

# THROUGHOUT WARS and PEACE to 1945...

## COLT SHINGLES remain the trouble free roof of the future.



1895



PROGRESS



TO

Fire retardant.  
Gale proof.  
Permanent  
Rot proof.  
Vermin proof  
Beauty in colour  
and appearance.  
Perfect insulation.

Twenty times lighter than tiles.  
Saves 40% roof timber.  
One inch Cedar equals 11 in. concrete  
in resistance to heat or cold.  
Economical in cost and fixing.  
Long trouble-free life.



1939.

Used for roofing houses, schools, garages, airport buildings, factories, agricultural buildings, and other permanent structures. We quote for supply and fixing if required.

In Peace, Colt Shingles will be specified more widely than ever for their beauty, long life, high insulation value and weatherproof qualities.

Copies of our Shingle Handbook containing 110 photographs and full technical information on request. Write to W. H. Colt (London) Ltd., Surbiton, Surrey. Telephone: Elmbridge 6511 (4 lines).

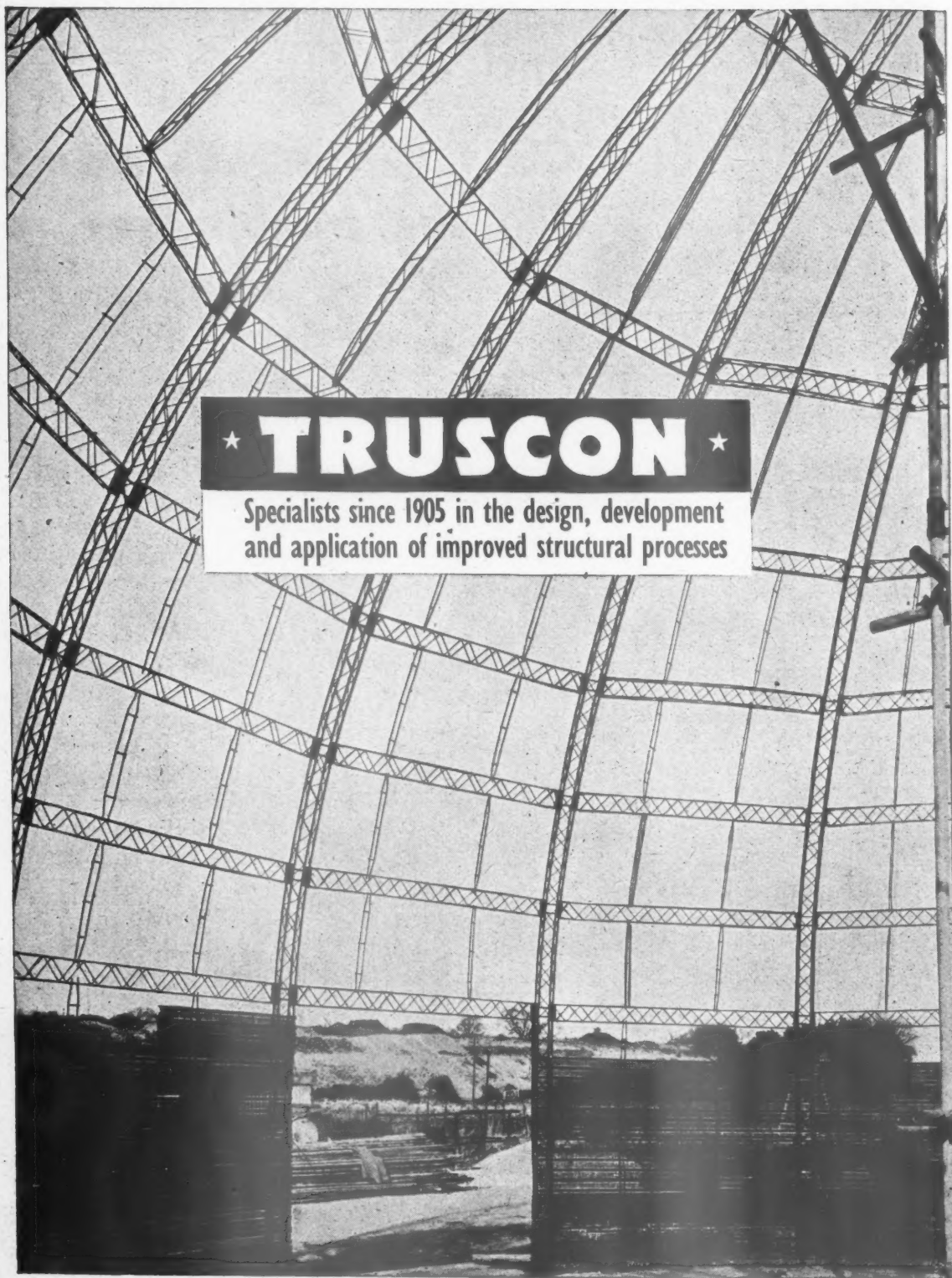


1939-45.



# COLT Canadian Cedar Wood SHINGLES

Specially chosen from No. 1 Grade XXXXX Shingles



# ★ TRUSCON ★

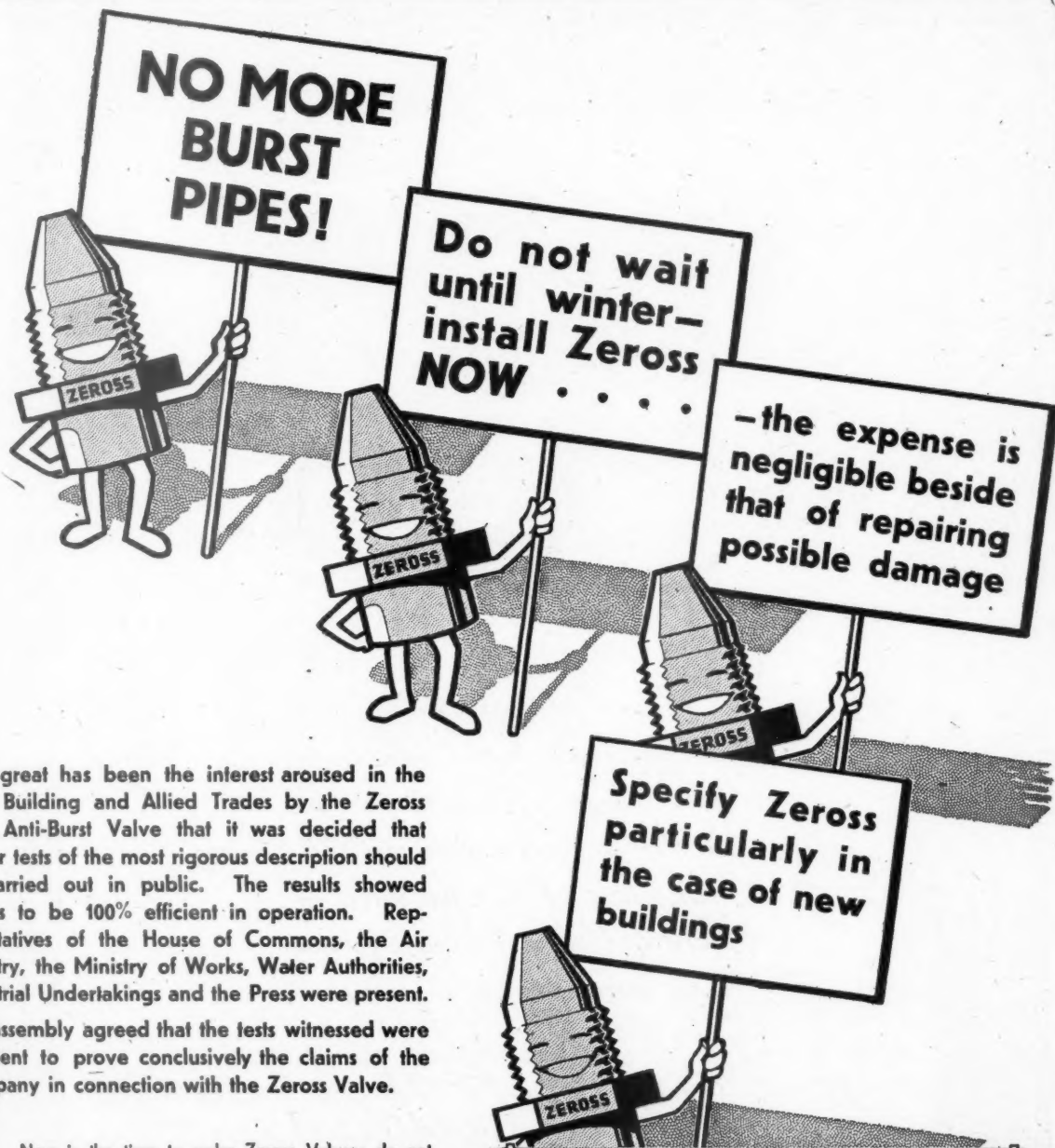
Specialists since 1905 in the design, development  
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**THE TRUSSED CONCRETE STEEL COMPANY LIMITED**  
**Structural Engineers**

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4-545



**S**o great has been the interest aroused in the Building and Allied Trades by the ZeroSS Anti-Burst Valve that it was decided that further tests of the most rigorous description should be carried out in public. The results showed ZeroSS 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 ZeroSS Valve.

Now is the time to order ZeroSS 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. "ZeroSS" should be specified particularly in the case of new buildings as well as in existing water systems. "ZeroSS" technicians will gladly give advice and assistance.

Remember that ZeroSS 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.



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PORTCULLIS "DARTMOUTH" GAS FIRE

*Design of unusual merit  
associated with advanced  
technical efficiency will  
continue to be characteristic  
qualities of the products of  
Bratt Colbran when peace-  
time manufacture is resumed.*

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One girl can clear them all away in fifteen minutes—and the whole hundred, stacked, occupy but 20 square feet of floor space.

The possibilities of multi-purpose rooms open a new field in architectural design. Kingfisher partitions folding windows, and furniture enable the concert hall to become a ballroom, the class room a temporary cinema.

Under license this equipment can be supplied now.



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*furnish the new Education*



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Telephone: Tipton 1631. Telegrams: Kingfisher, Phone, West Bromwich  
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Sisalkraft stands up to spading, trucking, and heavy traffic during concrete laying; it is easy to handle, and economical in use. Its extra toughness and strength cancels out the risk of imperfections in the finished concrete, that is why Sisalkraft is consistently used by Government Departments, County Engineers, Municipal

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Sisalkraft is not an emulsion-impregnated sheet of brown-paper. It is an unusually strong material, a fusion of pure bitumen and two sheets of extra-tough Kraft paper *reinforced with Sisal fibres*.

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TRADE MARK

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GRADE**

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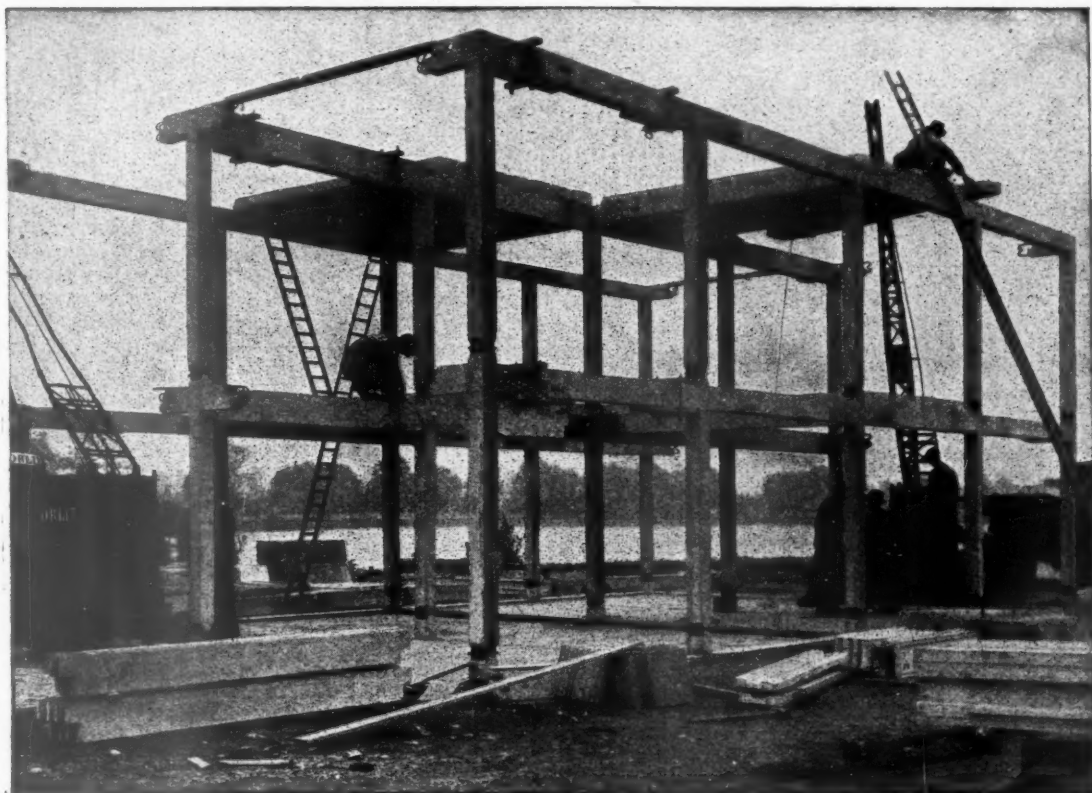
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Telephone: HOLBORN 6949 (14 lines)

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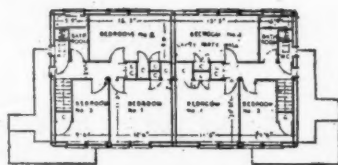


## THE ORLIT METHOD OF HOUSE CONSTRUCTION

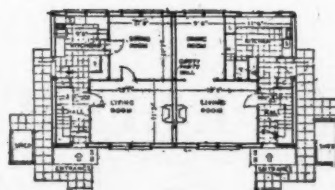
### *Setting out and foundations*

Our own method of utilising mechanical jigs guarantees accuracy in setting out the building, and speeds up the formation of concrete column bases

The Orlit method of house construction is the result of extensive experiments to solve problems of mass production, adaptability in design, and ease of erection in relation to their economical, structural and architectural aspects



# ORLIT

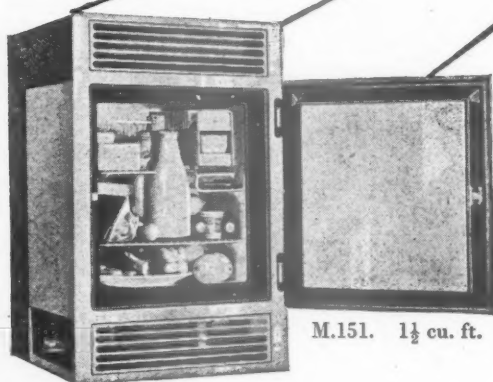


ORLIT LTD., 18, BUCKINGHAM GATE, LONDON, S.W.1. Telephone VICTORIA 6701/2/3





Bucks' Rural Demonstration Economy Post War Kitchen in conjunction with "Good Housekeeping."



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.

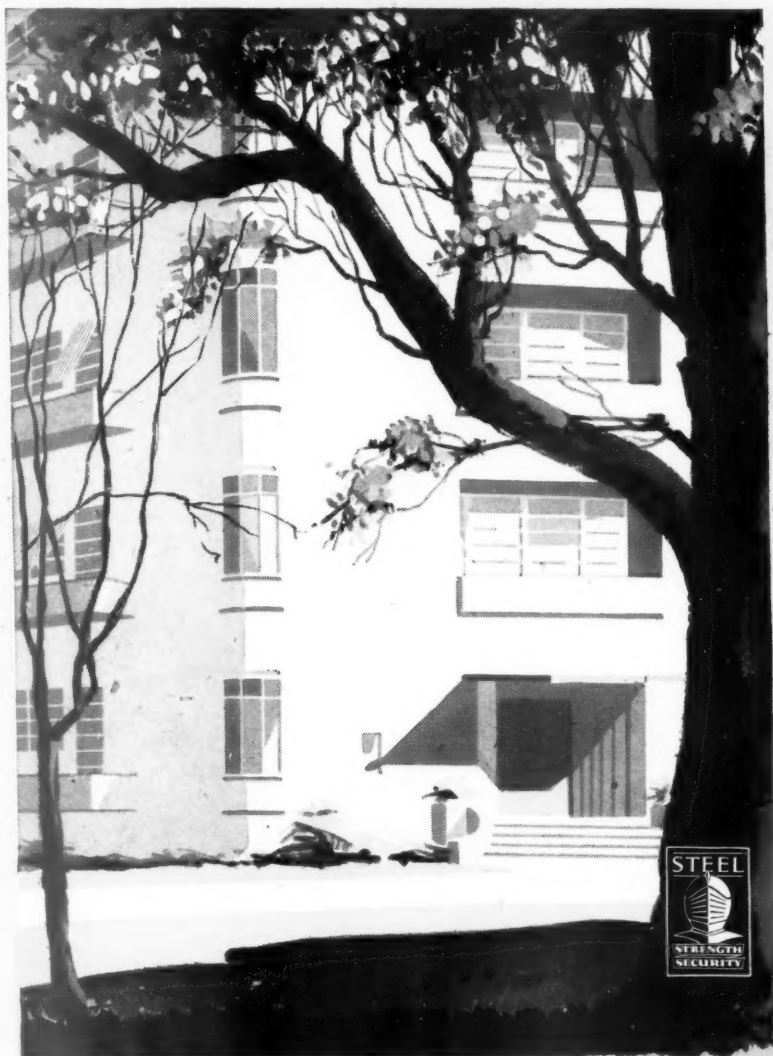
Electrolux 'Built-in' Refrigerators operate equally well by Gas or Electricity. Free Standing Models operate by Gas, Electricity or Paraffin.

## ELECTROLUX LIMITED

Works: LUTON, BEDFORDSHIRE

'Phone: LUTON 4020





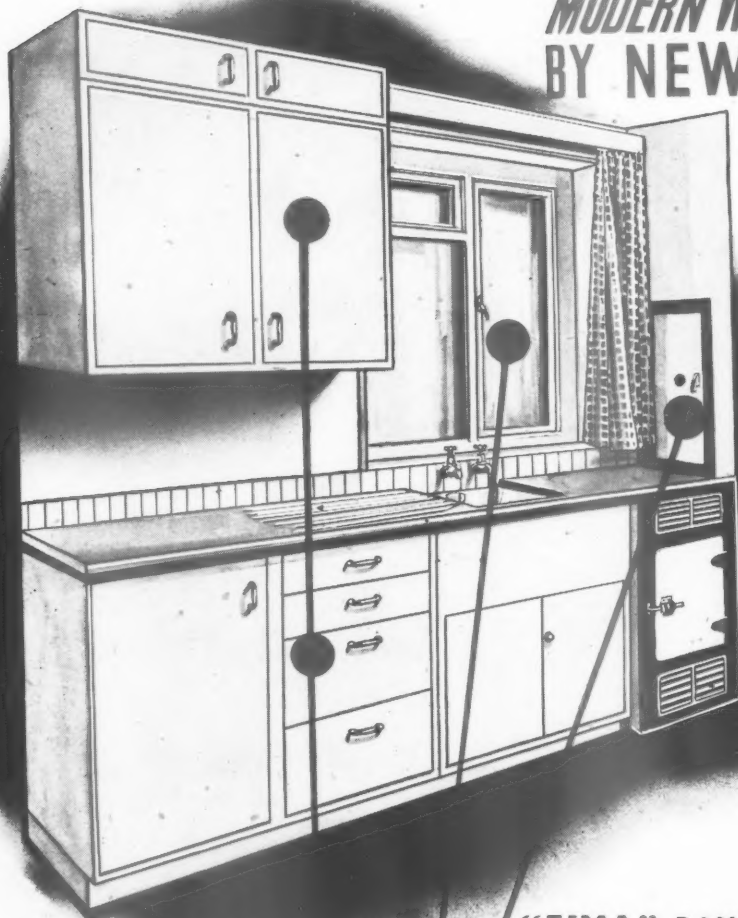
# STEEL-FRAMED FLATS

*... better in every way*

THE BRITISH STEELWORK ASSOCIATION, WESTMINSTER, LONDON, S.W.1



## MODERN WOODWORK BY NEWSOMS



### "EJMA" RANGE OF CUPBOARD UNITS

TO EQUIP ALL NEW  
KITCHENS.  
TO MODERNISE OLD  
KITCHENS.

The Cupboards are designed  
to Unit Pattern as recom-  
mended in B.S.S. 1195.

### "EJMA" RANGE OF STANDARD CASEMENT WINDOWS

ECONOMICAL, WEATHER AND DRAUGHT  
RESISTING, MAXIMUM DAYLIGHT  
ADMISSION.

Adopted as a British Standard (B.S.S. 644)  
No. 1/1944.

### NEWSUM'S TRADESMAN'S HATCH

INEXPENSIVE, FOOLPROOF,  
HYGIENIC, CONVENIENT.

Every Tradesman's Hatch is fitted with a  
Patent Automatic Locking Device which  
prevents any interference with contents  
from the exterior.

# NEWSOMS OF LINCOLN.

TELEGRAMS—  
NEWSOMS, LINCOLN.

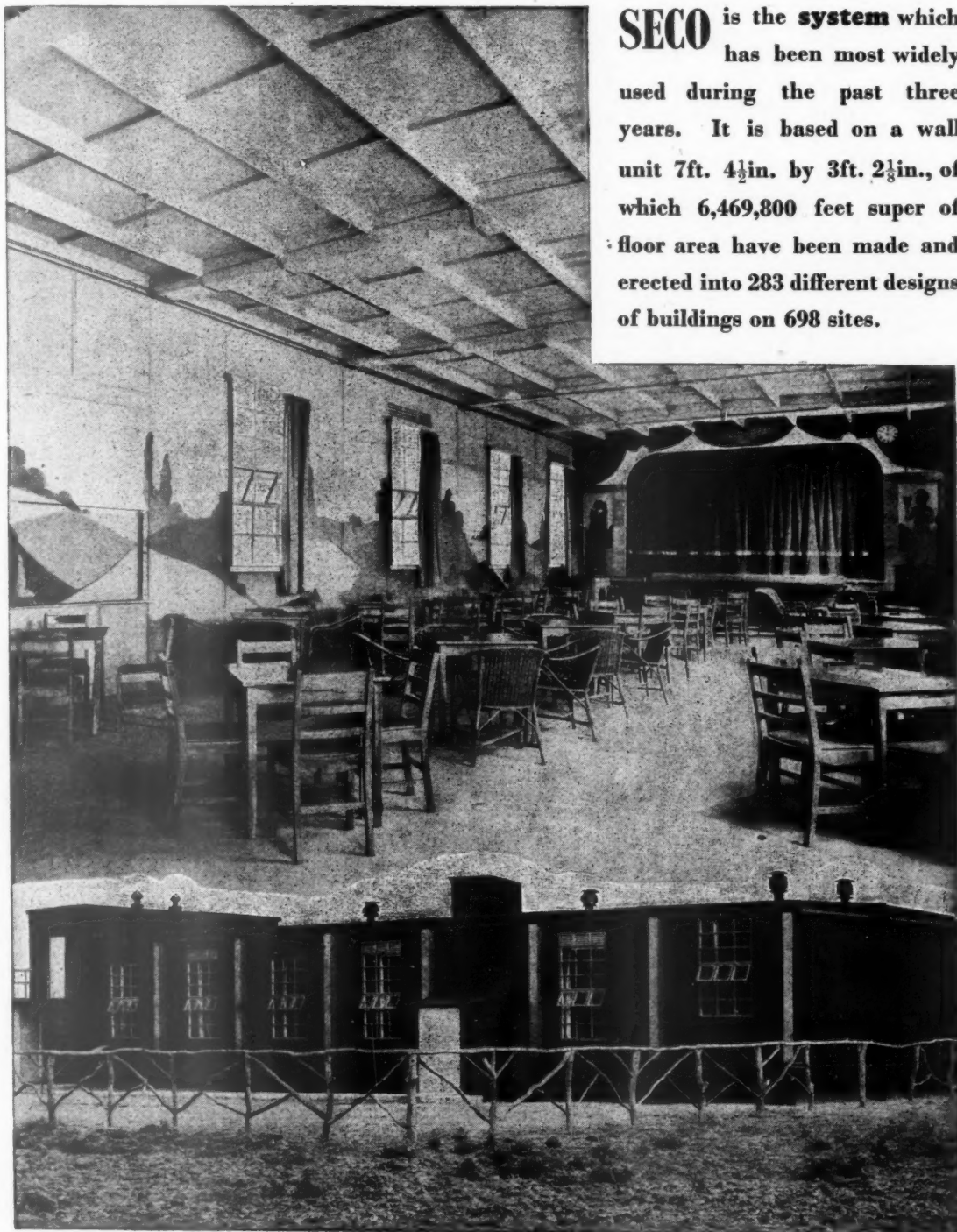
H. NEWSUM SONS & CO., LTD.

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

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Mayfair 9080

*Stenham & Co.*

# H.A.I.S. CABLE



We manufactured an enormous quantity of the H.A.I.S. cable used so successfully for maintaining a continual supply of petrol between England and the Continent.

In the above photograph are seen three 30 nautical mile lengths of H.A.I.S. cable being coiled down at our Works.

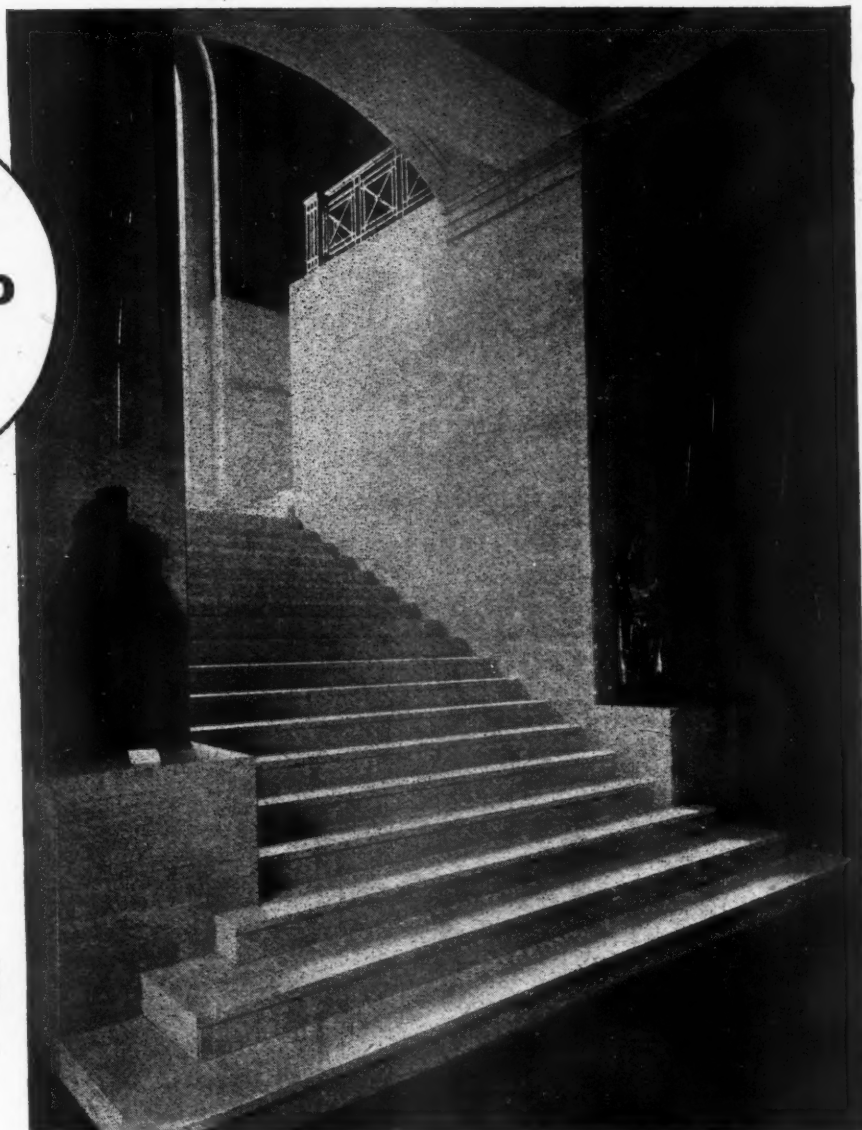
**BRITISH INSULATED CALLENDER'S CABLES LIMITED**

Main Works  
**ERITH, HELSBY, LEIGH (Lancs) and PRESCOT.**

**PLAN FOR  
CONTROLLED  
COMFORT**

Extension to FITZWILLIAM  
MUSEUM • CAMBRIDGE

Architects:  
SMITH & BREWER, F.R.I.B.A.



Just as Crittalls installed invisible embedded panel warming, inlet and extract mechanical ventilation and hot water equipment in the impressive new building of St. Swithun's School, Winchester, so will they install 'controlled comfort' in many other important public buildings in post-war Britain.

Other services undertaken include Oil or Gas Fired Boilers, Electric Thermal Storage, Air Conditioning, Thermostatic Control, Steam Supplies, Compressed Air Supplies, Radiator Warming, Dulrae Electric Warming, Cooking Equipment.



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AND COMPANY LIMITED. ALDWYCH HOUSE. LONDON. W.C.2. Phone: TEMple Bar 7777

BIRMINGHAM: Prudential Buildings, St. Philip's Place. Central 2478

LIVERPOOL: Martin's Bank Building, Water Street. Central 5832



## STANDARD KITCHEN UNITS

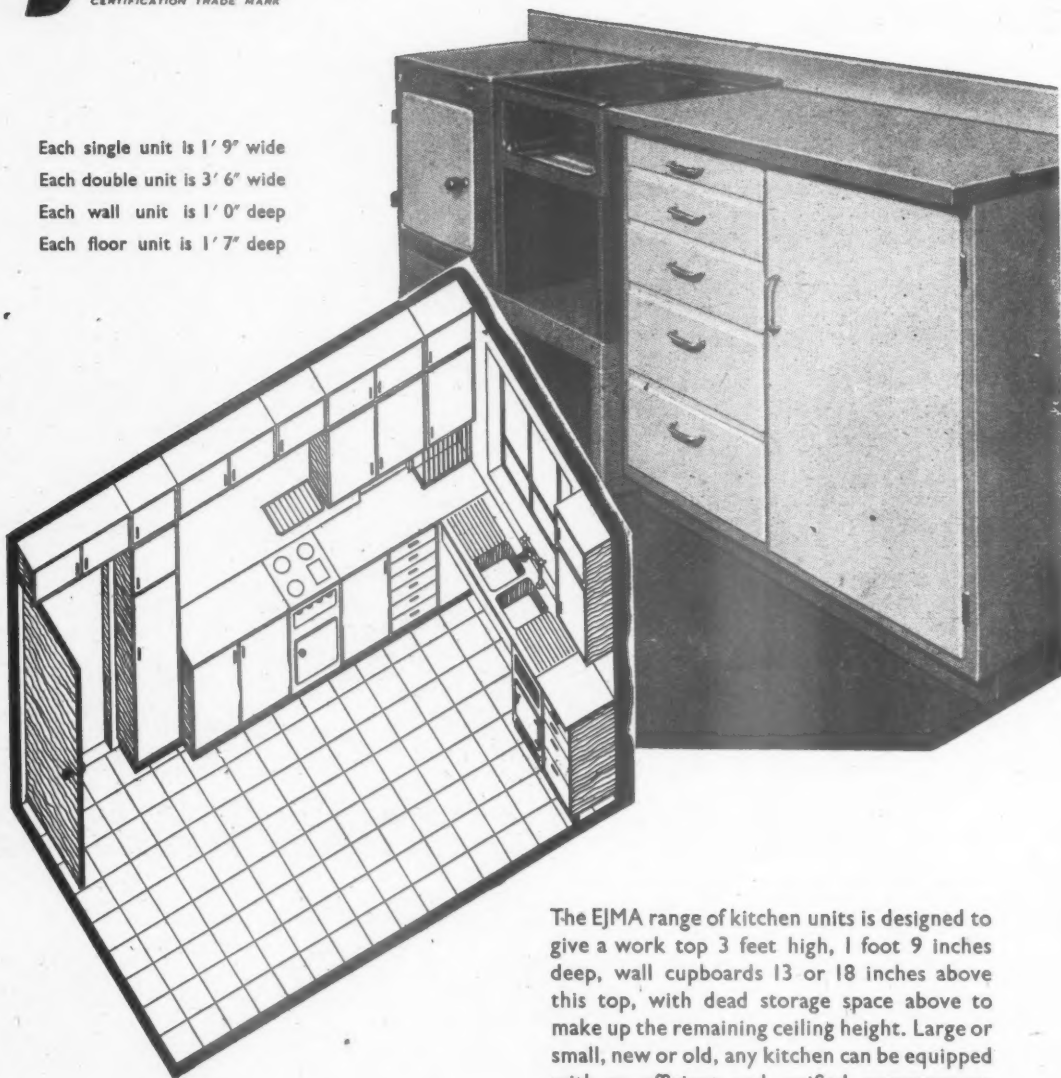
**EJMA**  
CERTIFICATION TRADE MARK

Each single unit is 1' 9" wide

Each double unit is 3' 6" wide

Each wall unit is 1' 0" deep

Each floor unit is 1' 7" deep

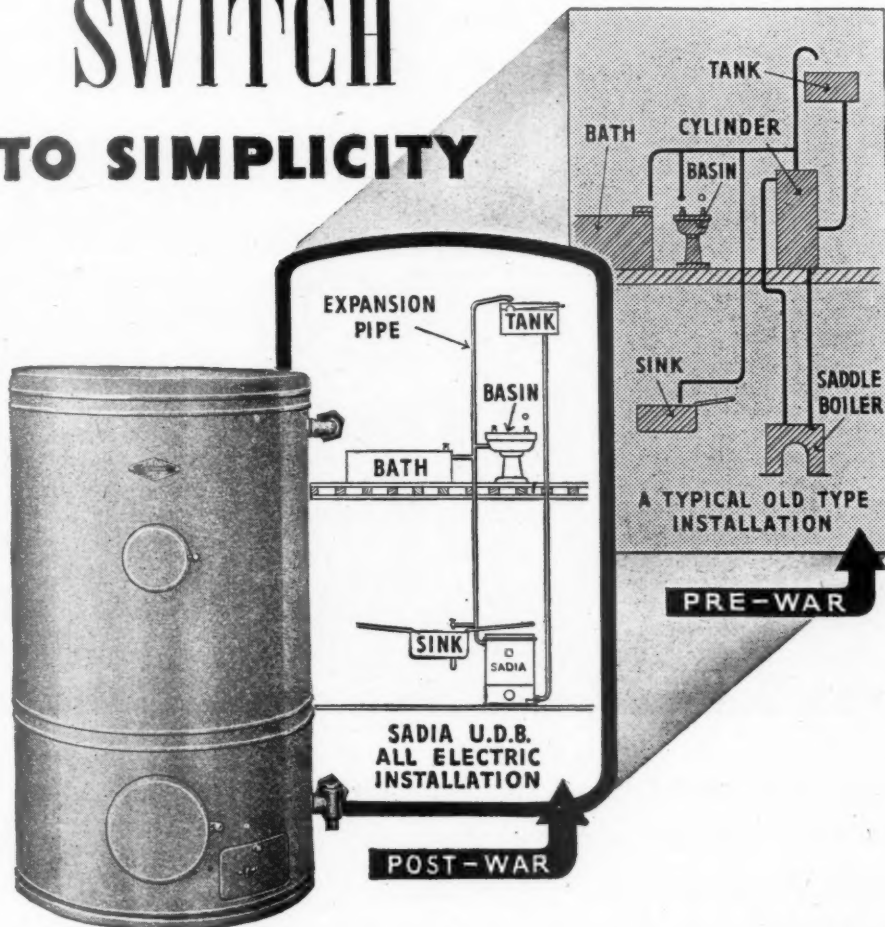


The EJMA range of kitchen units is designed to give a work top 3 feet high, 1 foot 9 inches deep, wall cupboards 13 or 18 inches above this top, with dead storage space above to make up the remaining ceiling height. Large or small, new or old, any kitchen can be equipped with an efficient and unified arrangement.

THE  
**ENGLISH JOINERY MANUFACTURERS ASSOCIATION**  
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*Stonham & Kirk*

# SWITCH TO SIMPLICITY



## **SADIA** TYPE U.D.B. *A completely automatic Hot Water system for the small house*

**UNIT:**—Small and compact, designed to fit in with future kitchen units and occupy the least possible space.

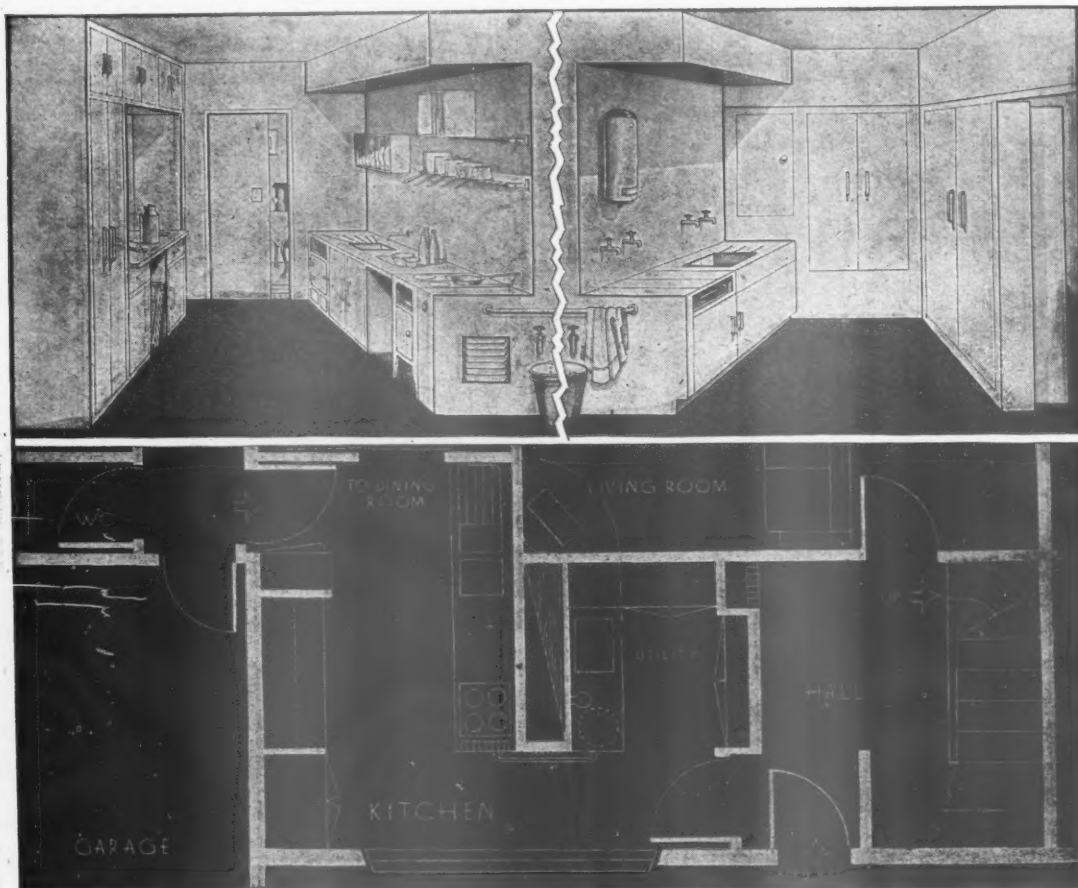
**INSTALLATION:**—There is a minimum of pipe-work, no flues or ventilation. No constructional alteration to existing buildings.

**ADVANTAGES:**—Cheap to run: no maintenance or servicing necessary. Silent, fumeless, odourless. A system in itself or can be used as an alternative to an existing solid fuel boiler.

*Further particulars on request.*

**SADIA** TYPE U.D.B.  
AUTOMATIC ELECTRIC WATER HEATER

Aidas Electric Limited, Sadia Works, Rowdell Road, Northolt, Middlesex. Telephone: WAXlow 1607  
Scottish Agents: W. Brown & Co. (Engineers) Ltd., 89 Douglas Street, Glasgow, C.2



**EMPHASIS ON LAY-OUT.** The habitable and well-equipped Kitchen is proving to be the touchstone of post-war planning. Already it is the subject of nation-wide debate and practical research

The Kitchen lay-out shewn above provides for the separation of the two main activities of food preparation and laundry work; and the installation of labour, saving gas appliances for automatic cooking, water-heating, clothes boiling-drying cupboards and a gas refrigerator; whilst warmth is furnished by an efficient gas radiator.

This kitchen may be inspected by appointment only, at Radiation House, Aston, Birmingham.

RADIATION LTD. are manufacturing and supplying gas appliances conforming fully to specifications drawn up by Ministries concerned with Housing, and will be pleased, on request, to furnish full particulars to Local Housing Authorities.

# Radiation Ltd

COMPRISING

Arden Hill & Co. Ltd. Davis Gas Stove Co. Ltd. Eagle Range & Grate Co. Ltd.  
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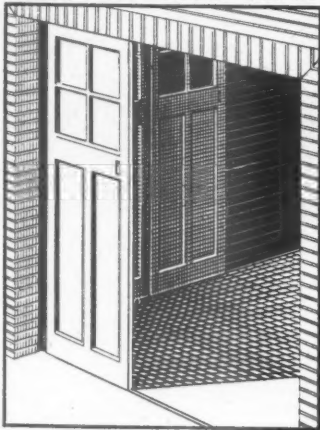
RADIATION HOUSE, ASTON, BIRMINGHAM 6; AND 7 STRATFORD PLACE, LONDON, W.1



# THE VALUE OF SLIDING



## OUT OF THE WAY



In these days, to slide on a banana skin can be considered as something approaching a luxury. But that, of course, is only one way of sliding—and not very pleasant. The real pleasure of sliding comes from a sense of travelling swiftly and smoothly between one place and another with rare economy of time and effort. Now apply this perfect principle to doors and what do we find? Without a doubt we should be led to consider a door fitted with King Sliding Door Gear—and it is worth considering. 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. Doors that slide mean doorways that allow free passage all around them.

# KING SLIDING DOOR GEAR

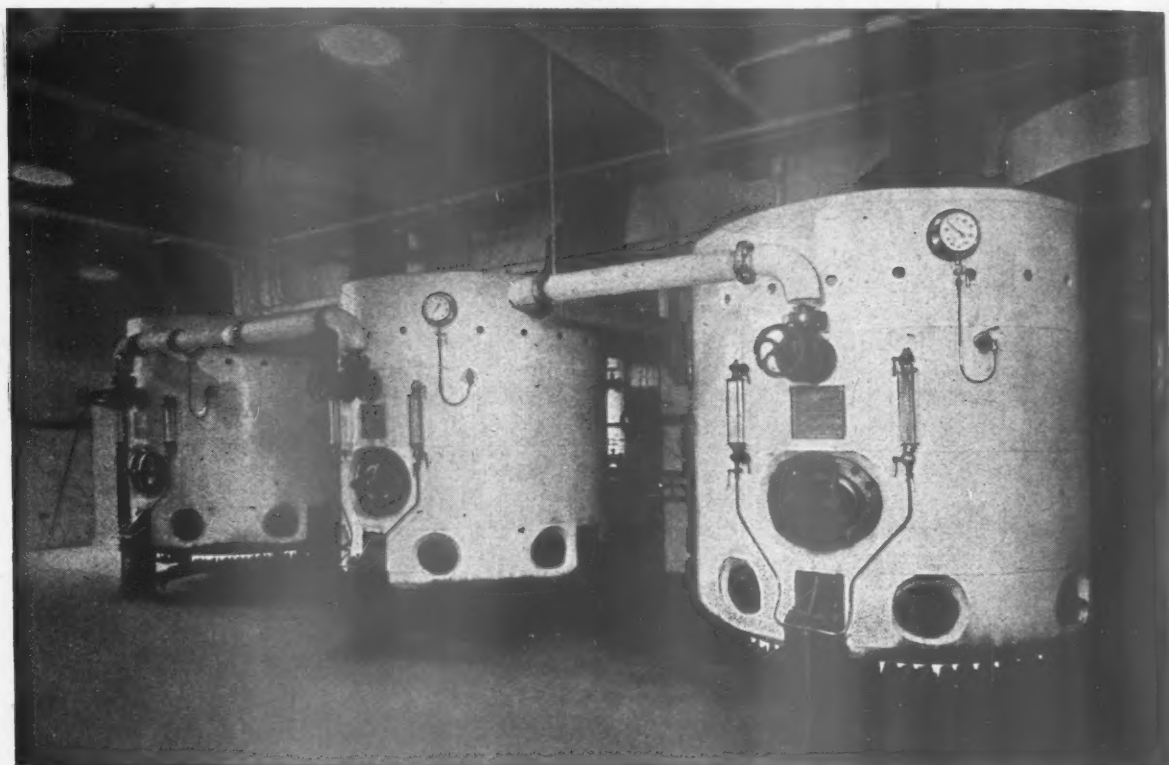
For ante rooms, cloak rooms, garages, lifts, etc., and places where space is limited or traffic congestion is likely to occur, sliding doors are the perfect application.

WRITE FOR ILLUSTRATED BOOKLET

**GEO. W. KING LTD. HITCHIN. HERTS**

TELEPHONE HITCHIN 960 (10 LINES)

# MODERN ENGINEERING INSTALLATIONS by HADENS



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HEATING BY ALL SYSTEMS  
HIGH PRESSURE HOT WATER SYSTEMS  
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Phone: TERMINUS 2877 (10 lines)  
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# CELOTEX

**BUILDING BOARD  
HARD BOARD  
INSULATING BOARD  
ACOUSTIC TILES**

The range of Celotex products, although limited by present-day conditions, still includes a board which is exactly right for use wherever the specification calls for any type of fibre building board. The Chart below details the present Celotex range and notes the principal uses of each product; Celotex Limited will gladly supply any further information.

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### INSULATING BOARD $\frac{1}{2}$ " THICK

Wall and ceiling lining, partitions, floors and roofs, plaster base, thermal insulation, permanent shuttering to concrete, sound insulation, acoustical correction, prevention of condensation, decorative finish.  
Sizes 4' wide, 8', 10' and 12' long.

### BUILDING BOARD $\frac{3}{8}$ " THICK

Wall and ceiling lining, partitions and floors, plaster base, decorative finish.  
Size 4' wide, 8', 10' and 12' long.

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Wall and ceiling lining, partitions and floors, decorative finish. Sizes 4' wide, 8', 10' and 12' long.

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Sizes 6" x 12", 12" x 12" and 12" x 24".

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Efficient and simple means of application of Celotex to all types of structures.  
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IS REGARDED AS THE STANDARD  
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OF ITS UNVARYING CONSISTENCY; it is  
**STANDARDISED BY NATURE**

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*"The Knight Protector  
of Wood & Metal"*



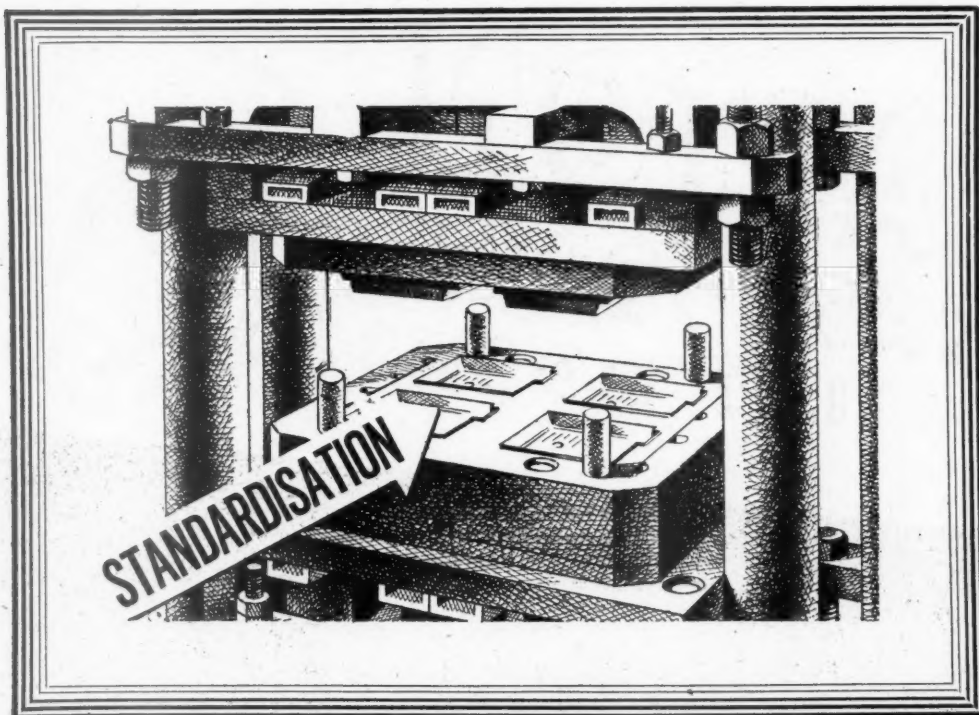
**DOCKER BROTHERS** LADYWOOD BIRMINGHAM 16

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...at a high standard of quality

The term "standardisation" may stand for mere uniformity. At the M.E.M. factory, however, it means that all production is brought *up* to a high level of quality, design and finish.

The architect who specifies M.E.M. switch and fusegear and the electrician who selects M.E.M. know that a reliable installation is certain *and* at a reasonable cost. For although M.E.M. gear is good it is not expensive. Good design and modern factory practice have cut out all waste of both materials and man-hours. The M.E.M. factory is self-contained and self-sufficient. It produces good electrical gear from start to finish—good all through.



M.E.M. "Memroy" Switchfuse

**MEM**

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The Caston patent "Castodor," illustrated here, is one fitted to the lifts in R.M.S. "Queen Mary." These are of the light single plate type. Not only are these doors thoroughly efficient, vibration proof, and fire-resisting, but they offer infinite decorative possibilities. These doors are approved by the Board of Trade and insurance authorities.

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**1935** "PYLUMINIZING" for the protection of Aluminium.

**1936** "SPRA-BONDERIZING" for Paint Anchorage by conveyorized and mechanically-controlled production methods.

**1937** "D" Process for "PARKERIZING" and "BONDERIZING" of Iron and Steel, also for treatment of Zinc and Cadmium surfaces or mixtures of these with ferrous metal assemblies.

**1938** "PYROGRIP" Cold cement for dressing mops and bobs used for scurfing and polishing.

**1939** "PARKERIZING" for Lubrication.

**1942** "BONDERITE" 'K' for treatment of continuous steel strip and sheet production.

Other war developments which have taken place are, at present, available only to Government Factories and Contractors.

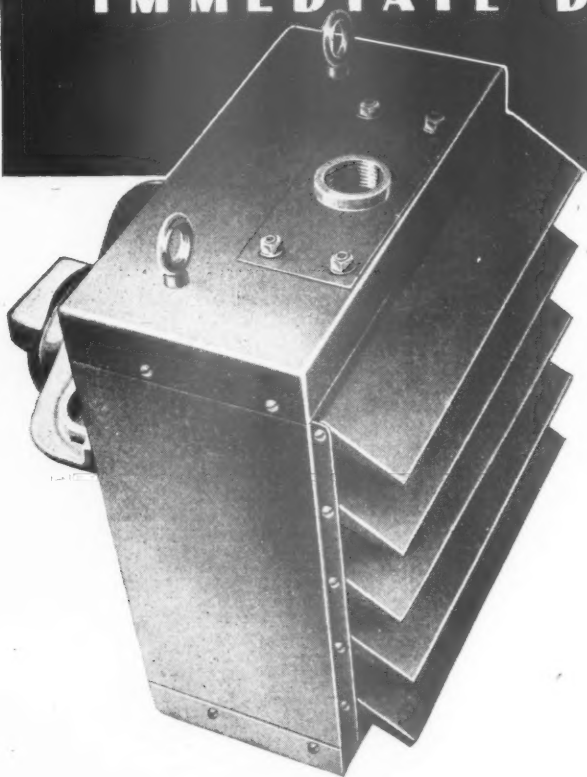
IT CANNOT BE PARKERIZED OR BONDERIZED  
(Registered) (Registered)  
WITHOUT *Pyrene* CHEMICALS

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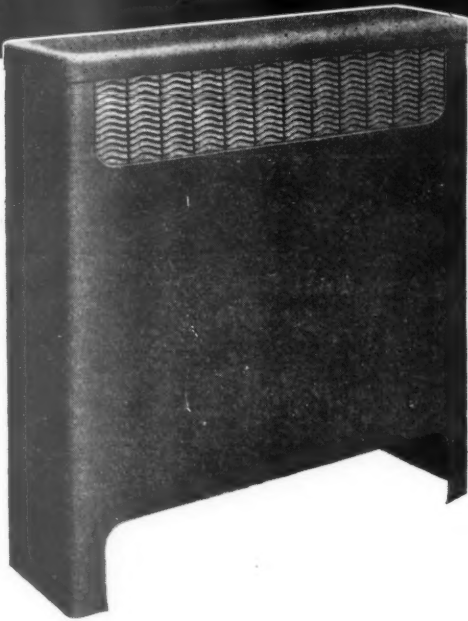
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**IMMEDIATE DELIVERY**



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HEATER HAS PROVED THE NEED FOR EXTENDING  
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TASTES AND DESIGNS. WE ARE NOW →

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**Specialists also in:—**  
 ROAD SIGNS  
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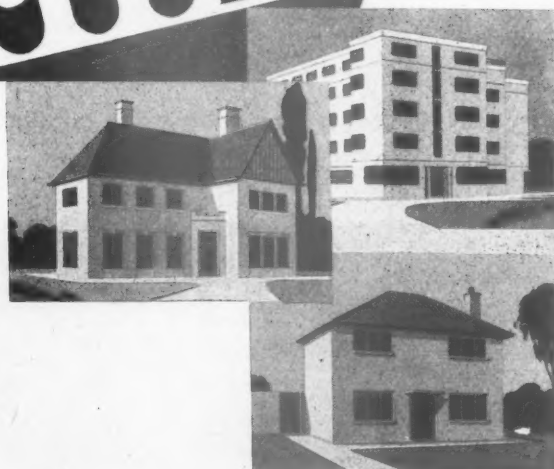
R.I.

A new offensive will now have to start. Its object, the safeguarding of life and property by a replacement of the railings and gates which went for "Scrap for Victory."

May we co-operate with you in solving this problem? Our specialised experience is at your service.

**THOMAS BLACKBURN & SONS LTD.**  
 Incorporating Russell Edwards & Stevensons • Preston, Lancashire

# HOUSING For the Housing Estate - Mansion - or Luxury Flat

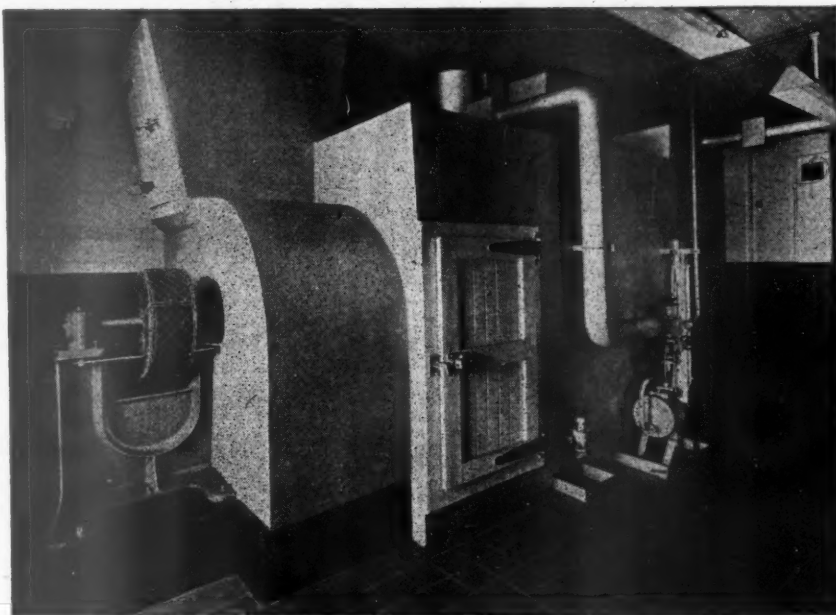


Sanders Quality Electrical products provide everything that is required for the control of Electrical Equipment:—

Compact Distribution Units  
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in Department Stores, Retail Shops, Factories, Office Buildings, Hospitals, Laboratories, Schools, Restaurants, Cafés, Theatres, Cinemas, Hotels, Dairies, Breweries, &c., often present Architects with unfamiliar problems of a highly technical nature, which are best solved by obtaining the expert assistance and co-operation of

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**PROVIDES THE PERFECT RENDERED FINISH**  
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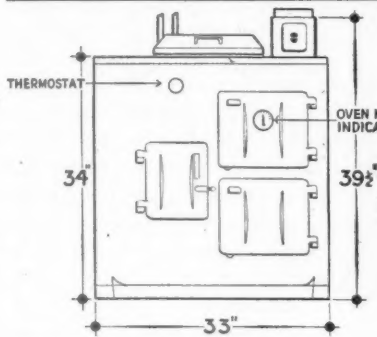


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## AT LAST—HEAT STORAGE COOKING for HOUSING SCHEMES

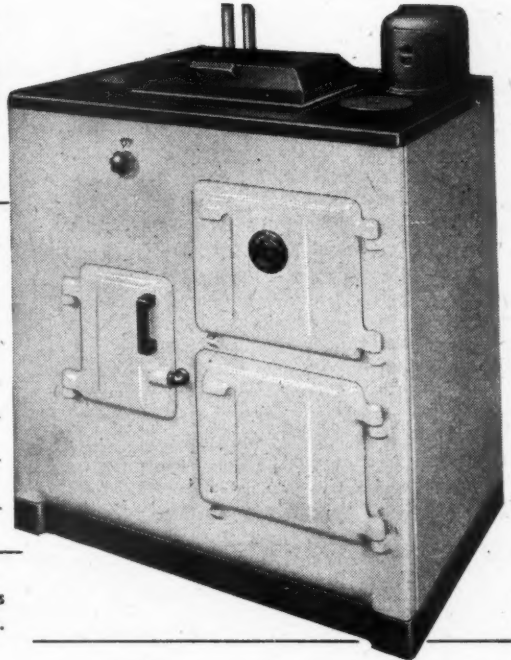
The "H.S." Cooker regulated by thermostat, answers the national need for a Heat Storage Cooker, with its efficiency and startling fuel economy, sufficiently low priced to be used in municipal housing schemes. In addition to cooking, from the one fire is provided a constant supply of hot water, thus abolishing the uneconomic system (especially in summer) of heating water from the sitting-room fire. Easy to work, providing a gentle warmth day and night, having two spacious ovens, top for roasting and lower for slow cooking, and extensive fast boiling hot-plate, the "H.S." brings the advantages of Heat Storage Cooking, FOR THE FIRST TIME, to the lower-grade-income home.

### THE "H.S." HEAT STORAGE COOKER



#### BRIEF TECHNICAL DETAILS

Each oven: 12" x 10" x 17" deep.  
 Inside diam. of flue outlet 4 1/2" suitable for 4" diam. asbestos pipe.  
 Boiler: 70/80 gall. water at 150/160° F. over 24 hours.  
 Storage Cylinder: 30/35 gall. within 15 feet of cooker and insulated.  
 Fuel: Anthracite, Coke or Phurnacite.  
 Consumption: 20 lbs. per 24 hours.  
 Weight: 588 lbs.  
 Finish: Mottled Porcelain enamel.



Full details of the "H.S." Heat Storage Cooker and "ESSE-Q" Continuous Burning Heating Stove (described below) will be gladly supplied on request.

## ESSE-Q INSET CONTINUOUS BURNING HEATING STOVE

### DESIGNED FOR HOUSING SCHEMES

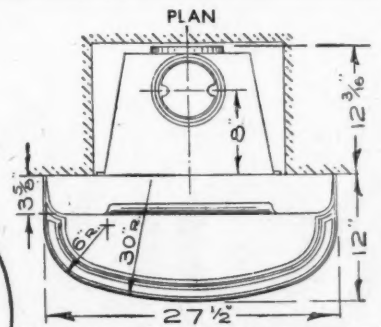
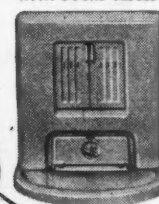
This latest ESSE Stove, open and closed fire, burning any type of solid fuel, designed to reduce smoke emission when bituminous coal is used, is specially suitable for municipal or other mass housing projects. Exterior finish is oatmeal (or other colours) mottled porcelain enamel. Fitted with tight-fitting sideways sliding fire-doors (obviating ugly appearance of inner side of fire-doors when open), the ESSE-Q is of clean, functional design, self-setting, with top flue outlet for placing in recess (see plan below). Fire-doors are closed for overnight burning and boosting.



#### BRIEF TECHNICAL DETAILS

Overall Height ... 28 1/2"  
 Fireplace Opening: ... 27 1/2"  
 Height: Min. ... 27 1/2" Max. ... 28"  
 Width: Min. ... 18" Max. ... 24"  
 Depth: 12 1/2"

#### WITH DOORS CLOSED



FULL DETAILS GLADLY SUPPLIED ON REQUEST FROM

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ESTABLISHED 1854

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HEAD OFFICE & WORKS:

BONNYBRIDGE, SCOTLAND



## A continuous service



This kitchen, planned and equipped by Allied Ironfounders Ltd., for the Canteen at Messrs. Johnson & Johnson Ltd., Gargrave, includes two Aga Heavy Duty Cookers, a two-pan electric fish fryer, a three-compartment steaming oven and a 30-gall. boiling pan.

Meals are constantly being demanded, and served, from this cool, clean kitchen, kept free from dust and fumes by the AGA Cooker. This heat-storage Cooker retains its heat at the cooking points only, and none escapes into the kitchen to make it uncomfortably hot, nor are the food values lost by the escape of steam. Full efficiency, ensuring instant readiness for service, is maintained by refuelling only three times in 24 hours, and the AGA Cooker does not burn more than a guaranteed quantity of fuel.

The illustration shows a part-view of a kitchen designed and equipped by Allied Ironfounders Ltd., in co-operation with their subsidiary companies.

**ALLIED IRONFOUNDERS LTD.**

Heavy Cooking Departments.

10 LILLIE'S CHAMBERS, 39 ALBION STREET, LEEDS

**AGA HEAT LIMITED**

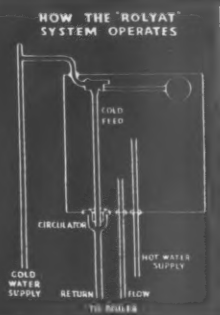
(Proprietors: Allied Ironfounders Ltd.)

ORCHARD HOUSE, 30 ORCHARD ST., LONDON. W.1 Telephone: Mayfair 6131

The word AGA is the registered trade mark of Aga Heat Ltd.



## One tank-5 consecutive hot baths!



Post-war housing demands many improvements and a hot water system which eliminates much unnecessary piping. The Rolyat Hot Water Tank is the most up-to-date apparatus of its kind—one tank being sufficient for five consecutive baths. It is false economy to save a few pounds on the cost of a house by installing a cheap and inefficient hot water apparatus: the tenant suffers from the resultant continuous increased fuel costs in obtaining the required amount of hot water.

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Welsh Slates give the best roofing service in the world.



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**B**ECAUSE many of the strong arms that hewed this fine stone are now busy with more urgent tasks, we ask you to accept with patience any delays of to-day whilst planning to make full use of the beauty and permanence of 'HOPTON-WOOD' stone in to-morrow's era of reconstruction.

THE HOPTON-WOOD STONE FIRMS LTD.  
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It "cradles" every contour of the body. Lumps cannot form in it. Vermin cannot live in it.

It truly is the greatest contribution to comfort and hygiene ever devised.

(Present production is limited to a few priority lines).



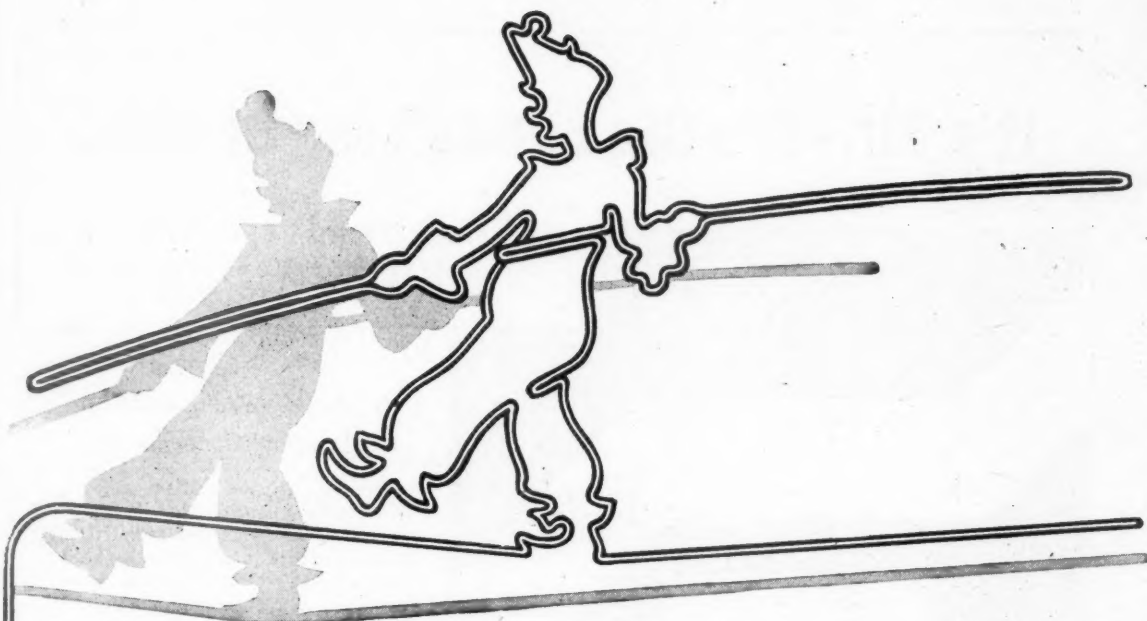
... AND THE MARVEL IS THAT  
ANYTHING SO LIGHT AND 'AIRY'  
AND SEEMINGLY UNSUBSTANTIAL  
CAN STAND SO MUCH HARD WEAR



# DUNLOPILLO

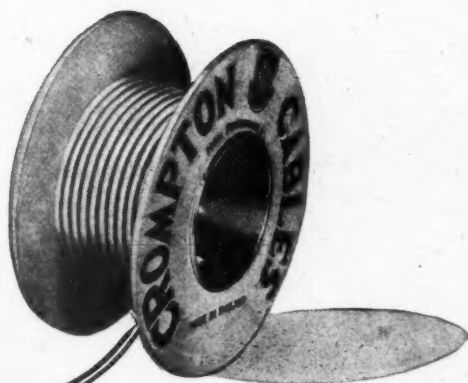
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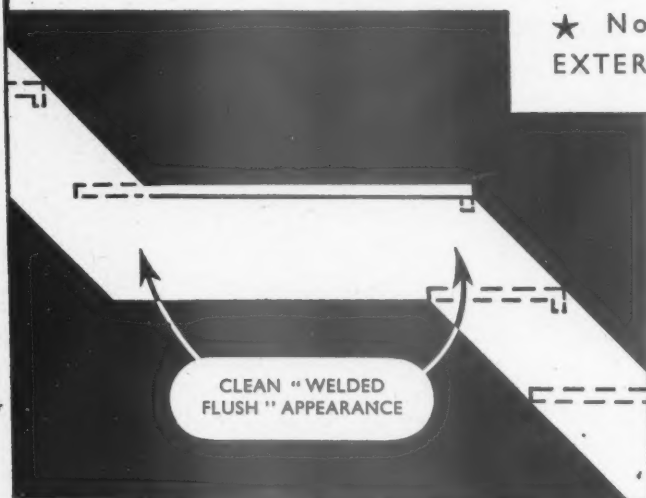
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# It's BIG—It's Big Enough for Sebels!

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EXTERNAL STEEL STAIRCASES



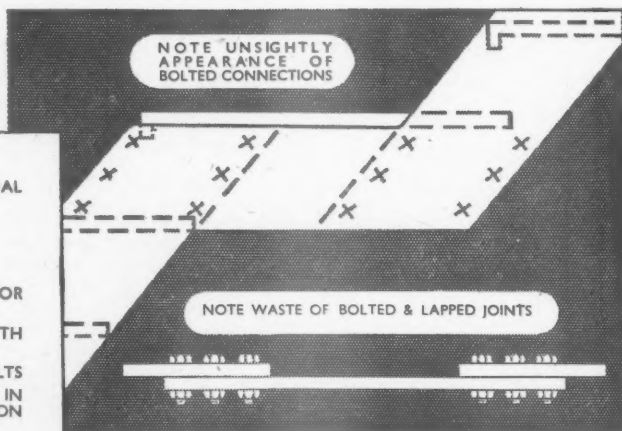
## The New "Welded-Flush" Landing Connection

Sebels—equipped and accustomed to handle quantity-production of metal fabrications on a basis of "time and cost" competition—could not encourage the old-style steel staircase, with each landing a source of weakness and waste, as the standard construction on a Sebel job. Hence the new Sebel "Welded-Flush" construction, in which each landing is a welded section of the whole structure, with the same strength as the parent structure and no added weight.

Study the many defects of the usual external steel staircase, and you will see that "welding-flush" is the best possible construction to use to-day. Sebels will be pleased to study your requirements in steel staircase construction and quote you the "welded-flush" price.

### NOTE THE WEAK POINTS OF THE USUAL LANDING CONNECTION:—

- A WASTE OF MATERIAL
- B ADDED DEAD WEIGHT
- C LARGE HIDDEN SURFACE FOR CORROSION
- D LOSS OF STRUCTURAL STRENGTH DUE TO BOLT HOLES
- E WEIGHT AND COST OF BOLTS
- F WASTE OF SKILLED LABOUR IN MANUFACTURE AND ERECTION



IF IT'S A BIG JOB ASK

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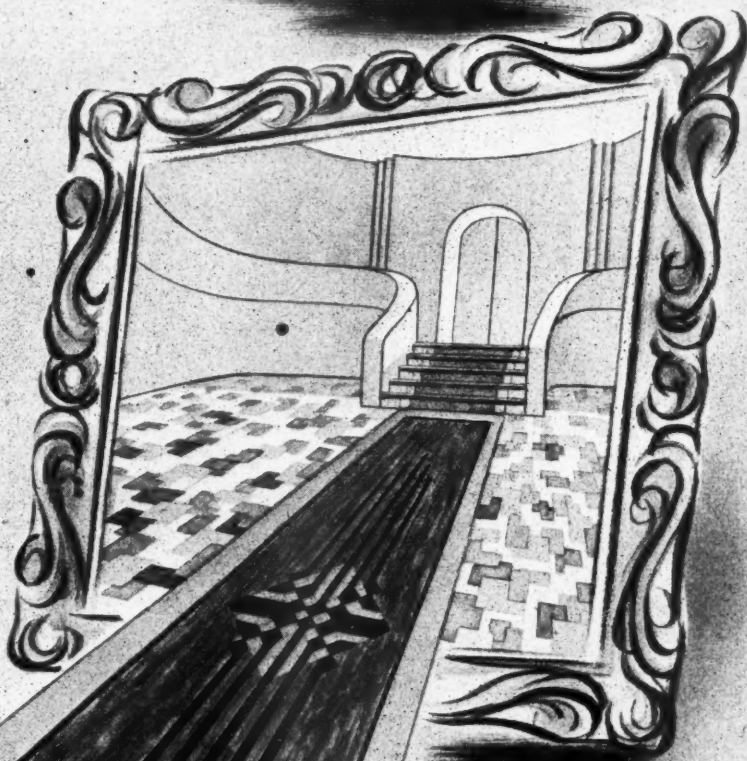
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## Windows—then and now!

The earliest *windows* were just openings to admit the *wind* into dwellings. Then came the earliest glass windows, but they only admitted light. The dual purpose of the window—admission of air and light—was still unknown.

Evidence shows that glass windows were already used in Pompeii, but it was not until the 12th century that they became popular in England. In 1695 a window tax was imposed. As late as 1850 it yielded £1,832,684. It was abolished in 1851. At

last it was realized that the tax limited the number of windows and the entry of air and sunshine.

All the time window frames underwent great changes. Heavy cast-iron frames gave way to lighter materials until eventually a frame was evolved—the John Dale window cast in aluminium alloy—which combines lightness with strength, weather resistance with ease of cleaning, advantages which post-war builders and dwellers will be quick to appreciate.

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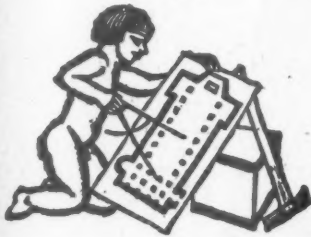
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In common with every other periodical this JOURNAL is rationed to a small part of its peacetime needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee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

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## DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

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

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

**BRENTWOOD.** *Country Life and Country Needs Exhibition.* At Brentwood School. (Sponsor, BIAE.) SEPT. 20-29

**BRISTOL.** *Town and Country Planning Summer School.* At Bristol University. (Sponsor, TPI.) SEPT. 20-25  
*Modern Building Tools Exhibition.* At Black Boy's Hill. (Sponsor, MOW.) OCT. 23-27

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

**GRAVESEND.** *NALGO Exhibition.* SEPT. 20-29

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

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

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

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

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

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

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

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

*Report from Members of the Association for Planning and Regional Reconstruction, attending the Town Planning Summer School.* At the Association Headquarters, 34, Gordon Square, W.C.1. (Sponsor, APRR.) 6 p.m. SEPT. 27

A. F. Russell. *Planning for New Housing Standards.* Chadwick Public Lecture. At the Royal Society of Tropical Medicine and Hygiene, 26, Portland Place, W.1. Chairman, Frederick R. Hiorns. (Sponsor, Chadwick Trust.) 2.30 p.m. OCT. 2  
*Current Town Planning in Canada and USA.* 3. Middle West and the TVA. At the Association for Planning and Regional Reconstruction, 34, Gordon Square, W.C.1. Speaker, Miss J. Tyrwhitt. Chairman, Major Reed. (Sponsor, APRR.) 1 p.m. OCT. 4

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

**REYDON.** *Country Life and Country Needs Exhibition.* (Sponsor, BIAE.) SEPT. 20-26

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

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

**SOUTH KIRBY.** *NALGO Exhibition.* At Station House. (Sponsor, BIAE.) SEPT. 20-25

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

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

## NEWS

THURSDAY, SEPTEMBER 20, 1945  
No. 2643. VOL. 102

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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 new Chamber of the House of Commons will be 456 loud speakers and an ENGINEER'S PERISCOPE IN THE CEILING for adjusting the ventilation.*

Speaking at a meeting in London of the Town and Country Planning Association, Mr. A. Gilbert Scott, who is associated with his brother Sir Giles Gilbert Scott in designing the new House of Commons, said: As it is impossible to construct a chamber of such size and shape which can be guaranteed acoustically perfect throughout for members speaking from all sorts of positions, it has been decided to install sound amplification by arrangement with the BBC, and 456 loudspeakers are being installed, roughly one to every two persons. All these have to be incorporated inconspicuously in the seating. No provision is being made for broadcasting or television, though every other known service is being installed, including annunciators, division bells, electric clocks, pneumatic tubes, and vacuum cleaning, in addition to all types of heating and air conditioning. The building will develop into a mass of ducts and conduits, all of which will be discreetly hidden. The chief problem is not the heating but the cooling of the chamber and the elimination of hot air. It is proposed to install a periscope in the ceiling so that the control engineer might observe any large movement of members or strangers and immediately adjust the ventilation accordingly. Each occupant of the chamber will be provided with a heating panel under his feet and a gentle current of air from varying directions will be introduced horizontally above head level. Air conditioning with humidification and cleaning by electrical filtration, by which dirt is attracted to a flat negative plate where it can be sponged off, is being installed in all the new rooms and telephone boxes.



Ritz Cinema, Warrington

Architects:  
J. Owen Bond & Son, F/A.R.I.B.A.



Odeon Cinema, North Watford

Architects:  
J. Owen Bond & Son, F/A.R.I.B.A.



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## From AN ARCHITECT'S Commonplace Book

**HOW CARPATHIAN CASTLES CAME TO THE MIDLANDS.** [*From Narrow Boat, by L. T. C. Rolt (Eyre and Spottiswoode)*] Each member of the family played his especial part. George began in his spare time from the factory; he was the lettering expert, and painted the owner's name and port of origin in elaborate cream lettering, shaded with blue, on the large vermilion centre panel of the cabin side. Then it was the old man's turn to embellish his son's work with little garlands of bright flowers in the four corners and between the lettering. Finally it was left to Herbert, the younger son, to paint his castles on the four small side panels. Apart from striking a line with a chalked string to keep the lettering level, they did no preliminary sketching or spacing out whatever, but worked straight out of their heads with wonderful rapidity and skill. I watched fascinated while Herbert painted the four castles in the space of one afternoon. Dipping first into one and then another of the small tins of oil paint of his own grinding and mixing, he blended together the green, the blue and the sepia until a typical scene, dear to generations of canal folk, suddenly took shape under his hand. Here it would be a castle with a single battlemented turret, rising against a background of rolling blue hills and red sunset; there a more monastic structure, twin towered, and backed by woods, a stream flowing improbably through an arch in the base of one tower and spreading into a lake in the foreground. Each panel differed from its neighbour, yet all were true to that traditional form which appears so strangely foreign in its conception. Who first established this convention of tall stuccoed towers and wide-eaved red roofs? Perhaps it was some old wandering Romany who exchanged his caravan for a narrow boat when the canals were young, and adorned the walls of his new home with his memories of fairy-tale castles in the Carpathians.

### *A Five Years' Plan to extend BRADFORD CATHEDRAL by nearly half its length has been approved by the Cathedral Council.*

Estimated to cost £150,000, the extensions will provide seating for 400 more people, making a total of 1,400. A public appeal is to be made for funds. A new double porch at the west end with a colonnaded outer portion leading to a flagged terrace will have wings on either side, one to provide accommodation for the bishop, the provost, and the honorary canons, and the other for the choir and music. There will be a new lady chapel and the east end extensions will include a chapter house.



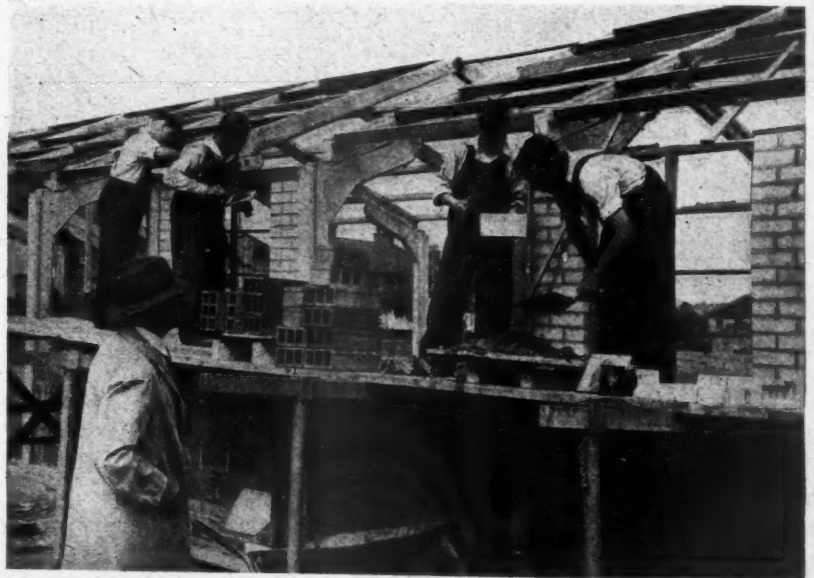
Mr. Clough Williams-Ellis said that they envisaged executive control beyond the boundaries of the national park by normal country planning, or the national park of which they dreamed might be hedged with nightmare. Dr. G. M. Trevelyan, Master of Trinity, said that nothing but a national park could save the Lake District.

### *The Minister of Town and Country Planning, Mr. Lewis Silkin, has appointed Professor R. S. T. Chorley to be a Member of the NATIONAL PARKS COMMITTEE.*

clare that a whole district belongs to the nation it is rather difficult to see where it is going to stop, and whether we shall not have many more picnics in our gardens.

### *Mr. J. W. Cropper, Lord Lieutenant of Westmorland, speaking at Keswick on the National Park proposal for the Lake District: We fear our privacy and OUR ENJOYMENT OF SPORT MAY BE INTERRUPTED.*

Mr. J. W. Cropper, Lord Lieutenant of Westmorland, presiding at a meeting at Keswick to celebrate the fiftieth birthday of the National Trust, paid a tribute to the founders of the Trust, Octavia Hill, Sir Robert Hunter, and Canon Rawnsley. Mr. Cropper said that the first property of the National Trust was the Ruskin Memorial on Friar's Craig, in 1900, and two years later they acquired 100 acres of Brandlehow, Derwentwater. Sir John Randles gave properties on the Keswick side of Derwentwater. They had recently accepted 80 acres at Langstrath as a memorial to the late Eustace Charlton of Keswick. They also hoped soon to have a museum in Beatrix Potter's house and the original pictures of the delightful characters of her books. The thanksgiving for victory and memorials to the fallen might be opportunities for people to help the Trust. They had the prospect of a national park for the Lake District. Some of them who lived there were not altogether happy about the national park in many ways. We fear our privacy and our enjoyment of sport may be interrupted, he said, because when you de-



*The youngest team in the country, working under the Building Apprenticeship and Training Council, is erecting an 80 ft. one storey nursery school at Chatham for the Kent Education Authority. There are twenty-four boys, aged 14 to 16, and all are paid Trade Union rates of wages. Top, Mr. George Tomlinson, Minister of Works, laying the commemoration stone. Bottom, boy bricklayers at work on the nursery school.*





### *Third BISF Prototype*

This week we illustrate the third of the house types erected at the Northolt experimental site by the British Iron and Steel Federation to designs by Mr. Frederick Gibberd. It

is of completely dry, factory-made construction designed specifically for quick erection. Above, a view of the front of the pair of houses. See pages 205 to 213.

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*The Building Congress which was to have been held on July 24 and 25 will now be held on OCTOBER 30 AND 31 at the Central Hall, Westminster.*

The object of the congress is to enable all those in any way interested in the work of the building group of professions and industries to meet and discuss the problems facing them at the present time. The congress will be opened on the first day by the Archbishop of Canterbury, and the concluding address on the second day will be given by Mr. Ernest Bevin, Minister of Labour and National Service from 1940 to 1945 and now Foreign Secretary. A civic welcome to the delegates to the congress will be given by the Mayor of Westminster. The business of the congress will be conducted in four sessions dealing respectively with the supply of labour and materials, town planning policy and the need for a balanced programme, the position of the building industries and local authorities in relation to the forthcoming national housing programme, and finally the future relationships of the building industries with the various Government departments concerned with building activity. These sessions will be addressed respectively by Messrs. G. A. Isaacs (Minister of Labour), Lewis Silkin (Minister of Town and Country Planning), Aneurin Bevan (Minister of Health) and George Tomlinson (Minister of Works). The presidents of the leading Institutions associated with the building industry have also agreed to speak. Tickets price one guinea are obtainable from the Building Industries National Council, 11, Weymouth Street, W.1. Immediate application for tickets by members of the building industry, members of local authorities and any others interested is desirable as the accommodation is limited and is rapidly being taken up.

***Fifty-eight acres of cliff land at Fairlight, near Hastings, including Stumble Wood, with views over Rye Bay to Dungeness, have been PRESENTED TO THE NATIONAL TRUST.***

The land has been given by Mrs. Eves in memory of her husband, Mr. Reginald Grenville Eves, R.A., the portrait painter, who had known and loved it since his boyhood, and spent his money in gradually acquiring it to preserve it from the possibility of ill-advised development. Marked on the Ordnance map as Marsham, the land lies four and a half miles east of Hastings. It gives a view westwards over Fairlight Cove to the Lovers' Seat above Fairlight Glen and onwards across Pevensey Bay to the South Downs and Beachy Head. Inland, the view takes in the hill-top church of Fairlight and the countryside rolling back to the Brede Valley and to Winchelsea and Rye. Immediately below is Marsham Farm, of which the bluff is part, and eastward the eye sweeps across Rye Bay to Dungeness.

***Mr. Richard Coppock has been elected Chairman of the General Purposes Committee of the BUILDING INDUSTRIES NATIONAL COUNCIL and Mr. A. W. Davson, the Vice Chairman.***

# TELEVISION

THE long awaited report of Lord Hankey's Television Committee recently burst upon an expectant public.

The Committee recommends :—(1) An early resumption of visual broadcasting under the control of the BBC. (2) Extension of television to the six chief urban centres. (3) An improving standard of definition, equal to that of the screen, and possibly including colour and stereoscopy. (4) Vigorous and independent research, unhampered by monopoly. (5) Development of cinema television. (6) Private licences for domestic viewers at an additional fee of £1 per year over and above the Sound licence. (7) Television to be made available to the maximum number of homes.

The Ministry of Education has, happily, been represented on the Committee, and the report affirms the belief that in the educational field "television opens up considerable possibilities." Here is an understatement of Churchillian restraint. The possibilities are, in fact, staggering. For what is implied when a nation of forty-six millions, blind for a century, again begins to see? The answer is already borne to us through the audibly mounting public interest in the æsthetics of housing. But this is only the beginning. In this wide seeing future television is destined to play a leading part. Television could be a potent instrument for the information and education of the public in all matters concerned with the visual arts, with planning, and with architecture. How will it be used?

In the development of an educational and entertainment policy for television, obviously, architecture and the arts can only form part of a whole. The ARCHITECTS' JOURNAL does not wish to stake out a claim in the television programmes for architecture and the visual arts at the expense of any other section. Far from it. But the very nature of this new form of radio makes it certain that for good or ill the visual arts will be a vastly more prominent feature in public instruction and entertainment than hitherto. It is therefore of the utmost importance that the profound cultural implications of this new technical development should be realized in all quarters vividly, fully, and in time. Much will depend on whether the BBC obtains renewal of its monopoly when the present Charter comes up for review next year. In any case it will be a challenging responsibility for those, whoever they may be, who are to formulate television policies and programmes, and to nominate individual directors and programme makers with suitable qualifications, experience, imagination, and outlook. Seeing at a distance will demand far-sightedness. For only if all aspects of televising are given due weight while policy is still being formed will the public in the long run derive the widest benefit. There are passages in the report which suggest that a more narrow procedure might be followed. Yet, to-day, when housing questions are headlines, it would be nothing less than tele-myopia if

the educationists, reporters, and entertainers concerned were to be driven into saying, "We do not deny that architecture and the visual arts may become factors in the television service, but other things such as Greyhound Racing and Cup Finals must come first."

As regards television and architecture in general, and architecture in relation to town and country planning and to landscape, the central necessity seems to be a policy which will seek to impose no particular viewpoint, taste, or fashion, but which will positively provide every kind of information, and stimulate every kind of discussion. The information and entertainment can be various, and variously presented. All the familiar apparatus of architectural education, and of visual and technical education in general, can be brought into play and adapted for general instruction and delight. The magic lantern of tomorrow will have the sky for its screen and the nation for its audience. Illustrated talks, visits to many parts of the countryside and to actual towns and buildings, flights in aeroplanes and views from the air, exhibitions, books, films, plans, drawings, models, maps, photographs, here are some of the raw materials. They are waiting to be cast into the furnace of a new radio technique in moulding a higher form of civilization with a better standard of visual values.



*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

### DURHAM POWER STATION

In announcing its decision to enlarge two of its existing stations rather than set up a new power plant in the Durham area, the North-Eastern Electric Supply Company has implied that this was a concession to amenity mongers and the Durham workers have stigmatized it as a victory of beauty over utility.

But the evidence is quite otherwise. I understand that at the Durham Inquiry it was stated that not only were there several other sites along the river more suitable for a power station on technical grounds, but that ancient underground workings which might cause instability were suspected at the chosen NESCO site. No official report of the findings of the Inquiry has been issued by the Ministry of Town and Country Planning, but it is known that the Ministry intimated to NESCO that it would like further evidence that othersites along the river were not more suitable than the debatable Kepier site.

Both Ministry and NESCO officials have been seen wandering upon the banks of the Tees and there is little doubt that NESCO came to the same conclusion as those who were preparing the evidence at the Inquiry—namely that there were other sites along the river technically superior to that at Kepier. On the other hand, those alternative sites were in private ownership, whereas the Kepier site had been bought by NESCO in the early thirties. Negotiations about the others would take time, be costly, and be an open confession that NESCO had not

made any detailed investigations of any alternative sites before pressing the claims of the Kepier field, which happened already to be their property.

To make the best of a bad job, NESCO has decided to undertake extensions at two of its existing plants—a procedure which it repeatedly stated at the Inquiry was technically quite impossible. Durham workers suffer no loss, for the employment that might have been given by the erection of a power station at Kepier was infinitesimal and would not have been recruited locally.

And so there has been a great deal of fuss about nothing, and the moral to be drawn is that if we want sound objective planning misrepresentations of the beauty *versus* utility nature should not be allowed to fog essentially practical issues.

### STAGG (AND RUSSELL) PARTY

Walking recently with Auden's other idiots in Leicester Square, I was sucked—as irresistibly as a bus ticket into a fresh-air intake—into Messrs. Stagg & Russell's wonderful London Exhibition.

It is a remarkable and inconsequent show, full of the visual shocks proper to all exhibitions, but this time achieved without using any of the current design clichés such as those which have been re-assembled so inexpertly as the background to the Greater London Plan—visitors to Stagg & Russells are guided by silken cords on wooden posts—as at Windsor Castle or Hampton Court, and not, as at the Greater London Plan, by pseudo-glowing wall shapes which deposit you in ill-lit culs-de-sac. Lights are directly above exhibits and frankly exposed—not, as at the G.L. Plan, where the map captions are concealed with the lighting.

Best of all to the lazy-minded, there is practically no written matter to distract the attention from such varied objects as models of Elizabethan London, modern fire engines, a full-size dummy of V2, replicas of the Crown jewels, oil paintings of old



London, of a naval officer, and, as a climax, "The most sensational room in the world."

For once the ad-men have not overstated, for in this elaborately furnished sitting room, every stick of furniture from the canary in its cage to the coal-scuttle, from the piano to the statuettes in the china cupboard, pictures, fender, guitar, potted palm—even biscuits on a plate—all are covered with carapaces of postage stamps worked into coloured patterns.

This room is the result of many years' work by a Londoner, and a notice on the wall reminds us that it is copyright. Frankly, I don't think he need worry.

#### SOUTH OF THE BORDER

Art knows no frontiers, and across the Square is another disturbing and stimulating sight—a picture whose painter—H. Dalton Clifford—is the only architect (except Oliver Hill, of course) to be represented in the Artists of Fame and Promise exhibition organized by the Leicester Galleries.

Mr. Clifford, hitherto better known as a designer of fabrics, camouflage and collapsible huts, is represented for the first time in any gallery by a writhing composition of Aztec masonry, morose eye-sockets and quilted bellies, all corralled into a mahogany frame (unmistakably the work of an architect) and skilfully executed without the aid of a single postage stamp. Farewell, Leicester Square.

#### SWEDISH BEVERIDGE

An official volume has reached me from Stockholm with the staggering title: *Riktlinjer För Skapande Av Socialväsensdets Forskningsorganisation*, which means, more or less, *The Formation of a Research Organization for Social Activities*. It is a report by Hjalmar Cederström, the architect and engineer for the new Söder Hospital in Stockholm, recently mentioned in these columns. The report is sponsored by a committee appointed by the Swedish Government in 1943 to make proposals for the care of those who are only partially fit for work on

account of inherited incapacity, illness, accident, unemployment or old age.

For such people, says the report, the social conditions in Sweden and in other countries are very unsatisfactory. Radical steps must be taken and the State must co-operate with the municipalities and with industry to assure citizens better conditions and complete social security.

The report is, in fact, the Swedish equivalent of the Beveridge scheme, with the difference that whereas Beveridge wanted to provide State assistance, with certain limitations, without service in return, Mr. Cederström's idea is that everybody shall be given work to do within his or her capacity.

"Social problems cannot be solved by unemployment and grants," goes on the report, "but only by work and production. Reconstruction must aim at providing youth, mature labour, partial labour and the over-aged with the right to work, a right which is now denied to many individuals."

Thorough scientific research on an international scale for "social-technical" planning, including housing and physical planning, is, however, essential, writes Mr. Cederström. Each research organization needs a centrum, and the big general hospital, like the Söder Hospital, which is in intimate contact with other social institutions, is the natural choice.

Frankly, I find these proposals, however well-meaning, even more ominous than those of Beveridge. There is a depressing odour of the well-run labour camp about such schemes. In a few years' time, when even the aged and the infirm are being dragooned and fixed into the fatuous treadmill, we shall once again be hearing about the dangers of Unemployment, so-called Overproduction and Plenty, the inevitable final results of science and planning. The proposal that our temples of the future should be the hygienically whited sepulchres of disease is the more significant.

ASTRAGAL



## LETTERS

P. M. Dean,  
Sergt. R.E.

B. A. P. Winton-Lewis,  
A.R.I.B.A.

F. H. Bullock, B.Sc.,  
(Engineer and Manager, East Worcester-shire Waterworks Company.)

G. B. J. Athoe,  
(Secretary, Incorporated Association of Architects and Surveyors.)

### Land for Schools.

SIR.—It would appear from the report on the Schools Conference that there is a considerable amount of unwillingness on the part of the Local Authorities to resort to the Compulsory Purchase of Land.

Mr. W. F. Herbert states that compulsory purchase is un-English. One might equally state that the direction of building trade operatives is un-English, but it just doesn't get us anywhere. The need for both is unquestionable.

We want large numbers of well-designed, well-built schools laid out in accordance with modern principles. We must have the land on which to build these schools; moreover, we must have a lot of land so that our kiddies can have the playgrounds and sportsgrounds which are so essential for their well-being and physical fitness. It matters not how we get it so long as we do get it.

We are not anxious to have our money squandered. We are willing to pay a fair price for the land which we require, but we are not prepared for one instant to consider the interests of the land speculator. I consider that a fair price for land is the price that was paid for it in the first place. There is no necessity to consider a profit to the landowner for, if he is worth



## WINNER IN THE HBISC COMPETITION



*This was one of the winning designs in the competition recently organized by the House Building Industries' Standing Committee open to members of the National House-Builders Registration Council for small architect-designed houses of permanent traditional design and construction. This three-bedroom design was submitted by Messrs. Davis Estates and was designed by Mr. A. Kenneth Barter, L.R.I.B.A. A prototype pair is to be*

*built at Orpington, and another pair at Plymouth. They should be completed by the end of October when they will be on show for some three months. Walls are of 11-in. cavity brickwork and internal partitions of laminated slabs. The roof is steel-framed covered with lightweight building slabs and tiled. The ground floor is of concrete covered with composition flooring, while the first floor is of precast concrete beam construction.*

his salt, he will have made the land a source of income while in his possession.

Moreover, why should we pay higher taxes in order that a private individual may make a large, unearned profit out of a public necessity? The operative word is unearned.

The needs of the many *must* be placed before the interests of the few.

The Local Authorities are democratically elected to *serve* the public interest. Then let them cast sectional interests aside and carry out this their duty.

Let them act on our behalf to obtain this land at a fair price and build these schools which we so urgently need. Let them make good use of the powers vested in them by our representatives in Parliament. Let them achieve this object in the speediest and most economical manner in which it is possible. The demands of the public must come first, foremost and always.

Middle East Forces

P. M. DEAN,  
Sergt., R.E.

### Housing.

SIR,—The end of Japanese hostilities in the Far East, and the subsequent demobilisation, makes Housing more than ever

No. 1 Priority. Not only should every available man or woman who can be useful in the building industry be demobilised as quickly as possible, but every encouragement should be given to all who can help to provide houses, whether local authorities or builders, large and small.

Brighton

B. A. P. WINTON-LEWIS

### Thermal Insulation

SIR,—In your issue of August 30 you set out some considerations regarding the design of houses for heat retention.

The architect is becoming increasingly aware of the importance of such factors as affecting economies in the amount of fuel needed adequately to heat domestic premises, but there is another advantage to be gained from good thermal design, which may not be sufficiently recognised. I refer to the reduction in the risk of burst water pipes and fittings as a result of frost. The expense and inconvenience experienced by hundreds of thousands of people every winter are such that in the design of new

houses there is the strongest possible reason for taking steps to eliminate burst pipes as far as is practicable.

F. H. BULLOCK,  
Engineer and Manager,  
East Worcestershire Waterworks Company,  
Bromsgrove

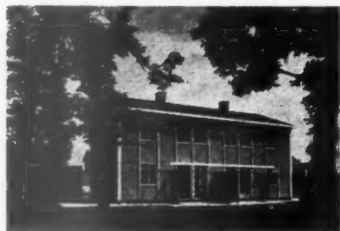
### The Admiralty Extension

SIR,—The burden of Mr. Gazzard's letter seems to be that the Admiralty Extension is a war memorial in itself—on the principle of Wren's memorial motto—*Si monumentum requiris, circumspice*. By all means have it that way. I never suggested that the extension should be removed. My proposal that sculptural adornment should be added is in no way negated by Mr. Gazzard's revelation that the facing is composed of pre-cast concrete slabs. The nature of the sculpture can surely be left to our sculptors.

G. B. J. ATHOE,  
Secretary,  
Incorporated Association of Architects  
and Surveyors  
London



# PAIR OF BISF PROTOTYPE HOUSES AT NORTHOLT BY FREDERICK GIBBERD



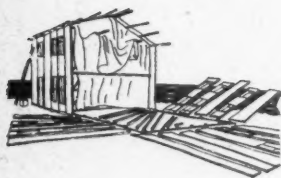
*Top, a general view of the front elevation. Below, the back elevation. The finish of the steel panels is of a rough textured finish of paint and stone chippings applied in the factory.*

**GENERAL**—The British Iron and Steel Federation C Type house illustrated here is the third in the series of steel house types which the Federation is producing in its housing research programme. The prototype has been erected on the Government Experimental Housing Site at Northolt, opposite the

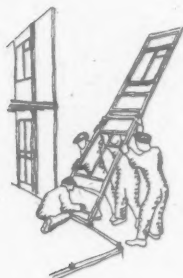
two other types—A and B—which the Federation have already erected. (See A.J., Oct. 12, 1944, pp. 260, 265 and 274-6.) The consulting engineer was Mr. Donovan H. Lee, M.Inst.C.E.

The C Type is a completely prefabricated factory made house of permanent construction. It has been specifically designed for exceptionally fast erection, without the use of special machines and to bring in labour normally outside the building trade. The simplicity and speed of erection has been

attained by building the structure of a series of two-storey panels which stand side by side with a cover strip over the joint between them. The panels provide both the structural frame and the external finishes, and have doors or windows already in them. In this way, a small gang can erect the shell of the house complete with its doors and windows in one day. The actual prototype was erected in 540 site hours, as against over 2,000 required for a house of conventional construction.



Placing of wall units for right-hand house.



Erection of wall unit.

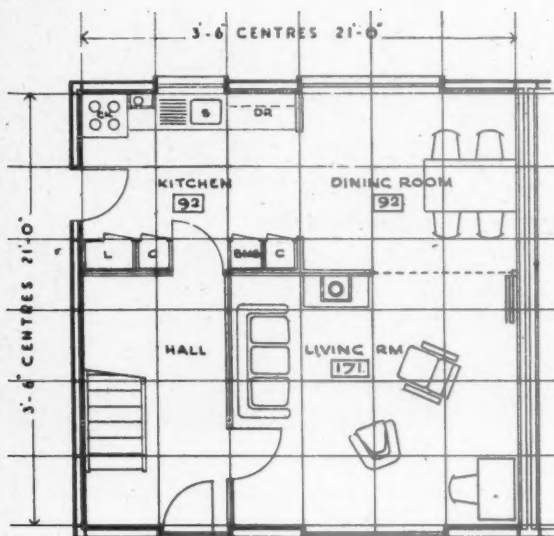


Fixing of floor joist.

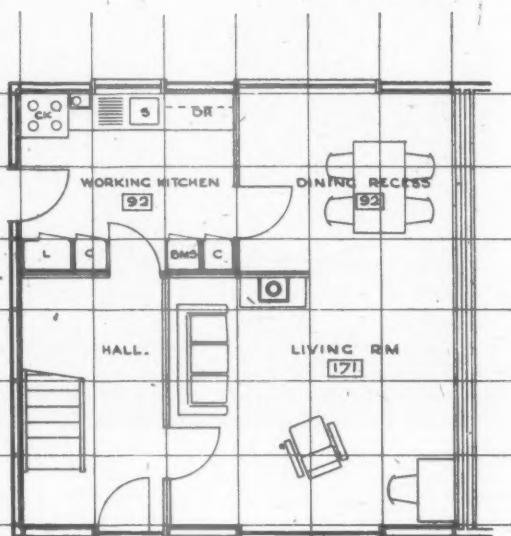


Fixing of cleats between wall units and bolts to floor joists.

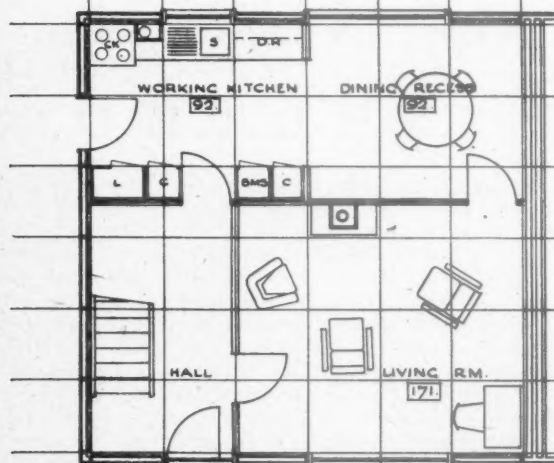
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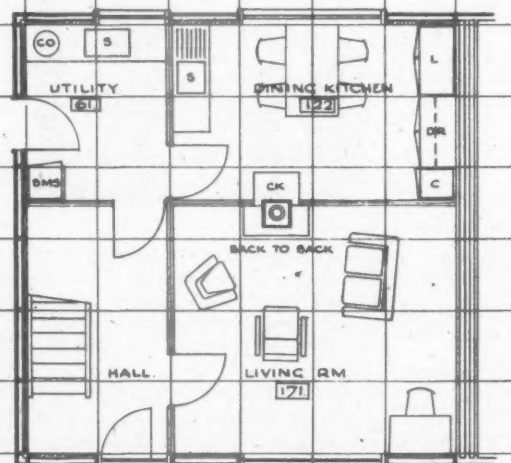
1. OPEN PLAN.



2. LIVING ROOM WITH DINING RECESS.

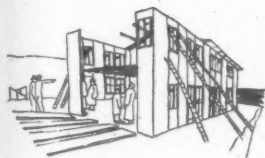


3. KITCHEN WITH DINING RECESS.

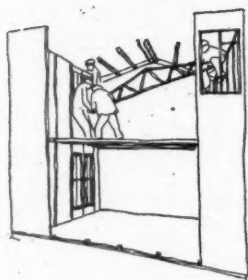


4. DINING KITCHEN & UTILITY ROOM.

# PAIR OF BISF HOUSES AT NORTHOLT



Four units at gable wall left out to lift roof trusses through gap.



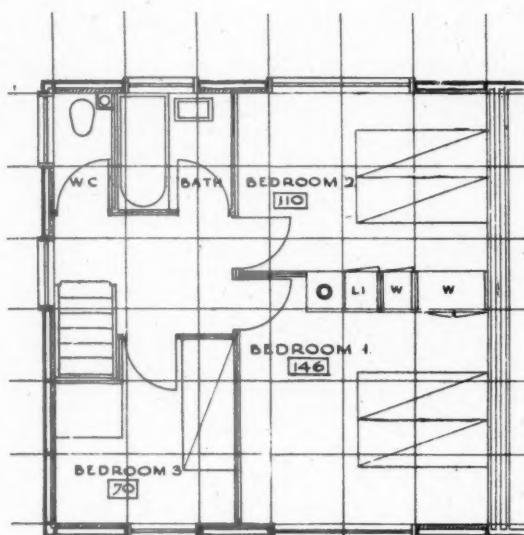
Hoisting of roof truss.



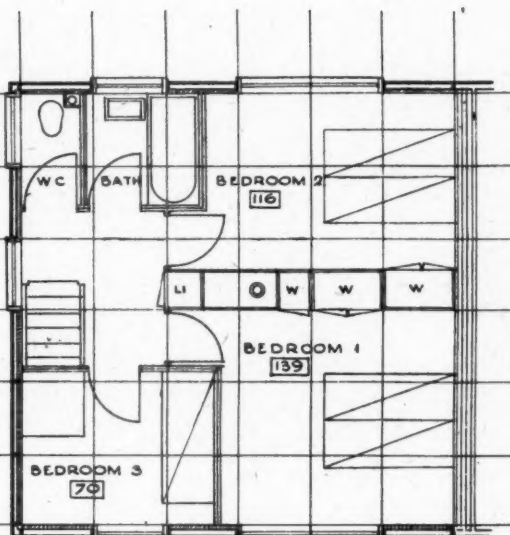
Bolting of roof truss.



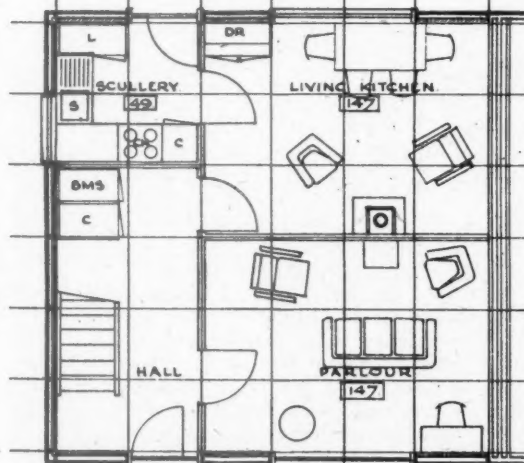
Fixing of purlin.



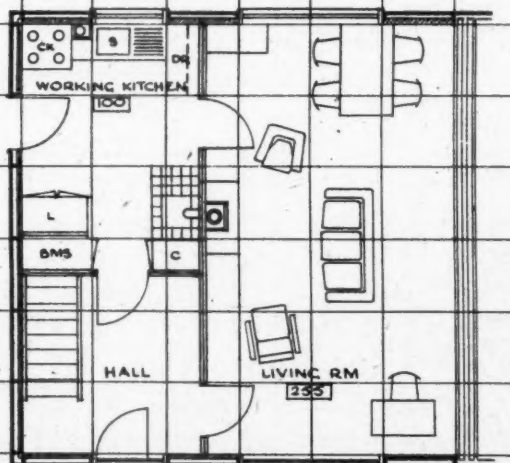
FIRST FLOOR FOR TYPES 1, 2, 3, 4, 5.



FIRST FLOOR FOR TYPE 6.

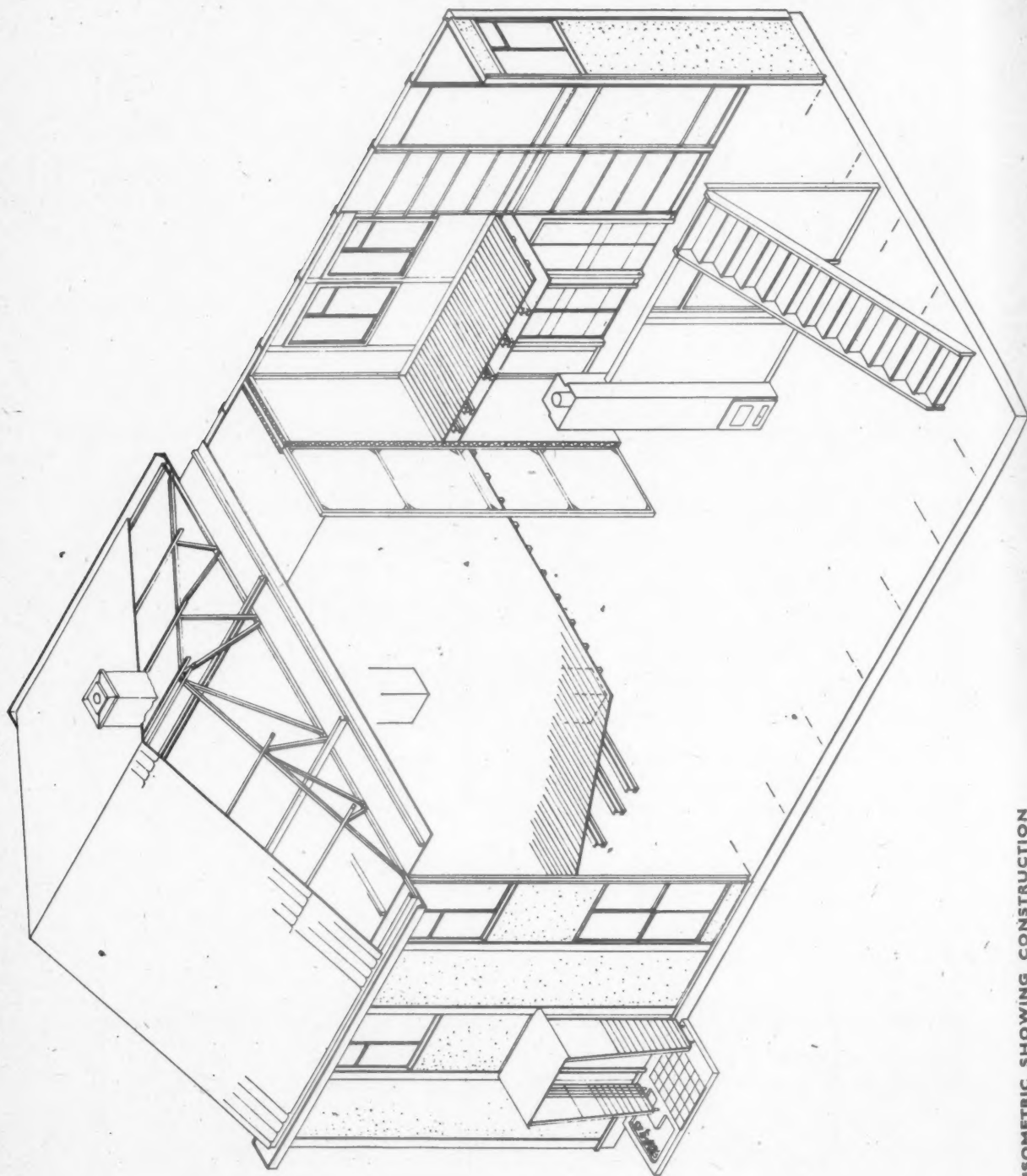


5. PARLOUR.



6. THROUGH LIVING ROOM.





ISOMETRIC SHOWING CONSTRUCTION

The internal equipment, such as the staircase, the plumbing, space heater and kitchen fittings, is all prefabricated complete with finishes.

The external colour scheme of this house is rough textured pink walls with stove enamelled cover fillets of the same colour, white corner posts, eaves and windows. One entrance door is blue, the other

Indian red, and the roof is dark brown.

**PLANNING**—The house is designed to a modular system. After experiment with a 3 ft. 6 in. module on the previous houses and 3 ft. 9 in. on this one, the Federation have standardised all their plans to a module of 3 ft. 6 in. In this, the 3 bedroom type, each

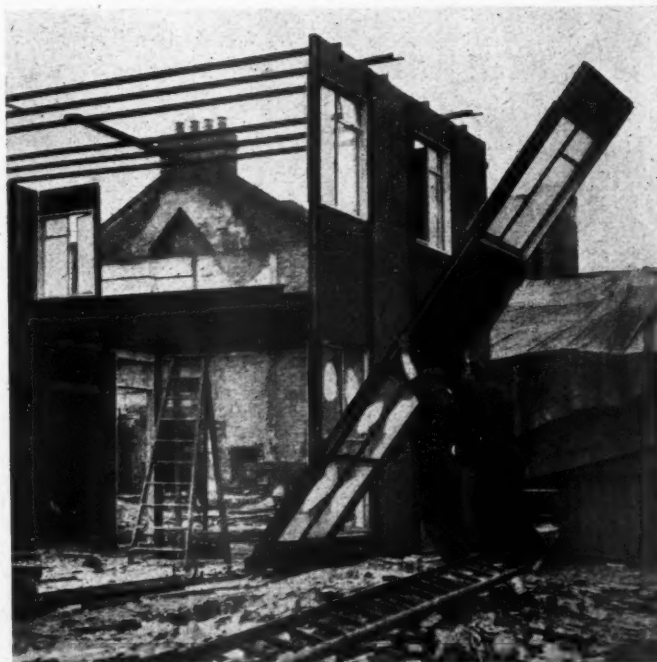
house is 6 modules wide by 6 modules deep, making a total internal area of 880 sq. ft. Five different plan types are possible within this area simply by changing the position of the prefabricated partitions. In the sixth type, the through living room can be provided by slight adjustment of the internal floor beams. The previous houses erected were on the

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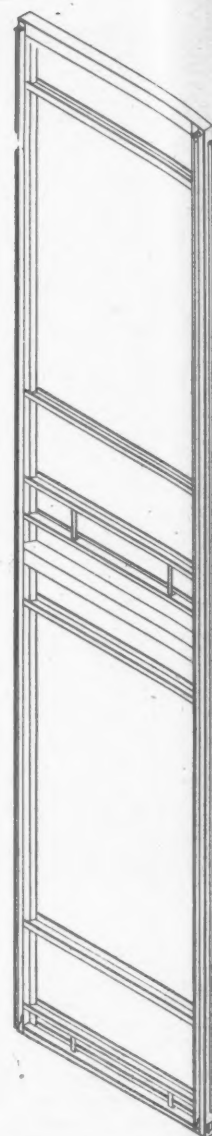
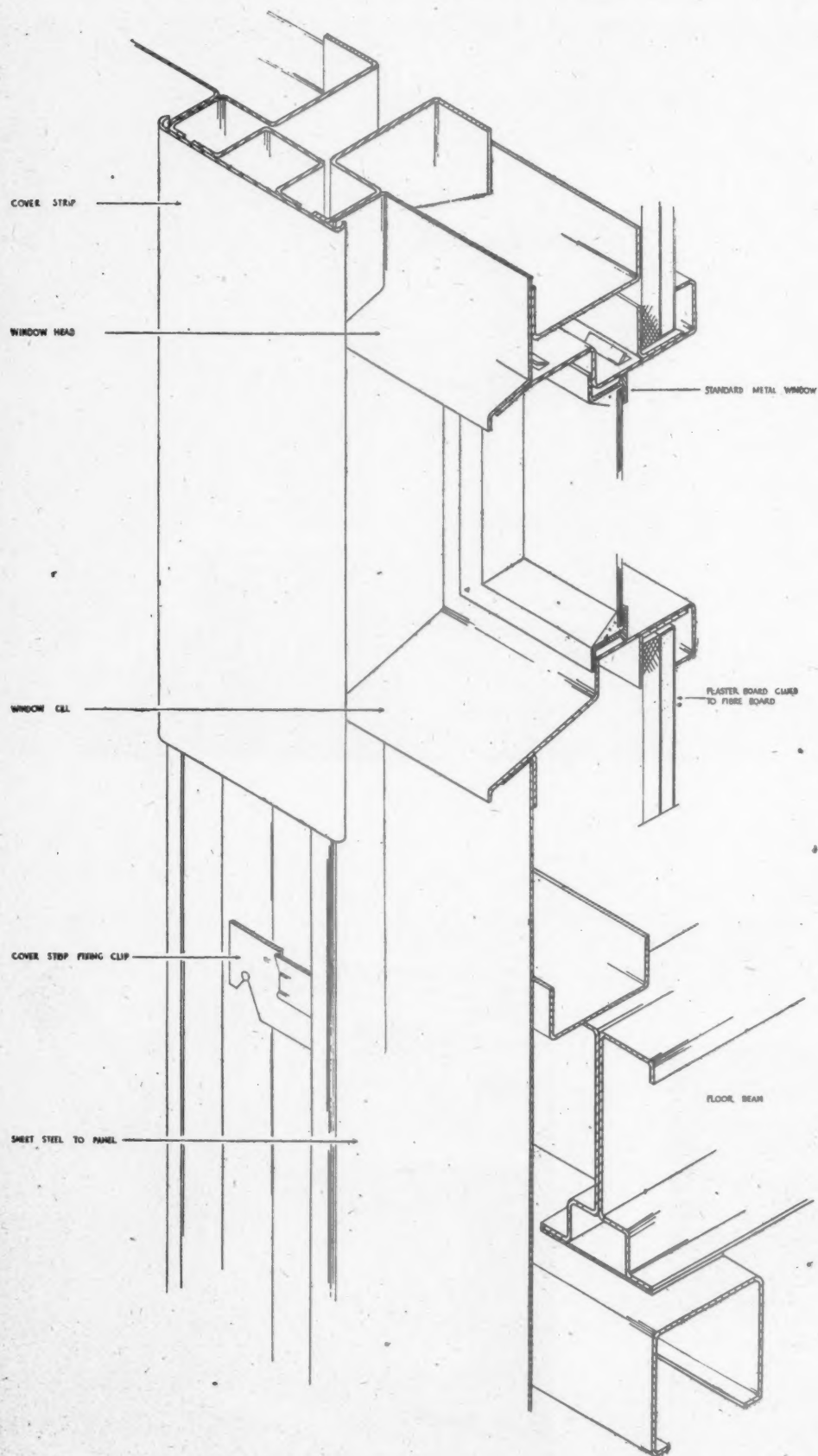
P A



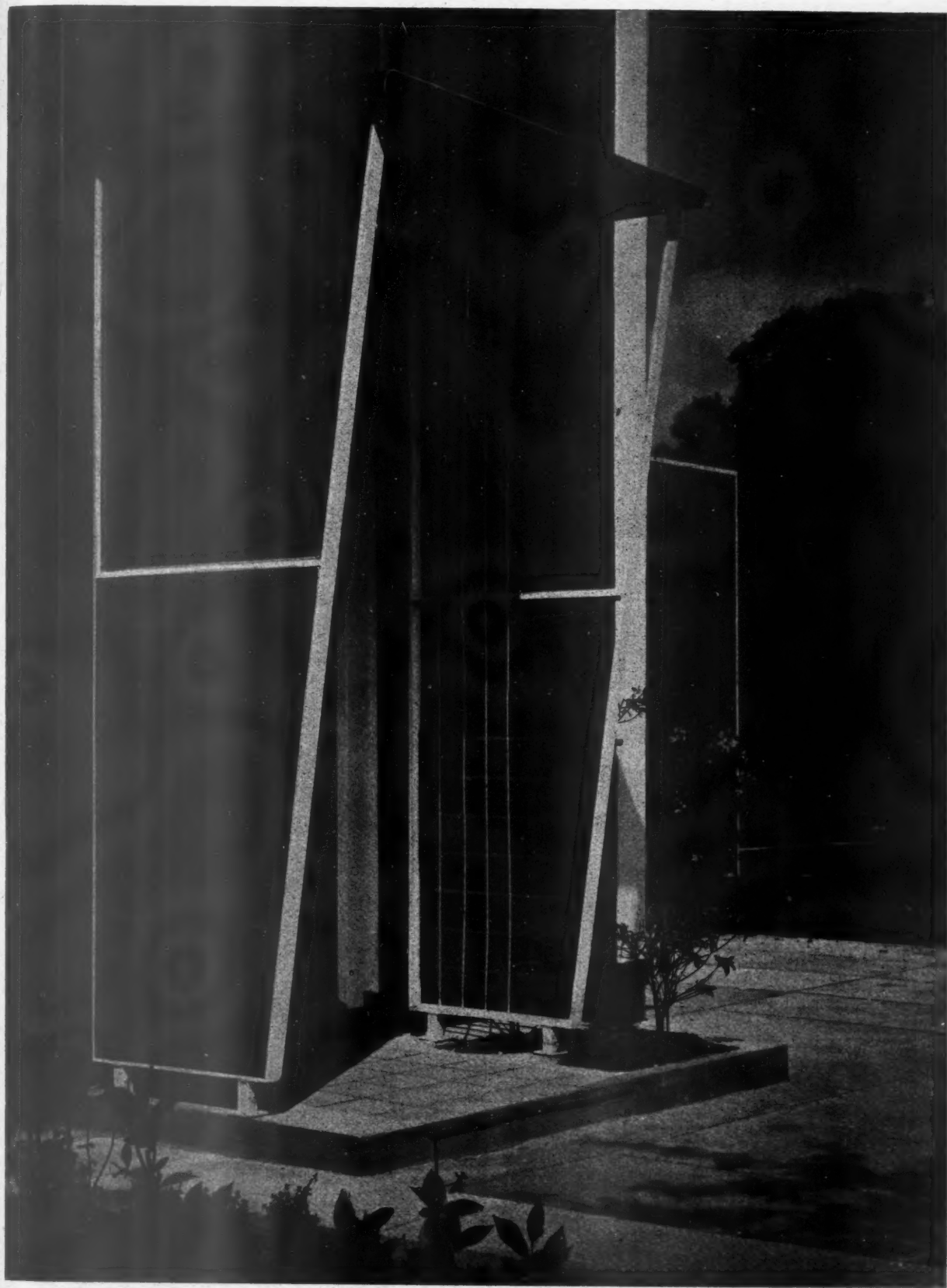
On facing page, isometric diagram showing general construction. Above, the fascia board being fixed in position. Below, the steel wall sections being loaded on to a lorry. Right, a steel wall section being lifted into place.



PAIR OF BISF HOUSES AT NORTHOLT



Left, diagram showing the steelwork. Above, the basic steel framework of one of the wall sections. On facing page, a main entrance porch; the roof is of sheet steel supported by sheet steel T sections; the party wall side is enclosed with timber and glass to form a screen and the other side has a timber and metal trellis for growing plants.



DESIGNED BY FREDERICK GIBBERD





PAIR OF BISF HOUSES AT NORTHOLT

open plan—Type 1. The C house is the Type 2—Living room with dining recess.

**CONSTRUCTION—Panels:** Two storey panel, one module wide, is clad externally with steel sheet, spot welded to light gauge steel frame. Standard metal windows and doors are housed in pressed steel frames incorporated in the panels. The vertical joints are covered by a stove enamelled fillet which is latched into position, no screws or bolts being visible.

**Roof:** Consists of light structural steel trusses and purlins supporting a roof covering of protected steel sheeting.

**Partitions:** Factory made units of timber or steel frame, lined with plasterboard or fibreboard.

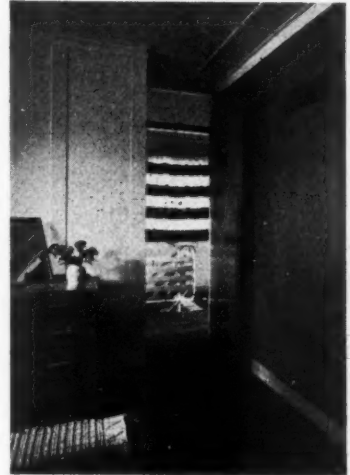
**Floors:** The first floor beams are of twin cold-formed steel sections incorporating timber nailing strips for ceiling boards. The floor finish is of  $\frac{3}{8}$  in. tongued and grooved timber on 2 in. by 2 in. battens, fabricated in large units, one module by half the house in depth. The ground floor is of solid concrete with linoleum finish with a waterproof membrane interposed. **Party Wall:** Of double leaf construction, consisting of prefabricated wood-wool panels and timber nailing strips, clipped to the steel frame and lined with wall board on the site.

**Flue:** An 8 in. diameter cast iron flue pipe enclosed in a cellulose enamelled metal casing with hot air vents to Bedroom No. 1 and Dining Space. In the Right Hand House, the Dining Space is heated with hot water radiator as an alternative.

**COMPONENTS—Windows** are of standard metal sections. The French doors to the Dining Room are standard metal casement sections. Front and side doors are in pressed steel. Inside, the doors are of wood with flush finish. Stove enamelled steel door frames are used with the steel framed partitions in the Left Hand House. In the Right Hand House, door frames and partitions are of timber. The staircase is of spot welded pressed steel construction, with wood-faced treads. Picture rails and skirtings are of wood. Kitchen equipment consists of prefabricated steel units of standard sizes with a stove enamelled finish.

**SERVICES—**The cold water storage tank is housed in the roof space with the rising main taken in the duct. In both houses the Living Room fire, besides providing hot air and space heating, supplies hot water to Bathroom and Kitchen. In the Left Hand House the hot water storage tank is in the linen cupboard; in the Right Hand House the storage tank is combined with the space heater in the living room. The domestic hot water circulates to the towel rail in the Bathroom, with draw-off points in Kitchen and Bathroom.

**PLUMBING—**Prefabricated in both houses, and on the one-pipe system. No pipes are exposed. In the Left Hand House the plumbing consists of two main sections; the larger unit is a one-storey high duct, forming the partition between the w.c. and Bathroom. The smaller and lower unit consists of



soil and branch pipes to Ground Floor.

In the Right Hand House there is no plumbing duct, and a few site connections have to be made to the separate pipes, which arrive on site all ready strapped as units. Sanitary fittings include a vitreous enamelled steel sink and drainer in one unit, a vitreous enamelled steel lavatory basin and a 5 ft. 6 in. rectangular iron bath.

#### ELECTRICAL INSTALLATION

—The wiring is of PVC cable. The runs to the light points are carried in the floor and roof spaces; power plugs are wired within the first floor space on the ring-main system. Drops are made in the external wall spaces.

**FINISHES—Internal:** The ceilings are of fibreboard, finished with distemper. Internal walls are either of plasterboard or fibreboard, the joints being covered with hardboard or plywood cover fillets. The whole wall surface is finished with coloured distemper. Special composition linoleum covers the ground floor. The internal flush doors and wardrobe assembly are finished in eggshell varnish. The Bathroom and portions of the Kitchen walls are lined with enamelled asbestos.

**External:** External wall panels are finished with paint harling applied in the factory—a rough mixture of paint and stone chippings. The cover fillets are finished with stove-enamelled paint applied to rust-proof treated steel.



On facing page, a view from the staircase looking down into the hall. Above, a view from a bedroom looking onto the landing. Left, the living room fireplace with dining area beyond.

# 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.

## PHYSICAL PLANNING

2109 Australian Survey

COUNTRY TOWNS OF VICTORIA: A SOCIAL SURVEY. A. J. and J. J. McIntyre. (Melbourne University Press, 1944.) First survey of amenities of 180 country towns in Victoria of between 250 and 10,000 people. Towns largely dependent on Melbourne excluded.

Influenced by the American Sociologists, Dr. E. de S. Brunner and Dr. J. H. Kolb, both of whom visited Australia in 1937, the authors endeavoured not only to record facts with regard to social amenities and technical facilities, but also to assess the attitudes of the various sections of the population.

The following aspects were investigated:

1. Location of town, nature of district, size and lay-out of town.
2. Amenities such as water supply, electricity, gas, etc.
3. Communications—train and road services, mails, etc.
4. Commerce and the professions.
5. Industry.
6. Recreational, social and cultural equipment and its use.
7. Schools.
8. Churches.
9. Health.
10. Miscellaneous.

The whole investigation is the more necessary as the centralization of the population in Australia and in Victoria is particularly great. Over half of the Victorian population lives in Melbourne and its suburbs, which covers approximately 0.2 per cent. of the total area of the State.

Country towns in Victoria exist primarily as service, distributing and collecting centres for the surrounding agricultural districts, while others are largely dependent upon transport services, especially railways. The development of transport facilities has acted as a centralizing factor on the countryside. It can generally be observed that larger towns are growing larger while the population of smaller towns is gradually declining.

But the provision of adequate services and community facilities usually lags far behind the increase of population. Urban services, such as gas supply and sewerage, which are available even to the lowest metropolitan income groups are lacking to many country people.

## STRUCTURE

2110 Concrete Road Joints

EXPANSION JOINTS UNNECESSARY IN PAVEMENTS. (Engineering News-Record, March 22, 1945, pp. 398-401.) Comprehensive tests by Oregon State

Highway Department indicate expansion joints not needed in concrete roadways, provided dummy joints are properly spaced. Conclusions based on three-year observation of two test sections of roadway.

2111 Concrete Road Joints

JOINTS IN CONCRETE ROADS. T. R. Grigson. (Concrete and Constructional Engineering, June and July, 1945, pp. 111-117, 138-146.) Reasons for desirability of joints. Efficiency of various types of joints. Spacing. Joint fillers. Most commonly used types of

joints. Treatment of joints. Expansion joints with pre-moulded filler.

2112

Piles

BEARING PILES. R. R. Minikin. (Civil Engineering, March, April, May, June, July, 1945, pp. 64-72, 84-88, 112-118, 132-134, 158-165.) Formulae for bearing capacity of piles. Assessment of cushioning effect. Results of experiments. Handling of piles. Types of hammer. Water jets. Various types of piles.

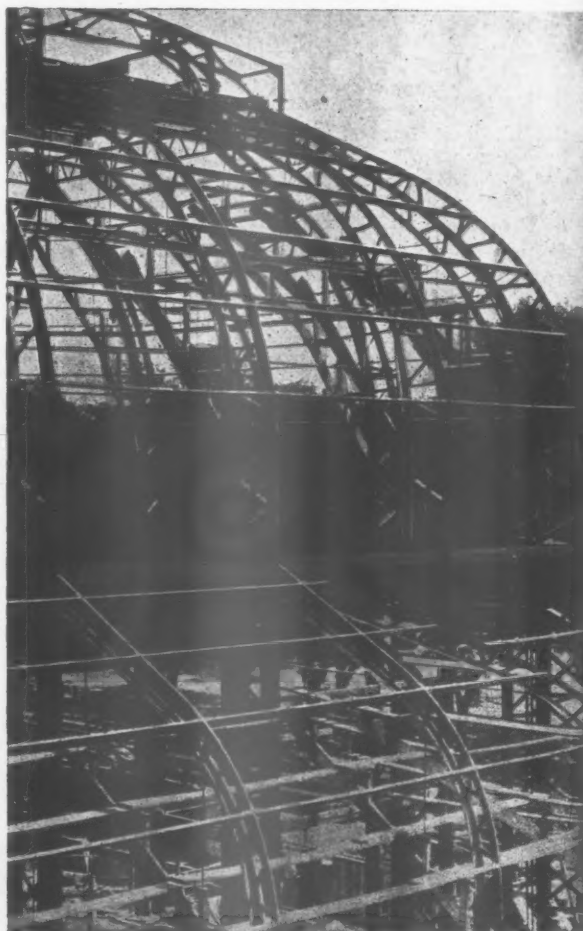
## MATERIALS

2113

Aluminium Alloys

THE APPLICATION OF LIGHT ALUMINIUM ALLOYS TO STRUCTURAL ENGINEERING. D. V. Pike. (The Structural Engineer, July, 1945, pp. 309-335.) Examples of structures in aluminium. Available forms. Properties of aluminium alloys. Principles of design.

In this country the aluminium alloys have found their most common applications in the field of aircraft production, but in the USA, France and Germany their use for structural engineering purposes has already been widely explored. The most outstand-

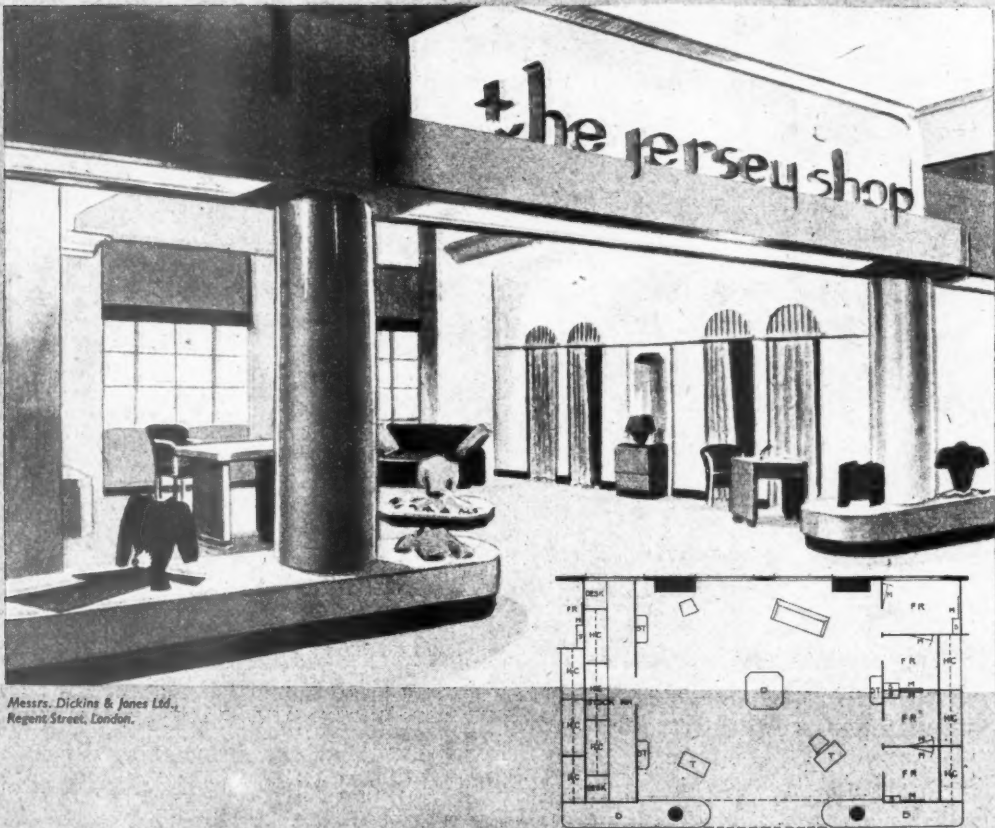


Framework for a conservatory in aluminium alloy at the Botanical Gardens, Washington, USA. The material was chosen because of its high corrosion resistance. See No. 2113.









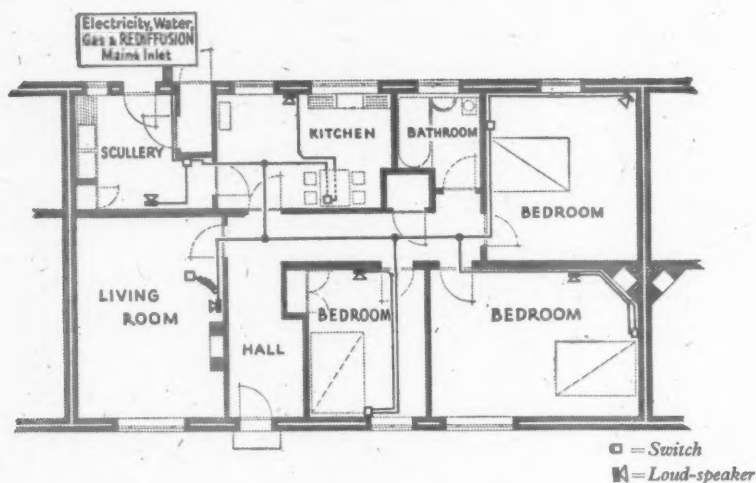
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or fading, and all electrical interference will be carefully eliminated. Foreign programmes will be received over aërials designed to cut out fading and distortion, and beamed on all the best programmes that the world can offer.

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ing advantages as compared with steel are: higher strength/weight ratio and higher resistance to corrosion, a fact which reduces the necessity of maintenance to a minimum.

Aluminium alloys are available as extruded sections, extruded and drawn tubes, rolled sheet, strip and plate, and castings. They are conveniently divided into the non-heat-treatable and the heat-treatable groups. The specific gravity varies between 2.65 and 2.85, as against 7.8 of steel, the melting range is between 530 deg. and 657 deg. C, and the coefficient of linear expansion is about twice that of steel. Aluminium alloys have no yield point. The modulus of elasticity is about one-third of that of steel. The minimum ultimate tensile strength varies for different types of alloys between 11 and 35 tons per sq. in. (as against 28 to 32 tons per sq. in. for mild steel), but the ratio proof stress/ultimate tensile strength is more favourable than the ratio yield point/ultimate tensile strength for mild steel. The comparatively small modulus of elasticity has to be borne in mind whenever deflection becomes the governing factor of design. In continuous structures this is of far less importance than in the conventional types.

Under normal urban and rural conditions, most of the alloys are highly resistant to atmospheric attack, but in other atmospheres only certain of the alloys are suitable.

The weight of an aluminium structure may be between 45 and 55 per cent. of that of a corresponding steel structure. Where transport in the Dominions, Colonies and the more remote foreign countries is concerned, this may be of importance.

#### 2114 Timber Stress Grading

STRESS GRADING OF TIMBER. C. J. Chaplin. (Timber Development Association, London, 1945.) Reasons for grading for strength. Influence of defects and of natural characteristics of timber upon its strength. General requirements for stress-grades.

Owing to the change that has taken place in the world's economics, no longer can timber be wasted as in pre-war house design. To make timber as a structural material competitive with steel and concrete it is necessary to supply timber of well defined strength properties which can be relied upon. This can only be done by grouping timber into grades within given limits of size of defects and of other characteristics that have been found by extensive investigations and tests to determine the strength of the timber.

The recent awakening of interest in timber structures (repeatedly reported in the Information Centre) has been largely due to the improvements made in fastening members together with devices now widely known as timber connectors and by the use of modern glues and glueing practice. The traditional carpenter's joints can develop only a fraction of the strength of the timber members that meet at the joint and the old types of truss required to have extravagant sizes of timber in order that the joints might be of adequate strength. Whereas a timber truss made with the old traditional joints could only compete with a steel truss on spans up to about 20 ft., timber structures can now be made on a successfully competitive basis for spans of more than 200 ft.

Intensive research in USA and in this country has resulted in the establishment of grading rules as laid down in several British Standard Specifications. The booklet explains the essential data to be provided for the design and the main points to be covered by stress grading rules. Further research is needed into the strength and behaviour of structures in which stress-graded timber is used.

## HEATING and Ventilation

2115

### Wall Materials

SUMMER COMFORT FACTORS AS INFLUENCED BY THERMAL PROPERTIES OF BUILDING MATERIALS. C. O. Mackey and L. T. Wright. (John B. Pierce Foundation (N.Y.) Research Study No. II.) Charts given of temperatures at different times for single layer walls of any material. Simple method of finding effects of wall materials upon rate of heat flow. Discussion of effects of wall materials upon comfort conditions.

(Author's summary). 1. Charts are presented that give the maximum and minimum temperatures, and the times of occurrence of these temperatures, for single layer walls of any material, thickness and principal orientation, when the temperature of the indoor air is constant.

2. A simple approximate method of finding the effects of thickness and thermal properties of wall materials upon the hourly variation in the rate of heat flow at the inside surface is given for single layer walls with any hourly variation in the outdoor temperature and in the incident solar radiation and for any assumed constant temperature of the indoor air.

3. The effects of thermal properties and thickness of wall materials upon conditions influencing comfort in an uncooled enclosure are discussed and examples given. The choice of the thermal properties and thickness of the wall materials for comfort is shown to be intimately associated with the orientation and time of occupancy of a room. It is shown that a building with all walls of the same material in a uniform thickness does not meet the ideal thermal requirements.

2116

### Thermal Conditions

THE INFLUENCE OF HEAT CAPACITY OF WALLS ON INTERIOR THERMAL CONDITIONS AND HEAT ECONOMY. C. E. A. Winslow, L. P. Herrington and R. J. Lorenzi. (Heating, Piping and Air Conditioning, April, 1945, p. 207.) Results of experimental study of temperatures in rooms with walls of high and low thermal capacity. Reference made to possible fuel economies following from night-cooling.

Two experimental houses were built, one with walls of 16-in. brickwork, and the other with stud walls, with wood sheathing and lath and plaster interior finish. The houses were heated intermittently with 8-hour off-periods to simulate cooling at night. External conditions were held constant at 20 deg. F. and 40 deg. F. for part of the tests, and for the remainder, a cyclic variation (10 deg. to 30 deg. F.) was used. The transmittance of the brick wall was 0.44 B.Th.U. per sq. ft. per hour per deg. F., and its heat capacity was 33.4 B.Th.U. per sq. ft. per deg. F. The corresponding figures for the frame wall were 0.32 and 2.6 respectively. The rooms were heated by radiation from electric heaters.

The cooling and heating rates in the two rooms were very similar, although the heat inputs were different. It was estimated that whereas a saving of only 13-15 per cent. of fuel could be effected by turning off the heat for 8 hours at night in the brick room, with the frame room, with walls of much lower thermal capacity, a saving of 18-24 per cent. could be obtained. The economy was most marked with the lower outdoor temperatures.

The effect of opening a window was also studied.

Under summer conditions, the brick room had lower maximum temperatures and greater time lag than the frame-wall room, and would generally lead to more pleasant conditions.

2117

### Electricity Charges

THE DOMESTIC CONSUMER AND METHODS OF CHARGING. J. M. Donaldson. (Electrical Review, June 29, 1945, p. 933.) Queries by electricity consumers. Several bases for charging. Adjustment for coal cost.

The three bases for electricity sales with fixed charges are:—(1) rateable value, (2) house area, and (3) total watts. The author discusses the various advantages and disadvantages of each; the second basis is the one preferred by the Electricity Commissioners.

Reference is made from time to time in the article to the differences which exist between various sales areas and their charges. Preferences are expressed by the author, but it is characteristic of this problem at present that it is not being resolved effectively by discussion. It arises from the fact that the various areas are not under one control, nor have they equal marketing conditions, nor do they generate on the same economic basis. It is natural, perhaps, for members of the industry to accept these conditions as a proper basis for discussion; but a layman might readily come to the conclusion that the discussion, and indeed the problems, could be dissipated by doing away with the separate areas.

## 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.

2118

### Tiles

Q Are there any glazed acoustic or insulating tiles made, and, if so, by whom?

A We do not know of any glazed acoustic tiles manufactured to-day as a standard product, as a combination of a glazed surface with an acoustic or insulating material is seldom required. We would, however, refer you to Messrs. Huntley & Sparke, The Burgh Road, S.W.19, who manufacture an insulating tile which can be painted with a hard gloss paint.

2119

### Stains in Oak

Q Could you advise us of any method of removing from old oak, which has been nailed with iron nails, the familiar blue stain in such a way that the wood can be finished in its natural colour, or only lightly stained, with wax polish?

A Iron nails are always liable to cause such a stain in oak, particularly when open to the weather, and the only method of removing it is by scraping the wood. We would suggest that in future you use copper-covered nails in the oak.





*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.*

## RIBA

### L. H. Keay

September 7, at the City Art Gallery, Manchester. Conference organized by the RIBA in connection with the Manchester and District Town Planning Exhibition. Speakers included L. H. Keay, O.B.E., Vice-President RIBA, City Architect and Director of Housing, Liverpool, who spoke on **THE AMENITIES OF LIVING—THE HOUSE AND THE NEIGHBOURHOOD**.

**L. H. Keay** One of the recommendations of the Dudley Committee upon the Design of Dwellings was that a house for five people should have a floor area of not less than 900 superficial feet. There was nothing in the Report which supported the inference that every house should be of this area. In fact it called particular attention to the need for the greatest variety in type and accommodation. To-day, specialists in new forms of construction seem to confine attention to the three bedroomed house of about 900 feet super, whilst the official temporary bungalows, which may be expected shortly to run off the belts in thousands have but two bedrooms. Houses of these two types may predominate in the immediate post-war developments.

There is every reason to fear that the mistakes known to have been made after the last war will be repeated again, and that working through a number of unco-ordinated agencies we may eventually produce the number of houses required but in segregated groups lacking variety and all those amenities which are essential in communal planning.

Look back for a moment to the problem which faced the country in 1919 and to the method by which its solution was sought. For the first time the responsi-

bility for the housing of the lowest income groups was to devolve almost entirely upon the local authorities. Their incursion as competitors into the field of house building was resented by those who hitherto had been almost the sole providers. For this reason the activities of the local authorities were restricted, and in addition to the evil of segregation their developments lacked the variety and amenities which we now regard as essential.

To-day an even greater problem faces us. New communities have to be established and the redevelopment of the older districts of many of our large towns has become essential by reason of obsolescence and war damage. The mere building of houses or flats will not create a community, and if future generations are to lead a full and healthy social life we must seek to re-establish community life where it has ceased to exist and make it possible when we build afresh upon the scale that will be essential in the post war years.

It is significant that so much is heard to-day of the need for planning community or neighbourhood units, for it is upon this conception of complete planning which it envisages that we may avoid the mistakes of the inter-war period. The size of these units is a matter for discussion, but there are advantages in working in units of 10,000 persons. Such developments at normal density will cover about 300 acres and should be capable of supporting a Secondary School and a number of amenity buildings within easy walking distance of any part of the unit. Four such units would constitute a township of 40,000 to 50,000 persons, a population figure which might be considered as nearing the limit for the normal provincial townships.

If it is agreed that planning on a unit basis is desirable, it becomes necessary to lay down standards of density and of land areas. Lands adequate for the purpose must be reserved for houses, open spaces, schools, community buildings, local industries and roads. I will not attempt to lay down what those standards should be for the varying purposes. Fortunately there can be no serious divergence of opinion upon them. Once agreed upon, however, it is possible to set out a proportional pattern for any development, and within that development to assign the sites required for houses varying in size and accommodation and suitable for accommodation by families within the different income levels. And so we consider the dwellings as units of the whole community—the house and the neighbourhood—and it is upon the density of the population to be accommodated that the area of lands required for other purposes will be assessed. Provided that our standards of land areas are correct and adhered to, there need be no fear of any deficiency in sites for schools, recreational purposes or for any of the essential amenities. There is, however, a very grave danger that the urgency of the problem of providing shelter may lead to a demand that the whole effort of the Building Industry shall be concentrated upon the production of standardised dwellings and the utilisation of every available frontage. The choice is a simple one. Working to a carefully prepared plan ensuring a balanced development, or chaos followed later by the severest criticism of a repetition of past mistakes.

I have suggested planning for units of 10,000 persons. In such a population there must be variety in types of accommodation. The aged and single persons are equally entitled to shelter as the large families. The proportions of families of varying size differ in each locality, but are ascertainable, and if due regard is paid to them standardisation of accommodation must give way to variety and we need have no fear of undue monotony. Practical difficulties stand in the way of indiscriminate mixing of dwellings for the various income groups, and the larger units of 10,000

people may have to be sub-divided into smaller units each having their separate groups of dwellings, varying in size and accommodation, in design and site arrangement. The siting of each distinct group is equally important as the planning of each type of accommodation. Flats are better overlooking the open spaces made more extensive as the result of vertical building.

The homes for older people should on no account be segregated in some quiet part of the development but be within easy reach of shops. Each neighbourhood must have its focal point, its social centre where are situated places of worship, library, shops, clinics, the administrative buildings of the township and community centre. It is around this background of essential and amenity buildings that we must plan our residential areas ensuring ease and safety of access, interest in design and some element of surprise to relieve monotony.

Architecturally and for other reasons it is to be regretted that one church with its tapering spire no longer occupies the premier position in our urban development, the common meeting place of the neighbourhood and the focal point of its development. Whether the community centre will ever take its place is doubtful, but if neighbourliness is to flourish in the neighbourhood a strenuous effort must be made to provide some common meeting ground.

Certain local authorities are fortunate in possessing power under local Acts enabling them to erect any type of building on land held by them for urban development. That there may be a reluctance to use these powers to the full is less important than the fact that Parliament has made them available. It is a recognition of the benefit which results when both planning and building for a community are under one and the same control and is particularly exemplified in Welwyn Garden City.

With thousands seeking shelter it will be unpopular to suggest that some of the labour and materials available should be diverted to the erection of buildings other than houses. And yet when the number of completed houses in a development reaches 200-250 a shop may be needed, and unless schools are available in the vicinity it will not be long before the building of a new school will become necessary. Other buildings must therefore be considered in conjunction with houses if we are to ensure the proper development of the neighbourhood unit.

I should like to stress the importance of reaching a standard of densities and land areas. Such a standard is invaluable whether the extension of an existing township or the building of an entirely new one is under consideration. In the first instance it will be necessary to take into our calculations portions of existing developments and by adding lands in the vicinity available for development and the subsequent application of our standards to ensure that the deficiencies in the already built-up areas are made good and all the amenities requisite for a neighbourhood unit are made available. In the second case where the development of virgin land is contemplated we can ascertain immediately by the application of our standards the number of persons who can be housed at given densities in a development in which a place will be available for all essential amenities. Thus we shall know that an estate of about 300 acres can be made to accommodate 10,000 persons living at a gross density of 34 persons to the acre. That 165 acres will be set apart for houses, 60 acres be available for open spaces and 20 acres for schools. Sites for local industries up to a total of 20 acres can be provided and in the centre of the development 10 acres will house the communal buildings, including churches, shops, community and health centres. The balance will be needed for main roads skirting the neighbourhood unit.

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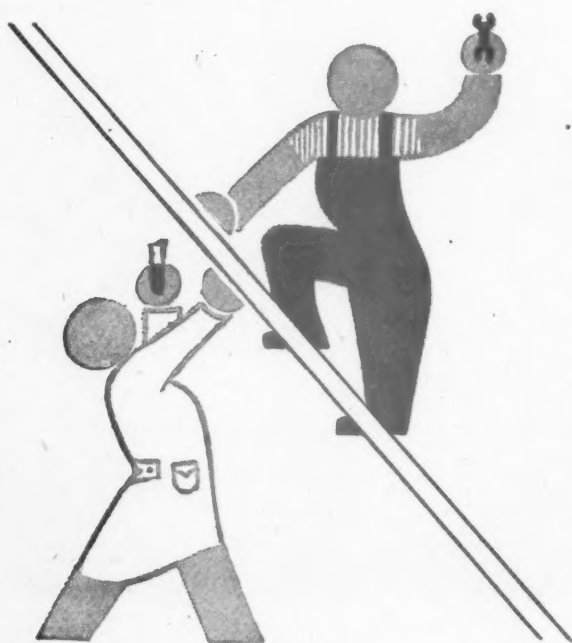
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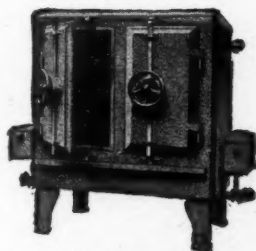


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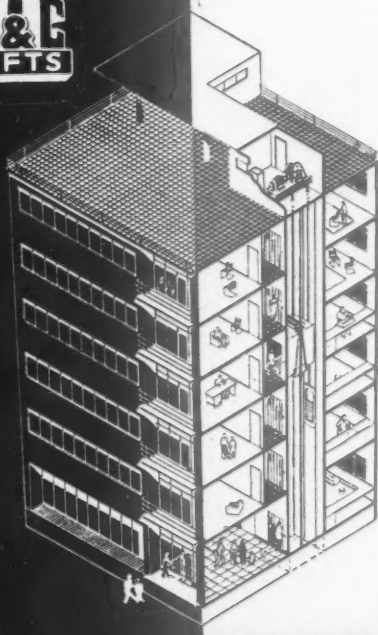
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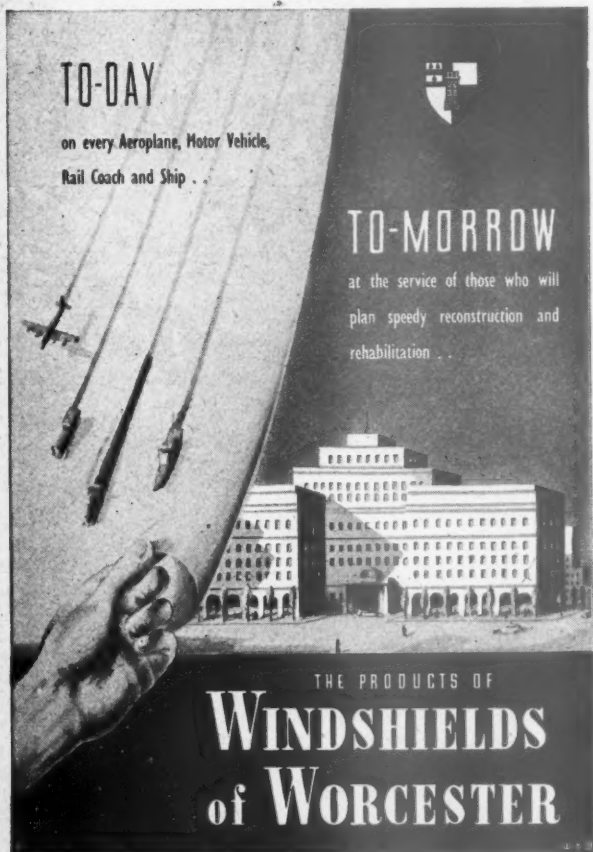
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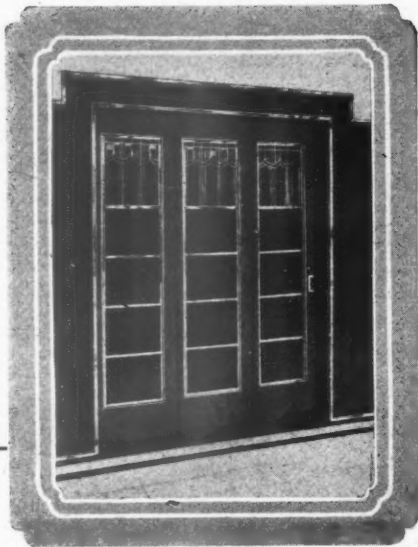
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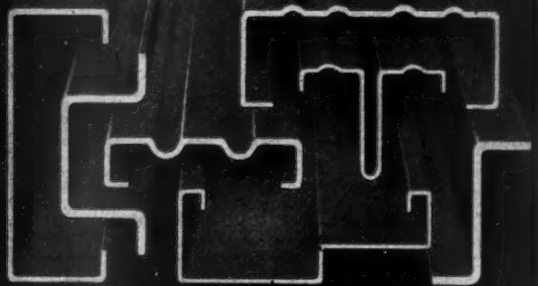
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Telephone: Govan 614. Telegrams: Gyproc, Glasgow.  
LONDON OFFICE: 21 St. James's Square, London, S.W.1.  
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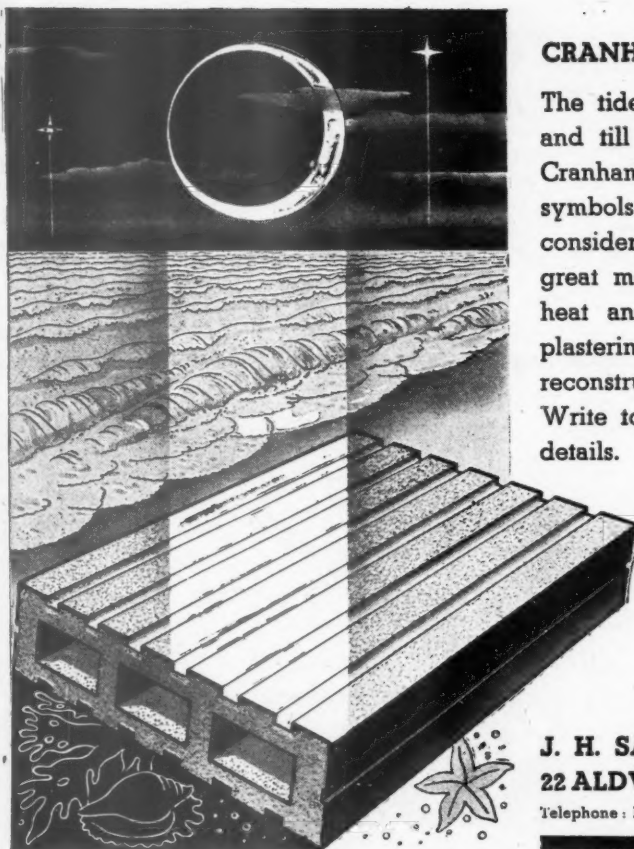
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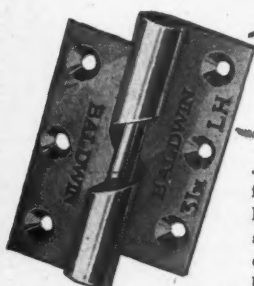
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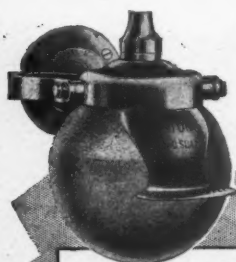
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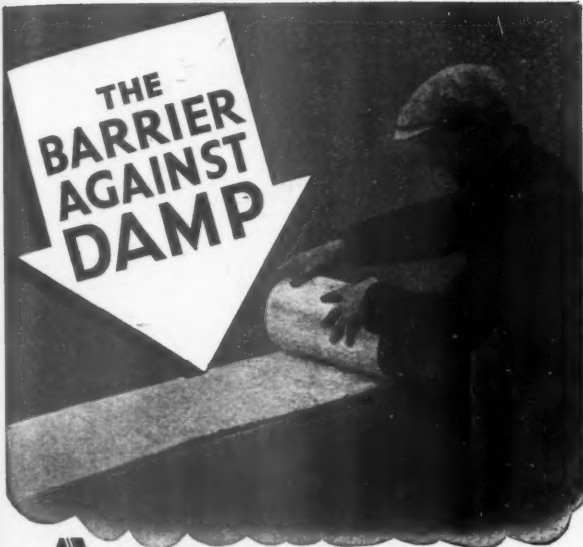
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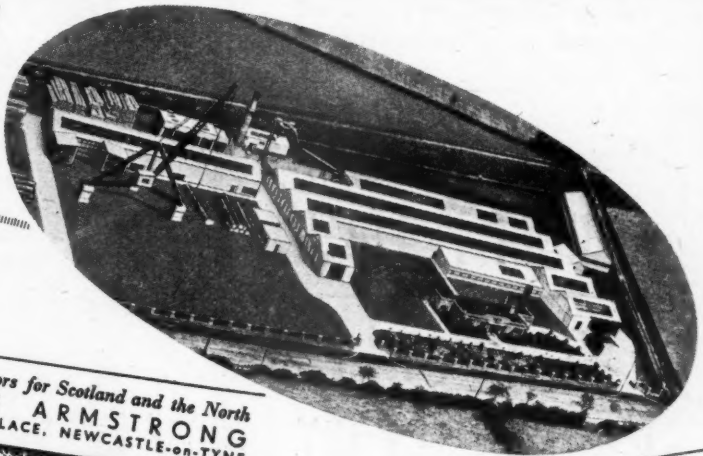
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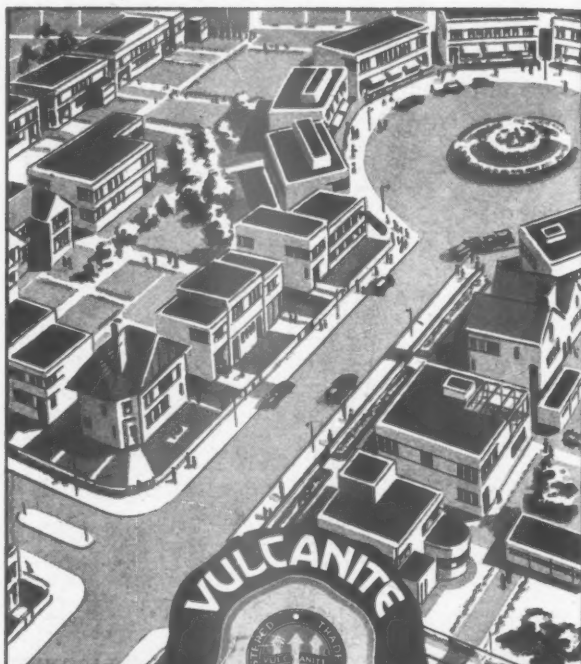
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## CLASSIFIED ADVERTISEMENTS

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

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

## Public and Official Announcements

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

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

## NORTH RIDING EDUCATION COMMITTEE

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

F. BARRACLOUGH,  
Secretary.

Education Offices, County Hall,  
Northallerton. 652

## CITY OF CANTERBURY.

### SENIOR ASSISTANT ARCHITECT.

Applications are invited for the appointment of a Senior Assistant Architect in the City Architect's Department at a salary of £420 by £20 to £500 per annum, plus cost-of-living bonus, at present 25s. per week.

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

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

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

J. BOYLE,  
Town Clerk.

Municipal Buildings, Dane John,  
Canterbury. 660  
5th September, 1945.

## CITY OF ST. ALBANS

### CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

#### ARCHITECTURAL ASSISTANTS.

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

(a) ARCHITECTURAL ASSISTANT. Salary, £400 per annum, plus current cost-of-living bonus, £59 16s. per annum. Applicants must possess an architectural qualification, and have had experience in the preparation of plans, working drawings, specifications and layouts of modern municipal housing estates, including surveying and levelling.

(b) ARCHITECTURAL ASSISTANT. Salary, £250 per annum, plus current cost-of-living bonus, £59 16s. per annum. Applicants should have had experience in architectural work, preferably in the office of a local authority.

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

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

S. H. E. CRANE,  
Town Clerk.

Town Clerk's Office, 38, St. Peter's Street,  
St. Albans. 656  
September, 1945.

## NORTHERN POLYTECHNIC, HOLLOWAY, LONDON, N.7.

The Governing Body invite immediate applications for appointment as lecturers in the Evening School of the Department of Architecture, Surveying and Building on one or more of the following subjects: Building Construction and Working Drawings; Geometrical Drawing; Drainage and Sanitation; Structural Mechanics; Builders Quantities. Applicants should in the first instance submit written particulars of training and professional experience; teaching experience is desirable but not essential. Details of salary and times of classes will be sent to suitable applicants.

R. H. CURRELL,  
Secretary. 678

## COUNTY OF BERKS.

### COUNTY PLANNING OFFICER.

Applications are invited from persons who hold a recognised town planning qualification and who have had considerable experience in planning work, for the appointment of County Planning Officer for the County of Berks, at a salary to be within a scale of £800 per annum, rising annually by £50 to £1,000 per annum, according to experience, subject to the initial salary not exceeding £900 per annum, plus the appropriate cost-of-living bonus.

Fuller particulars and conditions of appointment and forms of application can be obtained, on receipt of a stamped addressed envelope, from the undersigned, to whom completed applications should be returned not later than Wednesday, 31st October, 1945.

Canvassing either directly or indirectly will be a disqualification.

H. J. C. NEOBARD,  
Clerk of the Council. 683

Shiré Hall, Reading.

## UXBRIDGE URBAN DISTRICT COUNCIL.

### APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited from Registered Architects for the appointment of Architectural Assistant on the permanent staff of the Engineer and Surveyor, at a commencing salary of £450, rising by annual increments of £25 to £550 per annum, plus cost-of-living bonus, at present £59 16s. per annum. Preference will be given to candidates who have passed a recognised qualifying examination, and experience in the preparation and administration of Town Planning Schemes would be deemed an advantage. Candidates should have had experience in municipal housing design and lay-out, and in the design of public buildings.

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

Applications endorsed "Architectural Assistant," stating full particulars of age, qualifications, experience and present and previous appointments, and giving the names of three persons to whom reference may be made, must be delivered to the undersigned not later than Monday, 8th October. Canvassing will be deemed a disqualification.

JOHN POOLE,  
Clerk of the Council.

Council Offices, 265, High Street,  
Uxbridge. 679  
12th September, 1945.

## COUNTY BOROUGH OF BLACKBURN.

### BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments in the Borough Engineer and Surveyor's Department:—

(a) ARCHITECTURAL ASSISTANT. Salary, £360 per annum, rising, subject to satisfactory service, by annual increments of £15 to £405 per annum.

Applicants must have architectural qualifications, with experience in design, preparation of plans, working drawings, specifications, etc., for housing schemes and general architectural work.

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

(b) TEMPORARY ARCHITECTURAL ASSISTANT. Salary, £320 per annum, rising, subject to satisfactory service, by annual increments of £15 to £350 per annum.

The appointment is temporary and will be terminable by one week's notice in writing on either side.

Applications, endorsed "Architectural Assistant" or "Temporary Architectural Assistant," stating age, qualifications, experience, present and past appointments, together with not more than three recent testimonials, should be delivered to the Borough Engineer and Surveyor, Town Hall, Blackburn, not later than 28th September, 1945.

CHAS. S. ROBINSON,  
Town Clerk. 671

## GELLYGAER URBAN DISTRICT COUNCIL.

### JUNIOR ARCHITECTURAL ASSISTANT (TEMPORARY).

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

Applicants should have been trained in an architect's office, should be neat draughtsmen and have a good knowledge of building construction.

Salary at the rate of £250 per annum, plus bonus on the Whitley Scale (at present £59 16s.).

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

TUDOR LAWRENCE,  
Clerk of the Council. 669

6th September, 1945.

## HALTEMPRICE URBAN DISTRICT COUNCIL.

### ENGINEER'S DEPARTMENT.

Applications are invited for the appointment of Architectural Assistant at a salary of £450 per annum, rising by two annual increments of £25 to £500. Candidates should be A.R.I.B.A. or equivalent, with experience on housing and general architectural work.

The appointment is for a minimum period of three years, and a war bonus of £59 16s. per annum is payable in addition to the basic salary.

The appointment will be in accordance with the Council's Regulations for temporary staff, and the successful candidate will be required to pass a medical examination.

Forms of application may be obtained from the Engineer, Anlaby House, Anlaby, E. Yorks, and should be returned to the undersigned not later than noon on Friday, 5th October, 1945.

Canvassing directly or indirectly will disqualify applicants.

The Ministry of Labour and National Service have given permission under Control of Engagement Order, 1945, for the advertisement of the above vacancy. A/9E.

A. B. GLASSPOOL,  
Clerk of the Council. 680  
Anlaby House, Anlaby, E. Yorks.  
September, 1945.

## COUNTY OF WARWICK.

### ARCHITECT'S DEPARTMENT.

ARCHITECTURAL ASSISTANT (Temporary) required immediately. Applicants should be members of the R.I.B.A. Experience in connection with school buildings an advantage. Salary at the rate of £350 per annum, plus cost-of-living bonus, at present £59 16s., and plus £22 15s. per annum for temporary increase in office hours.

Applications stating present employment, age and experience, together with copies of not more than three testimonials, to be sent to C. H. Elkins, L.R.I.B.A., County Architect, Shire Hall, Warwick, on or before 27th September, 1945.

L. EDGAR STEPHENS,  
Clerk of the Council. 681  
Shire Hall, Warwick.  
6th September, 1945.

## COUNTY BOROUGH OF BIRKENHEAD.

Applications are invited for the following TEMPORARY APPOINTMENTS:—

(a) ONE SENIOR ARCHITECTURAL ASSISTANT. Salary, £425 per annum, plus bonus, at present £59 16s. per annum.

(b) THREE ARCHITECTURAL ASSISTANTS. Salary, £375 per annum, plus bonus, at present £59 16s. per annum.

Candidates for posts (a) and (b) should be A.R.I.B.A. or hold equivalent qualification; and must have had experience in housing, alterations and additions to properties, new buildings, quantities, specifications and estimates.

(c) ENGINEERING ASSISTANTS. Salary, £375 per annum, plus bonus, at present £59 16s. per annum.

Candidates for post (c) must have passed the Testamur Examination of the Institution of Municipal and County Engineers and/or A.M.I.C.E., and must have had considerable experience in municipal engineering works. With regard to post (c) the Ministry of Labour and National Service have given permission under the Control of Engagement Order, 1945, for the advertisement of these vacancies. E.1575.XA.

The above posts are subject to the Local Government Superannuation Act, 1937, and the persons appointed will be required to contribute the appropriate percentage of their salaries to the Corporation's Superannuation Scheme.

The appointments will be subject to one month's notice on either side, and to the successful candidates passing a medical examination.

Applications, which must be made in accordance with particulars to be obtained from the Borough Engineer and Surveyor, Town Hall, Birkenhead, to be sent, with copies of three recent testimonials, to the undersigned not later than 24th September, 1945.

E. W. TAME,  
Town Clerk. 674  
Town Hall, Birkenhead.  
September, 1945.



# NORTHERN POLYTECHNIC, HOLLOWAY ROAD, N.7.

## SCHOOL OF ARCHITECTURE

Vacancies exist for full-time and part-time (day and evening classes) **STUDIO MASTERS** in Architecture.

Intending applicants should apply by letter in the first instance, giving details of previous experience and qualifications, to the Secretary.

688

## Competition

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

### CITY OF WESTMINSTER.

#### ARCHITECTURAL COMPETITION FOR WORKING CLASS FLATS.

##### PRELIMINARY NOTICE.

The Westminster City Council will shortly be inviting, by public advertisement and otherwise, Architects to submit designs in Competition for the lay-out of about 30 acres of land in Westminster with a frontage to Grosvenor Road and the River Thames of about 600 yards, and for the design of flats and other buildings to be erected thereon.

Prizes of 700 guineas, 500 guineas, 300 guineas and 200 guineas respectively will be paid to the authors of the designs placed by the Assessor as first, second, third and fourth in order of merit.

Subject to the usual conditions, the author of the winning design will be appointed the Architect for the execution of the first Section of the scheme and be paid therefor in accordance with the R.I.B.A. Scale of Architects' Fees for State-aided multi-storey flats.

Any Architect desiring to receive full particulars of the Council's invitation when published may now apply to the undersigned.

PARKER MORRIS,

Town Clerk.

Westminster City Hall, Charing Cross Road, W.C.2.

12th September, 1945.

682

## Partnership

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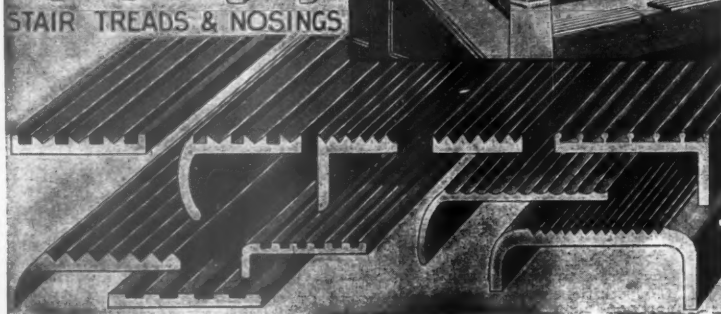
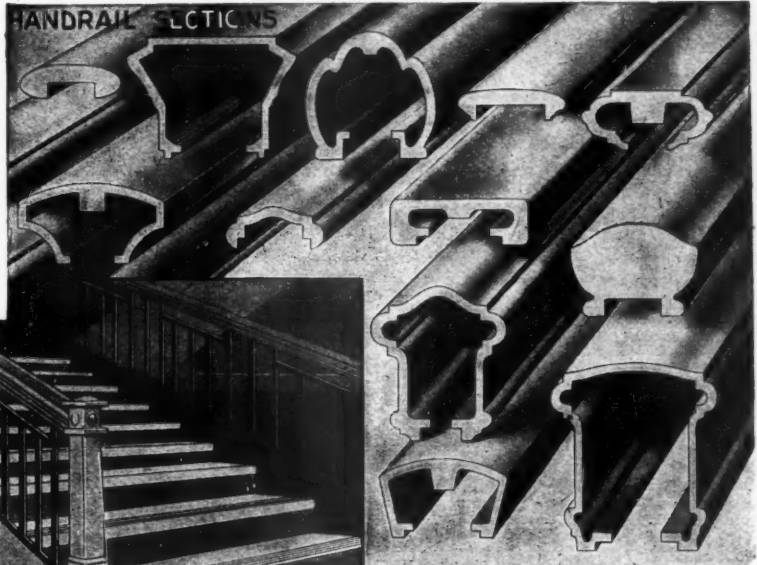
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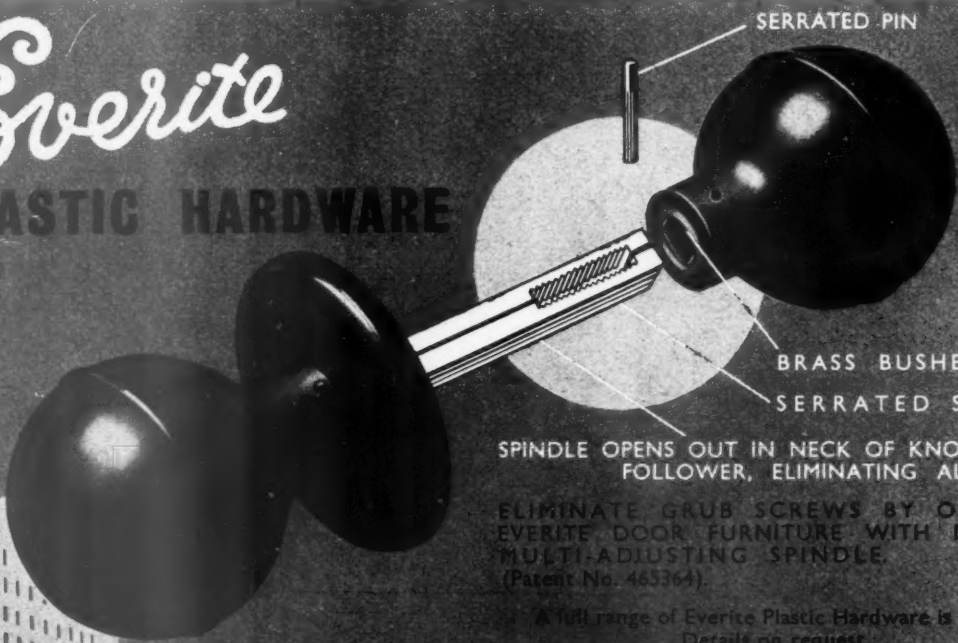
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