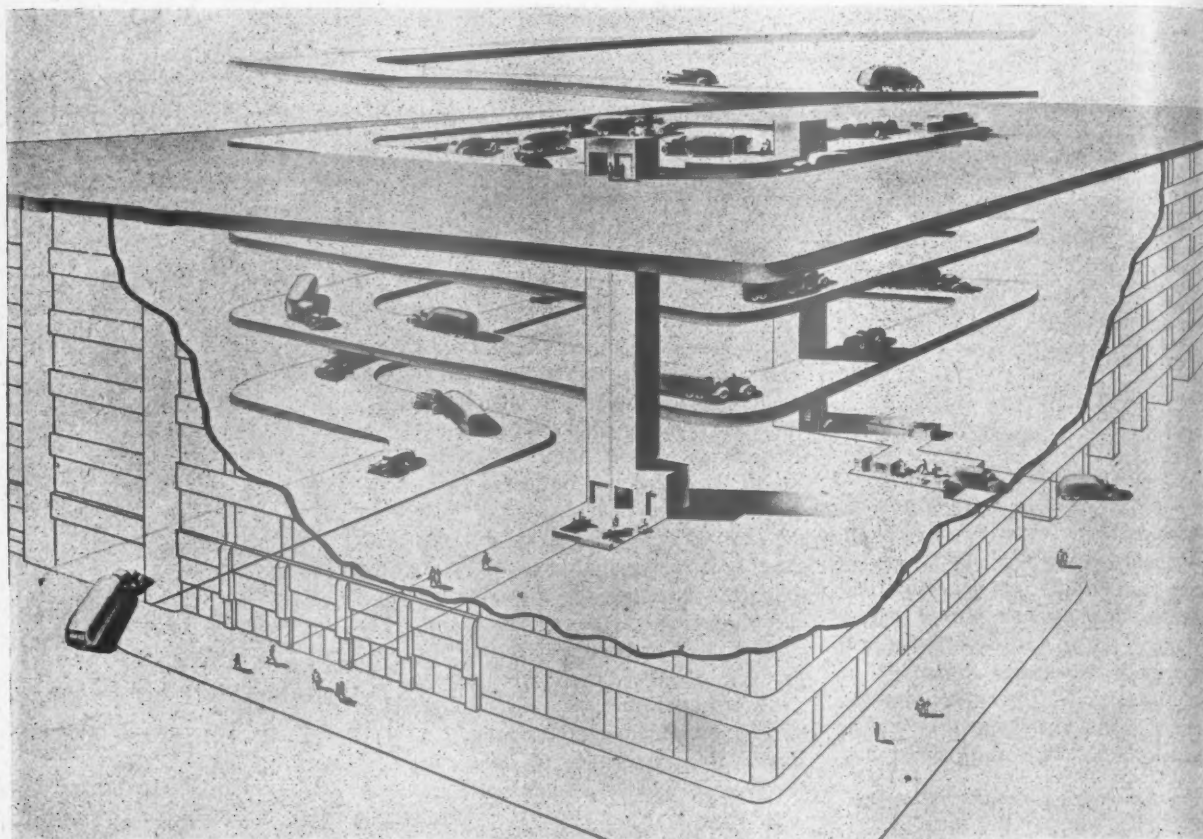
Till reading your article I had been labouring under the happy delusion that I was the first to stumble across this idea, and convinced of the possibilities and realizing the expense to which we go to bring steel hangars all the way from home, for a purpose to which they are not suited, I have been endeavouring to persuade the powers that be that hangars for any span could be put up much more cheaply and quickly with cocoanut matting and rendering. I have even gone to the trouble of designing a system of centring which could be used for any span between 30 to 120 ft.,



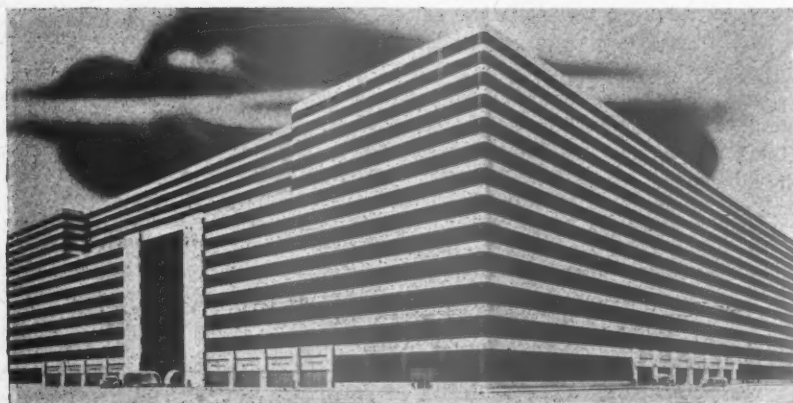
A sheet of corrugated Perspex. See Astragal's note.

* With acknowledgments to *The New Statesman and Nation*.

U S A COMMERCE CENTRE WILL HAVE INTERNAL ROAD



This thirteen-storey Interstate Commerce Centre covering four square blocks (180,000 sq. ft.) and providing tenants with over four acres of space on each floor, will be built in Manhattan as soon as materials are available. It is specially designed to facilitate large-scale commercial or production enterprise. A revolutionary feature will be the installation of a 32-ft. wide highway running through the interior of the building for more than three-quarters of a mile, which will enable cars and lorries to drive direct from the street to loading platforms on each floor.



and yet be transportable in 3-ton lorries, and once assembled on the job could be used for any length of hangar without having to be dissembled. However, my efforts have met with very little success, since not being an engineer I cannot produce calculations showing what depth of corrugation is necessary for any particular span, or what the safety of the structure is.

Now it appears that Mr. J. H. Waller has beaten me to it, and I offer him my humble apologies if, through a sheer accident, I have transgressed what must have been originally his idea. The situation is not without its compensations, because if Mr. Waller has some practical experience of this system, the powers that be would probably listen to him where they will not to what they consider to be the babblings of a mere architect. Having spent over 2 years in this island, I assure you that the

adoption of this system for stores, aircraft hangars, etc., would have greatly helped the war effort in the East, and for Mr. Waller's information the cement rendering will stick to cocoanut matting much better than to hessian.

I should like to hear from Mr. Waller, and would be delighted to put at his disposal my idea for mobile centring.

Colombo

J. BLACKBURN

Swedish Housing

SIR,—Astragal's note and the small line illustration of the Swedish Timber House designed for MOW is interesting. The design is a pleasant one and could perhaps be improved if the treatment of the windows and doors were more uniform as regards sash bars. It seems strange indeed in

the present acute shortage of houses that this country can have acted so strangely. The other article on Fagersta has some extremely interesting illustrations, notably the house plans. Presumably the house is centrally heated by radiators situate under the windows, but apparently there is also provided an open hearth fireplace for a wood fire. This also appears to be the case in the women's pleasant sewing room with a well designed open hearth fireplace. Seemingly the windows are mostly kept one size despite the differing sizes of the rooms they light. The plan of the bedroom floor is excellent, despite the fact that the best bedroom door would be stopped by the bedside cabinet, and the arrangement of the landing is charming, as well as original, in so small a house.

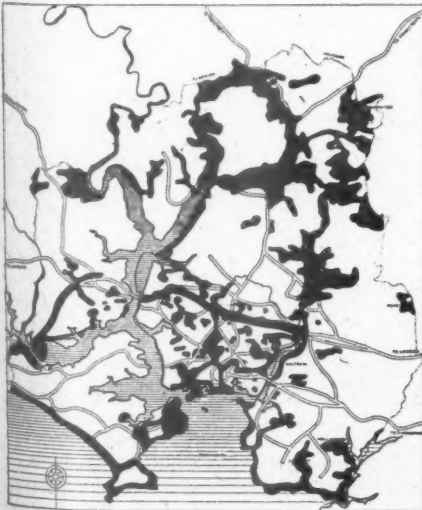
Stratford-on-Avon

CHARLES BARKER

PHYSICAL PLANNING SUPPLEMENT

SIR CHARLES DISCUSSES

the plan for Plymouth



Sir Charles Reilly, septuagenarian architectural educationist, fresh from a visit to Plymouth in connection with Arthur J. Rank's film of the plan *The Way in Which We Live*, now under shooting, contributes for this week's Supplement some characteristically vigorous and racy comments on this now familiar proposal by Sir Patrick Abercrombie. Above is a plan of the new city centre and shopping centre, sited in the vale between the Hoe and the Station Place. Left, a map of the park system.

town and region planned together

The Plymouth Plan, by Mr. Paton Watson, the City Engineer, and Sir Patrick Abercrombie, with an introduction and foreword by Viscount Astor and the American Ambassador, all produced in a volume worthy of such names, yet at a mysteriously low price, if one can obtain it at all, is, as far as I know, the first plan of a town which is, as all such plans should be, a Regional Plan too. It is also the first town plan about which a full-length feature film is in the course of being made, a film called *The Way in Which We Live*. Someone in power has decided that it is time films dealt seriously with culture, and that the best expression

of modern culture is modern town planning, with the result that the director of that grand film about modern painting, *Out of Chaos*, Miss Jill Craigie, is at the moment in Plymouth making a still grander film. Let us hope it will not when finished be hidden away as was *Out of Chaos*, for fear of offending middle class taste or possibly the Royal Academy.

access to the Hoe

This Plymouth Plan about to be popularized in this thoroughly democratic way has, as all good plans of towns should have, one central dominating idea as well as several lesser ones. Everyone who has arrived at Plymouth by sea knows as he passes wooded headland after wooded headland that it is the finest port of arrival in the country, and he hopes that all good Americans will get their first glimpse of England by using it. If, however, one arrived in pre-war days by train at the North Station, as one usually did, or even if one arrives there to-day with the centre of the town cleared by our late enemy, one finds a muddle of streets giving no suggestion of how one should reach the sea front at the Hoe, with its famous stretches of grass and its glorious view of the entrance to the port, and probably, too, of sections of the Fleet lying at anchor. In fact, there used to be a crazy-pavement mediaeval town between the station and the Hoe and, even if one got near to the latter in one's perambulations, it was extremely difficult to find the ways up and out of the town on to its sea front.

grass, gardens and sea

Now, however, all this is to be altered. Directly one leaves the station one will see in front of one a wide pedestrian avenue of grass and gardens going down and then up on to

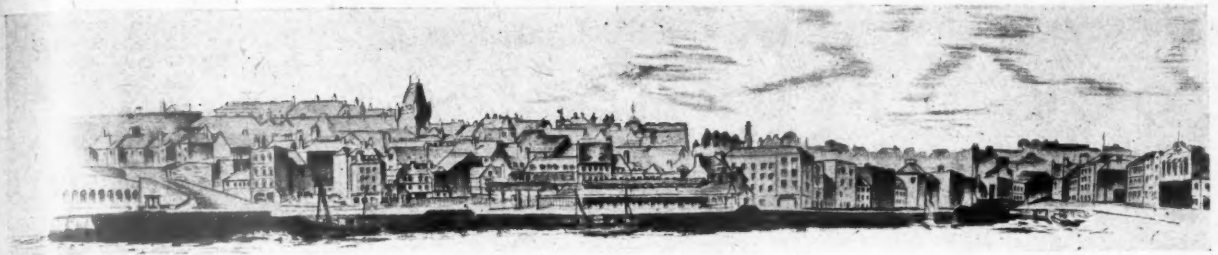
the Hoe some half a mile away. This avenue centres on the Naval Monument. I wish it centred on something more worthy. If perhaps the rococo top of the obelisk were removed, like parts of the Prudential Insurance Buildings and other distressing things in the path of the avenue, it would be a still greater improvement. Anyhow, it will be a grand thing for the town to have this fine park-like back-bone, the one straight thing among the complexities of the water line, of the old citadel, and of the surrounding islands and hills. At last one will be able to find one's way without having to possess the instincts of the original pack donkey, which probably settled the old route through this and other mediaeval cities. The railway and motor coaches will come into their own, better late than never, even if a flying and perhaps an atomic energy age is at hand.

famous stores two a penny

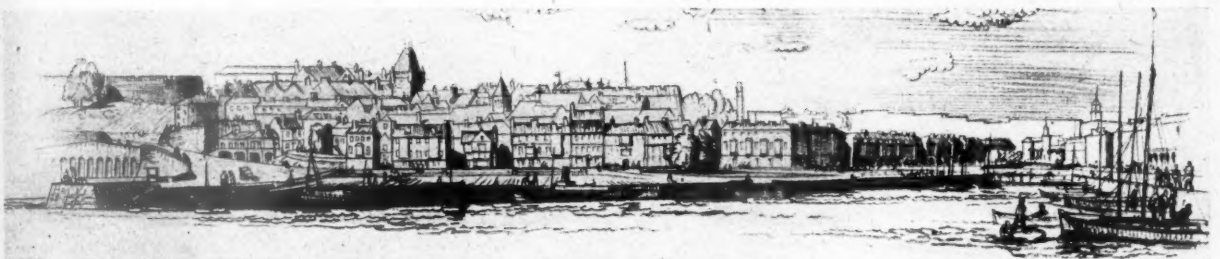
Along this avenue to the left and right after one has passed a cultural and residential area (what names we town planners love to use) one has on either hand three large shopping precincts, but with ring roads round them on their far sides. Each of these consists of four large groups of stores with a parking space in the centre. The stores so envisaged are like some half-dozen Oxford Streets full of Selfridges but without any traffic, but then town planners do not hold themselves responsible for the architecture shown by their perspective men. That is a mere detail. Abercrombie now tells me he wants to see William Crabtree designing these precincts in the manner of Peter Jones, and naturally I am in complete agreement. The point, however, is that this is a very large shopping centre, much more than the actual town, though that is over a quarter of a million, requires. It is a shopping centre to serve the whole Region, as the old one did.



Town Planners do not hold themselves responsible, quips Sir Charles, for the architecture of their perspective men. Much closer collaboration between town planners and architects at all stages will certainly be needed if the deceptive abstractions of many plan shapes are to stand the visual and other tests of actual building.



Ancient Plymouth was gutted by bombs, but enough of this small area remains to justify creation of an historic precinct where new building is carefully designed to harmonise with the old: note that harmony does not mean unison, or that new building should be faked or pseudo antique. For civilization generally, creative preservation has much the same value as the office file on an old job, often very useful to refer to for current work and future plans. Above, the Barbican of to-day seen from the East, below, proposed reconstruction from the same viewpoint.



shopkeepers' opposition

From the shopping precinct one passes on to the Municipal and Law Courts precinct, then to two precincts for banks, then to two more for hotels and boarding houses, till one climbs the slight rise and finally reaches the Hoe. When one gets there, hidden away on the left are an open air theatre and stadium and a marine pavilion, all called, of course, an Entertainment Centre, and on the right there is the old town and Barbican mercifully left, as it is except for a little clearing up of the outline of its roofs to make it even more picturesque. So all tastes are catered for, which is perhaps right. No one, not even a town planner, should ride roughshod over an old town like Plymouth, with its Mayflower Steps and other historical associations. Where Hitler has been at work is, of course, another matter. In the centre of the town the authors have seized this opportunity and have replaced an awkward mediæval town by a modern one. Even so, however, I hear the shopkeepers are not welcoming the new co-operative era as they should. Like their London predecessors of Wren's time, they each want to rebuild their premises as they like and differently from those of their neighbours, forgetting that that vulgar old advertising way of doing things belongs to a competitive era only a hundred years old, which we hope has gone for ever, and that once more we are all going to be gentlemen as we were when the terraces on the Hoe were built.

That then is the general idea of the plan. Having seen the site lately and watched 3,000 of the youth of the town of both sexes marching in procession with banners asking for it, I, like them, say it is a fine plan, which the town of Plymouth ought to have.

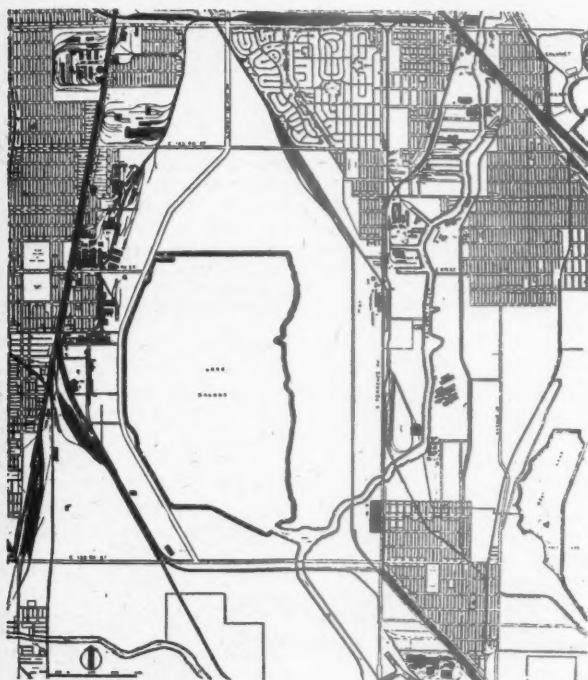
regional woodlands

I do not know much about the Regional Plan. It looks all right. Those of the poor *overspill*—another blessed word—who want to live in the country villages round about can do so, I suppose, with the help of modern transport. On paper it would seem a wonderful area in which to live with its planned town, its cultivated area, its wild woodlands, its shores and islands all in reach. One should be able there, as Lewis Mumford maintains, to satisfy both the cultivated and primitive sides of one's nature without going to sophisticated places like Switzerland or the Riviera.

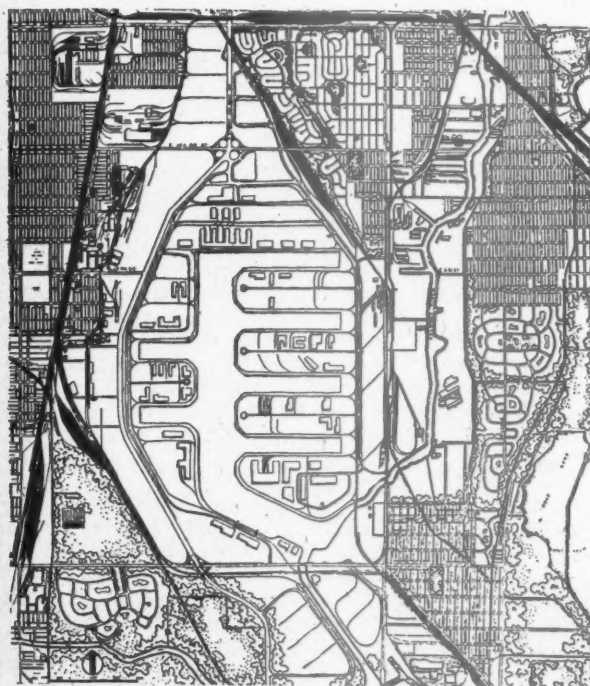
are community centres human?

I am not so happy about the planning of the work-a-day areas like Devonport, but then I am never happy about suburban planning unless it includes real neighbourliness in the position of the houses and flats and in the run of the streets, and not just Community Centres dropped from heaven. I (as indeed some may have heard by now) believe wholeheartedly in a revival of the village green, or rather in a group of four or five oval greens about a Community Centre, that modern development of the Village Inn and the Country Club, like the petals of a flower round its centre. That should make for real community life, and in this Plymouth Plan I do not see that that life will grow as naturally as it should in the new era we are now entering. If one has a car Plymouth will be a grand place in which to live, and not one just to come to and go away from, when this plan is carried out in the next ten years, as indeed now seems probable.

DOCK REFORM



BEFORE



AFTER

Dock reform : this sweeping proposal from Chicago, illustrating the conversion of a derelict urban pond on an existing waterways system into a large inland harbour with full facilities, can be related to some present-day questions and aspects of inland ports in Britain.

PLANNING PAYS

The U.S. Federal Housing Administration's Land Planning Bulletin Number One, aims to bring previously chaotic private enterprise housing of its own accord into the planning arena. Such efforts are of topical interest in this country where, in spite of present trends, ribbon developers are still eager to revive their activities.

1. Well-planned, protected, and properly improved residential neighbourhoods have long been recognised as factors essential to the successful marketing of properties in all price ranges. One reason for this is the recognition on the part of purchasers of these properties of the greater stability of real estate values in such areas.

2. The development of slums, blighted residential areas, and the depreciation of property values are generally due to the failure to apply the fundamental principles used in planning high priced neighbourhoods to areas composed of houses of modest cost.

3. In recent years the increased demand for low cost houses has emphasized the need for a sound marketing policy and programme, and for adequate planning of neighbourhoods to avoid rapid deterioration of property values, future slums, and preventable financial losses to developers and home owners.

4. Premature and unwarranted subdivisions are to be found in the outskirts of practically every metropolitan area. They are conceived in the hope of profiting through the sale of land by high pressure lot selling schemes.

5. Failure properly to analyse the market results in property being offered to the public in a price range or of a type for which there is no active demand.

6. Improper location of a subdivision commonly results from an attempt to find use for vacant land instead of selecting land with a definite residential purpose in mind.

7. Lack of adequate street improvements and utilities result in conditions which are undesirable to prospective home purchasers.

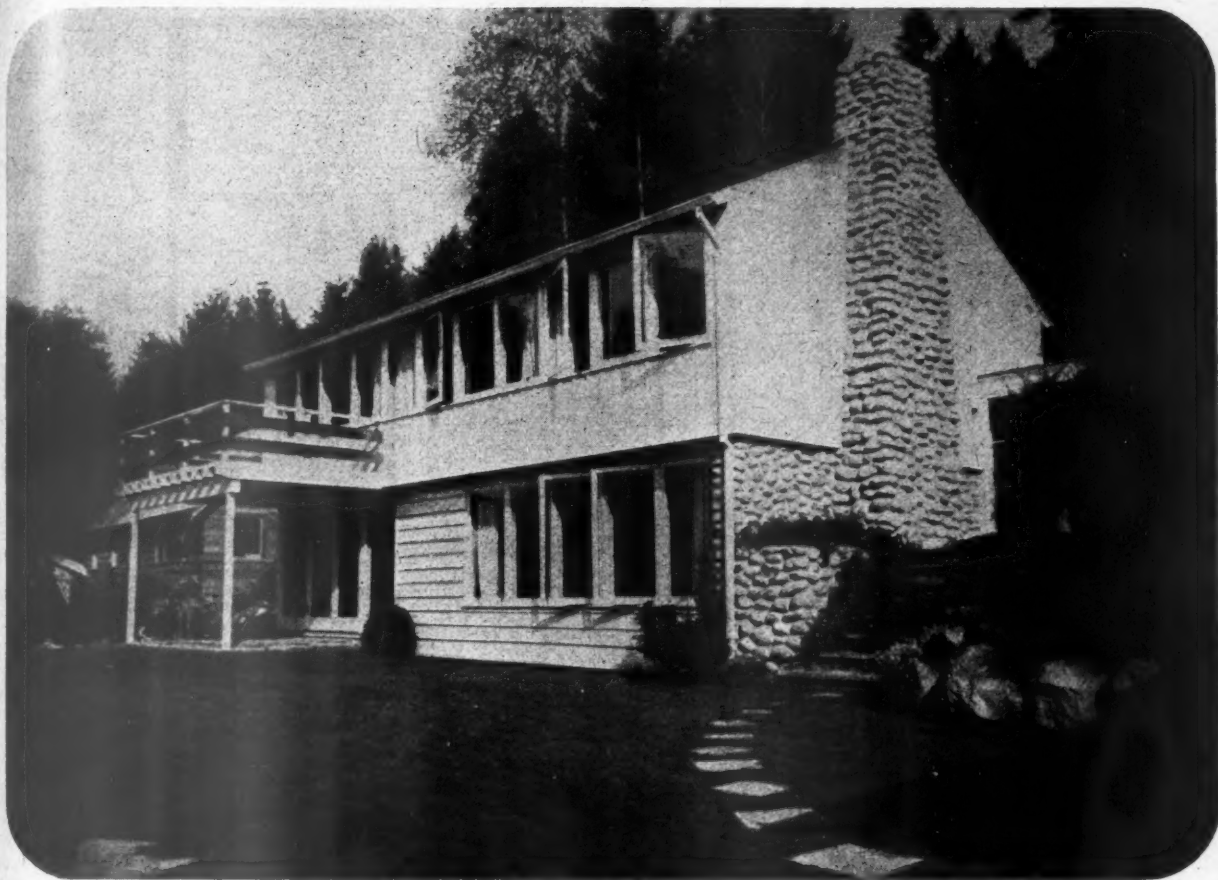
8. Poor subdivision design due to ill-considered and improperly studied layout, while one of the least recognized, is one of the commonest causes of land development failures.

9. Lack of suitable protective covenants controlling the use of land, prohibition of nuisances, regulation as to lot sizes and location of buildings, restriction against temporary buildings, and similar considerations, is one major cause of neighbourhood blight.

10. Lack of community planning and zoning retards otherwise successfully planned subdivisions.

11. Short blocks increase initial construction costs because of the large number of cross streets, and also increase traffic hazards and travel time through such districts.

12. Lots that have sharp pointed corners are wasteful of land because the resulting wedge-shaped areas have little or no utility, and constitute poor building sites.



TWO HOUSES

OF TIMBER IN CANADA

DESIGNED BY PETER THORNTON

These two houses were built in 1939 at Caulfield, British Columbia, to designs by a young Canadian architect trained in London. Construction is of timber boarding painted white backed by Ruberoid roofing felt on fir studs, the walls containing chimneys being of river pebbles in mortar.

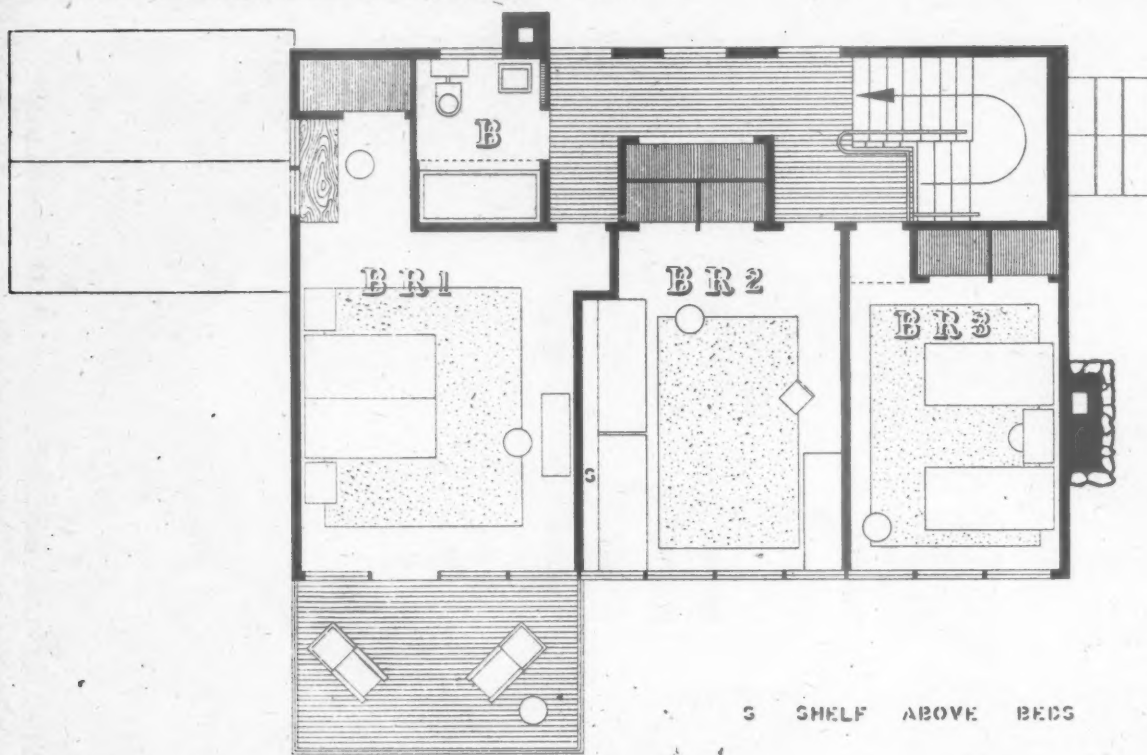
Floors in the main rooms are of oak boarding. A 3-in. thick composition of sawdust and hydrated lime forms insulation between floor joists. All glazing is of double weight. Balcony rails are in the one case of timber and in the other of wrought iron, balcony floors being

of cedar slats $1\frac{1}{2}$ in. by $1\frac{3}{4}$ in., spaced $\frac{3}{4}$ in. apart.

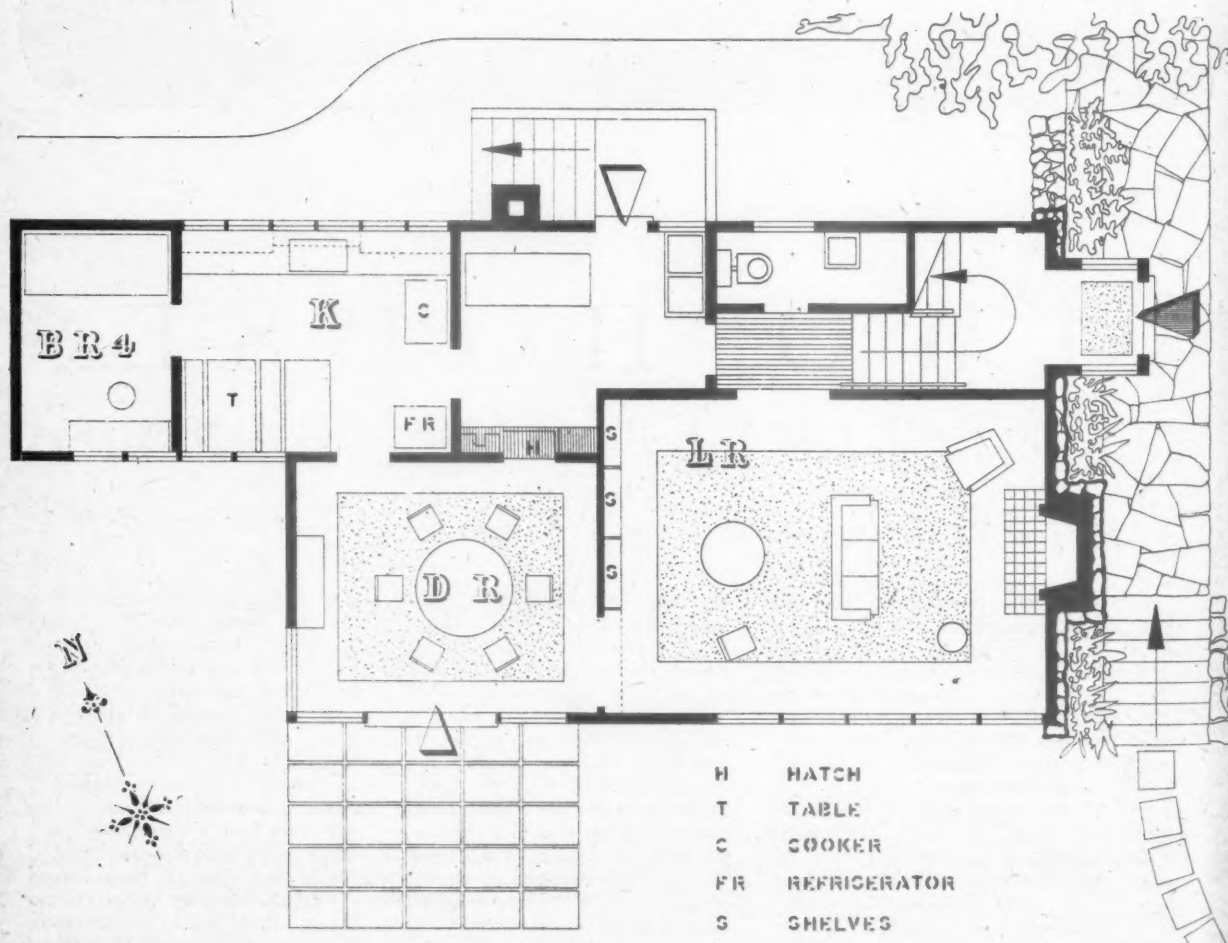
In the smaller house without garage the main entrance hall is on the east at mezzanine level, from which stairs lead down to the ground floor and up to the first floor. Service entrance into the utility room is on the north. The larger house has a garage with concrete floor and flat roof of reinforced concrete 4 in. thick. The roof over the rest of the job is one-way and is covered with a 5-ply bituminous covering. The living room and dining room in this house are separated by a wide

door sliding into the partition wall. Off the living room is a study recess and above this off the main bedroom is a dressing recess; in both cases the ceiling is dropped 6 in. The hearths in the living room and main bedroom are of brick.

In this house the main entrance is on the north and kitchen entrance on the south from a service courtyard surround by a river pebble wall. Maids' bedrooms in both houses are off the kitchens on the ground floors. Both houses have heating chambers for central heating in the basements.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

[Scale: $\frac{1}{4}$ " = 1' 0"]

On facing page, plans of the smaller house without attached garage of which a view from the south is shown on page 191. Below, view from the south of the larger house of which plans are shown on page 195. Right, the living room of the larger house looking towards the wide doorway to the dining room.



TWO HOUSES OF TIMBER IN CANADA

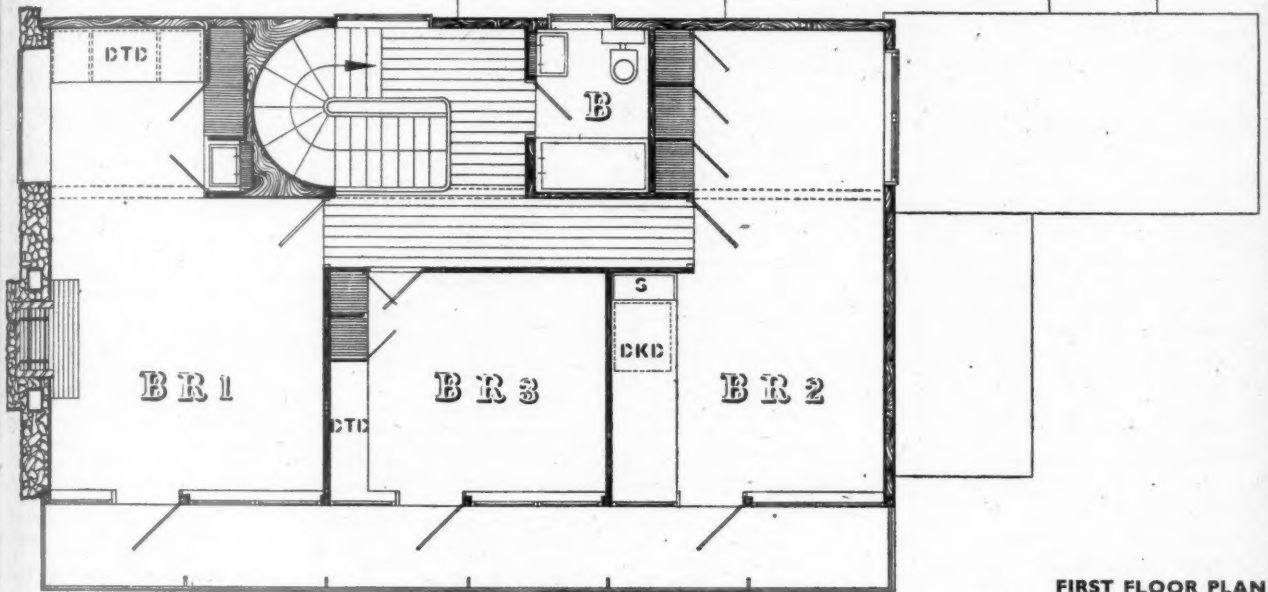


On facing page, plans of the larger house with garage. Left, a close up of this house showing the end of the balcony with its wrought iron railing and the flue wall and chimney of river pebbles. Below, a general view from the south-west showing the river pebble retaining wall of the terrace approached by a wide flight of steps.

TWO HOUSES OF TIMBER IN CANADA

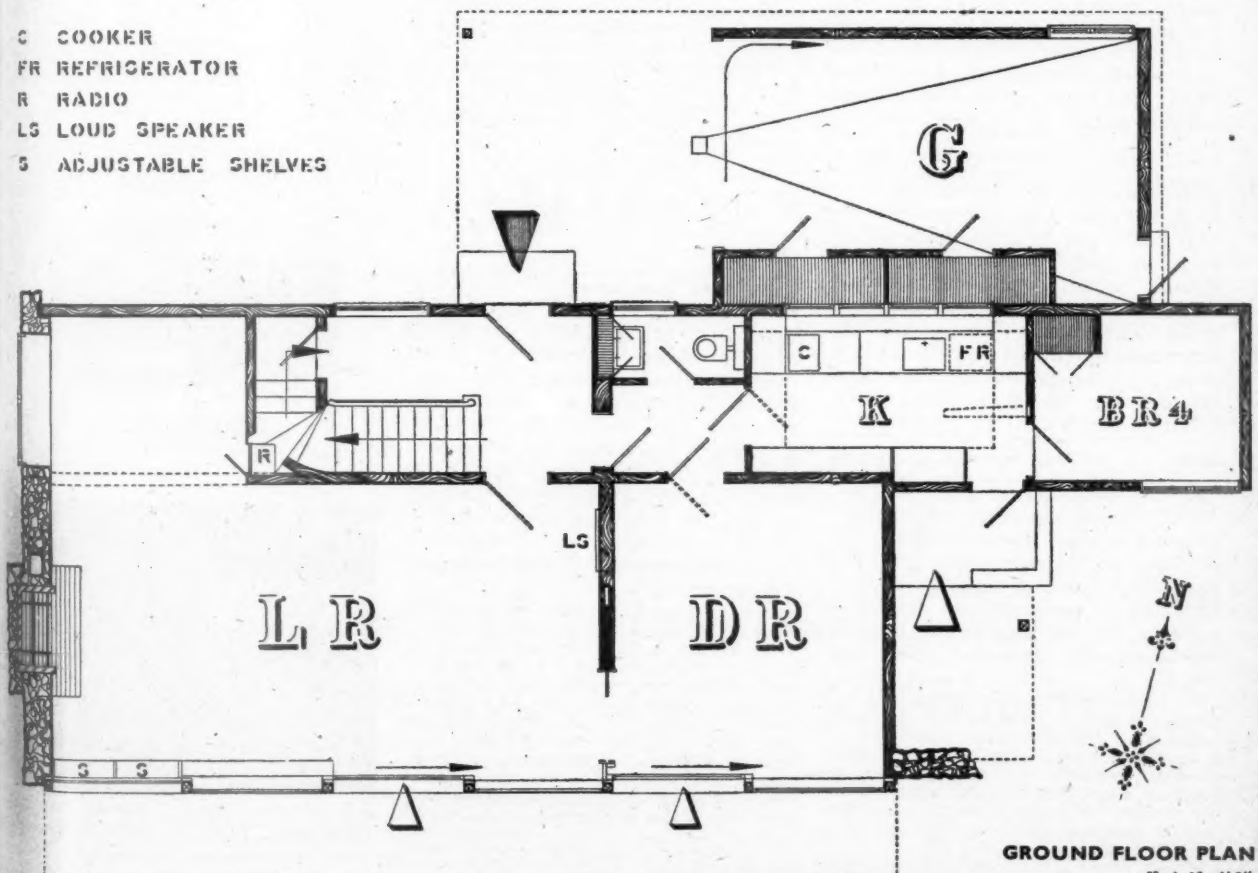


- DTD DRESSING TABLE
WITH DRAWERS UNDER
CKD DESK WITH DRAWERS
UNDER
S ADJUSTABLE SHELVES



FIRST FLOOR PLAN

- C COOKER
FR REFRIGERATOR
R RADIO
LS LOUD SPEAKER
S ADJUSTABLE SHELVES



GROUND FLOOR PLAN

[Scale 1/4" = 1' 0"]

INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

STRUCTURE

2099 Floor Repair

A NEW METHOD OF CONCRETE FLOOR REPAIR. Cyril H. Fitch. (*The Architects' Journal*, July 26, 1945, pp. 61-62.) Repair by cement gun of reinforced hollow tile floor in departmental store, badly damaged by fire in air raid. Loading up to $1\frac{1}{2}$ times design load after repair caused deflection less than $1/1,000$ th the span. BRS thoroughly satisfied with method and results.

2100 Orlit System

THE ORLIT SYSTEM OF HOUSE CONSTRUCTION. Architect: E. Katona. (*THE ARCHITECTS' JOURNAL*, July '12, 1945, pp. 29-34.) Pre-cast reinforced concrete frame with cavity walls. Simple method of horizontal and vertical connections. Outer leaf of special stone-faced dense concrete slabs, the inner of lightweight concrete slabs. Floors and roofs of channel shaped concrete units.

2101 Prefabrication in Britain

PREFABRICATION IN GREAT BRITAIN. F. R. S. Yorke. (*Architectural Record*, May, 1945, pp. 99-112.) Lack of interest in prefabrication before war. Present necessity of non-traditional methods. Technical development under Government control. Fifty experimental building licences issued; about 30 prototypes already built. Survey of 9 types, all but one already published in *THE ARCHITECTS' JOURNAL*.

2102 Prefabrication in Canada

THE PREFABRICATED HOUSE INDUSTRY. E. G. Faludi and Catherine Chard. (*Journal of the Royal Architectural Institute of Canada*, March, 1945.) Post-war Canadian housing market. Production capacity of Canadian building industry. Prefabricated house production in Britain, USA and Canada.

The minimum housing programme of Canada in the first ten years after the war is estimated at 700,000 houses. Between the years 1930 and 1937 only 2.8 houses per 100 families were built in Canada, whereas in England and Sweden in the same period the number of houses built by unassisted private enterprise alone was 16.5 and 26.3 per 100 families respectively.

It is estimated that 133,000 workers would

be necessary to provide the number of houses required, whereas only 82,500 workers can be expected to be available. There is particularly great shortage of skilled craftsmen. Timber will be in short supply, partly because of the exhaustion due to wartime exploitation, partly because of the commitments in the exportation to Britain. The timber market is now flooded with green, wet lumber. It seems that less conventional materials and more plywood and fibreboards will be used after the war.

The article describes some of the British and American systems, and comes to the conclusion that in Britain more emphasis is laid on the permanent character of the structures than in the USA. The realization that prefabrication can be simply an extension of the process of producing building materials in the factory, has, not yet, in general, touched the American market. The Canadian systems have developed under similar conditions as the US systems, initially as temporary structures, suitable for summer camps and emergency wartime housing. Both the Canadian and the US market are now in the running for systems of prefabrication aiming at permanent structures. These systems may be developed along lines similar to those along which the prototypes of the more advanced British systems were worked out; but whereas the British systems are predominantly in steel and concrete, the chief materials used in Canada will very likely be timber and its derivative products.

MATERIALS

2103 Cast Iron

CAST IRON. (*Special number of Official Architect*, Vol. 8, No. 5, May, 1945.) Records of an Iron Age (John Summerson); What is Wrong with Cast Iron? (Hartland Thomas); Cast Iron and Architectural Design (John Gloag); Structural Uses of Cast Iron (Richard Sheppard); Yesterday and To-day—Designing for Cast Iron (Grey Wornum); Cast Iron To-day (J. G. Pearce); Finishes on Cast Iron (Derek Bridgewater). Historical uses* of cast iron. Cast iron in modern building technique and equipment.

It was perhaps unfortunate for the reputation of cast iron that it reached the climax of its history in Mid-Victorian times. It was used extensively both for structure and for ornament, and, needless to say, architects were merciless in its use as a general factotum, making it look like ropework, logs with the bark on, masonry, etc. Modern industrial development, with a greater understanding of the comparative properties of different materials and the uses most appropriate to each, may revive the

* Yesterday and To-day—Designing for Cast Iron. (Grey Wornum)

popularity of cast iron for uses to which it is particularly suited. The present series of articles gives a welcome review of the qualities of cast iron and its past and present uses.

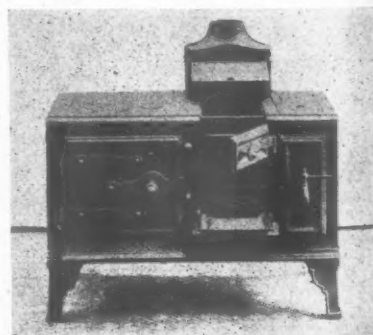
The first article brings illustrations (photographed by the National Buildings Record) of some striking examples of cast-iron work in the last century.

The second article puts the question: What is wrong with cast iron? and gives the answer that its very virtues, tractability and convenience for repetition, made it liable to abuse. But cast iron can be as up to date as any other material, and it is up to the ironfounders to restyle their material for modern use.

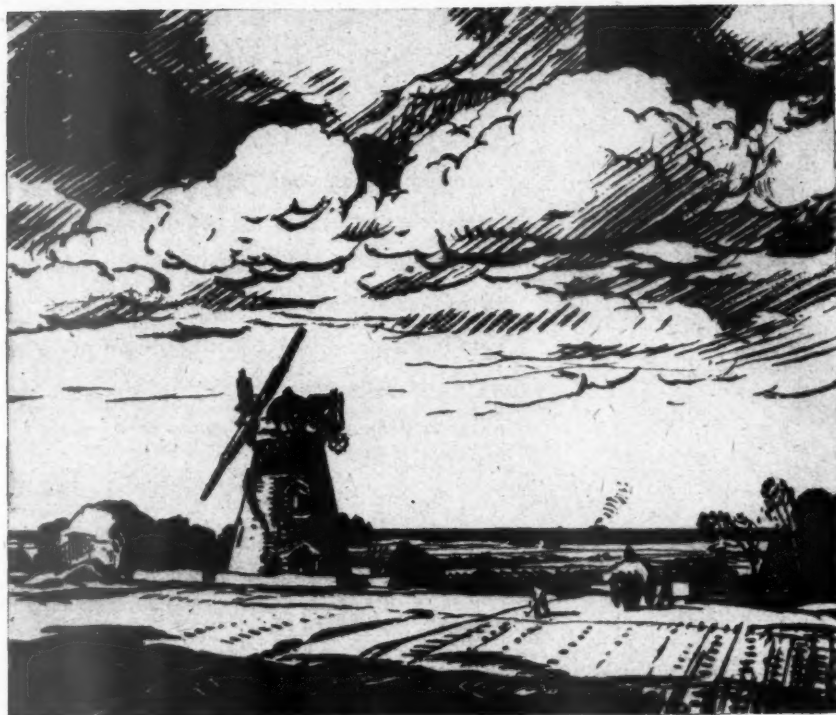
Mr. Gloag's article enumerates a few famous uses: the iron bridge over the Severn, cast in the year 1778; an aqueduct for the Shrewsbury canal built by Telford; the Palm House at Kew Gardens and Paxton's Crystal Palace, which represented the first large scale successful example of prefabricated building. (Convenience for repetition made it the obvious material in the early days of mass production.) The article concludes in saying that a literature on design in cast iron is badly needed if we want to make full use of the services of this versatile material.

In structural uses cast iron was largely displaced by steel, which is equally strong in tension and compression. Nevertheless, there are certain functions for which cast iron is as suitable as steel. Whether it will again be widely used will, as Mr. Sheppard states, depend not so much upon its treatment at the hand of a few gifted designers, but, as always, primarily upon cost. Cast iron is particularly suitable for standardisation. The ease with which standardised brackets and heads can be fixed makes it possible to use iron columns in combination with beams of concrete and timber. (The blitz revealed how well cast-iron columns stood up to the test of fire.)

Cast iron is most widely used in building for domestic appliances and components. Illustrations of the development of cookers beginning by a model of the brothers Haworth to a contemporary labour saving design are very instructive.



Top, Victorian edition of a small cast-iron kitchen range. Below, its contemporary equivalent in enameled cast iron. See No. 2103.



OLD MILL AT BLAKENEY,
On the King's Lynn to Cromer Coast.

IN 1347 Blakeney, and the adjoining village of Cley, supplied two ships and thirty sailors for the fleet of Edward III which besieged Calais, and in 1588 their mariners helped to defeat the Spanish Armada. From the moment a building is erected, it is in a state of siege

by rain and insidious dampness that creeps up from the ground, but the use of 'PUDLO' Brand Waterproofer in Portland cement concrete or renderings will prevent or remedy dampness that would, in many cases, be otherwise incurable.

'PUDLO'

BRAND

CEMENT WATERPROOFER

Used with Portland Cement in renderings or concrete to exclude or retain water.

KERNER-GREENWOOD & COMPANY, LIMITED
ANN'S PLACE, KING'S LYNN

Sole Proprietors and Manufacturers

The word 'PUDLO' is the Registered Trade Brand of Kerner-Greenwood & Co. Ltd., by whom all articles bearing that Brand are manufactured or guaranteed



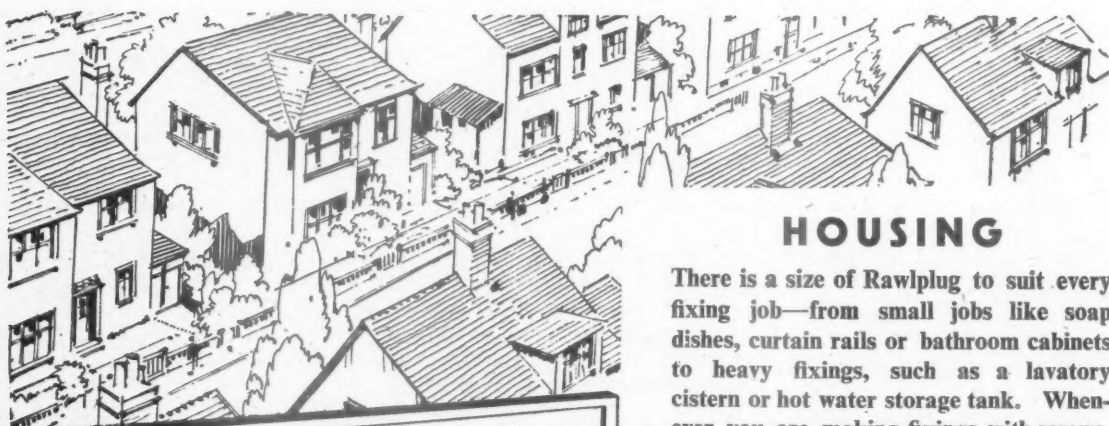
Throughout the world the name of MILNERS' is a synonym for SECURITY. The same sound craftsmanship which has made MILNERS' SAFES and STRONG-ROOMS so universally respected is embodied in MILNERS' STEEL EQUIPMENT, which is designed to promote office and factory efficiency. As soon as conditions permit MILNERS' organisation will resume its world-wide service, using past experience to ensure efficient designs for the future.

*Milners —
The Safest
Safe Investment!*



NOTE NEW ADDRESS:—

MILNERS SAFE CO. LTD., 58, HOLBORN VIADUCT, LONDON; E.C.1. Telephone: CENTral 0041/5
Telegrams: Holdfast, Cent, London

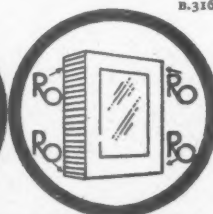
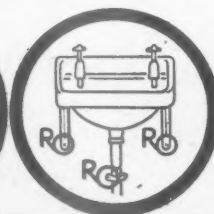
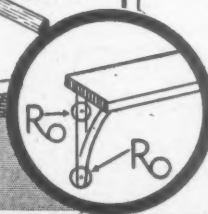
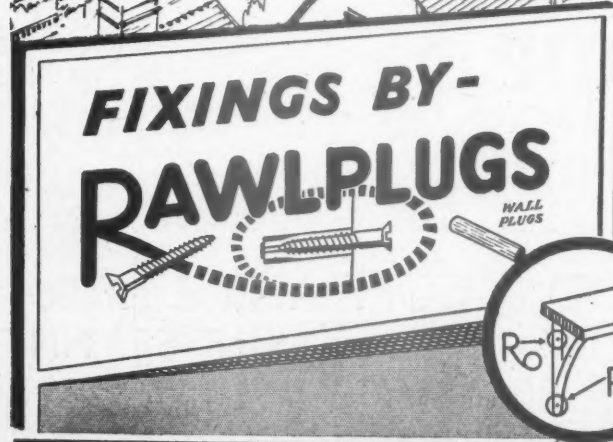


HOUSING

There is a size of Rawlplug to suit every fixing job—from small jobs like soap dishes, curtain rails or bathroom cabinets to heavy fixings, such as a lavatory cistern or hot water storage tank. Whenever you are making fixings with screws, use Rawlplugs. They save time and labour—and when you make a fixing with Rawlplugs, you know it's fixed for good.

Technical Literature sent on request.
THE RAWLPLUG CO. LTD., LONDON, S.W.7

B.316



The article "Cast Iron To-day" discusses the transformation the industry has undergone in recent years. In the British Cast Iron Research Association the industry has an organised unit for the conduct of research and experiment, which is to be expanded considerably for post-war purposes. The last article (by Mr. Bridgewater) is about the most important question of surface treatment. The finishes for cast iron can be divided in three main groups. In the first group a modification of the chemical composition of the surface of the iron makes this surface more resistant to corrosion. The second group contains permanent or nearly permanent coatings of a different material. In the third group a relatively temporary thin coating of paint, varnish or lacquer is applied as a protection, and to provide a coloured and attractive finish. Through these new surfaces and finishes cast-iron appliances can be made to fit extremely well into contemporary architecture.

2104 Lumber Stress Grading

NEW SPECIFICATION FOR STRESS-GRADE LUMBER. (*Engineering News-Record*, June 14, 1945, p. 808.) National Design Specifications for stress-grade lumber and its fastenings published by National Lumber Manufacturers' Association.

The comprehensive booklet retains for proposed general peace time use the 20 per cent. increase in stresses promulgated by the War Production Board in 1943. (See No. 1318: 9.12.43.) The new material is intended for inclusion in building codes and specifications. It is expected to apply to all structures where designed timber members are used.

2105 Wall Decoration Colours

FLAT COLOURS FOR WALL DECORATION. B.S. 381WD:1945. (*British Standards Institution*. 6d.) Colour card containing ten colours.

2106 Dry Rot

DRY ROT IN BUILDINGS AND ITS PREVENTION. W. P. K. Findlay. Paper read at a Sessional Meeting of the Royal Sanitary Institute in London on January 17, 1945. (*Journal of the Royal Sanitary Institute*, April, 1945, pp. 85-90.) Prevalence of dry rot. Cause and nature of the disease. Conditions influencing the development. Cure of dry rot. Prevention in new buildings. Increase of dry rot as a result of the war. (See short item on this paper, No. 1978: 7.6.45.)

Dry rot in buildings became troublesome as softwood was substituted for oak, and during the last century many famous buildings have suffered from its attack. It became increasingly important after the last war owing to the use of unseasoned timber, the speed of building and the adoption of certain new, untried methods of construction. Since this war there has been a marked increase in the prevalence of dry rot. General neglect of upkeep, combined with war damage, has allowed dampness to get into the buildings and rot has followed. In some districts at least 75 per cent. of the houses in which fires occurred have since developed dry rot, and in many cases the damage caused by the subsequent rot was far greater than that caused by the fire.

The growth of dry rot is due to fungi, the most dangerous of which is *Merulius Lacrimans* (see also *Inf. Centre* No. 1429, A. J., March 30, 1944, p. 249), and in the majority of cases the infection is air-

borne and the spores have come from other outbreaks of dry rot in the neighbourhood. If an outbreak of dry rot is discovered in a building a thorough investigation of the building must be carried out immediately. The focus of the attack must be sought for and its complete extent followed up. (Frequently it is found to extend very much further than is at first suspected.) The most common indication is the shrinkage of the attacked wood, which leads to a waviness of the surface. Ground floor timbers are most frequently attacked; the conditions of joists, skirtings, window frames, etc., should be carefully inspected. Having localised the outbreak, one proceeds to cut away all timber which shows the least sign of attack, and it is advisable to cut into sound wood for twelve to eighteen inches beyond the last visible sign of attack.* One of the most difficult things is to ensure that the fungus does not grow out again from the infected brickwork, and a most careful sterilization treatment of the walls must be carried out before replacements are put in. An additional precaution is to coat the surface of the walls with a cement or hard plaster layer. As far as possible the new timber used for replacement should be kept out of contact with the infected wall. The ends of joists may be wrapped in bituminous felt, which protects them against dampness and infection. All new timber used for replacement should be thoroughly treated with preservative after it has been cut to the final size. Pressure-treated timber is more resistant than timber treated with a surface preservative. Since a defective ventilation facilitates the outbreak of dry rot, it is always advisable to increase ventilation when carrying out repairs. Additional airbricks should be inserted and a clear passage for the air right under the floor from one side of the house to the other should be provided.

Temperature has an important effect on the rate of development of the fungi and woodwork slightly affected by dry rot may sometimes be sterilized by exposure to a temperature above the maximum suitable for the growth of the fungi.

The moisture content of timber is the really important factor determining whether fungi will develop and cause rot in the woodwork. Timber containing less than 20 per cent. moisture, based on its dry weight, is absolutely immune, and there is little risk of serious decay occurring in wood containing less than 25 per cent. Precautions should be taken to ensure that the woodwork in buildings never reaches a moisture content sufficiently high to permit the development of fungi. In every new building it is against the penetration of dampness that precautions must be taken. The use of built-in timbers surrounded by brickwork should be avoided as far as possible. If timber is embedded in concrete only material impregnated under pressure should be used. The rise of dampness from the soil is a frequent cause of dampness and the fundamental importance of adequately draining building land before buildings are erected on it must be emphasized. Effective damp-proof courses should be inserted in brick walls to prevent the rise of water, and in the case of a solid floor the whole surface of the concrete should be covered with a layer of bitumen not less than one-eighth of an inch thick. An adequate subfloor ventilation must be provided. If the flow of air under floors is obstructed by a solid floor, it may be advisable to lay a drainpipe under the concrete. The percolation of rain water through the walls can be resisted by suitable renderings. In the case of flat roofs a damp-proof course must be inserted in the parapet to prevent damp working down the wall and reaching the ends of the roofing timbers. Condensation troubles can be reduced by

* This, by some experts, is considered inadequate, see No. 1496: 25.5.44.

providing extra ventilation, by the use of more absorptive surfaces, or by better heat insulation.

PLUMBING and Sanitation

2107 Thames Barrage

THE THAMES BARRAGE SCHEME AND ITS IMPORTANCE IN THE LONDON RECONSTRUCTION PLANS. J. H. O. Bunge. (*Journal of the Royal Society of Arts*, May 25, 1945.) Outline of schemes supported by Thames Barrage Association. Discussion of paper includes opposition on number of points by Sir Cyril Kirkpatrick, lately of Port of London Authority.

Advantages of barrage scheme are claimed to be: Keeping of sewage out of London, two way river traffic at all times, elimination of mud banks and general improvement of amenities, better fire-fighting facilities for riverside areas, less danger of flooding. Among objections to the scheme which were raised during discussion of the paper were: Danger of silting of the Estuary, a uniform high water level would be unhealthy, effect on drainage system of London would be serious and a rise in permanent saturation level would be certain, the scheme would involve much daily pumping to maintain a constant water level, and finally it would not be practicable to pass all the necessary traffic through the proposed locks. The lecturer disagreed with these arguments.

QUESTIONS and Answers

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, 45, The Avenue, Cheam, Surrey.

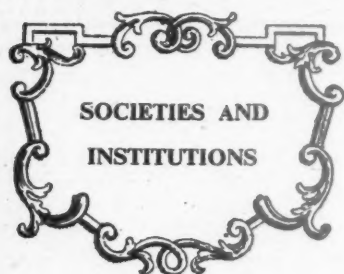
2108 New Appointments

Q Should a salaried architect, at present in a position, but seeking a change of post for personal reasons, apply to the Appointments Board, or are the services of this department reserved for those who are at the time unemployed, or who are demobilised from the Services? Alternatively, should one make application to the Central Register?

A A salaried architect who wishes to change his appointment is at liberty to find another position through advertisements and other usual methods, but he is to-day restricted from taking up the new appointment, being still subject to direction by the Ministry of Labour.

He must therefore first obtain his release from his present engagement and can only take the new position with the Ministry of Labour's consent. They are at liberty to direct him elsewhere if they do not consider the new position to be of sufficient national importance.

It would be advisable to contact your local office of Ministry of Labour and National Service, to verify this matter so far as your particular case is concerned.



Speeches and lectures delivered before societies, as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries, and not verbatim.

RFAC

City Plan

The following are extracts from OBSERVATIONS ON THE CITY OF LONDON'S REPORT ON POST-WAR RECONSTRUCTION, issued by the Royal Fine Art Commission. (HMSO, 2d.)

STREET IMPROVEMENTS

What the Commission chiefly look for in the road proposals, is a plan which combines ready access for occupiers of premises in the City, with improved opportunities for architectural development of the resulting building blocks. The plans proposed are mainly traffic plans, other considerations being secondary. The Report advocates (a) a new circular route, intended to act partly as a by-pass and partly as a distributive road for through traffic, including public service vehicles; and (b) street widenings within this ring, whose effect would be to relieve congestion mainly in the western and more heavily damaged section of the City. For general convenience of access, however, it seems essential to provide a carefully spaced network of main roads—without bottlenecks—along which public service vehicles can pick up and set down passengers reasonably near, though not necessarily adjacent to, their offices—in whatever part of the City these may lie. The northern section of the circular route fulfils its double function of by-pass and distributive road more satisfactorily than the southern section; and it is recommended that the possibilities of a main east-west route on the higher ground should be considered, in preference to either of the embankment treatments proposed in the Report. A line linking Queen Victoria Street with a widened Cannon Street and Eastcheap, and thence cutting through to Hart Street, Crutched Friars, Aldgate and Whitechapel; or alternatively linking up Mark Lane with Fenchurch Street and Aldgate in such a way as to form an improved forecourt to Fenchurch

Street Station, would have many advantages.

On the northern arm of the circular route as proposed, the big roundabouts shown in the Report at the crossing of Bishopsgate and Moorgate do not appear essential; that at the junction with Aldersgate, Long Lane and Barbican should be considerably simplified by planning more equal angles between the entrant roads; and that proposed for Holborn Circus—in addition to awkward plotting—creates two particularly dangerous collision points. This roundabout, though considerable in area, achieves neither good building frontages nor convenient traffic circulation. The Commission recommend for consideration a complete re-alignment of this traffic junction in hexagonal form, one entrant street being a new link with Fleet Street branching off the southern portion of a widened Fetter Lane. This would take through traffic from Fleet Street to Liverpool Street Station and the north-east by means of the circular route without requiring a turning back from Ludgate Circus by St. Bride Street and Shoe Lane.

ST. PAUL'S

The Commission understood from their meeting at Guildhall that it was not the desire of the City so to replan the surroundings of the Cathedral as to place it in a backwater. With this point of view they are in entire agreement; but at the same time the Commission have always regarded the passage of heavy main traffic close to St. Paul's, particularly at the south-west corner, as being a defect capable of improvement. The opportunity has now been given by war damage to remedy this state of affairs, to separate the main traffic routes from a short ceremonial forecourt to the west portico of the Cathedral, and to open up some extremely interesting and rather informal views of the Cathedral by widening the open space round it.

The Commission are satisfied that a return to the original Cathedral precinct, with main traffic carried along a widened Carter Lane, is a practicable possibility. They also feel that it would be a mistake to carry cross traffic from Newgate Street to Cannon Street by any main road immediately east of the Cathedral (as shown either by Drawing No. 3 or by Drawing No. 4). They would prefer to see this link by a widened Queen Street which would then be a main road linking Southwark Bridge with Cheapside, while its extension would be a dignified approach to Guildhall.

The Commission further recommend investigation into the possibilities of a wider approach to St. Paul's from the point where Ave Maria Lane meets Ludgate Hill, including a replanning of the forecourt so as to separate normal traffic from that special to ceremonial occasions. The Commission does not regard a symmetrical treatment of the environment of St. Paul's as desirable under present conditions. Whatever may have been the original intention, and whatever later attempts may have been made to enclose the building within a formal colonnade while the Cathedral was under construction, the City as it developed in the XVIIth and XVIIIth centuries followed an irregular layout, in which the single buildings, such as the City churches, rather than the composition of surrounding buildings, produced the most interesting effects. The great dome of St. Paul's dominated the uneven roofs and was seen in a hundred different views—not solely along one or two axes.

The west portico is, however, a terminal feature to one approach only, namely that from Ludgate Hill: and the Commission agree that it should have a more worthy and a less congested forecourt than it at present possesses, free from through traffic, capable of accommodating a large crowd on special occasions, and making provision for the proper circulation of ceremonial vehicles and processions. They are also impressed by the advantages of an open

view on the south side, although it is not essential that this should be axial with the transepts.

HEIGHT OF BUILDING BLOCKS

One of the most remarkable features of Wren's Plan of London after the Great Fire was the carefully designed arrangement of building blocks to provide good frontages and convenient depth of site for buildings. The present Proposals do not appear to envisage any marked improvement in the size, shape and alignment of building blocks; in many cases proposed street improvements and roundabouts result in plan shapes on which no architect could hope to design a successful and convenient building. No doubt some adjustment in the lines of minor roads and courts is intended to accompany the more detailed stage of replanning. But, in the published Report, no indication is given of how such adjustments are to be made.

Many of the widened main streets create awkward junctions with narrow streets and alleys, and call for re-arrangement, and possibly the elimination of some of the small streets so affected.

The Commission have always endorsed in principle the necessity for control of height, particularly in the region of St. Paul's, and between the Cathedral and River. They now take the view, however, that the pre-war proposals should be considerably amended to meet a new situation, in respect, for example, of the buildings on either side of Queen Victoria Street, south of the Cathedral. Moreover, if building up to the maximum by-law height allowed (71) is open to owners and possibly even enjoined on them, in any part of the City except certain specified areas in the neighbourhood of the Cathedral, the tendency will clearly be for frontages to be erected on the most favourable sites to a height of 80 feet with two floors in the roof, and for the back land to be less advantageously developed. The Commission fully realise the difficulty of devising and then imposing a new form of control on owners; but they feel very strongly that a lead should be given by the Corporation in this matter, so as to enable proper replanning of entire City blocks to be undertaken, in vertical section as well as in plan.

TOWER HILL

It is highly desirable that there should be, if possible, some form of precinct around the Tower, free from through traffic; since this neighbourhood is one of the two sites affected by the Proposals which are of supreme historical and architectural interest.

The road and traffic arrangements proposed in the Report would, however, in the opinion of the Commission, destroy the very amenities which the City seeks to preserve. Two alternatives suggest themselves. One is that the southern arm of the circular route should avoid Tower Hill altogether, while dock traffic travelling south and west should cross Tower Bridge—or use, if and when it is constructed, the projected tunnel—and join the A-Ring route on the South Bank. The other is that the proposed road between the Tower Ditch and the gardens to the north of it where the site of the Scaffold is, should be abandoned, leaving only one wide road, viz., that running just south of the Port of London Authority building, and Trinity House. In this way the two gardens could be linked together, preserving the fine fragment of London Wall (which could be shown to advantage with its accompanying Ditch), and also the site of the Scaffold; and leaving the Church of All Hallows with access from the gardens on one side at least.

OPEN SPACES

The Commission agree in principle with the opinion expressed in the Report that small open spaces are more suited to the use and character of the City than large



Housing



Schools



Millions of new houses will be needed; millions of children will be staying longer at school, and school buildings everywhere must be enlarged and new schools built. For all these buildings thousands of miles of pipes and

gutters, millions of stoves, fireplaces, and so forth will be made of cast iron. But there are many other uses in building for this old, tried, but up-to-date material. Cast iron is a building proposition: it is worth looking into.

Issued by The British Ironfounders' Association, 145 St. Vincent Street, Glasgow, C.2.

Facts about the Building Uses of Cast Iron

The British Cast Iron Research Association has a Building Uses Department which is available for dealing with enquiries from architects and builders about cast iron. Mr. Derek L. Bridgwater, F.R.I.B.A., is Consultant to the Department.

Enquiries should be addressed to :

**The Building Uses Department, British Cast Iron Research Association,
Alvechurch, Birmingham**

ones. They recommend, however, that open space in traffic roundabouts, where it is of little use, should be discounted, and a slight increase obtained in certain areas.

In addition the Commission recommend a footpath survey and plan, with the object of linking up as far as possible these open spaces with disused burial grounds, churchyards and monuments to which the public have access, the Tower Wall at Cripplegate, and historic buildings. Such a pedestrian network need not of course be by public right of way throughout its entire length; some sections would be by courtesy of private owners or of the Church authorities.

Publications Received

How Should We Rebuild London? C. B. Purdom. (J. M. Dent, 12s. 6d.)
Highland Power. (Scottish Association of Scientific Workers, 3s. 6d.)
National Parks in England and Wales. J. Dower. (HMSO, 1s. 0d.)
The Scrap Book of Huddersfield. N. Spencer. (Private Publication.)
When Democracy Builds. Frank Lloyd Wright. (University of Chicago Press.)
The Making of Scientific Management. L. Urwick and E. Brech. (Management Publications Trust, 7s. 6d.)
City of Norwich Plan, 1945. H. C. Rowley, C. H. James and S. R. Pierce. (The City of Norwich Corporation, 7s. 6d.)
More Advanced Quantity Surveying. A. J. Willis. (Crosby Lockwood, £1 5s. 0d.)
Approved House Designs. (Department of Health for Scotland.)

Bombed Churches as War Memorials. (Architectural Press, 3s. 6d.)
Basic Road Statistics. (British Road Federation, 1s. 0d.)
Bricklayers Repair Work. W. Frost. (The Technical Press, 4s. 6d.)
Spon's Architects' and Builders' Pocket Book. C. Young and B. Engel. (E. and F. N. Spon, 9s. 0d.)
British Architects and Craftsmen. S. Sitwell. (B. T. Batsford, £1 1s. 0d.)
English Church Design. F. H. Crossley. (B. T. Batsford, 12s. 6d.)
Builders' Handbook on Carpentry and Joinery. S. H. Glenister. (G. Allen & Unwin, 5s. 0d.)
Municipal and Private Enterprise Housing. R. L. Reiss. (J. M. Dent, 3s. 6d.)
Water, Drainage and the Community. Rolt Hammond. (J. M. Dent, 3s. 6d.)
British Furniture Makers. J. Glóag. (Wm. Collins, 5s. 0d.)
Kitchen Planning. (British Commercial Gas Association.)
Planning Acts, 1943-5. Compensation for Acquisition of Land. J. R. Smith-Saville. (The London Gazette, 16s. 6d.)
Pocket Section Book. (Fleming Bros.)
Whither Plastics? H. R. Fleck. (The Temple Press, 15s. 0d.)
Architectural Practice and Procedure. H. H. Turner. (B. T. Batsford, 18s. 0d.)
Prefabricated Homes. B. H. Cox. (Paul Elek, 2s. 0d.)
Community Restaurants in Design. Sir W. Deedes. (London Council of Social Service, 2s. 6d.)
Polish Art. Jerzy Zarnecki. (Polish Publications Committee, 2s. 6d.)
Practical Building Mechanics. Newman Tate. (E. Chapman & Hall, 15s. 0d.)
Town and Country Planning Act. D. Head. (Sweet & Maxwell, £1 1s. 0d.)
The County of London Plan. E. Carter and E. Goldfinger. (Penguin Books, 3s. 6d.)

Brickwork. W. B. McKay. (Longmans, Green, 7s. 6d.)
Sheffield Replanned. (Sheffield City Council, 5s. 0d.)
Housing and the State. Marian Bowley. (G. Allen & Unwin, 15s. 0d.)
Dry Rot in Wood. Department of Scientific Industrial Research. (HMSO, 1s. 0d.)
Studies in Polish Architecture. Jerzy Faczynski. (University Press of Liverpool, £1 1s. 0d.)
The Meaning and Purpose of Art. A. R. Howell. (A. Zwemmer, 18s. 0d.)
A Review of Recent Progress. (Reinforced Concrete Association, 1s. 6d.)
Works of Art in Italy. (HMSO, 1s. 6d.)
Commercial Art and Industrial Design. J. Lewis. (R. Ross, 2s. 6d.)
Stress Grading of Timber. C. J. Chaplin. (Timber Development Association.)
The National Trust. J. Lees-Milne. (B. T. Batsford, 12s. 6d.)
Venice. A. Stokes. (Faber & Faber, 10s. 6d.)
Manchester and District Regional Planning Proposals. R. Nicholas. (Jarrold & Son.)
The Plan of London County. Lewis Mumford. (Faber & Faber, 1s. 6d.)
Greater London Plan, 1944. Patrick Abercrombie. (HMSO, £1 5s. 0d.)
The Building of London. M. and A. Potter. (Penguin Books [Puffin], 9d.)
Builders' Calculations. S. H. Glenister. (G. G. Harrap, 5s. 0d.)
Magahda Architecture and Culture. S. C. Chatterjee. (University of Calcutta.)
Valetta and the Three Cities. A. S. T. B. Harrison. (Government of Malta.)
Observations on the City of London's Report on Post-War Reconstruction. Royal Fine Art Commission. (HMSO, 2d.)
Report on Cheltenham. (Georgian Group, 2s. 0d.)
Building Societies' Year Book. G. E. Franey. (Franey & Co., 12s. 6d.)

MODERN CATERING EQUIPMENT

Designed and constructed by skilled craftsmen with lifelong experience of the requirements of the Trade.

We respectfully offer our expert services in the preparation of layout plans of any type of installation in which you are interested.

Sumerling
 & Co., LTD.
 44, BERNERS STREET,
 LONDON • W.1.

Supply & Demand



The post-war demands upon the Building Industry will be unprecedented. All the resources of the 'S.G.B.' organisation will be at the disposal of architects, engineers and contractors... in all parts of the country.

ABERDEEN • BRIGHTON

BIRMINGHAM • BRISTOL • CARDIFF



London Office & Works
PLOUGH LANE,
 LONDON, S.W. 17.
 Telephone WIMBLEDON 6201-5



Registered Head Office
 SAUNDERTON, BUCKINGHAMSHIRE
 PRINCE ROYAL 480-4

• NOTTINGHAM • NEWCASTLE • PLYMOUTH • PORTSMOUTH • SOUTHAMPTON

• MANCHESTER

• DUNDEE • EDINBURGH • EXETER • GLASGOW • HIGH WYCOMBE • HULL • LIVERPOOL • LONDON • MANCHESTER

LOW TENSION CABLING...



No Risk



OF DAMAGE OR FIRE

The distinctive characteristic of 'Pyrotanax' M.I. Cables is the fact that they are made wholly and solely of copper and mineral insulant. Oil, water, condensation—nothing will affect them. They can be knocked about, trampled on and crushed without being any the worse for such treatment. Above all they are inherently fire-resisting and unaffected by accidental overload. Bend them as you will to any shape; they can be held snugly in position by any form of clip, saddle or clamping device. They do not require conduit or any other form of protection, once installed, they are virtually everlasting—efficient, economical and safe.

'Pyrotanax' M.I. Cables which conform with I.E.E. regulations are supplied with single or multiple cores in a wide range of current ratings and are now giving satisfactory and permanent service in

Flats, Hotels, Picture Galleries, Cathedrals and Churches, Theatres, Skating Rinks, Turkish Baths, Electrical Generating Stations, Factories and Works, Printeries, Laundries, Breweries, Rolling Mills, Paper Mills, Railway Workshops, Aerodromes, Shipyards, Dockyards, Warships, Oil Tankers, Passenger and Cargo Ships, Oil Pumping and Storage Installations, etc.

LONDON OFFICE: 7 Victoria Street, S.W.1.

Telephone: ABBey 1654.

BIRMINGHAM OFFICE: Nelson House, 2 Moor Street, Birmingham 4.

Telephone: Midland 1265.



PYROTENAX LTD. HEBBURN, Co. DURHAM

Telephone: Hebburn 32244/5.

G.D.18



Stress-graded Timber will be very much in the headlines in the near future.

Stress-grading is a method of testing which enables us to gauge visually the stresses that pieces of timber of known species will bear. In this way it is possible, by selecting the minimum sizes for a specified performance, to effect valuable economies.

S-G Timber cannot be supplied until we have ample stocks in the country from which to select the required grades. Of one thing you may be sure—as soon as it can be done Travis & Arnold will be ready to supply it.

TRAVIS & ARNOLD

Technicians in Timber

ASTOR HOUSE • ALDWYCH • LONDON • W.C.2

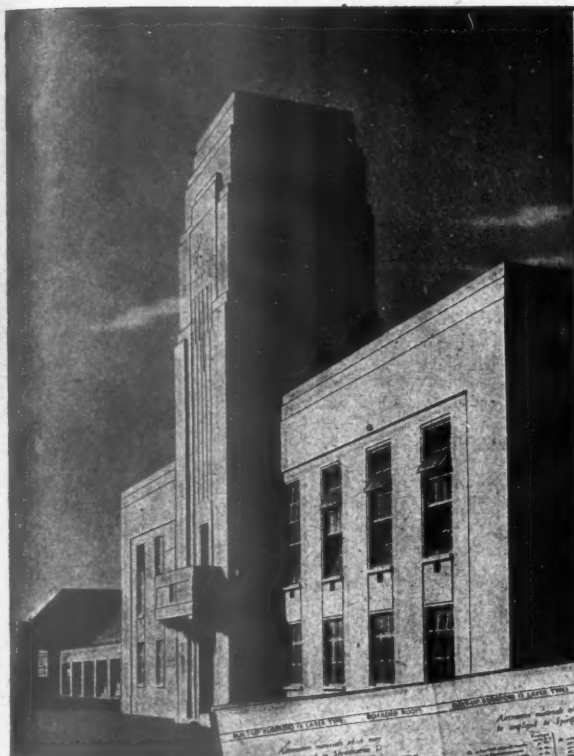
'phone: HOLBORN 5322

TRAVIS & ARNOLD

TIMBER IMPORTERS & BUILDERS MERCHANTS

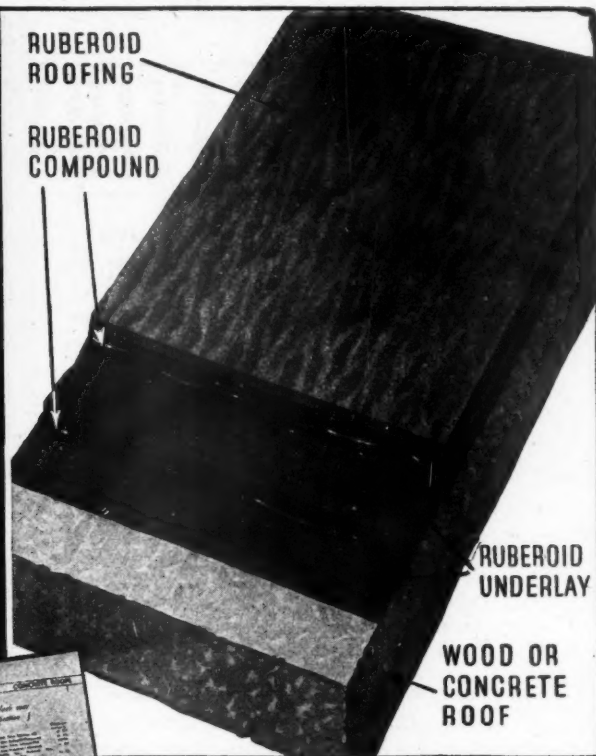
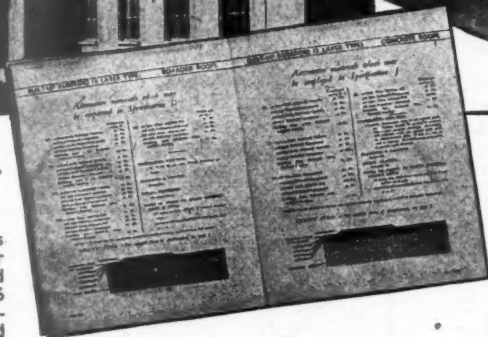
Head Office: NORTHAMPTON

Branches at Cambridge, Cromer, Eastleigh, Lymington, Newbury, Northampton, Peterborough, Rugby, Southampton, Sutton Bridge (Lincs).



County School,
Weston-Super-Mare.
Architect: A. J. Toomer, Esq.,
F.R.I.B.A. Taunton.

Architects and Engineers
are invited to write for
a copy of this Ruberoid
publication No. 326
entitled "Standard Spec-
ifications for Ruberoid
Roofs."



THE RUBEROID BUILT-UP ROOF

A Ruberoid Built-up Roof consists of two or more layers of Ruberoid underlay, bedded together and surfaced with either Ruberoid Standard Roofing or Ruberoid Astos Asbestos Roofing. It can be laid on either boarded or concrete roofs, whether flat, pitched or curved. It is a permanent roof which will withstand all weather conditions.

An attractive alternative is provided by a finishing layer of Ruberoid Slate Surfaced Roofing in red, green or blue. These colours are particularly soft and pleasant, being formed of natural crushed slate applied to the surface during manufacture.

Ruberoid Contract Departments located in London, Birmingham, Manchester, Newcastle, Edinburgh, Dublin and Belfast, promptly undertake work on any scale and in any part of the country. Estimates sent on receipt of particulars.

RUBEROID ROOFING

THE RUBEROID CO., LTD., 1, COMMONWEALTH HOUSE, NEW OXFORD STREET, W.C.1

AS OUR INDUSTRY IS CONTROLLED AND PRIORITY HAS TO BE GIVEN TO GOVERNMENT WORK, OUR ABILITY TO EXECUTE ORDERS IS SUBJECT TO THE REGULATIONS IMPOSED ON OUR INDUSTRY BY THE MINISTRY OF WORKS.

WALTERISATION

Its interest to the Architectural Profession and the Building Trades

- **WALTERISATION** is an anti-corrosion (phosphate) treatment and is an approved A.I.D. (Class 1) protective.
- Wherever the Architect or the Builder come into contact with the necessity for anti-corrosion, **WALTERISATION** offers them outstanding advantages, and will well repay close investigation.
- In addition to simplicity and speed of application without skilled labour, and lowness of cost, **WALTERISATION** has a special interest in the excellent base it provides for paint, varnish, lacquer or other finishing process.

Full details will gladly be supplied on application

THE WALTERISATION COMPANY LIMITED
Waddon Marsh Way · Purley Way · Croydon · Surrey

Midland Agents: The Morgan Electro Plating Works Ltd.

Lombard Street, Birmingham, 12

Northern Agents: John Towaroe & Sons Ltd., West Street, Sheffield, 1

Stelcon

BICYCLE

PARKING



PATENT No. 425265

"a simple and orderly system"

STELCON BICYCLE BLOCKS are now providing effective parking for hundreds of thousands of cyclists.

STELCON (INDUSTRIAL FLOORS) LTD
CLIFFORD'S INN · LONDON E.C.4
Telephone: HOLborn 2916



TRADE MARK

ROBERT ADAMS

ROBERT ADAMS (VICTOR) LTD.
OF 3-5, EMERALD STREET, W.C.1

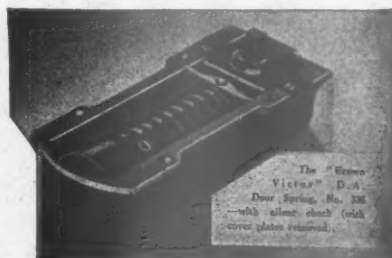
139a STAINES ROAD, HOUNSLOW

TELEPHONE: HOUNSLOW 5714

'VICTOR'

DOOR SPRINGS

NOTED FOR QUALITY AND GREAT DURABILITY



The "Victor" D.A.
Door Spring, No. 228
with glass check (with
cover plates removed)

KETTON

**KETTON
CEMENT**

When Studying Concrete Problems make a good start by selecting the right Cement

IN COLD WEATHER - SAY 40°F

USE WINTER CEMENT

FOR HIGH EARLY STRENGTH

USE KETTOCRETE RAPID HARDENING

FOR NORMAL PURPOSES

USE KETCO PORTLAND

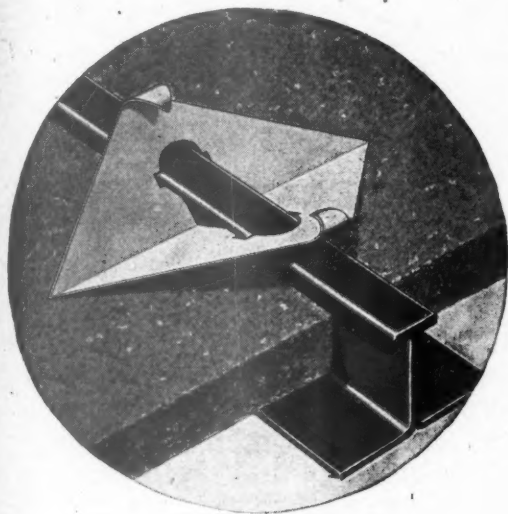
FOR WATERPROOFING CONCRETE

USE KETTON WATERPROOF

MANUFACTURED AT THE KETTON PORTLAND CEMENT WORKS, RUTLAND.
DISTRIBUTED BY THOS W WARD LTD., ALBION WORKS, SHEFFIELD.

SPRING

OF BUILDING BOARD FIXING



definitely increased with the 'PIMCO' PATENT METAL "V" CLIP

Save time in erection of interior wall and ceiling boards by using this simplest of all fixing methods. Without the use of screws, bolts or special tools, fixer has only to slide "V" clips on the flanged T bar illustrated, fix latter to purlins with hangers provided, insert board under clips and the job is done! There is no time lost due to awkward fixing in confined spaces since the clips are fixed to the T bars on the bench before erection.

Full details and information sheet on request.



SUNDEALA BOARD CO. LTD., ALDWYCH HOUSE, W.C.2. Phone: CHAncery 8159
Works: Sunbury-on-Thames, Middx.

Members of Building Board Manufacturers' Association of Great Britain Ltd.

"A Sign of Good Storefitting!"

HICKMAN

STOREFITTERS

LONDON.

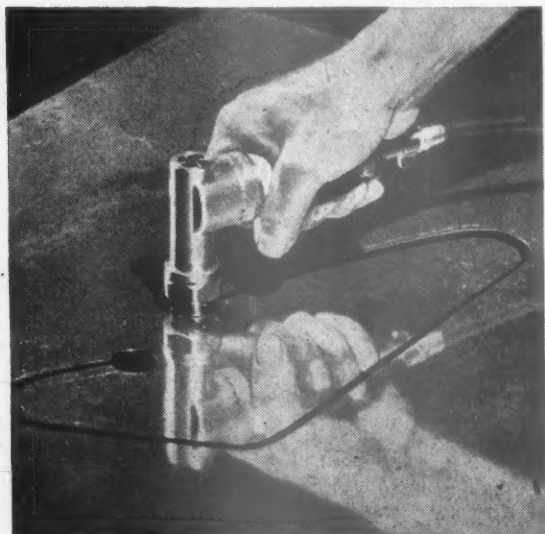
JOINERY,
PANELLING,
COUNTERS,
SPECIAL FITMENTS

CRAFTSMEN IN
STAINLESS STEEL,
ALUMINIUM,
BRONZE,
WROUGHT IRON,
ETC.

SPEED · SERVICE · CRAFTSMANSHIP.

HICKMAN LTD, NORTH CIRCULAR RD, LONDON, N.W. 2.
TELEPHONE GLADSTONE 6262.

Extra pairs of hands



Increased output with **Powered Tools**

The biggest and most urgent building job in our history and a small, but growing, army of building operatives — that is the housing problem. The full use of power-operated hand tools will lighten the task of both the building contractor and operative, by reducing effort, by increasing output, by saving time.

MODERN BUILDING TOOLS

MINISTRY OF WORKS

DEMONSTRATION UNITS

SEPT. 11-15

Paradise Street,
LIVERPOOL

SEPT. 25-29

Victoria Buildings Site,
Deansgate Street,
St. Mary's Gate,
MANCHESTER

Moving shortly to Birmingham and Bristol

Here are the tools —

Power-driven Drills, Hammers, Grinders, Polishers,
Nut Runners, Saws, Routers, Screw Drivers, Small
Shears, Tappers, Planers, etc.

— use them to finish the job!



THE QUALITY OF PERSONAL PRIDE

The quality of personal pride in production has always animated the house of Nobles & Hoare. Supplies of raw materials have been very scarce and difficulties manifold; but with the gradual return to more normal conditions products more closely approximating to the pre-war standard and in freer supply, are gradually becoming available. Amongst these are the following well known Nobles & Hoare lines:

"NOBELIN" Enamel Paint for interior or exterior use.

"ALBAMATTE" Flat Oil Paint.

"NOBLEX" Washable Dis-temper.

"ALBAGLOSS" a perfect White Enamel drying with a hard elastic film of beautiful lustre.

"BODICOTE" ready mixed flat white under coating with exceptional degree of obliteration.

VARNISHES for interior] or exterior use.

Nobles & Hoare

LIMITED

Varnish, Paint and Cellulose Lacquer Manufacturers,
Woodbridge Works, Kingston Road, Leatherhead, Surrey
Tel: Leatherhead 2450 & 2992.

N&H N&H N&H N&H N&H N&H N&H

HELPFUL HINTS SERIES —

We shall be publishing these Hints as a booklet. Supplies will be limited. Order a copy NOW and one will be reserved for you.

HINT No. 12. In the application of a waterproofed rendering as an internal tanking to a basement, a large cove should be formed at the junction of the floor and wall, all internal wall angles should also be coved.

Cementone No. 3

Is a liquid, which, when applied in two coats externally on porous walls — brickwork, cement rendering, artificial stone etc.—will prevent the penetration of rain and dampness. It does not discolour the surface.

Write for
our
technical
handbook

JOSEPH FREEMAN SONS & CO. LTD. CEMENTONE WORKS, WANDSWORTH, LONDON
Phone: BAT. Q876-9 S.W. 18

Off the Shelf!

AEROFOIL SECTION AXIAL FLOW FANS

For summer cooling and ventilation of factories, workshops and offices. Also Man Coolers for foundries. All of guaranteed performance. Motors are A/C 400-440 volts. 3 phase 50 cycles only.

Stock list and prices will be sent on application.

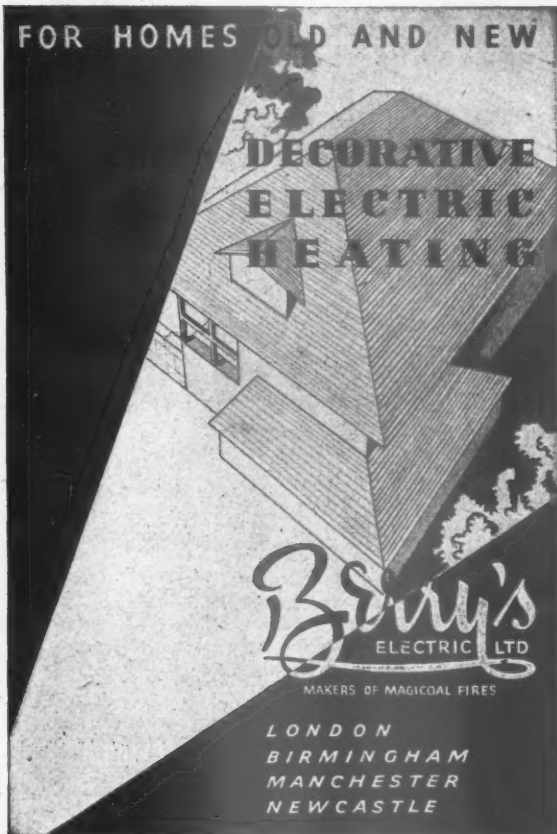


AIRSCREW FANS

AIRSCREW CO. LTD. GROSVENOR GARDENS HOUSE WESTMINSTER LONDON S.W.1 Telephone VIC. 4527
AND AT WEYBRIDGE · MANCHESTER · GLASGOW

FOR HOMES OLD AND NEW

**DECORATIVE
ELECTRIC
HEATING**



Berry's
ELECTRIC LTD
MAKERS OF MAGICAL FIRES

LONDON
BIRMINGHAM
MANCHESTER
NEWCASTLE

RECONSTRUCTION CALLS

FOR **FELT**

ESPECIALLY **STERLING FELT**

- ★ **HAIR FELT SHEETS**
for Sound, Insulation.
 - ★ **FELTS**
for Moisture Absorption.
 - ★ **WATERPROOF BITUMEN FELT
WASHERS** for Roofing & for pre-
fabricated house assembly, etc.
- FELT CUT, TURNED AND WATER-
PROOFED**

Write us giving particulars of your requirements.

**STERLING TEXTILE
INDUSTRIES LIMITED**

**STERLING WORKS, ALEXANDRA RD.
PONDERS END, MIDDLESEX.**

'Phone: HOWARD 2214-5, 1755. 'Grams: STERTEX, ENFIELD.

DEMOLITION

Demolition is a highly specialised trade necessitating experienced direction and the use of skilled top and mattock men.

The National Federation of Demolition Contractors has been very careful to ensure that all its members are demolition contractors of experience and with adequate organisations.

The employment of a member of The National Federation of Demolition Contractors means that demolition will be carried out with speed, economy and safety.



DEMOLITION

Fulllest information may be obtained from

THE SECRETARY, 13, BLOOMSBURY SQUARE, LONDON, W.C.1

Chancery 6731, 2, 3.

Efficient insulation

is essential to economic recovery

To minimise waste of fuel due to excessive heat losses by the provision of efficient thermal insulation in all new buildings has become an essential part of the National programme for economic recovery. Among the materials available for the purpose, and especially suitable because of its low thermal conductivity of (0.57 B.Th.U./Sq.ft./hr./°F./in.) is GYPKLITH. These wood wool building slabs are light in weight, structurally strong, provide a good key for plaster or cement, and can be cut or chased with wood-working tools. Full technical information on request.



Gypklith

WOOD WOOL BUILDING SLABS

GYPROC PRODUCTS LTD

Makers also of Gyproc Plaster Board, Gypstole Partitions and Ceilings, Plaxstole and Acoustole Ceilings

HEAD OFFICE: Westfield, Upper Singewell Road, Gravesend, Kent.
Telephone: Gravesend 4251-4
GLASGOW OFFICE: Gyproc Wharf, Shieldhall, Glasgow, S.W.1.
Telephone: Govan 614.
LONDON OFFICE: 21 St. James's Square, London, S.W.1.
Telephone: Whitehall 9021.



Modern

METAL FINISHES

*will enhance
the beauty of
the Post-War
home*

The use of light alloys in modern furnishing and interior decoration will be a *sine qua non* of post-war housing. We are ready to place at your disposal our war-time experience in the anodising of Aluminium and its Alloys in natural or colourful finishes; bright finishes for the bathroom and lavatory, and rust-proofing generally in the kitchen.

J. V. RUSHTON

(BIRMINGHAM) LIMITED,

ANODIC WORKS, BATH ROW,
BIRMINGHAM.

WORKS AT

WOLVERHAMPTON • COVENTRY • REDDITCH

and branches throughout the Country.

constant flow ventilation constant flow ventilation constant flow



*Air Change
without draught*

THERE IS A COLT

CONSTANT FLOW

VENTILATOR FOR EVERY TYPE OF HOUSE

SILENT, AUTOMATIC,
NON-MECHANICAL

Information sheets 20/21
from

Dept.
H/C.F. **Colt**

VENTILATION LTD.
SURBITON, SURREY.
TEL. ELMBRIDGE 6511 (4 LINES)

constant flow ventilation constant flow ventilation constant flow

AIR CONDITIONING'S

First Name -

Carrier

EN-TOUT-CAS

PAST—PRESENT—FUTURE

PRE-WAR

Over 30,000 Hard Lawn Tennis Courts were made, including ALL the Hard Courts used for: The British Hard Court Championships—The British Professional Championships—The British Junior Championships—(also many Overseas Championships) in addition to Public Parks, Recreation Grounds, Squash Courts, etc.

WAR-PERIOD

Worked on 200 Aerodromes; Opencast Collieries; rebuilt 250 Armoured Fighting Vehicles; and made well over 300,000 Prefabricated Sections for Government Buildings, and are now making these Sections for 75 Government houses per week.

Camouflage painted Twenty Two Million Square Yards of Buildings and Runways.

Maintained (by Tarring and Gritting) Eighteen Million Square Yards of Runways.

POST-WAR

Already hundreds of orders have been received for new Courts, Recreation Grounds, Public Parks, Squash Courts, etc., also orders to repair thousands of blitzed and neglected Hard Courts, etc.

May we put your name down on our Rotation List, then we can give your enquiry prompt attention as soon as war conditions permit?



By Appointment
to the late
King George V.
Hard Lawn Tennis
Court Makers.

**THE EN-TOUT-CAS CO.
LTD.**

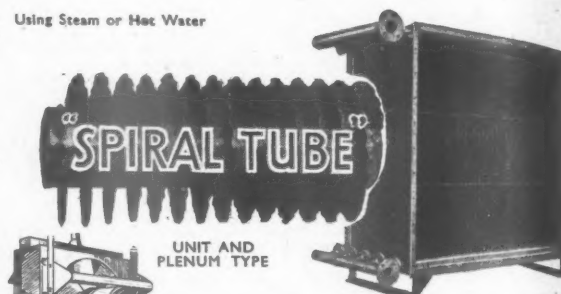
SYSTON, LEICESTER

Telephone: 86177 Syson (3 lines).



By Appointment
to H.M. the
King of Sweden,
Hard Lawn Tennis
Court Makers.

Using Steam or Hot Water



UNIT AND
PLENUM TYPE

AIR HEATERS

THE SPIRAL TUBE & COMPONENTS CO., LTD.
Osmaston Park Road, Derby
London Office: Honeypot Lane, Stanmore, Middlesex



UTILITY STOVE

TWO STOVES IN ONE!

"A HEATING MIRACLE"—vide the Daily Mirror

ECONOMY with EFFICIENCY will be a post-war keynote for many years—and "INTEROVEN" STOVES will be greatly in demand because they save their cost in brickwork, labour and space.

The fact that they work perfectly with wood, peat or coal brings in so many enquiries that at present we are embarrassed by "controls."

Perhaps sooner than we expect the leash will be off and nobody will be better pleased than ourselves to offer the facilities and service which made "INTEROVENS" famous. Essential replacements of all pre-war "INTEROVEN" Stoves can be supplied. New Lists sent on application enclosing stamp (Gost. Order) to our new and larger showrooms:—

THE INTEROVEN STOVE Co. Ltd.
67 BAKER STREET, W1.

Sole Makers of the only
GENUINE "INTEROVEN" Stoves,
Pascall's Patents.

fine woodwork

BATH CABINET MAKERS AND ARTCRAFT LTD
BATH · LONDON ADDRESS · 4 CAVENDISH SQ. W.1.
BATH PHONE: 7214-5 LONDON PHONE: LANGHAM 2860

FOR YOUR POST WAR RECONSTRUCTION

FREDERICK RESTALL LTD
GT: HAMPTON STREET
BIRMINGHAM. 18.

FLUSH DOORS OF ALL TYPES WILL AGAIN BE OUR SPECIALTY
 AS PRE-WAR

TEL: NORTHERN 2252

'X' = Prefabrication

in POST WAR
**ARCHITECTURAL
 CONSTRUCTION**



The advantages of using Jicwood 'X' are so many that we can only state briefly a few of its uses. Jicwood 'X', consisting of plywood, plastic or light metal skins permanently bonded to a low density expanded plastic core, offers better thermal insulation than high grade cork; it is vermin and bacteria proof; non-warping and above all, combines great strength and rigidity without framework, yet can be made as light as 0.6 lb. per square foot. Its qualities suggest numerous uses, such as temporary housing (prototypes licensed by M.O.W. are erected), partitions, panelling, doors, flooring, furniture, fixtures; in fact, Jicwood 'X' can be utilised for practically all stressed applications.

Jicwood 'X'



JICWOOD LTD., WEYBRIDGE, SURREY

Telephone: WEYBRIDGE 1600

Telegrams: JICWOOD, WEYBRIDGE

*A stage further
towards the Artistic Interior*

**VECTAIR
CONCEALED
CONVECTION
HEATING**

Better for Health... Better for Design

The British Trane Co., Ltd., designers and manufacturers of Vectairs, would be pleased to discuss with you the application of this modern heating apparatus for all purposes. Write for booklet EV/A13: Vectair House, 52 Clerkenwell Close, London, E.C.1. Telephone: Clerkenwell 6864 & 3826.



**FOLLOW THE EXAMPLE
OF THE NATION'S LEADING
ORGANISATIONS & INSTALL**

STEEL SHELVING • PARTITIONS
BINS • CUPBOARDS • BENCHES ETC

by **EVERTAUT
LIMITED**

(Proprietors: J. B. Brooks & Co. Ltd.) E.T.4

• EVERTAUT LTD • WALSALL ROAD • PERRY BARR • BIRMINGHAM 22

DURASTEEL DOORS



WAR-TIME EXPERIENCE APPLIED TO POST-WAR PLANNING

Over 150 Municipal Authorities, Electrical Undertakings and Government Departments use DURASTEEL 3DF2 Sheets in their Fire Protection Schemes. DURASTEEL 3DF2 SHEETING has been fully tested for Heat and Fire resistance (Official Rating BS/ARP 27 and BS/ARP 47). DURASTEEL Doors incorporating Durasteel Sheeting have passed official tests by the Fire Offices Committee, and are built to approved specification.

TO-DAY ORDERS CAN BE TAKEN for DURASTEEL Fire Protection Doors. Inquire now about immediate needs and Post War Planning. Send too for technical data.

DURASTEEL ROOFS LIMITED

OLDFIELD LANE GREENFORD MIDDLESEX
TEL. WAXLOW 1051 (Dial H-Exch) GRAMS: ENDURAFIRE, PHONE LONDON



MORRIS SINGER COMPANY

ARCHITECTURAL METALWORK

Bronze Founders for over 100 years

FERRY LANE WORKS • WALTHAMSTOW • LONDON E.17. LARKSWOOD 1055

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," War Address: 45 The Avenue, Cheam, Surrey, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," War Address: 45 The Avenue, Cheam, Surrey.

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: 75, Eaton Place, London, S.W.1. TEL.: SLOANE 5615. 991

BOROUGH OF LUTON.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT to the Borough Engineer's Department, at a salary of £510 per annum, rising by annual increments of £15 to £555, plus cost-of-living bonus, at present at the rate of £59 16s. per annum. The position will be a temporary one in the first instance, but will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applicants should have had some practical experience after completion of training, and have made specific progress in obtaining a recognised professional qualification.

Applications, giving particulars of age, training, experience and qualifications, and stating position in relation to National Service, should be forwarded to the Borough Engineer, Town Hall, Luton, not later than the 22nd September, 1945.

Canvassing will disqualify.

W. H. ROBINSON,
Town Clerk.

28th August, 1945.

534

NORTH RIDING EDUCATION COMMITTEE

Applications are invited for the post of TECHNICAL ASSISTANT (Grade "C") in the Buildings Department. The post is exempt from the age restrictions of the Control of Engagement Order. The salary is £225 a year, rising by annual increments of £15 to £300 a year, plus cost-of-living bonus, at present £60 a year. Under existing conditions, working hours are increased by one-seventh, and the payment for this is at the rate of one-seventh of the basic salary. The total commencing emoluments are therefore about £317 a year. The post is subject to the provisions of the Local Government Superannuation Act. Applicants should have sound experience in carrying out surveys of sites and buildings, be neat draughtsmen and be experienced in maintenance work and in dealing with builders' accounts. Further particulars and form of application may be obtained by sending a stamped addressed foolscap envelope, and completed applications, with copies of two recent testimonials, should be returned not later than 6th October.

F. BARRACLOUGH,
Secretary.

Education Offices, County Hall,
Northallerton.

652

BLACKWELL RURAL DISTRICT COUNCIL.

ARCHITECT AND HOUSING MANAGER.

Applications are invited for the above appointment. Salary, £400, rising by annual increments, on satisfactory service, by £50 to £600 per annum, plus cost-of-living bonus, £59 16s., and travelling expenses.

Candidates must be Associates of the Royal Institute of British Architects or hold equivalent qualifications and are Registered Architects.

They must have had experience in the design, preparation of working drawings, specifications, and laying out of estates for housing and other architectural work usually undertaken by a local authority and the repair and maintenance of houses.

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

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

Applications, stating age, qualifications and experience, accompanied by three recent testimonials, must be received by me not later than 20th September, 1945.

W. S. COCKERHAM,

Clerk to the Council.

Dale Close, 100, Chesterfield Road South,
Mansfield.

31st August, 1945.

647

STAFFORDSHIRE COUNTY COUNCIL.

TOWN AND COUNTRY PLANNING DEPARTMENT.

Applications are invited for the appointment of a Senior Planning Assistant, Grade E, at a commencing salary of £450 per annum, rising, subject to satisfactory service, by two annual increments of £20 and one of £10, to £720 per annum, plus cost-of-living bonus of £59 16s. per annum and travelling allowance in accordance with the County Council's scale.

Applicants should be members of the Town Planning Institute, or hold an equivalent qualification, and have had experience in the preparation of Planning Schemes by a Planning Authority.

The appointment is subject to the Local Government Superannuation Acts, and the successful applicant will be required to pass a medical examination. The appointment will be terminable by one calendar month's notice on either side.

Application in writing, stating age, qualifications, and experience, and position with regard to National Service Act, accompanied by copies of three recent testimonials, marked in the top left-hand corner "Planning Appointment," must be lodged with the undersigned not later than first post on Monday, 1st October, 1945.

Canvassing directly or indirectly will be a disqualification. Applicants must state in their application whether they are related to a member of the County Council.

T. H. EVANS,

Clerk of the County Council.

County Buildings, Stafford.

6th September, 1945.

665

BOROUGH OF CHELMSFORD.

ARCHITECTURAL ASSISTANT.

Applications are invited for the temporary appointment of an Architectural Assistant in the Office of the Borough Engineer and Surveyor at a salary of £420 per annum, rising, subject to satisfactory service, by £20 per annum to £480 per annum, plus cost-of-living award, at present 23s. per week. Preference will be given to persons who have passed the Final Examination of the Royal Institute of British Architects, or who hold equivalent qualifications. Applicants should have had previous experience in the design of Council houses, housing layouts, etc. The appointment will be terminable by one month's notice on either side.

Applications, stating age, qualifications, experience and position with regard to military service, accompanied by copies of three recent testimonials, and endorsed "Architectural Assistant," should reach the undersigned not later than noon on Wednesday, 26th September, 1945.

VINCENT J. WILLIS, M.Inst.M. & Cy.E.,

Reg. Arch.,

Borough Engineer and Surveyor and
Planning Officer.

Municipal Offices, Rainford House,
Duke Street, Chelmsford.

666

LONDON COUNTY COUNCIL.

Appointment of Senior Planning Officer in the Town Planning and Building Regulation Division (Statutory Branch) of the Architect's Department at a salary of £800 per annum, rising by annual increments of £50 to a maximum of £1,000 per annum, together with cost-of-living bonus, at present £60 per annum, for men, and £48 per annum for women.

The position is subject to the Council's Superannuation and Provident Fund, and will be temporary in the first instance; but the successful candidate will be eligible for consideration at a later date for appointment to the permanent staff. Candidates should possess appropriate professional qualifications and experience, and should be conversant with current town planning legislation. The duties of the position will include in particular work in connection with the development of the Council's town planning proposals, the drafting of scheme provisions and the preparation of redevelopment proposals for large urban areas. The person appointed will be responsible also for the supervision of duties undertaken by the staff engaged on all branches of the Council's planning work.

Applications should be made to the Architect to the Council, County Hall, Westminster Bridge, London, S.E.1, for form of application (enclose stamped addressed foolscap envelope), to be returned by Saturday, 29th September, 1945. Canvassing disqualifies.

661

DERBYSHIRE COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an Architectural Assistant.

Candidates must be over 30, unless medically unfit for Military Service. Salary, £325, by annual increments of £12 10s. to £350, plus cost-of-living bonus, at present £59 16s. per annum, and an allowance for extended office hours.

Applications should be sent to the undersigned by 22nd September, 1945.

J. HARRISON,

County Architect.

The appointment is subject to the approval of the Ministry of Labour.

13th September, 1945.

668

BOROUGH OF SOUTHALE.

BOROUGH ENGINEER AND SURVEYORS DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant on the permanent staff of the Council. Salary, £365 x £15-£425, plus cost-of-living bonus, at present £59 16s. per annum. Commencing salary according to qualifications and experience.

Candidates should be registered architects, and preference will be given to members of the Royal Institute of British Architects. Experience in preparation of working drawings, specifications, surveying and setting-out in connection with housing works, is desirable.

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

Applications must be submitted on the official form, which should be obtained from, and returned to, the Borough Engineer, Town Hall, Southale, Middlesex, with copies of three recent testimonials, not later than noon on September 18th, 1945.

Canvassing any member of the Council or any Committee thereof, directly or indirectly, will disqualify.

M. LINDSAY TAYLOR,

Town Clerk.

Town Clerk's Offices, South Road,

Southale, Middx.

31st August, 1945.

641

LONDON COUNTY COUNCIL.

VACANCIES FOR PLANNING STAFF IN THE ARCHITECT'S DEPARTMENT.

Applications are invited for a number of positions in the following grades:

Temporary Planning Officers, Grade II-£500-

£25-£650 per annum.

Temporary Planning Officers, Grade III-£380-

£20-£500 per annum.

Cost-of-living additions, at present £60 a year for men, and £48 for women, are added to all salaries.

Successful candidates will be subject to the Council's Superannuation and Provident Fund. When permanent appointments are resumed, temporary staff with satisfactory service will receive consideration on a merit basis.

Candidates should possess appropriate professional qualifications and experience, and should be conversant with current town planning legislation.

Application should be made to the Architect to the Council, County Hall, Westminster Bridge, S.E.1, for form of application (enclose stamped addressed foolscap envelope), to be returned by Saturday, 29th September, 1945. Canvassing disqualifies.

662

CITY OF CANTERBURY.

SENIOR ASSISTANT ARCHITECT.

Applications are invited for the appointment of a Senior Assistant Architect in the City Architect's Department at a salary of £420 by £20 to £500 per annum, plus cost-of-living bonus, at present 23s. per week.

Preference will be given to candidates trained in a recognised School of Architecture and who are A.R.I.B.A. Consideration will be given to serving men. Previous experience of municipal work, including schools, is desirable, but not essential.

The successful candidate will be required to pass a medical examination for the Local Government Superannuation Act, 1937.

Applications, endorsed "Senior Assistant Architect," giving age, full particulars of experience and qualifications, and the name of three persons to whom reference may be made, should be received by Mr. L. Hugh Wilson, A.R.I.B.A., A.M.T.P.I., City Architect, not later than 31st October, 1945.

J. BOYLE,

Town Clerk.

Municipal Buildings, Dane John,

Canterbury.

5th September, 1945.

660

COUNTY BOROUGH OF CROYDON.

BOROUGH VALUER'S DEPARTMENT.

Applications are invited from qualified persons for the appointment of a TEMPORARY SENIOR SURVEYOR on the staff of the Borough Valuer at a salary of £8 8s. per week, plus war bonus (at present £1 3s. per week).

Applicants must be experienced in dealing with applications for Building Licences, conversant with Ministry of Health regulations, and competent to control staff and take full responsibility for the administration of this work.

Applications, on forms to be obtained from the Borough Valuer, together with copies of three recent testimonials, to be returned to him not later than 22nd September, 1945.

E. TABERNER,

Town Clerk.

Town Hall, Croydon.

August, 1945.

649

GELLYGAER URBAN DISTRICT COUNCIL.

JUNIOR ARCHITECTURAL ASSISTANT
(TEMPORARY).

Applications are invited for the appointment of Junior Architectural Assistant (temporary) in the Engineer and Surveyor's Department.

Applicants should have been trained in an architect's office, should be neat draughtsmen and have a good knowledge of building construction. Salary at the rate of £250 per annum, plus bonus on the Whitley Scale (at present £59 15s.).

Applications, giving details of qualifications and experience, position as to National Service and the earliest date available for duty, should be sent, together with three recent testimonials, to the undersigned not later than Thursday, 27th September, 1945.

TUDOR LAWRENCE.

Clerk of the Council.

6th September, 1945.

DERBYSHIRE COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a Senior Architectural Assistant.

The salary will be £400 per annum, rising by annual increments of £12 10s. to £450 per annum, plus cost-of-living bonus, at present £59 18s. per annum, and an allowance for extended office hours.

Candidates must be qualified as Associates of the Royal Institute of British Architects and over 30 years of age unless medically unfit for Army Service.

Applications should be sent to the undersigned by 22nd September, 1945.

The appointment is subject to the approval of the Ministry of Labour.

J. HARRISON.

County Architect.

13th September, 1945.

CITY OF ST. ALBANS

CITY ENGINEER AND SURVEYOR'S
DEPARTMENT.

ARCHITECTURAL ASSISTANTS.

Applications are invited for the following appointments in the above department:—

(a) ARCHITECTURAL ASSISTANT. Salary, £400 per annum, plus current cost-of-living bonus, £59 15s. per annum. Applicants must possess an architectural qualification, and have had experience in the preparation of plans, working drawings, specifications and layouts of modern municipal housing estates, including surveying and levelling.

(b) ARCHITECTURAL ASSISTANT. Salary, £250 per annum, plus current cost-of-living bonus, £59 15s. per annum. Applicants should have had experience in architectural work, preferably in the office of a local authority.

Both the above appointments are for a temporary period and will be subject to one month's notice on either side, and the position with regard to military service must be stated.

Applications in writing, stating age and experience, together with copies of two recent testimonials (non-returnable), must be received by me not later than first post on 24th September, 1945.

S. H. E. CRANE.

Town Clerk.

Town Clerk's Office, 38, St. Peter's Street,

St. Albans.

September, 1945.

656

Architectural Appointments Vacant
Four lines or under, 4s.; each additional line, 1s.

MANCHESTER.—Architectural Assistants required for industrial and housing work; good prospects. Write fully, stating age, experience, qualifications, and salary required. Ernest A. Newton, Leach & Booker, Chartered Architects, 28, Kennedy Street, Manchester, 2. 614

ARCHITECTURAL DRAUGHTSMAN required in Drawing Office in Maidstone district; position offers good prospects for suitable applicant. Write, stating age, experience, and salary required, to Box 613.

PROGRESSIVE Firm of Architects, with fifty years' standing in the Midlands, have vacancies for one or two experienced Architectural Assistants; good salaries paid to suitable applicants, who must be first-class draughtsmen and well trained for important large scale work; a similar vacancy occurs in our London office. Please state qualifications, age, and experience to Box 600.

ARCHITECT'S SENIOR ASSISTANT required in N.E. London; experienced in design of industrial and commercial buildings; state age, experience, and salary required. Box 604

ARCHITECTURAL ASSISTANT, with housing and surveying experience, required. Telephone Central 6683 or write Box 621.

JUNIOR ARCHITECTURAL ASSISTANT required for Birmingham Architect office. Apply, telephone Birmingham Central 3628 or write Box 642. State experience and salary required.

FIRST-CLASS ARCHITECT'S ASSISTANT required immediately for housing, factory, banks and other general work; experienced in working drawings, details, specifications, surveys and knowledge of quantities. Write, giving age, experience and salary required and when available, to Tennant & Smith, F./A.R.I.B.A., Roper-gate Chambers, Pontefract, Yorks. 651

SENIOR ARCHITECTURAL ASSISTANT required for Birmingham Architect office. Apply, telephone Birmingham Central 3628 or write Box 643. State experience and salary required.

SENIOR and Junior Assistants required by Bristol architect for large-scale industrial work in all parts of the country; applicants must be capable of taking responsibility and be prepared to travel extensively. Apply, James Mackintosh, 18, Orchard Street, Bristol 1. 664

SENIOR ASSISTANT to handle building work and steel-work and reinforcement concrete structural design, required by Birmingham architects. Write, stating qualifications, age, and salary required. Box 658

REQUIRED, young Architectural Assistant for research and technical detailing for prefabricated houses. Write, stating salary required, to Box 655.

ASSISTANT, interested permanent prefabrication, required by London architects, M.O.W. staff priority; working drawings and specifications from sketches; quick perspectives and knowledge quantities with to-day's prices desirable but not essential. Box 644.

VICTOR KERR & COLBOURN would be glad if any of their pre-war male staff, however situated, would communicate with them at 212, High Holborn, W.C.1. Holborn 2400. 645

ARCHITECT'S ASSISTANT, good draughtsman and designer of large and small houses, factories, etc., £400 or more according to ability; possibility of partnership if suitable; near Birmingham in high-class district. Box 646.

Architectural Appointments Wanted

R.A.F. Officer (air crew), with pre-war experience as architectural Representative, wishes to contact progressive firm with view to engagement on release from H.M. Forces. Box 81.

ARCHITECT, 40 (Major R.E., Group 15), pre-war office manager to well-known London architects, considerable experience large scale office and flat buildings in London, and of L.B.A. and contract and building law, offers services in similar capacity; salary £1,000 p.a. or arrangement with view to partnership. Box 95.

THIRD Year Student of Architecture (Liverpool School) desires post in Liverpool office during September in order to gain experience. Box 101.

ARCHITECT'S ASSISTANT requires post in South of England; good draughtsman and knowledge of building construction; prepare working drawings and details; prefers domestic work; recently discharged Army. Box 100.

ARCHITECT, with war damage experience in London, offers spare-time assistance with surveys, estimates, and preparation of conversion schemes. Box 99.

SECRETARY requires post in London, 9.30 to 4.30; good architectural experience. Box 98.

EXPERIENCED Architectural Assistant requires spare-time work in the London area; special knowledge of modern materials and methods of construction. Box 97.

SECRETARY, educated and experienced, seeks part-time employment with Architects. Please write Mrs. B., 11, Bessborough Gardens, London, S.W.1. 102

ARCHITECT'S ASSISTANT requires spare-time work; working drawings, sketches, tracings, etc. Box 103.

A.R.I.B.A. (39), with over 20 years' varied experience of important work, desires post, preferably near London; particularly interested in design. Box 104.

PERSPECTIVE ARTIST; work promptly executed, in any medium; moderate fees; London and West of England. Box 105.

ARCHITECT'S and Surveyor's Assistant, 3 yrs. technical school training, 24 yrs. with Architect and Surveyor, seeks progressive position in London. Box 114.

A.R.I.B.A. (27) seeks permanent and progressive post; experience in Domestic, Commercial and Town Planning work; mid-Berkshire preferred, but willing to work from office in own home in this area; accommodation essential other district; own transport; salary on the basis of £500 p.a. Box 113.

REGISTERED ARCHITECT (33), Lieut.-Col. R.E., due demob. late Oct., desires post as Senior Assistant with prospects partnership, or position as Architect and Building Manager to commercial firm; used to responsibility; 9 years' experience, private practice, commercial and official architecture. Box 111.

QUALIFIED CIVIL ENGINEER desires spare-time appointment with architect, engineer or clients in the preparation of schemes including roads drainage and water mains supply, etc.; all matters in strict confidence. Replies to Box 109.

ARTIST DRAUGHTSMAN, 2 years architectural studies U.S.A., 4 years gen. building work, 4 years secretary to builders' merchant, 5 years technical illustrations, seeks position architect's office. Box 106.

ARCHITECT, with wide experience, requires responsible permanent or progressive post with good firm of architects or commercial company; capable man with all-round knowledge housing and town planning, schools, hospitals, factory and heavy industrial works, railway buildings, offices, Public Authority work, etc.; would consider part-time work in preparation of schemes and planning in London and N.W. area; appointment for interview at any time in London area. Box 107.

REGISTERED ARCHITECT, age 33 years, with good knowledge of quantities, requires position with London or South-East Coast firm of architects or surveyors; capable of taking complete charge of small architectural practice. Box 108.

QUALIFIED ARCHITECT, specialist in Furniture, Joinery and Decoration, with many years' independent practice and experience in European countries, seeks suitable position with cabinet makers' firm in London. Box 110.

ASSISTANT (33), A.I.A.S., seeks position with Architect or Surveyor; 10 years' experience both domestic and general; neat and accurate draughtsman; details all scales; good planner; houses, flats, shows, estate development, hospitals, factories, specifications and supervision; a knowledge of quantities and estimating, alterations, conversions, surveys, reports, field work, etc. Salary, £600. Box 115.

ARCHITECTURAL STUDENT, age 17, with Architecture as hobby, seeks post in London architect's office. Box 112.

Other Appointments Vacant

Four lines or under, 4s.; each additional line, 1s.

ARCHITECT'S SECRETARY required; interesting and varied work. Apply Box 545.

DEVELOPMENT organisation requires Man to take charge of work in connection with the application of Material in Building; candidates must have had good technical training, and preferably be qualified architects or engineers, with building experience; good personality and exceptional initiative essential; ability to lecture and prepare technical literature desirable; salary £700 per annum upwards, according to qualifications; permanent post, with generous superannuation; London area. Reply, stating age and experience, to Box 625.

SURVEYOR and Specification Writer required in busy architect's office. Write Ley Colbeck & Partners, Palmerston House, 51, Bishopsgate, E.C.2. Phone, London Wall 2917. 648

Other Appointments Wanted

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

EXPERIENCED MECHANICAL DESIGNER desires post in building industry; can design for special purpose or large quantity production; sound knowledge of rotary and reciprocating machines, air and hydraulics, valves, etc.; well versed in modern materials and practice. Box 592.

EXPERT Stress Analyst and Structural Designer, B.Sc. degree, with outstanding record in structural design, offers technical assistance or consultant service to Architects and Structural Engineers, especially those engaging in bold design projects; specialist in welded steel frameworks; reinforced concrete, curved beams, bridges and portals; excellent knowledge of the properties and economic use of light alloy materials; thoroughly conversant with technical literature here and abroad. Box 593.

Planning

As originators of the Auto-Recorder System of Machine Milking, we have had extensive experience of planning layouts to accommodate the new technique. The Ministry of Agriculture's Clean Milk Bill, when passed, will mean a large increase in the number of new or modified farm buildings required. The position will be affected also by the findings of the English and Scottish Commissions on this important subject. The service of our Technical Department is available to any Architect who may be consulted in these matters. Write in confidence to: Gascogines (Reading), Ltd., Berkeley Avenue, Reading.

Property for Sale

Four lines or under, 4s.; each additional line, 1s.

BEDFORD NEW TOWN ESTATE, N.W.1.—Valuable Building Sites for post-war development of approximately 3 acre upwards to 10 acres, to be let on 99 years' lease, for the erection of important buildings. Apply Drivers & Norris, 407, Holloway Road, N.7. Telephone: North 3148. 629

SOUTHWARK ST., S.E.1.—Unrestricted freehold site for erection of business premises; close to London Bridge; frontage 34 ft., depth 68 ft.; let temporary tenancy, £25 p.a.; price £3,500. Box 654.

For Sale

Four lines or under, 4s.; each additional line, 1s.

HOUSING PRODUCTION II. Quantity Production Technique in Building; a limited number of copies, price 21s. Box 635.

ELECTRICITY FOR COUNTRY HOUSE.—Complete equipment for Sale, including 20 h.p. Oil Engine, Electric Generator and Booster Set, Switchboard, Battery, and Motors, 200 volts supply, in good running order; inspection.—Apply Bailly, Grundy & Barrett, Ltd., Electrical Engineers, Cambridge. 546

Miscellaneous

Four lines or under, 4s.; each additional line, 1s.

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 53, Gt. Marlborough St., W.1. Gerrard 4223-4225.

F. J. BAYNES, LTD., established over 100 years. Heating, Ventilating and Sanitary Engineers. 99/101, St. Paul's Road, N.1. Canonbury 2562. 584

FENCING AND GATES of every type, supplied and erected. Specialists in chain link. Boulton & Paul, Limited, Norwich. 662

WELL-KNOWN SPECIALIST on building materials re-opening consulting practice, closed during war, is now able to undertake a few non-competitive additional research and technical market investigations; well equipped chemical and physical laboratories. Inquiries to Box 410.

CONSIDERABLE Surplus Funds available, at low interest rates, for building finance, property mortgages, ground rents, or any similar sound security in sums preferably of not less than £10,000. Chas. B. Buxton, Ltd., Local Authorities' Loans Brokers, 9, Clements Lane, Lombard Street, London, E.C.4. 581

WANTED.—One set of "Arts Et Matières Graphiques." Please reply to Box 5.

DUPLICATING. Typewriting, Shorthand, Specifications, etc. by qualified expert; well established. Miss Stone, Eagle House, 109, Jermyn Street, S.W.1. WHI. 9682. 659

OFFICE accommodation required by Architect recommending practice; one, two or three rooms; Victoria or City preferred. Box 563.

CENTRAL HEATING OIL BURNERS.—Insist on the British-made Parwinae—no stoking, clean, trouble free; no waiting for coal or coke deliveries; available now if oil permit obtainable. Parker, Winder & Achurch, Ltd., Makers, 80, Broad Street, Birmingham, 1. 992

MONOMARK Service. Permanent London address. Letters redirected immediately. Confidential, 5s. p.a. Royal Patronage. Key tags 3 for 1s. 3d. Write BM/MONOSR, W.C.1. 44

R.E. OFFICER (C.R.E.), re-commencing practice, urgently requires office accommodation in Central or N.W. London area; would consider sharing with another. Box 657.

FIRM of Quantity Surveyors with offices and staff available in Westminster and on South Coast, invite enquiries for preparation of Schedules of War Damage, re-requisitioning, approx. estimates, survey of land or estates, survey of houses, factories and other property. Box 160, c/o Pool's, Aldwych House, London, W.C.2. 663

Partnership

Six lines or under, 8s.; each additional line, 1s.

CHARTERED ARCHITECT, specializing on commercial work, desires Partner, with a view to early succession; work in hand includes large West End scheme, etc.; excellent connection; moderate capital required. Box 630.

Educational Announcements.

Four lines or under, 4s.; each additional line, 1s.

R.I.B.A. QUALIFYING EXAMINATIONS. Mr. C. W. Box, F.R.I.B.A., M.R.San.I. Courses of Correspondence and Personal in Studio, 115, Gower St., London, W.C.1. Telephone: EUSTON 3906.

R.I.B.A. and T.P. INST. EXAMS. Private Courses of Tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, 161, West Heath Road, N.W.3. Tel.: SPE 5319. 415

ESSEX EDUCATION COMMITTEE.

SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART. Forest Road, Walthamstow, E.17. Principal: H. Lowery, D.Sc.

DEPARTMENT OF ARCHITECTURE AND BUILDING.

Head of Department: D. Winston Aldred, F.R.I.B.A., A.M.I.Struct.E.

SESSION 1945-46.

Full-Time and Part-Time Courses are held in the following subjects: Architecture, Structural Engineering, Quantity Surveying, Building Surveying, Building and Building Crafts.

Day Classes commence on Wednesday, 12th September, 1945. Evening Classes enrol from 17th September, 1945. 650

Wm. OLIVER & SONS, Ltd.

(of Bunhill Row), 12/13 Bow Lane, E.C.4 City 3335

HOME GROWN { HARDWOODS
SOFTWOODS

Quota Merchants for
NATIONAL STOCK

ELLISON ELECTRIC SWITCHGEAR

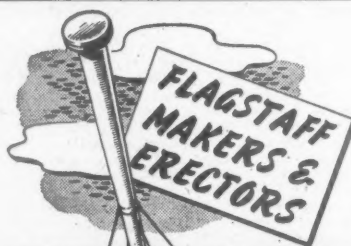
For High Voltage Mains
Distribution Mains
and Motor Starters

GEORGE ELLISON
LIMITED
Derry Barr, Birmingham 22B

STEELWORK BY SHARMAN & SONS

SWAN WORKS, HANWORTH, MIDDX.

*Phones: Feltham 3007. Sunbury 2367. *Grams: "Sharmans," Feltham.



R.C. CUTTING & CO. LTD

FLAGSTAFF DEPT.
39, VICTORIA STREET, S.W.1. TEL. ABBEY 8085
and 81, MANCHESTER, BIRMINGHAM, Bournemouth

NORTHERN POLYTECHNIC

HOLLOWAY, LONDON, N.7.

Principal: T. J. DRAKELEY, D.Sc., Ph.D.(London), F.R.I.C., F.I.E.E.

Head of Department of Architecture: T. E. SCOTT, F.R.I.B.A.

DAY SCHOOL OF ARCHITECTURE

The Five Years' Course qualifies for exemption from the Final Examination for Associateship of the R.I.B.A. and for registration under the Architects (Registration) Acts, 1931-1938. Students who complete satisfactorily the first Three Years of the course are granted exemption from the Intermediate Examination of the R.I.B.A.

School year begins 24th September, 1945.

Fees—£20 per annum, or £7 per term.

EVENING SCHOOL OF ARCHITECTURE

(Five years' Course recognised by the R.I.B.A. for exemption from the Intermediate Examination.)

New Session begins 24th September, 1945.

Fees from 10s. to 50s. per course according to age of student.

Special Design classes, and lectures on the Theory of Structures, Hygiene, Materials, Specifications, and Professional Practice in preparation for the Final Examination of the R.I.B.A.

ENTRY TO THE SCHOOLS. Intending Day Students are interviewed at any time by appointment. Intending Evening Students will be interviewed from 5.30—7.30 p.m. on 17th and 18th September, 1945, or on any subsequent evening.

Prospectus post free on application.

Telephone: NORTH 1686.

SOUND INSTRUCTION by Postal Method

is offered by the world's largest and greatest correspondence school in the following subjects:

Architecture	Architectural Drawing and Designing	Surveying and Mapping
Building Contracting	Building Construction and Interior Work	Municipal Engineering
Building Construction and Quantities	Building Specifications and Quantities	Plan and Map
Quantity Surveying	Structural Steelwork	Draughtsmanship
Civil Engineering		Structural Engineering
		Concrete Engineering
		Structural Drawing
		Construction Draughtsmanship
		Sanitary Engineering
		Air Conditioning
		Heating and Ventilation

Special Courses for the Diplomas

of the R.I.B.A., I.O.B., C.S.I., I.C.E., I.M. & Cy.E., I.Struct.E., R.S.I., I.S.E., etc.

Special Terms for members of H.M. Forces and discharged disabled members of H.M. Armed Forces.

Write to-day for Syllabus of our Courses in any of the subjects mentioned above

INTERNATIONAL

CORRESPONDENCE SCHOOLS, LTD.

Dept. 141, International Buildings
KINGSWAY, LONDON, W.C.2



SPEED

is a system of dry Unit Construction for
HOUSES, SCHOOLS, HOSPITALS & FACTORIES,
which gives utmost speed of erection on the site.

Crypto

MEAT MACHINERY. VEGETABLE PEELERS.
POTATO CHIP CUTTERS. MIXERS.
"ROTAPAN" LOW PRESSURE STEAM COOKERS.
COFFEE MILLS, ETC.

TELEPHONE ELGAR 7744

SCIENTIFICALLY
DESIGNED AND
MANUFACTURED
THROUGHOUT BY:-

LANCASHIRE DYNAMO & CRYPTO LTD. ACTON LANE. WILLESDEN, N.W.10

Why does timber decay ?



Registered Trade Mark

Specified and used by the Admiralty, War Office, Air Ministry, Home Office, Ministry of Works and Planning, Ministry of Supply, Public Authorities, Estates.

Perfectly dry timber does not decay.

Wood removed from the Pyramids of Egypt was found in a good state of preservation after 3,400 years of service.

Moisture allows the spores of wood-destroying fungi to germinate. The necessary moisture can be supplied by a leaking pipe or a damp wall.

It is economical to eliminate the risk of a dry rot outbreak. The risk can be avoided if CUPRINOL is specified to protect the vulnerable timbers against attack.

Such an "insurance premium" against decay will be less than one-fifth of one per cent on the value of the property.

CUPRINOL

WOOD AND FABRIC PRESERVATIVE

(Manufactured by Cuprinol, Ltd., London)

JENSON & NICHOLSON LTD., CUPRINOL SECTION, 36 ST. JAMES'S STREET, LONDON, S.W.1

DISTRIBUTORS OF CUPRINOL PRODUCTS IN THE UNITED KINGDOM AND NORTHERN IRELAND

London County Council.

**L.C.C. BRIXTON SCHOOL OF BUILDING,
FERNDAL ROAD, S.W.4.**

(Tel.: BRixton 5913.)

Principal: D. A. G. REID, B.Sc. (Eng.), A.M.Inst.C.E.

Enrolment for part-time day and evening courses, session 1945-46, 17th-21st September, 1945.

Classes open Monday, 24th September, 1945.

National Certificate courses (day or evening) in General Building, Building Administration, Quantity Surveying and Building Surveying, Sanitary Engineering, Structural Engineering (Steelwork or Reinforced Concrete).

Courses in preparation for the examinations of the following professional institutions:—

Royal Institute of British Architects.
Chartered Surveyors Institution.
Institute of Builders.
Institution of Structural Engineers.

Interior Decoration courses for the National Diploma of Design and the examinations of the Institute of British Decorators.

Building Trades courses in preparation for the City & Guilds of London Institute's, examinations in the following trades:—

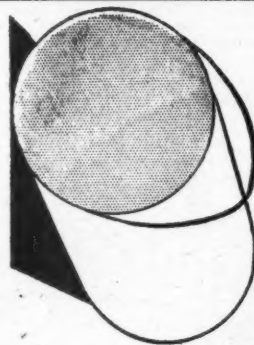
Carpentry and Joinery.	Plastering.
Brickwork.	Painting and Decorating.
Masonry.	Woodcutting Machinists' work.
Plumbing.	

Specialised courses for advanced students in Structural Welding, Building Organisation, Workshop Management, etc.

Full-time courses in Building, Architecture, Structural Engineering, Surveying.

Workshops available for all building trades.

Further information may be obtained on application to the Secretary at the School.



PAINTS

...and complaints

Trial and error, has never, and never will, play a part in the manufacture of Smith & Rodger paints. That is why painters in every part of the country use them exclusively. Below you will find examples of the products manufactured by Smith & Rodger, and should you desire to know more about these, a post card will bring catalogue post free by return.

"SOLVIT." A new and effective paint, varnish and polish remover VITAMEL FINE WHITE ENAMEL. Good lasting gloss. You cannot get a better enamel.

"WALDURA" WASHABLE DISTEMPER. The best obtainable.

The mentioning of goods in our advertisement does not imply that they are available without restriction. The advertisement is intended to keep our name and goods before our customers during a period, when many items are unobtainable or reserved for essential purposes.

SMITH & RODGER

Paint and Enamel Manufacturers

LTD

ELLIOT STREET, GLASGOW

TELEPHONE: CITY 6341-2

TELEGRAMS: SMITH-RODGER, GLASGOW

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Accrington Brick Co.		Etchells Congdon & Muir, Ltd.		Newman, Wm., & Sons, Ltd.	
Acoustical Manufacturing Co., Ltd.		Evertaut, Ltd.	liv	Newsum, H., Sons & Co., Ltd.	xlviii
Adams, Robt. (Victor), Ltd.	xlvi	Ewart & Son, Ltd.		Nobles & Hoare, Ltd.	xlviii
Aero Pipe & Glass Co., Ltd.	xlix	Forrest, George, & Son, Ltd.		North British Rubber Co., Ltd.	
Aircrow Co., Ltd.		Foyles		Oliver, Wm., & Son, Ltd.	lviii
Allied Ironfounders, Ltd.		Franki Compressed Pile Co., Ltd.		Parnall, George, & Co., Ltd.	
Anderson, C. F., & Sons, Ltd.	x	Freeman, Joseph, Sons & Co., Ltd.	xlix	Patchett, & Co., Ltd.	
Anderson, D., & Sons, Ltd.	v	Fullwood & Bland, Ltd., R. J.		Pilkington Bros., Ltd.	
Associated Metal Works		Gaze, W. H., & Co., Ltd.	xviii	Precision Roofs, Ltd.	xvi
Bailey, Sir W. H., & Co., Ltd.		Gray, J. W., & Son, Ltd.		Pressed Steel Co., Ltd.	
Banister, Walton & Co., Ltd.		Greenwood's & Airvac Ventilating Co., Ltd.		Pyrene Co., Ltd.	
Bath Cabinet Makers & Artcraft, Ltd.	lii	Griffiths Bros. & Co. (London), Ltd.		Pyrotenax, Ltd.	xliv
Belling & Co., Ltd.	xx	Guest, Keen & Nettlefolds, Ltd.		Rawplug, Ltd.	xl
Benham & Sons, Ltd.	xxxv	Gyproc Products, Ltd.	ii	Restall, Fredk., Ltd.	liii
Benjamin Electric, Ltd., The	l	Hall, Matthew, & Co., Ltd.	iii	Robinson & Kershaw, Ltd.	ii
Berry's Electric, Ltd.		Harvey, G. A., & Co. (London), Ltd.	lii	Rownson, Drew & Clydesdale, Ltd.	xlv
Blackburn, Thomas, & Sons, Ltd.		Hayward-Tyler & Co., Ltd.		Rubertoid Co., Ltd.	ii
Booth, John, & Sons (Bolton), Ltd.		Henderson P.C. & Co., Ltd.	xlvii	Rushton, J. V., & Co., Ltd.	
Boulton & Paul, Ltd.		Hickman, Ltd.	xxxix	Rustproof Metal Window Co., Ltd.	vii
Braby, Fredk., & Co., Ltd.	xvii	Higgs & Hill, Ltd.		Sadd, John, & Sons, Ltd.	
Braithwaite & Co., Engineers, Ltd.	xlii	Hilton, James, & Son (Leigh), Ltd.	xxxviii	Sanders, Wm., & Co. (Wednesbury), Ltd.	
Bratt Colbran, Ltd.		Hopem Henry, & Sons, Ltd.	ix, xxxii	Sankey, J. H., & Son, Ltd.	vi
Briggs, William, & Sons, Ltd.		Hopton-Wood Stone Firms, Ltd.		Sankey, Joseph, & Sons, Ltd.	xliii
Brightside Foundry & Engineering Co.		Hotric, Ltd.	xxxiii	Scaffolding (Gt. Britain), Ltd.	xxiii
British Electrical Development Assoc.	xli	Imperial Chemical Industries, Ltd.	lx, xxxii	Semtex, Ltd.	lviii
British Ironfounders' Assoc.		International Correspondence Schools, Ltd.	lviii	Sharman & Sons	xv
British Reinforced Concrete Eng. Co., Ltd.	liv	Interoven Stove Co., Ltd.	lii	Sieglwart Fireproof Floor Co., Ltd.	lx
British Trane Co., Ltd.		Jenkins, Robert, & Co., Ltd.	li	Smith & Rodger, Ltd.	lii
Broadcast Relay Service, Ltd.		Jenson & Nicholson Ltd.	lii	Smith & Wellstood, Ltd.	lii
Bromsgrove Guild, Ltd.		Jicwood, Ltd.	lii	Spiral Tube & Components Co., Ltd.	xxvii
Brush Electrical Engineering Co., Ltd.	viii	Kerner-Greenwood & Co., Ltd.	xxxix	Stainless Steel Sink Co., Ltd.	ii
Bull Motors (E. R. & F. Turner), Ltd.		Ketton Portland Cement Works	xli	Steel & Co., Pressings, Ltd.	
Cable Makers' Assoc.	xxxvi	Laing, John, & Son, Ltd.	lxii	Steel & Gunton, Ltd.	
Carlisle Electrical Mfg. Co., Ltd.	xviii	Lamont, James H., & Co., Ltd.	xx	Stelcon (Industrial Floors), Ltd.	xli
Carrier Engineering Co. Ltd.	lii	Lancashire Dynamo & Crypto, Ltd.	lviii	Sterling Textile Industries, Ltd.	i
Cellacite & British Uralite, Ltd.	iv	Lead Industries Development Council	ii	Sumerling & Co., Ltd.	xlii
Celcon, Ltd.		Limmer & Trinidad Lake Asphalt Co.		Sunderland Board Co., Ltd.	xlvii
Colthurst, Symons & Co., Ltd.	li	Lockerbie & Wilkinson (Tipton), Ltd.	xxvi	Telephone Rentals, Ltd.	
Cott Ventilation, Ltd.		London Brick Co., Ltd.	lix	Tentest Fibre Board Co., Ltd.	xliii
Crittall Manufacturing Co., Ltd.		London County Council		Travis & Arnold	xliii
Croft Granite, Brick & Concrete Co., Ltd.	lviii	McArd, Robert, & Co., Ltd.		Tretol, Ltd.	
Cuttinger R. C., & Co., Ltd.	xxv	McCall & Co. (Sheffield), Ltd.	xiv	Trussed Concrete Steel Co., Ltd.	xix
Davidson, C., & Sons, Ltd.		Matthews & Yates, Ltd.		Tubular Furniture, Ltd.	xi
Dawsons, Ltd.	xxx	Metal Finishes, Ltd.	xv	Turners Asbestos Cement Co., Ltd.	lviii
Dreadnought Fireproof Doors (1930), Ltd.	lv	Metropolitan-Vickers Electric Co., Ltd.	xxxiv	Uni-Seco Structures, Ltd.	
Durasteel Roofs, Ltd.		Midland Electric Mfrg. Co., Ltd.	lx	United Ebonite & Lorry, Ltd.	
Eagle Pencil Co.		Midland Woodworking Co., Ltd.	xli	United Steel Companies, Ltd., The	
Eagle Range & Grate Co.	xxviii	Mills Scaffold Co., Ltd.	xli	Val de Travers Asphalt Paving Co., Ltd.	xli
Edgar, Wm., & Son, Ltd.		Milner's Safe Co., Ltd.	xlii	Van Dorn Electric Tools	xlii
Ellis (Kensington), Ltd.	lviii	Ministry of Works	xliii	Vulcan Products, Ltd.	
Ellison, George, Ltd.	xxii	Morris Singer Co.	iv	Walterisation Co., Ltd., The	xlii
English Electric Co., Ltd.		Mumford, Bailey & Preston, Ltd.		Wardle Engineering Co., Ltd.	lx
English Joinery Manufacturers' Assoc.	lii	National Federation of Demolition Contractors	i	Wares, W. C., & Sons, Ltd.	xxx
En-Tout-Cas Co., Ltd.				Wimpey, George, & Co., Ltd.	xxi
				Wood Wool Building Slab Mfrs., Assoc.	

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property and Land Sales—see pages lvi, lvii, lviii and lix.



TIMBER MERCHANTS AND SAWMILLERS

Modern sawmill and transport facilities.
Architects and Builders Specifications
efficiently and promptly executed.

W.C. Ware
AND SONS LIMITED

6-8, KENNINGTON LANE, S.E.11. Phone: Reliance 1864/2647
11, MANETTE STREET W.1. Phone: Gerrard 2621
138-140 SAFFRON HILL, E.C.1. Phone: Holborn 2326

SOFTWOODS · HARDWOODS · WALLBOARDS · PLYWOOD · PLASTERBOARD

PAGE

xlvi

lviii

xvi

xliv

xi

liii

ii

xlv

li

vii

vi

xlvi

xxiii

lviii

xv

lix

lii

xxvii

ii

xlvi

i

xlvi

xlvi

xlv

xix

xi

lviii

xii

xlvi

lx

xxx

xxi