



The perfect finish

It takes your mind back, doesn't it; back to summer days when the finish of a race assumed a large importance. Well, we can wait with due patience until the men who steered these craft have helped to write "finis" to a sterner job.

There is another perfect finish—Cerrux, that is appreciated wherever it is used. Today, naturally, it is somewhat restricted for non-essential purposes but we shall be happy to supply you, if we are permitted to do so. CELLON, Ltd., Kingston-on-Thames. Telephone: Kingston 1234.

CERRUX
DECORATIVE FINISHES

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Abbey Building Supplies Co.	—	Franki Compressed Pile Co., Ltd., The	—	Mellowes & Co., Ltd.	—
Accrington Brick Co., Ltd.	—	Frazzi Ltd.	—	Merchant Trading Co., Ltd.	—
Adamite Co., Ltd.	xxii	Freeman, Joseph, Sons & Co., Ltd. ...	xviii	Midland Joinery Works Ltd., The	xxxii
Aga Heat Ltd.	xxvii	Girtings Ferro-Concrete Co., Ltd. ...	xix	Mills Scaffold Co., Ltd.	xxxiv
Aircscrew Co., Ltd., The	—	Gray, J. W. & Son, Ltd.	—	Milners Safe Co., Ltd.	—
Anderson, D., & Son, Ltd.	xxi	Greenwood's & Airvac Ventilating	—	Moler Products Ltd.	—
Anderson, C. F. & Son, Ltd.	—	Co., Ltd.	ii	Oliver, Wm., & Sons, Ltd.	xxx
Architectural Press Ltd.	xxxii	Gyproc Products Ltd.	—	Paragon Glazing Co. Ltd.	xxxiii
Arens Controls Ltd.	xxx	Haden, G. N., & Sons, Ltd.	—	Parsons, C. H. Ltd.	—
Austins of East Ham Ltd.	viii	Hammond & Champness Ltd.	—	Penfold Fencing Ltd.	—
Bell, A., & Co., Ltd.	—	Harris & Sheldon Ltd.	—	Pickerings Ltd.	xiii
Birmabright Ltd.	xviii	Helliwell & Co., Ltd.	ii	P.I.M. Board Co., Ltd.	—
Boulton & Paul, Ltd.	—	Henleys Telegraph Works Co., Ltd.,	—	Radiation Ltd.	xvii
Braby, Fredk., & Co., Ltd.	—	W. T.	—	Reinforced Concrete Association, Ltd.	—
Braithwaite & Co., Engineers, Ltd. ..	vi	Hills Patent Glazing Co. Ltd.	xiv	Ruberoid Co., Ltd., The	xxix
Bratt, Colbran, Ltd.	—	Holden & Brooke Ltd.	—	Rubery Owen & Co., Ltd.	—
Briggs, William & Sons Ltd.	vii	Hopton-Wood Stone Firms Ltd., The	xii	Rustproof Metal Window Co., Ltd. ...	—
British Celanese Ltd.	—	Horseley Bridge & Thomas Piggott,	—	Sadd, John, & Sons, Ltd.	xv
British Paints Ltd.	—	Ltd.	—	Sanders, Wm. & Co. (Wednesbury), Ltd.	—
British Trane Co., Ltd.	—	Hy-Rib Sales	x	Sankey, Joseph & Sons Ltd.	xxxviii
Broadcast Relay Service, Ltd.	—	I.C.I. Metals Ltd.	xxxix	Sankey-Sheldon	—
Brockhouse Heater Co., Ltd.	—	International Correspondence Schools	—	Scaffolding (Great Britain), Ltd.	xxv
Brown, Donald (Brownall) Ltd.	—	Ltd.	—	Sealocrete Products Ltd.	xxxiii
Cable Makers' Association	xxxiv	Jenkins, Robert, & Co., Ltd.	—	Sharman, R. W.	xxx
Callender's Cable & Construction Co.,	—	Johnsons Reinforced Concrete En-	—	Sharp Bros. & Knight Ltd.	iv
Ltd.	—	gineering Co., Ltd.	—	Smith & Rodger Ltd.	ii
Cellactite & British Uralite, Ltd.	—	Jones, Saml. & Co. Ltd.	xxvi	Spiral Tube & Components Co. Ltd.	xxxii
Cellon Ltd.	iii	Kerner-Greenwood & Co., Ltd.	xxiii	Square Grip Reinforcement Co., Ltd.	—
Chance Bros., Ltd.	—	Ketton Portland Cement Co. Ltd.	xxxiii	Stainless Steel Sink Co., Ltd.	xxx
Copper Development Assoc.	—	Laing, John & Son, Ltd.	—	Stuart's Granolithic Co., Ltd.	—
Crittall Manufacturing Co., Ltd.	xvi	Leaderflush Ltd.	—	Sutcliffe, Speakman & Co., Ltd.	—
Crittall, Richard, & Co., Ltd.	—	Lillington & Co. Ltd., George	xiv	Taylor, Woodrow Construction, Ltd.	ii
Dent & Hellyer Ltd.	v	Limmer & Trinidad Lake Asphalte	—	Tentest Fibre Board Co., Ltd.	—
Dufalite Ltd.	xxvii	Co., Ltd.	—	Thornton, A. G., Ltd.	ii
Ellison, George, Ltd.	xxx	McCall & Company (Sheffield), Ltd.	—	Trussed Concrete Steel Co., Ltd.	xxvii
En-Tout-Cas Co. Ltd.	xxxii	McNeill, F., & Co., Ltd.	—	Turners Asbestos Cement Co.	xi
Esavian Ltd.	—	Magnet Joinery Co.	—	Wadsworth, William, & Sons, Ltd. ...	—
Evertaut Ltd.	—	Marley Tile Company Ltd., The ..	ix	Walker, Croswell & Co., Ltd.	xxxix
Expanded Metal Co., Ltd.	—	Mason, E. N. & Sons, Ltd.	—	Ward, Thos. W., Ltd.	xxxiii

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



SHARP BROS. & KNIGHT LTD.

Joinery Manufacturers

BURTON-ON-TRENT

Owing to existing circumstances, we regret we are not in a position to give our Builder and Architect clients that Service to which they have been accustomed in the past.

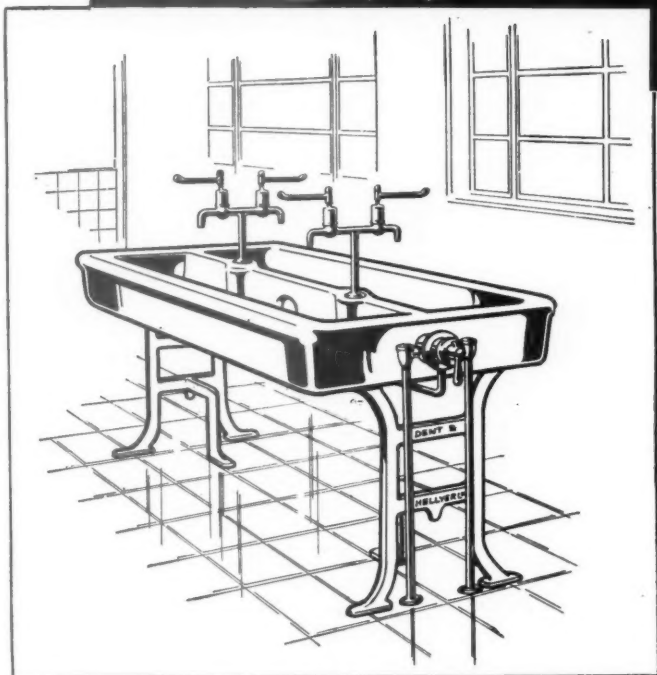
Meanwhile however, we look forward to a return of those happier times which will see the restoration of normal business and Building Conditions.

Phone : Burton-on-Trent 3350.

Telegrams : "Joinery, Burton-on-Trent."

D & H *Specialised*

SANITARY EQUIPMENT



"COMMUNE" SURGEONS' TROUGH LAVATORY for island position in emergency hospital, elbow action valves, delivering water at any desired temperature controlled by D. & H. Thermostatic Valve.

for

**FACTORIES
CANTEENS
FOOD CENTRES
HOSPITALS
AND
ALL GOVERNMENT
CONTRACTS**

D. & H. Equipment covers every conceivable requirement for sanitary appliances, each manufactured to a high standard of efficiency, in the latest modern designs. Speedy deliveries from large stocks are assured, and suggestions for special installations can be developed at once by our technical experts.

POST-WAR PLANNING. Our ample experience of all branches of Sanitary Engineering in war and peace over a period now covering NINE REIGNS AND 20 WARS encourages us to look forward to a useful part in the great work of reconstruction with our contribution of MODERN SANITARY ENGINEERING AND APPLIANCES.

"ALDWYCH" FACTORY CLOSET SUITE

White glazed inside and buff glazed outside fireclay Closet with "S" and "P" trap, and with plain hardwood inserta seat pads. 2-gallon flushing cistern, painted cast iron, with cover and brackets, valveless syphon, ball valve, brass chain and polished hardwood pull. This specification can be modified to suit requirements.



"ISLAND" FOUNTAIN LAVATORY

White glazed fireclay "Island" ablution fountain lavatory with pedestal foot-operated umbrella spray controlled by universal pedal ring, chromium plated central supply pillar and liquid soap dispensers. Four additional types available; particulars on request.



DENT & HELLYER LTD

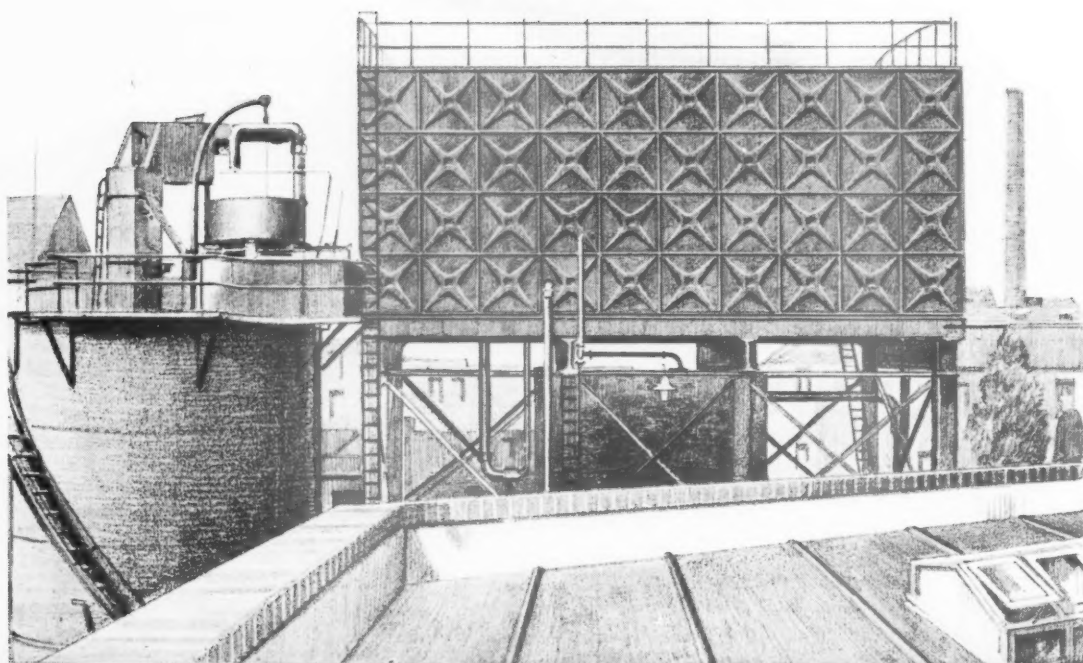
(of Red Lion Square) Offices: 103 KINGSWAY, W.C.2. Tel. HOL 6415

SPECIALISTS FOR OVER 200 YEARS IN SANITARY ENGINEERING



TO ensure an adequate and uninterrupted water supply is the first essential in a modern laundry. The Braithwaite Tank installation shown was specifically designed for this purpose.

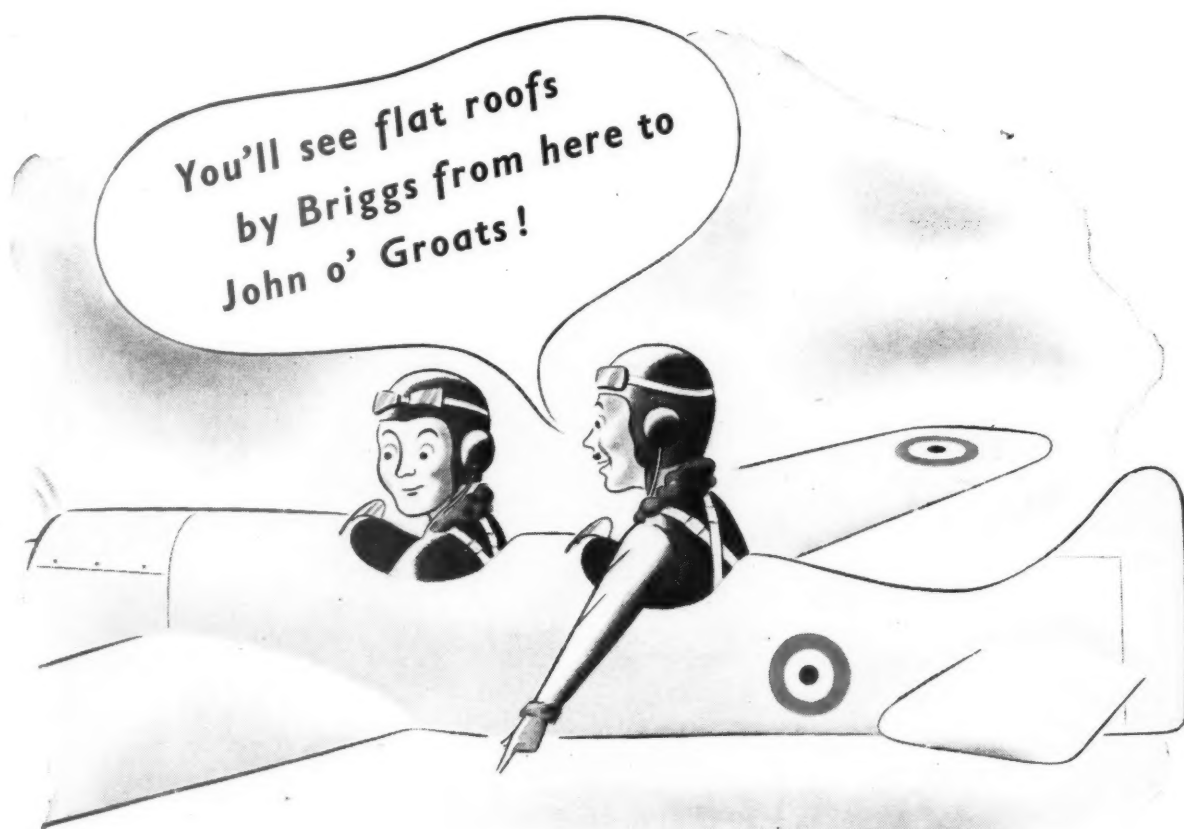
Tanks for every liquid storage requirement are featured in the Braithwaite P.S. Tank brochure. You are invited to apply for a copy.



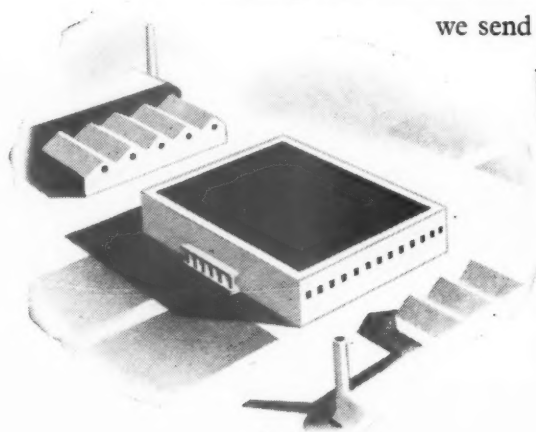
BRAITHWAITE

PRESSED STEEL TANKS

BRAITHWAITE & CO. ENGINEERS LTD. 35 KINGS HOUSE, 10 HAYMARKET, LONDON, S.W.1
Telephone: WHItchall 3993



Architects specify the Briggs "Challenge" Flat Roofing System with absolute confidence. It is dependable, as durable as the building itself, and, whilst it provides strength without weight, gives scope for individuality. There's seventy-five years of experience behind the Briggs weatherproofing materials, which include their "Aqualite" system of waterproofing. This is now used extensively for keeping basements, underground shelters, etc., free from water and damp. Briggs' long experience is especially valuable for dealing with unusual roofing and waterproofing problems — may we send you further details?



William Briggs

AND SONS LTD.

DUNDEE

London: Vauxhall Grove, S.W. 8
Also at Glasgow, Edinburgh, Liverpool, Bristol,
Aberdeen, Norwich

AUSTINS WINDOWS

pre-eminent

yesterday in housing

today in vital work

tomorrow in the

programme of reconstruction

AUSTINS OF EAST HAM LTD • Stormproof Joinery & Mouldings

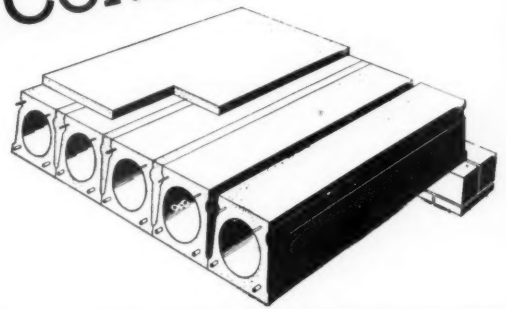
● GRANGEWOOD 3444/8





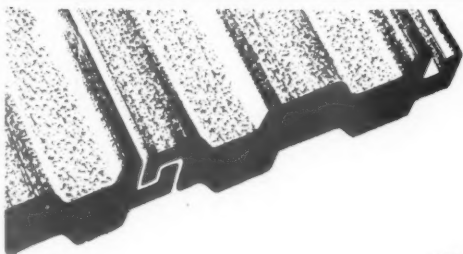
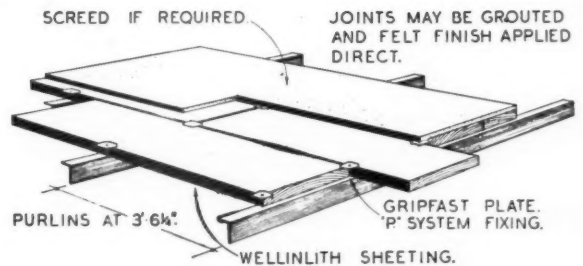
MARLEY "EAGLE" PRECAST CONCRETE UNITS

Insuring easy handling
and rapidity in erection.



As recommended by the
Department of Scientific and
Industrial Research Wartime
Building Bulletin No. 15.A.

LIGHTWEIGHT FACTORY ROOFING



NOTE THE DEEP INTERLOCK



MARLEY ROOFING TILES



THE PLAIN

Size: 10½" x 6½" with full
range of specials.

THE LUDLOW

The lowest cost tile roofing.
Interlocking type. Size:
15" x 9". Weight: 7 to 8 cwt.
per square. Gauge: 11" to
12". No. per square: 12"
gauge, 150; 11" gauge, 165.

THE ROMAN

An economical roof of high
performance and distinctive
appearance. Each tile has
two rolls with solid ends for
eaves tiles. Usually laid with-
out dentil course at ridge.
Size: 16½" x 13½". Weight:
8½ cwt. per square. Gauge:
13½". No. per square: 87.

MANUFACTURERS
OF ALL KINDS OF
PRECAST CONCRETE
PRODUCTS . . .

THE MARLEY TILE COMPANY LTD.

HEAD OFFICE - - - - LONDON ROAD, RIVERHEAD, SEVENOAKS, KENT
Telephone and Telegrams: Sevenoaks 1251. Works throughout the country

HY-RIB is the answer to your centering problem

UTILISE THE
REINFORCING STEEL
AS CENTERING

Hy-Rib is a centering for concrete during construction.

Hy-Rib is a reinforcement for the structural slab.



Above right. Hy-Rib sheets in position ready to receive concrete slab. Tubular scaffold may be used for supporting Hy-Rib if timber is not available.

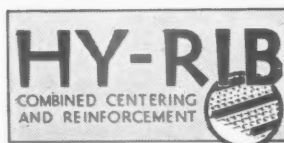
Left. Soffit of slab after striking bearers. Hy-Rib provides 'keyed' surface for plaster.

Over 11,000,000 square feet of HY-RIB has been used in Wartime building

For the guidance of Constructional Staffs we provide working drawings for particular applications of Hy-Rib.

Hy-Rib is unequalled in providing the above facilities and its use reduces labour costs to a minimum.

Hy-Rib is immediately available from stock.



HY-RIB SALES • 6 COLLINGHAM GARDENS • EARLS COURT • S.W.5 'PHONE FROBISHER 8141

ASBESTOS-CEMENT

*Solves this
problem*



The Nation's Need for SHELVING in Nissen Huts

This is one of a series of advertisements designed to show how Asbestos-cement can help to solve an almost infinitely varied range of problems. At present, war-time needs have a monopoly of its service, but when peace comes the manufacturers look forward to extending further its usefulness.



**TURNERS
ASBESTOS
CEMENT CO**

(Branch of Turner & Newall Ltd.)

**TRAFFORD PARK
MANCHESTER 17**



The above sketch shows:
"TURNALL"
Asbestos-cement Shelving
for use in Nissen Huts.

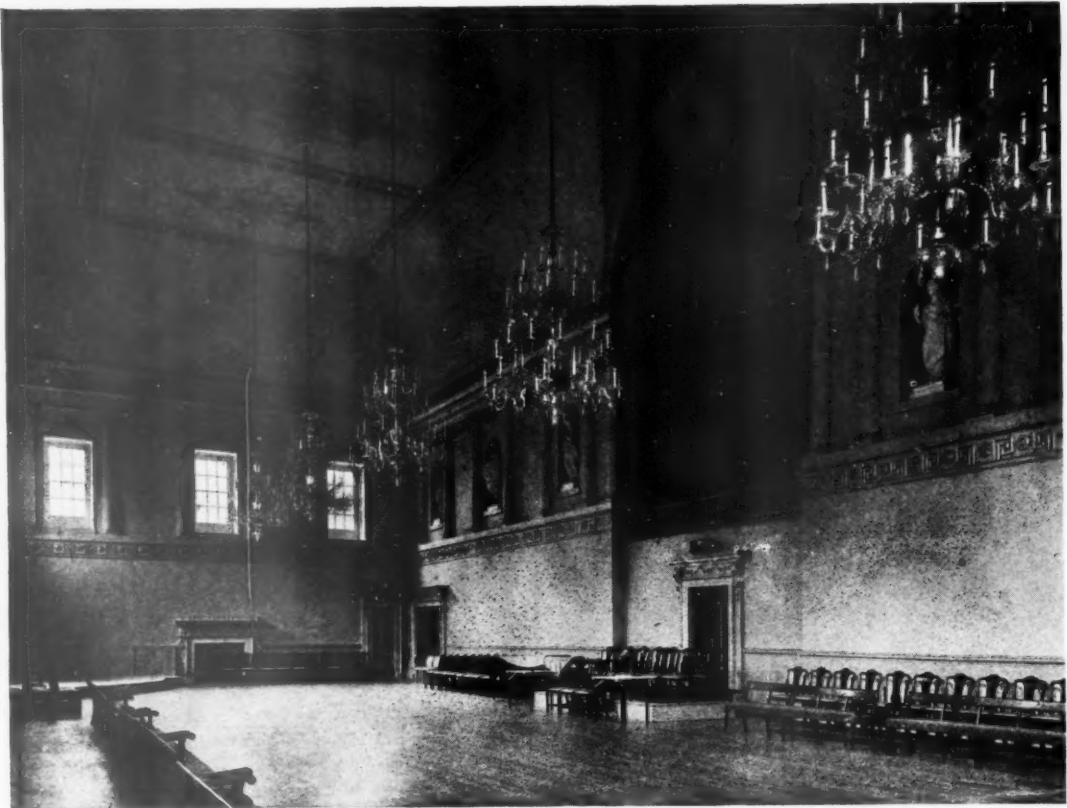


LOVINGLY the sculptor fingers the stone, takes up the old familiar tools and feels the chisel bite into the unbroken surface. While his hands work with steady rhythm, his imagination hurries on to form the image of the completed task. Hopton-Wood, the finest of the British marbles, provides his urge and inspiration.

‘HOPTON-WOOD’

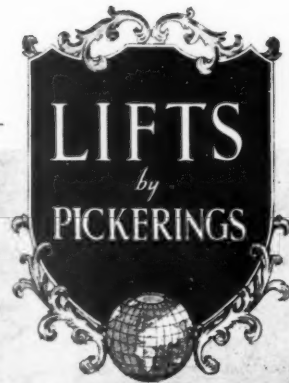
THE HOPTON-WOOD STONE FIRMS LTD., WIRKSWORTH, DERBYSHIRE

and at VICTORIA HOUSE, BLOOMSBURY SQUARE, LONDON, W.C.1. Telephone: Holborn 0895

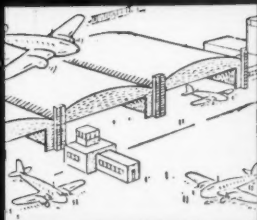


The Assembly Rooms, Bath

When the celebrated Assembly Rooms at Bath, recently damaged by enemy action, were renovated prior to the war the buildings were equipped with lifts by Pickerings. The illustration shows the Ballroom, with minstrels' gallery.



PICKERINGS LIMITED . GLOBE ELEVATOR WORKS . STOCKTON - ON - TEES



Hundreds of Thousands of Gallons of

LILLINGTON'S No. 1 METALLIC LIQUID

have been successfully used
all over the country for

WATERPROOFING CONCRETE

No. 1 Metallic Liquid is unequalled for the waterproofing of Retaining Walls, Foundations, Cement Renderings, Underground Storage Tanks, Concrete Flat Roofs, and for waterproofing and dustproofing concrete floors. Its use accelerates the setting time of concrete, provides rapid hardening, and permanently increases the strength by 33½%.

Tens of thousands of gallons of No. 1 Metallic Liquid have been used by Municipal Authorities for waterproofing Anderson and all other types of air-raid shelters and for waterproofing STATIC WATER TANKS.

Specified for the last 30 years by the Government Departments and the leading Architects and Contractors. Immediate deliveries always given. Specify and use it because—

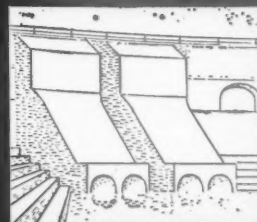
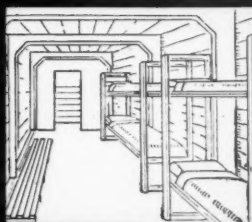
**Lillington's No. 1 Metallic Liquid is
GUARANTEED to Waterproof Concrete**

Lillington's NO. 1 METALLIC LIQUID

From **5/- PER GAL.** [according to quantity] Special Prices for Large Contracts

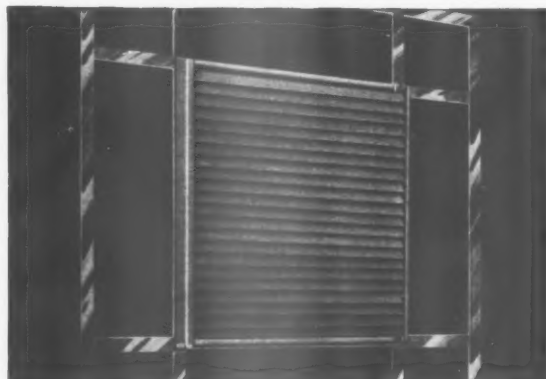
Write for Brochure No. 15

GEORGE LILLINGTON & CO., LTD.
TATE RD., SUTTON, SURREY: Phone: EWELL 1851



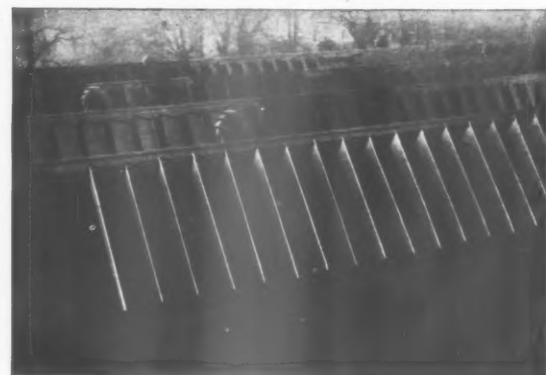
HILLS

BLACKOUT VENTILATORS and STEEL OBSCURATION SHUTTERS



Newham Patent pending

This is the only double Blackout Chevron Ventilator and it is approved by the Home Office. It is fitted by merely removing a pane of glass and drilling four holes in the window frame so that the ventilator when fixed replaces the glass—it can later be removed and the window re-glazed without structural repair. Supplied ready for fixing. Sizes: 12"x12", 12"x18", 18"x12", 18"x18" Double Chevron.



HILLS STEEL OBSCURATION SHUTTERS are designed to give for all practical purposes 85 per cent natural light combined with complete obscuration at night, and a weatherproof protection should glass be broken by concussion or blast. The system is fully approved by the Air Ministry and Ministry of Supply.

HILLS

Descriptive Leaflets on Application.

HILLS PATENT GLAZING COMPANY LIMITED

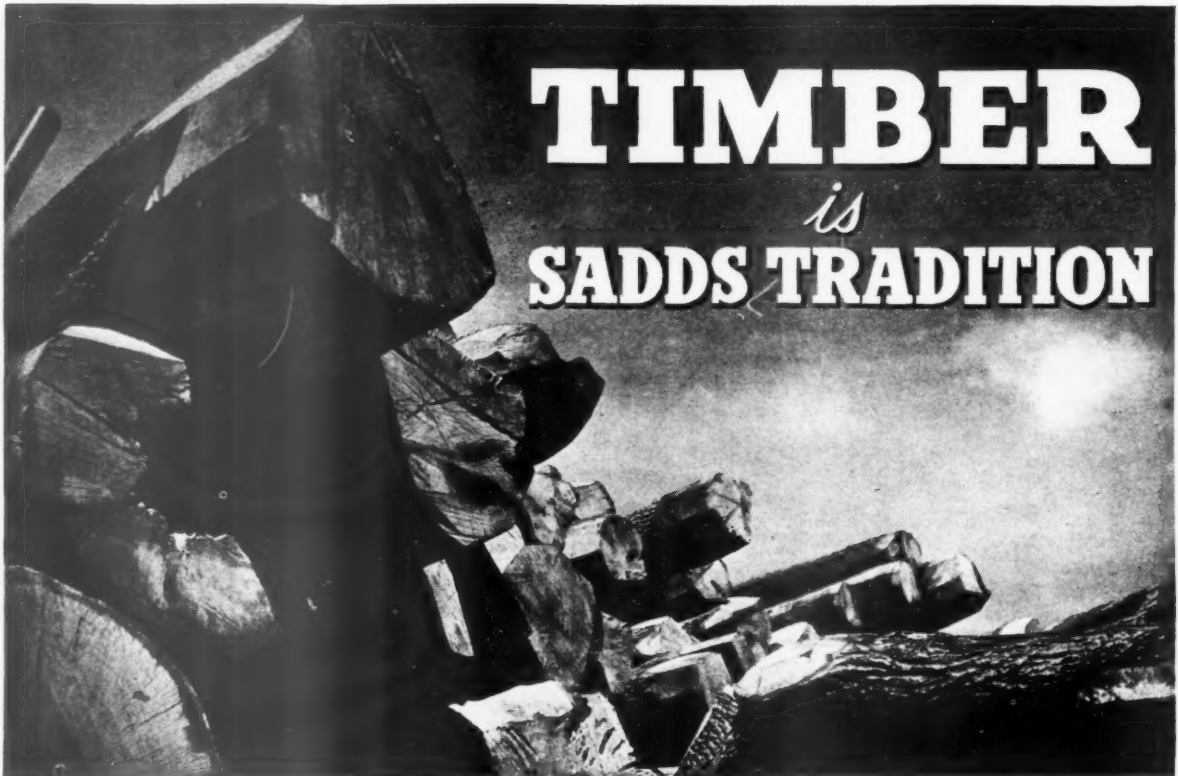
ALBION ROAD, WEST BROMWICH.

PHONE: WEST BROMWICH 1025 (6 lines).

LONDON OFFICE WAR ADDRESS: 24, HEATH HURST ROAD, HAMPSTEAD, N.W.3

PHONE: HAMPSTEAD 0700.

40-W.

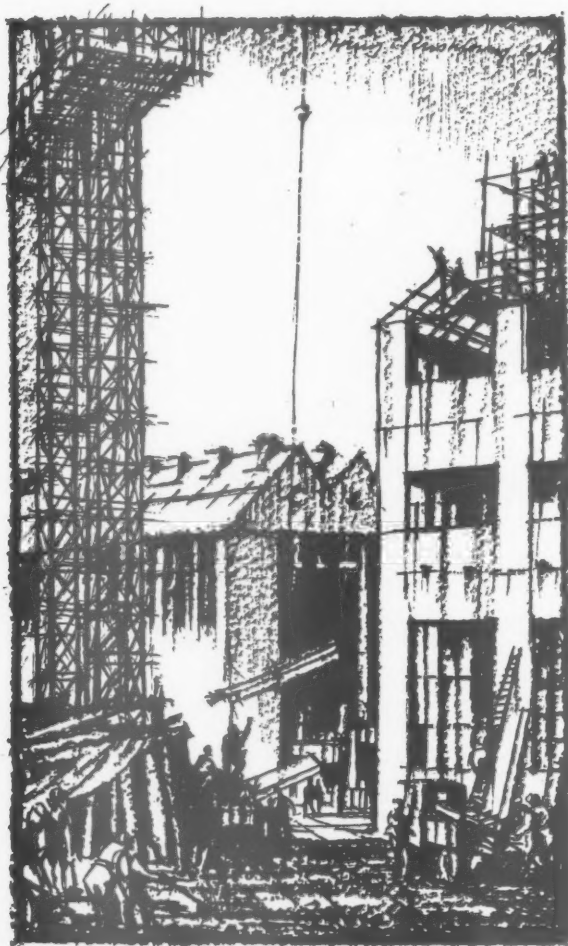


Hair of spunyarn, blood of Stockholm tar and every finger a marlinespike, described the old-time sailorman. But it was adaptability that enabled a shellback to turn his hand to anything aboard a ship. And it is adaptability that has kept Sadds abreast—and often ahead—of the changing days which call for new ways, new products, in unfamiliar materials, and new production records.

Anything in Wood or Wood associated with another material.

JOHN SADD & SONS LTD.
MALDON (Telephone: Maldon 131) ESSEX

CRITTALL WINDOWS



WHEN YOU
REBUILD

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

COOKING

The kitchen is the work-room where food—the motive power of the household—is made ready.

Nourishing and appetising meals require good, well-cooked food ; badly prepared and poorly cooked dishes lose a great part of their value and involve waste of materials, time and money.

The health of the Nation largely depends on the care expended by housewives and cooks engaged in the preparation of the millions of meals needed each day. Is it not essential, therefore, that no effort be spared to equip our homes with the best and most economical appliances available ?

Radiation Ltd. comprises Firms of long experience and with specialised knowledge of all matters concerned with cooking processes. Information as to suitable equipment will be gladly supplied.

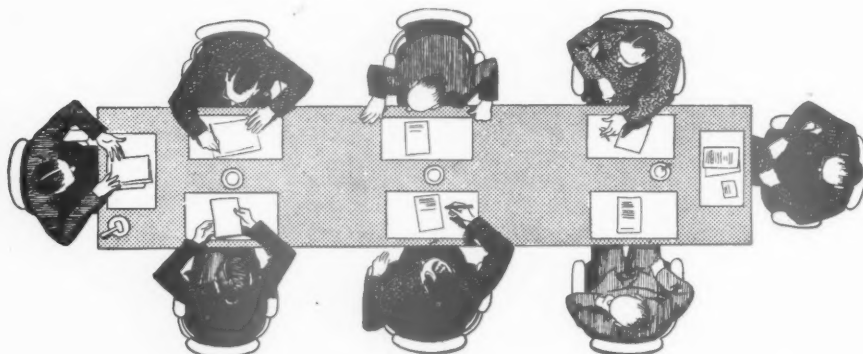
Radiation Ltd

COMPRISING

ARDEN HILL & CO. LTD. ★ FLETCHER, RUSSELL & CO. LTD.
BRATT COLBRAN LTD. ★ NAUTILUS FIRE CO. LTD.
DAVIS GAS STOVE CO. LTD. ★ RICHMONDS' GAS STOVE CO. LTD.
EAGLE RANGE & GRATE CO., LTD. ★ WILSONS & MATHIESSONS, LTD.
JOHN WRIGHT & CO. LTD.

Radiation House, Aston, Birmingham 6 ; and 7 Stratford Place, London, W.1

LIGHT THOUGHTS ON LIGHT ALLOYS



Item on the agenda

*Behold the members of the Board
Who've wrought and fought, who've hemmed and hawed,
And now they've taken their decision
Unanimous without division.
The Secretary writes a minute
To show there's really nothing in it.*

F.O.W.

**But that clerklly man — usually so astute — was in error.
The decision was most important.
The minute read:**

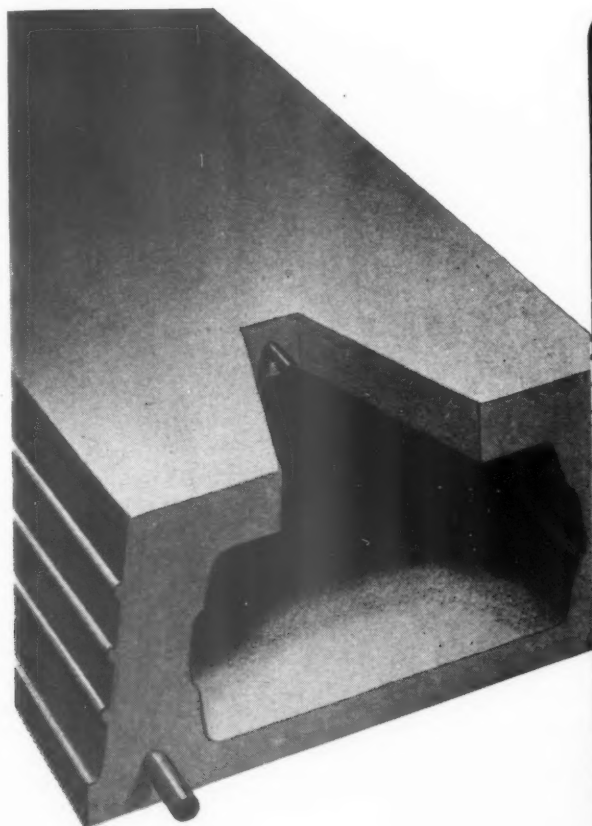
... "Strength is essential and corrosion would be fatal" "It was therefore Resolved that in order to safeguard this important component against corrosion the material specified shall in future be Birmabright"

BIRMABRIGHT

BIRMABRIGHT LTD. • WOODGATE WORKS • QUINTON • BIRMINGHAM, 32

B.W

To speed up essential building...

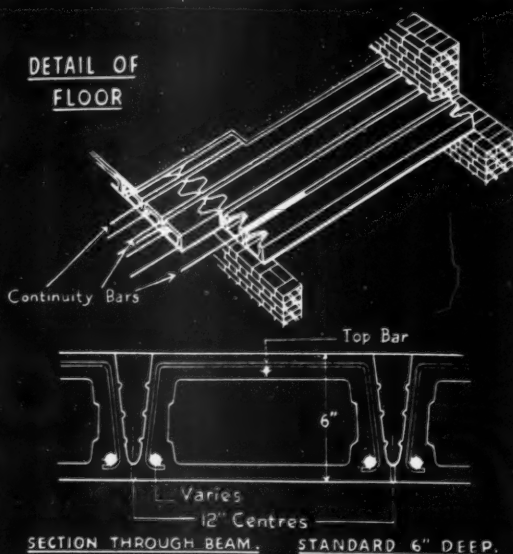


GIRLING'S HOLLOW CONCRETE BEAMS

for Floors & Roofs

SPEED is vital in the erection of essential wartime structures. Easily and quickly installed by semi-skilled labour, GIRLING'S Precast Concrete Floor and Roof Beams form a solid, firm platform upon which following trades can proceed without delay thus reducing building time to the minimum. On recent priority contracts fixing progress at the rate of over 1,000 yards per day was consistently maintained. For speed . . . safety . . . economy . . . specify GIRLING Beams.

DETAIL OF
FLOOR



SECTION THROUGH BEAM. STANDARD 6" DEEP.

NO TIMBER · NO PLASTERING · STEEL & CEMENT REDUCED TO THE MINIMUM

GIRLING'S FERRO-CONCRETE CO., LTD.

SOUTH : Great West Road, Feltham, Middlesex. Phone : HOUnslow 1158.

MIDLANDS : Rothwell, near Leeds. Phone : Rothwell 3174 (Leeds Extension).

SCOTLAND : Southbank Road, Kirkintilloch, Glasgow. Phone : Kirkintilloch 1785



THE ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS'
JOURNAL AND THE ARCHITECTURAL ENGINEER
IS PUBLISHED EVERY THURSDAY BY THE ARCHI-
TECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS'
JOURNAL, THE ARCHITECTURAL REVIEW, SPECI-
FICATION, AND WHO'S WHO IN ARCHITECTURE)
War Address : 45 THE AVENUE, CHEAM, SURREY.

*

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS:
BY POST IN THE UNITED KINGDOM £1 3 10
BY POST TO CANADA £1 3 10
BY POST ELSEWHERE ABROAD £1 8 6
SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING
BOTH THE ARCHITECTURAL REVIEW AND THE
ARCHITECTS' JOURNAL : INLAND £2 6s. ; ABROAD
£2 10s.

SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

*

SINGLE COPIES, SIXPENCE ; POST FREE, EIGHTPENCE.
SPECIAL NUMBERS ARE INCLUDED IN SUBSCRIPTION ;
SINGLE COPIES, ONE SHILLING ; POST FREE, 1s. 3d.
BACK NUMBERS MORE THAN TWELVE MONTHS OLD
(WHEN AVAILABLE), DOUBLE PRICE.

*

SUBSCRIBERS CAN HAVE THEIR VOLUMES BOUND
COMPLETE WITH INDEX, IN CLOTH CASES, AT A
COST OF 12s. 6d. EACH. CARRIAGE 1s. EXTRA

*

War Address : 45 The Avenue, Cheam, Surrey
TELEPHONE : VIGILANT 0087-9 (3 LINES)

The Editor will be glad to receive MS. articles
and also illustrations of current architecture in this
country and abroad with a view to publication.
Though every care will be taken, the Editor cannot
hold himself responsible for material sent him.

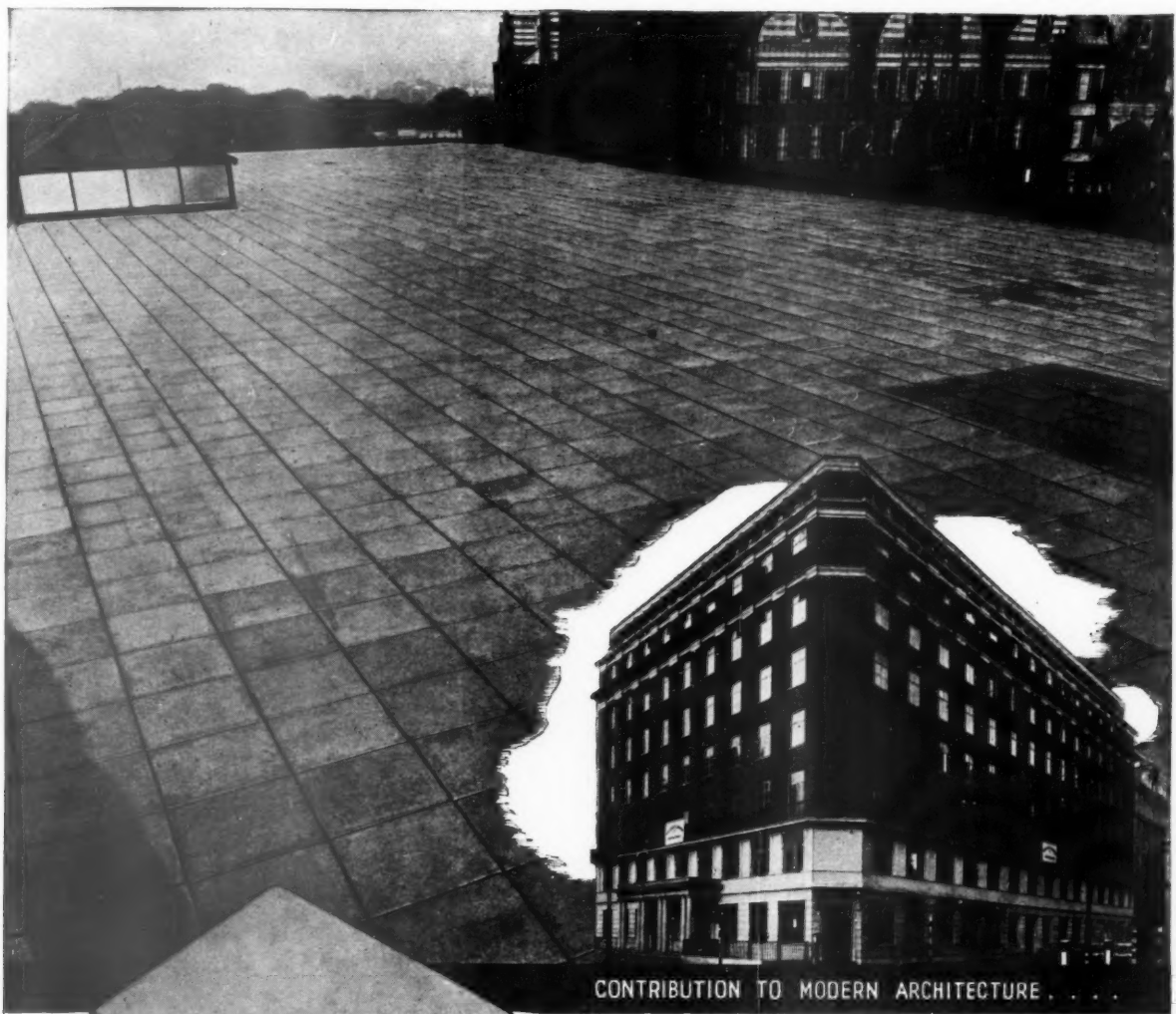
THURSDAY, SEPTEMBER 17, 1942. NUMBER 2486 : VOLUME 96

PRINCIPAL CONTENTS

News	177
Creator of the First Unit Exhibition	178
This Week's Leading Article	179
Notes and Topics	180
<i>Astragal's Notes on Current Events</i>	
Letters from Readers	182
Waterloo Bridge	183
Information Sheet	facing page 184
<i>Structural Steelwork (877)</i>	
Three Exhibitions	185
Detachable Unit Exhibition Stand : Designed by John Grey	186
Mobile Kitchen : Designed by J. Fraser Reekie	188
Societies and Institutions	190
Information Centre	192

The fact that goods made of raw materials in short supply
owing to war conditions are advertised in this JOURNAL
should not be taken as an indication that they are necessarily
available for export.

Owing to the paper shortage the JOURNAL, in common with all
other papers, is now only supplied to newsagents on a "firm
order" basis. This means that newsagents are now unable to
supply the JOURNAL except to a client's definite order.



CONTRIBUTION TO MODERN ARCHITECTURE

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



THERMOTILE
Insulated
PROMENADE ROOFING



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

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



ST. ALBANS, WOOD STREET, CITY—a Gothic church with a Wren steeple. An apse, by Sir Giles Gilbert Scott, was added in the last century. This view is seen from the basement of the bombed building.

For the reconstruction, use— • “REDALON” Liquid • “ATLAS WHITE” Cement • “BULL DOG” Clips • “ELLICEM” Cement Paint • “COLEMANOID” Waterproof and Hardener • “ALUNDUM” Non Slip Products • “ADAMITE” Mixture.

The Adamite Company Ltd., Head Office: Manfield House, Strand, London, W.C.2

TEMple Bar 6233.

NOTE: The above picture is one of a series of drawings by Dennis Flanders. We have a very limited number of reproductions, printed on art paper and bearing no advertising matter. A Copy will be sent you free and post free on request.

In common with every other periodical and newspaper in the country, this JOURNAL is rationed to a small proportion of its peace-time requirements of paper. This means that it is no longer a free agent printing as many pages as it thinks fit and selling to as many readers as wish to buy it. Instead a balance has to be struck between circulation and number of pages. A batch of new readers may mean that a page has to be struck off, and conversely a page added may mean that a number of readers have to go short of their copy. Thus in everyone's interest, including the reader's, it is



important that the utmost economy of paper should be practised, and unless a reader is a subscriber he cannot be sure of getting a copy of the JOURNAL. We are sorry for this but it is a necessity imposed by the war on all newspapers. The subscription is £1 3s. 10d. per annum.

from AN ARCHITECT'S Commonplace Book

THE ROW ABOUT THE GOVERNMENT BUILDINGS IN WHITEHALL

Ruskin's enthusiasm for the Gothic Revival did not last long . . . During the fight between Gilbert Scott and Palmerston, for example, he was believed to be the leader on the Gothic side. 'Above and beyond all,' wrote the *Daily Telegraph*, 'it (the controversy) is a godsend, a windfall, an apocalypse to Mr. Ruskin;' his works were quoted in Parliament, and Gilbert Scott justified his final submission to the classical party with the words, 'Even Mr. Ruskin told me that I had done quite right.' Fortunately for him, Scott had not seen a letter which contains Ruskin's feelings on this controversy and on the Revival generally. 'Nice, sensible discussion you're having in England there about Gothic and Italian, aren't you? And the best of the jest is that, besides nobody knowing which is which, there is not a man living who can build either. What a goose poor Scott (who will get his liver fit for a *pate de Strasbourg* with vexation) must be not to say at once he'll build anything! If I were he, I'd build Lord P. an office with all the capitals upside down, and tell him it was in Greek style, inverted to express typically Government by Party. Up to-day, down to-morrow.

From the Gothic Revival by Kenneth Clark.

was headed by Alderman C. W. Gascoigne, Chairman of the Housing Committee.

The Living in Cities Exhibition and Homes to Live In Exhibition, both organized by the British Institute of Adult Education, are touring the following towns.

Living In Cities Exhibition: Cardiff, National Museum of Wales, Oct. 1-Nov. 1; Gravesend, Oct. 10-24, Lecture by Mr. A. Collingridge, Oct. 10, at 6.30 p.m.; Y.M.C.A. Cheltenham, Oct. 12-Nov. 30. Coseley, Oct. 24-Nov. 7. Homes to Live In Exhibition: Bromley, Oct. 3-17, Orpington, Oct. 24-Nov. 7.

★
A gun factory which six months ago stood in London has been dismantled and shipped piece by piece to the United States, Mr. Edward Stettinius, Lease-Lend administrator, discloses. It is easier, he states, to ship the factory than ship guns.

Asked in Parliament by Mr. Bosson about the plans and proposals for the post-war revision of the lay-out of London, and when M.P.s would be permitted to see them, Mr. Hicks, Parliamentary Secretary, MOWP, said he assumed that reference was being made to the area of the Corporation of the City of London and the London County Council.

The Minister understood that these authorities had provisional plans for redevelopment in an advanced stage of preparation, but he could not say when they would be completed. The question when and by whom such provisional plans might be inspected was for the authorities themselves to determine.

★
The R.I.B.A. Architectural Science Board has organised a course of lectures on Recent Developments in Building Science affecting Architects. Three groups of four lectures each, free to all, are being arranged for the winter months. The first four lectures will be held at the R.I.B.A. on

NEWS

The Minister of Health, Mr. Ernest Brown, accompanied by Mr. George Hicks, Parliamentary Secretary, MOWP, has received representations from a deputation from the Sheffield City Council regarding preparatory action under war conditions for the resumption of the Council's housing pro-

gramme. Arrangements were discussed to expedite the examination of the proposals so that there would be no avoidable delay when it became possible to restart house building. Mr. Brown and Mr. Hicks welcomed the Council's action in approaching the Government, and indicated that they would look forward to similar action by other local authorities. The deputation was introduced by Mr. Fred Marshall, M.P., and



Creator of First Unit Exhibition

"That's the bag I like," says Mr. John Grey, F.R.I.B.A., at the Design Round the Clock Exhibition. He is talking to Miss Marjorie Morrison, who assisted him in devising the exhibition for the D.I.A. Mr. Grey is a member of the Council of the D.I.A., and Miss Morrison, editor of the News Sheet and librarian, has taken over the secretarial work of the Association for

the war period. The theme of the exhibition is the life of a normal family, illustrating their daily contact with design. The exhibition screens are shown in lightweight detachable stands; each panel is detachable and can be slipped out of the frame and replaced by a new one. The stands were designed by Mr. Grey. A working drawing of one of them appears on page 186.

two consecutive Saturday afternoons, October 10 and 17. The Board particularly wishes to bring in architects serving with the forces.

The lectures will be given by leading authorities and special care is being taken that they shall deal with the various subjects discussed in a practical manner so that the course may give those who attend it a realistic picture of the latest technical advances. Ample time will be reserved for discussion. The course is being arranged with the co-operation of the Building Research Station and other interested Government Departments and the military authorities. Anyone who hopes to attend and who writes to the Secretary of the A.S.B. Lectures Committee (Mr. Denis Poulton, F.R.I.B.A.) at the R.I.B.A., will be sent a full syllabus as soon as it is produced. Further details are given on page 190.

In the House of Commons, Mr.

Bossom asked the Parliamentary Secretary, MOWP, whether he could state the number of places that were being provisionally allowed for members in the sketches that were being prepared of the restored Chamber for his Majesty's Commons on the main floor level; and how was this number decided upon.

Mr. Hicks: Survey and plans have been made of all the information available of the Chamber as it existed before the damage occurred. Certain very preliminary documents have been prepared, but there are no sketch plans in existence which are intended to show the number of places to be provided or any drawings of the proposed rebuilding which have received sufficiently advanced consideration to be regarded as a definite proposal. Mr. Bossom said that such plans were in existence and could be seen, and asked how

the number of seats—over 200 more than in the former Chamber—had been obtained. Mr. Hicks said that what had been recently drawn up were reproductions on a uniform scale of reseating plans prepared by Sir Charles Barrie in approximately 1860, Mr. E. M. Barrie in approximately 1890, and Sir John Taylor in 1893.

Six of London's eight new deep tunnel air raid shelters are practically ready for use. Each of the eight shelters will hold just over 8,000 people. Four shelters are sited to the north of the river and four south, and all are constructed below tube stations. Four canteens and two medical aid posts, each with an examination room, a sick bay and an observation room are provided. The tunnels are mechanically ventilated and

lavatories and cold water wash basins are installed. The construction of the shelters is being undertaken by the L.P.T.B. as agents of the Ministry of Home Security and the work is being directed, in collaboration with the Chief Engineer of the Ministry by two firms of consulting engineers.

★★

The Building Centre, still very much alive, has moved to 23, Maddox Street, W.1, the old R.I.B.A. building. Tel. Mayfair 2128.

This is the story of a typical 1942 building job; the outcome of a visit of the Minister of Information and the Minister of Works and Planning to Salisbury on Saturday, August 29, to determine where a social centre for American troops on leave could be made available immediately.

The two Ministers looked around and decided to take over a partly constructed store building. Instructions were given for plans to be prepared at once, and a staff, working throughout Saturday night had them completed by the following day, when they were passed and put into operation. The workmen started on the Monday and the job began. At the end of that week a large floor had been converted, temporarily roofed and divided into a number of rooms. The snack bar counter was fixed, coffee percolators and boilers fitted, plumbing, including water supply and main drainage, well on the way and the black-out curtains hung. Late on September 9 the workmen filed out having completed the American Red Cross Canteen in ten days, three days under the estimated schedule.

★

At a recent meeting of the Executive Committee of the London Master Builders' Association a resolution was passed welcoming the publication of the Uthwatt Committee's Report, and hoping that the Government will promptly announce its adoption of the main provisions so that the building industry may be able to plan ahead for post-war reconstruction. The Association has set up a Committee, under the chairmanship of Mr. D. C. Burgess, to consider the Uthwatt recommendations with a view to ascertaining the extent to which they will affect the building industry in the London area.

On August 6, we summarized arguments that have been advanced by members of the R.I.B.A. in favour of an immediate election, but the R.I.B.A. Council remains silent. A method, possibly not the best one, of testing the opinion of the profession as a whole and so settling this vexed question, is suggested below.

R.I.B.A. ELECTION

—THE NEXT STEP?

A FEW weeks ago we summarized the correspondence received on this subject. It showed that there is a considerable number of R.I.B.A. members who believe that an early election is necessary in the interests of the Institute and the profession. We know that there are other members of the opposite opinion, but they have not put their opinions into written form. This is a pity; for however powerful the arguments on one side of a discussion, a correct course of action can be planned only when the opposing views also are taken into account.

To hold an election is always an expensive business. It would involve a considerable use of paper and impose additional strain on the Institute staff. Is it worth it? Would it be possible to devise a simpler procedure appropriate to wartime?

Such questions should obviously be discussed by the membership in a way that will allow all the opinions of both sides to be brought forward. We believe this can be done only at a General Meeting. No discussion among individuals or even in organised groups can have the same value as a large-scale, carefully prepared meeting where authoritative decisions can be taken. The reckless criticisms one so frequently hears could then be answered and the right sort of publicity given to ideas of real value. The agenda of such a General Meeting should not, we believe, be confined to the question of an election. Constructive criticism of past work and suggestions for the future should be welcomed and might well prove the most valuable part of the discussion. We are sure that the Council does not think the opinions of members are worthless, but we do most earnestly suggest that opinions have little value unless they can be submitted to such a body as a General Meeting and amended and improved in the light of suggestions made there. We repeat: the Council can doubt neither the goodwill nor the ability of R.I.B.A. members—but we think it would be wise to demonstrate this by positive action.

There is, it seems, provision in the Bye-Laws by which a

General Meeting could be called by members themselves if they feel sufficiently strongly about it. We refer to Bye-Law 60, which allows a postal poll of the membership to be taken on any resolution proposed for that purpose by 40 Fellows, 40 Associates and 40 Licentiates. Should such a resolution be passed by a majority of those voting, it becomes a resolution of the Royal Institute. Assuming therefore that 120 such members were agreed, it would presumably be possible for them to propose a resolution that a General Meeting should be called to discuss the policy of the Institute and the holding of an election. A postal poll of the membership would then be taken and if the resolution received a majority of the votes cast a General Meeting would have to be held. The question of whether an election is needed could then be decided.

Certainly this is a cumbersome business, but fortunately no detailed procedure is laid down in the Bye-Laws and it should be easy to devise a means by which a postcard could be sent to each member and used by him as a ballot card to be returned.

Clearly, however, a General Meeting called on the initiative of the Council or the War Executive Committee would be preferable by far. As well as avoiding possible hard feelings it might save time and would certainly allow more satisfactory arrangements to be made for the meeting itself. Most important would be some provision for ascertaining the views of provincial members and those in the armed forces. Architects now serving as soldiers have already shown that they think their interests may be neglected during the war, and though it is inevitable that they should be to some extent cut off from professional life this only increases the obligation to study their wishes and future needs in every possible way. We would suggest that serving members should be put into touch with the nearest Allied Society so that their voice can be heard through this organisation. Though they might not be able to attend in great numbers we are sure that civilian members would be anxious to make allowance for this.

In the event of a General Meeting being called Allied Societies should be asked to hold discussions as a result of which a delegate could be sent to London. Many people would find it impossible to attend even these meetings and they should therefore be encouraged to write succinct letters which could be read out at the General Meeting. The fact that only a small proportion of members in the armed forces are as yet stationed abroad is perhaps another reason why arrangements should be put in hand as soon as possible.

Obviously this is not a perfect plan. In present circumstances objection can be made to every course of action—but we must not allow this to prevent action altogether. Perhaps this is not even the best plan. In that event we should like to hear of better ones—and most of all we should like to hear of a better one from the Council of the R.I.B.A.



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

REBUILDING EUROPE

There seems to be a good many Atlantic trips just now for those examining building problems. As between the two countries, it is all to the good when big-minded men like Mr. Palmer, of U.S.H.A. fame, get over to see what we are doing. I often wonder if the numerous committees who are studying our post-war problems are not still isolationist in attitude. They never mention anything but our tight little isle. Big building problems after the war will probably be in Poland and Russia, with the biggest, according to Air-Marshal Harris, in Germany. Shouldn't some of us be working on that problem as it must affect our building output?

★

Maybe the best place to get a perspective on it and see Britain and Europe as a unit, is America. Anyhow, the Americans seem to have recognized that rebuilding in Europe will mean a re-organization of the trade in raw and finished materials for building. Judging by the interest that so many industrialists are again taking in prefabrication, they are certainly thinking of building as a post-war outlet. The ploughshare and the sword have always been thought of as a handy interchangeable unit. Perhaps the tank and the Dymaxion will be as adaptable.

MINORITY OF ONE

Professor Dennison in his minority report to the Scott Report points out the inconsistencies of the majority of the Scott committee who never say exactly what they mean by maintenance of a prosperous agriculture, but assume that it will result in (a) making the farm hand as prosperous as the town worker; (b) arresting the drift from the land; two things which Professor Dennison says are mutually incompatible because the only sure basis for raising agricultural wages is an increased output per head, which would almost certainly result in fewer people being employed on the land.

*

But what the Professor doesn't seem to notice is that the majority never say what they mean by drift from the land either. They seem to think the war has in some measure arrested it, though they specifically state that it has reduced further than ever the number of agricultural workers. One of the graver features of the pre-war situation was the high average age of the land worker who showed signs of becoming an extinct species; another was the shortage of educational facilities, social services, source industries and almost every kind of modern convenience in rural areas. There is nothing in the report that proves conclusively that the majority would not be content with the reversal of these tendencies.

*

The only really definite statements they make about agriculture are (i) that they are not concerned with the details of agricultural policy (ii) but that the Government must have a policy because (iii) land in this country is too scarce for private people to be allowed to waste it, because its money value happens to be low.

*

By wasting land they mean developing it sporadically, which spoils its potential usefulness as open country (regardless of whether it is to be farmed, afforested or developed as a pleasure park) without any corresponding gain. So they recommend that even mobile industries should be restricted to existing small towns

(an ordinary village is defined as less than 1,500 inhabitants).

*

Professor Dennison resents this. In spite of indications that agriculture and industry are like oil and water and will not mix, he maintains that they do better for being side by side. The chief point he makes is that the cost of electrifying all villages of over 250 inhabitants, as suggested by the majority, would be greatly reduced if each village had a factory or two in it.

*

Personally I can't see why the cost should not be much the same from the national point of view; or if the scattering of factories made it necessary to write off services suitable for industry in existing towns, slightly more.

*

In fact the desirability of keeping down the cost of services* is potentially the most powerful argument against dispersal of industry and population over the country-side. Unfortunately evidence on this and other key subjects is almost impossible to come by and is likely to remain so until something like a Planning Commission has been sitting for a couple of years.

THE PROFESSION AFTER THE WAR

All Mr. Butlin's efforts have so far failed to fill the Ministry of Supply hostels, according to the parliamentary reports. The suggestion was made some time ago that after the war they should become holiday or school camps. What does Mr. Butlin think of that possibility? Incidentally, it would be interesting to know how the outfit started up by Holford to handle the Alexander Gibb hostels compared for efficiency with Government departments and others who worked similar projects. The investigation would be useful in all sorts of ways, but it would have to be total and independent. One got the impression that Holford's team included some of the best of the technical brains in the country. How did it compare with the "departments?"

*

How has the "outside" architect

*meaning distributive costs of all kinds.

compared with the official in the war building programme? Compared for speed and economy of labour and materials? It is a question bristling with difficulties, but one of enormous importance to the future of the profession. Of course, peace-time problems are going to be very different from war-time ones, but they will clearly require coherent, big-scale organization.

*

The tendency at the present time seems to keep the work inside the departments. Is this policy based on experience over the last three years, or have all the architects gone behind the glazing bars at Lambeth Bridge House? At the beginning of the war outside men were called in to handle, it would seem, more building than they do now. All of us, in uniform and out of it, would like to know just who is going to employ us after the war. Perhaps there is a committee sitting somewhere that can tell us.

CRAZY WORLD

Suggestions and Instructions for the Arrangement, Planning and Construction of Mental Hospitals, issued by the Board of Control (under the Lunacy and Mental Treatment Acts, 1890, 1891 and 1930) make a mere architect wonder which way up he stands. The movement for a better planned Britain gathers speed so slowly that one is tempted at times to agree that the idea of a planned community may be intrinsically unreasonable. If one reads the pamphlet referred to above in this mood, one does not know whether to be cheered or depressed by the fact that planned communities are provided as a matter of course—for lunatics.

*

"The site of a mental hospital should be chosen with care, and permit of being carefully drained. It should be accessible from the chief industrial centres of the area it is to serve, and within reach of a town." The instructions go on to add that the necessary services should be available, and that no public road should cross the site (which should be of "suitable shape and contour"); that the layout

should be planned for the maximum number to be accommodated (the position of all buildings necessary to complete the scheme being shown) and that the provisions of the Ribbon Development Act should be observed.

★

The accommodation specified is naturally somewhat unusual, but it does include a number of features that would be greatly appreciated on an ordinary housing estate, i.e., a church, a recreation hall (equipped with cinema), a library with lecture rooms opening off it, a recreation ground with sports pavilion; a food shop and canteen (for occasional use of patients and visitors), not to mention pleasure gardens and a shelter at the entrance of the estate "to accommodate visitors awaiting road transport." These recommendations are based on an assumed population of 1,000 (and medical staff).

★

One day, perhaps, if we have not all migrated to the orderly precincts of an asylum, a Ministry of Planning will issue comparable "Suggestions Concerning the Arrangement, Planning and Construction of Neighbourhood Units."

LECTURES AT THE R.I.B.A.

The course of lectures to be held at the R.I.B.A. next month, on *Recent Scientific and Technical Developments in Building* should give architects what they badly need—a summary of developments war is causing in methods of building, and the whole approach to building problems.

★

Tradition broke down some time ago, and for the last decade or so we have been without any satisfactory alternative. There have been many signs that a new scientific approach has been developing as a result of the war, but nothing like a complete account has yet been given of what is happening—and this is what the R.I.B.A. lectures set out to do. They should be well worth attending.

ASTRAGAL

LETTERS

Gordon W. Johnson

G. B. J. Athoe
(Secretary, I.A.A.S.)

Ernst L. Freud

John C. Tickle

B. N. Solly,
(Secretary, Architects' Benevolent Society.)

Alien Architectural Students

Sir,—Subject to one reservation, I wish to support fully all Mr. Colin Penn says in your issue of August 20. My reservation is that in referring to an alien I mean one who is not eligible for military service or a conscientious objector—in other words one who, in all respects, is on the same terms as our own boys and girls.

As a past member of the Registration Council and Chairman of the F. & G.P. Committee for a number of years, I know something of the efforts made in the early days by the Committee, supported by the Council, to put the Scholarship Fund on a sound financial basis. I know, too, how very pleased we were to see the results of our work. To me the pride I had in my part is rather marred by this recent decision of discrimination by the Council, which I feel is a great mistake.

During this war, the Allies are pooling their resources—each Nation helping one another in the common effort to the utmost of its ability. Does this not mean that we should also do our utmost to help the unfortunate youngsters of other friendly countries who are here possibly by force of circumstances. All architects who contribute to the Scholarship Fund may be assured that no student unworthy of assistance will pass through the very fine mesh sieve of the Council's Selection Committee, and if an alien can prove worth and, by assistance from the Fund, make good, then it is a gain for architecture in this Country or abroad—does it really matter which? I look forward to the Council not reversing the decision but rescinding the previous one so that the blot may be removed from its records.

A further point arises from Mr. Penn's letter because he states that funds must be conserved for the need that will arise after the War. The maximum sum which can be produced each year by the Council's Fund after providing for administrative expenses is, in round figures, £3,000. This amount will hardly touch the fringe of after-war requirements and demands.

I feel that many will be with me when I say that a Country that can spend fourteen or more millions of pounds a day for war purposes, can and must find adequate funds to educate as architects all our young

people who prove themselves suitable for such training. The Profession must in future be open to all our youth of ability, entirely irrespective of whether the parents can or cannot afford to pay the fees and maintenance costs.

I hope to see some training in architecture find a place even in the Elementary School, and records kept of those who show an interest, so that the subject may be continued in their advanced education and ultimately, from the compiled records, selections made of students to be further trained in the recognised Architectural Schools, which should be provided by the Country.

If ever there was a need for unity the need to provide for the education of our returning youth and the youth of the future is surely it. Why not a combined Education Committee at once to approach the Board of Education with a well-considered scheme designed not only for those returning from the Services but also for the future?

GORDON W. JOHNSON

Bournemouth

Sir,—As a member of the Architects Registration Council, I voted for the resolution, passed by the Council, denying scholarships to aliens; and I shall continue to oppose any proposition which would benefit alien students at a time when so many of our own nationals are, through war service, unable to enjoy the advantages of higher architectural education provided by funds subscribed by British architects.

Who are the alien students concerned? Surely they are not nationals of the United Nations, as, presumably, such persons would be serving as combatants. If they are refugees from enemy countries, whilst we have every sympathy for them, they can hardly expect benefits intended, but denied by circumstances, to our own nationals.

G. B. J. ATHOE.

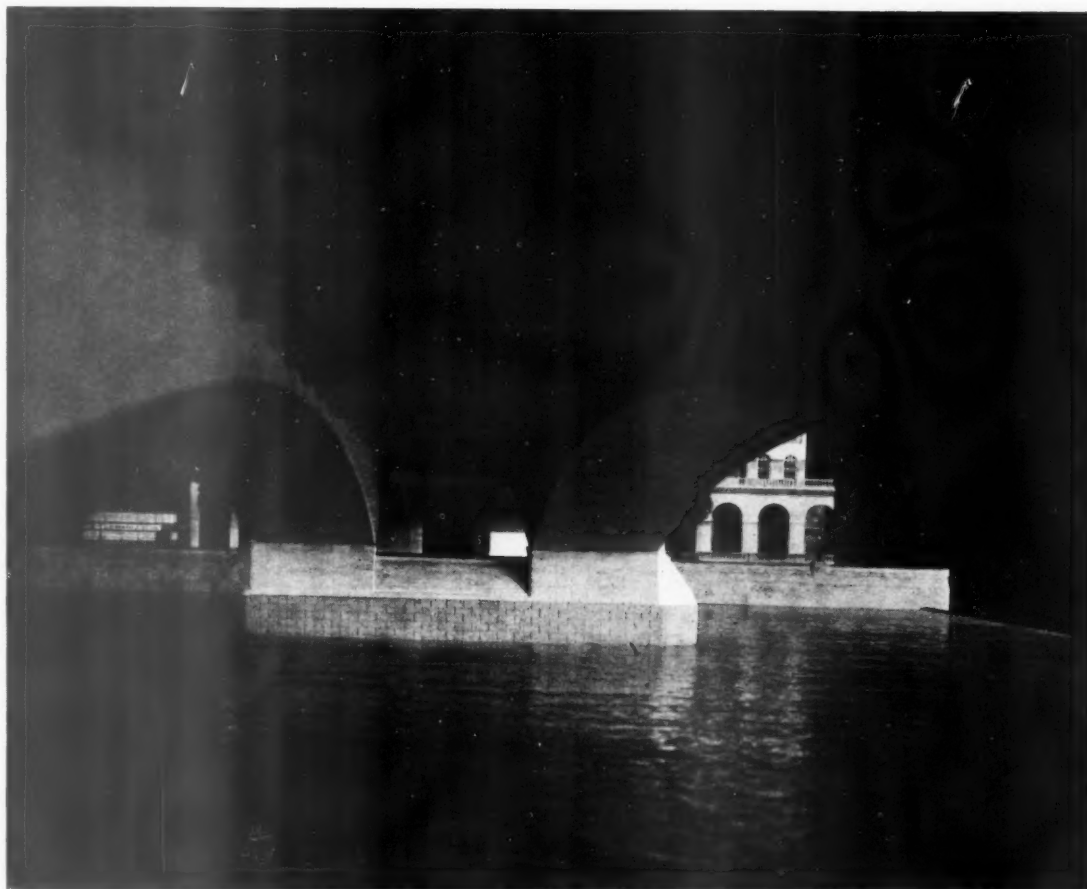
London.

The Hub of the House

Sir,—On behalf and together with the Good Housekeeping Institute, I have done work on similar lines to the very interesting and well produced report *The Hub of the House*, by the Association for Planning and Regional Reconstruction. I shall be grateful, therefore, if you would allow me to mention a few technical points on which we differ.

(1) In our opinion the door leading out to the garden, yard, balcony or back entrance should not be placed in the kitchen. This position wastes the best lighted wall space underneath the window, and is apt to make the kitchen into a passage. Although the report states that this door would be better placed in the utility or work

★ MODEL



★ ACTUAL DESIGN



Top, a view of the model, looking towards the entrance to the tramway tunnel on the north side of the embankment; bottom, the actual design, taken from the same viewpoint.

WATERLOO BRIDGE

WATERLOO BRIDGE



ORIGINAL DESIGN: OCT., 1934



FINAL DESIGN: JUNE, 1935



ACTUAL DESIGN: AUGUST, 1942

In October, 1923, a short note in this JOURNAL announced that one of the eight piers of Waterloo Bridge was sinking. This was the first indication that Rennie's Bridge was unsafe. After a long battle of words it was finally decided that a new bridge should be built and, in October, 1934, Sir Giles Gilbert Scott's preliminary design for the new scheme was published. In the following year his final scheme was accepted by the L.C.C. and building work was begun in October, 1937. The new bridge was opened to traffic last month.

room (and by the division of domestic processes seems to agree that such a room is a necessity), nevertheless all the plans show this door in the kitchen.

(2) Consequently the fittings appear arranged on opposite walls, although their position on adjacent walls or, even better, on three walls of a bay would provide a more convenient, uninterrupted, working space.

(3) Storage space seems most valuable between 3 ft. and 5 ft. from the floor, but in no plans are cupboards provided between 3 ft. and 4 ft. 6 in. We suggest that the best position for a built-in fitting from floor to ceiling would be along the wall facing the window. This can easily be achieved if doors are spaced from the corner by at least 1 ft. 9 in.

We are convinced that the space provided for storage of food is insufficient, especially as no proper larders have been planned. We further want to mention the convenience of sliding doors in kitchen fittings, as they give access to the interior of the cupboard without any obstruction when open.

It seems to me that planning of single rooms without connection to the surrounding rooms of the flat or house is of little practical value. In my work for The Good Housekeeping Institute, I have therefore concentrated on solutions of complete "domestic offices," comprising the kitchen proper with larder, workroom and back entrance, with connections to the hall, dining room or recess and the children's day room—all three of which have to be in direct communication with the place where the housewife works.

London.

ERNST L. FREUD

Sir,—Sir Kingsley Wood states that 85 per cent. of the purchasing power of the nation is now in the hands of people with nett incomes of under £500 p.a., so it seems certain that after the war, families with incomes of between £300 and £500 (after paying tax) will have increased very much in number, as compared with 1939. The higher income groups are being reduced to this level by taxation and lower-paid folk are joining it owing to increased earnings.

From this it follows that apart from cottages the main, if not the exclusive demand for houses, will be for those costing about £500 to £1,000 (1939 prices), thus making the design of these small dwellings of even greater importance than before the war. After many years experience, including building three houses within these limits for my own occupation, my wife and I agree that the kitchen is "The Hub of the House," but we consider that first it should be designed to contain a breakfast table and secondly it must

c
a
l
.
r
h
;
y
;
e
;
e
a
g
e
d
y
e
-
r
e
n
e
y
le
r-
is
k
e,
n
ic
n
d
ne
d
of
i-
e-

at
er
of
er
at
of
ng
in
ne
ed
id
ed

m
ve
se
39
of
er
er
d-
its
nd
ub
at
in
ust

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

TABLE GIVING EFFICIENCY COEFFICIENTS FOR CENTRALLY LOADED COLUMNS OF TUBULAR SECTION.

D x t Ins.	Wt. in lbs./ft. run.	LENGTH OF COLUMN OR STRUT IN FEET									
		6	7	8	9	10	12	14	16	18	20
2 x 1/4	4.70	0.38	0.33	.	.	.	.	.	.	.	.
2 1/2 x 1/4	6.00	0.60	0.52	0.41	0.33	0.28	.	.	.	.	.
3 x 1/4	7.30	0.72	0.63	0.54	0.47	0.39	0.27	.	.	.	.
3 1/2 x 1/4	8.70	0.80	0.73	0.65	0.57	0.51	0.40	0.26	.	.	.
4 x 1/4	10.00	0.85	0.80	0.73	0.67	0.60	0.49	0.38	0.30	.	.
4 1/2 x 1/4	11.30	0.88	0.84	0.79	0.73	0.68	0.56	0.46	0.37	0.31	.
5 x 3/8	19.50	0.90	0.87	0.82	0.78	0.73	0.62	0.52	0.42	0.35	0.26
5 1/2 x 3/8	20.50	0.92	0.89	0.85	0.82	0.78	0.68	0.58	0.50	0.41	0.35
6 x 3/8	22.50	0.94	0.91	0.88	0.85	0.82	0.73	0.65	0.56	0.47	0.40
6 1/2 x 3/8	24.50	0.95	0.93	0.90	0.87	0.84	0.78	0.70	0.62	0.53	0.47
7 x 3/8	26.50	0.96	0.94	0.92	0.89	0.87	0.81	0.73	0.66	0.58	0.52
7 1/2 x 3/8	28.50	0.96	0.95	0.93	0.91	0.88	0.83	0.77	0.71	0.63	0.56
8 x 3/8	30.50	0.97	0.96	0.94	0.92	0.88	0.86	0.80	0.74	0.68	0.61
9 x 3/8	34.50	0.98	0.97	0.95	0.94	0.93	0.89	0.84	0.80	0.74	0.68
10 x 1/2	50.70	0.99	0.98	0.96	0.95	0.94	0.91	0.87	0.83	0.79	0.73
11 x 1/2	56.10	1.00	0.99	0.98	0.96	0.95	0.93	0.90	0.86	0.83	0.78
12 x 5/8	75.90	1.00	0.99	0.98	0.97	0.96	0.94	0.91	0.88	0.85	0.82
13 x 5/8	82.60	1.00	1.00	0.99	0.98	0.97	0.95	0.93	0.90	0.87	0.83
14 x 3/4	106.10	1.00	1.00	0.99	0.98	0.98	0.97	0.94	0.92	0.89	0.87
15 x 3/4	114.20	1.00	1.00	1.00	0.99	0.98	0.96	0.95	0.93	0.91	0.88
16 x 3/4	122.20	1.00	1.00	1.00	1.00	0.99	0.97	0.96	0.94	0.92	0.88
17 x 3/4	130.20	1.00	1.00	1.00	1.00	0.99	0.98	0.96	0.94	0.93	0.91
18 x 3/4	138.20	1.00	1.00	1.00	1.00	1.00	0.98	0.97	0.95	0.94	0.92

TYPICAL DETAIL
OF
COLUMN SECTION.

Issued by Brailhwaite & Co., Engineers, Ltd. Compiled by Samuel & Hamann, Consulting Engineers.

INFORMATION SHEET: STEEL FRAME CONSTRUCTION, 83: WELDING 39.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 877 •

STRUCTURAL STEELWORK

Subject : Welding 39 : Comparative Efficiencies of Centrally Loaded Tubular Columns.

General :

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose—namely, to indicate the way in which economical design as affected by general planning considerations may be obtained.

Both the principles of design and the general and detailed application of welded steelwork are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight resulting from the use of lighter and smaller steel members and connections are taken into consideration in the preliminary arrangement of the building components, in order to obtain maximum economy in the design of the steel framing.

This Sheet of detailed considerations of design in welded steel is the third of a group giving comparative Efficiency Coefficients of columns, and deals with tubular sections.

Loading :

Circular columns can be used for a varied range of loadings. For instance, a tube 2 in. in diameter and $\frac{1}{4}$ in. thick is capable of carrying 3.8 tons for a length of 6 ft. 0 in., while a tube 18 in. in diameter and 2 in. thick can carry approximately 720 tons. The Efficiency Coefficients on the front of this Sheet are calculated in the same way as those on previous Sheets, and the formula for permitted load is similar to that used for joists, i.e., $2.12we$ where :—

w = The weight per foot run.

e = The Efficiency Coefficient.

Choice of Section :

It should be mentioned here that although the Efficiency Coefficients of tubular columns have been calculated as 100 per cent. of those used for plain R.S.J. sections, since no extra welding labour is involved in fabricating tubular columns, nevertheless a direct comparison of the Efficiency Coefficients of tubular and R.S.J. columns is not a true measure of their comparative economic efficiencies. This is due to the fact that the

price of tubular sections is considerably greater than that of R.S.J.'s and this difference in price has not been taken into consideration in calculating Efficiency Coefficients, since future relative prices of tubular and other sections are unknown and are likely to vary to a large extent with the quantity of tubes in demand.

This price will also vary with the particular sections under consideration.

This point should be borne in mind when use is made of the Efficiency Coefficients for circular columns, e.g., as in Sheet 15 of the Riveted series and Sheet 35 of the welded series.

The column sections given in the table on the front of this Sheet are invariably those with the smallest "t" dimension. Greater thicknesses can be used without appreciable variation in the values of the Efficiency Coefficients, but with slender columns in particular, it is more economical to use a tube of large diameter and small thickness than a tube of small diameter with a greater thickness.

Application :

Circular columns do not fit into walls as easily as rectangular ones, but they are suitable for free-standing columns. It is emphasized that the connection of beams to circular columns presents no difficulties in welded construction, and both rigid and pinned column splices have been developed so that it is quite feasible to construct a multi-storey building with the internal columns circular. They are not so convenient, however, when the loads are eccentric.

For external columns or where Bending Moments in one direction due to wind have to be taken, sections consisting of two channels are to be recommended, or in cases where the Bending Moments are excessive, plated joists or plate girder sections. (See Figures 1 to 4 on Sheet 36.)

Solid steel columns are uneconomical under all circumstances.

Previous Sheets :

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 829, 830, 832, 836, 837, 838, 839, 840, 842, 843, 845, 847, 848, 849, 850, 851, 852, 853, 855, 856, 857, 859, 860, 862, 863, 865 revised, 867, 869, 870, 871, 874, and 875.

Issued by : Braithwaite & Co., Engineers, Limited.

London Office (Temporary Address) :

King's House, Haymarket, London, S.W.1.

Telephone : Whitehall 3993.

THREE EXHIBITIONS IN LONDON

be fitted with a boiler of a size that can be kept in all night if required. With a boiler in the kitchen, radiator in the hall, cylinder cupboard on landing and towel rail in bathroom, the whole house is kept free from frost in the coldest weather. In the early morning, when most people are rushed, to rake the boiler and adjust dampers only takes a few seconds and a glowing fire results almost at once. A continuous burning boiler is the greatest possible blessing; and we have to put up with a little dust, because all alternative methods cost more to install and very much more for upkeep, and therefore are not practical for houses of these values.

Given these two essentials, kitchens fitted up as shown in your issue of August 27 would be indeed ideal.

Letchworth.

JOHN C. TICKLE

A.B.S.

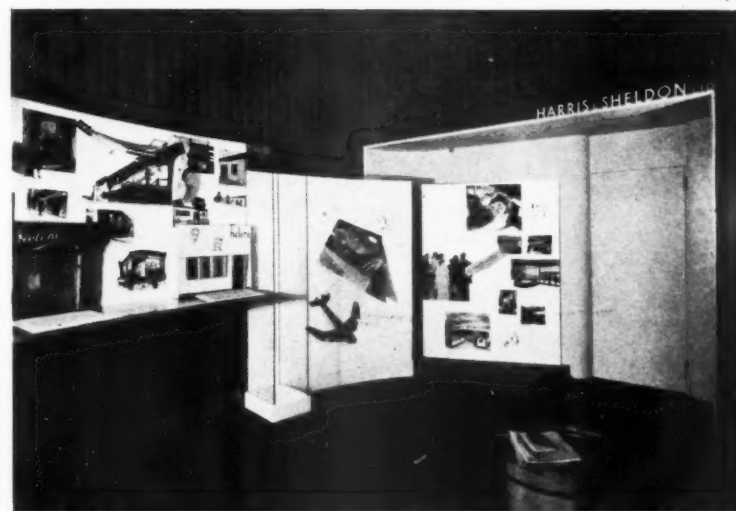
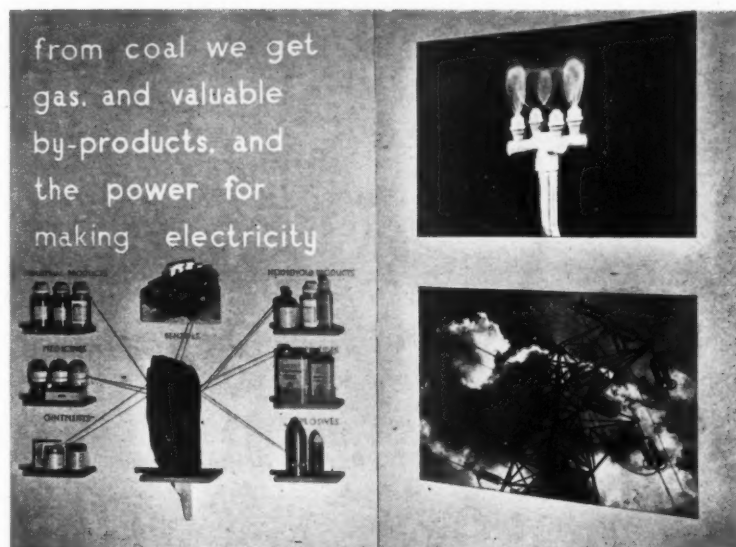
Sir,—The Architects' Benevolent Society has recently received from the Nottingham, Derby and Lincoln Architectural Society a cheque for £3 as the proceeds of paper salvage from their library.

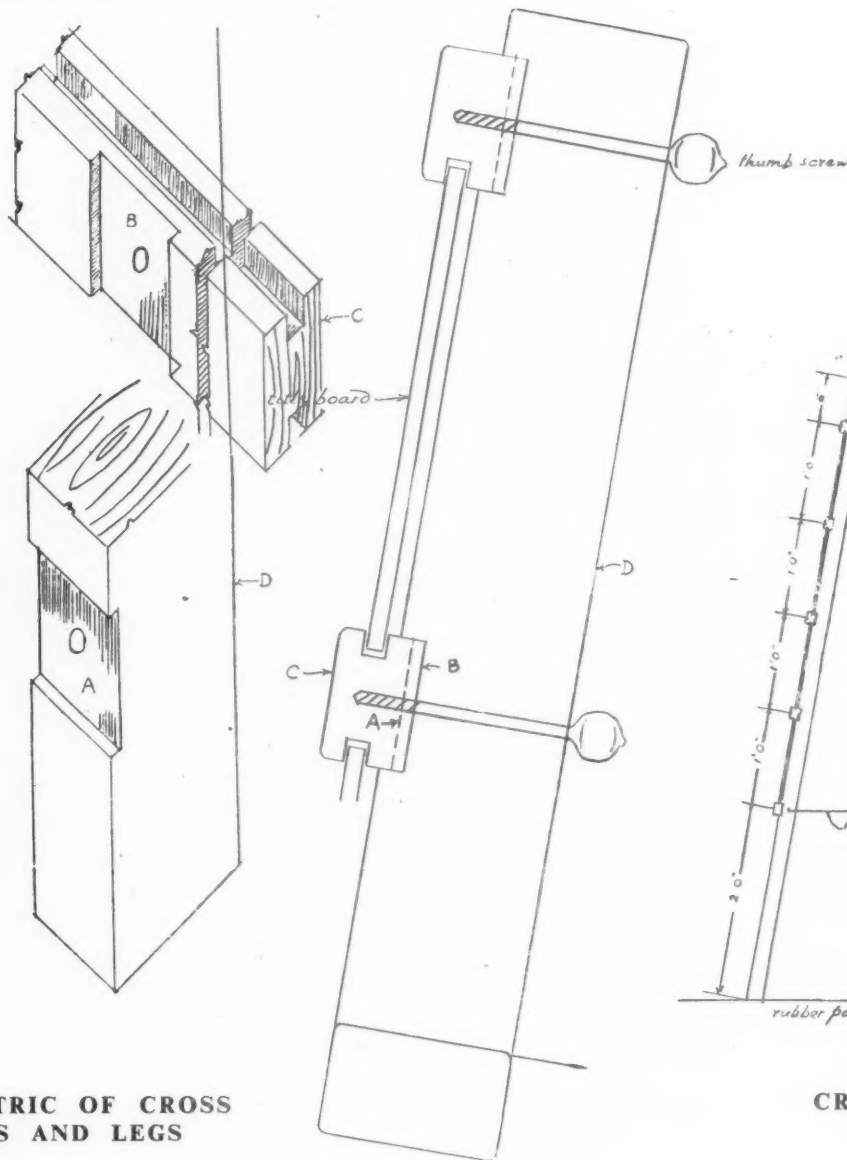
Other societies and individuals may also be going through their bookshelves in the interests of national salvage. If they would follow this example for the benefit of the A.B.S., the money would be received most gratefully, and used without delay for the relief of present distress.

London.

B. N. SOLLY

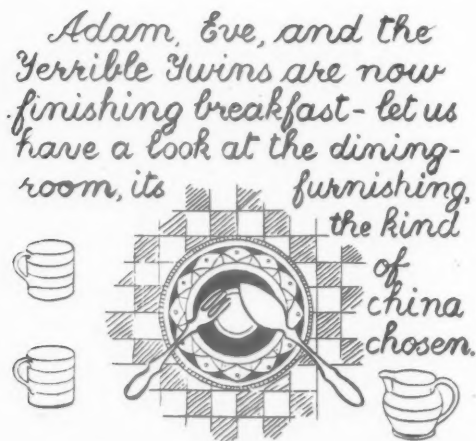
**Among the exhibitions to be seen in London are Fuel Saving, at Harrod's Stores, Shop Development, at Harris & Sheldon, Berkeley Square, and Design Round the Clock, at the A.A. At the Fuel exhibition, organized by Harrods in co-operation with the Minister of Fuel and Power, one section has been designed and planned by Mr. Rodney Thomas, for Ascot Gas Water Heaters. A photograph of one of the exhibits appears at the top of this page. Shop Development (a corner is seen in the centre illustration) is shown in the new showrooms of Harris & Sheldon. The interior decoration of the new showrooms and office was designed by Mr. Grey Wornum, the furniture by Mr. Charles Russell. The Design Round the Clock exhibition (right) is described and further illustrated on pages 186 and 187.*





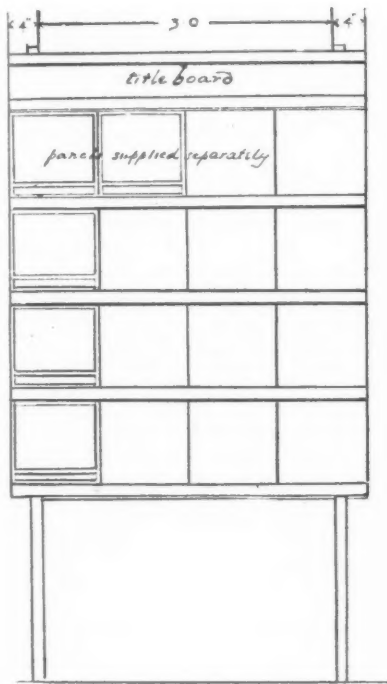
AXONOMETRIC OF CROSS
BOARDS AND LEGS

CROSS SECTION



DETACHABLE UNIT-EXHIBITION

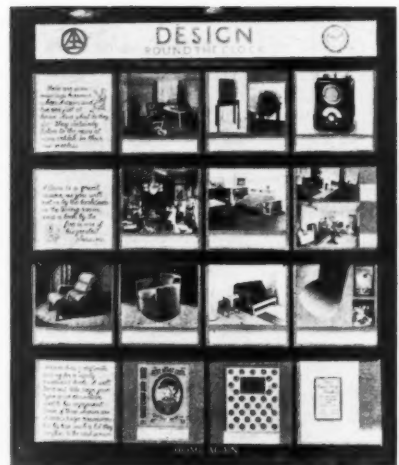
Mr. John Grey, F.R.I.B.A., who devised the Design Round the Clock Exhibition for the D.I.A., now being held at the A.A., also designed the special light-weight stands in which the illustrative units are displayed. These stands can easily be taken to pieces, transported and re-erected. But they have the additional and novel advantage that new illustrated unit panels can be slipped in as desired to deal with any aspect of design. Thus the collection of unit panels can be constantly added to and kept up to date, forming a valuable library of industrial design. From these exhibitions of varying sizes and specific subjects can be arranged and afterwards the units returned to the library. The theme chosen as the basis for this



FRONT ELEVATION

exhibition is the life of a normal family, illustrating their daily contact with design. The scene opens with the husband getting up in the morning, bathing and having his breakfast, which proceedings provide an opportunity for illustrating many points of design in bedrooms, bathroom and dining rooms. Meanwhile his wife is cooking in the kitchen, which is similarly analysed, and so via transport he goes to his office or factory, while his wife and family are engaged on shopping expeditions and at school. This theme can be expanded indefinitely to include almost any branch of human activity. To avoid the monotony of an unrelieved sequence of photographs in the exhibition a variety of coloured drawings, plans, book illustrations and sample

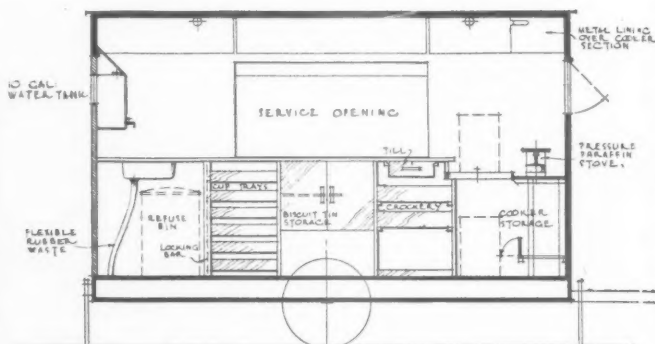
finishes are introduced. The stories on the panel units to the exhibition screens were composed by Mr. Grey, and the actual lettering was drawn by Miss Marjorie Morrison. The sketches on the panels, with the exception of a few by Mr. Grey and Flight-Lieutenant Charles Stone, are also by Miss Morrison. A close-up of one of these panels is shown on the right. The exhibition is the first to be devised on the unit principle, either in this country or abroad. In October the exhibition will be transferred to the Geffrye Museum, Kingsland Road, London, and after a period there it will go on tour. A photograph of Mr. Grey and Miss Morrison, taken in the exhibition, appears on page 178, and a general view of the exhibition on page 185.



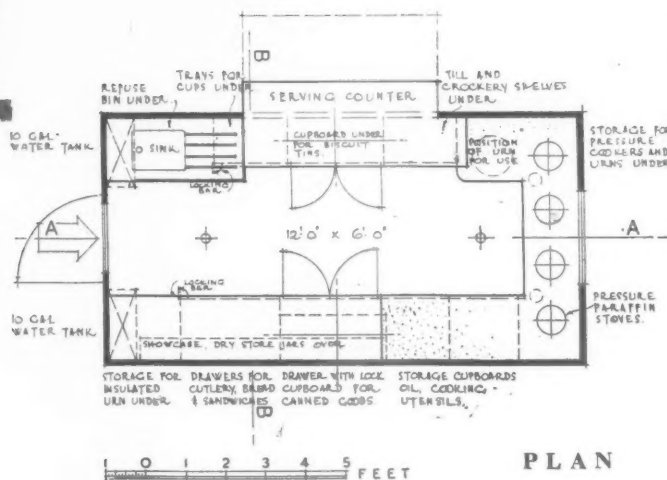
STAND: DESIGNED BY JOHN GREY



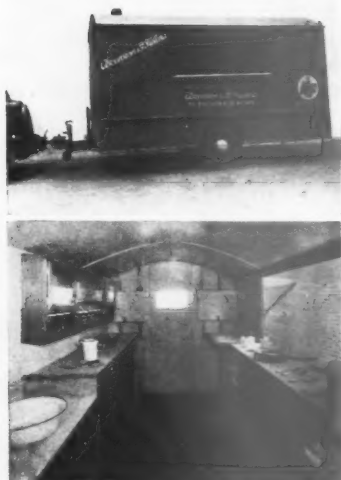
MOBILE KITCHEN: DESIGNED BY



SECTION A-A



PLAN

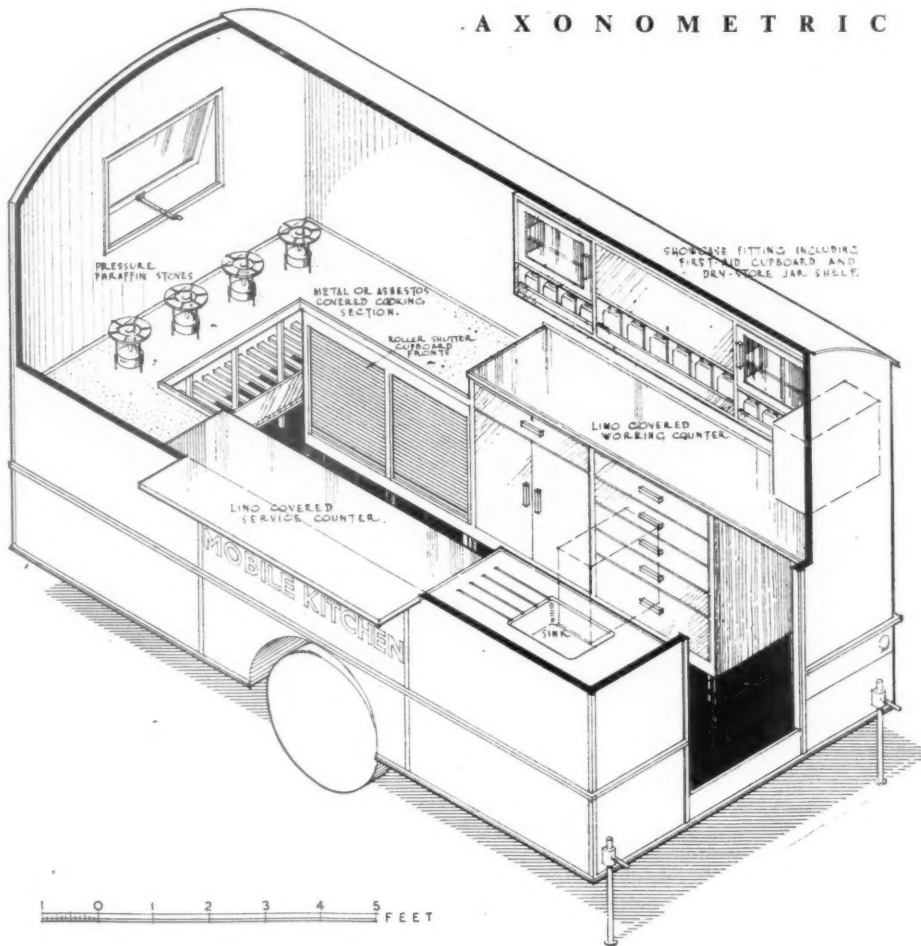


Designed, in the early days of the war, to provide hot meals and drinks for various emergency conditions, a considerable number of these mobile kitchens are now in operation chiefly in connection with relief feeding arrangements after air raids for the public, Civil Defence Workers and Fire Services. After initial modifications in the light of actual-working conditions and to suit available materials, the design was standardized. The kitchens can be used to provide complete meals or as bases for ordinary mobile canteens or tea cars. They can also be used as service centres in connection with fixed communal kitchens. Many of the kitchens have been presented for service in Britain by Canadian and other overseas communities and organizations.

Each kitchen is mounted on a two-wheel caravan trailer chassis with standard fire-pump type coupling, combined automatic overrun and handbrake, and can be towed by any car of 12 h.p. or more. Two wheels allow for greater manœuvring freedom than is possible with a four-wheel vehicle. Quick-dropping legs at the corners are provided for stability in operation. The body is built up in $1\frac{1}{4}$ in. square framing, covered externally with hardboard and internally with insulation board and plywood. The roof over the cooking section is lined with steel. Internal dimensions are: length 12 ft., width 6 ft., headroom 6 ft. 10 in. The floor is $\frac{3}{4}$ in. T. & G. boarding on 4 in. by 2 in. bearers and is covered with lino. The service opening is 4 ft. 10 in. wide.

J. FRASER REEKIE

AXONOMETRIC



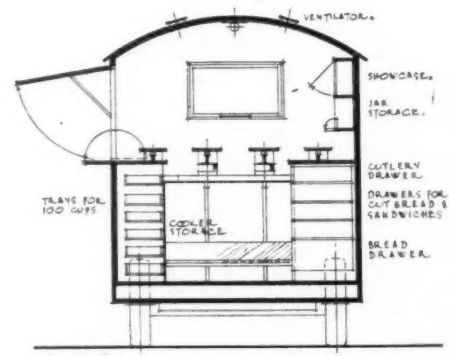
Ventilators are fitted in the roof and the kitchen is wired for electric lighting from batteries or mains connection.

Fittings are constructed in oak and oak-faced plywood and include: drawers for cutlery, bread and sandwiches; cupboard for canned goods; roller shutter-fronted larder and store; cupboard to hold six standard biscuit tins; crockery shelves; trays for 100 cups held by quick-release catches so that they can be lifted out for service; and showcase with shelves for dry-goods jars and first-aid cabinet. Locking rails are provided where necessary to prevent drawers or equipment from slipping when the kitchen is in motion.

Working and service counters are 3 ft. high and are covered with lino. The cooking section

counter is 2 ft. 6 in. high and is covered with steel sheeting or other fire-proof material. The sink is enamelled iron with hardwood drainer and is fitted with a flexible rubber waste pipe. Space under the sink is occupied by a refuse bin. Two water tanks, each holding 10 gallons, are provided.

Cooking is done by means of four Primus-type pressure paraffin stoves, and other standard equipment comprises: 2 steam pressure cookers, each 2½ gallons capacity; 2 three-gallon boiler urns for water heating; 1 insulated storage urn, capacity 100 cups of tea; and 1 insulated food container, capacity 70 portions of stew. This equipment is stored on racks under the cooking section. Additional equipment can be carried if necessary.



SECTION B-B

Stew and tea are the hot foods urgently required under blitz conditions and with the standard equipment 200 portions of stew and 500 cups of tea can be prepared in three hours. Two kitchens on one occasion provided 3,000 meals in 36 hours. The cost of a fully-equipped mobile kitchen is about £275.

LITERATURE

U.S.A. UP TO A POINT

The American Nation: A Short History of the United States. By John Gloag. 390 pp. London: Cassell. 7s. 6d. net.

Mr. Gloag's title and his own reputation lead one to expect more of this book than there is in fact in it. Not that it is not a good book, or that it is not an excellent thing that it should be published now.

People in this country suffer from an ignorance, or seriously inadequate knowledge, of the United States of America more remarkable even, if less excusable, than that they have of, for instance, the U.S.S.R. It is proper that men of Mr. Gloag's capacity should set themselves to repair such gaps. It is right that we should be reminded of all in American history that we had forgotten, that the war of 1812 should be given its due, unhappy place in the record, and that the fact should be made plain for a British public that has somehow never quite got used to the idea that the U.S.A. is a separate nation, of a separate growth, sharing not all of our national prejudices and beliefs. Even the professional historians have not always done these things adequately. And indeed Mr. Gloag's history book does with balance, care and good judgment, until it comes to 1939, all the conventional things that a good conventional history book should do.

It is well-planned. About one-half of it is a general history of the U.S.A. A further third or so takes the States of the Union one by one and gives some account of their history, but tails off in most instances during the XIX Century and largely leaves the current intensity of state patriotism unaccounted for. And then, in less than one-sixth of the book, there is a series of chapters on the political parties, the judiciary, education, some social organisations, the cities and homes, and the creative contribution of America to the world.

From Mr. Gloag this should have been the most interesting and valuable part of the book. Frankly, it is cursory and disappointing. The section on the cities and homes is better than the rest and has the recommendation that it includes some paragraphs from his earlier book, "Men and Buildings." Too much of the rest of it is mere guide-bookery. It recites facts without relating them to the background. (Occasional facts are missed out: like the existence of Rotary—at least as important as Kiwanis International). It is odd, indeed, that Mr. Gloag should have skipped so lightly over the part of his book which should have justified him in calling it "The American Nation."

Finishing the historical part at the point where America has entered the

war, he has yet said nothing, beyond quoting the Atlantic Charter and giving ten lines of comment on that document, about the American nation in the first twenty-seven months of the war. He has ignored practically everything that President Roosevelt has done since the New Deal. He has left out Lord Lothian. The book was planned, Mr. Gloag tells us, in the U.S.A. in the summer of 1939; I hesitate to run the risk of seeming to complain that it does not contain things that it was never intended to contain. Yet here were facts entirely relevant to the theme of the American nation—without which, indeed, the American nation cannot be properly studied or comprehended. Here was the stuff to make the book different from, and better than, any other competent history. On the scale on which the book is written, it could have been done in a chapter; and Mr. Gloag would have been one of the best men to do it.

There are two other curious omissions. One may deplore but possibly excuse the absence of any reference to the American contribution, comparatively small as it is, to serious music; one may remark the leaving out of the churches from the catalogue of social organizations; one may note that the summary nature of the final short chapter on the creative contribution of the U.S.A. to the world is made up for in the introduction; one may suppose, a little incredulously, that he did not find any contemporary art in America worth writing about. But Mr. Gloag should surely have dealt with the American trade unions of to-day. And how on earth did he come to leave out the American Press?

E. H. W. Atkinson.

NEW REGIONAL OFFICERS

In accordance with the terms of the Ministry of Works and Planning Circular No. 1 sent to all local and planning authorities on July 21 last, the Minister has now appointed Regional Planning Officers for the whole of England and Wales. The work of these officers will be of an advisory and liaison character, and briefly will consist of keeping planning authorities informed as to requirements of national planning policy as this develops, and the Minister of Works and Planning of the problems in their area; they will also advise local authorities regarding planning problems generally, particularly those authorities with devastated areas, on the question of surveys and preliminary plans for reconstruction. Contact will also be kept with Regional Officers of other Ministries on all matters of mutual concern. The names and addresses of the Regional Planning Officers are as follows:—

Chief Planning Inspector and Chief Regional Planning Officer.—K. S. Dodd, M.C., M.A., A.M.I.N.S.T.C.E., M.T.P.I., Ministry of Works and Planning, Lambeth Bridge House, London, S.E.1. (Telephone: Reliance 7611).

Regional Planning Officers:

Northern Region.—R. B. Walker, F.R.I.B.A., M.T.P.I., 19, Highbury, Jesmond, Newcastle-on-Tyne. (Telephone: Jesmond 2225).

North Eastern Region.—R. H. Mattocks, P.P.T.P.I., Temporary Address—7, Blenheim

Terrace, Woodhouse Lane, Leeds, 2. (Telephone: Leeds 22382).

North Midland Region.—R. A. Hudson, M.T.P.I., 44, Lucknow Avenue, Mapperley Park, Nottingham. (Telephone: Nottingham 66907).

Eastern Region.—E. FitzGibbon, B.A., B.A.I., Temporary address—c/o Ministry of Health, 12, Queen Anne Terrace, Cambridge. (Telephone: Cambridge 54461).

Southern Region.—A. Morris, M.I.N.S.T.C.E., M.T.P.I., 61, Western Elms Avenue, Reading, Berks. (Telephone: Reading 60826).

South-Western Region.—H. W. J. Heck, M.I.M. & C.Y.E., M.T.P.I., 15, Elmdale Avenue, Clifton, Bristol. (Telephone: Bristol 34670).

Wales.—R. D. Jones, A.R.I.B.A., A.M.T.P.I., 17, Ninian Road, Cardiff. (Telephone: Cardiff 686).

Midland Region.—E. H. Doubleday, P.A.S.I., A.M.T.P.I., 75, Westfield Road, Edgbaston, Birmingham. (Telephone: Edgbaston 3624 and 3625).

North-Western Region.—M. J. Hellier, A.M.I.M. & C.Y.E., A.M.T.P.I., 100, Palatine Road, West Didsbury, Manchester, 20. (Telephone: Didsbury 3937).

South-Eastern Region.—H. R. Wardill, F.S.I., M.T.P.I., 24, Calverley Park, Tunbridge Wells, Kent. (Telephone: Tunbridge Wells 3237).

SOCIETIES AND INSTITUTIONS

R.I.B.A. Lectures

A Course of Lectures are to be given at the R.I.B.A. on RECENT SCIENTIFIC AND TECHNICAL DEVELOPMENTS IN BUILDING.

The following is the programme as arranged at the time of going to press:—

Saturday, October 10, at 2.15 p.m. G. L. Greaves (A). *The Scientific Organisation of an Architect's Work.* 4.30 p.m. A. W. Skempton, M.S.C., A.M.I.N.S.T.C.E. and P. C. G. Hauser, B.S.C., M.I.N.S.T.C.E., M.I.STRUCT.E. *Foundations.* (Mr. Skempton will deal with soil mechanics).

Saturday, October 17, at 2.15 p.m. and 4.30 p.m. Ewart S. Andrews, B.S.C., M.I.N.S.T.C.E., M.I.STRUCT.E. and C. S. White (A). *The Influence of Recent Scientific Research on the Design of Building Structures.*

The chairman of the first session on Saturday, October 10, will be Mr. Alister MacDonald, Chairman of the A.S.B. and of the second session, October 10, Sir George Burt.

The President of the R.I.B.A., Mr. Ansell, will open the first meeting.

Those who wish to attend are asked to notify the Secretary at the R.I.B.A. without delay.

Tea will be provided for all those who notify their intention to be present at least three days before the session.

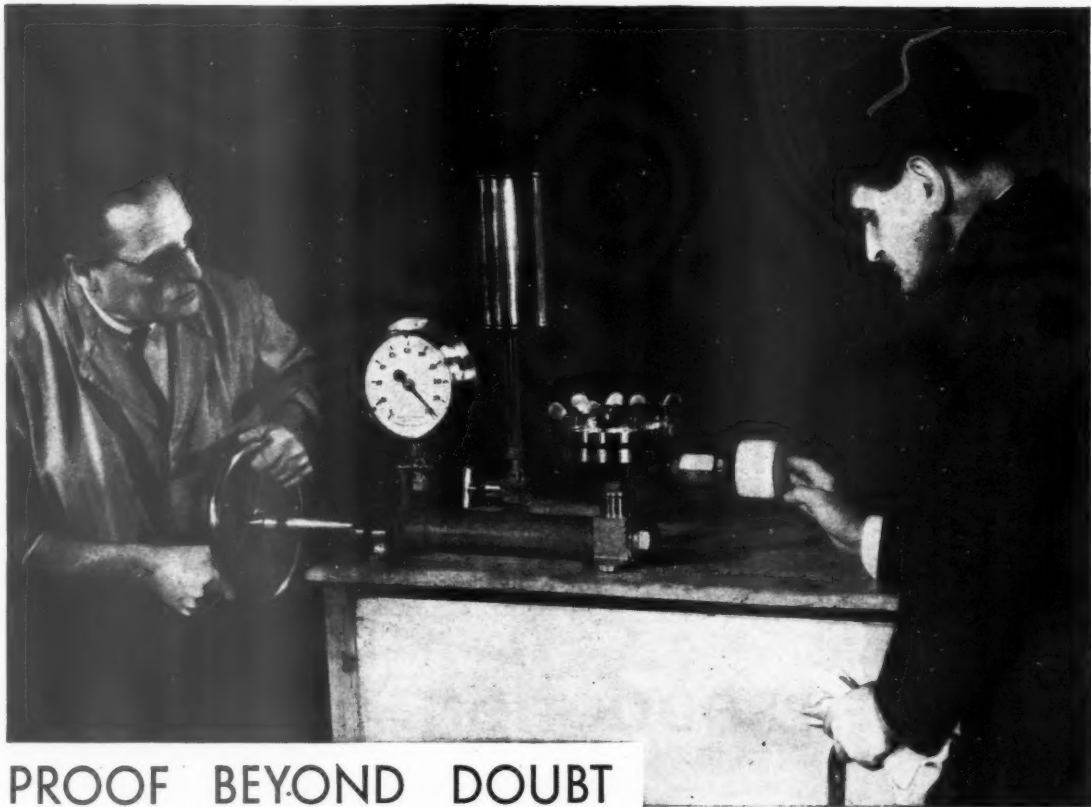
R.I.B.A. Examinations

The Final Examination was held in London and Edinburgh from July 1 to July 9 last. Of the 60 candidates examined, 39 passed as follows: Passed whole examination, 25; passed whole examination, subject to approval of thesis, 5; passed Part I. only, 7; Passed Part I. only subject to approval of remaining testimonies of study, 2. 20 candidates were relegated.

The successful candidates are:—

Abbott, Harold Dickenson; Ball, Brian William Bradford (subject to approval of thesis); Burley, Ronald Edward; Butterfield, Lawrence Albert; Caldwell, James Edwin Lees; Dickinson, Sidney Naylor; Eaton, Thomas Albert; Garland, Robert; Garwood, Walter William; Gibson, Percy Albert; Harvey, Earl Miners; Hatton, John Murthwaite; Hershman, Abraham (subject to approval of thesis); Hirschfeld, Hans Julius Walter; Hounsell (Miss) Jean Burwood; Kellett, Keith Gordon; King, Thomas Edward James (subject to approval of thesis); Lewis, David Hubert; MacRandal, Daniel Joseph; McVeigh, William Cleland; Mayer, William Edgar; Moss, Gordon Kenneth; Osgood, Frederick Farrar; Preece, Ernest John; Smith, Ernest William; Smith, Harry Thomas Donald (subject to approval of thesis); Smith, Ronald Frederick; Stoddard, Gilbert (subject to approval of thesis); Whelan, Randolph St. George; Williams, Bobby Royston.

CEMENT WATERPROOFED AGAINST GREAT PRESSURE



PROOF BEYOND DOUBT

The cylinders tested by this machine are composed of 2 parts of standard sand to 1 part of Portland cement with the addition of 5% (by weight of the cement) of 'PUDLO' Brand waterproofing powder. They are cast around hollow steel nipples and then screwed into the testing apparatus, which is charged with water. Hydraulic pressure is applied by screwing in the plunger provided with a wheel handle, and the needle of the gauge indicates that water is being forced against the waterproofed cement mortar at a pressure of 300 lbs. per square inch. This test was made in public view at every Building Trades Exhibition held at Olympia since 1919, and on each occasion the full pressure of 300 lbs. per square inch was continuously maintained for the whole of the fourteen days that the exhibition lasted. On the last day of each exhibition the cylinder was broken in half, when it was found that, even under this great pressure, no water had penetrated the substance of the waterproofed cement, thus proving beyond doubt the value of 'PUDLO' Brand waterproofer for all cement work which has to keep out or retain water under pressure.



'PUDLO'

BRAND

CEMENT WATERPROOFER

KERNER-GREENWOOD & COMPANY, LIMITED

ANN'S PLACE

KING'S LYNN

Sole Proprietors and Manufacturers

Od. P. St.

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

CAUSE AND EFFECT

INTERRUPTION OF SUPPLY=

Idle Machines

IDLE MACHINES=

Loss of Production

LOSS OF PRODUCTION=

Longer War

•• Ensure minimum risk of
breakdown by insisting on



C.M.A.

CABLES

MEMBERS OF THE C.M.A.

The Anchor Cable Co.
Ltd.
British Insulated Cables
Ltd.
Callender's Cable &
Construction Co. Ltd.
The Craigpark Electric
Cable Co. Ltd.

Crompton Parkinson
Ltd. (Derby Cables Ltd).
The Enfield Cable
Works Ltd.
Edison Swan Cables Ltd.
W. T. Glover & Co. Ltd.
Greengate & Irwell
Rubber Co. Ltd.

W. T. Henley's Tele-
graph Works Co. Ltd.
The India Rubber, Gutta-
Percha & Telegraph
Works Co. Ltd.
(The Silvertown Co.)
Johnson & Phillips Ltd.
Liverpool Electric Cable
Co. Ltd.

The London Electric
Wire Co. and Smiths Ltd.
The Macintosh Cable
Co. Ltd.
The Metropolitan
Electric Cable &
Construction Co. Ltd.
Pirelli-General Cable
Works Ltd. (General
Electric Co. Ltd.)

St. Helens Cable &
Rubber Co. Ltd.
Siemens Brothers & Co.
Ltd. (Siemens Electric
Lamps and Supplies Ltd.)
Standard Telephones
& Cables Ltd.
Union Cable Co. Ltd.

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

'Phone Holborn 7633

Part I. only:—

Beard, Geoffrey John; Hooper, David Vincent; Morris, William; Owen, Stanley George; Poel, Stanley Bacon; Sawday, John Trevor (subject to approval of remaining testimony of study); Waring, Arnold Shaw (subject to approval of remaining testimony of study); Wilson, Ian Burns; Wyler, Derreck Roy.

The Special Final Examination was held in London and Edinburgh from July 1 to July 8. Of the 29 candidates examined, 12 passed (2 of whom sat for and passed in Part I. only), and 17 were relegated. The successful candidates are:—

Blouet, Douglas Montague Ralph; Cook, John Howden; Fyfe, Clark; Horton, Edmund Nixon; Johnson, Sidney Arthur Ernest; Lycett, Kenneth Samuel; Mort, Ralph; Shrimplin, Clifford Walter; Steer, Louis George; Willis, Henry Challenger.

Part I. only:—

Passmore, Edward William; Sommer (Mrs.) Camilla.

The examination in professional practice for students of schools of architecture recognized for exemption from the R.I.B.A. final examination was held in London and Edinburgh on July 7 and 9. Nine candidates were examined and passed. The successful candidates are:—

Childs, Derrick Rigby; Eastwick-Field, John Charles; Gillman, Gordon; Greenen, Frank Roland; Lurie, Samuel; McLaren (Miss) Elizabeth; Mallick, Sushil; Penman, Larmont Douglas; Spittal (Miss) Elizabeth.

A.A. Annual General Meeting

The annual general meeting of the A.A. will be held on September 29, at 6 p.m. Mr. Arthur W. Kenyon, F.R.I.B.A., will deliver his presidential address and has chosen for his subject: A Master Plan for Britain.

ARCHITECTURAL SCHOOLS

Edinburgh College of Art

At the Edinburgh College of Art, School of Architecture and Department of Town and Country Planning, the term begins on October 1. The School is Recognized by the R.I.B.A. Students who successfully pass the qualifying examination for the Certificate are eligible for exemption from the Intermediate Examinations of the R.I.B.A. and students who obtain the diploma of the school are eligible for exemption from the Final Examinations of the R.I.B.A. After spending a period of not less than one year in practical experience outside the school, students who hold the diploma are eligible for election as Associates R.I.B.A. if of British nationality. This period of office experience is normally undertaken between the third and fourth year of the Day Course (i.e., after gaining the certificate). The diploma (final examination) of the school is recognized as a qualification for registration under Section 6 (1) (c) of the Architects (Registration) Act, 1931, and for the designation registered architect. The principal is Mr. Robert Lyon, M.A. (Dunelm), A.R.C.A. (London).

Welsh School of Architecture

Classes in the Welsh School of Architecture, Cardiff, which has now been at work for rather more than 22 years under the charge of Mr. W. S. Purchon, M.A., F.R.I.B.A., begin on October 6. The three years' full-time day course leads to the award of the certificate, to the holders of which the R.I.B.A. grants exemption from its Intermediate Examination, while those students who successfully pass through the further two years forming the Diploma Course, are exempted from the R.I.B.A. Final Examination, a special course of lectures on professional practice and a special examination in this subject being held in the school. Success in the Diploma course also forms a complete qualification for Registration under the Architects (Registration) Acts of 1931 and 1938. A course leading to the Degree of B.Arch. has been arranged jointly by the University of Wales and the Welsh

School of Architecture. This course is open only to matriculated students. There is also an Evening Atelier. The School of Architecture has for the last 14 years been granted the status of Final Recognition by the R.I.B.A.

The following local architects assist in the work of the advanced courses as honorary lecturers: Messrs. Percy Thomas, P.-P.R.I.B.A., T. Alwyn Lloyd, F.R.I.B.A., P.-P.R.I.B.A., Ivor P. Jones, A.R.I.B.A., J. Williamson, F.R.I.B.A., C. F. Jones, A.R.I.B.A., John W. Bishop, A.R.I.B.A., and C. F. Bates, F.R.I.B.A. The external examiners are Professor L. B. Budden, of the University of Liverpool, and Professor R. A. Cordingley, of the University of Manchester. Ten Scholarships covering tuition fees and maintenance grants of £40 per annum for three years are offered to residents in certain districts of Wales and Monmouthshire for competition annually.

IN PARLIAMENT

House of Commons

Central Planning Authority.—Mr. Silkin asked the Parliamentary Secretary to the Ministry of Works and Planning when legislation will be introduced to set up a central planning authority and for the amendment of the Town and Country Planning Act, 1932; and whether local authorities will first be consulted?

Mr. Strauss: As I informed the House on April 29 last, consideration of the reports of the Scott and Uthwatt Committees, which have only recently been received by my Noble Friend, is necessary before decisions on these matters can be reached. It is proposed to consult the associations of local authorities and the London County Council before legislation to amend the Town and Country Planning Act, 1932, is introduced.

Small Buildings and the War Effort (Building Trade).—Mr. Touche asked the Minister of Labour whether he is aware that some owners of small businesses in the building trade have been directed into other industrial work locally after being given only two or three days' notice before the order becomes operative; and whether, in view of the hardship involved in such cases, he will take steps to ensure that such persons shall be given a longer notice in order to give them time to make the necessary arrangements for their businesses?

Mr. G. Tomlinson: The length of notice given to men directed to employment on urgent building contracts must be considered in regard to the importance of manning the work speedily, but there is a right of appeal to an independent Appeal Board which can be exercised by men in cases of the kind indicated by my hon. Friend or in other circumstances where hardship may be involved.

Mr. Kirby asked the Minister of Labour how many bricklayers, plasterers, slaters and joiners were registered as unemployed in the city of Liverpool on August 31, 1942; and the reasons for their being so unemployed?

Mr. Tomlinson: I am having the available information sent to my hon. Friend.

OBITUARY

The late Mr. D. H. Jones

We regret to record the death of Mr. D. H. Jones. In 1900 he and his brother, the late Mr. Daniel Palmer-Jones, invented the Scaffixer, the first mechanical coupling to be used with timber pole scaffolding, and founded the first company, named the Patent Rapid Scaffold Tie Company Ltd. A few years later they made application for the first patent to cover a coupling to be used with steel tubing, known as patent steel tubular scaffolding. The Tubular Scaffolding Co., Ltd., was incorporated in 1920, and in 1922 the name was changed to Messrs. Scaffolding (Great Britain), Limited, incorporating both companies. Mr. Jones, from 1931 to 1934 was a member of the Lambeth Borough Council.

TRADE NOTES

Canadian and U.S.A. Building Boards

Associated Boards, Ltd., has recently been incorporated as the Agent of the Ministry of Supply (Paper Control) for the distribution of Building Boards of Canadian and U.S.A. origin imported on public account. Enquiries as to the availability and use of different types of boards should be addressed to the firms whose names and addresses are set out below, and who are sub-agents of Associated Boards, Ltd., or, if preferred, to Associated Boards, Ltd., at Oswaldestree House, 34-35, Norfolk Street, Strand, W.C.2.

The boards imported are to be known as National Stock Building Boards and include the following types, the current Control prices for which are as specified against each of them:—

TYPE OF BOARD	CURRENT CONTROL PRICE
$\frac{1}{8}$ " Insulation (Homogeneous) Board	Delivered to Site.
$\frac{1}{8}$ " Bitumen Laminated Board	2/8d. nett, sq. yd.
$\frac{1}{8}$ " Hardboard	2/3d. nett, sq. yd.
$\frac{1}{8}$ " Hardboard	5d. nett, sq. ft.
$\frac{1}{8}$ " Laminated Wallboard—	6d. nett, sq. ft.
Up to 2,500 sq. ft.	2 3/4d. nett, sq. ft.
2,500/5,000 sq. ft.	2 1/2d. nett, sq. ft.
Over 5,000 sq. ft.	2 1/4d. nett, sq. ft.

In addition to the above, stocks of $\frac{1}{8}$ " Laminated as well as $\frac{1}{8}$ " Bituminous Insulation Boards are available.

It should be noted that the above prices are subject to alteration without notice on the instructions of the Control.

Substantial stocks are held available at convenient points throughout the country, and delivery for purposes of an essential character can be effected on receipt of Authority to release by the Control.

LIST OF FIRMS

The Merchant Trading Co., Ltd., Columbia House, 69, Aldwych, W.C.2.
The TenTest Fibre Board Co., Ltd., 75, Crescent West, Hadley Wood, Barnet.
Treetex, Ltd., Cecil Chambers, 76/86, Strand, W.C.2.
Insulite Products Corporation, Ltd., Adelaide House, London Bridge, E.C.4.
Masonite, Ltd., Bevis Marks House, Bevis Marks, E.C.3.
Gliksten Doors, Ltd., Carpenters Road, Stratford, E.15.
The Wood-Fibre Wallboard Co., Blenheim Wharf, Eagle Wharf Road, N.1.
MacAndrews & Forbes, Ltd., 2, Caxton Street, Westminster, S.W.1.
James Webster & Bro. Ltd., "Tacoma," Merrilocks Road, Blundellsands, Liverpool, 23.

Building Boards Joint Committee

As a natural development of many years close collaboration the Paper Makers' Association of Great Britain and Ireland, 1912 (Inc.) and the Insulation, Building and Hard Board Association Ltd., in joint session, recently decided to form a small committee to deal with the many problems that daily arise in connection with their common interests. The joint committee under the chairmanship of Mr. Galloway, of Masonite, Ltd., is fully representative of the Home Producers and Importers of Building Boards. Other members are Messrs. C. Geoffrey Cullen, Lloyd Boards Ltd.; Gilbert H. Norris, TenTest Fibre Board Co., Ltd.; W. H. North, Insulite Products Corporation, Ltd., and Mr. G. H. Peters, P.I.M. Board Co., Ltd. Major W. F. Dawson, Paper Makers' Association, has been appointed Secretary to the Committee.

As representative of the home producing and importing sides of the Building Board Industry the Building Boards Joint Committee feel that they should now unite more closely than ever before to formulate plans to meet the demands upon their products in connection with post-war planning and reconstruction. Practical suggestions have already been made to the Ministry of Fuel and Power regarding the thermal insulation of buildings.

The Building Boards Joint Committee operates from Melbourne House, Aldwych, W.C.2, at which address the Secretary will be pleased to receive enquiries.

★ *How can I lag The Hot Storage Cylinder of a Domestic Hot Water System?* Q 967

★ *Is literature available regarding the Construction of Steel Houses, built either in this Country or Abroad?* Q 968

THE ARCHITECTS' JOURNAL INFORMATION CENTRE

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

War Address:

45 THE AVENUE,
CHEAM, SURREY.
Telephone: VIGILANT 0087

Q 967

ARCHITECT, CAMBS.—*To economise on fuel, I wish TO LAG the HOT STORAGE CYLINDER of a domestic hot water system. The cylinder is enclosed in the lower part of a linen cupboard, but owing to its position and that of the man-lid, etc., it is not practical to lag it in the usual manner. A casing of wood has been formed round the cylinder and it is suggested that this should be stuffed with hay or straw. Is there any risk of spontaneous combustion bearing in mind that on some occasions it is possible that the water in the cylinder will nearly reach boiling point? If so, can you suggest any other suitable material. Sand or sawdust have been considered but are not thought suitable owing to the difficulty of removal when the cylinder requires cleaning. The space to be filled is about 9 cubic feet?*

Spontaneous combustion is most unlikely, but at the same time, hay and straw are highly inflammable and are not suitable; in addition they would harbour and attract vermin.

The cylinder should be encased with felt, with a canvas backing, such as can be obtained from local builders' merchants. It can be tied round in such a manner that it can easily be removed for cleaning. Old pieces of carpet and sacking could be used instead. Alternatively, the cylinder could be boxed in with asbestos and filled in with slag wool, but this would be more expensive and access would be difficult.

Glass silk could be used instead of felt with excellent results, but it is more expensive.

Q 968

ENQUIRER, STAFFS.—*Is literature available regarding the CONSTRUCTION OF STEEL HOUSES, built either in this country or abroad?*

Following are the direct references to all steel houses in British publications, in the R.I.B.A. Library Catalogue:—

The Steel House. By the Duke of Atholl.—*The Spectator*, Feb. 27, 1926. p. 355.

Steel House Construction.—*The Builder*, May 11, 1934. p. 816.

Report by Court of Enquiry concerning Steel Houses. By the Ministry of Labour. Pamphlet No. C.M.D. 2392—1925.

In the catalogue are a large number of references to foreign and more particularly to American publications, but it is doubtful whether you could obtain copies except through the R.I.B.A. or a similar technical library, where the catalogues would be open for your inspection.

There are also a large number of articles in the back numbers of British periodicals, under the general heading of Prefabrication which have, no doubt, some bearing on the subject.

Your best course is to visit the R.I.B.A. or some other technical library. Alternatively the British Steelwork Association, Steel House, 11, Tothill Street, London, S.W., or any of the large steelwork firms would probably be able to answer a specific query.

Q 969

ENQUIRER, YORKS.—*Please give me the names of some MANUFACTURERS OF STEEL BUNKS.*

Following is a list of four firms.

Mellows & Co., Ltd., Corporation Street, Sheffield, 3.

Standard Range & Foundry Co., Ltd., Watford, Herts.

J. & W. Shale, 26, Tomlin's Terrace, London, E.14.

Southerns, Ltd., New Wolverhampton Road, Oldbury, Birmingham.

If you wish to make other enquiries you should get in touch with the Secretary of the Metallic Bedstead Manufacturers' Association, 8, Waterloo Street, Birmingham. Telephone: Midland 5524. Most of the manufacturers of metal bunks are members of this association.

Q 970

ENQUIRER, HERTS.—*I am at present working as a civil engineering tracer-draughtsman and wish to follow a COURSE OF STUDY FOR the Intermediate R.I.B.A. EXAMINATION. Is it possible for you to recommend me to a suitable and reliable school through which I might study by correspondence in my spare time after working hours?*

We recommend:

The International Correspondence Schools, Ltd., International Buildings, Kingsway, London, W.C.2.

Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I., Tutor, St. Catherine's College, Cambridge.

Mr. C. W. Box, F.R.I.B.A., M.R.San.I., 115, Gower Street, London, W.C.1.

Q 971

ENQUIRER, DEVON.—*Could you advise me where to acquire some illustrations or sketches of the MOPIN SYSTEM, mostly the jointing of the units is required. At present I have only written data on this subject.*

We give below the list of references to the Mopin system contained in the R.I.B.A. Library, which is the most comprehensive list that you are likely to obtain. We would normally undertake to visit the R.I.B.A. if necessary, to ascertain which of the publications are illustrated, but it is very improbable that you would be able to obtain copies of the publications through an ordinary bookseller, and would have to visit the R.I.B.A. Library or some similar technical library to see them.

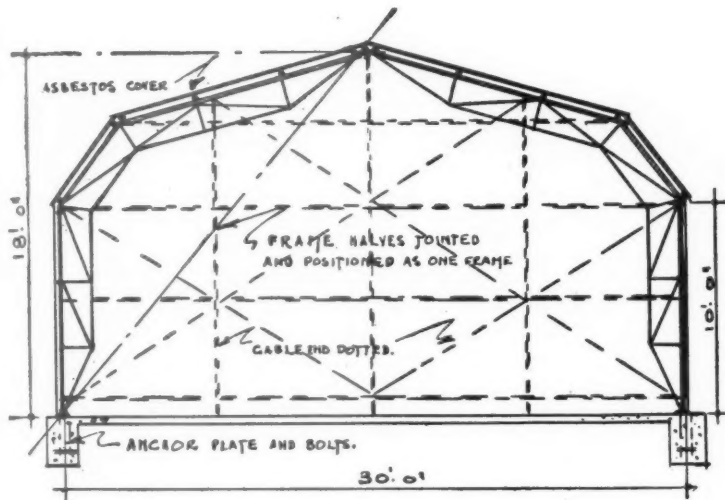
If you are not in a position to visit a suitable library, we suggest you write to Messrs. E. Mopin & Co., King's Street Chambers, Wellington Street, Leeds, 1, as they would probably be pleased to answer any question you may wish to put.

Concrete, Vibrated (Prefabricated). Books and Manuscripts.

Mopin. E. & Cie.—Plancher en dalles de béton armé et vibré sur jouées "E.M." Pam., 4to. (193-).

PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 6



METHODS OF FABRICATION

This form of construction lends itself admirably to the prefabrication of single storey buildings of any size. The standard sections (roof trusses, wall frames and columns, and door and window frames) are light in weight and conveniently transportable. Assembly on the site is simply and rapidly effected, the sections being bolted or welded together according to specification. The buildings can be dismantled with equal facility, and only the loss of foundations is involved since the various sections all remain available for re-erection—thus it may be said that this form of construction has all the essentials of a permanent building plus the facilities of a portable building. A further consideration is the flexibility of the system, allowing alterations or extensions to be made to existing buildings simply and quickly.

Three alternative methods of fabrication are available:—

- (1) Complete factory prefabrication, leaving assembly only to be carried out on the site.
- (2) Site welding. The welding of the final fixings and connections is sometimes more satisfactorily effected on the site; where site welding is not practicable or economical special bolt joint or joint plates are supplied for such connections (see Figs. 3 and 4 reproduced from data sheet No. 3).
- (3) Site fabrication and welding. In certain circumstances complete site fabrication is advantageous. Though more costly than factory prefabrication, in cases where transport costs are heavy and access to the site difficult, and where the fabricated sections required are large in number and simple in design, it sometimes proves economical to erect temporary portable workshops on the site where the fabricators and mobile welding units can execute the whole of their work.

The method to be adopted is in each case dependent upon the circumstances prevailing, and the type and size of the building, or buildings, to be erected, and it is well that proper consideration should be given to these factors before a decision is made.

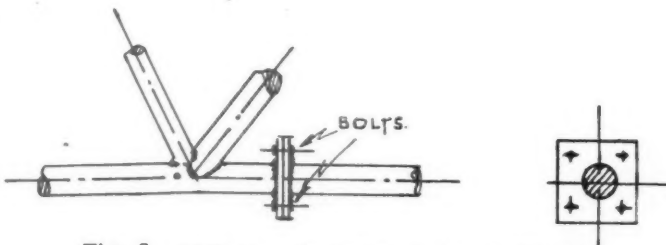


Fig. 3. DETAIL. JOINT FOR SMALL SPANS.

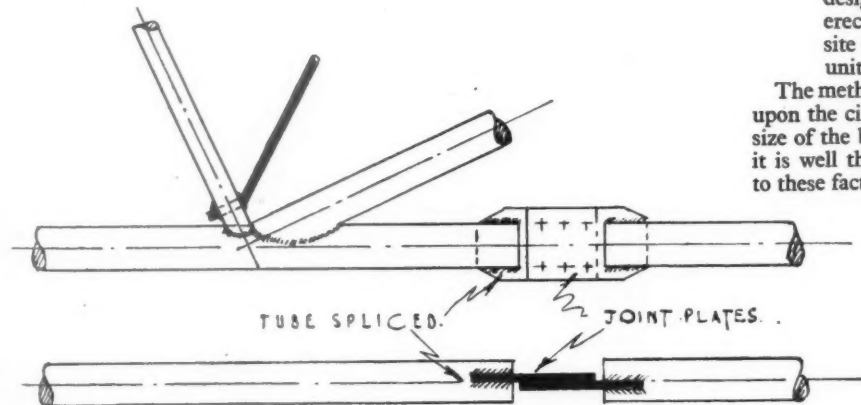


Fig. 4. Bolt connection for larger trusses.

- Speed in erection
- Economy in steel
- Lightness of structure with great strength

ADVERTISERS' ANNOUNCEMENT

NOTE.—These data sheets are appearing weekly in THE ARCHITECTS' JOURNAL—they will be available shortly in complete Folder form and application for these Folders should be addressed to Scaffolding [Great Britain] Limited, 77, Easton Street, High Wycombe, Buckinghamshire

Mopin, E.—Precast units turned out from moulds immediately after casting. (From Concrete Bg. and Concrete Products). Pam., 4to (193-); Construction of Buildings by Standard Units of Vibrated Concrete. Typescript sm. fo. (193-); Booklet on the Manufacture of Articles of Vibrated Concrete by Instant Demoulding. Typescript sm. fo. (193-).

Steel Frame and Reinforced Concrete (precast) Blocks. Mopin System.—(a) Books. (Mopin System). Revue de la Ste. (?) des Ingénieurs Soudeurs. (193-.) (Not in Library); Mopin, E. G. P. The Mopin System of Construction as applied to Residential Buildings. (From Ferro-concrete, Sept.). Pam., 4to, 1935; (b) Articles in Periodicals. (Mopin System). "Science et Industrie," 1933, Oct. and Dec. (Not in Library); The Mopin System of Construction. (In Review of Construction and Materials). R.I.B.A. Jnl., 3 S., xli., 1934, pp. 518-575; (Mopin System). Documents Coloniaux, 1938 Apl. (Not in Library).

(Ditto Mopin System). Individual Examples.—(a) Books. Fillipi, P. La Cité de la Muette à Drancy (Seine). (Mopin.) (From Technique des Travaux, Nov.). Pam., 4to, 1934; (b) Articles in Periodicals. Rowse, E. A. A. Housing in Paris, Cité de la Muette, Drancy. Architects' Journal, 1934 (lxxx.), Aug. 9, Housing Suppt., p. 195.

Q 972

ENQUIRER, YORKS.—*I am at present a gunner in the Royal Artillery, and I wish to know if it is possible for me to obtain a TRANSFER TO THE ROYAL*

ENGINEERS as a draughtsman. I have just passed my second year examination at a Technical College where I am studying for my National Certificate, obtaining a first class pass in all subjects which includes mathematics, building construction and building geometry. I consider myself a good draughtsman and I possess a good all-round knowledge of the building trade generally. Previous to being conscripted I was employed in the building trade for seven years, two years being spent in the drawing office of a builders' merchant. If it is possible for me to transfer no doubt you can tell me how to set about it and what branch of the R.E.'s to put in for. I am 26 years of age and have been in H.M. Forces for the past two years.

It is only possible to obtain a transfer with the approval of your C.O., and there is no higher authority to whom you personally can apply. We suggest you apply to him for transfer to the Works Service of the Royal Engineers, as an architectural draughtsman.

It is possible for others to take up the matter on your behalf, and the Association of Architects, Surveyors and Technical Assistants, 113, High Holborn, London, W.C.1, are particularly helpful in this respect. We suggest that you might get in touch with the Secretary

with a view to joining the organization, as the subscription for members of the forces is very low, and membership may well be useful to you in other ways.

Q 973

ARCHITECT, ESSEX.—*I am considering using a method of prefabricated concrete construction to erect a TEMPORARY CANTEEN. Have you a list of firms that turn out suitable units, and are within easy reach of this district?*

The Capping Tile Co., Ltd., Selinas Lane, Whalebone Lane, Dagenham. (Phone: Seven Kings 2304).

Messrs. Stent Precast Concrete, Ltd., 1, Victoria Street, London, S.W.1. (Phone: WHitehall 2573). Works: Dagenham Dock, Dagenham, Essex.

Q 974

ENGINEER, HERTS.—*I wish to get in touch with the Board of Education in connection with extensions to SCHOOLS, and should be glad if you would let me know the address to which I should write.*

You should write to the Board of Education, Alexandra House, Kingsway, London, W.C.2. Telephone: Temple Bar 8020.

THREE JAYS

SELF-ADHESIVE TAPE is working in the national interest

Remember this now and after Victory!

SAMUEL JONES & CO. LTD.
16-17 NEW BRIDGE STREET, LONDON. E.C.4. Telephone CENTRAL 6500

Supplies of SELF-ADHESIVE TAPES are now restricted to Government orders. Until normal trading is possible the general trade cannot be supplied. Then once again our SELF-ADHESIVE TAPES will be available for all sealing purposes

BUTTERFLY BRAND

LET IN THE DAYLIGHT

AND SAVE FUEL IN THE FACTORIES

Dufay Glazing Units glazed with DUFAYWYRE are the complete answer to the re-introduction of daylight and A.R.P. protection for the workers. Lighting costs are reduced by £3,000 per annum per 100,000 sq. ft. of floor space.

It has been proved that in factories which have returned to daylight working conditions, not only have lighting costs been considerably reduced but output has increased and the workpeople's health improved.

DUFAYWYRE "A" QUALITY GLAZING UNITS

HAVE ALL THE FOLLOWING ADVANTAGES:

1. Pass 80% of the incident light.
2. Pass the ultra-violet rays of daylight.
3. Do not require white painting in summer.
4. Give even distribution of light over the whole floor; no hot spots.
5. Absolutely no danger from blast. Complete protection for workers.
6. Fix as glass; no special gadgets required.
7. As easily washed and cleaned as glass.
8. Not affected by heat or cold, sun or snow.
9. Non-inflammable.
10. Guaranteed to carry a load of 112 lbs. per square foot.
11. Reduce absenteeism and increase production.
12. CUT TO ANY SIZE TO FIT EXISTING GLAZING BARS.

DUFAYWYRE IS A PRODUCT MADE BY DUFAY-CHROMEX LIMITED AND APPROVED BY THE MINISTRY OF WORKS AND BUILDINGS.

Our technical staff are at your disposal without obligation. A postcard to: DUFALITE LTD., ELSTREE, HERTS., or a telephone message to ELSTREE 1733, will bring a representative by return.

DUFALITE LIMITED, ELSTREE, HERTS. Phone: ELSTREE 1733

For Roofs

**TRUSCON
PRECAST
FLOORS**

- SAVE SITE LABOUR
- SAVE TIMBER
- PROVIDE WORKING PLATFORM FOR FOLLOWING TRADES
- SAVE COST
- SAVE WEIGHT

TRUSCON FLOORS

6 COLLINGHAM GARDENS, EARLS COURT, S.W.5 'PHONE: FRO 8141

For Floors

HOW AN AGA COOKER SAVED ITS OWN COST IN 2½ YEARS

The Cardiff Royal Infirmary, catering for 700 patients per day, started cooking with an AGA Heavy Duty Installation five years ago. The cost of the cooker, with auxiliary equipment, was £750. In the first year the saving on fuel alone was £300 and this rate of saving has been maintained.

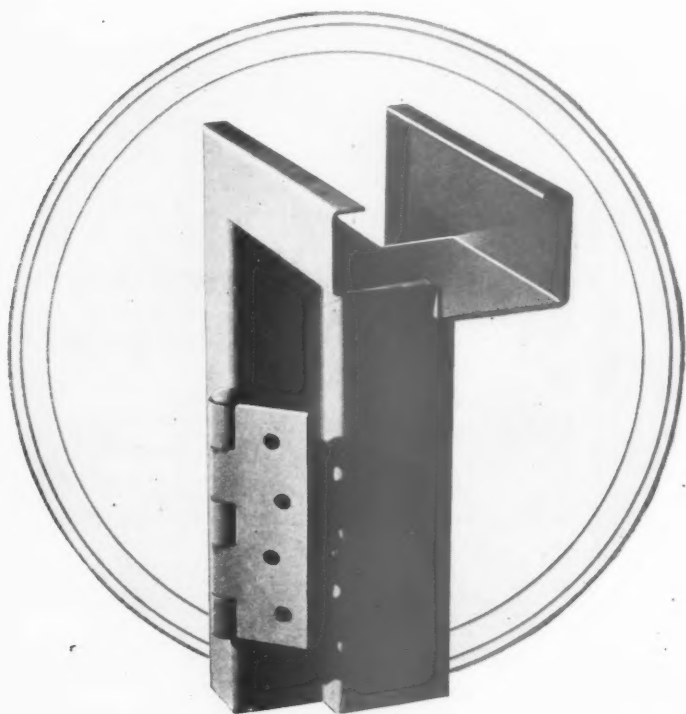
Heat storage cooking means a cool kitchen, a clean kitchen, attention only twice in 24 hours, constant cooking heat night and day and a guaranteed low fuel consumption. AGA Heat Limited, with its Associated Companies, are equipped to design complete kitchens, to supply working drawings and all equipment in any kind of establishment, and suitable to any catering load.

YOU KNOW WHERE YOU ARE WITH AN AGA

**YOU KNOW WHERE
YOU ARE WITH AN**

AGA
Regd. Trade Mark

AGA HEAT LIMITED
(PROPRIETORS: ALLIED IRONFOUNDERS LTD.)
COALBROOKDALE, SHROPSHIRE



SANKEY

METAL TRIM

DOOR FRAMES • WINDOW CILLS
PRESSED STEEL SKIRTING
PICTURE RAIL • CORNER BEAD
ETC., ETC.

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

JOSEPH SANKEY & SONS LTD.

Works: WELLINGTON, SHROPSHIRE.

LONDON OFFICE: 168 REGENT ST., W.1



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

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



THE RUBEROID BUILT-UP ROOF

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

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

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

RUBEROID ROOFING

THE RUBEROID CO., LTD., 1, MEADOW MILLS, STONEHOUSE, GLOUCESTERSHIRE

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

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 Monday morning for inclusion in the following week'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

CORPORATION OF THE CITY OF GLASGOW.**APPOINTMENT OF DIRECTOR OF HOUSING.**

The Corporation of the City of Glasgow invite applications for the post of DIRECTOR OF HOUSING.

The appointment will be held during the pleasure of the Corporation, and the salary offered is at the rate of £1,500, rising by annual increments of £50 to £2,000 per annum.

The duties of the Director of Housing include the surveying of sites for housing schemes, the preparation of plans and schedules, and the supervision of the work of erection, the repair and maintenance of houses and various commercial buildings belonging to the Corporation, the execution of building work by direct labour and the repair of war damage.

If the person appointed is under 50 years of age, he will be required to join the Corporation Superannuation Scheme on passing the medical examination therefor.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, must be lodged with the subscriber not later than Saturday, 10th October, 1942, in an envelope marked on the outside "Appointment of Director of Housing."

WILLIAM KERR,

City Chambers, Glasgow, C.2. Town Clerk. 810
10th September, 1942.

Architectural Appointments Wanted

ARCHITECT, experienced in carrying through large and small schemes, all parts country. Salary £800 to £1,000 per annum, according to locality. Box No. 468.

REGISTERED ARCHITECT, exempt from military service, requires responsible position. Eight years in general practice and with public authorities. Experienced in design and construction of factories, housing, war buildings, etc., civil defence schemes. Reconstruction and post-war planning. Can drive car. Available immediately. Write: Architect, "Keeper's House," Roffey Park, Faygate, nr. Horsham. 470

A.R.I.B.A. requires part-time work, many years experience all types of work, including war damage. Box 472.

EXPERIENCED SURVEYOR offers part-time services in connection with war damage repairs, bills of quantities, estimates, specifications, etc. North-west London area. Box No. 477.

DRAUGHTSMAN (Architectural), requires change, aged 17, 2½ years' experience in preparing working drawings of small structures under supervision, constructional details, tracing and building surveys. Write A.H., 61, Openview, Earlsfield, S.W.18. 483

ARCHITECTURAL STUDENT, at present engaged as Engineering Draughtsman, requires part-time Architectural Drawing work. D. Wheeler, 28, Endymion Road, Hatfield, Herts. 484

ARCHITECT, Alien, Swiss and Hungarian University Degree, 10-years' practice, good draughtsman, experienced designer, desires full or part-time work with firm or at home. Box No. 489

ARCHITECTURAL ASSISTANT, just completed 5 years' course at Regent Street Polytechnic School of Architecture and qualified for election as A.R.I.B.A., seeks employment. London or Kent preferred. Write, J. T. Dannatt, Church Road, Halstead, Nr. Sevenoaks, Kent. 490

REGISTERED ARCHITECT, available shortly, requires whole or part-time post. Experienced in supervising work on site. Designing and drafting, building maintenance and surveys (W. D. claims), variations builders accounts. Salary £450-£500 per annum. Box 491.

THOROUGHLY EXPERIENCED ESTATE CLERK-OF-WORKS desires post as CLERK-OF-WORKS, MANAGER, &c. Experienced in Estate Management; control of all contract work; estate and maintenance staffs; supervision all branches of the building, allied and specialists trades; all office work; plans; specifications; and rent collecting; keen, energetic, alert and conscientious. Not liable for military service. Highest recommendations. Please apply Box No. 492.

DRAUGHTSMAN, last 2½ years civil engineering, requires engineering or building appointment, available September 1. London area. Box 494.

PART TIME WORK, surveys, war damage, etc. Qualified and experienced Senior Assistant offers services in London area. 496

Classified Advertisements continued on page xxxii.

Wm. OLIVER & SONS, Ltd.

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

HOME GROWN { **HARDWOODS**
 { **SOFTWOODS**

Quota Merchants for
NATIONAL STOCK

ARENS WINDOW CONTROLS

THE MODERN METHOD OF OPERATING ALL TYPES OF VENTILATORS

NO UNSIGHTLY RODS, LEVERS OR CORDS, ETC.

SEND FOR INFORMATION SHEET No. 441

ARENS CONTROLS LIMITED

Tunstall Rd., East Croydon. ADDiscombe 3051-2-3-4

See Information Sheet Nos. 411, 414 & 415. Copies may be obtained from: **GEORGE ELLISON LIMITED** PERRY PARK BIRMINGHAM 72.

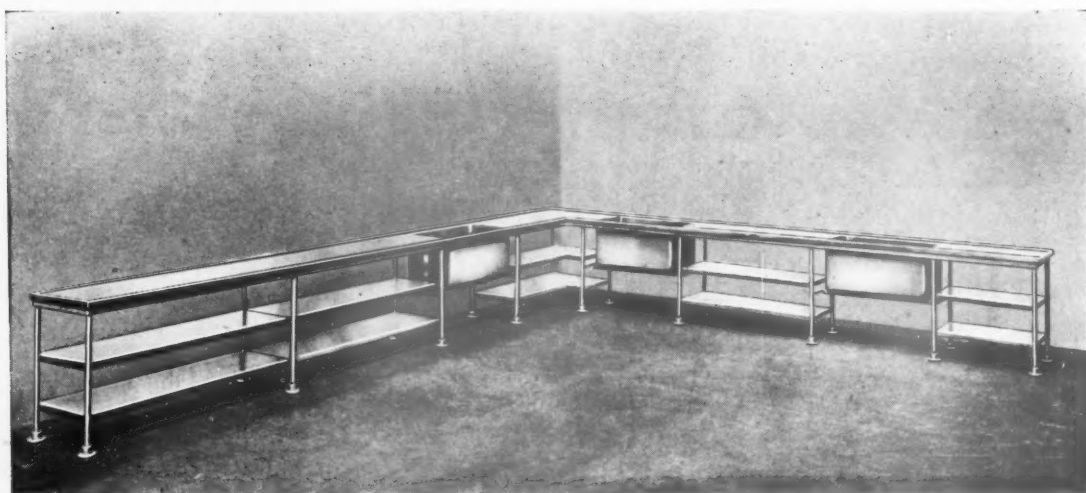
ELLISON ELECTRIC SWITCHGEAR

STEELWORK BY

SHARMAN & SON
SWAN WORKS, HANWORTH, MIDD.

'Phones: Feltham 3007. Sunbury 2367.

Grams: "Sharmar, Feltham."



PLAND PRODUCTS

IN STAINLESS STEEL

The manufacture of well-designed and sturdily built Stainless Steel Equipment is our job. Sinks and Sink Units we produce in a wide range of standard models for small domestic kitchens, for large hospitals and hotels.

UNDER PRESENT CONDITIONS STAINLESS STEEL IS ONLY AVAILABLE FOR ESSENTIAL WORK.

STAINLESS STEEL SINK CO. LTD.

Head Office and Works:
LEEDS: Ring Rd., Lower Wortley.
Telephone: Armley 38711.

London Office and Showroom:
LONDON: 14 Great Peter St., Westminster, S.W.1
Telephone: Abbey 1575

td.
C.4
DS
OS

S
ALL
ETC.
II
-2-3-4

N
C
AR

N
SON
DDX.
S:
eltham."

**FROM A PIN TO
A BATTLESHIP**

**The non-ferrous
metals and alloys
of**

**I.C.I.
METALS**

**are used in every
sphere of industry.**

**They are well
worth remembering
against the time
when unrestricted
trading is permitted.**

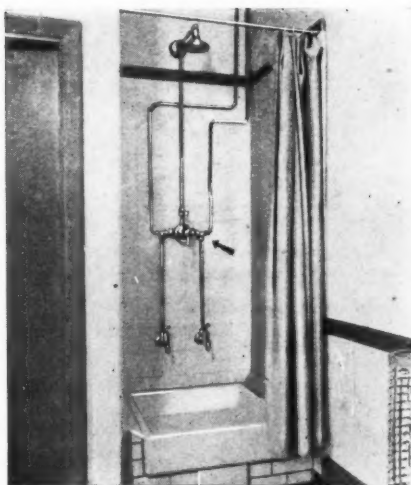
I.C.I METALS Ltd., BIRMINGHAM

k Units
hotels.

TD.

r, S.W.1

**They hold the temperature
steady.**



*Leonard-Thermostatic hot and cold Water Mixing Valve
serving shower and foot bath.*



By means of a quick-acting thermostat the Leonard-Thermostatic Water Mixing Valve delivers blended water from hot and cold and keeps it at a steady temperature in spite of variation of pressures or temperatures in the supplies. It holds the temperature of the blended water steady and avoids risk of scalding.

Leonard-Thermostatic Valves save water, save heat, save installation costs. They are widely used for all types of group washing equipment and process work. Leonard Valves have been adopted as standard equipment by Government Departments, County Councils and Municipalities.



*Send for pamphlet
from the Makers.*

Specify

Leonard-Thermostatic

hot and cold

WATER MIXING VALVES

for group washing equipment

WALKER, CROSWELLER & CO. LTD.

CHELTENHAM, GLOS.

and 6 Gordon Sq. London W.C.1

M17

ARCHITECTS' AND SURVEYORS' ASSISTANT (25). Exempt from military service, desires post preferably in Midlands. Has passed R.I.B.A. Final, Part I. Nine years general experience in design and construction including war damage repairs and A.R.P. work. Excellent testimonials. Write E.W.D., 48, Thurlow Road, Thurlow, Leicester. 497

ARCHITECT AND SURVEYOR (Registered), requires responsible position (West or Mid-Wales preferred). Age 36, married, experienced in Factories, Commercial Buildings, Licensed Premises, Hospitals, Alterations to Existing Buildings, One-Eighth Scale Working Drawings, Details, Specifications, Preparing Bills of Quantities, Estimating, Land Surveying and Levelling, Checking Building Contractors' Accounts, Measuring War Damage and Preparing Schedules of Repairs. Salary £9 per week. Box 498.

ARCHITECT'S ASSISTANT (28), having 10 years experience in an architect's office, seeks position as architectural draughtsman or supervisor of works. Experienced in surveying, levelling, the preparation of working drawings and details, and the supervision of work. J. C. O'Dwyer, River View, Ballinacurra, Limerick. 499

ADAPTABLE YOUNG MAN, 19 (exempt from military service), studying for R.I.B.A., seeks position in architect's office. Extremely keen, practical, willing to do anything connected with architecture; one year office experience; R.S.A. certificate.—Write R. W. Terry, 37, Morley Avenue, N.22. Phone BOW 5366 (after 6 p.m.). 1

REGISTERED ARCHITECT requires employment on work subject to Essential Works Order or other scheme of National importance. Experienced in surveying and levelling, designing and planning and supervision of all building construction.—Box 4.

CHARTERED ARCHITECT, exempt military service, requires senior post, with possibilities of partnership. Box No. 5.

ARCHITECT'S ASSISTANT, widely experienced, free two days a week, London area. Would undertake usual office duties. Jones, 17, Lichfield Road, Kew Gardens. Tel. Rich. 1737. 6

ARCHITECT'S ASSISTANT (24) (B.Arch., A.R.I.B.A.), experienced in preparing Sketches, Working Drawings, Details, etc., also supervision and sound construction. Would prefer aircraft design. Box 7.

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, Great Marlborough Street, W.1. Gerrard 4223-4224-4225.

SPECIFICATIONS AND BILLS OF QUANTITIES, etc., expeditiously and accurately typed or duplicated. Translations and Facsimile, Typewriting. All work treated confidentially. Miss G. Saunders, Typewriting Bureau, 17, Dacre Street, Westminster, S.W.1. Telephone: Whitehall 2805.

WANTED. Copy of the "Architectural Review" for September, 1940 Box 475.

WANTED. Complete set of copies of "The Architectural Review," July, 1940—June, 1942. Box 495.

"WALLCRAFT" PLASTIC PAINT. Approx. 50 cwt. in powder form. Reasonable offers accepted for all or part. Samples supplied. A. R. & W. Cleaver, Ltd., Wood Street, Northampton. Phone 1434. 805

TO MANUFACTURERS.—Wanted, a large iron or copper kettle and large saucepan (iron), suitable for hanging on chain over cottage fire. Send prices to Box No. 2.

WANTED, a complete set of bound volumes of "The Architectural Review," Vols. I—L. Box No. 3.

FOR ARCHITECTURAL PHOTOGRAPHS, a special camera with first class Rodenstock wide-angle lens for sale. 3 double plate holders and 4 single film holders. Also Leica Standard Model, Almar 1:3.5 with Distancemeter, for sale. Box 809.

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. Short Term Wartime Tuition Arranged. Courses by Correspondence and Personal in Studio. 115, Gower St., London, W.C.1. Telephone: Euston 3906

R.I.B.A. AND T.P. INST. EXAMS. Private Courses of tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, St. Catherine's College, Cambridge. 231

UNIVERSITY OF LIVERPOOL

LIVERPOOL SCHOOL OF ARCHITECTURE

INCLUDING DEPARTMENT OF CIVIC DESIGN

Professor of Architecture:

L. B. BUDDEN, M.A., F.R.I.B.A.

The School provides a thorough theoretical and practical training for students wishing to enter the Architectural Profession. The courses, which lead to a Degree (B.Arch.) and a Diploma, begin early in October. These qualifications both carry with them exemption from the series of Examinations leading to the Association of the Royal Institute of British Architects, with the exception of Professional Practice. A written paper and oral test in this subject are now conducted in the School. A Degree of Master of Architecture (M.Arch.) has been established, and the Degree of M.A. may also be taken in Architecture.

DEPARTMENT OF CIVIC DESIGN

Professor of Civic Design:

W. G. HOLFORD, B.Arch., A.R.I.B.A., M.T.P.I.

The Department provides a training for Architects and Engineers who wish to specialise in Town Planning. The courses, which begin in October, lead to a Certificate and Diploma.

Prospectuses of Classes may be obtained on application to the Registrar of the University.

S. DUMBELL,

Registrar.

750

THE MIDLAND JOINERY WORKS Ltd.

BURTON-ON-TRENT

Architects can rely on a quality unmatched, by men who have learnt their craft.

Phone: 3685 (3 lines).

Grams: "Midjoin" Burton-on-Trent.



By Appointment
to H.M. the
King George VI.

EN-TOUT-CAS



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

The
LARGEST MAKERS
of
HARD TENNIS COURTS
in
GREAT BRITAIN

EXPERTS AND MATERIAL
READY THE MOMENT
THE V DAY ARRIVES

THE EN-TOUT-CAS CO. LTD.

SYSTON, LEICESTER

Telegrams:
EN-TOUT-CAS
SYSTON

Telephones:
86177 (3 lines)
SYSTON

THE MODERN HOUSE

By F. R. S. YORKE, A.R.I.B.A.

The book includes a selection of the most successful examples of advanced house design from the leaders of the movement. Containing more than 200 pages, 7½" x 10", illustrated by more than 500 photographs, plans and constructional details, of houses from all over the world, it outlines the requirements of the new type of home and discusses plan, wall, window and roof. The third and enlarged edition includes an additional number of English examples. Price 21s. Postage 8d.

War Address:

THE ARCHITECTURAL PRESS
45 THE AVENUE, CHEAM, SURREY

SPIRAL TUBE
UNIT AND PLENUM TYPE
AIR HEATERS

Catalogue from Technical Department
THE SPIRAL TUBE & COMPONENTS CO., LTD.
Osmaston Park Road, Derby
London Office: Honeyput Lane, Stanmore, Middlesex

WS

90s
ses
art
e's
231

E
GN

and
the
o a
per,
ion
ute-
the
per
the
ch.)
also

l.
and
mg.
cate
tion

r.
730

E

es
t.
py
s,
e-
ll,
an
d.

S
Y



LTD.,
Middlesex