

Galvanized Mild Steel

in any Size, Gauge or Section

"HARCO" Mild Steel Gutters, up to and including $\frac{1}{4}$ -in. plate, are supplied as standard with pressed socket ends, as shown; thicker than $\frac{1}{4}$ -in. plate riveted or welded butt straps are supplied.

> "HARCO" PRODUCTS Although supplies are restricted they are still available for essential purposes.

> > A

GA HARVEY & CO. (LONDON) LD WOOLWICH RP. LONDON S.E.T.

iv] THE ARCHITECTS' JOURNAL for May 10, 1945

WIMPEYS AT WORK

Scientific methods in planned building construction



PUTTING THE PLAN INTO OPERATION

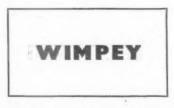
At Wimpeys' office on the site, the Building Agent puts into operation the predetermined constructional plan. Day by day he keeps a close watch to ensure that progress is up to schedule, from the preliminary excavation to roofing, lighting and the final details of decoration.

The successful construction of a modern building is a considerable feat of organisation. Many trades are involved, and much 'thinking ahead ' is necessary to ensure that men, materials and plant in sufficient quantity are available on the job at the right time.

On Wimpey contracts all these factors are co-ordinated in a complete programme of production. Each day's work is compared with the programme, and any falling behind is investigated so that the cause may be promptly removed.

The staff on every major contract includes specialists in planning and quality control, who provide the Agent with information which enables him to direct production on the most efficient lines. In addition, the Agent is able to draw on the wealth of scientific knowledge which Wimpeys have acquired as pioneers of modern constructional methods.

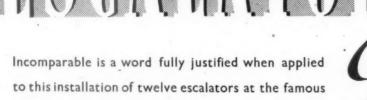
Sixty years of steady growth have taken Wimpeys to the front rank of national building contractors.



GEORGE WIMPEY AND CO. LTD. BUILDING CONTRACTORS SINCE 1880 TILEHOUSE LANE DENHAM MIDDX.

D

Lo



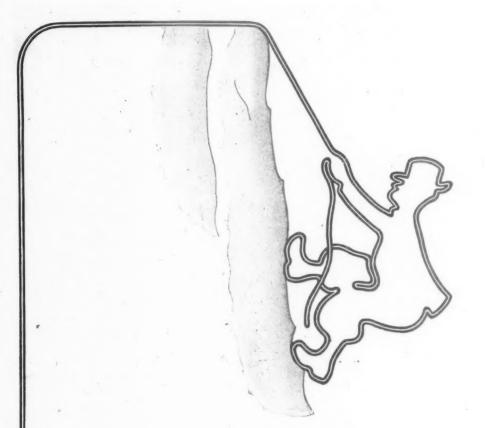
Knightsbridge Store.



LIFT & ESCALATOR ENGINEERS DARTFORD • KENT • Telephone: Dartford 3456 London Office: 10, St. Swithin's Lane, E.C.4. Mansion House 9811

14.670

at rods



CROMPTON V.D.R. CABLE

WILL NEVER LET YOU DOWN



CRUMPTON PARKINSON LIMITED. ELECTRA HOUSE, VICTORIA EMBANKMENT, LONDON, W.C.2 Telephone: TEMple Bar 5911 Telegrams: Crompark, Estrand, Landon

WE CAN DUET

NIRE

TWISTEEL

There's been a lot of chatter about these new houses that are wanted—but when "TWISTEEL" and "WIREWELD" get on the job there will soon be something doing !

..... and they're ready for the word "go," too! Ready not merely with their "basic rations" in ordinary concrete fabrication, but ready with something really concrete.

TWISTEEL REINFORCEMENT LTD.

ALMA ST., SMETHWICK, STAFFS.

And at London, Belfast, Warrington and Glasgow. Telephone Nos. :

 Smethwick 1991 (5 lines)
 London : Sloane 9218 (3 lines)

 Belfast 24541 (3 lines)
 Warrington 273

 Glasgow: City 7651 (4 lines)

CONCRETE

FLOORS

FREE FROM DUSTING

by simple application of Tretol Fluat to Old and New Floors Oil and Acid resisting

RETOL FLUAT CEMENT SURFACE HARDENER

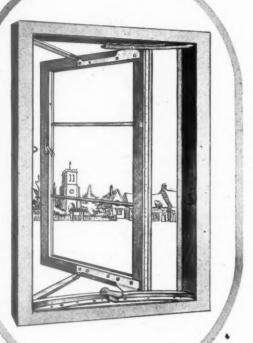
Tretol Ltd., 12 North End Road, London, N.W.II. Tel. Speedwell 2866





THE ARCHITECTS' JOURNAL for May 10, 1945 [ix

"CRAILING" WINDOWS



in a si

The unique design of the Crailing Window has many definite advantages. The outside glass can be easily cleaned from within the room. It can be fixed in any position desired from closed to fully open by the simple fastening device.

Special Metal weather sealing strips on the sash ensure a draftproof and weather tight window. The mechanism is made of non-ferrous metals thus eliminating corrosion. The torque tube hinge mechanism concealed in the frame prevents the sash from twisting.

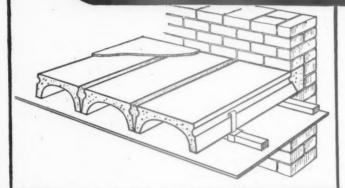
Other Hills' products for post-war production include the "Lamella" trussless wood roof and "Replicate" doors.

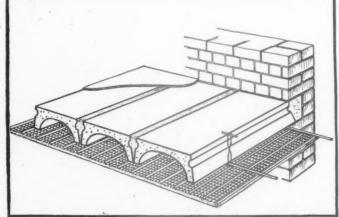
Particulars sent on application.

GUIDE ROLLER LOCKING PLATE FASTENER SASH PLATE STAY RAIL TORQUE TUBE DUAL HINGE

F. HILLS & SONSLIMITED · MANCHESTER · 17 ® cw.i

TRUSCON PRECAST FLOORS PERMIT THE USE OF ALL TYPES OF CEILINGS





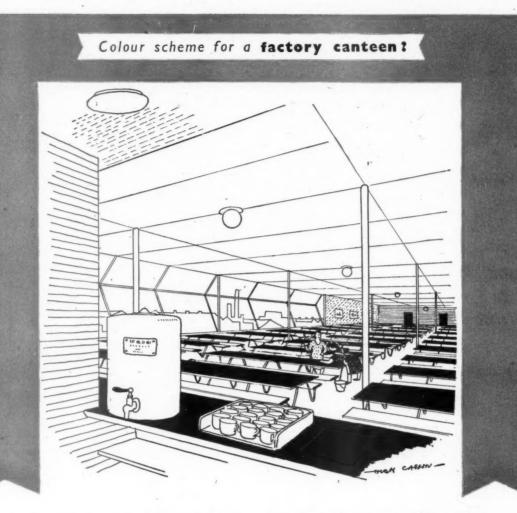
The Truscon Precast Unit System when employed in Floors or Flat Roofs allows simple and accurate provision to be made for receiving all types of ceiling construction irrespective of the process —"dry" or "wet" technique.

Carefully designed suspension hangers are provided for use with the precast Truscon units to suit various systems of ceiling construction. Diagrams on the left show two types of suspension—the upper diagram illustrating the support provided for a "ceiling board and batten" ceiling and the lower diagram the support for the "metal lathing and plaster" process.

Electric light conduits and other services may be accommodated, and the ceiling being suspended, affords a high degree of sound and thermal resistance.



An advertisement of THE TRUSSED CONCRETE STEEL CO. LTD., London, Manchester, Newcastle-on-Tyne, Birmingham, Glasgow, Cardiff, Taunton



A factory workers' canteen is used for short periods — at regular intervals. Therefore the colour scheme can and should be bright and stimulating, but not to such a degree that it becomes garish and tiresome when seen day after day.

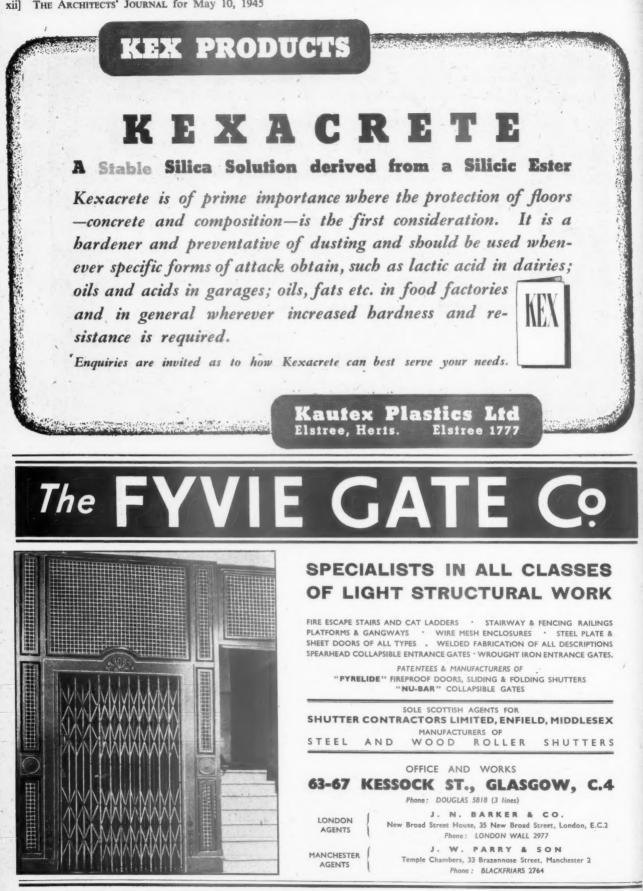
Under the contemporary "Workers' playtime" system, the canteen is often used for entertainments, concerts, dances and so forth, and should therefore create an appropriate atmosphere warm, welcoming, gay.

Considerations such as these — functional, psychological and æsthetic — will underlie the soundlyplanned colour scheme of the future. But with all this, of course, will go a care for the goodness of the materials. The paints specified should obviously cover well, obliterate well, last well and wash well. Here is a suggested specification: (1) columns: brilliant lemon yellow oil paint; (2) ceiling : pale wedgwood blue; (3) plaster walls : pearl grey; (4)exposed brick: pale biscuit; (5)floor and benches: natural wood; (6) table tops, counters, etc.: burnt red; (7) window frames: white.

★ Reproductions of this series, with actual colour references, will be supplied on request, price 1d. each. Previous subjects include Portal Estate, Factory Corridor, Concert Hall. Please write to The Silicate Paint Co., J. B. Orr & Company Ltd., Charlton, London, S.E.7.

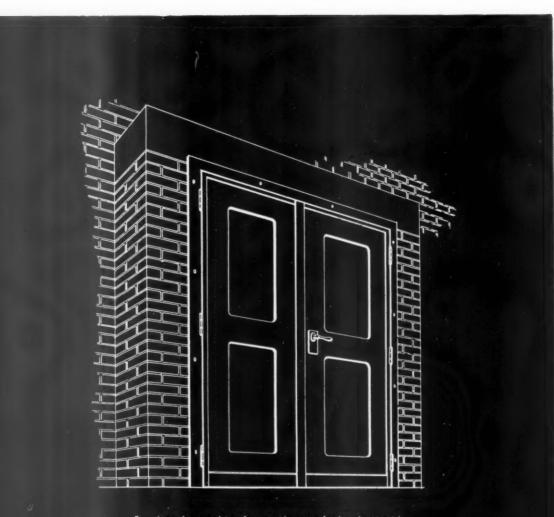


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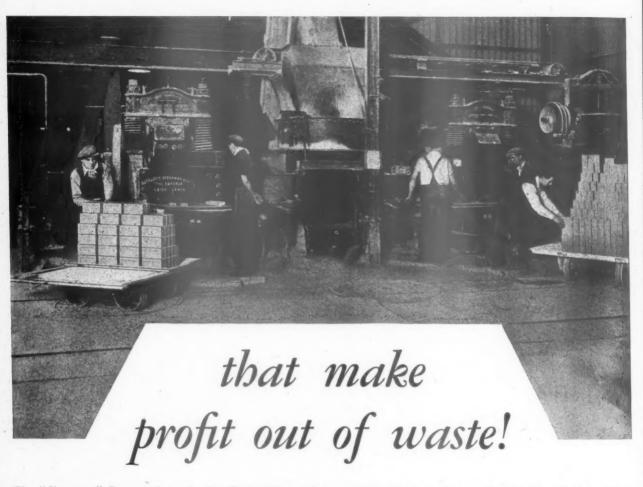
Fires have destroyed in a few months more food and essential war products than thousands of men can consume or produce in many months. Many important buildings, material of incalculable value, and irreplaceable machinery have been saved by Dreadnought Fireproof Doors. These are composite doors of steel and asbestos. They are light in weight and easily handled by women workers. Dreadnought Fireproof Doors are made to Fire Offices Committee Specifications.

DREADNOUGHT

26, VICTORIA STREET,

WESTMINSTER, LONDON, S.W.I.

The Machines...



The "Emperor" Presses shown in this illustration are being used for the manufacture of Sand Lime Bricks. They also give excellent results in manufacturing bricks from waste materials such as shale, clinker, ashes, etc. "Emperor" Presses are made in various sizes capable of producing from 1,200 to 2,400 bricks per hour and of exerting a pressure of from 100 to 200 tons. We have been manufacturing Brickmaking and Briquetting plant for over 50 years and undertake the erection of complete brick works, including the constructional work. We're always ready to give the benefit of our experience to people who make bricks or are interested in doing so.

AND COMPANY LTD., LEIGH, LANCASHIRE

LONDON OFFICE: 66 VICTORIA STREET. TELEPHONE: VICTORIA 7982-3

RED. HAND ROOFINGS





We should like to express our thanks to the Merchant Trade for the many demonstrations of goodwill during the time that supplies of roofing felts were slowed up in consequence of the priority demand for Airstrip material for Normandy.

Despite difficulties, we will continue to do our best for our merchant friends.

D. ANDERSON & SON LTD. Makers of Quality Roofings since 1849

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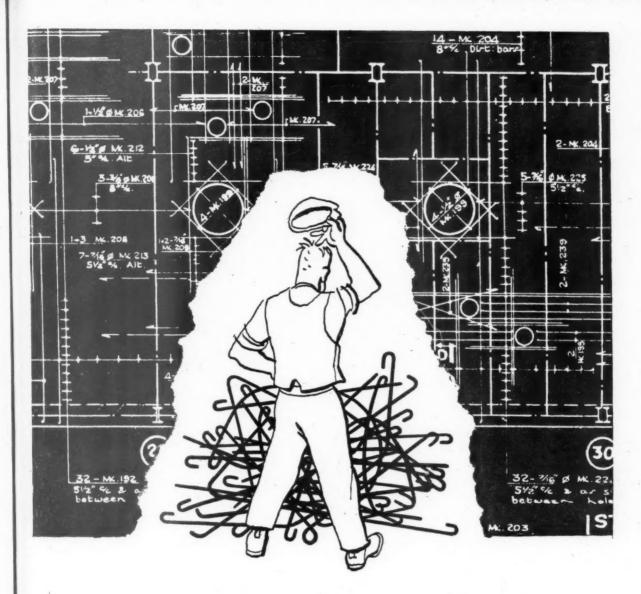
xvi] THE ARCHITECTS' JOURNAL for May 10, 1945

AN INCH CAN SPOIL THE JOB

THE JOB IS any fair-sized lay of concrete, and the dangerous inch is the bottom inch of the slab, where any seepage of moisture from the mix into a porous subsoil can cause that bugbear of concrete engineers — weakened " bottom-inch." It looks to us as though this problem will become a large-scale one in the future, for if there's going to be plenty of anything after the war, there will certainly be plenty of concrete work to be done. So it seems to us that I B E C O, famous waterproof concreting paper, is going to save engineers a good many headaches. For I B E C O is absolutely impervious to moisture. Used as an underlay to any concrete slab it is a positive insurance against honeycombing. Its worth has been proved to the hilt in many large Government contracts. Light in weight, handy to transport in bulk and easy to handle, I B E C O is tough and stands up to a lot of trampling without damage. This makes it a good curing overlay as well. It is low in cost and it's a British product. Any concrete engineer who likes to be abreast of modern technique should certainly know the full facts about I B E C O. Write now for further details and samples of each of the five weights made to C. Davidson & Sons Ltd. (Dept. K. 38), Mugie Moss, Bucksburn, Aberdeenshire.



WATERPROOF KRAFT PAPER



No head scratching on the site

From the time you let us have the specification we take off your hands all the worry concerned with the supply of reinforcing material; do all that's required in the way of bending, hooking, radiusing, etc., and get the material to the site not only when it's wanted but in the order

it's wanted, and bundled and labelled for easy sorting and quick handling.

e

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a.

GUEST, KEEN & NETTLEFOLDS LIMITED

CASTLE WORKS AND ROLLING MILLS, CARDIFF. 66 CANNON ST., LONDON, E.C.4. 111 NEW ST., BIRMINGHAM

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. . . but the crew was saved

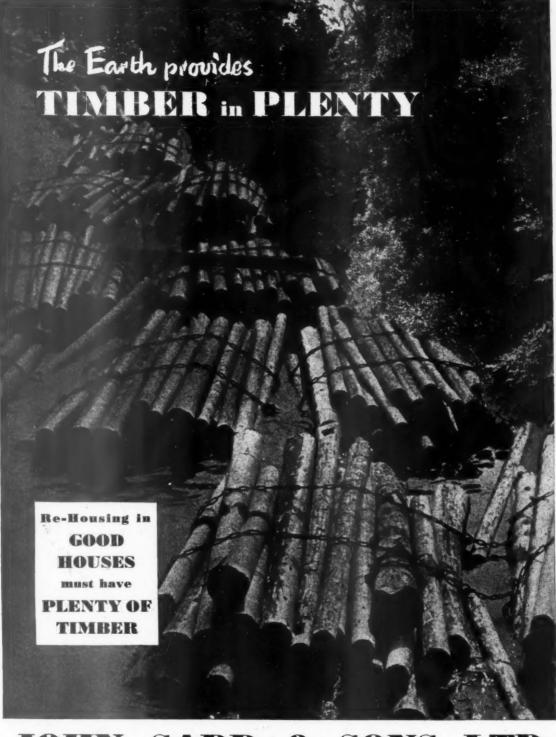


Many an airman will look back with gratitude to the dinghy that survived the buffeting of "the drink". The apron material used with it to give protection against the weather is just another of those everyday commodities which in easier times we took for granted. Imperial Chemical Industries have, since the war began, produced millions of yards of "Rexine" and "Vynide" leathercloths and rubberised cloth alike for the military and civil services. Years of research and experiment were necessary to develop the

material which is as good as scientific research and manufacturing experience can produce. The knowledge gained will be directed in post-war years to the production of a range of Mural "Rexine" and Mural "Vynide" panelling cloths outstanding in colour and design for all forms of interior decoration.



IMPERIAL CHEMICAL INDUSTRIES LTD., LONDON, S.W.1-





MALDON Telephone : Maldon 131

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4.7360

London Office: Aldwych House, W.C.2. Telephone: Holborn 7225

BSSBX



STEEL DOESN'T BURN You greatly reduce fire risk if you store in Sankey-Sheldon Adjustable Steel Shelving and Bins. And you can store more goods per cubic foot of available space. The Sankey-Sheldon A. B. C. System of Unit storage allows the greatest flexibility. The self-contained stacks are built of standard parts that can be assembled and re-assembled to any plan. Shelves and partitions can be adjusted to the exact spacing required by the goods. Not a cubic inch of space need be wasted. The steel is stove-enamelled, giving a durable finish that is easily cleaned. For low-cost, space-saving storage, consult Sankey-Sheldon. **STORE IN STEEL**

SANKEY- SHELDON STEEL EQUIPMENT AND FURNITURE

Chief Office · 46 Cannon Street, London, E.C.4

ALSO HARRIS & SHELDON, LTD., MAKERS OF SHOPS

Enquiries to Sankey-Sheldon, Dept. A.J., 46 Cannon Street, E.C.4





POR , RECONSTRUCTION

nodised aluminium

when the rubble is finally cleared, design and desoration will be served again by ANODISED ALUMINIUM in forms and finishes as diverse as taste may demand.

In natural colour or with added dye, held constant by the anodising process, the metal carries attractively into any decorative scheme its own peculiar degree of lightness, adaptability and endurance.

Aluminium and its alloys are produced in ingots for spandrels, crestings, statuary and other cast pièces—in extrusions for glazing bars, window sections, mouldings, architraves and handrailing—in sheets for panelling and fascias—in tubes, rods and other standard forms.

Numerous long-standing installations are illustrated in the B.A. Co's booklet "Aluminium in Architecture and Decoration."

British Aluminium

THE



Telephone: CLErkenwell 3494. SALISBURY HOUSE, LONDON WALL, LONDON, E.C.2. Telegrams ; Cryolite, Ave, London

HOW WOULD YOU SURFACE PRE-CAST STONE?

The best way to save hours of laborious rubbing down is to use a B & D Sander which will surface. pre-cast stone easily and rapidly. The cleaning up of decorative stone work is an arduous and often delicate task, and the final completion of a new building can be delayed by using the wrong methods.

Black & Decker Sanders with their variety of accessories play an important part in structural building both in the workshop and on the site.

Juicker and better with

Black & Decker

FOR THE BUILDING TRADE



For removing rust and scale use B & D Sander with cup wire brush.





IN IN IN IN IN IN IN IN IN IN

BLACK & DECKER LTD · HARMONDSWORTH · MIDDX 'PHONE: WEST DRAYTON 2681/6 BRANCH SERVICE STATIONS: LONDON, BIRMINGH/M, BRISTOL, GLASGOW, LEEDS, MANCHESTER, NOTTINGHAM

Smee's

with cup grinding wheel





In co-operation with our associate company, The Taylor Rustless Fittings Co. Ltd., we shall be able to supply tasteful stainless steel architectural fittings such as door plates, handles, banister rails, bathroom fittings, etc. For the present, of course, stainless steel is a priority product.

HYGIENIC STAINLESS STEEL FOR THE KITCHEN OF THE FUTURE

When freedom of choice once again becomes the order of the day, Pland Stainless Steel Sinks will bring hygiene and beauty to the kitchen. Well ahead in modern design, and always retaining their initial bright and clean appearance with minimum attention, they will constitute the wisest choice possible to make.

THE STAINLESS STEEL SINK COMPANY LTD. Ring Road, Lower Wortley, Leeds, 12, also at 14 Gt. Peter Street, Westminster, S.W.I Tel.: LEEDS 38711 Tel.: ABBEY 1575

в

Damage

Repair

War

FACTS ABOUT

FOR PLASTERING

Serial Note No. 64 issued to local authorities in the London and South Eastern Regions by the Ministry of Health recommends the use of LIME gauged with Portland cement for plastering.

"Hydrated lime gauged with Portland cement will give adequate strength at early ages. It is easy to apply, is suitable for plastering on brick, partition units and on wood and metal lath, and will give permanent and satisfactory results. It can be used for both backing and finishing coats."

THE SOUTHERN LIME ASSOCIATION

4, SOUTHAMPTON ROW, LONDON, W.C.1.

Space Heating Space Saving

is achieved by concealed Vectair Convection Heating. In the illustration it is clear that if all the recessed heaters were of the projecting type, at least 6 inches of floor space would have to be taken off the sides of the classroom.



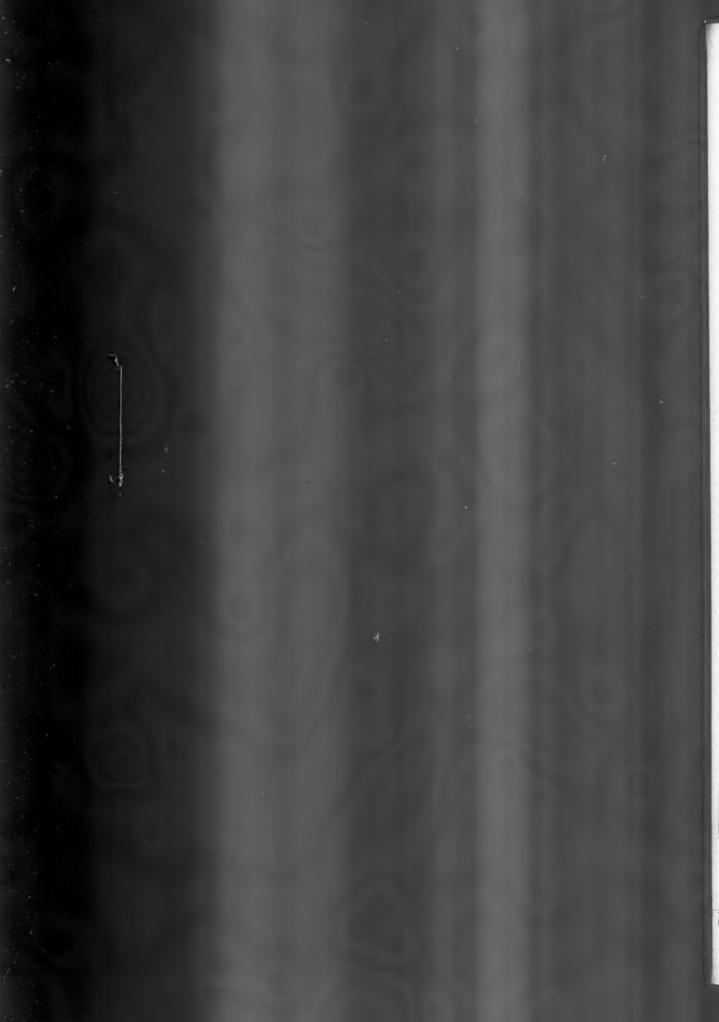
• Write for Brochure V/A14.

BRITISH TRANE CO. LTD. Vectair House

52 Clerkenwell Close, London, E.C.I. Tele.: Clerkenwell 6864 & 3826.

Agencies at Belfast, Birmingham, Cardiff, Dublin Glasgow, Liverpool, Newcastle, Sheffield and Torquay. Vectair (Concealed) Heating for Schools





IMAGINE you're a steeplejack

on London's tallest chimney (built by P. C. Richardson, Middlesborough, Limited) and you'll get some idea of what the PHORPRES bricks have to stand up to— 5,200 tons of them Just think for a moment what it would feel like to be on top of this 350 foot chimney in an 80-mile-an-hour gale. The side-sway at the cap (approximately 12 inches from the perpendicular) would give you a good indication of the fluctuating stresses which are constantly being transmitted throughout the whole structure—right down to the footings. A chimney gets no protection from wind or rain, heat or cold. Year in and year out, it just has to take it.

Bricks that will stand up to this sort of test can be relied on for all general building purposes.

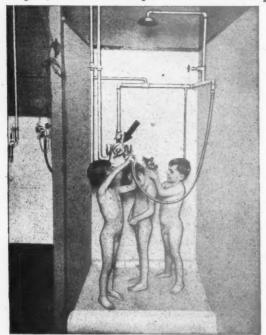


Limehouse Generating Station of the Metropolitan Borough of Stepney: A. E. Campbell, M.I.E.E., Borough Electrical Engineer. Contractors: Messrs. P. C. Richardson & Co. (Middlesbrough) Limited, Middlesbrough.

ERB

LONDON BRICK COMPANY HEAD OFFICE : STEWARTBY, BEDFORD, BEDS. BIRMINGHAM OFFICE : PRUDENTIAL BUILDINGS, ST. PHILIP'S PLACE, BIRMINGHAM, 3. BRISTOL DEPOT : ASHLEY HILL GOODS DEPOT (G.W.R.) ASHLEY HILL. LIMITED Telephone : KEMPSTON 3131 Telephone: COLMORE 4141 Telephone : BRISTOL 46572 xxvi] THE ARCHITECTS' JOURNAL for May 10, 1945

They hold the temperature steady



Leonard-Tnermostatic Hot and Cold Water Mixing Valve serving a shower and hand sprays at a Day Nursery



By means of a quick-acting thermostat the Leonard-Thermostatic Water Mixing Valve delivers blended water from hot and cold and keeps it at a steady temperature no matter how the pressures or temperatures fluctuate in the supplies.

Leonard-Thermostatichot and cold Water Mixing Valves have been specified by leading Architects for group washing equipment in emergency work.



They are widely used by Government Departments and Municipal Authorities wherever schemes for washrooms have been specified.

HOT COLD WATER WATER

Specify

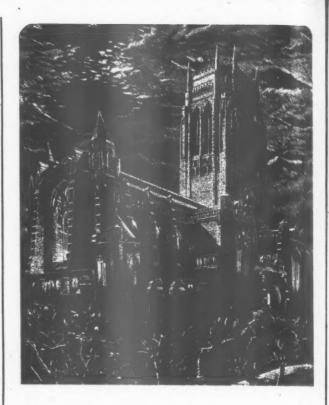
eonard-Thermostatic

hot and cold water mixing valves for group washing equipment

Send for illustrated pamphlet from the manufacturers WALKER, CROSWELLER & CO. LTD. CHELTENHAM and London.

61.1769

GD 14



The Cathedral It has been said that "a good example is the best sermon." There is a special significance, therefore, in the fact that "Pyrotenax" low-tension cables are being increasingly used in Cathedrals and Churches. Quite apart from the fire risks that they eliminate, and the fact that they are practically indestructible, Pyrotenax Cables have the further advantage that their copper sheath is quite unaffected by the tannic acid always present in oak so widely employed in ecclesiastical buildings.

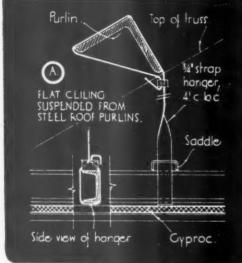
> FIRE RESISTANT * UNAFFECTED BY OIL, WATER, CONDENSATION, ACCIDENTAL OVERLOAD OR GROSS ILL-USAGE * EASY TO INSTAL *

For Lighting & Power



PYROTENAX, LTD., HEBBURN, CO. DURHAM. Telephone: Hebburn 32244/5 LONDON OFFICE: 7 Victoria St., S.W.I. 'Phone Abbey 1654 BIRMINGHAM OFFICE, 2 Moor Street. 'Phone Midland 1265

STRONG, LIGHTWEIGHT, FIRE-RESISTING



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There

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Quite , and tible,

ntage ected

oak dings,

arn 32244/5

suspended ceilings

The sketch shows typical construction for a GYPSTELE suspended ceiling incorporating panels of GYPROC fireresisting plaster-board. This type of ceiling is very light in weight and is suitable for both flat and sloping construction. For further information see Information Sheet 829, also "Facts About Bundled Wall and Ceiling Board," copies of which are freely available.

SAN BELLEVILLE Gyproc nailed Hanger r Panel strip. (c) fixing at truss angle (a) Junction of ceiling and wall or intermediate channel - Hanger ************ Panel strip & hanger (d.) Section parallel to truss angle, (b). Alternative wall junction. or intermediale channel D CEILINGS HEAD OFFICE: Westfield, Upper Single Telephone: Gravesend 4251-4 vesend, Kent. roc, Gravesend **GYPROC PRODUCTS LIMITED** GLASGOW OFFICE: Gyproc Wharf, Shieldhall, Glasgow, S.W.I Telephone: Govan 614 Telegrams: Gyproc, Glasgow REGISTERED OFFICES: 21 St. James's Square, London, S.W.1

istered Architects

28th March 1945.

Messrs. The Dunlop Rubber Co. Ltd., Clerkenwell House, Clerkenwell Green, E.C.1.

For the attention of Mr. Leahy.

Dear Sirs,

Reí

I understand that you are preparing for post-war problems in respect of rubber flooring.

As you know; pre-war I used a great deal of your 12 x 12" mottled rubber at the Middlesex Hospital, and elsewhere. At the 'Middlesex' as far as I can remember something like 1700 yds. were used. I can without hesitation say that, in my opinion and in the opinion of the users of the material, this is one of the best floors we have at the Hospital. It has shown no sign of wear; it always looks well; it is easy to clean and quiet to walk on.

I hope that in the big developments in hospital work which are bound to come when big building starts again, I shall have an opportunity of using this material extensively.

If this letter is of any use to you, I should be quite pleased that you should make what use you can of the opinion given.

Yours faithfully,





POWER SUPERSEDES HUMAN EFFORT



WE live by bread. But, from time immemorial corn was cut and gathered by manual labour. So man's ability to feed himself was limited by the small scope of his two hands. Symbolic of our more enlightened age are those mechanical devices which help agriculture and BRUSH ELECTRICAL EQUIPMENT plays an ever-increasing part in their production.

In this, as in most other departments of human activity where electrical power has replaced manual labour, BRUSH is a name respected for its integrity and reputation for sound workmanship.

BRÜSH

ELECTRICAL ENGINEERING CO. LTD. LOUGHBOROUGH · ENGLAND

TURBO-GENERATORS, TRANSFORMERS, E.H.T. and M.T. SWITCHGEAR, A.C. and D.C. MOTORS and GENERATORS, BATTERY ELECTRIC VEHICLES and TRUCKS, TRACTION EQUIPMENT, BUS and COACH BODIES BRANCHES: LONDON, BIRMINGHAM, CARDIFF, BATH, MANCHESTER, LEEDS, NEWCASTLE, GLASGOW, BELFAST, DUBLIN, Installation costs of domestic water supply services will be much reduced by the use of "KUTERLON" Long Length Copper Tube which is now supplied in coil form in lengths up to 60 ft. Annealing

or the use of mechanical bending appliances are not necessary. Bending can be done by

This Long Length Copper Tube

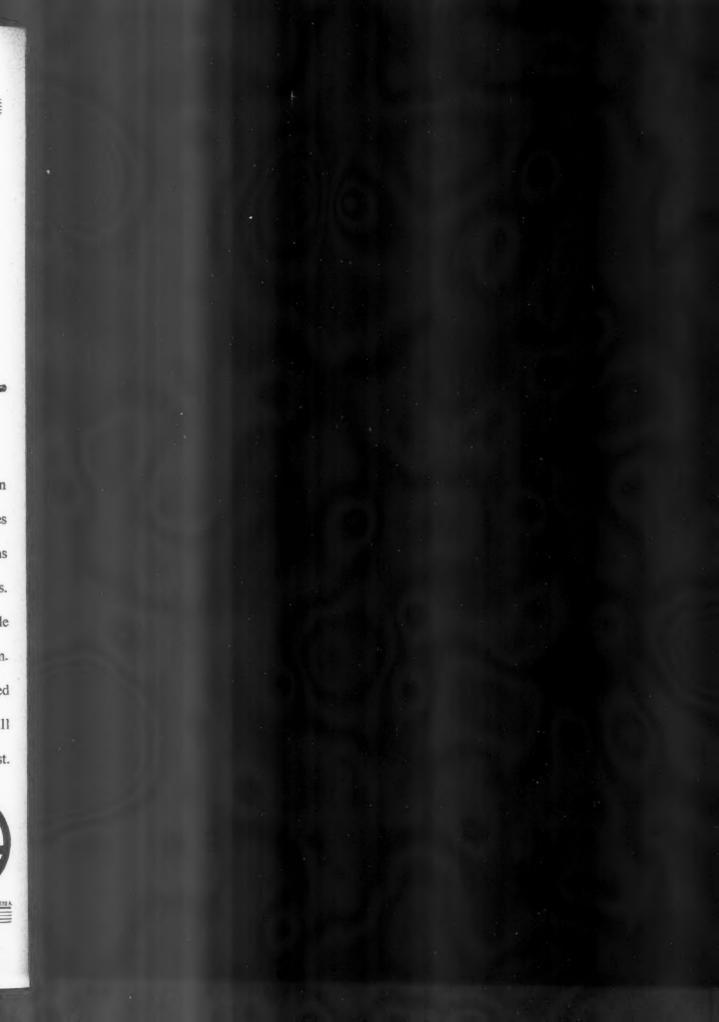
will save a lot of joinling

hand, and the tube can be laid easily in trenches and run round obstructions such as rock or tree trunks. "KUTERLON" will be available for post-war reconstruction. but meantime is supplied to current licensing regulations. Full

information will be supplied on request.

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







HIGGS AND HILL LIMITED

LONDON

LEEDS

COVENTRY

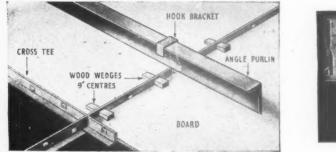


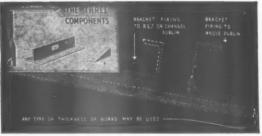
FOR APPLYING ANY TYPE OF BOARD TO CEILING & WALLS

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



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





P

D

POINTS TO BE 8 NOTED

- 1. Fixed to UNDERSIDE of purlins-steel or woodcovering unsightly hook bolts, clips, etc.
- Assures the insulating value of air-space between roof and underside of purlins. No dust or dirt. 2.
- Can be fixed to steel or wood purlins of roofs and 3. joists of flat ceiling.
- No unsightly nail heads showing.
- Can be applied to new or old buildings of any con-5. struction independently of the roofing contractor,

who proceeds with his work ahead of the AnD Wedge Method.

- Any thickness of board can be used, from 1" to 1".
 This method can be used for applying linings to
- exterior walls.
- The simplicity of application is such that any contractor can apply the AnD Wedge Method, and the materials making up this method can be purchased by the contractor.

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

C. F. ANDERSON & SON, LTD. Wallboards for Government Work **TELEPHONE: CLERKENWELL 4582**

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

TASIAN 40

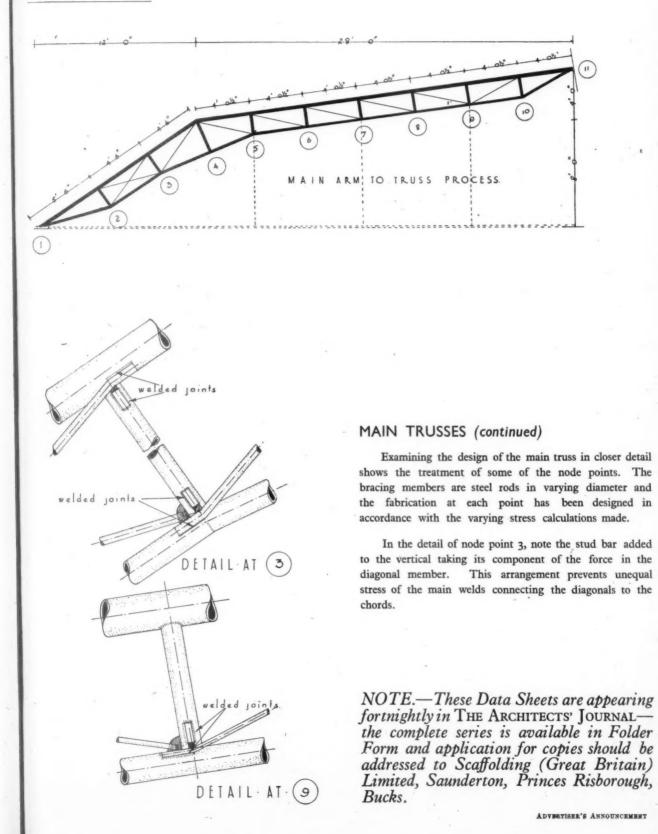
PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 18

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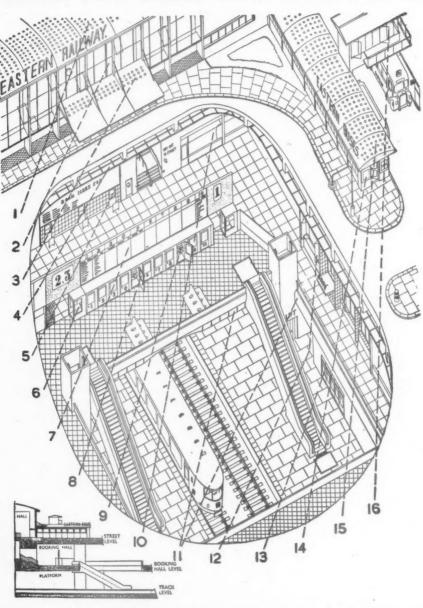
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582



FACTS ABOUT GLASS FOR ARCHITECTURAL STUDENTS

SPECIFICATION FOR GLASS IN A RAILWAY TERMINUS



ENTRANCE HALL AT STREET LEVEL (I) Roof: Glass lenses in reinforced concrete. (2) Clerestory glazing : {* Georgian Wired Cast. (3) Canopy over entrance: Glass lenses in reinforced concrete.

BUS SHELTER (15) Roof: Glass lenses in reinforced concrete. (14) Vertical glazing: Georgian Polished Wired. (16) Control room window: 32 oz. Sheet Glass. **BOOKING HALL LEVEL** (4) Ceiling laylight: in $\frac{1}{4}$ " Rolled Glass, with fluorescent lighting above. (5) Booking office windows: "ARMOURPLATE" Glass louvre type. (7) Train indicator and platform numbers: Sandblast or acid obscured glass, internally lit. (6) Ticket collector's box: Georgian Polished Wired. (8) Telephone kiosks: Double glazed with 32 oz. Sheet Glass. (9) Scribbling panels in telephone kiosks : Ground surface "VITROLITE." (12) Restaurant : Polished Plate Glass in doors and windows. (10) Shops : Windows glazed with Polished Plate Glass.

(The numbers in brackets correspond to the key numbers in the drawing.)

TRACK LEVEL (11) Cornice lighting with fluorescent tubes behind a diffusing glass such as Kaleidoscope. (13) Automatic tobacco machines : Georgian Polished Wired fronts.

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order." Subscription rates : by post in the U.K. or abroad, f1 155. od. per annum. Single copies, gd. ; post free, 11d. Special numbers are included in subscription; single copies, 15. 6d. ; post free, 15. gd. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 155. each ; carriage 15. extra. Goods advertised in the JOURNAL and made of raw materials now in short supply, are not necessarily available for export.

DIARY FOR MAY JUNE AND JULY

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.

BELPER, Derby. Homes to Live In. Exhibition. At the Small Public Hall, King Street.' (Sponsor, BIAE.) May 23-30 BIRMINGHAM. The English Town: Its Continuity and Development. At the George Dixon Grammar School, Edgbaston, Birmingham. (Sponsor, TCPA.) May 17-31 P UXTON. The English Town: Its Con-

B UXTON. The English Town: Its Continuity and Development. Exhibition. At the Pavilion Gardens. (Sponsor, TCPA.) MAY 10-14

BRISTOL. Country Life- and Country Needs. Exhibition. At the Museum and Art Gallery. Guide lecturer from May 10-19, Miss McLeish. (Sponsor, BIAE.) May 10-26

GREAT CASTERTON, Lines. Homes to Live In. Exhibition. At the School House. (Sponsor, BIAE.) May 12-13

LIVERPOOL. Present Day Architectural Works. Exhibition arranged by the Liverpool Architectural Society. At the Bluecoat Chambers. The object of the exhibition is to show the public what the architect does for his money. Exhibits include preliminary perspectives and models, sketch designs and photographs of the completed work of a number of local buildings. All the exhibitors are members of the Liverpool Architectural Society. Among the many buildings shown are flats at Wirral and Liverpool; Mersey Tunnel Ventilation Building; Liverpool Cathedral; University Library and Public Library, Liverpool; and the Civic Memorial, Southport. (Sponsor, Liverpool Architectural Society.) May 10-19

LONDON. Royal Academy of Arts. One Hundred and Seventy-Seventh Summer Exhibition. May 10 onwards

Living in Cities. Exhibition. At the Municipal Offices, Lambeth. (Sponsor, BIAE.) MAY 10-17

Your House. Exhibition. At Heal and Son, Ltd., 196, Tottenham Court Road, W.1. The exhibition, arranged by Felix Goldsmith, is designed to demonstrate the application of modern building methods to the construction of well-designed and well-built houses to suit individual needs. It will be opened by Professor Sir Charles Reilly at 2.30 p.m. on May 11. MAY 11

Illuminating Engineering Society Annual General Meeting. At the Institution of Mechanical Engineers, Storey's Gate, St. James's Park, S.W.1. Address on Daylight and Its Penetration into the Sea, by Dr. W. R. G. Atkins. 5 p.m. May 15 A. F. Dufton. Heat Conservation in Small Houses. Architectural Science Board Lecture. At RIBA, 66, Portland Place, W.I. (Sponsor, RIBA, Architectural Science Board.) 5.30 p.m. MAY 16 Professor J. D. Bernal. The Social Relations of Science. Trueman Wood Lecture. At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 1.45 p.m. MAY 16

1.45 p.m. T. Alwyn Lloyd. Preservation of Coastal Amenities in Wales. At Caxton Hall, Caxton Street, Westminster, S.W.1. (Sponsor, TPI.) 6 p.m. MAY 17

Aluminium from War to Peace. Exhibition at Selfridge's. All sections of the aluminium industry have combined to stage an exhibition that will tell, for the first time, the story of aluminium and its varied applications in the nation's post-war reconstruction plan. Aluminium in housing is featured in the exhibition. There will be planned kitchens and other rooms and a bathroom in all of which aluminium is used to the best advantage. The public will get a pre-view of furniture, domestic appliances and utensils of all kinds. Examples of anodised aluminium ranging from electric fittings to complete kitchens in anodised aluminium are being shown. (Sponsor, Aluminium Development Association.) May 30-JUNE 30 Donald Barber. Shopping Centres and Town Planning. At 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m. May 31 Christian Barman. Design in Modern Transport. At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. The lecture will be illustrated by lantern slides. Chairman, T. E. Thomas, General Manager, London Passenger Transport Board. (Sponsor, RSA.) 1.45 p.m. JUNE 6 Dr. J. M. Mackintosh. Social Medicine and Town Planning. At 28, King Street, W:C.2: Chairman, Dr. Norman Macfadyen. (Sponsor, TCPA.) 1.15 p.m. JUNE 14 MANCHESTER. Worthwhile British Products. An exhibition of furnishing fabrics, glass, pottery and printing showing our pre-war attainment and chosen from the Manchester City Art Gallery Collection. At the Municipal School of Art, All Saints, Manchester, 15. Open during school hours. Closing 8 p.m. on Monday, Tuesday and Thursday and 12 noon on Wednesday and Sturday. May 10-JUNE 23

WORCESTER. Country Life and Country Needs. Exhibition. At the Women's Institutes. (Sponsor, BIAE.) May 14-26

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

 \star 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.

Lieutenant - Colonel F. G. Sainsbury, J.P., has been re-elected PRESIDENT OF THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS for a third term. Mr. W. Forbes Campbell, of Glasgow, has been elected Chairman of Council, and Mr. Charles H. Taylor, Vice-Chairman of Council.

*

The Tees Conservancy Commissioners have approved A THREE MILLION POUND SCHEME

for the development of the ports. A scheme for the progressive post-war development of the ports on the Tees, estimated to cover over £3,000,000 on presentday charges, excluding the cost of land and the necessary craft, has been approved by the Tees Conservancy Commissioners. According to the Daily Telegraph, the Development. Committee reported the opinion that the fall in status of the ports was not due so much to a decline in the actual trade of the River Tees, but to the relatively greater progress achieved at other ports. Prospects for the area are considered to be more hopeful since Mr. Dalton, President of the Board of Trade, included both banks of the Tees in the Government scheme for a diversification of industries.

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THE MAN on the BRIDGE

IT HAS BEEN OUR PRIVILEGE to manufacture, among many other implements of war, the main structural members for the famous BAILEY BRIDGE

HENRY HOPE & SONS LTD SMETHWICK. BIRMINGHAM & 17 BERNERS ST., LONDON, W.1

Makers of Fine Metal Windows since 1818

From AN ARCHITECT'S Commonplace Book

A YANKEE ON ENGLAND : THE FARMHOUSE. [From A Passionate Pilgrim, by Henry James.] At widely opposite points of the expanse two great towers of cathedrals rose sharply out of a reddish blur of habitation, taking the mild English light. We gave an irrepressible attention to this same solar reserve, and found it only a refinement of art. The sky never was empty and never idle; the clouds were continually at play for our benefit. . . . We made our way along the rounded ridge of the downs and reached, by a descent, through slanting angular fields, green to cottage doors, a russet village that beckoned us from the heart of the maze in which the hedges wrapped it up. Close beside it, I admit, the roaring train bounces out of a hole in the hills; yet there broods upon this charming hamlet an old-time quietude that makes a violation of confidence of naming it so far away. We struck through a narrow lane, a green lane, dim with its barriers of hawthorn ; it led us to a superb old farmhouse, now rather rudely jostled by the multiplied roads and by-ways that have reduced its ancient appanage. It stands there in stubborn picturesqueness, doggedly submitting to be pointed out and sketched. It is a wonderful image of the domiciliary conditions of the past -cruelly complete ; with bended beams and joists beneath the burden of gables, that seem to ache and groan with memories and regrets. The short low windows, where lead and glass combine equally to create an inward gloom, retain their opacity as a part of the primitive idea of defence. Such an old house provokes on the part of an American a luxury of respect. So propped and patched, so tinkered with clumsy tenderness, clustered so richly about its central English sturdiness, its oaken vertebrations, so humanized with ages of use and touches of beneficient affection, it seemed to offer to our grateful eves a small rude symbol of the great English social order.

** Mr Bevin, the Minister of Labour: I AM NOT GOING TO ALLOW ARCHITECTS or anybody else to jump the claims of the ordinary Class A man. Mr. Bevin was answering a question by Mr. Bossom in the House of Commons concerning the release of architects and surveyors from war-time duties. Mr. Bossom asked the Minister of Labour if he is satisfied that the number of architects and surveyors that will be released from war-time duties will, in addition to those who are now available, be sufficient to enable the Government's announced housing programme and other essential construction work required during the first two post-war years to be completed. Mr. Bevin: I am satisfied that existing arrangements providing for the release of architects and surveyors for the housing programme go as far as possible, and that we must have regard both to the needs of the Services and to the needs of the housing de partments. Subject to the requirements of the Services, we are doing and shall continue to do all we can to provide the housing staff Which is essentially required. Mr. Bossom: Has my right hon. Friend not gone into this definitely, and calculated the number of architects required in relation to the number of operatives, so that we can be getting on with the housing programme? Mr. Bevin: with the housing programme? Mr. Bevin: Yes, I have calculated, but I am not going to allow architects or anybody else to jump the claims of the ordinary Class A man. Mr. Bossom: While I quite agree with my right hon. Friend, is he not aware that this is not a question of anybody jumping a claim but of providing houses for our people? Mr. Bevin: I am quite certain that there is a definite effort to put pressure upon me for certain professions to get their men out in advance of the ordinary unknown man, and I stand for the unknown man.

At the corner of Cheyne Walk and Seaton Street, Chelsea, a three storey block of PREFABRI-CATED FLATS is to be erccted. The flats to have three bedrooms, a living room 15ft. by 12ft., and a balcony will be constructed on the Braithwaite unit system. Cottages of the same type have been built at

Burnt Oak, Hendon. According to the *Evening News*, the Chelsea Borough Council decided to experiment with flats because of the high cost of land in Chelsea. The Council was not satisfied that the use of a site for one family only was economical. The cheapest site for a Portal house in Chelsea works out at £600, and some are over £800. One piece of land which the Council intends to lease for temporary houses would, if purchased, cost about £2,000 a site. In many parts of London estimates of from t700 to £900 have been made for sites for houses designed to last ten years, but prices have in most cases still to be settled.

In the fighting which followed the Allied invasion of the Continent, British Empire WAR GRAVES WERE UNSCATHED. Plans for the commemoration of the British Empire dead in this war have been made. These facts are given in the 25th annual report of the Imperial War Graves Commission, Stationery Office, price 1s., which says: Officers of the Imperial War Graves Commission went over to France and Belgium last October, to make preliminary arrange-ments for a resumption of the work. In North Africa cemeteries are to be constructed at Sollum, Tobruk, and Massicault. Sites and layouts for 15 cemeteries south of Rome are in preparation. So swift was the Allied ad-vance that the tide of battle swept past the cemeteries and monuments in the French cemeteries and monuments in the traditional departments of the Somme, the Pas de Calais, and the Nord and in the Ypres Salient, and the Nord and the them unscathed. The for the most part left them unscathed. The tablet in Bayeux Cathedral to the Million Dead of the British Empire, placed there in December, 1925, was undamaged. The Com-mission hopes gradually to rebuild its organ-ization in France. In the light of recent dis-cussions in the House of Lords on spiritual and utilitarian claims in memorials, special interest attaches to three types of the Commission's memorial in honour of the dead who have no known grave. One is the Tower Hill memorial to 12,000 men of the Merchant Hill memorial to 12,000 men of the Merchant Navy by Sir Edwin Lutyens. The others are the Ophthalmic Hospital in Cairo, com-memorating the missing of the Egyptian Labour Corps, and the tribute to the civilian victims of air attacks, designed by Sir Charles Peers, which is to be placed close to the Un-known Warrior's tomb in Westminster Abbey.

An organization with the name SERVICE ARTS AND TECH-NICALS ORGANIZATION (SATO) has been established in India to help architects and their fellows in the other sections of the building industry. All members and students serving in India or SEAC are asked to get in touch with SATO by writing to Capt. P. J. Marshall, R.E., the General Secretary, c/o Messrs. Grindley's Bank, Calcutta. SATO is able to render considerable assistance to architects and students in the Forces by acting as a distribution centre for technical information and publications and in the organization of educational work. It is now in close touch with the RIBA, who will be providing SATO with all the material assistance and backing possible.

A revised policy for the CONTROL OF BUILDING and building repair work is to be issued by the Government. A few weeks ago the Minister of Health in-formed the House of Commons of the Government's decision to extend to the whole country the £10 limit applicable to London and the south-east and to delegate the issue of licences for work costing between $\pounds 10$ and $\pounds 100$ to the local authorities. There is still to be a single policy for the whole country, but, according to *The Times*, it is understood that the £10 limit and the licensing scheme are being reconsidered. Circumstances have changed since Mr. Willink made his statement, and the national £10 limit did not, therefore, come into force on May 1, as Mr. Willink had announced, but the new plan is not quite ready for publication. The general character of the changes is indicated in the following statethe ment issued by the Ministry of Works. The Minister of Works has been reviewing the arrangements for the licensing of civil building in the light of experience gained in the London area and in the Home Counties, where the lower licensing limit has been in force. In this connection he has taken into account the expressed by local views

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First of the Thirty-Thousand

The first of the thirty-thousand prefabricated temporary houses being sent to this country by the USA Government on lease-lend has now been erected and equipped for demonstration purposes at the Building Research Station at Garston. Regular shipments are expected to start this month and it is expected that all the houses will have been

authorities and representatives of all sections of the building and civil engineering indus-tries. As a result he has decided to make a number of modifications in the licensing system. These are designed to reduce to the minimum the burden placed upon local authority licensing staffs and the restrictions upon the freedom of action of individual householders and builders. The revised scheme, which is now in course of being drafted, will be applied to the whole of Great Britain, including London. Full de-tails and the date when it will come into force will be announced early in May. The Times also states that Sunday work on building and civil contracting is to be prohibited and overtime work reduced. In 1942, a direction issued under Defence Regulation S6A.B. allowed a maximum of 60 hours a week on week-days. A reduction of six hours a week is being made. The Ministry says the industries and the Government, who have together from time to time reviewed the position in the light of existing circumstances, are at one in considering that it is not practicable to maintain these very long hours and heavy overtime for an indefinite period. It adds: The Minister of Works, after discussion with both sides of the two industries, has accepted their unanimous re-commendation that the working week should be reduced throughout the country to a maximum of 54 hours. A direction under the A direction under the

Defence Regulation to this effect is being issued and will come into force on May 14 next. The general permission for Sunday work in London will also cease as from that date. No excess of 54 hours or Sunday work will be permissible other than the present specified exceptions or by special permission of the Ministry of Works.

Unless the Government publishes immediately its plans for road reconstruction after the war, every branch of trade and industry will be SEVERELY HANDICAPPED. Captain M. Clark-Hall, Assistant Secretary of the British Road Federation, after expressing this opinion at the Nottingham Rotary Club, said: We know that the Government has the facts in its possession, and its refusal to publish them can mean only one of two things. Either the Government is determined to impose a secret policy upon the country without consulting the interested sections of the community, or it is understandably reluctant to lay open to public criticism a policy which it knows to be inadequate to meet the needs of the country in the post-war years.

delivered by the early part of next year. The house, shown above, is described and illustrated in this issue, while on page 359, Captain Maurice, Director of Temporary Housing, explains the temporary housing programme, of which the thirty-thousand from America will form a considerable part. The house was designed originally for the TVA.

*

Without substantial alteration in important details, the Government proposals on the CONTROL OF LAND USE WILL FAIL to achieve their purpose. This criticism of the White Paper on Control of Land Use is made in a memorandum to the Minister of Town and Country Planning by The Central Landowners' Association, Criticism is offered to the proposal to settle the compensation formula by an expert committee after five years time, thus creating an unjustifiable degree of uncertainty which will make developable land a non-negotiable property and act as a check on development. The principle that receipts from betterment charge will broadly balance the payments of fair compensation, rather than that fair compensation should be determined on the merits of each case, is con-sidered open to serious objection. As it stands the proposal provides no adequate stimulus to development and 20 per cent. is an insufficient reward for enterprise and initiative by the owner. It is also contended that if floating value is eliminated from compensation it should be eliminated in valuations for death duties. The memorandum points out that the proposals affect not only the owners of large estates but a numerous body of small owners, mortgagees, and trustees.

The Government has approved the re-erection of war damaged premises and the BUILDING OF NEW HOUSES BY APPRENTICES as part of their training—the Building Apprenticeship and Training Council. A minimum charter for building trade apprentices is recommended in the second report of the Building Apprenticeship and Training Council. The report states that the Government has approved the scheme for the building of new houses and re-erection of war-damaged premises by apprentices as part of their training. The object is to find practical training for a new entry of 25.000 apprentices, between the ages of 15 and 17, a year. The building work will be carried out under craftsmen instructors. It is proposed that this practical training should: Give boys the full status of apprentices; provide for their transfer to employers; be carried out for local or public authorities by an apprentice master. To encourage local authorities, the Ministry of Works will treimburse any costs.

Mr. W. H. Forsdike, Chairman of the National Joint Council for the Building Industry, has announced two new agreements to REGULATE CONDITIONS OF LABOUR the building trades. in The first deals with loss of wages and output through inclement weather. Its practical effect is that within the normal working week, and exclusive of overtime, the operative shall receive payment for half the time on the job during which his work has to be stopped because of bad weather, and pay for a guaranteed minimum of 32 hours in any one week. The second new rule lays down that, instead of employment being terminable at one hour's notice at any time, there will in future be two hours' notice given before the normal finishing time on Fridays. It is hoped that this provision will increase the continuity of service and lessen the casual character of building trades employ-ment. Mr. Forsdike, who was speaking at a meeting in London, described it as a red-letter day for the administrative side of the industry, and as another triumph for the conciliation machinery which had worked so successfully for nearly a quarter of a century. These new deci-sions will become operative when the relevant Essential Work Orders under the Defence Regulations are withdrawn as a whole or in part, and when the industry reverts to work other than under direct Government contract.

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A. W. Curton: Given 200,000 operatives and providing it gets the materials, the Building Industry WILL PRODUCE 300,000 HOUSES IN THE FIRST TWO YEARS after the war. This statement was made by Mr. A. W. Curton, the Chairman of the House-Building Industries' Standing Committee of the National Federation of Registered House-Builders, when he launched the scheme for a competition for the designing and building of 30 pairs of prototype houses to be erected throughout England and Wales. (See page 359.) "We ask the Government," he said, "to remove the Essential Work Order. Both employers and employees are fed up with forced direction of labour."

USE THE TOOLS

I is an architectural commonplace to state that the design of any object is conditioned mainly by the materials of which it is made, but some of us tend to forget how much we are also limited by the machines which will make the objects we design. We know enough, for example, about

the objects we design. We know chough, for example, about the extrusion process to understand why we can design a more complicated section than could be produced by rolling, and we realize that press sizes set a limit to its overall dimensions. We understand, too, enough about small hand tools not to ask the impossible of the craftsman on the site. But do we know enough about the more elaborate types of builders' plant to appreciate the economies they could give us?

In a recent Architectural Science Board lecture, Mr. Wynne-Edwards stressed the close relationship between mechanization, man hours, and the housing standards of the community, and suggested that the poor housing of the lower wage groups was due mainly to a low degree of mechanization. In this sense mechanization must be interpreted as meaning any type of tool, large or small, used in the factory or on the building site. Tools in the factory are naturally the major part, but an untold number of man hours could be saved by power tools of all kinds on the site.

In the years before the war we laughed easily at the sacrifices of the cavalry colonels who had to exchange their horses for armoured cars, yet after five years of mechanized warfare we still find the RIBA asking for well tried materials and the builders praising the advantages of traditional methods. And those so inelastic Army minds now seem to think easily in terms, not of rifles, mules and entrenching tools, but of bulldozers, power shovels, tractors and lorries. Whether we like it or not, the general public will not believe that an industry which could make pre-fabricated harbours and lay landing strips in a matter of hours, still cannot provide houses at a rent which the poor can afford.

If full mechanization is one of the answers to the housing problem, what is the architect to do about it? It is not enough to know what a machine does; the function of a bulldozer can be understood by the most childish mind. We must have the imagination to see what the machine *could* do, properly used on a job designed with that particular machine in view.

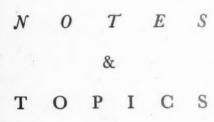
Start with foundations. The excavated trench must have a certain minimum width so that the labourer can swing a pick and shovel; thereafter concrete and brick footings, and a lot of back-filling and ramming. A mechanical trenching machine working in reasonable soil could dig a trench say eighteen inches or two feet wide and the appropriate depth : thereafter we could fill the trench to ground level with a fairly lean concrete mix and start our traditional or prefabricated building from there. Cheaper? Not for the single house on the remote site, but almost certainly so on any large-scale housing scheme.

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Thought along these lines should come from the architect. Not that the builder is incapable of thinking for himself, but he will remember that only two or three decades ago many architects would not allow a concrete mixer to be used, and he will suspect that an intelligent idea may be interpreted as a mere wish to save himself trouble. The architect must design with the machines in mind all the time and not work on the happy assumption that the contractor will know whether it is economic to use a machine on the job or not. The tools are available, but we cannot finish the job until we have learnt how to use them.



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



USA TEMPORARY HOUSE

There is certainly more character in the design of the USA temporary house than in the original Portal. The plan is a definite improvement though the house doesn't come up to the Arcon either in planning or general design. Fittings and finish do not compare with those of our own temporary houses, and it was disappointing to find a jumble of dust-collecting pipesspaghetti as the Americans call itcoming from the land where Plumbing Civilization are practically and synonyms.

But why prize open the gift horse's mouth? Here are 30,000 more homes, and we should be thankful for this timely help from the USA. After all, they should be a good deal more comfortable than discarded bomber bodies, which are now being proposed as still another means of easing the housing

situation—at least so long as it is understood that Homosote resents flying brick-bats.

GEORGIAN GROUP

After a period of consolidation and re-grouping, the Georgian Group has recently gone over to the offensive again under the energetic generalship of its burly, tufty-haired, persistent barrister-treasurer, Angus Acworth. The new campaign has wider aims than those originally formulated in 1937, and it is waged by no dusty guerrilla bands of antiquarians, but by a fully armoured division of technicians and experts.

They have now started leaflet raids, the first three of which have reached me. Leaflet 1 describes the origin of the Group and its aims. (The name Georgian—let it be noted in Cheam is chosen for convenience only, and "Victorian architecture comes increasingly within its scope.") Leaflet 2 explains the provisions of the TCP Act, 1944, which deal with buildings of architectural or historic interest.

Leaflet 3—and here lies controversy —deals with glazing bars. Many 18th century houses, says the author of this leaflet, have lost their windows by enemy action, and first-aid repairs naturally do not include the replacement of glazing-bars. The Group asks that, when circumstances permit, these bars be restored in their original form —despite what it calls "the dangerously attractive simplicity of single sheets of plate glass."

That this request has been widely misunderstood was shown by the recent *Times* correspondence on the subject. This got quickly bogged down in an argument about window-clean-

ing, and ended with a letter of truly monumental pointlessness contributed, I regret to say, by an architect.

Whether glazing bars are an essential element of the 18th century window, or merely a limitation of contemporary technique, is a matter of opinion and taste. But arguments about cleaning are surely irrelevant? The owner of a carved Chippendale chair does not remove the carving because the chair would then be easier to dust. If the chair is pretty enough, it is worth the trouble of dusting. Otherwise why not sell it and buy a tubular type which never needs dusting at all?

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An 18th century window without its glazing bars may let in more light and be easier to clean, but I for one agree with the Georgian Group that these advantages are not usually worth their æsthetic price.

But whether you agree on this point or not, it is but a minor skirmish in the main campaign of the Group in the defence of architectural quality, and it is a campaign we should all support.

BRIGHTON AFTERNOON

Talking of sash windows, I recently spent a pleasant Sunday at Brighton, the town of bow-windows, stucco and mathematical tiles, once the capital of Graham Greeneland, and now emerging from its wartime seclusion.

The piers are still gat-toothed, but barbed wire is being cleared from the promenades, and the oriental cupolas on the kiosks glinted in their new goldleaf. The sea was as grey and polished as a pewter plate, and the afternoon sun shone palely on the shabby stuccoed terraces, gleamed on the astrakhan-like curls of the few strollers, and lit the distant gables of Roedean as if they were tapers upon an altar.

It was a pretty sight, undisturbed by the pre-war stench and noise of traffic; and most of the visitors—often a discordant note upon the promenade remained imprisoned behind the steaming windows of the wintergardens-a slowly surging bouillabaisse of sateen blouses and monkey fur. of cigars, hand-painted ties and signet rings.

I walked down to look at Brunswick Square and Adelaide Crescent-fine Regency development lately threatened by Hove's borough surveyor with demolition on the grounds of old age and unsuitability for modern life. From a brief survey, it seemed clear that these charges are generally without foundation. The houses needed painting, certainly, and their mews and stable yards behind are shoddy enough; but in general the terraces seem' soundly built, well converted, and admirably maintained.

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A new battleground here, I suspect, for the Georgian Group-and one very well worth fighting over.

BOX FRAME CONSTRUCTION

MARS held a meeting recently to discuss with fellow-member Ove N. Arup his proposals for Box Frame Construction. Arup's Memorandum on the subject has already been reviewed in the JOURNAL (Information Centre. No. 1710, December 14, 1944), but it was felt that the idea had not received sufficient attention, for it has peculiar advantages at the present time.

By Box Frame is meant a structure like an egg-box on its side. This is a structural type with immense inherent strength. It is yet another instance of the modern tendency to conceive a structure as a single whole, rather than as separate units like walls, beams, slabs, and so on, added together. 'This is a structural unity that accords well with the architectural need for unity of form

The Box Frame is suited to large projects where continuous blocks of building are required such as terraced houses, flats, offices, hospitals, hostels and the like. Its economies do not begin to appear if used on too small a scale. The floor- and roof-slabs, together with the main partitions and end walls form the structural Box Frame-preferably of reinforced concrete-whilst the front and back walls, and the subsidiary partitions, are nonstructural. These can be of prefabri-

cated panels, or built in bricks, or blocks, as preferred.

The inherent strength of the Box Frame allows considerable freedom in the placing of the main walls and slabs, and in the provision of openings in them for doors, corridors, and staircases, as with a portion omitted the stresses redistribute themselves through the adjoining walls and slabs,

The peculiar aptness of the system at the present time is threefold :----

(1) It comes to the assistance of Prefabrication just where this is weakest, namely, in load-bearing. (2) It draws upon the Civil Engineering Industry to supplement the Building Industry.

(3) It secures the main benefits of Standardization, without imposing Uniformity.

All prefabrication systems divide the load-bearing members from the others, and most have great difficulty in fitting the structural framework' into the system of wall- and floor-panels. Box Frame Construction removes this difficulty entirely, leaving clear spaces to be filled with prefabricated units. The Box Frames should be constructed in large-scale repetition work like the Mulberry harbours, leaving the prefabricated infilling and other trades to follow on afterwards in the dry. Considerable variety in the treatment of the non-structural façades is permissible-even to the extent of letting each householder suit his own taskas the strong rhythm imposed by the repetition of the bays would pull the design together.

Arup told me to say that no proprietary rights are claimed in the system. which is free for anyone to use, and that he is willing to send a copy of his Memorandum to anybody who writes for it. The only obstacle, it seems, to the wide adoption of Box Frame Construction is the dog-in-the-manger attitude of the leaders of the Building Industry. I hope they will come to realize how foolish it is to insist upon the over-expansion of their industry to cope with the whole of Reconstruction, leaving them with a colossal problem of readjustment when the emergency is over.

ASTRAGAL



LETTERS

S. Yudkin, F.F.S.(Eng.)

R. W. Mugford President, The English Joinery Manufacturers' Association

Prefabrication

SIR,—In an interview reported in the national Press, the newly-appointed Director General of Housing, Sir Frederick Pile, asks for as many suggestions as possible, and promises to look into all.

May I, in all due deference, ask the General to commence his duties at the Ministry of Works, by carefully assuring himself of the true meaning of the so much misused word

true meaning of the so intern inistated work prefabrication. Whatever the longsuffering public is being made to believe as the Ministry of Works' interpretation of the word, it certainly does not stand for shoddiness, unhealthiness, loss of personal privacy, high initial cost, and the hundred and one other meanings given meanly by implication, in the pational given, mainly by implication, in the national Press.

Press. The only meaning of Prefabrication, we of the trade have been brought up to under-stand, is more factory made parts, in larger units than normal, to save site manhours. Prefabrication of this type would, in prac-tice, then mean the speedier and so cheaper erection of houses to rehouse the country's homelare. Nothing more but nothing large

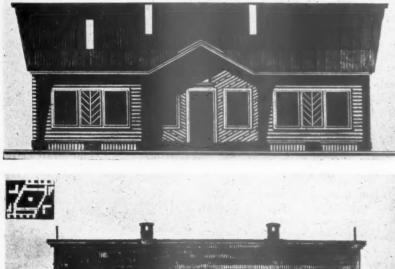
bomeless. Nothing more but nothing less. But when one sees the 'sites' of bombed areas with the adopted type of asbestos hut, dotted over the London Civil Defence Region, one weeps at the total lack of thought and feeling that has allowed this state of affaire state of affairs.

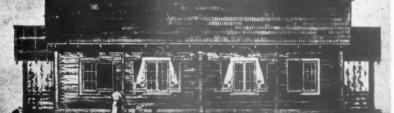
state of affairs. Under cover of this word prefabrication the homeless are being fobbed off with small inconvenient huts, so liable to condensation that even the ceilings may not be distem-pered, and so lacking in privacy that the w.c.'s are left standing some yards from the house and open to the eyes of all passers by. As for cheapness, well we have been given

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RUSSIAN VILLAGE BUILDINGS







Some of the drawings on show at an exhibition of the work of Soviet architects and planners now being held in Moscow. Many of the designs are of timber construction. Top, a large village school, by P. Shteller. Centre, a small village school, by O. Lyalin. Below, a prefabricated village house in the Ukraine, by V. Galshtein and Kliks. The traditional style of every region is being preserved in Soviet reconstruction schemes, as these designs show. The peasant who builds his own log cabins with accommodation for his family and his animals under one roof is now supplied with a simple set of drawings to work to. For town and village housing, designs range from small detached or semi-detached homes or blocks of two-, three- and four-roomed flats, to phalansteries, intended to house an entire community. Wherever possible, Russian villages are being modelled round a village green on the English pattern. Ribbonbuilding is prescribed.

Parliamentary figures of anything between £400 and £1,100.

And as for speed in erection, any length of time between, originally, 60 manhours, and finally 900 manhours in the last Parliamentary debate.

Surely someone at the Ministry knows the real price and correct manhours appropriate to the erection of these huts? If so let us have it, but quite apart from cost, is this really the best that can be done. What has happened to the Northolt types of two floors houses? These were supposed to cost only some £800 each average, take up less ground area, and remain permanent structures.

What has happened to the Birmingham type of house, with its two floors, also per-manent, and erected mainly from prefabricated units?

Of what use were all these experiments if we of the trade and profession allow the present huts to go down or up as the case may be. What future generation will grow up, having lived the first ten years of their lives in these open to all temporary and costly shelters?

costly shelters? *Please*, Sir Frederick, in ' cutting your first length of red tape,' as you have promised, go into this question carefully, and give the country and future citizens the homes they deserve and for which their fathers and older brothers and sisters have been fighting so hard.

You have saved London and Southern England before, do so now. S. YUDKIN, F.F.S.(ENG.)

London

The **RIBA** Report

SIR,-It is to be regretted that the Report of the small Committee of the RIBA should have been so misleading.

It is generally admitted that there is no world shortage of timber, and we have the highest authority for stating that this excellent and essential commodity is having the attention it deserves by the Government in fixing up contracts and giving high priority as soon as possible so as to increase supplies for our great building programme, although, in common with many

programme, although, in common with many other commodities used so extensively during the war, it is temporarily in short supply, princi-pally owing to lack of available freightage. The Timber Controller said a short time ago at the annual meeting of the Ontario Retail Lumber Dealers' Association that one hundred million more feet of lumber would be weitable in Consta in 1044 with available in Canada in 1945 than in 1944, with much of the total available for ordinary con-struction purposes and that Great Britain, as might be expected, is likely to receive 45 per cent. might be expected, is likely to receive 4.5 per cent. of the total output of the Canadian lumber industry, and again we have been informed by representatives recently returned from Sweden, that that country is full of felled timber, cut to various sizes, ready for export, and we also know that large supplies will be available from Burgin from Russia.

Apart from timber being an essential need to the community, it is necessary to the inter-national order in the import, export and exchange of raw materials for all concerned.

Research has been going on and study given to good design, economical manufacture and standardization of woodwork generally for which

British Standards are being issued. In speeding up the housing production it is necessary that the whole matter both as regards necessary that the whole matter both as regards traditional and new ideas evolved during the war, be dealt with with vision and without prejudice, and, as an MP recently said : The people of this country will insist on and require houses with timber in them.

London.

R. W. MUGFORD, *President*, The English Joinery Manufacturers' Association.

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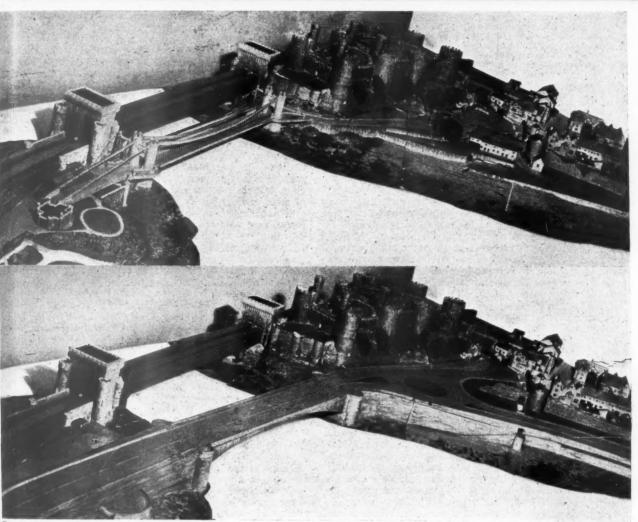
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PHYSICAL PLANNING SUPPLEMENT



Top is Conway Bridge as it is today, with the Castle in the background, and, below, as the Ministry of War Transport (Highway Authority for the trunk road) proposes to rebuild it after the war. The engineer for the project was Mr. H. W. Fitz Simons, M.I.C.E., and the architect was Mr. Percy Thomas, P.R.I.B.A. The model was made by Mr. Ivor Davies.

Planning progress in WALES

Reconstruction and planning problems in Wales fall, like the country, into three main divisions. There are those of the industrial South, the agricultural middle, and the mountainous and picturesque North. In the following article Mr. Clough Williams-Ellis, who is a member of the Welsh Reconstruction Advisory Council, describes the progress towards a solution of some of the problems and the production of a plan for Wales. As he clearly shows, a solution to many of the problems will continue to be impossible until an overall national planning policy is drawn up.

by Clough Williams - Ellis

As the guiding principle of all planning is, or should be, The Best Use of the Land (from the point of view, that is, of its inhabitants as citizens of a whole country), it seems logical to begin with at least a bird's glance at the actual terrain—Wales itself—which is very far indeed from being merely a convenient historical or geographical Administrative Region.

When in 1942 Parliament set up the Welsh Reconstruction

Advisory Council, on which I serve under Sir John Rees's brilliant captaincy, it was with these terms of reference:—

"To survey, in conformity with the general examination of reconstruction problems now being conducted by the Government, those problems of reconstruction which are of special application to Wales and Monmouthshire, and to advise on them."

We took this to mean, in plain English, "What's the matter with Wales and what should be done about it?—but don't try and show us things that we are not prepared to look at."

Well, our first formal and full-dress response to the questions put to us was an Interim Report submitted to the Minister Without Portfolio (Sir William Jowitt) at the end of 1943, and one of its first paragraphs was a brief description of Wales for the benefit of those legislators who know only roughly our shape and size and location, but of our surface features, nothing at all.

I need only quote this much:-

"The physical build of Wales is best grasped by considering the

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country as a large 'square,' some five million acres in extent, with a considerable area scooped out of its left or western side by the broad sweep of Cardigan Bay. The centre of the figure is a mountain mass of very old hard rocks, covered by thin and generally infertile soils, and deeply dissected by rivers. The 'square' is divided more or less horizontally into three portions, in the north, by a discontinuous mountain line running from Cardigan Bay in the west to the English Plain in the east, formed by Cader Idris, the Arran and the Berwyn Range; and in the south, by a discontinuous line formed by the Prescelly Mountains, the hills of Carmarthenshire, the Black Mountains and the Bercon Beacons."

Carmarthenshire, the Black Mountains and the Brecon Beacons. More roughly still, one might speak of the crinkled industrial South, the rolling agricultural middle and the more vehemently mountainous and picturesque North, the two characteristic industries of which last, its tourism and its slate-quarrying, being both due to its tempestuous geology.

Naturally, our reconstruction and planning problems fall like our country—into three main divisions also, though, of course, you get no clear-cut boundary to either, but only areas where this or the other consideration is perhaps predominant or even paramount.

Llanelly and Blaenau Festiniog are obviously industrial, Fishguard and Holyhead maritime, Haverfordwest and Machynlleth agricultural, Llandrindod Wells and Llandudno manifestly Resorts, and so on, all neat and easy.

But there are far more places that are a bit of everything and might be as truly classified under one heading as under any other of half a dozen. Their several characters overlap confusingly, both in time and space—surviving scraps of what they were originally and of what they had become between the wars, further mixed up with what they think they are now or aim to become next, as to which last, of course, these are as yet no more than hopes and hints.

The planner's job, as ever, is to try correctly to cast the horoscope of all such places and areas, to try to foresee their likely destiny under the coming pressure of events and forces that can be now no more than shrewdly guessed at—to plan to promote and expedite this issue if it be a happy one, to arrest or minimize it if it be otherwise.

Our task is easiest, of course, when a place or an area already has some pronounced bias towards agriculture or industry or whatever it may be and a reasonable chance of maintaining it. We then do all in our power to try and improve that chance into a certainty, by no means neglecting, however, to provide whatever extra props we reasonably can in the way of subsidiary lines of business, to keep the structure from collapse should its main support ever subside or crumble. In South Wales we have bitterly learnt the danger of Single Industry Towns, the heightened danger when that industry depends, as do so many of ours, on mineral extraction and exhaustible deposits.

It is indeed a question whether some of these towns should or could be propped, whether they had not best be written off as a total loss and just abandoned and perhaps used as quarries for materials to be re-used in building something better somewhere else.

With our acute house-famine such abandonment may seem a reckless aggravation of the crisis, and it is not likely to be immediately practicable anywhere, and, maybe, all we can do for some years will be to see that those blighted areas that really do seem doomed shall not deflect our energies and materials and money to the nursing of incurable cripples, however painful their plight, however repellant their sores. By all means let them be given such temporary Care and Maintenance as may keep them a-septic whilst life is still in them, but no more, lest, throwing good money after bad, we make a hard decision yet harder and end by reprieving that which a civilized people should certainly condemn.

Some blighted places can certainly be replanned, rebuilt and adequately transformed into something efficient and seemly, and the temptation will always be to attempt it, both because of local pressure of all kinds, public and private, disinterested and not, good and bad, and for the sake of all the existing public services, communications, and amenities that represent large capital expenditures that cannot be lightly thrown away.

But of all our invalid places, which are we to pole-axe and which re-plan for prosperity and gracious living?

How much of what sort of industry where, and what about quite new industries and quite new towns on new sites?

Well, those are the sort of questions to which we have to try and find answers—that, indeed, we *must* answer, yet cannot with any sort of certainty whilst still lacking guidance from a National Planning Authority. The Welsh Members of Parliament are both wide awake

The Welsh Members of Parliament are both wide awake and vocal on this manifest need for central co-ordination, and attribute some of the lethargy in high places (particularly in regard to Welsh affairs) to the notorious lack of a Welsh Minister—a Secretary of State for Wales—who would, it is thought, stimulate the whole Government by his energetic example whilst solving the problems of his own Principality.

Meanwhile we get along as best we can with our little bits and pieces of planning, wherein we are on the whole (to be disloyally frank) a good way behind the English. At any rate, we are certainly patchy—with the good patches notable as islands in a stagnant and somewhat indifferently charted Which is not surprising because, though I have said a good deal about towns and industry, there are immense tracts of mountainous country with no human population whatso-We may be now all ever and next to no rateable values. agreed that wise and forethoughtful planning and the careful control of all works and buildings is a positive economy and that the old wasteful go-as-you-please game of grab can no longer be tolerated or afforded-but a really poor local authority cannot be adequately equipped even to secure that which it has, nor sufficiently staffed to initiate any positive planning at all.

As to our actual answers to that question, "What's wanted in Wales?" we should have to reply that it was for the most part very much what was wanted in the rest of Britain, with only local differences of emphasis here and there and in this and that—no more than a Welsh inflection to English words. Yet, even in Physical Planning alone, we have got our special and peculiar problems—Welsh problems that need predominantly Welsh solutions. Predominantly, but not exclusively, because, of course, whatever is to be done in the Principality must mesh in with any scheme for the Kingdom as a whole and make sense as part of the National Master Plan. "Must"—but how, when there is still no such thing as a

"Master Plan" or indeed a co-ordinated "National" programme of any kind?

Though it has been rather like being invited to add an appropriate wing to a building not yet planned, let alone built, we have done our best to play this whimsical game and in conformity with its ingeniously baffling rules. The Council has certainly analysed and synthesized the many tough problems that confronted it with a realistic sense of "oneness" that already presents a coherent picture put together from the scattered bits and pieces of the complex jig-saw that constitutes "The Welsh Puzzle."

Half-way down the left-hand side of the frame we have assembled the branches of a tree, part of a wheel, several whole sheep, most of a paddling child and a pair of sturdy legs ending in hob-nailed boots.

But we should very much like to see the rest of the picture, see how our own bit fits in, and to be assured that the whole composition makes reasonably good sense. We, of course, loyally assume that it does—or will—and meanwhile we have, like Sir William Beveridge, had to support ourselves with numerous "assumptions," since foundations laid on a vacuum are notoriously unreliable.

By way of a foundation of some sort for what I shall have to say, I do not think I can here do less than sketch briefly the overall general background of the *status quo ante bellum*, a situation so unhappy in the industrial areas of South Wales that The Valleys had indeed come to symbolize all that was tragical and hopeless in economic and social dissolution the very Shadow of Death.

The shadows had fallen ever thicker and faster between the two wars, not God knows unnoticed, but with little done to lighten them.

The University of South Wales and Monmouthshire produced its formidable reports, whereupon the Board of Trade promoted the formation of a National Industrial Develop-

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ment Council of Wales that did something to attract new industries to those places where the old had died.

Then came the Special Areas legislation which, too little and too late, did yet rally the patient perceptibly with an injection of Trading Estates and any way contrived to keep some sort of life just flickering at a low level until Dr. Mars called back again with his hideous tonic-the making of war munitions.

I suppose that my own part of Wales, the North, has altered less than most of the Kingdom during the past sixty years -and yet, remembering back, the changes seem to be enor-mous-both for better and for worse. On balance I think there is certainly a credit-chiefly due to improved social and economic conditions. Even I cannot claim that these are quite cancelled out by the dire depreciation of such precious capital assets as a superb countryside and a noble coastassets that we have heedlessly squandered and diminished in a way that has already wiped out part at least of the dis-

tinctive advantage we lately enjoyed over England. As England began her bout of barbarous building earlier than did we, so, too, does she seem to be now recovering her senses ahead of us and, with her painful hangover, to be resolved on reform, whilst we are still unregenerate.

It was, of course, South Wales that received the full blast of the industrial revolution, its scorching breath having left a blight that seems all the more shocking for the fact that the squalor of a mining village may still be closely set about by miles of pastoral peace, the lovely hills still seemingly aloof from the fever of the Valleys. Indeed, a century of mineral exploitation with its rises, falls and successive crises would read very like the temperature chart of a fever-patient who was being ignorantly treated and indifferently nursed.

Of course, we made all sorts of mistakes, as tough pioneers always have; we were greedy and short-sighted and took what we could as quick as we could and failed to look much below the surface, whether it was men or minerals, cheerfully assuming that the patience of the one and the supply of the other would be inexhaustible.

But they were not. Nor did home or foreign conditions stay put. Politics and economics broke into new rhythms, industry found new channels, overseas trade-streams changed in direction, volume and kind; new ideas in education, health and sociology further complicated the simple old rules of profitable extractive industry-and, well, the game is now not at all what it used to be.

Not that it was ever much of a game for the actual workers. It never was anywhere and isn't even now and, maybe, being a miner or a blast-furnace man are never likely to be greatly sought after employments, do what we will.

It is clear enough that the inducements to anyone to take on these arduous but essential jobs are already insufficient -as we are now learning to our dismay. But the Heavy Industry Manpower Shortage with which we are already confronted should be no surprise to those who have seen the Glamorgan Valleys or the coal towns or read the memoirs of Dr. Thomas Jones or the lives of the mineral magnates who, getting and spending, laid waste our heritage. The glittering fortunes that the mines and furnaces produced for these magnificos, the dingy degradation that was its tragic counterpart . . .

Those days are gone for ever, one hopes-the anxious squalor along with the careless opulence.

But just how essentially dirty, arduous and dangerous jobs are to be made attractive or else unnnecessary is for the industrial technician to discover and is not the immediate concern of the Town Planner, though certainly some of his problems can never be acceptably solved whilst so many loose ends lie around to trip him up and stultify his planning.

These, then, are a few random samples of the sort of matters that we in Wales shall need to make up our minds about,

recommended to the Baldwin Government, its usefulness during the present war in supplementing the over-taxed grid supply of electricity and in conserving coal would have been inestimable, quite apart from the immense amount of em-

Right is a map show ing the location of the Severn Barrage scheme. In a Report issued recently, it was stated that the power produced would feed South-West, Central and Eastern England with nearly 800,000 daily units.



ployment its construction would have provided just when work was so bitterly needed. As, apart from the calls of the new industries that it is hoped to establish in the dam's neighbourhood, electrical consumption generally is anyhow outrunning supply-the project is being considered anew, despite the fact that the construction costs have now, of course, enormously increased.

If the cost of coal goes on rising, as it is predicted it will, then economic justification can be claimed for this great work. On the other hand, there are those who maintain that, if coal does in fact get much; or indeed any dearer, we shall simply have to put up our shutters as an industrial country unable any longer to compete in the world's markets. Others might argue that, as men cannot well be conscripted and driven down the mines, and as they do not otherwise seem disposed any longer to win coal in the old way, we had better assure ourselves of all the power otherwise derived that we can until, perhaps by underground processing and conversion or otherwise, we somehow contrive to mitigate or even eliminate the most arduous dangers of the collier.

The fear, once expressed, that a South Wales Hydro-electric scheme might, by lessening the demand for Welsh coal, reduce the over-all prosperity of the region, has now, I think, been exorcised by the expectation of more than balancing benefits in other directions.

Of course, there are all sorts of subsidiary considerationsthe navigation of the Severn, its fisheries, cross-river communications, and so on.

Actually, whether there is a barrage or not-and in any case probably quite independent of it-a cross-Severn bridge in its neighbourhood (English Stones) has a high priority amongst Wales's post-war demands, reducing, as it would, the road distance between Cardiff and Bristol from 90 miles to 28.

So vital is the need for this improvement in communication to the whole of South Wales, and particularly to its new light industries, that it is unthinkable that railway interests should any longer be allowed to hold it back.

Linked up with this Severn crossing, a new arterial Southto-North trunk road is envisaged that would do much to break down the present notorious isolation of one end of the country from the other and that would incidentally open up some of the most inaccessible but attractive parts of Wales. That very fact has immediately given rise to a minority opposition which fears that accessibility will mean unworthy exploitation, whilst there are others who hold that the engineering difficulties and costs would be such as no possible benefit could justify and that, even if the road were in fact built, some of it would often be unusable in the winter because of the mist and snow that one must expect to encounter up in the Berwyn Mountains. The debate continues.

The St. Asaph by-pass is another road problem where the Ministry of Transport seems to have made a most unfortunate decision that it cannot for some reason revoke.

On the other hand, its scheme for *the new bridge at Con*way across the tidal estuary and under the walls of the old Castle is logically straightforward and disposes of an old and bitter controversy more generally acceptably than might have been expected. (See page 349.)

But of all the planning battles being waged in our pugnacious Principality, none has raged so fiercely as that over the prospective holiday camp on the South coast of Caernarvonshire. It is really alongside Afonwen junction, but whilst the location of Service camps was still covered by Security Silence, was mostly referred to by its opponents as "in Snowdonia"—not solely, I think, to mislead the foreign enemy. Objection to the post-war Butlinization of this establishment is largely based on cultural and religious grounds and on Wales for the Welsh considerations such as (particularly) inspire the small but active Welsh Nationalist Party. Though, no doubt, certain of the old-fashioned tourist interests might suffer to some extent by the coming of this up-to-date large-scale mass-holiday concern, the general economic advantages to the area would seem likely to far outweigh such possible losses, the great potential rateable value of the place quite apart.

It must therefore be said that, whatever the actual merits of the case, the powerful and popular opposition is at any rate singularly disinterested and sincere and prepared to suffer loss in defence of Welsh Integrity.

The amenity side of the matter has likewise been fiercely canvassed (if not always with full understanding), and generally this *cause celebre* has certainly served to stir people up and to make this planning issue at any rate seem really important and worth fighting over—for or against.

The core of the argument in its favour is that here is a camp put up to Government order for wartime service use, but designed and built to standard Holiday Camp plans, intended for use as such as soon as the war is over.

As we are going to need far, far more of such places than we have any hope of getting for many years, and building costs and difficulties being what they are going to be, it does seem to some a little wanton to throw away purpose-made accommodation for five thousand holiday-makers and a million pounds' worth of building at the very moment of maximum demand.

It is also argued that, as people must take their holidays somewhere and as all who can, try to do so near the sea, it is better to make provision for this demand by establishing efficient "concentration camps" at intervals along the coast with sterilized stretches between, than by allowing haphazard "all-over" development by all and sundry such as has so wastefully suburbanized the Denbighshire coast, where

Kemnel Bay indeed is Peacehaven with knobs on it.

But the case of the Butlin Camp (shown in the perspective below), with all its obscure legal complications is still *sub judice* and, along with Sir Patrick Abercrombie, being involved as a consultant, it would be improper for me to express any personal opinion here. The one great impropriety of the whole affair, however, it seems generally agreed, is that a service department should have irresponsibly made a private bargain (whether legally valid or not) with a commercial undertaking as to the post-war use of relinquished lands and buildings, regardless of all planning considerations, whether national or local.

It is just this high-handed manipulation that has been largely responsible for the healthy violence of the opposition, an advance sample, so it is feared, of what the Requisitioned Land and War Works may be seeking generally to legalize.

With so many war establishments of all sorts sited in Wales for strategic reasons, whether camps, aerodromes, factories or what not, this whole question looms large, particularly in the hitherto predominantly pastoral North. A few camps may be acceptably converted to holiday use, a few factories able to give welcome employment on peacetime production in appropriate places, a few (very few) airfields capable of useful conversion for civil flying, but mainly restitution of the land and a proper clean up is what will be called for.

Especially in and around the several *prospective National Park territories*, whether the Pembroke Coast, the Brecon Beacons and Black Mountains, Plynlimon, or Snowdonia.

Indeed, during what might be called this "phony" phase of town and country planning, efforts have wisely been largely concentrated on trying to preserve the integrity of these selected areas, these Amenity Hedgehogs against perpetual petty attacks and attempts at hostile infiltration.

Even the not very alert or imaginative local *tourist interests* are at last beginning to see on which side their bread is buttered. Coastal resorts, too, are now uneasily aware that golden eggs can no longer be laid by geese that have died of gross and careless gluttony, some, indeed, being so disturbed by their condition as actually to have called in expert planning advice with a view to reform and recovery.

A few enlightened landowners, too, apprehensively aware of what has happened elsewhere, are now prudently getting advice on their development schemes well in advance, determined to show that exploitation need by no means necessarily entail disfigurement, but that, on the contrary, it can and should mean an enhancement of existing amenities and, generally, that good architecture is good business.

In short, they realize that a better and less greedy technique has at last made nonsense of the old dilemma that defeated their less civilized fathers, who, not infrequently, ruined themselves as well as their properties through indiscriminate gluttony as often as through unadventurous abstinence. To say "You cannot both eat your cake and keep it" just

To say "You cannot both eat your cake and keep it" just isn't true any longer, and if that isn't a discovery of firstrate importance, then I'm not a Welshman.



Left, the proposed Butlin's holiday camp on the south coast of Caernarvonshire over which one of the fiercest of planning battles has been raging. The architects are Lionel H. Fewster and Partners and the surveyors, Kenneth Higgins and Partners. the icarick im-The ems ave alid war all

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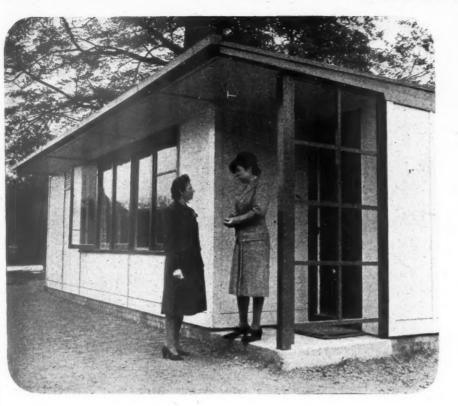
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Left, a close-up of the porch. Below, a general bird's-eye view of the prototype.

LEASE-LEND TEMPORARY BUNGALOW FROM THE UNITED STATES

GENERAL—A prototype house from the United States, the first of the 30,000 prefabricated houses which will be sent for erection as emergency, temporary housing for essential war personnel in bombed-out areas, has arrived in Great Britain, and is illustrated here. The prototype has been erected at the Building Research Station, Garston. Regular shipments are expected to start this month and it is expected that all the houses will have been delivered from the USA by early 1946.

The houses are being provided under Lend-Lease, through the US Foreign Economic Administration. Contracts for about three-quarters of the houses have been placed with private contractors by the Federal Public Housing Authority, a subsidiary division of the National Housing Agency, which has been responsible for the bulk of US war-time Government housing.

The houses are being constructed from the plans of one of the best of the smaller prefabricated houses designed in the USA. This plan was selected by the British Government as most suited to meet the immediate need for housing which could be erected with a minimum of site labour.

The American designers have shown ingenuity in constructing and packaging the houses within the restrictions imposed by the availability of materials and labour. In developing the design, indeed, careful attention had to be paid to economy in shipping space.

Fire risks have been considered and Local Authorities have already been advised as to the spacings that should be adopted in their layouts. PLANNING—The house measures 24 ft. $2\frac{1}{2}$ in. by 24 ft. $2\frac{1}{2}$ in., with a porch projecting 4 ft. $1\frac{1}{4}$ in. at one side to give an overall frontage of 28 ft. $3\frac{3}{4}$ in. It contains living room, two bedrooms, a kitchen and a bathroom. The two bedrooms are grouped together, and are entered through a top-ventilated lobby from the



living room. The kitchen also opens off the living room. The extension on the house provides a front entry with adequate space for a pram, and a rear entry with insulated larder, and with a hanging space for brooms and shelves for household supplies, opening off the kitchen. Total inside floor area is 600 sq. ft. The detached shed will be the timber-framed asbestos-cement covered temporary-house standard type.

CONSTRUCTION—The whole house can be erected entirely by manual labour, cranes being required only for the off-loading on to the site. Six crates are needed for delivering one house.

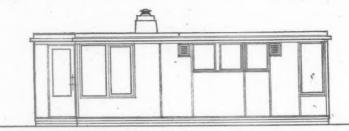
Foundations are 4 in. thick concrete slab, with or without brick dwarf walls.

Floor. There are six floor panels each approximately 8 ft. by 12 ft., and one panel 12 ft. by 4 ft. for porch. It is strip hardened flooring, tongued and grooved, on light timber framing and the panels are delivered in a finished condition. The wrappings from the packing crates are used to protect the floor during erection. 1-in. tolerance is allowed between panels and frames to take up movement and this space is covered with a jointing strip. There is no insulation under the floor.

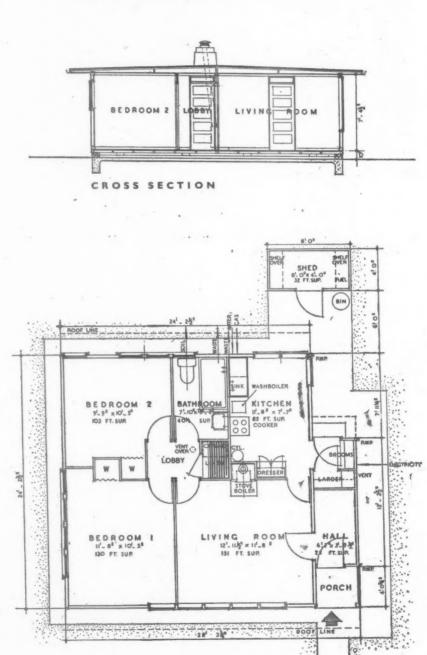
Walls are timber framed units, approximately 8 ft. long and 33 in. thick, faced internally with either fibreboard or asbestos cement sheeting and externally with one of the following materials :--Homosote, i.e., homogenous composition wallboard $\frac{1}{2}$ in. thick; insulated fibreboard sheathing 25in. thick : mineral surface fibreboard ; asbestos cement sheeting. When asbestos cement is used the wall is insulated with a blanket type insulator applied to the panels in the States, but no insulation is necessary for the other walling units. The Homosote and fibreboard will be painted externally.

Internal Partitions are studding, in units of varying lengths and faced with wallboard.

Roof of the main building is in twelve wedge-shaped units, approximately 4 ft. wide by 12 ft. long, with two smaller units for the porch roof. The underside is faced with wallboard, and the top surface is flat asbestos sheet covered with three layers of single ply roofing felt provided by UK. The roof is lined with a blanket type insulating material.



ELEVATION AT BACK



PLAN [Scale]" = 1' 0"]

USA EMERGENCY BUNGALOW

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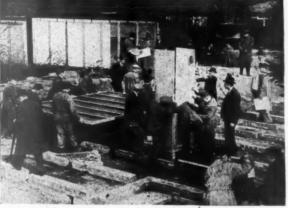
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hoi Th 100 abe wit for U wi the fla ere of fel lin typ ter Hoisting a packing case on to the building site from a lorry. Bitumen paper and timber are used for packing. Six crates are needed for each house.

2 Erecting the shroud of the flue while other workmen lay the first section of the floor. There are six floor panels each about 8 ft. by 12 ft., and an extra panel for the porch. The finished surface of the floor is hardwood.

3 Sorting out the numbered pieces of the plumbing unit and checking with the blue-prints. All pipework is of galvanized iron and arrives in cut lengths ready for assembly.







4 The first roof panel is being hoisted into position. The roof is of twelve wedge-shaped units, about 4 ft. by 12 ft., with two smaller units for the porch roof. Underside is faced with wallboard, and the top surface is flat asbestos sheet covered with three layers of single ply roofing felt. The roof is lined with a blanket type of insulating material.



All timber in the house has been treated with a toxic dip against woodworm and termite. US state that this is also equal to one coat of priming paint.

PLUMBING—The whole of the pipework for hot and cold water is of galvanised iron owing to a shortage of copper in the States. It will arrive cut to length and will be assembled in this country. It will be noted that both in the kitchen and bathroom the hot and cold taps are coupled, and are of galvanized iron as higher quality materials are not available. The bathroom fittings are from the USA.

WIRING—In houses of this type in America it is the practice to have plugs and sockets at skirting level in all rooms with no ceiling points, but wall brackets have been provided in this country. The wiring chases for the conduit are provided in the wall units; the wiring, all fittings and switches are provided and fixed in this country. The house does not lend itself to a harness system of wiring, but in all probability the wiring will be pre-cut.

FITTINGS—Kitchen fittings consist of sink; draining board; gas cooker (USA); hot water cylinder (provided by the USA) with an electric immersion heater and thermostat supplied by UK; washboiler supplied by UK with second draining board over; dresser; shelving. The hot-water cylinder is glass lined and is heated from a back boiler on the living room fire. It will be protected by a full-length insulating jacket. Owing to the shortage of timber in the States there will be no doors provided to the cupboards in the kitchen apart from those to the dresser.

The living room is heated by a solid fuel openable stove of the Siesta type, provided by the UK.

Both bedrooms are fitted with built-in wardrobes and provided with permanent ventilation. There will be no doors to the wardrobes, however, again owing to a shortage of timber.

The linen cupboard, which is placed in the central lobby, is heated by a pipe off the hot water cylinder in the kitchen. It is fitted with slat shelving. The cold water tank is at high level in the linen cupboard and will be a galvanized cistern provided by UK. For the first few thousand houses, however, a metal-lined timber eistern will be provided by US.





Above and left, views of the kitchen; all fittings are from the USA excepting the washboiler. Below, two views of the living room; the stove is a solid fuel openable stove provided by the UK, containing a back boiler for heating domestic hot water in the kitchen cylinder. The cylinder will contain an electric immersion heater thermostatically controlled for summer use.



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EMERGENCY BUNGALOW FROM THE UNITED STATES

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

1919

Maps for Planning

MAPS FOR THE NATIONAL PLAN. Association for Planning and Regional Reconstruction. (Lund Humphries, 1945, 15s. 8d.) Series of 37 maps of Britain drawn to uniform scale and providing vivid background to selected passages from Barlow, Scott and Uthwatt Reports.

Two transparent maps are included in the back pocket of this book. One gives county boundaries and the extent of the built-up area of all towns, and the names of some. The other shows the distribution of the population. These are designed to be placed over all the other maps in the book.

maps in the book. The Barlow Report : This section includes maps of local and central government boundaries population density and changes, the lines of trade and transport, the coalfields and the electricity grid. Then comes a series of maps showing industrial occupation including an elaborate analysis of employment, and areas of ill-balanced industry.

elaborate analysis of employment, and areas of ill-balanced industry. The Scott Report : Farming types and land characteristics occupy several of these maps. *Overcrowding* shows how grave is the position in many rural areas and an interesting map is *Country Towns Selected for Development*. The Beveridge Report : This section containsmans of the amount event by different local

The Beveridge Report : This section contains maps of the amount spent by different local authorities on health services, the distribution of doctors, the incidence of tuberculosis and very strikingly—the proportion of young children to old people in 1911 and in 1931.

1920 USA Highways Report

INTER-REGIONAL HIGHWAYS. Report of the US Highway Committee. (Reprinted in Great Britain by the Cement and Concrete Association, 1944.) Fully documented report of National Interregional Highway Committee, outlining and recommending national system of inter-regional highways. Analysis of road use.

As proof of the importance of interconnecting the major cities, evidence is here presented which indicates that nearly 90 per cent. of the traffic moving on main highways has either or both its origin and destination in cities, that traffic steadily increases with increased proximity to cities, that on transcity connections of main routes traffic mounts to volumes far greater than the general levels on rural sections, and that the heavily travelled sections of the proposed inter-regional system lie mainly within relatively narrow zones of traffic influence about cities of 10,000 or more population.

10,000 or more population. The analysis shows that on the average 49.6 per cent. of all traffic observed was moving from one city to another, and 36.6 per cent. was bound either from a city origin to a rural destination or from a rural origin to a city destination. Thus nearly seven-eighths of this main highway traffic in these representative

States is related in some manner to cities. Either they are its origin or its destination or both. Only 13.8 per cent. both begins and ends at rural points, and a portion of this movement undoubtedly passes through urban communities en route.

A study has been made of the available data on traffic flow in the vicinity of all cities of 10,000 or more population directly connected by the recommended system, with the object of determining the approximate distances from each city at which the more rapid increase of traffic volume begins. These distances have been measured as radial distances from centres located at the heart of the central business areas of the respective cities. They define, for each city, a circular area which may be described as the city's zone of local traffic influence.

It is found that the radii of these zones tend to increase with the population of the cities. By averaging the radii for all cities of each of several population ranges, the following determination was made of what may be called approximate normal radii of the zones of local traffic influence for cities of different sizes : Radius of zone

of traffic influence (miles).

35

30

City Population. 3,000,000 and more 1,000,000 to 3,000,000 . . 500,000 to 1,000,000 . .

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In general, the larger the city the larger is the population of the traffic on the main approach highways that is thus essentially concerned with the city.

As evidence supporting this generalization, reference is made to table 14 and figure 29, which record the results of origin-destination studies made at 27 cities of various population classes, from 6 of less than 2,500 persons to one of a population between 500,000 and 1,000,000 ,persons. As will be observed, the studies made at 3 cities of 300,000 or more population show that upward of 90 per cent. of the traffic moving toward these cities on main approach highways consisted of vehicles bound to ultimate or intermediate destinations within the cities themselves. For the 4 cities of 50,000 to 300,000 population, the similar proportion of city bound traffic was found to be above 80 per cent. For the smaller cities, the corresponding proportion tends to decline, reaching 50 per cent. for the cities of less than 2,500 population that were studied.

The table from the Report reproduced below shows the proportions of traffic bound to and beyond cities of various populations, as shown by origin-and-destination surveys on highways approaching 27 cities.

Population group	No. of cities	Traffic bound to the city	Traffic bound beyond the city
		Per cent.	Per cent.
Less than 2,500	6	49.3	50.7
2,500 to 10,000	6	56.7	43.3
10,000 to 25,000	63	78.1	21.9
25,000 to 50,000	5	79.0	21.0
50,000 to 100,000	2	83.8	16.2
100,000 to 300,000		81.6	18.4
300,000 to 500,000	22	92.8	7.2
500,000 to 1,000,000	Ĩ	95.8	4.2

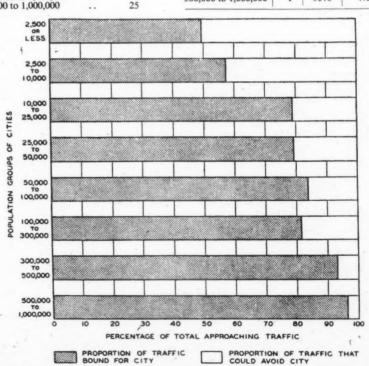


Table showing proportions of traffic bound to and beyond cities of various populations, as shown by origin and destination surveys on highways approaching 27 cities in the USA. From Inter-regional Highways. See No. 1920. 358] THE ARCHITECTS' JOURNAL for May 10, 1945

Plastics

1923

MATERIALS

1921

PLASTICS AND INDUSTRIAL DESIGN. John Gloag. With a Section on the Different Types of Plastics, their properties and uses by Grace Lovat Fraser. (George Allen & Unwin, 10s. 6d.) Plastics in relation to industrial design. Origin and character of plastics. Plastics no substitute. Industrial design to be considered a basic operation in the production of plastic goods. Survey of various types of plastics. 48 plates of illustrations. Glossary.

The perplexing possibilities provided by synthetic materials have aroused general interest and many speculations regarding their future uses. All who are interested in planning our future surroundings will, in simple non-technical language some sound ideas about the ways plastics can be

The purpose of the book is to examine plastics in relation to industrial design. In the first section the author discusses various aspects of recent developments in plastics to developments in plastics industry and wishes to make clear that the most important requirement would now be to make the quality of design fit the quality of material, and how British industrial production would benefit from such development. He sums up his thoughts as follows

 Plastics are not substitutes but are materials in their own right.
 Plastics do not provide the appropriate answer to every problem of industrial design and production. 3. Their properties and variety bring new

freedom to designers.

4. The limitless control which the designer can exercise over them is a severe test of his imaginative powers.

5. The need for design research work is imperative.

6. Such research work should be conducted by technical specialists in production, chemists, sales executives and industrial designers, working as a team. 7. Such research work must be directed by

specific terms of reference. 8. Industrial design, to be effective, must be regarded as a normal business operation. 9. Industrial designers must be regarded as technicians.

10. A new public, attuned to change and receptive to new ideas, may be growing up and establishing itself in the post-war world.

11. People everywhere are expecting, and are being encouraged to expect, a more

are being encouraged to expect, a more agreeable environment. Section II gives a survey of the various types of plastics with their properties and uses. The final section forms as it were an illus-trated commentary to Section II. Forty-eight plates show not only individual examples of industrial design but the use of plastics industrial design, but the use of plastics for a considerable variety of articles. These pictures tell a lively story of the immense potentialities of plastics.

EQUIPMENT

1922

USA Electric House

AN AMERICAN ELECTRIC HOUSE. (Electrical Times, March 1, 1945, p. 277.) Electrical equipment of proposed post-war house. Fluorescent lighting. The house is a two-room bungalow with a utility room in the basement. The living

room has a dining annexe. Fluorescent lamps are widely used for lighting, eight being used in the kitchen. The cooker is of the horizontal type, with radiant boiling plates. A refrigerator is provided. The automatic clothes washing machine not only washes the linen, but also rinses and spindries the clothes automatically, and switches itself off when these operations have been completed. An electric air-conditioner is provided in the basement, and it includes an electrostatic precipitator for cleaning the incoming air. An illustration of the kitchen is given.

Household Appliances

HOUSEHOLD APPLIANCES. (Planning. PEP Broadsheet No. 231, March 1945.) Study of market and design of appliances available before war and market as it may exist after war. Full report to be published later in year by Oxford University Deals Press. with: -(1) Household activities. (2) Factors affecting demand. (3) Design of appliances. (4) Estimated post-war demand. Particular appliances referred to as examples.

This study is of considerable interest to architects for the number of references to consumer preferences and for the interesting suggestions made about various items of household equipment. To manufacturers it should be valuable as a general picture of the overall position. The one outstanding conclusion is that the market for household appliances will be substantially greater in each of the first ten post-war years than it was in any pre-war year. It is wisely pointed out that this great demand will not be easy to satisfy, particularly immediately after the war, and that in order to obtain a maximum output it may be necessary to commence with production of pre-war models.

RADIATION DEMONSTRATION KITCHEN. (Architects' Journal, December 28, 1944, pp. 487-489; Gas Journal, November 8, 1944, p. 609, and other Illustrated description of journals.) gas and coke kitchen. Central plumbing duct.

KITCHEN PLANNING. Kitchen Planning Exhibition at Dorland Hall. London. sponsored by British Commercial Gas (Architects' Journal, Association. March 1, 1945.) Brief description and 4 pages illustrations, mainly photographs. Cooking and hot-water equipment by gas or coke.

1926

1924

1925

Electric Kitchen

A PLANNED ELECTRIC KITCHEN. Designed by E. R. Gilbert. (Architects' Journal, March 29, 1945, pp. 245-246.) PLANNED KITCHENS. (Electrical Review, December 29, 1944, p. 929.) E. R. Gilbert. Illustrated descriptions of all-electric kitchen in aluminium with its equipment.

The electrical equipment provided includes a storage water heater for summer use, a heated drying cupboard, cooker with separate hotplate, dish-washing machine and waste-disposal unit and a washing machine. For water heating in winter, a solid-fuel boiler is proposed, as being cheaper than the electrical heater. The kitchen is ventilated by means of a fan extracting air via a continuous duct running round three sides of the kitchen just below the ceiling.

Kitchen Equipment

KITCHEN FITMENTS AND EQUIPMENT. (British Standard 1195-1944, 2s.) Part I gives recommendations for overall space dimensions for all types of equipment, including cabinets. Part II provides for series of standard storage units based on recommendations of Part I.

1927

Any move which will help towards better and tidier kitchens is to be welcomed. At the same time, however, architects should realize that this standard will in due course affect all manufactured apparatus. They should therefore study this specification with care and take full advantage as soon as pos-sible to raise any criticism so that the next revision may be as complete and satisfactory as possible.

QUESTIONS and Answers

THE Information Centre answers any question about . architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to : THE ARCHITECTS' JOURNAL, 45, The Avenue, Cheam, Surrey.

Repairing Lease

Q A landlord lets premises on a full re-pairing lease and the term has now expired. The works of repairs and redecorations that have accrued due at the end of the term will cost more than £100 but the Ministry of Works will not grant a licence for the work to be carried out to the house. Can the landlord demand a sum of money equal to the cost of complying with the terms of the lease, as damages that have occurred to the property, and has any legislation been passed giving a decision on this matter

If the landlord and tenant have agreed A A that the tenant should do the repairs, the landlord has no right to demand a monetary payment in lieu of repairs.

In normal times, if the tenant does not fulfil his obligations, the landlord can sue for damages and expect to be awarded the value of the damage he has suffered, i.e., the cost of repairs.

However, the Courts will not penalize anyone for refusing to perform an illegal act and, in our view, the landlord has no chance whatsoever of securing damages for dilapidations at a time when it is illegal for the tenant to repair.

As a rule the parties prefer to agree upon monetary settlement, but we consider that there is no obligation upon the tenant to do anything until the removal of restric-tions makes it possible for him to comply with the provisions of his lease.

1929

Q I have been approached by a client who wishes to build for himself and in his spare time, without employing any member of the building trades in any capacity and not being himself such a person, and using only second-hand materials already available, a garage and workshop for his private use, the estimated cost being some eighty pounds, since no wages are

£10 Limit

Kitchen Exhibition

1928

Demonstration Kitchen

ES

We raised the roof "Bell wire" was what they called it down at the Works, but it was guite a bit bigger than any bell wire you ever saw, and-well, least said soonest mended. Like many other jobs we have tackled in the last few years it was extremely confidential. Also like many of these other jobs it meant special plant, rearrangement of factory layout, yes and in this case we even had to raise part of the factory roof. Your orders, when the time comes, may not call for such extreme measures but we shall be just as ready to put ourselves out to give you good service. FAMOUS FOR OVER A CENTURY

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involved. Is he required to obtain any licence or permit before carrying his projects into effect?

A Apart from obtaining the necessary approval of the Local Council before the building of a garage and workshop can be commenced, it is also necessary, to comply with present war regulations, to obtain a licence from the Ministry of Works before any building can be done, the total cost of which will exceed £10.

There are no exceptions to these regulations and both labour and materials have value irrespective of whether any cash payment is made for them or not.



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 cover. commas are used, the reports are summaries, and not verbatim.

MOW

F. H. P. Maurice

April 26, at the Ministry of Works. Statement on the TEMPORARY HOUSING PROGRAMME by Captain F. H. P. Maurice, R.N., Director of Temporary Housing.

F. H. P. Maurice: The Governgramme for temporary houses is to erect at least 145,000. The programme may be ex-tended if more temporary houses are required.

There are seven types of temporary houses Note: The are seven types of temporary houses now being put into production in the United Kingdom: the Uni-Seco House, the Arcon House, the Universal House, the Spooner House, the Universal House, the Phenix House, the Aluminium House. In House, the Aluminium House. In the USA 30,000 temporary houses are being produced for us on lease-lend, which we all appreciate as a very generous action on the part of the USA Government towards solving our housing difficulties. Production means that each item and part

required for the house is being fabricated or

manufactured somewhere in this country. When considering house production, one has to consider labour and raw materials, the making up of such raw materials into

structural and internal components of the house, the fabricating of certain of these components together to make prefabricated parts of the houses, the assembling of such parts together to make a complete house structure and the addition of all the internal components, such as baths, cookers, plumb-ing units, cupboards, door furniture, hinges, paint, nails, screws, etc., etc. materials are the vital factors. Labour and

The number of the various items of a typical house are:—*Structural items only*: Items, 177; No. of parts, 1,025. *Internal components*: Items, 32; No. of parts, 301; *total*: No. of items, 209; No. of parts, 1,326. The number of contracts and contractors for each house runs into several hundreds. quite apart from erection contracts.

The production difficulties at present, when the country is still producing war stores at a higher priority, are very considerable, and each and every item has to be examined for production capacity and labour and material preduction capacity and labour and material before an order can be placed. On several occasions, due to fluctuations of war re-quirements, we have had to re-seek capacity or alternative materials. Even then the rate of production of each item vital to the house is constantly reviewed to ensure that we do not receive an excess of some items and a deficit of others. The averse does not matter deficit of others. The excess does not matter except from the point of view of finding space to store them, but the deficit is all important and is the governing factor of completed houses.

At the other end of the story is the production of the sites on which to put the houses, and this finding of sites is the responsibility of the Local Authorities. A site available for a contract or to erect a house must fulfil three requirements:

(a) Access to the site, *i.e.*, the legal acquisition or lease must have been cleared. (b) The site must be fully developed, i.e., have roads, sewers, water, gas and/or elec-tricity laid on.

(c) A layout drawing must have been prepared showing where the houses are to go

and various details, etc. When these three requirements have been when these three requirements have been fulfilled a contractor can get on to the site, lay the foundations and drains, and com-mence erecting a house. Not until the foundation slabs are complete can a house be erected. And the *rate* of production of foundations and the *rate* of production of houses must be phased together.

Following on from that it is obvious that a Distributing Centre for the various items of the houses must be available in order (a)to relieve production factories of their pro-duce; and (b) to ensure that a completed house is delivered to each site when required.

Many manufacturers cannot store more than a few days' production at their own works, and any delay in removing their produce is liable to stop production. Accordingly, Dis-tributing Centres have been established throughout the country to which components of the houses, whether structural or internal, are delivered from the manufacturer and dis-

are delivered from the manufacturer and dis-tributed as completed houses to sites on de-mand. Items delivered from manufacturers into Centres must be phased as regards localities and as regards distribution out to sites fed from that Centre. It may be interesting to note that a Distri-buting Centre, distributing 50 houses per working day, is distributing a complete house every 11 minutes. Distributing Centres, which are now in operation, handle all parts of a house both structural and in-ternal, and the number of items and parts itself is enough of a problem to distribute, but there are, in addition, the duplication of gas or electrical installations, and if electrical gas or electrical installations, and if electrical four different voltages to consider. The de-livery of an incorrect voltage cooker may easily delay the completion of a house. Distributing Centres will be roughly related to the Civil Defence Regions some of which

may have more than one Centre. London will have three main Centres.

I have described the distribution of the houses and, to distribution must be added transport, and you will realize that the trans-

transport, and you will realize that the trans-port of all these items both from factory to Distributing Centres and from Centre to site requires organization. You want to know production figures. I intend that you should have them as often and as up to date as possible. To April 21 the actual production from manufacturers was 2.25 because. This is the input into the was 2,355 houses. This is the input into the Distributing Centres. The number of houses delivered to site for erection is 1,134.

Many of you have asked what will be the cost of these types of houses. The word Cost to us here means the cost of the house itself, all the internal components, the foundations, the drains and services within the curtilage and the connection of services, the paths and the fences, the cost of the Distributing Centres and transport, etc., and therefore it is an overall cost of getting the whole outfit ready for occupation. We require outfit ready for occupation. We require more experience of producing and erecting the different types of temporary houses before we can give accurate figures of cost. Furthermore, the costs must vary in different localities due to the different lengths of transport, haulage, unevenness of sites, and number of houses on individual sites, and number of nouses on individual sites, etc., etc., so that no figures are going to be quoted to-day. I do wish, however, to assure you that production contracts are sub-ject to close supervision, that items are to be costed, and that profits are to be limited. Erection and site preparation contracts are for the most part on competitive tender. As regards the American House, this is

coming over packed in crates, and we are arranging for its delivery to ports feeding the area in which the house is to be erected. At the ports the crates will be removed to a transit area in order to clear the unloading berth quickly, and they will then, without delay, be transported direct to the site, for erection. No Distributing Centre will be used except for certain components which we are providing from British production for the US House.

We propose training certain teams as Demonstration Erection Teams. These teams will then be available to the Erection Contractors in various areas to show them the best and quickest method of erection for the first few houses of each erection con-tract. By bringing a form of drill into the method of handling the various parts we can save a considerable amount of site erection time.

HBISC

Competition

The House-Building Industries' Standing Committee, formed by the National Federation of Registered House-Builders, is sponsoring a COMPETITION. FOR THE DESIGNING AND BUILDING OF **ONE PAIR OF THREE-BEDROOM HOUSES** open to all house-builders whose names appear on the register of the National House-Builders Registration Council.

For the first time since 1939, the house-building industry as an industry is to build 30 pairs of houses which will demonstrate to the public of this country the improve-ments the industry hopes to introduce in post-war houses.

The National Federation of Registered House-Builders which sponsored the scheme

House-Builders which sponsored the scheme have formed a Standing Committee on which are represented all the leading industries which contribute towards house-building. The building of the 30 pairs of post-war prototype houses will be preceded by a com-petition amongst those builders whose names appear on the register of the National House-Builders' Registration Council, mem-bership of which automatically binds the

builder to a good standard of building ex-aminations of the house during actual construction by an independent expert, and the issue of a guarantee of good building (and an undertaking to make good any faults) to the purchaser.

The competition is for houses of 900 square feet superficial area (exclusive of outbuild-ings) and of permanent character. All houses are to be architect designed, and houses are to be architect designed, and amongst the improvements which the Com-mittee considers to be most important are better insulation, better plumbing, fuel economy, that no bedroom should be less than 70 square feet, and that the height of rooms shall be not less than 8 feet. The ture of house proceed would sall a should

rooms shall be not less than 8 feet. The type of house proposed would sell at about $f_1.200$ to $f_1.300$ with land. The houses in each pair will provide an alternative lay-out. The choice of materials is to be left to the builder and his architect. There is every indication, however, that brick will be widely used, and as the Committee appreciates that speed of construction will be the essence of the post-war building programme, the houses will be designed to demonstrate that substan-tial saving in total man hours can be accom-plished by utilising traditional materials com-

plished by utilising traditional materials com-bined with expert scientific planning. The project has the approval of the Minis-ter of Works, and licences for the building of the houses will be granted as soon as the winning plans have been approved. The competition for the designs closes on June 30, and it is hoped that the 30 winning wildnes will be able to start building within 30, and it is hoped that the 30 winning builders will be able to start building within six weeks of the closing date. The houses will be built in thirty different areas in Eng-land and Wales, and when completed will be open to inspection by the public who will be asked to criticize them. It is hoped that the houses will be ready by October. Local committees of architects, builders and housewives will judge local entries. A Central Adjudication Panel will make final judgment. The three architects on the central

judgment. The three architects on the central panel will be D. E. E. Gibson, J. S. Allen, and Paul Mauger.

Submission of an entry by a builder consti-tutes an undertaking that the builder shall: (a) Pay to the House-Building Industries' Standing Committee the sum of £100 for

Standing Committee the sum of £100 for each house, *i.e.*, £200 for the pair, which shall be paid on receipt of notification that the licence to build has been granted. The Chairman of the Committee is Mr. A. W. Curton, of the National Federation of Registered House-Builders. All information on the competition can be obtained from (Mrs.) M. Pleydell-Bouverie Organizing Secretary, House-Building Indus-tries' Standing Committee, 167, Bickenhall Mansions, London, W.1. Telephone: Wel-beck 4984.

NJCBI New Working Rules

At the Annual Meeting of the National Joint Council for the Building Industry, held on March 27, 1945, the Council decided that ADDITIONAL NATIONAL WORKING RULES, as set out herewith, be adopted. The decisions, having been ratified, have been promulgated by the Procedure Committee, but the date of operation will be determined by the Council later, timely intimation being given to the parties.

WORKING RULE 2A. TIME LOST THROUGH INCLEMENT WEATHER.

1.—(a) Unless otherwise specifically instructed by the employer or his representative each operative shall present himself for work each week-day at the usual starting time of the shop

or job and shall there remain available for work throughout the normal working hours. Decisions as to when, during the normal working hours, as to when, during the normal working hours, work is to be carried out, interrupted and resumed, and as to whether some or all of the Operatives shall work at any particular time, shall be made by the employer or his repre-sentative and shall be implicitly observed. (b) If, in the shop or on the job, work is temporarily not available for an operative in

his own occupation, he shall hold himself ready and willing to perform work in any other build-ing industry occupation of which he is capable or at any other site or shop where work is available.

(c) An operative who complies with instructions given in accordance with 1 (a) and (b) above, shall be deemed to have been "available for work" during the relevant period.

(d) In cases where abnormal weather condi-tions interrupt work over a period, suitable arrangements, appropriate to the circumstances

of each case, may be made by the employer by which operatives shall register or establish that they are available for work on each day. (e) Throughout this Agreement the expression "normal working hours" means the hours prescribed under Working Rule 2 of the National Joint Council for the Building industry (*i.e.*, 14, 8 or 84 hours Mordeu to Erideu and Abours 71, 8 or 81 hours Monday to Friday and 4 hours Saturday) and excludes any hours worked during Saturday afternoons and Sundays and any other overtime hours.

2.-Where an operative in any pay-week has performed_actual work for his employer and, being in that Employer's employment, has kept himself available for work throughout the normal working hours of each working day of that week and has otherwise conformed with Section 1 of this Rule, but during any part of that week has been prevented by reason of inclement weather from working— (a) he shall receive payment at his current hourly rate for half the time lost by him by reason

of inclement weather during his normal working hours

(b) his total payments in respect of (i) normal working hours worked in that week, and (ii) any payments under 2 (a) above shall together be not less than 32 times the hourly wage rate applicable to him in that week (this amount being referred to hereinafter as the "guaranteed weekly minimum").

3.—Where an Operative is prevented by sick-ness or other cause beyond his control from being available for work throughout the normal working hours of each day of a pay week, or is in the employer's employment for only a part of the pay-week, or is absent on a holiday recognized either under the Holidays with Pay Agreement or under Working Rule 4 of the National Joint Agreement for the Building Industry, he shall be entitled only to such proportion of the guaranteed weekly minimum as is represented by the time he was "available for work" compared with the total normal working hours of that week (*i.e.*, 41¹/₂, 44 or 46¹/₂ as the case may be). as the case may be).

4.—Where an operative fails, for any other reason than those stated in 3 above, to hold himself available for work during any portion of the normal working hours of any day

(a) he shall not be entitled, in respect of any hours on that day, to the inclement weather payment specified in 2 (a) above;

(b) he shall forfeit his claim to a guaranteed weekly minimum in respect of the pay-week in which that day occurs.

5.—Where a pay-week during which an opera-tive actually works on the job is immediately followed by a complete pay-week during which though available for work throughout, he is prevented by inclement weather from performing actual work on the job, he shall be entitled to payment of the guaranteed weekly minimum in respect of the latter week (but not to any additional payments in respect of hours of incle-ment weather under 2(a) above).

-Where, during the next succeeding pay week (or pay-weeks) the operative is similarly

prevented by inclement weather from actually working on the job, he shall not be entitled to any payment under this Agreement, his duty in such circumstances being to register for unemployment benefit.

-For the purpose of calculating the guaranteed weekly minimum any increases or decreases of pay shall if they come into operation on any day other than the first day of a pay-week, be deemed to come into operation only on the first day of the pay-week immediately following.

WORKING RULE 2B.

TERMINATION OF EMPLOYMENT.

During the first six working days of employment, termination of service shall be upon the tendering of two hours' notice by either employer or workman, such notice to expire at the end of the normal working day.

Thereafter, termination of service shall be upon the tendering of two hours' notice by either employer or workman, such notice to expire at the normal finishing time on Fridays.

Provided always (i) that at the discretion of the employer an operative may be transferred, at any time during the period of his employment, from

one job to another; (ii) that the contract of employment shall be deemed a contract from hour to hour and that payments other than as prescribed in this Rule shall be for time actually worked; (iii) that in cases of misconduct an operative

may be summarily discharged at any time; (iv) that on termination of the particular operation for which the operative has been engaged, or when work is stopped (for reasons other than inclement weather), on the instructions of a recognised competent authority, employment may be terminated at 2 hours' notice expiring at the end of any day.

W. H. FORSDIKE, Chairman. J. W. STEPHENSON, Vice-Chairman. I. ERNEST JONES, Employers' Secre-

R. COPPOCK, Operatives' Secretary.

ABS Annual Report

The Ninety-fifth Annual Report of the ARCHITECTS' BENEVOLENT SOCIETY, including a statement of accounts, for the year 1944 was submitted to the Annual General Meeting on May 2. Extracts are given below.

The actual number of applications dealt with is only one more than in the previous with is only one more than in the previous year, but thirteen were new cases. One hundred and twelve applications were con-sidered, including thirty-seven from archi-tects or assistants, sixty-four from widows, and eleven on behalf of orphans. The ages of those assisted range from eighteen months to ninety-five years. One of the Society's pensioners died during the year, and a former subscriber, now afflicted with blind-ness, was elected to the vacant pension. " The behave of the American Fund so

The balance of the American Fund, so generously subscribed by American archi-tects in 1941, was expended during the year, and was specially useful for alleviating hardship arising from the flying bomb raids.

Subscriptions received during the year again show an increase, both in number and amount, and the Council are most grateful to these regular supporters, both new and old. The number of contributors, however, amount altogether to only 13 per cent, of the architects on the register, which is too small a proportion of support for really adequate relief to be given.

Among donations received during the year, the Council wish to thank the Institute of Registered Architects for a most welcome gift of £52 10s., the South-Eastern Society of Nev buil aris heav hea post arch

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NEW WHARVES



New wharves, new loading depots, new buildings of every kind will soon begin to arise. For our harbours, which have borne heavy enemy attack, will have to shoulder heavy peacetime responsibility. The post-war reconstruction will confront our architects and builders with the biggest job

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Architects for £50 in addition to their subscription, the Regional Professional Advisory Committee (Shelters) for Lancashire, Cheshire and North Wales for their donation of £15 17s. 9d., Mr. F. R. Yerbury for £11 11s. from Royalties on the "Students' Handbook," Mr. W. Haywood and Mr. A. Kingwell for £10 10s. each, the President, Mr. Percy Thomas, for £9 9s. from broadcasting fees, Mr. H. D. Hendry for £7 7s., the A.A. Students' Club for £5 13s. 9d. from the sale of their pantomime programmes, and the many Allied Societies, War Damage Commission Centres, Departments, Offices and individual architects who have contributed and so made the Society's work possible. An instalment of £6.925 13s. 4d. was the

An instalment of £6,925 13s. 4d. was received under the will of the late Mr. Arthur Ashbridge, whose great generosity has provided the Society with the largest legacy it has yet received. A further payment was received from the estate of the late Major W. Howe Greene, and other bequests were received from Mr. S. F. Harris (£200), Mr. S. Philpot (£50), and Mr. W. Unsworth (£300 for the purposes of benevolence of the RIBA). These legacies, invested under By-law 56, will increase the income on which the Society can rely to provide relief for those in need.

Receipts from insurance commission were rather less than in the previous year. Architects who insure through the ABS Insurance Department render a double service: to themselves by being fully covered against accidents, fire and other risks, and also to those who need the Society's help, for the commission received on policies taken out through the Society's agency is placed, as a donation from the policy-holder, to the general funds to relieve distress.

There are still 13,000 architects who as yet give nothing to the Society. If those who already subscribed will interest their friends in the Society and persuade them to give also, the Society's ability to help those who apply for aid will be increased to more adequate proportions, and its beneficial work continued with confidence.

BRF M. Clark-Hall

April 26, at a meeting of the Bristol Replanning Association. Talk on PLANNING NEW MOTORWAYS by M. Clark-Hall, Assistant Secretary of the British Road Federation.

M. Clark-Hall: Never again must the appalling conditions, existing in South Wales between the two wars, be allowed to occur. In order to avoid these it will be necessary to establish light industries along the mouths of the mining valleys. It is absolutely essential, if these industries are to prosper, that an adequate road system should be constructed immediately, linking Wales with England and the industrial North by means of motorways.

It is a terrible indictment, but I can, myself, see no sign of earnest endeavour upon the part of the Government to facilitate the rehabilitation of this depressed area by the construction of an adequate road system. Perhaps they have such plans. Then why do they not publish them? The only possible reason can be a policy both ineffectual and inept.

Replanning is a high-sounding word, but I say this with confidence and without fear of contradiction, that no branch of national reconstruction can hope to succeed unless considered in relation to the planning of a national highway system. Let the Government look to it, decide upon what is necessary, and then publish its plans and take the nation into its confidence.

ANNOUNCEMENTS

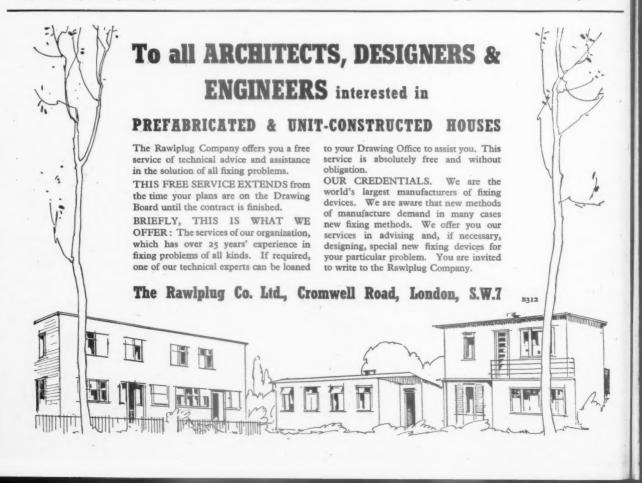
Mr. H. Victor Kerr, F.R.I.B.A., having been released from HM Forces, has resumed personal control of the practice of Victor Kerr & Colbourn, chartered architects and surveyors, from their locum tenens and would be glad to receive up-to-date catalogues and information, particularly on permanent prefabrication. Address: 212, High Holborn. Tel.: Holborn 2400.

Messrs. Maple & Co., Ltd. (and its associate company, H. H. Martyn & Co., Ltd., of Cheltenham), announces that Mr. J. F. Allden (late of Garton & Thorne, Ltd.) has recently joined its organization to deal with contracts in connection with ship and theatre decoration and furnishing, and all general architectural work.

The manufacturers of Duresco have changed the name of the company from the Silicate Paint Co., J. B. Orr and Co., Ltd., to that of Duresco Products Limited, the factory still being at Charlton, S.E.7. Duresco, the company's principal product, is so well known that it was felt to be in everyone's interest that the old name should at this juncture be changed. Tint books, literature and price lists are available on request to Duresco Products Ltd., Charlton, S.E.7.

In recognition of his 26 years of excellent service with Messrs. W. H. Gaze & Sons, Ltd., of Kingston-on-Thames, Mr. George W. Bruce, Works Manager, has been elected to the Board of Directors.

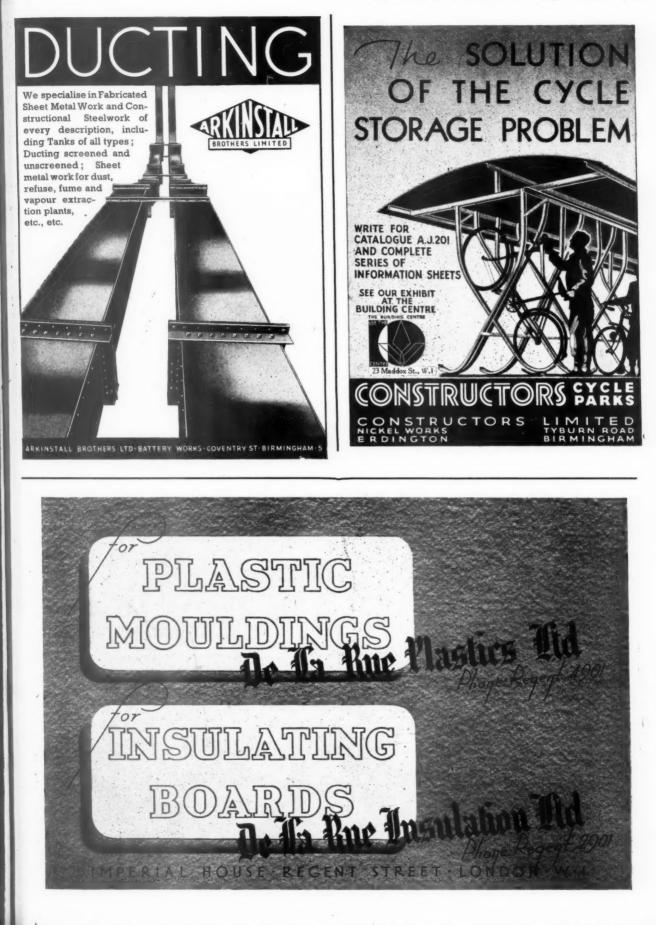
T. Arnold Brittain, DIP. ARCH., A.R.I.B.A., M.R.SAN.L., has taken up his duties as Architect for Post-War Housing at Stoke-on-Trent. Mr. E. Player, Technical Director of Birmid Industries, Ltd., has been appointed Joint Managing Director of that company, and also of the Birmingham Aluminium Casting (1903) Co., Ltd.—a subsidiary. Mr. Player will act with Mr. Cyril C. Maudslay, who continues as Chairman and Joint Managing Director of both companies.







THE ARCHITECTS' JOURNAL for May 10, 1945 [xli





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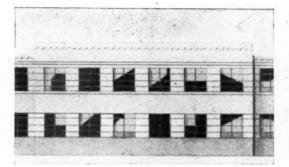
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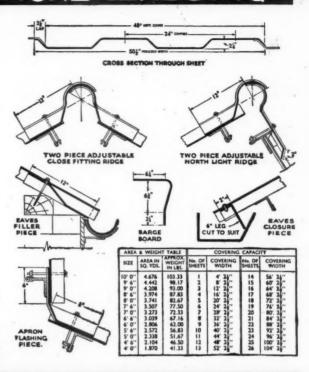
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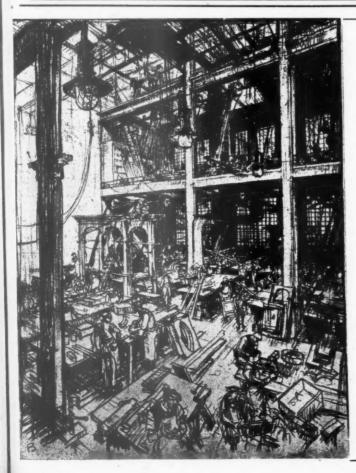
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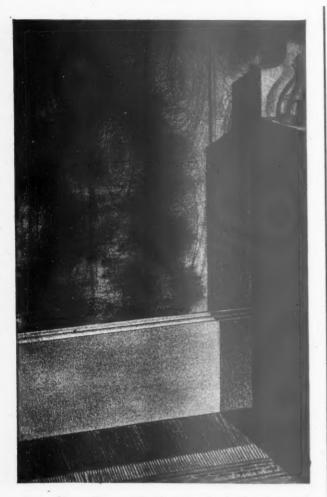
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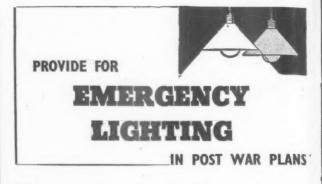
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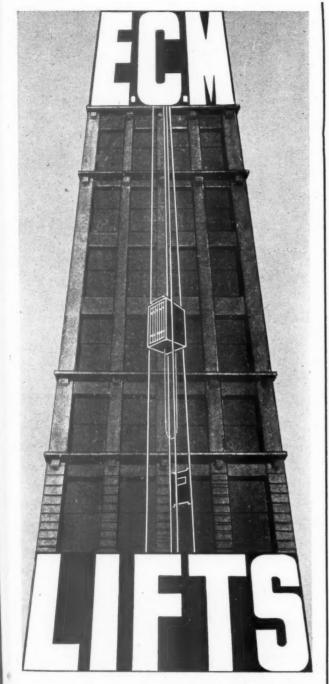


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CLASSIFIED ADVERTISEMENTS

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

in the following Thursday's paper. Replies to Box Numbers should be addressed care of "The Architects' Journal," War Address: 45 The Avenue, Cheam, Surrey.

Public and Official Announcements

Siz lines or under, Ss.; each additional line, Is. THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: 75. EARON PLACE, LONDON, S.W.I. THE.: SLOANE 5615. 991

SEAHAM URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

ASSISTANT. Applications are invited for the temporary appointment (for a period of not less than two years) of Architectural Assistant, at a salary of 256 per annum, plus war bonus. Applications should be members of the Royal Institute of British Architects, and have experi-ence in the planning, laying and construction of Housing Estates, and other buildings. The appointment will be subject to one month's notice on either side. Applications, stating age, qualifications, ex-perience, and liability for National Service, must be accompanied by copies of three recent testi-monial's, and reach the undersigned not later than first post on Saturday, 19th May, 1945. (No official forms provided.) Canvassing, directly or indirectly, will dis-qualify. JNO. C. EDINGTON,

JNO. C. EDINGTON, Clerk of the Council. Council Offices, Seaham, Co. Durham. 28th April, 1945. 718

NOTTINGHAMSHIRE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following

Applications are invited for the following appointments.— (a) ARCHITECTURAL ASSISTANTS, at salaries of 2550 to 2450 per annum, according to experience and qualifications, plus cost-of-living bonus, which at present amounts to £49 8s. per

bonus, which at present amounts to 2.49 on. per annum. (b) QUANTITY SURVEYORS, at salaries of £270 to £350 per annum, according to experience, plus cost-of-living bonus, which at present amounts to £49 8s. per annum. The posts will be subject to the Local Govern-ment Superannuation Acts, 1937 and 1939, and will be terminable upon one month's notice on either side at any time. The successful candidates will be required to pass a medical examination. In accordance with the general decision of the County Council, all appointments made during the War are, of a temporary character in the first instance.

the War are of a temporary character in the first instance. Forms of application may be obtained from the County Architect, Shire Hall, Notlingham. K. TWEEDALE MEABY, Clerk of the County Council. Shire Hall, Nottingham.

GLAMORGAN COUNTY COUNCIL.

Applications are invited for the following tem-porary appointments (with prospects of per-manency) in the Architect's Department :--PRINCIPAL ARCHITECTURAL ASSISTANT : Salary : £25 per annum, rising by annual increments of £25 to £600 per annum. ARCHITECTURAL ASSISTANT, Grade 1: Salary : £425 per annum, rising by annual increments of £25 to £600 per annum. THREK ARCHITECTURAL ASSISTANTS, Grade 2: Salary : £305 per annum, rising by annual increments of £20 to £400 per annum. Appropriate cost of living bonus will be paid in addition.

Appropriate cost of living bonus will be paid in addition. Tendidates must be qualified as Associates of the Royal Institute of British Architects, and the service of the Authority. Or a specially witable candidate employed by another Local Authority. The appointment will be subject to the general voice on the County Council with regard to conditions of the County Council with regard to conditions of the County Council with regard to conditions of the County Council with regard or the Authority. The appointment will be subject to the general voice on ether side. Applications, on forms which may be obtained from the County Architect (Blamorgan County Hall, Cardiff, must be returned to him in sealed envelopes, endorsed: Architectural Assistants, on later than Saturday, 26th May, 1946. Te a disqualification.

D. J. PARRY, Clerk of the County Council. 26th April, 1945.

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SCHOOL OF ARCHITECTURE.

Applications are invited for the post of LECTURER IN ARCHITECTURE. Applications should be Associate Members of the Royal Insti-ute of British Architects, preferably trained in a recognised School of Architecture. The salary will be in accordance with the Burnham Scale (2500 x £15-£525, plus allow-ances for graduate status and additional train-ing if applicable). In fixing the commencing salary, previous teaching and/or professional ex-perience will be taken into account. It is hoped to fill the vacancy by September, 1945, but in the case of the successful candidate being a member of H.M. Forces, the commencing date of the appointment may be postponed. Further particulars and forms of application may be obtained from the Director of Education, Guildhall, Kingston-upon-Hull, and should be re-turned not later than the 31st May, 1945.

CITY AND COUNTY OF THE CITY OF EXETER.

Applications are invited for the following pointments in the City Architect's Depart-

Applications are minimum for the city Architect's programments in the City Architect's programment (a) PRINCIPAL ASSISTANT ARCHITECT (Education Section), at a salary of £450 per annum, rising by two annual increments of £25 to £500 per annum, plus cost of living bonus, at present £59 198. 3d. (b) SENIOR ASSISTANT ARCHITECT (Housing Section), at a salary of £400 per annum, rising by two annual increments of £10 to £420 per annum, plus cost of living bonus as above.

annum, rising by two annual increments of 2.10 to 2420 per annum, plus cost of living bonus as above. Candidates must be Associates of the Royal fination of British Architects, and should have date of British Architects and should have date of British Architects, and should have date of the board date of British Architects, and should have date of the board date of British Architects, with salaries and exact designations, full details of experience and date when available, together with copies of three recent testimonials should be and to the British Architects and the server date when available, together with copies of three recent testimonials should be are to F. R. Strattect, 2. Southerhaw West, Exeter, not later the 19th May, 1945. Applications architects serving with the British and the May, 1945. Applications architects are and cate of the British and the British Architects are and the British Architects are and the British and the British architects are and the British and the British and the British and the British architects are and the British and the British architects are and the British and the British and Br

Town Clerk's Office, Exeter. 26th April, 1945. 715

TECHNICAL ASSISTANTS, temporary, re-quired by Borough of Chelmsford. (a) ENGINEERING ASSISTANTS: Candidates should hold the Testamur of Insti-tution of Municipal and County Engineers, or be Associate Members of Institution of Civil Engineering and Surveying, including Roads, Sewerage, Housing Layouts, Sewage Disposal, etc. Salary, 23265 to 2410 per annum, plus cost of living bonus, at present £59 168. per annum. Reference: E.1427XA.

Keterence : E.1427XA. (b) ARCHITECTURAL ASSISTANTS : Candidates should have passed the Final Examination of Royal Institute of British Architects or equivalent, and have had previous experience in design of Council Houses, Housing Layouts, etc. Salary, £365 to £410 per annum, plus cost of living bonus, at present £59 168. per annum. Reference : EA.1351XA.

Commencing salaries in each case in accord-ance with qualifications and experience. Write, quoting appropriate reference numbers, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned com-pleted by 28th May, 1945. 719

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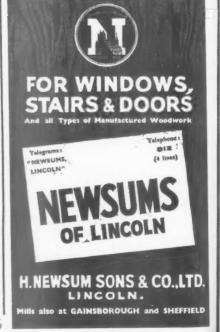
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Council. Candidates must hold the Testamur of Institu-tion of Municipal and County Engineers and either be Chartered Engineers, Surveyors, or Architects, with preferably the added qualifica-tion of the Town Planning Institute, and abould lave had recent experience of Town Planning Schemes.

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De returned completed of 218 may, 1940. 122 ARCHITECTURAL ASSISTANT, temporary, required by the Urban District Council of Horsham. Candidates must have been born before 1923, and should hold a recognised qualification or be Registered Architect, and have had good experi-ence in the design and construction of build ings, layout, of housing estates, preparation of specifications, plans, quantities, and estimates, and also ba good surveyors and levellers. Salary: 2450 p.a., inclusive. Write, quoting EA.1400XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 21st May, 1945. 713 A joint Committee of Buxton Borough, Matlock Urban, Bakewell and Chapel Rural Councils require a fully qualified ARCHITECT, capable of advising the Councils and carrying through their schemes up to completion of construction of the houses. The appointment will, in the first instance, be for a period of three years. Salary 6500 rising by 650 to 6600 per appoint

The appointment with in the new mean sector a period of three years. Salary £500, rising by £50 to £600 per annum. Travelling allowance £75 per annum, plus 24d, per mile. Successful candidate must provide a car

per mile. Successiul candidate must provide a car. Office accommodation and technical assistance-will be provided at Bakewell, where the person appointed must reside. Write, quoting EA.1383XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 21st May, 1945. TARCHITECTURAL ASSISTANT, permanent, required by the Pontypridd Urban District-Council for work in connection with Council's Post-War Housing Scheme. Candidates must have been born before 1923. and should be Associates of the Royal Institute of British Architects, or hold equivalent qualifica-tions. Salary £350 per annum, plus current war born.

tions. Salary £350 per annum, plus current war bonus. The appointment is subject to provisions of the L.G.S. Act, 1937, and successful candidate will be required to pass a medical examination. Write, quoting EA.1422XA. to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, W.C.2. for application form, which must be returned completed by 21st May, 1945. ARCHITECTURAL ASSISTANTS, temporary, required by City of Peterborough Corporation, for work in connection with housing programme of City Council. Candidates must have been born before 1923, and should have passed all or parts of examina-tion of the R.I.B.A., or hold an equivalent ualification. Salary £270 p.a., rising by annual increments of £15 p.a. to £315, plus current war bonus and extende office hours, making the grade £375 to £435 p.a.

extended office hours, making the grade 2515 to £435 p.a. Write, quoting EA.1418XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 21st May, 1945. 734

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Bell Street, Dundee. 1st May, 1945. 727

SOMERSET COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of Temporary, Class II, ARCHITECTURAL ASSISTANTS, at a salary within the scale £310 per annum by annual increments of £10 to per annum by £350 per annum.

per annum by annual increments of 2.0 to 2550 per annum. The commencing salaries will be determined by experience and qualifications. War bonus in accordance with the Council's scale to be paid in addition to the above salaries. The successful candidate will be required to pass a medical examination by the County Medical Officer of Health. Applications, position in regard to Military Service and length of time required to take up new appointment, together with copies of three recent testimonials, should be sent to the under-signed not later than Friday, 18th May, 1945. R. O. HARRIS, A.R.I.B.A., County Architect. Park Street, Taunton, Somerset.

Park Street, Taunton, Somerset. 27th April, 1945. 730

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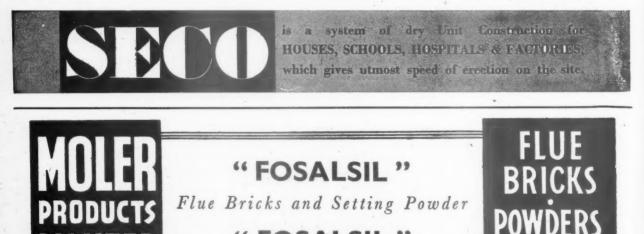
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