

STACK

THE ARCHITECTS' JOURNAL



standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur.

NEWS and COMMENT

Diary

News

Astragal's Notes and Topics

Letters

Societies and Institutions

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Questions and Answers

Prices

The Industry

PHYSICAL PLANNING

SUPPLEMENT

CURRENT BUILDINGS

HOUSING STATISTICS

Architectural Appointments
Wanted and Vacant

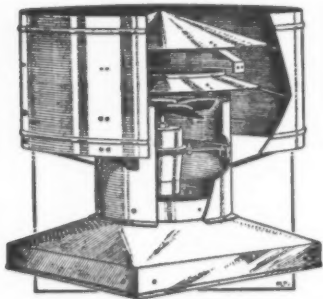
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy. : W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. Department of Architecture, School of Building, Ferndale Road, Brixton, S.W.4.	Brixton 7048
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
AScW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre. 9, Conduit Street, W.1.	Mayfair 8641/6
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Flaxman 7766
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Sloane 8266
BJA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Borough Architect, Town Hall, Newport, Mon.	Newport 3111
CAS	County Architects Society. C/o F. R. Steele, F.R.I.B.A., County Hall, Chichester.	Chichester 3001
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CCP	Council for Codes of Practice. Lambeth Bridge House, S.E.1.	Reliance 7611
CDA	Copper Development Association. Kendals Hall, Radlett, Herts.	Radlett 5616
CIAM	Congrès Internationaux d'Architecture Moderne. Dolderal, 7 Zurich, Switzerland.	
CID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane 4280	
CUJC	Coal Utilization Joint Council. 13, Grosvenor Gardens, London, S.W.1.	Victoria 1534
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 1761
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FASSC	Federation of Association of Specialists and Sub-Contractors. 21, Tothill Street, S.W.1.	Whitehall 9696
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FOB 1951	Festival of Britain 1951. 2, Savoy Court, Strand, W.C.2.	Waterloo 1951
FPC	The Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 5615
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215

No. 2903] [Vol. 112
THE ARCHITECTURAL PRESS
8, 11 and 13, Queen Anne's Gate, Westminster,
S.W.1. Phone: Whitehall 0611

Price 9d.
Registered as a Newspaper.

R v. 112² Oct. - Dec. 1950



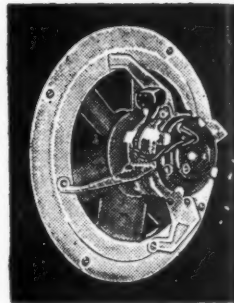
CUT-AWAY VIEW SHOWING FAN INSTALLATION IN DUAL-PURPOSE "MECHAVENT" NATURAL AND MECHANICAL ROOF VENTILATOR

GREENWOOD-AIRVAC

FAN UNITS AND VENTILATING EQUIPMENT FOR HOUSING AND INDUSTRY

COMPLETE SYSTEMS OF SCIENTIFICALLY BALANCED VENTILATION FOR BUILDINGS TRUNKED HOODS WITH FANS FOR REMOVING UNWANTED HEAT, FUMES AND STEAM FROM THE KITCHEN EQUIPMENT OF SCHOOLS, HOSPITALS, CANTEENS, RESTAURANTS AND HOTELS EFFICIENT VENTILATION FOR KITCHENS AND CANTEENS

MECHANICAL AND STATIC EXTRACTORS AND INTAKES FOR ROOFS AND WALLS



RING MOUNTED WALL FAN WITH HOPPER OR AUTOMATIC LOUVRES. A USEFUL EXTRACTOR FAN ASSEMBLY

GREENWOOD'S MULTI-LOUVRED "MAXAIRE" PANELS, "DIFUSEX", AND HIT AND MISS VENTILATORS



FOR CUPBOARDS, DOORS, WALLS, PARTITIONS, CEILINGS, AND FOR FITTING EXTERNALLY

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LIMITED

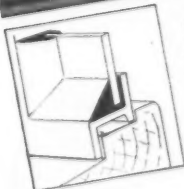
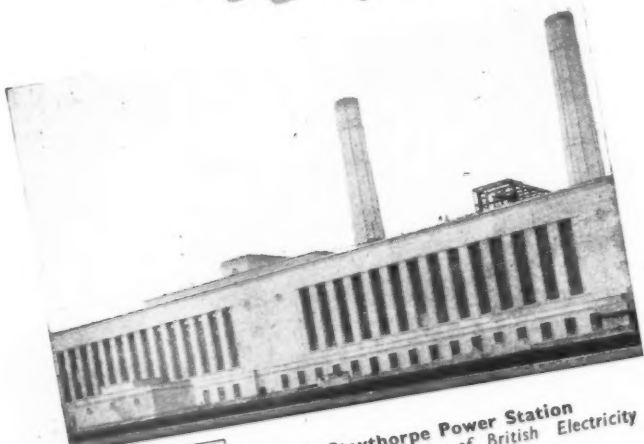
SPECIALISTS IN THE DESIGN AND MANUFACTURE OF VENTILATORS AND VENTILATING EQUIPMENT

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

AIRVAC, LONDON

ARBOLITE

..is the most **advanced**
METAL CASEMENT
PUTTY



Part of Staythorpe Power Station
Reproduced by courtesy of British Electricity
Authority, East Midlands Division.
Architect: T. Cecil Howitt, F.R.I.B.A.
Contractor: Balfour, Beatty & Co., Ltd.
Windows: Henry Hope & Sons, Ltd.
Glazed throughout with Arbolite Metal
Casement Putty

ARBOLITE is supplied in a "ready for use" consistency and consequently requires no pre-mixing on the site.

It works easily, points neatly and remains exactly as finished without shrinking, cracking or wrinkling.

ARBOLITE has excellent keying properties and ensures a tight, tough waterproof joint, adding considerably to the life of metal windows.

ADS HEAD RATCLIFFE & CO., LTD., BELPER, DERBY



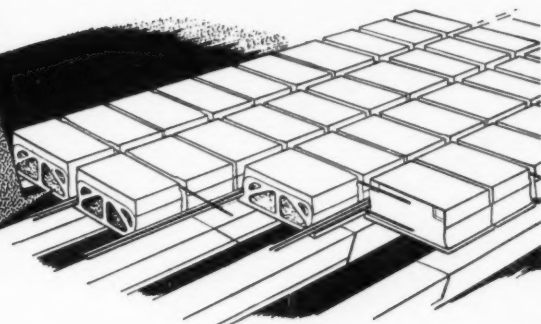
y
y

d
it

o-
h
y

B Y

fireproof FLOORS



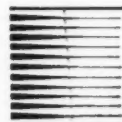
*With the unique Telescopic
Centering in all types of Buildings*

The Smith Two-way reinforced fireproof floor can be employed for any flooring or roofing requirement.

Work can commence on the site within 3/4 days of receipt of details.

The employment of Patent telescopic centers permits the immediate use of the floor with the additional advantage of their removal in the minimum of time.

Working space for other trades not obstructed by props and timber shuttering.



SMITH'S

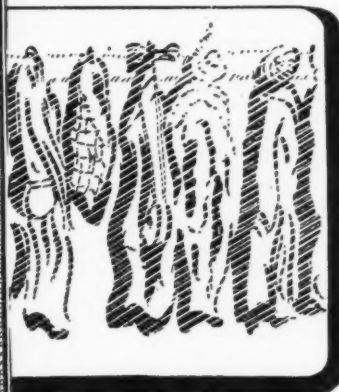
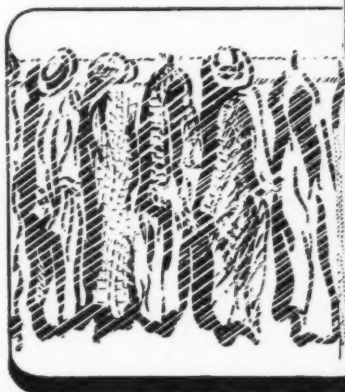
SMITH'S FIREPROOF FLOORS LIMITED
(Dept AJ.) Imber Court, East Molesey, Surrey
Phone: Emberbrook 3300

2 WAY REINFORCED FIREPROOF FLOORS

Yours the problem-

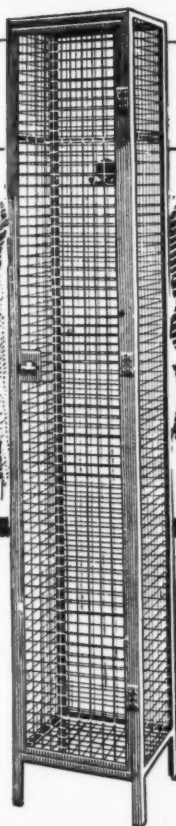
Harveys the answer!

"Harco"



"Harco"

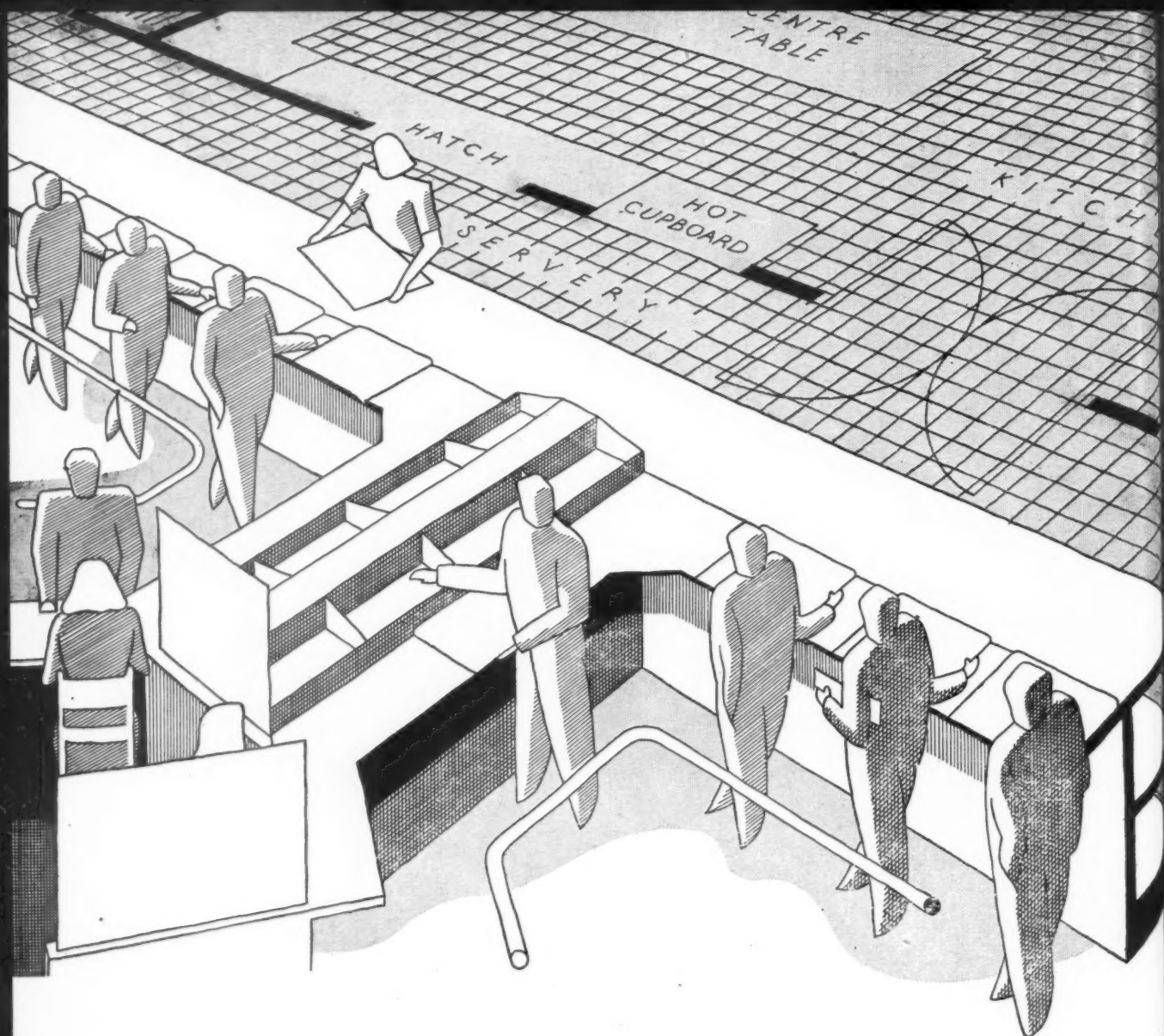
Whenever it is a question as to "Where to get" Wire Work of every description, and for all purposes—remember Harveys. Their "Harco" products are especially designed for use in Factories and Schools.



Amongst the many "Harco" products made, especial attention is drawn to Lockers, Cloak-room Fittings, Partitions, Lift Enclosures, Radiator and Pipe Covers, Machinery and Belt Guards.

Send for Catalogue . . . AJ.725

G. A. Harvey & Co. (London) Ltd. Woolwich Road, London, S.E.7



Planning for Industrial Catering

WHILST THE PLANNING of every kitchen or canteen will vary according to individual circumstances, there are many essential data, including dimensions, which are common to any such scheme. It is of great value, too, if the planner can have access to the knowledge which has been accumulated from past experience of similar problems.

The Gas Industry has collated a great deal of information on the subject of industrial catering. For instance, planning requirements to which consideration must be given; schedules of equipment required to produce a given number of meals in a given time; typical plans illustrating the possibilities of combining various types of equipment; and examples of kitchens which have been designed and installed to suit individual sites and conditions. This information is freely available to architects, and others in responsible positions, who are concerned with the planning and equipment of industrial kitchens and canteens.

The collation of this kind of information is one of many activities by which The Gas Council seeks to promote the development of gas services for cooking.

hot water, space heating and refrigeration. In all cases where the use of gas is envisaged, early consultation with the Gas Undertaking is advisable.

GAS

Another Problem solved by **FLEETWOOD!**



DURAMATT

FLAT WALL PAINT

**MAY BE APPLIED DIRECT TO
THESE SURFACES WITHOUT
PRIMING OR SEALING**

**New PLASTER
New CEMENT
New CONCRETE
New ASBESTOS
New PATENT
WALL BOARD
New PLASTER
BOARD**

DURAMATT is unaffected by the chemical action in any of these materials and allows contained moisture in the walls to come through without risk of saponification or flaking. Efflorescent salts can be washed off without damaging the paint film.

DURAMATT cuts cost because one coat only direct to wall surface is necessary to give a solid lasting finish which may be repeatedly washed. Further coats may be safely applied if desired.

DURAMATT remarkable light-diffusing properties and power of obliteration make it the ideal finish for interior decoration on old or new work, particularly for housing schemes, schools, hospitals, public buildings, etc.

DURAMATT is inert, non-poisonous and hygienic and is available in white and twelve lovely pastel shades all of which are fast to lime, alkali, etc.

Write for trade prices and shade cards

FLEETWOOD PAINTS LIMITED, PRINCE STREET, DEPTFORD, LONDON. S.E.8

CONDENSATION DOES NOT FORM ON ANY POROUS SURFACE DECORATED WITH DURAMATT



SEALOCRETE AND SEALANTONE

CASE HARDENED · WATERPROOF
DUSTPROOF & COLOURFUL

*MAKE
CONCRETE
OR CEMENT
WHAT IT
SHOULD BE*

INFORMATION SHEET ON

SEALOCRETE CONCRETE SURFACE DRESSING

FOR USE ON

Newly Laid or Existing Cement or Concrete Floors

A full strength Solution

requiring the addition of water only to

CASE-HARDEN

DUSTPROOF

OILPROOF

GREASEPROOF

ACIDPROOF

Newly Laid or existing cement or
concrete floors.

Sealocrete Concrete Surface Dressing applied
to cement and concrete floors makes them less
susceptible to attack by common acids.

ABRASION

Sealocrete Concrete Surface Dressing increases
resistance to abrasion.

EASY AND ECONOMICAL to apply

APPLICATION. After Wire Brushing concrete and by soft brooms.

Full instructions for use on application to Sole Manufacturers.

Inventors & Sole Manufacturers:

SEALOCRETE PRODUCTS LTD
ATLANTIC WORKS, MACBETH STREET, LONDON, W.6

Tel.: RIVerside 2686, 2687, 7275.

Telegrams & Cables: "EXPLOITURE, LONDON"

THE MOST SATISFACTORY FLOOR FOR NEW HOUSING TODAY



Armstrong's Accotile Flooring is laid throughout the five blocks of Forty Lane Flats, recently completed by Wembley Borough Council. The architects are Robert Atkinson & Partners, 13 Manchester Square, London, W.1, and the contractors William Old Ltd., 533 Pinner Road, North Harrow, Middlesex.

WHAT IS ACCOTILE?

Armstrong's Accotile is a composition of inert asbestos fibres and ground rock fillers, fadeless mineral pigment, and asphalt or resin binders, supplied in accurately-cut tiles, border strips, etc. It was originally made by our American Company and is widely used in the U.S.A., where 20 years of successful experience have proved its merits. Since the war it has been manufactured in England at the Tyneside factory of the Armstrong Cork Company Ltd.

PRESENT-DAY conditions strictly limit the choice of flooring available for new housing. It must be inexpensive, yet satisfactory when laid direct on base concrete; it should be attractive in appearance; it must wear well, and be easily and cheaply maintained.

Armstrong's Accotile Flooring fulfils these needs perfectly, and offers other advantages as well.

**ALSO FOR SCHOOLS,
HOSPITALS, PUBLIC
BUILDINGS, AND
COMMERCIAL PREMISES**

LAI D DIRECT ON CONCRETE— NO DAMP-COURSE

Accotile can be quickly laid on any sub-floor—concrete, wood, or metal. It is especially suitable for use on concrete direct to earth since it is unaffected by alkaline moisture. Damp-proofing is not essential unless actual water pressure is suspected.

INEXPENSIVE

Accotile installed costs considerably less than good quality linoleum, and is competitive with any other flooring laid direct on concrete.

OUTSTANDINGLY DURABLE

Accotile withstands hard wear. It stands up to the hard usage frequently met with in Council property and will, in most cases, long outlast more expensive floors. Many local authorities have found repair costs, too, much reduced by Accotile installations. Accidental damage is easily and cheaply made good. Broken tiles are quickly replaced.

Accotile durability is proved. Accotile floors laid in England twelve years ago can be inspected. They are still in excellent condition.

DECORATIVE—UNLIMITED CHOICE OF DESIGN

With Accotile there is unlimited scope for decorative effect. The tiles are made in a wide range of plain and marbled colours and can be laid in any design. The colours are fast since they are an integral part of the tile.

EASILY MAINTAINED— NON-STAINING

Accotile is kept fresh and new-looking indefinitely by normal sweeping and washing, but may be polished if an extra high finish is desired. It offers good resistance to most acids and, being non-absorbent, does not stain. Even marks made by smouldering cigarettes are easily removed.

ACCOTILE is quiet and comfortable to walk on, warm and non-slip. For schools, hospitals, and public buildings, Accotile flooring is economical both in first cost and in maintenance.

Armstrong's Top-set Coved Skirting, available in Pompeian Red and Plain Black, gives an added finish.

Business offices, shops, restaurants, and licensed premises, are among places that exploit to the full the advantages of Accotile. In existing buildings, it is laid in a matter of hours and can be used immediately, so that occupation of the room is disturbed for the minimum time.

INSTALLATION

To ensure satisfaction, Accotile is laid only by skilled personnel trained in Armstrong's Laying School, where particular attention is paid to workmanship and the correct method of setting out.

ARMSTRONG'S ACCOTILE[★] FLOORING

THE LOW-COST FLOOR WITH THE LUXURY LOOK

ARMSTRONG CORK COMPANY LIMITED, FLOORING DEPARTMENT

IMPERIAL BUILDINGS, 56 KINGSWAY, LONDON W.C.2. TELEPHONE: CHANCERY 6281

SCOTTISH BRANCH: 5 OSWALD STREET, GLASGOW C.1 • TELEPHONE: CENTRAL 5703

★ British Registered Trade Mark 663028. Armstrong Cork Co. Ltd., Registered Users



VERNASCA

A flat oil paint with good covering power and an artistic matt finish.

It is easy to apply and is available in a range of twenty-eight shades that includes the most popular of the fashionable colours. There is no better finish for interior use on plaster, brickwork, cement, wallboards and similar surfaces.

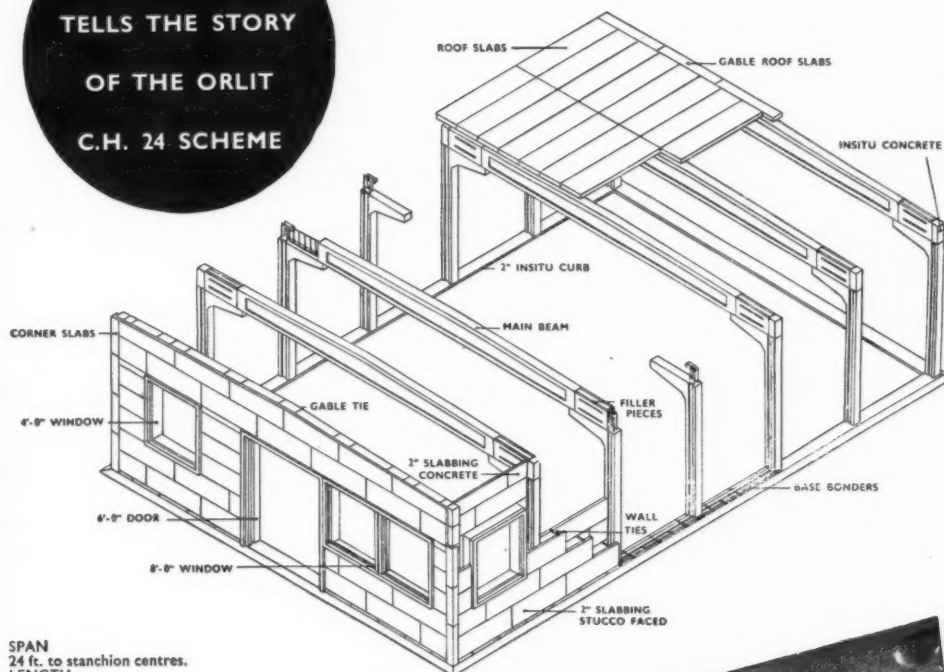
Mander's VERNASCA

There's a Mander's paint for every job

MANDER BROTHERS LIMITED • WOLVERHAMPTON

TBW4

THIS PICTURE
TELLS THE STORY
OF THE ORLIT
C.H. 24 SCHEME



SPAN
24 ft. to stanchion centres.
LENGTH
Any multiple of 6 ft.
HEIGHT
9' 10½\"/>



THE MISSION HALL
LINGFIELD, SURREY

Architect :
Cyril J. Greening; A.R.I.B.A., A.M.T.P.I.

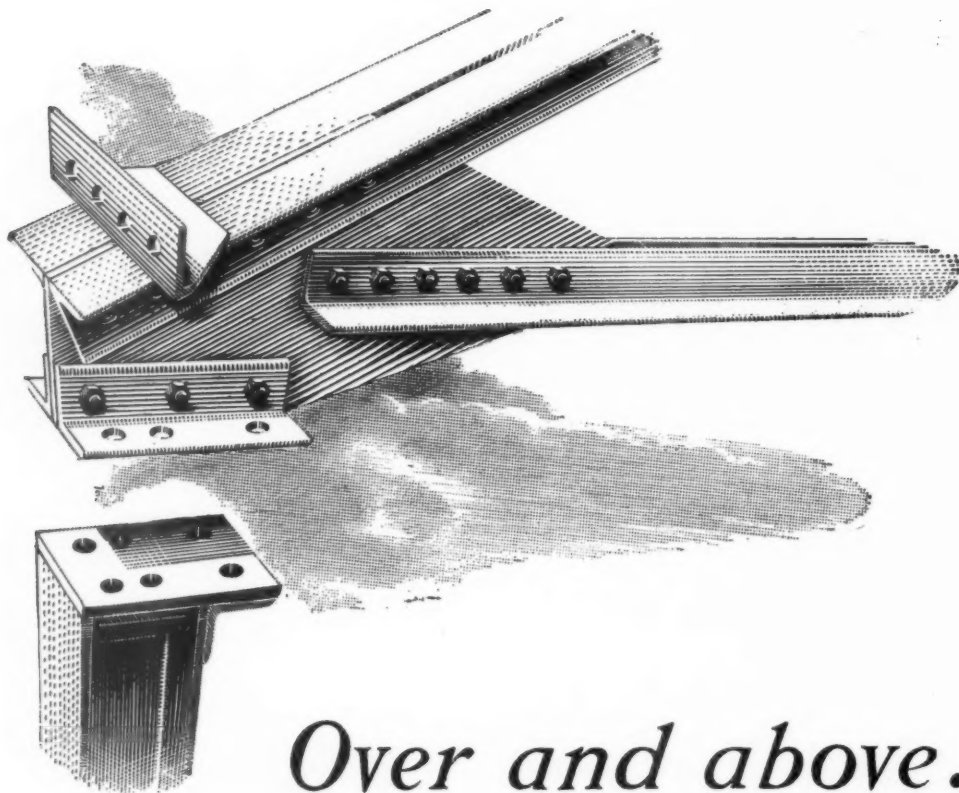
ORLIT CONSTRUCTION

PRE-CAST CONCRETE PRE-STRESSED CONCRETE

ORLIT LTD. 18, Buckingham Gate, London, S.W.1
Tel : Victoria 6701
ORLIT (Lancashire) Ltd. 3, Brown St., Manchester, 2
Tel : Blackfriars 0718
THE SCOTTISH ORLIT CO. LTD. 79, George, St., Edinburgh
Tel : Edinburgh 34814
ORLIT (N. Ireland) LTD. Benson St., Lisburn, Co. Antrim
Tel : Lisburn 3249
TARSLAG LTD. Economac House, Wolverhampton
Tel : Wolverhampton 23831
TARSLAG LTD. Tees Bridge, Stockton-on-Tees
Tel : Stockton-on-Tees 6355
BEACON PRE-CAST LTD. Glasshouse Lane, Topsham Rd., Exeter
Tel : Topsham 8332

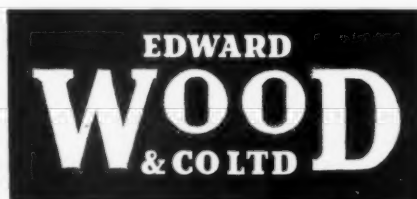
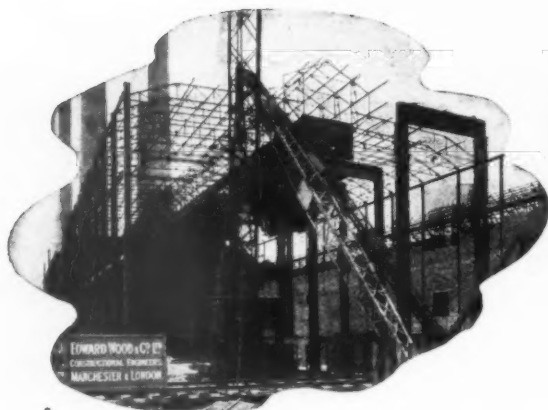
—yet not quite the whole story. The C.H. 24 Scheme, suitable for single storey buildings, is explained above in its structural details, but it must be emphasised that Orlit is a *method* which is capable of great flexibility. Orlit gives the economic advantages of pre-cast construction, yet allows architects full scope to exercise their faculties of design.

Apply to any of the firms listed on left for full details.



Over and above...

Over and above all, it's a matter of organisation. Every rivet or bolt position in a steel structure represents a potential delay, from the first stanchion to the last roof truss. Such delays are minimised in an organisation where resources are more than sufficient to ensure an even flow of work from start to finish. These resources exist very fully at our Trafford Park works and our advisory department is at your service.



Constructional Engineers

Regd. Office and Works:

MANCHESTER 17

Tel.: TRAfford Park 2341 (10 lines)

London Office: 68 VICTORIA ST., S.W.1 Tel.: VICtoria 1331-1332

Technical Offices: BIRMINGHAM, LOUGHBOROUGH

dmWD11

the name behind the job



CORNER HOUSE HOTEL, EDGWARE



RICHARD

COSTAIN
LIMITED

BUILDING & CIVIL ENGINEERING CONTRACTORS
DOLPHIN SQUARE, LONDON S.W.1 VICTORIA 6624



HIGGS^{AND} HILL
LIMITED

LONDON

LEEDS

COVENTRY





**Firm to the tread . . .
good-looking . . .
and extremely long-wearing**

SAFE STAIRS—essential in public places, valuable everywhere—need neither look dull nor lose their safety with wear.

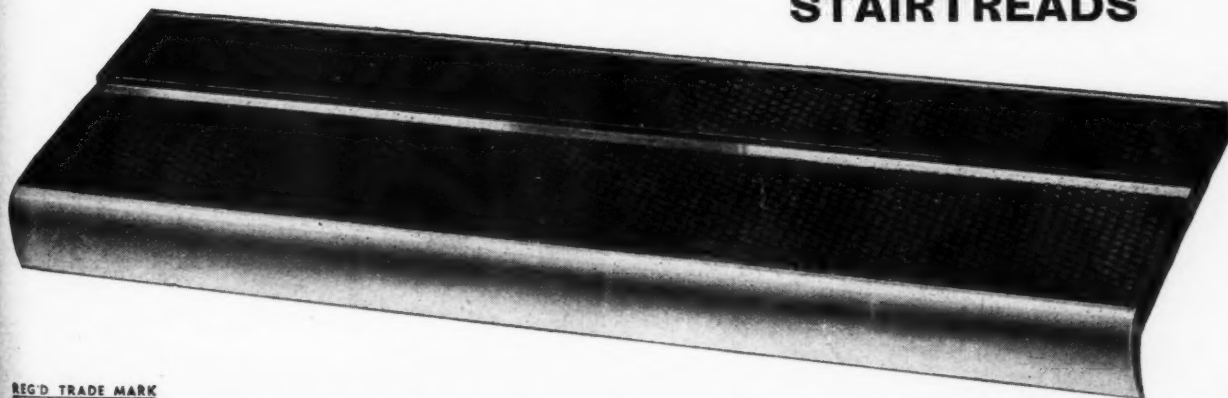
In Ferodo Stairtreads, each part is important. The aluminium nosing is not there merely for its looks: it contributes to safety by giving each step a gleaming outline.

And the inlaid Ferodo fabric, non-slip through and through, seems to absorb endless wear without itself wearing appreciably. It gives a safe, friendly tread, even to wet shoes.

Ferodo Stairtreads are made in single and double channel types. Instead of Ferodo fabric, the inlaid strips may be of Ferodo composition, giving a non-slip surface in red, white, or grey.

Easily fitted, easily cleaned, and needing no other maintenance, Ferodo Stairtreads are being installed in many new and existing public buildings, stores, offices, etc. The various models, including a plain steel-backed industrial type, are described and illustrated in our Catalogue No. 732KK, gladly sent on request.

FERODO STAIRTREADS



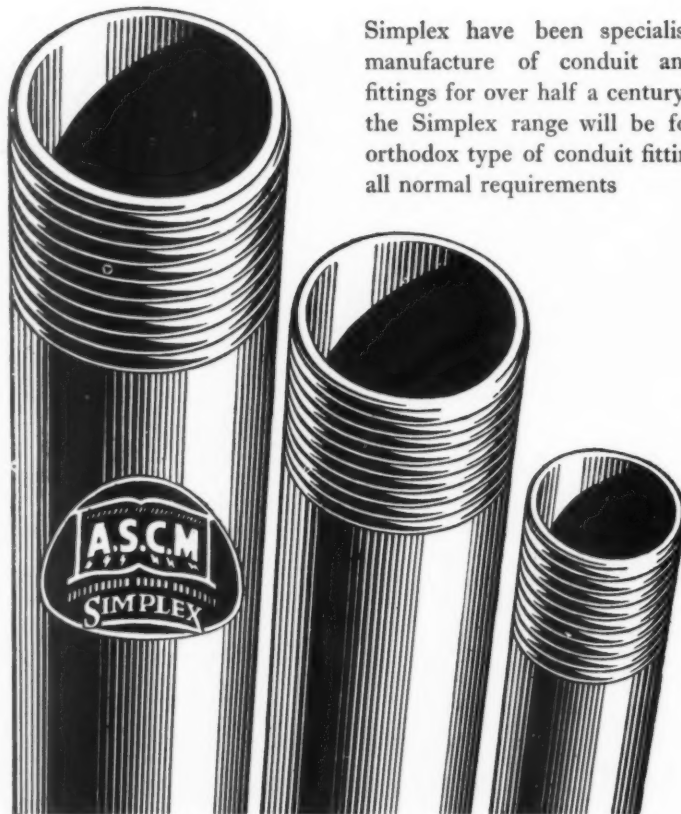
FERODO LIMITED, CHAPEL-EN-LE-FRITH

xiii

A Member of the Turner & Newall Organization

Conduit & Conduit Fittings

Simplex have been specialists in the manufacture of conduit and conduit fittings for over half a century. Within the Simplex range will be found every orthodox type of conduit fitting to meet all normal requirements



MADE BY THE HOUSE OF

Simplex

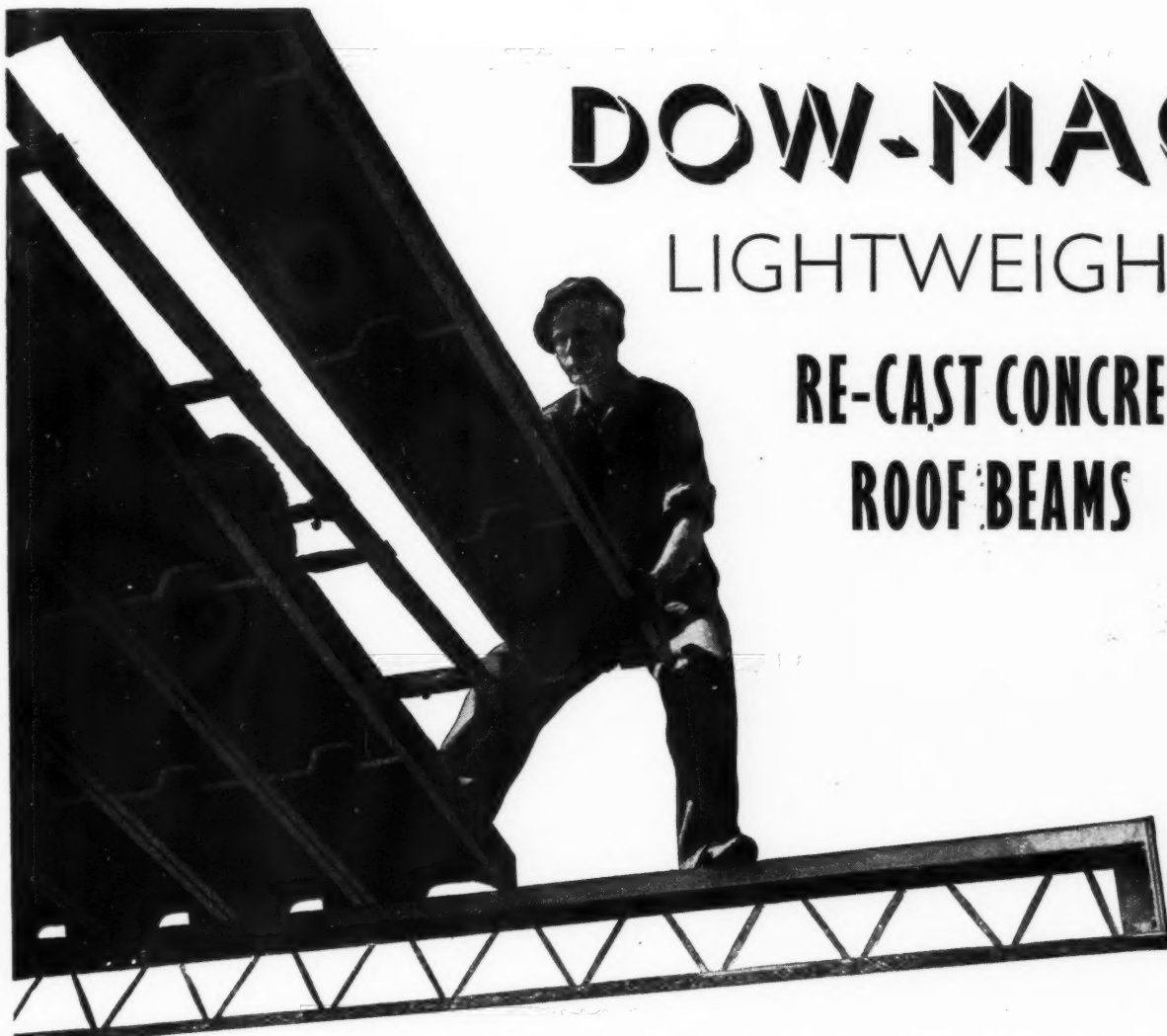
Simplex Electric Company Limited
Oldbury Birmingham and Branches

A  COMPANY

DOW-MAC

LIGHTWEIGHT

RE-CAST CONCRETE ROOF BEAMS



EVOLVED to meet the current need for economy in structural materials and labour, this beam can be supplied as a simple roof beam, with the extraordinarily low dead-weight of $17\frac{1}{2}$ lbs. per square foot, to carry a superimposed load of 30 lbs./sq.ft., or modified as a floor beam to carry more than twice this loading.

The photographs demonstrate the simplicity of

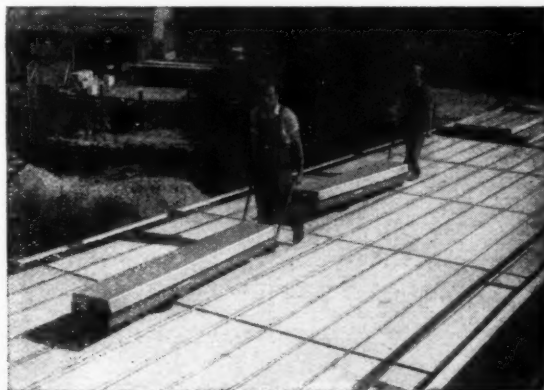
fixing, which can be carried out by two unskilled men. Each beam covers 1.06 yards super with a clear span of 8ft.

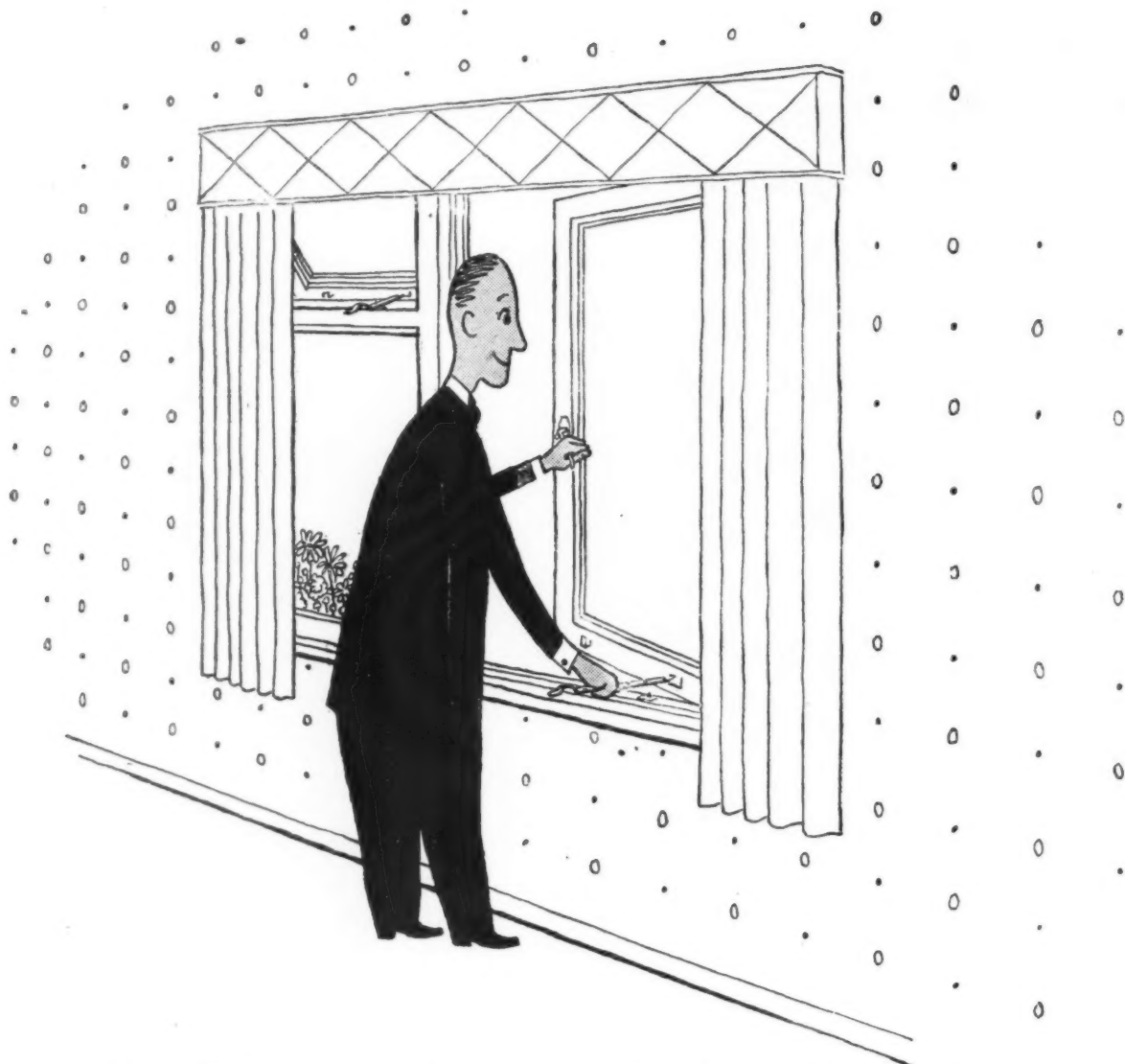
Special units are manufactured for eaves, verges and abutments and provision can be made for fixing fascias and soffits.

If you have a roofing problem, our design service and modern factory facilities are at your disposal.

DOW-MAC (PRODUCTS) LIMITED, TALLINGTON, STAMFORD, LINCOLNSHIRE

TELEPHONE:
PETERBOROUGH 4501
(8 lines)





You'd have to open lots of windows

before you'd find a better window than an Austin window

The same high quality is found in staircases, kitchen units, doors—in fact any Austin joinery

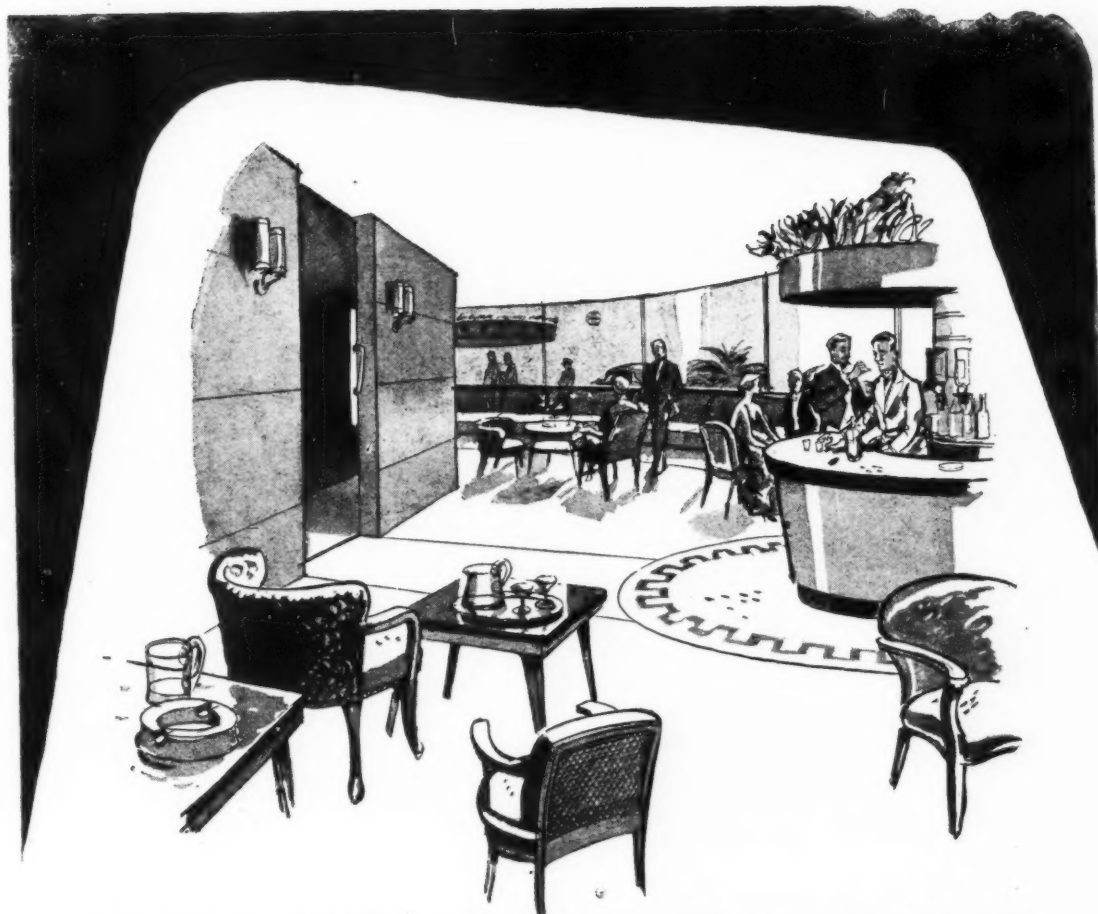
Austins of East Ham

The Biggest Name in Joinery

AUSTINS OF EAST HAM LTD., LONDON, E.6. GRANGEWOOD 3444
the parent Company of
THE AUSTIN-HALL GROUP OF COMPANIES



21432



ROBBIALAC PAINTS

Combine colour with dignity

The hotel bar or lounge must not only look inviting and comfortable, it must also be able to withstand the inevitable wear and tear without becoming shabby. Here, the sophisticated townsman, the country squire, and the traveller from distant climes, take their ease. Colour with dignity is the keynote. For this reason Robbialac Paints are widely used in the decoration of hotel bars and the hotel industry generally. Advice on the choice of finishes for specific purposes, inside or outside, will always be gladly given by the makers.

JENSON & NICHOLSON LTD

Jenson House, Stratford, London, E.15

NEW
INTERIOR WALL TREATMENT

ROBBIALAC SUEDE FINISH
WALL PAINT is the perfect, new finish for walls and ceilings . . . velvety in appearance and to the touch. Hygienic, dirt-resisting, washable. Suede Finish is ideal for canteens, restaurants, bars, offices, shops, etc. Many beautiful pastel tints, all intermixable. Please write for details.

for colour

quality & lasting beauty

There's a place in every plan for these versatile Building Boards





SUNDEALA Medium Hardboard

Used externally for pavilions, bungalows, shop fronts, signs, and general building, and internally for walls, ceilings, partitions and distinctive panelling effects in all types of buildings. Waterproofed throughout and supplied in sizes up to 12 ft. x 6 ft. in thicknesses $\frac{1}{4}$ " to $\frac{1}{2}$ ".



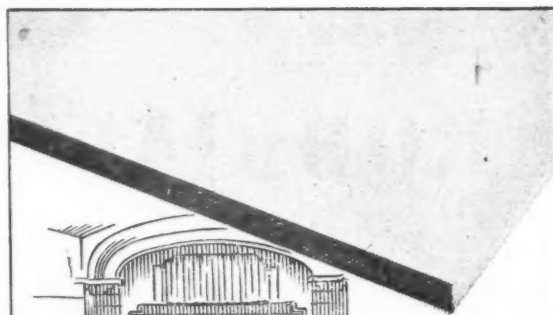
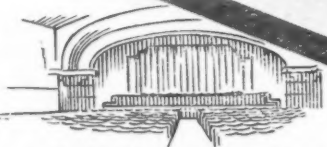

SUNDEALA Hardboard

Especially suitable for use as shuttering for poured concrete, for dados, doors, counters and all panelling purposes, where extra strength and hardness is required. Waterproofed throughout and supplied in sizes up to 12 ft. x 4 ft. in thicknesses $\frac{1}{4}$ " and $\frac{3}{16}$ ".




SUNDEALA Insulation Board

Used for the construction and lining of all walls, ceilings and partitions that need to be insulated against heat, cold, sound, condensation, and to be immune from pattern staining. Waterproofed throughout and supplied in sizes up to 12 ft. x 6 ft. x $\frac{1}{2}$ " thick.

SUNDEALA Flameproof Board

Used extensively for the interior construction of theatres, concert halls, schools, factories, exhibition buildings etc. to check the spread of fire in the early stages. Officially approved by the L.C.C. Flameproofed throughout and supplied in standard size sheets 8 ft. x 4 ft. x $\frac{1}{2}$ " thick.

SUNDEALA

The Pioneer British-made Building & Insulation Boards

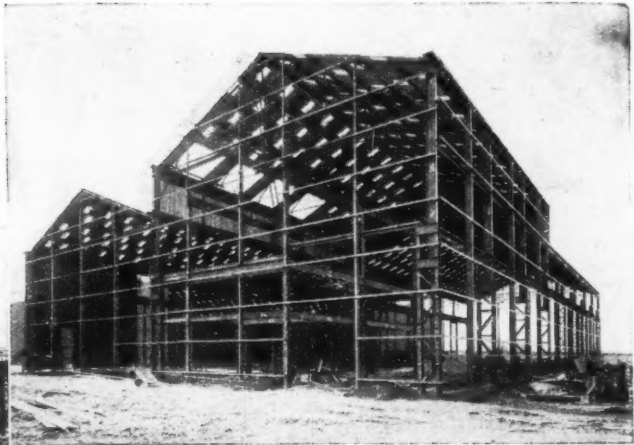
Full technical details and prices furnished on request.

SUNDEALA BOARD CO. LTD., ALDWYCH HOUSE, LONDON, W.C.2. Tel: CHAncery 8159

Works: Sunbury-on-Thames, Middlesex.

GLASGOW: BALTIC CHAMBERS, 50 WELLINGTON ST., C.2. NEWCASTLE-UPON-TYNE: NORTHUMBRIA HOUSE, PORTLAND TERRACE, 2

STRUCTURAL



STEELWORK



BY

AUSTINS

CENTENARY YEAR 1850-1950



James Austin & Sons Dewsbury Ltd., Dewsbury

THORNHILL IRON AND STEEL WORKS
TELEPHONE: 1750 (5 LINES) TELEGRAMS: AUSTINS DEWSBURY

Associate Companies: ASTLEY BROOK & CO. LTD., St. George's Works, Huddersfield, Manufacturers of "A.B.C." GARAGES & GREENHOUSES, and A. J. RILEY & SON LTD., Victoria Works, Batley. Boiler Makers, Construction Engineers



A SECRET? NO!...

There isn't any secrecy about the ingredients of "NINE ELMS" Paint.

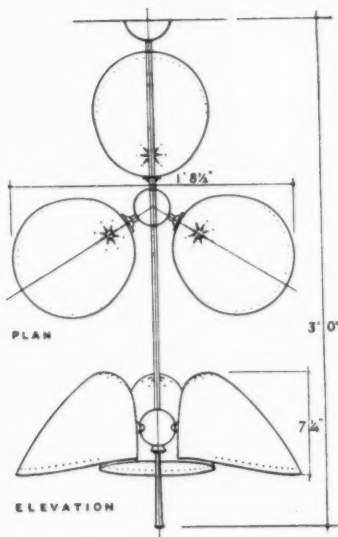
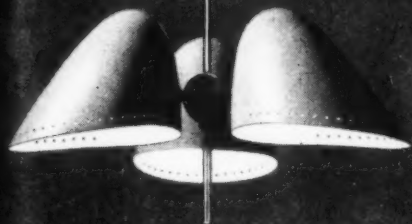


All experienced decorators know the remarkable protective capability of White Lead Paint. But its behaviour depends on the method by which it is prepared, on the use of Genuine White Lead, finely ground and scientifically blended with Refined Linseed Oil and the best Liquid Driers and Thinners. This is the guaranteed formula from which 'NINE ELMS' PURE WHITE LEAD PAINT is made. It protects as no other paint can. T. & W. Farmiloe are the manufacturers of the paint from actual blue lead (corroded by them), to finished paint. With the addition of pigment, 'NINE ELMS' is also available in a variety of lovely pastel colours, supplied in Glossy, Undercoat, Semi-prepared and Flat.

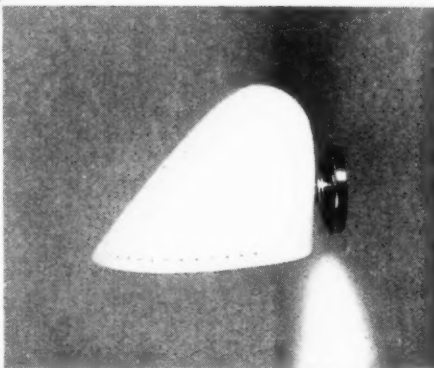
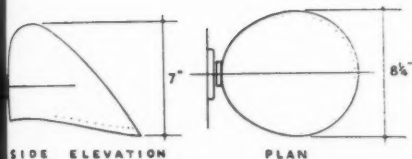
NINE ELMS PURE PAINT

at
t.

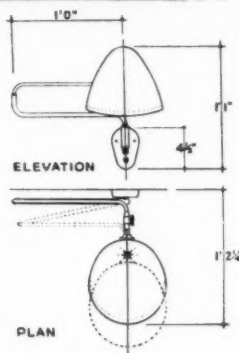
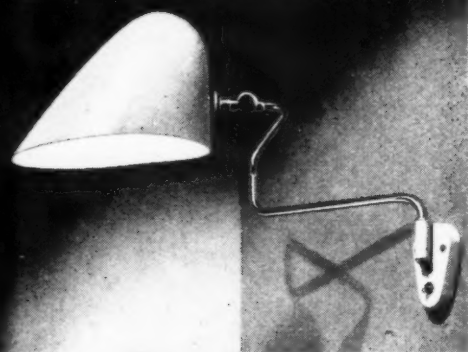
VERSALITE



VERSALITE Pendant. Three-light with metal reflectors. Finishes: reflectors, centre body and ceiling plate ivory white; remainder, satin brass or satin chrome. Overall suspension 3 ft. Lamps: up to 3 x 100 watts.



VERSALITE Bracket. Fixed. Metal reflector. Finishes: reflector, ivory white; back plate, satin brass or satin chrome. Lamp: up to 100 watts.



VERSALITE Bracket. Adjustable arm. Metal reflector. Finishes: reflector and back plate, ivory white; arm, satin brass or satin chrome. Complete with switch. Lamp: up to 100 watts.

These are some of the designs available in our new Versalite series of adjustable lighting fittings. Write to us for a catalogue giving full information about all fittings in this range, or pay us a visit at the Lighting Centre.

TROUGHTON & YOUNG (LIGHTING) LTD.

THE LIGHTING CENTRE, 143, KNIGHTSBRIDGE, LONDON, S.W.1

Telephone: KENSINGTON 7457 (15 lines).

Regency



OR RECENT

Painted stucco and classic colonnades or concrete and steel in the contemporary manner? Whatever the preference, there remains the perennial problem of preserving and beautifying the builder's materials, and for every decorative requirement there is always a Docker Finish that "has been made for the job."



HERMATOR

Super Gloss Paint decorates, protects and preserves under the most arduous conditions. For interior decoration of the highest quality specify MUROLEUM Flat Oil Paint.



DOCKER BROTHERS

Makers of Paints, Lacquers and Varnishes for every purpose

LADYWOOD · BIRMINGHAM · 16

STANDARD PRACTICE

A sandfaced brick used to be an expensive hand-made article. After much experiment London Brick Company Limited devised a method by which the sand could be blasted into the brick under heavy air pressure and eventually a process was perfected by which sandfaced bricks of high quality could be economically produced by mechanical means. After exhaustive tests of its weathering properties it rapidly gained general acceptance among architects until now it has become standard practice, when a small grained texture is required, to specify



Phorpres bricks are available in a very wide range of standard specials. Particulars of these may be obtained from the Technical and Research Department, who are at your service for information or advice on brickwork problems.

the PHORPRES sandfaced brick



LONDON BRICK COMPANY LTD Head Office: AFRICA HOUSE, KINGSWAY, LONDON, W.C.2 Telephone: Holborn 8282. Midland District Office: Prudential Buildings, St. Philip's Place, Birmingham, 3 Telephone: Colmore 4141. South Western District Office: 11 Orchard Street, Bristol, 1 Telephone: Bristol 23004/5. Northern District Office: Gascoigne Street, Boar Lane, Leeds, 1 Telephone: Leeds 20771



MARLITH

used as permanent shuttering
speeds up construction,
reduces costs, and provides
excellent thermal insulation

THE SHUTTERING for this flat in-situ reinforced concrete roof consisted of 2-inch MARLITH laid in temporary 2" x 2" x 3/16" steel tees supported by tubular steel scaffolding. The concrete was poured and the reinforcement applied in the normal way. When the concrete was set, the temporary steel tees and scaffolding were removed, leaving the underside of the MARLITH ready for plastering.

The drawing on right shows a similar construction in which timber props were used in place of tubular scaffolding, in conjunction with soffite boards and 1" thick MARLITH filling pieces.

The use of MARLITH in this way speeds up construction and reduces costs by eliminating the need for erecting and dismantling steel or timber shuttering and the application of insulation as a separate operation. It reduces the thermal transmittance "U" value of a 4½" flat concrete roof from 0.61 to 0.20, and the increased thermal insulation will maintain the temperature of the interior surface of the roof, thus minimising or preventing the formation of condensation.

MARLITH

Wood Wool Building Slabs

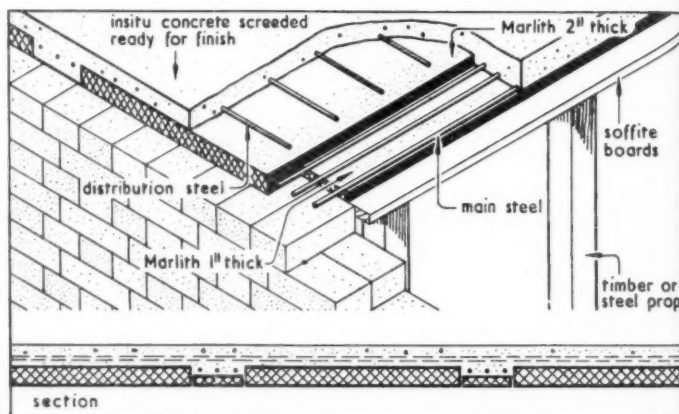
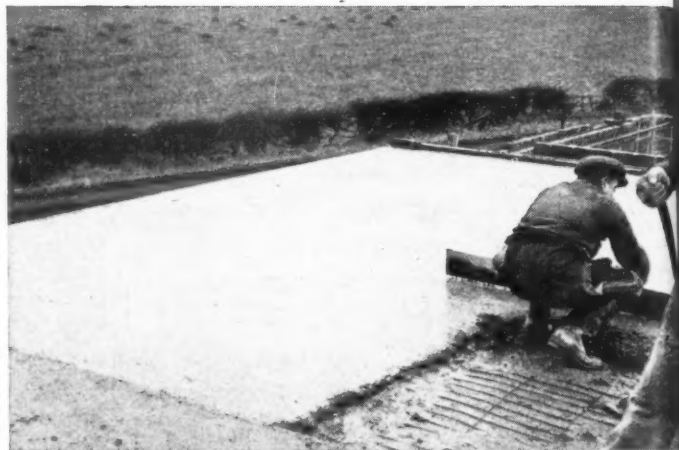
The Marley Tile Company Limited · Sevenoaks · Kent

THE PHOTOGRAPHS were taken at Whitby Junior and Infants School, and show: *below*, MARLITH slabs being placed in position in the temporary steel tees; *above*, concrete being levelled.

ARCHITECTS: John Keppie & Henderson & J. L. Gleave, Chartered Architects, 196 West Regent Street, Glasgow C2

CONTRACTORS: Messrs. Jaram & Son, 20A Gladstone Street, Scarborough.

AUTHORITY: North Riding Education Committee, Northallerton





There is merit in being a firm of long standing—if the policy behind the business is not just one of standing still. A hundred years at Jarvis has seen many changes, but none in the attitude that only the most modern, efficient, methods are good enough for a job which carries the Jarvis name.

J. JARVIS & SONS LTD • 12 BUCKINGHAM PALACE GARDENS • LONDON • S.W.1

REDUCTION OF HOT WATER RUNNING COSTS —and the best use of available fuels



PROGRESSIVE HOUSING AUTHORITIES are installing Sadia coal-electric water heaters because they give tenants a really efficient hot water system, and at the same time the lowest possible running costs. The coal-electric Sadia is not only suitable for blocks of flats, but for houses of every type, and for old houses that are being converted into flats.

The coal-electric Sadia makes the best use of available fuel supplies. In summer, when electricity is plentiful, it acts as an electric water heater, and the user has all the convenience of cool, clean, automatic water heating. In the colder weather, when the fire is wanted for space heating, the coal-electric Sadia acts as a storage tank for the boiler.

The small illustration shows how there is a substantial saving in plumbing costs with the coal-electric Sadia, by the elimination of expansion pipes. A common down-service pipe supplies water from a storage tank in the roof to all the cold water taps, in addition to the ball valves of the Sadia water heaters.

SADIA

HOT WATER BY
ELECTRICITY

Please write for fully descriptive leaflets to
AIDAS ELECTRIC LTD., SADIA WORKS, ROWDELL ROAD, NORTHOLT, MIDDLESEX.
SCOTTISH AGENTS: W. BROWN & CO. (ENGINEERS) LTD., 89 DOUGLAS STREET, GLASGOW, C.2
MANUFACTURED IN SOUTH AFRICA BY SADIA WATER HEATERS (PTY.) LTD., 3-5 NEWTON
STREET, VILLAGE MAIN, JOHANNESBURG

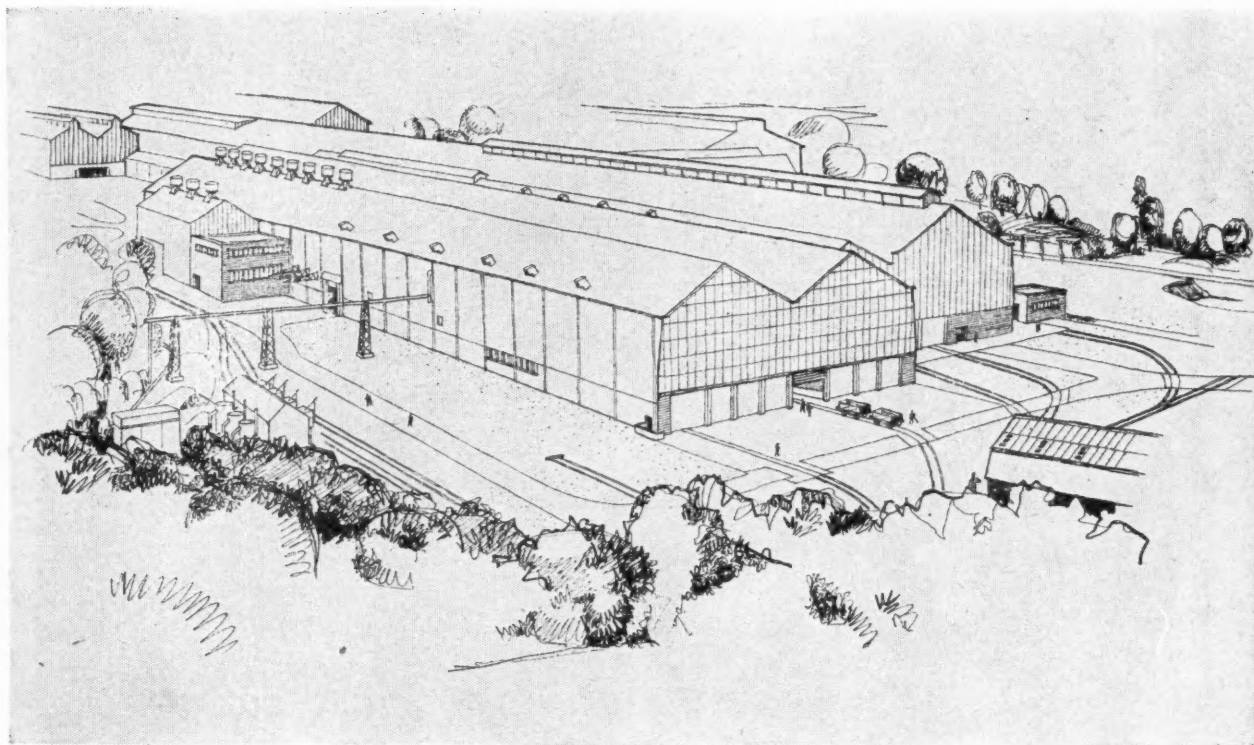


Sadia Type C.E.L. Coal-Electric Water Heater (with ball Tank)



Northern Aluminium presents

ONE OF THE MOST ADVANCED ROLLING MILLS IN THE WORLD



The new continuous strip mill at Rogerstone, with hot and cold rolling lines, increases Britain's capacity for aluminium sheet production by more than one-third, and challenges comparison with any aluminium-producing unit in the world.

The building in which it is housed is entirely sheathed in Noral corrugated sheet with aluminium foil insulation and demonstrates many other uses of Noral alloys in building. It is itself an illustration of the significance of this new mill to architects.

Northern Aluminium COMPANY LIMITED

MAKERS OF NORAL SHEET, STRIP, PLATE, SECTIONS, TUBING, WIRE, FORGINGS, CASTINGS, PASTE FOR PAINT

TECHNICAL DEVELOPMENT DIVISION: BANBURY, OXON · SALES OFFICES: LONDON, BIRMINGHAM, MANCHESTER, BRISTOL, NEWCASTLE-ON-TYNE, LEEDS



Houses at Merton Village,
Ford, Lancs.
Architect :
Felix Holt, A.R.I.B.A.

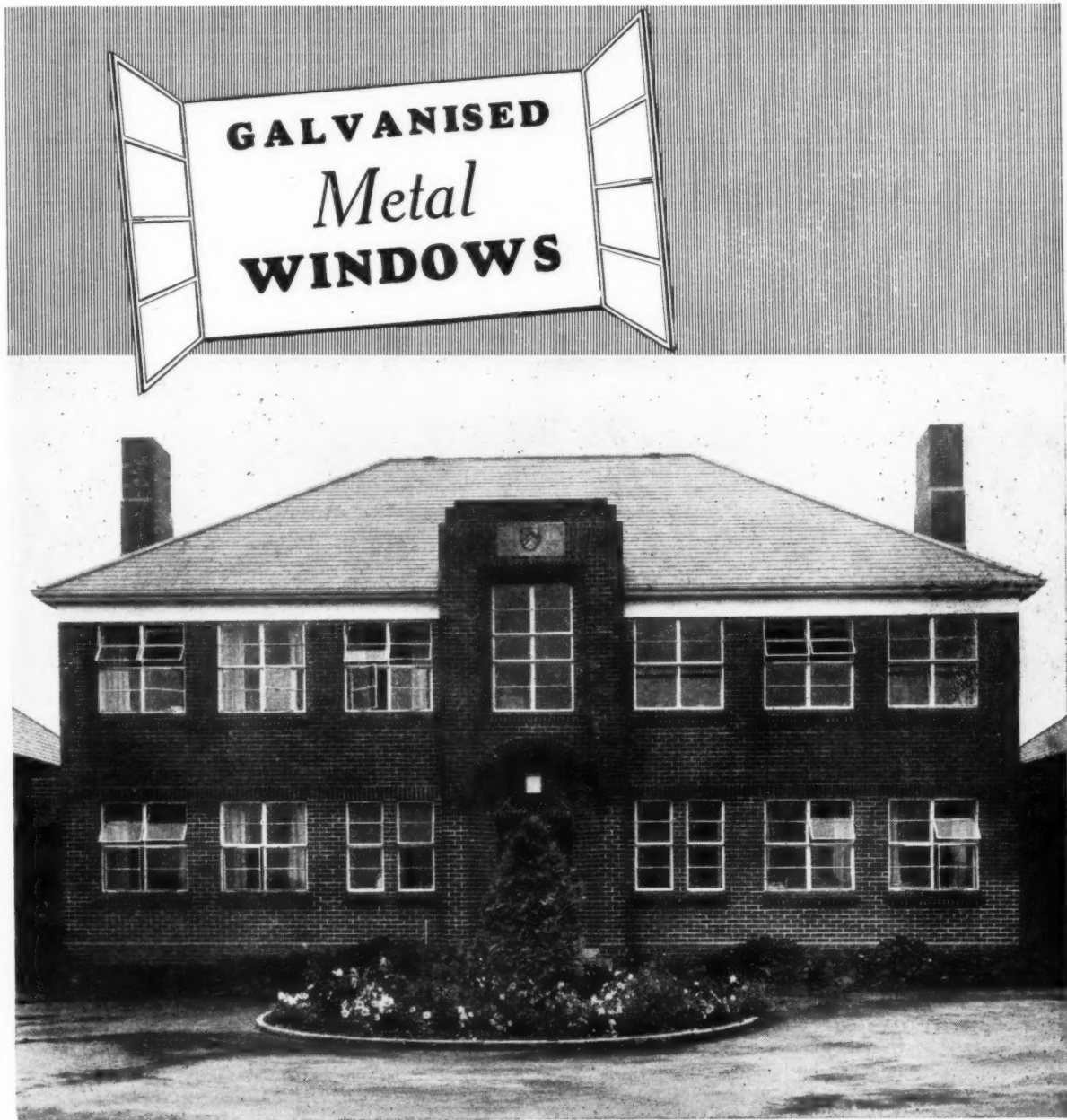
*'Good plain brickwork
composed of finely coloured
and textured bricks needs
no embellishment'*

— THE HOUSING MANUAL, 1949



FOR BEAUTY
AND PERMANENCE

Issued by The National Federation of Clay Industries, London, W.C.1



JONWINDOWS
Purpose Made Hot-Dip Galvanised Windows

*60 years
of Window
making*

JOHN WILLIAMS & SONS (CARDIFF) LTD., EAST MOORS ROAD, CARDIFF

Telephone Cardiff 2501

Telegrams "Metal" Cardiff

London: Bank Chambers - Finsbury Park - N.4 - Telephone Archway 2294 - Telegrams Dissolving London



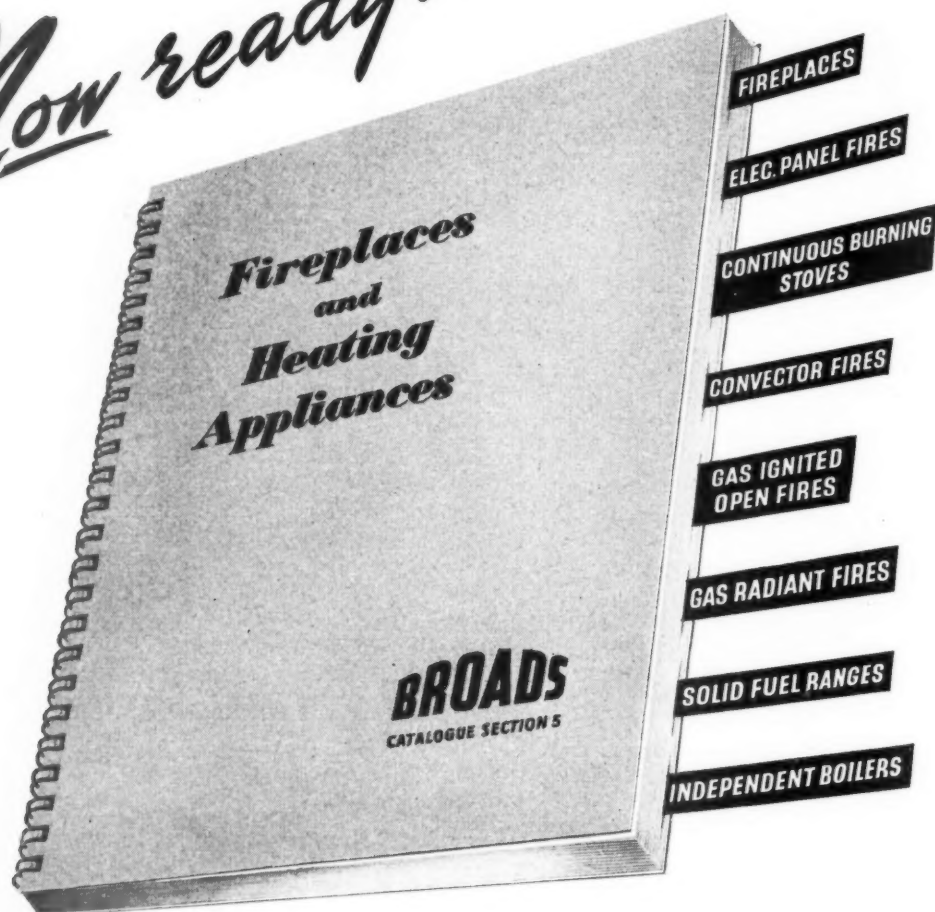
BROADS CATALOGUE

SECTION 5:

FIREPLACES

& HEATING APPLIANCES

Now ready...

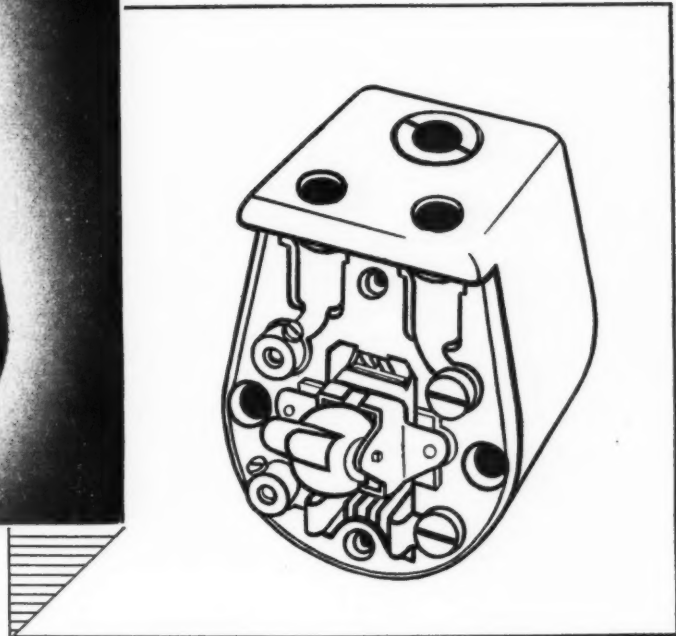


This Catalogue offers a wide selection of modern Fireplaces in a variety of materials. A complete section devoted to Heating and Cooking Appliances of approved Fuel Economy types is included. Full dimensional details are given and, to assist selection, plans and sections of all designs are provided together with technical data and performance.

SHOWROOMS AT 22 PRAED ST., PADDINGTON, W.2

64 pages in 2 colours wire-bound for opening flat—a very practical and comprehensive Catalogue.

BROAD & CO. LTD., 4 SOUTH WHARF, PADDINGTON, W.2. Tel: PADdington 7061 (20 lines)



*The **TEMCO** Top entry Switch Socket solves the problem....*

of providing TEMCO quality
for the highly competitive installation.

Made in 5-amp. and 15-amp. 2 and 3-pin B.S.S. gauge.

The quick make-and-break switch for A.C. or D.C. complies with B.S.S.816.

Porcelain base is recessed and provided with knock-outs.

Moulded dolly has no metal insert.

The plug with the automatically adjusted cord grip, is identical with the one used on the more elaborate TEMCO front-entry switch sockets.

Write for CATALOGUE Series 2
OF TEMCO ELECTRICAL
WIRING ACCESSORIES

Manufactured by:

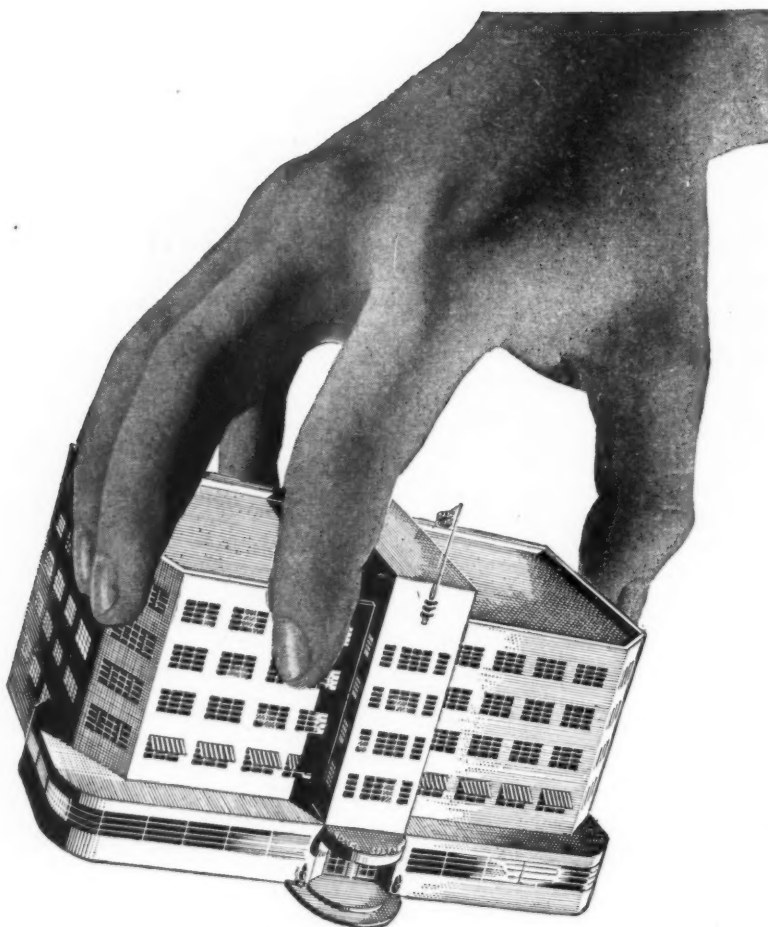
TELEPHONE MANUFACTURING COMPANY LTD.

and Marketed by their Sales Organisation:

T.M.C.-HARWELL (SALES) LTD.

37 UPPER BERKELEY STREET, LONDON, W.1. Tel: Paddington 1867-8-9

Take an hotel...



and see at how many points in its structure and fittings aluminium alloys can be used with increased efficiency and economy.

Our Technical and Development Departments have done intensive research in this field, and the results are freely available to architects, builders and decorators.

The Metals Division of I.C.I. produces a wide range of aluminium alloys in sheet, strip, tubes, extruded rods and sections. Their lightness makes handling easier and reduces erection and transport costs; their strength, durability and corrosion-resistance give long life and low-cost maintenance.

Here is a list of parts for which aluminium alloys are recommended in the building industry.

- Roof coverings
- Cladding and facings
- Corrugated sheets
- Glazing bars, roof lights, ventilators and window frames
- Gutters and drain-pipes
- Structural framing and canopies
- Partitions and panelling
- Lighting and heating fittings
- locks, bolts, catches and plates
- Domestic furniture, including chairs, built-in cupboards, lockers, meat safes and cabinets
- Sections for picture rails, skirting and architraves

'KYNAL' AND 'KYNALCORE' **ALUMINIUM ALLOYS**

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



M.164

You can be sure of the quality

Olivette

High grade enamel paints. Supplied in interior and exterior qualities in a full range of colours for all decorative purposes.

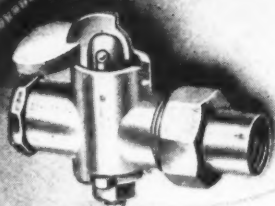
LEIGH PAINTS

W. & J. LEIGH LIMITED • TOWER WORKS • BOLTON • LANCs
Telephone No. Bolton 4277/9.
London Office: 15, St. Helen's Place, E.C.3. Telephone No. London Wall 1457/9.

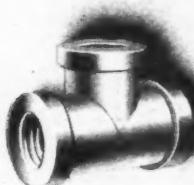
EDGAR FITTINGS

$\frac{1}{2}$ " $\frac{3}{4}$ " and 1"
Hot Pressed
Main Cocks

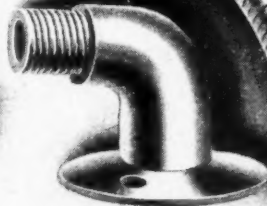
SMALL BRASSWORK



$\frac{1}{2}$ " B.S.P. Union Cock
with safety type drop fan



$\frac{1}{2}$ " B.S.P. Equal Tee



$\frac{1}{2}$ " B.S.P. Flanged Elbow

FLEXIBLE ARMoured RUBBER TUBE

Standard length 3 feet, greater lengths can be supplied
Size $\frac{1}{4}$ " inch nominal bore, fitted with $\frac{1}{8}$ " inch B.S.P.
M.X.F. brass connectors.

PLUGS AND SOCKETS FOR ALL PURPOSES

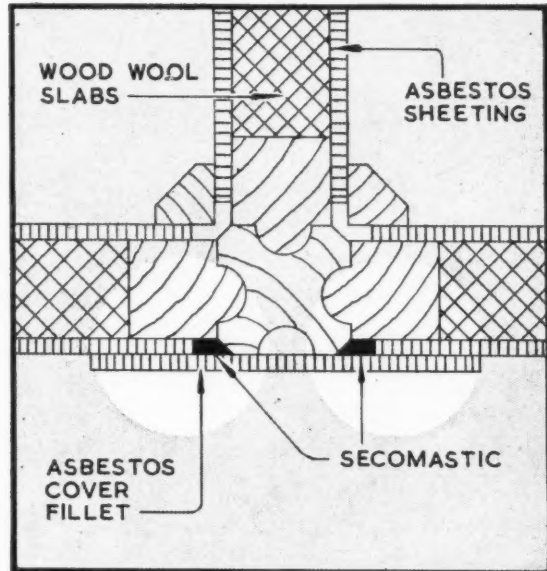
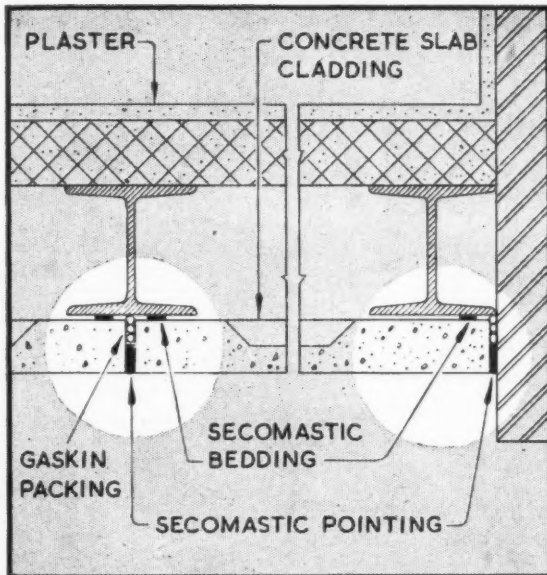
ILLUSTRATED: Flexible Plug
and Socket with Flange for
Floor Fixing. Socket screwed
 $\frac{1}{2}$ " B.S.P.. Nose-piece of Plug
screwed $\frac{1}{4}$ " B.S.P.



WM. EDGAR & SON, LTD. BLENHEIM WORKS, HAMMERSMITH, LONDON, W.6.
Telephone: RIVerside 3486

See our exhibit at THE BUILDING CENTRE 9, Conduit Street, W.1.

l'
ed
ts



EXPANSION JOINT PROBLEMS

SOLVED BY

SECOMASTIC

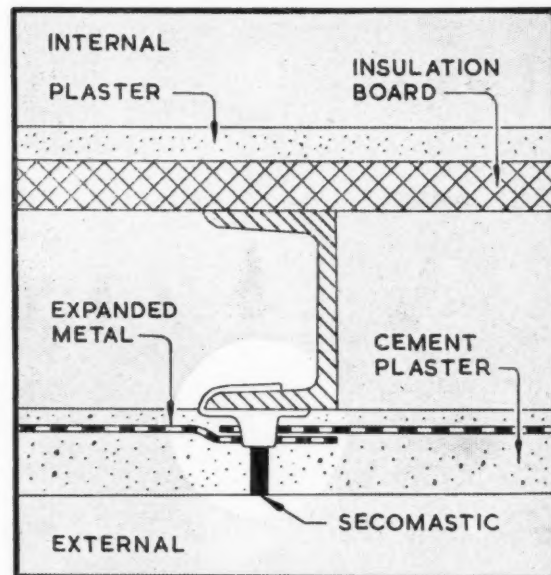
The illustrations show typical examples of the use of SECOMASTIC for expansion joints. In each case the problem was to provide a weatherproof seal whilst at the same time allowing for the normal contraction and expansion of the joint.

SECOMASTIC fulfils this requirement admirably since the movement of the joint is taken up within the body of the mastic which remains in a plastic state, though protected by an outer skin.

There are a great many uses, both in new construction and maintenance work, for which Secomastic has outstanding advantages and a "code of good practice" is gradually being built up whereby the best results can be obtained where joints occur which require sealing.

The problem of efficient and economical application of the mastic is solved by the SECO caulking gun, particularly when used with the SECOMASTIC patented extra-capacity cartridges.

Informative literature will be supplied on request and the SECOMASTIC Technical Staff, who know a great



deal about jointing and sealing problems, will be pleased to advise on specific applications. Please address your enquiries to Architectural Department.

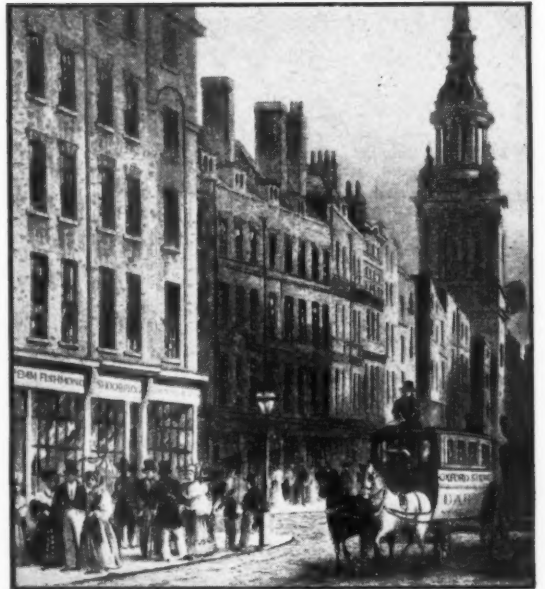
SECOMASTIC REGD. **JOINT SEALING COMPOUND**

SECOMASTIC LTD., 11 UPPER BROOK ST., PARK LANE, LONDON, W.1. TELEPHONE: MAYFAIR 9080



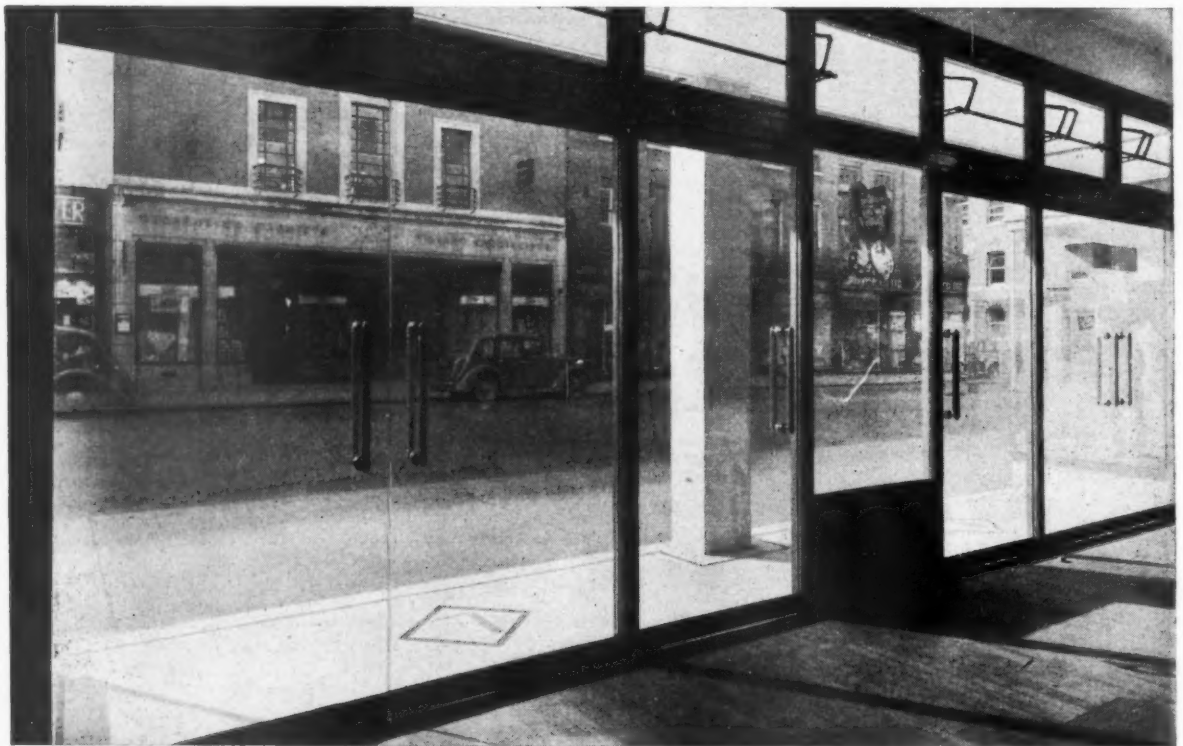
When customers stayed on the pavement

Even fifty years ago shops were still thought of as houses with a place of business on the ground floor, and a door was still a door that, quite unintentionally, said "Keep Out!" To-day, shops can have large doors of sparkling, transparent shock-resisting "ARMOURPLATE" glass, that give an uninterrupted view of the interior, swing back at a touch to admit customers, and say "Come in! This means you!" Any shop invites customers inside when it is opened up and brightened with



A view of Cheapside and Bow Church in the 1840's

"ARMOURPLATE" Glass Doors



Littlewoods Chain Stores, Worcester

Shopfitters: Messrs. Hickman Ltd., London



Consult the Technical Sales and Service Department at St. Helens, Lancs. or Selwyn House, Cleveland Row, St. James's, London, S.W.1. Telephone: St. Helens 4001; Whitehall 5672-6.

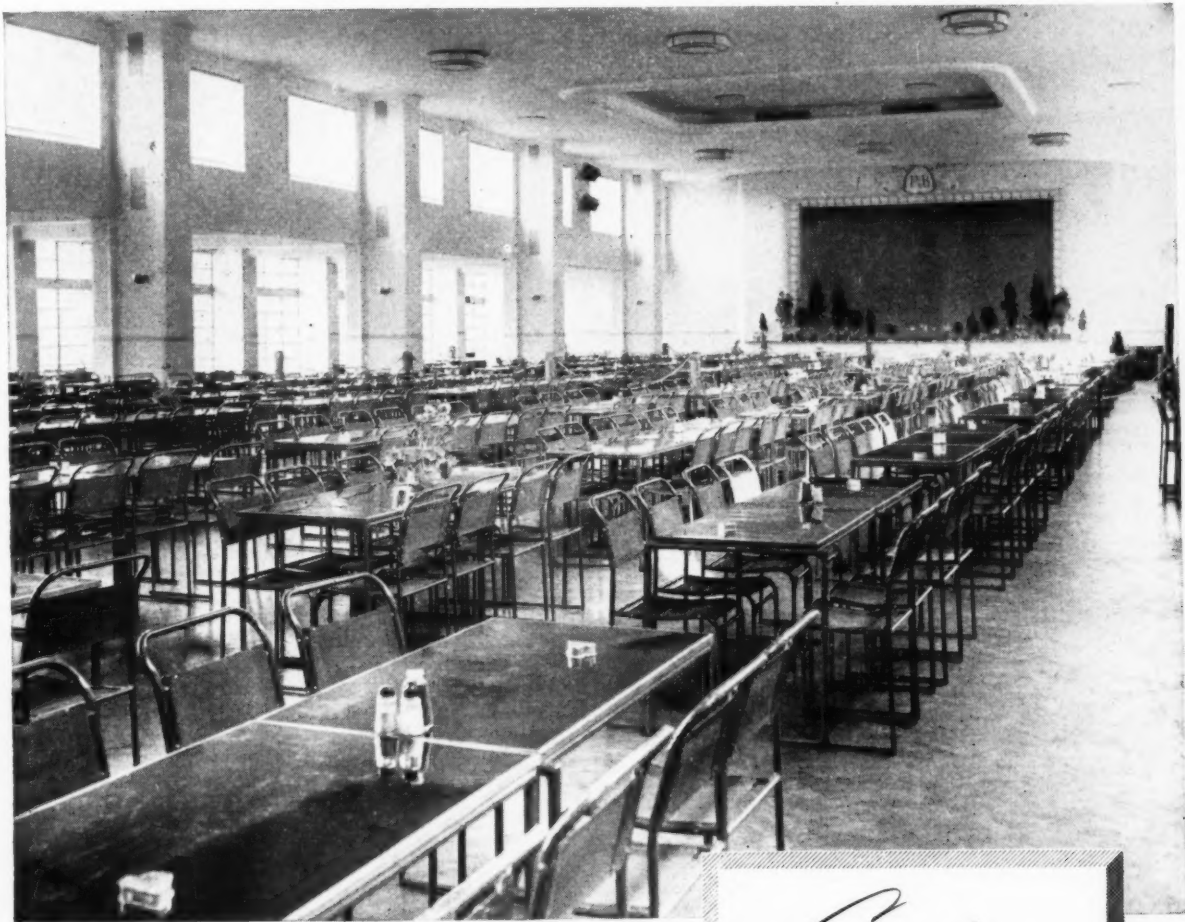
PILKINGTON BROTHERS LIMITED

"ARMOURPLATE" is the registered trade mark of Pilkington Brothers Limited

Supplies are available through the usual trade channels.



*Paton & Baldwin Ltd., Canteen—Darlington
Photograph by courtesy of Paton & Baldwin
Ltd. Architects: Sir Alex Gibbs & Partners,
Queen Anne's Lodge, London, S.W.1.*



NOWADAYS the works canteen often serves a dual purpose and for that reason permanent furniture is undesirable. When the last meal is served as likely as not preparations will commence for an evening concert or maybe a staff dance. In these circumstances Kingfisher space-saving furniture is the perfect answer. Strong, light and easy-to-handle it facilitates re-arrangement, removal and stacking in a matter of minutes and at the same time provides that degree of comfort which is looked for in furniture of a more permanent character.

The attractive and colourful appearance of Kingfisher Tubular Steel Nesting Chairs and Tables, the unmistakable mark of quality which withstands the most arduous conditions, and the remarkable economy of storage space make them ideal for use in canteens as well as in public halls, civic restaurants and other public buildings.

Kingfisher experience and productions are invaluable to Architects when preparing new designs.

Comfort
+
convenience

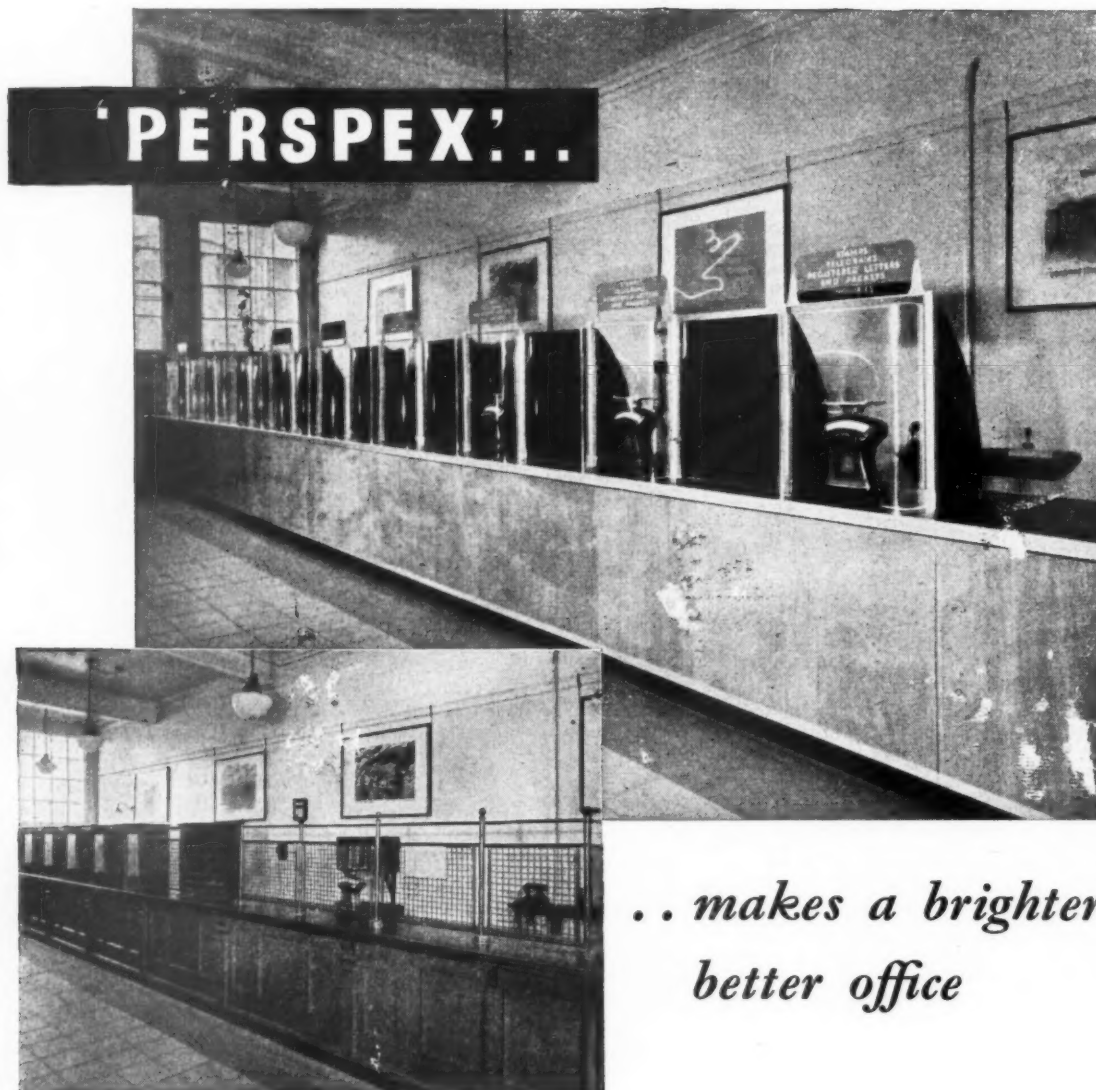


Kingfisher



CANTEEN FURNITURE AND EQUIPMENT

KINGFISHER LIMITED. Charles Street and Phoenix Street, West Bromwich, Staffs. Phone: Tipton 1631. Grams: Kingfisher, Phone, West Bromwich.
London: 139 Knightsbridge, S.W.1. Telephone: Kensington 1331



These two photographs of the Public Office, Chelmsford Head Post Office, before and after refitting, speak for themselves. 'Perspex' is attractive and easily fitted. It is available in transparent, clear and opaque colours as well as clear material. These new serving units—for which 160 square feet of 'Perspex' were used—were fabricated and installed by Sign and Metal Industries Limited, a subsidiary of Acme Showcard & Sign Co.


'PERSPEX' IS THE REGISTERED TRADE MARK OF
THE ACRYLIC SHEET MANUFACTURED BY I.C.I.

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



P.424

The Great Wall of China



WE BUILD IN STEEL

TIMES change and the Great Wall could no longer stem an invader. But whatever the day and age, man will always build for security—security against enemies, against wind and weather, or merely against intrusion. With the times, materials change; today security in building means steel. Banister, Walton build in steel.

**BANISTER,
WALTON & CO.
LTD.**

STRUCTURAL STEELWORK

RIVETED ★ WELDED

LONDON, S.W.1 — 82 Victoria Street

MANCHESTER 17 — Trafford Park

BIRMINGHAM 18 — 61-63 Western Road

Put your
finger on



PRODORITE

LTD.



THE INDUSTRIAL FLOOR SPECIALISTS for over 25 years

(ACID & NON-ACID PROOF)

EAGLE WORKS • WEDNESBURY • STAFFS

Telephone : Wednesbury 0284 (5 lines)

London Office :

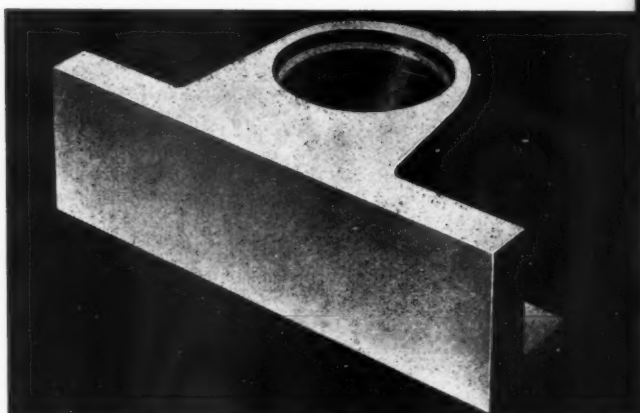
Artillery House, Artillery Row, S.W.1.

Telephone :

Abbey 3816 (5 lines)

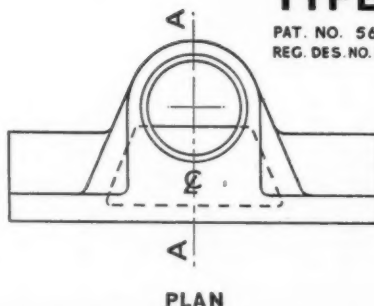
**For every type of fire
there is a
TRUE FLUE
(PATENTED)
LINTOL BLOCK**

The unit illustrated, in refractory material, is for use with the standard open fire and forms a stream-lined connection between the fire and the flue. The surfaces above the fire are rapidly warmed, resulting in improved combustion of the gases, elimination of eddies and minimisation of smoke. Combined with this "gather-over" block is the lintol; thus, in one piece and in one operation, the usual reinforced lintol or chimney-bar and arch, together with the costly and often inefficient gathering over, are dispensed with. The underside of this unit conforms with the line of the fire-back and has a weir-shaped front. The top is designed to take "True Flue" circular rebated flue linings or it can be used with the traditional 9in. by 9in. parged brick flue. As indicated above, other designs of lintols to suit any type of stove on the market are available for immediate delivery, together with ample stocks of circular rebated flue linings.

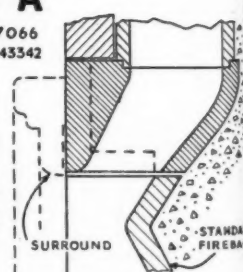


TYPE 'A'

PAT. NO. 567066
REG. DES. NO. 843342



PLAN



SECTION AA

For further information please apply to :

TRUE FLUE LTD., CONVECTOR HOUSE, ACACIA ROAD, ST. JOHN'S WOOD, N.W. 8.
TELEPHONE: PRIMROSE 7161/2



L.T.E. CANTEEN, Baker Street.

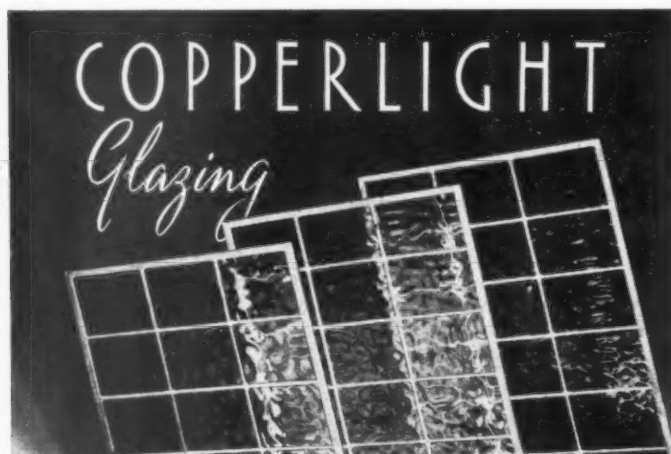
Architect: THOMAS BILBOW, F.R.I.B.A.

CANTEEN RADIANT HEATING BY EMBEDDED PANELS

*Radiant Warming by Embedded Panels,
Hot Water Service, Balanced Inlet & Ex-
tract Ventilation to kitchen, Thermostatic
control of room temperature by*

RICHARD CRITTALL

RICHARD CRITTALL & COMPANY LIMITED, 151 Great Portland, Street, London, W.1. Tel. Museum 3366
and at Martins Bank Building, Liverpool, Central 3283, Prudential Buildings,
St. Philip's Place, Birmingham, Central 2478, and 136 Wellington Street,
Glasgow, C.2. Douglas 8761



PROMPT
DELIVERY

Copperlight Glazing is very adaptable to design and purpose. It finds wide scope in Public, Industrial and Commercial Buildings, Hotels and Stores.

CHROMIUM-PLATED FINISH NOW AVAILABLE. This alternative finish harmonizes with stainless steel for shopfitting and strikes a modern note for all other interior and exterior glazing.

FIRE-RESISTING GLAZING. Copperlights not only give an air of quality, they may also perform a vital service when conforming to Fire-Resisting Specification (see below). Clark-Eaton are equipped to handle any orders, however large—or small—including fixing if required, and can give prompt delivery.

Please send your enquiries for Copperlight or any other form of Glazing, to:

JAMES CLARK & EATON LTD

(Amalgamating James Clark & Son Ltd.,
and Eaton, Parr & Gibson Ltd.)

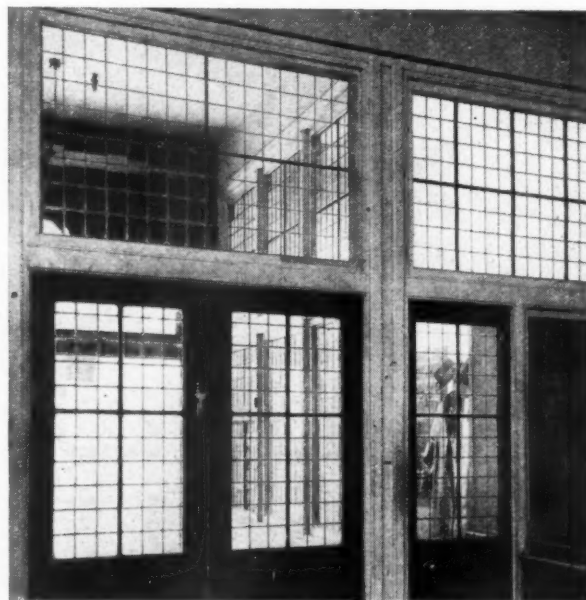
Glass for all Structural and Decorative Purposes

SCORESBY HOUSE, GLASSHILL ST.,
BLACKFRIARS, LONDON, S.E.1

BRANCHES:
CANTERBURY • BOURNEMOUTH
EASTBOURNE • READING



Please Note Change of
Telephone No. to
WATERloo 8010
(20 LINES)



*Copperlight Fire-Resisting Glazing in the offices of
Courtaulds Ltd., St. Martins-le-Grand, London, E.C.1.*

L.C.C. FIRE-RESISTING SPECIFICATION : Glass must not be less than $\frac{1}{4}$ in. thick, in squares not exceeding 16 square inches. Panels must not exceed 2 feet either way. (For large panels a number of Copperlights may be assembled with metal dividing bars).



Lacquered Boards

**- A new
development in
LACQUERED BOARDS**

- A HARD GLOSSY 'PLASTIC ENAMEL' FINISH SPECIALLY RESISTANT TO ABRASION—EASY TO CLEAN

Now available from Merchants' stocks in the following types:—

- PLAIN PANEL BOARD, TILE BOARD, HORIZONTAL LINE BOARD, in white, cream and pastel green finishes
- UNITEX SELVEDGE. To avoid risk of damaging the corners and edges all Unitex Lacquered Boards are provided with special safety edges.

SIZES 4' x 4' and 4' x 6' (Approx)

SAVE TIME AND MONEY BY
"decorating as you build"

For BATHROOMS • KITCHENS • BATH PANELS • SPLASHBACKS • DADOS
LARDERS • SHOP FITTINGS • CARAVANS

The **MERCHANT TRADING COMPANY** *Limited.*

EFFINGHAM HOUSE, ARUNDEL STREET, STRAND, LONDON, W.C.2

Telegrams: "Themetraco. Estrand, London."

Telephone: TEMple Bar 5303 (8 lines)



THE NATIONAL CASH REGISTER FACTORY, DUNDEE.
*Designed by J. Stanley Beard, Bennett & Wilkins,
Chartered Architects, Surveyors, London, W.1.*

Another important modern factory where a
BRIGGS ROOF is responsible for the protection of
valuable plant and machinery.

Factory efficiency and production can only be

maintained if the roof is sound and secure—it is
wise therefore to specify BRIGGS. Since BRIGGS
ROOFS were laid many years ago there has been
adequate experience for their durability and
economy to be proved.

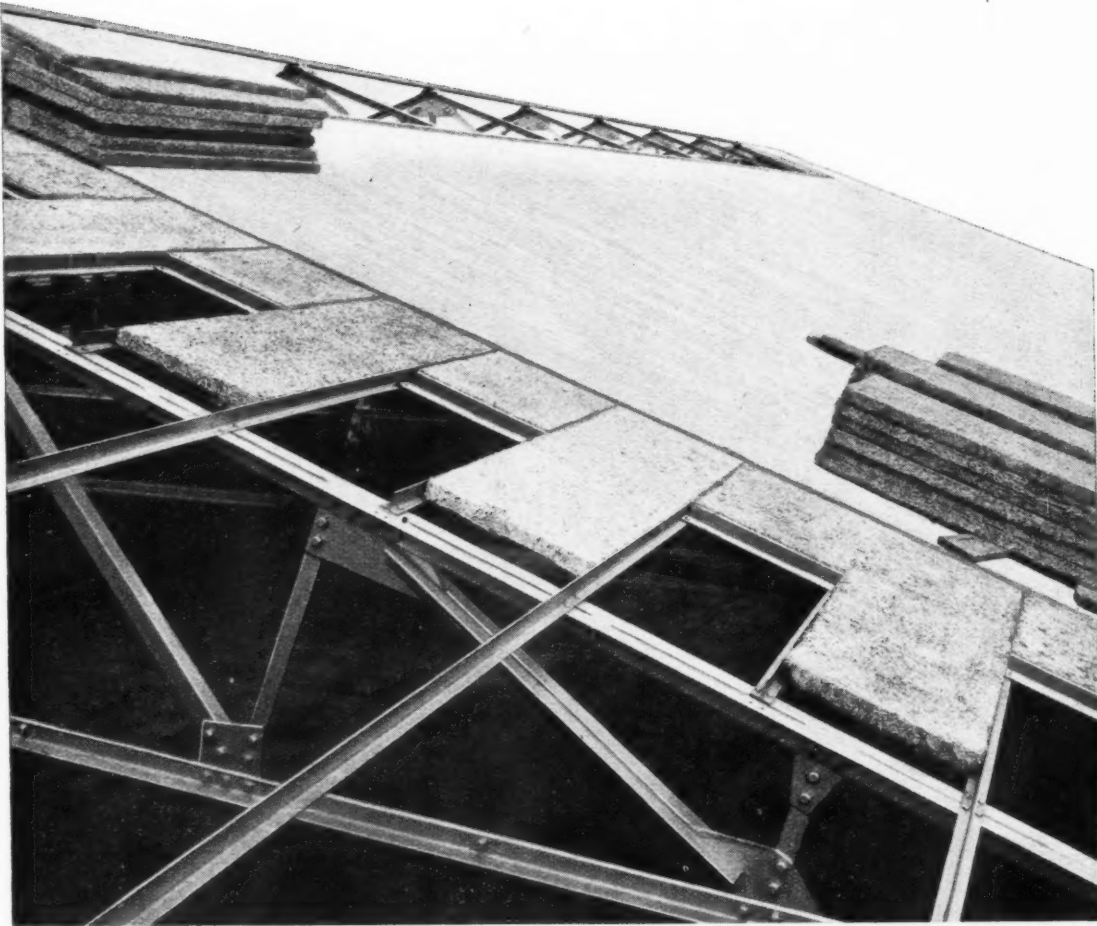
Staffs are maintained throughout the country
for estimating and laying BRIGGS ROOFS and for
giving technical information when required.



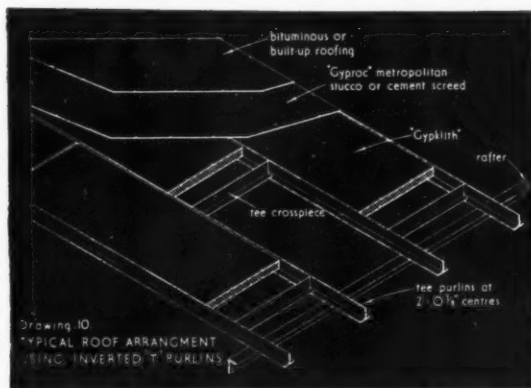
WILLIAM BRIGGS & SONS LIMITED

Dundee and London, Vauxhall Grove, S.W.8

OFFICES & DEPOTS AT: ABERDEEN, EDINBURGH
GLASGOW, LEICESTER, LIVERPOOL, NORWICH



This form of **GYPKLITH** *construction*
Registered Trade Mark
is PARTICULARLY SUITABLE FOR FACTORY ROOFS



Typical roof arrangement using inverted "T" purlins

In the building illustrated, GYPKLITH is supported between purlins of inverted "T" section, spaced at centres equal to 2 ft. plus the web thickness and bolted direct through the flange to the trusses.

The top surface of the GYPKLITH is screeded with GYPROC Metropolitan Stucco ready for finishing with bituminous roofing.

The underside of the GYPKLITH is left untreated in order not to impair its sound absorbent properties. A relatively smooth finish can, however, be obtained by brushing GYPKLITH Surface Filler over the underside of the slabs before fixing in place.

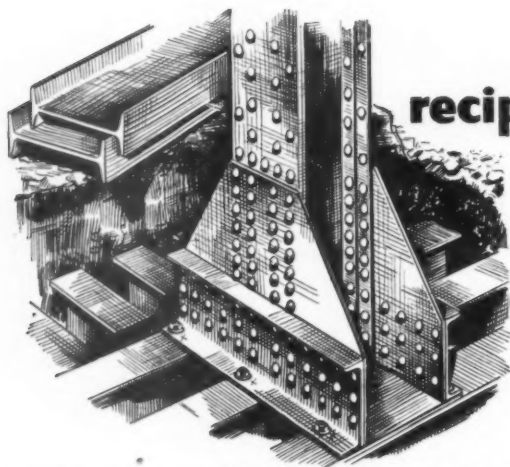
The thermal transmittance "U" value of this roof construction, using 3" thick GYPKLITH, is 0.15 B.Th.U's per sq. ft. per hour per 1°F difference in temperature.

Further information about this and other GYPROC products or systems will gladly be supplied.

Makers also of ACOUSTEAL Ceilings, GYPROC Plaster Board, GYFSTEAL Partitions and Ceilings, GYPROC 1" Solid Partitions and PLAXSTEAL Ceilings

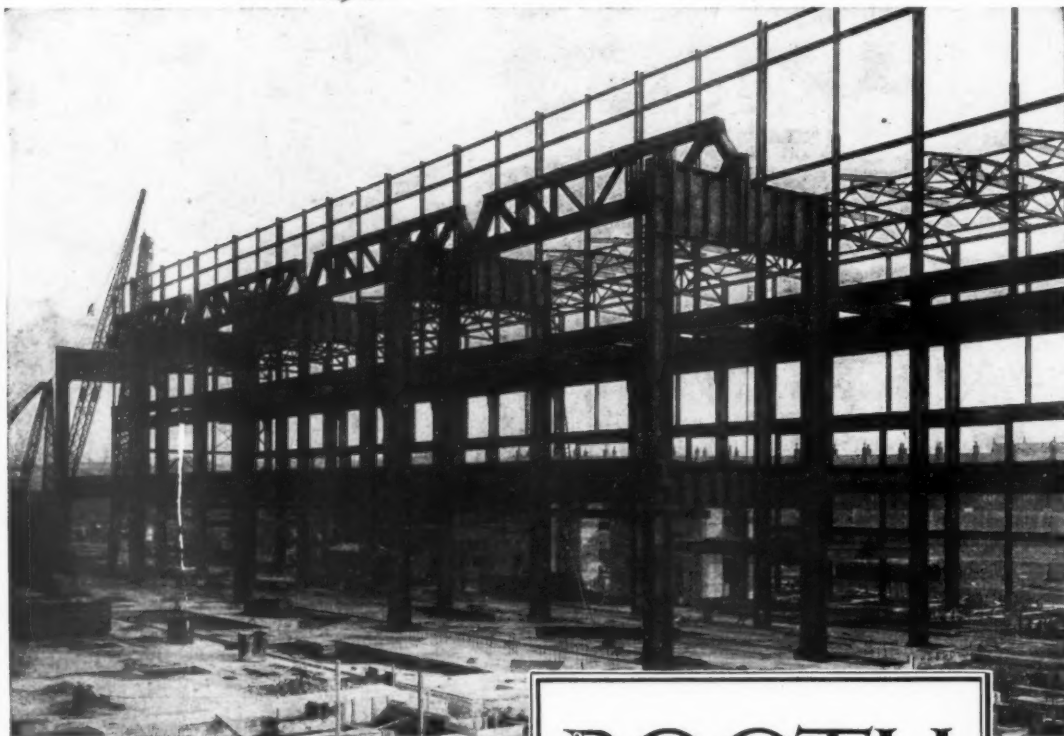
GYPROC PRODUCTS LIMITED

HEAD OFFICE: Westfield, Upper Singlewell Road, Gravesend, Kent. Tel: Gravesend 4251-4 Grams: Gyproc, Gravesend
 GLASGOW OFFICE: Gyproc Wharf, Shieldhall, Glasgow, S.W.1. Telephone: Govan 614 Telegrams: Gyproc, Glasgow
 LONDON OFFICE: Morris House, 1-5 Jermyn Street, London, S.W.1 Telephone: Whitehall 9821-5 G.K.11



recipe for reconstruction . .

to equal parts of skilled design and careful organisation add a large measure of BOOTH STEELWORK. Repeat sufficiently often and the urgent need for building reconstruction will soon give way to a period of consolidation.



BOOTH STEELWORK

The steelwork shown above is part of a project which required riveted and welded steelwork. Both types were fabricated and erected by BOOTH, BOLTON.

JOHN BOOTH & SONS (BOLTON) LTD., HULTON STEELWORKS, BOLTON. 'Phone : 1195

NEW GOVERNMENT OFFICES USE HOLOPLAST MOVABLE WALLS

The illustration shows an interior view of the huge new Government Building now being completed at Whitehall Gardens, London. HOLOPLAST chosen for Economy and Efficiency.

★ ★ ★ 6 IMPORTANT REASONS Why your Organisation can benefit by the use of HOLOPLAST.

- (1) **SPACE SAVING.**
Holoplast Movable Walls are one third the thickness of ordinary walls—this saves space and provides greater accommodation.
- (2) **MAINTENANCE.**
Holoplast Walls have a hard and beautiful finish—last longer—are not easily damaged—maintenance costs are at least halved.
- (3) **TIME SAVING.**
Holoplast Walls can be built TEN TIMES quicker than ordinary walls—permitting earlier occupation.
- (4) **BUSINESS DISLOCATION.**
Holoplast Walls obviate disorganisation when alterations have to be made—no dirt, dust or noise.
- (5) **ALTERATION COSTS.**
When alterations are made Holoplast costs next to nothing to take down, and all material can be used again.
- (6) **TAILOR-MADE FOR THE JOB.**
No bills for extras—the price quoted for the whole perfect job is guaranteed.



Ministry of Works. Crown Copyright reserved.

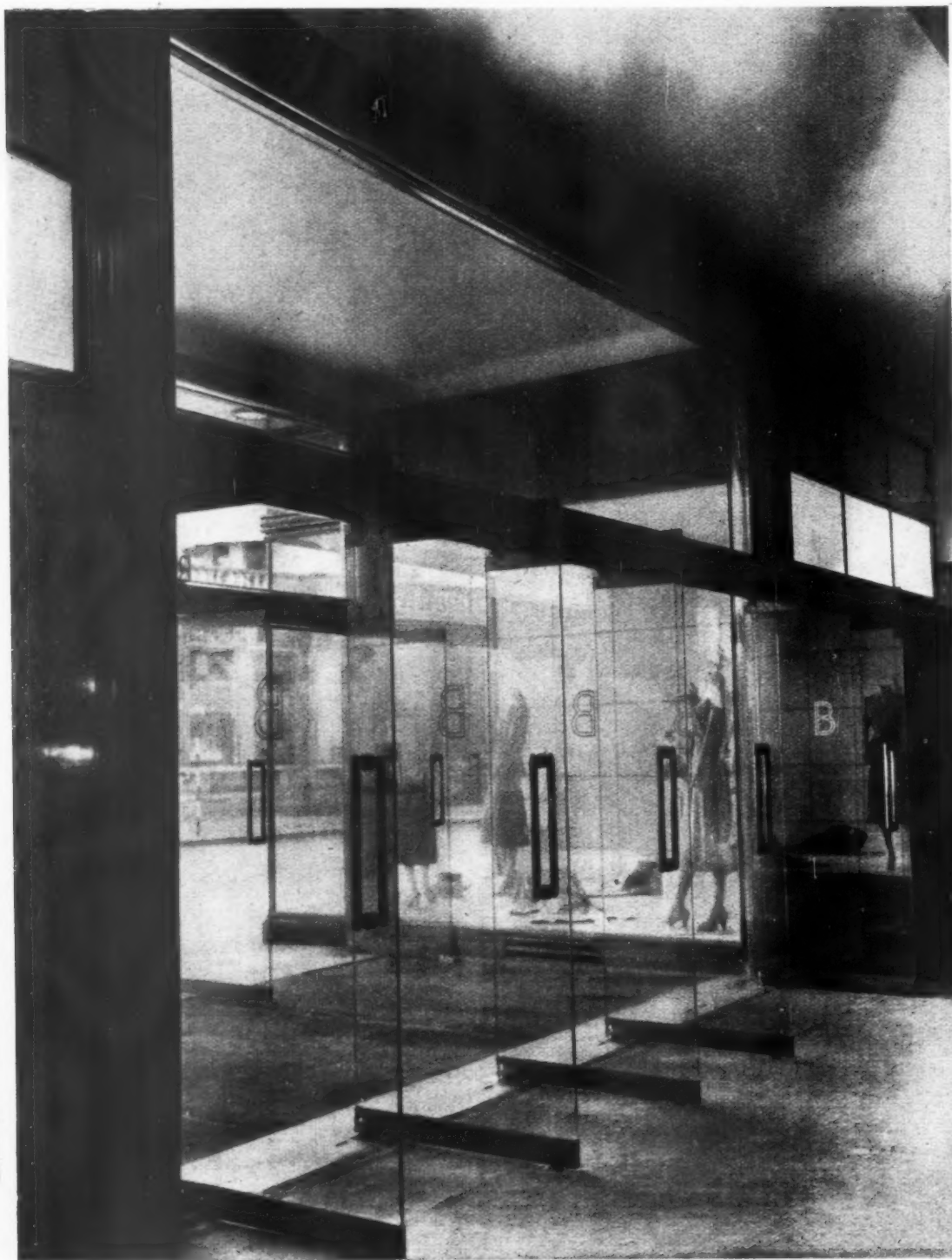
★ NO MATERIAL
LICENCES ARE
REQUIRED

"HOLOPLAST"

116 VICTORIA STREET LONDON S.W.1
NEW HYTHE Nr. MAIDSTONE KENT

Tel. VICTORIA 9981
Tel. AYLESFORD 7361

C R E A T I O N W I T H C R A F T S M A N S H I P



Messrs. Bobby & Co. Ltd., Eastbourne. Architects: George Baines & Son, F.R.I.B.A.

THE ASSOCIATED COMPANIES OF
COURTNEY, POPE

COURTNEY, POPE LTD. Store Fitting, Architectural Joinery and Metalwork.

COURTNEY, POPE (ELECTRICAL) LTD. Electrical Contractors, Fluorescent Lighting Specialists.

AMHURST PARK WORKS, TOTTENHAM, LONDON, N.15 STAMFORD HILL 4266 (TEN LINES)



THE ARCHITECTS' JOURNAL

No 2903 5 Oct. 1950 VOL 112

EDITORIAL BOARD: (1) *Consulting Editor*, F. R. Yerbury Hon. A.R.I.B.A. (2) *Guest Editor* Raglan Squire F.R.I.B.A. in association with Arcon (3) *House Editor*, J. M. Richards A.R.I.B.A. (4) *Technical Editor*, R. Fitzmaurice, B.Sc., M.I.C.E., Hon. A.R.I.B.A. (5) *Editor Information Sheets*, Cotterell Butler A.R.I.B.A. (6) *Editorial Director*, H. de C. Hastings. SPECIALIST EDITORS*: (7) Planning (8) Practice (9) Surveying and Specification (10) Materials (11) General Construction (12) Structural Engineering (13) Sound Insulation and Acoustics (14) Heating and Ventilation (15) Lighting (16) Sanitation (17) Legal.

ASSISTANT EDITORS: *Chief Assistant Editor*, D. A. C. A. Boyne *Assistant Editor (News)*, K. J. Robinson *Assistant Editors (Buildings)*, L. F. R. Jones, A. P. Lambert *Assistant Editor (Information Sheets)* E. G. Johnson *Photographic Department*, E. R. H. Read, H. de Burgh Galwey *Editorial Secretary*, Betty E. Harris

* To preserve freedom of criticism these editors, as leaders in their respective fields, remain anonymous
9, 11 & 13 Queen Anne's Gate, Westminster, London, S.W.1 Whitehall 0611

Subscription rates: by post in the U.K. or abroad, £1 15s. 0d. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Half-yearly volumes can be bound complete with index in cloth cases for £1; carriage 1s. extra.



ROUGH-HEW THEM HOW WE MAY

A belated but final word on the new Ocean Terminal at Southampton (see *AJ*, August 3, 10, 17 and 24). It has been pointed out to me that I never acknowledged the fact that the designs for this building were submitted to, and approved by, the Royal Fine Art Commission, a panel of whose members, consisting of Maxwell Fry, Edward Maufe and Knapp Fisher, "viewed the site from all its aspects," before strongly commending, to quote J. H. Jellett, the Docks Engineer, the proposal to "develop the south end of the building and have the north end plain as a means of emphasizing its seaward-looking character."

An unaccustomed fluttering of my heart warns me that the long dried-up source of sympathy within can still eke

out a tiny drop. It is surely a bit hard for an architect, having obtained the approval of his design by such an eminent body as the RFAC (see again names above) to be criticized (inadequately, I freely admit) by a mere columnist who is anonymous, and who is taking good care to stay that way with these big guns going off. If the RFAC approved one of my designs, I would be as pleased as Punch.

Or would I? On second thoughts I'm not so sure. Before letting myself go I would check and compare very carefully all the designs which have received the Commission's approval. The results, I think, would be very illuminating, and somewhat disturbing.

To return, however, to the Ocean Terminal, I can only repeat that, despite this august approval, I still do not think this building is as good a design as it might be. But, of course, one man's meat . . .

SALISBURY SPIRE

The Building Centre's exhibition of stone and metal work from the top of Salisbury Cathedral spire closes at the end of this week. Go to see it if you can but avoid the photographs if, like me, you have no head for heights. The pictures of men hopping around quite casually at four hundred feet or more gives me a slightly clammy feeling.

I was impressed by the quality of most of the early ironwork and by the courage of craftsmen who built the 150-ft. spire. I gather from Mr. Forsyth, who is supervising the repairs, that the load on each of the four pieces which carry the complete tower and spire structure is something like 6,000 tons and that the foundations go down only

five feet! It makes me wonder if our ideas about factors of safety are all wrong.

HIGH WYCOMBE'S NEW HIGHWAYS

At the hundreds of shows held every year in small towns and villages the arts seldom have any place. I am pleased to say that at the exhibition, held recently in a tent at High Wycombe, by the local Arts Association, interest was focused on Anthony Chitty's plan for the district. The County Council Planning Department also exhibited some of its planning survey drawings. As the layman rarely appreciates the importance to him of what is being done in the planning offices, and the services it can and should perform for him, the initiative of the High Wycombe Arts Association is commendable. Perhaps next year the Association will consider presentation of the work of the architect with the assistance of the local Society of Architects.

BRAUN'S STUDY

I suppose that one should always applaud any attempt to make the layman take an informed interest in architecture. Hugh Braun's history* is factual enough, and he very rightly starts with primitive huts and ends with present-day buildings, but I feel that a page without illustrations headed "Nowadays" is not enough to describe the road that designers have followed since Victorian times. Surely the reader should be given not only history, but some fuller explanation of the buildings he sees going up today. None the less, this is quite a good book to present to the enquiring mind, and it is reasonably cheap.

* The Story of English Architecture. By Hugh Braun, F.R.I.B.A. (Faber and Faber, 12s. 6d.)



PLUMBING & STRUTTING DOOR FRAMES FOR A BLOCK OF FLATS

CITY OF BIRMINGHAM HOUSING AT REDNAL

H. J. Manzoni, C.B.E., *City Engineer & Surveyor*

HOPE'S

Steel Door

FRAMES

Send for Catalogue No. 254

HENRY HOPE & SONS LTD., *Birmingham & 17 Berners St., London, W.1*

PARLIAMENT SQUARE

The new Parliament Square is taking shape, and it's beginning to be possible to see what we have gained and what we have lost as a result of Grey Wornum's efforts. We've clearly gained a lot in tidiness and simplicity of layout; the statues, in particular, are arranged in a less haphazard fashion. Temporarily we have also gained some elegant lamp-standards (see illustration) which I commend to the notice of other local authorities. I hope the permanent ones will be as simple and unobtrusive.

We have lost the Buxton Memorial Fountain—not everybody's taste, but I regret its passing. I think things that are temporarily out of fashion ought to be left because it's surprising how fashions come round again. After all, many of the things we value now—like Regency terraces—have passed through a stage of being thoroughly despised, and we owe their survival to the fact that they were not pulled down just because they were unfashionable.

On a more important scale, we may have lost the possibility of a more drastic replanning of the area in a few years' time. Readers will remember the *Architectural Review's* scheme for restoring Westminster's precinctual character, which received a great deal of support. It clearly could not be put into effect right away because it depends on a new road, by-passing the Abbey precincts, which present restrictions on expenditure would not allow. But it is obviously the long-term ideal, and the risk is that the work that is now being done will be made an excuse not to tackle the bigger job when the time comes. (This subject is referred to, by the way, on page 306 of this issue.)

Meanwhile, heavy traffic, facilitated by the new roadways, will continue to roar past the north side of the Abbey with increasing speed—right through the middle of what would still be a peaceful collegiate precinct if it had not been for the ruthless efforts of the Victorian road engineers. What we want to aim at is the undoing of their work, not merely making it more agreeable to look at.



A new view of Central Hall, Westminster. (See Astragal's note).

CENTRAL HALL REGAINED

There is another scene of building activity to the west of Parliament Square, where the demolition of the old Westminster Hospital has just been completed. This has opened up a head-on view of Rickards's Central Hall and a new view of the north flank of the Abbey, and some people have said they wish the site could have remained open and these views preserved.

I don't think that would really be a good plan, because a sense of enclosure will be an important attribute of the precinct it is hoped will eventually be planned there, and it should not be opened out too widely on the western side. But I wish there was going to be a less bulky building on the hospital site than Tait's new Colonial Office. A lot of people seem to dislike the massive edifice he has designed, but I suppose it's too late now for second thoughts.

NEWEST NEW TOWN

It is easy to pass along main roads quite near Corby without ever seeing it. But Corby as the newest New Town

has a greater attraction than Corby alone and recently ASTRAGAL visited it for the first time. Prepared for a horizon of belching chimneys sur-



One of the temporary lamp standards in Parliament Square, which Astragal refers to on this page.



The Mask and the Face

The mask, which for years has concealed the face of the Central Hall, Westminster, has now been removed and for a short time Londoners, looking across the site of the de-

molished Westminster Hospital, will view it as it was meant to be seen. Before long, however, it will be hidden by the new Colonial Office.

rou
iron
car
mon

Fi
clin
As
of
com
sam
twir
van
ston
plac
hou
umb
talk
guid
unre
enou
Cor
ther
and
were
strea

Of
not
sma
year
scra
is p
hou
it is

DO Y
The
answ
atten
ques
infor
Now
coul
floor
tions
Num
subs
whic
indu
zatio

The
num
of p
denc
enda
I ass
to th
answ
tellig
Stree

rounded by miles of devastation after ironstone working, I approached by car from Thrapston on a fine sunny morning.

First impressions were, however, climatic, sociological and architectural. As you climb up to the 50 ft. plateau of Corby a powerful bracing wind comes to meet you, and stays. At the same time, abruptly, the brick and twin plaster houses of East Anglia vanish and Northamptonshire limestone with pantiles or slates take their place. More distant landscape-plus-houses resembles Lancashire or Northumberland, and as 3 out of 5 people talk Scots, local phenomena are a poor guide to geographical position. Land unrestored after iron workings is grim enough, but the workings do not ring Corby but rather pop up here and there behind houses or across fields; and the steel works, though very big, were sending only half a dozen modest streamers of smoke down the wind.

Of Corby as a town one feels it has not had time to catch up. Shops are small and usually makeshift. Its 18-year growth has already been a scramble, and it is still in a hurry as is plainly shown by the number of houses now building. Equally plainly it is a very special kind of New Town.

DO YOU KNOW?

The DSIR has just started an Unanswered Question bulletin in an attempt to answer specific technical questions where the normal sources of information have apparently failed. Now it isn't likely that many of us could be much help when the DSIR is flooded and, in fact, most of the questions mean to me nothing whatever. Number 1, for example: "Is there any substance (hormonal or otherwise) which, applied to plant tissues, will induce (a) cork formation or (b) suberization of all walls?"

There is one building industry one, number 12: "What is the best method of protecting the structure from subsidence following the cutting of a tree endangering it and its root system?" I assume that "its" is meant to refer to the tree, but I still cannot think of an answer. If you can, write to DSIR, Intelligence I, Charles House, Regent Street, SW1.

ASTRAGAL

The Editors

CONTROL OF DESIGN

TWO important issues arise from letters in the correspondence columns of this week's JOURNAL. The first is raised by C. Talbot Larrington, who is under the misapprehension that the JOURNAL advocates that in the interest of a high standard of design, advisory bodies like the Royal Fine Art Commission and the Council of Industrial Design should be given power to insist on their advice being accepted and acted upon. This is very far from being the JOURNAL's desire. Mr. Larrington in his letter describes clearly the disastrous effect such powers would have.

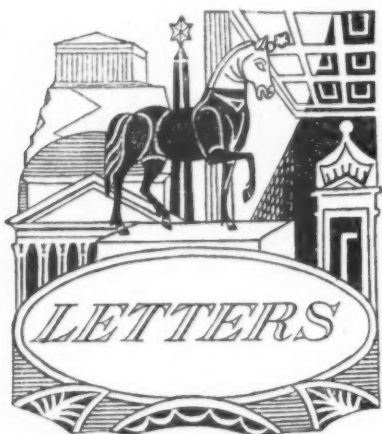
It cannot be too much emphasized that the only way to obtain good architecture is by employing the best architects. Advisory bodies on design, however well intentioned, can never create great works of art. They can, and should, only tender advice and criticism in an endeavour to make sure that a certain minimum standard of quality is obtained.

It has become apparent, as readers will have seen for themselves from examples published in the JOURNAL over the last year, that several valuable opportunities to ensure the highest standards of design in buildings of national importance have been lost because there exists no means of ensuring that such buildings are designed by the best architects in the country. In the JOURNAL for August 10 we stated that "pending a more enlightened policy and more imaginative leadership on the part of the Ministry of Works—the one existing Government department that could exercise some influence in this direction—it would surely be wise for the Government to set some individual or commission the task of foreseeing such opportunities and to give them the authority to see they are taken advantage of." This might perhaps mean giving power to such a commission to appoint or approve the architect for buildings of which the good design is of special importance to the nation, but once the architect had been appointed he should be interfered with as little as possible.

THE ARCHITECT AND THE ENGINEER

Another issue of great importance is mentioned in a letter from J. H. Jellett, the Docks Engineer for Southampton. This concerns the relationship of the architect and the engineer. We feel that ideally these two professions should not be in the position, with regard to each other, of employer and employee, but should instead have the happier relationship of consultant and chief designer. As Mr. Jellett says, there are engineering structures which, although largely the work of the engineer, would benefit as regards design from the advice of an architect. And, of course, the architect is largely dependent on the advice of the engineer as regards the structural aspects of his own design.

The JOURNAL's plea is for correct and responsible relations between two professions, and the avoidance of the position whereby the one becomes subservient to the other.



J. H. Jellett, M.I.C.E.

C. Talbot Larrington and A. H.

Dawes Dingle, A/A.R.I.B.A.

Ernest Hillson

Dock Terminal: The Engineer Replies again

SIR,—Although I can hardly expect you to devote any more of your valuable space to this discussion, there are one or two points which I cannot let pass without further comment. I am disappointed that there is no acknowledgment by ASTRAGAL of the fact that the design was submitted to and approved by the Royal Commission on Fine Arts. In view of your own editorial reference to this Commission in your issue of August 10, some such acknowledgment would appear to be not out of place. I am not suggesting that, having learned that the design was approved by the Royal Commission you should then discover in it aesthetic merit which was not apparent to you before, but, presuming that you find yourselves conscientiously bound to criticise unfavourably this particular decision of such an august body, the courageous course would appear to be that you should inform your readers in so many words.

ASTRAGAL, in his comments on Mr. Dromgoole's letter, appears to be at pains to advise him that those who assume responsibility for designing important buildings, must be prepared to hear criticisms of their work. This is such an obvious platitude as to be very nearly an insult when tendered as advice to a qualified professional man, and moreover, I am unable to discover in Mr. Dromgoole's letter any suggestion that he resents, or would resent genuine architectural criticisms of his designs as such. So far, however, neither you, nor ASTRAGAL have favoured us with very much solid food for thought of this kind.

ASTRAGAL's statement that he respects Mr. Dromgoole's frankness in acknowledging full responsibility for the design, is another example of condescension which might well have been omitted. No professional man with any degree of faith in himself and his work would seek to evade responsibility for his designs merely because they had been criticised in public journals, or anywhere

else for that matter. The fact that ASTRAGAL considers it worth while to refer in this way to these elementary principles of professional conduct as though they were something unusual, appears to me to call in question his competence to criticise professional work in any way whatsoever.

Your methods of deducing the statement that the building was designed by myself from the wording of the official handout, has all the dangers and defects of oversimplification. It is true that the responsibility for the design was in the last resort in my hands, in that had I myself had any reason to be dissatisfied with it, it was open to me to ask Mr. Dromgoole to revise his ideas. I would however mention that, as far as the pure architecture of a building is concerned, and where no other considerations of cost or functional suitability are involved, this would be an impertinent intrusion into another professional colleague's sphere of responsibility, which I hope I shall never allow myself. There is a big difference between "responsibility for" a design, and being the original author of it, which nobody with any knowledge of these matters should find any difficulty in appreciating.

I must say that ASTRAGAL's statement, in which he deplores the principle whereby the architect of an important building works under an engineer, reads more like the recital of a religious devotee intoning an article of his particular dogma, than a reasoned statement of professional opinion on a complex technical matter. As is so often the case with dogma of this kind, it gets into difficulties when it comes up against practical realities. For example, how do you propose for this purpose to define "buildings." There are many engineering structures whose finished appearance would benefit greatly from the attentions of a good architect in the design stage, just as there are many buildings whose operational requirements are so complex and closely defined that the engineer, if he happens—as in this case—to be the person most fully acquainted with these requirements, must have the last word *de facto*, even if the formal administrative arrangements give it to the architect *de jure*.

Possibly you are prepared to amplify this statement of your belief by saying that any project which requires the attention of an architect in any degree whatsoever, becomes by reason of this, a building, and that therefore the architect should be in charge. As there are many buildings in which the architect will rightly be in charge and would also require the assistance of engineers, the logical conclusion of this argument is that, while architects may properly be put in charge of engineers, engineers must never be in charge of architects. Again, if this is in fact your view, I invite you to make a public statement of it, but I doubt whether even the RIBA will be prepared to follow you into this position, which is likely to ensure them the uncompromising hostility of the other professional institutions.

Southampton.

J. H. JELLETT.

Control of Design

SIR,—Watching each issue of the JOURNAL carefully, since the editorial criticisms of the Ocean Terminal on August 10, we had hoped that some representative body of architects would have taken the JOURNAL to task over advocating a policy that seems to us to be full of terrifying possibilities for the profession.

Apparently, in the matter of good design, the JOURNAL is asking for advisory bodies to be given power to insist on action being taken according to their ideas; surely one doesn't require to use much imagination to foresee the catastrophic effect that this would

have upon individual effort and the eventual sterility it would produce in architectural design; buildings would soon become monuments to concession and architects, privately commissioned, would finally in desperation submit the plans only, and the boys-who-know would style the favoured façades.

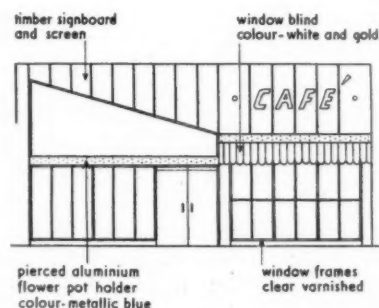
Anyhow, the most one could expect from such a restrictive practice would be a depressingly imitative style, in the favoured idiom, developed to get the drawings through the controls; for one must surely acknowledge that it is almost entirely over the matter of appearance that controversy rages.

However, to carry it a little further, simply to replace the misguided neo-classical façade by a post-cubist abstraction would be obviously naughty; or is the idea of plan and elevation being conceived together outmoded? Logically then, control would have to be not only of elevation but also of plan, and the conclusion is that even qualified architects would need to be weeded out—those who would be allowed to design and those who would not! For if there's going to be an advisory controlling body then some architects will be bound to have their hair shortened.

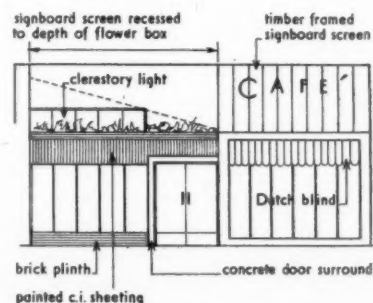
Perhaps we have not quite reached that final stage but we are, at least, at the first stage of facial control, and to support this statement we bring to your notice a quite recent example which, although small and insignificant, indicates the earliest signs of decay and, unless immediately stopped, the final extraction from the individual of his freedom to design.

However reactionary we may seem, for our own part we prefer that the possibly-really-bad should rub shoulders with the rarely-exceptionally-good, rather than the whole be reduced to a clinical mediocrity. Imagine some future Betjeman becoming enraptured over our medallioned housing estates!

The drawing herewith enclosed shows alterations to a small café and is a copy of



the working drawing submitted to the appropriate authorities; the architects' panel who considered our elevation unsuitable is nominated by the local architectural society and comprises five practising architects, their opinion apparently re-enforced by the County Planning Department who produced the "new look," shown below.



RECONSTRUCTION OF STATION OFFICE

Approval to the alteration, valid anyhow for only five years, was given subject to our changing our elevational design in order to "preserve the amenities of the district." A quick study of our drawing would show, apart from any aesthetic consideration, the reason we adopted the shaped window was to obtain maximum light with the existing lean-to behind, etc., etc.

What we think of this effort of control, as far as quality of design, choice of materials, lettering, draughtsmanship, function and the multiple implications of such petty tyranny is unprintable; however, theirs is the power and in order to conform, we must now reluctantly return to what seemed to us a rather unhealthy adolescent period in design, when Hitler and pimples were getting beneath the skin.

We would appreciate your comments on this example of criticism with the power of control; for government backed interference has such power to control where an architect is attempting to earn a living and must bear the cost of appeal against decisions; anyhow the butter is off this bread-and-butter line when drawings have to be revised and details scrapped. Furthermore, one is placed in the most unenviable position with one's client in attempting to explain away a change of face without losing face. Summing up, we humbly suggest you invite opinion as to the virtue of having this control for which you clamour, and in the field of aesthetic criticism, whether it is not better that a greater tolerance be shown to those who honestly endeavour yet cannot see the light—which of course is almost everybody but oneself.

C. TALBOT LARRINGTON.

A. H. DAWES DINGLE.

Torquay.

Timber Supplies

SIR.—I was interested to read the article in your issue of August 3 written by Ian Bowen, and was pleased to see such an early comment upon Mr. Masterman's recent Report on this question.

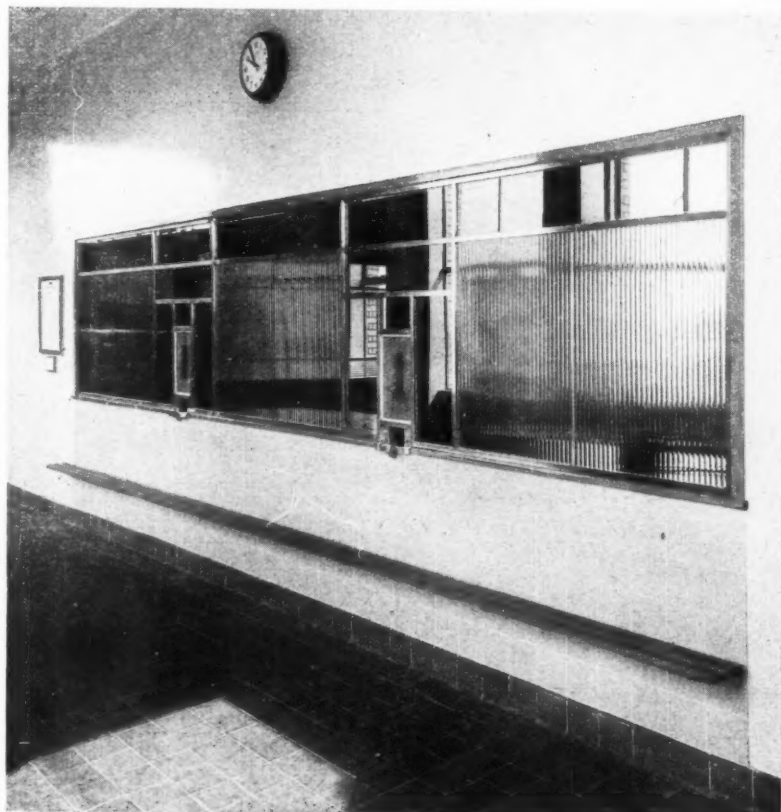
I cannot, however, altogether agree with Mr. Bowen's conclusions. He states that "the prejudice against flat roofs is mainly on aesthetic grounds," but I would suggest that flat roofs, generally speaking, are not at all suitable to the English climate. Further, he emphasizes the portion of Mr. Masterman's paper which deals with flat roofs and the constructional design of the first floor, but for some reason or other he entirely disregards Mr. Masterman's observations on the possibilities of alternative methods of pitched roof construction. A close study of Mr. Masterman's paper would show that there is no reason to depart substantially from the use of the traditional pitched roof, so long as suitable alternative methods of construction are used.

I do not wish to join issue with Mr. Bowen on the national and international position regarding timber supplies, and have no hesitation in accepting his figures and conclusions on this aspect of the matter. I do, however, suggest that the increased use of flat roofs is not the answer to this question, particularly so far as housing is concerned. The local authorities would get all the advantage they seek if they would study and adopt the alternative systems of pitched roofing to which Mr. Masterman refers. Such a course would not entail an increase in the importation of timber, or the further expenditure of foreign currency. I strongly support Mr. Bowen's concluding suggestion that "the results of research already completed should be exploited both by vigorous administrative action and by the voluntary action of local authorities and architects."

ERNEST HILLSON.

President, National Federation of Roofing Contractors.

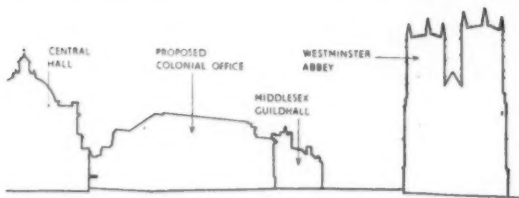
Manchester.



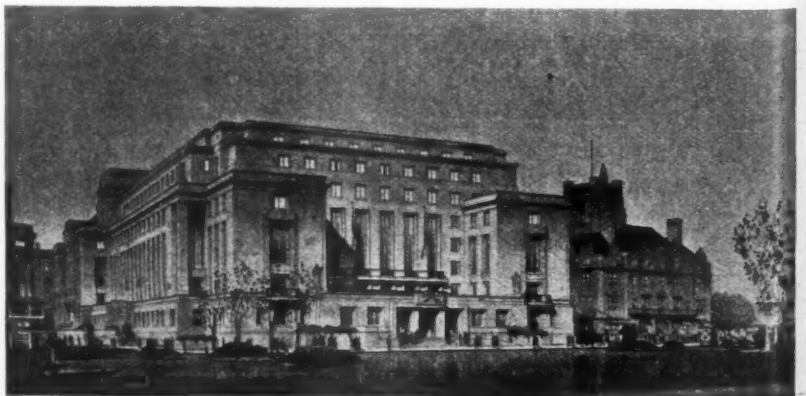
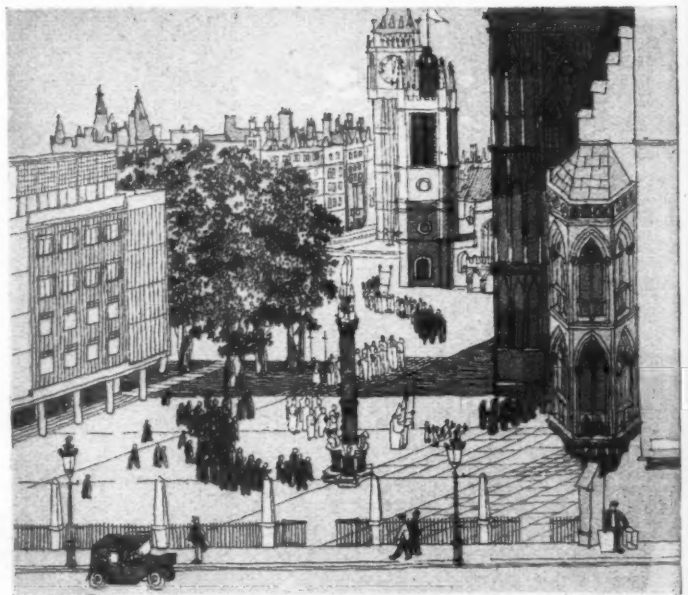
A new interior for Lea Bridge Station, designed by H. H. Powell, architect for the Eastern Region, has recently been completed. Above, the glazed front, with luggage rack below. Right, the parcel reception counter. Below, a general view of the looking counter.



WESTMINSTER REVEALED: A TEMPORARY GAP IN THE PRECINCT'S WALLS



Above is an unique and transitory view into the Westminster precinct, revealed by the demolition of the old Westminster Hospital. On this site work will shortly begin on the new Colonial Office (below, right, first published in the JOURNAL for August 4, 1949), designed by T. S. Tait, of Sir John Burnet, Tait & Partners. The outline drawing, above, indicates roughly how this proposed building (height: 90 ft.) will appear in relationship with its immediate neighbours, the Central Hall and Westminster Abbey (height of nave: 140 ft.). Despite the virtues of a new view of the Abbey and another open space in Westminster it is more important to preserve the enclosed intimate quality of the precinct obtained by grouping small buildings close to the Abbey. This was realized in the Architectural Review's plan for Westminster, and the sketch, above right, shows the small scale suggested in this plan for any new building on this site. It is debatable whether the proposed Colonial Office has this quality. See Astragal's comments, on page 301.

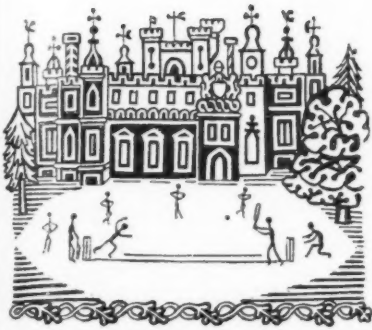


At the
David
has a

AR

The
fica

The
form
respo
always
prisin
exist,
archi
bodie
not y
practi
Men
RIBA
that
respo
relief
cope
in due
his
detail
work
seems
warni
the t
and p
perati
the q
not a
It is
trend
Produ
Amer
bill o
less
prese
at so
comb
ties
may
bill o
sched
made
for f
lation
probl
At
two
what



At the invitation of Arcon, Owen Davis, the firm's quantity surveyor, has written the following:

ARCON

The Purpose of a Specification

The purpose of a specification, the form it should take, and whose responsibility it is to write it, are not always understood. And it is not surprising that some confusion should exist, at least in the minds of young architects, as the attitude of professional bodies and educational authorities has not yet caught up with contemporary practice.

Memories of student days and the RIBA scale of fees, remind architects that specification writing is their responsibility; later, they learn with relief that the quantity surveyor can cope from mere notes, but find out in due course that the builder *must* have his specification. The copying of detailed descriptions of materials and workmanship from the bill of quantities seems a waste of time and there are dire warnings that discrepancies between the two documents will be a nuisance and probably lead to extras. In desperation the matter is frequently left to the quantity surveyor and the result is not always what it should be.

It is not possible to predict future trends. Contractors, stimulated by the Productivity Team's description of American methods, may agree that the bill of quantities could become a much less elaborate document than it is at present. As a result it may be possible, at some time in the future, to write a combined specification and bill of quantities; alternatively, the specification may resume its former glory and the bill of quantities may become merely a schedule of quantities—references being made to the specification or drawings for full descriptions. But these speculations do not help us with our present problems.

At one time the specification served two purposes; it told the contractors what to allow for in their tenders, and

later, it told the successful contractor how the building was to be constructed. The advent of the bill of quantities changed its purpose into that of telling the quantity surveyor what to allow for in his bill of quantities.

When the status of the quantity surveying profession had risen to a fairly high level, the average architect in private practice considered it unreasonable that he should be required to write a full specification in order to convey his ideas to his trusted colleague, the quantity surveyor. Similarly, when the bill of quantities became an elaborate contract document, it was felt that the contractor could no longer require an equally elaborate specification. It followed that two quite separate things were required—brief specification notes to enable the quantity surveyor to interpret the architect's wishes and, later, a brief specification which would tell the contractor how the job is to be built, *in so far as this had not already been made clear in the bill of quantities and on the drawings.*

This comparatively new procedure is already widely practised but it has not yet been officially sanctioned; it is not adequately taught in the schools and it is not reflected in the terms of service or scales of fees.

INADEQUATE TEACHING

One may ask why the procedure is not functioning properly if it is already so widely adopted. I think the answer is firstly, that architectural students are taught specification writing, which they have neither the time to absorb nor to practise, but they are not taught what information is *essential* for them to give to the quantity surveyor. Secondly, the brief specification which is to be read in conjunction with the bill of quantities, is left to the quantity surveyor and as this service is not reflected in his scale of fees it is natural for him to regard it as something of an imposition, to be got over as quickly as possible.

There can be no doubt that a high proportion of young architects and architectural assistants have little or no idea of what information the quantity surveyor must have and I suggest that students should be taught that drawings and specification notes are complementary to one another, that one, without the other, is useless to the quantity surveyor, and that however much the quantity surveyor can be relied upon to elaborate descriptions, it is for the architect to decide what each component is to be made of. Surely it is not too much to expect that a student should not be allowed to qualify as an architect until he has at least learned to state, in the briefest possible terms, what his requirements are.

Although I have said that the quantity surveyor can be relied upon to elaborate descriptions, I still do not feel

that architects can afford to neglect this important aspect of their work entirely or be relieved of their responsibility; I merely mean that they can regard this as something which can be entrusted to a colleague, under their supervision.

There seems to be no question that the brief specification for the contractor should be written by the quantity surveyor, as the bill of quantities is the contract document and the specification can do no more than elucidate what is already there. But to expect him to write the specification when (according to the scale of fees) the architect is paid for it and he is *not*, and when his own work has been made more difficult by the lack of that very document, is asking a lot of human nature and, in fact, creates a sense of grievance quite out of proportion to the sum of money involved. In consequence I suggest that the job should be made officially his; that it should be mentioned in his terms of service and reflected in his scale of fees.

I suggest that more study should be given to the form which these "brief specifications" should take, so that they can be written with some degree of consistency and thus become familiar to those who are called upon to interpret them.

The bill of quantities states what the materials and workmanship are to be but it does not state where they are to be used. This is largely the function of the specification and frequently it can be done by a brief reference to the bill of quantities, e.g., "All ground floor slabs are to be of 6 in. concrete, as item, except that in the outhouse which is to be of 4 in. concrete as item"

COMPOSITE ITEMS

The difficulty is with composite items, such as a screen consisting partly of fir framing covered with plasterboard and partly of a deal glazed light in a hardwood surround. For convenience, the various components are spread over the bill of quantities, in the carpenter, joiner, plasterer, glazier and painter, but isolated references to these items in trade order, cannot help the contractor to visualize the whole. Frequently a brief reference to the detail drawing is all that is required but this does not always occur to the junior who has merely been told to state where the various items appearing in the bill of quantities occur on the job.

If it is prepared conscientiously, a brief specification such as this can be adequate and can go far towards assuring the contractor that the contract documents do tie up. The danger is that when cross referencing is employed, it is easy to write a specification which only someone with the mind of a cross-word addict can follow and it is, therefore, essential that specification writers should be properly trained and not merely be taught to write a full specification in the traditional manner.

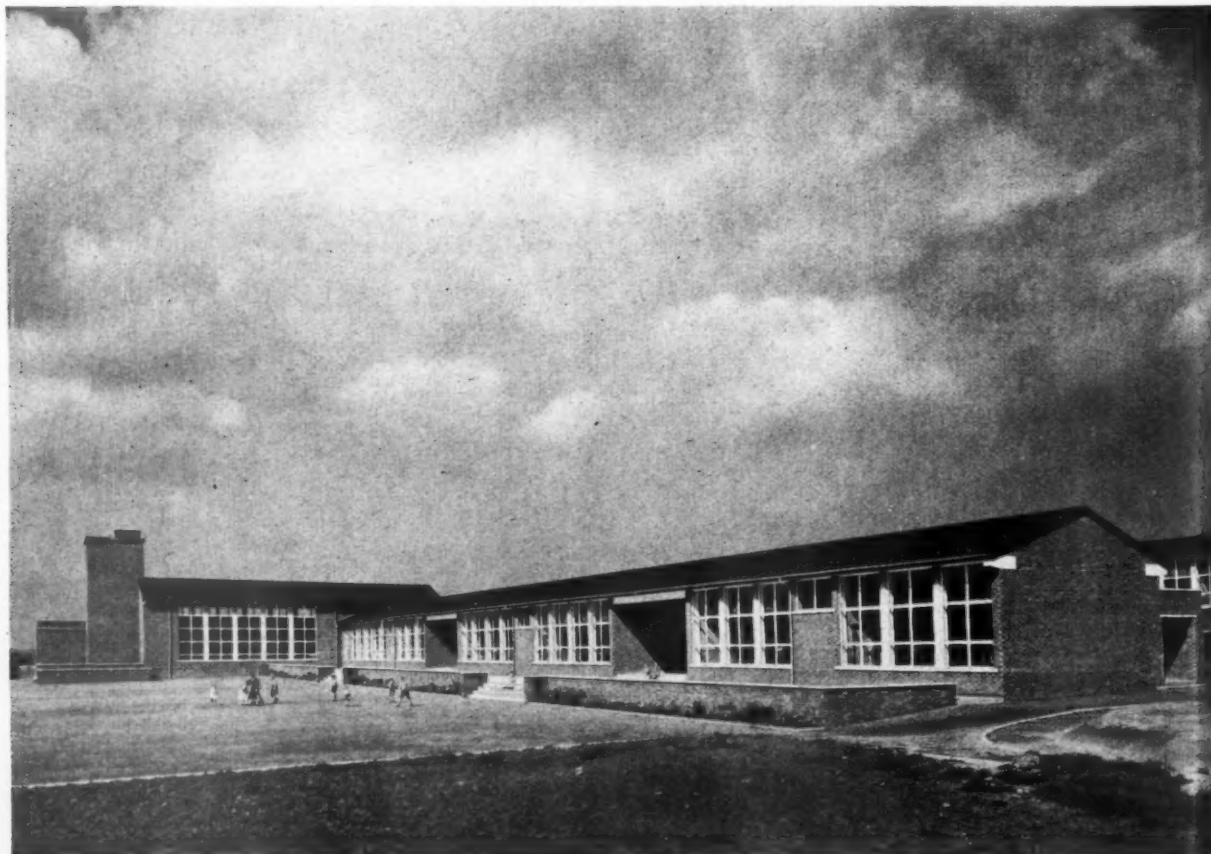
PRIMARY SCHOOL

at SEACROFT, LEEDS

designed by R. A. H. LIVETT, CITY ARCHITECT

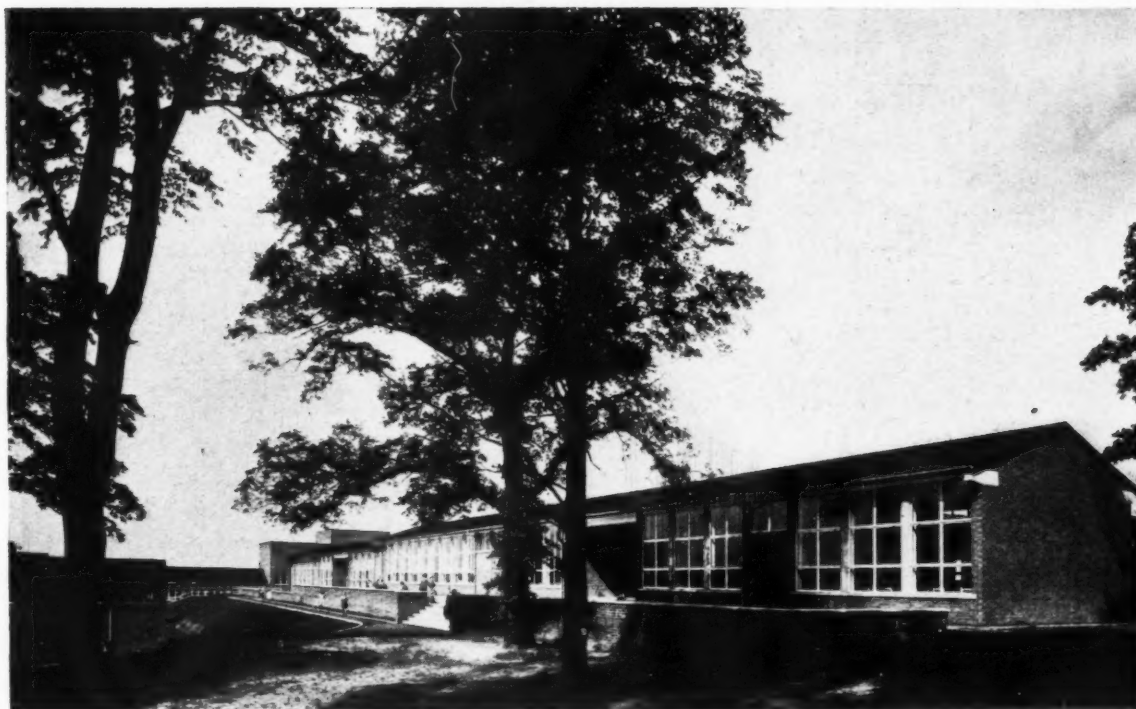
The new primary school at Seacroft, Leeds, which was opened on July 15 by the Minister of Education, is the first school of the large building programme under the new Education Act to be completed for the City of Leeds Education Committee. The building is the first stage in the development of a 27-acre site situated in a new municipal housing estate. A secondary modern school for 680 boys and a nursery for 120 infants under 5 are to be built on the site, the latter on an area adjacent to the primary school.

A classroom block from the south-east.



SITE.—
infant c
for 380
site wh
and dis
window
ment is
ment an
tion wi

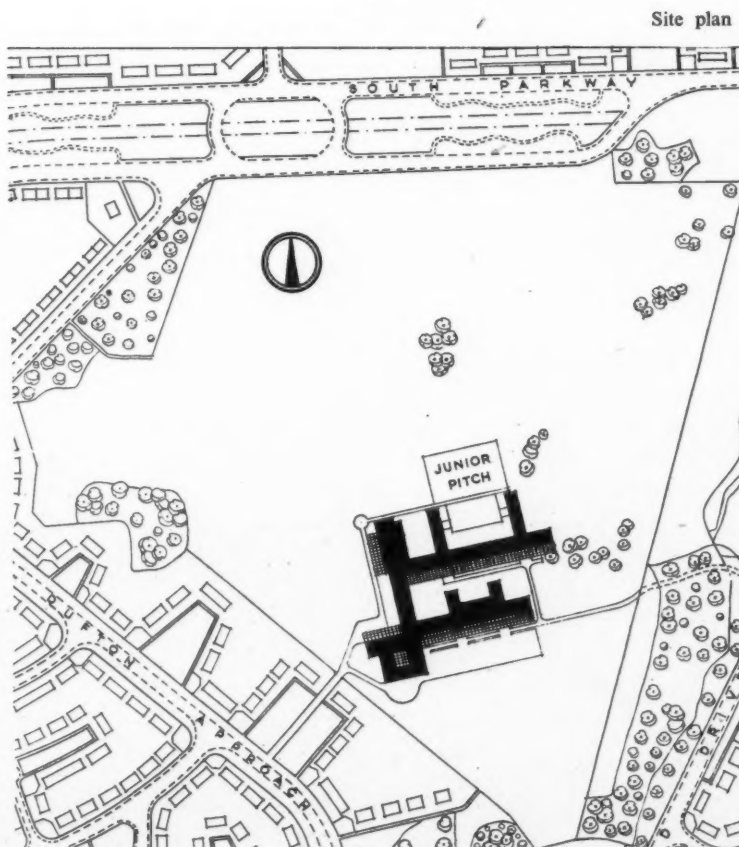
PLAN.—
directly
from w
staff an
The cl
contour
subsidi
terraces
accomm
dors.
at some
disturba
placed
vision.
fixed st

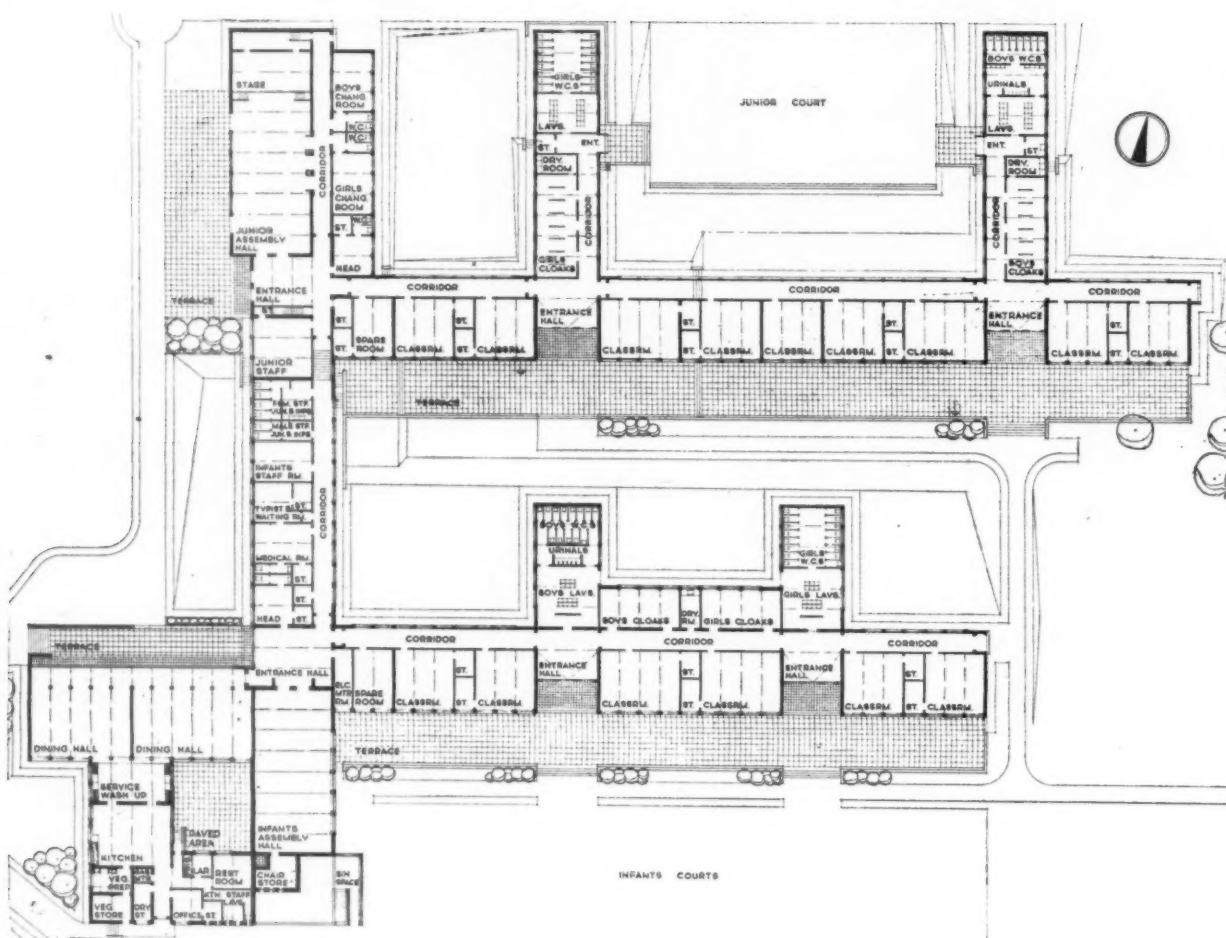


A classroom block and terrace from the south-east.

SITE.—The primary school, which consists of an infant department for 260 and junior department, for 380 children, has been placed on a part of the site which slopes to the south, and views of near and distant woodlands can be obtained from the windows of all the main rooms. The junior department is raised several feet above the infant department and a change of level occurs in the administration wing which connects the two.

PLAN.—The principal approach to the site leads directly to the main entrance hall of each department, from which there is direct access to assembly halls, staff and administration rooms and classroom wings. The classrooms, which are planned along the contours for economy, are divided into groups by subsidiary entrance halls which lead from the terraces on the south side to classrooms and sanitary accommodation, thus avoiding long unbroken corridors. The junior playground is placed behind and at some distance from the classrooms to avoid noise disturbance, whereas the infants' playground is placed in front of the classrooms for easier supervision. The junior assembly hall, which has a fixed stage and changing rooms, may be used for





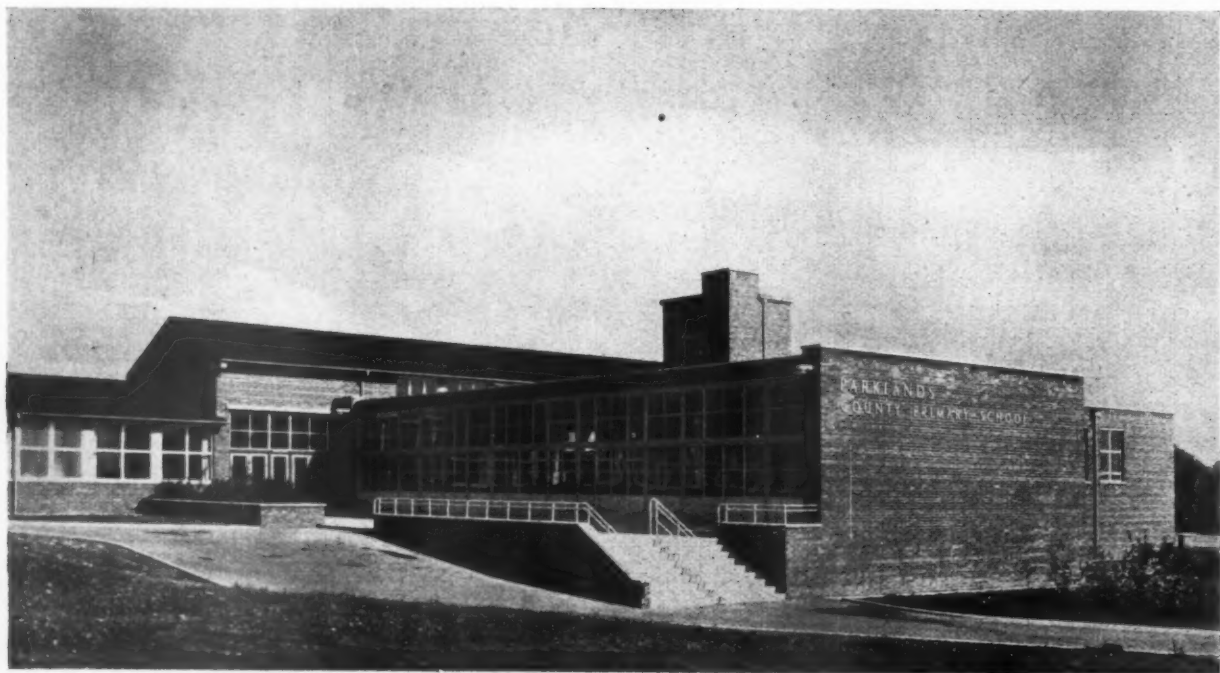
PRIMARY SCHOOL

at SEACROFT, LEEDS

designed by R. A. H. LIVETT, CITY ARCHITECT

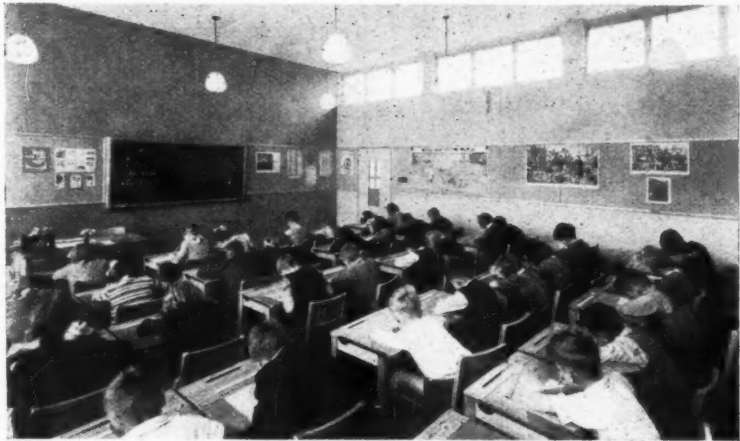
Plan [Scale : $\frac{1}{4}$ " = 1'0"]

The dining hall from the northwest.



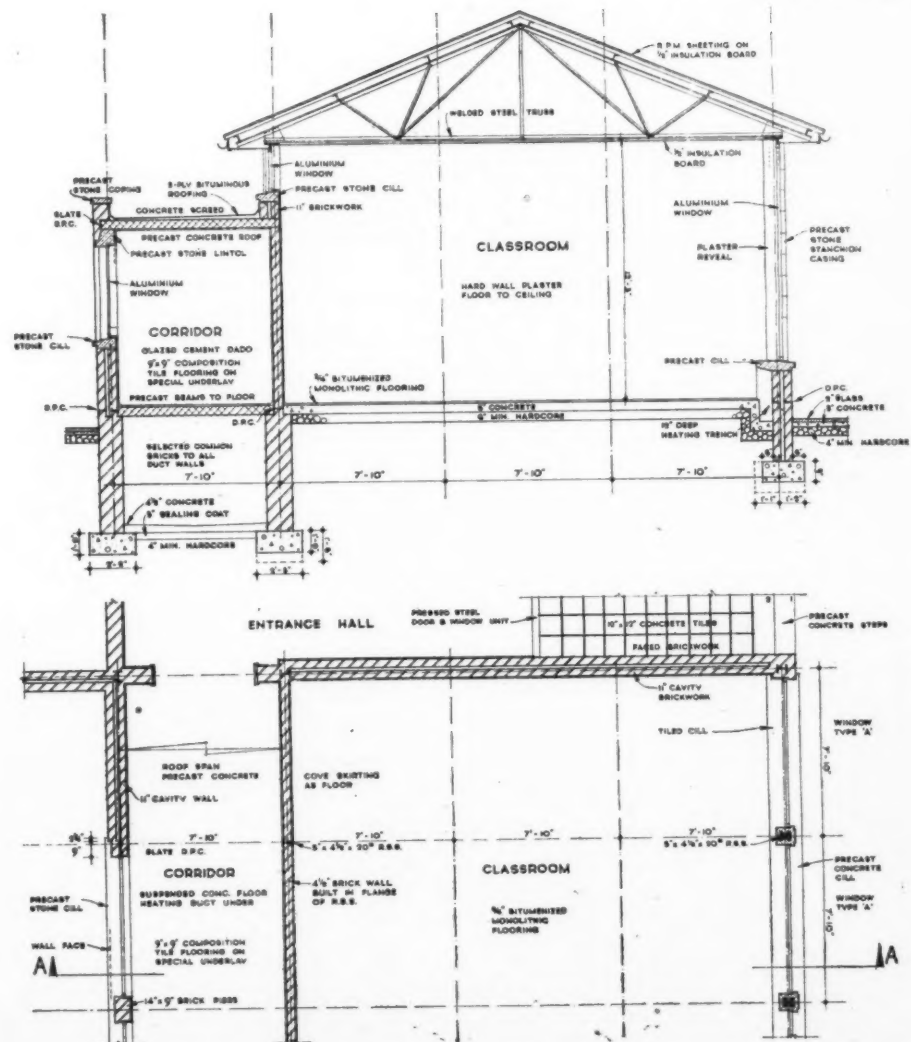
local activities. The dining hall can be reached under cover via the connecting administration block and has a continuous sliding-folding window along one side, opening on to a terrace. The kitchen is planned to cater for 500 meals daily.

CONSTRUCTION AND FINISHES.—The building was designed on a 7-ft. 10-in. grid and economy in the use of timber was aimed at. It has a steel frame and external, load-bearing walls of 11-in. cavity brickwork. Rolled steel stanchions, at grid centres, are only 5 in. by 4½ in. (6 in. by 6 in. in Assembly Hall, where spans and height are greater). The pitched roof has light, welded steel trusses, supporting patent, asphalt-protected steel decking on ½ in. insulation board. The fascia is also of pressed steel. Flat roofs consist of pre-cast concrete slabs, ½ in. insulation board and covering of 3-ply bituminous roofing felt. Acoustical considerations have



Typical classroom interior.

Section A-A



Plan of typical classroom [Scale: ½"=1'0"]



Typical classroom and entrance seen from the south.

PRIMARY SCHOOL

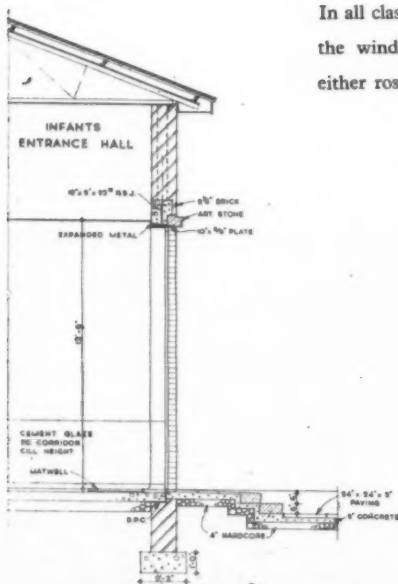
at SEACROFT, LEEDS
designed by R. A. H. LIVETT,
COUNTY ARCHITECT

been satisfied by the use of a monolithic, bituminous cork flooring screed and ceilings of insulation board, supported by aluminium sections, spanning between the trusses. Flooring in Assembly Hall needs to be more hard-wearing and composition blocks, laid in basket weave pattern, are used. Flush doors were specially made solid, to stand up to heavy usage and observation panels in them are of unbreakable glass; frames are, again, of pressed steel—to save timber. Aluminium was chosen for window frames, delivery in this case being quicker than for steel. Special consideration was given to the internal decoration. Doors in corridors and entrances are red, in classrooms blue and assembly halls yellow. In all classrooms, the blackboard wall is grey-green, the window wall white and the remaining walls either rose, primrose or warm stone.

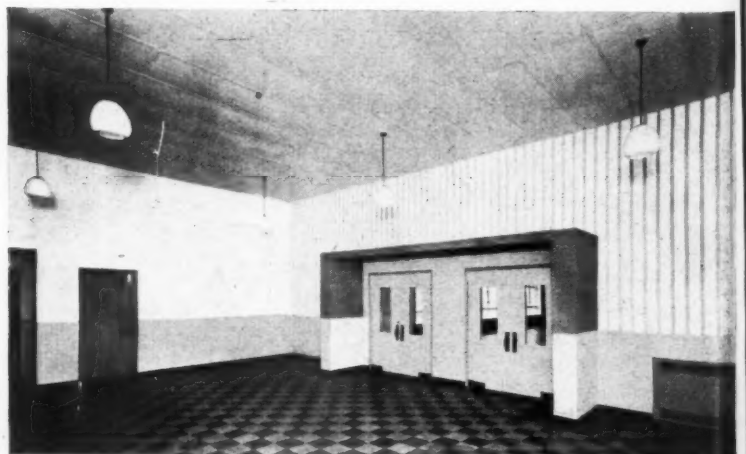
SERVICES.—Convactor type heaters are operated by an accelerated, low pressure hot-water system, which also caters for the hot water supply. The heaters for the principal rooms were especially designed and are concealed behind continuous metal panels under the main windows. All pipe runs are concealed in ducts. Electric lighting is designed to give even illumination, thus allowing the arrangement of classrooms to be varied. Pear-shaped, opal glass fittings were selected having a fairly high efficiency, but the aperture is small enough to prevent direct glare.

The contract was based on a Schedule of Rates and Prices to facilitate early commencement of the work. The cost per place is not expected to exceed £215.

The general contractors were William Nicholson and Sons (Leeds) Ltd. For list of sub-contractors see page 322.



Section through infants' entrance hall
[Scale: $\frac{1}{4}" = 1'0"$]



Infants' entrance hall.

HOUSE

at FREEPORT, LONG ISLAND

NEW YORK, USA

designed by HUSON JACKSON

A firm of builders asked the architect to design a house, the intention being to build one and then take orders for the construction of additional houses. The intending buyer would then be able to see the finished house and would be able to make minor alterations in layout and finish for the one he was to have constructed.

The living room.



HOUSE

at FREEPORT, LONG ISLAND, NEW YORK, USA
designed by HUSON JACKSON

PLAN.—The living room and bedrooms face south. Some privacy between neighbouring houses is obtained by placing the living room and all bedrooms on the side which faces the rooms of least use in the next house. Landscaping work, including fences or hedges is left to the owner.

CONSTRUCTION.—The foundations are of poured concrete. A steel joist supported on brick piers carries the 10-in. by 2-in. wood joists. Brick walls are of cavity construction. Other walls are of 4-in. by 2-in. studs packed with glass wool insulation.



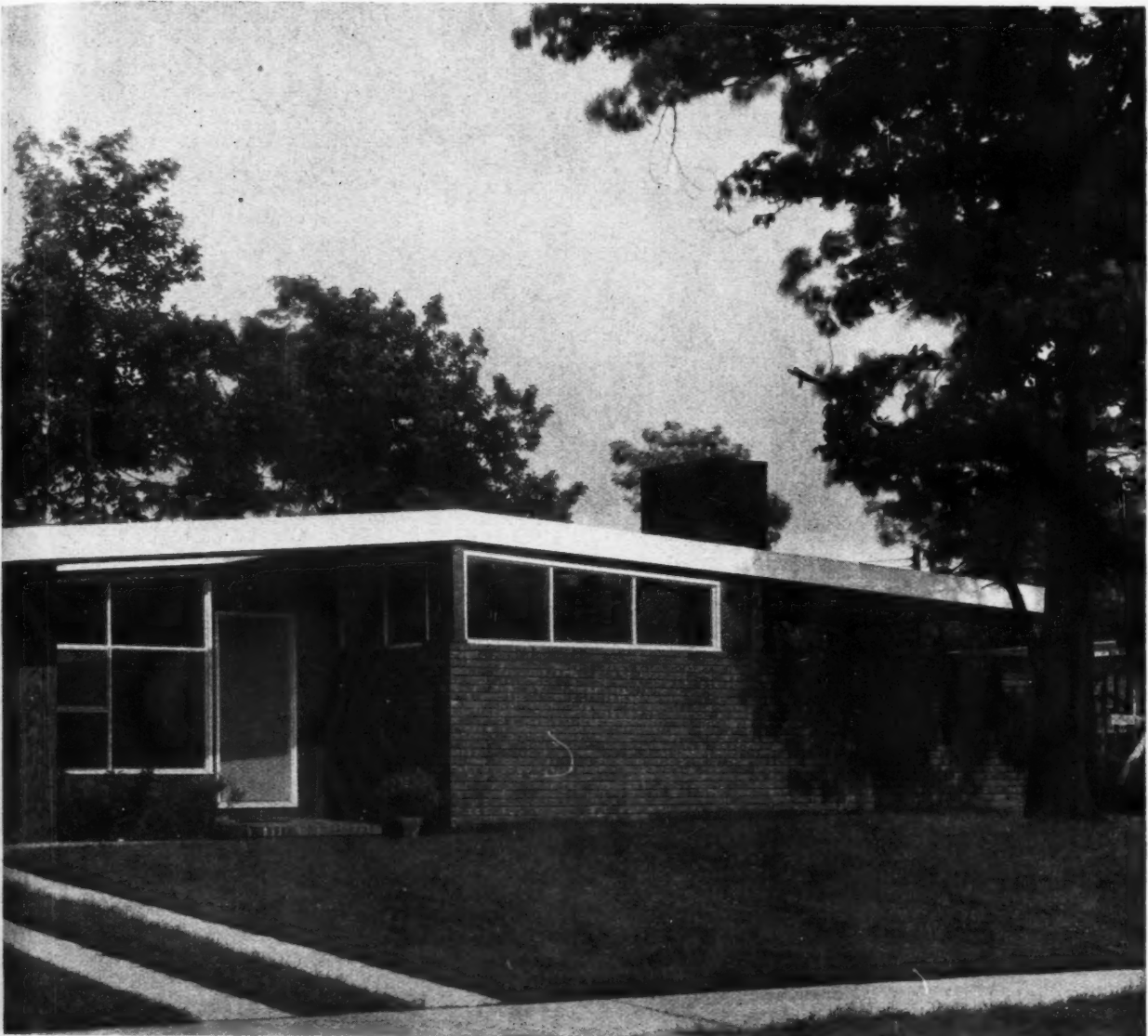
The house from the north-west.



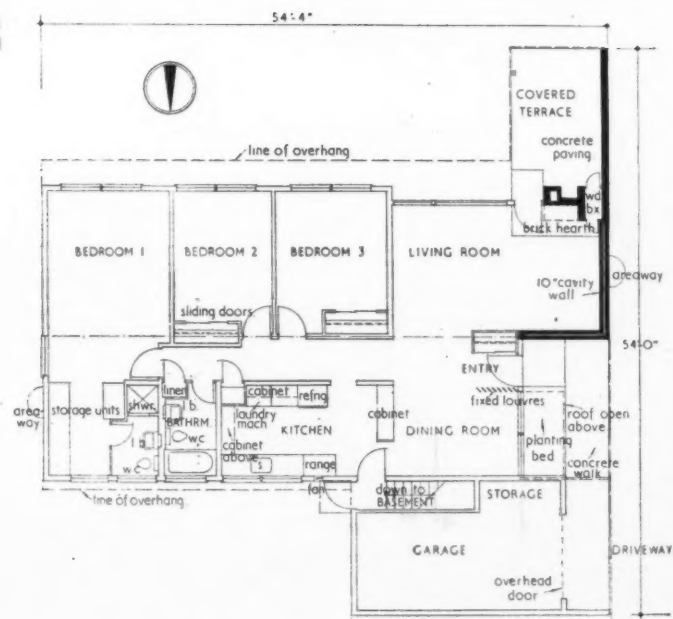
The covered terrace.

A 4-in. layer of glass wool is laid between the 10-in. by 2-in. roof joists. All joists and studs are at 1-ft. 4-in. centres.

FINISHES.—Facing bricks are used for exposed exterior and interior surfaces. Exterior woodwork is of cedar. Plasterboard walls and ceilings have recessed edges which are fitted with plaster of Paris reinforced with tape. The ceramic glazed wall tiles in the bathroom are fixed with a rubber base adhesive to the plasterboard, which has previously been water-proofed.



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



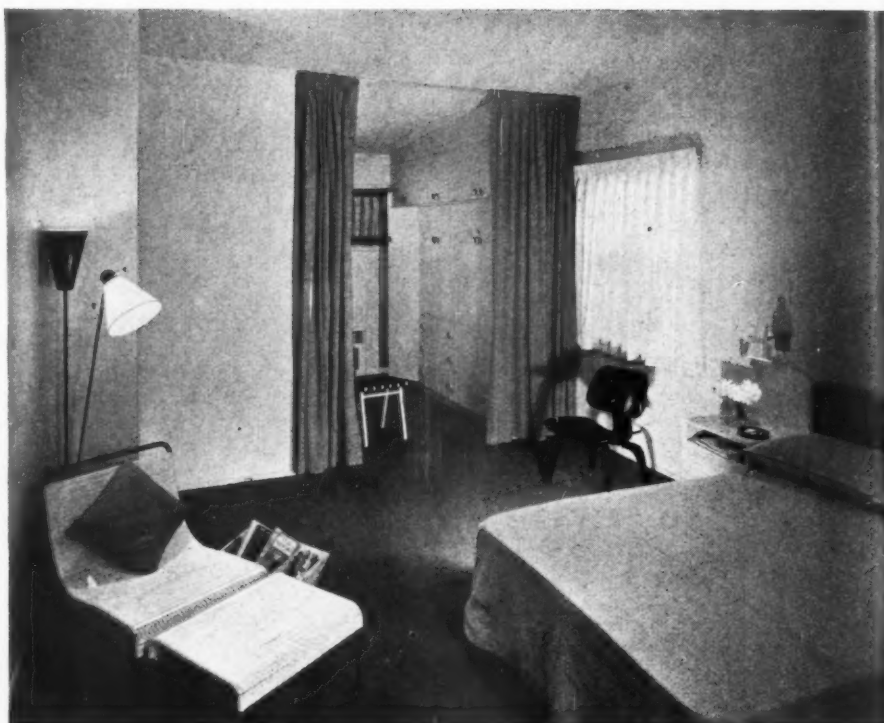
SERVICES.—Kitchen equipment includes electric range, refrigerator and automatic clothes washer. The sink is of stainless steel. The oil-fired boiler supplies hot water to baseboard radiators and for convectors by means of a thermostatically-controlled circulating pump. Extract fans are fitted in the kitchen and in the passage ceiling.

COST.—The cost of the house, including a plot of land 120 ft. by 75 ft. is \$18,500 (£6,600).

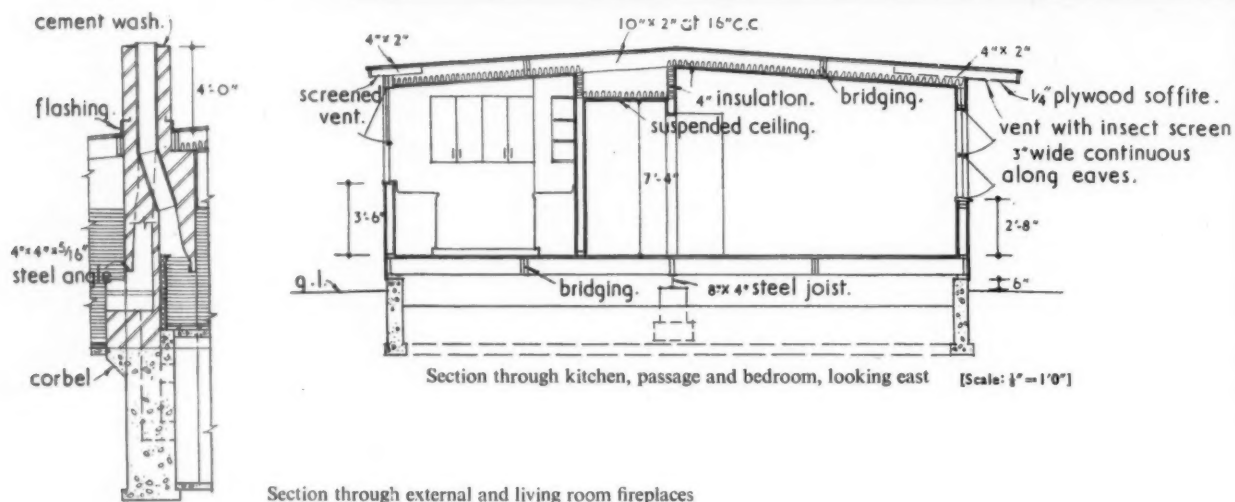
The house was designed for Kee-Lee Homes. The builders were Keenan Morrow and LeRoy Simon.

HOUSE

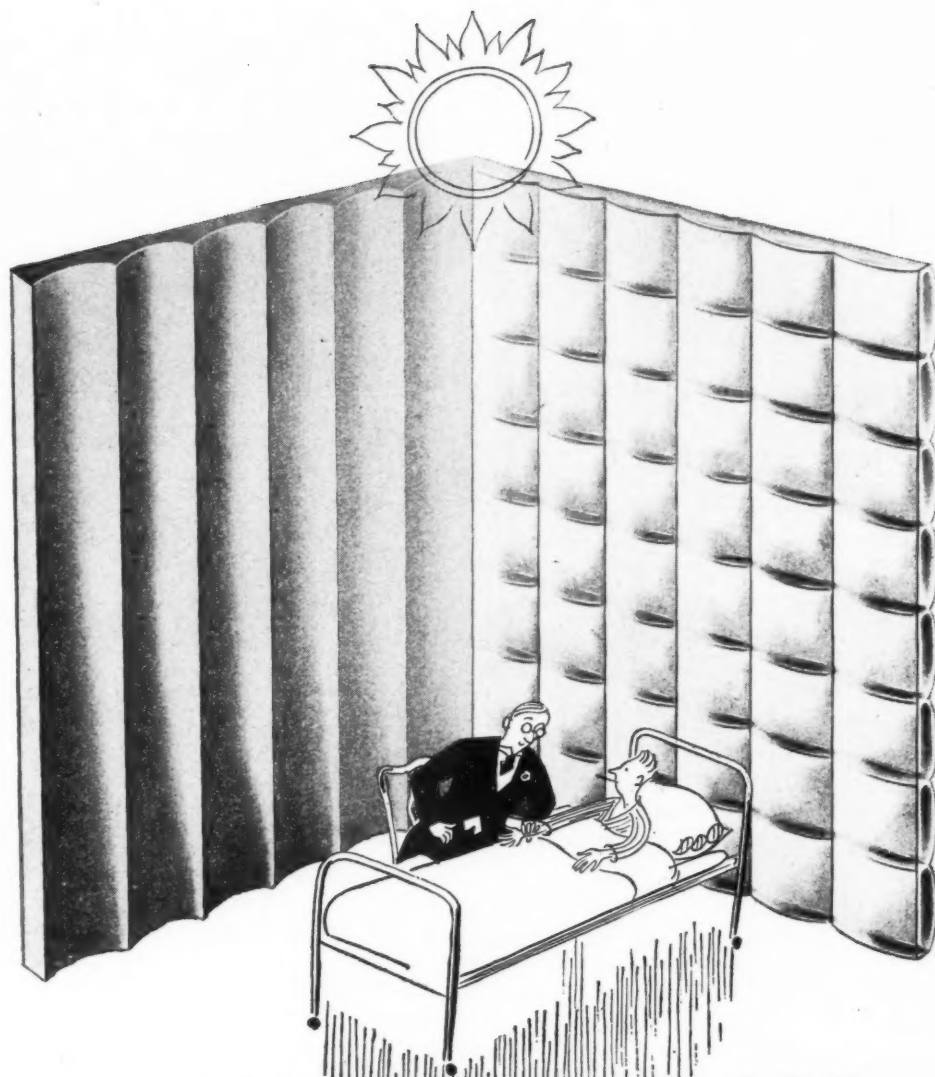
at FREEPORT, LONG ISLAND,
NEW YORK, USA
designed by HUSON JACKSON



The principal bedroom (bedroom 1 on plan) looking towards the dressing room. A shower, wash and lavatory basins are situated behind the curtain on the left.



Far left, the dining room. The door opens on to a staircase to the basement in which is the oil-fired boiler. The opening on the right leads to the kitchen. Above left, the nursery and below left, the study-bedroom (bedrooms 2 and 3 on plan). Floors in both rooms are covered with linoleum.



health through GLASS

Will the hospital of the future be built entirely of glass, like some gigantic green-house? . . . More and more glass is being used in hospital construction inside and out. Much of it is coming from Chance Brothers. The classically simple lines of Chance Reeded and Reedlyte Glasses offer opportunities for large-scale partitioning and interior design in almost every kind of modern building. From the practical point of view, they are exceptionally white and allow the maximum passage of light while ensuring a high degree of privacy. Both surfaces are smooth and free from crevices, easy to keep clean.



CHANCE REEDED

- Narrow Reeded ($\frac{1}{8}$ in. ribs)
- Broad Reeded ($\frac{3}{8}$ in. ribs)
- Major Reeded ($1\frac{1}{4}$ in. ribs)
- Cross Reeded ($\frac{1}{2}$ in. ribs)

CHANCE REEDLYTE

- A stipple-finish version of Reeded to give increased obscuring power.
- Narrow Reedlyte ($\frac{1}{8}$ in. ribs)
- Broad Reedlyte ($\frac{3}{8}$ in. ribs)

The maximum size of the above glasses is 100 in. x 42 in.

Free samples of glass and detailed literature will be forwarded on request.

FOR SCIENCE, INDUSTRY AND THE HOME

CHANCE BROTHERS LIMITED, Glass Works, Smethwick 40, Birmingham. Telephone: West Bromwich 1051.
LONDON OFFICE: 28 St. James's Square, London, S.W.1. Telephone: Whitehall 1603. Branch Works at Glasgow, St. Helens and Malvern.



**chosen
for its beauty, utility
and economy**



FORMICA was specified for internal use in the Maypole Child Welfare Centre, Birmingham. Designed by Donald A. Goldfinch, F.R.I.B.A., F.R.San.I.



Portion of kitchen. Walls are panelled throughout in FORMICA. Table top is also FORMICA.

'Formica' is a registered trade mark and De La Rue are the sole registered users.

THOMAS DE LA RUE & CO. LTD., Plastics Division, Imperial House, 84/86, Regent Street, London, W.1.

Telephone: REGent 2901. Telegrams: "Delinsul", Piccy, London.



Lecture room and canteen. Hatches, counter and table top in FORMICA.



Corner of consulting room showing green linette FORMICA table tops.

'FORMICA' laminated plastic is essentially decorative and the range of colours and finishes gives scope for the most formal or "traditional" effects as well as the most modern.

On the scores of utility and economy, the material fully justifies the architect's selection because 'FORMICA' is the hardest wearing surface in the field of decorative laminated plastics. It is impervious to spilt foods, beverages, alcohol, food acids, etc., and is heat and abrasion resistant. All colours and finishes are available in two distinct grades—STANDARD and CIGARETTE PROOF.

• Please write for literature.



INFORMATION CENTRE · INFORMATION SHEETS
QUESTIONS AND ANSWERS · CURRENT TECHNIQUE
THE INDUSTRY · PRICES · TECHNICAL ARTICLES

TECHNICAL SECTION

*A digest of current information
prepared by independent specialists;
printed so that readers may cut
out items for filing and paste
them up in classified order,
headings below.*

INFORMATION CENTRE

2.108 planning: general MAPS

Maps, Topographical and Statistical. T. W. Birch (Geoffrey Cumberlege, Clarendon Press, Oxford, 1949, 15s.).

This book could be studied with profit by almost any architect/town-planner, especially those who are in any way engaged on map-making and who wish to know more about the fascinating subject of maps. 240 pp., over 100 illustrations; useful list of sources of information.

By topographical maps is meant maps which are mainly concerned with the surface of the earth and man's physical environment. Topographical maps are normally drawn at scales between 10 inches and 1 inch to the mile. By statistical maps is meant maps which depict man's social and economic environment.

The first part of the book deals with topographical maps. It describes some early and modern types of maps; methods of surveying; representation of relief; different map projections; map preparation and interpretation. Included are some notes on air-photo-survey and interpretation of air photographs.

The second part of the book, which is about statistical maps, includes chapters on dot maps and density maps and appropriate methods of drawings. The examples shown are good.

1 Sociology. 2 Planning: General. 3 Planning: Regional and National. 4 Planning: Urban and Rural. 5 Planning: Public Utilities. 6 Planning: Social and Recreational. 7 Practice. 8 Surveying, Specification. 9 Design: General. 10 Design: Building Types. 11 Materials: General. 12 Materials: Metal. 13 Materials: Timber. 14 Materials: Concrete. 15 Materials: Applied Finishes, Treatments. 16 Materials: Miscellaneous. 17 Construction: General. 18 Construction: Theory. 19 Construction: Details. 20 Construction: Complete Structures. 21 Construction: Miscellaneous. 22 Sound Insulation-Acoustics. 23 Heating, Ventilation. 24 Lighting. 25 Water Supply, Sanitation. 26 Services Equipment: Miscellaneous. 27 Furniture, Fittings. 28 Miscellaneous.

5.37 planning: public utilities TRAFFIC CONGESTION

Traffic Congestion in Large Cities. S. Green (The Surveyor, Aug. 11, 1950, pp. 463-465).

Analysis of the relative costs of delays incurred through traffic congestion and of making traffic circulation improvements.

The article describes: type of traffic, capacity of traffic lanes, and causes of congestion; improvements in form of palliatives such as prohibition and restriction and major improvements of the type familiar to all town-planners.

5.38 planning: public utilities ROADS AND ACCIDENTS

Roads—Past, Present and Future. G. T. Bennet (J. Inst. of Municipal Engineers, Aug. 1, 1950, pp. 138-150).

Paper by the County Surveyor of Bucks on the problem of heavy traffic volume through villages.

Formulae are discussed for balancing the good effect of speed limit in reducing accidents against the bad effect (economic loss) due to loss of speed.

6.27 planning: social and recreational AMBULANCE STATIONS SITING AND PLANNING

National Health Service Ambulance Stations. Circular 60/50. (MOH, 1950.)

Notes on siting and planning of new stations; 4 pp.

The notes on planning include reference to garage, workshop, control and office, and staff accommodation, and standards for installation of services and storage of petrol and lubricants. Before a station is built or equipped, the local licensing authority under the Petroleum (Consolidation) Act, 1928, should be consulted about safety precautions.

11.24 materials: general BRITISH STANDARDS

British Standards Handbook No. 3, 1950. "Building Materials and Components for Housing." (British Standards Institution, 1950. 25s.) and British Standards Addendum No. 3, 1950, to BS Handbook No. 3, 1947 Edition. (British Standards Institution, 1950. 5s.)

New edition of collected abbreviated British Standards including all issued to end of 1949. Summarises 279 British Standards. The addendum No. 3 brings the 1947 edition and its supplements up to date as an alternative to the new edition.

The increasing use of British Standards makes an up to date reference to them indispensable to almost any architect's office. The cost of a complete set of the individual standards is considerable and the problem of keeping them filed is also difficult. For most purposes reference to the abridged standards published as Handbook No. 3 is quite adequate and very convenient.

The early edition of Handbook No. 3, published in 1945, is now dangerously out of date because of the many changes from wartime to peacetime conditions and because of the many additional standards since produced.

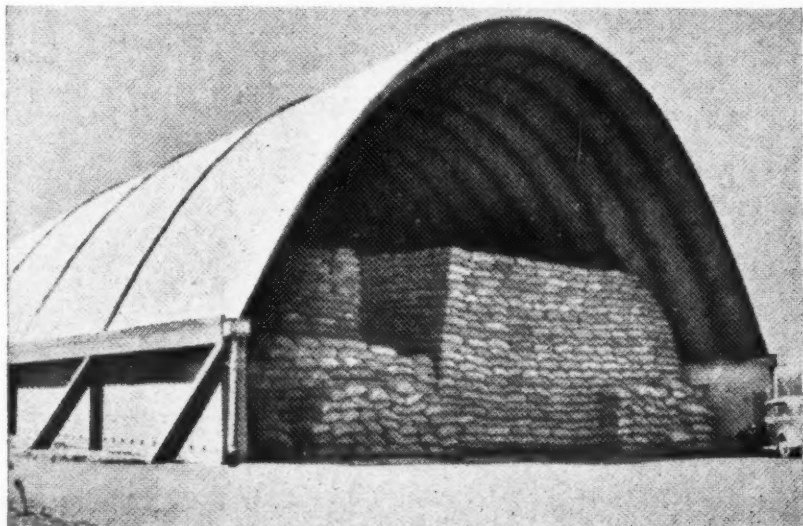
The 1947 edition, plus addendum No. 2 can still be used if the present No. 3 addendum (PD.1023) is added but many will find it more convenient to have all information in one volume as provided by the No. 3 Handbook 1950 edition which covers 279 British Standards.

13.61 materials: timber TIMBER RESEARCH

Forest Products Research, 1939-47. DSIR (HMSO, 1950. 3s. 6d.).

General report on the work of Forest Products Research Laboratory. 94 pp. Useful list of publications.

Although too general to be of great value for reference on detailed points, this publication should be noted as giving an excellent review of the wide scope of the work of the Forest Products Research Laboratory. The long and comprehensive list of publications, including both those published by HMSO and those published elsewhere, forms a very useful reference.



Corrugated concrete arch. S. African example. See 18.57.

DURESCO certainly



BUT we also make

SILCOLAC

Hard Gloss Paint

SILPACO

Flat Oil Paint

CHARLTON ENAMEL

Hygienic Porcelain Finish

ALKALI RESISTING PRIMER

For exterior application

CALDURO CEILINGWHITE

in paste form

SILKARDO

Washable Distemper

PETRIFYING LIQUID

For thinning and waterproofing

SILKAS VARNISH

CHARLTON WHITE

Flat Undercoating

DURESCO

Texture Paint

AQUAMAT

The one-coat Washable Distemper



DURESCO PRODUCTS

DURESCO PRODUCTS LTD., CHARLTON, LONDON S.E.7. TEL: GREENWICH 0035 (four lines)

16.65 materials: miscellaneous STONE PRESERVATION AND MAINTENANCE

Weathering, Preservation and Maintenance of Natural Stone Masonry. (Part I.) (Building Research Station Digest No. 20. July, 1950.)

Valuable summary of causes of stone decay with useful advice on preservative measures.

The very considerable heritage of large and small stone buildings spread throughout the

land inevitably means that there must be a constant flow of problems connected with the maintenance and preservation of stonework. This Digest should be valuable as a reference to all those who have to deal with such problems though those familiar with the subject will be aware of the fuller treatment given in the BRS publication "Building Stones," by R. J. Schaffer.

This present Digest, after brief notes on the classification of stone, deals with the factors affecting weathering and durability. These include atmospheric pollution, solubility of

the stone, skin formation, maintenance by washing, "moisture rhythm," salt action, lack of damp courses or dampcourses incorrectly detailed, backing materials, sea salts and treatment to remove soluble salts.

16.66 materials: miscellaneous STONE PRESERVATION AND MAINTENANCE

The Weathering, Preservation and Maintenance of Natural Stone Masonry (Part II.) (Building Research Digest No. 21. August, 1950.)

Continuation of Part I (see 16.65). Frost, thermal expansion and corrosion, vegetation, bacteria, staining, and excellent section on maintenance, restoration and cleaning.

This note, together with Part I, gives an excellent outline of the whole subject of weathering, preservation and maintenance of stone. The present note commences with a consideration of frost damage and it is clear that except in exposed conditions such as copings, cornices and the like, frost damage is likely to be very small. There are brief notes on thermal expansion and the real danger of damage from iron cramps and dowels or window bars is dealt with.

Damage from lichens and mosses is unlikely but a recipe is given for removing these where necessary. Virginian Creeper is not harmful but the roots of ivy may cause serious trouble if they secure a foothold in joints. In spite of much recent discussion there is no evidence that bacteria are harmful.

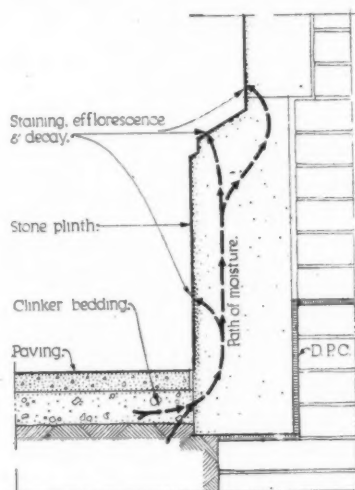
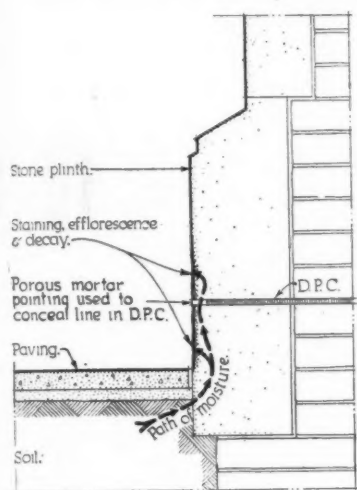
There are some interesting and useful notes on staining including recipes for removing various types of stains. The subject of maintenance and restoration is dealt with fairly fully and the very strong warnings about stone preservatives should be carefully noted by all who have to deal with old stone buildings. The value of cleaning is discussed and various methods are described in some detail. The restoration of old work is considered at some length including notes on the redressing of old stone. The use of new stone for replacements and the merits of plastic repair are discussed. The note includes details of how to carry out plastic repair where this is thought desirable. Altogether a most useful paper for all concerned with the maintenance of stone buildings.

18.57 construction: theory PRESTRESSED STEEL STRUCTURES

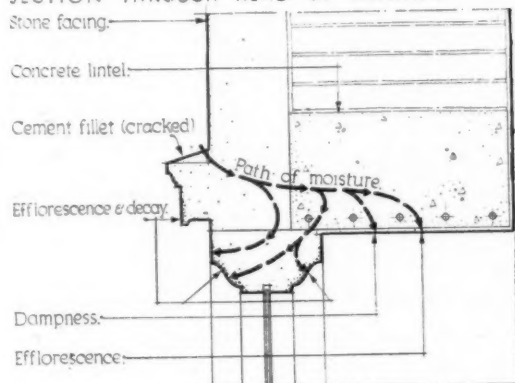
Constructions en Acier Précomprimé. (Precompressed Steel Structures.) G. Magnel (L'Ossature Métallique [Belgium], June, 1950, pp. 300-313).

The idea of pre-stressing applied to steel construction. A lattice girder of 47 ft. span and 3 ft. depth tested to destruction. Promising development, also in the USA. 14 pp., 16 illustrations.

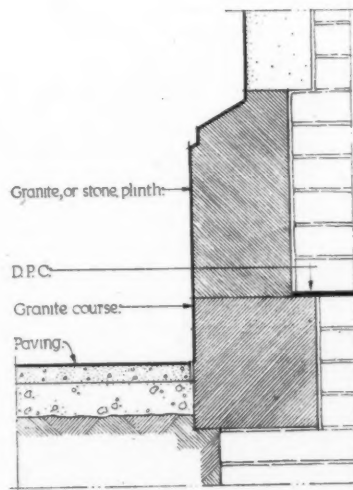
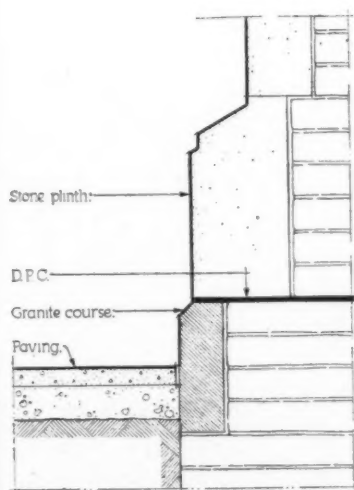
The term "pre-stressing" has in recent years mostly been applied to concrete construction, but several other materials have been and are being used in a pre-stressed condition. In steel construction the idea of utilizing the shrinking stresses due to welding dates back at least to 1930. This report by Professor Magnel of Ghent University deals with actual loading tests where the bottom chord of a 47 ft. long lattice girder is put into pre-compression by 8 pairs of high-tensile steel wires anchored at the end of the girder and producing an upward camber of $\frac{1}{8}$ in. While the loss of pre-stress owing to shrinkage and creep is one of the main problems in concrete construction, such losses, according to this report, need not be taken into account in pre-stressed steel construction. Both chords and diagonals of the test girder consist of light



SECTION THROUGH HEAD OF WINDOW



Decay in masonry caused by soluble salts. Above left, from soil; above right, from clinker bedding below paving; right from concrete lintel. Below, preventative designs incorporating use of non-porous course. See 16.65.



I n l a i d

L i n o l e u m

SEMTEX LIMITED, A Dunlop Company, undertakes large contracts for the installation of high grade inlaid linoleum. SEMTEX LTD. is a specialist flooring organisation offering the following advantages:

NATION-WIDE INSTALLATION Branches at principal towns ensure the speediest and most convenient service.

DESIGN SERVICE Suggestions and colour schemes to meet individual requirements can be prepared.

CRAFTSMAN LAID Installation by experts ensures the greatest efficiency and economy.

MAINTENANCE Efficiently manned maintenance units provide first class after-sales service on a contract basis.

ADVISORY SERVICE The Company's specialists can advise on all matters relating to floor coverings.

SEMTEX LIMITED

185-187-189, FINCHLEY ROAD, LONDON, N.W.3. Telephone: MAIDA VALE 6070 Telegrams: SEMTEX, HAVER, LONDON
BRANCHES IN: Aberdeen, Belfast, Birmingham, Brighton, Bristol, Cardiff, Colchester, Dundee, Edinburgh, Glasgow, Hull, Leeds, Leicester, Liverpool, London (Sales Office), Manchester, Middlesbrough, Newcastle, Plymouth, Sheffield, Southampton

5058/cx8

gauge steel plates pressed into trapezoid shapes and riveted at their ends. The verticals are 2½-in. diameter tubes. The results of these tests showed good agreement between calculated and observed stresses, measured by electric strain gauges. A scheme has been worked out for aircraft hangars of 500 ft. clear span, with main lattice girders at only 8 ft. 4 in. centres (this is an extraordinary figure, perhaps a printing mistake?). The latticed rafter is pre-stressed by parabolic wires and is only 15 ft. deep, i.e., 1/3 of the clear span, and looking extremely slender. Investigations in the USA follow rather different ideas of pre-stressing. During the rolling process steel joists are provided with a number of grooves in the underside of their bottom flange. High-tensile wires are laid into these grooves and put into tension. The joists are re-rolled at 200° C. thereby closing the grooves with the tensioned wires permanently embedded. It is said that such girders can be cut at any point without loss of pre-stress, and a 37 per cent. increase of bending moment capacity is claimed. From the report before us such claims appear quite reasonable. Further developments are expected with great interest.

18.58 construction: theory UNDERGROUND CAR PARKS

Precautions against Fire and Explosion in Underground Car Parks. Post-War Building Studies No. 28. (HMSO 1950. 1s.)

Report of authoritative committee. Essential reference for those concerned with underground car parks and of value in connection with all garage buildings.

This is a report of a Sub-Committee of the Joint Committee on Fire Grading of Buildings of the DSIR and the Fire Offices' Committee. It should be of interest to all authorities concerned with the formulation of safety regulations and is an essential reference for architects.

The Committee concludes that no practical amount of ventilation will reduce the effects of an explosion sufficiently to prevent serious damage and the result is to emphasize the need for reducing the risk of explosion.

Recommendations on structure refer to the grade of fire resistance, the use of special drainage channels in floor to deal with spill petrol, the use of automatic fire doors and precautions designed to increase resistance to explosions. There are also recommendations on measures to avoid risk from nearby service stations.

Mechanical ventilation is required to be run in two parts with independent sources of electrical supply and there are also recommendations about natural ventilation and on electrical, heating and fire extinguishing equipment.

Though intended as a specialist report on underground car parks this is a document which might usefully be studied by those concerned with any form of garage building.

18.59 construction: theory CORRUGATED CONCRETE ARCH

The Corrugated Concrete Arch. J. H. de W. Waller (Civil Engineering and P. W. Review, June and July, 1950.)

The true arch with compressive stresses only. Rapid construction of large floor area buildings at low cost. Interesting examples of structures actually built. 5 pp., 12 illustrations.

The weakness of concrete in tension makes concrete structures in pure compression the most economical types. The ideal arch shape for constant load per unit of arch length is the catenary. Geometrically it is the same curve as that formed by a completely flexible cable suspended between two points in space. Corrugations give a thin sheet higher re-

sistance against bending and buckling, and wide use is being made of this fact, not only in the design of steel and metal products, but also in other materials. Shuttering problems, however, present certain difficulties in concrete construction.

The Great Arch of Ctesiphon, near Baghdad, built about 1,600 years ago, is a true or catenary arch, 112 ft. high and of 90 ft. span. It consists of low quality bricks, and sufficient is left of the rectangular building to prove the remarkable efficiency of the basic design. Since 1940 development work has been done on similar lines, and a number of corrugated concrete arch buildings have been erected. Ribs of tubular scaffolding at 3 ft. centres, were covered by sheets of light hessian. Two layers of 3 to 1 mortar were put on these sheets, resulting in about 1½ in. thickness of the shell. Its corrugations are due to the natural sag of the sheets between the centering ribs when pouring the concrete. From small beginnings with huts for the Services, of 20 ft. and 40 ft. span, the dimensions gradually grew to 60 ft. span and 200 ft. length, with 6 ft. corrugations. Domed ends were used for an experimental structure of 60 ft. span built by the Ministry of Works, at the Field Test Unit, North London. Loading tests were carried out, simulating wind pressure and wind suction, and the horizontal and vertical deflection were measured. Ample rigidity was observed without signs of cracking. The design for a 300 ft. span arch of 125 ft. height is reproduced in detail and the erection procedure given. A grid of longitudinal and transverse steel rods of ½ in. diameter supports the sheets of hessian or other fabric. A coat is applied to the soffit with a cement gun from a travelling staging inside. The total thickness of concrete is 3½ in. Other designs refer to aircraft hangars, of 400 ft. span and 720 ft. long. In Southern Rhodesia factory buildings were erected on these principles, almost entirely by native labour. An example is given of native houses in the Belgian Congo, with a double skin for insulation. The illustration shows a building erected for storing grain in bags, as used in South Africa. The application of the ancient idea of the catenary arch, but stiffened by corrugations, may well lead to further progress in modern concrete construction.

18.60 construction: theory GEOMETRY

Geometry III. George A. Hanby. (Pitman, 1950. 7s. 6d.)

Intended for the young building student. Relates subject to building problems. Might well be useful as reference for architectural draughtsmen, especially on solid geometry.

20.186 construction: complete structures OCEAN TERMINAL, SOUTHAMPTON

Ocean Terminal at Ocean Dock, Southampton. (The Architects' Journal, August 10, 1950, and other journals.)

Full description of this large building, just put into service. Interesting details of construction. Internal finishes, heating, lighting, internal transport and loud speaker systems. 8 pp., 9 illustrations.

This large building is to serve the embarkation and disembarkation of passengers arriving by sea ("Queen Mary" and "Queen Elizabeth") and by road and rail, both of which extend right into the building. Internal lifts and escalators serve the first floor with its waiting and customs halls. This floor connects to the ships by means of telescopic gangways built in light alloys. A sightseers' balcony is on top of the building, which is about 1,300 ft. long and 111 ft. wide. While the architectural treatment of this structure

may be open to argument, there can be little doubt about some interesting structural features. Some of the most modern types of design have been incorporated, both in steel and in concrete construction. Piled foundations support the steel framed building. Beam and column construction is used for the ground floor, forming a rigid entablature for the two-pin portal frames of 91 ft. 7½ in. span, spaced at 20 ft. 2 in. centres. These portals are welded, with the exception of three bolted and riveted site erection joints. They accommodate the first and second floor, taking advantage of the full headroom of the rigid portals. The basic section of these frames is a 24 in. by 7½ in. rolled steel joist (the deepest available), with flange plates welded on to suit the bending moment distribution. In view of the great length of the building, two expansion joints were provided, with slotted end connections in the floor beams and purlins. The joints in the concrete floors are covered by bronze sliding plates, and by flexible copper strips in the precast concrete block walls. Expansion joints in the roof glazing are covered by aluminium plates.

20.187 construction: complete structures SHELL CONCRETE, CANADA

Novel Coliseum. (Engineering News Record [USA], July 20, 1950, p. 30.)

A coliseum building has just been completed at Quebec City, with a 240 ft. span thin shell concrete roof. Concrete piles take the horizontal thrust of the arch and the vertical loads, without horizontal ties. Frames of A-shape support the arch abutments. They are placed on 4 ft. thick RC slabs, which are supported by vertical and battered piles, some of which carry 60 tons compression, while others have to resist 25 tons uplift. Horizontal deflection of the roof had been limited to a design value of only 0.5 in. and the piles had to meet this severe specification. The old building had been destroyed by fire, and the new one was used for hockey games six months after starting excavations.

24.140 lighting ARTIFICIAL LIGHTING TECHNIQUES

Engineering Aspects of Planned Lighting. A Symposium. (Illum. Engineering [USA], May, 1950. Whole Issue.)

Artificial lighting, classrooms, factories, shops, indoor sports; useful review, illustrated, photographs.

This is a series of short notes attempting a general analysis of advanced lighting practice. They will be reviewed here under their individual headings.

Why Design for the Best in Classrooms? By G. P. Wakefield. An advanced specification for classroom illumination, can be distorted and diluted in practice until it is little better than average. The article gives examples showing how architects' prejudice resulted in unintended glare due to polished marble cills and dark green window frames, how the builders' unfamiliarity with modern lighting needs led to dark brown lockers (costing 9 foot candles of reflected light to nearby desks), and darker floors than specified; and how the janitor varnished the deliberately matt desks because he thought post-war finishes bad! Then decoration and venetian blinds were left out to save money. The argument is that in the face of such difficulties you have to plan for the best to get the second best.

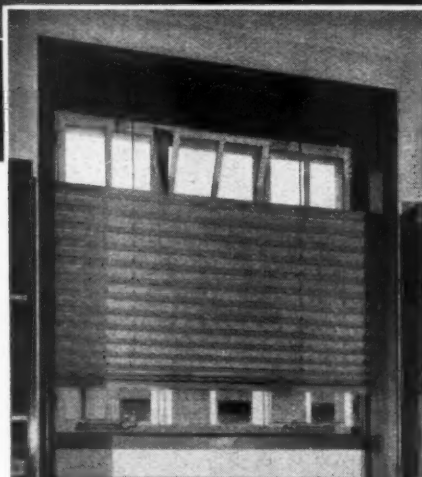
High-grade Lighting for High-priced Man-hours. By A. A. Brainerd. It is shown that although foot-candle requirements for offices and workshops are much the same, the requirements for quality (i.e., freedom from glare) are stringent in the workshop where the need is greatest, where production



R.I.B.A. HEADQUARTERS
ASTON WEBB COMMITTEE ROOM

ACCORDO *Blinds*

EFFICIENT in operation, and unobtrusive when not in use, ACCORDO Blinds have been specified for leading hospitals, schools, public and commercial buildings throughout the country. Springs have been eliminated and other moving parts kept to a minimum. ACCORDO Blinds have a trouble-free gravity action, enabling adjustment from top and bottom to give light or shade exactly where required. The distraction of noisy flapping blinds is effectively prevented when windows are open by the use of special guide rods. ACCORDO Blinds can be fitted to horizontal laylights or sloping roof lights, and can be supplied in any widths up to 20 feet. ACCORDO Dark Blinds, which give complete obscuration of light, are recommended for laboratories, operating theatres and rooms used for instructional or cinematic purposes. Illustrated literature will be sent on request.



HILLS

(WEST BROMWICH) LIMITED

ALBION RD., WEST BROMWICH Phone: WEST Bromwich 1025 (7 lines) • LONDON OFFICE, 125 HIGH HOLBORN, W.C.1. Phone: HOLborn 8005/6

actual
person
same
if the
go to
This
Amer
Basi
tary
The
artic
it. T
essen
gives
princ
tect
engin
Indo
Cover
tennis
of pr
Ther
Other
ings.
troffe
cones
of g
descri
articl
choic
cover
appea
very
woul
24.1
CLAS
Why
room
neer
Critic
illum
The
Amer
he d
the
light
of ch
visual
—an
what
All e
This
views
writi
it is
Build
kinso
and
more
be ta
of ev
quali
impo
Inci
Amer
notin
Class
Class
sign
Class
sev
Rece
mi
Halls
sta
Oper
24.
BAK
Ligh
(illu
p. 38
Nat
lamp
anal
The
bake
datic
deco
Rev
arch

actually occurs, and where the highest paid personnel are. The argument is for the same high-quality standards throughout, or if they are to be different, the best should go to the production end.

This applies to Britain as much as to America.

Basic Fundamentals. Answer to Supplementary Lighting Problems, by W. H. Kahler. The title is nearly meaningless, but the article is good. Perhaps the editor re-titled it. The author shows that local lighting is essential in many kinds of factory work, and gives good examples to illustrate general principles. Local lighting is a thing architects have to watch in factories; lighting engineers are prone to neglect it.

Indoor Sports Lighting, by C. J. Allen. Covers gymnasia, badminton, squash, table tennis and indoor bowling. Good discussion of practice in detail.

These are the most important articles. Others deal with Louverall (egg-crate) ceilings, indirect lighting, direct lighting from troffers embedded in suspended ceilings, cones and coffers. There are quite a number of good points in them, especially the descriptions of American practice. One article gives a comprehensive guide for the choice and care of fluorescent lamps, covering size, noise, maintenance, cost, appearance, and adaptability. It would be a very good idea if ELMA in this country would give us a British equivalent.

24.141 lighting

CLASSROOM ARTIFICIAL LIGHTING

Why 30 Foot Candles Minimum for School-room Lighting. C. L. Crouch. (Illum. Engineering [USA]. June, 1950. p. 393.)

Critical visual task in school; evidence of illumination needed for it. Useful.

The author is the technical director of the American IES. In this article he gives what he describes as "supporting material" for the American recommendations for school lighting (i.e., artificial lighting). It consists of choosing what is called the most critical visual task in school—handwriting in pencil—and then working out by various techniques what the minimum desirable illumination is. All evidence points to 20-30 foot candles.

This may be a desirable level, but advanced views in the country would not accept handwriting in pencil as the critical factor, because it is not done for long periods. Probably the Building Research Station analysis by Hopkinson, studying various possible factors, and arriving at a value of 10 foot candles is more reliable if this kind of evidence is to be taken. But this may not be the right kind of evidence; and, as so often is the case, the quality rather than the quantity may be the important thing.

Incidentally this article gives current American recommendations, which are worth noting:

Classrooms (except as below)	30 foot candles
Classrooms for partially sighted	50 " "
Classrooms for drafting, sewing, typing	50 " "
Reception, gymnasia, swimming	20 " "
Halls, corridors with lockers, stairs	10 " "
Open corridors	5 " "

24.142 lighting

BAKERY LIGHTING

Lighting for Bakeries. A Report by the IES. (Illum. Engineering [USA]. June, 1950. p. 387.)

Natural and artificial lighting, germicidal lamps, decoration. Valuable specialist analysis; illustrated, photographs.

The report is a very full examination of bakery processes and plant, with recommendations on natural and artificial lighting, decoration, and the use of germicidal lamps. Review has little general interest, but the architect doing a bakery should consult it.

CURRENT TECHNIQUE

This feature appears from time to time to bring to readers' notice new constructional ideas, worthy of more widespread adoption.

"KEYING-UP" BRICKS FOR UNDERPINNING

Repairs and alterations to existing buildings frequently involve the pinning up of brick or concrete foundations, walls, or columns, to existing work. In such cases the avoidance of any subsidence at the point of pinning is important but by no means easy to ensure. Recently a patent wedging brick has been successfully used for this purpose in a number of buildings. The brick consists of two parts, as shown in Figure 1. The lower part "A" is recessed to take the wedge shaped upper part "B," which has a frog on the underside. The bottom of the recessed part of "A" is grooved and perforated to take the mortar in which the wedge is set. Driving the wedge up the inclined face of the recess effects a tight bearing under the work to be underpinned and forces the cement mortar into the grooves and other spaces. The bricks are generally made of stiff Staffordshire blue clay and of standard sizes, but they could be made of concrete and of any reasonable dimensions. Figure 2 shows the method of using the bricks for underpinning an old footing, and it should be noticed that they can be used for side pinning as well as overhead pinning. Figure 3 shows a simple application for pinning up to an RSJ and Figure 4 their use when a new opening has to be inserted in an existing wall. When the keying bricks are to be inserted, the top of the masonry upon which they are to be placed should be covered with a layer of cement mortar. Part "A" having been placed in position and its interior filled with cement mortar, the nose of the wedge portion (frog underneath) should then be inserted in the middle of the cement mortar lying within the base and pushed in with the fingers as far as it will go. It should then be driven into position up the wedge path by means of a wooden implement until completely wedged up to the soffit above. The mortar is thus forced into the crevices of the composite keying-up brick. The angle of the wedge is about 15 deg. from the horizontal and the brick is capable of sustaining a considerable load during the setting of the mortar. It has been suggested that these bricks might also be used as a means of rapid filling, of brick panels in framed structures. The bricks would be placed in the panel with only one horizontal mortar joint in about every six courses, with the keying-up bricks inserted just under the soffit of a frame member. The exterior could then be cement gunned and the interior plastered on the dry, though tight, unmortared brickwork. It should be noted that these bricks are patented by the inventor—H. Mason. (Pat. No. 544382.)

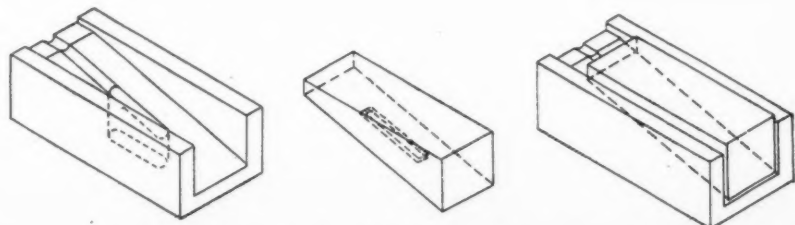


Fig. 1, left, part "A"; centre, part "B", the wedge; right, the complete brick, parts "A" and "B" assembled.

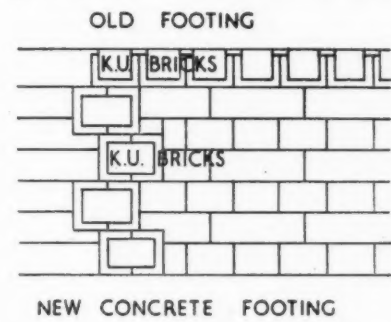


Fig. 2, underpinning an old footing.

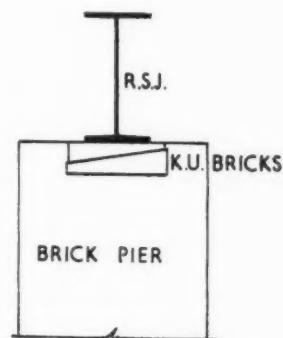


Fig. 3, pinning up to an R.S.J.

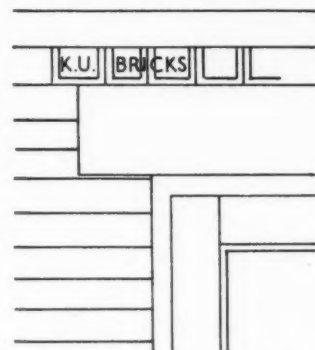


Fig. 4, inserting a new opening in an existing wall.

Readers requiring up-to-date information on building products and services may complete and post this form to *The Architects' Journal*, 9, 11 and 13, Queen Anne's Gate, S.W.1.

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order please).

Please ask manufacturers to send further particulars to:—

NAME

PROFESSION or TRADE

ADDRESS

A.J. 5.10.50

Announcements

Mr. Andrew Gray, A.R.I.B.A., is now practising at Barn Close, Lower Slaughter, Cheltenham, Glos., and will be pleased to receive trade catalogues.

The companies of Mosers Ltd. and Nettlefold & Sons Ltd. have amalgamated and are now known as Nettlefold & Moser Ltd. Their address is 170-194, Borough High Street, London, S.E.1.

Mr. George C. Oldham, L.R.I.B.A., A.N.Z.I.A., of 465, Childers Road, Gisborne, New Zealand, would be glad to receive Information Sheets, catalogues and trade literature.

Since the death of Mr. S. J. Stainton in February the firm of Cherrington & Stainton, architects, 2, Augustus Road, Edgbaston, Birmingham, 15, has been reorganized. Business is being carried on under the former name. The following are the partners in the firm:—H. Cherrington, F.R.I.B.A., K. V. Norrish, A.R.I.B.A., C. R. A. Smart, L.R.I.B.A., M. S. Stainton (son of the late S. J. Stainton).

Mr. James Scott, B.E., Architect and Civil Engineer, also practising as James V. T. Scott, DIP.LARCH(LIVERPOOL), A.R.I.B.A., DIP. T.P. (EDINBURGH), A.M.T.P.I., Architect and Planning Consultant, has returned from his temporary wartime address to 22, Lombard Street, Belfast (Tel.: Belfast 23243).

Dr. Kurt Billig, DIP.L.ING., DR. SC., A.M.I.C.E., M.I.STRUCT.E., M.A.M.SOC.C.E., has been appointed Professor of Civil Engineering at the University of Hong Kong. Previously he was a partner in the firm of Waller and Billig, Consulting Engineers, Westminster.

S. H. Wright & Co. Ltd., incorporated practitioners in advertising, of 44, Bedford Row, London, W.C.1, have closed their Manchester sales office and opened a new sales office at State Insurance Buildings, 14, Dale Street, Liverpool 2.

Buildings Illustrated

Parklands County Primary School at Seacroft, Leeds. (Pages 308-312.) City Architect: R. A. Livett, O.B.E., A.R.I.B.A. Deputy City Architect: P. B. Haswell, B.A., A.R.I.B.A. Chief Assistant Architect (Education): A. R. Peadon, B.A., A.R.I.B.A., A.M.T.P.I. General Contractors: William Nicholson & Sons (Leeds) Ltd. Sub-contractors: Steelwork, Edward Bidgood & Co. Ltd.; plumbing, J. H. Shouksmith & Sons Ltd.; heating and hot water supply, Modern Heating Co. (Button) Ltd.; convactor heater units, C. A. Dunham Co. Ltd.; boilers and radiators, Ideal Boilers & Radiators Ltd.; electric pumps, Holden & Brooke Ltd.; electrical and radio installation, B.C.S. Electrics Ltd.; electric light fittings, Hailwood & Ackroyd Ltd.; aluminium windows, pressed steel door frames and entrance screens, Gardiner Sons & Co. Ltd.; roofing, Robertson Building Service; bituminous roofing, Roy (Roofing) Ltd.; flooring, Protheroe & MacNab Ltd., Semtex Ltd., Granwood Flooring Co. Ltd.; pre-cast concrete floors and roofs, Concrete Ltd.; pre-cast stonework, Kingston Concrete Products Ltd.; concrete roof lights, Girlings Ferro-Concrete Co. Ltd.; insulation board ceilings, Sundeala Board Co. Ltd.; plasterers, James Phillips (Plasterers) Ltd.; tiler, A. Andrew & Sons (Marbles & Tiles) Ltd.; sanitary fittings, Associated Clay Industries Ltd.; glazed block partitions, Leeds Fireclay Co. Ltd.; glazed cement, Modern Surfaces Ltd.; timber doors, John Sadd & Sons Ltd.; ironmongery, Joseph Kaye & Sons Ltd., James Gibbons Ltd.; cloakroom fittings, James Haigh (Engineers) Ltd.; kitchen extract fan and canopy, Air Treatment Engineers Co. Ltd.; painting and decorating, Wm. Latimer & Co. Ltd.; paints, Robert Bowran & Co. Ltd.; facing bricks, Crossley & Sons Ltd.; playgrounds and roads, James Brook Ltd.; furniture, Wake & Dean Ltd., Smith & Co. (School Furnishers) Ltd., T. H. Wilson Ltd.; blackboards, North of England School Furnishing Co. Ltd.



GET that new plant into action quickly—speed up the fixings! Machinery and equipment? Bolt it down same day with Rawlbolts. Screw fixings—wiring, lighting, pipes, switchgear and the rest—fix them fast, firm and permanently with Rawlplugs. Rawlplugs are the world's speediest, vibration-proof fixing devices—in brick, cement, concrete and all types of masonry.

Use Rawlplug Fixing Devices where "speed is the essence of the contract"

THE RAWLPLUG COMPANY LIMITED • CROMWELL ROAD • LONDON • S.W.7

RAWLPLUG
FIXING DEVICES

WRITE FOR TECHNICAL LITERATURE

B 396

TUCKER'S 'Armourply'

**DOORS • COUNTERS
AND TABLE TOPS
CUBICLE UNITS
REFRIGERATORS**



**INSULATING PANELS
ESCALATOR PANELS
ROOF PANELS
VEHICLE BODIES**

Combines light weight with strength in a wide range of decorative and utility surfaces

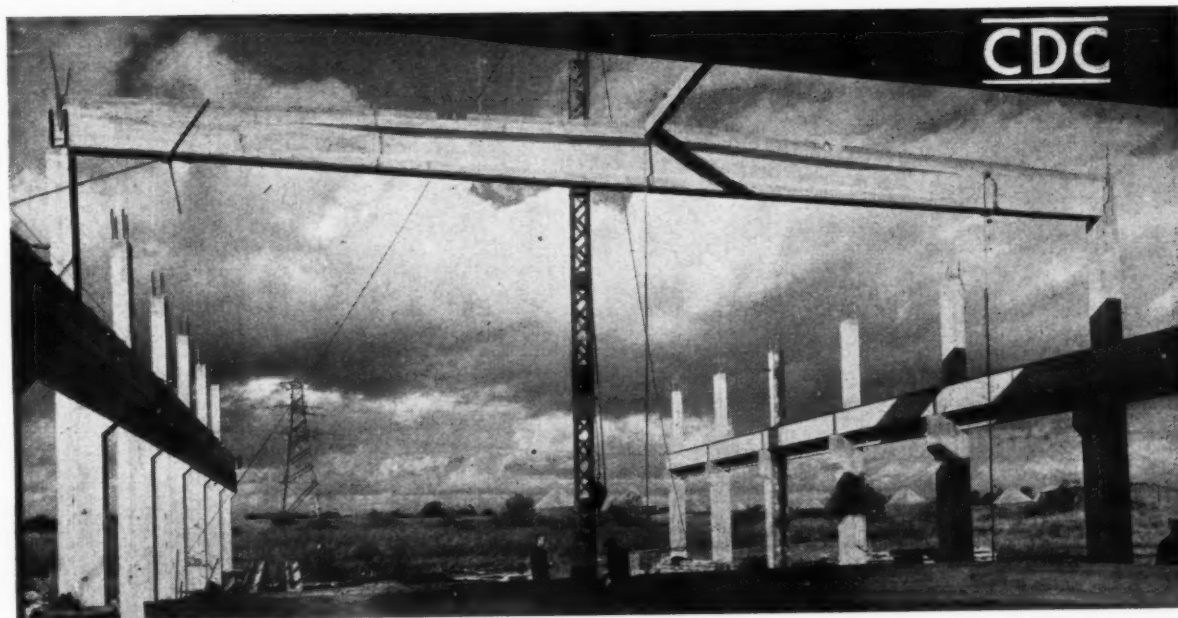
Manufactured by

WILLIAM MALLINSON & SONS LTD

130 - 150 HACKNEY ROAD, LONDON, E.2

• Telephone : SHOREDITCH 8888 - 8811

• Telegrams : ALMONER, LONDON



PRESTRESSED CONCRETE BEAMS

The advantages of using prestressed, precast beams are:

- | | | |
|-------------------------|--------------------|---------------------|
| 1 REDUCED CROSS-SECTION | 2 LOW INITIAL COST | 3 LOW ERECTION COST |
|-------------------------|--------------------|---------------------|

Shown above is a 55-ft. span I-section saddle-back roof beam of 12-in. width in course of erection. These beams have a depth:span ratio of 1 to 22. CDC Ltd. manufacture prestressed precast piles, beams, trestles, poles and floor units.

CONCRETE DEVELOPMENT CO. LTD
Office & Works: THORNEY LANE, IVER, BUCKS. Tel: IVER 809



for
BUILDING
and
MAINTENANCE



MOBILE
AIR COMPRESSOR SETS

Post coupon for details of new HMS 11 and HMS 12 compressor sets and range of equipment—leaflet HEC 488/48

NAME
FIRM
ADDRESS

5.10.50

THE HYMATIC ENGINEERING CO. LIMITED
REDDITCH, WORCESTERSHIRE



Speeds the job!

STELLITH

WOOD WOOL BUILDING SLABS

For internal or external walls, partitions, ceilings and roofs, the inherent qualities of this permanent building material ensure a substantial saving in time and labour.

Architects and Builders are invited to write for further particulars.

SLABS: 6 ft. by 2 ft. THICKNESS: $\frac{1}{4}$ in., 1 in., 1 $\frac{1}{2}$ in., 2 in., 2 $\frac{1}{2}$ in., 3 in. WEIGHT: 25 lbs. cu. ft. N.P.L. TESTED. Fire resisting, damp proof, high thermal insulating value. Sound absorbing. Vermin proof. Technical information sheets and samples available on application from:

STELLA BUILDING PRODUCTS LTD.

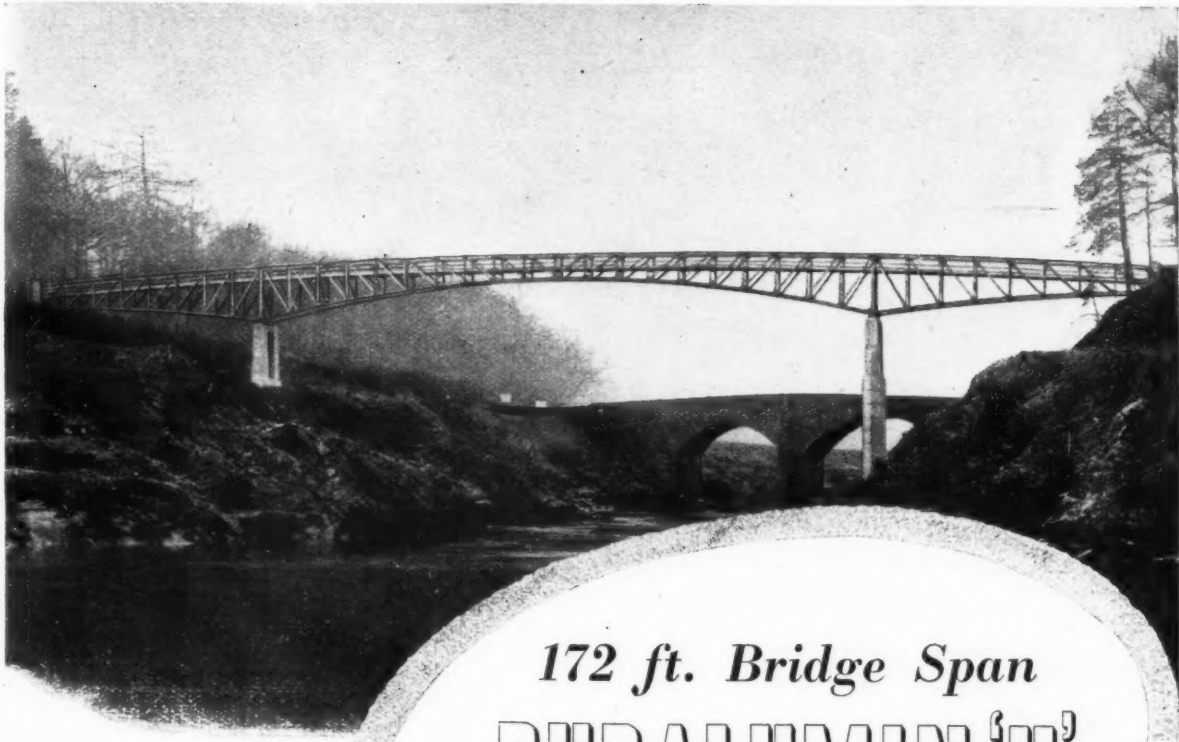
TUDOR AVENUE, NORTH SHIELDS. Tel. N. Shields 1447

or to our sole distributors

The MERCHANT TRADING COMPANY Limited

COLUMBIA HOUSE, 69, ALDWYCH, LONDON, W.C.2.

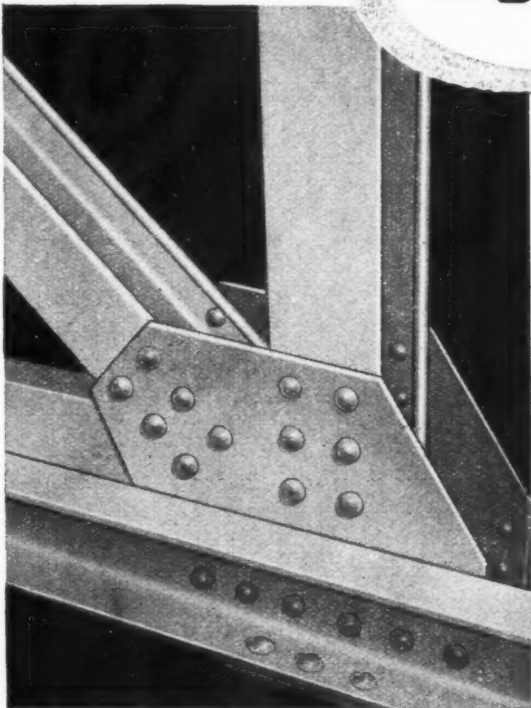
Telegrams: Themetraco, Estrand, London.
Telephone: Holborn 3291 (5 lines)



172 ft. Bridge Span
in **DURALUMIN 'H'**

REGD. TRADE MARK

CBI



Constructional details, showing beaded 'I' beams for compression members. All rivets are in 'MG5' alloy, driven cold by ordinary percussive means.

The new Clunie bridge across the river Tummel — built in connection with the giant Tummel-Garry hydro-electric scheme — is entirely of Duralumin 'H'. The centre span measures 172 ft. 6 ins., and the side spans each 69 ft. The lightness of 'Duralumin' — which is as strong as steel, but only one third as heavy — greatly facilitated erection, and its well-known resistance to corrosion will considerably reduce maintenance costs. 'Duralumin' is one of a series of light alloys manufactured and marketed solely by James Booth & Co. Ltd. of Birmingham.

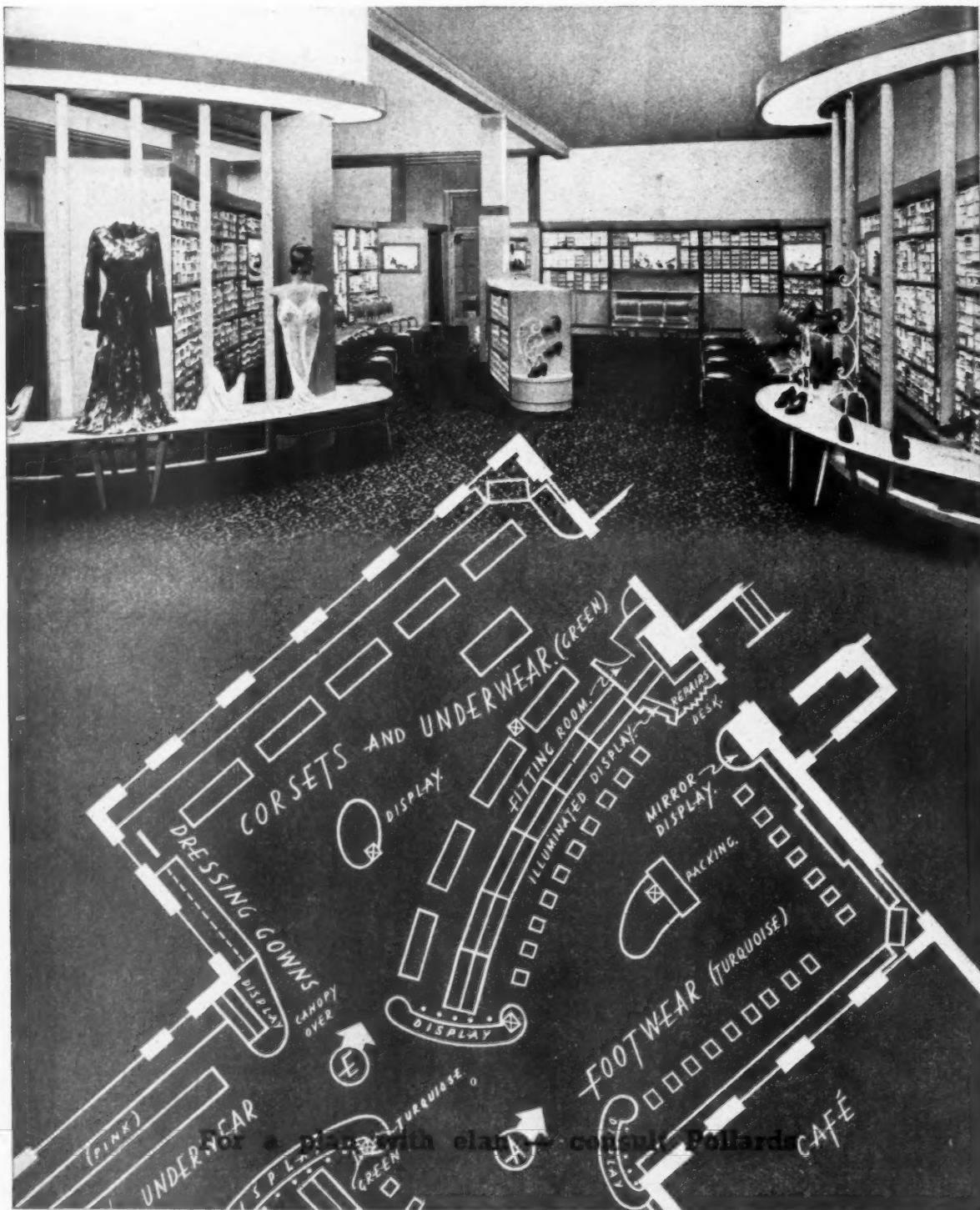
The Clunie bridge was built to the specifications of Sir Alexander Gibb and Partners, by P. & W. MacLellan, Ltd., of Clutha Works, Glasgow, who were also responsible for the erecting of it.



JAMES BOOTH & COMPANY LIMITED · ARGYLE STREET WORKS · BIRMINGHAM · 7

G21

SHOWROOM DESIGN



E. POLLARD & CO. LTD., 159 St. John St., London, E.C.1
 Tel: Clerkenwell 6701. Showrooms: 299 Oxford St., London, W.1

POLLARDS

For luxury bar



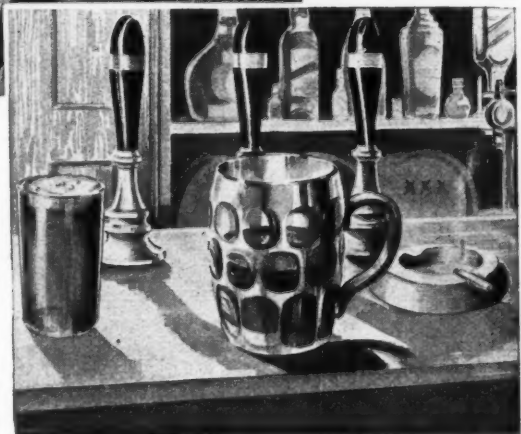
The buff counter top and green front in WARERITE cigarette-proof material enhance this snack bar at the famous 'Cock Tavern', Fleet St., London. Green WARERITE materials also provide the flush door facings.

Architect: Leonard J. Multon, F.R.I.B.A.
Contractors: Fullers (Builders) Ltd.

Photo: J. W. Mellish & Co.

... or humble pub

WARERITE materials offer smart colours or friendly patterns to match any decorative scheme. Individual designs may be incorporated in them if required, and they include a cigarette-proof grade. Whether used constructionally as panelling or to surface a bar counter, WARERITE materials always look right. Throughout years of spilt drinks and wear and tear, a damp cloth suffices to clean them.



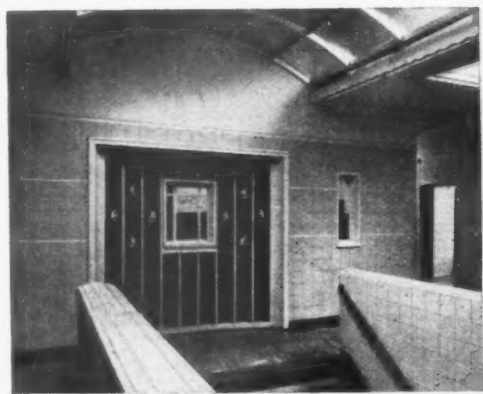
WARERITE

TRADE MARK

LAMINATED PLASTICS

Made by WARERITE LIMITED • WARE • HERTS Manufacturers of decorative laminates for 20 years

UNIT OF BAKELITE LIMITED • Phone: Ware 502 • Grams: Warerite, Ware



solve
the
problem
with
tiles

For simple and straightforward treatment or attractive decorative effect, tiles by Pilkington's are most suitable for interior or exterior walls and floors. An interesting example of unusual treatment is shown above.

We also specialize in faience for fireplaces and certain other purposes, and mosaic for floors.

Pilkington's
TILES
L I M I T E D

CLIFTON JUNCTION, Nr. MANCHESTER
London Office: 27b, Old Gloucester Street,
Holborn, W.C.2



8

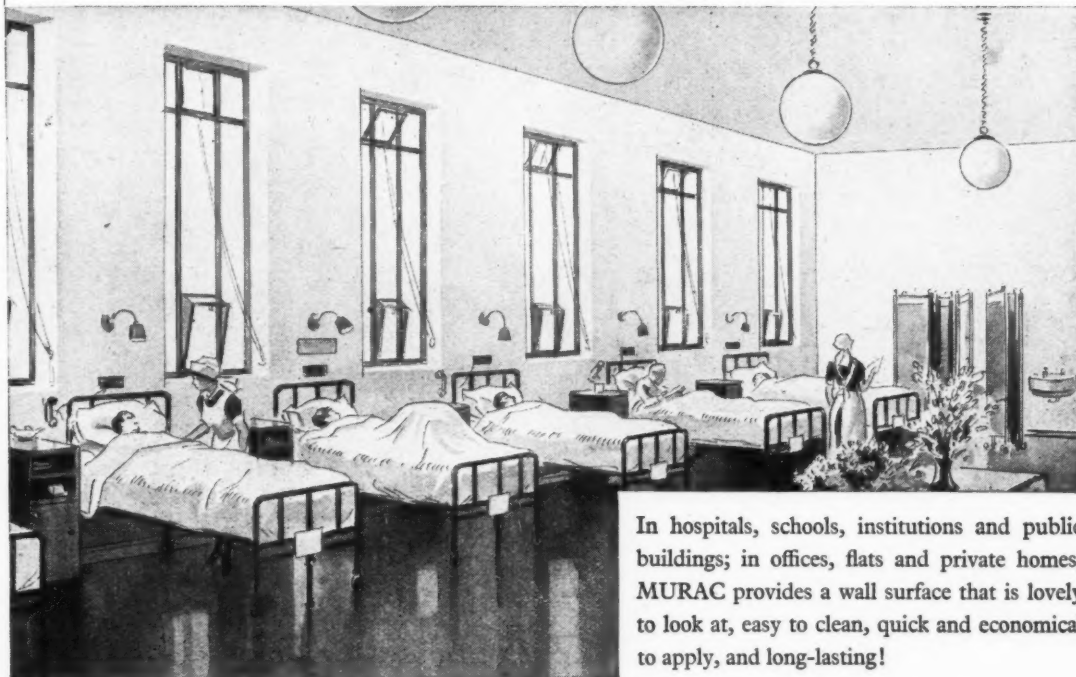
defeat the
NOISE element
permanently by
specifying

ACOUSTICAL
TREATMENT BY THE
BURGESS
METHOD
OF SOUND ABSORPTION

BURGESS PRODUCTS
COMPANY LIMITED · ACOUSTICAL DIVISION
HINCKLEY LEICESTERSHIRE

NEW *matt* FINISH FOR WALLS

supersedes distemper and water paint!



In hospitals, schools, institutions and public buildings; in offices, flats and private homes, MURAC provides a wall surface that is lovely to look at, easy to clean, quick and economical to apply, and long-lasting!



Stains, grease and dirty fingermarks easily washed off!



You can wash it... rub it... scrub it!

Send for FREE
colour scheme booklet

MURAC COSTS NO MORE TO APPLY THAN DISTEMPER

- ★ *Special new matt finish for wall decoration*
- ★ *Tested in use over the past fifteen years*
- ★ *Applied with large flat wall brush*
- ★ *Dries matt with attractive dull sheen*
- ★ *Long-lasting; no powdering or flaking*
- ★ *Can be washed and scrubbed over and over again*
- ★ *Available in eighteen basic colours*
- ★ *Easily blended to any shade*

MURAC

NEW MATT FINISH FOR WALLS

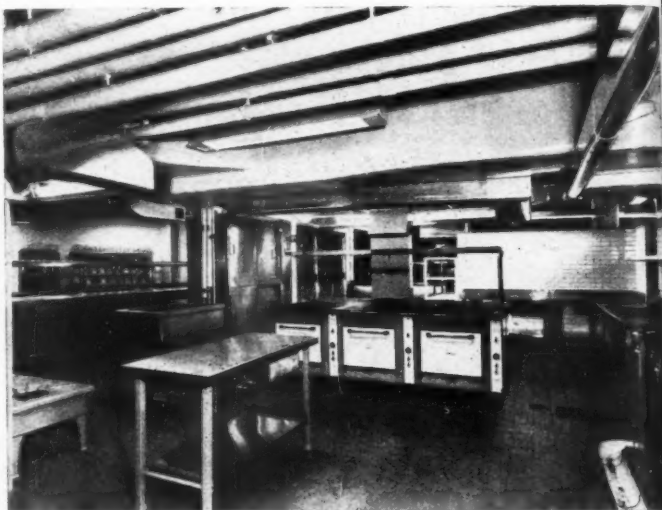


Made in the BROLAC works by JOHN HALL & SONS (Bristol and London) LTD., HENGROVE • BRISTOL 4

BENHAM

MODERN KITCHEN PLANNING

OLD - FASHIONED kitchens are now being superseded by modern, hygienic and labour-saving installations. Being manufacturers of gas, steam and electric cooking apparatus, the planning of kitchens, although a specialist's job, is simplified, since we can offer advice as to the choice of equipment for the type of installation required. We also stress the importance of close co-operation with architects and consulting engineers in connection with schemes, whether they apply to schools, institutions, factories, restaurants or hospitals.



Part of the new kitchen equipment of the Great Room, Grosvenor House, Park Lane, W.1.

Benham and Sons Limited

66 Wigmore Street : London W.1.

Telephone: WELbeck 9253

BIRMINGHAM BOURNEMOUTH BRIGHTON MANCHESTER CARDIFF GLASGOW
Associated Companies: Dublin, Melbourne and Johannesburg.

ESTABLISHED 1875

TRUETT & STEEL
LTD

BUILDING CONTRACTORS

WESTMINSTER

THORNTON HEATH

WHITEHALL 3342 & 4051

THORNTON HEATH 1122/4/5/6

Licence-free SKIRTING

- ★ Three Standard widths
- ★ Nosed on one edge.
- ★ Easy to cut, join and mitre.
- ★ In convenient 8ft. lengths
- ★ **MADE FROM KNOT-FREE, WARP-FREE—**

WEYROC

REGD.

MAN-MADE TIMBER

WEYROC's strength, smooth, easily decorated finish and freedom from knots, faults and warping have made it an ideal material for skirting as for many other building applications. Now it is available for the job in ready-to-use lengths, saving the time and cost of cutting and nosing! WEYROC Skirting is licence free, in 8ft. lengths, $\frac{3}{4}$ in. thick and 3in., $4\frac{1}{2}$ in. and 6in. wide. After normal filling it can be painted, varnished or distempered. Like WEYROC Man-made Timber, it does more than a good job—it releases vital timber for other duties!

From WEYROC Main Distributors or the Sole Manufacturers. Prices from 3/8 per length.

MAIN DISTRIBUTORS

BRISTOL: Bryce White & Co. Ltd. **CARDIFF:** John Bland & Co. Ltd. **EXETER:** Gabriel, Wade & English Ltd. **LEEDS:** Alvin, Morris & Co. (Timber) Ltd. **LIVERPOOL:** Charles Taylor, Sons & Co. Ltd. **LONDON:** Gabriel Wade & English Ltd., E. Sherry Ltd., John Lenanton & Son Ltd. **MIDLANDS:** J. O. Walker & Co. Ltd., Leicester, C. Walsh Graham Ltd., Wednesbury, Staffs. **NEWCASTLE:** J. T. Dove Ltd. **SCOTLAND:** Brownlee & Co. Ltd., Glasgow.

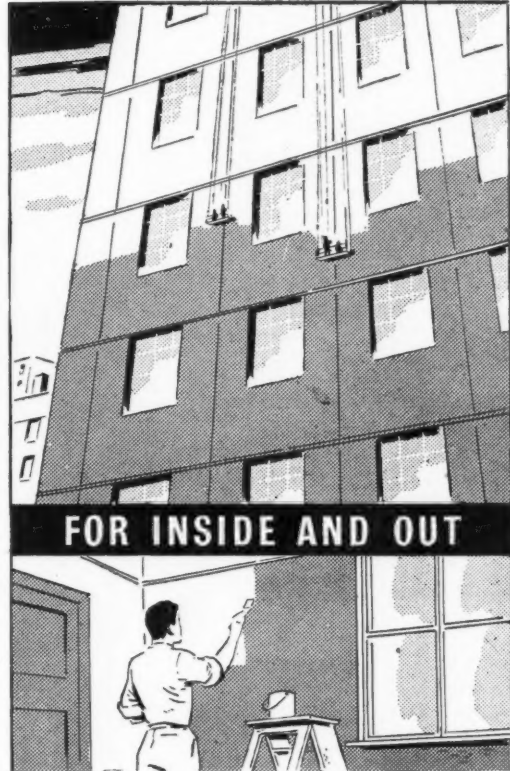
The Airscrew Company & Jicwood Ltd.

Weybridge



Surrey

Telephone: Weybridge 1600. Telegrams: Airscrew, Weybridge



FOR INSIDE AND OUT

On factories or public buildings, both interior and exterior TEMPLE PRODUCTS bring the dignity, durability, and touch of colour which is so necessary to make your working hours more pleasant.

For your home, both inside and out, there is glamour, sophistication, or just plain comfort in a full range of Decorative Finishes, including our famous GUARDIAN HARD ENAMEL GLOSS PAINT and MAYFAIR FLAT WALL ENAMEL, which have given such good service over the many years of their manufacture.

MAKE IT A *GOOD* JOB WITH

TEMPLE

PRODUCTS

DECORATIVE FINISHES

The TEMPLE VARNISH Co. Ltd.
43 ALDWYCH LONDON, W.C.2
(Works at Strood, Kent) Phone Temple Bar 9935





Cocktail Bar in Oak.
Designed and built
by Finewood
Products.

FINWOOD PRODUCTS Ltd

Contemporary Furniture & Interior Architecture

Ship Interiors

Municipal & School Furnishing

Flat & Hotel Schemes

Panelling & Fitting Public Houses & Offices

Government Contractors

107, BUCKINGHAM AVENUE, TRADING ESTATE, SLOUGH, BUCKS
PHONE 22925

We are the largest manufacturers of high grade drawing instruments and slide rules in the British Empire, and our Kinwest drawing materials have gained a reputation throughout the world for superb quality and accuracy.



Our catalogue which includes particulars of Drawing Boards, Tee and Set Squares, Scales, Slide Rules, Drawing Instruments, Curves, Protractors, Drawing Materials, etc., is sent Post Free on request.

A G THORNTON LTD
Drawing Instrument Specialists
WYTHENSHAW, MANCHESTER

Tel.: WYThenshaw 2277 (4 lines)



WROUGHT IRON GATES

WIDE RANGE OF DESIGNS

Ornamental or plain. Also Tubular steel gates from £2 and special purpose mesh gates for farm or factory.

Send for illustrated leaflet
Trade supplied

TAYLOR & COMPANY
Bridge Works, Compton,
Wolverhampton



PHENCO FLOOR COVERING

PHENCO is recommended by Architects as exceptionally strong and hard wearing, with high resistance to oil, grease and chemicals. NON-inflammable. Non-slip and dustless and easily kept clean by normal methods.

PHENCO is tested to British Standards Specification for wear, indentation, pliability, water absorption and non-inflammability. B.S.S. 476/1932, B.S.S. 386/1936, B.S.S. 810/1938.

PHENCO FLOORING is a durable and flexible material with pleasing colour tones. It is supplied in 8 or 12 yard rolls, 36 in. wide by 3/32 in. or 1/8 in. thick; also in tiles 12 in. by 12 in. and 9 in. by 9 in. and 1/8 in. thick.

SAMPLES AND FULL QUOTATIONS ON REQUEST TO

PHOENIX RUBBER CO. LTD.

91, Bishopsgate, London, E.C.2. Tel.: London Wall 1622

Works at: 2K, Buckingham Ave., Trading Estate, Slough, Bucks
Tel.: Slough 22307/8/9

Agents for Birmingham area
A. D. FOULKES LTD.

Agents for Sheffield area
JOHN HADFIELD & SONS LTD.

FOR
ARCHITECTURAL
PHOTOGRAPHY
In the North East of England



PHILIPSON STUDIOS
20, Oxford St, Newcastle upon Tyne
Telephone Newcastle 27281

BRITAIN'S
BEST
BRICKS!

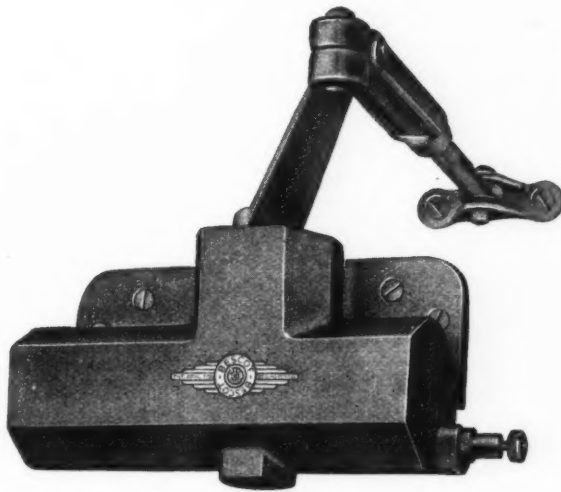
ACCINGTON 'NORI' BRICKS

THE ACCINGTON BRICK & TILE COMPANY
ACCINGTON. (ACCINGTON 2684)

The IMPROVED BESCOT CLOSER

THE LATEST STEP
IN
DOOR CLOSER DEVELOPMENT

FEATURES WORTH NOTING ARE THE
LONG LIFE COMPRESSION SPRING AND
THE OIL EXPANSION CHAMBER TO
AVOID LOSS OF CHECK



DEMONSTRATIONS AND SUPPLIES THROUGH ANY LEADING MERCHANT

Manufactured by

S B & N LTD. BROCKHURST CRESCENT, BESCOT, WALSALL, STAFFS.

★ Over 50 experts have combined to make MODERN BUILDING CONSTRUCTION

Edited by **RICHARD GREENHALGH, A.I.Struct.E.**

These three volumes contain the experience and skill of craftsmen and experts—men who learned from years of practical work the best way to do a job. Whether you have been in the Industry for many years or have only recently taken it up you will find these books invaluable.

**Post this Coupon
TODAY**

THE NEW ERA PUBLISHING CO. LTD.
Pitman House, Parker Street, London, W.C.2

Please send me, free of cost or obligation, your Illustrated Brochure on MODERN BUILDING CONSTRUCTION, and particulars of your offer to deliver the complete work for a nominal first payment, the balance to be paid by a few further monthly instalments.

Name
Address.....

Date..... A.J.40
South African enquiries to CENTRAL NEWS AGENCY
Box 1033, JOHANNESBURG.

Craftsmanship in Building

Building Calculations

Builder's Geometry

Building Science

Brickwork

Training of Craftsmen and

Specialists in the Building

Industry

Roof Coverings

Plastering

Painting and Decorating

Paperhanging

Glazing

Plumbing

Gas-Fitting

Electrical Fitting

Training and Opportunities of

an Architectural Student

History of Architecture

Architectural Drawing

Architectural Design

Architectural Acoustics

Architect's Office and Routine

Structural Engineering

Fire-resisting Construction

Concrete Plain and Reinforced

Masonry

Joinery

Carpentry

Stairs and Handrails

Shop Fronts and Fittings

Builder's Office and Routine

Book-keeping, Accounting,

Costing

Estimating

Preliminary Operations

Superintendence

Drainage and Sanitation

Heating

Ventilation

Prefabrication

Land Surveying and Levelling

Specifications and Quantities

Building Law

Royal Institute of British

Architects

Chartered Surveyors' Institution

Institution of Structural Engineers

PRESENTED IN THREE PROFUSELY ILLUSTRATED VOLUMES WITH
FIVE INSET COLOUR PLATES.

THE MIDLAND BRICK CO. (Wellingboro) Ltd.

are now producing a

RED WIRECUT ENGINEERING BRICK

Civil engineers, contractors and builders are invited to send their enquiries through their usual merchant or direct to us. Copy of test certificate and samples will be gladly sent on request.

THE MIDLAND BRICK CO. (WELLINGBORO) LTD.
STATION ROAD, LONG BUCKBY, NORTHANTS
Phone: Long Buckby 284 Est. 1867

High Speed Service . . .

. . . our highly mobile Organisation enables us to couple the claims of:—
High Speed Efficiency and First Class Craftsmanship for New Building, Reconstruction and Decoration Work in the London Area.

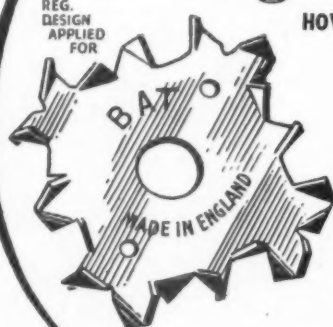
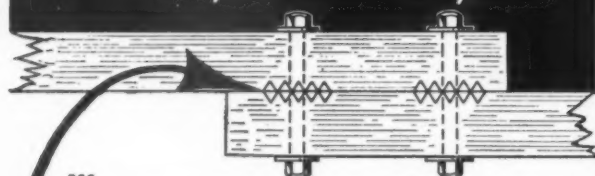
We should be glad to quote for any job and to explain how our system would save you time.

BRICE & PARTNERS

*Builders, Contractors
and Estate Developers,*

Telephone : 340-348 Ilford Lane,
Ilford 4080 Ilford, Essex.

*"We are unable
to get the lengths"*



HOW OFTEN

DO WE HEAR THIS?

'BAT' square toothed plate Timber Connectors can be used in the construction of standard timber components, such as purlin, trusses, bracing members, towers, temporary framework and any timber joint.

WRITE FOR LIST AND SAMPLES

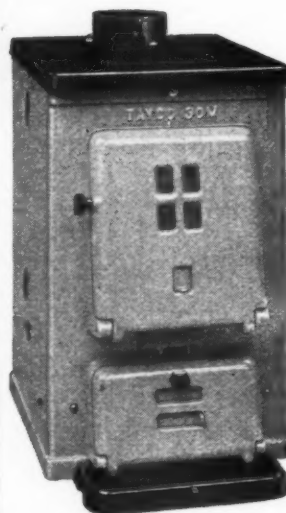
SQUARE TOOTHED PLATE TIMBER CONNECTORS

AUTOMATIC PRESSINGS LTD.

'BAT' WORKS, BLACKHEATH, STAFFS.

Manufacturers of the "Bat" Carded Belt Hooks,
Belt Lacing and V-type lacer

TAYCO New Series DOMESTIC BOILERS



No. 30M (Illustrated)

- Designed in accordance with British Standard No. 758
- Patented hinged hotplate cover
- Vibratory type shaking grate
- Constant hot water
- Low fuel consumption
- Durable enamel finish
- Easy clean surface
- Made in 7 capacities from 21,000 to 80,000 B.T.U's.
- Approved by Fuel Efficiency Dept. of Ministry of Fuel and Power.

Full Particulars from

R. TAYLOR & CO. (Ironfounders) LTD
Muirhall Foundry, Larbert, Stirlingshire
London Office & Showrooms :—66, Victoria Street, S.W.1
Also at Building Centre, 9, Conduit Street, W.1.

CARRON COOKING APPLIANCES

in the main kitchen of Queen Elizabeth's Hospital, Birmingham



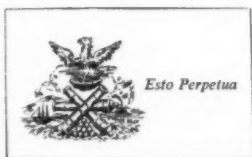
CARRON STEAM JACKETED TILTING PAN
Outer and inner pans of cast iron • Pan tilted by means of machine-cut worm gearing with turned handwheel protected by cast iron gear box • Outer casing of enamelled sheet steel or stainless steel

BATTERY OF CARRON STEAMING OVENS

Two baskets to each compartment
• Steam-tight doors fastened with slip bolts operated by centre disc • Fitted with full safety precautions • Vitreous enamel finish

CARRON STEAM JACKETED BOILING PANS

Cast iron, with hinged counter-balanced cover of stainless steel or copper polished finish • Lifting handle with bakelite grip positioned to keep hand clear of vapour • Vitreous enamel finish



These are Carron products made by modern Carron processes embodying the Carron tradition for fine workmanship begun in 1759

CARRON COMPANY • CARRON • STIRLINGSHIRE

Showrooms & Offices: 15 Upper Thames St., London, E.C.4.
22-26 Redcross St., Liverpool 1 • 125 Buchanan St., Glasgow, C.1
Offices: 14 Ridgfield, Manchester. 2.

CARRON equipment...CARRON service

The highly experienced staff of experts at Carron is always ready to assist in selecting the equipment most suited to specific needs. Cooking installations utilising electricity, gas, steam, oil or solid fuel—there is Carron equipment for every requirement. May we send you full information about the comprehensive range of Carron installations and our Advisory Service?

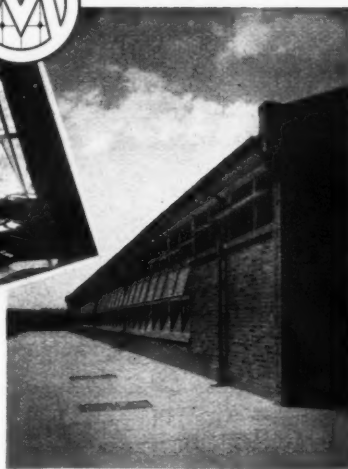
Looking to the Future

SPECIFY MELLOWES METAL WINDOWS . . .



Athersley County Primary School, Barnsley.

Architects: Messrs. Dyson, Cawthorne & Coles, Barnsley.



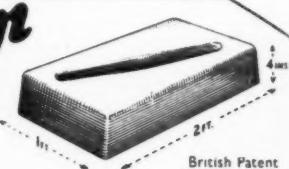
MELLOWES & Co LTD
LONDON SHEFFIELD OLDHAM

INSULITE
the Wood-Fibre Insulating Board

More than
30 years
MANUFACTURING
EXPERIENCE
of
WOOD-FIBRE
INSULATING BOARD
and
HARDBOARD

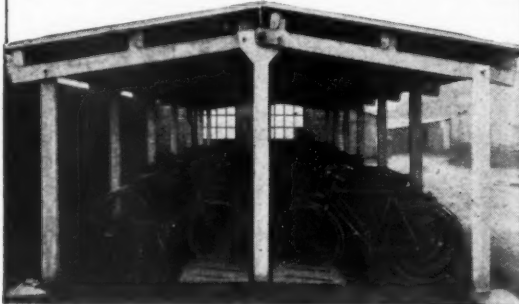
INSULITE PRODUCTS CORPORATION LTD
41, KINGSWAY, LONDON, W.C.2. TEMple Bar 9385/7

Stelcon



British Patent
No. 425265

BICYCLE PARKING



This "All Concrete" park is practical and requires no maintenance. Full details will gladly be sent on request.

STELCON (INDUSTRIAL FLOORS) LTD.
Cliffords Inn LONDON E.C. 4
Telephone: HOLborn 2916

Introducing
"PETRADENE"
the
SUPERPLASTER
A QUICK SETTING PLASTER
HARDER THAN CONCRETE

(patent pending.)

Compression strength 6,200 lbs. per sq. in.

Setting time 5/10 minutes

Extreme hardness saves material.

Full details, prices and samples from

PETRADENE LIMITED
23-39 BENDON VALLEY,
GARRATT LANE, WANDSWORTH,
LONDON S.W.18

Phone: BATTERSEA 2497/b

Foreign Rights Available.

DAMP WALLS?

SOLVE ALL YOUR WATERPROOFING
TROUBLES OUTSIDE &
INSIDE BY SPECIFYING



**GRANGER'S
SOLUTION
GRADE 1210**

EASY TO APPLY TO DAMP OR DRY
BRICK • STONE • CEMENT • ROUGHCAST
PLASTER • CEMENT WASH • DISTEMPER
WOOD • WALLBOARDS • ETC.
WATERPROOFS INVISIBLY

1 gallon tin 13/6, 5 gallon drum 12/- per gallon,
10 gallon drum 11/3 per gallon, 40 gallon drum
10/6 per gallon.

1 gallon provides 2 applications to 12 sq. yds.

Interesting Technical Brochure with Building Research
Station's 12 year test report and names of Local
Suppliers on request from the Manufacturers

Manufactured and Guaranteed Effective by
GRANGERSOL LIMITED
LOATES LANE, WATFORD, HERTS.
Telephone: Watford 4086.

....and the point is

if you use **LIGHT ALLOY STRUCTURES**

- MATERIAL LICENCES ARE NOT REQUIRED.
- YOU ARE ASSURED OF QUICK DELIVERY.
- THEY ARE ECONOMICAL DUE TO PAINTING BEING UNNECESSARY UNDER ALL NORMAL CONDITIONS.

Contractors to the Ministry of Works for Light Alloy Structures.

BLACKBURN and GENERAL AIRCRAFT LIMITED
BROUGH E. YOKS

5088/2

CORK, THE FLOOR THAT'S HALF AIR

is not only **QUIET, WARM, LUXURIOUS**
but **TOUGH, LONG-LASTING, ECONOMICAL**

IMPACT NOISE

Cork's air-cellular structure kills noise. Tests of impact noise produced by dropping a steel ball gave the following comparative values for different floors:

HARDWOOD, taken as	100
MARBLE - - -	47.4
QUARRY TILE - -	12.3
CONCRETE - - -	10.5
LINOLEUM - - -	2.74
RUBBER TILE - -	1.37
CORK TILE - -	.46

CORK, most luxurious of floors, has long been the architect's first choice where silence is essential, or comfort more important than cost.

But this resilient material, more than half air, is also exceedingly tough. It stands years of heavy foot traffic in busy shops, offices, hospitals, schools, restaurants, even in buses, with scarcely perceptible wear. In domestic use, it may well last a lifetime.

So cork is truly *economical*—far more so, when you count the years, than 'cheaper' floors that can never give the same satisfaction. Even first cost is competitive, normally lower than for wood blocks. And with this warm, quiet surface there is far less need for carpeting.

PURE CORK IN TILE FORM

Armstrong's Cork Tiles, famous since 1896, are made of nothing but pure, resilient Spanish cork, bonded under heat by its own resins—no dust or gritty granules, no adulterant. A special feature of Armstrong's Cork Tiles is that they are supplied not only straight-edged but also tongued and grooved, which obviates sanding after laying and prevents lipping and curling. You are invited to write for further particulars.

ARMSTRONG'S CORK TILE FLOORING

ARMSTRONG CORK COMPANY LTD., FLOORING DEPARTMENT,
IMPERIAL BUILDINGS, 56 KINGSWAY, LONDON W.C.2
Telephone: Chancery 6281

SCOTTISH BRANCH:
5 OSWALD STREET, GLASGOW C.1
Telephone: Central 5703



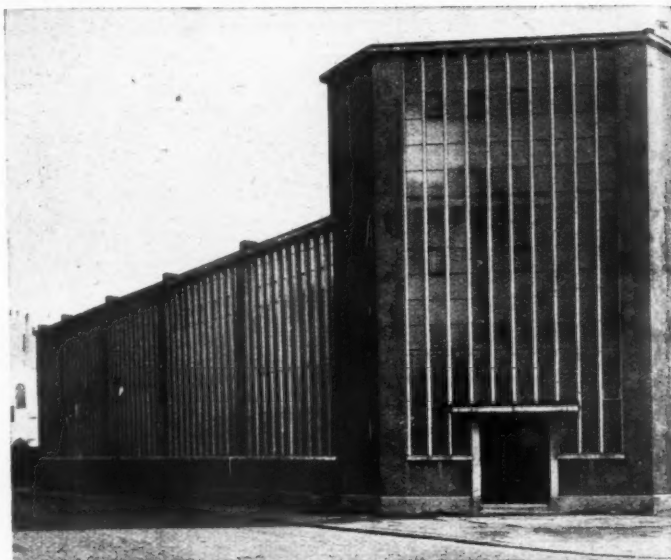
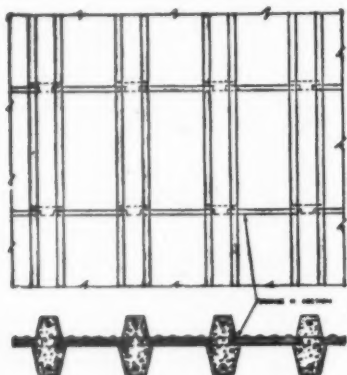
GLAS-CRETE WINDOWS

REINFORCED CONCRETE AND GLASS CONSTRUCTION

GLAS-CRETE patent Mullion Windows comprising vertical R.C. mullions, grooved and slotted to receive "H" bronze members, which in turn carry $\frac{1}{2}$ in. rough cast, figured cast, or sheet glass.

It is thus possible to construct windows continuously up to any desired height, as the weight of each glass is carried on the "H" members, which, in turn, transmit it to the mullions.

The mullions may be spaced at any centres up to 2ft. 9ins. but the "H" members should be at 1ft. 3ins. or multiples. Opening portions can be introduced where required.

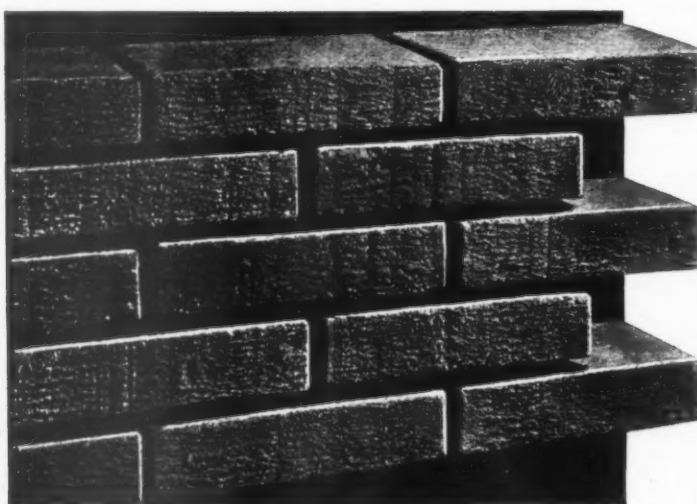


G. H. Lawrence Ltd.
Sheffield.

Messrs. Hadfield Cawkwell & Davidson
Chartered Architects.

J. A. KING AND COMPANY LIMITED
181 QUEEN VICTORIA STREET, LONDON, E.C.4
TELEPHONE: CENTRAL 5866 (6 LINES) TELEGRAMS: KINOVIQUE, CENT, LONDON

IBSTOCK Facings



New Colourings—New Effects

Here are inexpensive facings entirely different in effect and colouring. From pale buffs to soft reds tinged with grey, the appearance suffuses quiet warmth, restful and attractive.

In addition to the well-known Buff-Multis, these facings are made in :-

SALMON-BROWN ranging from buff-grey to very light salmon.

RED-MULTI in tones of deep red to mottled purple.

CHESTNUT-BROWN. Our newest shade, sandfaced wirecut.

Supplies of facing bricks are fully booked until late Autumn but we are making reservations against specifications, etc., for next winter and 1951

Salmon-Brown :

IBSTOCK BRICK & TILE CO. LTD., near Leicester
London: L.M.S. Goods Depot, Wright's Lane, Kensington, W.8.

Red-Multi :

Chestnut-Brown

Phone: Ibstock 391 (2 lines)
Phone: Western 1281 (2 lines)

THE WELLS HOUSE

This attractive block of flats has recently been completed for the Borough of Hampstead. The design of in-situ reinforced concrete and the supply of reinforcement thereto were carried out by Twisteel.



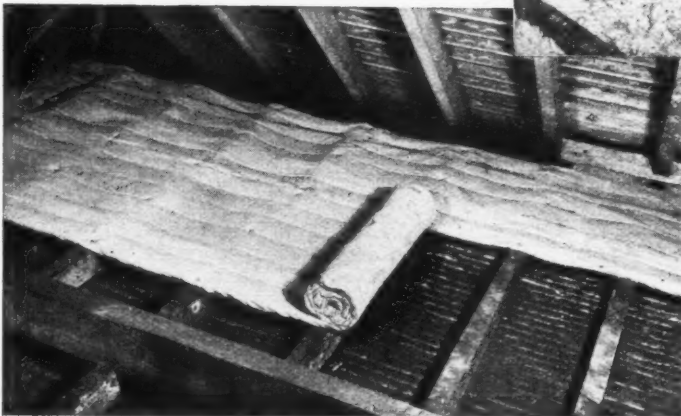
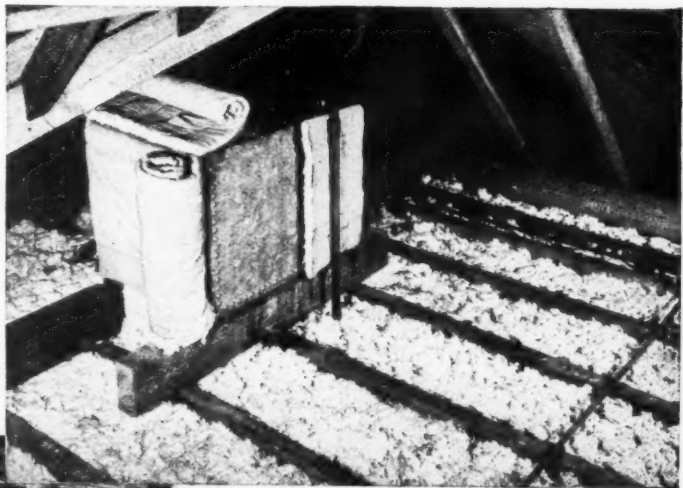
C. H. James, R.A., F.R.I.B.A. Architect

LONDON: 43 UPPER GROSVENOR STREET, W.1. Telephone: GROsvenor 1216.
BIRMINGHAM: ALMA STREET, SMETHWICK, 40. Telephone: SMethwick 1991
MANCHESTER: 7 OXFORD ROAD, MANCHESTER 1. Telephone: ARdwick 1691
SCOTLAND: JOHNSTONS & PATON, LTD. 224 INGRAM STREET, GLASGOW C.1. Telephone: CIty 7661

TWISTEEL

REINFORCEMENT LTD.

M'NEILL'S



McNeill's fire- and sound - proof **SLAGBESTOS** Slag Wool has unusually high insulating properties. It is made in a variety of forms for quick and easy application to old or new buildings.

SLAGBESTOS is practically indestructible and retains its efficiency under all conditions.

Write for leaflet to:

Dept. B.5 F. McNeill & Co. Ltd.
10 Lower Grosvenor Place, London, S.W.1



Let in the Light...

TO FACTORIES WITH

HELLIWELL

PATENT GLAZING

HELLIWELL Patent Glazing has stood the test of time and with some 70 years of constant study and practice in this specialised field Helliwell offers you a service of construction in Weatherproof Patent Glazing at the top of its class.

HELLIWELL & CO. LTD.

Brighouse, Yorks. & 68 Victoria St., London S.W.1

***A booklet for the
Practising
Architect....***

A handy and concise guide to the planning of Tower Clock and Strike and Chime installations for either new or existing buildings. Diagrams, tables, photographs and full details of the various types of equipment available and the scope of each.

A copy for your own files may be obtained on application to

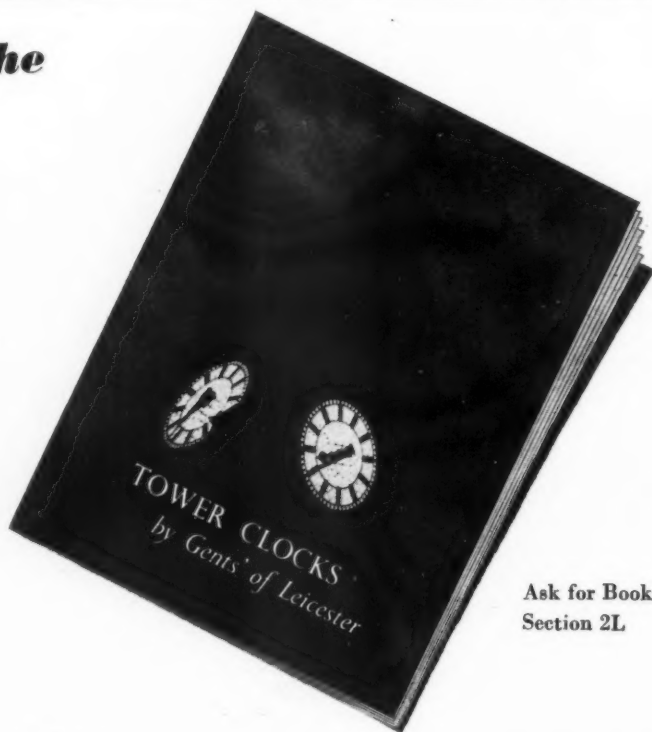
**GENTS'
OF LEICESTER**

Makers of Electrical Equipment for over 75 years

GENT & CO. LTD., Faraday Works, LEICESTER

London Office: 47, Victoria Street, S.W.1

Newcastle-on-Tyne: Tangent House, Leazes Park Road



Ask for Book 5
Section 2L

ALL THIS *and handsome too!*



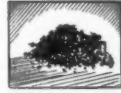
Lavish Cooking Space



Constant Hot Water



Exact Oven Temperature



Burns any Solid Fuel



Large Hot Plate

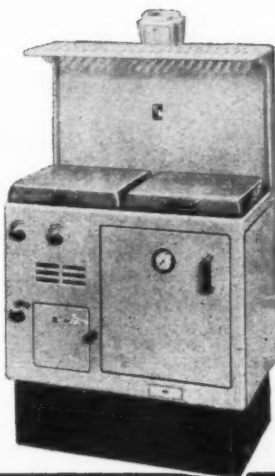


Easy to Clean

All these aids to care-free cooking come with the new Advance Range. Its smooth modern lines and bright enamel finish conceal a wealth of oven space to cook for six to ten people, while the twist of a wrist gives the right oven temperature. The continuous burning system puts an end to daily fire lighting and helps towards greater fuel economy.

There are two models. Number 31 has everything a cook can want and is finished in stone coloured vitreous enamel. Number 35, in grey porcelain enamel, is a simple model with the same cooking capacity.

THE ADVANCE RANGE



RADIATION GROUP SALES LTD. SOLID FUEL DIVISION,
ASTON, BIRMINGHAM, 6
Product of Radiation Ltd

The history of Plastering progress is the history of SIRAPITE

1880 The introduction of Hard-wall plaster—Sirapite Plaster.

1935 The introduction of plaster board finish—Sirapite Board Finish.

1949 The introduction of high covering capacity, non-cracking, rapid drying undercoating free from injurious alkalis—Sirapite Browning.



THE GYPSUM MINES LIMITED

MOUNTFIELD · ROBERTSBRIDGE · SUSSEX
ALSO AT KINGSTON-ON-SOAR · NOTTINGHAM

Unistucc Liquid Stone

The modern economical treatment for the preservation and decoration of cement, stone, concrete, brick and plaster surfaces.

THE UNITED PAINT CO. LTD
 15, St. Helens Place, London, E.C.3
 LIVERPOOL NEWCASTLE-ON-TYNE CARDIFF, ETC.

Implement Buildings



Designed for agricultural and other uses . . . constructed from precast concrete units . . . provide cover at low cost and can be adapted to any plan. Complete details and prices on application. New catalogue of Johnston Brothers products available on request.

Johnston Brothers
(CONTRACTORS) LTD.

DOSELEY QUARRIES, DAWLEY, SALOP
 LONDON OFFICE: IBEX HOUSE, MINORIES, E.C.3

L.G.B

= FORESIGHT = PATENT - GRATES

The ROSSLYN OVEN - OVER - FIRE
 ALL - NIGHT - BURNING
 COMBINATION GRATE

★ **ON THE** **GOVERNMENT LIST**
 OF APPROVED APPLIANCES
 for the Housing Programme



Outstanding features are:—

CONTINUOUS BURNING at very low cost—normally 1 lb. of coke per hour;

UNLIMITED HOT WATER, DAY AND NIGHT with minimum attention;

UNIFORM OVEN TEMPERATURE makes the oven always available for immediate use.

MAXIMUM EFFICIENCY and **ACCURATE CONTROL** by single Damper and Spin Wheel.

The **ROSSLYN** is a soundly constructed, self-contained, all-purpose cooker capable of amazing performance. Supplied in Porcelain finishes—**SPRING GREEN, SANDRINGHAM, MOTTLE BROWN, BLACK**. This model has recently undergone severe efficiency tests. Details, prices and sizes sent on request.

SAMUEL SMITH & SONS, LTD.,
 BEEHIVE FOUNDRY, SMETHWICK 41 STAFFS

.. for all electrical installations

F. H. Wheeler

& Co. Ltd.

Head Office: 39 Victoria Street, London, S.W.1. Tel: ABBey 8080 (18 Lines)

Branches: Manchester, Bournemouth, Glasgow, Birmingham, Hull, Southampton, Hereford, Sheffield, Thetford, York, Bristol, Edinburgh, Aberdeen.

G
E

IST
NCES
mme

y low
hour;
AND
makes
mediate

URATE
d Spin

ll-
in
LE
re

FD.,
AFFS



VITAG
FINE
WASH
PAINT
PAINT

SMIT
ELLIO

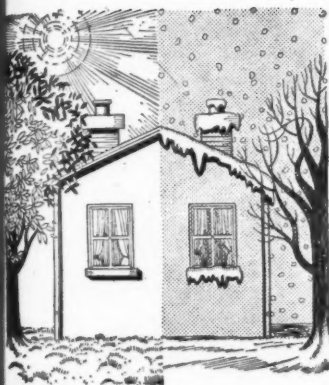
Phone : C

W
*AC
W
RU
*CO
CO

GA

Drivers
Northa
Southa
Southa
and b

* Briti



It's a
TOUGH
climate!

—and a paint has to be good to stand up to the vagaries of the British climate. Decorators in the know rely on Smith & Rodger Paints & Varnishes to maintain their reputation for a good job that lasts.

VITAGLOSS HIGH GLOSS PAINT *AND
FINE WHITE ENAMEL * WALDURA
WASHABLE WATER PAINT * SOLVIT
PAINT REMOVER * VITACHARM FLAT
PAINT

SMITH & RODGER LTD

ELLIOT STREET • GLASGOW, C.3

Phone: CITY 6341/2 Grams: "SMITROD" GLASGOW

**SMITH &
RODGER**
PAINTS • •
VARNISHES

FLOORING

WOOD Block, Strip and Parquet
ACCOTILE Armstrong's Plastic Decorative Tiles
WEYROC "Man-made" Wood Blocks and Tiles
RUBBER Tiles and Rolls
CORK Tiles
COMPOSITION Magnesite Jointless Flooring

Supplied and laid by

GABRIEL, WADE & ENGLISH
Ltd

Approved Specialists

Enquiries to:

Aldwych House,
London, W.C.2.
Holborn 8421

East Station Road,
Peterborough.
Peterborough 4234

Drivers Wharf
Northam
Southampton.
Southampton 2261/2

and branches at Exeter, Cambridge, Wisbech, Ipswich, Bedford,
Leicester, Scarborough, Teddington.

* British registered Trade Mark No. 663698 Armstrong Cork Company Ltd.
Registered Users.

STEELWORK

BY

R. W.

SHARMAN

LTD.

HEAD OFFICE: The Parade,
Sunbury, Middx.

Telephone: Sunbury 3210 and 3464

Telegraphic address: Sharman, Sunbury

(all communications to be addressed to above)

WORKS: Swan Works,
Hanworth, Middx.

Telephone: Feltham 3007 and 3990

LONDON OFFICES:
5 Victoria Street,
S.W.1.

Telephone: Abbey 5731-2.

Contractors to Admiralty, Air Ministry, Crown Agent for the
Colonies, L.C.C., Ministry of Supply, Ministry of Works, Ordnance
Survey, War Office, etc.



ESSE equipment
installed by
Caterers Appli-
cances Ltd. in the
canteen of J & P
Coats Ltd.,
Paisley

specify **ESSE** equipment

other ESSE manufactures include a full range of the most modern heavy-duty cooking equipment: Boiling Pans, Steaming Ovens, Hot Closets, Carving Tables, Fish Fryers, Water Boilers, Calorifiers, etc. for steam, gas, and electricity. ESSE Cooking Equipment is frequently installed along with ESSE Heat Storage Cookers which give Continuous Cooking service day & night with outstanding fuel economy

The ESSE COOKER Co.

Proprietors:
Smith & Wellstood Ltd. Est. 1854

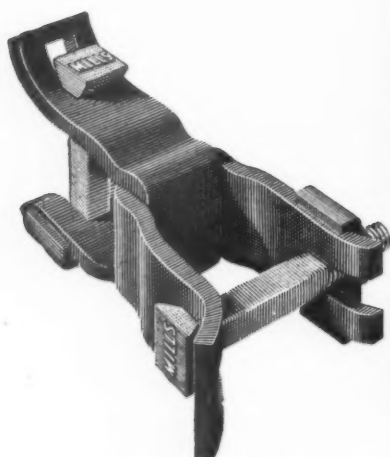
Head Office & Works:
Bonnybridge, Scotland

London: 63 Conduit St. W.1.
and Liverpool, Edinburgh and
Glasgow.

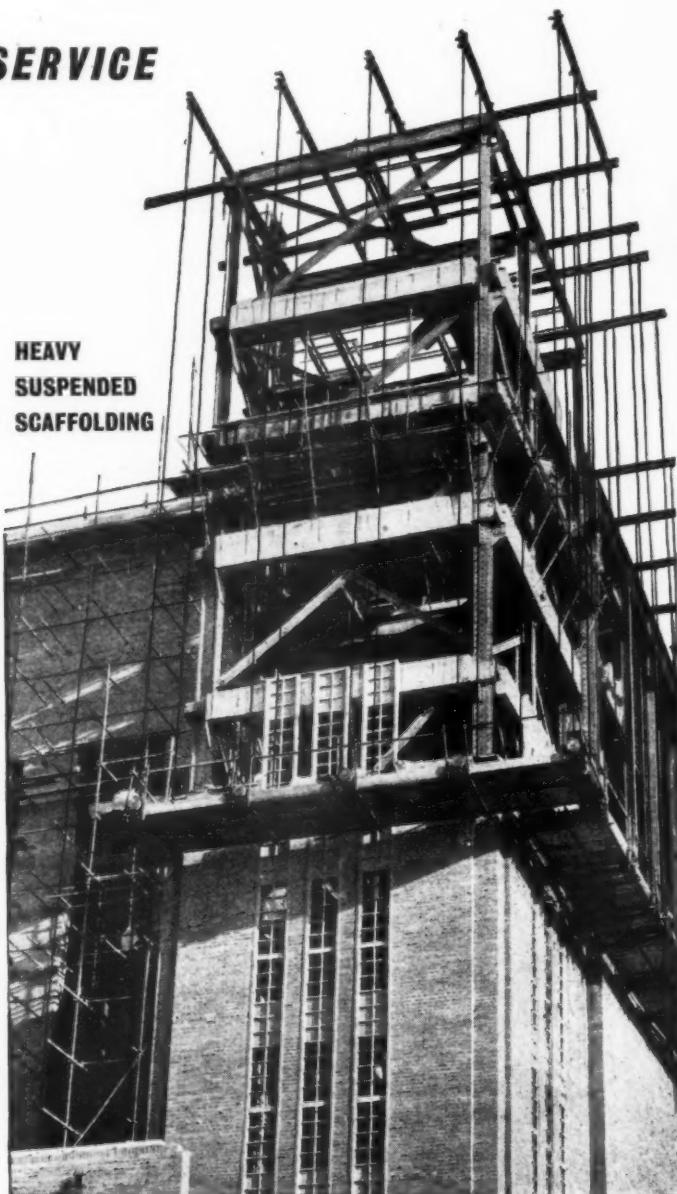
Agent in Eire:
Mr. D. A. Baird, 107 Amiens Street,
Dublin

FOR SCAFFOLD SERVICE

**right
on
time**



**HEAVY
SUSPENDED
SCAFFOLDING**



SIMPLY CALL UP

MILLS

TELEPHONE YOUR NEAREST DEPOT

BELFAST • BIRMINGHAM • BOURNEMOUTH • BRIGHTON
BRISTOL • CANTERBURY • CARDIFF • COVENTRY
DUBLIN • EXETER • GLASGOW • HULL • ILFORD
LIVERPOOL • LOWESTOFT • MANCHESTER • NEWCASTLE • NORWICH
PORTSMOUTH • PLYMOUTH • SOUTHAMPTON • SWANSEA • YARMOUTH



Steel and Aluminium
Scaffolding for sale,
contract, or hire. Every
requirement met also
for ancillary equipment,
including: Shuttering •
Steel Props • Trench
Struts • Splitheads •
Hoists • Concrete
Mixers • Cradles •
Builders' Hand Carts •
Barrows • Trestles, etc.

MILLS SCAFFOLD CO. LTD., Head Office and Depot: **TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6** • Tel.: **RiVerside 5026/8.**

