

THROUGHOUT WARS and PEACE to 1945...

COLT SHINGLES remain the trouble free roof of the future.

Throughout the war, Colt's have maintained a continuous and uninterrupted supply and fixing service of Colt Shingles on War Department, Air Ministry and other Government and essential buildings. Our Technical Department is at the service of all Architects.

Colt Shingles proved themselves during the war to be superior to other roof covering in their remarkable resistance to blast, more than justifying our claims for the permanent security of a Colt Shingled roof.

Fire retardant.
Bale 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.

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., Weybridge, Surrey. Telephone: Elmbridge 6511 (4 lines).

COLT Canadian Cedar Wood SHINGLES
(CEDAR WOOD TILES)

Specially chosen from No. 1 Grade XXXXX Shingles

1895

PROGRESS

TO

1939.

1939-45.

1945 SHINGLES

**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 Condition-
ing, Thermostatic Control, Steam
Supplies, Compressed Air Sup-
plies, Radiator Warming, Dulrae
Electric Warming, Cooking
Equipment.

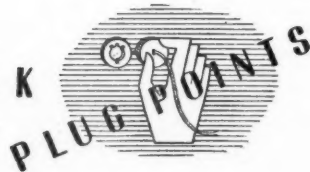


BY APPOINTMENT
ENGINEERS TO H.M.
KING GEORGE VI

RICHARD CRITTALL

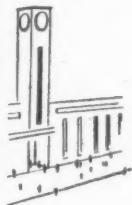
AND COMPANY LIMITED, ALDWYCH HOUSE, LONDON, W.C.2. Phone: TEMple Bar 7777

Dont Forget the CLOCK

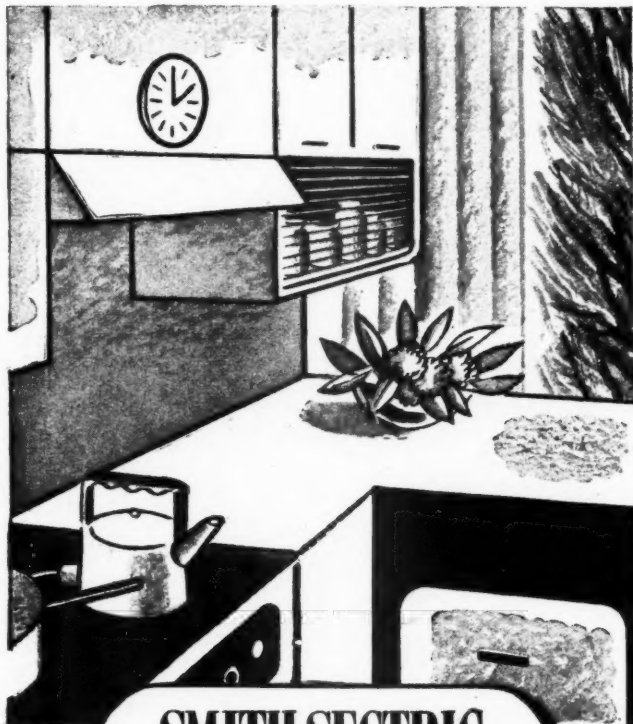


IN THE KITCHEN

The average woman in the average home spends much of her day in the kitchen. It is there that she specially needs an ever accurate A.C. mains time service. Provision for such a service can best be made by specifying a Smith "Sectric" Clock Connector in every kitchen you plan. Whether or not is included a standard Smith "Sectric" Wall Clock, or one built in to wall or cabinet in your own design, this type of clock plug point is the neatest and most efficient available. Your enquiry is invited.



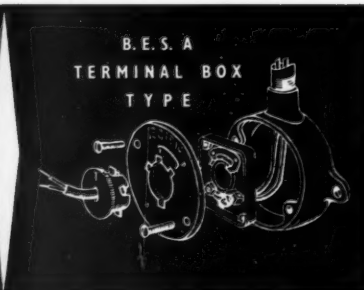
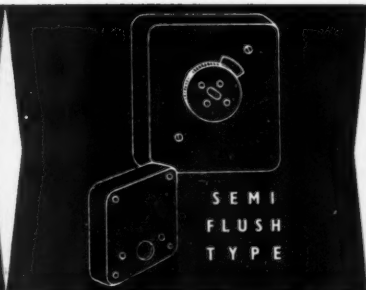
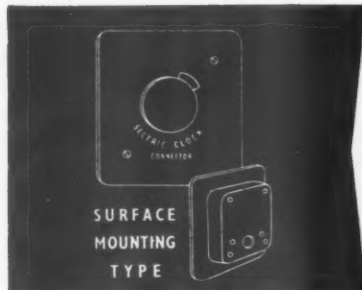
Smith "Sectric" Commercial Clocks are available for all conceivable interior and exterior purposes, in standard designs or to architects' specifications, from small office clocks to large turret structures.



SMITH SECTRIC
CLOCKS

plug in to Greenwich time

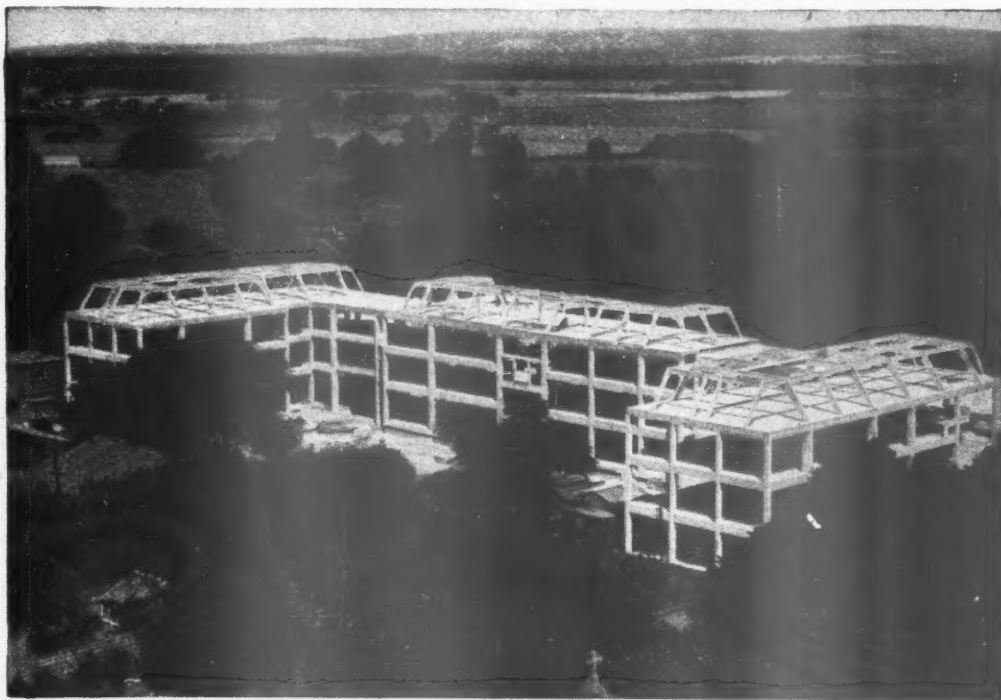
& "Sectric" Clock Connectors



SMITH'S ENGLISH CLOCKS LTD. CRICKLEWOOD WORKS, LONDON, N.W.2

The Clock and Watch Division of S. Smith & Sons (England) Ltd.

Registered S.C. 34



REINFORCED CONCRETE FRAME OF WEST SUSSEX COUNTY OFFICES CHICHESTER
C. G. Stillman, F.R.I.B.A., Architect

TRUSCON

*a complete service
in Reinforced Concrete*

THE TRUSSED CONCRETE STEEL CO., LTD.

Reinforced Concrete Specialists

6, Collingham Gardens, Earls Court, London, S.W.5

Telephone: FRO 8141

³ Also at Manchester • Newcastle-on-Tyne • Birmingham • Glasgow • Cardiff

ALUMINIUM ALLOYS

are *Strong*

—they are used for
bridge construction

*—why not for
your projects?*

DESIGNERS of bridges face two load problems . . . the ever fluctuating live load of people, cars, lorries, buses. And the dead load . . . the weight of the bridge itself—the ever-present problem of more weight needed to carry deadweight.

The second problem is more important than the first. Bridges are designed first to carry the load of their own structure, and second, the traffic load. Any saving in dead load represents an enormous reduction in construction costs and maintenance charges.

Aluminium alloys are doing for bridge designers and engineers what they have done for years in the field of aeronautics and transport . . . cutting deadweight without sacrificing strength, saving costs through non-rusting and corrosion resisting characteristics, cutting labour charges through easy fabrication and light weight. The strength/weight ratio of aluminium alloys means less weight to carry less deadweight.

Aluminium alloys are proving themselves in bridge construction as they have done in hundreds of other engineering projects and products. If your product ought to be rust-free, if it should resist corrosion, if it could benefit from lightness allied with strength, if ease of fabrication could reduce manufacturing costs, then Aluminium Alloys can serve you.

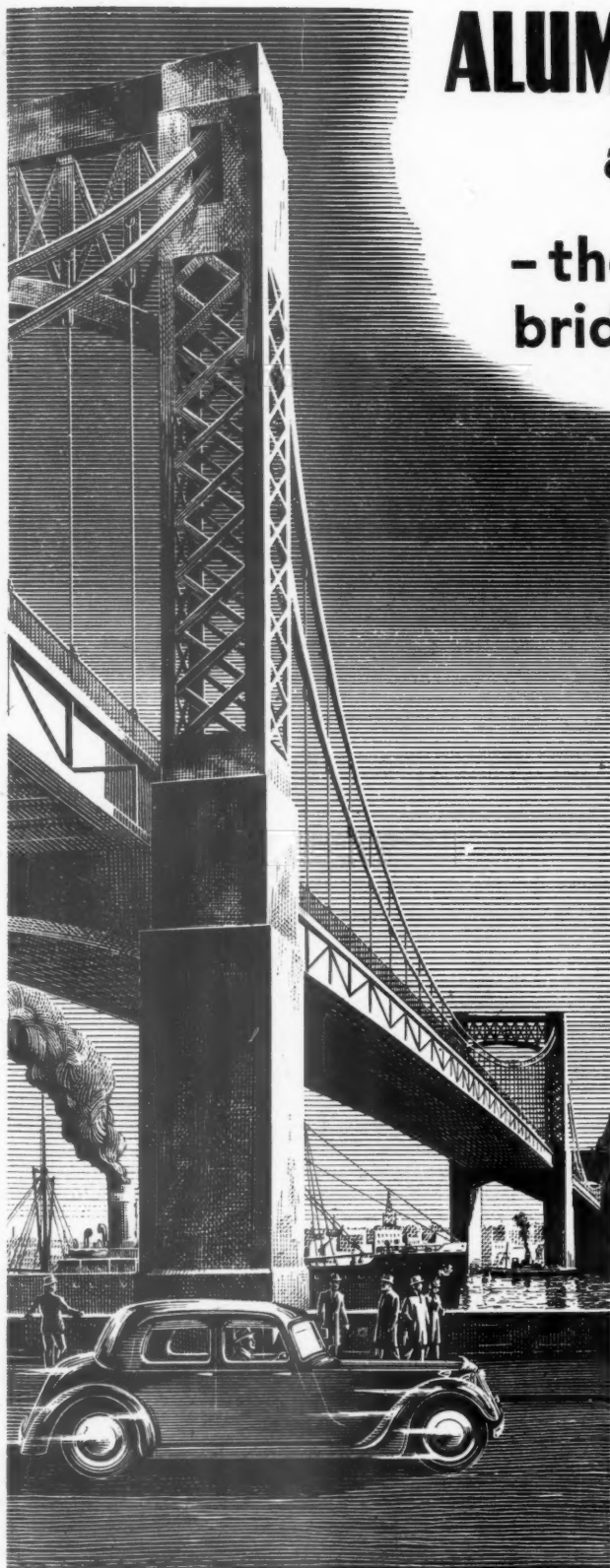


ALUMINIUM DEVELOPMENT ASSOCIATION

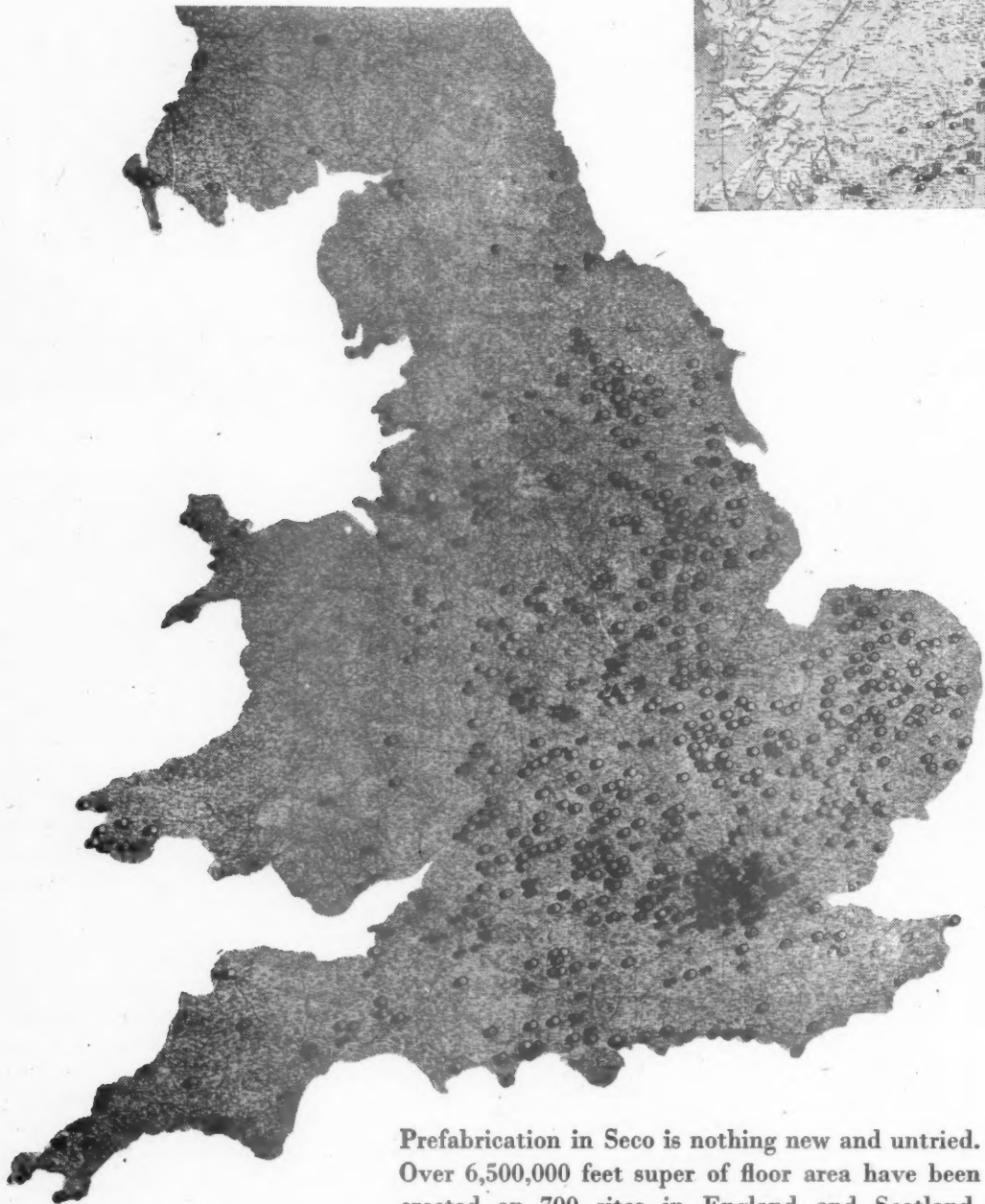
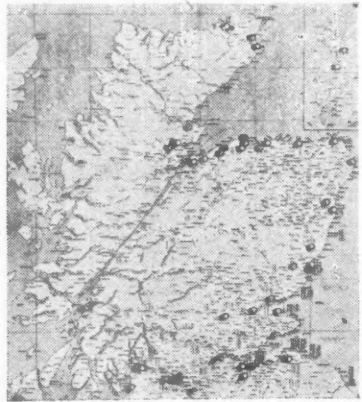
UNION CHAMBERS, 63, TEMPLE ROW, BIRMINGHAM, 2

Telephone: Midland 0847/8

Telegrams: Lightaldev B'ham 2



SECO have EXPERIENCE



Prefabrication in Seco is nothing new and untried. Over 6,500,000 feet super of floor area have been erected on 700 sites in England and Scotland. Some of these sites have as many as 250 buildings of different types and sizes.

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

UNI-SECO STRUCTURES LIMITED

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

Mayfair 9080

Stoneham & Kirk

RELAXATION OF LICENSING CONTROL

★ Important Announcement from The **UNDERFEED STOKER MAKERS ASSOCIATION**

It is no longer necessary for purchasers to secure licences to install Underfeed Stokers. The Underfeed Stoker Makers now obtain authority to supply. This relaxation of war-time restrictions follows on the recognition by the Ministry of Fuel and Power of the important function of these appliances in securing economy in fuel consumption and their use is encouraged where adequate supplies of suitable fuels are available. This is an important step in post-war industrial development.

Wherever it can be installed, the Underfeed Stoker is recognised as being more efficient and easier on fuel than any method of hand-firing. Experience under restrictions imposed by war-time conditions has proved that the Underfeed Stoker is not "selective" in its requirements and that a wide range of low-grade fuels can be burned satisfactorily. The Underfeed Stoker meets the problem of rising fuel costs and labour shortage.

In many boiler installations, provision was made for fitting Underfeed Stokers when they became available. Arrangements should be made with the Stoker Makers without delay. For full details of the Underfeed Stoker and its advantages, write to this Association or to any of its member firms.

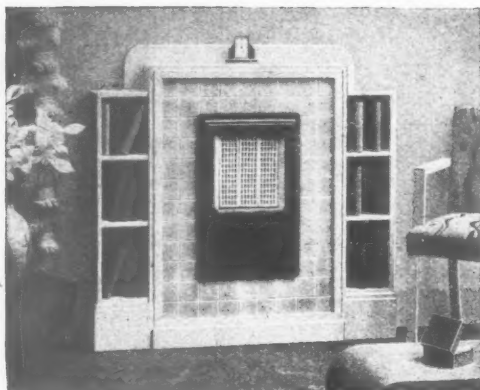


This advertisement is sponsored by the following Members of the U.S.M.A.

"BEANESS," Binns & Speight Ltd., Bradford	★	"C.G.S.," Bastian & Allen Ltd., London, W.C.1
"IRON FIREMAN," Ashwell & Nesbit Ltd., Leicester	★	"MIRPLEES COMBUSTIONEER,"
Mirrlees, Watson & Co. Ltd., Stockport	★	"MOTORSTOKOR," Hope's Heating & Lighting Ltd., Birmingham
"PRIOR," Prior Stokers Ltd., London	★	"RILEY ROBOT," Riley Stoker Co. Ltd., London
"RIMER," Rimer Manufacturing Co. Ltd., Pontypridd, Glam.	★	"UNICALOR," Joshua Bigwood
& Son Ltd., Wolverhampton	★	"VULCAN," John Thompson (Triumph Stoker) Ltd., Leeds.

(12)

UNDERFEED STOKER MAKERS ASSOCIATION, 12 RICKETT ST., LONDON, S.W.6. FULHAM 7881-5



PORTCULLIS "RAYELLO" 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.*

*Bratt Colbran
Limited*

Ten, Mortimer Street, London, West One

SPECIALISTS IN SOLID FUEL, GAS AND ELECTRICAL HEATING

Specify the extra toughness of **SISALKRAFT** **SUB-SOIL PAPER**

Present-day road construction demands the extra toughness of Sisalkraft Waterproof Paper between the sub-soil and the base concrete.

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

Authorities and Public Works Contractors . . . and why Sisalkraft for post-war use is playing such an important part in reconstruction plans.

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*.

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

SISALKRAFT
TRADE MARK
**SUB-SOIL
GRADE**

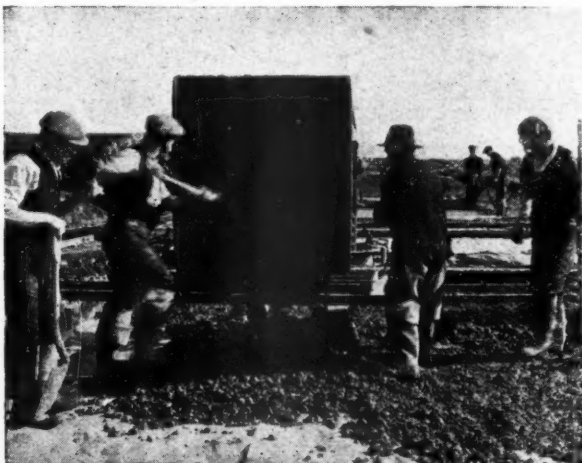
J. H. SANKEY & SON, LTD.

Sole Distributors for British Sisalkraft Ltd.

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

Telephone: HOLBORN 6949 (14 lines)

Telegrams: BRICKWORK ESTRAND LONDON



THE NAME THAT MEANS EVERYTHING IN

Lift Doors



The perfect fire-resisting lift door
approved by the National Fire Brigade Association.
Finish to match all types of decoration. *Established 1847.*

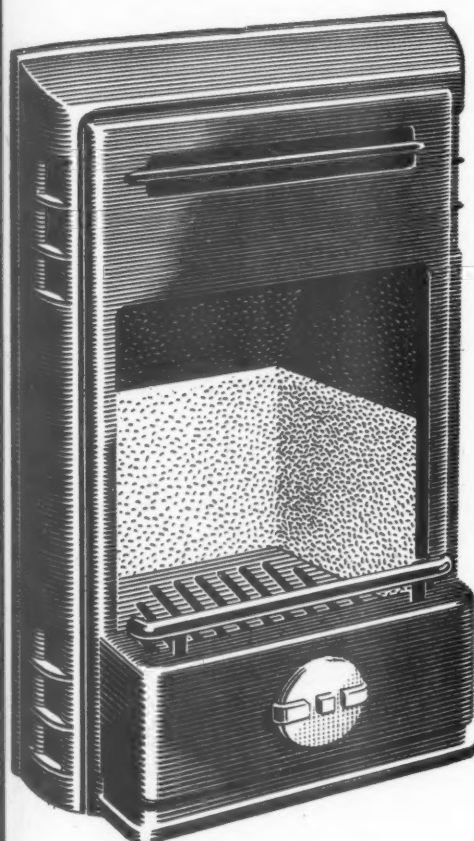
Caston PATENT LIFT DOORS

CASTON & COMPANY LTD., TABARD STREET, LONDON, S.E.1. Telegrams: "Lattice, London." Telephone: Hop 1991 (4 lines)

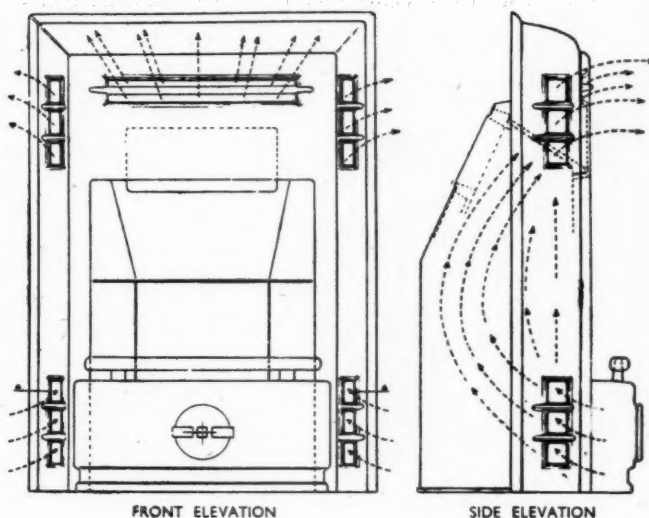
NEW-FASHIONED VISIBLE HEAT

EXAMPLE

A.I. "PROJECTOR" HEATING UNIT

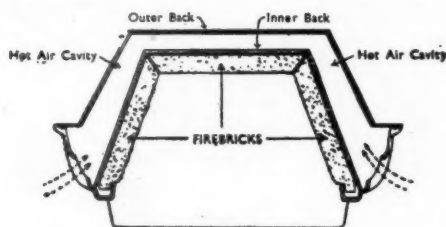


SPECIFICATION: This is a self-contained interior grate, with double casing, which gives warmth on the convection principle. By carefully arranged air inlets in the sides and top of the unit, the heat from the fire is projected over the whole area of the room. The path of this heated air is indicated by dotted lines in the accompanying diagrams.



FRONT ELEVATION

SIDE ELEVATION



SECTIONAL PLAN A.A.
with bottom grate & fire removed

SIZES: Overall sizes: 25½" high x 19½" wide x 12" fire.
Minimum size of existing fire opening required: 22" high x 16" wide.
Clearance from underside of projecting lintel (if any) over fire opening to level of hearth must be at least 26".

FINISHES: Ebony black or coloured vitreous enamel, or "Alisheen" de Luxe enamel.

ADVANTAGES: The unit can be fitted to most existing fireplaces. It gives more heat per unit of fuel, and cuts down fuel consumption by approximately 40% over the ordinary coal fire.

ONE OF THE MANY CONTRIBUTIONS TO THE POST-WAR HOME THAT WILL BE MADE BY

ALLIED IRONFOUNDERS LIMITED



ALLIED IRON
REGD. TRADE MARK

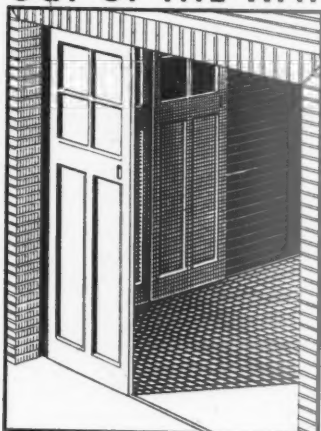
Proprietors of: AGA HEAT LIMITED; ALLIED IRON (S.W.) LTD.; BRITISH BATH CO. LTD.; THE BURTON FOUNDRY CO. LTD.; CALLENDER AMBOTS FOUNDRY COS. LTD.; THE JAMES CLAY (WELLINGTON) LTD.; THE COALBROOKDALE CO. LTD.; M. COCKBURN & CO. LTD.; E. W. CROSTHWAITE LTD.; DOBBIE, FORBES & CO. LTD.; EXCELSIOR FOUNDRY CO.; THE FALKIRK IRON CO. LTD.; THE FORTH & CLYDE & SUNNYSIDE IRON COS. LTD.; GENERAL GAS APPLIANCES LTD.; F. HELM LTD.; H. E. HOOLE & CO. LTD.; McDOWALL STEVEN & CO. LTD.; PLANET FOUNDRY CO. LTD.; SINCLAIR IRON CO. LTD.; THE WELWYN FOUNDRY CO. LTD.

KETLEY • WELLINGTON • SHROPSHIRE

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.

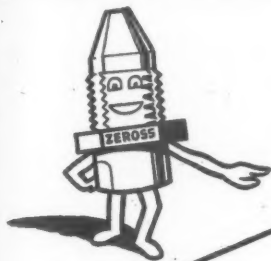
KING SLIDING DOOR GEAR

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)



NO MORE BURST PIPES!



Here is a remarkably simple, yet 100% efficient device for the prevention of bursts in water installations due to freezing.

Zeross is a metal valve so designed that when ice begins to form in a water system, the resulting increased pressure set up thereby is relieved by the automatic operation of the valve, which discharges the total excess volume of water due to expansion.

The valve reseats itself immediately this pressure has been relieved and before the thaw has taken place.

Zeross has undergone the most severe and rigid tests and may be specified with complete confidence.

Zeross technicians will gladly give advice and assistance on all your freezing problems.



A CERTAIN AND AUTOMATIC SAFEGUARD AGAINST BURST PIPES DUE TO FROST.

WHEN CORRECTLY INSTALLED GIVES 100% EFFICIENCY.

CANNOT CORRODE. NO ESSENTIAL PARTS IN CONTACT WITH WATER.

SUPPLIED WITH ESSENTIAL CHAMBERED TEES AND MADE IN A RANGE OF TYPES AND SIZES TO SUIT ALL DOMESTIC AND INDUSTRIAL WATER INSTALLATIONS.

CAN BE FITTED INTO IRON, LEAD OR COPPER SYSTEMS WITH EQUAL EASE AND EFFICIENCY.

FOR FULL DETAILS WRITE TO: **S. GRAHAME ROSS LTD., SLOUGH** TEL.: BURNHAM (Bucks) 686

POST-WAR SUPPLIES OF
Leathercloth

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

Where firms have, or can acquire, suitable base fabric, we shall be pleased to quote for its processing into leathercloth. A sample of the fabric should be submitted. Only cloths in the grey or bleached state can be considered.



IMPERIAL CHEMICAL INDUSTRIES LIMITED
LEATHERCLOTH DIVISION, HYDE, CHESHIRE

Telephone : HYDE 651

● Telegrams : REXINE, HYDE



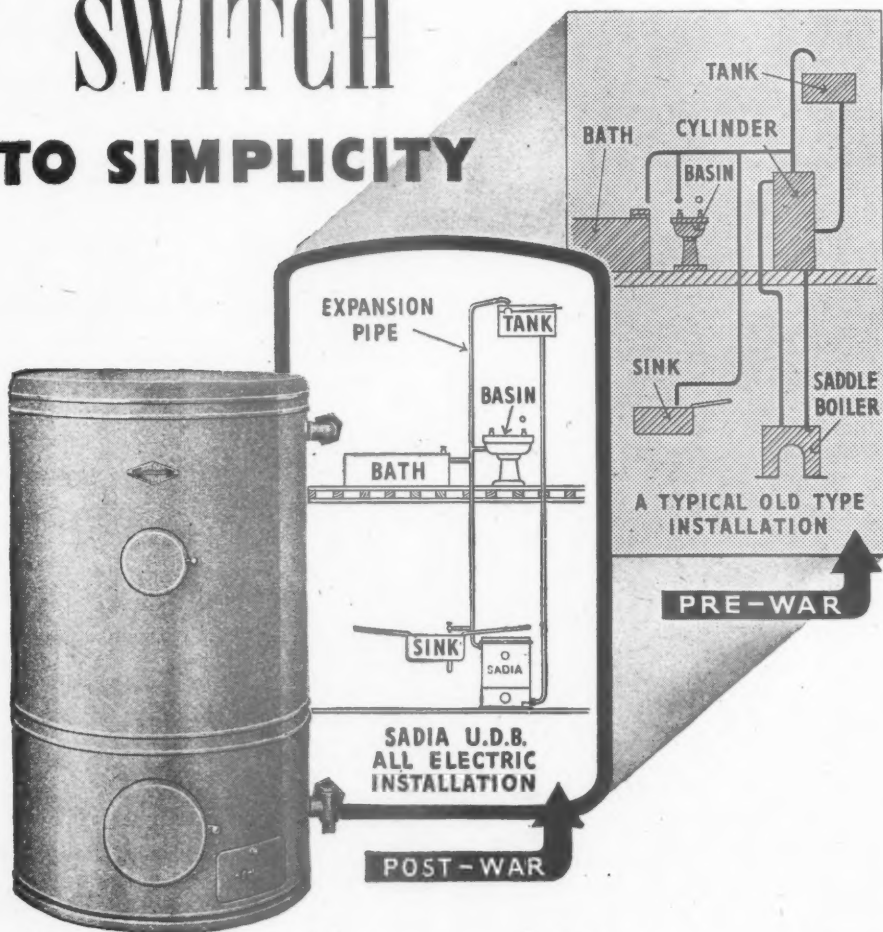
HOLLOW!

Hollow extrusions in aluminium alloys form a welcome addition to the materials of construction which are now available to the engineering and manufacturing industries. Here we have lightness of material and *lightness of form* combined with strength in a fashion which is new, and which cannot be provided so economically in any other manner. The uses for solid extrusions are legion, the hollow extrusion extends those uses into all kinds of unexpected fields. If you have a difficult construction problem drop a line to our Development Department. Maybe they will find you the answer in "HOLLOW EXTRUSIONS."

BIRMETALS

BIRMETALS-LIMITED BIRMINGHAM-32

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.

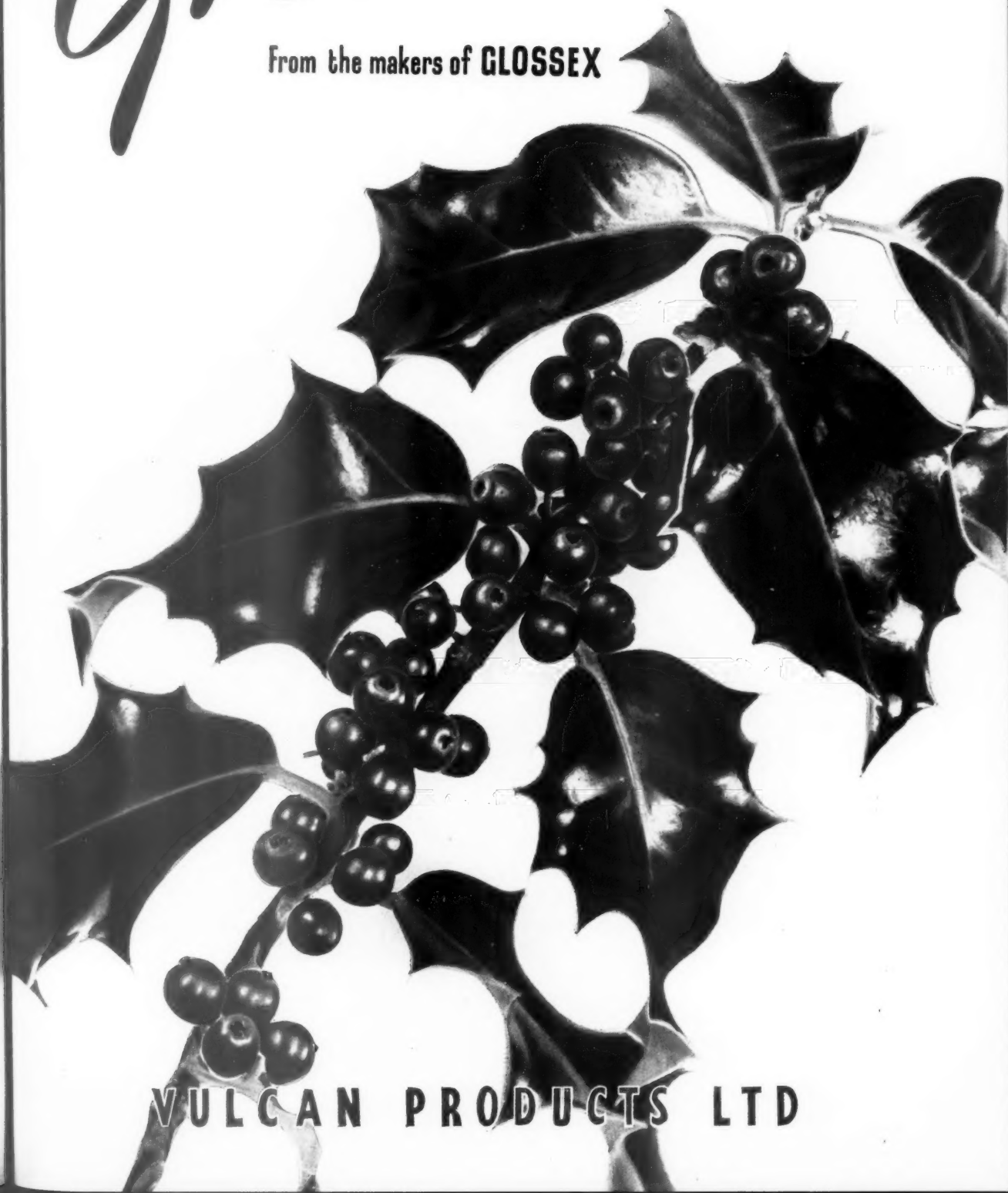
*Further particulars
on request.*

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

Greetings

From the makers of GLOSSEX



VULCAN PRODUCTS LTD



Painting by Anna Zinkeisen

This Present Age . . . 10

Modern civilisation is a complex structure of human organisms in differing combinations, each contributing some indispensable function to the whole. As with every living thing it is subject to many diseases of known and unknown origin. The minds and genius of men must be dedicated to the total elimination of these through the greater study of humanity itself. The foundations of a healthy social state can be laid on this basis by ensuring that the constitution is organically sound. It is a fundamental principle of democracy that all men are created equal; but it is also a law of nature that all are not equal in capacity. An appreciation of these

factors imposes a duty on the individual to contribute, to the limit of his powers, towards the well-being of the nation. Each citizen therefore, has a vital stake in the shaping of destinies that cannot be evaded, and must acquire the power to think and act with that characteristic honesty and independence which has imbued our nation throughout its great and glorious history. The maximum productive potential within our industry is desirable, but outside, it is the development of human personality as a dynamic force, which remains a personal obligation to procure the liberties and freedoms of progressive social reform.



THE UNITED STEEL COMPANIES LIMITED

17, WESTBOURNE ROAD . SHEFFIELD 10

STEEL, PEECH & TOZER, SHEFFIELD
SAMUEL FOX & CO. LTD., SHEFFIELD
UNITED STRIP & BAR MILLS, SHEFFIELD

APPLEBY - FRODINGHAM STEEL CO. LTD., SCUNTHORPE
WORKINGTON IRON & STEEL CO., WORKINGTON
UNITED COKE & CHEMICALS CO. LTD., CUMBERLAND

THE ROTHERVALE COLLIERIES, TREETON
THE SHEFFIELD COAL CO. LTD., TREETON
THOS. BUTLIN & CO., WELLINGBOROUGH



Use
“417 CEMENT”
for winter concrete work

Avoid the dangers of freezing. With “417 Cement,” concreting can be carried on continuously throughout the winter in safety. The accelerated setting and hardening of this cement makes it possible to carry on even during frost.



Full particulars of the use of “417 Cement” for cold weather work will be sent on application. Please send 1d. stamp for leaflet to :—

THE CEMENT MARKETING COMPANY LIMITED

192 ASHLEY GARDENS, LONDON, S.W.1.

Telephone: VICTORIA 6677

OR G. & T. EARLE LTD., CEMENT MANUFACTURERS, HULL



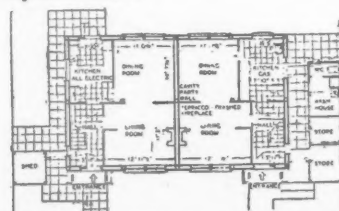
Traditional methods and materials

The Orlit method of house construction is based on the use of "traditional" indigenous materials which do not have to be imported from abroad. The heavy demands on shipping space and on foreign currency will not therefore restrict the development of Orlit.

The Orlit method is, in fact, a development of traditional building and its application to modern methods of factory production.

The wide experience gained during the war in the mass-production of concrete structures, and extensive experiments with surface finishes and lightweight concretes, account for the good reception of the Orlit houses, both by builders and housing experts. Yet the pleasing exterior and the architectural merits of the system appeal to expert and layman alike.

ORLIT



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



100 Chairs -and a girl

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.



Kingfisher Ltd.

furnish the new Education



KINGFISHER LTD., Charles Street & Phoenix Street, West Bromwich, STAFFS.
Telephone: Tipton 1631. Telegrams: Kingfisher, Phone, West Bromwich
LONDON: 139 Knightsbridge, S.W.1. Telephone: Kensington 1331.



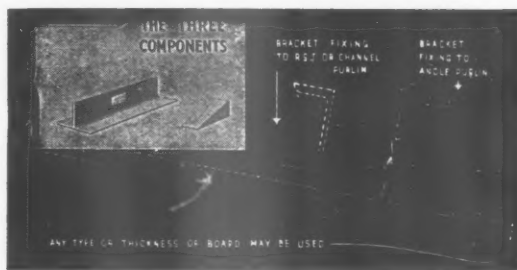
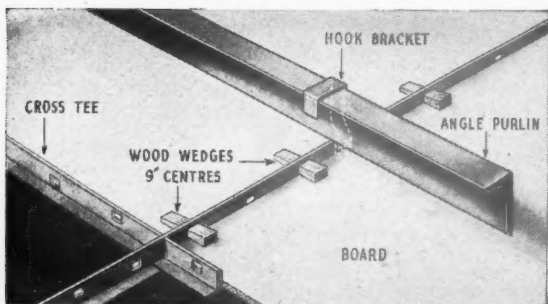
Patent No. 519406

FOR APPLYING ANY TYPE OF BOARD TO CEILING & WALLS

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



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



8 POINTS TO BE NOTED

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

The simplicity of application is such that any contractor can apply the AND Wedge Method, and the materials making up this method can be purchased by the contractor.

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

C. F. ANDERSON & SON, LTD.

Wallboards for Government Work

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

TELEPHONE: CLERKENWELL 4582

STEEL is our Business



We make it!

ABOVE: A group of Cargo Fleet Steel Furnaces in full operation.



RIGHT: General view of one of our fourteen Constructional Bays.

We fabricate it!!

RIGHT: Steelwork in course of erection by our workmen at Warwick Gardens, Kensington.



We ERECT it!!!



CARGO FLEET IRON Co. LTD.

CONSTRUCTIONAL ENGINEERS · MALLEABLE WORKS · STOCKTON-ON-TEES

Telephone: Stockton-on-Tees 66117 (Private Branch Exchange) Telegrams: CARFLECO, PHONE, STOCKTON-ON-TEES
also at LONDON and MIDDLESBROUGH



WORKERS' TRAVEL ASSOCIATION LTD.

HOLIDAY CENTRES ARCHITECTURAL COMPETITION

The Workers' Travel Association Ltd. invites
the submission of architectural designs

for

COASTAL & INLAND HOLIDAY CENTRES

each to accommodate 500/550 guests
with staff of 50.

PREMIUMS:

Two of £250 Two of £100

LAST DAY FOR QUESTIONS,
15 DECEMBER, 1945:

FOR SUBMISSION OF DESIGNS,
31 MARCH, 1946.

ASSESSORS:

Sir Patrick Abercrombie, M.A., F.R.I.B.A.,
P.P.T.P.I.; J. H. Forshaw, M.C., M.A.,
F.R.I.B.A., M.T.P.I.; C. G. Kemp, A.R.I.B.A.

Conditions of the competition, which have been
approved by the R.I.B.A., may be obtained from
The Workers' Travel Association Limited,
34/36, Gillingham Street, London, S.W.1, or 49,
Cannon Street, London, E.C.4, on payment of a
deposit of ten shillings, returnable on receipt of
a *bona fide* design, or in the event of an applicant
deciding not to compete, on the return of the com-
petition documents at least four weeks prior to
the date for submitting designs.

CVS-42

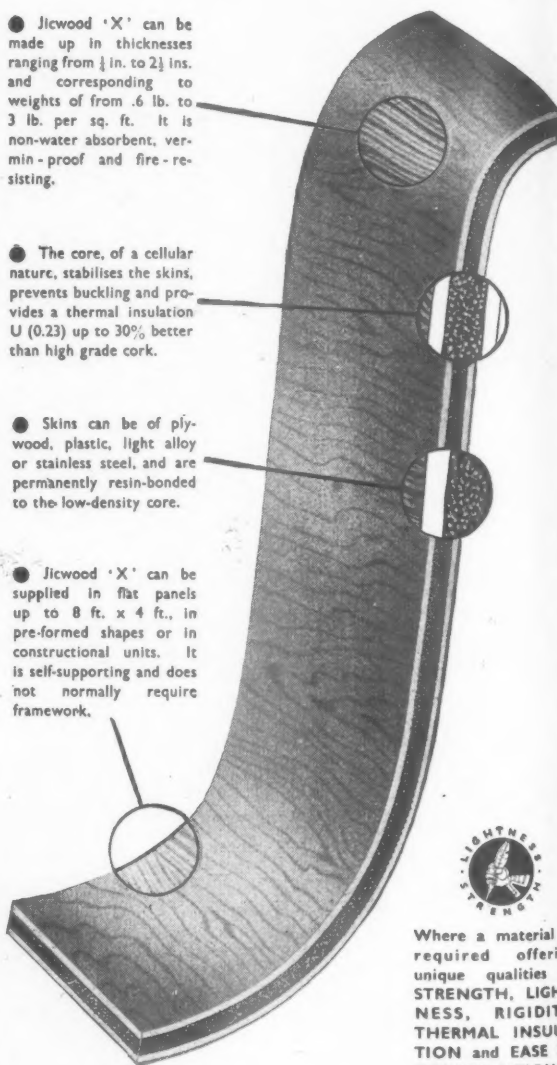
Lightness COMBINED WITH STRENGTH

● Jicwood 'X' can be
made up in thicknesses
ranging from $\frac{1}{4}$ in. to $2\frac{1}{2}$ ins.
and corresponding to
weights of from .6 lb. to
3 lb. per sq. ft. It is
non-water absorbent, ver-
min-proof and fire-re-
sisting.

● The core, of a cellular
nature, stabilises the skins,
prevents buckling and pro-
vides a thermal insulation
U (0.23) up to 30% better
than high grade cork.

● Skins can be of ply-
wood, plastic, light alloy
or stainless steel, and are
permanently resin-bonded
to the low-density core.

● Jicwood 'X' can be
supplied in flat panels
up to 8 ft. x 4 ft., in
pre-formed shapes or in
constructional units. It
is self-supporting and does
not normally require
framework.



Where a material is
required offering
unique qualities of
STRENGTH, LIGHT-
NESS, RIGIDITY,
THERMAL INSULA-
TION and EASE OF
CONSTRUCTION -
use JICWOOD 'X'.

Jicwood 'X'

JICWOOD LIMITED, WEYBRIDGE, SURREY

Telephone: Weybridge 1600.

Telegrams: Jicwood, Weybridge.



FOR KITCHENS LARGE OR SMALL

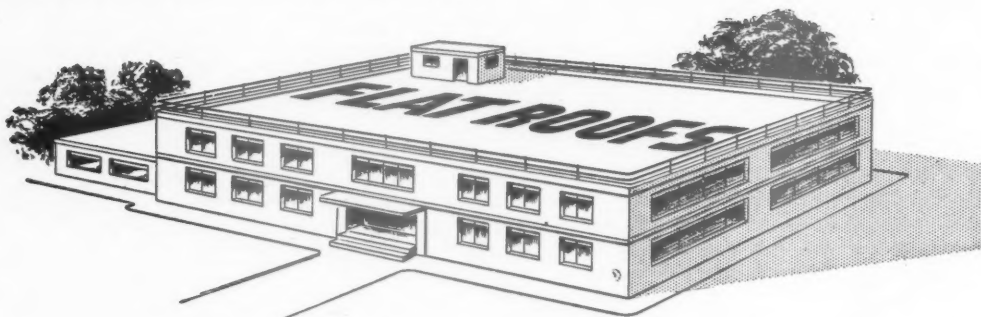
Designed to fit snugly into lines of kitchen equipment, New World gas cookers are available with these features:

1. All controls on the front.
2. Vertical or horizontal models, i.e. with hotplate over oven or with hotplate alongside oven.
3. Regulo oven-heat control, New World oven, Radiation hotplate features and finishes.

Radiation Ltd. Service is available to help in the development of your plans.

NEW WORLD

Radiation Ltd Radiation House, Aston, Birmingham 6
Showrooms and London Office: 7 Stratford Place, W.1



... a job for experts only

PITCHED roofs have been in vogue for a long time, and the technique of building them is now so well understood that no special technical attainments are necessary.

The modern flat roof is a different proposition—a highly scientific form of construction which demands a special knowledge in theory and practice.

Since the inception of the flat roof principle F. McNEILL & CO. LTD. have been

amongst the few firms in this country who have specialised in the construction of coverings for flat roofs and understand this work so thoroughly that many of the outstanding advances in technique can be placed to their credit.

Despite the continued restrictions on building work our technicians will be pleased to co-operate in tackling problems in connection with post-war construction.

F. McNEILL & CO. LTD.

Specialists in Flat Roof Coverings

10, LOWER GROSVENOR PLACE, LONDON, S.W.1

Telephone: Victoria 6022-4

Telegrams: "Eyeball," London



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

THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD.

10 GROSVENOR PLACE, LONDON, S.W.1

SLOANE 7123

Announcing a New Issue of

CERAMICS

in Art & Industry

It was with great regret that we had to suspend the publication of this Journal during the war years. Those readers who have written to enquire if we intend to resume publication will be interested to know that the 1945 edition is now in the printers' hands and that we hope to have copies available before the end of the year.

The 1945 issue is devoted mainly to an illustrated review of the part which ceramic products have played in the war effort. It is, however, of more than merely retrospective interest, as almost all the applications shown and described will have a part to play in peacetime industry and reconstruction.

In future issues we shall endeavour to deal with many different aspects of ceramics both from a technical and a more general standpoint, thus catering for the extremely varied interests of our 7,000 or more readers.

Unfortunately, our mailing list was partially destroyed during the war and it has, moreover, been difficult to keep track of changes of addresses of readers. We are now compiling an up-to-date mailing list and if you would like your name included, we shall be glad if you will let us know as soon as possible. But please remember it may not be possible to post copies for some weeks yet.



Owing to the reduced quantity of paper at our disposal, we regret that we can only send copies to those applying on business or professional letter headings and it will also, unfortunately, be impossible to send copies to *individual* students. We shall, however, be very pleased to send a copy to the Principal or Librarian of any University, College, Technical School or Public Library, so that the Journal may be available for reference.

Please be good enough to give your full name and address in BLOCK LETTERS to prevent any possible errors in mailing. To comply with the Control of Paper Regulations, readers in Great Britain are asked to enclose a penny stamp. Applications should be addressed as follows:

DOULTON & CO., LIMITED

DEPT. 60, DOULTON HOUSE, ALBERT EMBANKMENT, LONDON, S.E.1

Heating Cooking

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

**Electric PORTABLE
& BUILT-IN FIRES**

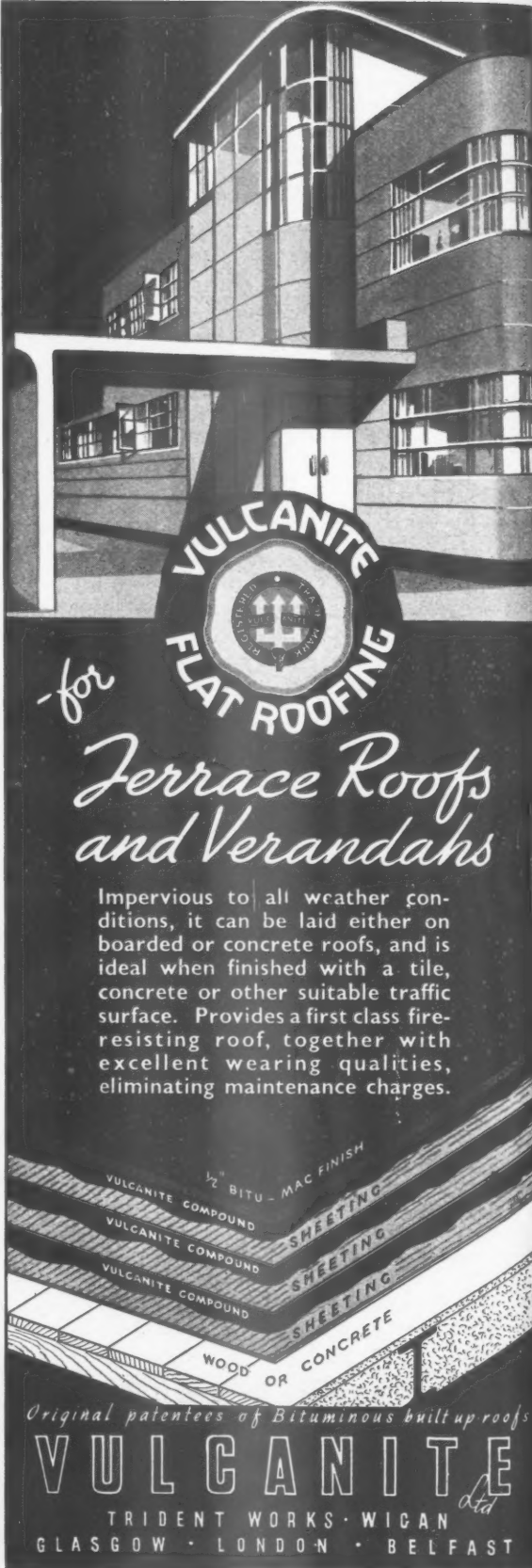
**Electric COOKING
EQUIPMENT**

You can't beat a

Belling

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

C.R.C. 51R



VULCANITE
for
*Terrace Roofs
and Verandahs*

Impervious to all weather conditions, it can be laid either on boarded or concrete roofs, and is ideal when finished with a tile, concrete or other suitable traffic surface. Provides a first class fire-resisting roof, together with excellent wearing qualities, eliminating maintenance charges.

1/2" BITU - MAC FINISH
VULCANITE COMPOUND
VULCANITE COMPOUND
VULCANITE COMPOUND
SHEETING
SHEETING
SHEETING
WOOD OR CONCRETE

Original patentees of Bituminous built up roofs
VULCANITE
TRIDENT WORKS · WIGAN
GLASGOW · LONDON · BELFAST

V.8

Structural Steelwork

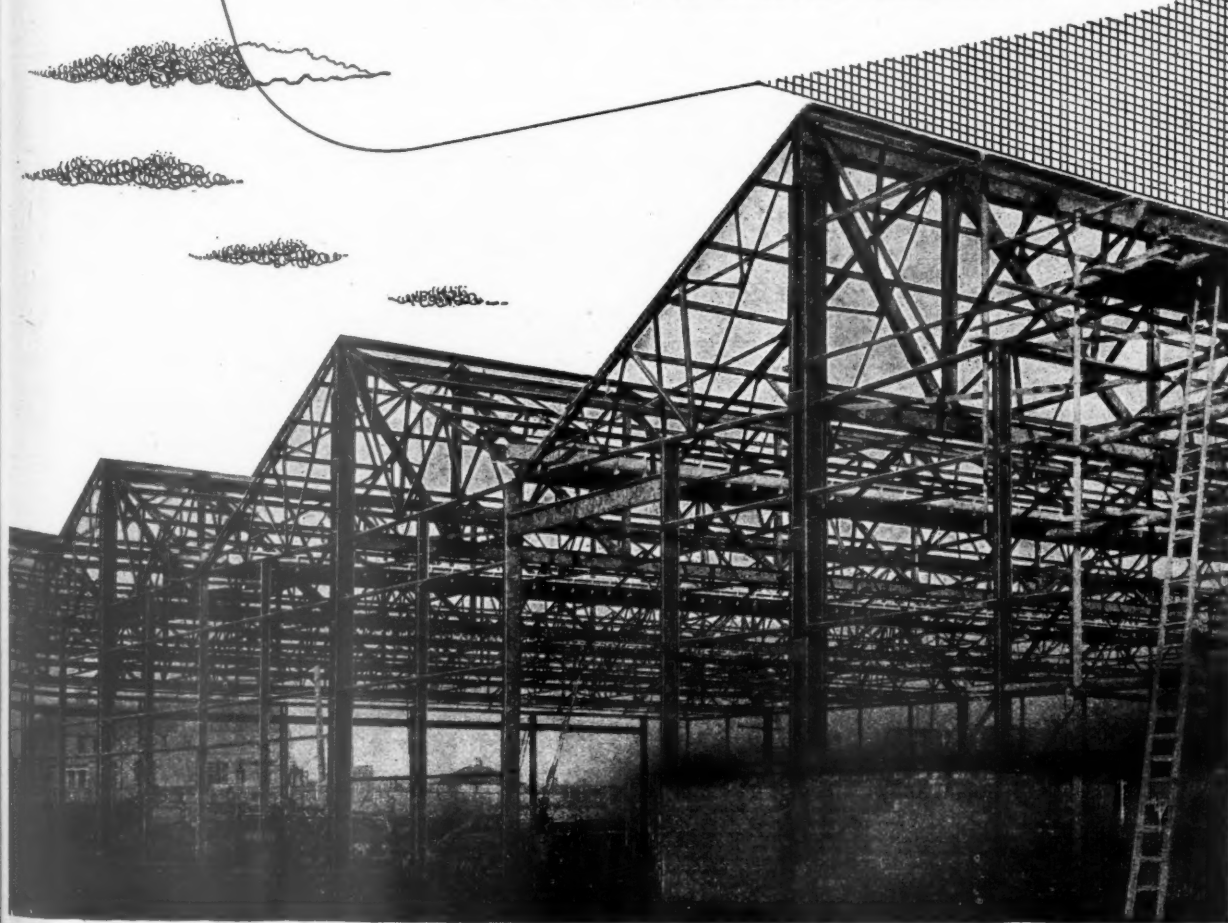
of every type, Steel Frame Buildings for Factories, Offices and Residential Flats, Airport Buildings, Hangars, Dock Warehouses, Piers and Pier Concert Pavilions, Swimming Baths, etc., are constructed with sound materials and craftsmanship.

By

HORSELEY-PIGGOTT

HORSELEY BRIDGE AND THOMAS PIGGOTT LTD
HORSELEY WORKS, TIPTON, STAFFS. 'Phone: 1104 P.B.X

London Office: 22, Carlisle Place, Westminster, S.W.1.



"Office delays can cause production bottlenecks"

Individual output suffers the moment delay occurs in communication between members of your organization with consequent loss of revenue. The Strowgerphone can save minutes—or even hours—of precious time and it promotes efficiency.

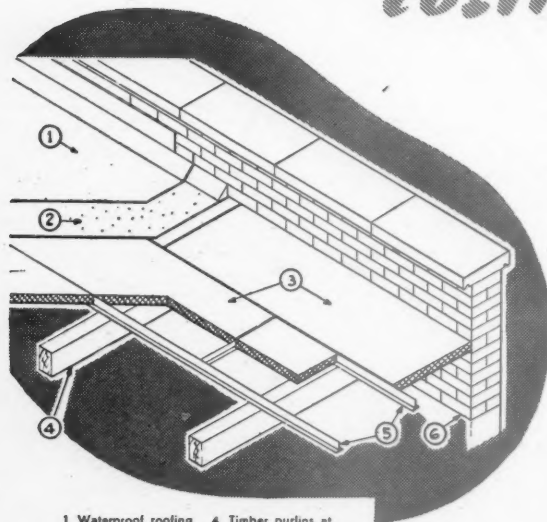
One simple rental charge secures the service. Write or telephone our nearest branch for details.

AUTOMATIC TELEPHONE & ELECTRIC CO. LTD.

MELBOURNE HOUSE, ALDWYCH, LONDON, W.C.2 Temple Bar 4506
STROWGER WORKS, LIVERPOOL, 7



WARMER housing— costing less to heat



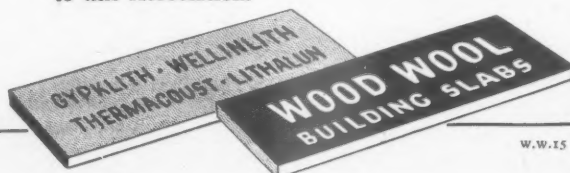
- 1 Waterproof roofing
- 2 Scream
- 3 2" woodwool slabs
- 4 Timber purlins at 4'-0" c/c approx.
- 5 Lightweight steel tees
- 6 External brickwork

2" WOOD WOOL SLABS USED OVER TIMBER PURLINS IN FLAT ROOF CONSTRUCTION

Insulation is the biggest technical advance in modern building construction; and Wood Wool Slabs the ideal way of applying it.

Insulated houses are comfortable houses, easier and cheaper to keep warm in cold weather, cool when the weather is hot. Walls, roofs and partitions *should and can* be insulated; with Wood Wool Slabs the insulation can be an *integral* part of the construction.

Wood Wool Slabs in addition to their high insulating properties have a wide range of uses as a building material. They can be used as permanent shuttering in concrete construction, for free-standing and stud partitions, are fire-resistant, rot-proof and vermin-proof. They provide an excellent surface for bitumen, plaster and cement rendering. For details and technical data write to this Association.



THE WOOD WOOL BUILDING SLAB MANUFACTURERS ASSOCIATION
11 IRONMONGER LANE, E.C.2, Royal 3288

W.W.15



The advantages and uses of Catalin in interior decoration and furnishing are too numerous to specify. Sufficient to say that with its superb range of colour and effect, its ease of fabrication and adaptation to any manufacturing operation, Catalin provides endless scope for design and ornament. It is a material both useful and decorative.

colourful
Catalin
TRADE MARK REGD.

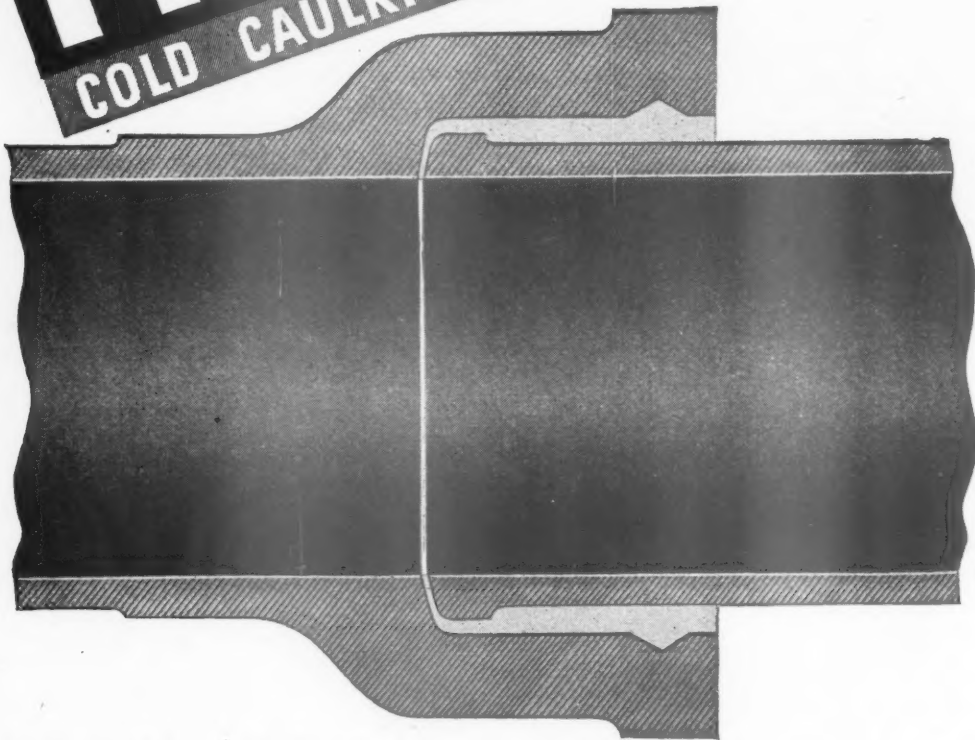
THE GEM OF
MODERN PLASTICS

*All concerned with the
design and construction
of the homes of the
future should contact*

CATALIN LTD.
WALTHAM ABBEY, ESSEX

PHILPLUG

COLD CAULKING COMPOUND



Socket-Pipe Jointing

The perfect jointing material for Water, Gas, Drainage and Hot Water Pipes, also Cast Iron and Asbestos Cement, Soil and Waste Pipes, etc.

Unlimited supplies are available, and no other jointing material can claim all the following advantages :—

1. Maximum flexibility combined with a consistent density throughout the depth of the joint.
2. No heat or fire required, enabling work to be executed in inclement weather and under conditions not possible with other materials.
3. The "Philplug" joint shows an overall saving of at least

30% on labour and materials, and 85% of transport charges.

All that is required for making a "Philplug" joint is a little cold water, standard caulking tools and a hammer.

Only $\frac{1}{4}$ lb. "Philplug" C.C.C. is required per inch diameter of pipe, therefore a 4 inch pipe requires only 1 lb. for a full depth joint.

Tested and approved by leading pipe manufacturers, the Building Research Station, and specified by various Government Departments.

"Philplug" is packed in dry form in 1 lb., 7 lb. and 28 lb. tins and if stored dry will keep indefinitely.



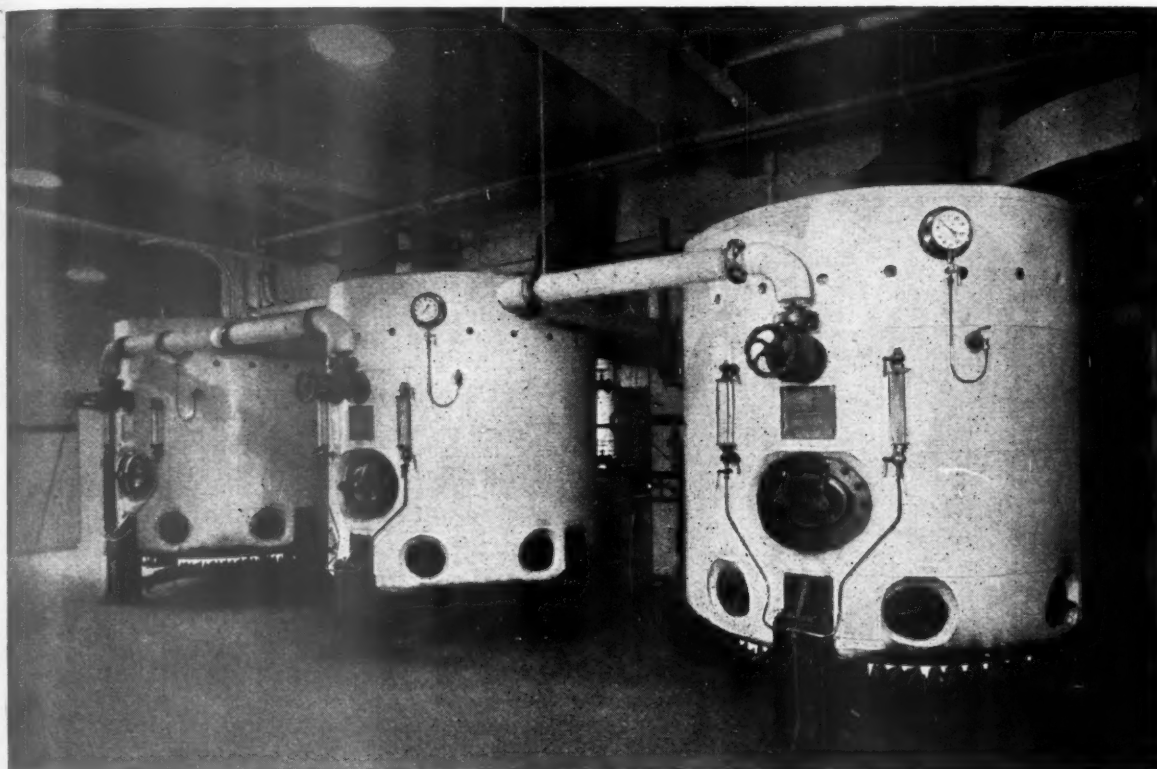
Write now for particulars to—(Co distributors) :

BURN BROS. (LONDON) LTD.,

6, STAMFORD STREET, BLACKFRIARS, S.E.1.

Waterloo 5261

MODERN ENGINEERING INSTALLATIONS by HADENS



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



HEATING BY ALL SYSTEMS
HIGH PRESSURE HOT WATER SYSTEMS
FOR HEATING AND PROCESS WORK

AIR CONDITIONING AND VENTILATION
PLUMBING AND SANITATION
ELECTRIC LIGHTING AND POWER

G. N. HADEN & SONS LTD

★ ★ Estd. 1816

MAIN BRANCHES:

Manchester 2, 4 Albert Square	- - - - -	Blackfriars 6156
Glasgow C.2, 86 St. Vincent Street	- - - - -	Central 3196
Birmingham 3, 45 Great Charles Street	- - - - -	Central 8391
Bristol 1, Orchard Street	- - - - -	Bristol 20286
Lincoln, Guildhall Street	- - - - -	Lincoln 993
Bournemouth, Avon Road	- - - - -	Boscombe 512
Torquay, Castle Road	- - - - -	Torquay 3831

Sub-Branches:

Newcastle-on-Tyne 1, 13 Morley Street	- -	Newcastle-on-Tyne 26780
York, 39 Micklegate	- -	York 4236
Liverpool 1, St. Luke's Chambers, Bold Place	- -	Royal 5699
Norwich, City Chambers, Upper King Street	- -	Norwich 22638
Eastbourne, 16 Cornfield Terrace	- -	Eastbourne 2363
Canterbury, 58 Whitstable Road	- -	Canterbury 4189

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

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

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

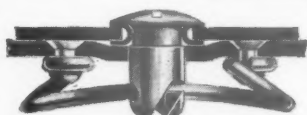
One of a million USES FOR

DZUS

FASTENERS



Dzus Fasteners used
on inspection panels on
electric main conduit.



In the modern home a million uses can be found for Dzus—the simple **quick-release** fastener which makes a strong, vibration proof joint yet takes only a quarter turn of a coin to undo. Wherever regular inspection is needed, Dzus fasteners give **instant** access, saving all the old-fashioned screwing and unscrewing.

The Dzus Technical Advisory Service is at your disposal—they will advise you regarding the millions of uses for Dzus.

DZUS FASTENERS ARE MANUFACTURED BY DZUS FASTENER EUROPE LTD.

Sole Distribution by

THOS. P. HEADLAND LTD.

164-168, WESTMINSTER BRIDGE ROAD, LONDON, S.E.1

The post-war heating of buildings

Planning authorities will doubtless incorporate the most modern methods of heating in post-war buildings.

They agree that whatever the method to be used, the mechanical firing of boilers burning solid fuel will be the cheapest and most effective method of heat production.

It follows then, that the Iron Fireman, the first and foremost Automatic Coal Stoker, will play an important part in the post-war heating of buildings and we invite your questions and enquiries.

The Iron Fireman range of stokers includes some 40 models and sizes, covering industrial, civil, institutional, horticultural and domestic heating requirements.

Iron Fireman AUTOMATIC COAL STOKERS

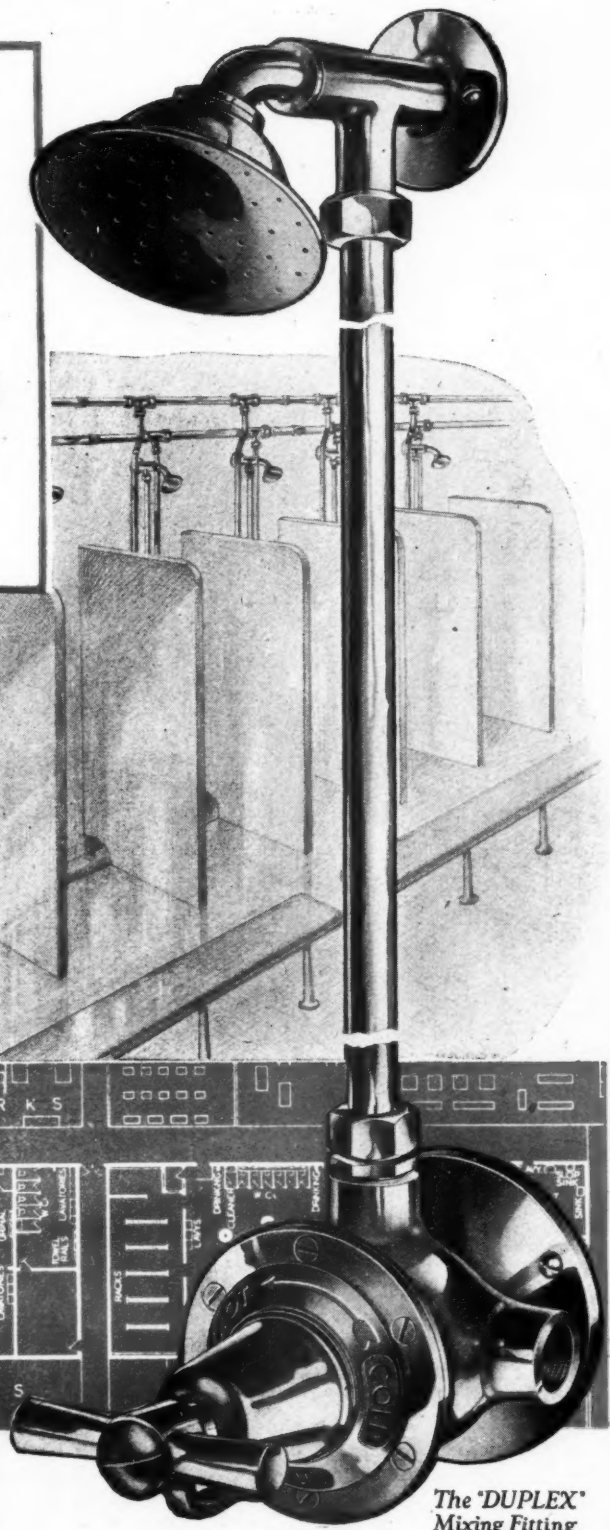


ASHWELL & NESBIT LTD., BARKBY ROAD
LEICESTER

LONDON: 37 Pembroke Square, W.8. BIRMINGHAM (4):
12 Whittall St. GLASGOW: 103 Douglas St., C.2. LEEDS (6):
32 Headingley Lane. MANCHESTER (13): 184 Oxford Road.

Shower Equipment and other Sanitary Fittings

For Factories, Public
Institutions & Schools



Shanks

*The 'DUPLEX'
Mixing Fitting*

HEAD OFFICE: SHANKS & CO., LTD., TUBAL WORKS, BARRHEAD, SCOTLAND
Also at London, Manchester, Newcastle-on-Tyne, Glasgow, Bristol, Dublin, Belfast

Save this man's time



1 easy to fix

The New Empire Multi-point is held by a back plate fixed by six screws, together with the baffler.

2 easy to maintain

Heat exchanger or valve or burner can be removed independently and without dismantling baffler, vent pipe or plumbing installation.

3 simple to use

The Ewart Geyser is made with the single-minded aim of giving trouble-free service. The valve embodies every operational safeguard; the jet burner is self-cleaning and non-corrosive. Water temperature is regulated at will.

4 standardisation

Tapered BSP threads are now standard on all Ewart Geysers, enabling commercial pipe fittings to be used and ensuring water-tight joints. The baffler has a B.S. vent pipe connection.



by specifying
EWART
GEYSERS

EWART & SON, LTD. 169 REGENT ST. W.I. - WORKS: LETCHWORTH, HERTS. ESTD. 1834.

In common
war needs
pages. W
get a copy

DIA
JAN

Titles of
papers and
by their i

BIRMINGHAM

Plans
New Street
National
House Bu
mittee.

E DINBU
submitted by
Proposed
Foundation
Academy,
Thistle Fo
to 5 p.m.

GLASGO
tion
425, Sau
Designed
coal in in
to remind
efficient a
fuel; the
ber of up
cluding o
and stove
designs o
other do
Ministry o

LEICESTER
Need
Art Galler

LIVERP
Asso
be opene
pool. Al
Students U

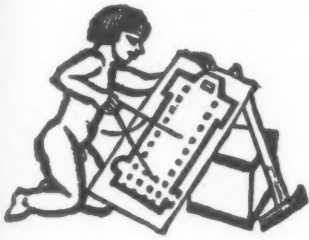
LANES
Pu

LONDON
Colo
Henry S.
At the Ba
Street, W
(Limited.)
10 a.m. to

NALGO
Museum,
BIAE.)

Exhibition
Present.
N.W.3.
Colnaghi,
Reed, as v
galleries.
torical se

In common with every other periodical this JOURNAL is rationed to a small part of its pre-war needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order." Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw materials now in short supply, are not necessarily available for export.



DIARY FOR DECEMBER JANUARY AND FEBRUARY

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. *Permanent House Plans.* Exhibition at the Art Gallery, New Street. The plans were selected in a National Competition organised by The House Building Industries Standing Committee. DEC. 13-22

EDINBURGH. *Exhibition of Designs submitted in the competition promoted by the Thistle Foundation, for the Proposed Buildings at Edinburgh for the Foundation.* At the Royal Scottish Academy, Princes Street. (Sponsor, the Thistle Foundation.) Weekdays, 10 a.m. to 5 p.m. Sundays, 2 p.m. to 5 p.m. DEC. 13-16

GLASGOW. *Other People's Jobs.* Exhibition at the Scottish Building Centre, 425, Sauchiehall Street, Glasgow, C.2. Designed to emphasise the importance of coal in industry, transport and home, and to remind the public of the need for the efficient and careful use of every type of fuel; the exhibition will include a number of up-to-date domestic appliances, including open coal fires, solid fuel cookers and stoves, as well as some of the latest designs of gas and electric cookers and other domestic appliances. (Sponsor, Ministry of Fuel and Power.) DEC. 13-29

LEICESTER. *Country Life and Country Needs.* Exhibition at the Museum and Art Gallery. (Sponsor, BIAE.) DEC. 13-30

LIVERPOOL. *Architectural Students Association Annual Conference.* To be opened by the Lord Mayor of Liverpool, Alderman Luke Hogan, at the Students Union. DEC. 17-21

LANELLY. *NALGO Exhibition at the Public Library.* (Sponsor, BIAE.) DEC. 17-25

LONDON. *Winter Exhibition of Water Colour Drawings and Paintings.* By Henry S. Merritt and Laurence Clarke. At the Batsford Gallery, 15, North Audley Street, W.1. (Sponsor, B. T. Batsford, Limited.) 10 a.m. to 4 p.m. Saturdays 10 a.m. to 12 noon. DEC. 13-22

NALGO Exhibition. At the Geffrye Museum, Kingsland Road, E. (Sponsor, BIAE.) DEC. 13-15

Exhibition of Hampstead Artists, Past and Present. At Studio House, Haverstock Hill, N.W.3. Works are being lent by Messrs. Colnaghi, Agnew, Lefevre, Frost and Reed, as well as private collectors and public galleries. Many of the pictures in the historical section have never before been ex-

hibited. (Sponsor, Hampstead Artists' Council.) DEC. 16 onwards.

J. F. Eccles. *The Creation of a New Town.* At the Livingstone Hall, Broadway, Westminster, S.W.1. (Sponsor, TPI.) 6 p.m. DEC. 20

Dr. H. Andrew of the Building Research Station. *Plastering.* ASB Lecture at The RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 5.45 p.m. JAN. 2

Schools Speakers. J. H. Newsom, County Education Officer of Hertfordshire, and others, and showing a film *Children's Charter.* At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m. JAN. 8

Richard H. Sheppard, J. H. Newsom, Hertfordshire County Education Officer and others. *Talk on Schools and showing of the film Children's Charter.* At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m. JAN. 8

S. C. Mount. *A Factory in a Railway Tunnel.* At the Institution of Heating and Ventilating Engineers, 72-74, Victoria Street, S.W.1. (Sponsor, IHVE.) JAN. 9

W. R. Watson. *The Control of Electrical Installation Work.* At the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE.) 5 p.m. JAN. 10

Country Road Lighting. Discussion opened by C. R. Bicknell at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE.) 5 p.m. JAN. 14

1945 AA Students Panto. It's Out of All Proportion. At the AA, 36, Bedford Square, W.C.1. December 11, 12 and 13. 7.30 p.m. December 14, 6.30 p.m. Tickets 5s., 3s. 6d. and 2s. 6d., must be booked in advance from Miss I. L. E. Griessmann, Panto Secretary. Cheques made payable to AA Students' Club. DEC. 13-14

A. Ramsay Moon. *Shop and Site Welding.* At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, ICE.) 5.30 p.m. JAN. 15

National Federation of Building Trades Employers' Dinner. At The Dorchester Hotel. Guest of honour, Mr. Aneurin Bevan, Minister of Health. JAN. 30

Kenneth Holmes, Principal of the Leicester College of Arts and Crafts. *The Place of The Art School in The Life of the Community.* At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 1.45 p.m. FEB. 13

NEWS

THURSDAY, DECEMBER 13, 1945
No. 2655. VOL. 102

News	423
The New County Architect for Westmorland	424
This Week's Leading Article	425
Astragal's Notes and Topics	426
Letters from Readers	427
Recent Architecture in Holland	428
Physical Planning Supplement:	
Gravesend Replanned	429
Drawing Offices for the Bristol Aeroplane Co.—Designed by Eric Ross	433
Information Centre	437
Societies and Institutions	439

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.

On thirteen sites in England DEMONSTRATION PERMANENT HOUSES are under construction from plans selected in the national competition organized by the House-Building Industries Standing Committee.

Sites where the houses are under construction are as follow:—*Northern Area*—Handforth, near Manchester; Sale Moor, near Manchester; Wakefield; Morley, near Leeds. Building on three other pairs of houses (at Liverpool, Wythenshaw and Sale) will start shortly. *Midlands Area*—Walsall; Coventry; Leicester; Cardiff. Building on five other pairs of houses (at Hanley, Birmingham, Norwich, Chesham and Oxford) will start shortly. *London and Southern Area*—Ardingly, Sussex; Letchworth; Hayes Middx.; Eastcote; Northwood. Building on seven other pairs of houses (at Hornchurch, Hythe, Purley, Brighton, Hove, Orpington and Plymouth) will start shortly. It is anticipated that the first pairs of houses will be completed, furnished and open for exhibition before Christmas.

★
Sir William Douglas, K.C.B., K.B.E., Permanent Secretary of the Ministry of Supply since 1942, has now taken up his duties as PERMANENT SECRETARY OF THE MINISTRY OF HEALTH, on the retirement of Sir John Maude, K.C.E., K.B.E.



The large distribution and control panel through which programmes pass to subscribers and which is constantly manned by a Rediffusion engineer.

Radio Listening to be clearer and simpler in the future

IN the future, radio entertainment will develop more and more on a system already bringing new reception experience to thousands of fortunate listeners in certain areas. They have no hunting for stations, no hair's breadth adjustments of the tuning dial to cut out unwanted stations, no irritating crackling and distortion to interfere with their listening. Just a simple movement of a switch from one position to another gives them the programmes they require.

This is not yet a feasible proposition

for listeners everywhere, but Broadcast Relay Service Ltd. are already operating a service which brings radio into the home by private direct lines from the B.B.C. studios.

Subscribers to this service are thus sure of the best reception of radio. They can select the Home or Light programme, confident that the reproduction will be the exact counterpart of the studio performance. And selected programmes from world radio stations are also available to them.

Rediffusion also equips factories for announcements and music

REDIFFUSION

BY BROADCAST RELAY SERVICE LTD.

CARLTON HOUSE, REGENT STREET, LONDON, S.W.1

serves the following areas:

BANGOR (Co. DOWN), BARGOED, BARROW, BLACKPOOL, BROADSTAIRS, DARLINGTON, EXETER, GATESHEAD, HULL, KENDAL, LANCASTER, MAIDSTONE, MARGATE, MERTHYR, MORECAMBE, NEWCASTLE, NEWPORT (MON.), NORTH AND SOUTH SHIELDS, NOTTINGHAM, PLYMOUTH, PONTYPRIDD, RAMSGATE, RHONDDA VALLEY, ROCHDALE, ROTHERHAM, ST. HELENS, STRETTFORD, SUNDERLAND, SWANSEA, WALLASEY, WALLSEND, WHITLEY BAY, WOLVERHAMPTON, and also in MALTA and TRINIDAD.

Fr
A H
by C.
in th
volun
its el
most
it."
an ex
piece
here
The
and
wher
is no
oddit
This
reme
horro
★★
The
cided
of T
FOR
erecte
The M
except
teneme
timber
allowe
author
wood:
floor a
per dw
dwelling
will of
permit
ment
in con
structi
should
softwo
ment
of ea
hardw
for a
board
height
amoun
special
hardw
also p
on ap
Officer
★
The
Trad
Thom
CH
W A
BOA
The
nounce
duction
the M
verted
and th
has a
dent,
Region
Nation
Mr. T
Wales
1940,

From AN ARCHITECT'S Commonplace Book

A HOT MUSEUM PIECE OF THE NINETIES. [From Dr. Philligo: His Journal and Opinions, by C. E. Vulliamy (Michael Joseph).] Lucy is anxious to have our drawing-room decorated and equipped in the fashionable style. Whether I shall be able to afford this I cannot say. She has been reading a volume in the Victoria Library for Gentlewomen and has been inspired, perhaps unfortunately, by its elaborate descriptions. (This refers to *The Gentlewoman at Home*, by Mrs. Talbot Coke). It is a most remarkable period piece. The ideal home, we read, ought to be "just like the woman who owns it." The dining-room walls are "covered with a rich red-and-gold Tynecastle tapestry, which forms an excellent background for divers old portraits. The cornice is dark carved oak, as is the mantel-piece, reaching nearly to the ceiling and laden with beaten copper, blue-and-white Nankin jars, and here and there a touch of yellow pottery. The carpet is of rich Turkey pile, in oriental colours . . . The curtains are of dull red cut velvet, the chairs covered with the same material in ruddy gold"—and then a broad frieze of gold leather paper "leads pleasantly to a yellow ceiling paper," and somewhere or other there is "a bold design of large storks flying across a rich red background." But this is not all by any means. You must have Mushrabeyah arches and mirror and screen, Eastern rugs, oddities from Gibraltar, Mooltan, Tangier and China, and "grotesque little brass gods from India." This hot abomination, all blood and mustard, was known as "a colour scheme," and it was, pray remember, "just like the woman who owns it." She lingers, even now, in the memory's museum of horrors. Her red and leathery face is not unlike the dull anchovy coverings of her chairs.*

★★
The Ministry of Health has decided upon the maximum amounts of TIMBER TO BE USED FOR NEW DWELLINGS erected by local authorities.

The Ministry of Health has decided that, except as regards softwood for multiple tenement flats, the maximum amounts of timber for all purposes which can be allowed for new dwellings erected by local authorities should be as follows:—(a) Softwood: 2 standards per 1,000 superficial feet floor area. (b) Plywood: 450 square feet per dwelling. (c) Hardwood: 10 cu. ft. per dwelling. The Minister is satisfied that it will often be possible to use less than the permitted amounts of timber without detriment to sound and efficient building, e.g., in connection with special methods of construction in floors and roofs; and savings should be effected wherever possible. The softwood requirements for multiple tenement flats will be dealt with on the merits of each particular scheme. As regards hardwood, sufficient home-grown hardwood for a 10-ft. length per house of close boarded fencing, not exceeding 6 ft. in height, may be allowed, as an extra to the amount specified in paragraph 2(c) in special cases, to give privacy. Home-grown hardwood fence posts for site enclosure are also permissible, and these can be obtained on application to the Timber Control Area Officer without a certificate to purchase.

★
The President of the Board of Trade has appointed Mr. Percy Thomas, P.R.I.B.A., TO BE CHAIRMAN OF THE WALES REGIONAL BOARD FOR INDUSTRY.

The Board of Trade has recently announced that the war-time Regional Production Boards, which were answerable to the Minister of Production, are being converted into Regional Boards for Industry, and the President of the Board of Trade has appointed Mr. Percy Thomas, President, RIBA, to be Chairman of the Wales Regional Board and a member of the National Production Advisory Council. Mr. Thomas was appointed Area Officer for Wales, under the Ministry of Supply, in 1940, and since the formation of the

Ministry of Production in 1942, has been Regional Controller and Chairman of the Wales Regional Board. During the war the Boards were chiefly concerned with the production of munitions, and their interest was mainly in the engineering and allied industries. In future they will exercise their activity over the whole field of productive industry. Under their terms of reference the Boards "will advise Ministers upon industrial conditions within the regions and upon steps which may be necessary to bring regional resources in productive capacity or labour into fuller use." They will keep local industry advised of Government policy in relation to industry and keep headquarters informed of the views of local industry.

The Governors are to press on with the plans for the REBUILDING OF GUY'S HOSPITAL.

At the annual meeting of the Court of Governors of Guy's Hospital it was agreed to press on with the plans for the rebuild-

ing. A tribute was paid to the Bermondsey Borough Council's assistance in the acquisition of the site. The hospital when completed will have 1,000 beds. Arrangements were made for a joint meeting between representatives of the Kent County Council and the governors of the hospital so that plans for closer co-operation between the two bodies in connection with the treatment of cancer might be discussed. The purchase of an additional deep X-ray therapy plant, costing £2,000, was approved.

★★
The RIBA Distinction in Town Planning is OBTAINABLE BY FELLOWS, Associates (who are not less than 26 years of age) and Licentiates.

The test by means of which this Distinction is awarded is conducted by special Examiners appointed by the Council of the RIBA. This award does not take the place of the RIBA Diploma in Town Planning, which is obtainable by Fellows, Associates and Licentiates of the RIBA without any minimum age limit. The primary purpose of the Distinction is to satisfy a demand from senior architects to take a qualifying test in town planning suited to their age and existing attainments. The Examiners will meet three times a year—in February, May and October. Applications should be submitted to the Secretary of the RIBA by January 1, April 1 and September 1 annually. Copies of the form of application containing the procedure, regulations, general scope of study and bibliography may be obtained, free, on application to the Secretary, RIBA.



Mr. Victor Watlington, Director of the British Electrical and Allied Manufacturers' Association, who is retiring in 1946 after fifty years service in the electrical industry.

Dr. J. A. Ringers, Minister of Public Works and Reconstruction at The Hague, addressing the Institution of Civil Engineers: the temporary bridge that served Londoners during the rebuilding of Waterloo bridge is now TO SPAN THE RIVER AT ARNHEM.



The New County Architect for Westmorland

Lieut. R. H. Crompton, R.N.V.R., has recently been released from the Navy to take up his duties in Kendal. An Associate of the RIBA and an Associate Member of the Town Planning Institute, he was trained in Manchester, and before the war held architectural appointments with Torquay Corporation, Cheshire County Council and Dorset County Council. During the war years he served mostly in H.M.

Light Coastal Forces. It is noteworthy that Westmorland County Council has appointed a comparatively young architect (he is thirty-three) directly from the Forces, to set up and control their new Architects' Department. His planning knowledge should be a source of help to him and satisfaction to his Council in an area which recent National Park suggestions have had under close review.

★
The
Trad
nounc
accep
Coun
hold
year
BIT

The e
ranges
hold f
equipm
held in
July 1,
It will
sive as
Fair, an
Cripps.
the bes
produce
but not
years in
be goin
manufa
interest
the Cou
to choo
availabl
that the
of sele
those s
designs
but no
And no
ground
sale or
and obs
not be
early s
models
pose of
industri
abroad;
long.
will tak
normal
S. C. H
Industri
plans w
possible
at an e
industry
by coll
goods a
Council
Council
sentative
seek the
with the

Wor
repl
STAL
DOW
CAT

stored
Three
top of
already
replace
is put
book to
which
61 win
and 80
limited
will be
is Mr.
of the
Victori
slabs a
tombs
of the
of this
of the

★ *The President of the Board of Trade (Sir Stafford Cripps) announced that the Government has accepted a proposal from the Council of Industrial Design to hold in the summer of next year a NATIONAL EXHIBITION OF DESIGN.*

The exhibition will cover all the main ranges of consumer goods—clothing, household furnishings and equipment, office equipment and civil transport. It will be held in London, will open not later than July 1, and will be on a considerable scale. It will not be anything so vast or all-inclusive as a commercial exhibition or Trade Fair, and space will not be sold, said Sir S. Cripps. It will represent the best and only the best that modern British industry can produce, largely the new post-war designs, but not excluding those good designs of the years immediately before the war which will be going into production again. "I look to manufacturers in their own and the national interest to do everything they can to provide the Council of Industrial Design with plenty to choose from. The more good designs available, the more will be shown. I know that the Council means to keep its standards of selection high, but whatever reaches those standards will be chosen. No bad designs will be accepted, whatever happens, but no good ones will be crowded out. And no goods will be excluded on the ground that they are not yet on general sale or in quantity production. The public and observers from the world overseas will not be put off by the fact that at this very early stage a certain number of advance models may be shown. One main purpose of the exhibition is to enable our industries to give a lead at home and abroad; it would be a mistake to wait too long. In 1947 the British Industries Fair will take up the running, performing its normal function as a trade exhibition." Mr. S. C. Leslie, Director of the Council of Industrial Design, said that the detailed plans were being worked out as quickly as possible and would be laid before industry at an early date. It was hoped that each industry would co-operate with the Council by collecting the full range of its own goods and making them available to the Council's selectors. Within a short time the Council would approach the various representative trade associations concerned, to seek their help and discuss ways and means with them.

Work has begun on the replacement of THE STAINED GLASS WINDOWS OF CANTERBURY CATHEDRAL, which were stored for safety during the war.

Three tiers of figures and shields at the top of the west window of the nave are already in place. It may take two years to replace all the glass, and before each piece is put back it is being photographed for a book to be published in the spring of 1947, which will be a complete record of all the 61 windows, with 20 plates in full colour and 80 other plates. The edition will be limited to 960 copies, and the probable cost will be 12 guineas a volume. The author is Mr. Bernard Rackham, formerly Keeper of the Department of Ceramics at the Victoria and Albert Museum. Concrete slabs and sandbags covering the ancient tombs have been removed, and restoration of the cathedral organ will begin at the end of this month. By next Easter a large part of the organ should be in use.

PREFABRICATION

I: A DEFINITION

THE word Prefabrication and what it implies still appears to be misunderstood, not merely by the lay public, but too often within the industry itself. Let us try to clarify the word and the issues involved. To begin with a definition: Prefabrication is the devolution of building processes from the site into the factory.

Obviously, processed clay walling is not prefabrication, but when we have moulded the clay and burned it in the kiln to produce a brick, we have, strictly speaking, prefabricated. Some have distinguished between preforming and prefabrication. The distinction is invalid; it is immaterial to the process. Clearly, the ordinary building job comprises a mass of elements fabricated or part fabricated in the factory before arriving at the site—bricks, joists, floor boards, windows, doors, ironmongery, linoleum, baths and wash-hand basins. It would be hard to find a product that had not, on arrival, already been processed in some way; even cement and sand are processed materials. A brick wall, though built of prefabricated elements, still absorbs a good deal of site labour in its erection. As a finished article it is only partly prefabricated. A wall can be built entire at the factory in brick, concrete or steel and delivered in one piece. The house itself can be delivered in half a dozen finished sections, or in one unit completed under the fathering roof of the fabricator's shed, even down to the laying of the table napkins.

We are obviously dealing with different degrees of the same process—the elimination of sitework—the haphazard, the slow, the subject to interruption by weather, the inaccurate. We seek to supercede this by exact control in the factory, by the mass production belt, rationalization, precision and quantity. Prefabrication springs from technological advances and the development of new materials. Where, before, we had only half a dozen methods of building a wall we have now a hundred. We can build thick walls or thin walls, walls which will keep out the weather, keep in the heat, be good or bad sound insulators, use whatever materials are in supply at the moment. The house, a 2,000 site man-hour project, can be reduced to 300 or less. We have not found how to cut down cost, but the total man-hours per house are substantially less than before. A reduction in cost only awaits better organization and grasp of the matter.

The prevailing view is that prefabrication is an entirely new thing to be treated almost as a separate industry. On the contrary, prefabrication is best looked at as an addition to technique. We retain the old techniques where we want them; we graft on the new. It is of small consequence, in the long run, if much of the extant prefabricated work is of poor quality and weak design. What matters is the new opportunity. In due time we shall learn how to use these new techniques to advantage.

Protagonists of the old ways will deplore their passing. The well-built brick or stone house, made to last centuries is to be admired but no longer copied. The cold fact is that we cannot provide the necessary man power and skill to build enough houses of traditional construction to keep all our population adequately housed. Prefabrication—speeding up building by calling in the machine—offers us a chance, at last, to cope with this problem and to provide everybody with reasonable living accommodation within measurable time. On this ground alone its coming must be welcomed.

The traditional builder and the production engineer must cease to regard each other as natural enemies, and must now co-operate for their mutual benefit as well as the benefit of the community as a whole. The struggle is an unreal one partly the result of misunderstanding of what precisely this word Prefabrication implies.



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

LEICESTER SQUARE TO OXFORD STREET

Successor to Jolly Alice [or Half a Ton of Love] at the Oxford Street showroom of Mr. Charles Stafford, is Epstein's four-and-a-half-ton Jacob and the Angel. First exhibited in the more conventional surroundings of the Leicester Galleries, it is now the centrepiece of what is perhaps the strangest show in London—not forgetting that stamp-covered room in Leicester Square.

Outside in the window beneath the lurid neon lights a wax female torso slowly revolves, while through a loud-speaker the recorded voice of Mr. Stafford [self-styled Director of

Supreme Arts] cajoles the public with promises of unparalleled sensation—or your money back. Astragal, bent as usual with his load of responsibility to the readers of the A.J., never able to resist temptation, paid his sixpence and passed beyond the screen into the main hall.

In one corner sits Madame Berth, Clairvoyante, "born on Blackpool Sands." In another is a photographer ["Be photographed with Jacob and the Angel"]. In the third is an artist ["Novelty portraits 2s. 6d."]. Round the walls is a miscellaneous collection of vaguely rude exhibits, including gilded Egyptian chairs, bronze busts, marble statues, nude paintings (including "an original Van Dyck") and—here's a puzzle for the psychologist—small shrubs in boxes. Against one wall stand two radio gramophone cases ingeniously converted into peepshows—shrunk heads from the Amazon and the Siamese Twins. ["They're human," says the placard, and adds reassuringly, "They're naked."]

In the centre stands Jacob and the Angel, splendidly aloof in the spotlights. Behind it—to extract for the prurient the ultimate thrill—is a delicately adjusted mirror. ["Take a good look," says the placard, "and then look again."] Round it revolves slowly the British public—over 50,000 of them have already seen it—silent for the most part, the women gripping their shopping bags defiantly, the men dislodging their embarrassment with facetiousness.

The most violent reactions witnessed during my visit were those of a tot in a porridge-coloured tweed ensemble who burst into tears, and the giggles of some teen-age girls in sateen blouses, which were quelled by a dominating type with an 18-inch high coiffure, who said, "I don't see anything to laugh at."

"Is it beautiful," croons Mr. Stafford over and over again through the loud-speaker, "or is it shocking?" Frankly, Mr. Stafford, with all deference to your motives, the show is neither. It is just very, very nasty—whether a fair-booth like this one is preferable to the whispering galleries of Bond Street in public display of art is, of course, open to interminable argument, but it is at least a tribute to Epstein's integrity and strength that even in such a furtive and amateurishly arranged erotic setting, his work still has the power to lift the heart.

Ever since the days of Rhodesia House Epstein has been haunted by sensationalism, and if he has not sought it—and many say that he has—he must by now be used to it. Rima's green-daubed semitic profile, Adam with the Rector of Stiffkey at Blackpool, Genesis brooding in the moonlit drawing room of Finella (floor specially strengthened) in aid of the Cambridge Preservation Society. It has been a melancholy and sometimes degrading progress. Let's hope Oxford Street is the bottom.

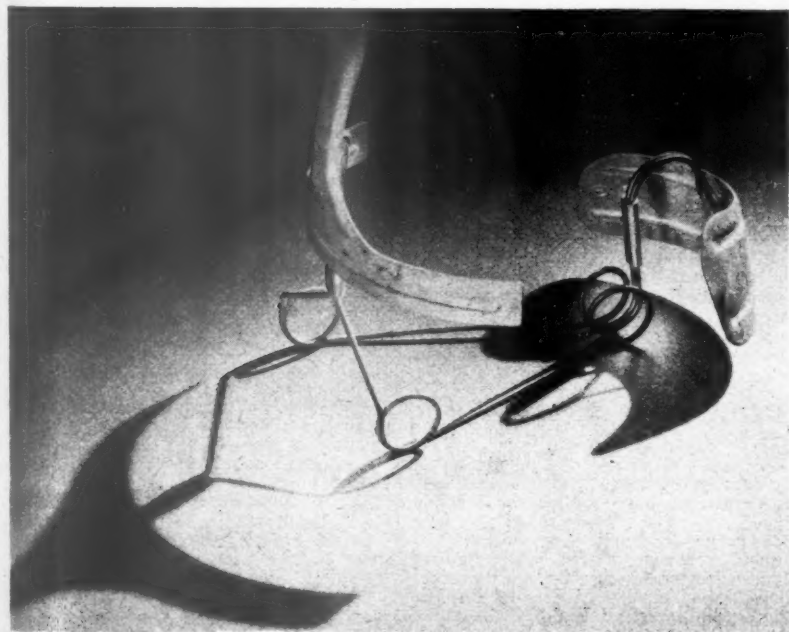
DESIGN IN THE WAKE OF THE HUN

Opposite are some examples of recent German industrial design. They have been culled from ex-occupied territory in which the Germans left them—no doubt unintentionally. The strange object which looks like a model helicopter or a surrealist table decoration is a stand for a German officer's hat, an ingenious piece of specialized design, in springy wire and curved plates of a lightweight alloy.

Even though Nazism preferred the nationalistic Gothic to the international Roman typefaces for its printed words, it did not kill the German typographer's ability to produce clean, logical layouts—still seen in such utilitarian wartime printing as field post-cards and teleprinter message-forms

(many of which, in the later years of the war, were printed on the back of German maps of England and Russia, no longer useful). German books of 1942-43 show less austerity than British books of the same period. Margins are comparatively broad and some bindings are decorated with gold-leaf.

Packages for various branded products used by the German Forces as welfare goods compare favourably with most pre-war packaging. Note how the Auxol hair-tonic bottle, plastic cap, labels and cartons have obviously been designed *together*. These are the work of Professor O. W. Hadank, whose pre-war designs were internationally known. He even signed his work as a package designer; the name Hadank is unobtrusively worked into the pattern of the carton.



Two examples of industrial design seen recently in Germany. Top, a hair tonic bottle and box by Professor Hadank. Below, a gadget whose mysterious use is revealed by Astragal this week.

PRICE OF MANUFACTURING PLASTICS

Some months ago one of the bigger plastic manufacturers published a series of advertisements pointing out that the plastics industry was *not* a sure-fire method of getting rich quick. Partly no doubt the advertisement was an astute method of self-defence, but at the same time it gave a very sound warning to would-be speculators in the industry.

Any ex-Service man wondering how to invest his gratuity, and not already warned by that advertisement, should find food for thought in some figures which were quoted to me the other day by a manufacturer who *has* started in the plastics industry recently. Even a modest line in plastic-moulding presses may cost about £5,750. The smallest and simplest-looking steel mould will set you back another hundred pounds, and if you fancy trying your hand at anything so ambitious as an eggcup, you will find the mould costs a good thousand.

On the whole it costs a lot less (even at present prices) to buy a second-hand typewriter and churn out those glamorous articles on *The Plastic World of To-morrow*.

ASTRAGAL



LETTERS

Ronald Chapman

Hjalmar Cederstrom

Housing Architects without Detailed Knowledge

SIR.—The numbers of architects and other designers preparing drawings for the construction of small houses must now be considerable. It will, I think, be agreed that to a very great extent they are working without that detailed knowledge of the requirements, particularly from the point of view of compliance with Government regulations and policy, and the availability of materials, which is necessary if delay and expense is to be avoided at a later date through variations and revisions.

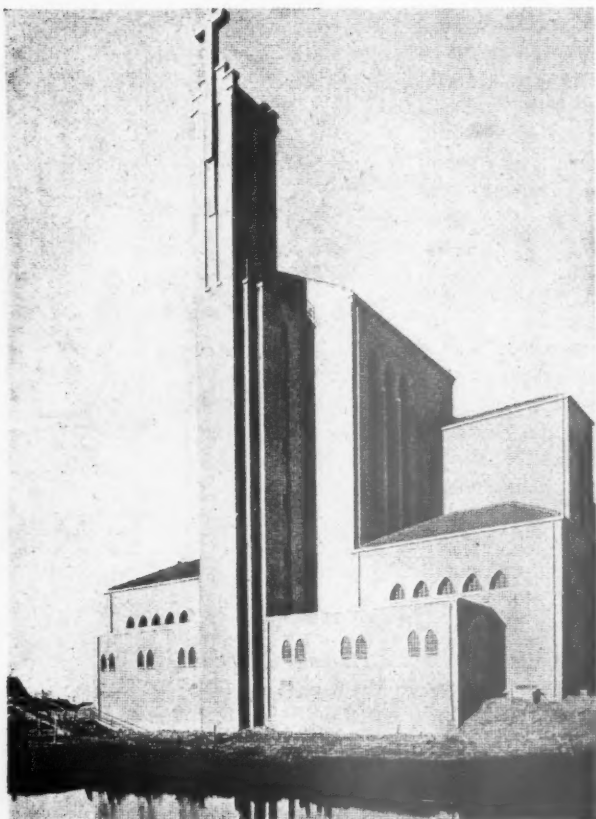
This extra expense is also greatly aggravated where the system of construction is designed for quantity or mass production.

My own experience, and a file showing most of the small house plans published within recent years, shows that while type plans appear to reduce themselves to a fairly small number, variety of planning grids leads to infinite variation.

Now, the Ministry of Works has sponsored the manufacture of unit domestic equipment to a standard width of 1 ft. 9 in. which suggests a planning grid of 3 ft. 6 in. Most board materials, however, such as plasterboard, plywood, wallboard, are not available in this width, nor has the Ministry given any indication of the manner in which clearances are to be allowed in order to provide a tolerance sufficient to take up variations in size within normal commercial limits (in this case probably plus or minus $\frac{1}{4}$ in.). In practice this makes it impossible to fit a range of equipment to the "spot on" dimensions of a pre-arranged planning grid.

Among the grids being used by designers are 3 ft., 3 ft. 4 in., 3 ft. 6 in., 3 ft. 9 in. and 4 ft., but only two of these are related to the production sizes of wall lining

RECENT ARCHITECTURE IN HOLLAND



Top left, St. Augustinus Church at Amsterdam-West by K. Tholens (1940). Top right, the Dutch Reformed Church, Haarlem by B. T. Boeyinga (1940). Below left, week-end house at Loosdrecht by Paul Bromberg. Below right, country

house at Tongeren by G. Rietveld (1940). The illustrations come from *Architecture in the Netherlands* by Paul Bromberg, published by the Netherlands Information Bureau in New York. Some facts on reconstruction in Holland appear on page 432.

materials, and in no case does any method exist for dealing with the question of tolerances.

What is needed is: First, a very rapid and detailed information service from the Government Departments concerned to architects and other designers setting out Government regulations and policy as they affect housing; secondly, either these Departments or the professional or trade union bodies, or all of them together, should set about reducing the numbers of dimensional grids being used, and relate them to the production sizes of building materials, making due allowance for satisfactory clearances.

Once machinery has been set up for the production of a building material, or the tools made for the manufacture of equipment, alterations in size are virtually impossible.

Therefore, if the designers fail to achieve this co-ordination during the design stage of our post-war housing proposals, we shall

be prevented from bringing about any dimensional relationship between planning, equipment, and materials, for many years to come.

London.

RONALD CHAPMAN

Swedish Beveridge

SIR.—ASTRAGAL in his note entitled *Swedish Beveridge* ends his description of my social proposals in a manner that indicates that he has totally misunderstood them.

My proposals simply mean to create a hospital treatment that with all resources of medicine, technology and science might allow the citizens of a country to live longer with preserved health. To make this possible, however, social security must necessarily be created. This problem cannot be solved solely by legislation and statutes based on theoretical speculations. The way to a solution leads *via* research

and practical tests of proposed reform measures applied on a clientèle, limited in number, within a certain experimental district. We must always bear in mind that all technical, scientific and industrial evolution has been effected by research and experiments.

Now the moment has come when this course of action has to be applied to social matters as well.

The immense reconstruction work now begun must also result in social security. But reconstructive activity in this domain as well, can only be exercised by positively minded persons who, besides their readiness to test every alternative, have the necessary experience to give a final judgment on different proposals and who are guided by the main object of bringing about a social order that offers the citizens social security without forcing them back into the old treadmill.

Stockholm

HJALMAR CEDERSTROM

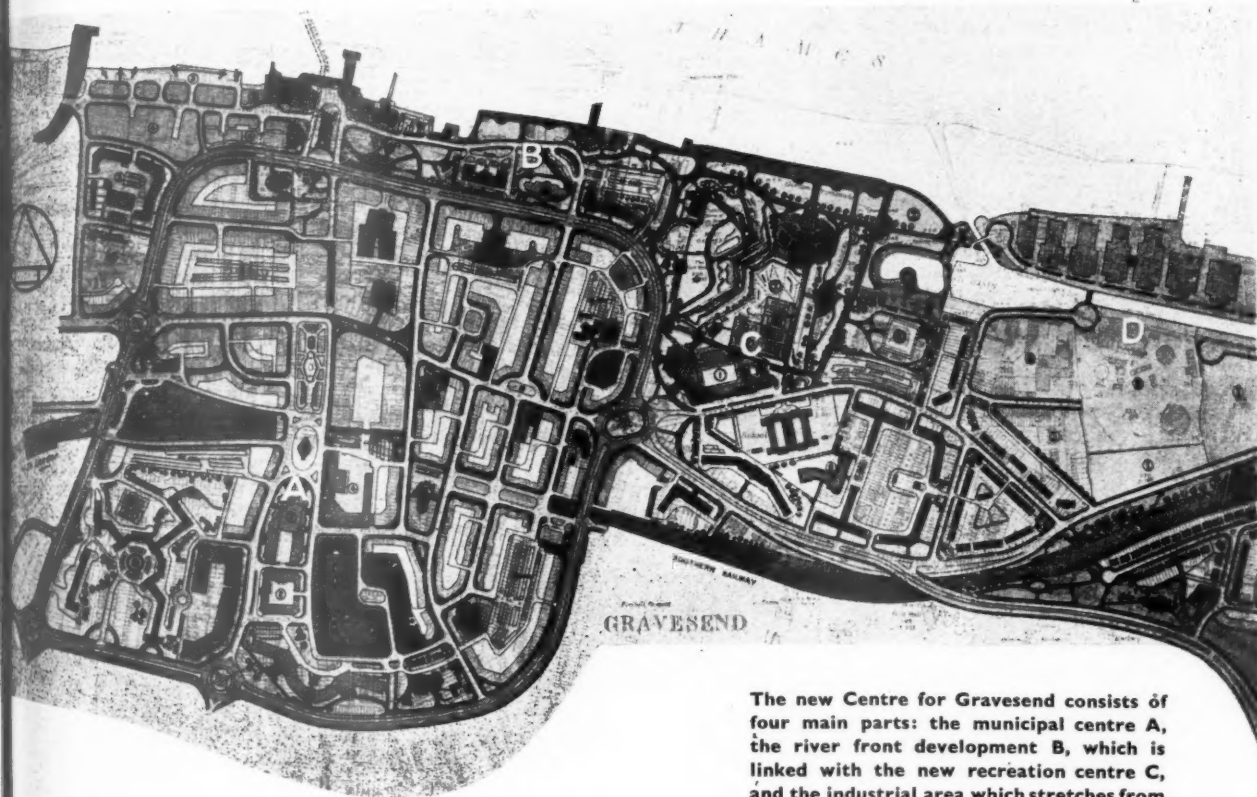
The Gr
Minister
town ce
of the p
Planning

general

Graves
the first
Thames
mound
town to

PHYSICAL PLANNING SUPPLEMENT

GRAVESEND REPLANNED



The new Centre for Gravesend consists of four main parts: the municipal centre A, the river front development B, which is linked with the new recreation centre C, and the industrial area which stretches from the river and canal basin to the railway. The centre, around which a ring road is laid, is divided into six sections each serviced with adequate transport and parking facilities. An independent pedestrian network is provided.

The Gravesend Corporation's redevelopment plans were put to the public in an exhibition opened by the Minister of Town and Country Planning on October 29, 1945. The planning suggestions, so far only for the town centre and in draft form, are prior to a final report to be published in full detail at a later date. The authors of the plan are George E. Hill, Borough Engineer and Planning Officer, Maurice Fuller, Deputy Engineer and Planning Officer, and Douglas H. E. Hockley, Senior Planning Assistant.

General characteristics

Gravesend, chartered as a Borough in 1562, is built where the first area of high ground meets the south bank of the Thames estuary, which here is about half a mile wide. This mound of chalk and hard sand rises in the middle of the town to 160 feet above sea level. To East and West it is

flanked by low-lying marshes, and continues to the South to become part of the chalk lands of the North Downs.

The growth of the town was determined by its dependence on the river, being a River and Sea Pilotage Station, half a mile from Tilbury Docks. Lately it has developed as a commercial centre and dormitory serving a considerable area of North Kent and part of Essex. Other factors of importance

to the life of Gravesend are its associations with the Services, possessing military barracks, aerodrome and Merchant Service training centre with an ever-changing population. The promenade and beach are the only ones of their size on the South bank of the Thames.

The problems the planners of Gravesend have to face are provision of up-to-date housing, the majority of the houses in the town centre being sub-standard, especially so in the South and East of the town; reorganization of the badly congested transport net; development and extension of already existing amenities on the river front and at the centre; and enlargement of the town's general facilities for commerce, administration and recreation.

road plan

The radial pattern of the road system, which has resulted in congestion at the centre, has been remedied by a ring road around the centre, joined at properly considered junctions by the existing radial roads. The ring road is provided with pedestrian subways, and follows wherever possible the line of existing streets or of property which is ripe for demolition. Private vehicles will be allowed into the centre on the radial roads, whilst through traffic will be confined to the ring road.

Provisions are made for the three Public Service systems which convey people to the town, the railway, buses and river ferry. A considerable number of people cross the

river each day by ferry and, because the ferry service is suspended in adverse weather, it is felt that it should be supplemented by means of a passenger foot tunnel under the chalk river bed with approach near the town pier by means of a passenger lift. A quay and suitable approach to the river bank which the watermen could use in connection with their boats is to be developed between St. Andrew's Church and the town pier, which would also provide facilities for the local rowing and sailing clubs.

commercial, administrative, and industrial development.

The town centre inside the ring road is subdivided into six sections, each with their own car park, from which every building of the area it serves can be reached by a three-minute walk. A commercial frontage of 21,000 feet has been made available in the present plan. It will not be wholly used for this purpose in the immediate future and will remain in residential usage as long as this is practicable. Special areas have been set aside for professional use in quieter positions. The market facilities, needed by Gravesend as the commercial centre of the adjoining agricultural region, are given better access. For industrial development two areas are proposed in the West adjoining the Southern Railway line, and on the canal basin. This development is of considerable importance, for 60 per cent. of the Borough's and of the neighbouring towns' coal supplies and a number

An aerial view of the central district and the new recreational centre in the east, which incorporates the already existing ornamental gardens and contains new amenities; e.g. an open air theatre for 3,000 people and sports facilities.



The ri
for rec
ing the
and a p

of othe
ing wh
in the
adjoini
increas
the Ba
Albion
access

reside

The
Borough
houses
standa
meet t
mercia
of the
are to
comm
for sin
couple
the V
town's
certain
related
will, n
new h
scatter
the Co
access
Religi

The river front developed for recreational use, including the existing promenade and a proposed car park.



of other seaborne imports are discharged at the already existing wharves. The Corporation Depot and Stores are placed in the same area. Engineering Works occupy the area adjoining the Canal Basin and the usefulness of this site is increased by the construction of an access road adjoining the Basin and Canal and the incorporation of the present Albion Parade with the factory sites. New and improved access roads to the industrial area form part of the plan.

residential development

The construction of modern houses to the South of the Borough has resulted in a movement of population from the houses in the town centre, which are well below modern standards. This trend, it is anticipated, will continue. To meet the demand for new housing in the vicinity of the commercial centre, housing development is planned to the South of the Central Station and to the East. The Housing areas are to be grouped in self-contained units with their own communal facilities. Special emphasis is laid on provision for single persons, such as seafarers' wives, and childless couples in blocks of flats, and on communal facilities such as the Veterans' Club, with its club building sited near the town's recreation centre. Reference is made in the Plan to certain Religious Buildings in the town which must be related to residential development. Some of these buildings will, no doubt, be moved as the people they serve move to new housing areas, some, because those who use them are scattered throughout the Borough will wish to remain in the Central Area where Public Service Transport makes them accessible. For these reasons, only one new site for a Religious Building is suggested in the town centre, this to

the South as part of the Local Government Centre for the district.

recreation and open spaces

Gravesend possesses unique opportunities for leisure amenities in its river front, which is unrivalled in the Thames estuary. In the plan, the river front is developed as a promenade and gardens, continuous from the Canal Basin on the East to the Town Pier on the West, from which unequalled views of the Estuary and the largest concentration of shipping in the world could be obtained. In the East a recreational centre is developed with a bathing pool, already existing ornamental gardens, tennis courts, putting green, band enclosure, a bowling green and a pavilion, and an open-air theatre seating 3,000 people. It is proposed that Canal Basin should be divided into two and that in the Western half should be constructed a children's boating lake and fitted children's playground. This would be properly screened from the other half of the basin which would continue as a lay-up for yachts and a supply and repair basin for the industries which adjoin it.

There is a great need in the Borough for both a theatre and a large Public Hall and Assembly Rooms. It is felt that both these should in their setting be related to the River and Recreational Area adjoining the Promenade and have access off the distributive ring road; this is fulfilled in the position chosen which has the additional advantage of being near the Central Bus Station. Within the town centre open space and rest gardens have been provided. The municipal and Government Offices are sited in Public Gardens, bringing a large open space to the southern part of the town. A large area is cleared and laid out as a garden in front of the Civic Hall and Public Administration Buildings.



The civic centre showing the open space in front of municipal offices.

civic design

In contrast to the general planning approach, which is gratifyingly progressive, especially in the provision of generous communal amenities, the look of the scheme, like most contemporary plans, leaves much to be desired.

Although there exists on the river front, in the parks and civic buildings, ample material for the visual planner, little use is made of these opportunities. The buildings, as shown in the preliminary perspective sketches, though modern, or at least not revivalist, are so only in the negative, characterless sense. The grouping is undistinguished (in the main civic square of a painful and insipid monumentality) which seems to be the unfortunate idiom of modern municipal architecture.

It is in these visual respects that the plan needs revising most, and it is to be hoped that, before finalised plans are made, the Gravesend planners will reconsider the general disposition of building groups in relation to planting and natural features in the light of contemporary ideas on civic design.

TOWN PLANNING IN THE NETHERLANDS

The following article, which describes the progress of reconstruction work in the Netherlands, is condensed from a lecture which was given recently at The Institution of Civil Engineers by Dr. J. A. Ringers, Minister of Public Works and Reconstruction, the Hague, and President of the Dutch Institute of Engineers.

Dr. J. A. Ringers stated that he proposed to deal with the reconstruction works in the Netherlands from a wider point of view than merely the technical aspects. He would include problems of organization and also describe the connection between the reconstruction work proper and the condition of the Dutch people during the five long years of German domination and its present condition.

Where any figures were mentioned it was necessary to remember that when comparing them with similar figures in this country they should be multiplied by five or six, in view of the difference in the population of the two countries. Thus, the fact that 200 churches had been completely destroyed and about 300 badly damaged meant for the Netherlands the same loss as about 1,000-1,200 churches completely destroyed and about 1,600-1,800 badly damaged in this country.

War damage in the Netherlands fell into three main periods: firstly, the hostilities in May, 1940, in the northern part of the country and the 'province of Zeeland, when very serious devastation occurred only in a small number of towns and villages, but upwards of 32,000 houses were destroyed and more than 27,000 in Rotterdam alone. In addition, the Dutch themselves rendered bridges, railways and canals useless on a large scale. After about two years, however, most of the damage had been put right.

The second period started with the damage caused necessarily by the RAF in view of the fact that the Germans had lodged themselves in Dutch towns. During that period the possibilities of reconstruction became less and less as the war progressed.

The third period began during the gradual liberation of the

southern provinces, when fighting at places like Arnhem entailed an enormous number of victims. Devastation on a large scale of numerous costly technical installations was also carried out by the Germans which could not be justified on strategical grounds. Harbour cranes, wharves and other installations which require costly and intricate foundations in the soft soil of the Low Countries were destroyed by heavy explosive charges.

From time immemorial the flooding of land in low-lying country had been a strategic means of defence of the first order in the Netherlands. Among the largest areas flooded during the war was Wieringermeer polder, covering 50,000 acres. It lay from six to fifteen feet below sea level. Another inundation, necessary as a war measure, was that of the island of Walcheren. Although steps have now been taken to close the gaps, the eastern part of Walcheren island is still flooded, but it is hoped that before the end of the year it will be entirely dry again.

In those flooded areas the houses are undermined to such an extent that they have to be demolished, the trees have been killed by the salt water and everything is covered with a thick layer of clay and silt. After the civil engineers have finished their job of stopping the gaps in the dykes, the agriculturists will set to work to render the soil suitable again by a judicious treatment and a systematic planting programme of crops suited to the purpose.

The organization and reconstruction work came into being in May, 1940, just after hostilities had ceased. At the beginning few obstacles were placed in the way by the Germans who hoped to win over the Dutch by their attitude. They found, in due course, that such an attitude

was not effective and from that time on life in Holland became one continuous, sometimes open, but in the majority of cases, secret battle against the intentions and methods of the occupiers.

Dr. Ringer then described how a case of war damage was dealt with from the time, when the bomb had been dropped, the first aid men had attended to help the injured and steps had been taken to supply food, clothing and shelter for the homeless.

The removal of debris had to be taken in hand, but increasing difficulties arose from lack of materials, labour and means of transport. Owners of destroyed buildings and houses had to consider how they were to rebuild their property. They were entitled to compensation, taking as a basis the value of the destroyed premises on the day just before the war. That was not nearly sufficient to pay for the building cost of the new premises and so a series of allowances and, if necessary, interest-free mortgages had to be arranged.

It was considered that only compensation on this basis was fair as otherwise all those who had suffered in their businesses might have put forward claims with equal justice. The compensation for buildings was linked up with the reconstruction of the building itself so as to prevent the money being used for other purposes. At the same time opportunities were taken to carry out the replanning of towns and villages so that on occasions the owner had to rebuild on a different site and in accordance with architectural standards laid down.

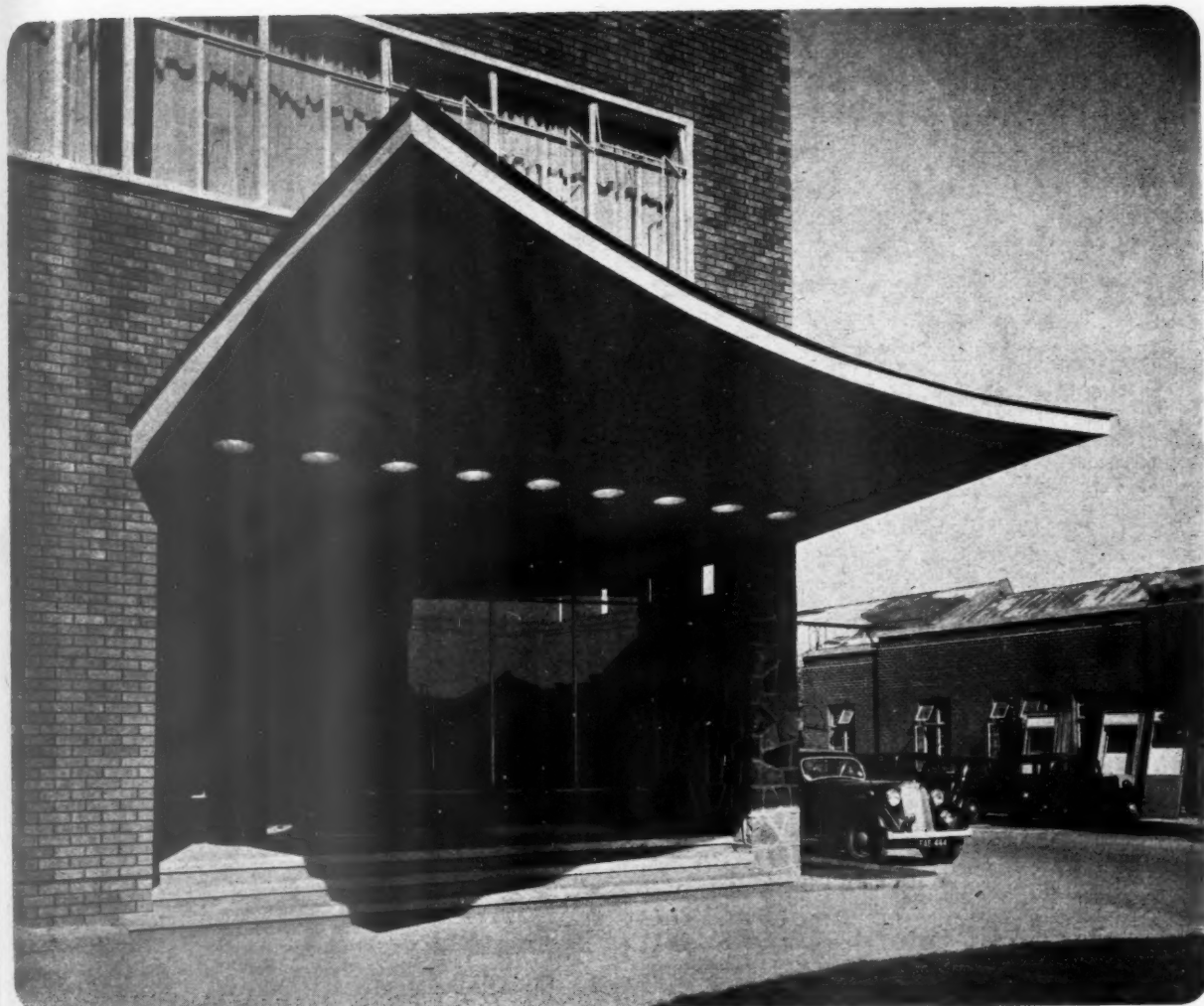
Before the war about 40,000 new houses were built in Holland every year of which 34,000 were for the normal increase in population and about 6,000 to replace condemned old houses or slums. In spite of the difficulties between 1940 and 1945, 60,000 houses were built but that left arrears of about 300,000 houses. Holland had for many years paid particular attention to good housing for the people, and Public Health

and Housing Acts were passed. Under the Housing Act of 1902, the Municipal Authorities were given the right to make bye-laws as regards the requirements which houses and other buildings had to meet. These covered not only the location of buildings in respect to the road and from each other, but also their height, size of rooms and landings, with regulations of a hygienic nature to allow free admittance of air and light. There were a number of regional inspectors, whose duty it was to supervise the fulfilment of the regulations.

The Housing Act also had a social aspect as it was appreciated that the housing problem was rightly called the "heart of the social problem." That led to a general improvement in the standard of the houses built not only in the working-class districts of the cities, but also in the smaller towns.

Under the Housing Act, the initiative for the building of houses was for the greater part left to the local authorities, but it was now being considered whether the government's house-building policy should not take a different course, the building programme being drawn up by government authorities in accordance with the various requirements which might be laid down for every township in the country.

Great importance is being paid to the aesthetic and architectural side of the problem. When a reconstruction project is lodged for which financial support is desired, it is first ascertained who is to act as architect, as architects have to be approved by a Committee of experts appointed for the purpose. It is also necessary to ensure that an individual building is in harmony with the whole framework, and that part is entrusted to supervisors who are specially selected architects considered to have the necessary qualifications for this task. At the same time, town plans are being drawn up so that both in cities and villages there shall be a pleasing arrangement of the whole.



The main entrance with its canopy of reinforced concrete pierced by a row of circular pavement lights. The front curve of the canopy takes up the curve of the drive.

DRAWING OFFICES

FOR THE BRISTOL AEROPLANE CO.

DESIGNED BY ERIC ROSS

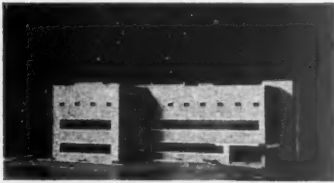
GENERAL—This building was recently completed for the Bristol Aeroplane Company at Filton, near Bristol, to accommodate aircraft design, executive and technical drawing office personnel. The offices are in a built-up area of the works and form part of a long-term replanning scheme to bring the works up to date.

PLANNING—The plan was developed to take full advantage of the fine view to the East, and of orientation, while preserving a maximum of openness between the building and the works road which runs along the north side. The ground floor is given up to entrance hall, reception, general and technical drawing offices, a

small cleaner's room and switch room.

The first floor is allocated to administrative and executive staff, while the second floor forms one large drawing office with top lighting.

There are toilet rooms on each floor and separate cloak rooms on the second floor. Another



A model of the job. The main entrance faces east.

small cleaner's room is provided on the second floor.

Continuous windows have been designed in the two lower floors to give freedom and flexibility in partitioning of offices by readily removable glazed screens.

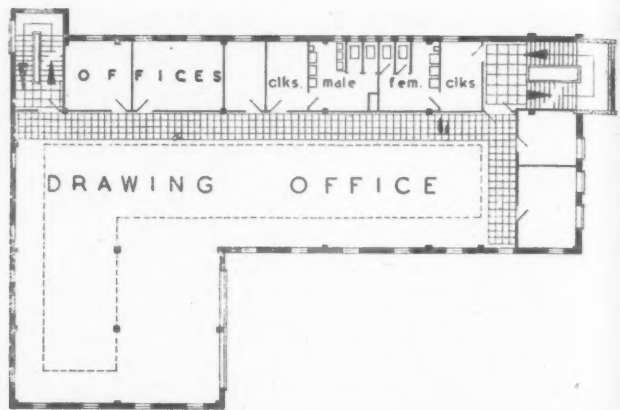
At roof level a small dining room for senior staff has been planned, while a link to the west gives access to a general staff dining room in an existing building.

CONSTRUCTION—The building is of steel frame construction with 11-in. cavity brick walls. Monolithic reinforced concrete has been used for the staircases, check walls and canopies.

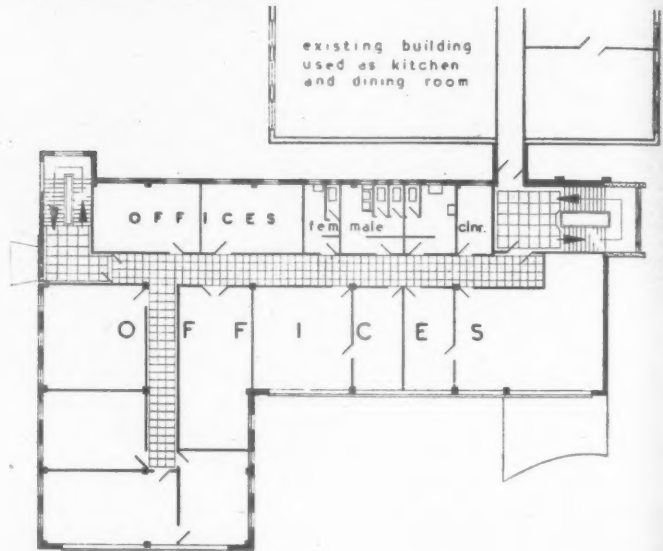
The roof dining room has a reinforced concrete barrel type roof. The drawing office on the top floor has a continuous Lencrete roof.

Along the north side of the entrance hall runs a rubble stone wall.

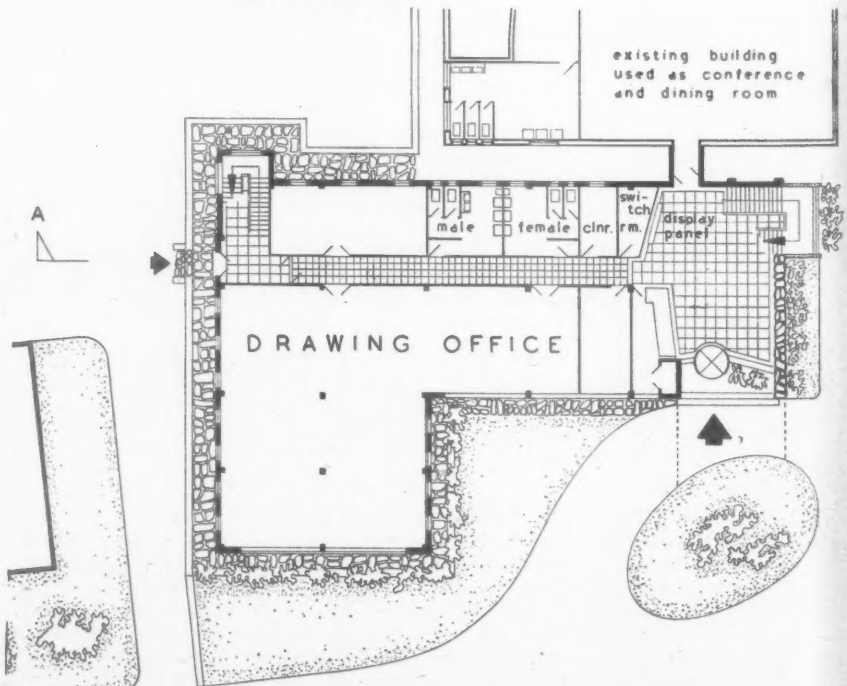
A list of general contractor and sub-contractors is given on page xlv.



SECOND FLOOR PLAN



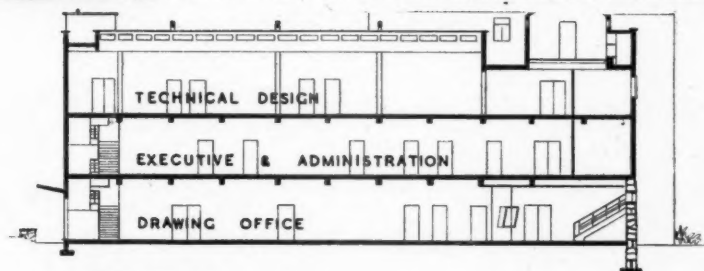
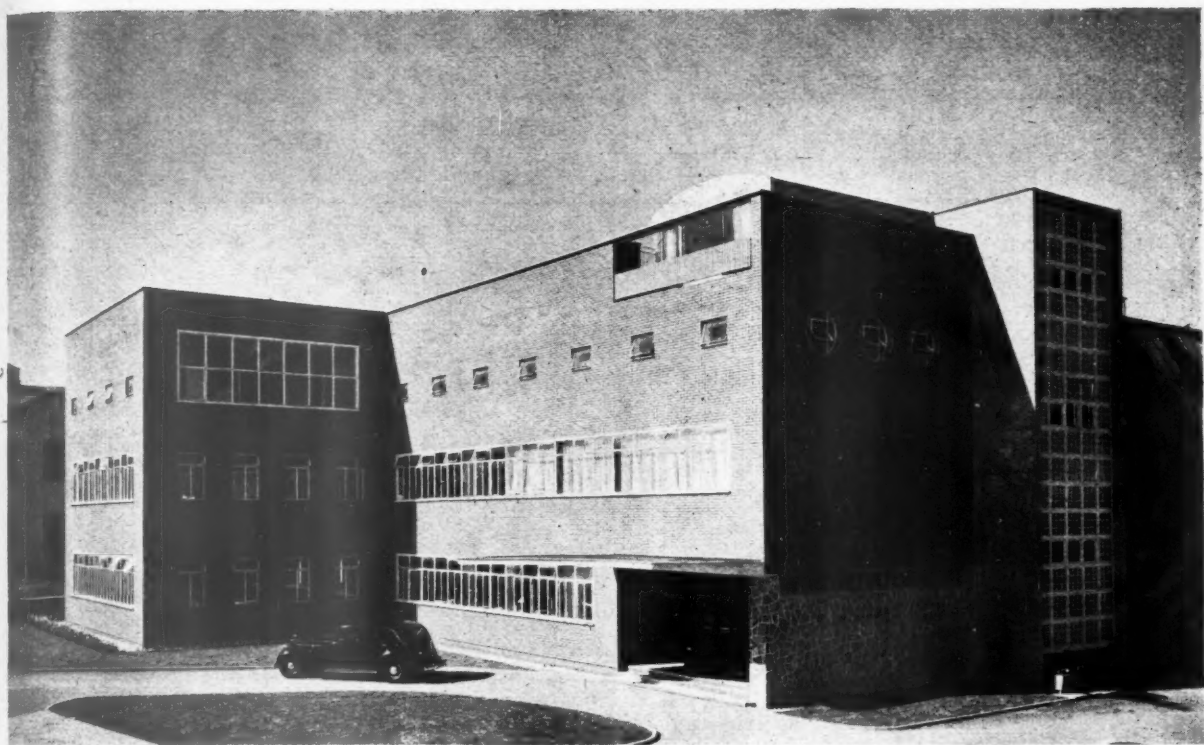
FIRST FLOOR PLAN



GROUND FLOOR PLAN

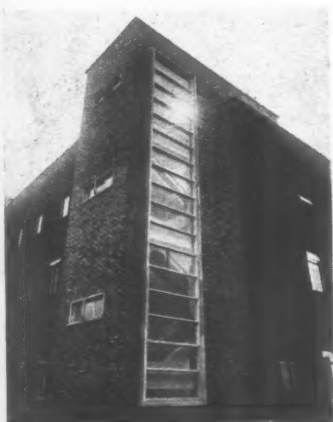
[Scale: $\frac{1}{8}'' = 1'0''$]

DRAWING
OFFICES
FOR THE
BRISTOL
AEROPLANE
COMPANY



SECTION AA

Above, the building from the east; on the roof above the main entrance is the dining room for senior staff members with its curved barrel roof and view of a fine landscape to the east. Left top, the secondary entrance and staircase on the north-west corner. Left below, Lenscrete exterior of the main staircase at night. Below, the main entrance hall with its rubble stone wall.



DESIGNED BY ERIC ROSS



Above, the main staircase. Right, the small dining room on the roof. Below, the main drawing office on the second floor with its Lencroft roof.



DRAWING OFFICES FOR THE BRISTOL AEROPLANE CO.

I
T
all
the
kin
spe
stay
and
men
PP
225
PLA
Step
Mar
Sup
Den
Lili
revi
pape
Am
Crea
finan
tion
team
VAs
2254
TVA
Extr
port
Octo
Supp
TVA
tions
tilize
vatio
ducti
redis
S T
2255
WINT
(Eng
1945,
cold
of 8
along
The
concre
5 to
carried
ranged
snowfa
many
pour i
curing
and r
pletely
It was
suppor
40 ft.
suppor
work a
timber
of nev
roof p
by der
progre
contain
the cor

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

2253 TVA

PLANNING FOR ACTION. Gordon Stephenson. (*Architects' Journal*, March 29, 1945, *Physical Planning Supplement*, pp. 241-244.) TVA: *Democracy on the March*, by D. E. Lilienthal (Penguin Books, 1944, 9d.), reviewed together with extracts from a paper by Lilienthal read at meeting of American Society of Planning Officials. Creation of TVA in 1933. TVA finance and returns. Local participation. Planning for action. Technical teamwork. Lessons of TVA. New VAs.

2254 TVA

TVA: 1944-1945 PROGRESS REPORT. Extracts from the *TVA 1944-45 Report to Congress*. (*Architects' Journal*, October 11, 1945, *Physical Planning Supplement*, pp. 259-262.) Survey of TVA activities under wartime conditions. Production of agricultural fertilizers. New methods of food preservation. Increased power for war production. Land acquisition. Population redistribution. Research progress.

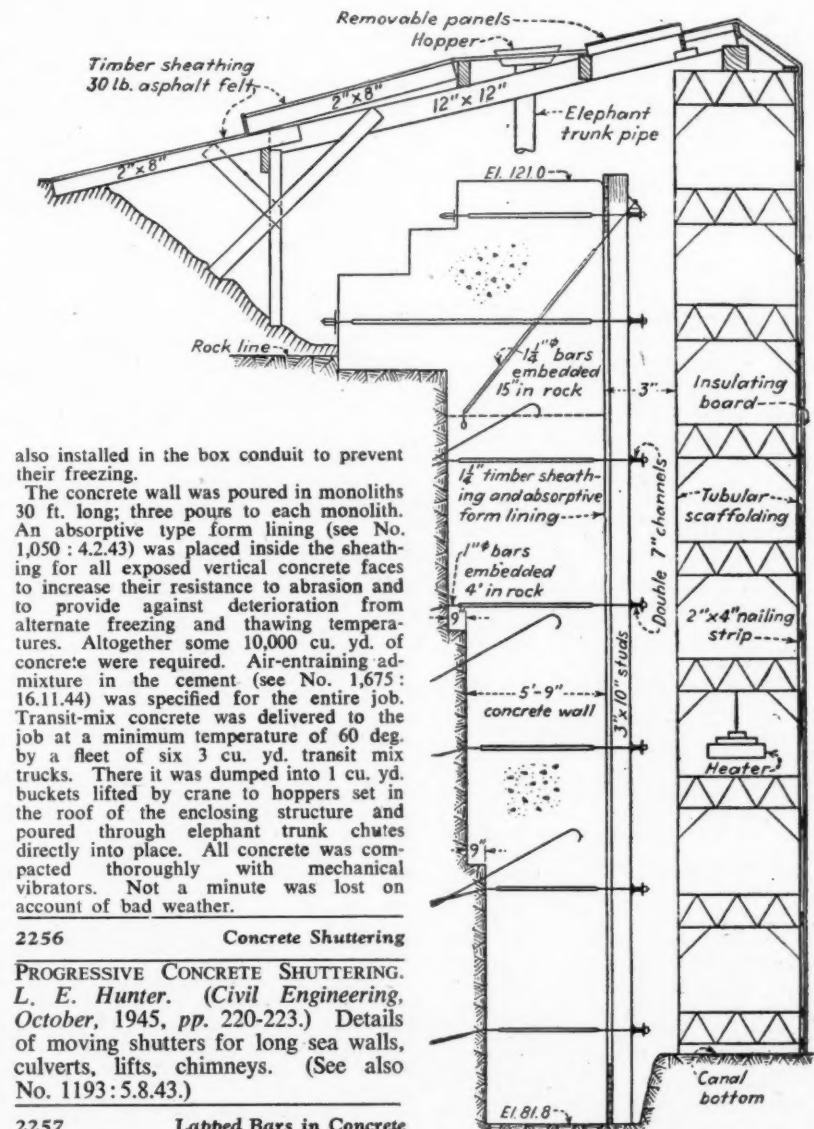
STRUCTURE

2255 Concreting in Winter

WINTERTIME CONCRETING AT THE SOO. (*Engineering News-Record*, July 26, 1945, pp. 94-99.) Modern methods of cold weather concreting in construction of 878-ft. long concrete facing wall along approach canal.

The job involved the construction of a concrete facing wall, 39 ft. high and from 5 to 6½ ft. thick. The work had to be carried out in winter, when temperatures ranged to 24 deg. below zero and the snowfall aggregated some 90 in. Unlike many construction jobs where each concrete pour is housed and heated only during the curing period, with the housing being moved and re-used, this project involved completely housing the entire length of the wall. It was necessary to erect 900 lin. ft. of self-supporting steel tubular scaffolding about 40 ft. high along the face of the wall to support the insulating board enclosing the work and to serve as a working scaffold. A timber roof was built over the entire length of new wall. Removable sections in the roof permitted panel forms to be lifted out by derrick and moved forward as the work progressed. A saw-dust filled timber box containing a 6 in. steam line for heating the concrete extended the full length of the

job. A 2-in. water line and a 6 in. compressed air line required on the job were



also installed in the box conduit to prevent their freezing.

The concrete wall was poured in monoliths 30 ft. long; three pours to each monolith. An absorptive type form lining (see No. 1,050:4.2.43) was placed inside the sheathing for all exposed vertical concrete faces to increase their resistance to abrasion and to provide against deterioration from alternate freezing and thawing temperatures. Altogether some 10,000 cu. yd. of concrete were required. Air-entraining admixture in the cement (see No. 1,675:16.11.44) was specified for the entire job. Transit-mix concrete was delivered to the job at a minimum temperature of 60 deg. by a fleet of six 3 cu. yd. transit mix trucks. There it was dumped into 1 cu. yd. buckets lifted by crane to hoppers set in the roof of the enclosing structure and poured through elephant trunk chutes directly into place. All concrete was compacted thoroughly with mechanical vibrators. Not a minute was lost on account of bad weather.

2256 Concrete Shuttering

PROGRESSIVE CONCRETE SHUTTERING. L. E. Hunter. (*Civil Engineering*, October, 1945, pp. 220-223.) Details of moving shutters for long sea walls, culverts, lifts, chimneys. (See also No. 1193:5.8.43.)

2257 Lapped Bars in Concrete

LAPPED BAR SPLICES IN CONCRETE BEAMS. R. W. Kluge and E. C. Tuma. (*Journal of the American Concrete Institute*, September, 1945, pp. 13-33.) Tests to determine behaviour and strength of lapped bar splices varied in length and method of splicing.

The tests were made with two types of

deformed bars, both considered to be among the best available regarding bonding properties; ½ in. and 1 in. diameter bars were used; the length of the splice varied from 10- to 50-bar diameters. The lapped bars were either in contact with each other or spaced 1½ bar diameters apart. The concrete had an average cylinder strength of 4,700 lb./sq. in. at 28 days. The yield point of the steel varied between 45,000 and 61,800 lb./sq. in. The bars lapped 30-bar diameters or more developed, at the limits of the splice, the yield strength of the steel. There was little difference in the behaviour of splices containing bars spaced 1½ bar diameters compared with the lapped bars in contact.

It should be noted that the bars used in these tests contained a type of lug pattern superior to many commercial bars, particularly to plain bars.

Section showing the housing over a concrete wall which allowed concreting in 24 deg. below zero. Tubular steel scaffolding served a triple purpose—continuous support for the timber framed roof, working platform for erecting concrete forms and framework for mounting the insulating board housing. See No. 2255.

2258

BISF Houses

PAIR OF BISF PROTOTYPE HOUSES AT NORTHOLT. *Designed by Frederick Gibberd. (The Architects' Journal, September 20, 1945, pp. 205-213, and other journals.)* Third in series of steel house types produced by British Iron and Steel Federation.

The walls are composed of two-storey panels, one module wide, providing both the structural frame and external finishes, with incorporated metal windows and door frames. After experiment with a 3 ft. 6 in. module on the previous houses and 3 ft. 9 in. on this, the Federation have standardized all their plans to a module of 3 ft. 6 in. External cladding: steel sheet, welded to light gauge steel frame, finished with paint harling applied in the factory. The vertical joints are covered by a fillet. The roof consists of light steel trusses and purlins supporting a covering of protected steel sheeting. The first floor beams are of twin cold-formed steel sections incorporating timber nailing strips for ceiling boards. The floor finish is of $\frac{1}{4}$ in. tongued and grooved timber on battens, fabricated in large units. Ceilings and internal surfaces: fibreboard or plaster-board. The party wall is of double leaf construction.

2259

Lamella House

LAMELLA HOUSE WITH TRUSSLESS WOOD ROOF. *(The Architects' Journal, September 6, 1945, pp. 175-176, and other journals.)* Lamella trussless timber roof, system suitable for covering large spans without intermediate support, applied to house construction. Maximum length of component timber pieces 4 ft.

PLUMBING

and Sanitation

2260

Water and Health

THE WATER UNDERTAKING AND ITS CONTRIBUTION TO THE NATION'S HEALTH. *Donald Whiteley. (Journal of the Royal Sanitary Institute, October, 1945.)* General discussion of waterborne diseases. Summary of main points of 1945 Water Bill.

2261

Durham Water Supplies

WATER SUPPLIES IN THE COUNTY OF DURHAM. *J. Arthur Rodwall. (Journal of the Royal Sanitary Institute, October, 1945.)* Meeting demand. Preservation of purity. Afforestation as means of conservation, as purifying medium and as profitable investment. Government aid for afforestation. Aesthetic value. Progressive planting of catchment areas. Problems of distribution, particularly failures in mains and reservoirs due to colliery operations.

2262

Durham Water Supplies

WATER SUPPLIES IN THE COUNTY OF DURHAM. *W. Gordon Carey. (Journal of the Royal Sanitary Institute, October, 1945.)* Deep well water supplies. Purity of supply. Value of

fluorine in water in preventing decay of teeth. Unlikelihood of hard water being responsible for various diseases. Surface water supplies. Need for, and methods of, purification. Chlorination.

2263

Durham Water Supplies

WATER SUPPLIES IN THE COUNTY OF DURHAM. *Alfred B. E. Blackburn. (Journal of the Royal Sanitary Institute, October, 1945.)* Some results of 1939 survey of water supplies. Figures of water supply companies in County of Durham. Future sources. The 1945 Water Act. Public relations as aid to preventing water waste.

2264

Copper Tube Fittings

CAPILLARY FITTINGS AND COMPRESSION FITTINGS FOR LIGHT GAUGE COPPER TUBE. *BS 864:1945. (British Standards Institution, 2s. 0d.)* Specification for two types of fittings for use with light gauge copper tubing. (1) By flow of solder by capillary action. (2) By compression either of a ring or sleeve or part of the fitting on to the tube or by compression of flared end of tube against true face of fitting. Working pressures defined. Method of designation of sizes of fittings and dimensional specification for each type which will enable interchange of fittings on any one type even though differing in design.

2265

Book on Plumbing

THE PRACTICAL PLUMBER AND SANITARY ENGINEER. *Edited by W. J. Woolgar. (Odhams Press, 8s. 6d.)* Eight authors contribute to book. While intended for students of plumbing, is in parts useful to other students, including architects. Simple explanations of all aspects of plumbing. Many diagrams.

Any book with eight authors is bound to be better in some parts than others. The general level in this case is high. In particular the first chapter on Working Principles is a simple and sound explanation of principles. Some of the material, for example the chapters on metals and alloys and that on tools, is too detailed for any but plumbing students. Information is up to date to the extent of including a chapter on duct and unit plumbing in which there are descriptions and illustrations of a number of prefabricated plumbing units. A useful book for the architectural student to know, though hardly one he will wish to read in full.

2266

Dirt and Vermin

DIRT AND VERMIN. *Draft British Standard Code of Practice (Chapter X). (HMSO, 1s. 0d.)* Description of habits of vermin. Constructional precautions.

This Code deals with bed-bugs, rats and mice, cockroaches and black beetles, flies and other insects, and with the general problem of dirt. Emphasis throughout is laid on cleanliness and need for precautions in construction to avoid provision of places of harbourage. Some of the suggestions seem likely to raise difficulties for the architect. Disinfestation is referred to and the new insecticide DDT mentioned. Evidence on the duration of usefulness of this is not yet available.

2267

Manhole Step Irons

MANHOLE STEP IRONS. *BS 1,247: 1945 (British Standards Institution, 2s.)* Design, material and dimensions. Type 1, general purpose pattern, and type 2, pre-cast concrete manhole pattern. Method of test.

2268

Sewage Treatment

A SURVEY OF SEWAGE TREATMENT AND SEWAGE TREATMENT WORKS. *J. Campbell Riddell. (Journal of the Royal Sanitary Institute, October, 1945.)* General description of method and sewage treatment.

HEATING

and Ventilation

2269

Radio Heating

RADIO HEATING. *Exhibition. (Descriptive pamphlet available from Redifusion, Ltd.)* Recent exhibition at Dorland Hall, London, showed how Radio Heating works and what it could do for industry, including pre-heating of plastics, drying of materials, glueing of wood, welding of thermoplastics, and case hardening.

EQUIPMENT

2270

Kitchen Equipment

KITCHEN EQUIPMENT. NO. 3, LAUNDRY AND WASHING-UP EQUIPMENT. *(Architectural Design and Construction, August, 1945.)* Some illustrations of stainless steel sinks, various wash boilers and washing machines, two water softeners, two drying cabinets, and two dish washing machines. Generally dimensions given. Notes and comments. (See also Nos. 2213, 2214: 22.11.45.)

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.

2271

Wooden Houses

Q I would be much obliged to you if you would give me an address to where I could write for information concerning the purchase of a wooden chalet from either Norway or Sweden?

A We assume that your query is based on the recent Press reports of Swedish houses being sent to this country.

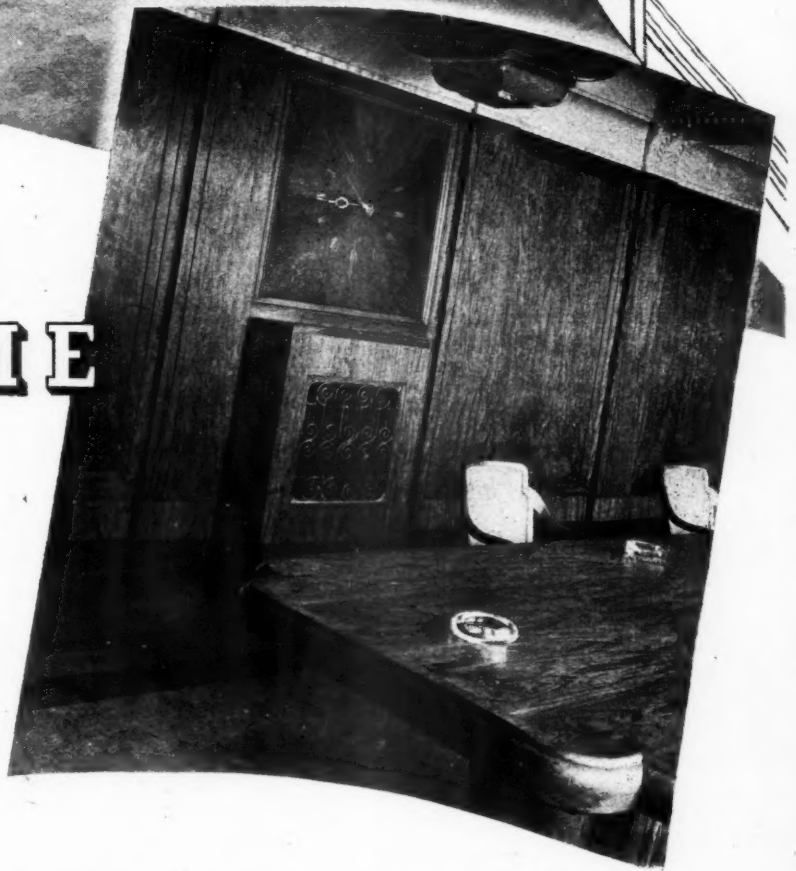
TWO AGES OF TIMBER



By
Courtesy of
the Victoria and
Albert Museum.

THE TEST OF TIME

THE craftsmen of the Jacobean period, exercising their skill upon the fine wood of their day, produced furniture whose charm has lasted three centuries. Fine wood is still to be had; and craftsmen, working with modern methods, can produce masterpieces suited to the needs of today.



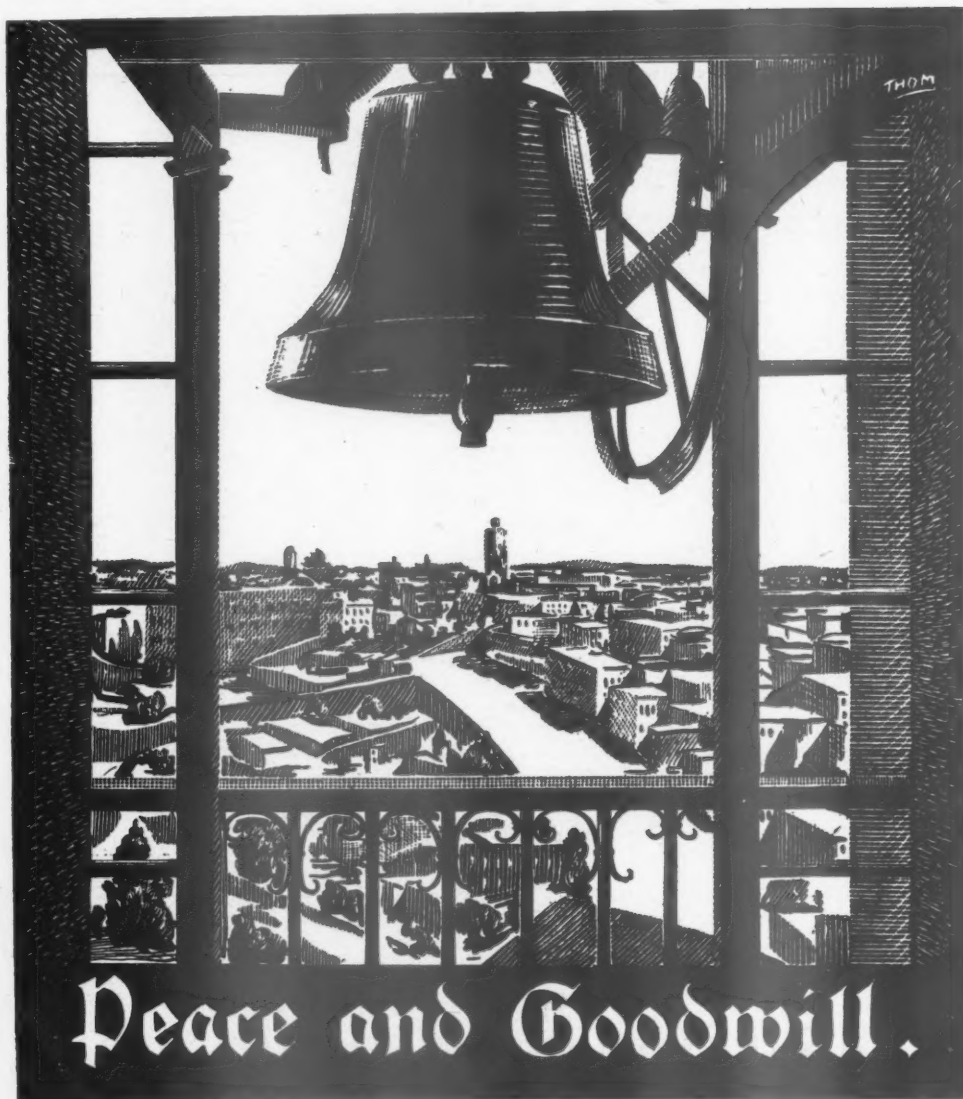
WILLIAM MALLINSON & SONS LTD

TIMBER AND VENEER MERCHANTS AND PANEL MANUFACTURERS

130-142 HACKNEY ROAD • LONDON • E 2

TELEPHONE • BISHOPSGATE 1234

TELEGRAMS • 'ALMONER' LONDON



Bethlehem, from the Tower of the Church of the Nativity. In the foreground is the famous bell—broadcast to the World every Christmas Day

THESE simple words have never meant so much to us. Now, at last, our hopes have been realised, and Bull Motors greet their many friends with the wish that this first Christmas since Victory shall be their happiest and most memorable. To our absent friends we wish a safe return and God-speed.

BULL MOTORS (E. R. & F. TURNER LTD.) IPSWICH

ALSO: LONDON, MANCHESTER, BIRMINGHAM, SHEFFIELD, NEWCASTLE and GLASGOW.

All
Gove
to v
coun
for t
able
find
Hall
If,
these
woul
from
it ve
be g

Spe
befo
repo
deat
whi
Gove
men
To
conc
init
tion
cove
com
sum

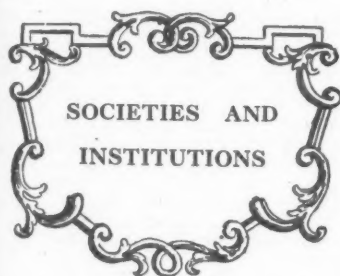
AA
W

At
to
SCIE
Hou
A.R.
Stat
W.

estab
this
nigh
shal
good
tion
Fir
buil
a sp
draw
In
activ
buil
cour
very
no
only
of B
seve
any
stud
year
poir

All these houses are being supplied to Government order and are being allocated to various local authorities throughout the country. If your local council has applied for them they should be long before available in your district, and the best way to find this out would be to apply to the Town Hall.

If, however, you wish to purchase one of these houses as a private individual, you would have first of all to obtain permission from the Bank of England, and we think it very unlikely that this permission would be given.



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.

AA

William Allen

At 36, Bedford Square, W.C.1. Talk to the Architectural Association on SCIENCE IN THE CONSTRUCTION OF HOUSES, by William Allen, B.A.R.C.H., A.R.I.B.A., of the Building Research Station.

W. Allen: Organised building research has an established position in the scientific life of this country, and my main purpose to-night is to describe how it is being marshalled behind the efforts to work out good alternative forms of house construction in the present post-war period.

First, however, a word about "organised building research," for the term itself has a special significance to which I should draw your attention.

In the ordinary course of free scientific activity, many investigators have examined building problems. Mostly, they were, of course, isolated studies—especially in the very early days of research—and they had no profound effect upon practice. That is only natural, since, even quite simple items of building may have to be examined from several angles to get an answer that means anything in general practice. For instance, studies of sound insulation made twenty years ago or more gave some useful pointers on how to improve party walls,

but they did not, and indeed could not, have much effect upon practice until associated with studies of fire protection (the other main function of a party wall) and until, also, we had some idea of what standards of insulation and fire protection to aim for. Thus, building research, to be fruitful, must be carried on under conditions where problems will be seen as a whole, and researches can be planned to cover all essential points.

That is what is meant by the term "organised building research," and emphasis is laid upon it here because it so happens that this country was the first to organise its building research along those lines, and is still the only country with a comprehensive organisation in full working order, though similar steps are now being taken in some of the Dominions. The initial step here was taken about twenty-five years ago, just after the last war, when the Government set up under the Department of Scientific and Industrial Research a unit which was called the Building Research Station. In the first instance it was intended to study building materials and methods of construction, and was composed of elements of physics, chemistry, and engineering in association with architects, builders and so on to represent the "user" side. Naturally, there have been many extensions to the central idea, with particular trends recently towards the study of human needs in building; but the main effort of building research has been upon materials and methods of construction, and it is the intention here to show how we are making use of what has been done along this line in the past twenty-five years.

STANDARDS

When orthodox building forms have to be supplemented by alternatives, the first question which arises is this—to what standards are they to be built?

At the end of the last war, when there was also an urgent need for alternative house types, this question could not be answered, and there is every reason to believe that the inability to do so was a principal cause of the unpopularity of some of the post-last-war houses. In fact, many of them had good features, which might have been better appreciated had there not been less satisfactory points giving irritation. Some evidence about the technical performance of alternative house types built in the 1920's was collected by the Station during the inter-war period, and during the past three years a more comprehensive and detailed survey was carried out the results of which were published in the first report of the Burt Committee on *House Construction* last year.

Thus, the critical importance of standards of performance was realised from the outset this time; and as soon as it became possible to divert time from war programmes for the purpose, work was put in hand to draw together the relevant researches and, on that foundation, to formulate the standards. In some cases, this part of the work was done in association with the Study Committees on Post-War Building, and they formed a valuable link in the chain of development. The circumstances were a little less propitious than could be wished, of course: the standards had to represent adequacy (there is no point in them otherwise) but without avoidable excess. It was not possible to say:—"If you go for such-and-such a figure you will be on the safe side," because we cannot now afford waste. But to strike a high target and not overshoot it implies a refined state of knowledge, and it had to be admitted that some of the standards would probably need revision as we acquired experience in trying to reach them, as indeed has been the case. However, the work went on, and early in 1944, it was possible to publish definite standards for:—(a) Strength and stability; (b) thermal insulation; (c) sound insulation; (d) fire hazard; and also to give close guidance on the following:—

(a) moisture penetration and condensation; (b) maintenance and durability; (c) vermin infestation. These were published as a group in Post-War Building Studies No. 1, *House Construction*.

A little later, standards of natural and artificial lighting were added to the lists by publication in Post-War Building Studies No. 12. There remains yet to come the recommendations for the heating of houses and flats in the same series.

Read together as a group, it will be seen that the scope of the standards is comprehensive, and so far as is known, they form a more advanced statement of criteria than has previously appeared. Comment in other countries seems to confirm this.

One last point about standards ought to be mentioned. The idea that they at once become necessary when alternative constructions have to be considered begs the question—why do they differ from those of orthodox construction? Are the standards of the orthodox house not satisfactory? The answer is, of course, that the normal pre-war house was partly shaped by tradition, and otherwise was a compromise between what seemed desirable and what was practicable when built in brick. Thus the 11-in. cavity wall has more strength than necessary, but less thermal insulation than is economically justified. Obviously, it is not a sound idea to use it as a guide. The new standards were determined independently, therefore, upon the basis of all the information available, including experience with orthodox houses.

ORGANISATION OF STUDIES

It is, of course, one thing to recommend standards, and another to attain them on the huge scale now envisaged—in, moreover, times of great difficulty. In the normal course of events, a considerable period would probably have elapsed between the publication of recommendations and their general attainment, this time being necessary for the general diffusion of the knowledge on which they are based. Had this been allowed to occur now, the opportunity to influence the rehousing programme at a vital stage would have been lost.

The danger was circumvented by introducing a procedure for licensing and development which enabled designs to be brought under review by those concerned with research at certain important stages. The procedure is roughly as follows:—(1) The promoter of an alternative form of construction puts forward his scheme in the form of an application for a licence to erect a prototype. (2) The design is considered on technical grounds, and if the design is regarded as promising, a licence is granted. (3) When the prototype is erected, it is examined, and usually subjected to tests on doubtful points, after which a Report goes forward to the Burt Committee.

There are subsequent stages when the best schemes go forward for pre-production trials, and technical consultations are often carried along at the same time. We can leave these for the moment, however, and concentrate on what is the important factor in the arrangement—that at an early stage, while the design is still in some degree fluid, the designer and the research side are brought together; and that they remain in touch over the vital period of the construction and study of the prototype.

This has proved of the very highest value. The new standards are founded on information not yet common knowledge to the building industry, and it was impossible to hope they could be attained widely and quickly without the combined efforts of designers and the research side. Indeed, it stretched the available information up to and beyond every reasonable limit even to make a rough guess at some of the characteristics of the new systems put forward; and to a greater or lesser extent, it became necessary to treat the construction and design of most of the prototypes as part of

the general research programme which has developed around the housing work.

This, of course, has been the most interesting part of the work, and a few moments may be well spent on illustrating it.

Let us take first the studies of strength and stability, where some very awkward problems presented themselves. The central difficulty was the fact that very little was known about the behaviour and requirements of framed structures for houses. The orthodox pre-war house had been so amply satisfactory in respect of strength that there had been no incentive to study the problem generally, and it was impossible when we came to deal with the post-war houses either to state comprehensive standards or to criticise new designs closely. The most important point was that no one could say what proportion of the total strength in a frame system comes from the cladding, the partitions, the stairs, the chimney and so on. Normally, they are neglected and the frame is assumed to take all the load; but they all play a part and cannot be neglected without waste.

In the circumstances, there was obviously no alternative but to study the prototypes in the field, and accordingly a new research team was built up for the purpose. This was two years ago, and since then they have examined a total of some thirty or forty houses, on all of which deflection measurements have been made and on quite a few of which stress studies have also been carried out. This will give some idea of the magnitude of the task, though not of its difficulty. The stress studies in particular have been troublesome, because they demand a degree of refinement not easily obtained outside the laboratory, and also because special instruments have had to be designed and made at the Station for the work. Lately, we have taken delivery of a new and excellently equipped mobile electrical laboratory which should ease and improve this side of the work a great deal.

In addition to these field studies, special laboratory work has had to be undertaken at the Building Research Station also. In addition to the special facilities, the older-established part of the Engineering laboratories provides a third major branch of the structural studies, but that side of the work is, no doubt, sufficiently familiar to need no elaboration here.

It does not seem desirable in a sketch of this kind to describe in detail the research findings that are coming out of the programme, but we may note in passing at least two major points to date: first, it has been observed that the measured stress is always smaller than was calculated, which indicates that the basis of design is conservative even after due allowance has been made for the normal factor of safety; and second, that before the loads approach the point of failure, deflections reach a point which should not be exceeded for other reasons. Deflection therefore is the important factor, and in this respect we have at last been able to establish a group of what seem to be reasonable acceptance criteria.

If we take the sound transmission studies as a second illustration of this part of the story, we will see other aspects of the organisation at work.

Many people will recall that only just before the war did the obscurity in which this subject had been clouded begin to roll away. From the multitude of measurements that had been done, we at last began to see something of the principles which lay behind them; it was the first real turn in a road along which a generation of research people had travelled. But though we had confidence, we had time to make only one or two applications in practice before the war came on, and we had to buoy our hopes for a few years with the knowledge that they at least had been successful.

The Station resumed an active interest in the work when it was asked to convene a Committee on Acoustics in the Ministry of Works' series of post-war building studies. The most urgent questions before the Committee naturally concerned noise in dwellings, and more particularly the problem of the party wall. There has been plenty of evidence now for nearly a century that 9-in. brickwork provides inadequate insulation between houses, and it was not so much a question of whether a higher standard should be set—that was certainly desirable—but whether there was any hope of reaching it on present knowledge, and without unreasonable cost. It was finally decided to attempt it, and the standard was set at 55 db., which is appreciably above what the 9-in. wall can provide, and generally demands, in fact, some measure of discontinuous treatment. The value of 55 db. was based both on calculations and on pre-war experience, and is believed to be the minimum which will deal with normal domestic noise. It is a higher target than is believed to exist among housing authorities elsewhere in the world at present, and reflects our confidence in the present research position here.

The field tests on sound transmission are in the hands of the National Physical Laboratory, which is jointly responsible with the Station for the general conduct of acoustics researches. To date some 30 measurements on prototypes have been made, and the work is only now getting into full swing. Unfortunately, the first tests were unsatisfactory; 11-in. cavity party walls yielded no worse insulation than 9-in. solid constructions, which was a disappointment. It is believed that the cause of the loss lay in certain faulty details which introduced indirect paths for sound; discontinuous construction is, of course, hyper-sensitive to things of this sort, rather in the same way that an electrical system is sensitive to a single short-circuit. However, better results began to come in before long, and now the evidence at last exists that we can reach our target without difficulty or exceptional expense. For instance, a prototype was recently examined where the party wall consisted of two 3-in. leaves of breeze-concrete cast *in situ*; it gave the desired standard of 55 db. reduction, nicely and without excess. Such a wall involves no unfamiliar techniques or materials, and if anything it is less expensive than 9-in. brickwork. Evidence of this kind justifies the claim that building research is passing its milestones steadily.

As with the studies of structural stability, the great variety of prototypes has provided the research side with a concentration of full-scale experience such as in normal times would not have come our way in several years. In fact, nothing could have been better in the way of development studies, for we have been forced at every turn to devise new examples of discontinuous treatment, and then to measure their effect in the prototype. But at the same time, emphasis has been thrown on laboratory studies to supplement the field work, and virtually the whole of the testing capacity has been taken for housing studies. Often it has been to give information on some new proposal prior to building the prototype, but a general programme of related studies is being carried along and is itself a contributor of important practical information. For instance, within very recent weeks a new, thin, double-leaf construction, with dry sand in each leaf, has shown itself able to exceed the requirement of 55 db. The efficiency of this unit is markedly greater than in previous constructions. The overall thickness is only 4½ in. and the idea appears to be a most promising material for a new and simpler form of

party wall. Further studies will be made at once and also some investigations on the fire-risk side to make sure that this is cleared up at the same time.

CONCLUSION

Examples of this kind could be continued—for instance, nothing adequate has been said of the fire protection studies—where great advances have been made, nor has the thermal insulation work been described, though it is another of the points where a real advance on pre-war practice has been made. Then there is the work on lighting, where this country has now a leading position, and on heating appliances, where some most interesting developments are expected. The catalogue is an extensive one, and perhaps can be best summarised by saying that practically the whole of the Station's laboratory capacity is now marshalled behind the housing work, and that there are major efforts also in other Establishments of the Department.

Probably, the main period of novelty is behind us—some 70 or 80 different proposals for complete house types have been examined—and for good or ill the broad character of Britain's alternative house construction is now fixed; but before us lies immediately a second stage in the programme, when the most promising of the alternatives pass into pre-production trials in their final form (this is being dealt with at the Ministry of Works), and beyond that there lies a time when the immediate emergency has passed and even better houses can be built. All this work too will call heavily upon organised building research, because it will continually demand refinement; and ultimately we can be confident that if we keep our present lead we can have the technically finest housing in the world. As it is, we can be reasonably certain now that the alternative construction of the next two or three years will far surpass in quality the effort after the last war, and in some respects will surpass even very good pre-war houses.

AA

Nikolaus Pevsner

At 36, Bedford Square, W.C.1. Talk to the Architectural Association on VISUAL PLANNING AND THE CITY OF LONDON by Dr. Nikolaus Pevsner. Chairman: Graham Dawbarn, F.R.I.B.A., President of the AA.

N. Pevsner: The Industrial Revolution has almost completely submerged this country, and not much has been left of buildings that preceded it. The colleges at Oxford and Cambridge are examples of early work yet remaining. Such work is intricate and varied, and the variety extends both to the planning and the individual building and it is incongruous to place Gothic buildings in contrast with Classic but in this case the effect is pleasing. Compare the university colleges with the Ecole Militaire in Paris, formally logical and with spectacular wings on both sides. The Champs Elysées is another example of the French, as distinguished from the informal English plan. When tried to impose a formal plan on the City of London. That plan would have broken away from the tradition of this country. When came to see this, and in his later work showed a very sensitive feeling for the London which he had to plan; and built in a free and varied way. Forms of all kinds are to be found in his church spires, ranging from severe Classic to Gothic. This free mixing of contrasts was carried further by Vanbrugh, in whom it became almost irritating. Vanbrugh began landscape gardening. His

Froys for Fireplaces..

• • baths and bathrooms • sanitary fittings
cooking and heating equipment • door and
window furniture • light castings • glazing • wall-
boards • electric fittings • paints & distempers • etc. etc.

The finest Trade display showrooms in the country

W · N · **F R O Y** & SONS
LIMITED

BRUNSWICK WORKS

64 KING STREET, HAMMERSMITH, LONDON, W.6

Phone: RIVerside 4101 (20 lines)

building might be as formal as a Palladian mansion, but by placing it in front of an undulating piece of water he created a sense of informality.

This sort of contrast appears in English towns. The most striking piece of planning in London is that of the Inns of Court. These, like the colleges at Oxford and Cambridge, are groups of buildings around grass. The main contribution of London to European town planning is the square. This began with Inigo Jones's Covent Garden and was followed by other squares throughout the West End. Each such square is a unit in itself, but within it the houses are not necessarily of one shape. They are similar but not identical as are those in the Place Vendôme; and such things as the three large open spaces in Nancy following one axis is not to be found in London. Regent Street corresponded to the Champs Elysées. Its buildings were classical, but the individual blocks had individual character and there was a good deal of deliberate contrast between them.

Bath is the best surviving example of civic planning in this country, but even there the planned groups of buildings do not follow one axis as would be expected in classic planning. In Bath, Brighton, Cheltenham or anywhere else you find the deliberate grouping of Nature and architecture. Usually you also find that the houses, although of one type are not exactly similar.

Two movements that originated in this country have influenced the whole world. One is the picturesque or landscape movement of the Eighteenth Century, and the other the Garden City or Garden Suburb movement of forty years ago. In the Eighteenth Century movement the attempt was made to apply to the town Uvedale Price's dogma that the great point was to

mix what was striking with what was pleasing. The garden city idea introduces the picturesque into the town. The square introduces a hedgehog of picturesque planning, but otherwise leaves the town to itself; in the later movement the town was left alone while garden cities or garden suburbs were made outside it.

There is the possibility of applying this informal planning to the City of London. Metropolitan planning is primarily social planning but the best social planning may not secure aesthetic results, and while we want a healthy city we also want something for the eye to enjoy. In the Royal Academy plan there has been too much regard for symmetry. It is not in accord with English tradition and, moreover, it has not the right functional approach. Modern architecture confronts the architect with a different problem from the one which confronted the architect of the Nineteenth Century. It is now necessary to consider the use of the building, not merely to design façades; and the outcome of this has been the predominance of informal asymmetrical planning. If we ask what is the City, what happens around the Bank, we find that most of the business is transacted by people walking short distances to meet each other, standing about or meeting in pubs and at lunch. This is a pedestrian system of contact, and the right functional approach is to keep fast traffic away, have service roads inside and precincts with pedestrian links connecting them. Even before the war the City was losing trade after trade. These are going to the West End. The reason for their going is the sheer grimness, blackness and bleakness of the City as it has been and will still be if the original plan for the City of London is carried out, even with the improvements suggested. A very complete scheme will be necessary to give a

new lease of life to the City of London, and the appointment of Mr. William Holford seems to indicate that the stars are favourable.

Buildings Illustrated

Aircraft Design Drawing Office for Bristol Aeroplane Co. Eric Ross, architect (pages 433 to 436). Wm. Cowlin & Son, Ltd., Bristol, general contractors; R. Watson & Co. (C.E.), Ltd., Bolton, structural steelwork; Concrete, Ltd., Hounslow, precast reinforced concrete floors and flat roofs; A. Scull & Sons, Ltd., Bristol, heating, plumbing and ventilating; Gardiner Sons & Co., Ltd., Bristol, metal doors and windows; steel doors and gates; staircase balustrade, door furniture and sanitary fittings; Cattybrook Brick Co., Ltd., Bristol, bricks; General Asphalt Co., Ltd., London, asphalt roofs and approach roads; British Reinforced Concrete Co., Ltd., Stafford, reinforcement to staircases, window heads, canopies, etc.; Roneo, Ltd., Romford, Essex, steel partitioning to offices; Colston Electric Co., Ltd., Bristol, electric light and power; George Parnall & Co., Ltd., Bristol, revolving doors and screens; Marble Mosaic Co., Ltd., Bristol, terrazzo floors; Pickering's, Ltd., Stockton-on-Tees, service lifts; W. A. Telling & Co., Bristol, plastering and granolithic floors; A. Bagnall & Sons, Bristol, painting and decorating; Lenscrete, Ltd., glass brick windows, glass and concrete roofs.

ANNOUNCEMENT

The Home Information Centre, organised by the Women's Gas Council in co-operation with the Housing Centre, is being held at 169, Regent Street, W.1, by courtesy of Messrs. Ewart & Son, Ltd., manufacturers of Ewart Gas Water Heaters.

LENSCRETE LTD
GLASS & FERRO-CONCRETE

66, QUEENS CIRCUS, LONDON, S.W.8

TEL.: MACAULAY 1064-5



Drawing Office of the Bristol Aeroplane Co.

Architect: Eric Ross, A.R.I.B.A.

GLASS BRICK WINDOWS—GLASS & CONCRETE ROOFS

A
RONUK
PRODUCT



★ WOOD DYE

THE "1-COAT" TRANSPARENT
PENETRATING, PERMANENT
PRESERVATIVE STAIN FOR ALL
NEW WOODWORK.

It cannot raise the grain.

★ 8 SHADES:
ALL SIZES

ADVISORY SERVICE

Shade cards, panels, full directions
and working instructions for con-
tractors' use, estimates and 45 years
of specialists' experience are at
your service.

RONUK Ltd., Portslade, Sussex
Pelishing } 16 South Molton Street
Contract Depot } London, W.1

NOVOID

THE CONCRETE PROOFER

REGISTERED TRADE MARK

**WATERPROOFS CONCRETE
IN THE MASS
—not just the surface**

NOVOID is a powder of approximately the same specific gravity as Portland Cement, consisting of Soluble Silicates and Calcium Chloride, each held in a neutral base. It is believed to be the only such material combining these efficient hardening and proofing chemicals. Used in the proportion of 7 per cent. of the cement,

- ★ NOVOID MAKES CONCRETE ABSOLUTELY IMPERMEABLE—EVEN BY SEA WATER
- ★ NOVOID PRODUCES EARLIER HARDENING AND INCREASES STRENGTH

★ During over a Quarter of a Century, NOVOID has been successfully used by many large undertakings, municipal authorities, public utilities, etc.

**Water cannot get where there is no void.
Write for proof of NOVOID efficiency—**

THE DART COMPANY (NOVOID) LTD.,
VICTORIA ROAD, WILLESDEN, LONDON, N.W.10
Phone: ELG 5661



Specify "Decent Living"

A "Fordham" Seamless Steel Flushing Cistern is a necessity in the civilised home, where the embarrassment of noisy flushing will no longer be tolerated.



Fordham

SEAMLESS STEEL FLUSHING CISTERN

FORDHAM PRESSINGS LIMITED, DUDLEY ROAD,
WOLVERHAMPTON. Phone: Wolverhampton 23861

Biro

MARKS A TURNING POINT
IN THE HISTORY OF



Retail Price

55/-

including purchase tax

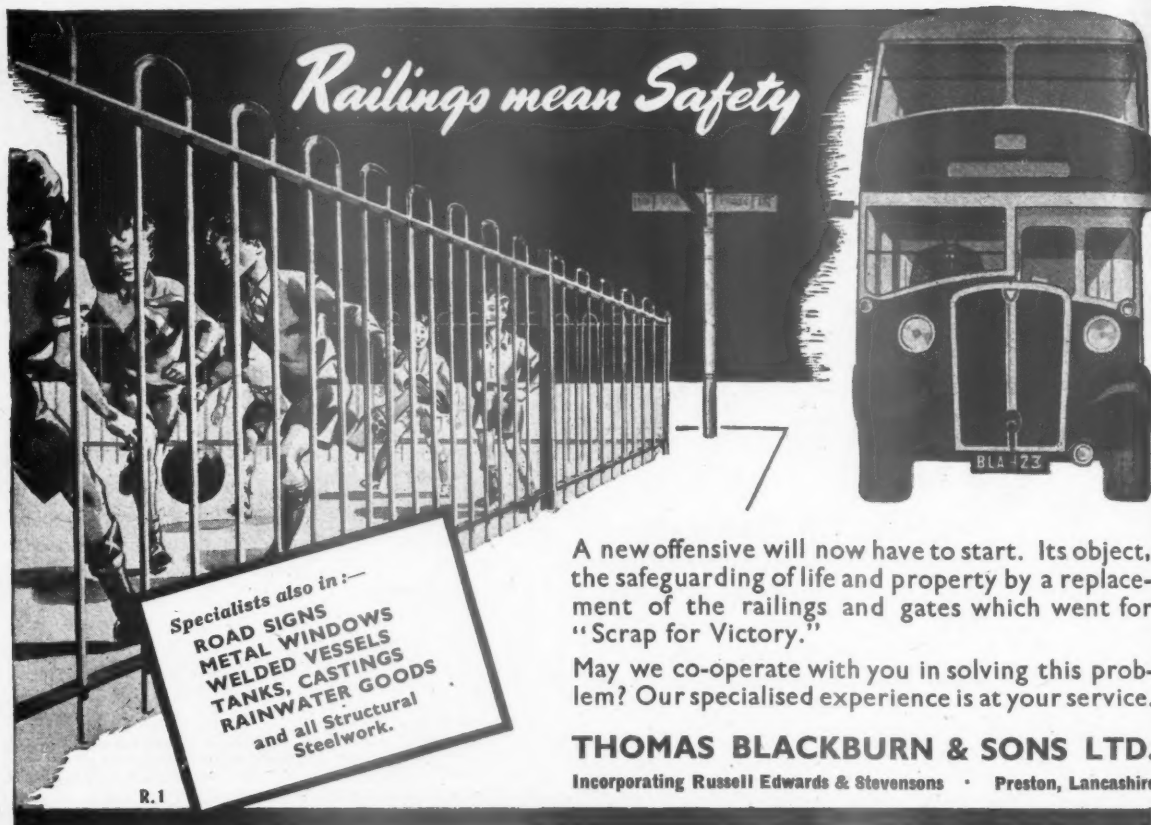
"BIRO" is unique: it writes with a ball-bearing point—a point that never goes wrong, never floods, bends or splutters—a point that rolls your writing on to the paper with effortless ease. "BIRO" ink dries as you write; you cannot smudge it; you need no blotter.

"BIRO" writes six months or more without refilling—according to the amount you write. To replenish "BIRO" for a similar period of trouble-free service, a refill unit is inserted while you wait.

The demand for "BIRO" has far exceeded production capacity. Consequently you may have to be patient until your turn comes round.

Biro

for perpetually perfect WRITING



Railings mean Safety

Specialists also in :—
 ROAD SIGNS
 METAL WINDOWS
 WELDED VESSELS
 TANKS, CASTINGS
 RAINWATER GOODS
 and all Structural
 Steelwork.

R.1

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



**THEY DESERVE
 THE BEST HOUSES
 WE CAN
 BUILD**

Steel Casements are lighter in construction
 RESULT - more light is admitted
 Steel offers greater resistance to weather
 RESULT - lower maintenance costs

—And an important feature of the best Patchett all-steel that admit more the weather.

PATCHETT & CO LTD
 WESTLAND ROAD LEEDS 11.

QUICK DELIVERIES

HEATING & VENTILATING CONSTRUCTIONAL STEEL WORK
 CYLINDER WORK BUNKERS MACHINING & GENERAL ENG
 GAS CUTTING & WELDING ELECTRIC ARC WELDING
 ORNAMENTAL IRON WORK STEEL CASEMENTS



LIFTS

FOR EVERY TYPE OF GOODS TRANSPORT

Makers of electric-passenger, goods and hand power lifts.



HAMMOND & CHAMPNESS LTD., WALTHAMSTOW, E.17

THE NATIONAL GALLERY—PROTECTED BY DREADNOUGHT FIREPROOF DOORS



DREADNOUGHT FIREPROOF DOORS (1930) LTD., 26 VICTORIA ST., WESTMINSTER, S.W.1

RESEARCH AND PRODUCTION MOVE TOGETHER



The strategy of war industry has proved how necessary it is to co-ordinate production with research. They move forward together. This co-ordination has advanced tremendously the uses

of aluminium and its alloys — uses that are ready to-day to play an influential part in restoring the arts of peace. Also, abundant supplies are now available.

ALUMINIUM UNION LIMITED

A fully-owned subsidiary of Aluminium Limited, Montreal, Canada

GROSVENOR HOUSE, PARK LANE, LONDON, W.1

"A Sign of Good Storefitting!"

HICKMAN

STOREFITTERS

LONDON.

JOINERY,
PANELLING,
COUNTERS,
SPECIAL FITMENTS

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

SPEED · SERVICE · CRAFTSMANSHIP.

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



BY APPOINTMENT
TO THE LATE KING GEORGE V.

BROMSGROVE GUILD LTD

ARCHITECTURAL METALWORKERS

BROMSGROVE

WORCESTERSHIRE

GLAS-CRETE CONSTRUCTIONS

for

ROOF LIGHTS, LANTERNS,
FLOORS & PAVEMENTS,
CANOPIES, WINDOWS,
GLASS PARTITIONS.

Wherever daylight is required to be admitted to a building of any type, whether through roof, floor, walls or pavement, there is suitable **GLAS-CRETE** construction for the purpose.

All the horizontal constructions are designed to carry normal roof and floor loads and where excessive loading conditions are required the constructions can be modified to meet them.



The illustration is of the roof to the turbine house at Fulham Power Station where many thousands of sq. ft. of GLAS-CRETE constructions were installed. The construction shown is double glazed in order to minimise the risk of condensation which is a vital point in connection with electrical machinery.

J. A. KING AND COMPANY LIMITED
181 QUEEN VICTORIA STREET, LONDON, E.C. 4
TELEPHONE CENTRAL 5866 (4 LINES) TELEGRAMS KINOVIQUE CENT LONDON

QUICKER than the TELEPHONE!



The delays and inconveniences associated with the telephone are eliminated by the CALLBOY system of two-way loud-speaker internal communication. The CALLBOY gives the Principal or Chief Executive instant contact with from one to ten departments. Installation is simplicity itself.

The CALLBOY system is ideally suitable for installation in large houses, flats, schools, public buildings, etc. For example, when used in a block of flats, the tenants have instant contact with the caretaker, thus saving him innumerable journeys to and from the various floors to ascertain their requirements. Greater efficiency always with minimum effort.

- ACCOUNTS
- SECRETARY
- MATERIAL CONTROL
- PRODUCTION
- PERSONEL

- STORES
- SALES
- GOODS INWARD
- GOODS OUTWARD
- DRAWING OFFICE

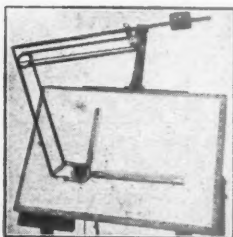
Write for particulars: Dept. A5.

EASCO ELECTRICAL • LONDON, S.W.9.

"MAVITTA"

Drafting Machines & Tables

Various types and sizes.



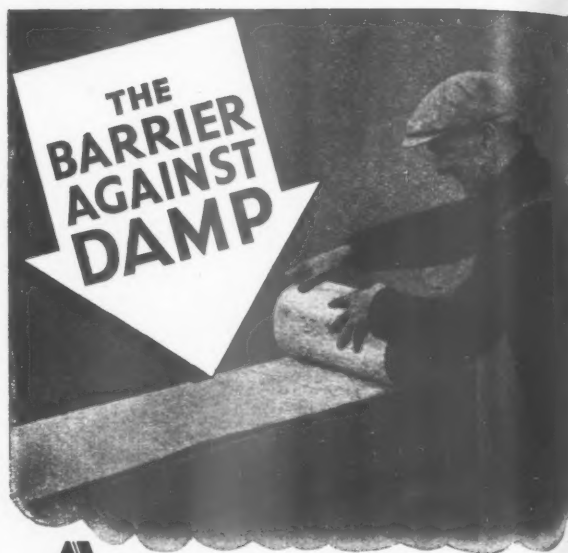
As supplied to large and small Drawing Offices all over the country.

British Made.

THE MAVITTA DRAFTING MACHINES LTD.

Anchor Works, Park Road, Aston, Birmingham, 6.

'Phone—East 0482.

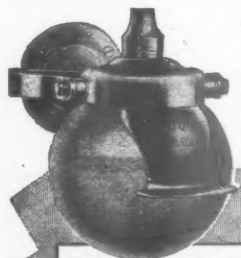


AQUALITE BITUMEN DAMPCOURSE

WILLIAM BRIGGS & SONS, LTD.,
DUNDEE AND LONDON

Branches throughout the Country

CALENDARS 1946. May we reserve your 1946 Calendar? To comply with regulations a 1d. stamp should accompany your request.



The difference between
a mere washroom and
Luxury . . . is found in

TOILETIQUETTE

By **HOMACOL**

In their building plans of to-day and to-morrow, it would be just as unthinkable to provide inadequate heating and ventilation as to overlook the essential appointments of the modern Toilet. That is why your attention is drawn to the handsome Homacol Liquid Soap Dispensers whose drop-by-drop service of uncontaminated soap not only provides maximum efficiency but brings the new technique of "Toiletiquette" to every washroom. Homacol has pioneered this Liquid Soap luxury and to-day these dispensers are in use throughout the world.

Write now for full particulars to:—

HORTON MANUFACTURING CO. LTD.
RICKMANSWORTH • HERTFORDSHIRE
'Phone: Rickmansworth 3191 D4



*To-day's most modern
Liquid Soap System*



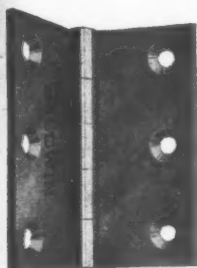
DECORATION

CLARK & FENN LTD.

16, OLD TOWN, CLAPHAM, S.W.4.

MACaulay 2455 (Four lines)

CRAFTSMEN IN FIBROUS PLASTER & HIGH CLASS DECORATION



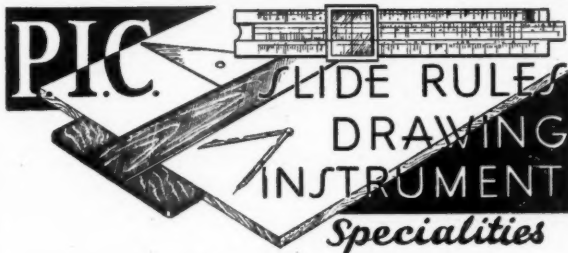
*One of the
strong silent type*

... Perfectly made, quick and free in action on the famous BALDWIN polished chilled iron joint and enclosed steel pin. Always ask for them by name.

**BALDWIN PRECISION MADE
cast iron butt hinges**

Sole Manufacturers: BALDWIN, SON & CO. LTD., Stourport-on-Severn

M-W.49



Now only available for work of National importance. We look forward to the time when we shall be able to meet the requirements of all our friends. In the meantime, orders will, whenever possible, be dealt with in rotation.

A. G. THORNTON LTD
Drawing Instrument Specialists
41 GARTSIDE ST. MANCHESTER 3.

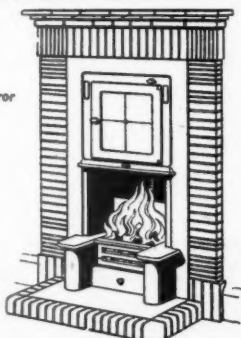
T50

UTILITY STOVE

TWO STOVES IN ONE!

"A HEATING MIRACLE" —vide the Daily Mirror

- ECONOMY with EFFICIENCY will be a post-war keynote for many years—and "INTEROVEN" STOVES will be greatly in demand because they save their cost in brickwork, labour and space.
- The fact that they work perfectly with wood, peat or coal brings in so many enquiries that at present we are embarrassed by "controls."
- Perhaps sooner than we expect the lease will be off and nobody will be better pleased than ourselves to offer the facilities and service which made "INTEROVENS" famous.
- Essential replacements of all pre-war "INTEROVEN" Stoves can be supplied.
- New Lists sent on application enclosing stamp (Govt. Order) to our new and larger showrooms:—



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

THE INTEROVEN STOVE CO. LTD.

67 BAKER STREET, LONDON, W.1.

*Watch these
numbers
grow*

6203

Week by week
the number of
buildings res-
tored by us con-
tinues to grow.

Consult us about your factory TO-DAY!

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

FIRE ESCAPES

6" DIAMETER

All Steel

Weight—five pounds only

No Limit to Height

Simply fixed in any Building

When planning a new Building

write for
details
of the

DAVY



JOHN KERR & CO (Mr.), LTD., NORTHWICH 26, CHES.

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

ROBERT GORDON'S TECHNICAL COLLEGE, ABERDEEN.

SCHOOL OF ARCHITECTURE AND DEPARTMENT OF BUILDING.

Head: E. F. DAVIES, B.Arch.(Lvpl.), F.R.I.B.A., F.R.I.A.S.

LECTURER AND STUDIO INSTRUCTOR IN CONSTRUCTION.

Applications are invited for the post of Full-time Lecturer and Studio Instructor in Constructional Subjects, including Steel and Reinforced Concrete.

The School is recognised for purposes of exemption from the R.I.B.A. Intermediate and Final Examinations.

Candidates must be Fellows or Associates of the Royal Institute of British Architects, and should possess the Degree or Diploma of a recognised School of Architecture. Teaching and professional experience are desirable qualifications.

The commencing salary will be determined, according to the experience of the successful candidate. The salary scales are under review at the present time.

Conditions of appointment and forms of application may be obtained from the undersigned, to whom completed applications should be returned by Monday, 7th January, 1946.

A. C. WEST,
Director.
951

EBBW VALE URBAN DISTRICT COUNCIL.

APPOINTMENT OF TEMPORARY ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a Temporary Architectural Assistant, in the Engineer and Surveyor's Department of the Council, at a commencing salary of £350 per annum, rising by annual increments of £25 to a maximum of £400, plus cost-of-living bonus, at present £59 15s. per annum.

Applicants must be Registered Architects, experienced in land surveying and levelling, building inspection, and the preparation of working and detail drawings, specifications and quantities for housing and other public buildings, and preference will be given to candidates who are members of the Royal Institute of British Architects.

The appointment will be terminable by one month's notice in writing on either side, and will be subject to the Council's Regulations and Conditions of Service for the time being in operation.

Applications, stating age, qualifications, with full particulars of experience, and endorsed "Architectural Assistant," must be received by the undersigned not later than the 22nd December, 1945, and should be accompanied by not more than three copies of recent testimonials.

R. E. HERRERT,
Clerk of the Council.

Council Offices, Ebbw Vale, Mon.
28th November, 1945. 950

WEST SUFFOLK COUNTY COUNCIL.

Applications are invited for the undermentioned appointments in the County Architect's Department:—

(1) **ARCHITECTURAL ASSISTANT.** Salary £310—£15—£355 per annum, plus cost-of-living bonus (at present £60 per annum).

(2) **BUILDINGS' INSPECTOR.** Salary, £240—£15—£300 per annum, plus cost-of-living bonus (at present £60 per annum). Successful candidate will be required to provide a motor cycle, or car not exceeding 8 h.p. Travelling allowance in accordance with County Scale.

Both appointments will be on non-established staff, but may become permanent.

Forms of application may be obtained from the undersigned, by whom applications, accompanied by three recent testimonials, should be received not later than 21st December 1945.

L. G. H. MURRAY,
Clerk to the County Council.

Shire Hall, Bury St. Edmunds.
27th November, 1945. 947

COUNTY OF KINCARDINE.

COUNTY ARCHITECT AND PLANNING OFFICER.

Applications are invited for the post of County Architect and Planning Officer. Applicants should be architects, preferably with a planning qualification, and should have had practical experience in the whole-time service of a Local Authority.

Salary will be on a scale rising from £600 to £850 per annum by annual increments of £50, plus J.I.C. war bonus. Placing on this scale may be granted in accordance with qualifications and experience. The post is superannuable, and medical examination will be required. A house will be available.

A statement of the duties, terms, and conditions of appointment, etc., may be obtained from the undersigned, with whom applications (35 copies, including copies of not more than three testimonials) should be lodged not later than 5th January, 1946.

JOHN SLEVIN,
County Clerk.

33, Evan Street, Stonehaven.
26th November, 1945. 939

TENDRING RURAL DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant on the staff of the Engineer and Surveyor's Department, at a salary of £400 per annum, rising by two annual increments of £25 each to £450 per annum.

Candidates should hold a recognized Architectural Qualification and have had experience in the preparation of Municipal Housing Schemes.

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

Applications, stating age, qualifications, and experience, endorsed "Architectural Assistant," and accompanied by the names and addresses of two references, must reach the undersigned not later than 29th December, 1945.

H. M. A. WARD,
Clerk to the Council.

Council Offices, Weeley, near Clacton-on-Sea,
Essex. 956

THE UNIVERSITY OF LIVERPOOL.

LIVERPOOL SCHOOL OF ARCHITECTURE.

Applications are invited for the full-time post of **UNGRADED LECTURER and STUDIO INSTRUCTOR**, in the School of Architecture, at a salary of £500 per annum, with child allowances.

Applications, accompanied if possible by drawings or photographs of work, two testimonials, and the names of two referees, should be received not later than 11th February, 1946, by the undersigned, from whom further particulars may be obtained.

STANLEY DUMBELL,
Registrar.

November, 1945. 964

BOROUGH OF LUTON.

BOROUGH ENGINEER'S DEPARTMENT—APPOINTMENT OF TECHNICAL STAFF.

Applications are invited for the following appointments:—

(1) **CHIEF PLANNING ASSISTANT.** Salary £500 per annum, rising by annual increments of £25 to £600.

(2) **TWO PLANNING ASSISTANTS.** Salary £310 per annum, rising by annual increments of £15 to £355.

(3) **ESTATES AND MAINTENANCE ASSISTANT.** Salary £420 per annum, rising by annual increments of £20 to £460.

(4) **TWO JUNIOR ENGINEERING ASSISTANTS.** Salary £240 per annum, rising by annual increments of £15 to £300.

(5) **BUILDING INSPECTOR.** Salary £310 per annum, rising by annual increments of £15 to £355.

Appointment No. 1 will be on the Council's permanent staff, and the remaining appointments will be temporary in the first instance, with prospect of transfers to the permanent staff. A temporary cost-of-living bonus of £59 15s. per annum will be paid in respect of each appointment, and all appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.

The persons appointed to the vacancies Nos. 1 and 3 will be required to provide and maintain a car, for the use of which an allowance will be paid on the basis of the Ministry of Home Security Scale, or such other scale as may be adopted by the Council.

Applicants for the post of Chief Planning Assistant must have had extensive experience in the preparation and administration of planning schemes, and be suitably qualified for appointments No. 2, considerable municipal experience and be first-class draughtsmen; appointment No. 3, extensive experience in maintenance of buildings of all descriptions and estate work, including valuations, and be A.R.I.B.A. or P.A.S.I.; appointments No. 4, considerable municipal experience and be first-class draughtsmen, and for appointment No. 5, experience in control of building works and administration of bye-laws.

Applications, stating age, qualifications and experience, together with copies of not more than three recent testimonials, should be delivered, suitably endorsed, to the Borough Engineer, Town Hall, Luton, not later than Monday, 24th December, 1945. Canvassing will be a disqualification.

The Ministry of Labour and National Service have given permission under the Control of Engagement Order, 1945, for the advertisement of the vacancies of Junior Engineering Assistants (E.3049X).

W. H. ROBINSON,
Town Clerk.

Town Hall, Luton.
26th November, 1945. 960

EAST GLAMORGAN JOINT PLANNING COMMITTEE.

DEPUTY PLANNING OFFICER.

Applications are invited for the appointment of Deputy Planning Officer to the above Committee, at a salary of £500, rising by annual increments of £25 to a maximum of £600 per annum, plus bonus.

Applicants must have passed the final examination of the Town Planning Institute or its equivalent, and preference will be given to candidates with qualifications in engineering, architecture or surveying. A wide experience in the preparation of planning schemes and interim development control is essential.

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

Applications, stating age, qualifications, experience, etc., and containing the names of three persons to whom reference can be made, must be delivered to the undersigned not later than the first post on Thursday, 20th December 1945.

BERNARD M. MURPHY,
Clerk of the Committee.

Town Hall, Mountain Ash, Glamorgan.
1st December, 1945. 997

ESSEX EDUCATION COMMITTEE.

SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART, FOREST ROAD, WALTHAMSTOW, E.17.

DEPARTMENT OF ARCHITECTURE AND BUILDING.

Applications are invited from suitably qualified men for the post of **LECTURER IN ARCHITECTURAL BUILDING CONSTRUCTION AND SPECIFICATION WRITING.** Knowledge of surveying an advantage.

Salary—Burn Scale (London allowance), with increments for professional experience, approved training and graduation where applicable.

Applications giving full particulars of training, qualifications and experience, with copies of three recent testimonials, should reach the Clerk to the Governors at the College by 10th December.

B. E. LAWRENCE,
Chief Education Officer.

County Offices, Chelmsford. 995

BOROUGH OF SOUTHGATE. TO BUILDERS AND CONTRACTORS.

DIRECTION OF NEW HOUSES, BARROWELL GREEN HOUSING SITE, N.21.

The above-mentioned Council invite tenders for the erection of 14 pairs "Duplex" type houses at the Barrowell Green Housing Site, No. 21. Plans can be seen by arrangement with the Borough Engineer and Surveyor, Mr. J. T. W. Paul, F.R.I.B.A., at the Town Hall, Palmers Green, N.13.

Contractors wishing to tender should make written application not later than Monday, 17th December, 1945, to the Borough Engineer and Surveyor, enclosing cheque for £2 2s. as deposit for form of tender and Bills of Quantities. This deposit will be returned on receipt of a bona fide tender and/or the return of all documents. In the case of the accepted tender, deposit will be retained until the Contract and Bond have been entered into with the Council, and in the event of withdrawal, such deposit will be forfeited.

No tender will be accepted unless submitted in a plain sealed envelope, which shall bear no name or mark indicating the sender, and shall be addressed to "Tender for 'Duplex' Houses," and addressed to the Town Clerk, Southgate Town Hall, London, N.13.

The Council do not bind themselves to accept the lowest or any tender, and the acceptance of any tender will be subject to the approval of the Ministry of Health.

GORDON H. TAYLOR,
Town Clerk.

Southgate, Town Hall, Palmers Green, N.13. 971
7th December, 1945.

CITY OF NORWICH.

CITY ENGINEER'S DEPARTMENT—TOWN PLANNING SECTION.

SENIOR PLANNING ASSISTANT.

Applications are invited for the above permanent appointment, at a salary commencing at £365 per annum, plus cost-of-living bonus, at present £59 19s. per annum, and rising subject to satisfactory service by annual increments of £15 and one of £10 to a maximum of £420 per annum.

Candidates must have had experience in the preparation and administration of planning schemes, and the control of interim development. Preference will be given to applicants capable of preparing alternative designs for the reconstruction of war damaged and built-up areas.

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

Relationship to members of the Council or their staff must be declared in the application. Canvassing, directly or indirectly, will be a disqualification.

Applications stating age, qualifications, experience and present position, accompanied by copies of not more than three recent testimonials, must be received by the City Engineer, City Hall, Norwich, not later than first post on Tuesday, 19th January, 1946. 974

**NORTHERN POLYTECHNIC, HOLLOWAY,
N.7.**

Applications are invited for appointment as PART-TIME LECTURER (Evenings) in the Department of Architecture, Surveying and Building on Properties and Uses of Building Materials. Applicants should in the first instance submit written particulars of training and professional experience. Details of salary and times of classes will be sent to suitable applicants.

R. H. CURRELL,
Clerk. 969

URBAN DISTRICT COUNCIL OF FELTHAM.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant on the permanent staff of the Engineer and Surveyor's Department in Grade D of the Council's grading scheme, at a commencing salary at the rate of £440 per annum, rising, subject to satisfactory service, by annual increments of £20 per annum, to a maximum of £500 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

Applicants should be qualified architects, and have had experience in the preparation of plans, specifications, and quantities for public and domestic buildings, and preference will be given to persons with experience in the preparation of housing schemes.

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

Form of application may be obtained from the undersigned, and should be returned, accompanied by copies of not more than three testimonials, not later than Tuesday, the 1st January, 1946.

Canvassing will disqualify, and applicants must declare, in writing, whether, to their knowledge, they are related to any member of or the holder of any senior office under the Council.

J. S. SVRETT,
Clerk of the Council.

Council Offices, Feltham, Middlesex. 980
7th December, 1945.

BOROUGH OF CLITHEROE.

BOROUGH SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited from Registered Architects for the above appointment, at a salary of £325 per annum, plus war bonus (at present £59 16s.).

The appointment will be subject to one month's notice in writing on either side, and the successful candidate will be required to pass a medical examination for superannuation purposes, and to contribute to the Superannuation Fund.

Applications, stating age, qualifications, previous experience and position in relation to National Service, and accompanied by copies of three recent testimonials, must be delivered to the undersigned in a plain sealed envelope, endorsed "Architectural Assistant," not later than 12 noon on Saturday, 29th December, 1945.

G. HETHERINGTON,
Town Clerk.

The Castle, Clitheroe, Lancs. 976
4th December, 1945.

WOMBWELL URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment on the staff of the Housing Architect and Surveyor, at a salary of £400 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

Applicants must be Registered Architects, and must have considerable experience in the preparation of drawings, etc., for local authority works and housing in particular.

The appointment will be subject to the Council's regulations and conditions of service.

Applications, stating age, professional qualifications and experience, and date upon which duties can be commenced, together with the names and addresses of three persons to whom reference may be made, should be delivered to the undersigned not later than the 31st December, 1945, and endorsed "Architectural Assistant."

BURY & WALKERS,
Acting Clerks of the Council.

Town Hall, Wombwell. 982
5th December, 1945.

Tenders

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

CITY OF WINCHESTER.

HOUSING.

Drawings, Specifications, and Bills of Quantities will shortly be available for the erection of up to 150 permanent houses (first instalment).

Persons wishing to tender are invited to submit their names in writing to Mr. H. S. Sawyer and Mr. A. E. T. Mort, of High Street, Winchester, and to enclose a cheque value £2 2s., payable to the Winchester Corporation, which will be returned on receipt of a bona fide tender and the return of all documents.

Applications should be received not later than 31st December, 1945.

F. W. KEMPTON,
Town Clerk.

Guildhall, Winchester. 978
5th December, 1945.

Partnership

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

CHARTERED ARCHITECT AND SURVEYOR requires Partnership with progressive Architect; ex-officer, just released; excellent experience in G.P. work; preferably in South of England, or would take appointment with partnership in view.—Box 928

Architectural Appointments Vacant

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

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

ASSISTANT QUANTITY SURVEYORS required by Midland Brewery Co.; all-round experience essential.—Apply, stating experience, age, salary required, to Box 930.

JUNIOR ARCHITECTURAL ASSISTANT required immediately in well-known East Midlands office. Box 927.

ARCHITECT'S ASSISTANT required. Apply, stating age, experience, and salary, to Henry C. Smart & Partners, Architects and Surveyors, 251-3, Finsbury Pavement House, 120, Moorgate, E.C.2. 942

QUANTITY SURVEYOR required by large multiple organisation, having head offices in the Oxford Street area; permanent position, carrying good salary and expenses. Write in confidence, full details of experience and qualifications, Box Q8.2477, Everetts Advertising, Ltd., 10, Hertford Street, W.1. 944

ARCHITECTURAL ASSISTANT urgently required in busy Northamptonshire office, chiefly housing and industrial work; good draughtsman, and experience in surveys of existing buildings, and specifications. Please write, giving details of experience, age, and salary required, to Box 967.

ARCHITECTURAL DRAUGHTSMAN urgently required for progressive industrial factory; situated in Stoke-on-Trent; chiefly factory work; work to drawing and detailed work essential; knowledge of modern buildings, also setting out and standard bye-laws; salary in accordance with experience and ability. Write, giving all details, to Box 955.

SENIOR ASSISTANT required by West End Architects. Apply in writing, stating qualifications and salary required, to J. Stanley Beard & Bennett, F.R.I.B.A., 101/3, Baker Street, London, W.1. 958

ADVANCED JUNIOR ASSISTANT required by West End Architects; must be good draughtsman, experienced in detailing, making surveys and measured drawings. Apply in writing, stating qualifications and salary required, to J. Stanley Beard & Bennett, F.R.I.B.A., 101/3, Baker Street, London, W.1. 959

ARCHITECT'S ASSISTANT; good draughtsman; capable of preparing complete working drawings from sketches; salary, £350 per annum; state age and experience. Gelder and Kitchen, Architects, Hull. 965

ARCHITECTURAL DRAUGHTSMAN, for Glasgow; preferable with experience in shop fronts; able to take own measurements and make up estimates; state age, experience, and salary; with particulars of past experience; every encouragement will be given to the right man. Box 365, Robertson & Scott, Edinburgh. 2. 973

Architectural Appointments Wanted

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

ARCHITECTURAL ASSISTANT, willing to undertake spare-time work, working drawings, etc.; experience in most kinds of work, including surveying and levelling. Box 195.

EX-SERVICE WOMAN, University training to R.I.B.A. Intermediate Standard, seeks post in Architect's Office; Liverpool or Southport district. Box 195.

PROBATIONER, R.I.B.A., 1 year's experience, requires work in London Architect's Office; free January. Box 194.

DRAUGHTSMAN desires change; 8 years' varied experience, including Architects' and Civil Engineer's offices; 4 years' Army service; capable preparing working drawings, details; field and property surveying, levelling; preparing all types plans; great interest cartography. Box 198.

SECRETARY, experienced architectural work, accounts book-keeping, records, etc., seeks post; West End preferred. Box 197

FLT.-LIEUTENANT (age 22), awaiting release from R.A.F., "Chartered Architect," A.R.I.B.A., Dip. Arch., seeks progressive position as Architectural Assistant in London Office. Box 199.

ARCHITECT, Swiss (28); studied in Winterthur and Zurich, has had experience with leading Swiss Architects, seeks position in Architect's Office. Box 200.

A.R.I.B.A., Dip. Arch. London University (33). Capt. R.E., now released from Forces, would like appointment as Assistant to Architect within 14 hrs. London; varied experience, including housing, schools, shops, etc.; testimonials available; salary £500. Box 201.

RESPONSIBLE position required by Architect, with good knowledge of industrial buildings; experienced in specifications, war damage schedules, etc. Box 202.

EXPERIENCED A.R.I.B.A., London, offers spare-time assistance at home up to 20 hours per week; phone and car available. Box 203.

PROBATIONER, R.I.B.A., age 26, ex-Service man, neat and expeditious draughtsman, requires position immediately (London area); can provide references if required. Box 204.

ARCHITECTURAL ASSISTANT requires progressive position in Architect's and Surveyor's office; age 34; with much experience in schools, hospitals, and domestic architecture; also surveys and levels. Box 205.

Other Appointments Vacant

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

SHORTHAND-TYPIST required for Architects' and Town Planners' Office, in West End. Please apply, stating experience and salary required, to Box 960.

Other Appointments Wanted

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

SECRETARY-SHORTHAND TYPIST requires post with London Architect; several years' experience in Architects' offices, including accounts; good references. 972

For Sale

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

ELECTRICITY FOR COUNTRY HOUSE.—Complete equipment for Sale, including 20 h.p. Oil Engine, Electric Generator and Booster Set, Switchboard, Battery, and Motors, 250 volts supply; in good running order; inspection.—Apply Baily, Grandy & Barrett, Ltd., Electrical Engineers, Cambridge. 877

PAIR of Wrought Iron Gates; width 9 ft.; £15. Box 977.

INSTRUMENTS, in leather case, complete: Two Celluloid Set Squares; one Tee Square, mahogany, with ebony edge, double elephant; one Small Board, half Imperial, mahogany edge; all in good condition. What offers? Box 963.

THERMOSTATIC Mixing Valves for disposal: Walker Crossweller, type RK45, 40 off. Walker Crossweller, type RK30, 14 off. Walker Crossweller, type RK25, 50 off. Gummars, 1 in., 1 off.; 1½ in., 1 off. Crosby, 2 in., 1 off.; 2½ in., 1 off. Offers in writing to the Police Engineer, New Scotland Yard, S.W.1. 981

Miscellaneous

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

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 53, Gt. Marlborough St., W.1. Gerrard 4223-4224-4225.

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

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

FINANCE.—Ample supply of surplus funds available for Building Estates covering part purchase cost of land; then building finance; then permanent mortgage on very liberal scale. Chas. B. Buxton, Ltd., Local Authorities Loans Brokers, 9, Clements Lane, Lombard Street, E.C.4 747

WANTED.—One set of "Arts & Matters Graphiques." Please reply to Box 6.

ARCHITECT, with practical experience in industrial design and factory production method, desires to co-operate with manufacturers in return for modest retaining fee. Box 163.

REG. ARCHITECT, A.R.I.B.A., Dip. T.P., age 30, desires free lance work in own home; fees by arrangement. Box 900.

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

QUALIFIED Structural Engineer and Chartered Surveyor, expert in design of modern industrial buildings in R.C., steel, estimating, quantities, expert in modern materials, design of railway sidings, foundations, specifications, surveys, wishes to join firm of modern Architects on co-operative basis. Box 961.

SECRETARIAL and Shorthand-Typing done by lady experienced in Architectural and Surveying offices; hourly flat rate engagement for required number of hours daily or weekly; work usually done in own office, but could arrange for attendance at client's offices in London. Apply Box 966.

CHARTERED SURVEYORS and **ESTATE AGENTS**, with general London practice, wish to hear from Architect in private practice who is prepared to carry out direct for clients works comprising alterations and additions, conversions, war damage reinstatements, etc. Please write to Box 968.

TYPING.—Assistance required for Specifications, etc., in own time; preferably used to Architect's practice. Box 970.

OFFICE Accommodation (850 sq. ft.) available February; Sackville Street, W.1. Apply Box 979.

YOUTH, studying Architecture, London, seeks board. Write West, Wolverton Hall, Pershore, Worcs. 206

Educational Announcements.

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

R.I.B.A. QUALIFYING EXAMINATIONS. Mr. C. W. Box, F.R.I.B.A., M.R.San.I. Courses of Correspondence and Personal in Studio, 115, Gower St., London, W.C.1 (Tel.: Huston 3906), and at 23, St. James's St., Derby (Tel.: 45648).

R. I.B.A. and T.P. INST. EXAMS. Private Courses of Tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, 151, West Heath Road, N.W.3. Tel.: SPR 5319. 415

£100

EMBLEM DESIGN

will be awarded for the selected by the Co-operative Union Ltd., as being most suitable for use on co-operative societies' premises, vehicles, goods, publications, etc.

Conditions and entry forms obtainable from the General Secretary, Co-operative Union Ltd., Holyoake House, Hanover Street, Manchester 4.

Established over 100 years.

J. W. GRAY & SON LTD.

"FRANKLIN HOUSE," 37, RED LION ST. HIGH HOLBORN, LONDON, W.C.1.

Phone: CHANCERY 8701 (2 lines).

LIGHTNING CONDUCTORS

Manufacturers and Erectors

GEORGE ELLISON

LIMITED

PERRY BARR BIRMINGHAM 22B

Makers of reliable electric switchgear for mains supply and electric motor control

"COSMO" EJECTORS

FOR FILLING VATS, KIERS, TANKS, CISTERNS.

LIFTING WATER FROM WELLS, SUMPS, CELLARS.

HOLDEN & BROOKE, LTD. MANCHESTER, 12

66, VICTORIA ST., LONDON, S.W.1

STEELWORK BY SHARMAN & SONS

SWAN WORKS, HANWORTH, MIDD.

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

Maxheat Oval Tubular Electric Heaters
In single lengths or in multiple lengths for all standard voltages. Schemes submitted without obligation.
THE WARDLE ENGINEERING CO. LTD.
OLD TRAFFORD MANCHESTER 6

MODELS

ESTAB. 1883

John B. THORP

FOR TOWN PLANNING PUBLIC BUILDINGS ESTATES and INTERIORS
98 GRAYS INN ROAD, W.C.1
TELEPHONE: HOLBORN 1891

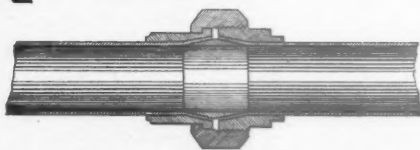
WHITE FACING BRICKS

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS BULWELL 78237-8

M. McCARTHY & SONS, LTD. BULWELL NOTTINGHAM

"KONGRIP"



COMPRESSION FITTINGS FOR LIGHT GAUGE COPPER TUBES

The fitting for hot and cold supplies, low pressure steam and exhaust leads. Makes secure joint, unaffected by extremes of temperature, pressure or vibration. The extended sleeve supports the tube and the assembled joint does not offer obstruction to free flow. Simple to instal and take apart again.

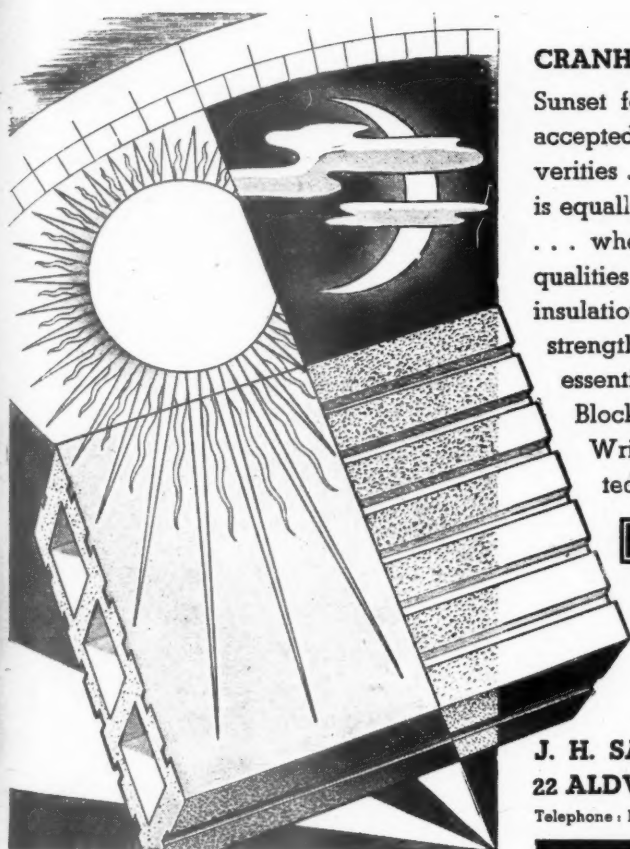
Catalogue and Sample on application.

Wm. BARTON & SONS, Ltd.

11 FORREST ROAD, EDINBURGH, 1:

TELEPHONE: 31591

TELEG.: STERILIZE



CRANHAM—A NEW WORD FOR DEPENDABILITY

Sunset following sunrise . . . so dependable that it is accepted as common-place . . . yet one of the eternal verities . . . and the dependability of Cranham Blocks is equally axiomatic. For post-war reconstruction jobs . . . where dependability will be a first priority . . . qualities of fire and damp resistance, of heat and sound insulation, of lightness combined with great mechanical strength, and a perfect key for plastering, will be essential . . . in a word, the qualities of Cranham Blocks!

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

SANKEY'S

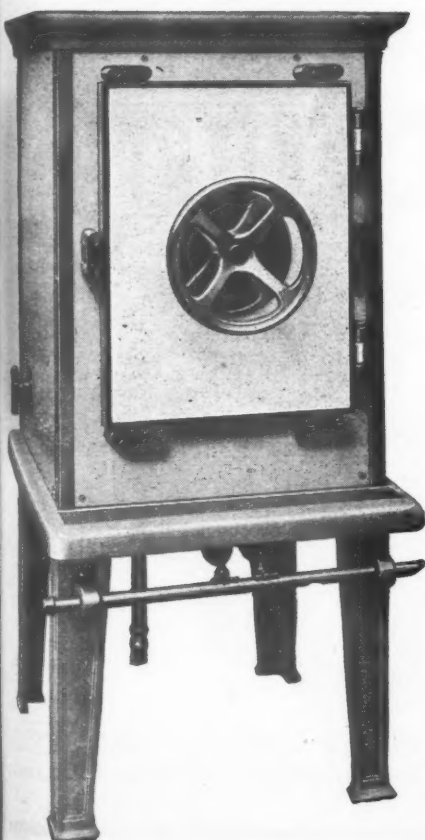
CRANHAM BLOCKS

J. H. SANKEY & SON LTD.

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

Telephone: HOLborn 6949 (14 lines)

Telegrams: Brickwork, Estrand, London



AN "ALLIED" UNIT

GAS STEAMING OVEN

Supplied with Single or Double Compartments. Constructed of Cast Iron and Mild Steel. Steam Generator in bottom of compartment heated by powerful gas burner and water fed from automatic supply cistern at side. Side hinged doors, fitted steam tight and locked by means of bolts operated by volute screw and handwheel.

The "Allied" Service covers every requirement from the single unit to the complete cooking installation. In addition to gas and electric units, we can also supply installations for steam.

ALLIED IRONFOUNDERS LTD.

HEAVY COOKING DEPARTMENTS

Mortimer House,
37-41 Mortimer Street, London, W.1

10 Lillie's Chambers;
39 Albion Street, Leeds



WORKS: FALKIRK

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Aacrington Brick Co.	ii	Easco Electrical Service	1	Morris Singer Co.	PAGE
Adams, Robert (Victor), Ltd.	xviii	Electrolux, Ltd.	liv	National Federation of Demolition Con-	
Air Conditioning & Engineering, Ltd.	xiii, iv	Ellison, George, Ltd.	xxxviii	tractors	
Allied Ironfounders, Ltd.	vii	English Joinery Manufacturers' Assoc.	xlv	Negus, W. & M., Ltd.	ii
Aluminium Development Assoc.	xlviii	Ewart & Son, Ltd.	xlv	Newsum, H., Sons & Co., Ltd.	xvii
Aluminium Union, Ltd.	xxiv	Flexo Plywood Industries, Ltd.	xlviii	North Wales Slate Quarries Assoc.	
Anderson, C. F., & Sons, Ltd.	lvii	Fordham Pressings, Ltd.	xlviii	Orlitt, Ltd.	xvii
Anderson, D., Son, Ltd.	xxxvi	Frankl Compressed Pile Co., Ltd.	xlviii	Parnall, George, & Co., Ltd.	xvii
Architects' Benevolent Society	xxxvi	Freeman, Joseph, Sons & Co., Ltd.	xlviii	Patchett & Co., Ltd.	xvii
Ascot Gas Water Heaters, Ltd.	xxxvi	Froy, W. N., & Sons, Ltd.	xlviii	Pickerings, Ltd.	xvii
Ashwell & Nesbit, Ltd.	xxxvi	Gray, W. H., & Son, Ltd.	xlviii	Positive Flow Ventilators, Ltd.	xvii
Automatic Telephone & Electric Co.,	xxxvi	Greenwood's & Airvac Ventilating Co.,	xlviii	Prodorite, Ltd.	xvii
Ltd.	xxxvi	Ltd.	xlviii	Proved & Producing Properties, Ltd.	xvii
Baldwin, Son & Co., Ltd.	ii	Guest, Keen & Nettlefolds, Ltd.	xlviii	Pyrene Co., Ltd.	xvii
Barton, Wm., & Sons, Ltd.	liv	Gyproc Products, Ltd.	xlviii	Radiation, Ltd.	xvii
Bath Cabinet Makers & Artcraft, Ltd.	xxx	Haden, G. N., & Sons, Ltd.	xlviii	Robinson & Kershaw, Ltd.	xvii
Belling & Co., Ltd.	xlv	Hall, Matthew & Co., Ltd.	xlviii	Romuk, Ltd.	xvii
Birmetals, Ltd.	xlv	Hammond & Champness, Ltd.	xlviii	Ross, S. Graham, Ltd.	xvii
Biro Pen	xlv	Harvey, G. A., & Co. (London), Ltd.	xlviii	Rowson, Drew & Clydesdale, Ltd.	xvii
Blackburn, Thomas, & Sons, Ltd.	xlv	Henderson, P. C., Ltd.	xlviii	Sadd, John, & Sons, Ltd.	xvii
Booth, John, & Sons (Bolton), Ltd.	xlv	Hickman, Ltd.	xlviii	Sankey, J. H., & Son, Ltd.	xvii
Braby, Fredk., & Co., Ltd.	xlv	Hobdell Engineering Co., Ltd.	xlviii	Scaffolding (Gt. Britain), Ltd.	xvii
Braithwaite & Co., Engineers, Ltd.	xlv	Holden & Brooke, Ltd.	xlviii	Secomastic, Ltd.	xvii
Bratt Colbran, Ltd.	xlv	Horton Mfg. Co., Ltd.	xlviii	Shanks & Co., Ltd.	xvii
Briegs, William, & Sons, Ltd.	xlv	Horseley Bridge & Thomas Pigott, Ltd.	xlviii	Sharman & Sons	xvii
British Electrical Development Assoc.	xlv	Ideal Boilers & Radiators, Ltd.	xlviii	Sieglwart Fireproof Floor Co., Ltd.	xvii
British Insulated Callenders' Cables, Ltd.	xlv	Imperial Chemical Industries, Ltd.	xlviii	Smiths Fireproof Floors, Ltd.	xvii
British Steelwork Assoc., The	xlv	International Correspondence Schools ..	xlviii	Smith, Stanley, & Co.	xvii
Broadcast Relay Service, Ltd.	xlv	Interoven Stove Co., Ltd.	xlviii	Smith's English Clocks, Ltd.	xvii
Bromsgrove Guild, Ltd.	xlv	Jicwood, Ltd.	xlviii	Spiral Tubes & Components Co., Ltd.	xvii
Bull Motors (E. R. & F. Turner, Ltd.)...	xlv	Jones, Saml., & Co., Ltd.	xlviii	Sterling Textile Industries, Ltd.	xvii
Burn Bros. (London), Ltd.	xlv	Kerner-Greenwood & Co., Ltd.	xlviii	Sundaala Board Co., Ltd.	xvii
Cargo Fleet Iron Co., Ltd.	xlv	Kerr, John, & Co. (Mfr.), Ltd.	xlviii	Tentest Fibre Board Co., Ltd.	xvii
Carlisle Electrical Mfg. Co., Ltd.	xlv	Ketson Portland Cement Works	xlviii	Thompson Beacon Windows, Ltd., John	xvii
Caston & Co., Ltd.	xlv	King, George W., Ltd.	xlviii	Thornborough & Son (Manchester), Ltd.	xvii
Catalin, Ltd.	xlv	King, J. A., & Co., Ltd.	xlviii	Thornton, A. G., Ltd.	xvii
Cellon, Ltd.	xlv	Kingfisher, Ltd.	xlviii	Thorp, John B.	xvii
Cement Marketing Co., Ltd.	xlv	Lancashire Dynamo & Crypto, Ltd.	xlviii	Trussed Concrete Steel Co., Ltd.	xvii
Central Institute of Art and Design.	xlv	Lenscrete, Ltd.	xlviii	Turners Asbestos Cement Co., Ltd.	xvii
Clark & Fenn, Ltd.	xlv	Limmer & Trinidad Lake Asphalt Co.	xlviii	Tyler, Ltd.	xvii
Colt, W. H. (London), Ltd.	xlv	Lloyd Boards, Ltd.	xlviii	Underfeed Stoker Makers' Assoc.	xvii
Co-operative Union, Ltd.	xlv	Lockerbie & Wilkinson (Tipton), Ltd.	xlviii	Uni-Seco Structures, Ltd.	xvii
Crittall Manufacturing Co., Ltd.	xlv	Maxrita Drafting Machines, Ltd.	xlviii	United Steel Companies, Ltd., The	xvii
Crittall, Richard, & Co., Ltd.	xlv	McCarthy, M., & Sons, Ltd.	xlviii	Val de Travers Asphalt Paving Co., Ltd.	xvii
Crompton Parkinson, Ltd.	xlv	Magnet Joinery Co., Ltd.	xlviii	Vulcan Products, Ltd.	xvii
Cutting, R. C., & Co., Ltd.	xlv	McNeill, F., & Co., Ltd.	xlviii	Vulcanite, Ltd.	xvii
Dart Co. (Novoid), Ltd.	xlv	Mallinson, William, & Sons, Ltd.	xlviii	Wardle Engineering Co., Ltd.	xvii
Doulton & Co., Ltd.	xlv	Metropolitan-Vickers Electrical Co., Ltd.	xlviii	Ware, W. C., & Sons, Ltd.	xvii
Dreadnought Fireproof Doors (1930),	xlv	Midland Woodworking Co., Ltd.	xlviii	Wates, Ltd.	xvii
Ltd.	xlv	Mills Scaffold Co., Ltd.	xlviii	Wilkinson Rubber Linatex, Ltd.	xvii
Dreyfus, A., Ltd.	xlv	Milners Safe Co., Ltd.	xlviii	Windshields of Worcester	xvii
Dzus Fastener (Europe), Ltd.	xlv	Mint, Birmingham, Ltd., The	xlviii	Wood Wool Building Slab Mfrs. Assoc.	xvii
				Workers' Travel Assoc., Ltd., The	xvii

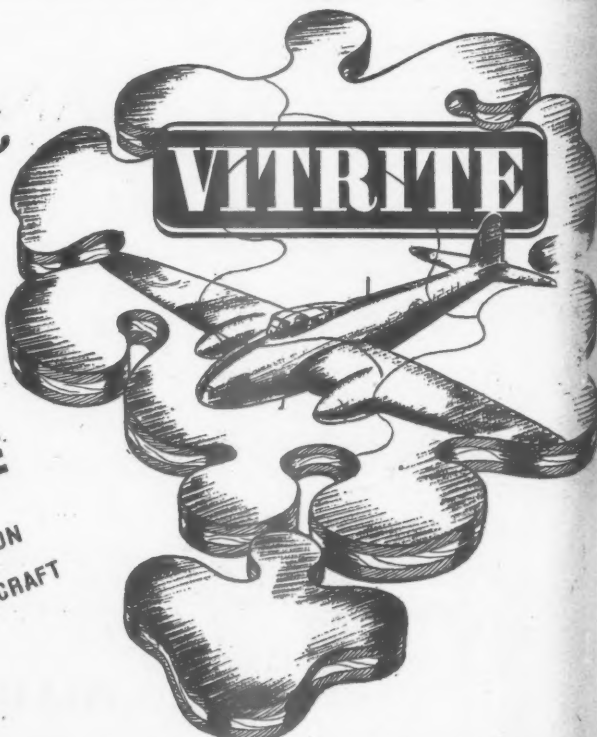
For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property and Land Sales—see pages lii, liii and liv.

GLUE YOUR VENEERED PANELS,
LAMINATIONS, PLYWOOD
& WOOD JOINTS WITH...

VITRITE REGD.
SYNTHETIC RESIN GLUE
USED IN THE CONSTRUCTION
OF THE MOSQUITO AIRCRAFT

STANLEY SMITH & CO

WORPLE ROAD, ISLEWORTH, MIDDLESEX
Phone: HOUslaw 3406 (5 lines) Grams: Stanmith Phone London



PAGE
II
xxii
xli
xxvii
xiv
xv
xi, iv
xxxvii
liv
iv
v
vii
ii
lii
vi
ix
viii
xx
xix
xxx
lii
xxx
xxx
xxx



MIDOL
na London