



IF building is to go forward at the speed which the nation demands, new ways of planning and of construction will be needed. Whatever may be the scope and shape of the building programme, structural steel will have an important contribution to make.

BANISTER, WALTON & CO. LTD

STRUCTURAL STEELWORK

RIVETED ★ WELDED

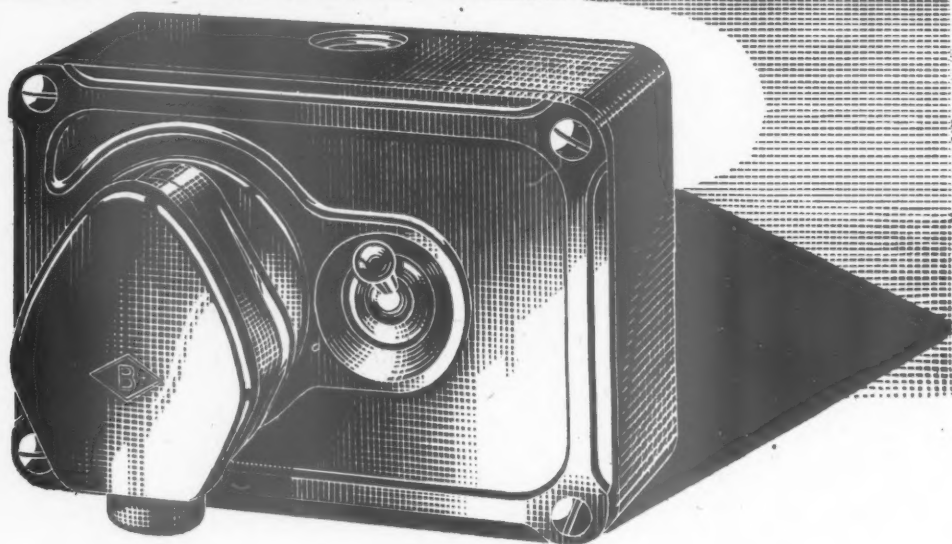
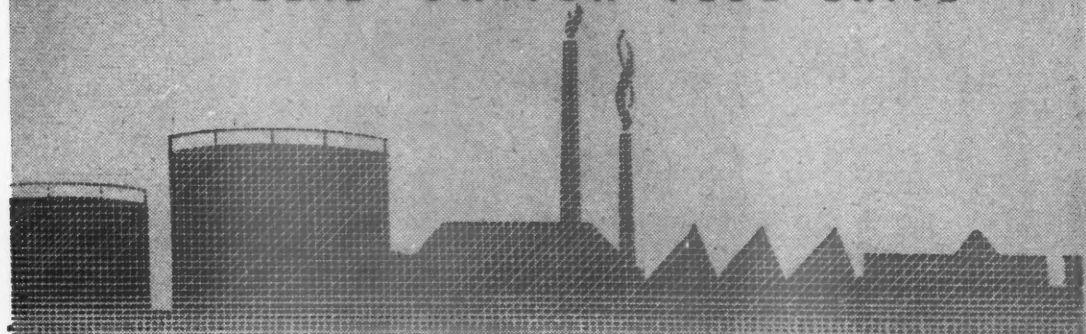
LONDON, S.W.1 — 82 Victoria Street

MANCHESTER 17 — Trafford Park

BIRMINGHAM 15 — 192 Broad Street

Industrial Contact

IRONCLAD SWITCH PLUG UNITS



ELECTRICAL ACCESSORIES FOR ALL WAR-TIME INSTALLATIONS

The outstanding quality of "BRITMAC" Ironclad Accessories is well known. The switchplug illustrated, Catalogue No. P. 1402, fully justifies its popularity, resulting in ever increasing demands, which bearing in mind present day conditions, we are endeavouring to satisfy. May we send you full details of the "BRITMAC" Ironclad Range?



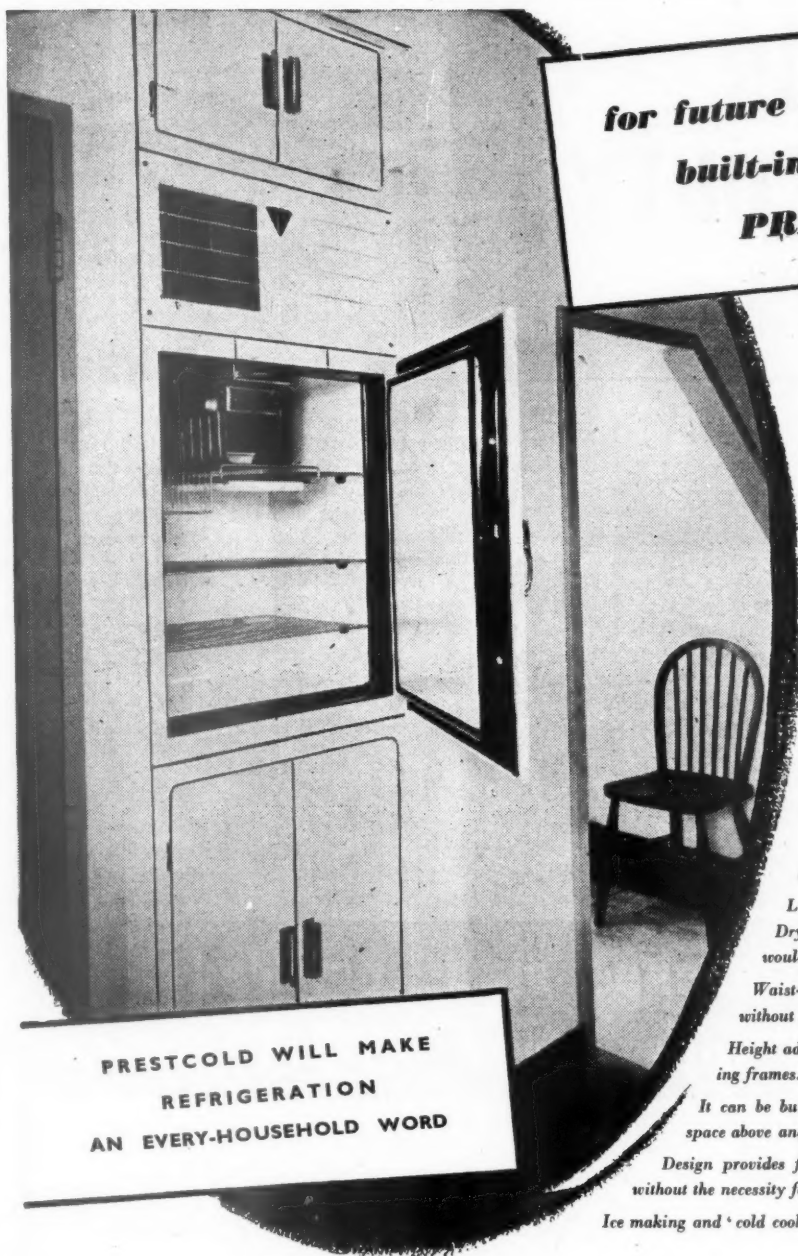
POINTS OF PERFECTION

C·H·PARSONS·LTD

Telephone:
ACOCKS GREEN
1642 SLINES

Britannia Works
Wharfdale Rd. Tyseley
BIRMINGHAM 11

Telegrams:
"HECTOMAR"
BIRMINGHAM



for future use . . .
built-in, by
PRESTCOLD

**PRESTCOLD WILL MAKE
REFRIGERATION
AN EVERY-HOUSEHOLD WORD**

This built-in Prestcold refrigerator, as shown, installed in the kitchen of the "Bryant" house in Birmingham, has the following important advantages:

Storage capacity of approximately $4\frac{1}{2}$ cubic feet, which will hold all the perishable foodstuffs for a family of four.

Larder space rendered unnecessary. Dry goods and non-perishable foodstuffs would be kept in kitchen cupboards.

Waist-high door, allowing access to interior without stooping.

Height adaptable by varying position of supporting frames.

It can be built into kitchen fittings with cupboard space above and below it.

Design provides for adequate ventilation of mechanism without the necessity for special air-bricks or ducting.

Ice making and 'cold cooking' facilities.

MOST important too, is the fact that this Prestcold refrigerator provides the food storage temperatures necessary for the proper safeguarding of perishable foods—for instance 35°F for fresh fish and poultry; 40°F for milk—

and even the lower temperatures needed to store the frozen foods which will be available later on. In addition, it will be most economical in current consumption, using only one unit a day.

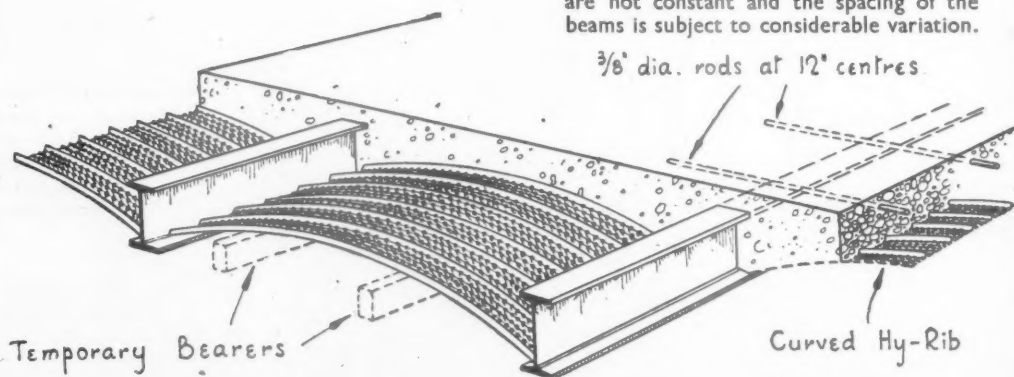
PRESTCOLD *Refrigeration*

A PRODUCT OF THE PRESSED STEEL COMPANY LIMITED • COWLEY • OXFORD

FOR HEAVY DUTY FLOORS.....



In power stations, industrial plants and colliery buildings where heavy duty floors are necessary. Arched Hy-Rib floors are adaptable to buildings where sizes of beams are not constant and the spacing of the beams is subject to considerable variation.



..... arched slabs centred and
reinforced with curved HY-RIB sheets

HY-RIB

- eliminates curved timber forms • acts as the curved centering
- provides good soffit contours • adds strength to the floor
- is supplied ready curved • can be easily handled and fixed



HY-RIB SALES

6, COLLINGHAM GARDENS • EARLS COURT • S.W.5

TELEPHONE: FROBISHER 8141

WARERITE PICTORIAL PANELS

*A Warerite Pictorial Panel
by Miss Pauline Baynes in black,
green and crimson drawing inks.*



NOT the least of the many attributes which attract interior decorators and furniture designers to Warerite Laminated Plastics is the novel method by which decorative effects are obtained.

The decoration is not applied after the panels are made, as would be the case with other surfacing materials, but it is done during fabrication. Decorative motifs can be drawn, painted in wash or opaque colour, stencilled, sprayed, printed or even photographed on to paper or fabric which has been previously impregnated with synthetic resin. Heat and pressure are then applied to this and additional sheets, and by a chemical change known as 'polymerization' the resin and paper, or fabric, with its design intact, become an integral part of the substance of the panel.

The possibilities of the process are limitless. For example: the Warerite Wall Linings of a private office or board-room might have maps of territories or aerial photographs of cities incorporated in their surfaces; dining-rooms, bath-rooms or nurseries could be treated with Warerite panels appropriately decorated with original paintings in colour, made absolutely permanent by the process itself; a piece of block-printed linen could be virtually transformed into a Warerite Table Top which would permanently resist heat, fruit juice or alcohol stains and even cigarette burns. In all cases the design, not being applied to the surface, as is usually the case, can never wear off or lose its original brilliance. It is as permanent as the Warerite Panel itself.

WARERITE LAMINATED PLASTICS MADE BY
TRADE MARK **WARERITE LTD. WARE, HERTS**
 UNIT OF BAKELITE LIMITED

ROOFS OF THE NATIONS



Church of St. Basil, Moscow

St. Basil's Church was erected by "Ivan the Terrible" about 300 years ago, over the grave of St. Basil. In all the colours of the spectrum, it is one of the most extraordinary buildings in the world. When it was finished, "Ivan the Terrible" found it so remarkable that he sent for the architect and asked him if he could repeat his design. "Yes," said the architect. "That, by heaven, you shall never do," cried Ivan and immediately ordered the architect's head to be cut off!

* * * * *

Many famous British buildings are protected by BRIGGS ROOFING — in all instances our trained specialists co-operated closely in the construction of the roof. And, they will co-operate just as closely in the re-roofing of bomb-scourged Britain — using to advantage their war-time experience and research in the reconstruction of the peace.

BRIGGS

R O O F I N G

WILLIAM BRIGGS & SONS LIMITED, DUNDEE. LONDON:
VAUXHALL GROVE, S.W.8. ALSO AT GLASGOW, EDINBURGH,
LIVERPOOL, BRISTOL, ABERDEEN, NORWICH, LEICESTER

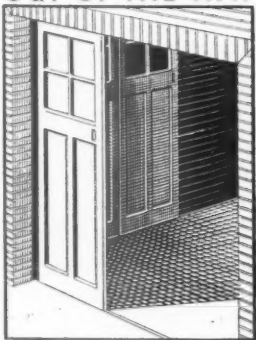
THE NATION'S ROOF

TO SWING OR NOT TO SWING



THAT IS THE QUESTION and when it comes to planning doors it needs extra careful thought—because there are few things more precious than space when you are working in confined quarters. A door that's hinged is a door that needs a lot of room; but with a sliding door it's different. If it's fitted with King Door Gear a touch of the hand takes it out of the way, gliding easily and quickly to nestle snugly against the wall, completely and unobtrusively out of the way.

OUT OF THE WAY



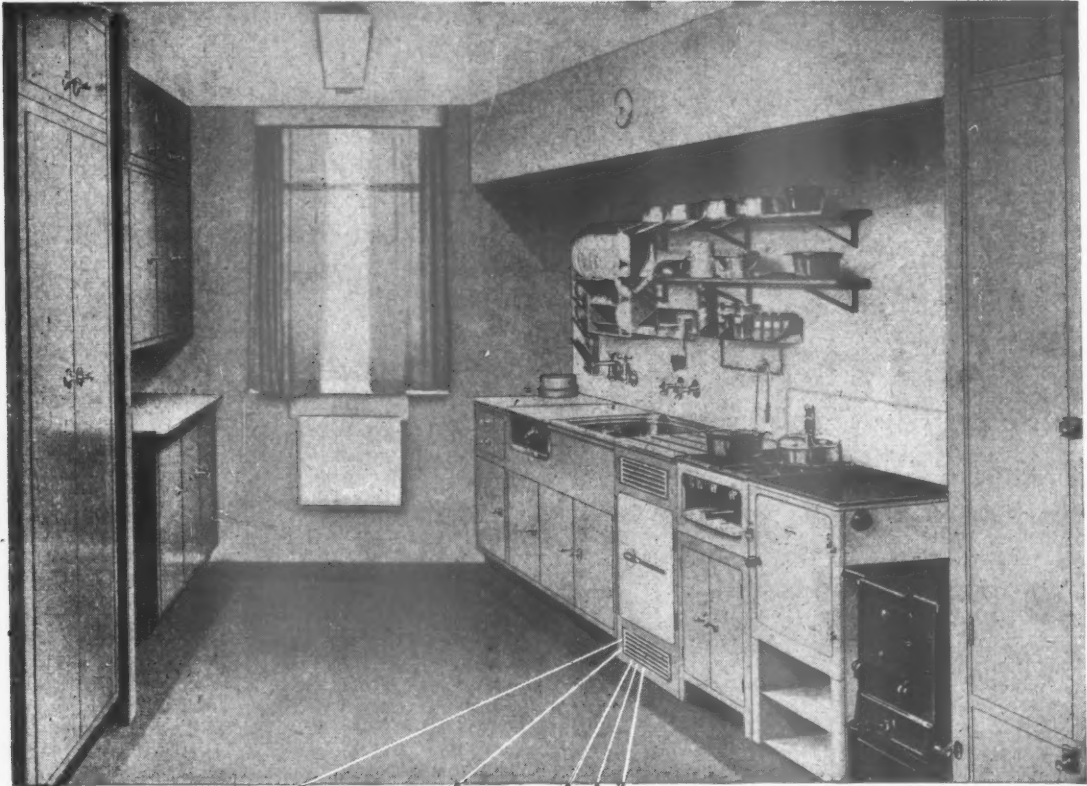
It is true to say that in post-war building every inch of space will be of the utmost value; take advantage of every scrap of it—when you can, and how you can. This is where King Door Gear comes in—or to be more precise slides along. Doors that slide mean doorways that allow free passage all around them.

For ante rooms, cloak rooms, garages, lifts, etc., and places where space is limited or traffic congestion is likely to occur, sliding doors are the perfect application.

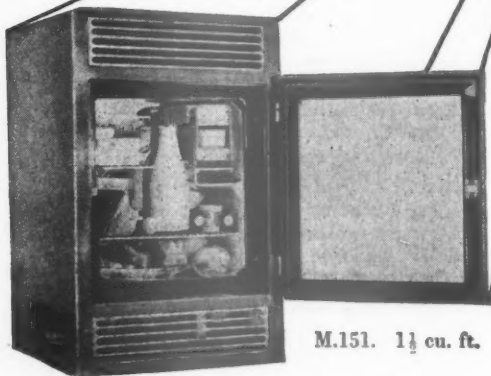
As specialists for over a quarter of a century we claim to satisfy the most exacting requirements for any type of sliding door gear. Write for fully illustrated booklet.

KING SLIDING DOOR GEAR

GEO. W. KING LTD HITCHIN · HERTS
TELEPHONE HITCHIN 960 (10 LINES)



Post-war Kitchen Interior by courtesy of MESSRS. RADIATION LTD.



M.151. 1½ cu. ft.

Kitchen equipment must satisfy the housewife's needs and, by its adaptability, meet the requirements of the kitchen planners. That is why Electrolux 'built-in' refrigerators are so popular. The M.151 shown fulfils the needs of the average small family, and like all Electrolux 'built-in' cabinets, fits in to any kitchen design. Moreover, it is noiseless, has no moving parts, and does not interfere with wireless reception.

Electrolux Refrigerators operate equally well by Gas, Electricity or Paraffin. Free standing models will be available.

ELECTROLUX LIMITED



BY APPOINTMENT
TO H.M. THE KING

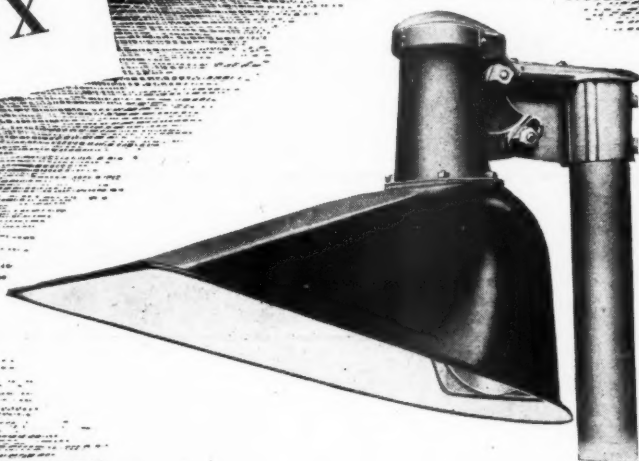
Works: LUTON, BEDFORDSHIRE

'Phone: LUTON 4020



BY APPOINTMENT
TO H.M. QUEEN MARY

BENJAMIN DUOFLUX



The logical way of lighting all sorts of outdoor areas is by the provision of a flood of light from high above. The Duoflux, mounted 25 or more feet above the ground on a pole or wall, spreads the light over the area in front of it, with the supplementary reflector at the back adding punch to the beam. No light is wasted upwards, and the fittings being placed at the side no obstruction is caused by inconvenient poles.

The Duoflux consists of a Crysteel Porcelain enamelled reflector on a die-cast neck. An adjustable bracket piece is available in types to suit pole top fixing or for clamping round a pole, with sufficient adjustment to enable the light to be directed in the required way. A specular reflector behind the lamp adds a beam to the general spread of light from the main reflector. They are available in types to suit E.D. or Filament lamps.

BENJAMIN

The Benjamin Electric Ltd., Brantwood Works, Tottenham, London, N.17
Telegrams : "Benjalect, Southtot, London."

Telephone : Tottenham 5252 (5 lines)

Information on REINFORCED CON

PROPORTIONING CONCRETE

Given the right materials, it is still of the utmost importance that the proportioning and mixing should be correctly carried out. With the same coarse and fine aggregates, the strength of concrete is usually controlled by varying the quantity of cement, and a mixture which is richer in cement has the greater strength. Usually the materials are measured by volume, and the volume of coarse aggregate is twice the volume of the fine aggregate for arbitrary proportioning. In view of the fact that the strongest concrete is the densest concrete, it is seldom that the best result is obtained by arbitrary proportioning, and the actual proportions of coarse and fine aggregates should be related to the grading of the materials, their void contents and their moisture content.

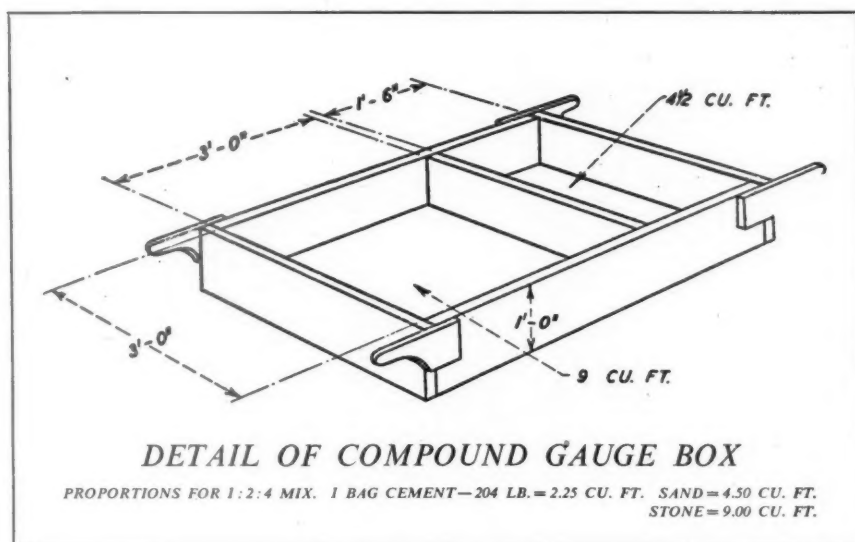
It is now the practice as far as possible to specify the concrete mixes in terms of one bag of cement, because when the cement is itself measured by volume it necessitates the greatest care in proportioning, and in windy weather results in loss of cement.

The most commonly used mix of concrete known as 1 : 2 : 4 can be proportioned using 1 cwt. bag of cement, $2\frac{1}{2}$ cu. ft. of fine aggregate and 5 cu. ft. of coarse aggregate. This is suitable for one batch in a 10/7 mixer.

The quantity of sand given assumes dry material. It is seldom, however, that the sand on the site is dry, particularly if it has to be washed either by the suppliers or at the site. This introduces a difficulty in the proportioning, because although *saturated* sand occupies the same volume as dry sand, a given weight of *damp*

Issued by **THE BRITISH REINFORCED CONCRETE ENGINEERING CO. LTD** STAFF
LONDON, BIRMINGHAM, BRISTOL, LEEDS, LEICESTER, MANCHESTER NEW

CONCRETE CONSTRUCTION



sand occupies a much greater volume than the same weight of dry sand. This is known as "bulking" of sand. A moisture content of 5% *by weight* results in an increase of 40% in volume. This must be allowed for, so as to obtain the true volume of equivalent dry sand, otherwise the mix will be found to be under-sanded and honeycombed. The easiest method of ascertaining the percentage of bulking is by inundation as the volume of dry sand is equal to the volume of saturated sand.

BRC

D. LTD STAFFORD Specialists in Reinforced Concrete Design & Suppliers of Reinforcement
 CHESTER NEWCASTLE, SHEFFIELD, CARDIFF, GLASGOW, DUBLIN, BELFAST



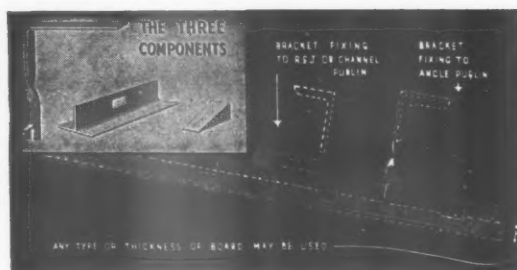
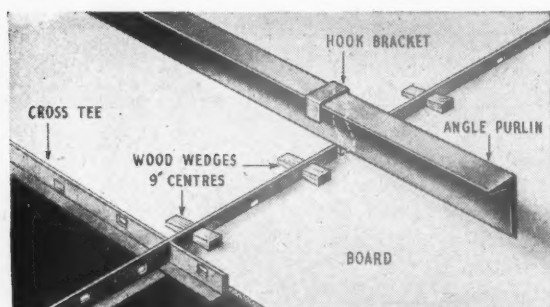
Patent No. 519406

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. Heaps.



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. Any thickness of board can be used, from $\frac{1}{8}$ " to $\frac{5}{8}$ ".
7. This method can be used for applying linings to exterior walls.
8. 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

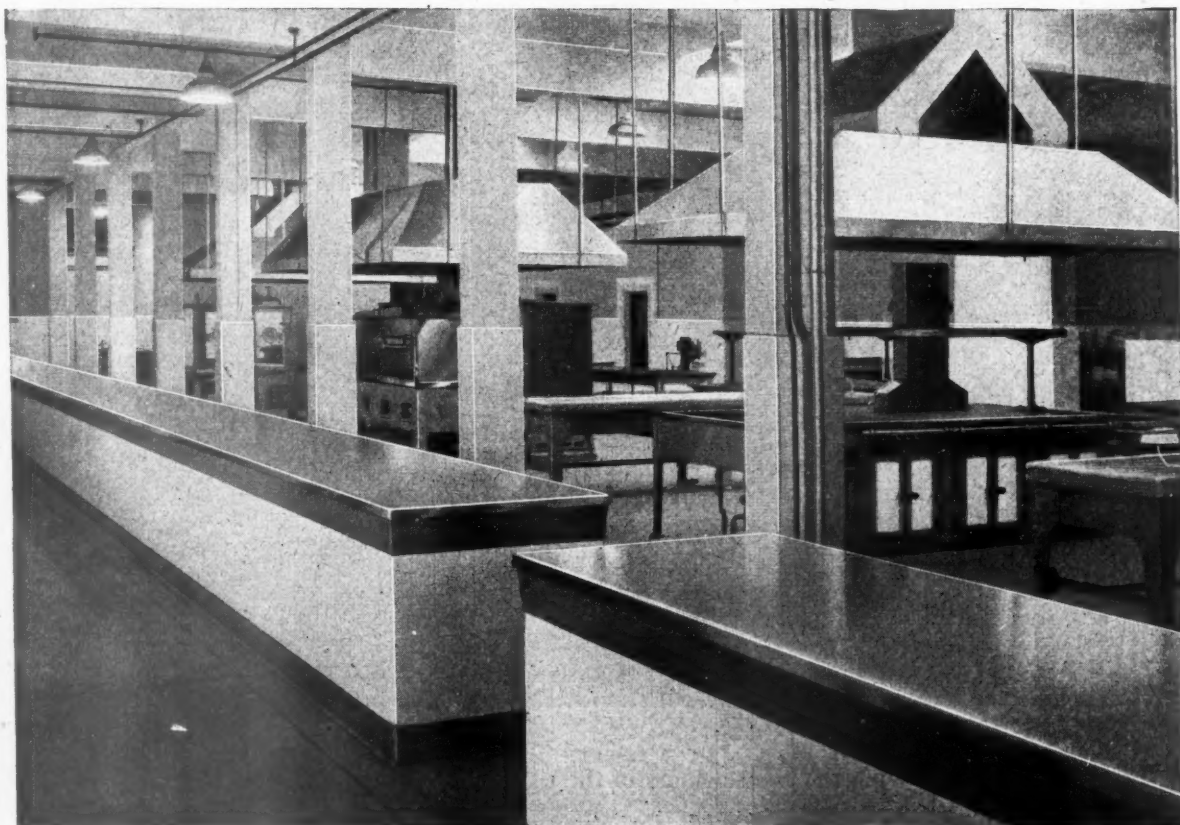
C. F. ANDERSON & SON, LTD.

Wallboards for Government Work

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

TELEPHONE: CLERKENWELL 4582

Large-scale Cooking and Serving of Food



MAIN APPARATUS is designed to stand up to heavy work. It combines reliability with the utmost economy in fuel consumption, and is finished to ensure cleanliness in use.

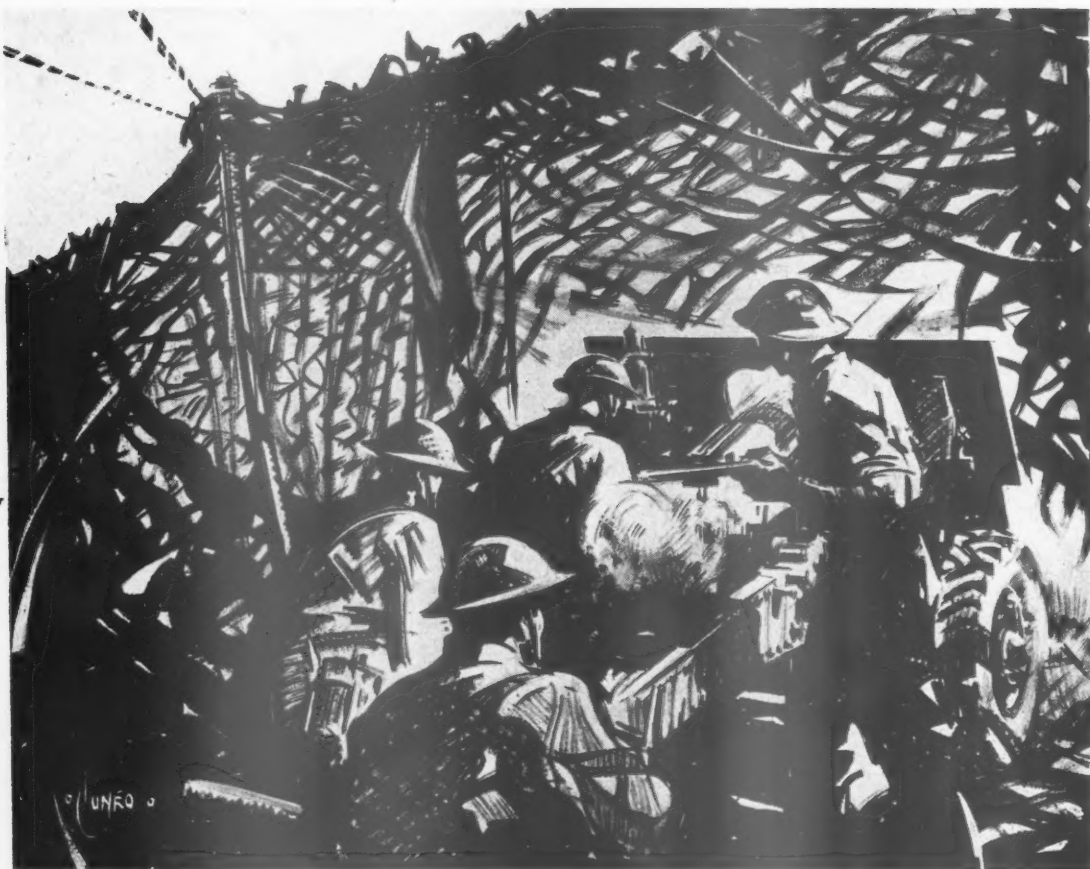
The complete planning and equipping of Kitchens for Hotels, Canteens, Institutions, etc., can be entrusted to **MAIN** specialists, whose long experience of catering problems, large and small, is at your service.

PART OF A LARGE CANTEN
KITCHEN INSTALLATION
BY **MAIN**



R. & A. MAIN LIMITED
LONDON AND FALKIRK

More than meets the eye



Skill in applying the right colours in the right place must be matched by the durability of the coatings and of the material. Camouflage, in short, must baffle not only the enemy but also the elements. I.C.I. have studied the problem thoroughly—and successfully, too—for since 1939 they have coated and supplied hundreds of thousands of yards of camouflage material. Because of this two-fold victory of design and durability, I.C.I. will in time be able to reveal the result of their wartime research in the form of peacetime excellence. Mural “Rexine” and Mural “Vynide” panelling cloths will be available in the widest choice of attractive designs, colours and effects for all forms of interior decoration.



IMPERIAL CHEMICAL INDUSTRIES LTD., LONDON. S.W. 1



WILL PLASTICS REPLACE WOOD ?



HARDLY A WEEK PASSES without a pronouncement by some prominent person on the subject of plastics and post-war planning. Some of this free publicity for plastics is, unfortunately, apt to mislead. The casual reader sometimes gets the impression that all the old well-known materials—wood, metal, stone and glass—are to become obsolete and that we shall soon be living in an almost one hundred per cent. plastics world.

Nothing could be more fallacious—or more detrimental to the interests of the plastics industry. The sweeping suggestion that 'plastics will replace wood,' for example, is an erroneous one.

It is improbable that plastics will replace wood to any great extent, and though we must speak of our own products, we can say, as one of the leading firms in the industry, that the same is generally true of all plastics. There are certain instances where plastics have outstanding advantages over wood, not by reason of lower cost, for usually the reverse is the case, but because of special properties with which plastics can be endowed, particularly in their resistance to heat, acids and alkalis.

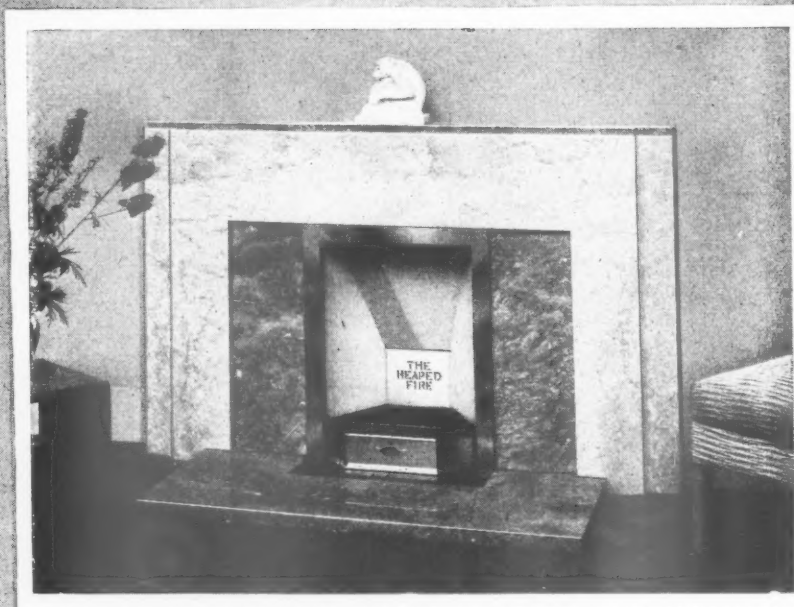
On the other hand, plastics have

been largely responsible for giving wood a vastly increased scope. Plywoods bonded with Bakelite Cements are more durable and so highly resistant to weather action, damp, fungoid growths and vermin as to make them suitable for exterior use in cases where formerly plywood could never have been considered. In addition, compressed wood impregnated with synthetic resin results in a product superior for many purposes to the natural material. There is little doubt that the combination of wood and plastics will find increasing scope in the post-war world and that highly satisfactory results will be achieved if the timber, plywood and plastics industries work hand in hand.

ADVERTISEMENT ISSUED BY BAKELITE LIMITED · 18 GROSVENOR GARDENS LONDON S.W.1

BAKELITE  PLASTICS
REGD. TRADE MARKS

Pioneers in the Plastics World



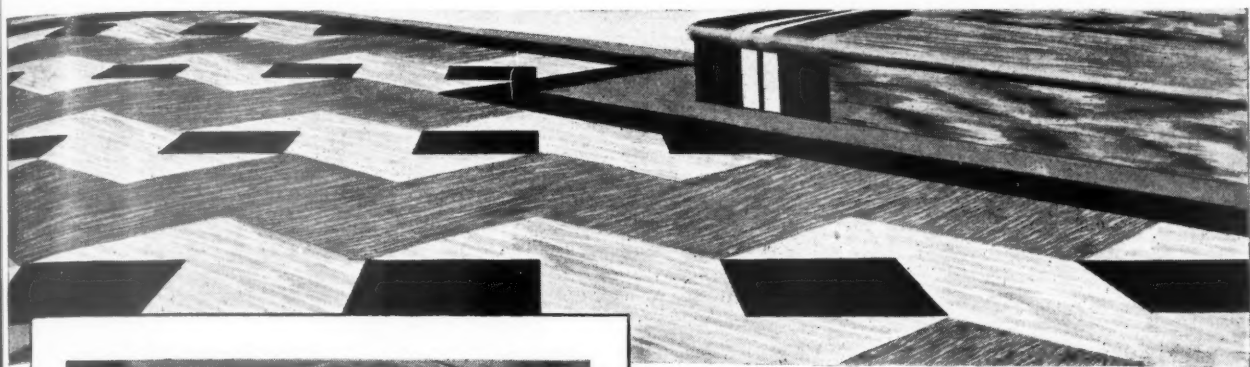
A TRADITION OF EXCELLENCE

Bratt Colbran fireplaces have always been distinguished by fine design and wise handling of good materials, closely associated with advanced technical efficiency. Present research promises great progress in technique after the war which will be developed with customary skill and taste.

BRATT COLBRAN LIMITED

10, MORTIMER STREET, LONDON, W.1

SPECIALISTS IN SOLID FUEL, GAS AND ELECTRICAL HEATING



NORTH BRITISH RUBBER FLOORING

gives the architect full scope for the development of decorative idea. The range includes continuous permanent coverings for wide floor areas; removable runners for passage ways; treads, nosings and risers for stairways; loose mats and matting.

Architects engaged on plans for future development are invited to write for particulars, colour schemes, etc.



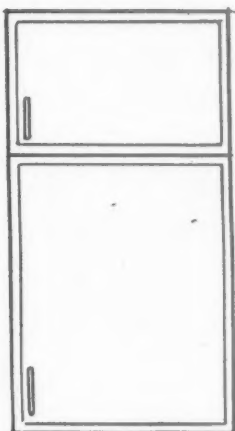
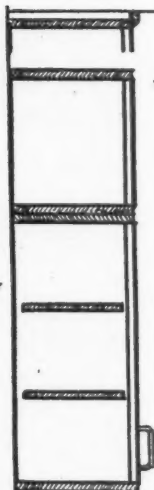
THE NORTH BRITISH RUBBER COMPANY LTD. EDINBURGH AND LONDON

RW/F 5A

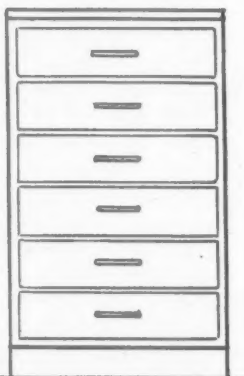
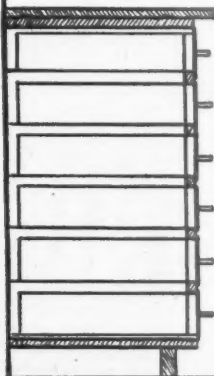
EJMA
CERTIFICATION TRADE MARK

STANDARD KITCHEN UNITS

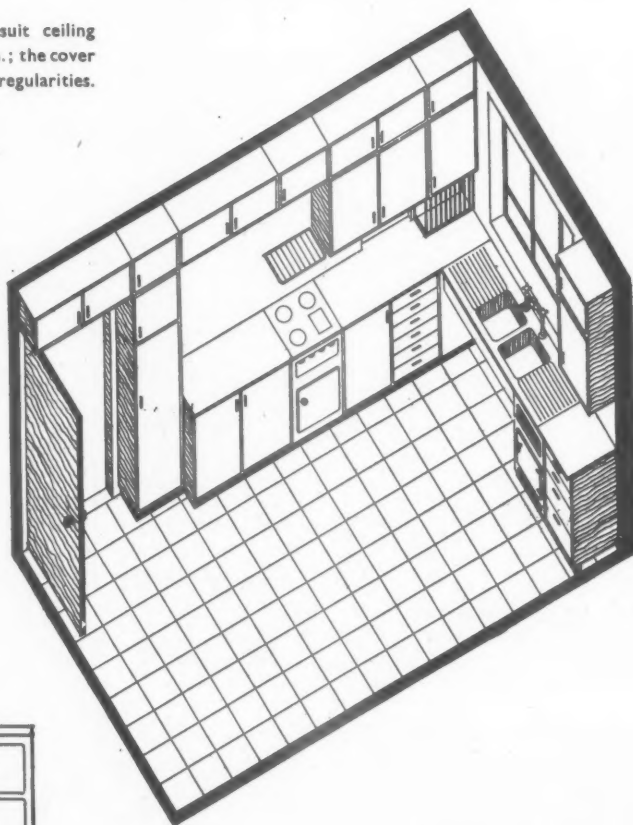
Top cupboards are made to suit ceiling heights from 7 ft. 6 in. to 8 ft. 6 in.; the cover bead makes up for ceiling irregularities.



Cupboards fixed to the wall leave a clear work space and the work top is in one piece level with cookers, sinks, etc.



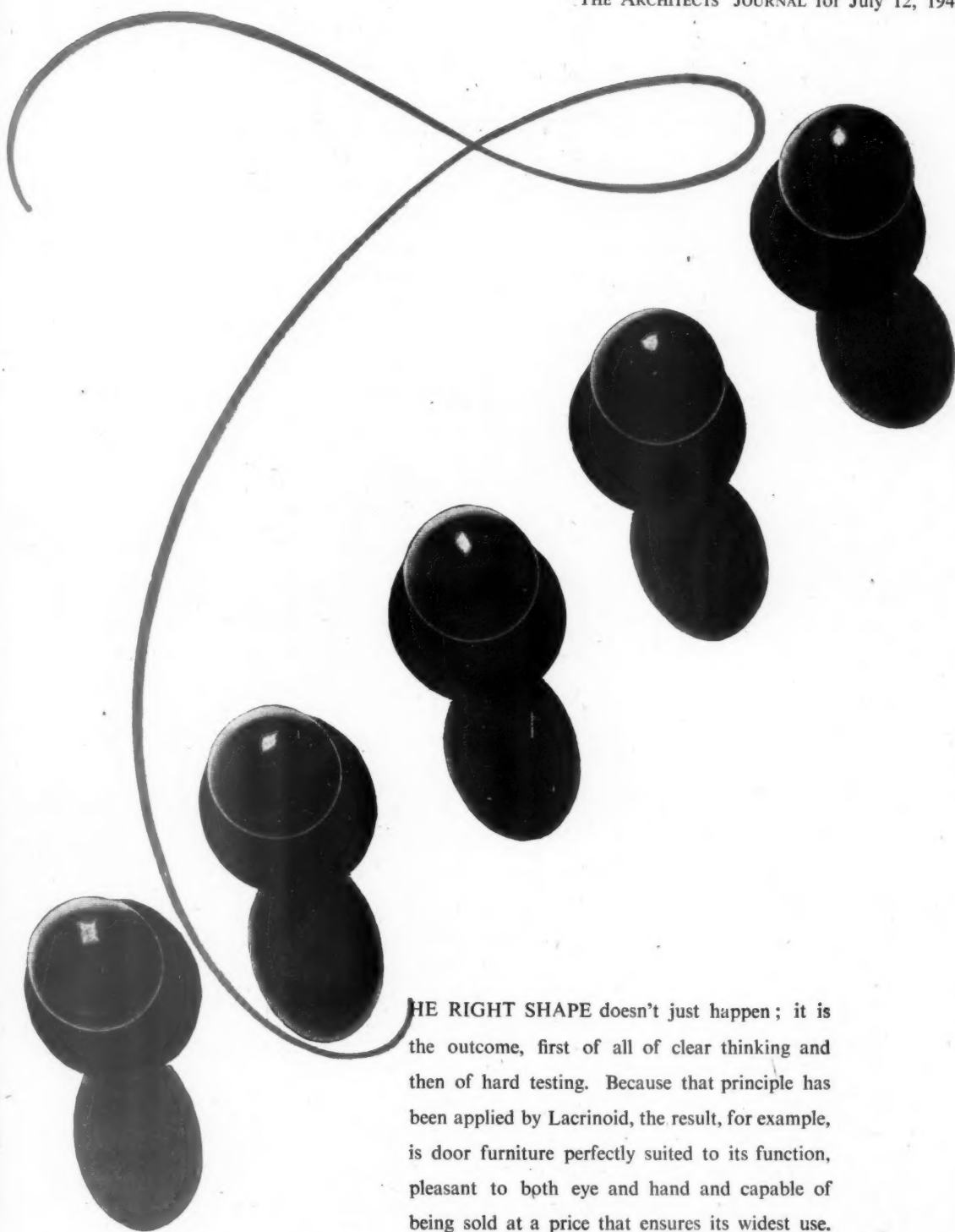
Continuous toe space 3 inches high by 2 inches deep



Any of the twenty single or double wall or floor units can be combined to equip a new kitchen, to replan an old one, or to add to existing equipment.

**THE
ENGLISH JOINERY MANUFACTURERS ASSOCIATION**

SACKVILLE HOUSE, 40 PICCADILLY, W.1 REGENT 4448 [INCORPORATED]

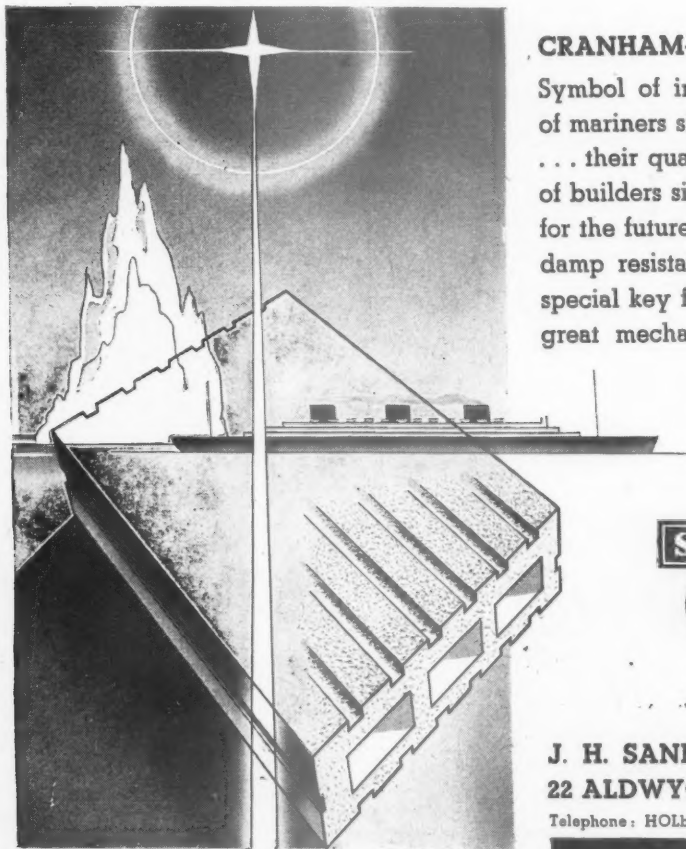


THE RIGHT SHAPE doesn't just happen; it is the outcome, first of all of clear thinking and then of hard testing. Because that principle has been applied by Lacrinoid, the result, for example, is door furniture perfectly suited to its function, pleasant to both eye and hand and capable of being sold at a price that ensures its widest use.

LACRINOID *for plastics*

DOOR FURNITURE - CABINET HANDLES - KNOBS FOR ALL PURPOSES

LACRINOID PRODUCTS LTD • MOULDERS, MANIPULATORS & FABRICATORS OF ALL PLASTICS • GIDEA PARK • ESSEX
Telephone Hornchurch 2981



CRANHAM—A NEW WORD FOR CONSTANCY

Symbol of immutability . . . the North Star . . . friend of mariners since the birth of history. Cranham Blocks . . . their qualities equally constant . . . familiar friends of builders since their introduction . . . and firm friends for the future! And what friendly qualities! Fire and damp resistance . . . heat and sound insulation . . . a special key for plastering . . . lightness combined with great mechanical strength! . . . qualities that never vary . . . once built-in Cranham Blocks remain constant.

Write to-day (enclosing 1d. stamp) for full technical details.

SANKEY'S

CRANHAM BLOCKS

J. H. SANKEY & SON LTD.

22 ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2

Telephone: HOLborn 6949 (14 lines)

Telegrams: Brickwork, Estrand, London

HERMATOR HARD GLOSS PAINT

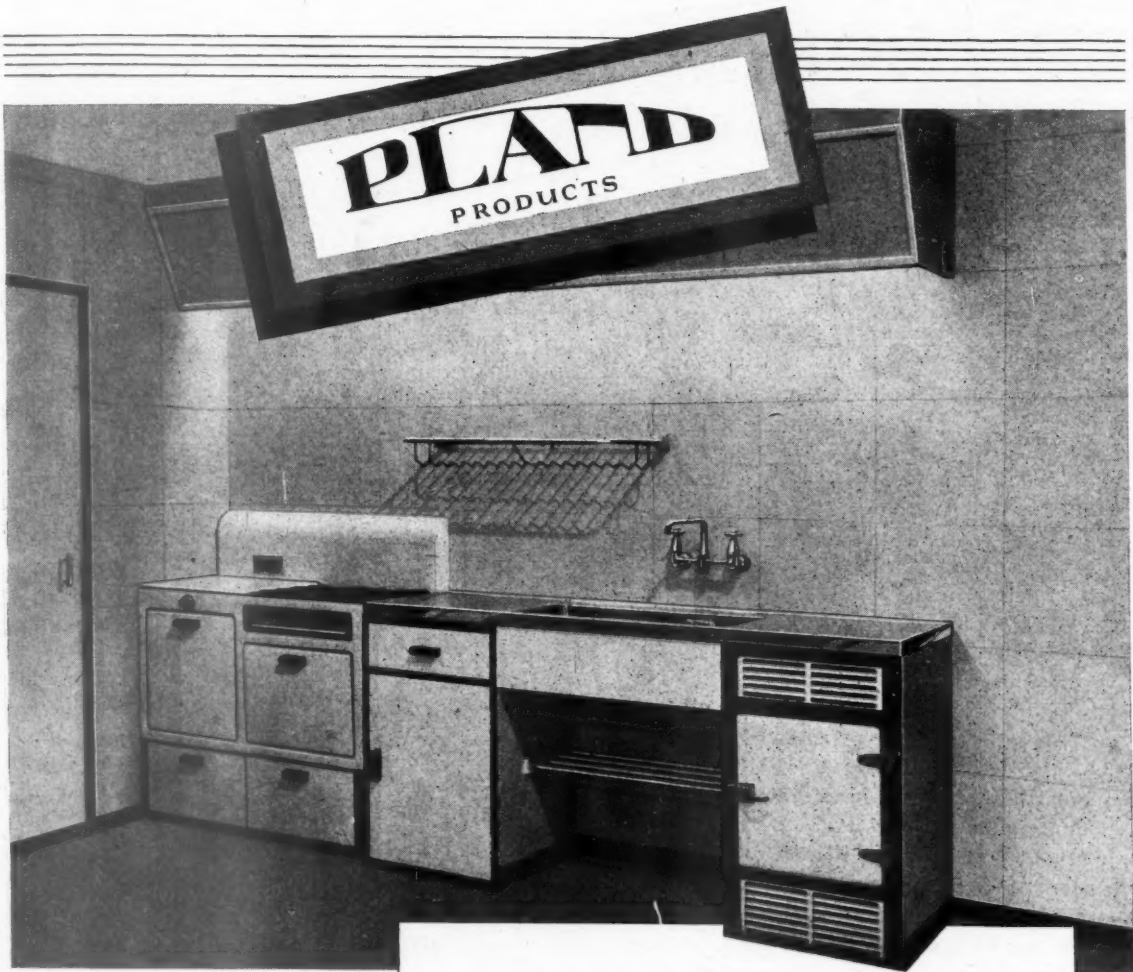


Hermator is Britain's standard for hard gloss paint. You may still specify "HERMATOR" with every confidence for the protection of wood and metal in all climates. It successfully resists rust, rot, decay, storm, rain, sleet, salt water and extremes of heat and cold. Not quite up to pre-war quality due to restrictions on imports of certain raw materials, but the best that can be produced under present conditions and can still be termed—

"The Knight Protector of Wood & Metal"



DOCKER BROTHERS LADYWOOD BIRMINGHAM 16



"BEAUTILITY"
...the last word in modernism

★ Stainless steel is still in great demand for priority purposes, but the position is gradually easing and 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 steel architectural fittings.

Beauty plus utility describes in a nutshell the Pland Stainless Steel Sinks.

Beautiful because of their modern lines and bright and clean appearance. Useful for the great part they play in hygiene and labour saving. They're well worth remembering for the time when stainless steel ceases to be a controlled product.

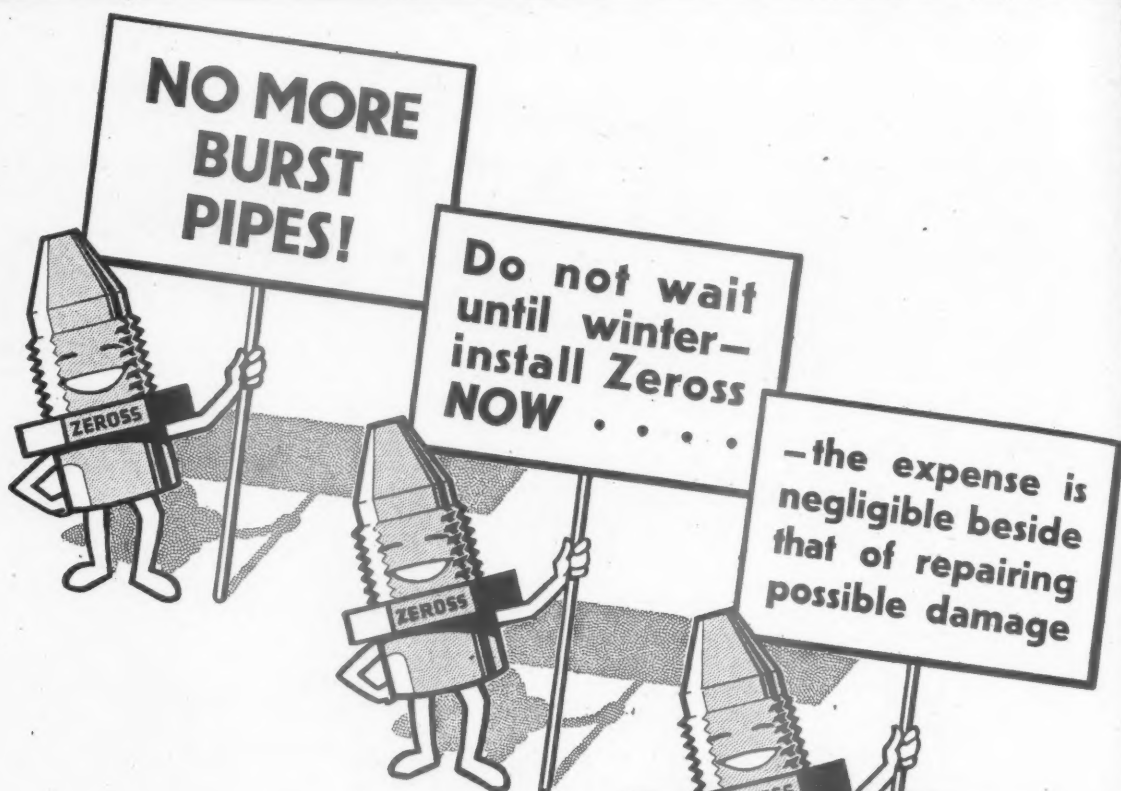
THE STAINLESS STEEL SINK COMPANY LIMITED

RING ROAD, LOWER WORTLEY, LEEDS 12.

Tel: Leeds 38711

Also at 14 GT. PETER STREET, WESTMINSTER, S.W.1

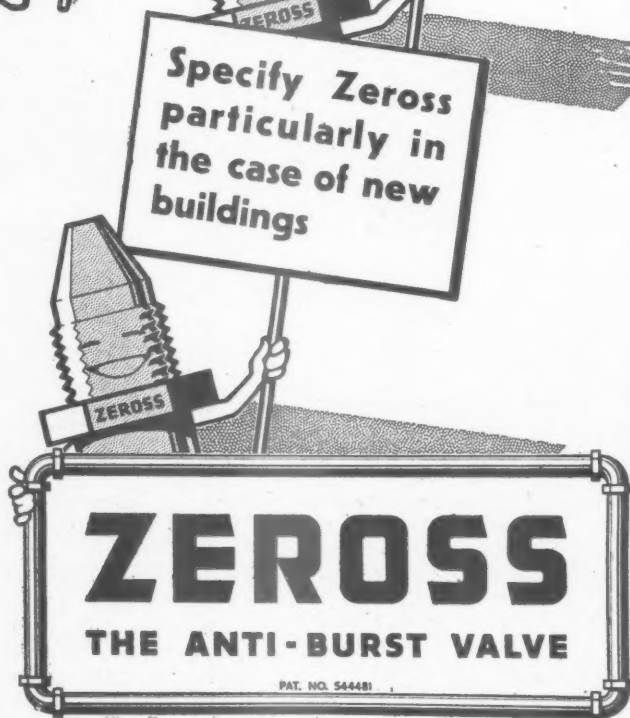
Tel: Abbey 1575



So great has been the interest aroused in the Building and Allied Trades by the Zerox Anti-Burst Valve that it was decided that further tests of the most rigorous description should be carried out in public. The results showed Zerox to be 100% efficient in operation. Representatives of the House of Commons, the Air Ministry, the Ministry of Works, Water Authorities, Industrial Undertakings and the Press were present. The assembly agreed that the tests witnessed were sufficient to prove conclusively the claims of the Company in connection with the Zerox Valve.

Now is the time to order Zerox Valves; do not wait until winter, when it may be too late. The cost of installation is negligible compared with that of making good the damage that may be caused by bursts due to freeze-ups. "Zerox" should be specified particularly in the case of new buildings as well as in existing water systems. "Zerox" technicians will gladly give advice and assistance.

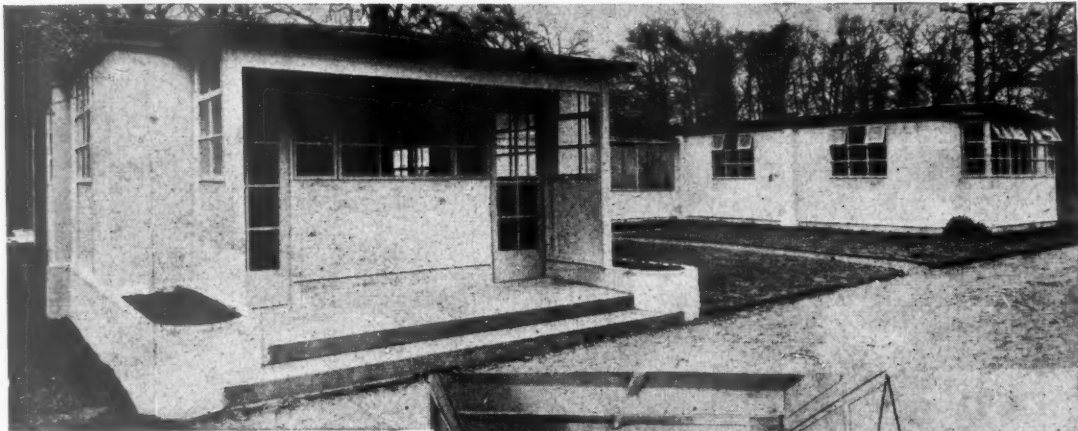
Remember that Zerox Valves are entirely self operating and require no maintenance. There is no constant wear on any part of the Valves and they cannot be affected by corrosion as the essential parts are not normally in contact with the water.



Write for descriptive folder and reports from
S. GRAHAME ROSS LTD. SLOUGH.
TEL.: BURNHAM (BUCKS) 686.

SECO

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



SECO is the **system** which
has been most widely
used during the past three
years. It is based on a wall
unit 7ft. 4½in. by 3ft. 2½in., of
which 6,469,800 feet super of
floor area have been made and
erected into 283 different designs
of buildings on 698 sites.



"Seco" and "Uni-Seco" are the Registered Trade Marks

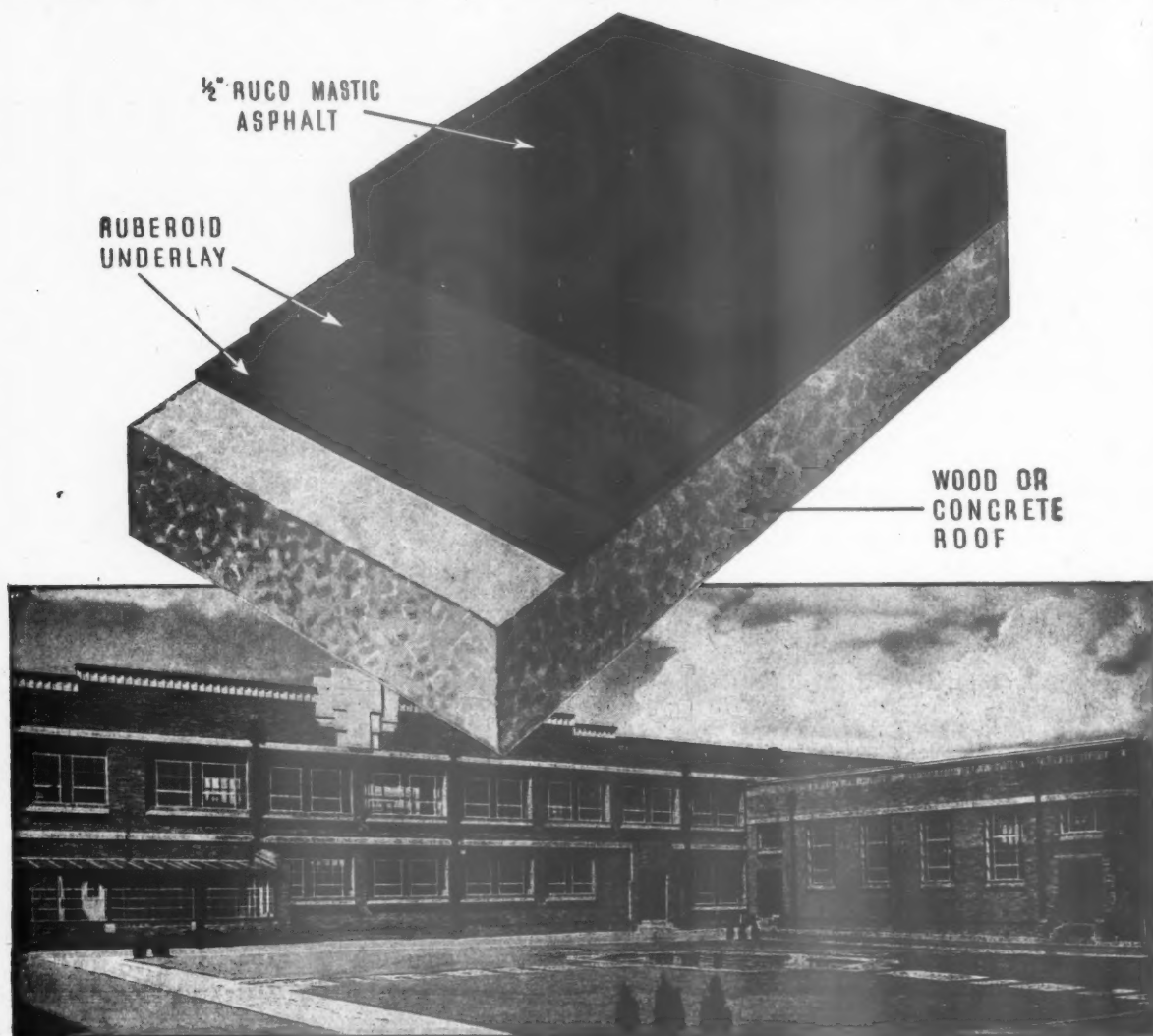
UNI-SECO STRUCTURES LIMITED

25, Upper Brook Street, Park Lane, London, W.1.

• Mayfair 9080

Stonham & Kirk

The Ruco Ruberoid Roof

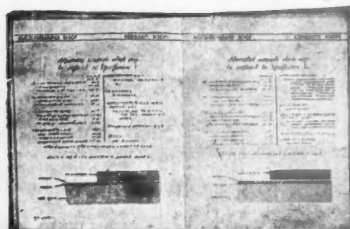


Grammar School, Mansfield.
Architects:
Messrs. Cook, Howard & Lane,
Mansfield.

The Ruco Ruberoid Roof consists of two or more layers of Ruberoid Underlay surfaced with $\frac{1}{2}$ " Ruco Mastic Asphalt. This is one of the most frequently specified Ruberoid Roofs, because of its excellent wearing properties and exceptionally low cost per year of service. The specification is suitable for all types of flat concrete or boarded roofs, particularly where the surface is to be used for foot traffic

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 plans

RUBEROID ROOFING



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.

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

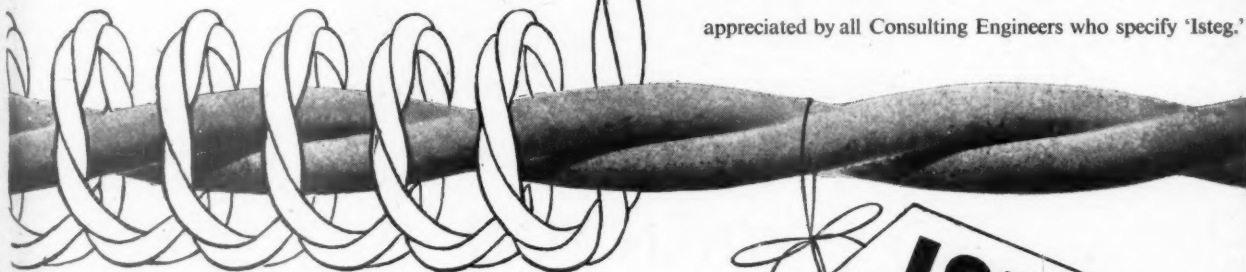
Architects and Engineers are invited to write for a copy of this Ruberoid Publication No. 326 entitled "Standard Specifications for Ruberoid Roofs."



WHAT'S THE CONNECTION?

The resemblance between the flex of your telephone and a length of 'Isteg' is a pure coincidence. Neither was copied from the other. But both have this in common — they can save consulting engineers quite a lot of time and trouble. Because of the higher stresses permitted when it is used, 'Isteg' shows a saving of one third in the weight of steel normally required — which is just as well, considering that

steel is likely to be a high priority material for some years to come. Being keyed to the concrete throughout its entire length 'Isteg' needs neither hooks nor overlengths and minimises the cracking problem. 'Isteg' is backed up by a first class service controlled by people who know how to interpret your requirements in a way which will be appreciated by all Consulting Engineers who specify 'Isteg.'



Manufactured by GUEST, KEEN & NETTLEFOLDS, LIMITED, CARDIFF

McCALL & COMPANY (SHEFFIELD) LIMITED, TEMPLEBOROUGH, SHEFFIELD

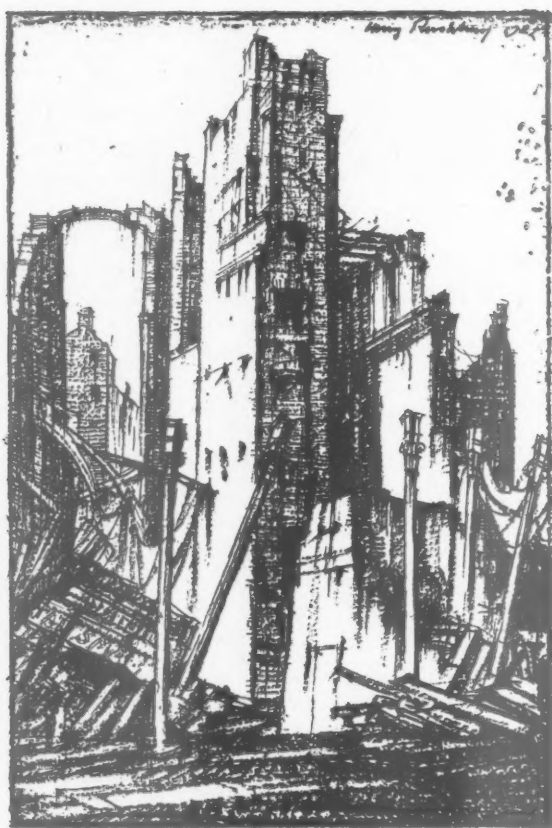
THE UNITED STEEL COMPANIES LIMITED, SHEFFIELD and

ISTEG STEEL PRODUCTS LTD. (SALES), 8 BUCKINGHAM PALACE GARDENS, LONDON, S.W. 1

TELEPHONE: SLOANE 9210

**ISTEG
STEEL**

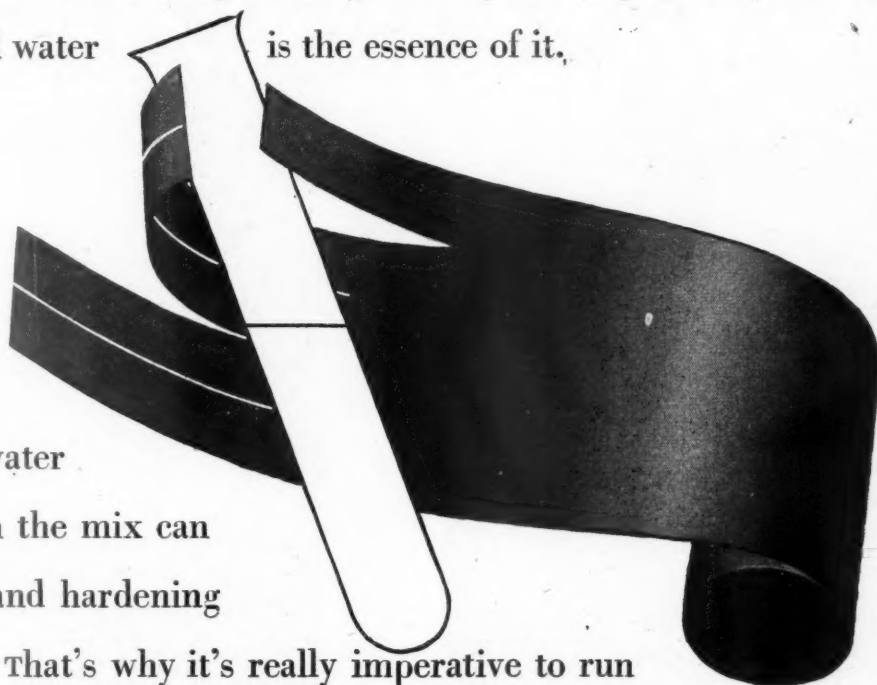
CRITTALL WINDOWS



WHEN YOU
REBUILD

THE CRITTALL MANUFACTURING CO. LTD., 210 HIGH HOLBORN, W.C.1.

The chemistry of concrete . . . What the concrete man calls setting and hardening is really a complicated physico-chemical process. And water is the essence of it.



Only while water is present in the mix can the setting and hardening take place. That's why it's really imperative to run an underlay of IBECO waterproof concreting paper under all concrete that has to stand the test of time. IBECO is waterproof throughout: the proofing bitumen is part of the paper itself. Light to transport, easy to handle, low in cost, IBECO is a really practical safeguard against unwanted drainage and consequent poor setting and incomplete hardening. It has been used in many a Government contract! samples and further details sent on request. Write to C. Davidson and Sons Ltd: (Dept. K.40) Mugie Moss, Aberdeen.



WATERPROOF KRAFT PAPER



OVER
£42,000,000

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

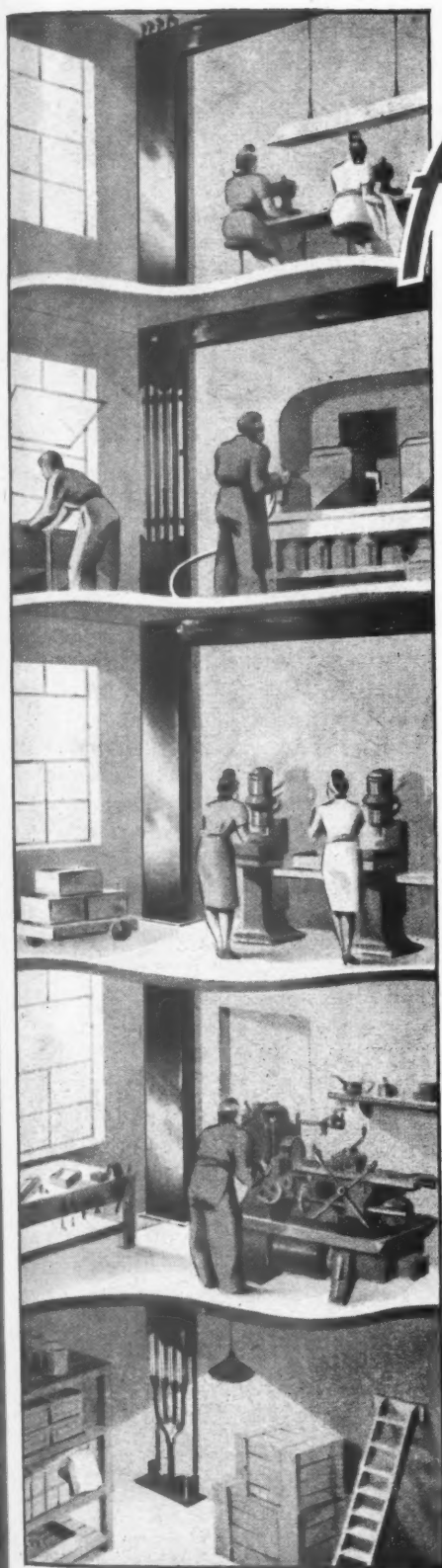
FOR THE PROTECTION OF
RE-CONSTRUCTED BRITAIN'S
NEW BUILDINGS AGAINST
FIRE RISKS, ARCHITECTS
ARE INVITED TO CONSULT



DREADNOUGHT
FIREPROOF DOORS (1930) LTD.

26 VICTORIA STREET,

WESTMINSTER, S.W.1



Aluminium

RISING MAINS fit the modern plan

In multi-floor factories, office buildings and blocks of flats, bare aluminium busbars have numerous advantages.

Suspended in a vertical metal duct (with non-inflammable baffles where required), they eliminate fire risk.

They withstand heavy overloads.

They are easily accessible for extensions, as the load increases with business.

They take up minimum space where change of direction is required.

They are economical in installation and maintenance costs.

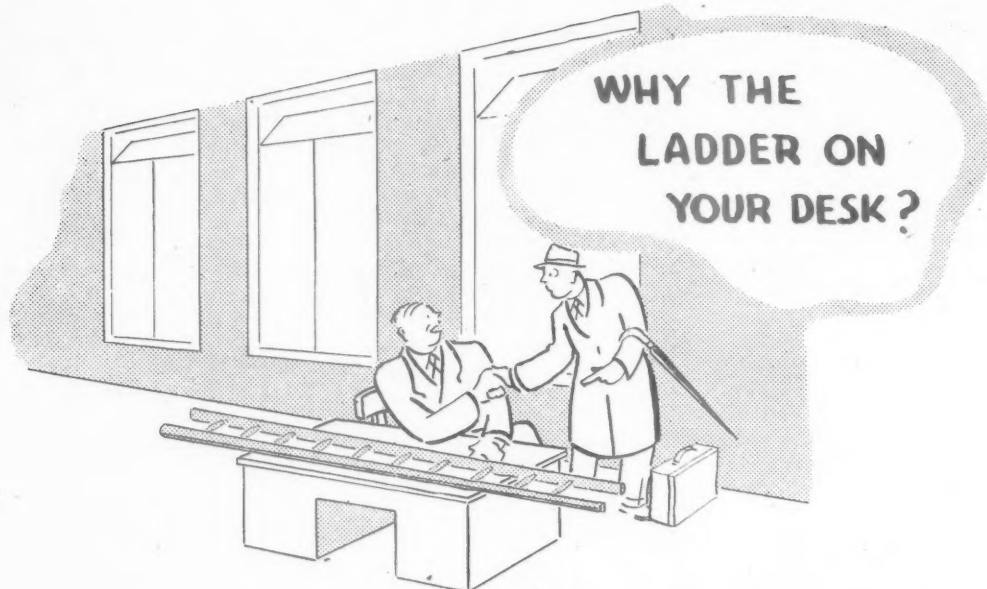
May we furnish you with the experience of users of aluminium busbars since 1915?



THE BRITISH ALUMINIUM CO. LTD. SALISBURY HOUSE LONDON WALL LONDON E.C.2

Telephone : CLErkenwell 3494

Telegrams : Cryolite, Ave, London

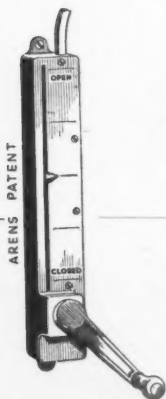


IT is positively staggering what some folks will put up with—the inconvenience and discomfort they will patiently bear—rather than bestir themselves to look round the corner or to observe how the factory down the street has solved the window problem. We do not for a moment suggest that you are in the same predicament as the gentleman in our funny drawing. But it is just possible you may not have heard of ARENS.

ARENS are the Window Control specialists. Their job is the planning and perfecting of neat, silent, unobtrusive mechanical devices that make window opening and closing the smooth, easy thing it should be, and *is* in many a modern factory and municipal building. You may depend upon it that Arens can show you a way to put your unruly windows under a nice uniform discipline, that answers to your wishes—instantly!

ARENS

REMOTE CONTROLS



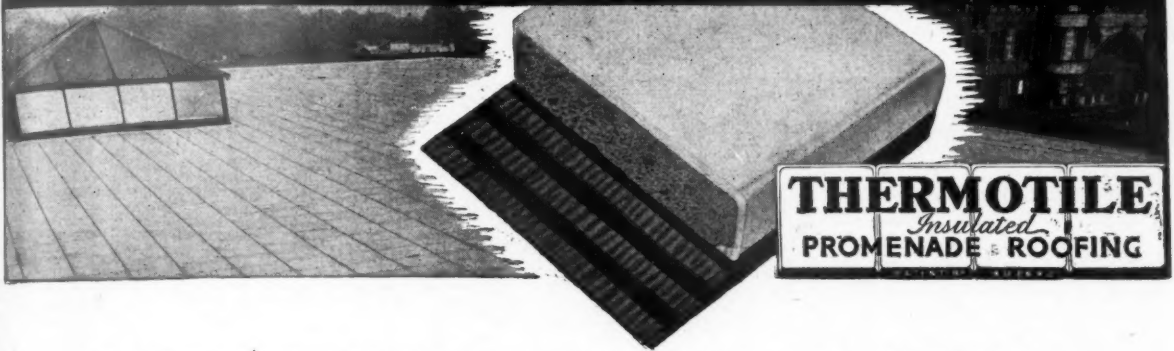
ARENS CONTROLS LTD., TUNSTALL ROAD, EAST CROYDON, SURREY

Telephones: ADDISCOMBE 3051/4
831/3 WARWICK ROAD, BIRMINGHAM,

Telegrams: UNICONTROL, 'Phone, London
Telephone: ACOCKS GREEN 0786

ARENS COMPACT GEAR BOX requires only one third of the space of a standard Worm Gear operator. Worm and sliding members are totally enclosed. Has a pleasant streamlined appearance. Four turns provide one inch of movement on the control. An Indicator which can be engraved to suit customer is incorporated.

CONTRIBUTION TO MODERN ARCHITECTURE



THERMOTILE
Insulated
PROMENADE ROOFING

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.



RED HAND
ROOFING

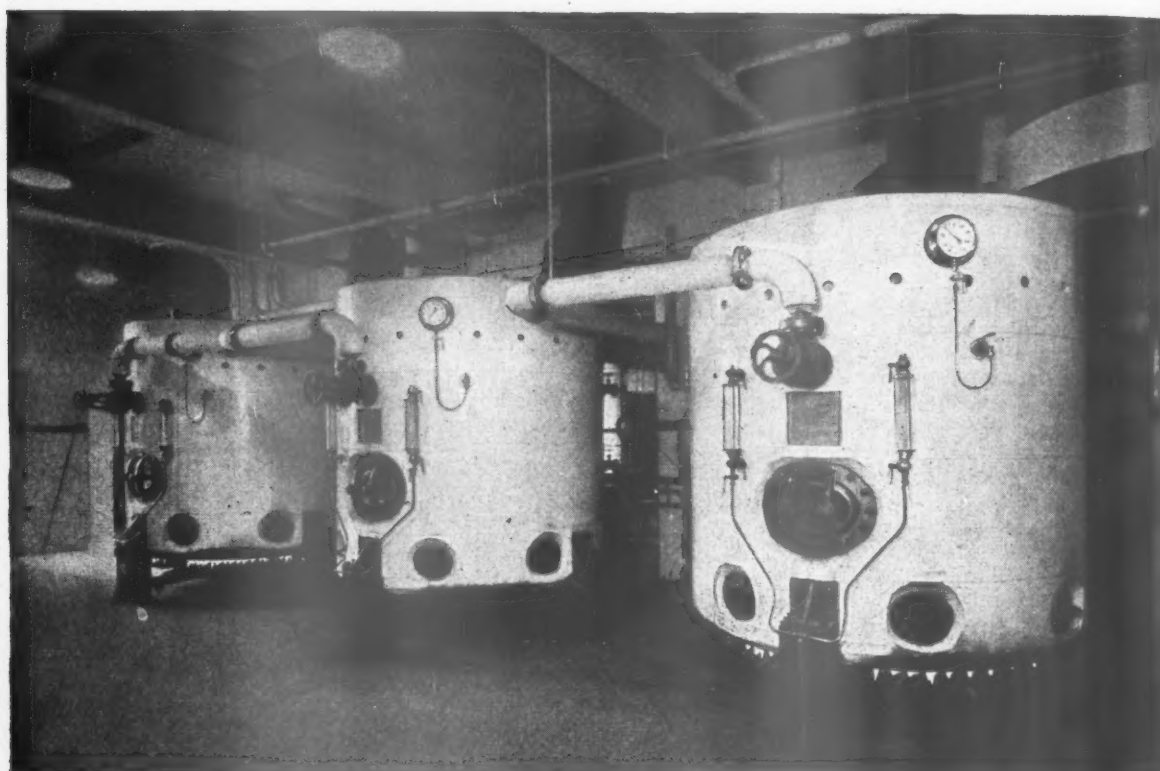
D. ANDERSON & SON LTD. STRETFORD. MANCHESTER
AND AT LONDON • BELFAST • BIRMINGHAM • GLASGOW

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.

MODERN ENGINEERING INSTALLATIONS by HADENS



THE Boiler House of a large gas fire public bath installation designed and installed by Hadens.

HEATING
BY ALL SYSTEMS
HIGH PRESSURE HOT WATER
SYSTEMS FOR HEATING AND PROCESS WORK
AIR CONDITIONING AND VENTILATION
PLUMBING & SANITATION, ELECTRIC LIGHTING & POWER



JAMES WATT

IN WAR TIME:
A.R.P. VENTILATION
AND GAS FILTRATION
HOT WATER SUPPLIES
FOR CLEANSING STATIONS
PATENT DEINFESTING APPARATUS FOR CLOTHING, ETC.

G. N. HADEN & SONS LTD

* * Estd. 1816

MAIN BRANCHES:

Manchester 2, 4 Albert Square	- - - - - Blackfriars 6356
Glasgow C.2, 86 St. Vincent Street	- - - - - Central 3196
Birmingham 3, 45 Great Charles Street	- - - - - Central 8391
Bristol 1, Orchard Street	- - - - - Bristol 20286
Lincoln, Guildhall Street	- - - - - Lincoln 993
Bournemouth, Avon Road	- - - - - Boscombe 512
Torquay, Castle Road	- - - - - Torquay 3831

Sub-Branches:

Newcastle-on-Tyne 1, 13 Mosley Street	- - - Newcastle-on-Tyne 26780
York, 39 Micklegate	- - - York 4256
Liverpool 1, St. Luke's Chambers, Bold Place	- - - Royal 5699
Norwich, City Chambers, Upper King Street	- - - Norwich 22638

Evacuated Branches:

Eastbourne, c/o London Office	- - - Terminus 2877
Canterbury, c/o London Office	- - - Terminus 2877

HADENS ENGINEERING CO. LTD., 199 Pearse Street, Dublin, C.5 Dublin 43987

19-29 Woburn Place, LONDON, W.C.1

'Phone : TERMINUS 2877 (10 lines)
Wires : Warmth, Westcent, London

HARMONY "Completeness and order in the relation of things"—says the Dictionary. With what freedom windows can now be used in designing the general mass and line of structures! To emphasize the verticals, as in this case, or to add breadth to the horizontals, and in many other ways to create harmony, both outside and inside the building. BEACON Metal Windows lend themselves to the widest possible application while remaining intrinsically sound in detailed design and enduring quality. The special design of the Staircase Window is interesting and the tall Bay Window gives the required relief to the elevation.

**JOHN THOMPSON BEACON WINDOWS LTD.
BEACON WORKS WOLVERHAMPTON**

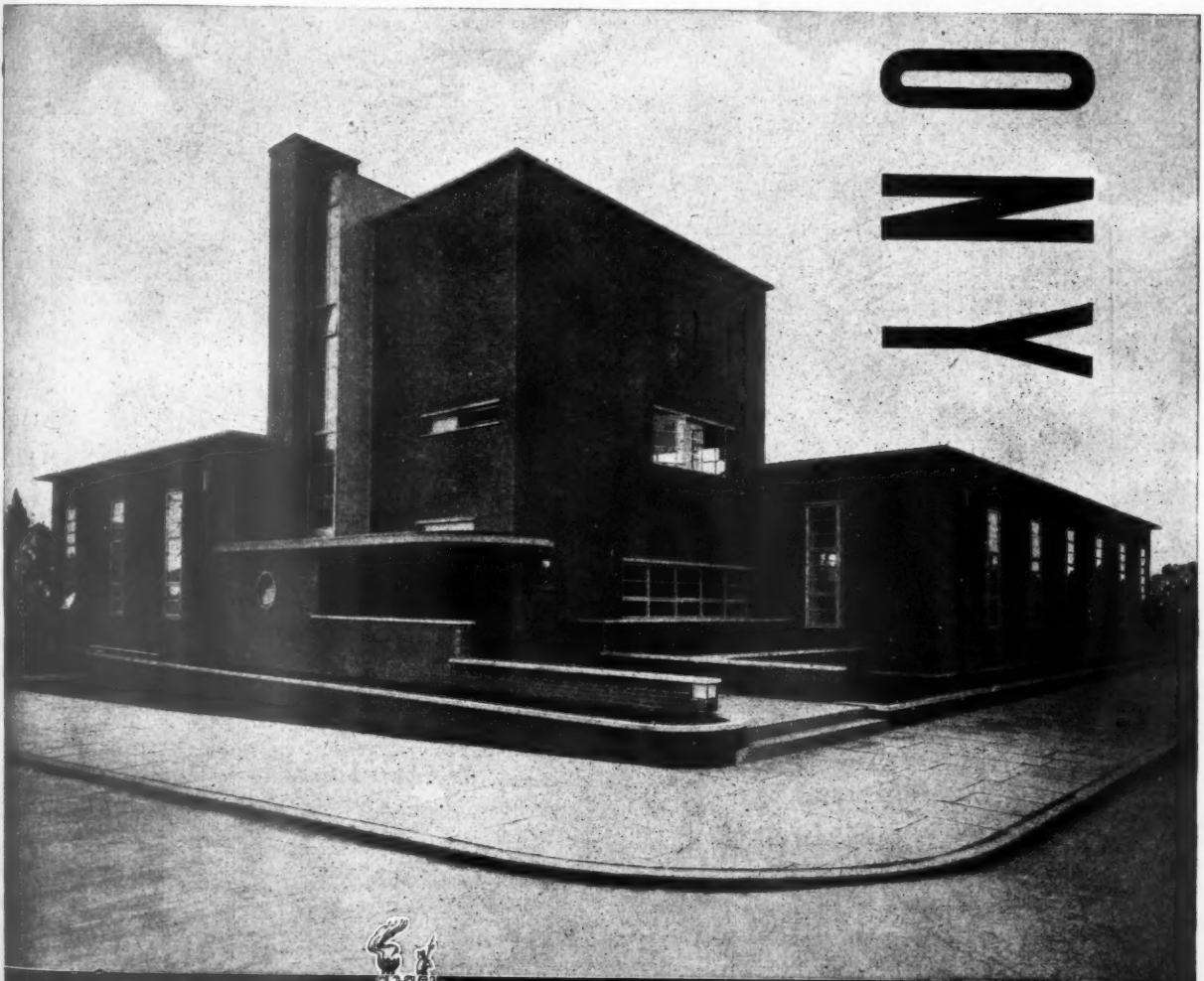
Telephones:
Bilston 41944/7 (4 lines)

Telegrams:
Windows, Wolverhampton

London Office: Imperial House, Kingsway, London, W.C.2.

Telephones: Temple Bar 3216 (3 lines)

HARMONY



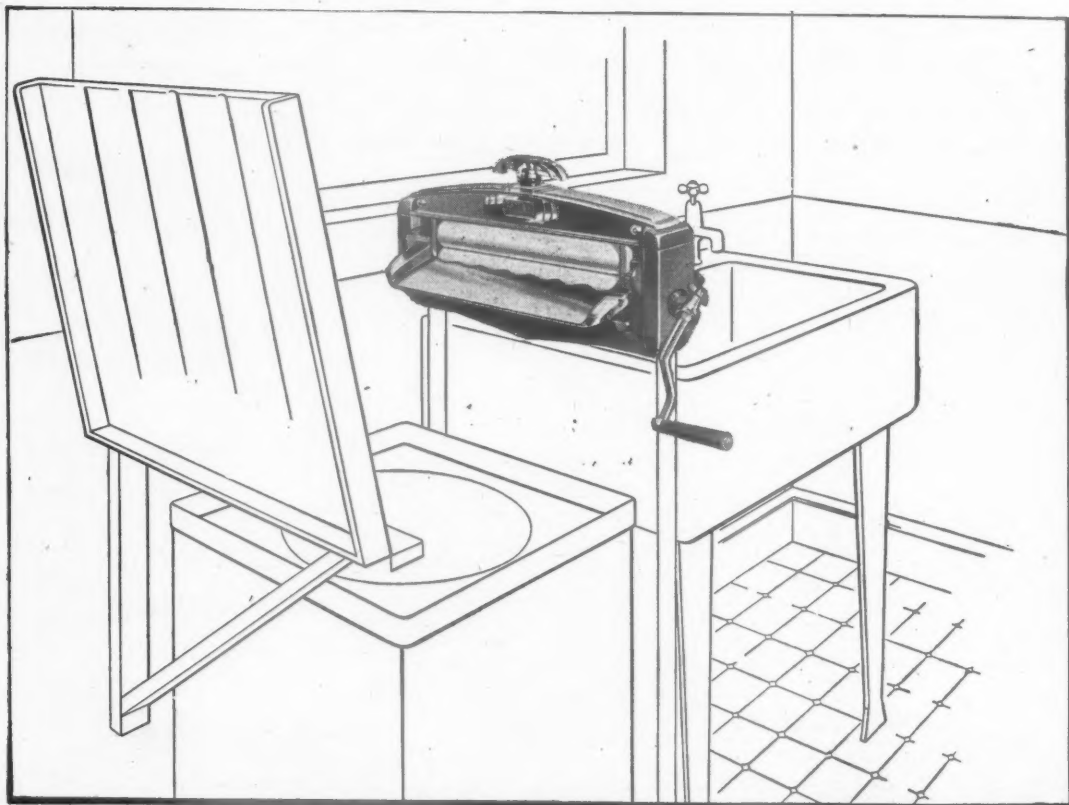
JOHN THOMPSON

BEACON

METAL WINDOWS



"Her New Deal—please— in the post-war world"



"BUT MRS. GREEN MADE-DO before the war. Oh, I know that she sometimes grumbled"

"Yes, she grumbled all right. Because it was making-do with a vengeance. What a kitchen! A cramped shallow trough for a sink, no draining board, a copper she couldn't use unless she had a huge coal fire on every wash-day, a mangle it would break a man's back almost to turn"

"Not good enough—we agree. So Mrs. Green joins hands with young Mrs. Brown! They want the planners to plan for them. Now what exactly do they want?"

They want a kitchen that has been designed for them. They don't feel they were designed for the old type of kitchen!

The kitchen which a carefully thought-out survey has laid down as fulfilling the minimum requirements of a home-keeping woman. A sink of the correct height and depth, to be used for either dish-washing or clothes-rinsing. A removable or hinged draining board, steady when in position and

suitably sloped. A wash-boiler under the draining board and next the sink to save mess and unnecessary labour.

And room for a rubber roller wringer, to enable them to do their home washing easily, without strain, yet with perfect results. The best wringer—and that means an Acme.

Interest in post-war housing means interest in the kitchen and the important work carried on there. Interest in that vital part of the work—the home laundry.

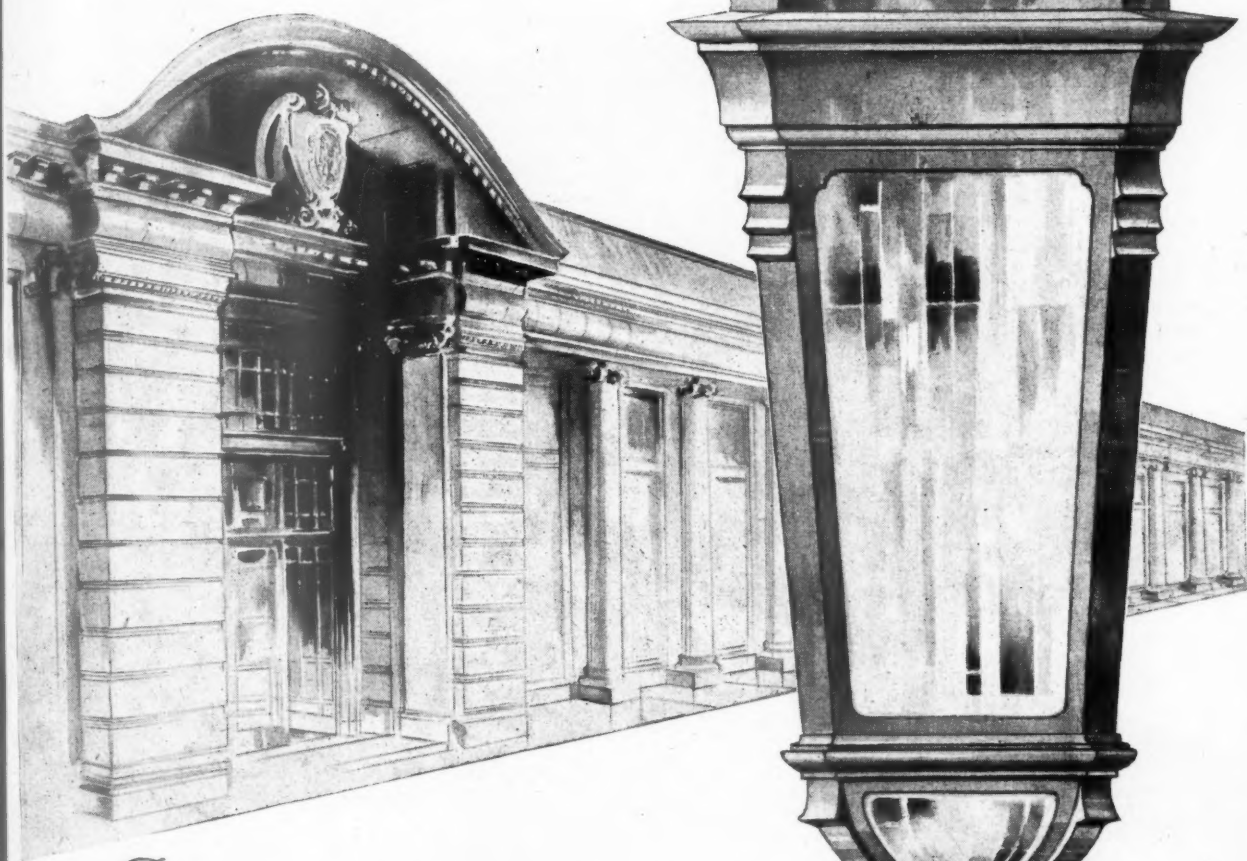
Surveys accepted and given definite support by Ministries and local authorities regard home laundry conditions as vital to house planning. Space should be provided for a rubber-roller wringer. No future kitchen ought to be planned without this provision. The wringer the housewife herself demands is the Acme. Experience has taught her it is the best.

If in your work you find any problem in connection with the fixing of wringers, please get in touch with us for advice or assistance. We will have much pleasure in helping you.

ACME

ACME WRINGERS LTD · DAVID STREET · GLASGOW · S · E

Lighting ... PUBLIC BUILDINGS



*Decorative metal
Wrought ironwork. Founders
Spinners Machinists*



**SPECIAL PURPOSE
DESIGNS FOR
FLUORESCENT LIGHTING**

GEORGE **FORREST** AND SON LTD

30-38 OSBORNE ROAD, ACTON, LONDON, W.3

ACORN: 5081
PRIVATE EXCHANGE

L I G H T I N G S P E C I A L I S T S

TIMBER • VENEERS • VENEERED PANELS • HARDWOOD FLOORING



WILLIAM MALLINSON & SONS LTD

TIMBER AND VENEER MERCHANTS AND PANEL MANUFACTURERS

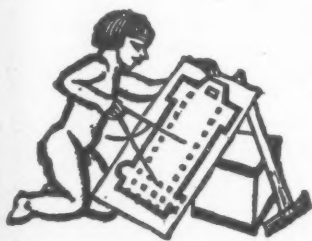
130-142 HACKNEY ROAD • LONDON • E 2

TELEPHONE • BISHOPSGATE 1234

TELEGRAMS • 'ALMONER' LONDON

In common with every other periodical this JOURNAL is rationed to a small part of its peacetime 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."

Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw materials now in short supply, are not necessarily available for export.



DIARY FOR JULY AUGUST AND SEPTEMBER

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.

CARDIFF. *Kitchen Planning Exhibition.* At James Howell & Co.'s stores.

JULY 12-14

COLCHESTER. *Country Life and Country Needs Exhibition.* At the Castle Museum. (Sponsor, BIAE.)

JULY 12-21

LONDON. *Royal Academy of Arts. One Hundred and Seventy-Seventh Summer Exhibition.*

JULY 12 to AUG. 12

A Psycho-Analyst Looks at Planning. Lecture by Dr. Edward Glover. At 28, King Street, W.C.2. Buffet lunch 2s. 6d., 12.45 to 1.15 p.m. Talk and discussion 1.15 to 2.15 p.m. (Sponsor, TCPA.)

JULY 12

AA Annual Prize Day and Exhibition of School Work. At 34-36, Bedford Square, W.C.1. Speeches in the Library 3.30 p.m., when the exhibition will be formally opened; afterwards tea will be served from 4.30 p.m. A dance, arranged by the AA Students' Club will begin at 8 p.m. and end at 5 a.m. Tickets 5s. each. The exhibition will remain open until August 10. (Sponsor, AA School of Architecture.)

JULY 13

Newer Heat Exhibition. At the Building Centre, Conduit Street, W.1. In view of the interest shown in the new fires and cookers at the exhibition the Coal Utilization Joint Council has arranged for the exhibition, which was due to close on June 30 to be continued until July 28. Open from 10 a.m. to 5.30 p.m. daily, Saturdays until 1 p.m. (Sponsor, BCUJC.)

JULY 12-28

Plastics in Display. Lecture at the Lighting Service Bureau, 2, Savoy Hill, W.C.2, by H. Metten, wholesale display manager of Lilley and Skinner. Chairman, Rowland Hill. (Sponsor, British Display Association.) 6 p.m.

JULY 12

News of the World Housing Exhibition. At Selfridges, Oxford Street, W. 10 a.m. to 5 p.m. Saturdays, 10 a.m. to 12.30 p.m. (Sponsor, the News of the World.)

JULY 16-AUG. 11

National Federation of Building Trades Employers' Half-Yearly Meeting. At the Connaught Rooms. G. W. Buchanan will preside, and representatives of the eleven Regions into which the Federation is divided—they cover every county in England and Wales—will be present.

JULY 18

Three films illustrating American building past and present, by courtesy of the USA Government: *The Home Place; Valley of Tennessee; The City.* At the Assembly Hall, Royal Empire Society, Craven Street Entrance, Strand, W.C.2. (Sponsor, IAAS, London branch.) 6 p.m.

Tickets from IAAS, 75, Eaton Place, S.W.1.

JULY 19

BINC Second Building Congress. At Central Hall, Westminster, S.W.1. The general object of the congress will be to enable those in both official and private positions to meet and discuss the many problems facing the building group of professions and industries at the present time. 10 a.m. Opening of the congress by the Lord Archbishop of York. First Session: Discussion on the supply of labour and materials for post-war building. Speaker: Ernest Bevin, M.P., Minister of Labour, 1940-45. Discussion opened by: J. W. Stephenson (President of the National Federation of Building Trades Operatives and Vice-Chairman, National Joint Council for the Building Industry), and Sir P. Malcolm Stewart, Bt. (President, National Council of BMP). 2.15 p.m. Second Session: Discussion on the position of the building industries and the local authorities in relation to post-war housing. Speaker: The Minister of Health (H. U. Willink, M.P.). Discussion opened by: E. B. Gillett (President, Chartered Surveyors' Institution). 10 a.m. Civic Welcome by the Mayor of Westminster (Councillor Douglas Wood, F.R.I.B.A.). Third Session: Discussion on the organization of the building industries and their future relationships with Government Departments. Speaker: The Minister of Works (Duncan Sandys, M.P.). Discussion opened by W. H. Forsdike (Senior Vice-President National Federation of Building Trades Employers and Chairman National Joint Council for the Building Industry). 2.15 p.m. Fourth Session: Discussion of the place of the building industries in the resuscitation of economic activity and in the maintenance of full employment thereafter, and on the need in this connection for a balanced building programme. Speaker: The Minister of Labour (R. A. Butler, M.P.). Discussion opened by Percy Thomas (President of the RIBA). 4.30 p.m. Summing up of congress by the President and Chairman of Congress Committee. Admission to the congress, open to all in any way interested in the activities of the building group of professions and industries, will be by ticket price 1 guinea, obtainable from the Building Industries National Council, 11, Weymouth Street, W.1. The fee will include Buffet Lunch, to be served each day between sessions in the Central Hall. (Sponsor, BINC.)

JULY 24-25

OXFORD. NALGO Exhibition of Local Government. At Somerville College. (Sponsor, BIAE.)

JULY 12-16

WEYMOUTH. Homes to Live In Exhibition. At Weymouth Technical College. (Sponsor, BIAE.)

JULY 12-21

NEWS

THURSDAY,
No. 2633.

JULY 12, 1945
VOL. 102

News	19
President of the AA	20
This Week's Leading Article	21
Astragal's Notes and Topics	22
Letters from Readers	23
Building in Palestine	24
Three Estate Layouts: Designed by G. A. Jellicoe, G. K. Cooper, Clough Williams-Ellis.	25
The Orlit System of House Construction: Architect, E. Katona	29
Information Centre	35
Societies and Institutions	36

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.

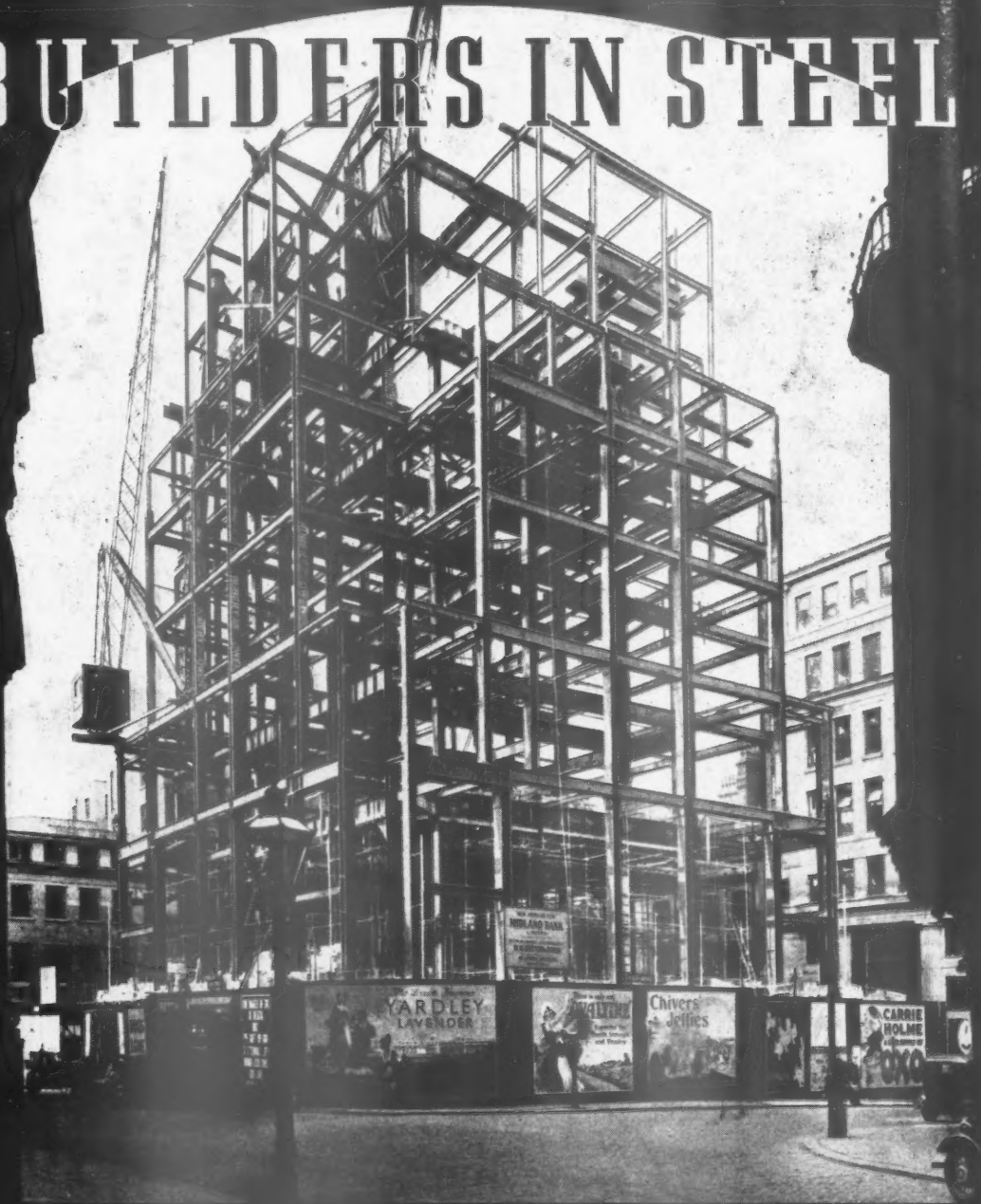
★★ means important news, for reasons which may or may not be obvious.

Any feature marked with more than two stars is very big building news indeed.

In the London Civil Defence Region over one hundred thousand dwellings were destroyed or DAMAGED BEYOND REPAIR by enemy action.

In the House of Commons Mr. Sandys, Minister of Works, stated that over 100,000 dwellings in the London civil defence region were destroyed or damaged beyond repair by enemy action during the course of the war. He said: In addition it is estimated that about three-quarters of London's 2,200,000 dwellings received damage of some kind. Fortunately a considerable proportion of this damage is of a minor character. Over 1,000,000 houses were damaged by rockets and flying bombs during the 10 months' bombardment. The great majority of these houses have been repaired at least up to the emergency standard laid down last winter. Except in a few areas, where the damage is most recent, the remainder will have been dealt with by the middle of July. When this important stage has been completed we shall be left with two main tasks of house repair in London. First, to repair the large number of dwellings which were so heavily damaged that they are not at present habitable; secondly, to finish off the remaining repairs on several hundred thousand houses which have so far not been repaired beyond the emergency standard. The Government intend to tackle the bulk of this work before the middle of July. Large numbers of these houses have, of course, been repaired up to a higher standard.

BUILDERS IN STEEL



*The Reconstruction of the Future will
need Our Experience of the Past*

RUBERY, OWEN & CO LTD

DARLASTON • • • SOUTH STAFFS

LONDON: IMPERIAL BUILDINGS, 56, KINGSWAY, W.C.2. BIRMINGHAM 3: LOMBARD HOUSE, Gt. CHARLES St.
78 KING STREET, MANCHESTER. 4 WINN ROAD, SOUTHAMPTON.

F

LE

Eli

an

thi

it i

to

bo

wh

the

for

ab

in

bu

Th

see

bu

nu

fur

★★

M

J.I.

ele

R/

Thi

The

He

of

opp

elec

Tit

61

has

por

cou

com

The

191

and

and

193

193

(in

wic

To

ma

the

Bo

men

the

has

Off

He

bu

the

ma

He

men

aw

tec

ser

Eng

RE

ing

por

Sup

Co

tion

★

At

Co

the

Fl

Via

Ce

Ke

From AN ARCHITECT'S Commonplace Book

LESSON OF THE MEDIAEVAL TOWN [From *The City: Its Growth, Its Decay, Its Future* by Eliel Saarinen (Reinhold Publishing Corporation)]. The landscape is—as is any appearance in nature—an open book where one can read about the drift to form-correlation, and about the significance of this drift as a fundamental law. In much the same way, the mediæval town is an open book where it is written with clear letters that man's creative instinct in those days was inspired by the same drift to correlation as in nature. If only the eyes are opened to see and the mind to understand, this open book of the mediæval town contains many enlightening chapters about that form-correlation through which the architectural form of the mediæval town became so animating. Since the mediæval era, the instinct for correlation has gradually waned. Even the eyes have lost much of their sharpness, for often-times we cannot discern the significance of correlation, no matter how clearly it is manifested about ourselves. In general people have little notion of form-correlation between the various buildings in the town. They look at buildings, as such, with little or no consideration as to whether or not these buildings are adequately interrelated one with another and correlated to the surroundings as a whole. That town which has many beautiful buildings they regard as a marvel of beauty. But only few seem to realize that if a town really is a marvel of beauty it is so because of a proper correlation of its buildings. Remove this correlation and the town becomes slovenly in appearance, regardless of the number of beautiful building units. Jumble together all the single handsome features of a well-furnished room, and the result is plain.

★★

Mr. Percy Edward Thomas, O.B.E., J.P., L.I.D., F.R.I.B.A., has been elected PRESIDENT OF THE RIBA for the session 1945-46.

This will be the fifth year, that Mr. Thomas has filled the office of President. He was nominated at the express request of the Council, and the election was unopposed. Only one man before has been elected President five times—Sir William Tite in 1861-63 and 1867-70. Mr. Thomas, 61 years of age, is a Cardiff architect who has been responsible for the design of important public buildings in all parts of the country. Many of his principal building commissions he won in open competition. These include Cardiff Technical College, 1911; Merthyr Y.M.C.A., 1911; Bristol Fire and Police Station, 1924; Newcastle Police and Fire Station, 1925; Swansea Guildhall, 1930; Accrington Police and Fire Station, 1930; Tunbridge Wells Civic Centre, 1934 (in collaboration with Mr. Ernest Prestwich, F.R.I.B.A.), Swinton and Pentlebury Town Hall, 1934. He has been placed in many other competitions, notably those for the Masonic Temple in London and the Board of Trade Offices on the Embankment. He was third in the competition for the Institute's own building in 1932. He has also designed the Glamorgan County Offices and the Welsh National Memorial Headquarters. This last is the third of his buildings to be erected in Cathays Park—the civic centre of Cardiff, and also in many ways the national centre of Wales. He is consulting architect for the Government Trading Estate at Treforest. He was awarded the Royal Gold Medal for Architecture in 1939. In the war of 1914-18 he served in the Artists Rifles and the Royal Engineers, and ended as Staff Officer to the RE XIIIth Army Corps in France. During the present war he has occupied important positions under the Ministry of Supply. Since 1942, he has been Regional Controller for Wales, Ministry of Production, and Chairman of the Regional Board.

★

At the first meeting of the RIBA Council for the session 1945-46, the following HONORARY OFFICERS WERE APPOINTED.

Vice-Presidents: J. Murray Easton; T. Cecil Howitt, D.S.O. (Nottingham); L. H. Keay, O.B.E., M.A.R.C.H. (L.V.P.L.) (Liverpool);

A. Leonard Roberts (Chairman of the Allied Societies' Conference) (Winchester). Honorary Secretary: Michael Waterhouse, M.C., B.A. OXON.; Honorary Treasurer: John L. Denman, J.P. (Brighton).

For the first time in any big national house-designing competition, WOMEN WILL BE INCLUDED in the committees adjudicating the designs sent in for the house-designing and building competition organized by the House-Building Industries' Standing Committee.

The competition closed on June 30. It was a National Competition for builders who are members of the National House-Builders Registration Council, and they were asked to design a pair of three bed-roomed houses, or alternatively, one having two and one having four bedrooms. For the purpose of preliminary adjudication the country has been divided into three Group Areas for which Committees of architects and builders have been nominated. Women will be included on these Committees. These women, who must be experienced in reading plans and know the needs of the working housewife, have been nominated by the women's organizations. Three will sit on each Group Area Committee, and there will be one woman member of the final assessing Committee which will sit in London. From the plans which are selected, houses will immediately be built, and it is hoped that they will be on view to the public before the end of the autumn. This drive on the part of the house-building and allied industries is designed to demonstrate the type of small house of the two, three or four bed-roomed type, which it is hoped will be available (as soon as labour is released) to the younger married couples who wish to invest their savings in their own house, as well as providing houses to let at nominal rents. The houses will be so designed that construction in numbers will not be delayed by lack of materials or fittings which may be in short supply. Given 25,000 men, the building industry believes that it could supply 30,000 houses of types such as these will be, within twelve months from the time an analysis is made of public criticism of the demonstration houses.

★

The Architects' Registration Council has issued the following statement on APPLICATIONS FOR REGISTRATION as Architects by members of the Forces who are being demobilized.

Although since August 1, 1940, the normal method of entering the architectural profession is by passing one of the examinations recognized by the Architects' Registration Council, men who joined the Armed Forces of the Crown—other than the Home Guard—before August 1, 1940, are still entitled to the benefit of the temporary provisions of the Architects' Registration Act, 1938, and the Regulations of the Council and can apply for admission to the Register of Architects within six months after discharge from the Forces, without passing an examination, provided they are able to fulfil the conditions of the Act and Regulations as follows:—(1) Under Section 2 of the Architects' Registration Act, 1938, a person shall upon application to the Council in the prescribed form and on payment of the prescribed fee, be entitled to be registered if he proves to the satisfaction of the Council that on July 29, 1938, he was or had been practising as an architect in the United Kingdom, or in some other part of His Majesty's Dominions. (2) Under Regulation 26 (2), a person is entitled to be registered as an architect if he can satisfy the Council that he was an architectural assistant on August 1, 1938, and had at that date been engaged in the study of architecture and execution of architectural work in the United Kingdom for at least 7 years. (3) Under Regulation 26 (5), a person is entitled to registration if he can satisfy the Council that he was an architectural assistant on August 1, 1938, had before that date served as an architectural assistant in an architect's office in the United Kingdom for at least a year, had been engaged in the study of architecture and execution of architectural work in any part of His Majesty's Dominions for at least 7 years, and had received an architectural education and training equivalent in value to that normally received by an architect in the United Kingdom. Application should be made to the Registrar, Architects' Registration Council, 68, Portland Place, London, W.1, giving the date of enlistment in the Forces, unit in which the applicant has served, and the date of his discharge.



President of the A.A.

Mr. Graham Richards Dawbarn, M.A. (CANTAB.), F.R.I.B.A., F.R.A.C.S., M.I.STRUCT.E., the new President of the Architectural Association, is a partner in Norman & Dawbarn, architects and consulting engineers. After he had been awarded the Godwin & Wimperis Bursary in 1931, he navigated 7,000 miles in the USA in a Puss Moth piloted by his late partner, Sir Nigel Norman, and reported on American aerodromes. Four years earlier he had been awarded the Henry Saxon Snell prize and reported on hospital construction in Europe. Fifty-one years old, he was educated at King's School, Canterbury, and Corpus Christi College, Cambridge, studied architecture under Professor Prior, Ernest Newton, and Arthur Keen, served in France with the Royal Fusiliers 1915-16, was invalided out in January, 1918, and was Assistant Engineer P.W.D.

Hongkong from 1921 to 1923. His executed works include Constantine Technical College, Middlesbrough, Raffles College, Singapore (with Cyril Farey), additions to Corpus Christi College, Cambridge, various civil aerodrome buildings, a permanent A.A.F. Station, reconstructions for the Tavistock Clinic, *The Lancet*, Hodder & Stoughton, and Dame Ethel Locke King. He continued in private practice throughout the war, working on aircraft repair depots, assembly sheds and military camps. Now he is engaged on housing and educational buildings. He was a member of the Business Buildings (Reconstruction) Committee, and, for eight years, examiner in Construction to the RIBA. He is a firm believer in the most intimate co-operation between architects and engineers.

Mr. Harold Conolly, A.R.I.B.A., has been appointed to the post of COUNTY ARCHITECT TO THE ESSEX COUNTY COUNCIL at a salary of £1,600 a year, rising to £2,000.

Badly damaged by bombing, the famous LA SCALA OPERA HOUSE IS NOW BEING SO SPEEDILY RE-BUILT, that it may reopen on the traditional date, December 26.

Repairs to the roof are nearly finished, while all boxes have been renovated. The rebuilding plan includes the enlargement of the stage, improvements to the lighting, and better accommodation for 50,000 costumes. The allies have allocated 20,000,000 lire to the reconstruction of the theatre, while a gift of 1,000,000 lire has come from Signor Toscanini, who may return to conduct the opening performances.

If materials and labour allow it, TWO HUNDRED AND FIFTY HUT SCHOOLS are to be built by the LCC to accommodate the 50,000 school children now returning from evacuation.

These timber hut schools are to be built on playgrounds and on the sites of bombed schools. Thirty have already been erected. So serious is the shortage of school accommodation that these schools will only partly solve the problem. It is anticipated that for several years most of London's school children will receive only part-time education. Two groups of children will be taught at each school by the same teachers in two sessions.

★★

With the termination of hostilities in Europe, the RIBA BOARD OF ARCHITECTURAL EDUCATION is arranging to resume all its normal activities.

During the war periodical meetings of the Board of Architectural Education have been held, but the main business of the Board has been transacted by the Officers of the Board. The three main Committees of the Board—the Schools Committee, the Examinations Committee, and the Prizes and Scholarships Committee will shortly resume their normal functions. The RIBA Visiting Board expects to resume its visits to Schools of Architecture next session. The competitions for the RIBA Prizes and Studentships will be re-instituted for the year 1946, the competitions being held on the usual lines during 1946, and the announcement of the Council's Deed of Award, followed by the Criticism of the Prizes, taking place in January, 1947. The Board is examining the values of the various prizes from the point of view of the increased cost of living, any accumulation of prize monies that may have taken place, and the conditions governing the competitions from the point of view of relaxations which might be made for those who have been affected by the war.

PROVIDE OPPORTUNITIES

WHAT is the future of the architectural profession to be? It seems that there is a steady move towards more and better official architects. The organization of work of the Miners' Welfare Association before the war showed clearly enough that official architecture need not be dull. Moreover, a number of County and Town appointments have recently been made with a view to achieving quality, initiative and imagination in official building, instead of mere safe respectability. All this is excellent and it is to be hoped the movement towards better and brighter official architecture will continue. Incidentally, it is to be hoped, too, that the value of good official assistants will also soon be recognized, and that the lesser lights will receive more attractive salaries.

But what of the private architect? Is he to continue only as a rarity, or will there still remain a considerable number of the profession which prefers the complete freedom of private practice to the more restricted field of service to local or government authorities? No doubt, a considerable number of private architects will remain and, however improved the conditions of official architects may become, this is as it should be, for the community will always benefit from the independence of thought and action of the private practitioner. If, however, the private architect is to be of the greatest value, then means must be found to bring to the forefront all the most promising material. This has not, as a rule, happened in the past. Some of the great architects have been "fortunate in their relations," and have thus started off in practices of their own. A certain number have found their way to the front through the chancy avenue of public competitions. A very few have been able, by a combination of hard work and a wise or fortunate choice of master, to grow into prominence through partnership as a reward for long service. These latter, it should be noticed, achieve a measure of freedom and security only rather late in their career. How many good, or even, brilliant, architects have never made their way to independent practice because of lack of opportunity can never be known, but we suspect the number has always been considerable.

Lack of opportunity could be largely overcome to the advantage not merely of the individual young architect, but to the public at large. There will soon be a vast amount of official work to be carried out—almost certainly more than can be done without the calling in of private practitioners. Could not a system be organized whereby small official works could be handed over to many young architects? Let each local authority decide to give one or more small jobs per year to young local men and women who have shown promise. If the result is a success, the dose could be repeated.

There need be no difficulty about the choice of the architects for there are a number of ways in which this could be arranged. The best students in each architectural school and in the RIBA examinations could be rewarded, say two years later,

with small private jobs. (Something of the kind was once tried with Rome scholars). Another method would be the holding of competitions open only to architects who have never done a job of their own over a certain size. Such competitions might well be held on a small scale to develop local talent. Doubtless, there are other ways of achieving the same object. We believe that some such scheme would be sure to provide a great deal of interesting work and give many young men an opportunity to start out on a successful career, which might otherwise be thwarted or at least seriously delayed by lack of opportunity. If the buildings chosen were small, the few failures which might occur would be a low price to pay for the excellent results which might be achieved. The risk, in fact, would not be great, as each fortunate recipient of a job would be sure to put his utmost energies and skill into such an opportunity.



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

ABUSE OF THE DINING ALCOVE

Architects, beware of the dining alcove. If it is incorporated in dwellings without sufficient knowledge of how people live in them, it may lead to bad conditions. This moral is dramatically revealed in an article which recently appeared in the Swedish paper *Form*. It is a report of an investigation into the habits of the home undertaken by the Svenska Slöjdföreningen and the Association of Swedish Architects under the leadership of Gotthard Johansson, who writes the article.

"I have often heard the expression," he says, "especially in radical architectural circles: 'What interests us is not how people live, but how they ought to live.' On the other hand, I have often heard in public discussions people who represent, or think they represent, the residents themselves say: 'Just give us enough space and we will use it aright. We don't need to learn how to live in a house.' Both expressions are equally wrong. In planning new houses we cannot disregard existing habits; at the same time it is unfortunately true that people do not always understand how to use their housing space in the most sensible way."

As a typical example of how bad planning is frequently the result of insufficient knowledge of how people live in their homes, he points to the dining alcove, which is now so often found in modern Swedish flats. "It originated," writes the author, "in the 1920's in the 'thick houses' that were built at that time. The depth of the houses was about 15 metres, within which space rooms fought a desperate struggle to reach the facade and the inner dark centre of the dwelling became disproportionately large. Someone then hit upon the brilliant idea of partitioning off the long narrow kitchen in the middle. This resulted in a back kitchen alcove lit by artificial light and a front dining alcove open to daylight, the two being divided off by a glass partition. Without increasing the space of the flat an extra room was obtained in this way."

"When the narrow houses appeared in the middle of the 1930's with a depth of only 8 to 10 metres, where the difficulties described above did not exist, the partitioned off kitchen was included as a matter of course, the only difference being that both the kitchen and dining alcoves were placed in front and were open to direct daylight. The type had arisen because of a problem in design, but architects and builders had come to believe that the reason for it was that people objected to eating in the kitchen."

In reality, many working class families, it was discovered, much preferred a big kitchen to a diminutive dining alcove. The habit of eating in the kitchen is deeply rooted in the Swedish working class, where it is a legacy from country districts. Moreover, with the growth of the servant problem, many middle class families now like to eat in the kitchen provided it is big enough.

Apart from this factor, it was found that the dining alcove is used for other purposes than that for which it was intended. Two, and sometimes three, people often sleep in it, school children do their homework in it, infants play in it, housewives sew in it, and it is often used as a family gathering place in the evenings. The average size of the alcoves investigated was 5.38 square metres and the smallest 3.95. More than half of them were found to fulfil four or five functions. In other words, the smallest room in the dwelling is most used.

"From the point of view of housing functionalism the dining alcove has thus proved to be a catastrophic miscalculation. It is used, it is true, to a great extent for the purpose for which it is intended, but in addition it has been put to a number of uses, for which it is not designed or intended. This, of course, is due partly to bad habits in the home, but it is also to a great extent due to the lack in the dwelling of any other suitable space for these functions. This has also helped to create yet another kind of overcrowding, about which the figures of the official statistics have nothing to say, an overcrowding based

on the technical construction of the dwelling, in its turn caused through ignorance of actual habits in the home."

As the author points out, it is self-evident from such examples as this that the attitude taken towards habits in the home must be twofold. We have to distinguish between habits which are a result of *necessity* and therefore should be accepted in the planning of new houses, and those which follow pure *routine*. So far as these are socially, hygienically and practically detrimental, they should be combated by means of information and propaganda.

In this country, as in Sweden, it is obvious, even from the example of the dining alcove alone—one among a number quoted by Mr. Johansson—that a survey of home habits should form an integral part of house planning.

POETS' CORNER

EPITAPH FOR THE LIVING

(Inspired by a letter in The Times)

Here sleepeth some who tried to waken
London from her slumber.
In prime of planning they were taken
And dumped beneath the lumber.

They tried to save the ship of State
From foundering upon The Land.
(Alas for London and for Fate,
By Blimps the ship was manned.)

But still with heart and hope we say:
Lie lightly on them, Earth, for they
Shall rise again another day
And build what they have planned.

EDWARD LEWIS

THERE'LL ALWAYS BE AN AD-MAN

Architects seldom figure in the ad-columns of the daily press, and when they do it is usually in some highly irregular position or as sufferers from some degrading sort of disease. Their well-known rôles as THINKERS (horn-rimmed spectacles and a firm mouth), and as EXPERTS (in thoughtful conversation with some intolerably reliable old craftsman over the merits of the Bumpo Building Block), are only displayed regularly in the advertisement pages of the technical press—and they fool nobody.

Welcome, therefore, to the advertisement reproduced below for its combination of sex-appeal with reasonable accuracy. Reasonable, because it contains surely one error. No, not the fact that the woman architect is particularly personable—for are not they all? Nor the *démodé* character of the plan under discussion—and God knows it's a real brute.

No, the mistake is surely in placing a cup of coffee—I beg your pardon, I'll write that again—a cup of *cocoa* upon a drawing, a fundamental prohibition in all well-run drawing offices. What ad-man can know the agony of that damp yellow ring across a half-inch detail, those biscuit crumbs dissolving wetly upon the wrinkled surface of the tracing paper? And it's no excuse to say that no amount of yellow rings could affect that plan.

ASTRAGAL

Surveys • plans • elevations • stresses and strains —it's hard on her nerves

There are plenty of problems for the woman who is an architect. They challenge her brain—and they fray her nerves; so the soothing cup of Rowntree's Cocoa comes as a boon.

She designs the houses: what of the busy housewives who live in them? Are their nerves any less jangled? By no means; the care of a home and family makes big demands on nervous energy. Amid the bustle of the day's housework, a cup of Rowntree's Cocoa soothes ragged nerves and aids digestion. Unlike so many drinks, it contains body-building protein, energy-giving carbohydrate and fat.

Rowntree's Cocoa
soothes frayed nerves



What is wrong
with this picture?
Astragal tells you
above.



LETTERS

Peter Dunham,
A.R.I.B.A., Maj. R.E.

John Gloag

Architects' Resettlement Advice Bureau

SIR,—I enclose a copy of a letter I have sent to the RIBA. I should be pleased if you could find room to publish it in the A.J., as I should like to hear the reactions of your correspondents to the suggestion therein.

Dunstable

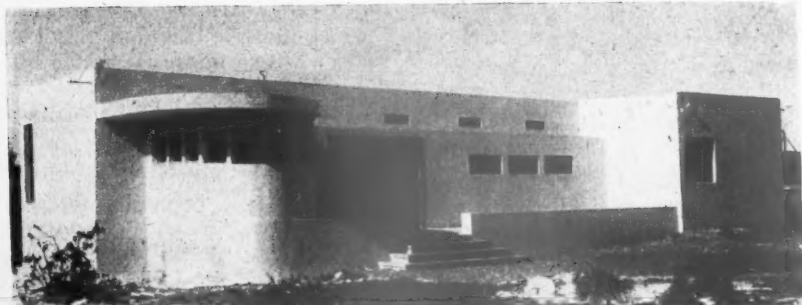
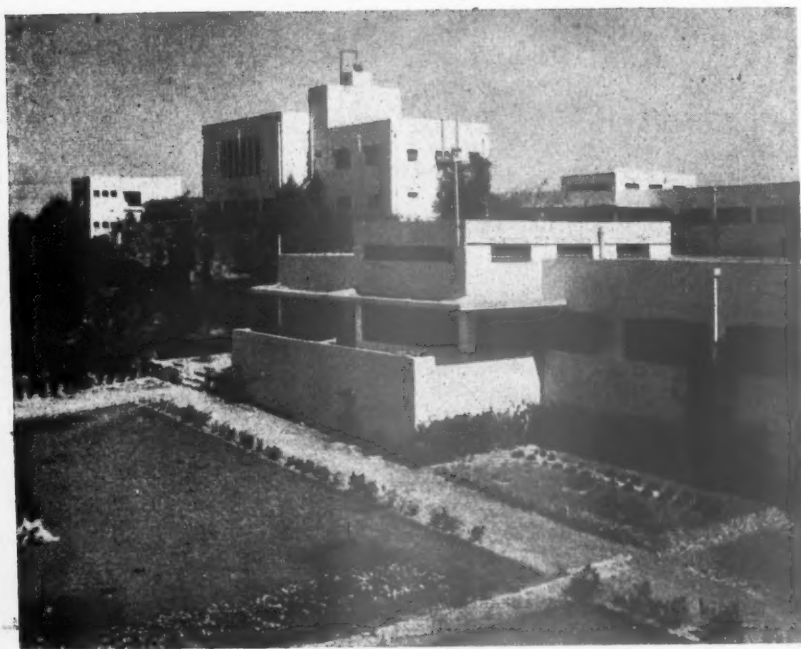
PETER DUNHAM

Below is Major Dunham's letter to the RIBA Council.

SIRS,—I suggest you set up at once an Architects' Resettlement Advice Bureau (a clumsy title I admit) for the benefit of architects who are now being released and for the many who will be released in the near future, that is if the Demobilization Committee which has kept in such close touch with the authorities concerned has done its stuff.

There are dozens of questions a returning architect wants to ask on all subjects—what books and pamphlets he ought to get—where he can see this and that—and a host of others. At present Mr. E. J. Carter is only too willing to help in every way, but he will not be able to cope and carry on his duties as librarian at the same time. Besides a properly organized affair could give so much better service.

BUILDING IN PALESTINE



A lecture on Architecture in the Jewish National Home was given at Palestine House recently, by Dr. Harry Rosenthal, when he described contemporary building developments in Palestine. Above are three of the buildings mentioned in the lecture. Top, porch of the Medical Centre, Jerusalem, by Eric Mendelsohn, established in 1939. Centre, a group of buildings at the Girls' Training Farm, Ayonoth. Below, the house of a farmer who also practises as village dentist; designed by Dr. Rosenthal.

I therefore suggest a room or part of room at the RIBA is set up, where all this interesting material can be displayed. It should include all relevant H.M. Stationery Office publications, particulars of the various schools' further architectural training schemes, recent books, information from the Development Associations (timber, zinc, etc., etc.), the Building Centre, Housing Centre, Town Planning organizations, etc. There could be either a sample of each of these publications for perusal, but much better still, there should be a stock of the more vital ones, so that they can be bought on the spot, instead of chasing round most of London for them. I suggest also the Building Research Station at Garston would probably co-operate and lay something on if approached by the RIBA. There are obviously many other things of interest that could also be included.

I'm sure the returning architect would find this most useful and strongly recommend that it should start at once. I should be pleased if you will let me know what the reactions of the appropriate committee are to this suggestion.

This bureau would of course, have to be staffed by one person, who could probably carry on to a certain extent with this normal staff duties. However, I don't care how short staffed the RIBA may be, I feel this is the first small practical service that you have been able to give to many of your members and students for the past five years or so, and it should be done at the expense of something else if necessary—shortage of staff is no excuse.

I must say, I should have thought somebody on the Council or the staff could have foreseen a need for this and that something on these lines might have been organized by now.

PETER DUNHAM

Global Topics And Astragal

SIR.—Astragal mourns the fact that the expression of his views on a variety of "global topics" has failed to inspire any action. As he was kind enough to include me under that large, vague heading, I feel compelled to admit that I derive from his well-conducted columns the continual refreshment of surprise and stimulation. To read Astragal is rather like attending a cocktail party, once a week, where you are offered various stimulants, but can never be sure that what looks like a dry Martini of the kind which reveals the genius of its composer may not turn out to be a draught as sharp as ammoniated tincture of quinine. The heady enthusiasms and fashionable patent medicines Astragal hands out are a tribute to his eager impartiality; but the recipient, though sometimes refreshed, is more often a little dazed. Does Astragal want things bigger and better, grimmer and greyer, or does he—as I suspect—want to give strong, sobering doses of common sense to a world that is half sozzled with theories? If he would set forth clearly what he stands for—apart from excellent entertainment—many more important things than a radiator in a school of architecture might be repaired, restored or replaced.

For example: if Astragal believed it was a good thing, he might advocate the restoration of the architect's sense of universal responsibility for design which he possessed in the eighteenth century and lost in the nineteenth. Here is a "global topic" worth tackling, for it is one that should engage the unremitting attention of the only profession that is trained to think logically about design.

London

JOHN GLOAG

On this
but for
Road E
Cooper

In the
but
the
tect
diffe

G.

This
north
undul
bound
propo
encir
The
havin
are a
mun
area
Ex
are

PHYSICAL PLANNING SUPPLEMENT



On this and the following pages are three estate layouts; they are not published together for the purposes of comparison but for their interesting solutions to three entirely different problems. Above is the general plan of the proposed Grange Road Estate at Letchworth by G. A. Jellicoe. On page 26 there is an estate layout on the dual access principle by Gerard K. Cooper, and on page 28 a proposal for an addition to the village of Moelfre in East Anglesey by Clough Williams-Ellis.

3 estate layouts

GRANGE ROAD LETCORTH

In this estate the road system is exact, but it is suggested that while keeping the character of the general design architects should be appointed to interpret the different sections individually.

G. A. Jellicoe

This estate comprises approximately 219 acres, and is sited north-west of Letchworth Garden City. The ground is undulating, and rises gently from south to north. It is bounded on the south and east by existing residential property, and on the north and west by the green belt that encircles Letchworth.

The plans show sites for 1,546 semi-detached houses, each having 30 ft. frontage and an average depth of 125 ft. There are also 11 detached houses. Space is allowed for community centre, school, and playing-fields, children's play areas, communal garages, gardens, and groves of trees.

Excepting the eleven referred to above, the houses shown are semi-detached. Consideration should be given to a

variation from this of at least 10 per cent. to include detached houses, terraces and, possibly, flats.

The Estate should contain a balanced proportion of Local Authority and private enterprise housing.

Community Centre. A scheme is indicated for hall, shops, church, and other buildings. This must be taken as undetermined; it is probably somewhat small, and the area which might be reserved for expansion is indicated on the drawings. "Corner shops" should be encouraged elsewhere.

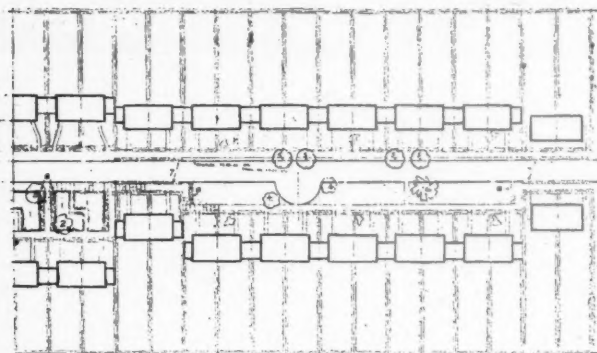
School. The buildings need not reflect the adjoining symmetry of layout. The landscape round the school should create a small world of its own, having for its purpose the elimination of boundaries.

Children's Play Area. Children might play in parts of the school playing-fields at all times. An additional area has been allocated in a part of the Estate furthest from this point.

Distributive Roads. These contain communal garages, with their wash yards away from the front, single bungalows, shelters, telephone booths, seats and other miscellaneous structures. All buildings should be linked by a curtain wall at least 6 ft. high.

Tree Planting is of the following kinds:—

(a) Indigenous hardwood trees, with underplanting along the



Left is a planting plan on a suggested layout for one of the residential roads in the Grange Road estate.

1. *Cotoneaster Horizontalis*.
2. *Arbutus Unedo* (Strawberry Tree).
3. *Prunus Amygdalus* (Almond Tree).
4. *Laburnum Vulgare* (Common Laburnum).
5. *Prunus Ceraesifera Pissadi* (Flowering Cherry).
6. *Crataegus Oxyacantha* (May Tree).
7. *Crataegus Monosyna* (Clipped thorn hedge).
8. *Ilex aquifolium* (Clipped holly hedge).

distributive roads, making these country ways.

- (b) Pollarded hardwoods adjoining community centre.
- (c) Varieties of thorn, to form groves of trees.
- (d) Individual planting of residential roads, each to be different, and based primarily on shrubs and small trees of the garden variety. Species from all over the world that grow satisfactorily may be included to give brightness, colour and interest.
- (e) Planting round School. This to include large and small trees, with an element of evergreens to give substance in the winter; trees to break the skyline and arranged like theatrical scenery, with the school as the auditorium. Foliage on the north boundary to be arranged to create shadows and fictitious perspective; surplus soil from the Estate may be dumped on this boundary to form a continuous mound.
- (f) Hedges adjoining paths leading to view-points over green belt to be approximately 8 ft. high and to act as wind-breaks.

Interpretation of the Drawings. Only the road system as shown is exact. It is hoped that architects will be appointed for different sections, and that each will interpret his section according to the general principles of the design that has been indicated. The circular road lends itself to private

enterprise development, where each house could be different from the other, the street planting for which should be well designed.

Maintenance. The country-ways may be left as rough grass land if considered desirable. The residential roads, on the other hand, should be well kept, and it would be of value to maintenance if school children could help to plant their particular trees and thus create a community pride in each residential road. The groves of trees may be left wild, and no harm need be considered done if children damage trees up to reachable height. Such an area should, however, be railed off for some years until the trees have reached reasonable maturity and are no longer liable to be damaged. All trees elsewhere will require protection during their early years of growth.

The need for protection from wind has its effect upon every part of the design; it is to be hoped, for instance, that fences between gardens may be draught proof. The general orientation of the houses is east and west.

2 DUAL ACCESS ESTATE LAYOUT

The dual access principle explained in the following article aims to save costs in the laying out of housing estates and to achieve the maximum degree of separation of different kinds of traffic. It is also suggested that this principle would enable estates to be inhabited before entrance motor roads are completed.

Gerard K. Cooper

Studies of the flow of traffic from houses on open planned Estates disclose important deficiencies in most pre-war practice.

An attempt has been made, summarized in the Traffic Flow Diagram on the facing page, to find an improved Planning Principle which will act as a basis for the design and layout of access roads.

It is suggested that the logical requirement is separation of

the various types of traffic to ensure that:

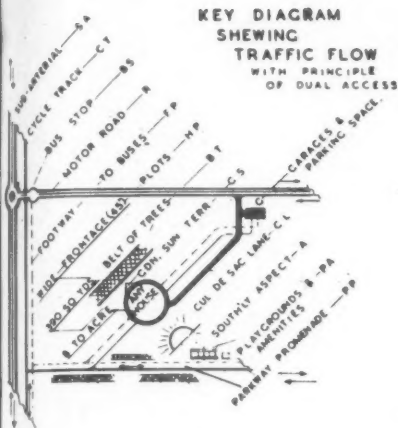
- (a) Expensive motor roads are not put down to serve as cycle tracks or footpaths.
- (b) The minimum amount of motor traffic is allowed in the vicinity of houses and fast and through traffic entirely diverted.
- (c) Inexpensive roadways are laid down past the front of houses (permitting wide frontages).
- (d) Residents and children are enabled to walk to 'buses, schools, playgrounds, and all necessary amenities without crossing motor roads.
- (e) Flexibility in the layout of plots and types of houses can be observed and provision for future developments and expansion be made.

Trials show that many variations are possible, and the illustration shows an angular "layoff" which has certain advantages in staggering the front building lines of the houses and giving a full potential daylight factor.

Orientation is obviously something separate from traffic planning principles, and whilst here the houses are shown with the garden on the North side and a Southern living

Above is principle The Plan includes cycle tracks, buses, amenities





Above is a key diagram to the dual-access principle illustrated in the drawing below. The Parkway Promenade (PP) which includes footpaths and separate two-way cycle tracks, enables residents to walk to buses, schools, playgrounds and all other amenities without crossing motor roads.

aspect, it is obvious that this can be reversed or varied as required to suit the type of house or lay of the land.

If planted tree belts are incorporated in the layout and sheltered corners can be provided with a combined sun veranda and tool-shed, the North side garden is most advantageous, but without knowing the individual house plan, this cannot be decided.

It is obvious that in planning a substantial estate utilizing the dual access principle, provision should be made for a varying size of house and garden, and in some cases no garden at all, opening directly on to "greens" which would connect at one side to the motor road and at the other to the "Parkway Promenade."

The latter would be a pleasant tree lined way, giving rapid circulation of foot and cycle traffic about the estate and, above all, a perfectly safe place for children to play or older persons to wander and gossip without the nuisance of motor traffic in the immediate vicinity.

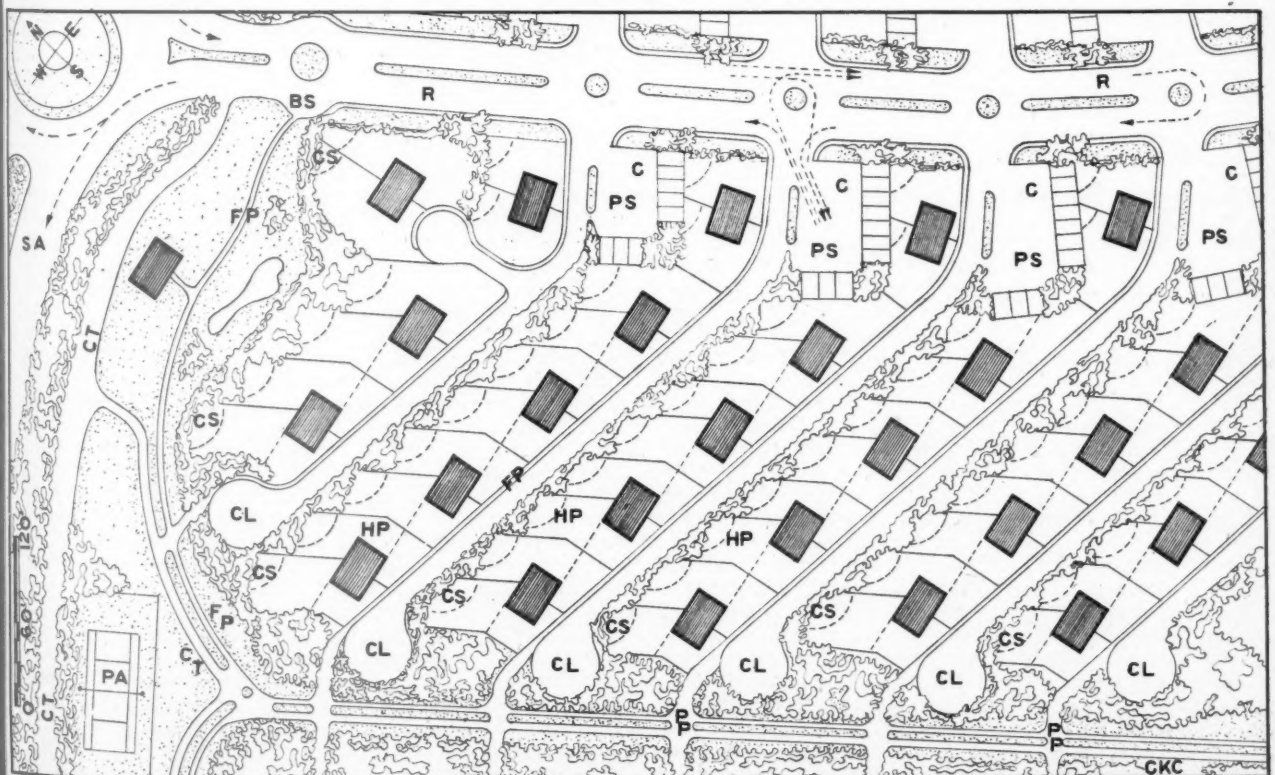
In preparing sites for houses now on open land, it is suggested that the utilization of this principle would enable estates to be made habitable and usable even before the entrance motor roads are completed, and that such motor roads can be completed in stages up to the final specification and widths.

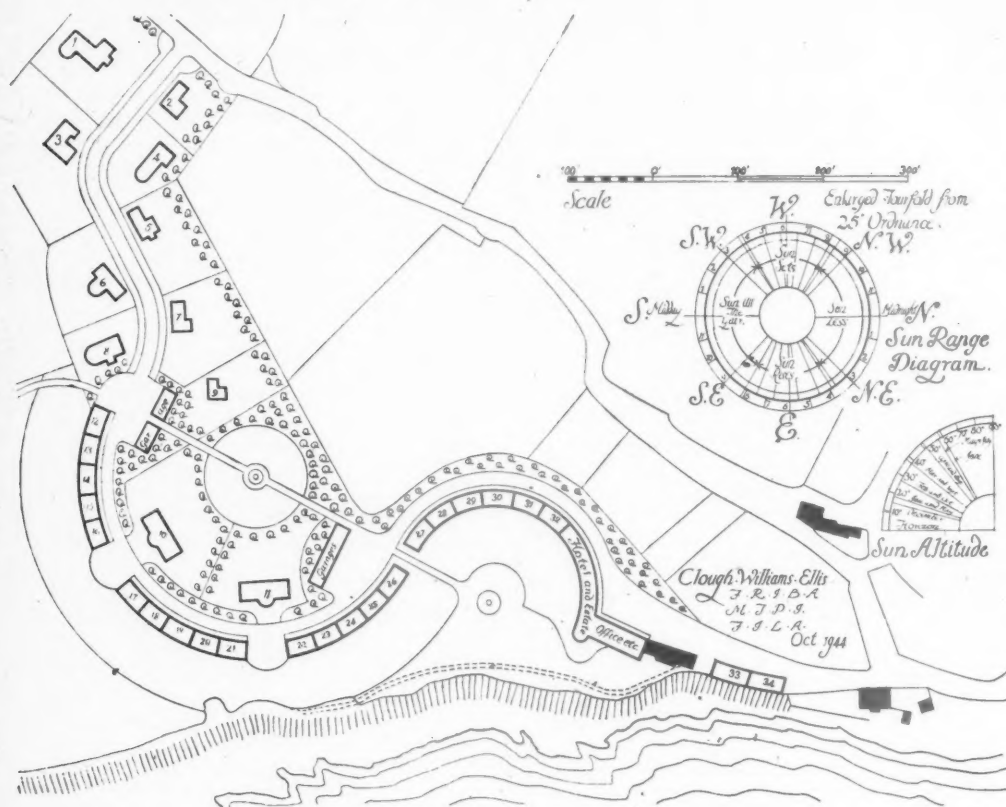
The staggered form of layout and bent "L" shaped plot with wide frontage lends itself readily to schemes for siting temporary housing.

In making a comparison of road costs, it will be seen that where a cul-de-sac lane has a length suitable for 8 pairs, or sixteen detached houses and a consequent maximum walking distance to garages of just over two hundred yards, that the length of the house plots, plus trees, determines the total frontage to the motor road and the "Parkway Promenade."

In a trial case, with 390-yard plots, this frontage came to 135 ft., and this means a 7 ft. 6 in. length of half the width of motor road and the same of the "Parkway Promenade," per house served. To this must be added the 45 ft. x 12 ft. or 14 ft. of the light specification "Lane."

On Estates where district heating is embodied the "Parkway Promenade" offers an excellent route for underground ducts.





3 MOELFRE VILLAGE EAST ANGLESEY

The estate layout above for Nant Bychan, an addition to the village of Moelfre in Anglesey, is a very individual solution to a problem which will arise in different forms on many parts of the coast. Compact, imaginative planning in this manner is the only way to avoid the destruction to the coastline by haphazard development which was so prevalent between the wars.

Clough Williams-Ellis

This development scheme, prepared at the request of a landowner, is for the southerly extension of the somewhat diffuse sea-side village of Moelfre on the East Anglesey Coast. The place began very well with a compact cove of solid, whitewashed fisherman's cottages, a few admirably appropriate new houses being added just before the last war. After that there was an unfortunate interval of go-as-you-please building, the damage, however, being confined to its hinder parts—inland.

Now discipline again. The estate has been divided into four distinct zones:—

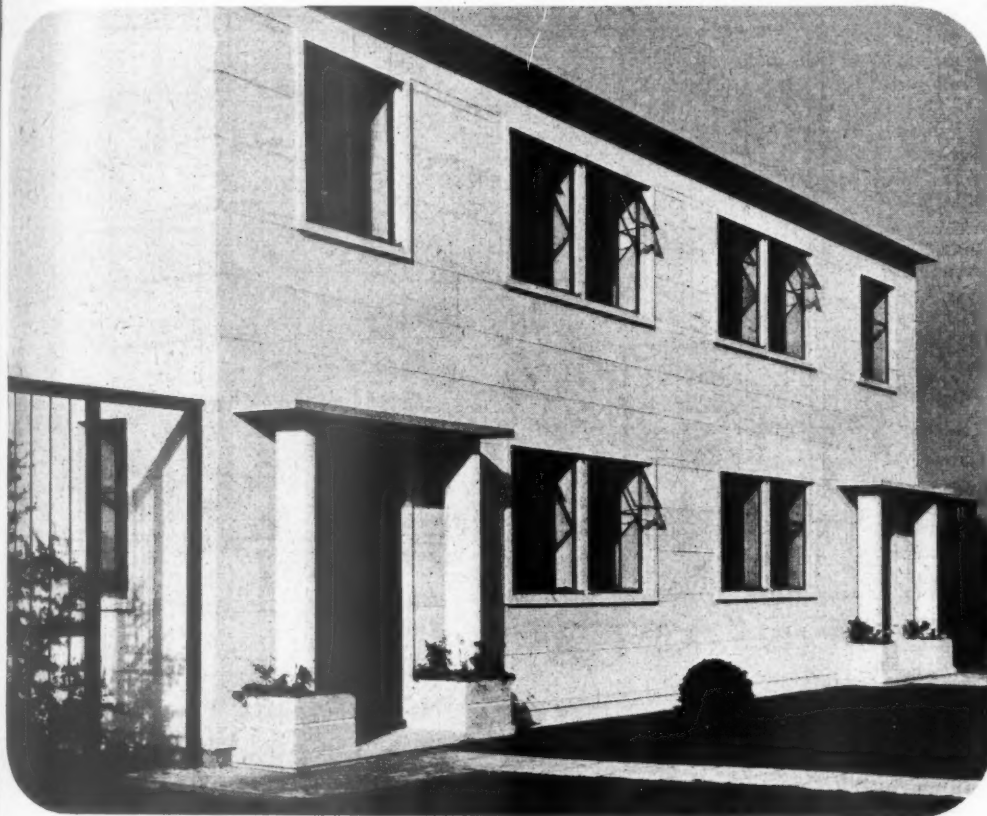
- (1) The greater parts sterilized from building in perpetuity by covenant and left as cliff-side sheep pasture as from time immemorial.
- (2) A very few specially selected and secluded and sheltered sites where a small island plot would be leased to an appreciative applicant prepared to build a cottage in the best old local Welsh tradition, so as not only to be worthy of its privileged position, but, fit, too, to contribute acceptably a new point of interest to the whole ensemble—(not marked on plan as they are beyond the area covered).
- (3) A limited number of individual leasehold sites in open order, which though back from the actual coast-line, none the less all have a sea-ward view. (Nos. 1-11 on map.)

(4) Close-order sea-front development in convex and concave crescent terraces, so securing maximum frontage and shelter and optimum prospect and aspect. It is proposed that the estate itself shall at any rate initiate this continuous development, though so long as continuity is maintained and elevations are acceptably harmonized in scale and colour, there is no intention of imposing uniformity on individual lease-holders or builders who may choose to occupy or themselves develop these sites. (Nos. 12-34 on map.)

N.B.—A detailed planting scheme both for amenity and shelter has already been prepared and will be put in hand as soon as food-production demands on the land allow of the necessary enclosures.

Planning control of all building development, particularly along the coast, and especially on such notable stretches as lie around Moelfre, will, quite rightly, be particularly strict, and any proposals that are unnecessarily diffuse and wasteful of land or sea-frontage or in any way destructive of existing amenities, whether natural or not, are unlikely to be accepted.

If Town and Country Planning is to become the positive guiding principle that it is intended to be, the merely negative attitude suggested above will soon be replaced by a more positive and directive policy, when development will not be sanctioned unless it can be clearly demonstrated that what is proposed will actually *enhance* the existing amenities and be to the general public benefit. It is in the expectation and hope of such rigorous standards and requirements that this scheme has been drafted, it being fully recognized that all reasonable measures taken to safeguard the integrity of the Anglesey coast will redound to the advantage of such of its resorts as Moelfre and hence to any carefully co-ordinated extensions thereof, as now envisaged at Nant Bychan. In short, the right thing from the point of view of public amenity and of planning generally will be found to be the best also for the long-term success and prosperity of the estate itself.



View of the front elevation of the completed pair of prototype houses built at Colnbrook. Below, a view of the kitchen looking towards the back entrance.

THE ORLIT SYSTEM OF HOUSE CONSTRUCTION

ARCHITECT: E. KATONA

GENERAL—The Orlit system is the outcome of many experiments to provide a system of construction for permanent multi-storey domestic buildings. The photographs and drawings here show a pair of demonstration houses built at Colnbrook. One or two alternative designs illustrate the flexibility of the system.

CONSTRUCTION — The construction of the carcass can be described as a precast reinforced concrete frame with cavity walls held in position by the columns of the frame. The frame has been designed for quick and foolproof erection, and both the vertical and horizontal connections of its component parts can be carried out in a very simple way. The vertical connections are formed

by bolting together steel plates cast into the ends of the columns, and the horizontal ones by pouring a small amount of concrete into the cavities at the ends of column brackets and beams, which contain the overlapping steel reinforcement. The connections are made at points where the bending stresses in the structure are low, preferably at points of contraflexure. These simple operations create monolithic frames, which provide support for floor and roof beams, and act as stiffeners to the outer walls.

The walls consist of two leaves, the outer being of special stone-faced dense concrete slabs, the inner of lightweight concrete slabs providing thermal insulation. The two leaves are connected by

metal tie-wedges and bonders. The finish of the external slabs is an integral part of the slabs



themselves, achieved by mechanical treatment of a surface of stone or marble chippings. A wide range of finishing colours and textures is possible.

Medium-sized slabs have been chosen as a useful modular unit, both for planning and fenestration. The relatively small slabs have the advantage that any expansion or contraction can be easily absorbed by the joints, especially where the inner and outer skins have to resist the very different expansions due to moisture and heat. The slabs are lightly reinforced to prevent breakage during handling.

The slabs are jointed in cement gauged lime mortar. Pointing is in the same material.

Concrete channels have been adopted for floors and roofs, but combined concrete and timber floors (as well as pitched roofs) can also be constructed. The concrete frames could be replaced by steel frames when material and skilled labour become available. Concrete, however, has a very great advantage in that no skilled labour is required for production or erection, and all the materials are immediately available in all parts of the country.

The manufacture of all constructional units can be carried out on the site, and all parts can be stored in the open before being transported to their definite location.

The material resists fire, impact and weather; it is also proof against dry rot and vermin. In short, it is of a highly permanent character.

The setting out on the site is simplified by the use of a special jig, which follows the outlines of the building. This jig fixes distances and levels of the column bases, and holds them in position during concreting of foundations. Shuttering is fixed to the jig for the accurate laying of the concrete curb. This makes all operations practically foolproof, and minimizes inaccurate setting out.

THERMAL INSULATION —

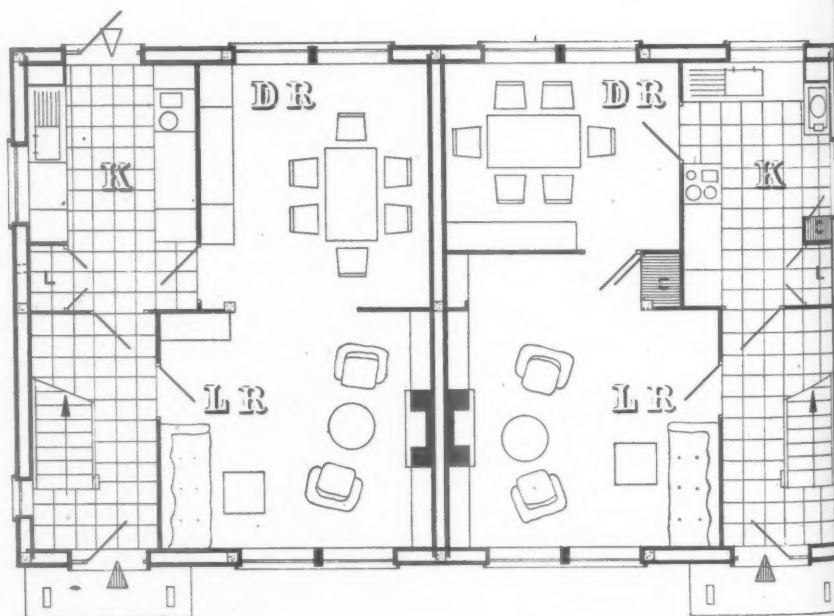
Walls: (1) Outer Skin: Orlit slabs, stone faced. Inner Skin: 2 in. foamed slag concrete slabs with $\frac{3}{8}$ -in. plaster board. $U = 0.23$ B.Th.U./sq. ft./1° F./1 hr.

(2) Outer Skin: Orlit slabs stone-faced. Inner Skin: lightweight concrete slabs faced with glass-wool on the cavity side and finished on the inside face with $\frac{1}{2}$ -in. sprayed plaster. $U = 0.18$.

(3) Comparison with brick walls plastered inside: (a) 11-in. cavity



FIRST FLOOR PLAN



GROUND FLOOR PLAN

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

wall, $U = 0.27$; (b) 9-in. wall, $U = 0.40$.

Roofs: (1) Orlit channels, $\frac{1}{2}$ -in. fibre board fixed on $1\frac{1}{2}$ -in. battens, $\frac{3}{8}$ -in. bitumastic felt, $U = 0.19$. (2) Orlit channels, $\frac{1}{2}$ -in.

fibre board fixed on $1\frac{1}{2}$ -in. battens, 2-in. foamed slag screed, $\frac{3}{8}$ -in. bitumastic felt, $U = 0.15$. (3) By comparison, the coefficient of thermal transmission of a good traditional roof is $U = 0.25$.

3-PLY ROOF

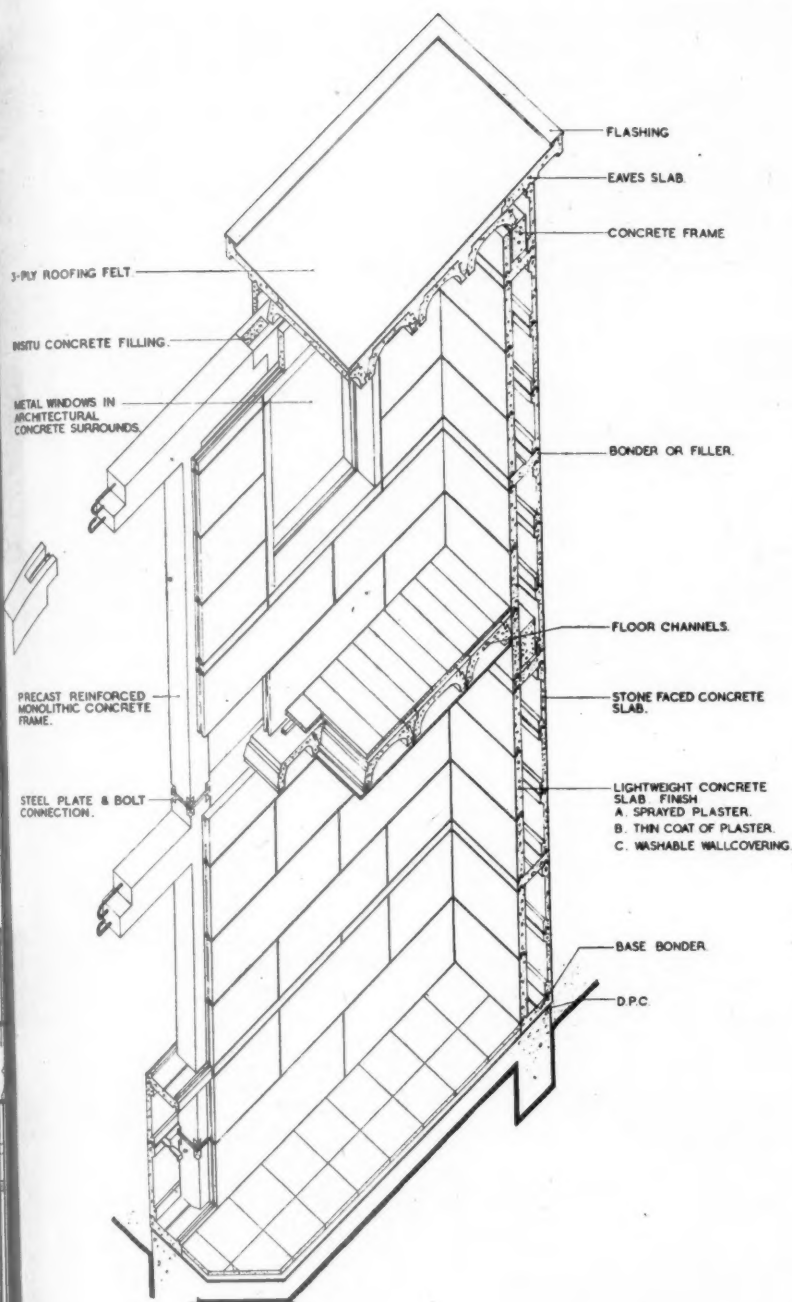
INSITU CONC

METAL WIND ARCHITECTURE CONCRETE S

PRECAST P MONOLITHIC FRAME

STEEL PL CONNECTION

anome



Isometric drawing to a scale of $\frac{1}{4}$ in. to 1 ft. 0 in., showing system of construction.

The coefficients of thermal transmission have been calculated for 15 m.p.h. wind. The Orlit wall behaves better than traditional construction under driving rain or wind. There is no infiltration of cold air, nor absorption of moisture by the outer vibrated, and practically impervious, wall slabs.

SOUND INSULATION—Owing to the weight of the materials and discontinuity of the construction at party walls, sound insulation provides no problem. The sound reduction factor of the party wall is $R \approx 56$ db. This figure complies with the recommendations by the Committee on Sound Insulation and Acoustics of Buildings. (Ministry of Works' Post-War Building Studies, No. 14.)

PLANNING—Design is governed by the 2-ft. module of the walls, and any layout should easily fit this modular pattern. The photographs show demonstration houses of 880 sq. ft. floor area, being the types built with Government subsidy, but other types can be built without difficulty. Terraced houses can also be built with the usual amendments of the end walls, and the system of construction can be used for multi-storey flats, schools, etc. Standardization lies only in the units, and not in a fixed house type. This allows extreme flexibility in design and leaves plenty of scope for the architect's imagination.

EQUIPMENT—The equipment of the demonstration houses complies with British Standards. Since it was not possible to obtain modern cookers, pre-war models had to be used in the demonstration houses.

FLOORS—Living Room: jointless Semtex Floor. Hall, Kitchen, Bath and Lavatory: Orlit tiles, Bedrooms: Columbian pine strip flooring. Ceilings: plasterboard fixed to battens. Roofing: built-up Ruberoid covering. Hot water supply: Sadia U.D.B. hot water storage heater. Refrigerator: Electrolux. Sink: Johnson stainless steel. Kitchen furniture and built-in furniture: supplied by Kandya. Other furniture: Utility, supplied by Whiteley's.

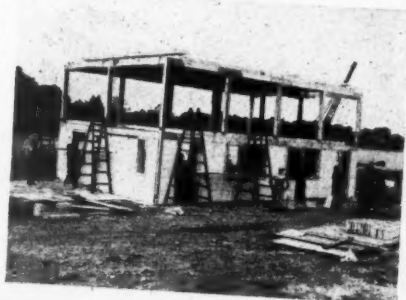
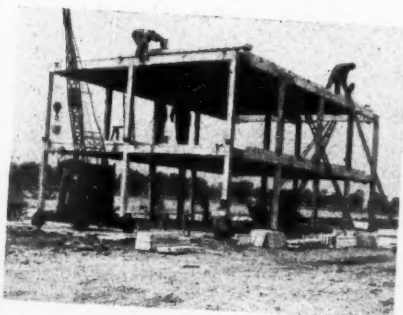
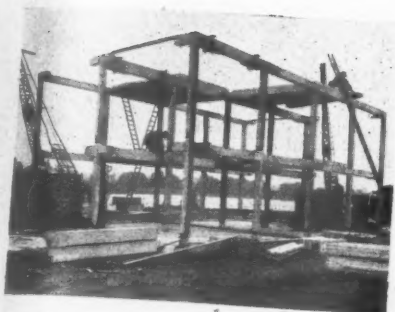
COST—It is claimed that the cost of the houses can very nearly be expressed as £1 per sq. ft. of floor area, i.e., £880 for the 880 sq. ft. type.



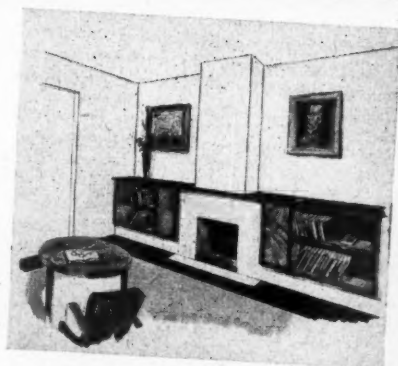
Top, base bonders in position showing an angle post with its metal connector at the joint. Left, a close-up showing the connections of members at the first floor level. The joint on the left is ready for its concrete infilling.

Top,
preca
and t
erecti

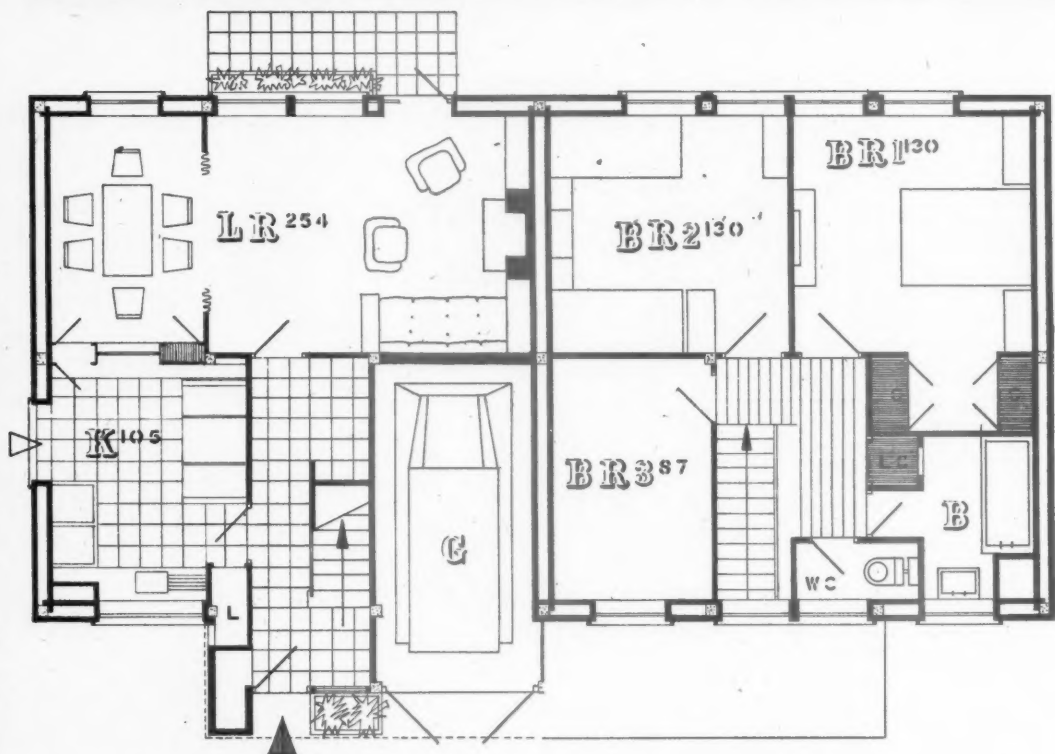
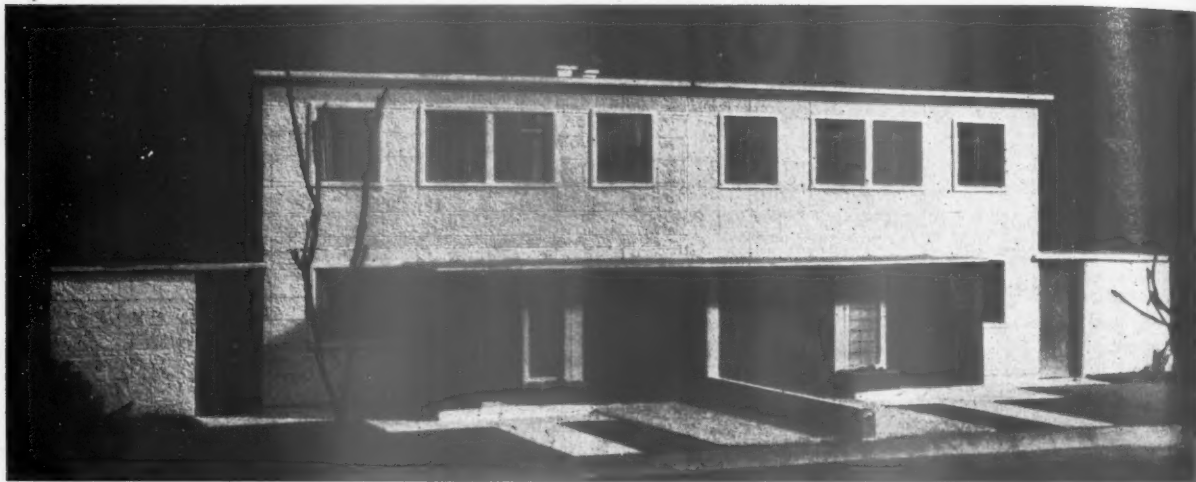
T



Top, three progress photographs taken during construction : from left to right, the precast frame in course of erection, the finished frame with floor and roof slabs in position, and walls completed up to first floor level. Below, a close-up of the walls during erection. Right, a sketch of a living room fireplace in the prototype houses.



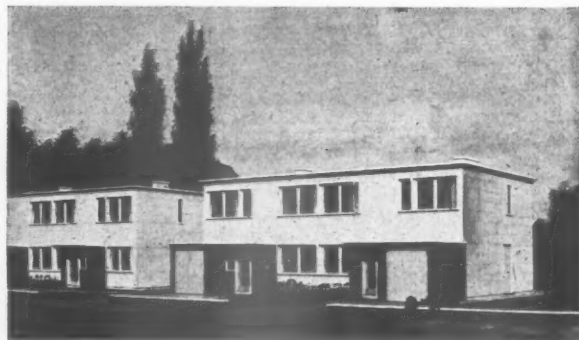
THE ORLIT SYSTEM



GROUND FLOOR PLAN

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

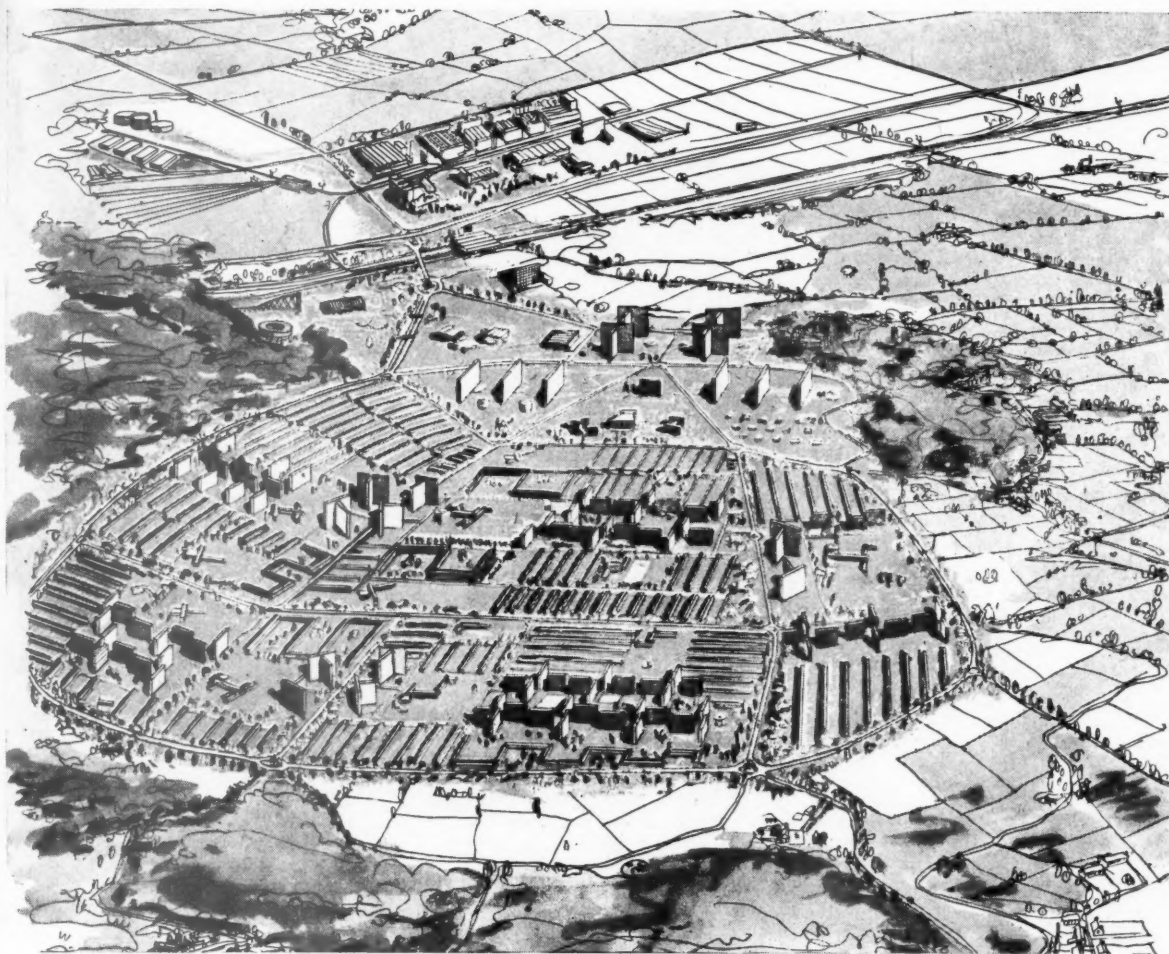
The Orlit system has wide flexibility. To illustrate this the firm has prepared a number of alternative plans and designs. Top, a model of Type 3 with garages. Below, ground and first floor plans of Type 3. Right, a perspective of Type 4, with and without garages.



THE ORLIT SYSTEM

BUILDING FOR DAYLIGHT

No. II FACTS FOR ARCHITECTURAL STUDENTS



Here is an imaginary town plan on an open sloping site with good aspect to the south, to house 50,000 people, with a medium and light industrial zone sufficiently large to employ the working population.

There are clearly defined working zones: the *industrial*, separated from the rest of the town by a narrow belt of agricultural land; and *administrative business and shopping*, sited on the spur of the hill behind the town, which also provides a visual screen between the industrial zone and the housing.

Housing is sited on the southern slope and divided into five neighbourhood units, each accommodating from 8,000 to 10,000 people. About 40% is in medium or high flat blocks and 50% in terrace or semi-detached houses. There are two nursery and infants' schools, one or two junior schools, and one senior school to each unit. By concentrating the high

and medium blocks of flats, large open spaces are provided which are interspersed with the more closely built areas of the terrace houses. The school playground between the houses gives additional open space.

Communication is by means of a ring road which circles the housing and links up with the trunk road, which passes the town, again dividing the town centre from the industrial area. A *railway* runs alongside the trunk road with branches to the industrial zones.

Community buildings, theatres and central library, are sited in the open area surrounding the administrative centre.

A small village which the town has avoided is shown at the right. By confining the housing area, the ring road gives immediate access on foot to the open countryside.

Daylight flows through this town, allowing windows to derive maximum benefits from the siting of individual buildings.

This is published by Pilkington Brothers Limited, of St. Helens, Lancashire, whose Technical Department is always available for consultation regarding the properties and uses of glass in architecture.

LONDON OFFICE AND SHOWROOMS AT 63 PICCADILLY, W.1 • TELEPHONE: REGENT 4281
where architectural students may get advice and information on all questions relating to the properties of glass and its use in building.

REMOVE RESTRICTIONS

on Planning

"The use of a local Gas Geyser system for a domestic hot water supply means greater freedom in house planning. With a centralized hot water system the draw-off taps must be carefully related to the heating source and to the hot water storage, and this greatly detracts from the flexibility of any building plan. Other considerations may, upon occasion, make it undesirable to plan compactly, but it should be remembered that an open plan embodying a central system of supply necessitating long pipe-runs entails high circulation losses. A local gas geyser system, however, imposes no planning restrictions; the geyser itself occupies no floor space and storage space for fuel and water is unnecessary. These advantages suit the present tendency in domestic designing to make use of every square foot of space. Gas geysers also allow considerable economies in flue construction and plumbing."

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

by always Specifying

EWART
GEYSERS
MULTIPOINT • BATH • SINK



II

The
all
the
kind
spec
staff
and
men

S T

2022

PION

I-BE

New

250-

ft. sp

timb

The

ft. a

centr

norm

have

High

lamin

havin

wide

24

at

mom

the c

The

and

toget

Each

three

the

toget

plant

exact

Exp

has

velop

With

perio

fabri

is no

const

secti

one

is a

M

2023

AIR

AND

(Bri

Gene

The

fin

sible

The

in o

mate

the

lines

2024

CAST

Stam

tion,

stre

In

descr

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

2022 Plant of Laminated Timber

PIONEER DESIGN IN LAMINATED WOOD I-BEAMS. S. B. Barnes. (*Engineering News Record*, February 22, 1945, pp. 250-252.) Three-hinged arches of 120 ft. span with rise of 72 ft. of laminated timber in wartime industrial plant.

The building covers an area of 248 x 740 ft. and is divided into two spans by a central row of double columns. Under normal conditions structural steel would have been used, but with steel classed as Highly Critical, three-hinged, glued laminated timber arches have been adopted, having a web 6 in. thick and flanges 14 in. wide. The depth of the section varies from 24 in. at the lower hinge to 49½ in. at the point of maximum bending moment, reducing again to 18 in. at the centre hinge in the crown of the arch. The section was made up entirely of 1 in. and 2 in. material, scarf spliced and glued together.

Each half of an arch was made up in three pieces, consisting of two flanges and the web. The three pieces were put together in a specially constructed field plant at the site. The parts had to be fitted exactly to curvature before being jointed.

Experience with these laminated arch ribs has suggested the possibility of further development of this type of construction. With improved glues of controlled setting periods and with better clamping devices fabrication costs could be reduced. There is no reason to doubt that glued laminated construction acts as a homogeneous section. The assurance that any defects in one lamination do not extend into the next is a definite structural advantage.

MATERIALS

2023 Airbricks and Gratings

AIRBRICKS AND GRATINGS (DIMENSIONS AND WORKMANSHIP). BS 493: 1945. (*British Standards Institution*, 2s. 0d.) General requirements and examples.

The first issue of this Specification was confined to cast iron airbricks, and it was possible to give requirements in some detail. The present revision has been undertaken in order to provide for the use of other materials, and it has been necessary to draft the Standard on somewhat more general lines.

2024 Cast Stone

CAST STONE. BS 1217: 1945. (*British Standards Institution*, 2s. 0d.) Definition, materials, colour and texture, strength, shrinkage, methods of testing.

In the past, manufactured stone has been described in a number of ways, such as re-

constructed stone, artificial stone, cast stone, etc. Cast stone has been adopted in the Specification. It means a building material manufactured from cement and natural aggregate, for use in a manner similar to and for the same purpose as natural building stone. It is not claimed that this Specification is complete since the liability to surface crazing has not been covered.

2025

Steel Fabric

STEEL FABRIC FOR CONCRETE REINFORCEMENT. Part A: Hard drawn steel wire fabric. Part B: Twisted steel fabric. Part C: Expanded metal (steel) fabric. BS 1221: 1945. (*British Standards Institution*, 2s. 0d.) Properties of materials, tests, tolerances, dimensions and weights.

This Specification is divided into three parts which have to be stated when the Specification is referred to. These three parts correspond to the three groups of material on the market. Although many of the clauses, test requirements, etc., of the three forms of fabric are similar, each has certain properties which differ from the others. Each part forms a complete specification for one of these classes of fabrics.

2026

Book on Quantity Surveying

MORE ADVANCED QUANTITY SURVEYING. Arthur J. Willis (*Crosby Lockwood & Son*, 1945, 25s.). Not full treatise but intended for more advanced students. Completes trilogy by same

author. Ample information in convenient sections with examples. Separate drawings in case. Taking off, editing of Bills, reproduction and reading of proofs, issuing of Bills, receipt of tenders, and examination of prices. Reduction Bills, writing of specifications.

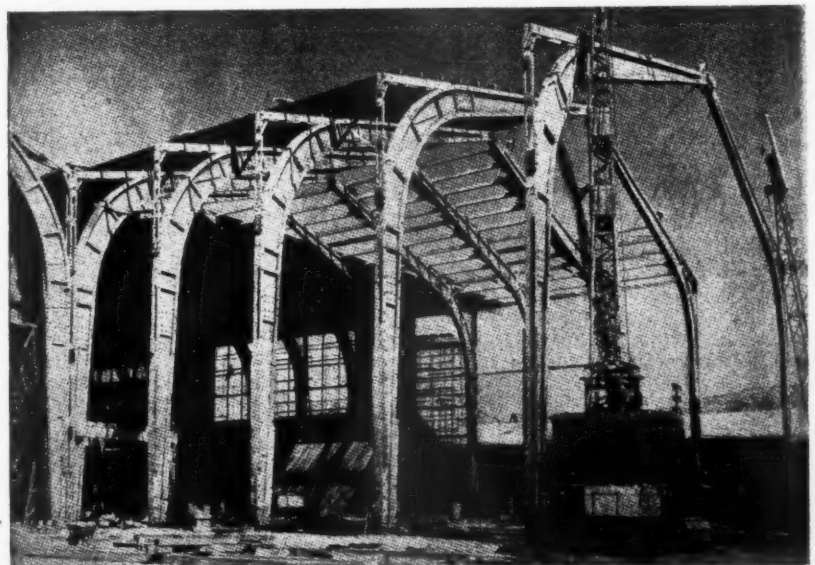
As its title implies, this book is not a full treatise on Quantity Surveying; it is intended for the more advanced students of the subject. It is best considered in relation to Mr. Willis's other works, *Elements of Quantity Surveying* and *An Example in Quantity Surveying*. (See Information Centre, Nos. 1444, April 4, 1944, and 1603, September 21, 1944.)

Elements of Quantity Surveying introduces the students to the subject and *An Example in Quantity Surveying* gives him a complete example of taking-off, abstracting and billing a Bill of Quantities. The latter was something of an innovation, as, unlike orthodox text-books, it consisted of a case containing complete drawings, dimensions, abstracts and bills resembling, as closely as possible, the actual documents to be found in a first-class Quantity Surveyor's office.

Having bridged the gap between theory and practice by inducing the student to prepare a Bill of Quantities for a complete house, it was unnecessary to follow the system further, and indeed it would have been impossible to reproduce in convenient form a similarly complete but more complicated work for the benefit of the more advanced student.

More Advanced Quantity Surveying deals with the whole subject in convenient sections, and in an extremely informative manner assists the student or junior taker-off to apply the knowledge he has already gained to serious work, at the same time stressing the necessity for accuracy, full descriptions, the proper setting out of dimensions, with side notes and side casts, the importance of which are so frequently overlooked by students.

The book contains a large number of well-chosen examples, and for this purpose Mr. Willis has adopted the method he popularized with *An Example in Quantity Surveying*—that of supplying separate drawings in a case which can be taken out and spread in front of the taker-off, thus obviating the necessity for turning back to small-



Three-hinged, glued, laminated timber arches in a USA wartime plant take the place of steel. Each half of the arch was lifted to position by a crane. See No. 2022.

scale drawings in the book itself—a process which can be extremely irritating.

Following the main sections of the book which deal primarily with taking-off, a chapter is devoted to the editing of Bills, the reproduction and reading over of proofs, the issuing of Bills to Contractors, the receipt of tenders and examination of prices, the possibility of Reduction Bills and similar matters which a Senior Surveyor must attend to before he can consider that he has completed his job.

One further chapter follows: the writing of the Specification—a job which now often falls to the lot of the Quantity Surveyor. Obviously, one chapter cannot be sufficient for the teaching of specification writing, and this the book does not set out to do, but the Student's attention is drawn to the object of the Specification, the methods of preparation most commonly adopted, and the importance of making the Specification and Bill of Quantities agree in all respects. Good examples are also shown in this section of the work.

There is no doubt that Mr. Willis's three books, taken together, constitute a carefully thought out programme of training for would-be Quantity Surveyors. In the more elementary works he avoided burdening the student with too much detail, and in this book he has avoided the common and equally irritating error of under-rating his reader's ability and knowledge. The system of providing separate drawings is one which cannot be too highly praised.

PLUMBING and Sanitation

2027 Cast Iron Gutters

CAST IRON GUTTERS, FITTINGS AND ACCESSORIES. PART I, HALF-ROUND GUTTERS. BS 1205 : Part I : 1945. (*British Standards Institution*, 2s.) Quality of material, sizes and finish. Diagrams of gutters and fittings.

Admirable as the efforts of the British Standards Institution are, it is necessary to register a protest at the production of this Specification as a Part I only. Not only is it irritating to have to refer to two documents in order to get the full Specification for Gutters, but it is also expensive since each Specification normally costs 2s. In the case of this one there are only 5½ pages of Specification, including the Foreword. Even so, it is necessary to refer to three additional BSS for full information on materials mentioned in this Specification so that to cover Half Round and Ogee Gutters fully will mean reference to at least 5 Specifications at a total cost of 10s.

2028 Cast Iron Pipes

CENTRIFUGALLY CAST (SPUN) IRON PIPES FOR WATER, GAS AND SEWAGE. BS 1211—1944. (*British Standards Institution*, 2s.) Materials, methods of test, tolerances on dimensions. Marking. Special conditions applicable to such pipes, according to methods of casting. Tables of Dimensions, weight, etc.

2029 Copper Tubes

LIGHT GAUGE COPPER TUBES FOR WATER, GAS AND SANITATION. BS 659:1944. (*British Standards Institution*, 2s.) Revision of 1936 standard. Now provides for reduction in thickness of the tubes. Two thicknesses included for larger sizes, one for water and gas and other for sanitation. Other

minor amendments and inclusion of minimum tensile strength and revised clause on chemical composition.

2030 Social Services in Factories

EMPLOYEE SERVICES. (*Brochure on Exhibition organized by the Recruitment and Training Department of the Cotton Board, Manchester.*) Little information of value to architects, but interesting as yet another example of growing demand for better conditions for factory workers. Deals with sanitary and working facilities, first-aid and rest rooms, clothing accommodation, factory seating and overall design.

ACOUSTICS and Sound Insulation

2031 Theory and Application

ACOUSTICS OF BUILDINGS. F. R. Watson. (*Building Standards Monthly*, February, 1945, p. 4.) Theory of acoustics. Public address systems. Application in the Pentagon.

This is a brief, but satisfactory review of acoustical theory and practice: It covers the general action of sound in rooms, the behaviour of the ear, the treatment of rooms to reduce noise levels (special emphasis is laid on office noises), resonances (rather unusual in a short article), and, very briefly, public address systems.

The note concludes with an outline of the acoustical problems in the Pentagon (the very large building which houses the American war departments). The chief features of treatment were these. Machinery for the air-conditioning plant was placed on the top floor, remote from the main activities, and mounted on resilient. The bus terminal ceiling was covered with slag wool, and the many hundreds of offices also had absorbent ceilings. The Lamsen tube conveyors were specially treated to reduce the explosive sound when packets left the tube. Some special treatments using convex panels were devised for a small auditorium and several meeting rooms.

Many architects have already observed how commonly the Americans now use sound absorbents, and this particular case is a good, typical example, though, of course, on a very large scale.

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.

2032 Light-weight Concrete

Q Could you give us some specifications and method of making lightweight cellular concrete with heavy aggregate, as distinct from breeze or furnace slag?

A The material you require appears to be that used in one of the Government's experimental houses at Northolt, and con-

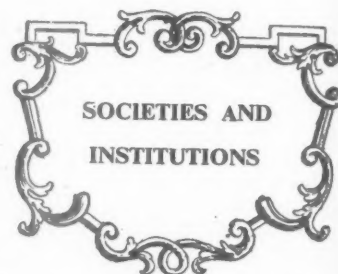
sists of a concrete made without the use of sand.

Recommendations for the use of no-fines concrete are contained in an Appendix in Post-War Building Studies No. 1, *House Construction*, published for the Ministry of Works, by HMSO, 2s. net (pp. 140-150).

2033 Patenting a Building Block

Q I have designed a lightweight concrete building block, and I would like to get it patented. Can you tell me how this can be done, please?

A To patent a lightweight concrete building block you should get in touch with a Patent Agent who would deal with the matter for you. This can be done through the Chartered Institute of Patent Agents, Staple Inn Buildings, London, W.C.1.



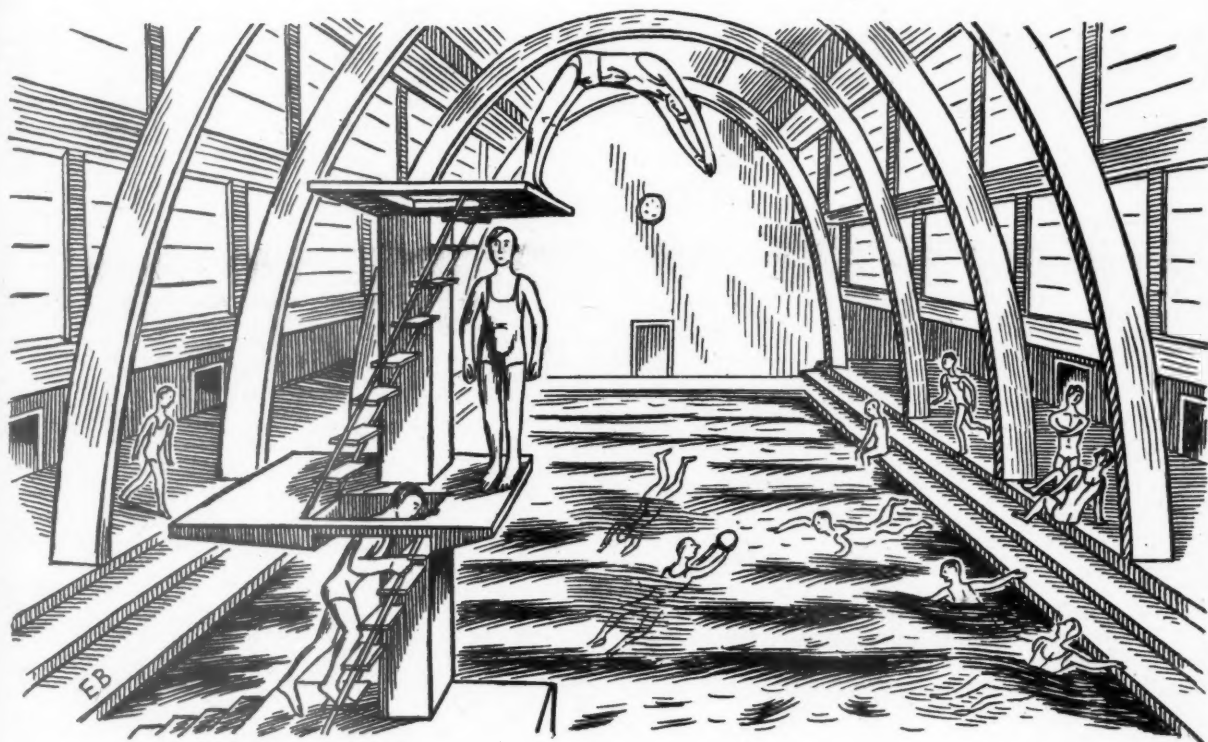
Speeches and lectures delivered before societies, as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a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

Liberator Council Conference

At Caxton Hall, Westminster. Conference to discuss the Plan of the Liberator Council (35-36, Castle Chambers, Union Street, Torquay) for INTEREST-FREE HOUSING CREDITS FOR MUNICIPAL HOUSING. The conference was attended by delegates from some 70 Councils from various parts of England, Scotland and Wales. Speakers included Eric Troward, President of the Liberator Council, W. R. Hipwell, President of the Allied Ex-Services Association and Editor of *Reveille*, W. A. Narbeth, Councillor, of Aylesbury Borough. Chairman: Wilfrid Hill.

E. Troward: It is daily becoming more obvious that the Government is frightened to proceed with an adequate housing programme, and

We need NEW BATHS



Never be it said that we Britons are lazy in our leisure! Soon we shall be asking, not only for new houses in which to play our bridge and do our crosswords, but for new baths in which to puff and blow and flap about like inadequate fish. These baths will need roofs and gutters and pipes and what not.

Which will, or should, involve zinc. For zinc is long-lived, rain-resistant and economical. Incidentally zinc is suitable for the modern building or the traditional, the site-built or the prefabricated: and every year zinc is finding new applications. It is a metal with a promising future as well as an honourable past.

new baths need ZINC

Zinc has entered into the construction of hundreds of existing swimming baths. But new techniques are being discovered and our publications describe them. If you would like to have our publication list or to know more about Zinc and the Zinc Development Association, write to the Z.D.A., Lincoln House, Turl Street, Oxford.



that the real underlying reason is not the shortage of man-power nor of building material for permanent houses, but the absence of sufficient money under peace-time conditions. We can spend £16 millions a day during wartime on material such as planes, tanks, shells and bombs, which quickly wear out or are destroyed at once, but the moment peace is declared it becomes impossible for the Government to use similar methods for financing housing under the existing financial system.

If housing is to be achieved in a nationwide programme of any value it will have to be by the introduction of new financial methods under suitable safeguards, as the old ones have completely broken down. The main reason for this is the gigantic rise of the National Debt, which from £800 millions in 1914 rose to £7,000 millions in 1919, and now stands at the enormous total of £23,000 millions, and will continue to rise till the Japanese war is over. By then it will be between £30,000 millions and £40,000 millions.

The Government is in a quandary, and fears to take the people into its confidence, preferring to put across a carefully worked out bluff to endeavour to show that the cause is shortage of man-power. The shortage of material for construction of permanent houses is also a myth.

What the Government has done is to balance its Housing Budget as far as it dares ahead (two years), and then decide how much money can be possibly raised under the old-fashioned existing methods of loans at interest. Having arrived at this figure, they have then worked backwards, and have done a little arithmetic sum, saying in effect: "We can raise £X for housing in the next two years, and no more. That sum of money will only be enough to build 220,000 permanent houses and 145,000 temporary houses and no more." They have then decided that only 50,000 men can be employed on building municipal houses,

and perhaps 50,000 on better class housing, namely, 100,000 in all, because that number of men would build all the houses for which the Government expects to be able to raise money under existing methods. In other words, it has worked the sum out backwards taking the answer that it wants, and applying the necessary labour figures to make the answer work out.

Let us content ourselves with the following remarks:—

1. Shortage of labour, even of skilled labour, did not stop us building aeroplanes or tanks, or making shells or bombs sufficient to win the war in Europe.

2. The Government did not say in 1940: "We have only 2,000 aeroplane pilots available, therefore we can only have 2,000 planes."

3. There was never any shortage of material for the building of factories, camps, the Mulberry Invasion Harbour, etc.

If the same energy, keenness, and adaptation were used in tackling the housing problem, as was constantly applied to the many problems of war production, there would be no shortage of labour or of materials.

I want to outline a little more fully the exact process we suggest to enable interest-free credits to come into circulation. One of the delegates has asked the following question: "Supposing you get this scheme going, and the Government take it up and each of the Big Five Banks agree to earmark £100 millions of their money for this purpose each year, making £500 millions a year total, would this not result in a general shortage of money for other purposes?"

The answer is: This delegate has not quite understood the nature of the plan. There is no question of earmarking money as such or of taking any of the actual money of the banks or their customers. What we suggest is the creation of a credit,

and that is a very different thing.

W. A. Narbeth: During this war the only question that arose in financial matters was, "Is this necessary?" If it was, then the money was forthcoming. Unless we are going to get an interest-free plan for housing, you representatives of Municipal Authorities will not be able to do anything. You are all up against the same thing. You are all tied down on the question of "How to afford it?" In certain years, my Council has paid out more in interest on loans than it has received in rates. I advise you to look into this matter as regards your own councils, and you will be astonished at the annual total which goes out as interest on loans.

If the only criterion during the war was necessity, then that is so now, and especially as regards housing. If the Government can do it for destruction, they can do it for construction and we must see that they do. Members of Councils here to-day must stress it to their friends on other councils and to the various Council Associations.

W. Hill: It seems to me that interest has become a habit, like cigarettes, beer, etc. and we take it for granted. History however, tells us that interest has been condemned throughout the ages, and indeed, up to the 17th century was forbidden under the laws of England. The Liberator Council is putting up a fight and is succeeding. I particularly ask you to bother your M.P.'s. It must finally be settled by legislation. Not 2 per cent. of M.P.'s know anything at all about Monetary Science.

ANNOUNCEMENT

F. Johnson, A.R.I.B.A., will be pleased to receive trade catalogues at Town Hall, Portadown, Northern Ireland.

THERE'S A RAWLPLUG



FOR EVERY SIZE OF SCREW



Whenever you use a Screw
Use a Rowlplug too!





Whenever you use a screw, use a Rowlplug too. They are invaluable for fixing electric, gas or sanitary fittings, wires, cables, machinery, fuse boxes, piping, shelves, picture rails, etc. Rowlplugs range in size from the small No. 3 for light wiring, to the large No. 28 which will withstand a direct pull of over 4 tons. Rowlplug fixing is safer, quicker and neater than any other method—and Rowlplugs are still obtainable from stock.

THE RAWLPLUG CO. LTD.,
GROMWELL ROAD, S.W.7

On the road to Victory

AS THE ROAD TO VICTORY OPENS
BEFORE OUR EYES AND THE ALLIED
FORCES FORGE AHEAD, REMEMBER
THAT THE PLANES, THE GUNS, THE
TANKS, THE LORRIES, THE SHIPS, ALL
DEPEND ON

CABLES

Throughout all the critical operations of
war, as well as for industrial and domestic
requirements, C.M.A. Cables have proved
their unfailing reliability.

C.M.A.



Regd. Trade Mark
No's. 566,585-6-7

MEMBERS OF THE CABLE MAKERS' ASSOCIATION

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

Advt. of the Cable Makers' Association, High Holborn House, 52-54 High Holborn, London, W.C.1.

'Phone: Holborn 7633



BY APPOINTMENT
TO THE LATE KING GEORGE V

BROMSGROVE GUILD LTD

ARCHITECTURAL METALWORKERS

BROMSGROVE

WORCESTERSHIRE

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



TRINIDAD LAKE ASPHALT
IS USUALLY REGARDED AS THE
STANDARD ASPHALTIC CEMENT
FOR ALL FORMS OF ASPHALT
IN ROAD AND BUILDING CON-
STRUCTION BECAUSE OF ITS
UNVARYING CONSISTENCY; it is
STANDARDISED BY NATURE

THE LIMMER & TRINIDAD
LAKE ASPHALT CO. LTD.

19, GROSVENOR PLACE, LONDON, S.W.1
SLOANE 7123



Mellowes
"ECLIPSE" PATENT GLAZING



MELLOWES & CO. LTD. SHEFFIELD
incorporating
FIELDING & SON (WERNETH) LTD. OLDHAM & LONDON

'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

-AND NOW - METROVICK WARM WHITE



THE END OF THE BEGINNING!

(with acknowledgments
to Mr. Churchill.)

The 5ft. FLUORESCENT LAMP

First the Metrovick Daylight 5 ft. Fluorescent Lamp, and now WARM-WHITE—these two lamps mark the end of the beginning—a phase of lighting which is the precursor of future illumination of utility and beauty.

Whilst the Daylight lamp is closely similar to diffused daylight, WARM-WHITE radiates a warmer glow suggestive of direct sunlight.

PRICE 24/-

METROPOLITAN-VICKERS
ELECTRICAL CO., LTD.
NUMBER ONE KINGSWAY. W.C.2

Write for leaflet SP 7103/26
on this subject.



s/q505

no query about

REINFORCEMENT BY Mc CALL'S

McCALL & CO. (SHEFFIELD) LIMITED · TEMPLEBOROUGH · SHEFFIELD and at LONDON

® S.R.B.1



Victory over What?

FEW readers will fail to recognise the famous "Winged Victory," one of the many priceless pieces of sculpture, in the Louvre, which, thanks to Pyrotenax M.I. Cables, can now be viewed during hours of darkness. So our reference is "Victory over danger of fire" for it was fear of fire which governed the Louvre authorities in their consistent refusal to instal artificial lighting—until Pyrotenax Cables made it perfectly safe.

For since Pyrotenax Cables consist solely of copper and a mineral insulant they are inherently fire-resistant. What is more to the point, they cannot cause a fire. Their tough seamless copper sheath makes any form of protection unnecessary; they will, in fact, withstand gross ill-usage without it affecting their efficiency or safety in any way. By the same token they are immune to damage by oil, water, condensation or prolonged overload. In short, they are virtually invulnerable and everlasting.

Yet they are easily bent to any shape—which they will retain and, being readily adaptable to all standard electrical fittings, are extremely simple to instal. Any form of clip, saddle or clamping device widely spaced serves to hold them in position.

Pyrotenax Cables, which are to I.E.E. regulations, are supplied with single or multiple cores in a wide range of current ratings. Before leaving the factory all cables are tested to withstand many times their designed voltage. Further information on request. Queries on specific points particularly invited.

LOW TENSION CABLING FOR LIGHTING & POWER



PYROTENAX, LTD., HEBBURN, CO. DURHAM. Telephone: Hebburn 32244/5

LONDON OFFICE: 7 Victoria St., S.W.1. 'Phone Abbey 1654

BIRMINGHAM OFFICE: 2 Moor Street. 'Phone Midland 1265

ARDOR

HOME INSULATION

HIGHEST EFFICIENCY
LOWEST COST

Ardor Aluminium Foil Insulation, for domestic use, is manufactured in rolls 12" wide and can thus be easily laid between the ceiling joists under the attic — the strategic place for thermal insulation. The living spaces of the house are thus kept warm in winter and cool in summer.

ARDOR INSULATION CO. LTD.
ST. MARY CRAY, KENT. ORPINGTON 2980

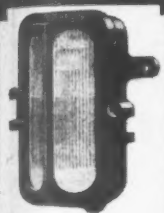
LOOKING AHEAD
TO A
BRIGHTER FUTURE
POST-WAR
RECONSTRUCTION
WILL BE JUDGED
BY
'MODERN
STANDARDS'

★ ADASTRA ★

LIGHTING STANDARDS

Send for Catalogue AJ/220
POLES LTD TYBURN ROAD
BIRMINGHAM 24

WARDLE PRISMATIC LIGHTING UNITS



No. 6232
WARDLE
PRISMATIC
Lighting Units
installed for
Lighting
GRAIN SILOS
for the Minis-
try of Food.



A typical GRAIN SILO where WARDLE

No. 6232 PRISMATIC Lighting Units are installed

Advice in all Lighting Problems is offered free and
without obligation.

Abridged Catalogue L33 will be sent on application.

WARDLE ENGINEERING CO. LTD.

OLD TRAFFORD MANCHESTER 16.

LONDON OFFICE: 34 VICTORIA STREET S.W.1.

GUARDING PROPERTY



When we describe ourselves as Specialists in fencing, we naturally include gates. Beyond living memory we have been designing, making and erecting gates of all kinds — simple field gates, workmanlike gates for factories and level-crossings, ornamental gates for parks and residences — and our reputation as craftsmen is unrivalled. Whether fencing or gates, therefore, our skill and knowledge is at your disposal



THE LION GATE,
MYCENAE, GREECE.

The noble lions guarding the gate to the prehistoric Acropolis form the most ancient sculpture extant, dating back to the 16th century B.C. Mycenae consisted of a walled citadel within a walled city and was the home of the civilisation described in the Iliad. Its wealth and power were fabulous.



founded 1797

Boulton & Paul Limited
NORWICH

Specify
and use



For quality, finish and
satisfaction when Govt.
controls relax

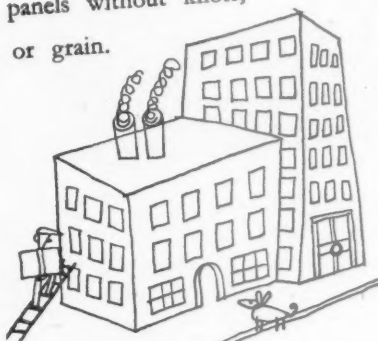


GRIFFITHS ARMOUR BRAND **PAINTS**

GRIFFITHS BROS. & CO., LONDON, LTD., MACKS ROAD, BERMONDSEY, LONDON, S.E. 16. Telephone: BER. 1151

LLOYD HARDBOARD

Timber in its most convenient form,
large panels without knots,
flaws or grain.



LLOYD BOARD

LLOYD BOARDS LIMITED
86, STRAND, LONDON, W.C. 2

MEMBERS OF THE BUILDING BOARD MANUFACTURERS ASSOCIATION

MODERN SHOPFITTING PRACTICE

For many years leading Architects have availed themselves of the Harris & Sheldon service, which is built on the sure foundations of nearly 70 years' practical experience as Makers of Shops.

Normal activities include Architectural Joinery and Metal Work for Public Buildings, Banks and Hotels, and the service is co-operative to a degree.

Production is at present dependent on controls, but the results of forward thinking and planning will be available in the near future.



Makers of Shops, Architectural Joinery & Metal Work

STAFFORD STREET

BIRMINGHAM 4



MORRIS SINGER COMPANY ARCHITECTURAL METALWORK

Bronze Founders for over 100 years

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



Another case for **PLAN COPYING**

Plan copying on Ilford Document Papers eliminates mechanical tracing and gives clean and workmanlike reproductions of the originals.

All Ilford Document Papers are capable of producing a strong black image combined with clean whites, thus giving the maximum visible contrast.

The Ilford booklets "Photography applied to Plan Copying in Engineering and other Industries" and "Ilford Document Papers: Instructions for their use and application" are available for all drawing offices.

The former makes suggestions as to the most suitable copying process for a variety of circumstances while the latter details the particular uses of the various papers.

The more important varieties of Ilford Document Papers are:

ILFORD DOCUMENT PAPERS No. 4 & 4T

for camera negatives and positives.

ILFORD DOCUMENT PAPER No. 60

for enlargements from smaller negatives.

ILFORD REFLEX DOCUMENT PAPER No. 50

for reflex copying.

ILFORD PHOTOMECHANICAL PAPER

where specially opaque negatives are required.

ILFORD

Document Papers

Made in England by

ILFORD LIMITED • ILFORD • LONDON

Metal Windows?

Yes!



RUSTPROOF METAL WINDOW COMPANY LIMITED

DEVA WORKS, SALTNEY, CHESTER. LONDON OFFICE:
9, HANOVER STREET, LONDON, W.1. TEL.: MAYFAIR 2764

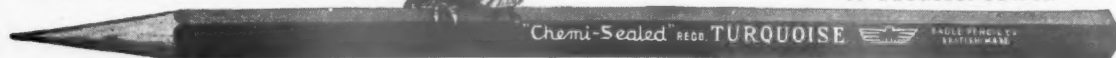
Today it's
EAGLE
WAR DRAWING

7 DEGREES: 2B to 4H



Tomorrow it will be
EAGLE Chemi-Sealed
TURQUOISE

17 DEGREES: 6B to 9H



SWIFTER! SMOOTHER! STRONGER!

MADE IN ENGLAND BY EAGLE PENCIL CO. LONDON, N. 17



TRADE MARK

ROBERT ADAMS

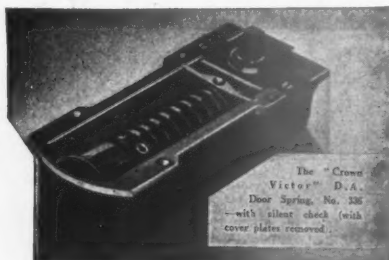
ROBERT ADAMS (VICTOR) LTD.
OF 3-5, EMERALD STREET, W.C.1

139a STAINES ROAD, HOUNSLOW

TELEPHONE: HOUNSLOW 5714

'VICTOR'
DOOR SPRINGS

NOTED FOR QUALITY AND GREAT DURABILITY



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 VI.

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

SYSTON, LEICESTER

Telephone: 86177 Syston (3 lines).



By Appointment
to H.M. the
King of Sweden.

**BATH CABINET MAKERS
AND ARTCRAFT LIMITED**

INCORPORATING BATH TIMBER SUPPLY LTD.

Furniture

Joinery

Decoration

STUDIO

HEAD OFFICE

WORKS

BATH

BATH

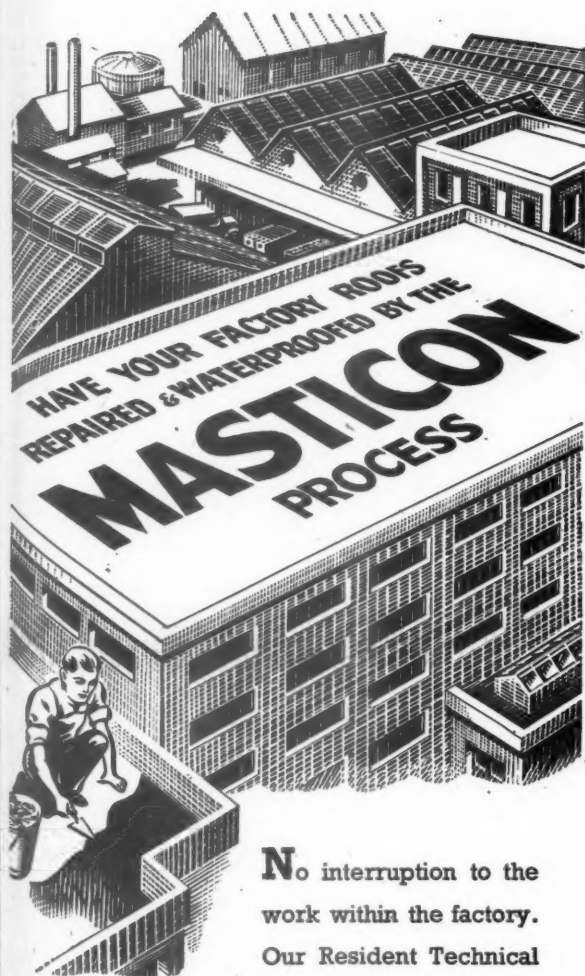
LONDON

TELEGRAMS: ART, BATH
TELEPHONES: BATH-7214-7215

LONDON ADDRESS:

4 CAVENDISH SQUARE, W.1

PHONE: LANGHAM 2860



No interruption to the work within the factory. Our Resident Technical Representative will

survey your roofs and estimates will be submitted without charge or obligation. Work will be undertaken by our local skilled staff. We have specialised in this service for 30 years. Write or telephone now for an appointment.

MASTICON ROOF SERVICE

Head Offices: Industrial Engineering Ltd.
Commonwealth House, London, W.C.1.
Telephone: Chancery 5171-2.

Heating Cooking

WE can offer to architects, builders and all those interested in planning post-war homes the accumulated experience of 35 years. We invite enquiries and will gladly co-operate in designing and making electric heating and cooking equipment to meet specified conditions. Hundreds of thousands of Belling Built-in Fires are installed in houses all over the country. New Built-in Fires for Housing Schemes and new Cookers—both vertical and horizontal—are being developed.

Electric PORTABLE & BUILT-IN FIRES

Electric COOKING EQUIPMENT

You can't beat a

Belling

Belling & Co. Ltd., Bridge Works, Enfield, Middx.
Telephone: Howard 1212

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

Size 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 work, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: 75, EATON PLACE, LONDON, S.W.1. TEL.: SLOANE 5615. 991

DURHAM RURAL DISTRICT COUNCIL.

CIVIL ENGINEERING ASSISTANT.

Applications are invited for the appointment of a Civil Engineering Assistant to the Temporary Staff in the Housing Architect's Department, at a salary of £360 per annum, rising by annual increments of £15 to £420 per annum, plus cost of living bonus (at present 24s. per week).

Applicants must hold the Testamur of the Municipal and County Engineers and/or be members of the Institute of Civil Engineers, and be well qualified to undertake large scale theodolite surveys, levels, setting out of road and sewer works, and have experience on planning schemes, with particular reference to housing.

Forms of application may be obtained from the undersigned, and should be returned to him accompanied by copies of three testimonials not later than Saturday, 28th July, 1945.

FRANK KIRBY,

Clerk to the Council.

Byland Lodge, Hawthorn Terrace,
Durham City.

3rd July, 1945.

933

COUNTY BOROUGH OF BURY.

Applications are invited for positions as Architectural Assistants, at salaries in accordance with the scale of the Lancashire and Cheshire Provincial Council: Grade "A." £230 x £15—£275; grade "B." £285 x £15—£315; grade "C." £320 x £15—£350, plus cost of living bonus, at present £59 16s. per annum.

Applications, stating details of training, qualifications and experience, together with two references, must be forwarded to the Borough Engineer and Surveyor, Bank Street, Bury, not later than Saturday, 28th July, 1945.

EDWARD S. SMITH,

Town Clerk.

Municipal Offices, Bank Street, Bury.
4th July, 1945.

931

COUNTY BOROUGH OF GREAT YARMOUTH.

TOWN PLANNING ASSISTANT.

Applications are invited for the above appointment, at a salary of £300 per annum, plus cost of living bonus, at present £59 16s.

Applicants should be good draughtsmen, and have had some experience in the preparation and administration of town planning schemes. Preference will be given to those who have passed, or are exempt from the Intermediate examination of the Joint Town Planning Examination Board. Architectural experience would be an advantage.

Applications, stating age, qualifications, details of experience, and position regarding Military service, together with copies of three testimonials, should be received by me not later than first post Monday, 23rd July, 1945.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether to their knowledge they are related to any member of, or holder of any senior office under the Council. A candidate who fails to do so will be disqualified, and, if appointed, will be liable to dismissal without notice.

FARRA CONWAY,

Town Clerk.

Town Hall, Great Yarmouth.

930

ARCHITECTURAL ASSISTANT, permanent, required by the Spalding Rural District Council. Salary £300 per annum, plus cost of living bonus (at present £59 16s. per annum). Candidate should have a sound knowledge of surveying, levelling, the preparation of drawings and quantities for housing and other architectural work. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937. Applications, stating age, qualifications, and experience, and earliest date on which duties could be commenced, if appointed, together with copies of two recent testimonials, must reach me not later than 20th July, 1945.

L. FENNELL,

Clerk of the Council.

7, The Crescent, Spalding, Lincs.

911

SCHOOLS OF TECHNOLOGY, ART AND COMMERCE, CHURCH STREET, ST. EBBE'S, OXFORD.

SCHOOL OF ARCHITECTURE.

Applications are invited from those wishing to be placed on the panel of Visiting Specialist Lecturers in the following subjects for the R.I.B.A. Final Course:—

- (1) Architectural Hygiene and Equipment of Buildings.
- (2) Professional Practice.
- (3) Specifications and Materials.
- (4) Mechanics of Architectural Construction (Intermediate), and
- (5) Structural Steelwork and Reinforced Concrete (Final).

Also in the Building Course for Quantity Surveying.

Forms of application, to be obtained from E. M. Rice, F.R.I.B.A., School of Architecture, Cowley Place, The Plain, Oxford, to whom they should be returned as soon as possible.

29th June, 1945.

924

CITY AND COUNTY OF THE CITY OF EXETER.

Applications are invited for the appointment of TEMPORARY ASSISTANT ARCHITECTS in the City Architect's Department, at salaries between £350 and £450 per annum, plus cost of living bonus, at present £59 19s. 3d.

The appointments will be subject to one calendar month's notice on either side, but successful candidates will be eligible to compete for permanent positions, which are likely to be created in due course.

Applications, stating age, qualifications, previous and present appointments, with salaries and exact designations, full details of experience, and date when available, together with copies of three recent testimonials, should be sent to F. R. Steele, F.R.I.B.A., F.S.I., A.M.T.P.I., City Architect, 2, Southernhay West, Exeter, not later than 21st July, 1945.

C. J. NEWMAN,

Town Clerk.

Town Clerk's Office, Exeter.

29th June, 1945.

920

CITY OF DURHAM.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant in the department of the City Engineer and Architect.

Salary at the rate of £350 per annum, plus war bonus (at present £62 8s.).

The post will be subject to the Local Government Superannuation Act, 1937, and will be terminable upon one month's notice on either side.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, to be forwarded to the City Engineer and Architect, Town Hall, Durham, not later than Friday 20th July, 1945.

GEORGE R. BULL,

Town Clerk.

32, Claypath, Durham.

927

- MINERS' WELFARE COMMISSION.

Applications are invited for six Architectural Assistants. Salary £360-£460 (including bonus), according to qualifications and experience.

Subject to satisfactory service, the Assistants will be eligible for appointment to the regular staff, and membership of the staff pension scheme, upon the occurrence of vacancies.

Preference will be given to candidates who are members of the R.I.B.A., and who have a good knowledge of building construction.

Forms of application may be obtained from the Establishment Officer, Miners' Welfare Commission, Ashley Court, Ashted, Surrey, to whom applications, accompanied by three recent testimonials, must be sent not later than 31st July, 1945.

BOROUGH OF OSWESTRY.

TEMPORARY ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a temporary Architectural Assistant, at a salary of £400 per annum, rising by two annual increments (subject to satisfactory service) to £450 per annum, plus current war bonus.

Candidates should be A.R.I.B.A. or have an equivalent qualification. A surveying qualification and previous experience in municipal housing schemes would be an advantage.

Applications, stating age, experience, and qualifications, together with copies of not more than three recent testimonials, must be delivered to the undersigned, marked "Temporary Architectural Assistant," on or before the 21st day of July, 1945.

H. BIRD JONES,

Town Clerk.

Guildhall, Oswestry, Shropshire.

2nd July, 1945.

921

LONDON COUNTY COUNCIL.

Required at Brixton School of Building, Ferndale Road, S.W.4, to commence in September next:—(1) TEACHER OF BUILDING in the Senior School. Applicants should be Professional Associates or Fellows of the Chartered Surveyors' Institution, and have had professional experience. Teaching experience an advantage. (2) TEACHER OF ARCHITECTURE in the Senior School.

Applicants should be Associates of the Royal Institute of British Architects, and preferably trained in a recognised school of architecture, and have professional experience. Appointments will be temporary, subject to review at any time, and in any event at the end of the war. Salaries in accordance with Burnham Scale, together with London allowance and additions for qualifications and training as applicable. Application form, T.1/40, obtainable from the Education Officer (T1), County Hall, S.E.1 (stamped addressed envelope necessary), returnable by 21st July, 1945.

BOROUGH OF MALDEN AND COOMBE.

ARCHITECTURAL ASSISTANT.

Applications are invited for the above permanent appointment, at a commencing salary of £325 per annum, rising, subject to satisfactory service, by two annual increments of £25 to a maximum of £375 per annum, plus cost of living bonus, at present amounting to £59 16s. per annum. The appointment is terminable by one month's notice on either side, and 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.

Applications from qualified Architects, giving particulars of age, experience, present and previous appointments, with salaries, accompanied by copies of not less than two recent testimonials, endorsed "Architectural Assistant," should be delivered to the undersigned not later than Monday, 30th July, 1945.

Candidates, when making application, must disclose in writing to the Town Clerk whether to their knowledge they are related to any member of or the holder of any office under the Council.

HAROLD E. BARRETT,

Town Clerk.

Municipal Offices, New Malden.

5th July, 1945.

928

CORPORATION OF LONDON.

PUBLIC HEALTH DEPARTMENT.

CITY ENGINEER'S OFFICE: TOWN PLANNING TEMPORARY ASSISTANTS

Applications are invited for Temporary Technical Assistants in the City Engineer's Office, to be engaged on the preparation of drawings, examination of applications for development, and on other work associated with town planning and reconstruction. Applicants should have passed the final examination of the Town Planning Joint Examination Board (or equivalent), and additional professional qualifications will be deemed an advantage; previous experience of statutory planning is desirable, but not essential.

Salaries offered are from £400 to £500 per annum, according to experience and qualifications, plus war bonus of £60 per annum.

Applications, giving full information as to age, qualifications and experience, accompanied by copies of not more than three recent testimonials, and endorsed "Town Planning Temporary Assistants," must be received at the office of the City Engineer, 55/61, Moorgate, E.C.2, not later than 15th August, 1945.

HARROGATE AND DISTRICT REGIONAL
PLANNING COMMITTEE.

SENIOR PLANNING ASSISTANT.

Applications are invited for the appointment of Senior Planning Assistant, at a salary of £400-£425-£450 per annum, plus cost of living bonus on the Whitley Council scale. Applicants should be Associate Members of the Town Planning Institute, and have had experience in the preparation of statutory planning schemes and the control of interim development. Preference will be given to applicants who possess also a qualification in engineering and/or architecture.

The appointment will be terminable by one month's notice on either side, and the successful candidate will be required to pass a medical examination. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937.

Applications, stating age, qualifications, and previous experience, endorsed "Planning Assistant," and accompanied by copies of not more than three recent testimonials, should be submitted to the undersigned not later than Monday, 23rd July, 1945.

Canvassing, either directly or indirectly, will disqualify.

J. M. DODDS,

Clerk to the Committee.

Municipal Offices, Harrogate.

2nd July, 1945.

928

Architectural Appointments Vacant

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

Wherever possible prospective employers are urged to give in their advertisement full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number is welcomed.

ARCHITECTURAL ASSISTANT required immediately in private practice; able to survey, level, and prepare working drawings; preferably Juniors seeking progressive job on housing, alterations, reconditioning, etc.; salary by arrangement; state age and experience. Walter Rudman & Edwards, 32, Market Place, Chippenham. 914

REQUIRED immediately, experienced Architectural Assistants. Must be first-class draughtsmen and well trained, for important large scale work. Apply, stating age, salary and experience, Herbert J. Rowe, F.R.I.B.A., Martins Bank Building, Liverpool 2. 848

ASSISTANT REQUIRED by Chartered Surveyors in London in connection with works of Alteration, Reconstruction, Conversion, etc. Permanent and progressive post. Write fully, stating age, experience and salary required, Box 889.

ARCHITECTURAL ASSISTANTS required, various grades. General practice, Housing, Industrial Design, etc. Forshaw & Greaves, 45, Trinity Street, Hanley, Stoke-on-Trent. 872

ESTIMATOR-DRAUGHTSMAN required, permanency for the right man, by a large firm of Joinery manufacturers in the Midlands. Reply, giving full particulars of previous experience, stating age and salary required, to Box 880.

ARCHITECTURAL ASSISTANT required in West Norfolk for busy practice, principally housing and small commercial buildings; man with experience in private practice and quantities preferred; salary by arrangement, according to qualifications; car owner/driver. Box 827.

ARCHITECTURAL DRAUGHTSMEN required in West Norfolk; preferably Juniors studying for R.I.B.A. examinations; must be good surveyors and car drivers; salary by arrangement. Box 828

QUALIFIED ARCHITECT required; speed and efficiency in design specifications for and supervision of industrial buildings essential; salary £600/£700, according to experience and qualifications; car and subsistence allowances additional; location at Gloucester. Box 896.

ARCHITECTURAL DRAUGHTSMEN required in Civil Engineer's Office, Westminster; state experience and salary required. Box 901.

ASSISTANT required in Architect's Department of large multiple company. Write, giving full details of qualifications, experience and salary required, to Box 925.

MESSRS. SEARLE & SEARLE, of No. 6, Old Bailey, E.C.4. have vacancy for Assistant Architect; interviews by written appointment only. 921

Architectural Appointments Wanted

Advertisements from Architectural Assistants and Students seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice.

SECRETARIAL Work wanted in London; light hours; previous architectural experience. Box 87.

R.I.B.A., 42, with over 23 years' first-class experience in private and municipal offices, at present engaged on housing, wishes to contact office where prospects are definitely good. Box 86.

ARCHITECTURAL and Stone-fitting Assistant offers free-lance services on Stone Reconstruction Projects. Box 55.

PRIVATE Work required by experienced Draughtsman; drawing and tracing contracts in architectural and reinforced concrete work carried out in very short time; moderate fees. Box 54.

CIVIL DESIGN ENGINEER seeks appointment as Staff Building Manager large works or industrial consultants; 20 years' experience factory layouts and general services, plant structures, etc.; expenditure memorandums, contract documents, etc. Box 53.

ARCHITECTURAL ASSISTANT, with many years' practice, seeks employment; London area. Box 52.

QUALIFIED, Continental Assistant, 25 years' experience, to be demobbed (group 1), requires post carrying responsibility and offering planning and supervising large scale projects. Box 51.

ARCHITECT, with wide experience, would accept post during his holidays, August 7 to September 7; London area. Offers indicating assistance required to Box 50.

ARCHITECTURAL ASSISTANT, 3 years' University training, and 2 years' practical office experience in housing, roads, restaurants, licensed premises and Town Planning, etc., requires change. Box 49.

SENIOR ASSISTANT, 31, registered Architect; 15 years' experience domestic, commercial works, cinemas, airports, etc.; used to complete control of work; good draughtsman and designer; London or South Coast areas only; salary 12 guineas per week. Box 47.

Build Homes—not merely Houses!

THIS Exhibition is designed to tell the story of housing, its problems, difficulties and possibilities.

Photographic screens show what has been done by local authorities and private enterprise in the inter-war years; while plans, models, sketches and photographs deal with post-war schemes.

Emphasis is given to the need for community development rather than the mere building of housing estates.

Full-sized, furnished rooms show modern lay-outs.

Constructional exhibits illustrate new building methods.

Post-war designs in Sanitary and hot water fittings, and electric, gas and solid fuel stoves show the improvements made in well-known models, as well as the prototypes of entirely new ideas.

NEWS OF THE WORLD
HOUSING EXHIBITION

SELFRIDGE'S BASEMENT

Open to Public July 16th, 1 p.m.

(Saturdays to 12.30 p.m.)

After that, daily 10 a.m. to 5 p.m.

JULY 16th—AUGUST 11th

ADMISSION FREE

ARCHITECTURAL ASSISTANT, 8 years' experience in the design of houses, factories, offices, brewery work, etc., from the sketch plan stage to working drawings, details and specifications and quantities, and now taking Final Examination for the A.R.I.B.A. soon, desires progressive position in office in the North-Western area; salary by arrangement. Box 48.

DESIGNER (light welded construction); interested in post-war appointment with progressive firm; has practical experience and valuable contacts. Box 8.

ARCHITECTURAL and Building Surveying Assistant; young man, age 24; P.A.S.I., M.R.San.I.; studying for the R.I.B.A. and T.P.I. examinations; 5½ years' experience; medical grade III; would prefer post in North England or Scotland. Box 44.

SENIOR ASSISTANT ARCHITECT (27), A.R.I.B.A., A.M.T.P.I., 8 years' office experience, including schools, clinics, offices, factories, houses, war damage, etc., requires appointment in London; salary required £650 p.a. Box 43.

ARCHITECT'S ASSISTANT (36) seeks new position; good draughtsman; can measure up premises, prepare working detail drawings for alterations or additions; experience in the design of schools, public halls, etc., together with all classes of domestic buildings; can survey, take levels. Box 45.

CHARLES HOWARD FROBISHER, F.R.S.A., F.R.G.S., A.F.S. (Hon.), of 61, Buslingthorpe Lane, Chapeltown Road, Leeds, 7, at present serving as an Engineer-Draughtsman on the staff of a C.R.E., wishes to contact principal prepared to pay reasonably attractive salary after demobilisation at end of this year, in return for first-class Architectural and Surveying work, executed with rapid precision and cheerfulness. 46

EXPERIENCED qualified Senior Architect, now teaching, offers part-time services during August in London area. Private Architects only. Box 39.

Other Appointments Vacant

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

ARTIST-DESIGNER required for product styling; must have flair for presentation and draughtsmanship; technical and inventive ingenuity an advantage; good position with industrial design team. Write Sir William Crawford & Partners, Ltd., 233, High Holborn, W.C.1. 834

COMPETENT Designer and Draughtsman (Senior and Junior) required by London firm of Decorators and Furnishers, having knowledge of traditional styles, with a flair for contemporary work; one with hotel and ship experience preferred; good prospects and permanency. Box 894.

Other Appointments Wanted

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

PROFESSIONAL Designer for reinforced concrete and modern building construction, with wide experience, seeks appointment or partnership with architect's office. Box 923.

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: Gascoignes (Reading), Ltd., Berkeley Avenue, Reading.

Tenders

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

Tenders are invited for the erection of 50 Non-parlour type, Three-Bedroom Houses, in blocks of two and four, on a site at Hunderton, Hereford. Plans and Specification and form of Tender may be had on application to the undersigned.

A deposit of £2 2s. must accompany all applications, which will be returned on receipt of a bona fide tender and upon return of the plans and specification.

The last day for the receipt of tenders is 23rd July, 1945.

T. B. FELTHAM, Town Clerk.

Town Hall, Hereford. 2nd July, 1945. 922

Property for Sale

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

HIGHBURY, N.5 (Aberdeen Park); attractive residential Site; 130 ft. frontage; area 29,100 sq. ft.; all services connected; part leased unexpired term of 3 years at ground rent £14 p.a.; freehold, £5,000. Box 916.

COMMERCIAL GARAGE PROPERTY, Wick Road, Hackney; extensive Site, and partly W.D. buildings let to April, 1946, at £200 p.a.; inclusive (rent reduced 50 per cent. on a/c. W.D.); suit builders, contractors, transport or storage depot; freehold, £6,500. Box 915.

OFF KINGSWAY, W.C.2, freehold Site for 2 Shops, Offices and Showrooms; frontages on two streets total 62 ft.; area 7,750 sq. ft.; now producing £125 p.a. on quarterly tenancy; price £18,500, or would let on Building Lease. Box 919.

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. 51, Gt. Marlborough St., W.1. Gerrard 4223-4224.

F. J. BAYNES, LTD., established over 100 years. Heating, Ventilating and Sanitary Engineers. 99/101, St. Paul's Road, N.1. Cannonbury 2552. 584

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

FENCING FOR ALL PURPOSES—Supplied and erected; established 100 years. Parker, Winder & Achurch, Ltd., 80, Broad Street, Birmingham, 1. 975

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

YOUR HOUSE.

An Exhibition of Modern Building Methods applied to Houses to suit individual needs. H&A's, 196, Tottenham Court Road, W.1. 744

CONSIDERABLE Surplus Funds Available at low interest rates in sums of not less than £10,000 for industrial securities. Enquiries entertained only from principals or their accredited Solicitors or Agents. Chas. B. Buxton, Ltd., Local Authorities Loans Brokers, 9, Clements Lane, Lombard Street, London, E.C.4. 676

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.

TWO LIGHT ROOMS, and share dead filing room, available 3rd floor, Bedford Row; £150, inclusive. 'Phone: HOL. 2405. 920

A PROVISIONAL Firm of Quantity Surveyors, with experienced staff and well known in London, offers their services, in measuring on site, taking off, working up, preparing Bills of Quantities and Accounts. Box 917.

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 by Correspondence and Personal in Studio 115, Gower St., London, W.C.1. Telephone: EUSTON 3305 and 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, 151, West Heath Road, N.W. 3. Tel.: SPE 5319. 475

BRAITHWAITE

PRESSED STEEL TANKS

BRAITHWAITE & Co., ENGINEERS Ltd

London Office: Temporary address:

35, KINGS HOUSE, HAYMARKET, S.W.1

Telephone: WHI 3993. Telegrams: Bromkirk-Phone

STEELWORK BY

SHARMAN

& SONS

SWAN WORKS, HANWORTH, MIDDX.

'Phone:

Falham 3007. Sunbury 2367.

'Grams:

"Sharmar," Falham.

MODELS

ESTAB.
1883

John B. THORP

BY

FOR 98 GRAYS INN ROAD,

TOWN PLANNING

PUBLIC BUILDINGS

ESTATES AND

INTERIORS

W.C.1

TELEPHONE:

HOLBORN 1011

ELLISON Starters

For ELECTRIC MOTORS—Give Unfailing Service

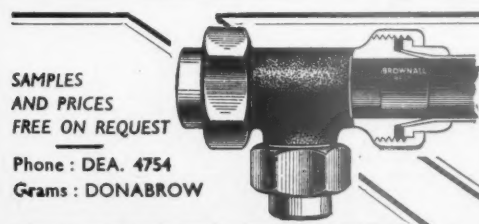
Made by GEORGE ELLISON LIMITED, Perry Barr, Birmingham, 22B

WHITE FACING BRICKS

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS
BULWELL 78237-8

M. McCARTHY & SONS, LTD
BULWELL • NOTTINGHAM



SAMPLES
AND PRICES
FREE ON REQUEST

Phone: DEA. 4754

Grams: DONABROW

THE BROWNALL JOINT

FOR LIGHT GAUGE COPPER PIPES

Extensively used on Government and Municipal buildings, Hospitals, Baths, Hotels, Factories and Housing Estates. Brownall Joints withstand every scientific and practical test. Expert technical service for Architects always available.

DONALD BROWN (Brownall) LTD. Lower Moss Lane, MANCHESTER 15

GREENWOOD'S



"DIFUSAIRE"
DISTRIBUTORS
FOR WALLS AND
CEILINGS

"DIFUSEX"
FOR WALLS & DOORS.
HINGED OR SLIDING
REGISTERS

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LIMITED

SPECIALISTS IN THE DESIGN AND MANUFACTURE OF VENTILATORS AND COMPLETE VENTILATING UNITS

BEACON HOUSE, KINGSWAY, LONDON, W.C.2.

Telephone: CHANCERY 8315/6/7

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 (Govt. 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.

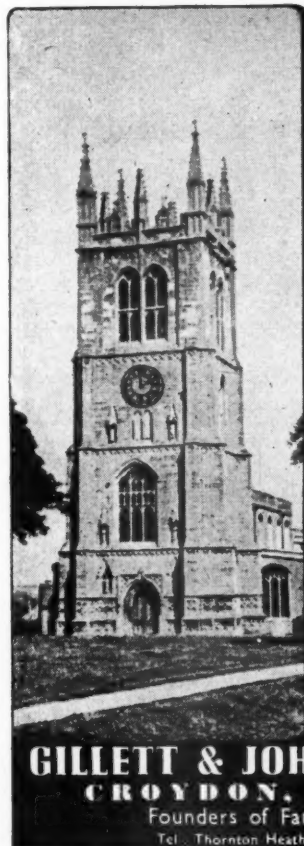
Watch these numbers grow

6203

Week by week the number of buildings restored by us continues to grow.

Consult us about your factory TO-DAY!

W & M NEGUS LTD
Station Works, KING JAMES ST, S.E.1. (WAT.5474)



TOWER CLOCKS and BELLS

CLOCKS for
COUNTY HALLS
CIVIC CENTRES
CHURCHES, Etc.

*Ringling Peals, Chimes
and Carillons*

GILLETT & JOHNSTON LTD.
CROYDON, SURREY
Founders of Famous Bells
Tel.: Thornton Heath 3221 (5 lines)

*"Silence is the element in which
great things fashion themselves together."*

CARLYLE.

BURGESS "PERFOTILE"

The perfect tile for
architectural acoustic correction.

Full particulars from the manufacturers:—

BURGESS PRODUCTS COMPANY LTD.
ACOUSTICAL ENGINEERS AND CONSULTANTS . HINCKLEY, LEICS.

*PHONE: Hinckley 700 (3 lines).

*GRAMS: Burducto, Hinckley.

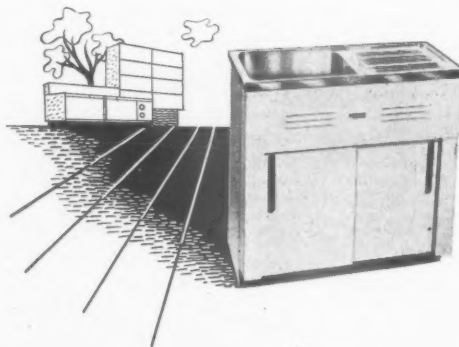
Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Accorington Brick Co.	xxxvi	Ewart & Son, Ltd.	xlii	Newalls Insulation Co., Ltd.	ix
Acme Wringers, Ltd.	xxxvi	Farmer, S. W., & Son, Ltd.	xxxvii	Newman, Wm., & Sons, Ltd.	ix
Acoustical Manufacturing Co., Ltd.	liv	Forrest, George, & Son, Ltd.	xxxvii	News of the World, Ltd.	ix
Adams, Robt. (Victor), Ltd.	liv	Franki Compressed Pile Co., Ltd.	xxxvii	North British Rubber Co., Ltd.	ix
Air Conditioning & Engineering, Ltd.	liv	Freeman, Joseph, Sons & Co., Ltd.	xxxvii	Orlit, Ltd.	ix
Allied Ironfounders, Ltd.	xiv	Fullwood & Bland, Ltd., R. J.	xxxvii	Parsons, C. H., Ltd.	ix
Anderson, C. F., & Sons, Ltd.	xxxvii	Fyvie Gate Co., Ltd.	xxxvii	Patridge, Wilson & Co., Ltd., J.	xii
Anderson, D., & Son, Ltd.	xxxvii	General Cable Mfg. Co., Ltd.	xxxvii	Pilkington Bros., Ltd.	xii
Ardor Insulation Co., Ltd.	xxxvii	Gillett & Johnston, Ltd.	xxxvii	Physi Formwork, Ltd.	xii
Arens Controls, Ltd.	xxxvii	Gray, J. W., & Son, Ltd.	xxxvii	Poles, Ltd.	xii
Bakelite, Ltd.	xxxvii	Greenwoods & Airvac Ventilating Co.	xxxvii	Pressed Steel Co., Ltd.	xii
Banister, Walton & Co., Ltd.	xxxvii	Griffiths Bros. & Co. (London), Ltd.	xxxvii	Prodorite, Ltd.	xii
Bartlett, G. F. E., & Son, Ltd.	xxxvii	Guest, Keen & Nettlefolds, Ltd.	xxxvii	Pyrotenax, Ltd.	xii
Bath Cabinet Makers & Artcraft, Ltd.	xxxvii	Haden, G. N., & Sons, Ltd.	xxxvii	Radiation, Ltd.	xii
Belling & Co., Ltd.	xxxvii	Hammond & Champness, Ltd.	xxxvii	Range Boilers, Ltd.	xii
Benham & Sons, Ltd.	xxxvii	Harris & Sheldon, Ltd.	xxxvii	Rawplug, Ltd.	xii
Benjamin Electric, Ltd., The	xxxvii	Harvey, G. A., & Co. (London), Ltd.	xxxvii	Restall, Fredk., Ltd.	xii
Birmetals, Ltd.	xxxvii	Henderson, P. C., Ltd.	xxxvii	Rheostatic, The Co., Ltd.	xii
Blackburn, Thomas, & Sons, Ltd.	xxxvii	Henleys Telegraph Works Co., Ltd., The	xxxvii	Ross, S. Grahame, Ltd.	xii
Bolton Gate Co., Ltd.	xxxvii	Hiduminium Applications, Ltd.	xxxvii	Ruberoid Co., Ltd.	xii
Booth, John, & Sons (Bolton), Ltd.	xxxvii	Hope, Henry, & Sons, Ltd.	xxxvii	Rubery, Owen & Co., Ltd.	xii
Boulton & Paul, Ltd.	xxxvii	Horseley Bridge & Thomas Pigott, Ltd.	xxxvii	Rustproof Metal Window Co., Ltd.	xii
Braby, Fredk., & Co., Ltd.	xxxvii	Ideal Boilers & Radiators, Ltd.	xxxvii	Sadd, John, & Sons, Ltd.	xii
Braithwaite & Co., Engineers, Ltd.	xxxvii	Ilford, Ltd.	xxxvii	Sankey, J. H., & Son, Ltd.	xii
Bratt Colbran, Ltd.	xxxvii	Imperial Chemical Industries, Ltd.	xxxvii	Sankey, Joseph, & Sons, Ltd.	xii
Briggs, William & Sons, Ltd.	xxxvii	Industrial Engineering, Ltd.	xxxvii	Saunders & Taylor, Ltd.	xii
Brightside Foundry, Ltd.	xxxvii	International Correspondence Schools	xxxvii	Scaffolding (Gt. Britain), Ltd.	xii
British Aluminium Co., Ltd.	xxxvii	Interoven Stove Co., Ltd.	xxxvii	Sharman & Sons	xii
British Electrical Development Assoc.	xxxvii	Isteg Steel Products, Ltd.	xxxvii	Siebert Fireproof Floor Co., Ltd.	xii
British Reinforced Concrete Engineering Co., Ltd.	xxxvii	Jicwood, Ltd.	xxxvii	Silicate Paint Co., The	xii
British Trane Co., Ltd.	xxxvii	Kautex Plastics, Ltd.	xxxvii	Smiths' Fireproof Floors, Ltd.	xii
Bromsgrove Guild, Ltd.	xxxvii	Kerner-Greenwood & Co., Ltd.	xxxvii	Smith, Henry (Constructional Engineers)	xii
Brown, Donald (Brownal), Ltd.	xxxvii	Ketton Portland Cement Works	xxxvii	Stainless Steel Sink Co., Ltd.	xii
Burgess Products, Ltd.	xxxvii	King, Geo. W., Ltd.	xxxvii	Stelcon (Industrial Floors), Ltd.	xii
Cable Makers' Assoc.	xxxvii	Lacrinoid Products, Ltd.	xxxvii	Sutcliffe Speakman & Co., Ltd.	xii
Carrier Engineering Co., Ltd.	xxxvii	Laing, John, & Co.	xxxvii	Tarmac, Ltd.	xii
Clarke & Vigilant Sprinklers, Ltd.	xxxvii	Lead Industries Development Council	xxxvii	Thompson Beacon Windows, Ltd., John Thorp, John B.	xii
Colt Ventilation, Ltd.	xxxvii	Limmer & Trinidad Lake Asphalt Co.	xxxvii	Tretol, Ltd.	xii
Copper Development Assoc.	xxxvii	Lloyd Boards, Ltd.	xxxvii	Trussed Concrete Steel Co., Ltd.	xii
Crittall Manufacturing Co., Ltd.	xxxvii	Lockerbie & Wilkinson (Tipton), Ltd.	xxxvii	Tubular Furniture, Ltd.	xii
Croft Granite, Brick & Concrete Co., Ltd.	xxxvii	London Brick Co., Ltd.	xxxvii	Tudor Accumulator Co., Ltd.	xii
Dale, John, Ltd.	xxxvii	Main, R. & A., Ltd.	xxxvii	Twistell Reinforcement, Ltd.	xii
Davidson, C., & Sons, Ltd.	xxxvii	Mallinson, William, & Sons, Ltd.	xxxvii	Underfed Stoker Makers' Assoc.	xii
Docker Brothers	xxxvii	Matthews & Yates, Ltd.	xxxvii	Uni-Seco Structures, Ltd.	xii
Dreadnought Fireproof Doors (1930), Ltd.	xxxvii	McArd, Robert, & Co., Ltd.	xxxvii	United Ebonite & Lorival, Ltd.	xii
Dunlop Rubber Co., Ltd.	xxxvii	McCall & Co. (Sheffield), Ltd.	xxxvii	United Steel Companies, Ltd.	xii
Eagle Pencil Co.	xxxvii	McCarthy, M., & Sons, Ltd.	xxxvii	Universal Asbestos Mfg. Co., Ltd.	xii
Easiscene-Porcelain Enamel (1938), Ltd.	xxxvii	McNeill, F., & Co., Ltd.	xxxvii	Venesta, Ltd.	xii
Electrolux, Ltd.	xxxvii	Mellowes, & Co., Ltd.	xxxvii	Walker, Crosswell & Co., Ltd.	xii
Ellison, George, Ltd.	xxxvii	Metropolitan-Vickers Electrical Co.	xxxvii	Wardle Engineering Co., Ltd.	xii
English Joinery Manufacturers' Assoc.	xxxvii	Midland Electric Mfg. Co., Ltd.	xxxvii	Warerite, Ltd.	xii
En-Tout-Cas Co., Ltd.	xxxvii	Midland Woodworking Co., Ltd.	xxxvii	Youngstown Kitchens	xii
Etchells, Congdon & Muir, Ltd.	xxxvii	Mills Scaffolding Co., Ltd.	xxxvii	Zinc Alloy Rust-Proofing Co., Ltd.	xii
		Morris Singer Co.	xxxvii	Zinc Development Assoc.	xii
		Negus, W. & M., Ltd.	xxxvii		

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

Throughout the war, work has gone on to improve the "Nevastane" Stainless Steel Sink. Designed for greatest efficiency and ease it is pleasing to look upon. Architects specify it. Housewives dream of it. Easily cleaned, bright, attractive, it makes the dreary drudgery of kitchen chores a delight. No modern kitchen is complete without its appropriate "Nevastane" Stainless Steel Sink. You can obtain full information direct from the manufacturers and patentees.

Brave new world.



THE FIRST NAME IN SINKS
NEVASTANE
STAINLESS STEEL SINKS

Manufacturers and Patentees

BENHAM AND SONS LIMITED
66 Wigmore Street, London, W.1
Telephone: Welbeck 9253 Telegrams: Benham, Wasdo, London

AGE
ii
lvii
xix
iv
xli
i
v
i
xlii
xlii
xxiv
xxiv
xxvi
xi
liii
xxii
lviii
xxiii
xxv
lviii
vi
xxv
ii
vii
xliii