LDING BRITAIN



HOPE'S WINDOWS for POWER STATIONS

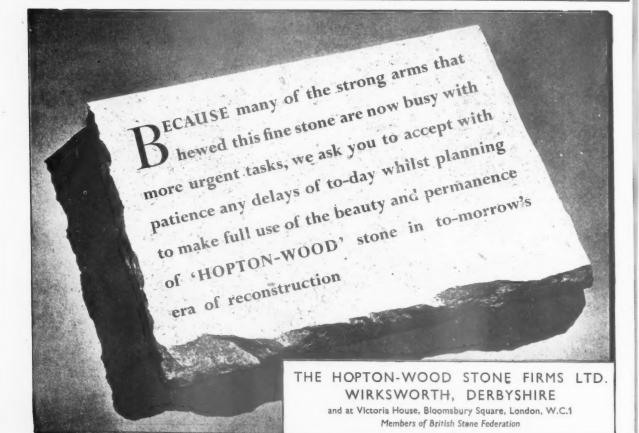
THINKY HOPE & SONS LID.



M. K. ELECTRIC LTD.

"ANTI-FLASH" Sockets were invented by M.K. Provide maximum safety with minimum dimensions. Conforms to B.S.S. 546 and the recommendations of the I.E.E. Made in 2, 5 and 15 amp. sizes, of all types. Illustrated on page 8, etc., of 1939/40 catalogue.

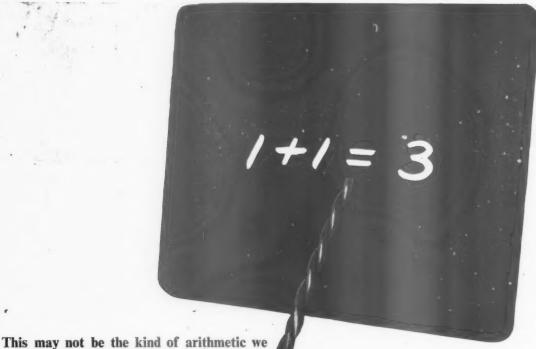
wi.K. 201





VENT-AXIA FOR BETTER AIR CONDITIONS

VENT-AXIA LTD. 9 VICTORIA STREET, LONDON, S.W.1 AND AT GLASGOW & MANCHESTER



learnt at school but it's a fact that if you take two tons of plain bars and add them together the Isteg way you get in reinforcement value the equivalent of at least three tons of plain bars the because an Isteg bar may be final stressed in tension at least you get the total plain bars.

length and weight. In addition to this an Isteg bar keys itself to the concrete throughout its entire length and can't turn or slip so there's no need for hooks or over-lengths. The final result is that with a substantial saving in cost you get a higher factor of safety and stability.

ISTEG STEEL

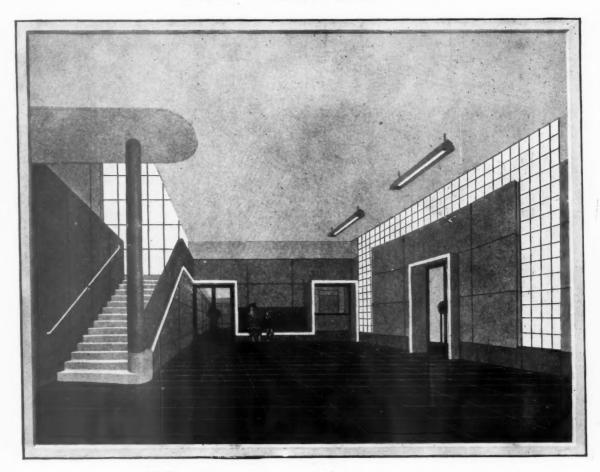
Isteg reinforcement is made by twisting together—cold—two ordinary round mild steel bars between longitudinally fixed heads. This cold working process—which is exclusive to. Isteg—raises the yield point and provides the maximum increase of strength without loss of ductility.

Manufactured by: Guest, Keen & Nettlefolds, Ltd., Cardiff. McCall & Co. (Sheffield), Ltd., Templeborough, Sheffield. 'Twisteel' Reinforcement Ltd., Smethwick. The United Steel Companies, Ltd., Sheffield and

1STEG STEEL PRODUCTS LIMITED (SALES)
8 BUCKINGHAM PALACE GARDENS, LONDON, S.W.1 · PHONE: SLOANE 9210

School Entrance Hall

DESIGNED BY MR. JULIAN LEATHART, F.R.I.B.A.



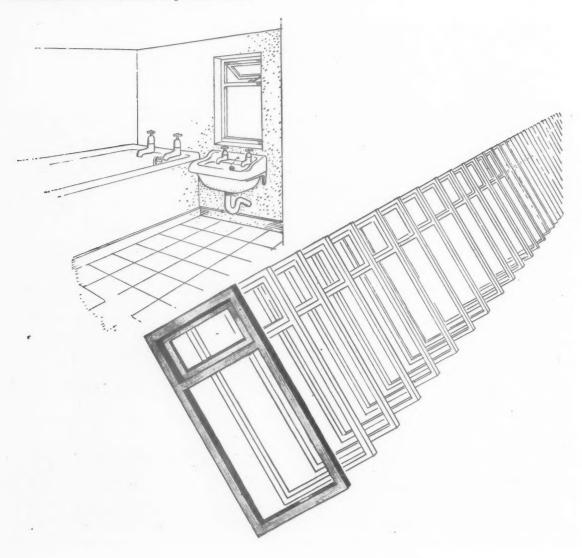
Mr. Leathart, whose drawing is reproduced here, is responsible for some of our most modern school buildings. He is one of a number of architects and designers we have invited to give us their ideas about the application of Warerite laminated plastics to post-war design.

In its purely utilitarian application Warerite is the perfect material for splash-backs, table tops and bar and shop counters, being highly resistant to wear and to the action of water, heat, acids and alcohol. In its more decorative applications its scope extends beyond the realm of architecture. It gives the furniture designer a new medium. For the interior decoration of ocean liners, railway coaches and passenger airplanes it holds many possibilities. After the war Warerite veneers and wall panels will be available in a wide range of colours. Until then it is a name to remember.

The Warerite panels covering the walls are carefully graded in colour to achieve evenly balanced natural lighting in all parts of the Hall. The deeper tones are placed on the walls which catch most light, while the lighter tones are placed adjoining the window openings and surrounding the entrance, which is set in a wall of glass bricks.

The joins between the Warerite panels are covered with an extruded plastics T-section in contrasting colours. Other details carried out in plastics are the door handles and fluorescent lighting fitments in moulded plastics and the stair handrail of extruded plastics on a metal tube core.

WARE RITE LAMINATED PLASTICS MADE BY WARERITE LTD . UNIT OF BAKELITE LIMITED . WARE, HERES



Single light windows for bathrooms, lavatories and larders are obtainable from the EJMA range of Standard Wood Casements in a number of combinations of fixed light or opening sash, with or without vent.

Wooden windows made quickly, made well and attractive to look at, that is the Time range. And that is why they have been adopted by Austins to be made by their method.

AUSTINS

LONDON, E.6

[LIMITED]

GRAngewood 3444

. for public service is the highest reward which individuals can earn for their work in the national effort.

> So, too, in a wider sense, the approval by Government Supply and Production Departments of "PARKERIZING" and "BONDERIZING" on a multitude of diverse components is a distinction which we are proud to claim, and an achievement which we feel justified in publicising.

> Our policy of constant devotion to the task of serving industrial metal finishing requirements, backed by years of patient experimental work, energised by a flexible outlook to meet changing conditions-has earned its recognition, namely the goodwill of and an established reputation in both official and industrial circles.

> This policy will continue both for the duration and afterwards when industry reverts to peace-time production.

PARKERIZED Regd, Trade Mark

METAL FINISHING PROCESSES

BONDERIZED Regd, Trade Mark

SPRA-BONDERIZED

Three words meaning rust-proofed with PYRENE Chemicals



for all copying processes

Ilford Limited manufacture a comprehensive range of document papers suitable for every copying process and for use with all types of copying machines.

Ilford Document Papers are coated with a high speed, contrasty, orthochromatic emulsion which yields excellent negatives with intense blacks and clean white lines, and are available to suit every subject. These papers are supplied in cut sizes or in rolls to fit the standard document copying cameras.

Ilford Limited are always willing to give expert advice on all matters concerning the application of Photography to plan copying in Engineering and other Industries.

Ilford Document Paper is made in grades as under:-

ILFORD Document Paper No. 4

Recommended for ordinary commercial use—coated on standard grade paper which is fairly thick and strong. Highly orthochromatic.

ILFORD Document Paper No. 4T

Highly orthochromatic. Coated on a thin tough base for use when copies are required for mailing.

ILFORD Document Paper No. 1

Coated on a smooth, thin rag base. Highly orthochromatic. Recommended for making copies that have to remain in perfect condition over long periods.

ILFORD Ortho Photomechanical Paper

for copying intricate plans containing fine lines, giving cleaner and stronger reproductions.

ILFORD Photomechanical Paper

A slower paper coated with a non-ortho emulsion.

The Ilford booklet "Photography Applied to Plan copying in Engineering and other Industries" describes several convenient processes applicable in every drawing office.

ILFORD LIMITED, ILFORD, LONDON



The SMITH TWO-WAY reinforced fireproof floor can be employed immediately for any flooring or roofing requirement. It is constructed with standardised pre-cast hollow concrete blocks.

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.

Limited quantities of TRIANCO TELESCOPIC CENTERS are now available for use in connection with suspended floors of all types,

Write or phone without delay.

SMITH'S

SMITH'S FIREPROOF FLOORS LTD. (Dept. A)
IMBER COURT, EAST MOLESEY, SURREY. 'Phone: Emberbrook 3300 (4 lines)









In the Hayward-Tyler borehole pump, the 'wet' motor is coupled to the pump under water. The motor is designed to use its environment, that is, it is cooled and lubricated by the water, which flows freely throughout the windings. There are only two bearings, and the efficiency is high. The units give the highest output from great

depths at the lowest cost. The unit runs extremely quietly, it is easy to instal with portable tackle, and has the advantage of low headroom. For more detailed information write (enclosing penny stamp) for an illustrated booklet, to the designers and makers, Hayward-Tyler and Co. Ltd., Shell Mex House, 76, Strand, London, W.C.2

HAYWARD-TYLER

for A.C. mains wet motor pump

1944/5 MODELS AVAILABLE TO PRIORITY USERS







Season to taste . . and serve immediately . .

You bet, Mrs. Beeton . . and there'll be a voice from the garden door . . "Come on, John, it's ready!" . . a spotless tablecloth . . knife right . . fork left . . a glass of ale sparkling in its crystal glass . . and "it" will have been cooked by gas. Perfectly cooked, of course. Edgars are ready now to place their long experience and service at the disposal of those whose job it is to plan and prepare installations for the use of gas in the future.



WM. EDGAR & SON, LTD.

Gas Apparatus Manufacturers and Contractors

BLENHEIM WORKS • HAMMERSMITH • LONDON, W.6.

Telephone: RIV. 3486

FOR DESIGN ε CRAFTSMANSHIP IN POSTWAR RECONSTRUCTION

THE MORRIS SINGER COMPANY
FERRY LANE WORKS - FOREST ROAD - WALTHAMSTOW - E.17.
PHONE: LAR: 1055. TELEGRAMS MORISINGER. WALT. LONDON.

ARCHITECTURAL METALWORK
METAL WINDOWS
STAINED & LEAD GLAZING



PRODUCTION FOLLOWS RESEARCH

Aluminium and its alloys have given immense service to the war effort, for production has followed research. Aluminium and its alloys have taken many shapes, and performed many tasks as a result of bold, inventive thinking that began in a laboratory. Research continues while production increases,

ALUMINIUM UNION LIMITED

GROSVENOR HOUSE, PARK LANE, LONDON, W.1

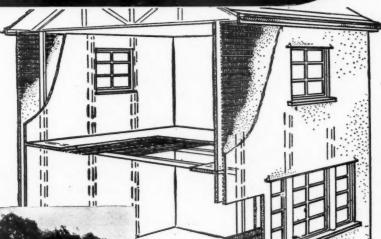
HY-RIB

THE RIBBED METAL LATHING

provides a keyed base for Walls and Floors

in FRAMED HOUSE CONSTRUCTION

Below: Illustration of framed house with external walls and first floor in Hy-Rib construction. This house is one of over 5,000 domestic dwellings constructed in the inter-war period in which the external walls were of cement rendering on Hy-Rib. The photograph was taken in May 1944, when the house was 22 years old.



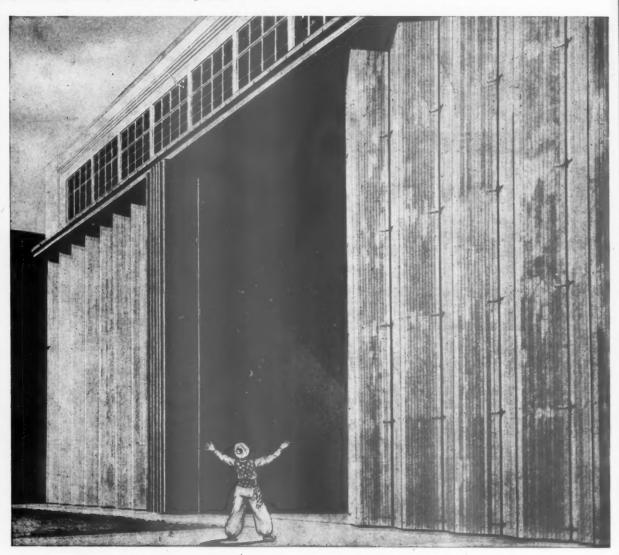


Above: Diagrammatic drawing of framed house showing Hy-Rib in walls and floor.

HY-RIB SALES, 6, COLLINGHAM GARDENS, EARLS COURT, S.W.5

Telephone: Frobisher 8141

Telegrams: Truscon Fulroad London



'OPEN ESAVIAN!'

With a soft plunk, forty tons of door glides open as softly as an apple falls. Where there was braced steel, there is now a gaping 300-ft.-wide opening. Where there was sealed protection against the worst the wind and the weather can do, there is now unobstructed access.

This is no miracle but a sound engineering principle that has withstood every test since it was first applied in 1917. This principle, the Esavian principle of "slide and fold," is of limitless adaptability. Already it embraces giant hangar doors at airfields and cunning little loggia doors for cocktail terraces.

THE ESAWIAN PRINCIPLE

FOR FOLDING DOORS AND WINDOWS

ESAVIAN LIMITED, STEVENAGE, HERTS • TELEPHONE: STEVENAGE 500
Also 181, HIGH HOLBORN, LONDON, W.C.I. TEL: HOLBORN 9116 and 39, WEST CAMPBELL ST., GLASGOW, C.2. TEL: CENTRAL 0867



A PRE-WAR EXAMPLE OF FIREPLACE CRAFTSMANSHIP

When the time comes to turn again to the tasks of peace, we look forward to making renewed progress in a tradition of craftsmanship we have made essentially our own.

BRATT COLBRAN LIMITED 10, MORTIMER STREET, LONDON, W. 1.

SPECIALISTS IN SOLID FUEL, GAS AND ELECTRICAL HEATING

PLUSTICITY

"BIRMABRIGHT" implies plasticity ... "plus":

plasticity being an outstanding characteristic
of the B.B.3 and B.B.5 alloys, which can be
of the B.B.3 and B.B.5 alloys, which can be
of the B.B.3 and B.B.5 alloys, which can be
of the B.B.3 and B.B.5 alloys, which can be
of the B.B.3 and B.B.5 alloys, which can be
of the B.B.3 and B.B.5 alloys which can be
of the B.B.3 and B.B.5 alloys available in
plasticity being an outstanding confidence.

The "plus" characteristics are ... + 1

of the "plus" characteristics are ... + 1

of the "plus" characteristics are ... + 1

of the B.B.3 and B.B.5 alloys available in
plus the standard of corrosion resistance ... + 8

of the B.B.3 alloys available in
plus the B.B.3 alloys available in
treatment ... + 9

of the B.B.3 alloys available in
plasticity being an outstanding characteristic

of the B.B.3 alloys available in
plasticity being an outstanding characteristic

and B.B.3 alloys available in
plasticity being an outstanding characteristic

of the B.B.3 alloys available in
plasticity being an outstanding characteristic

and B.B.3 alloys available in
plasticity being and B.B.3 alloys available in
plasticity being an outstanding characteristic

and B.B.3 alloys available in
plasticity being and B.B.3 alloys available in
plasticity being and B.B.3 alloys available in
plasticity being an outstanding characteristic

and B.B.3 alloys available in
plasticity being and B.B.5 alloys available in
plasticity being alloys available in
plasticity being and B.B.5 alloys available in

So "BIRMABRIGHT" has something . . . Plasticity plus nine other desirable qualities. One word describes its virtues . . . "PLUSTICITY." In case you do not know, "BIRMABRIGHT" is the registered trade mark of the well-known aluminium-magnesium-manganese alloys manufactured by . . .

BIRMETALS LIMITED QUINTON BIRMINGHAM.









When London crowds were wild with joy on hearing the news of the Relief of Mafeking, we were celebrating our Company's twenty-fifth birthday. We took pride in the fact that we had been responsible for many important buildings erected during the century just passed. A complete list of those buildings is far too long to enumerate here, but the following are well remembered. GOVERNMENT BUILDINGS: Woolwich Arsenal, Caterham Barracks, Waltham Abbey. LOCAL AUTHORITY BUILDINGS: Surrey County Buildings, Westminster Guildhall, London School Board Offices. LEARNED SOCIETY HEADQUARTERS: Royal College of Surgeons, Royal College of Physicians. COLLEGES: King's College, London; Wellington College. MUSEUMS: Natural History Museum, Tate Gallery. HOSPITALS: St. George's, St. Thomas's, St. Mary's, Middlesex, Westminster, Colney Hatch. SHOPS: Army & Navy Stores, Peter Robinson's. OFFICE BUILDINGS: Union Bank of London, British Equitable Assurance Co., Commercial Bank of Scotland, Guardian Assurance Co., Sun Fire Office, Employers' Liability Insurance Co.

Soon, London crowds will be welcoming a greater victory and we shall be able to turn our energies once more to creative building.

HIGGS AND HILL LIMIT

BUILDING AND CIVIL ENGINEERING CONTRACTORS

COVENTRY

CROWN WORKS WARWICK ROAD LONDON, S.W.8 ST. PAUL'S STREET

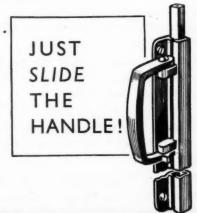
LEEDS



Arens have made far-reaching advances in the art of window opening without fuss or bother and with the minimum of effort-such patience-wrecking appendages as rods, levers and cords, are relics of a bygone age.

In the modern building, windows, roof-lights and top-hung ventilators are simply, neatly, and efficiently operated by the ARENS CONTROL.

For post-war planning you will want to know the application of our control to your particular problem, so write to us now for Information Sheet No. 441 which describes ARENS WINDOW CONTROLS in detail and indicates some of their many applications.



CONTROLS, LTD. EAST CROYDON, SURREY

TUNSTALL ROAD

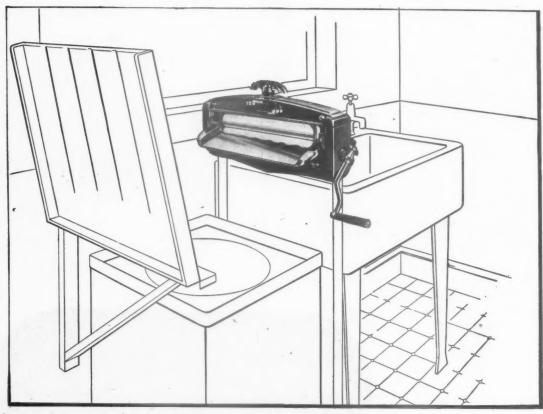
Telephones: ADDiscombe 3051/4

Telegrams: Unicontrol, Phone, London

831/3 WARWICK ROAD, BIRMINGHAM, II Telephone : Acocks Green 0786.

*

"Her New Deal-pleasein the post-war world"



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

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

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

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

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

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

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

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

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

If in your work you find any problem in connection with the fixing of wringers, please get

in touch with us for advice or assistance. We will have much pleasure in helping you. ACME

WIMPEYS AT WORK

The use of plant in planned building construction



PLANT IS PART OF THE PLAN

nd

em ith ne.

en

at

ies

tal

er-

h-

ds

th

The progress chart which is the invariable groundwork of every Wimpey job is passed for action only when the needs and resources of all departments interlock. The chart must obviously cover not only men, materials and transport . . . but also plant.

When Wimpeys start a job on site, the job is already in chart form, detailed and complete. And among the main factors which enable staff on site to work to exact schedule is their certain knowledge that the right plant will reach them. That whenever and wherever the job demands this type of crane or that size of excavator - it will be there on time.

The smooth working of this system is ensured by two other important advantages of Wimpeys' organisation. Wimpeys have a huge pool of up-to-date plant on which to draw. And the plant is kept in first-class order by a network of Wimpey maintenance depots: 7 acres near London, 10 acres at Glasgow, large depots at Cardiff, Birmingham, Manchester, Nottingham and Newcastle, and mechanical engineers all over the country.

This planned use of a vast range of modern plant is built on Wimpeys' experience during sixty years of steady growth.

WIMPEY

GEORGE WIMPEY AND COMPANY LIMITED TILEHOUSE LANE DENHAM MIDDLESEX

Visible Contact

IRONCLAD INDICATING SWITCH UNITS

POINTS OF PERFECTION

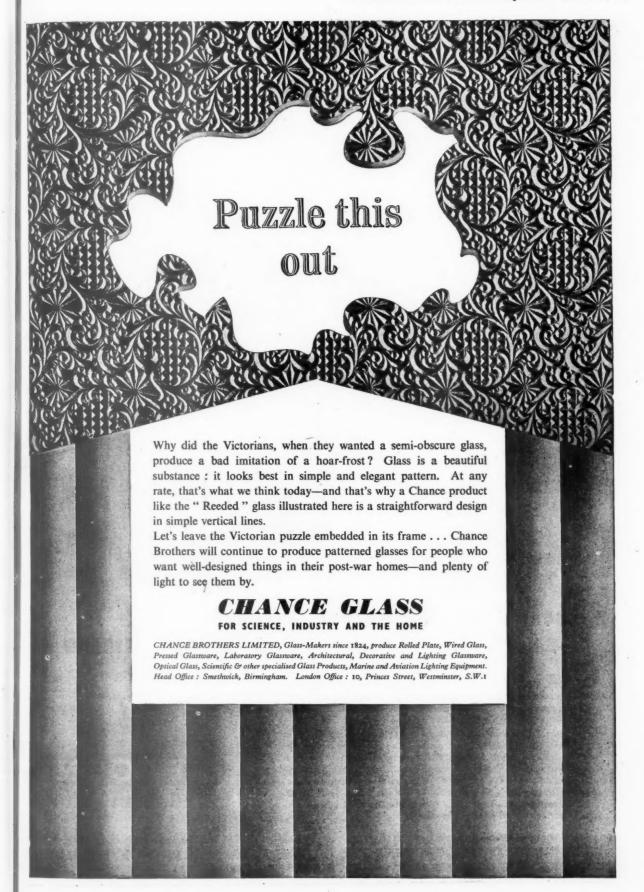
The installation of "BRITMAC" Ironclad Indicating Switch Units, is an effective method of ensuring safety and economy, the latter being of vital importance in the present "Battle for Fuel." The Switch Unit Illustrated, Catalogue Number P. 4391, is the I-section pattern. The Indicating Switch Units are available in one and two sections, 5-amp. and 15-amp. capacity, and can be fitted with either Single or Double Pole Switches. The outstanding quality of "BRITMAC" Ironclad Accessories is fully maintained in this range of Indicating Switch Units. May we send you full details of the "BRITMAC" Ironclad Range?

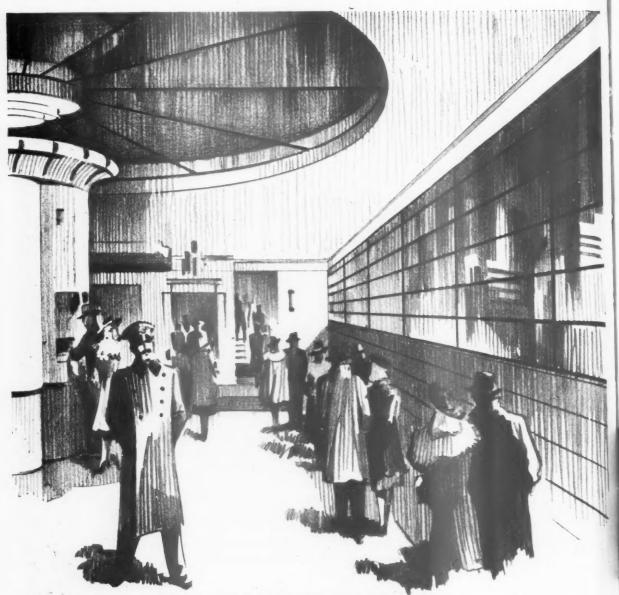
ELECTRICAL ACCESSORIES
FOR ALL WAR-TIME INSTALLATIONS

C.H.PARSONS.LTD

Telephone: ACOCKS GREEN 1642 5 LINES Britannia Works Wharfdale Rd. Tyseley BIRMING HAM 11

Telegrams: HECTOMAR BIRMINGHAM





LOOKING AT THE FUTURE THROUGH A BEACON WINDOW

ONTEMPORARY architecture has rightly demanded—in windows for modern buildings—maximum light, maximum strength, min.mum frame sections—and simplicity of form and design in keeping with enlightened living and working.

The range of Beacon Metal Windows meets these demands; is a revolutionary achievement in modern window technique made possible by a century of engineering experience. Standard designs in a variety which will leave full scope for the architect's individuality are depicted in our catalogue. Some of these designs can be supplied for priority orders now, but all of them will be available as soon as restrictions are relaxed. Why not let us send you a copy in anticipation of your post-war needs.



Telegrams: Windows, Wolverhampton.

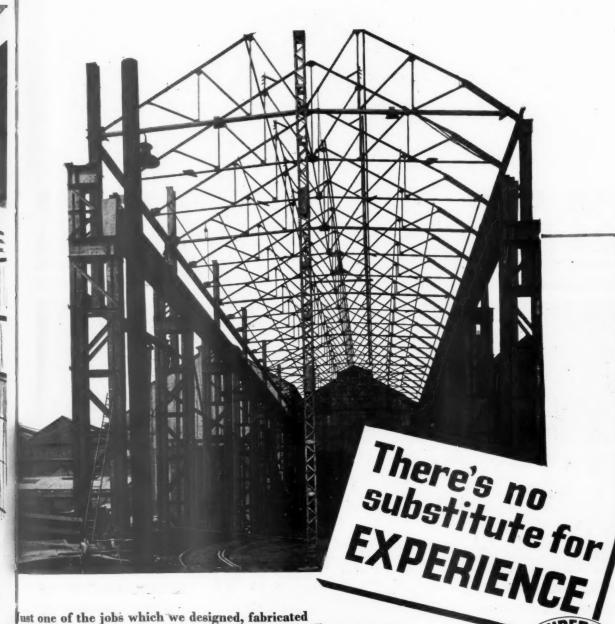
Telephones: Bilston 41944/5 (3 lines).

JOHN THOMPSON BEACON WINDOWS LTD. BEACON WORKS, WOLVERHAMPTON London Office: Imperial House, Kingsway, W.C.2. Telephones: Temple Bar 3216 (3 lines)

lust one and the rour disional E

CONST

Contract ADMIRA



ust one of the jobs which we designed, fabricated and then erected. Our Design and Drawing Offices are at our disposal for any type of work in the category of Constructional Engineering and Bridge Building.

We are fully equipped to deal with Light, Medium and Heavy Structures, Welded or Riveted.

WRIGHT, ANDERSON & CO. LTD.

CONSTRUCTIONAL ENGINEERS & BRIDGE BUILDERS, GATESHEAD, CO. DURHAM.

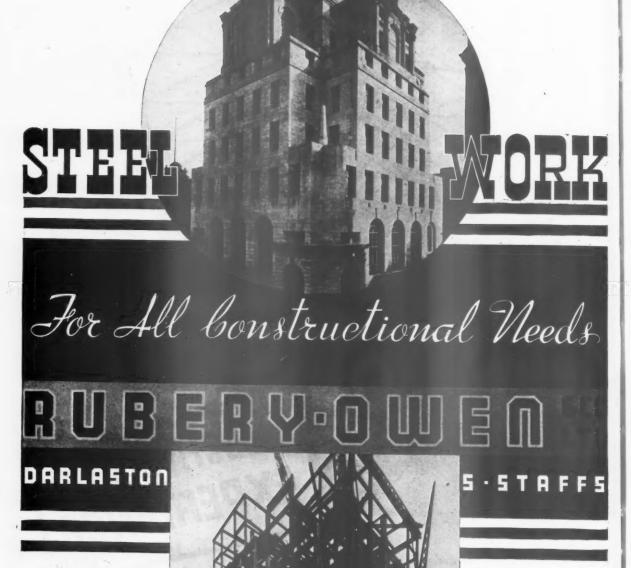
LONDON OFFICE: REGENT HOUSE, KINGSWAY, W.C.2.

DESIGN FABRICATION E ERECTION E

Telephones: Gateshead 72246 Holborn 9811
Telegrams: "Construct, Gateshead"

tore to t

DMIRALTY, WAR OFFICE, AIR MINISTRY, MINISTRY OF WORKS, CROWN AGENTS TO THE COLONIES



LONDON IMPERIAL BUILDINGS. 56 KINGSWAY. W.C.2. BIRMINGHAM 3; LOMBARD, HOUSE, Gt. CHARLES St.

in comm time need pages. a copy of

חו

00

Titles papers by the

BERY TCPA bury I

B_{hib} collab

CAR in co Bros.)

CHI tion, (Spor

tion.

film. with

L o Plan sor,

In year Mar Ruck the in Sep pre

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



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

DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

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

BERWICK-ON-TWEED. When We Build Again. Exhibition and Film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.).

BUXTON. When We Build Again. Exhibition and Film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.)
OCT. 14-21

CARDIFF. When We Build Again.
Exhibition and film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.)
SEPT. 16-23

CHELMSFORD. The English Town: Its Continuity and Development, Exhibition, and When We Build Again. Film. (Sponsor, TCPA.)

D'IRHAM. The English Town: Its Continuity and Development. Exhibition. (Sponsor, TCPA). Oct. 4-18

When we Build Again. Exhibition and film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.) Nov. 11-18

GREENFORD. When We Build Again. Exhibition. Speaker, Miss E. E. Halton. At 8 p.m. on September 14. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.)

L ONDON. John Charrington. The Place of Solid Fuel in Town and Country Planning. At 2, Savoy Hill, W.C.2. (Sponsor, TCPA.) 1.15 p.m. SEPT. 21

Presentation to Mr. W. J. Rudderham. In recognition of his completion of 25 years of service as Secretary of the London Master Builders' Association, Mr. W. J. Rudderham is to be the guest of honour of the Council of the Association at a luncheon in the Dorchester Hotel before its September meeting, on September 21. A presentation is to be made to him by members of the Council.

Sir Albert Howard, Fresh Food and Town Planning. At 2, Savoy Hill, W.C.2. Chairman, Lord Portsmouth. (Sponsor, TCPA.) 1.15 p.m. Oct. 19

A. W. Kenyon, Chairman of the RIBA Central Planning Advisory Committee. The National Plan. At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA). 6 p.m. Nov. 14

T. P. Bennett. The Architect and Organization of Post-War Building. At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA). 6 p.m.

NORFOLK. Your Inheritance. Exhibition. (Sponsor, HC.) SEPT. 7-30

S PALDING, LINCS. The English Town:

Its Continuity and Development. Exhibition. At the East Elloe Post-War Housing Committee, Holbeach. (Sponsor, TCPA):

DEC. 4-16.

STRETFORD, MANCHESTER. When We Build Again. Exhibition and film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.) SEPT. 30-OCT. 7

SUDBURY, SUFFOLK. The English Town: Its Continuity and Development. (Sponsor, TCPA.)

SWADLINCOTE. The English Town: Its Continuity and Development. Exhibition. (Sponsor, TCPA.) Oct. 24-Nov. 8

Y ORK. The Artist and the Church. Exhibition. At York Cathedral. (Sponsor, CEMA.)



NEWS

THURSDAY, SEPTEMBER No. 2589.	7, Vol.	
News		169
New Grid System		170
This Week's Leading Article	le	171
Astragal's Notes and Topic	s	172
Letters from Readers		173
Physical Planning Suppler Are the Aged being left o Planning? Hydro-Ele Development in the Highl Fire Station at Rowley R	ut of ectric lands	175
Staffordshire Designed J. Blackburn.	by	180
Information Centre	• •	183
Societies and Institutions		185
Prices		xxxiv

Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

* means spare a second for this, it will probably be worth it.

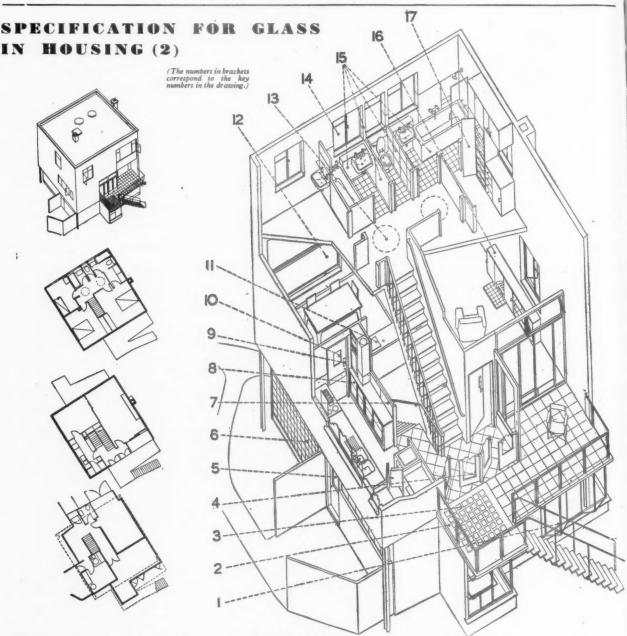
** means important news, for reasons which may or may not be obvious.

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

Until he has a job or unless he has one waiting for him, NO MAN WILL BE DEMOBILIZED.

This is the basis of a scheme prepared by a committee under the chairmanship of Mr. Malcolm McCorquodale, Parliamentary Secretary to the Ministry of Labour, for the consideration of the Cabinet. The scheme would work like this:—Instead of a schedule of reserved occupations there is to be a list of priority occupations which will offer first release from the Forces. Most obvious industries on this list are building, coal mining, and teaching. Other industries will be added during the turnover from war to peace. The miner or builder who has been longest away from Britain—in India, or with the Eighth Army, or in a prisoner-of-war camp—has a higher priority than one who has put in all his service in home bases. Demands by the employers for the return of specified experts for building up a business or preventing a closure will be met. Degree of domestic responsibility. A married man with children will rank before a married man without children or an unmarried man. Compassionate release may override these considerations.

FACTS ABOUT GLASS FOR ARCHITECTURAL STUDENTS



SUN ROOM (1): Folding windows glazed with Clear Polished Plate Glass.

BALUSTRADE (2): Georgian Wired Cast Glass.

BALCONY (over sun room) (3): "ARMOUR-LIGHT" Toughened Lenses in reinforced concrete.

Doors (4): Clear Polished Plate Glass.

LAUNDRY Door and Window (5): Georgian Wired Cast.

HALL (6): Insulight hollow Glass Brick panel wall.

KITCHEN Walls (7): "VITROLITE" to dado height.

Cupboard doors (8): 24 oz. Sheet Glass or Clouded Cathedral.

(9): Plate Glass fingerplates to doors. Service door (10): Panel in Double Rolled Cathedral. Cooker doors: "ARMOURPLATE."

Refrigerator shelves: Plate Glass. Hotplate (11): "ARMOURPLATE."

DINING ROOM Window (12): 4" Polished Plate Glass to vertical sliding sach window.

FURNITURE: 4" Polished Plate Glass to tops throughout.

LANDING (13): Rough Cast Glass roof dome to light interior.

BATHROOM and W.C. Windows (14): Pinhead Morocco provides light with privacy.

Walls: "VITROLITE" in ashlar sizes for w.c. (15) "VITROLITE" panels to dado height for

bathroom, and for access panel in front of bathroom duct and bath panel.

BEDROOMS: "VITROLITE" splashbacks and Plate Glass shelves to washbasins.

LIVING ROOM (16): "ARMOURPLATE" top to mantelpiece.

DRESSING ROOM (17): Mirror to door and reverse side of cupboard door.

SILLS: "VITROLITE" in bedrooms, bathroom and kitchen.

GARAGE DOORS and FRONT DOOR: Fire-resisting glazing: Georgian Wired Cast.

LARDER Window: Anti-fly Glass.
Insulation: Foam Glass or Fibreglass board.

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

LONDON OFFICE & SHOWROOMS AT 63 PICCADILLY, W.1 - TELEPHONE: REGENT 4281 where architectural students may get advice and information on all questions relating to the properties of glass and its use in building. "ARMOURLIGHT," "ARMOURPLATE" and "VITROLITE" are the registered trade marks of Pilkington Brothers Limited.

Fro

ARTITHE I wealth art. . patroi carica an althe p the o' The a first a year the b" Pos" We

woul The set on The c Advis meeti Book panel will mem trees. grou impo own it sh ing an a

Cri MI EA Los mo Ch H. He approvice

the

a no

vic int figure The and ben kn do I

win Ch ha ap ing gla No Co

From AN ARCHITECT'S Commonplace Book

ARTISTS' GOLDEN AGE. [From The Pre-Raphaelite Tragedy, by William Gaunt (Jonathan Cape)]. The latter half of the Victorian Age was a golden time for painters and sculptors. The national wealth was steadily mounting, and of every rich man's surplus something went to buy a work of art. . . . In the 'seventies and 'eighties each number of Punch had its joke about a painter, or his patrons. The artists made fortunes. The studios they had specially built for themselves, palatial caricatures of the top-lit bohemian attic, remain the astonishment and envy of subsequent generations, an abnormal growth unique in architecture. . . . At a dinner-party in the 'eighties, according to the publisher Kegan Paul, the host was a famous surgeon, the guest of honour was a royal prince, the other guests included the then acknowledged leader of the English Bar, and Millais, among others. The prince was interested in the question of professional incomes. "What," he inquired, "does a first-rate surgeon make in his profession?" "I should say," answered the surgeon, "fifteen thousand a year would be the mark." "And what does a great barrister make?" "I suppose, Sir," replied the barrister, "twenty-five thousand." Millais was the third to be questioned, on a painter's income. "Possibly, Sir, thirty-five thousand a year." "Oh, come, come," said the prince, incredulous. "Well, Sir," returned Millais, nettled, "as a matter of fact last year I made forty thousand, and it would have been more if I had not been taking a longer holiday than usual in Scotland."

The Royal Society of Arts has set up a consultative council on WAR MEMORIALS. The council, known as the War Memorials Advisory Council, will hold its inaugural meeting this month. Apart from a vellum Book of Remembrance or an inscribed panel recording the names of the fallen, the committee, says the Evening Standard, will recommend the garden type of memorial, parks and open spaces, memorial trees, playing fields and children's playgrounds, purchase of hilltops for public use, and purchase of hilltops for public use, and purchase of buildings of historic importance. London will probably have its own memorial—and one suggestion is that it should take the form of a park surrounding St. Paul's Cathedral. Leicester plans an after-care home for men and women who have been wounded or injured during the war. Surrey County Council has made plans for community centres catering for young and old. Brighton plans to have houses which shall be let rent free or at a nominal rent to the families of those who have been killed.

Criticism of the design of a proposed MEMORIAL TO THE LATE EARL OF LONSDALE in Lowther Parish Church, Westmorland, was made by the new Chancellor of the diocese, Mr. H. King, at Carlisle Cathedral. He asked Mr. Peel, a churchwarden, who appeared to support the application by the vicar and churchwardens—says The Times—why the figure of St. Cuthbert had been introduced. The window contained the figures of the Good Shepherd, a hospital nurse, a wounded man, and some sheep. There were pictures of a sheep dog trial and a sheep shearing. What had St. Cuthbert to do with sheep? Mr. Peel.—I don't know. The Chancellor.—Neither do I. I don't want to hurt anybody's feelings, but I am not satisfied that this is the right window to record this great man. The Chancellor added that nobody seemed quite happy about the design and adjourned the application until the next court. Postponing an application to introduce a stained glass window in Holy Trinity Church, Northwich, Mr. H. King, at Chester Consistory Court, pointed out that the inscription referred to St. Wenceslas of the famous carol, and asked: What right

rocm

op to

verse

room

isting

ding

281 ling.

ited.

have I to canonize a seventh-century king? He deferred consideration for the inscription to be amended by the artist and pointed out that if he had granted the application he would have been "shot at in public."

*

Village sanitary conditions are disgraceful and the lack of water A RATIONAL SHAME.

A KAIIONAL SHAME. This opinion is expressed in a report of a survey carried out in England and Wales by the National Federation of Women's Institutes. The sanitation of Cerne Abbas, Dorset, has "not much improved since Tudor days," the report said. At Lyminge, East Kent, evacuees have decided to "rush back to the towns" at the end of the war because the sanitary conditions make life a burden. About 2,500 out of 3,500 villages answering the questionnaire, it is stated, have a piped water supply to some part of the village, about 2,000 villages report that their water supply is tested, but some institutes say that contaminated wells are still in daily use. In 21 countries over 50 per cent. of the village schools have earth or bucket lavatories. At Great Rissington, Gloucs, is a "sanitary inconvenience called a vault which has not been emptied since the school was built 40 years ago." "The school at Cookhill, Worcs, has had no water supply since its well in the burial ground was condemned," the report added. "The drainage from 12 council houses in Warmington, Northants, goes into an open dike which runs through the centre of the village and under the bakehouse."

In recent flying bomb attacks LINCOLN'S INN, LONDON, WAS DAMAGED.

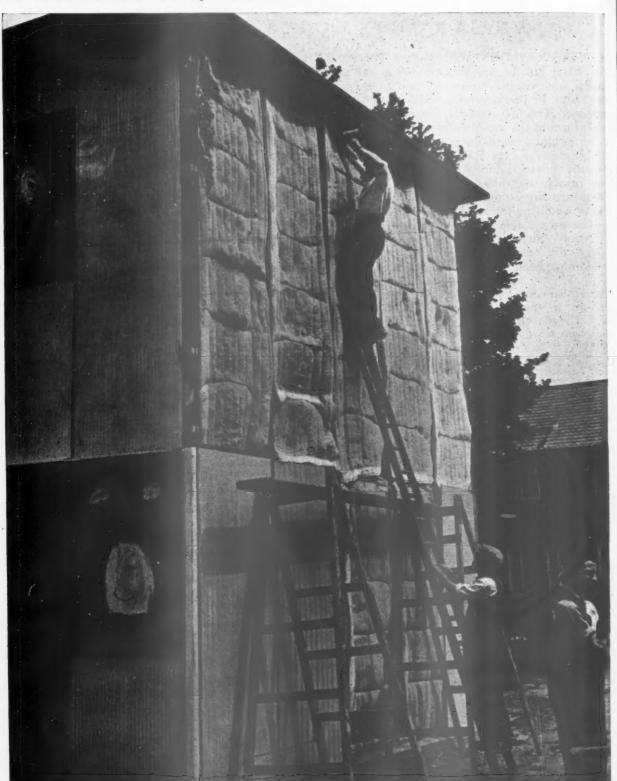
Windows and woodwork of the gatehouse facing Chancery Lane, which bears the date 1518, and of "old buildings," a block of lawyers' chambers, and residential flats adjoining, were shattered. There were residents in the flats, but nobody was hurt. Leaded windows of the hall and chapel, some of stained glass, were broken, but the main fabric was apparently not affected. A tablet on the chapel wall records that on Wednesday, October 13, 1914, a bomb from a Zeppelin fell outside the building causing damage.

There has been such a demand for the War Damage Commission's pamphlet COST OF WORKS (Form ROD.1) that the supply for free issue has been exhausted. The pamphlet has now been placed on sale, and may be obtained from HM Stationery Office, or through the booksellers, at 3d. per copy, or 25 for 5s.

The President of the Board of Trade has asked the SCHOOL FURNITURE INDUSTRY, together with interested Trade Unions, to form a Post War Reconstruction Committee for the Industry. The members of the committee are as follows:—R. J. W. Appleton (chairman), managing director, The Educational Supply Association, Ltd., Stevenage; G. H. Beckett, national organizer, Amalgamated Society of Woodcutting Machinists; Vincent Chatwin, managing director, Messrs. Kingfisher, Ltd.; Lindsay S. Harvey, secretary and joint manager, Messrs. James D. Bennet, Ltd.; J. Peirse, works manager, North of England School Furnishing Co., Ltd.; A. C. R.. Preston, director, Messrs. Wake & Dean, Ltd.; B. Sandercock, executive councilman, Amalgamated Society of Woodworkers; A. G. Tomkins, secretary, National Federation of Furniture Trade Unions; K. Varney, managing director, Messrs. Mann Egerton & Co., Ltd.; secretary, L. B. Dyball, A.C.A. This committee is now sitting, and will be presenting its report to the President of the Board of Trade at an early date.

There is a move to MAKE
THE NORFOLK BROADS
EVERYBODY'S PLAYGROUND, after the war.
The move will be made at a conference

The move will be made at a conference to be held on the post-war future of the Broads. The authorities are seeking the support of local councils in preventing haphazard development and jerry-building. Parts of the Broads may be reserved as a sanctuary for wild fowl.



New Grid System

An important housing experiment now being carried out is the pair of steel-frame Braithwaite houses at present under construction at the LCC Watling Estate at Hendon. A late stage of building is shown above. The value of the experiment lies in the system used rather than in the design of this particular pair of houses, for it has the

advantages of standardization to a modular grid, and dry, quick, precision assembly with semi-skilled labour; moreover, it allows ample scope for the individual designer. The Hendon houses, designed by Mr. F. R. S. Yorke, were described by Astragal on July 13 and will be fully illustrated in a future issue of the JOURNAL.

Speaking at Cowley about HOUSES AND MOTOR CARS, Sir Miles Thomas said it might be worth while for some of our economic theorists to go into the question of whether there is going to be enough sheet steel in the post war era to meet all requirements. Sir Miles Thomas, vice-chairman of the Nuffield Organization, was addressing a meeting of workers at Cowley, Oxford. He said: Most of the pre-fabricated houses promised to our returning soldiers are made of 20 gauge sheet steel. But the same processes are used in the production of sheet steel for car bodies, and it will be a great blow to national prosperity if, due to the failure to give a little arithmetical consideration to the problem, there is not enough steel of this nature to go round to enable cars to be built to absorb employment at home and to help redress the adverse trade balance on export markets. I commend the attention of the high level theorists to this practical problem.

reer.

ce,

lly

The establishment of a national plan is THE FIRST ESSENTIAL TO A HOUSING PROGRAMME, says the RIBA.

This national plan, states the RIBA in a report just published on *Housing* (Simpkin Marshall, price 1s.), should be established for the location of industry and the decentralisation of industrial towns on the lines suggested in the Barlow Report, together with settlement of the problems of compensation and betterment in the matter of land policy. These should be suppleof land policy. These should be supplemented by a national survey of housing requirements, and special support by the Government should be made available to such local authorities which, by reason of local conditions, have difficulty in meeting the conditions of the national plan. Other the conditions of the national plan. points from the report are as follows: In the framework of a national plan, the loca-tion of housing in relation to basic indus-tries and transport should be a national concern, and in relation to physical and social environment and local industry and transport a local concern. If long and term housing needs are to be met efficiently at reasonable cost, a programme for regular output is essential and should be maintained as a deliberate national policy. No residential area should be developed without due regard to its relationto forms of communal life. building by private enterprise would initiate a large proportion of development, it was a large proportion of development, it was necessary that the local authorities should prepare the basic plan so that the private developer might work in conjunction with them. Emphasizing the importance of schemes having a variety of types and sizes of dwellings, the report states that all dwellings, new or old, should conform to certain minimum standards. The provision of the minhum standards. The provision of the following is suggested as an immediate objective:—For every family a separate self-contained house or flat; suitable accommodation for old persons, single persons, and for certified tuberculous patients; adequate space for everyone within the house including storage space. patients; adequate space for everyone within the house, including storage space; adequate light, and air and outdoor space; protection from damp, heat and cold, and from noises and atmospheric pollution; a supply of hot and cold water within the house; adequate facilities for heating, cooking, and washing. ing, and washing.

THEY RETURN WHEN

RCHITECTS who are serving in the Forces are not the only members of the profession forbidden by circumstances to practice their art during these overlong war Many are in civil work which has little or no connection with the constructive nature of architecture; many, whose practices came to an end with the outbreak of war, are working on the uninspiring though necessary war-damage claims which have kept them going to some extent, although in very slender contact with their creative calling; some, not by any means a negligible number, are in Civil Defence; in London County practically the entire Architect's Department of the Council was drafted into this work. Such men and women, all over the country, are waiting to know what the status of architects is to be in that part of the future which will be theirs.

There are now increasing numbers of advertisements in the technical and lay press calling for planning officers in the offices of local authorities. It is this type of work which is likely to absorb most architects after the war, and it is of the greatest importance that they should be assured of an independant allegiance to their employers. In many cases these positions will, as far as we know at present, be carried on under the control of an existing department which has in all probability been concerned more with sanitation and highway problems than with the socially comprehensive work o Planning. The lot of a properly qualified Planning Officer is not likely to be a happy one in such circumstances. He will be hedged around with restrictive and unimaginative limitations, with little or no opportunity of making known to the employing authority the ideas and ideals which his training has fitted him to put into practice.

The Works Departments of local authorities, usually controlled now by a surveyor or engineer, were born of a period when towns spread with a rapidity and lack of control which resulted in the absence of the most elementary sanitary provisions. The first charge of the reformers of those days was almost literally to enable people to breathe and live in safety in the dark galleries of mean streets and to free them at least from the stench of undrained cess-pits. Such pioneer work was well and truly done. The safeguards now assured by the sanitary and structural bye-laws, no longer in their infant stage, are now admired and even adopted by city fathers throughout the entire world, whilst still being constantly renewed by changing circumstances. The need for reform, however, has not receded; its scope has merely been extended by the acceptance of the necessity for a higher standard. It is now falling to the local authorities, with the help of architects and planners, to exercise a far wider social influence, as important in our day as was the public works influence of one hundred years ago.

In these circumstances the architect, as Planning Officer, must now take the lead in creating environment; as necessary an amenity as were the street-widening and main-drainage of the nineteenth century (the former having been done to excess and the latter, in many cases, not at all). To do this great work effectively the Planner should not have to be responsible to another officer of the authority who employs him. In all fairness to himself, and also to the people for whom he is to plan, he should be responsible to the authority alone. It is, in fact, the people who employ him. In any other circumstances his position as a Planner, with all the sociological responsibilities implicit in the title, will be no more than that of an assistant surveyor.

It will therefore be the business of the profession to press urgently for the status of architects employed as Planning Officers to be fully recognized by the employing authorities as independent, and for principal planning positions to be filled only under conditions of direct responsibility to their members. It is up to the profession to show clearly the backing it proposes to give its members in the coming important years. There could not be a more opportune time, when more and more architects are being absorbed into official work. Far from indicating a loss of the independence so valued by the private practitioner, the increase of such positions should give architects opportunities for public service such as they have never experienced before. The influence of the professional body must therefore be prepared to insist on the status of the Architect and Planner being adequately safeguarded.



The Architects' Journal
War Address: 45, The Avenue, Cheam, Surrey
Telephone: Vigilant 0087-9

 \mathcal{N} O \mathcal{T} E &

T O P I C

RECONSCRIPTION

Big Business architects (whose work, by the way, has not always lacked utility or distinction) are evidently having difficult times. One of them complained to me recently of insufficient staff. At present he has only fifty draughtsmen. After the war, however, he hopes to make a fresh start, increasing this number to two hundred to be-

gin with, including at least ten to fifteen fully qualified managing designers.

I ventured to inquire about demobilized architects who might wish to return to or start practice on their own. "It doesn't matter," he replied, with a touch of Gauleiter in his manner, "We must get them in." I could not help wondering how many of our Forces architects who look forward to private life will relish being "got in," or how many of their Forces clients, who long for the personal attentions of peace, will approve of them being "got." But for many there will be no other alter-We need a public plan for native. private practice.

OUT OF THE STRONG

One does not usually look to heavy industries to provide lightness and brightness, but an attempt to bring these qualities into the lives of their workers is being made by Newton Chambers & Co., one of the oldest-established businesses in the Yorkshire heavy steel industry.

A recent article in World's Press News describes the Colour Plan which is being applied by this company to

buildings, vehicles, furniture, machines and machine tools. The twofold aim—which experience has already shown is being achieved—is (a) to prevent accidents and (b) to improve workers' spirits and consequently stimulate production.

For accident prevention, moving parts of machinery are now painted yellow; other dangerous parts are red, and stationary parts blue. It was found that mechanical faults often went unnoticed in their early stages because excessive leakage of oil, which is always a sign of trouble brewing, was undetected when the drips fell on dirty floors. To-day, floor space under machines is painted white, and drips show up as soon as they occur, so that defects can be remedied before they become serious. Factory notice-boards are painted in different colours, according to their different purposes; khaki, for instance, was an obvious choice for notices affecting the company's Home Guard unit.

A scheme of light, bright colours is all the more notable at these works because it contrasts with the drab exterior surroundings of the longindustrialized district in which they are situated. In the canteens and technical schools attached to the factory, the colour plan incorporates mural paintings-one, in the canteen, a hundred feet long. In the Engineering Training Schools, panels of less gargantuan dimensions show modern craftsmen alongside their forerunners in craftsmanship-e.g., a blacksmith as the ancestor of an oxy-acetylene welder, Galileo and George Stephenson as background to a tool-room foreman, who, in the words of World's Press News. "is always a hero in the eyes of the apprentices."

HOMES AND KITCHENS

Architects will praise (perhaps with a faint damn) two new books for the general public, Choose your Kitchen, by Adie Ballantyne (Faber & Faber, 5s.), and the Daily Mail Book of Britain's Post-War Homes (Associated Newspapers, 3s. 6d.).

Choose your Kitchen sums up to date, in a conscientious and informative way, essentials of planning and equipment for all types and sizes of kitchen.



A small heat storage cooker illustrated in Choose your Kitchen. See Astragal's note

There is useful information, with illustrations, on equipment and devices such as heat storage cookers; oven thermostats; instantaneous heaters; refrigerators; machines for washing clothes and dishes, and for ironing; mixers, vegetable scrapers, and so on. For the smallest 20th century home such things are beginning to be regarded as indispensable.

Housewives are asking for facts. Yet nothing is said about cost. The total pre-war bill, even for these few items, would probably have been at least £200; since then prices have risen, and of 20,000,000 British families, how many will be able to afford the outlay? What about hire or hire purchase? Is piecemeal acquisition any solution? Mrs. Ballantyne ignores such ques-But since people are longing to know about kitchens, and her



book does something towards telling them, it deserves a good mark. But before this kind of information can even begin to reach the enormous public waiting for homes, and bored to death with anything that savours of officialese, presentation must be radically improved. Fewer words, more pictures. The matter of this little book is excellent, but its manner, alas, is too impersonal.

The Daily Mail book, by contrast, is bright, pictorial, and chatty. It is true that there is still some harping on that theory of prefabricated feudalism, "The Englishman's House is his Castle," together with the familiar reluetance to admit that rugged and even ragged individuals have not been unknown to thrive in terrace houses, or that there is any difference between town planning and the planning of a

But on the whole, this book marks a step forward. It is by no means sad, for instance, to behold the sun setting on Tudorbethan, and the stars of sanity and simplicity emerging from the firmament of future Olympiads. The Chapter on Getting Together is quite exciting; it suggests that the time may not be distant when these enterprising propagandists of Fleet Street will take the logical step of fitting their ideal homes into an ideal town. Ideal Town Exhibition, here I come.





Left, model of the Daily Mail Village at Welwyn, opened by Earl Haig in 1922, which was first exhibited at the Ideal Home Exhibition. Right, an international housing conference view this village which consisted of 41 dwellings of "varying styles." From the Daily Mail Book of Britain's Post-War Homes. See Astragal's note.



LETTERS

Nathan Fielker (Executive Director, Housing Production Society)

I. Shamah (Managing Director, Pre-built Constructions)

R. S. Morgan

Equipment: Basic Dimensions Needed

SIR,—The need for co-operation in the building industry, both traditional and otherwise, is becoming increasingly evident. Muddling through must come to an end. A co-ordinated effort to establish a dimension or a module must be undertaken which will cover all house parts from the soap dish in the kitchen and bathroom equipment to built-in cupboards and wardrobes. This co-ordination must be undertaken by architects, industrial designers, the building and engineering industries their allied trades.

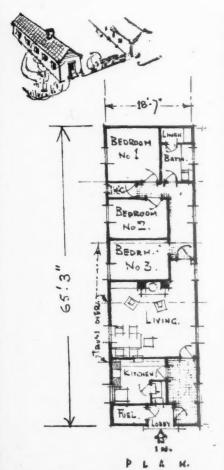
We have talked enough on the subject We have talked enough on the subject of planning and minimum floor areas, and it is getting us nowhere. Let us get down to the basic facts and agree on a basic dimension which will make possible an interchange of equipment not only in the house but between houses. In the past Mrs. Jones has moved and found that her cooker would not fit the new house. This cooker would not fit the new house. may even have influenced her move; the house she liked would not fit her cooker, so her family had to choose a house that would. It is time equipment fitted houses, not houses equipment.

We have had an era, the George V era, We have had an era, the George V era, when houses were designed around furniture. This was admirable because it preserved that well-designed furniture by master craftsmen who took pride in their work but such houses are for the few, almost one would add, the fortunate few. But the time of the few is past. We still have craftsmen who take pride in their work, but they are willing to work for the benefit of the many. This is simple if manufacturers will agree on a basic module which will enable Messrs. X to





Top, the Temple of the Sphinx, Cairo (left) and a view looking up the Eiffel Tower, Paris (right) see letter from I. Shamah. Below, an Army hut conversion scheme, see letter from Sapper R. S. Morgan, R.E.



JAMY BUT CONVERSION SCHEME 10 20

go into production without a separate investigation upon whose products will fit. The merchant who makes locks will know without reference that his lock will fit any without reference that his lock will ht any door; the architect, the engineer, the industrial designer will be able to square up paper on the agreed basic and work his design knowing that he need not worry about prime cost because that will be a question of quantity rather than special pattern. The builders' merchant will quote for quantity and quality in type of material without having to set up special plant.

May we ask those willing to co-operate designers, industrialists, manufacturers to join the attempt towards a rational plan. A conference is to be arranged shortly to discuss this question with a view to establishing once and for all a module that will not only be national but international to include export, the possibilities of which have never been greater. of which have never been greater.

NATHAN FIELKER, Executive Director, The Housing Production Society London

Classic and Romantic

SIR,—I was intrigued by your two photographs in the issue of the Journal for August 10 illustrating the themes dubbed Classic and Romantic. These two conceptions—which run through the spheres of life itself as well as art—are so subtle and elu-sive to grasp, and are made up of such a variety of qualities in different proportions, that sometimes photographs in juxtaposition illuminate these differences as no words

I enclose two photographs of mine which have used in lecturing to illustrate the wo themes. Perhaps if other readers can two themes.

two themes. Perhaps if other readers can supply some more you might run a series of them, to the benefit of both students and your readers.

The first photo is from the Temple of the Sphinx, Cairo. Simple, heavy, massive, bearing down to the earth. The second is of the Eiffel Tower, Paris, looking up from underneath. It is complex, light, airy, and pushes upwards to the skies. The one

constructed from nature's own material, abeit hewn and fashioned by man, and enduring for ever. The other of man-made material, not so durable, prefabricated in the factory and assembled on the site. And how this last expresses all the characteristic grace and precision of the French people.

*This real asse

I. SHAMAH

The Churchill House

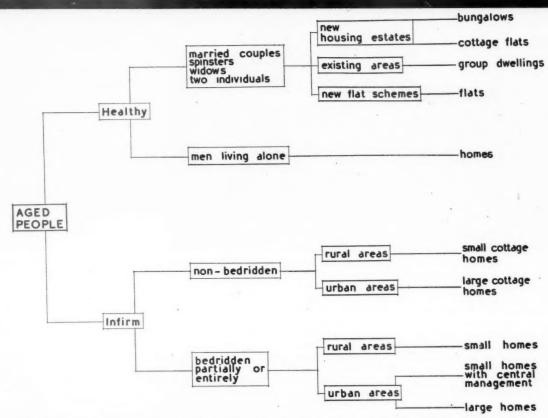
SIR,-The letter from Capt. Jackson, which expresses his theories about the adaptation of Nissen huts for post-war housing accommodation, has brought to my mind a very similar question, and perhaps my few remarks may be helpful in following up Capt. Jackson's very sound and reasonable suggestions.

There is, I imagine, no secret in the fact that huts of many designs beside the Nissen have been built to house Army personnel. Of these, particularly those built at the beginning of this war, many are of surprisingly solid construction. Some of them I can vouch for from personal experience are weatherproof and very comfortable—with features such as boarded floors and wallboard wall linings suggesting their use for post-war housing much more forcibly than the quite undomestic design of the Nissen.

I submit that we ought always to keep these in our minds when considering the adaptation of Service camps for a different adaptation of Service camps for a different use, and as a fuller indication of my meaning I am enclosing a little sketch layout for a particular type of hut I happen to have measured. It will be noticed that in this particular case the existing window positions are used—the whole of the shell of the hut being, in fact, maintained in its present state. Beyond the erection of partitions, the only operations of any account which are necessary are the provision of a ceiling at tie-beam level provision of a ceiling at tie-beam level (9 ft.) and a brick flue for the local heating system in the living room.

MORGAN (Sapper, R.E.) ★This supplement started out with a series of articles on the groundwork of physical planning. Now that chances of realization are drawing near, it will try to record notable developments in theory and practice so that they may be assessed in relation not only to other aspects of physical planning but to the whole picture of national reconstruction.

PHYSICAL PLANNING SUPPLEMENT



The chart above shows an outline plan for housing old people. It is taken from an RIBA thesis, Housing for Old Age, by E. G. Chandler, A.R.I.B.A. The aged are considered in two groups, the healthy and the infirm. The healthy are old people who are able to look after themselves provided they have housing suited to their special requirements; the infirm are those who need assistance or supervision in varying degrees. Provision for the healthy aged will form a proportion of ordinary housing in each neighbourhood unit. The type of home required for the infirm will depend largely on the extent to which they are bedridden, and buildings will be needed for them serving a number of neighbourhood units. The need to make proper provision for the aged in planning is one which, according to population estimates, will become increasingly urgent. In the following article Miss Olive Matthews shows the lines upon which this important aspect of planning should be tackled.

ARE THE AGED BEING LEFT OUT OF PLANNING?

by Olive Matthews

Our national plans for the post-war world should include adequate provision for old people; there will be a great many of them and their welfare should be a matter of interest to us all. At present many of the older generation feel discouraged when they hear the talk of post-war plans; they feel that the world they knew and enjoyed has gone, and that the new one may have no place in its scheme of things for them. Instead of this, we must give them solid reason for a hopeful outlook, by establishing now the principles of a sound policy for their well-being. Let us plan a Better World for the old as well as for the young.

The problem of old age is three-fold—what to live on, where to live, and who is to care for them if they become infirm. The Beveridge Report suggests an adequate income, and therefore this article says nothing on that

subject, but deals mainly with the need for housing for old people who remain active, and refers briefly to the need of better provision for those who need care or nursing.

statistics of age

It is now more generally realized that the number of old people is already very large, and that the proportion of old to young is expected to increase. Full figures are given in the White Paper on Current Trend of Population in Great Britain (CMD. 6358, 1942. Price 2d.), which is quoted on page 91 of the Beveridge Report. It shows that already persons of 65 and over form about 12 per cent. of our population, and that it is estimated that by 1961 they will form 17 per cent. of it. The facts need constant stressing, however, since those who have become enthusiastic over excellent but small voluntary schemes are only too apt to lose sight of the magnitude of the



Left is a group of almshouses at Chandler's Ford, by H. Collins, A.R.I.B.A. By a skilful use of existing trees the usual institutional atmosphere of so much of the housing provided for the aged is avoided. But, as Miss Matthews points out, the only real safeguard is to see that houses are included as a normal part of each neighbourhood unit, and not planned as a separate scheme. Right is an old people's home at Heerlen, Holland, by Peuty and Loos. This type of large, modern institutional building should be avoided here, as it is uncongenial to old people.

problem, It is important to be able to distinguish between the quality and the quantity of work on behalf of the old. For instance, our ancestors often remembered their needs and built beautiful almshouses; many of these still exist and provide a happy background for a fortunate few. In London, for instance, they provide for about 2,500 people -a very small drop in the ocean of need towards providing for, say, a tenth of eight millions. The careful study of statistics is therefore really necessary as a basis for an adequate approach to the problem of housing the Small voluntary schemes—almshouses, trusts, housing societies, war memorials and homes of all kinds -provide happily for a few; they should be encouraged and their numbers multiplied, provided only that their example is used to encourage effort on a larger scale, and never to discourage it. Otherwise they can be dangerous by lulling the general public into believing that the need is already being met.

the necessity for compulsion

In spite of the statistics which prove the demand, it must not be concluded that the old people's case for a suitable share in post-war housing has been won. would be a mistake to be lulled by the voices of Civil Servants or others who soothingly suggest "You may rest assured that this matter is now generally accepted . . or that, to use their favourite phrase, the right steps will be taken "in due course." Eleven years ago that sort of reply was given, but a Question in the House (July, 1935), asking for definite figures revealed that only 9 per cent. of the Rural District Councils, 14 per cent. of the Urban District Councils, and 33 per cent. of the Boroughs had built anything for their old people. When the Question was last put, in February, 1938, the percentage had risen to 23 per cent. of the RDC's, 33 per cent. of the UDC's, and 54 per cent. of the Boroughs. In other words, about half the authorities in England and Wales had still provided nothing for the old, and many of those who had done so had built only a very small proportion. The total of small dwellings had, however, risen in 4 or 5 years from 17,000 to 44,000. During those years, the Ministry of Health mildly recommended provision for the old, both in their interviews with authorities and in their circulars; and Sir Kingsley Wood, when Minister of Health, advocated it openly both inside and outside the Letters on the subject appeared in the Times and in the provincial press; articles were written, a broadcast was given, and about 5,000 copies of *Housing the Old*, now out of print, were bought by Local Authorities. The subject was discussed at Conferences, including the great Annual Conferences of the Rural District Councils' Association, in 1935, and the Urban District Councils' Association, and at the Women's Institute annual meeting at the Albert Hall. Yet in spite of all this half the authorities remained unconvinced, and there are therefore years of experience to prove that persuasive methods are not strong enough, and that the authority of Parliament must be exerted to secure a right policy for old people's housing. Until a compulsory proportion of it is embodied in an Act of Parliament no one can rest assured that it will be carried out.

what is the right proportion?

Local authorities should be given a fairly wide scope in the proportion of small-size dwellings that they will build, in order that due account may be taken of their varying needs. Broadly speaking, the more rural the district, the In country lower need be the proportion for the old. places, old folk are more likely to be able to continue to rent small cottages which are not Council houses. The lowest acceptable percentage even in country places should be 10 per cent., but normally speaking, RDC's might vary between 10 per cent. and 20 per cent. In Urban Districts the need is greater, and the proportion might be from 15 per cent.—25 per cent. In the great cities, the need is far more urgent, since rents are high, and there is a large proportion of solitary old people, as well as of old couples, many of whom can only rent very unsuitable rooms at high prices. The cities ought, therefore, to aim at a percentage of 20 per cent.—35 per cent. of small size dwellings, including bed-sitting rooms for solitary people. The LCC has already prepared plans for 16,000 dwellings to be built as soon as the war ends, but they have not yet announced what proportion of each size of dwelling will be built. The four great London Housing Trusts have always included a very high proportion of small sizes, and found it justified, and their experience deserves the most respectful attention. Out of a total of 15,900 dwellings they have provided 2,024 onerooms and 6,067 two-rooms. The full figures may be studied on page 20 of the LCC's booklet, London Housing Statistics (1938-39. Price 1s.). This booklet also shows the wide variation in practice of the London Boroughs, 5 of which have provided no one-room or two one Obj the one cent room percent fact.

fact
Th
in I
ove
size
alth
the
pro
qua

inc is est non pla sch giv ser alli

ap

to bit tio a ; the old to ne

ne in tir fa sa in th th





two-room homes—and only 11 of them have provided any one-room dwellings. In his booklet, Our Housing Objective (Dent, 6d.), the Rev. Charles Jenkinson gives one-room dwellings. the following percentages as those in practice at Leedsone-bedroomed, 30 per cent.; two-bedroomed, 12½ per. cent; three-bedroomed, 47½ per cent.; four and five-bedroomed, each 5 per cent. There is no doubt that the percentage of small sizes necessary in cities is a high one, although few city authorities may yet have realized the

The total number of dwellings built by Local Authorities in England and Wales before this war was, I understand, over 1,200,000. Of these there were 44,000 of the smallsize dwellings, no doubt mainly let to older tenants, although only 29,000 of them were definitely allocated to the old. Even taking the larger figure, this gives only a proportion of about 4 per cent., which is wholly inadequate to the demand.

inclusion not segregation

at ns, ist nal the ard ded urold nd, ilds it

the ities.

the

icils'

icils'

eting

the efore

are

ment ple's

t is

rest

pe in

build, rying

t, the

untry ue to

The

laces

DC's

ortion

great

high,

le, as

verv

there-

cent. s for

plans

ends.

each

ondon

opor-

their

of of

one-

ay be

ondon

ooklet

ondon

m or

In

The most important point in planning housing for the old is to see that it is included as a normal part of housing estates, and not as a eseparate scheme. Old age is a normal part of life, and elderly people do not want to be placed in a stagnant backwater. Many good charitable schemes are faulty in this respect—they build lavishly, and give every comfort, but spoil the effect by making a separate village, or colony, or quadrangle. Architecturally the quadrangle can be very attractive, and its form appeals very much to people with happy memories of their days at a University. It does not, however, appeal to retired wage-earners who prefer to be able to see "a bit of life" from their windows. It has a strong suggestion that its residents live under rules, especially if there is a gate which can be locked, and if the Matron's house is the dominant feature of the scheme.

The best plan is to scatter the small-size homes for the old among the larger ones, on every housing estate, not to concentrate them on one site. In this way, the old need not move far from their own district, and may be near younger relatives in the family houses, so that easy interchange of visits and mutual help are possible. Sometimes ground-floor flats for the old may be placed beneath family flats, and in central sites of cities this will be necessary; it will be an advantage if better methods of sound insulation have been established before they are built, as the noises from overhead are the only serious drawback to this plan. In building on sites where there is more space, small groups of a dozen dwellings for the old may be given, preferably of one storey-in short rows or bungalows in pairs. Although the area covered by bricks and mortar in building homes of one storey is greater, yet the extent of garden for the old can be smaller, so that the right number of dwellings per acre can still be maintained.

There is at present a tendency to suggest that after the war priority will be given to building houses for ex-Service men who have, or may have, young families. This might easily result in once more making the old mistake of building large housing estates where the dwellings are all of the same size and type; and all social workers on such estates have long realized the drawbacks of this plan. If housing for the old was indefinitely postponed, it would result in segregation; when eventually their turn came, they would be provided for separately. It would be better to suggest that our warm gratitude to fighting men should include heartfelt thanks to those who give their lives as well as to those who fight and return, and that this can be expressed by building small homes to be let, in the first instance, to the widows and old parents of those who have fallen. Ex-Service women will also deserve their own homes. Eventually, the country should try to build houses for all its women workers, including teachers, nurses, and land-girls, as well as for a few single men who might also like it.

provision for infirmity

Many solitary people could be happily housed in bedsittingrooms, adapted from existing houses, as Mrs. A. V. Hill has successfully proved in the Hornsey Rise Housing Trust. Yet others need entire care, and must be in institutions of some kind, but these could be far homelier than they have been in the past. An excellent design for a home for 24 infirm old people is included in E. G. Chandler's thesis *Housing for Old Age* (RIBA Library). Voluntary homes for the old have been greatly increased since the war, but their numbers would have to be multiplied many times before they met the demand.

conclusion

There will be a great need of help before the old people's cause is won, and it is hoped that all who are interested in their needs will take active steps to further them. In so doing they will be helping not only the old people themselves, but also the younger ones, both by releasing housing suitable for families and by providing for the care of the infirm when relatives no longer find it possible.





HYDRO-ELECTRIC development Highlands

On July 22nd, 1943, the Journal published an article by Hugh Quigley on the Hydro-Electric Development (Scotland) Bill, 1943, in which he described the low economic in which he described the low economic state of the Highlands, analysed the functions and structure of the North of Scotland Hydro-Electric Board and explained to what extent the development of hydro-electric power could bring back prosperity to this affected part of Scotland. The Board's Construction Scheme No. I has now been published, and Hugh Quigley criticises it in the following spirited article.

Hugh Quigley bу

The North of Scotland Hydro-Electric Board has apparently drawn up a general development scheme covering all waterpower projects it proposes to develop in the Highlands, and this scheme was approved by the Secretary of State for Scotland on March 21st, 1944. It is necessary to establish this fact before considering Constructional Scheme No. 1 relating to Loch Sloy, Loch Morar and Lochalsh. The three elements in this scheme have already by implication at least been approved, and presumably all further developments will be similarly affected. There is consequently only an academic interest to be found in the discussion of the Loch Sloy or any other project: the whole matter is a chose jugeé. Whether the legislation which created the Board allowed for such a denouement is doubtful. Certainly those who were and are interested in the planning of the Highlands must be dismayed and astonished at the same time. Even with this display of bureaucratic tyranny there may possibly be in the individual schemes some element of value.

The Loch Sloy scheme, with a generating plant capacity of 130,000 kilowatts, is an example of a combined pumping and generating station. At certain hours of the day water is pumped up from Loch Lomond to Loch Sloy reservoir, and at other times released from Loch Sloy to drive water-turbines in a power plant below on the shores of Loch Lomond, Such a plant is employed wholly to even out the power curves of a much larger system, in this case the Grid, and cannot be used to feed energy into an electricity distribution system. It forms an essential part of the Central Scottish Grid, and has no connection whatever with the Highlands. To claim that it forms part of any Highland plan, for energy or otherwise, is nonsense. It is a restatement of the old power com-pensation scheme already rejected by the House of Commons.

The Loch Morar plant, developing possibly 1,000 kilowatts from a plant capacity of 2,000 kilowatts, uses the water of the River Morar, and, located at the west end of the Loch, will supply energy for local purposes in the area. The Lochalsh project, twice the capacity of the Loch Morar scheme, will serve the mainland opposite Skye.

The description of the three schemes supplies no further information, and it is impossible to deduce anything additional of any value. The three maps provided are wholly inadequate. They have no contours, no shading, and give no levels. There is no indication of the fall, say, from Loch They have no contours, no shading, and give Sloy to Ben Lomond, no description of the real location and character of the various aqueducts, whether open culverts or pipes; no information relating to design of dams, culverts and pipes; no statement about changes in level and area of reservoirs, about incidence and volume of rainfall, about load curves in generating stations or employment of generating units. There is no hint of any agreement with the Central Electricity Board about the disposal of energy from Loch Sloy, no estimate of capital expenditure, of the cost of energy and the planning of distribution schemes.

Careful examination of the document issued by the Board

discloses only the following:

(1) A Main Development Scheme is in existence of which the three projects are No. 11, Part of No. 49, and Part Even Sherlock Holmes could not deduce from such data the nature of the main scheme which, although officially confirmed, has not been published.

(2) The Board, "before and during the preparation of the scheme," consulted the Amenity Committee and the Fisheries Committee, but nowhere does it state that the final scheme was approved by or even submitted to them.

(3) The estimate of capital expenditure is given as £4,600,000, a rough figure with no segregation of cost How the Board can even begin to estimate

pe aj de (4) T SI Ti th

In pla of Sco planni tributi Electr schem cation schem

10 M

Ma 1,0

me 1-s tie:

before it has had its detailed plans for "every permanent power station, dam, dwelling-house or other permanent structure which it is proposed to erect' approved seems miraculous—unless, of course, those detailed plans have already been accepted.

(4) The Board, instead of preparing its own schemes, has either accepted those already prepared by a firm of consulting engineers or commissioned this firm to do so. It obviously intends handing over to the latter such things as the design and elevation of dams, culverts, power stations and similar buildings, the form of transmission and distribution towers, the selection of material and the employment of labour.

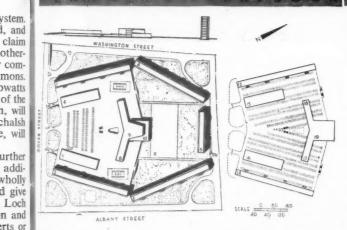
(5) There is no reference to town and country planning schemes or to economic development of any kind.

(6) The Board's idea of publication is to entrust preparation to a firm of solicitors assisted by Parliamentary agents, make copies scarce and inaccessible, and use legal verbiage which is neither grammatical nor comprehensible. I defy anyone to go through the sequence of "Whereases" on the first page without becoming confused and positively misinformed.

In plain English, Constructional Scheme No. 1 of the North of Scotland Hydro-Electric Board is a shocking travesty of planning. It uses the bait of two small and unimportant distribution schemes to put over an obsolete plan of the Central Electricity Board to provide a pumping, power-compensation scheme on Loch Lomond the economic and technical justification of which is more than doubtful. How many such schemes in USA, Germany and Switzerland have justified

themselves? What is more reprehensible still, it has advanced the impudent and irrelevant claim that, by doing so, it will advance the economic interests of the Highlands. The only result of the Loch Sloy scheme will be to increase the revenue to the Central Electricity Board from energy sold in Central Scotland only and, in return for that, it may easily disfigure Lochlomondside.

The Board is using the hoary administrative device of employing consulting engineers instead of its own planning and architectural department and escaping responsibility vis-à-vis the public by delegation to an outside body. architects are not employed there may be crenellated dams and corniced power-stations and camouflaged pipes, a separate Greek order for each pillar and a Renaissance style for each cornice with a set of amphoræ above each turbine. It is possible that the Board means well, but I can think of no recent organization which has dared to present so obscurantist an attitude or so secretive a policy. If it is honest in its intentions, let it publish forthwith its main development scheme. Let the Secretary of State for Scotland submit this scheme to his own planning department and publish the views of the Amenity Committee on the schemes contained in the first project. Let him also publish proper estimates of cost and income so that those who are interested in the economic welfare of the Highlands can form an inde-pendent judgment. Let him also insist on the Board having a competently staffed planning and architectural department. The Miners' Welfare Committee can guide him. The future of the Highlands and Highland water-power is much too important to be compromised by half-hearted and unimaginative schemes.



Key
1 Apartment, 12 Stories, 211,
3-Room Units, 23 5-Room
Units, Nursery, 4,800 sq. ft.
2 Apartment, 12 Stories: 152
4-Room Units, 23 5-Room
Units, Nursery, 5,200 sq. ft.
3 Apartment, 12 Stories, 228
3-Room Units, 24 5-Room
Units.

ystem

lverts

rea of about

nt of t with energy

of the

Board

which d Part educe

which,

shed.

of the

d the at the

ed to

en as f cost timate

Apartment, 12 Stories, 156 4-Room Units, 24 5-Room Units.

Units. Apartment, 12 Stories, 96 3-Room Units, 24 S-Room

Shops, I Storey, 14,400 sq. ft. Shops, I Storey, 14,400 sq. ft.

1000-FAMILY UNIT

Mr. Marcel Breuer's study of the redevelopment of a 24 gross acre slum area in Boston, Mass., is planned to house 1,000 families. The scheme consists of five 12-storey apartment buildings, two blocks of 1-storey shops, parking facili-ties for 182 cars, and a com-

8 School, 3 Stories, 24 Class rooms. [torium. 9 School and Community Audi-10 School and Community Gymnasium. [ground. 1 School and Community Play-12a Parking for 156 cars. 12b Parking for 26 cars. 12b Apartment Basement. 14 Apartment Basement. 15 Shops Basement. 15 Shops Basement. 16 Shops Basement. 17 Boiler Room. 18 Locker Rooms. 19 Gymnasium. [cars. 20 Gas Station, Parking for 786

munity block containing community schools. hall. gymnasium playground. apartment buildings are of the European access gallery type, though here the galleries are protected by louvre walls against the exigencies of the American climate. Novel in treatment is the development

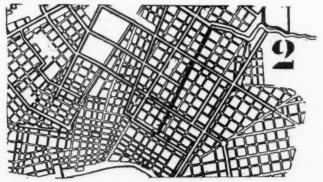
of the site as a platform with parking garages under, and shop delivery yards, transient snop delivery yards, transient parking, school yards, and general circulation, above. The bulk of the open space to the north of the community building becomes a quiet park, and recreation area for adults and children. Pot planting and small green areas are distributed on the circulation platform to break up the sun reflection. The project would be operated by a corporation co-operative. Based on

1940 prices and land values, a \$14.75 rent per room per \$14.75 rent per room per month, would be adequate to cover the costs, including landcover the costs, including land-scaping, new streets, and utili-ties. This study shows the imaginative power and that degree of formal conclusive-ness, common to all Mr. Breuer's work, whether ply-wood chair or city project. Very much a diagram, it pro-vides a useful precedent for development. vides a useful precedent for development and variation, for similar problems. (From Pencil Points)

ANNER' U I \mathbf{z}

ANSWER TO THE LAST PROBLEM THE (Planner's Scrapbook A.J. 24-8-44) New Delhi, India—20th Century Sir Edwin Lutyens. Example of the traditional grand manner used for modern requirements.

Can you place this town pattern? Its historical background, the form of social organization underlying it, the town planning approach employed, the locality?



Answer in the next Physical Planning Supplement.





FIRE STATION

AT ROWLEY REGIS, STAFFS.

BLACKBURN D E S I G N E D7 .

GENERAL-The scheme comprises four engine bays; an underground strengthened control room; meter room and battery charging room; offices for the first and second officers; a changing room; lavatories; a large recreation room and sliding pole for the personnel; and two self-contained flats, each comprising living room, scullery, larder, bathroom, with two and three bedrooms, respectively. The hose tower is set in one corner of the drill yard.

CONSTRUCTION-Reinforced concrete raft foundation; walls brick; floors, except to the living rooms, which are of timber, reinforced concrete. The roof is of flat reinforced concrete hollow block construction, with broad overhang-ing eaves. Windows are rustproofed steel in wood frames, except the large window to the main staircase which is in glass bricks. Ex-

ternally, the bricks are of a warm buff colour with red brick plinth and red brick and light-coloured precast stone dressings. The carved and coloured Borough Arms panel forms the central feature of the main elevation.

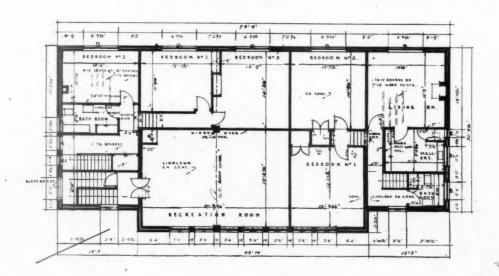
INTERNAL FINISHINGS-Owing to the strict economy suggested by the Home Office, internal finishings have been reduced to an absolute minimum and consist simply of distemper and paint in bright colours on plaster and fair-faced brickwork. The whole of the painting was carried out by the fire force personnel, under the direction of the architect.

SERVICES—These also have been cut down to an absolute minimum. The heating is of a low-pressure hotwater type, supplied from the existing boilers in a neighbouring clinic . and consists of radiators in recreation room and embedded heating

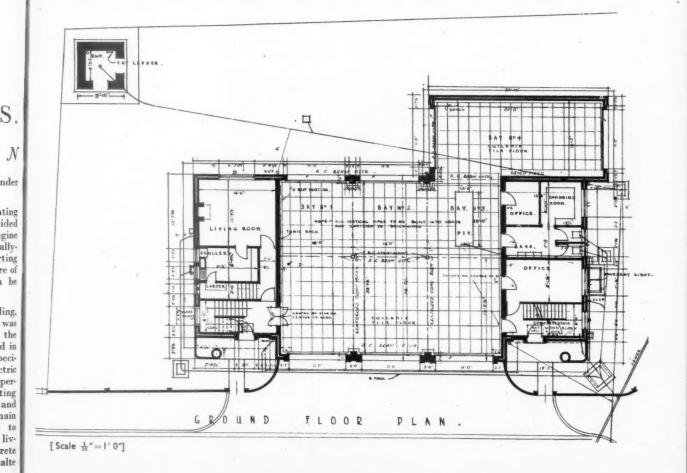
panels in the concrete floor under each engine.

ELECTRICAL—Electric lighting and warning systems are provided throughout and the main engine bay is equipped with electricallyoperated doors, heating and starting units. All engine room doors are of the overhead type which can be lifted with finger pressure.

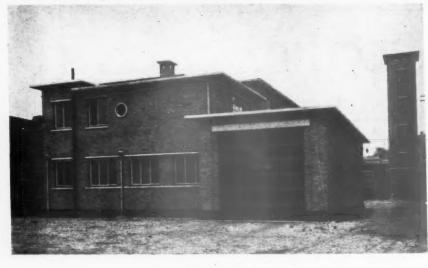
COST-The cost of the building, including services, fittings, etc., was £5,500. It is hoped that after the war the Station will be finished in accordance with the original specification which included: electric hose lift to tower; electrically-operated doors, heating and starting units to each bay; tile floors and dadoes to engine house and main staircase; wood block floors to administrative, recreation and living quarters; reinforced concrete finish to drill yard; and asphalte finish to roof.



FIRST FLOOR PLAN.







Above, another view of the main front: left, entrance to fire-engine No. 4 and the hose tower: bottom, section.

The all cut the we kind special staff and ment

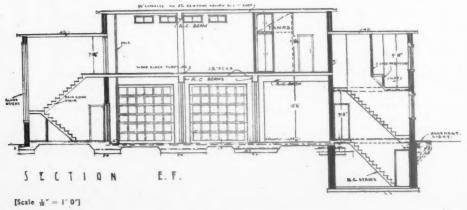
PH

1587

PRIZ SCHO tural for street.

Amount The

It we ear boo co pee ev it all bee the the wa a si



FIRE STATION, ROWLEY REGIS

DESIGNED BY

J. BLACKBURN

INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

PHYSICAL PLANNING

School Design

PRIZE DESIGN FOR AN ELEMENTARY SCHOOL, USA. I. Aroztegui (Architectural Record, April, 1944.) for school for 200 boys, aged 8-12, to receive a modern education in an American city.

The programme required provision for:—
(a) The development and maintenance of physical activities, including games; instruction in hygiene, nutrition, good habits and deportment; a positive stimu-

lus for physical health.

(b) That core of knowledge which is essential to a modern man living in a modern community; experience in the basic sciences, history, mathematics, social and political studies.

That experience in making and which will facilitate expression (c) That and understanding and give each student some opportunity for the development

of personality; language, music, drama, painting, architecture, and the crafts.

(d) That experience in co-operative living through association in the school to develop an awareness of society and of social obligations and promote the

art of living together.

It also stated that, although participants were invited to introduce new solutions for each aspect of this problem, it should be borne in mind that, as the school would be constructed from public funds, wasteful expenditure must be avoided. Because of the evolving nature of the educational system, it is natural that school buildings periodically become antiquated so that they must be rebuilt. It was therefore suggested that the life of the proposed structure should be thirty years.

I. Aroztegui, of the University of Illinois, was the prize-winning designer. He selected a large plot of ground in California as the site of this school project. He provides

seven classrooms of unusual shape, designed for modern and progressive education. Each classroom has its own outdoor class area. The rooms have a maximum of light and permit students to view a properly lighted blackboard. A portion of each classroom is devoted to special project work. The assembly hall is centrally located, as are the special crafts' room and the cafeteria. Outdoor dining space is project work. the careteria. Outdoor dining space is provided in connection with the cafeteria and the gymnasium and dressing rooms are well separated from the study rooms to eliminate disturbing noises. The design lends itself to adult use, as the classrooms can be closed off from the assembly library, and other services.

MATERIALS

Plastics

The Ministry of Works PLASTICS. Post-War Building Studies, No. 3. By a Committee convened by the British Plastics Federation. (HMSO, 48 pp., 1s.) Authoritative assessment of value of plastics in building. Covers raw materials, classification, manufacture and properties of plastics. Application to building as structure, fittings and finishes. Design and standardization.

Conclusions and recommendations.

The terms of reference of the Committee

To consider present practice and new proposals in the application of plastics to heating and ventilating, lighting, plumbing, electrical, gas, and mechanical installations, painting, internal and external furnishing, building construction, and any other applications which may suggest themselves. To make recommendations for practice in postwar building; to make such recommendations for further research as may arise after these studies," the situation being considered in terms of the immediate post-war period

and of a longer period beginning about five years after the cessation of hostilities.

The Committee set up a sub-committee consisting of two investigators into each of the seven main groups of plastics materials, namely, moulded plastics, laminated plastics, transparent and opaque sheeting (other than laminated sheet), resinous materials (plastics, cements and adhesives), extruded plastics, resin bonded sheets (including plywood and composite boards, etc., but not laminated plastics), and miscellaneous materials (including expanded plastics).

These are reported very concisely, the report containing introduction and four parts, as follows:-

(1) Raw materials, classification, processes of manufacture and properties of plastics.
(2) Application to building uses:
(a) In the building structure—load-

bearing members, linings or coverings for walls, ceilings, floors, and structural components.

(b) Fittings.
(c) Tubes and pipes.
(d) Applied finishes.
(e) Miscellaneous.
(f) Manipulation and fixing.

(g) Long-term uses.

Appendix I lists some two hundred actual and potential applications of plastics under the headings heating and ventilating, plumbing, electrical equipment and lighting, gas installations, applied finishes, telecommuni-cations, mechanical installations, acoustics, farm buildings, reinforced concrete, and general.

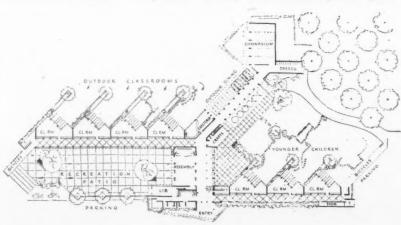
(3) Design and standardisation.
Appendix III lists British Standard Speci-

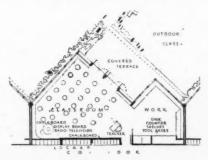
Appendix III lists British Standard Specifications to date.

(4) Conclusions and recommendations. A comprehensive chart of chief plastic materials, showing their basic and intermediate raw materials, form in which sold, and chief building applications is appended, and also a glossary of terms used in the election industry. plastics industry.

plastics industry.

The Committee concludes that the plastics industry is capable of making a useful contribution to the post-war demand for building materials, although there is no prospect of supplying plastics in large quantities to compete with bricks, steel and cement, and stresses the necessity for choosing the applications of plastics materials with discrimination. The cost, a very important factor, is in some cases (e.g., phenolic moulding powders, cellulose acetate), stabilized by the cost of the raw materials (although many of these would be cheapened by the extraction these would be cheapened by the extraction of chemical products from coal on a larger scale than at present), but will in most cases decrease with increased output and technical development. Resin bonded laminated wood is the only plastic material suitable at present, or in the near future, for use as a load-bearing structural material, and it can also be used externally. Other





Plans of a prize winning design for an elementary school in the USA. Left, general plan, showing the seven classrooms of unusual shape each with its own outdoor class area. Above, detail plan of a classroom. See No. 1587.

nain gine tom.

sheet plastics have not at present the durability for external use, though this will be improved in time, but for interior panellings and linings are hygienic, hardwearing and decorative with a wide range of effects, although they are comparatively expensive unless used as veneers on inexpensive back-ings. Composite boards of plastics, wood and sometimes metals (using low density materials faced with laminated plastics or wood veneers bonded with synthetic resin), provide sheet building materials with the good surface qualities of plastics, adequate strength and rigidity and good thermal in-sulation, i.e., combining the best qualities and eliminating many disadvantages of the component materials. This is also a useful field for the utilization of such waste materials as sawdust, flax or asbestos waste, by bonding with synthetic resin.

The dimensional stability of sheet plastics

is at least as good as that of other com-

mon building materials.

Plastics can be particularly useful in the form of mass-produced moulded fittings ready for use, no costly finishing operations being required, and the Hall Mark scheme, promoted by the British Plastics Federation and the British Standards Institute will maintain a high standard. Large mouldings, which have proved their use in the manufacture of aircraft components, may profitably be applied in building to units such as staircases. Light-weight expanded plastics offer possibilities for thermal insulation.

Finally, the committee stresses that the plastics industry is developing so rapidly and in so many new directions that it is difficult to forecast new materials and their

applications to building.

The recommendations of the committee are as follows:-

(1) Continuous collaboration between the plastics and building industries to ensure the best development and application of the

(2) Incorporation of the study and manipulation of plastics into all courses of in-struction in building subjects.
(3) (a) Research on the use of resin bonded

wood as a structural material

(b) Development of sheet plastics.(c) Trials of plastics piping in domes-

(d) Manufacture of relatively large building components, e.g., staircases and window frames.

(4) Standardization of the sizes of sheet materials.

(5) Establishment by the plastics and building industries of a range of British stan-dards for plastics for building purposes.

This report is of great value in that it is a sober, authoritative assessment of the value of plastics in the building industry and makes remarkably less exciting reading than the extravagant claims which are only too familiar in many of the articles in the popular press and periodicals that ought to know better. It is concisely written, so that the better. It is concisely written, so that the illustrations, none of which shows much that is new, seem on that account somewhat re-dundant. It is also to be expected that important developments have occurred under the accelerated pace of war conditions, which when disclosed will extend and perhaps modify certain conclusions in this booklet. But it remains the most important statement that the building industry has received from authorized representatives of the plastics industry at a time when this is most necessary.

1589

Concrete Mixes

THE DESIGN OF CONCRETE MIXES ON A MINIMUM STRENGTH BASIS. Morgan. (The Engineer, May 26, 1944, pp. 400-402.) How to design concrete strong enough, but only just strong enough, to achieve its purpose.

The strength of concrete depends on the water:cement ratio, provided the mix is fully compacted. In practice the workability of the mix has to be balanced against its richness. Allowance has to be made in the design for the variations in the crushing strength which inevitably occur. describes methods of assessing these variations and gives examples of design of mixes.

Concrete Mixes

RAPID AND SIMPLE CONCRETE PROPOR-TIONING. L. D. Long. (Engineering News Record, March 23, 1944, pp. 426-429.) Concrete proportioning reduced to use of simple empirical charts.

The Department of Public Works of the City of New York has adopted a simple method that enables the inspector not familiar with concrete technology to design the mix of concrete of good workability. Use of the scheme requires only "mechanical" understanding of four simple charts, and

the determination of the specific gravity and fineness modulus of the aggregates.

These charts are not directly applicable in this country, because the units in which cement and water are measured are different forms. ferent. It would be easy and desirable to prepare similar charts based on British units. The usual specification of a, say, units. The usual specification of a, say, 1:2:4 mix is non-scientific and often inapplicable.

LIGHTING

Floors as Reflectors

W. G. Darley. WHITE FLOORS. (Transactions of the Illuminating Engineers' Society of America, February, 1944, p. 112.) Report on condition of white floors in use in factories as light reflectors

In a number of American aircraft factories white floors have been laid to help light the undersides of wings and fuselage for fitters working there. (See previous notes in these columns.) The present note is a report on visits to some of these to see what light values and conditions they give in service, and how they are standing up to wear.

On intensities it was found that in areas where the incident foot candles ranged from 40-60 foot candles, the light reflected under the wings and fuselage was of 5-10 foot candles intensity generally. The refoot candles intensity generally. The re-flection factor of the floors ranged from 35 to 40. The intensities are not regarded as adequate for detailed work, but are a great improvement over those provided by ordinary grey concrete floor surfaces.

There is an interesting table of comparative reflection factors which is worth noting.

Condition	White Floors Av. Reflection Factor	Grey Floors Av. Reflection Factor
New	0.50	0.30
Clean Average	0·45 0·40	0.25
Dirty	0.30	0.15

In all cases where measurements were taken, maintenance was better for white

In summary the report says:—
1. Brightness ratios are improved and seeing is more comfortable.

 The brightness provides a constant inducement to cleanliness.
 Light floors call for light coloured machinery for best visual conditions. It may be concluded, therefore, that in several important respects white floors have

proved a successful experiment. It is puzzling to understand why they have not been tried here. Or if they have, why we hear so little about them.

QUESTIONS and Answers

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, The Avenue, Cheam, Surrey.

1592

Heating Systems

Who are the makers of:—
(a) The Bennlech Hearth (not the designer)?

(b) The Henry Martin warm air duct as used in the winning design of the Northants Cottage competition?

(c) The stove, boiler and ducting system used in the MOW house?

Are any other similar systems marketed for general space heating, either here or in the USA; if so, by whom?

(a) We understand that the Benllech Hearth was designed by a private architect now in the Forces, with whom we cannot get in contact. We believe however. not get in contact. We believe, however, that if you get in touch with Mr. J. E. S. Young, of the Metropolitan Vickers Electrical Co., Trafford Park, Manchester, he will be able to give you further information.

(b) Dr. Martin Henry was helped with his invention by Messrs. Pitchers, Ltd., Building Contractors, 57, Ashburton Grove, London, N.7, who will be willing to give

you any further information.

(c) The Ministry of Works are not prepared to disclose the manufacturers of the stove, boiler and duct system incorporated in their experimental house, at this stage; however, we understand that the Eagle Range and Grate Co., Ltd., of 7, Stratford Place, London, W.1, have constructed similar units, and Mr. Ellis, of that firm, will be pleased to answer enquiries.

will be pleased to answer enquiries.

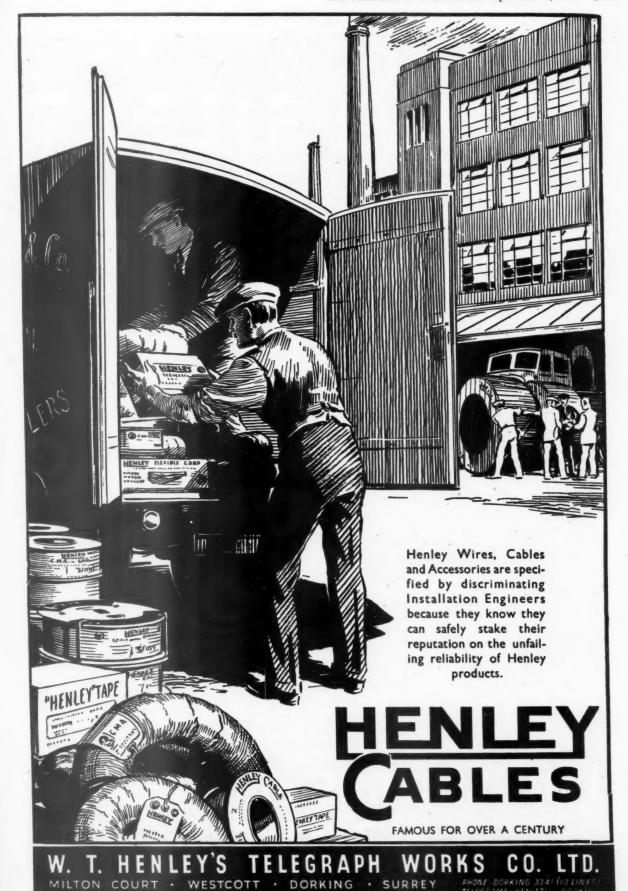
We regret that since the war we have not been able to compile up-to-date information about progress in other countries, although there is little doubt that work has been done on similar lines in the USA. are particularly interested in developments in the USA you might be able to obtain some information by communicating with the Library of the United States Office of War Information, American Embassy, 1, Grosvenor Square, London, W.1.

1593

Cost of Building

O What was the percentage increase in cost of building construction from 1916/1944? I do not require this information particularly for every trade, but an approximate all-in percentage taking as our datum 100 per cent. for the year 1944?

A Referring to the Chart prepared by Mr. H. J. Venning, F.S.I., published in *The Architect and Building News* of 14.1.44, it appears that building costs have risen between the beginning of 1916 and the beginning of 1944 by approxymately 153 per ginning of 1944 by approximately 153 per cent., i.e., a building costing £100 at the beginning of 1944 would have cost just under £39 if built at the beginning of 1916.



Mr. The 4, it

ot

5 iny ng, hin of my ent een in rer uld AL,

ms

the

nts em

the ech hi-aner, S. ers ter, her his ildve,

ore-

the

ted ge;

gle ord ted

not

ugh

een you ents tain

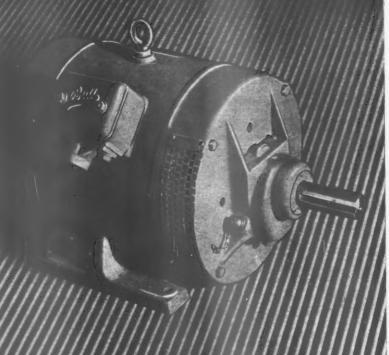
with of

ling in rom orm-our

beper the

just 916.

SUPER SILENT



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

ALSO LONDON, MANCHESTER, BIRMINGHAM, SHEFFIELD, NEWCASTLE AND GLASGOW



Sibered de w G m T co in tie co co su S. S. the purious is in the purious all assistivity were the place at the purious all assistivity were the place at the purious all assistivity as a transfer of the purious and the purious a





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

CSI

Sir Wm. Jowitt

July 18, at 12, Great George Street, S.W.1. Ordinary General Meeting of the Chartered Surveyors' Institution. Address on the Government's Town AND COUNTRY PLANNING BILL AND WHITE PAPER, CONTROL OF LAND USE, by Sir William Jowitt, K.C., M.P., Minister Without Portfolio.

Sir W. Jowitt: The Government have presented parts. They have their proposals in two parts. They have put forward to Parliament a Bill designed to meet the most urgent needs of the case. In this Bill they have embodied their proposals for enabling local planning authorities to deal with areas suffering from extenties to deal with areas suffering from extensive war damage and, if a little less urgently, with areas suffering from bad layout and obsolete development. They have also dealt in the Bill with certain other aspects of land planning which, in their view, require early treatment. In their White Paper they have set out, stating expressly that they did so for public debate, their longer-range proposals for the expressly that they did so for public debate, their longer-range proposals for the planning of the land. As you are well aware, my colleague, Mr. Morrison, the Minister of Town and Country Planning, explained to the House of Commons last week, on the Second Reading of the Bill, that he proposed, in the light of the debate, to enter into further discussion of the Bill with representatives of the local authorities; and it was then indicated that the Bill would be reconsidered after the recess, in the light of those discussions, recess, in the light of those discussions, and of such other representations as its publication might have enlisted. Both Bill and White Paper, therefore, are, in different degrees of urgency, at present, as it were, sub judico, and I do not propose, controversy with regard to the one or the in the course of this address, to enter into

other. For the sake, however, of removing misconceptions and putting their purposes into the right proportion, there are certain observations which I feel at liberty to make about them.

There is an old proverb, "Let sleeping dogs lie," and that proverb is one which coalition Government; and if ever there was a dog which was likely on being aroused to cause no little commotion, that dog was called the Land Problem.

dog was called the Land Problem.

There had been since the Act of 1909 was passed some control—over a limited class of land—and negative in character—over the right of a landowner to develop his land as he liked. It had become no longer sufficient that he should comply with existing hyerlaws and public health and existing bye-laws and public health and building Acts. That the provisions of that Act were wholly inadequate is obvious to anyone who considers what was done after the last war; and accordingly the Act was amended by a series of Acts passed in 1925, 1929 and 1932.

But planning under the Act of 1932 remained local, and national, permissive, not compulsory, negative, not positive. It was under the present Government that a Ministry of Town and Country Planning was first set up with wider positive powers, that planning was made compulsory and that a national outlook was secured.

It is instructive to pause here for a moment and to consider why it was that planning—even in those areas where it had been undertaken actively by the local authority, and there were very large areas where it had not been undertaken at allhad proved to be the comparative failure it had. First, I would say the absence of any conscious national direction. Second, I would say the risk of having to pay enormous compensation without any corre-

sponding chance of securing betterment.

To the first of these problems the Barlow Commission (which reported just after this war had started) devoted its attention. Their primary concern was the location of industry—a matter which as you know con-cerns many departments of State and is to be under the general supervision of the Board of Trade, though it will in no sense be treated as outside the scope of the Ministry of Town and Country Planning Ministry of Town and Country Planning which must take account of the location of industry, no less than of agricultural requirements, transport, housing, open spaces, and all other aspects of national policy that affect the use of land. The Barlow Commission called attention to the necessity of logening out our corporated. necessity of loosening out our congested urban areas and to the need for a better spreading of our population. Recently the strategical considerations to which they called attention have been present to our

If (which Heaven forbid) we were to have another war in 50 years' time, and flying bombs and rockets improve (it's an odd word to use) as the aeroplane has improved, the necessity on strategic grounds of a better speading of our population may become self-evident. The disadvantage of a target so large that it cannot be missed

But, I confess I think for my own part that there is a danger in overstressing the national aspect of planning, vital though it is. I am a great believer in our system of local government. It is by no means perfect, and it is capable of great improvement: but I should be sorry to see local interest and local initiative disregarded and lost. Of course, if it be granted that Whitehall is the repository of supreme wisdom and the avowed enemy of delay, we could disregard all local attempts at planning.

The advantages would be clear: no longer would any particular authority strive to keep within its boundaries some profitable undertaking—such as a great market— which yields substantial contribution to the rates. Whitehall wisdom would over-rule all such considerations, and the market would be placed where it would best serve the community as a whole. This would be a very real advantage: but it is, to my mind, an advantage purchased too dearly at the price of local know-ledge, local desires and local patriotism. Besides, there are some who would not accept the wisdom of Whitehall as supreme or its actions as unduly prompt. Moreaccept the wisdom of Whitehall as supreme or its actions as unduly prompt. Moreover, any plais we make must be flexible and adaptable. If we are to hold our own in the world in the years of swiftly changing opportunity which clearly lie ahead of us, we must be ready to change our dispositions and our equipment as "old needs" pass and new needs arise. In this sense planning never ends. In this sense planning never ends.

It is for these reasons that we are not prepared to recommend that a single master plan should be imposed from Whitehall for the country as a whole. Rather do we desire to achieve our ends by a system of collaboration—local planning with central direction and control—and our proposals must, I submit, be judged from this standpoint, do they or do they not make such a planning possible and likely to prove effective. Our new proposals therefore should be imposed from effective. Our new proposals therefore confirm and strengthen the powers of local planning authorities, but also give the Minister a wide power of control and direction over their activities. The outline of a national plan must be gradually and con-tinuously filled in by a process of making local and regional plans that will in each case satisfy national as well as local and regional requirements.

I turn now to the other reason which make planning ineffective—the likelihood of the planning authority being involved in paying compensation and the extreme unlikelihood of their getting any betterment. Suppose—if I may take an illustration—it were decided—and I confess I wish it were so decided—that the land around St. Paul's should be for ever an open space. Very large compensation—whether it would or would not run into millions of pounds I do not know—would obviously be payable to the existing owners by the City authority. The displaced owners would have to seek some other site; and the owner of that other site would reap the henefit.

But it is possible-and indeed perhaps probable—that that other site might not be within the territory of the City Corpora-tion, and even if it were the difficulty of showing cause and effect is such that under the existing law there would be little or no chance of securing betterment—the lawyers, that most deserving profession, would come off best if any suchn attempt were made, and the Chartered Surveyors might get some crumbs from the lawyers'

It was this problem that was referred to the Uthwatt Committee, and it is difficult to think of any Committee better qualified to undertake the task. Their analysis of the problem, their description of those mysteries of floating value, shifting value and generally of compensation and better-ment, is one of the most masterly surveys I have read.

The solution which they suggest to overcome the difficulty is of course much more debatable. It involves completely different treatment between land within and without town areas: to some extent this may be inevitable—but it would seem that, so far as possible, this differentiation should be avoided—at least in this sense, that it avoided—at least in this sense, that it should not make any financial difference to an owner whether his land is placed this side or the other side of the line of demarcation. For land within town areas they propose a betterment levy on any future increase in land values. This part of the plan would, of course, involve great political controversy: but it was also roundly condemned in a considered statement sent to me by the Council of the Chartered Surveyors' Institution on a series of grounds, some of which, I confess, seem more formidable to me than others. In regard to the other part of the scheme

-the transfer of development rights to a central authority—your Council were of opinion that this might facilitate town and country planning on broad lines, and might enable the control of future development to be seen as a national problem. This scheme might, they thought, therefore prove to be in the national interest. But they made their assent conditional upon the following (amongst other) stipulations:

(1) Power to revise the global valuation in the event of a misjudged estimate.

An equitable apportionment of the global sum-as, for instance, in the difficult case of dead ripe land.

(3) A right to appeal to any owner

aggrieved at his apportionment.

I confess that these qualifications brought home to my mind the extreme difficulty there would be in fixing any global valua-tion. Moreover, if the matter is approached from the standpoint of securing to every individual fair treatment, there would be a danger that the global sum would become merely the total of individual valuations, and that in so far as it fell short of that total, it will be claimed that it should be revised upwards, and this in its turn might once more bring in that element of floating value we all want to avoid.

We have, therefore, after very great consideration, tried to hit the target by a different means, and by the target I mean the

control of the use of development rights by a central authority. If every landowner—whether in town or is told, "In future you may no countrylonger avail yourself of your development rights without consent, and that consent will only be given on payment of an appro-priate fee," you have to all intents and priate fee," you have to all intents and purposes transferred the use of develop-ment rights from the individual to the planning authority: an authority, that is, con-sisting of two parts—a local body and a central body whose consent to the local body's plans is necessary.

But there are, of course, many of these development rights which were in existence before the war. It would be quite wrong for the Government to contemplate deprivby retrospective legislation, the owner of these rights—or, to be more precise, of 80 per cent. of the value of these rights without paying him proper compensation. And by proper compensation I mean a compensation which takes account of the actual value of his site without allowing for any inflation caused by floating value. In those cases, therefore, we must pay compensa-

tion.

In so far, however, as development rights accrue after the war, they might be a result of the war, and whether they were the result of the war or not, Parliament is feshion of the war of not, Parnament is fully entitled to prescribe that they shall not enrich the pocket of any individual. For instance, if for war purposes, a factory has been set up and a township built round it during the war, it may well be that land in that neighbourhood, which before the war had no development value, has now be-come possessed of development value. It does not seem to us either necessary equitable to compensate owners in this class of case. They will be allowed to retain 20 per cent. of that development value which has been brought about not through efforts their own, but entirely through the of public emergency.

Now I do not conceal it from you that

the task of working out these proposals is a very formidable one, but equally I claim that, if that task can be accomplished, we shall have gone a long way to solve the planning problem. For we shall have set up a Land Commission which will, on the

one hand, pay compensation and, on the other hand, will collect betterment. As it will be a Central Land Commission, it will no longer matter that the compensation is payable within the area of one local authority and that the betterment arises within the area of some other and different local

Moreover, local authorities will be able to plan without the constant dread of the liability to pay compensation cramping and hindering their plans. The main difficulties in working out this scheme obviously concern those unbuilt on areas in the neigh-

bourhood of towns.

As a general rule, and speaking by and rural land does not possess much development value. designate in our plan as green land, will not therefore be made the subject of valuation save in those cases where an owner claims that the land did, in fact, possess development value at March, 1939. If he can make good this claim, a valua-

tion will be made.

Nor do I think that built-on land will cause unduly serious difficulty. Under the existing law, a change of use of property shall not be deemed to have occurred if the character of the new use is similar to that of the previous use. If, therefore, today a small and unpretentious shop is rebuilt on the same area and converted into a several-storeyed departmental store, there Under our would be no change of use. scheme, however, we contemplate that a change of use shall be deemed to occur if there is an alteration in the nature or scale of the use, and a change of use demands consent, and consent involves, or may involve, payment of betterment.

those are exceptional cases and not the rule. In the case of built-on land we shall need to make valuations of the redevelopment value as at March 31, 1939. only if the owner claims that his land did, in fact, possess such value at that date.

It is with regard to the other land, the unbuilt-on land around the town, called in our plan white land, that the main difficulty will arise. With regard to this land, valuations must be made of the development value existing in 1939, and the valuers will in each case be asked to give such information as they can as to the period within which development was likely to take place. We do not, however, contemplate that any compensation will be paid during the next five years. Before the end of these five years we shall appoint a Committee of experts to advise us as to the true basis upon which we should fix the com-pensation. They will have the valuations prepared by the valuers and they will have such information as the valuers have been able to give as to the probable period of development. They will know what de-velopment has taken place during the last years and will be able to judge what is likely to take place in the immediate future. They will be asked to classify individual valuations in their appropriate categories so that the dead ripe land, instance, may receive better treatment than the land with a merely prospective chance of development. Thus, the owner dead ripe land might, after the end of the five-year period, receive in compensation 100 per cent. of the valuation of the development rights of his land in 1939. and another owner might receive a much smaller percentage.

in brief, is the general scheme of That,

the White Paper.

I do not assert confidently that it will work. I feel that in this matter we are sailing uncharted seas, and I do not doubt that from time to time we may have to change direction, or perhaps even let down an anchor. But—it is better to proceed on the principle of trial and error than never to proceed at all. The dangers and diffi-culties are manifest. Shall we succeed in

getting in betterment-that hare which has been so long chased and never yet caught? Shall we get it in in sufficient amounts to enable us to pay compensation, or shall we once more have to cut down our compensation-and therefore our planning-to a small and even negligible scale because we can't see enough coming into the kitty? I use the phrase "coming in": by that I do not, of course, mean that we contemplate that within the next few years the sum collected in betterment will equal the sum paid in compensation.

But if we succeed in collecting betterment and we can see it coming in at first as a trickle, but later as a steady stream—we may reasonably hope that, sooner or later, the betterment payments can finance compensation and finance it on a sufficiently generous basis to allow effective planning to take place. I must emphasize that there is no necessary equivalence between the one and the other; and in particular you should note that, whereas the betterment income will go on indefinitely, so long as beneficial changes in the use of land take place, compensation will cease altogether once the loss of development and redevelopment values existing in 1939 has

been made good.

Uthwatt Committee recommended further a general prohibition against development without consent of all unde-veloped land outside town areas. This we accept in regard to all land. They recommended immediate payment of compensation for loss of development values. accept this obligation to compensate in respect of rural land-the green land within five years. But in regard to the white land (undeveloped land near towns) and in regard to the redevelopment value of builtup land, we do not propose to pay com-pensation as a rule unless and until a genuine request to develop is made and refused. Of course, in those cases where the action of the planning authority makes it plain in advance that a refusal is inevitable-e.g., where land has been scheduled as an open space—the request and refusal may be taken for granted.

Lastly, the Uthwatt Committee mended that if and when approval for development was given, the State should buy the land-that is, buy the land at its agricultural value, for they would already, under the Uthwatt scheme, have paid compensation for the development rights-and lease it to the person undertaking the development. This recommendation we have not accepted. The idea that the State through some central body should become we have landowner on a large scale, whilst politically attractive to some of us, is very far from being attractive to others.

The origin and parentage of the scheme put forward by the Government makes it nevitable that it should be in the nature of a compromise between conflicting views. I think it inevitable that this recommendation and its rejection will be the subject of much controversy. For that very reason I wish to say very little about it; but it un-For that very reason I

doubtedly has repercussions.

The application of compulsory purchase at the appropriate figure may therefore be necessary, and we contemplate this as a part of our proposals; but this is apt to be a costly proceeding and invidious as be-tween two private citizens.

Such, then, in broadest and briefest out-line, is a sketch of the proposals H.M. Government has put forward in the White Paper.

I must make some reference to one other matter—I regret that the Bill is drafted in language which makes it very difficult for the ordinary reader to follow its provisions.

We can look forward-both in this Parliament and in the succeeding Parliaments-to spirited debates on many of the proposals contained in the present Bill.



In more than a score of important towns in Britain, Rediffusion subscribers are getting broadcast programmes by direct line from the B.B.C. to their homes. These are the forerunners of the new listening public of tomorrow. For them, radio reception is simplified down to a switch in the wall and a speaker on the table—nothing else. Nothing to adjust; nothing to replace; above all nothing to go wrong. Day by day they get programmes reproduced with a perfection which cannot be attained by ordinary means of reception.

nt

re ze

y,
of

se ad as

ed eeve na-Ve

in id

n-

es n-

uy

leve

te

ar

ne

it

re

of I In-

Se

be beut-M. ite

her

for

ns. iato als Rediffusion is an alternative means of receiving broadcast programmes: it

introduces perfect radio reception without a receiving set. Due to the direct line connection and constant supervision by engineers, the service is essentially reliable. It has stood up to greater tests during these past years than the days of peace will ever bring. In difficult conditions and times of emergency it has assisted the public authorities in carrying on their tasks.



Issued by BROADCAST RELAY SERVICE LTD.

PROPRIETORS OF REDIFFUSION SERVICES AND MANUFACTURERS OF COMMUNICATION EQUIPMENT VICTORIA STATION HOUSE, VICTORIA STREET, LONDON, S.W.I TELEPHONE VICTORIA 8831

PRICES

BY DAVIS, BELFIELD AND EVEREST, CHARTERED QUANTITY SURVEYORS

There have been no alterations in the prices of Basic Materials given below during July. Rates of Wages have not risen since April 2, 1943.

BASIC MATERIALS		Increase over pre-war prices at end of						
BASIC MATERIALS	Jan. 1944	Feb. 1944	Mar. 1944	Apr. 1944	May 1944	June 1944	July 1944	
Pertland cement 2-in. Unscreened ballast Fletton bricks (at station) Stoneware drainpipes (British Standard) (2 tons	+29.73	Per cent. +41.46 +108.70 +29.73	Per cent. +41·46 +108·70 +29·73	Per cent. +41·46 +108·70 +29·73	Per cent. +41·46 +108·70 +29·73	Per cent. +41.46 +108.70 +32.43	Per cent. +41·46 +108·70 +32·43	
Roofing tiles	+43·75 +45 +47·5 +43·53 +65·22 +32·5	+43.75 +45 +47.5 +43.53 +65.22 +32.5 +46.21	+43·75 +60 +47·5 +43·53 +65·22 +32·5 +46·21	+43·75 +60 +47·5 +43·53 +65·22 +32·5 +46·21	+43·75 +60 +47·5 +43·53 +65·22 +32·5 +46·21	+43.75 +60 +47.5 +43.53 +73.91 +32.5 +46.21	+43·75 +60 +47·5 +43·53 +73·91 +32·5 +46·21	
RATES OF WAGES (Central London Area) Labourers	1 21 42	+26·98 +21·43	+26·98 +21·43	+26·98 +21·43	+26·98 +21·43	+26·98 +21·43	+26·98 +21·43	

LABOUR—Rates of Wages since April 2, 1943.

LONDON DISTRICT
Within 12 miles radius
From 12-15 , , . . . 2s. 1d.

Craftsmen
Labourers
Labourers
N.B.—Prices of materials include for delivery to site in the Central London Area unless otherwise stated.

O. A. DAVIS, F.S.I.



W. H. GAZE & SONS LTD.

BUILDING & CIVIL ENGINEERING CONTRACTORS KINGSTON - ON - THAMES SURREY

and at WASHINGTON HOUSE, 40, CONDUIT STREET, LONDON, W.1

Works and Head Offices: KINGSTON HALL ROAD KINGSTON-ON-THAMES Branches:
SURBITON &
WALTON-ON-THAMES

Putting the houses in order

One of the first things to need attention is the roofs.

For repairing a damaged roof C.S. hand-made No. 7 Double Roman Tiles are excellent. None more so!

First they are light of weight. Second, can be fixed easily and securely so as to preclude any risk of them being blown off in gales. Third, being made by hand, they do not laminate or crack with frost.

C.S. Double Roman Tiles are equally suitable for new roofs. These handsome tiles afford permanent protection to the buildings they cover. Having large stocks of No. 7 Double Roman Tiles we are able to deliver any quantity on receipt of your instructions. State your requirements.



3151

COLTHURST · SYMONS & Co. Ltd.

Patent Tile Works

Bridgwater

Somerset



For the new generation

Building fine schools will be one of the vital postwar tasks. And Rustproof Metal Windows, giving maximum utility and durability with minimum cost of upkeep, will be available—not only for schools, but also for factories, hospitals, hotels, private homes, etc.

RUSTPROOF METAL WINDOW COMPANY LIMITED DEVA WORKS, SALTNEY, CHESTER

HANOVER STREET, LONDON, W.1. TELEPHONE: MAYFAIR 2764

Chlorination is inexpensive with the Belco!

250,000 Gals.
OF WATER DAILY



and only costs £18:18:0 complete.

To be efficient, a chlorinating system need not necessarily be expensive. The "Belco" Chlorinator is proving this daily. It reduces the operation to a simple one that entails practically no upkeep cost. The model illustrated will deal adequately with up to 250,000 gallons of water per day, is compact, highly efficient and easy to maintain.

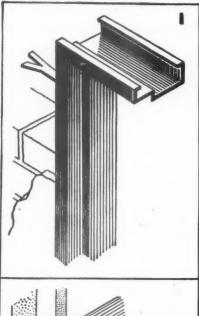
Send for folder B.C.41 which gives full details.



A. Bell & Co. Ltd. (Dept. A), Gold St., Northampton.
Also at 98, Bath St., Glasgow.

Tel. 771 (2 lines)

STEEL INSTEAD OF WOOD STEEL INSTEAD Sankey METAL TRIM



0

ot

to ep

n.

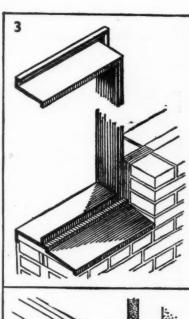
nes)

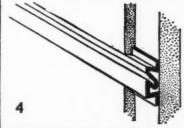
Pressed Steel Door Frame.
Corners Welded and Complete
with Hinges, Strike Plate and Lugs
for fixing.



Lining for Interior Window Reveal and External Cill. All sections Purpose Made and Rust Proofed If desired.







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

JOSEPH SANKEY & SONS, LTD., WELLINGTON, SHROPSHIRE. London Office: 168, REGENT ST., W.I.

Cementone

Has served in 12 WARS and is still ON ACTIVE SERVICE

For 168 years FREEMANS have served the building industry, for 168 years we have only supplied materials of proved quality. We are still serving and continuing our policy of supplying only proved materials, but our services are now mainly rendered to Government Departments and those employed on work of National Importance. Meantime YOU may have problems that CEMENTONE PRODUCTS can solve. We would be pleased to receive your enquiries for colouring cement, waterproofing, hardening, and dustproofing concrete, cement paints and colourless waterproofers for brickwork.

Write for our technical handbook.

JOSEPH FREEMAN, SONS & CO. LTD. CEMENTONE WORKS, GARRATT LANE, WANDSWORTH, S.W.18.



TRINIDAD MASTIC ASPHALT

Lake Asphalt, a valuable component of good mastic on account of its remarkable consistency, is provided for in:

B.S. 988 Mastic Asphalt for ROOFING with Limestone aggregate

B.S. 1076 Mastic Asphalt for FLOORING

B.S. 1097 Mastic Asphalt for DAMP PROOF courses and Tanking

THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD., 19, Grosvenor Place, London, S.W.A. SLOane 7123-4-5

or youndations

We will be glad to send you our illustrated brochure on receipt of One Penny.

FRANKI PILES

Throughout the countless ages, man, notwithstanding numerous setbacks, has always striven for something better in life, and we have to thank man's ingenuity for much that we have today.

It is realised today, however, that there is still much to be desired; all age-old ideas must be swept away and a new world built, embodying the best that man can devise.

One important thing, that cannot be overlooked is that brave new worlds can only be built on sure foundations: If the foundations are good, then the super-structure can be built with every confidence; this is the reason why so many eminent architects and engineers place such unlimited faith in franki Piles.

THE FRANKI COMPRESSED PILE CO., LTD. 39, VICTORIA STREET, WESTMINSTER, S.W.I

TELEPHONE: ABBEY 6006/9

FRANKI PILES

CARRY MORE TONS PER PILE.

CLASSIFIED ADVERTISEMENTS

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

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

Surrey.

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s. THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDESS: 75 EATON PLACE. LONDON, S.W.1. Tel.: SLOAME 5615. 991

HERTFORDSHIRE COUNTY COUNCIL.

APPOINTMENT OF COUNTY ARCHITECT.

The Hertfordshire County Council invite applications for the post of COUNTY ARCHITECT. Applicants must be members of the Royal Institute of British Architects.

The successful applicant will be required to reside in or near Hertford, and to provide a car, for which he will receive the usual County allow-

reside in or near Hertford, and to provide a car, for which he will receive the usual County allowances.

The salary for the post is \$1,500 per annum, and the appointment will be subject to three months' notice on either side, and also subject to the provisions of the Local Government Superannuation Acts. The successful applicant will be required to pass a medical examination.

The person appointed will be required to carry out all such fluties as may be assigned to him from time to time by the County Council, including the design and construction of the buildings required for all departments of the County Council, and will be responsible for the maintenance of County Buildings. He will be required to devote the whole of his time to the duties of his office, and will be prohibited from undertaking any private work.

Applications setting out age and particulars of experience, together with the names and addresses of three responsible persons to whom reference may be made, must be delivered to the undersigned not later than the 16th October, 1944.

Canvassing will be a disqualification.

Canvassing will be a disqualification.

P. ELTON LONGMORE,

Clerk of the County Council.

County Hall, Hertford, Herts. 9th August, 1944.

FERMANAGH COUNTY COUNCIL.

APPOINTMENT OF PLANNING OFFICER.

Applications are invited from qualified persons for the post of COUNTY PLANNING OFFICER for the preparation of a Planning Scheme for the County of Fernanagh, including the Urban District of Enniskillen, under the provisions of the Planning Acts (Northern Ireland), 1931 and 1944.

The salary fixed for the position is £750 per annum, inclusive of Travelling Expenses.

Applicants for the position must possess the following qualifications:—

He must be a Fellow, Associate or Member of the following:

The Royal Institute of British Architects;
The Royal Institute of the Architects of Ireland;
The Institution of Civil Engineers;
The Institution of the Civil Engineers of Ireland;

Ireland; The Institution of Municipal and County The Institu Engineers; or

The Chartered Surveyors' Institution; and, in addition, he must be at least an Associate Member of the Town Planning Institute, and have had practical planning experience. The probable duration of the work will be at least three years, and the person appointed must devote his whole time to the duties of the office. The post will be terminable by three months' notice, in writing, on either side, and the appointment is subject to the sanction of the Ministry of Health and Local Government. Selected Candidates will require to attend for Interview, when vouched expenses will be paid. The person appointed will be required to take up duties as soon as possible.

Applications in writing, giving full particulars of age, qualifications and experience, accompanied by copies of three recent testimonials, will be received by the undersigned not later than 4 p.m. on Friday, the 22nd day of September, 1944.

H. J. D. MOFFITT,

H. J. D. MOFFITT, cretary.

Fermanagh County Council, Courthouse, Enniskillen. 21st August, 1944.

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

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

TWO Junior Assistants required by Reading firm of Chartered Architects. Apply, stating age, experience, and salary required—must be exempt from National Service. Box 728.

QUALIFIED ARCHITECT required by Midland Brewery; must be exempt from military service. Apply, stating age, experience, salary required, etc., to Box 747.

QUALIFIED QUANTITY SURVEYOR required by Midland Brewery; must be exempt from military service. Apply, stating age, experience, salary required, etc., to Box 748.

A RCHITECTURAL ASSISTANT required at once for office in Manchester. Must be capable of preparing working drawings from sketches; good draughtsmanship essential. Applicants must state age, qualifications, and salary required. Box 755.

JUNIOR ASSISTANT required by City Architect (F.R.I.B.A.) for post-war development and War damage work. Apply, stating age, experience, and salary required. Should be discharged from H.M. Forces or otherwise exempt from National Service. No Conscientious Objector need apply. Box 754.

Architectural Appointments Wanted

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

A.I.B.A., with good all-round experience, desires spare time work. Box 345

A RCHITECT, experienced in carrying through works complete; London and provinces. Box 346.

A RCHITECTURAL ASSISTANT, aged 24, 6 years' experience, Inter-R.I.B.A., requires new position. Box 351.

JUNIOR ARCHITECTURAL ASSISTANT requires post in Architect's or Local Govern-ment Office; exempt military service; South London or Surrey. Box 348.

YOUNG Art Student, 17, very keen to make a start, at living wage, as Assistant in Architect's Drawing Office. "L. G.," 353, Gillott Road, Edgbaston, Birmingham, 16.

A. R.I.B.A., 26 (exempt), with good all-round practical experience, desires permanent, responsible position in Office which can offer sound post-war prospects; salary required £520; please give some details. Box 352.

ENIOR QUALIFIED ARCHITECT, long experience in all classes of housing, offers services to private firm or small LA. in South Midlands; housing and reconstruction only (no bureaucracies or big business). S. G. Wilson, 3, Greenhill Street, Stratford-on-Avon.

RCHITECTURAL ASSISTANT (25); R.I.B.A. A intermediate standard; experienced in pre-paring working drawings, and details of housing schemes, schools, shops, factories, etc., and also surveying and levelling, specifications and quantities; near and fast draughtsman; Belfast or Dublin preferred. Box 353.

ARCHITECTURAL ASSISTANT, aged 26; 6 years' office experience, with part-time school training; varied experience includes hospitals, schools. churches, cathedrals, etc.; working drawings and details; can carry out theodolite, dumphy and general surveys; R.I.B.A. intermediate standard; salary 25 approx.; references. Box 354.

ARCHITECT and SURVEYOR. L.R.I.B.A. (registered), desires responsible position; age 39; Quantity Surveying; 10 years' experience designing licensed houses and hotels for Midland breweries; 4th scale working drawings, details, specifications, hospitals, factories, housing estates, general supervision of works, checking accounts, measuring war damage and preparing schedules of repairs; permanent position with good prospects; salary by arrangement.—Box 350.



Established over 100 years.

J. W. GRAY & SON LTD.

FRANKLIN HOUSE," 37, RED LION ST. HIGH HOLBORN, LONDON, W.C.I. Phone: CHANCERY 8701 (2 lines).

LIGHTNING CONDUCTORS

Manufacturers and Erectors

MODELS

BY

John B. THORP

98 GRAYS INN ROAD,

TOWN PLANNING PUBLIC BUILDINGS ESTATES and INTERIORS

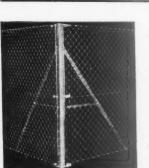
TELEPHONE : HOLBORN 1011

WHITE FACING

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS **BULWELL 78237-8**

M. MCCARTHY& SONS, LTD



Practical and Efficient

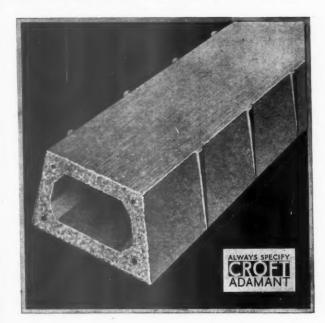
IRONWORK FENCING & GATES

for all enclosures, ensuring security and protection to property.

BOULTON & PAUL LIMITED NORWICH

CONTROL OF THE STATE OF THE STA

CROFT ADAMANT



PRECAST HOLLOW CONCRETE

FLOOR BEAMS

FOR GREAT STRENGTH EASY AND RAPID E R E C T I O N

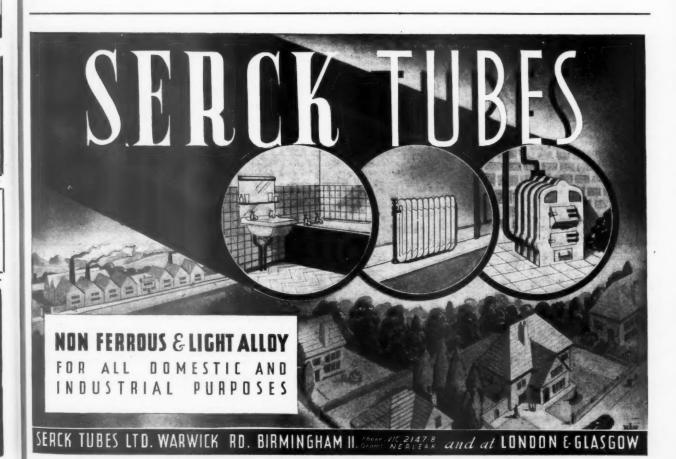
Made with Best British Portland Cement and Granite Aggregate from our own Quarry.

Your enquiries are invited

CROFT GRANITE, BRICK & CONCRETE CO. LTD., CROFT, Near LEICESTER

Telephones: Narborough 2261-2 3.

London Office evacuated to 57 Rosebery Avenue, Linslade, Leighton Buzzard. Tel.: Leighton Buzzard 3228. Branch Office and Works: West Bank, Widnes. Tel.: Widnes 2656-7.



Miscellaneous

Four lines or under, 4s.; each additional line, 1s. A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 53, Great Marlborough Street, W.1. Gerrard 4223-4224-

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

WANTED.—Specification, latest edition, com-plete set, "Planned Information." Thomas, 17, Park Mount Avenue, Baildon, Yorks.

GENTLEMAN, now Army officer, having large Architectural connection, would like to invest £5,000 in Company allied to the Building Trade (preferably paint) with a view to working directorship.—Box 756.

For Sale

Four lines or under, 4s.; each additional line, 1s. A RCHITECT'S Mahogany Desk; in original state; adjustable top, fluted legs; perfect condition; anything over £25.

Planning

As originators of the Auto-Recorder System of Machine Milking we have had extensive experience of planning lay-outs to accommodate the new technique. The service of our Technical Department is available to any Architect planning or modifying farm buildings for this purpose. Write in confidence to:—The Planning Dept., Gascoignes (Reading) Ltd., Gascoigne House, Berkeley Avenue, Reading.

Educational Announcements

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

R I.B.A. AND T.P. INST. EXAMS. Private of tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.B.I.B.A., M.T.P.I. Tutor, 161, West Heath Road, N.W.J.

R.I.B.A. QUALIFYING EXAMINATIONS.
Mr. C. W. Box, F.R.I.B.A., M.R.San.I.
Courses by Correspondence and Personal in Studio.
115, Gower St., London, W.C.I.
TELEPHONE: EUSTON 3305 and 3906.

EDINBURGH COLLEGE OF ART.
The School of Architecture and Department of
Town and Country Planning of Edinburgh
College of Art will re-open on Monday, 2nd
October, 1944.
Forms of application for admission and further
information may be obtained from the Registrar
and Secretary, Edinburgh College of Art,
Lauriston Place, Edinburgh, 3.

CITY OF HULL COLLEGE OF ART AND CRAFTS.

Principal: S. I. Hemming, A.R.C.A. (Lond.).
SCHOOL OF ARCHITECTURE.
Head of School: A. C. Light, B.A., A.R.I.B.A.

The School of Architecture at the Hull College of Art and Crafts conducts a Five Year Diploma Course in Architecture, and is recognised by the R.I.B.A. The School's Third Year examination exempts students from the R.I.B.A. Intermediate Examination, and Fourth and Fifth Year School work is accepted by the R.I.B.A. in lieu of testimonies for the R.I.B.A. Final Examination.

The NEW SESSION commences on September 13th 1964.

Examination.
The NEW SESSION commences on September 18th, 1944.
Particulars of the Diploma Course may be obtained on application to the Principal.
757.

NORTHERN POLYTECHNIC HOLLOWAY, LONDON, N.7.

Principal: T. J. DRAKELEY, D.Sc., PH.D.(London), F.R.J.C., F.I.R.I.

Head of Department of Architecture: T. E. Scorr, F.R.I.B.A.

DAY SCHOOL OF ARCHITECTURE

The Five Years' Course qualifies for exemption from the Final Examination for Associateship of the R.I.B.A. and for registration under the Architects (Registration Acts, 1931-1938. Students who complete satisfactoril the first Three Years of the course are granted exemption from the Intermediate Examination of the R.I.B.A.

School year begins 25th September, 1944. Fees-£20 per annum, or £7 per term.

EVENING SCHOOL OF ARCHITECTURE

(Five years' Course recognised by the R.I.B.A. exemption from the Intermediate Examination.)

New Session begins 25th September, 1944.

Fees from 10s. to 50s. per course according to age of student.

Special Pesign classes, and lectures on the Theory of Structures, Hygiene, Materials, Specifications, and Professional Practice in preparation for the Final Examination of the R.I.B.A.

ENTRY TO THE SCHOOLS. Intending Day Students are interviewed at any time by appointment Intending Evening Students will be interviewed from 5.30—7.30 p.m. on 18th and 19th September, 1944, or on any subsequent evening.

Prospectus post free on application.

Telephone: NORth 1686.

by Postal Method

is offered by the world's largest and greatest correspondence school in the following subjects:

Architecture
Architectural Drawing
and Designing
Building Construction
and Interior Work
Building Construction
and Quantities
Building Specifications
and Quantities
Building Specifications
and Quantities
Quantity Surveying
Structural Steelwork
Civil Engineering

Structural Steel... Civil Engineering

Surveying and Mapping Municipal Engineering Plan and Map Draughtsmanship Structural Engineering Concrete Engineering Structural Drawing

Construction Draughts-manship Sanitary Engineering Air Conditioning Heating and Ventilation

Special Courses for the Diplomas

of the R.I.B.A., I.O.B., C.S.I. Inst.C.E. Inst.M. & Cy.E., Inst.Struct.E., R.S.I. Inst.S.E., Town Planning Inst., etc.

Special Terms for members of H.M. Forces.

Write to-day for Syllabus of our Courses in any of the subjects mentioned above

INTERNATIONAL

CORRESPONDENCE SCHOOLS, LTD. Dept. 141, International Buildings

KINGSWAY, LONDON, W.C.2





LARGE DEPT. FOR BOOKS ON BUILDING



119-125 CHARING CROSS RD., LONDON, W.C.2

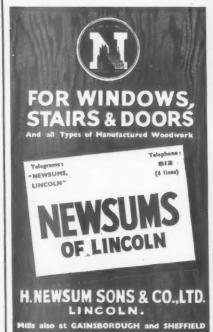
Open 9 a.m .- 4 p.m., including Saturday, Telephone: GERrard 5660 (16 lines).

STEELWORK BY

SWAN WORKS, HANWORTH, MIDDX.

'Phones: Feltham 3007. Sunbury 2367.

'Grams:
" Sharman, Feltham.





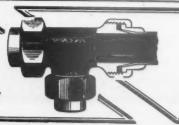
WALL PANELLING AND DOORS FURNITURE AND COUNTER TOPS

METROPOLITAN-VICKERS ELECTRICAL CO., LTD., TRAFFORD PARK, MANCHESTER, 17.

W/P201

SAMPLES AND PRICES FREE ON REQUEST

Phone: DEA. 4754 Grams: DONABROW



BROWNALL

FOR LIGHT GAUGE COPPER PIPES

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

DONALD BROWN (Brownall) LTD: Lower MOSGLAND, MANCHESTER IS



NORTHAMPTON

Town and County Benefit

BUILDING SOCIETY

Established 1848

This Society is willing to make a substantial advance towards the purchase of your house, repayable by easy monthly instalments on unsurpassed terms

THERE IS NO BETTER BUILDING SOCIETY

Write for Prospectus without obligation to H. PRESTON, Secretary, ABINGTON STREET NORTHAMPTON



VENTILATION

Specify the Positive Flow Ventilator for all applications where Positive Extract or Input is required. The P.F. Ventilator is controlled by Push Button Starter and can be provided with Reversing Switches for changing the direction of air flow. Architects are invited to write for Data Sheet 249A.

POSITIVE FLOW VENTILATORS LTD.

ASSOCIATED WITH DALLOW-LAMBERT & CO., LTD.

SPALDING ST., LEICESTER 20 KINGSWAY, LONDON Phone: 27832-3 Phone: CHAncery 6325-6

Stainless Steel METAL WORK

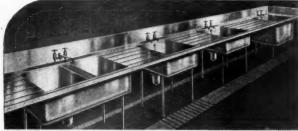


Illustration shows a range of Stainless Steel Sinks installed in a famous club

We are Specialists in

STAINLESS STEEL METAL WORK

FOR

Institute, Hospital, Hotel, Ship and Domestic Use

STAINLESS STEEL SINKS, SINK UNITS, SINK RANGES, TABLE TOPS, SHELVINGS, TANKS, PIPING, ETC.

Can be made to suit special requirements

Write for Catalogue to

Associated Metal Works

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE				
Acme Wringers, Ltd.	XXII	Davidson, C., & Sons, Ltd	FAGE	Limmer & Trinidad Lake Asphalte	PAUL				
Aga Heat, Ltd.	~~~	Eagle Pencil Co.	ii	Co., Ltd.	xxxviii				
Airwork General Trading Co., Ltd.		Easiclene-Porcelain Enamel (1938),	1.1	Lloyd Boards, Ltd	Xlv				
Allied Paints & Chemicals, Ltd		Ltd		Main, R. & A., Ltd.	YIA				
Aluminium Union, Ltd.	xiv	Edgar, Wm., & Son, Ltd.	xiii	Mallinson, William, & Son, Ltd	XXXiv				
Anderson, C. F., & Son, Ltd.	VIA	Ellison, George, Ltd.	xl	McCall & Company (Sheffield), Ltd.	XXXIV				
Architectural Press	xl	Esavian, Ltd.	xvi	McCarthy, M., & Sons, Ltd.	all la				
Ardor Insulation Co., Ltd.	xliii	Expanded Metal Co., Ltd.	xlv		xl				
Arens Controls, Ltd.	xxi	Foyles	xlii	Metropolitan-Vickers Electrical Co.,	-111				
Ashley Accessories	AAI	Franki Compressed Pile Co., Ltd		Ltd	xlii				
Associated Metal Works	xliii		xxxix _		xi				
	viii	Freeman, Joseph, Sons & Co., Ltd	xxxviii	Mills Scaffold Co., Ltd					
Austins, of East Ham, Ltd	VIII	Gaze, W. H., & Sons, Ltd.	XXXV	M.K. Electric, Ltd.	iv				
Austin, F. (Leyton), Ltd.		General Cable Manufacturing Co.,		Morris Singer Company	Xiv				
Bailey, Sir W. H., & Co., Ltd.		Ltd.		National Federation of Clay Indus-	70				
Bakelite, Ltd.	vii	Gillett & Johnston, Ltd	ii	tries					
Bell & Co., Ltd	XXXVI	Gray, J. W., & Son, Ltd.	xl	Newsum, H., Sons & Co., Ltd	xlii				
Birmetals, Ltd.	xviii .	Greenwoods & Airvac Ventilating		Nobles & Hoare, Ltd.	-				
Blackburn, Thomas, & Sons, Ltd	- 1	Co., Ltd.	ii	Northampton Town & County Benefit					
Boulton & Paul, Ltd	xl	Hall, J. & E., Ltd.	xix	Building Society	xhiii				
Braithwaite & Co., Engineers, Ltd		Harvey, G. A., & Co. (London), Ltd.		Parsons, C. H., Ltd.	XXIV				
Bratt Colbran, Ltd.	xvii	Hayward-Tyler & Co., Ltd	Xii	Pilkington Bros., Ltd	XXX				
Brightside Foundry & Engineering Co.,		Henleys Telegraph Works Co., Ltd.,		Poles, Ltd.	Xige				
Ltd.		W. T.	XXXI	Positive Flow Ventilators, Ltd	xliii				
British Commercial Gas Association		Hiduminium Applications, Ltd	-	Prodorite Ltd	-				
British Electrical Development Assoc.		Higgs & Hill, Ltd	XX	Pyrene Co., Ltd.	ix				
British Steelwork Assoc., The		Hopton-Wood Stone Firms, Ltd	iv	Rubery, Owen & Co., Ltd	xxviii				
British Trane Co., Ltd		Horseley. Bridge & Thomas Piggott,		Rustproof Metal Window Co., Ltd	XXXVi				
Broadcast Relay Service, Ltd	xxxiii	Ltd		Sankey, Joseph, Ltd	XXXVII				
Brown, Donald (Brownall), Ltd	xlii	Horton Manufacturing Co. Ltd		Serck Tubes, Ltd	- xii				
Brush Electrical Eng. Co., Ltd		Hope, Henry & Sons, Ltd	iii	Sharman, R. W	xlii				
Bull Motors (E. R. & F. Turner), Ltd.	xxxii -	Hunting Aerosurveys, Ltd		Smiths Fireproof Floors, Ltd	X				
Catering Equipment Mfrs. Assoc		Ilford, Ltd	X	Sutcliffe, Speakman & Co., Ltd					
Cellactite & British Uralite, Ltd		Imperial Chemical Industries, Ltd		Thompson Beacon Windows, Ltd.,					
Cement Marketing Co., Ltd		International Correspondence Schools,		John	xxvi				
Chance Bros., Ltd	XXV	Ltd	xlii	Thorp, J. B	xI.				
Cheetham, H. & Co., Ltd		Isteg Steel Products Co., Ltd	vi	Trussed Concrete Steel Co., Ltd	XV				
Chloride Electrical Storage Co., Ltd.		· Kautex Plastics, Ltd		Tullis, D. & J., Ltd					
Colthurst, Symons, & Co., Ltd	XXXV	Laing, John, & Son, Ltd	xlvi	Vent-Axia, Ltd					
Crabtree, J. A., & Co., Ltd.	-	Lancashire Dynamo & Crypto, Ltd		Waxed-Papers, Ltd	xlii				
Crittall Manufacturing Co., Ltd		Lead Industries Development Council	xlv	Wardle Engineering Co., Ltd					
Croft Granite, Brick & Concrete Co.,		Lillington, George, & Co. Ltd		Wimpey, George, & Co., Ltd					
Ltd	xli	Linden Doors, Ltd		Wright, Anderson, & Co., Ltd	XXVII				
For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational,									
Tot Appoint	Minter (11 cm	Mica of vacanty, competitions open, D	remings, 1	racings, etc., Lucationar,					











BOOKLET L.580/I GIVES FULL DETAILS AND UP TO DATE PRICES

ENGINEERING CO. WARDLE



n D