

# THROUGHOUT WARS and PEACE to 1945...

## COLT SHINGLES remain the trouble free roof of the future.

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

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

Fire retardant.  
Gale proof.  
Permanent  
rot proof.  
Vermin proof  
Beauty in colour  
and appearance.  
Perfect insulation.

Twenty times lighter than tiles.  
Saves 40% roof timber.  
One inch Cedar equals 11 in. concrete  
in resistance to heat or cold.  
Economical in cost and fixing.  
Long trouble-free life.

Used for roofing houses, schools, garages, airport buildings, factories, agricultural buildings, and other permanent structures. We quote for supply and fixing if required.

In Peace, Colt Shingles will be specified more widely than ever for their beauty, long life, high insulation value and weatherproof qualities.

Copies of our Shingle Handbook containing 110 photographs and full technical information on request. Write to W. H. Colt (London) Ltd., Wokingham, Surrey. Telephone: Elmbridge 6511 (4 lines).

**COLT** Canadian Cedar Wood SHINGLES  
(CEDAR WOOD TILES)

Specially chosen from No. 1 Grade XXXXX Shingles



1895



PROGRESS



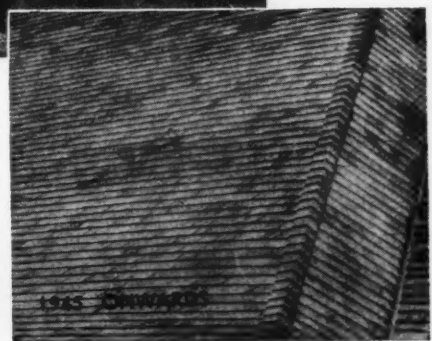
TO

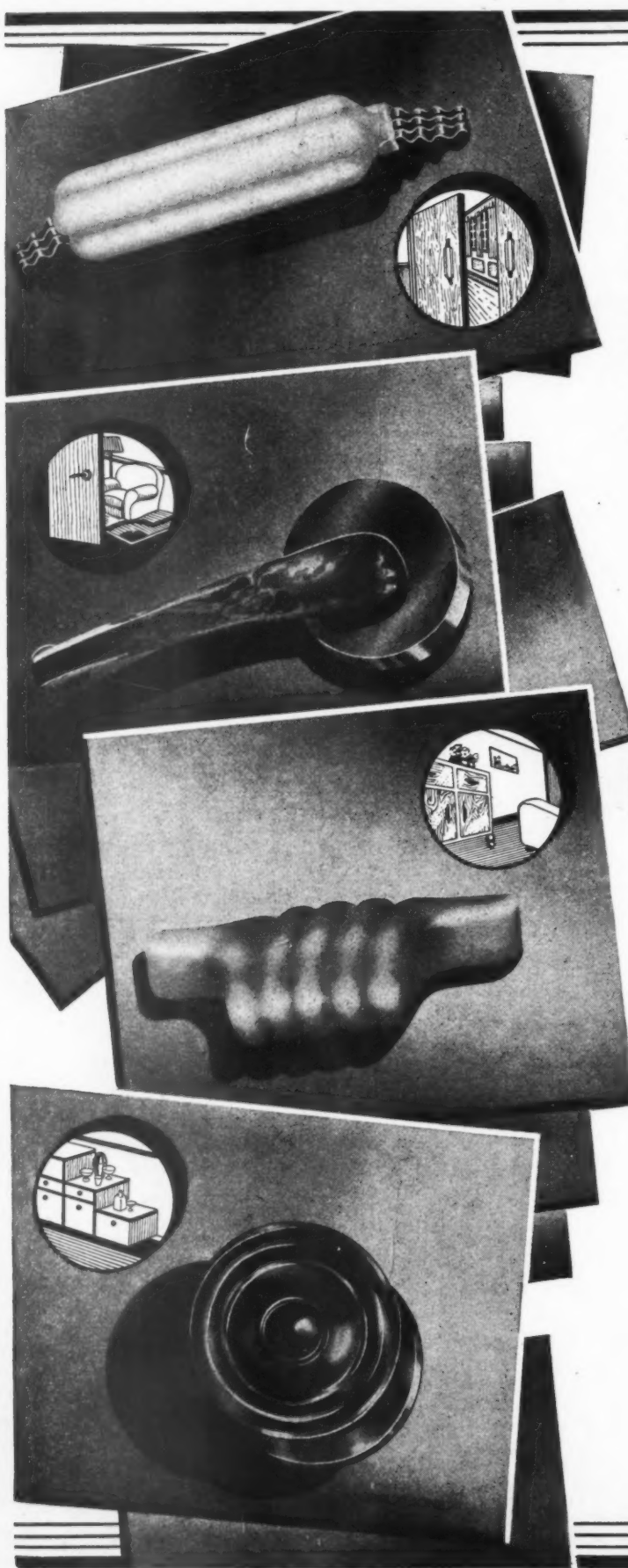


1939.



1939-45.





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

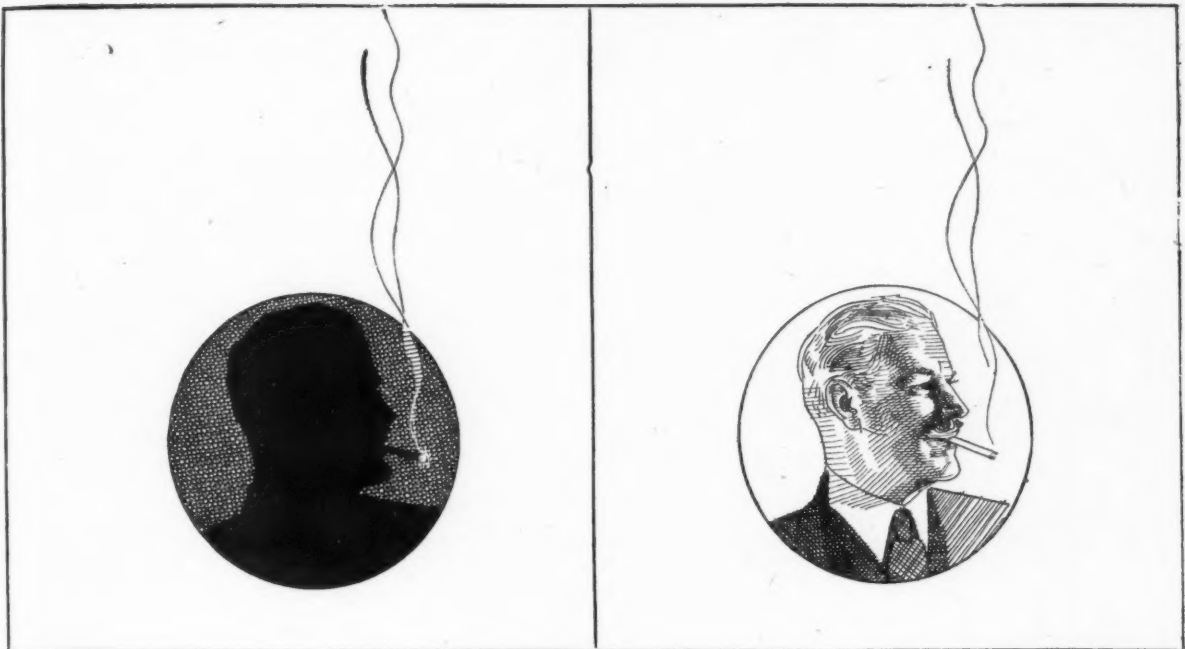
colourful  
*Catalin*  
TRADE MARK REGD.

THE GEM OF  
MODERN PLASTICS

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

*Dept. A.J.*

**CATALIN LTD.**  
WALTHAM ABBEY, ESSEX



## MORE SENSES THAN ONE

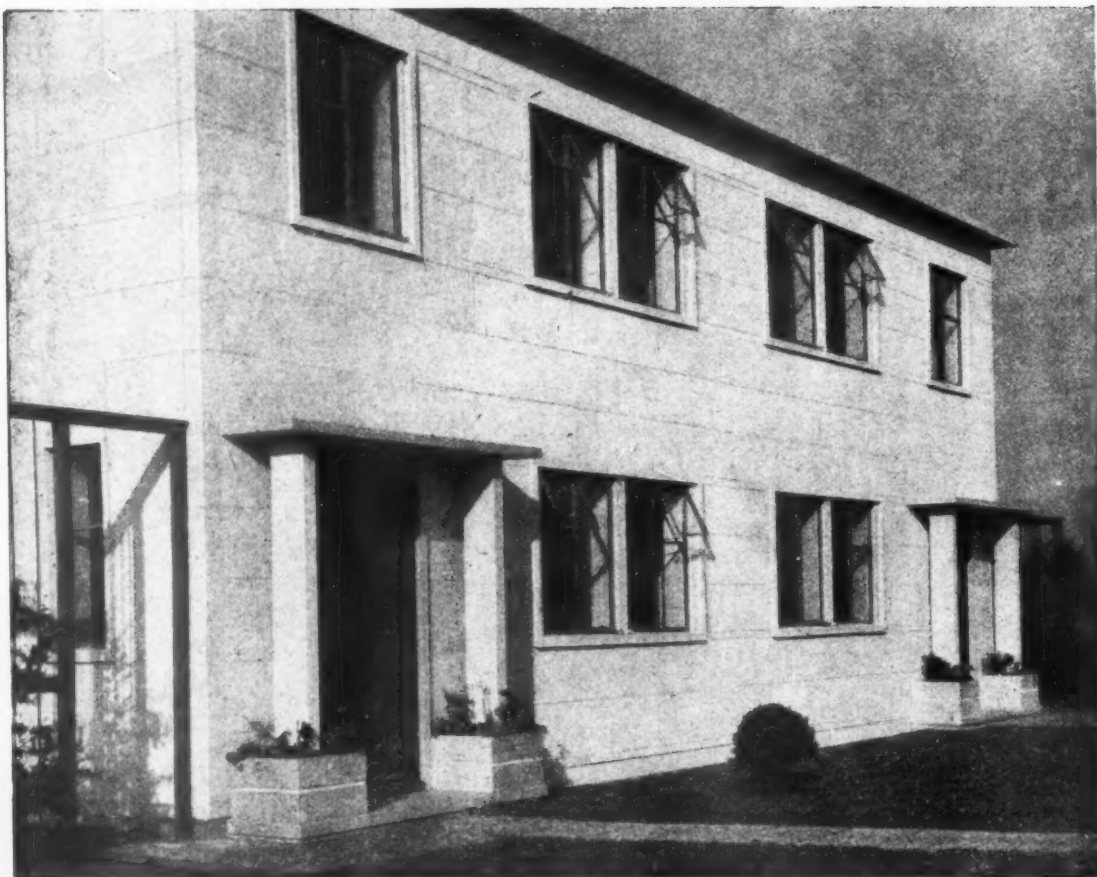
When smoked in the dark, a cigarette appears tasteless and insipid. The ability to satisfy the eye as well as the senses of taste and aroma would thus appear to be an essential ingredient of full enjoyment.

In the field of domestic heating, an appliance may be the last word in technical efficiency, but unless its appearance warms and cheers the eye it will to that extent fail in its purpose. The many advances in heating technique pioneered by Bratt Colbran Limited, have always been associated with distinguished and satisfying design, a combination which will be notably evident in the coming post-war models.

# BRATT COLBRAN LIMITED

10 MORTIMER STREET, LONDON, W.1

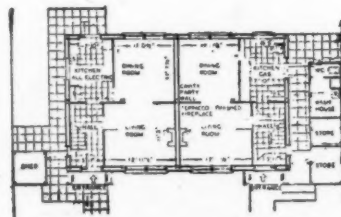
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## ***The Orlit method of house construction***

The Orlit method of house construction is the result of extensive experiments to solve problems of mass production, adaptability in design, and ease of erection in relation to their economical, structural and architectural aspects.

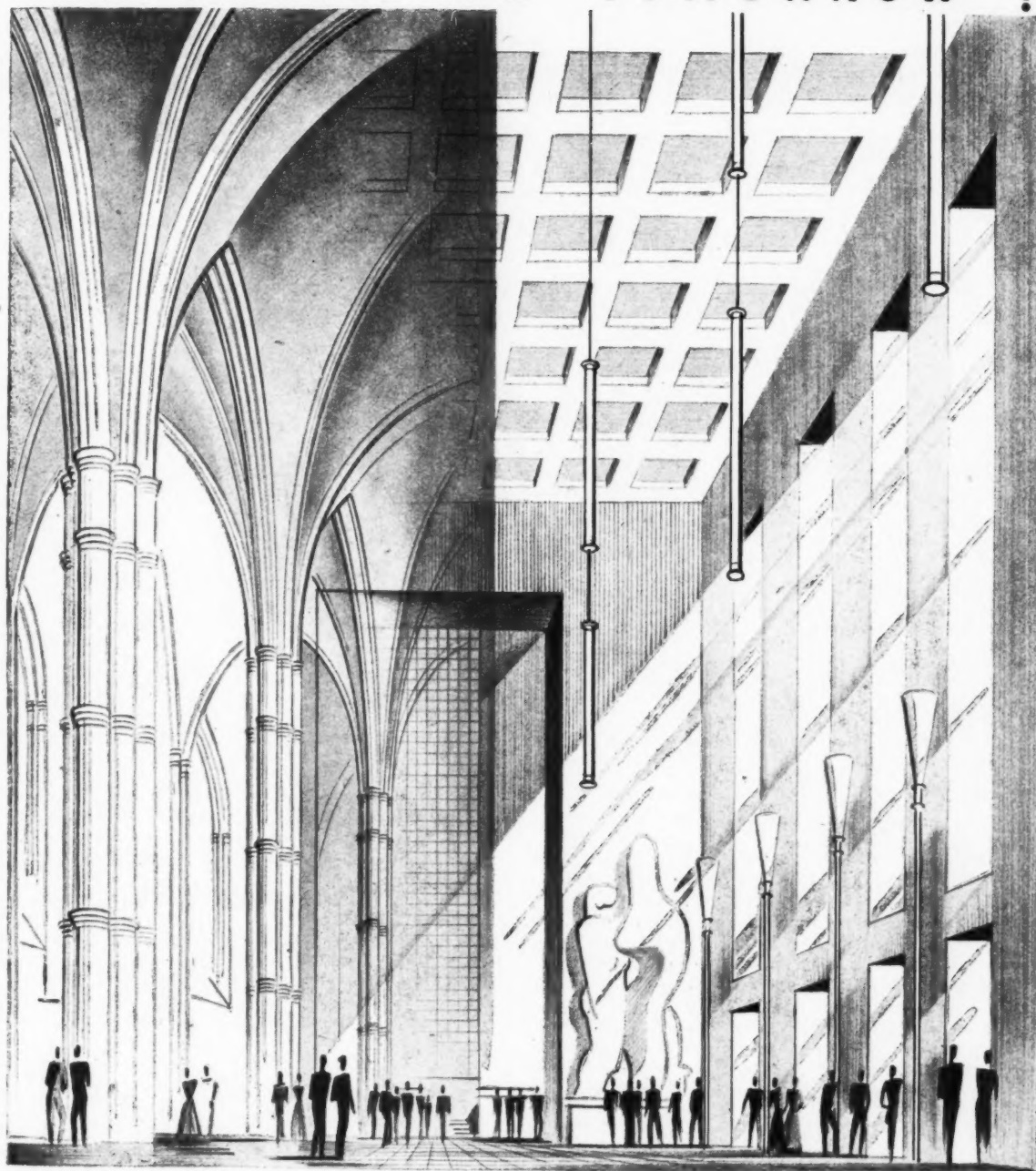
# **ORLIT**



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



# YESTERDAY OR TOMORROW ?



The mediæval cathedral and the mediæval house were cold and draughty; today our halls and houses are at a transitional stage, a little warmer in spots, a little less draughty in places. Tomorrow's buildings, public and private, will be warmed or cooled, ventilated and conditioned to be everywhere utterly independent of the weather. The medium for this flowering of civilisation, man's liberation from the elements will be—

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HEATING · PIPING · AIR CONDITIONING

THE BRIGHTSIDE FOUNDRY & ENGINEERING COMPANY LTD

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CC 15.

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Among the other processes used by Sebels are :—

**ELECTRO-GALVANISING.** The normal hot-dipped galvanising process for steel is well-known. Sebels are using a new process of galvanising by electrical means, which provides the same corrosion-resisting surface with a much thinner and more even coat... especially suitable for finer types of work.

**ELECTRO-ANODISING.** The electrolytic-anodising process imparts, normally, a silvery, non-corroding sheen to the surface of aluminium. A development of this finish is achieved by the introduction of suitable dyes into the anodising bath, producing permanent, scratch-resisting surfaces in various colours. A very pleasing range of finishes is made available in this process.

The three finishes described here have been adopted by Sebels in connection with their "quality-quantity" production methods, and are available on any contract undertaken in the Sebel workshops. Enquiries are cordially invited.

There is almost no limit to the size of structural and fabricated steel-work which Sebels can treat by the new Metal Spraying process. Briefly the process consists of feeding a specified metal or alloy through a pistol having melting and atomising chambers, and forcing the molten atomised particles at high pressure on to the surface to be protected. The surface, before being so treated, is sand or shot-blasted to give proper adhesion and remove all scale or irregularities. An exceptionally fine matt-finished surface proof against corrosion is obtained, and there is virtually no limit to the size or shape of the job which can be treated by this metal-spray process.

IF IT'S A BIG JOB ASK

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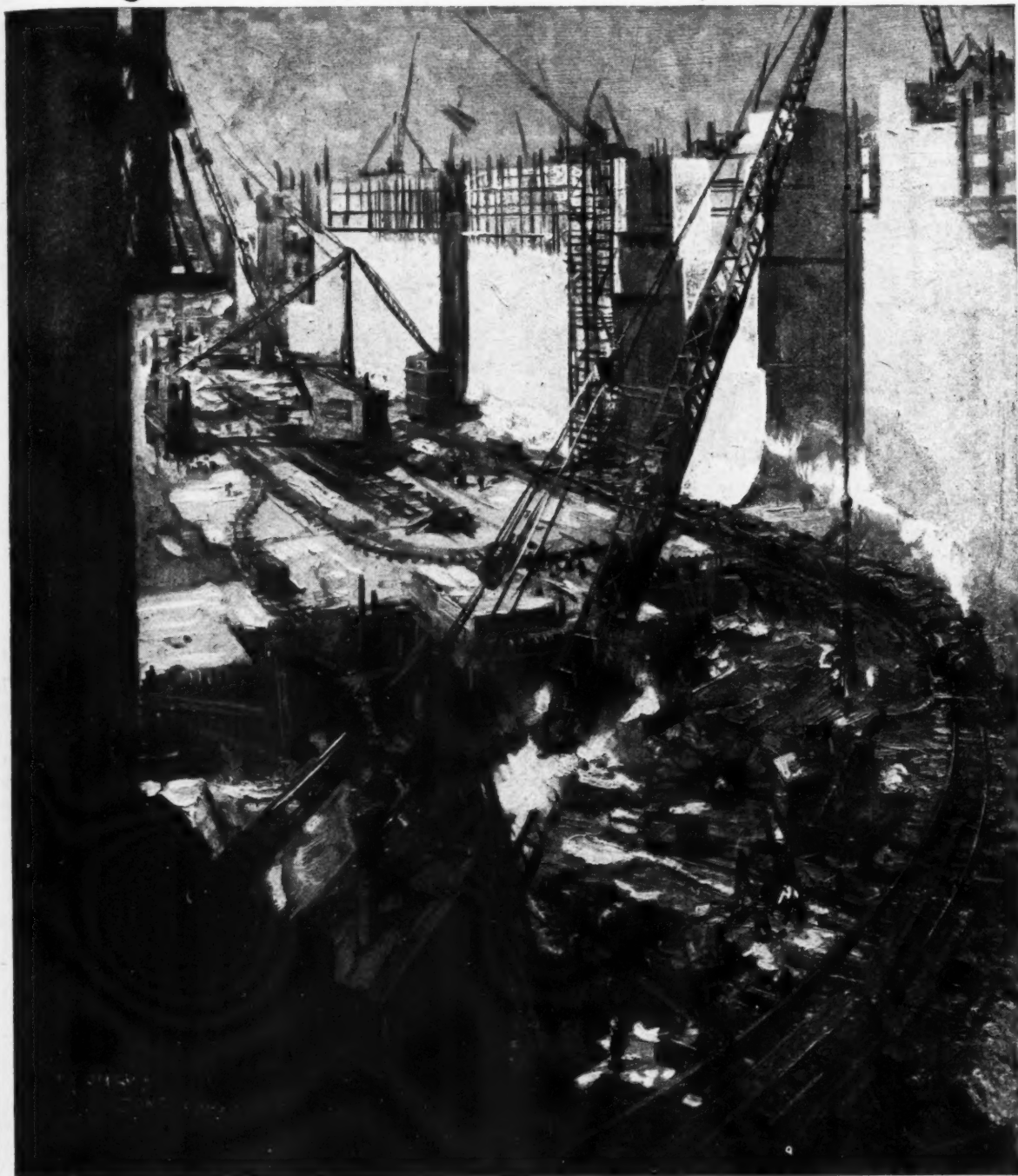
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Scientific 3.9

## Building the Post-war World . . .



No. 2. Graving Docks

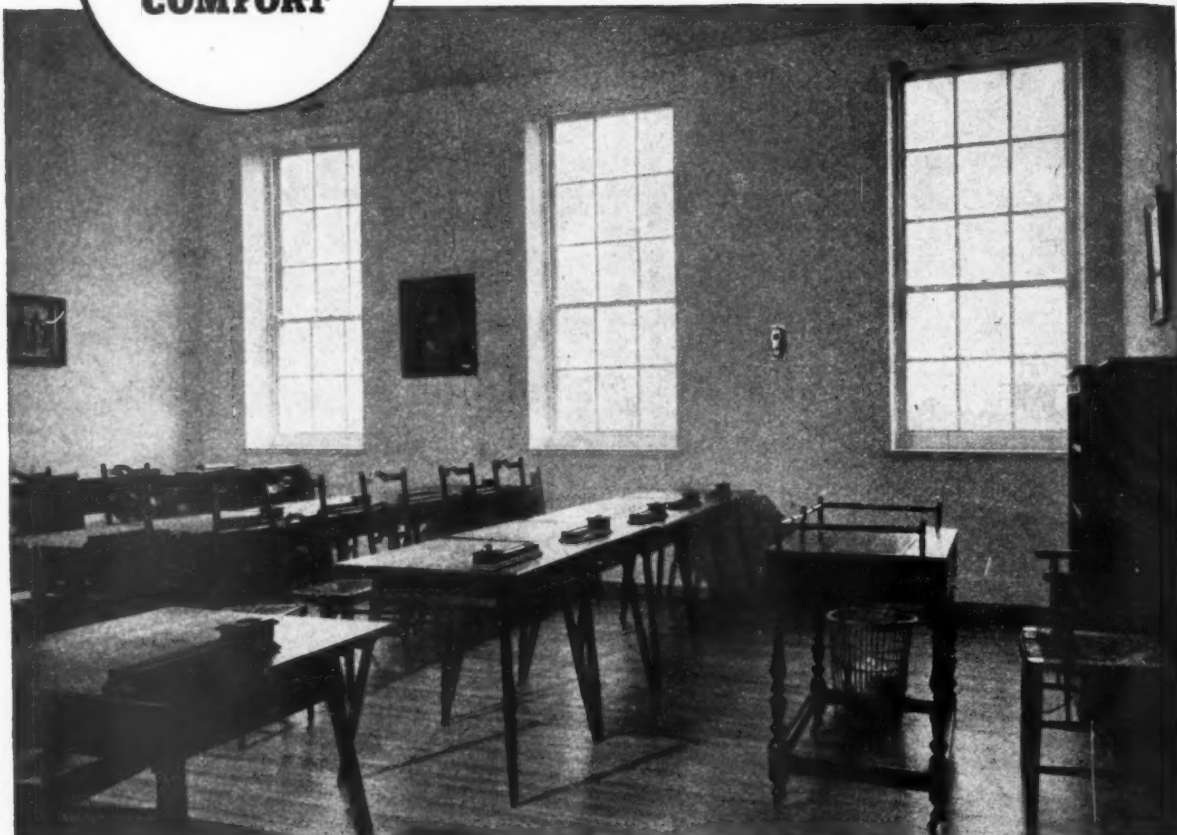
## a job for **TAYLOR WOODROW**

CONTRACTS RECENTLY COMPLETED AND IN HAND • PHENIX (Mulberry) PREFABRICATED HARBOURS • F.I.D.O. SCHEME FOR AERODROMES • OIL PIPE LINES • UNDERGROUND STORAGE TANKS • POWER STATION EXTENSIONS • DEEP SEWERS (Tunnel and Open Cut) • RAILWAY SIDINGS • BRIDGE RECONSTRUCTION

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*'Phone: Waxlow 2366. 'Grams: Taywood, Southall. Code: Bentley's Second. London Office: 10 PARK STREET, W.1. 'Phone: Grosvenor 4617*



**PLAN FOR  
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COMFORT**



ST. SWITHUN'S SCHOOL · WINCHESTER · Schoolroom

Architects: Mitchell & Bridgwater, A/A.R.I.B.A.



BY APPOINTMENT  
ENGINEERS TO H.M.  
KING GEORGE VI

Just as Crittalls installed invisible embedded panel warming, inlet and extract mechanical ventilation and hot water equipment in the impressive extension to the Fitzwilliam Museum, so will they install 'controlled comfort' in many other important public buildings in post-war Britain.

*Other services undertaken include Oil or Gas Fired Boilers, Electric Thermal Storage, Air Conditioning, Thermostatic Control, Steam Supplies, Compressed Air Supplies, Radiator Warming, Dulrae Electric Warming, Cooking Equipment.*

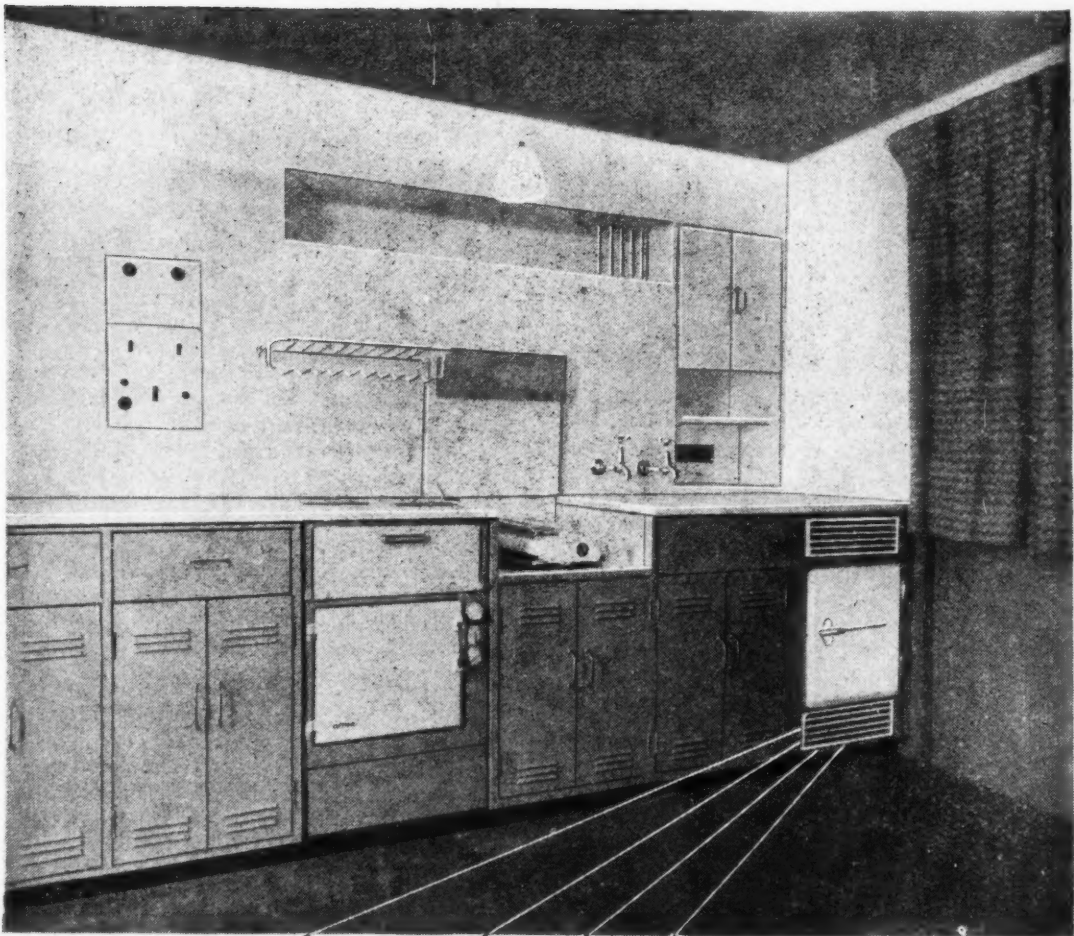
**RICHARD CRITTALL**

AND COMPANY LIMITED. 155, Great Portland St., London W.1. Phone MUSEum 3366

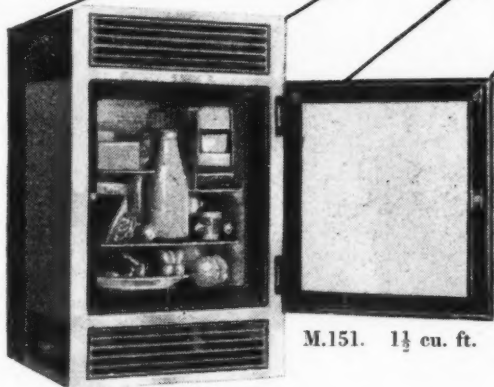
BIRMINGHAM: Prudential Buildings, St. Philip's Place. Central 2478

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The K. and B. Unit used in the Ministry of Works temporary house.



M.151. 1½ cu. ft.

The Electrolux M.151 is used by the Ministry of Works because its capacity is sufficient for a small household, and like all Electrolux 'built-in' cabinets, fits into any kitchen design. Moreover, it is noiseless, has no moving parts, and does not interfere with wireless reception.

Electrolux 'Built-in' Refrigerators operate equally well by Gas or Electricity. Free standing Models operate by Gas, Electricity or Paraffin.



REFRIGERATOR MAKERS  
TO H.M. THE KING

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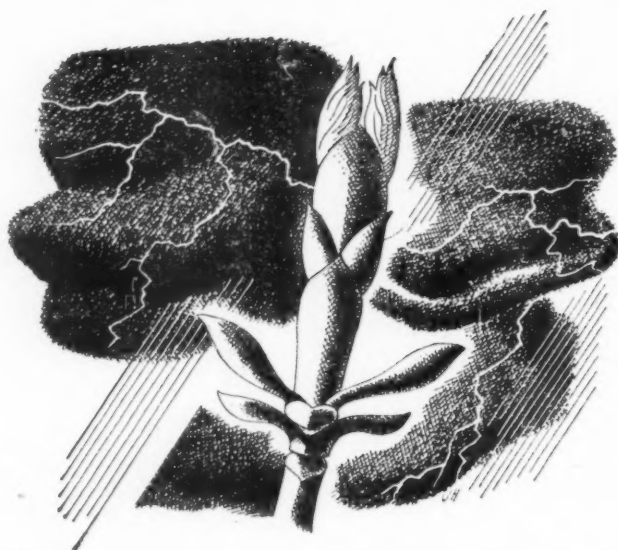
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## Destruction to Construction



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

Sisalkraft stands up to spading, trucking, and heavy traffic during concrete laying; it is easy to handle, and economical in use. Its extra toughness and strength cancels out the risk of imperfections in the finished concrete, that is why Sisalkraft is consistently used by Government Departments, County Engineers, Municipal

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Sisalkraft is not an emulsion-impregnated sheet of brown-paper. It is an unusually strong material, a fusion of pure bitumen and two sheets of extra-tough Kraft paper *reinforced with Sisal fibres*.

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

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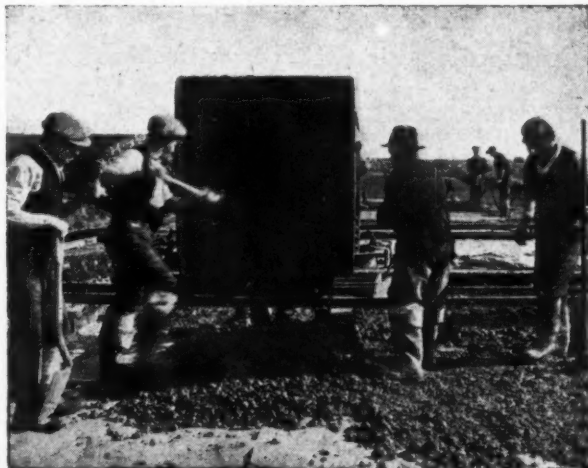
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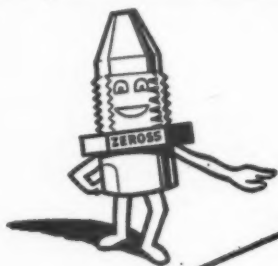
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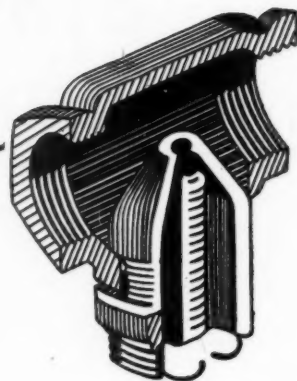
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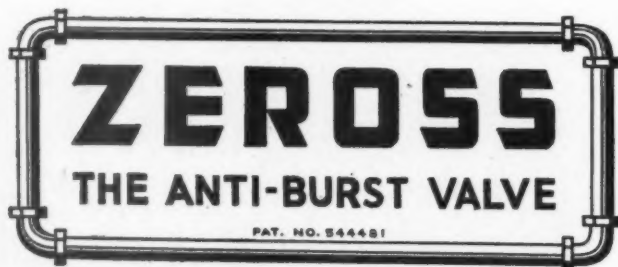
Here is a remarkably simple, yet 100% efficient device for the prevention of bursts in water installations due to freezing.

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

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

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

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



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**CANNOT CORRODE. NO ESSENTIAL PARTS IN CONTACT WITH WATER.**

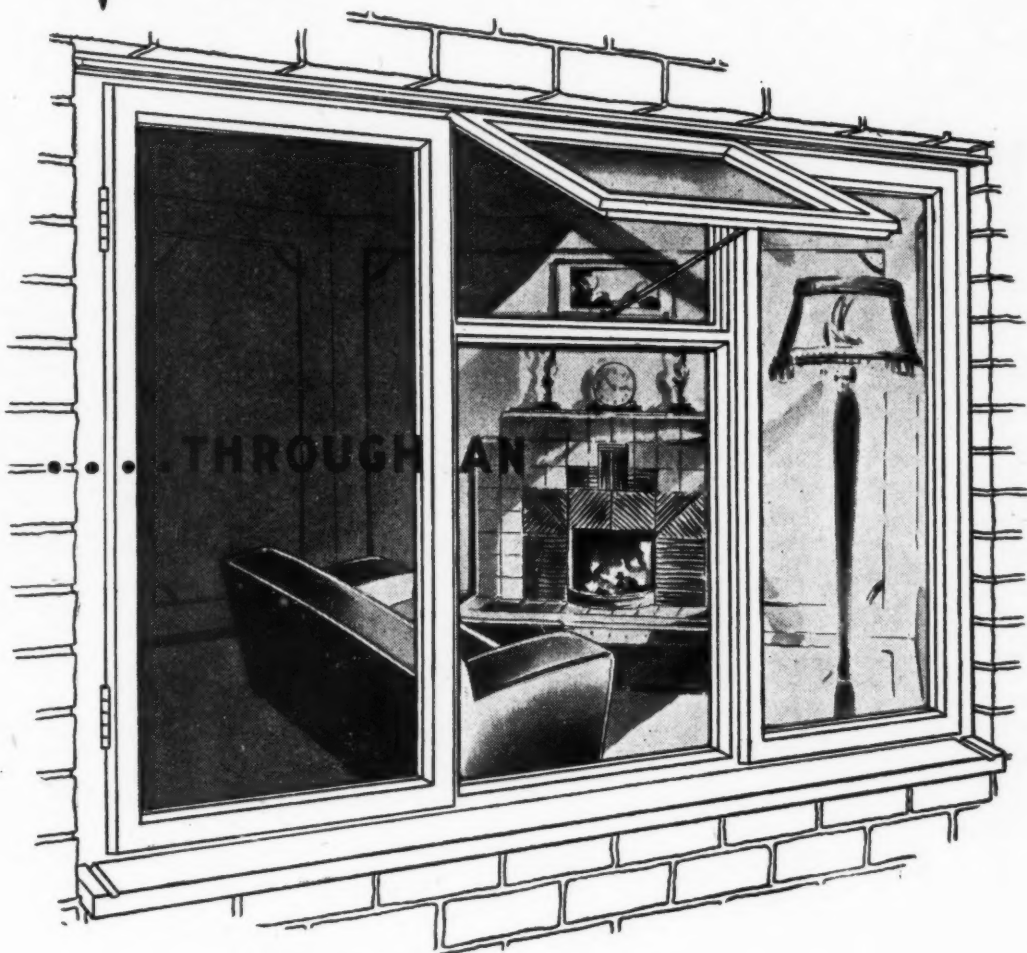
**SUPPLIED WITH ESSENTIAL CHAMBERED TEES AND MADE IN A RANGE OF TYPES AND SIZES TO SUIT ALL DOMESTIC AND INDUSTRIAL WATER INSTALLATIONS.**

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

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★ LOOK . . . .



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Better and more efficient lighting is wanted in the post war home.

Austins have decided to turn their great production capacity to **EJMA** windows, designed to use a minimum of timber and admit maximum light.

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OF EAST HAM

KITCHEN CABINETS, STAIRCASES, MOULDINGS.

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One girl can clear them all away in fifteen minutes—and the whole hundred, stacked, occupy but 20 square feet of floor space.

The possibilities of multi-purpose rooms open a new field in architectural design. Kingfisher partitions folding windows, and furniture enable the concert hall to become a ballroom, the class room a temporary cinema.

Under license this equipment can be supplied now.



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*furnish the new Education*

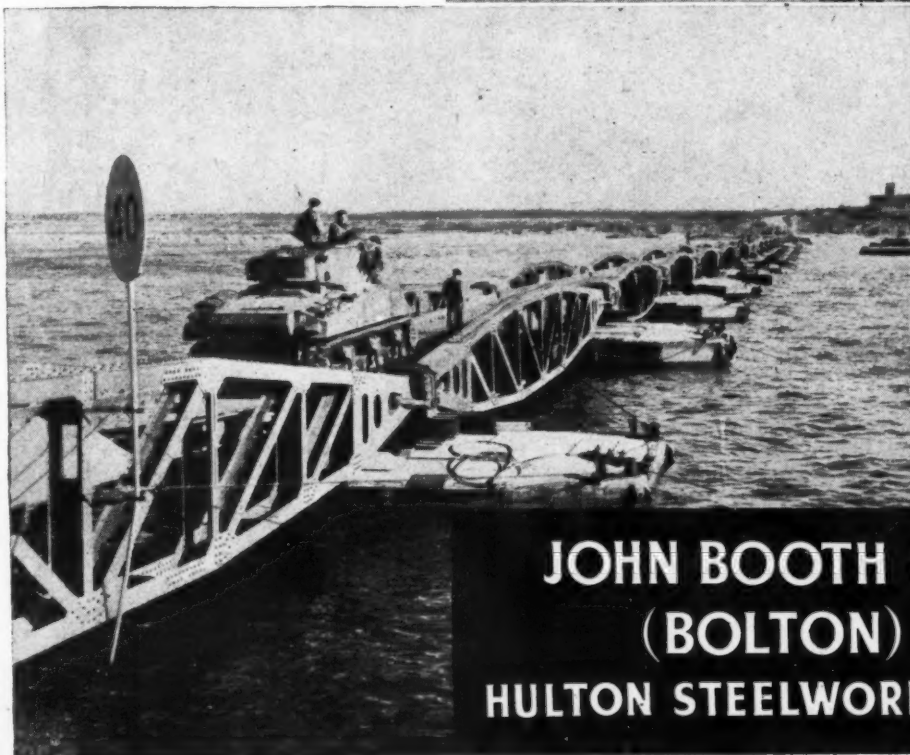


KINGFISHER LTD., Charles Street & Phoenix Street, West Bromwich, STAFFS.  
Telephone: Tipton 1631. Telegrams: Kingfisher, Phone, West Bromwich  
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***The answer to the  
Germans' "Impossible"***

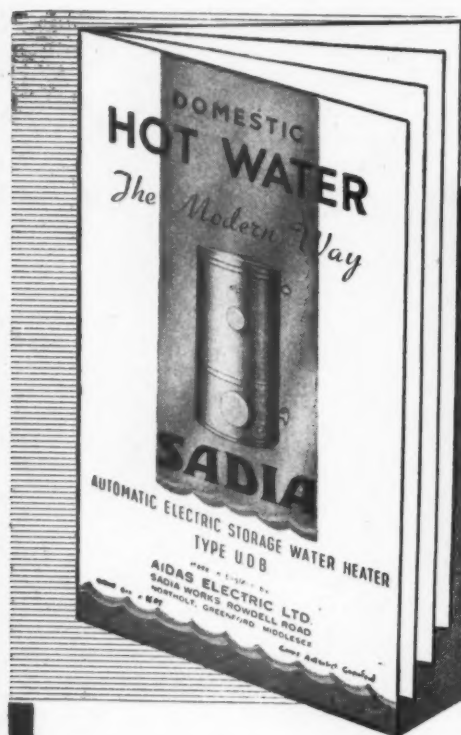
John Booth & Sons (Bolton) Ltd. was one of the parent firms entrusted with the construction of the floating bridges. There were 50 of them each 80ft. span. The unique design was tested by erecting one at Hulton Steelworks and twisting it 15 degrees in its length.



The Ministry congratulated Messrs. John Booth & Sons on the successful performance on time of their share of this remarkable engineering project.

**JOHN BOOTH & SONS  
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## THIS FREE BOOKLET

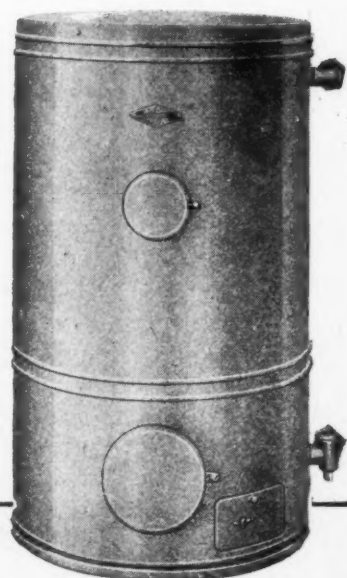
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3. There is *no* maintenance problem.
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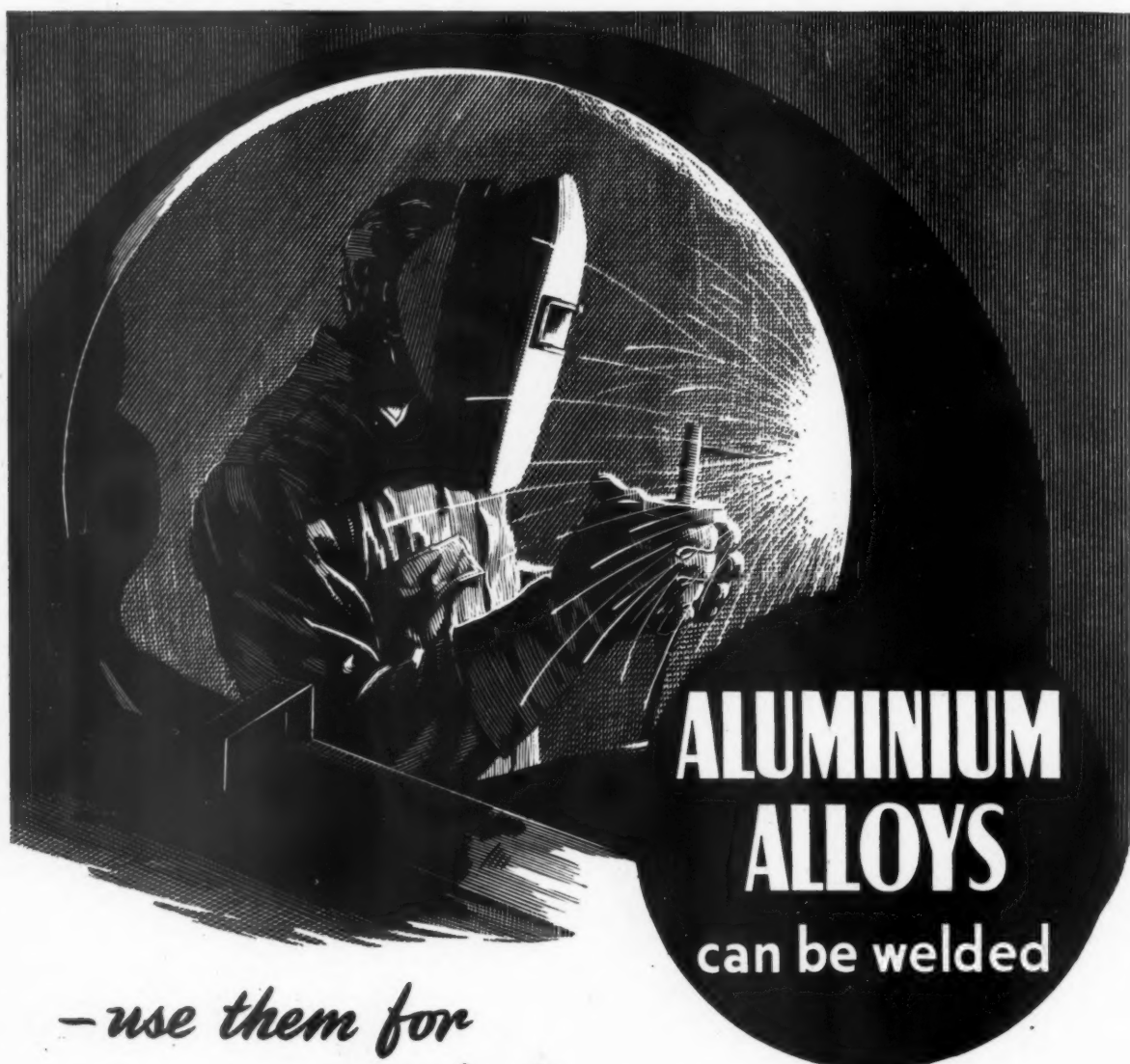


HIGGS<sup>AND</sup> HILL  
LIMITED

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LEEDS

COVENTRY



*— use them for  
your projects*

**M**ANIFEST are the advantages of aluminium and its alloys—it is ductile, resistant to corrosion, free from rust, has excellent strength/weight ratio, is fine in appearance—and to these can be added its ability to be welded by both fusion and resistance processes.

There have been misconceptions about welding aluminium alloys—misconceptions based upon established practice in welding. But, now, research has found a way of meeting the problems of welding

aluminium, of devising and providing oxide destroying fluxes, of temperature control, of operating methods departing from conventional practice but which on aluminium alloys give strong, perfect welds.

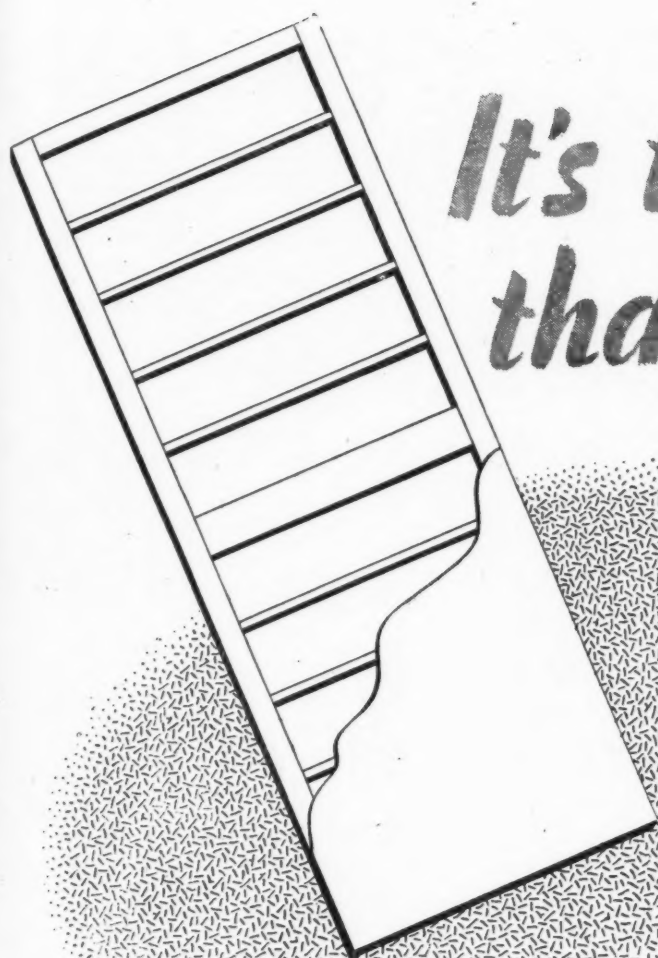
If, then, your product is one which necessitates welding, but would also gain from lightness, strength, ductility, freedom from rust, and good appearance, then aluminium or aluminium alloys are indicated. In The Aluminium Development Association's Information Bulletins Nos. 5 and 6—free on application—the subject of Aluminium Welding by the various processes is clearly and exhaustively described.



THE ALUMINIUM DEVELOPMENT ASSOCIATION

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*It's the core  
that counts*

There are many forms of construction for flush doors, and desire for durability or economy may dictate the choice of one rather than another. But in all, it is the material and the workmanship that is put into the hidden core that counts.

Sadd's put good work into every door they make, from the lowest price standard type to the specially designed job faced with decorative veneers.

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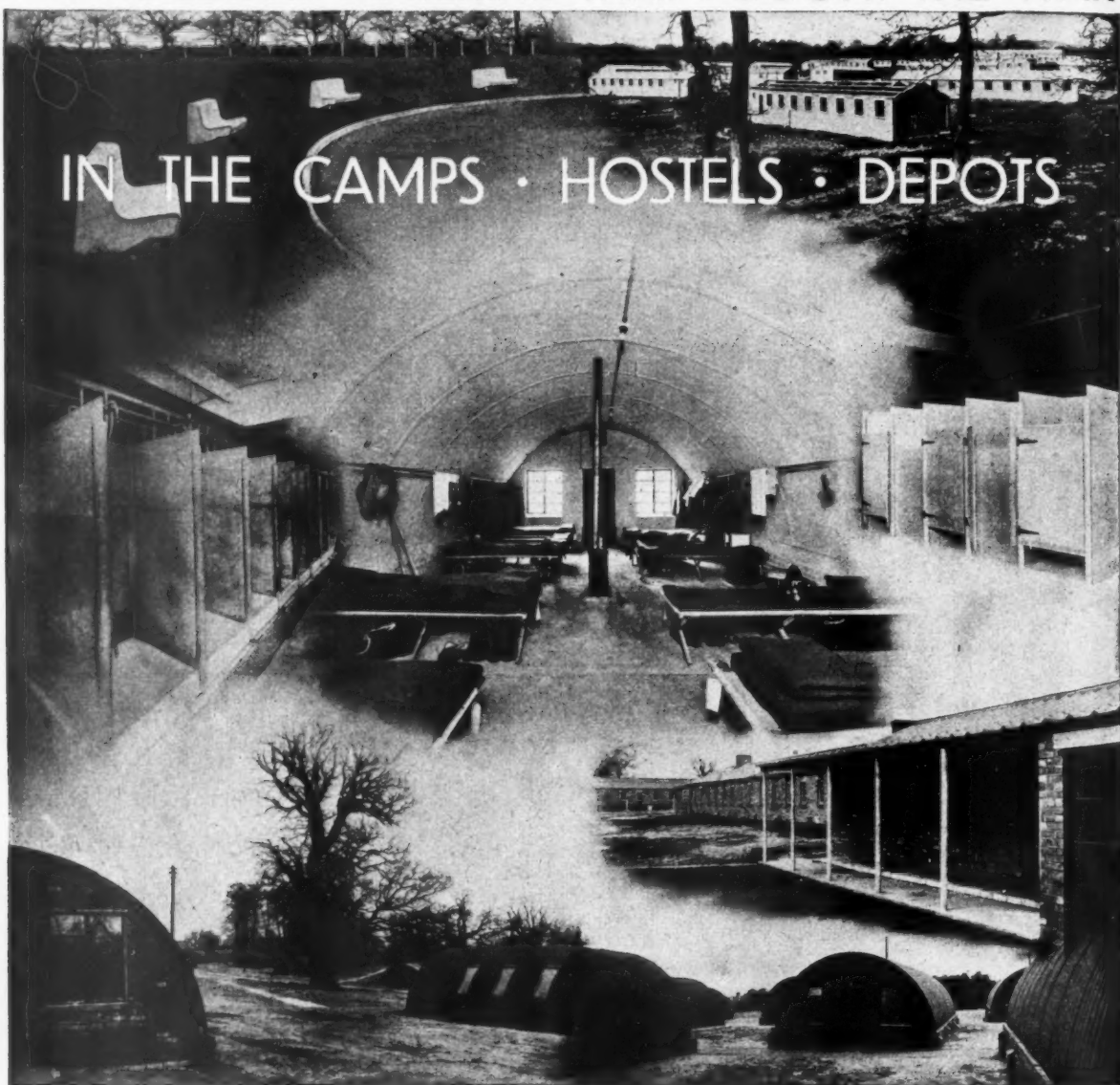
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THE BUILDING MATERIAL THAT FOUGHT THE WAR



IN THE CAMPS • HOSTELS • DEPOTS

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**TURNERS ASBESTOS CEMENT CO. LTD.**  
TRAFFORD PARK • MANCHESTER 17



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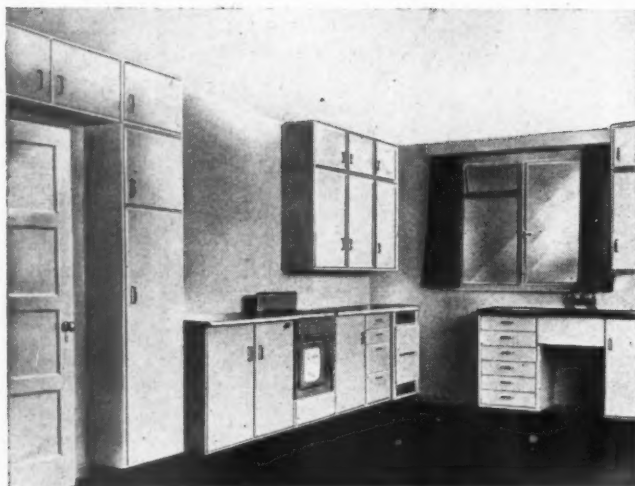
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Hollow extrusions in aluminium alloys form a welcome addition to the materials of construction which are now available to the engineering and manufacturing industries. Here we have lightness of material and *lightness of form* combined with strength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

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*Illustrating a model kitchen specially built in our factory for your inspection.*

HALL'S Ejma standard windows provide more than twice the daylight area per cubic foot of timber than that afforded in the pre-war standards. They are designed with extremely strong laminated joints and are specially machined to avoid the bugbear of binding windows. The sizes have been co-ordinated with brickwork dimensions thus saving many man hours on site. They are weather, draught and dust resisting.

We have an ample range of standardised units and you cannot do better than SPECIFY HALLS Ejma windows and doors.

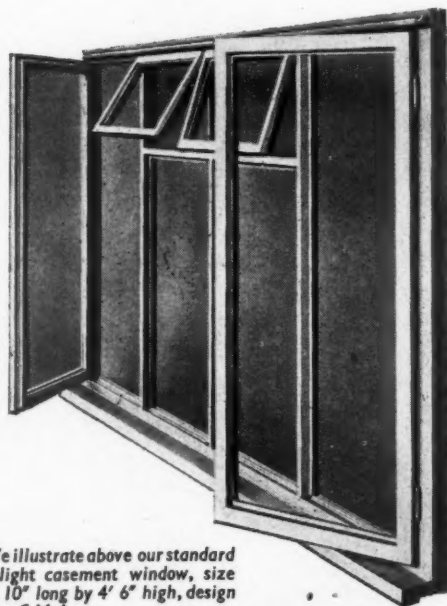
Whatever you need in KITCHEN UNITS, WINDOWS, DOORS AND FRAMES MANUFACTURED TO THE Ejma STANDARD, REMEMBER the name is HALL the mark of QUALITY for the RIGHT STANDARD at the RIGHT PRICE.



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HALLS of PADDOCK WOOD offer the fully approved range of Ejma kitchen units to British Standard Specification standard as approved by the Ministry of Health and the Ministry of Works. Our kitchen units will make old kitchens new and new kitchens the last word in utilisation. 16 individual units combine into 50 different arrangements and every unit is interchangeable with A.B.C. simplicity.

For equipping kitchens small or large specify kitchen units to the approved standard by HALLS of PADDOCK WOOD, one of Britain's finest and greatest joinery plants.



*We illustrate above our standard 4-light casement window, size 7' 10" long by 4' 6" high, design No. C.M.4.*

## **ROBERT H. HALL & CO. (KENT) LTD.**


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**PADDOCK WOOD KENT**

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**PADDOCK WOOD 105. 107. 108. 3 LINES**





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Aluminium has a big part to play in peacetime, as it had in war. A fivefold expansion in the world capacity for production of the virgin metal and its conversion to fabricated forms has ensured ample raw material for new and altogether larger fields of application.

Reconversion, however, takes time, and there has so far been little indication of the great improvements that designers are achieving by planning reconstruction in aluminium.

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This new potential, added to 50 years of research and experience on all aspects of production of the metal and its fabrication into commercial forms, will ensure that The British Aluminium Co. Ltd.—first in the field—is foremost in linking peace with progress.

The Company's Development and Technical Service Sections are available to advise manufacturers on the applications of aluminium for any industrial purpose.

**BRITISH  
ALUMINIUM**



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It is not necessary to hold up building work in cold and frosty weather. Tretol Anti-Freezer prevents concrete and mortar from freezing; building continues even at temperatures of 5°F. It increases the tensile strength of concrete and accelerates the setting time. Tretol Anti-Freezer is a liquid. When diluted in water it is used as the guaging water and requires no deviation from the usual method of work.

*For Waterproofing work in frosty weather use Tretol Anti-Freezer W.P.*



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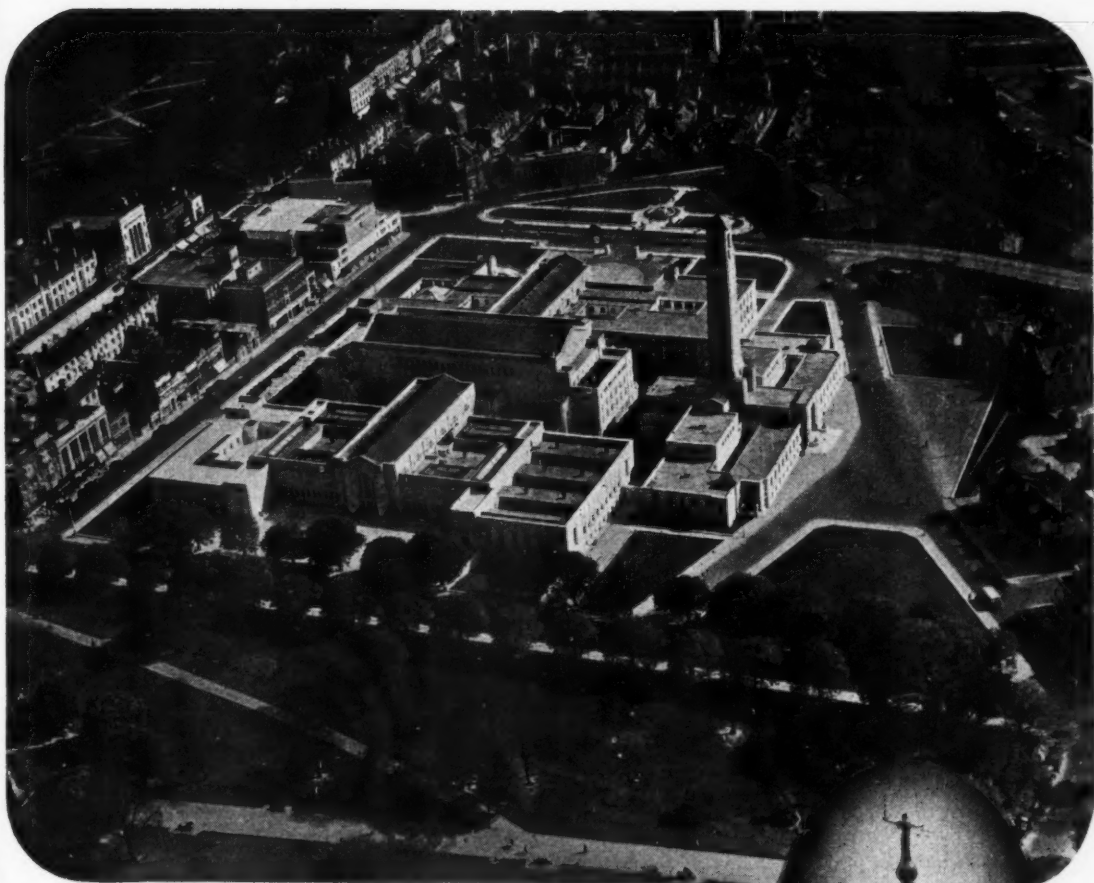
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**WALL SURFACES**

AND 20 YEARS'  
EXPERIENCE GOES  
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|--------------------------|-----|---------------------|
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| <b>FACED FLOOR</b>       |     | sed—surface heavily |
| <b>FLAGS</b>             |     | impregnated with    |
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|                          |     | duty.               |
| <b>"CONSOL" STEEL</b>    |     | 10 gauge steel—re-  |
| <b>ANCHOR FLOOR</b>      |     | sists concentrated  |
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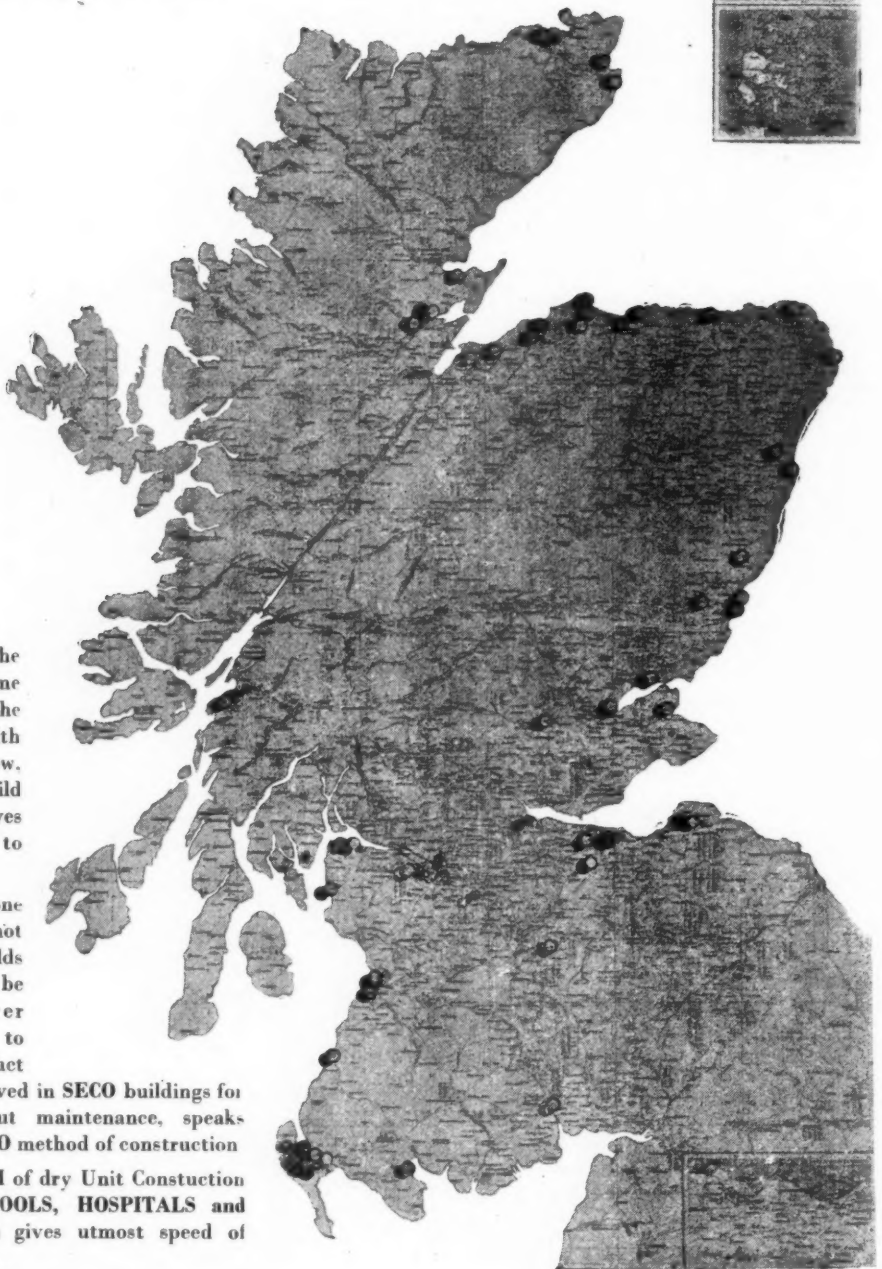
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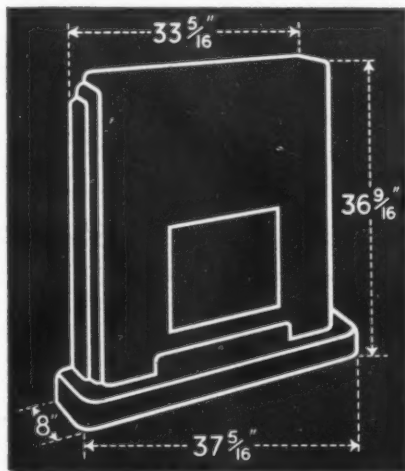


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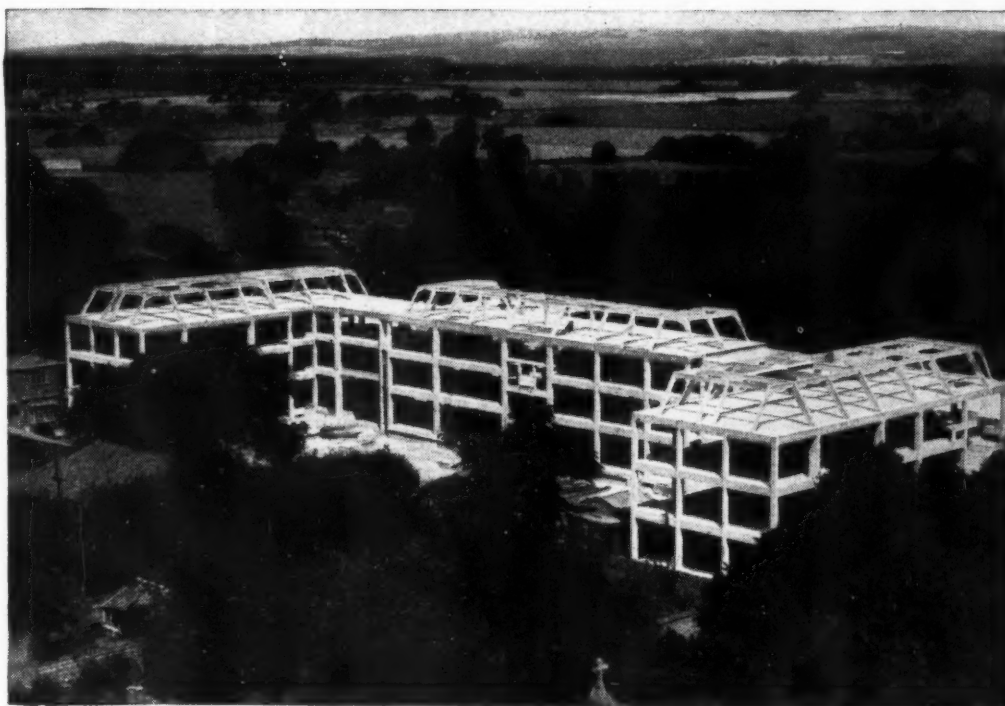
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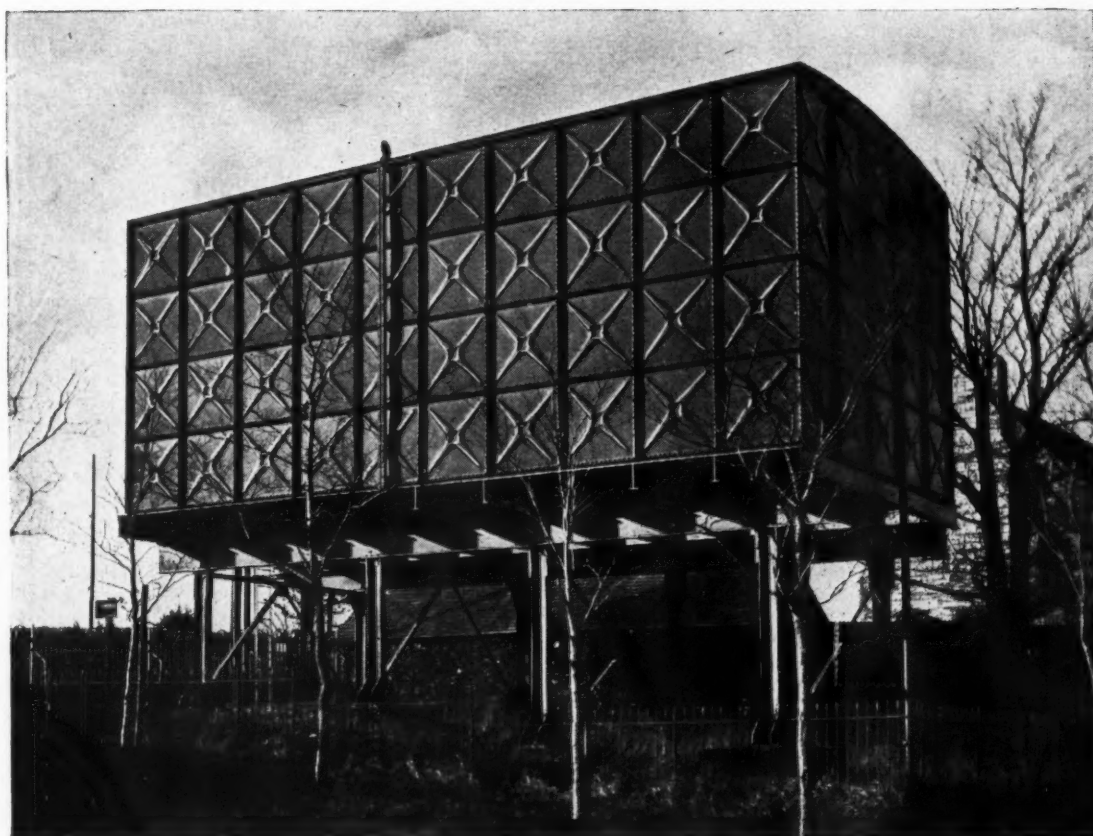
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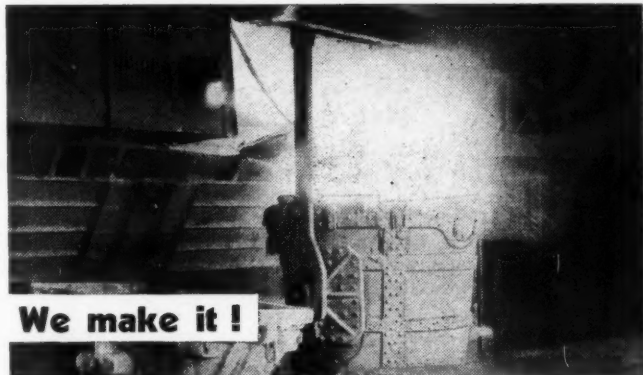
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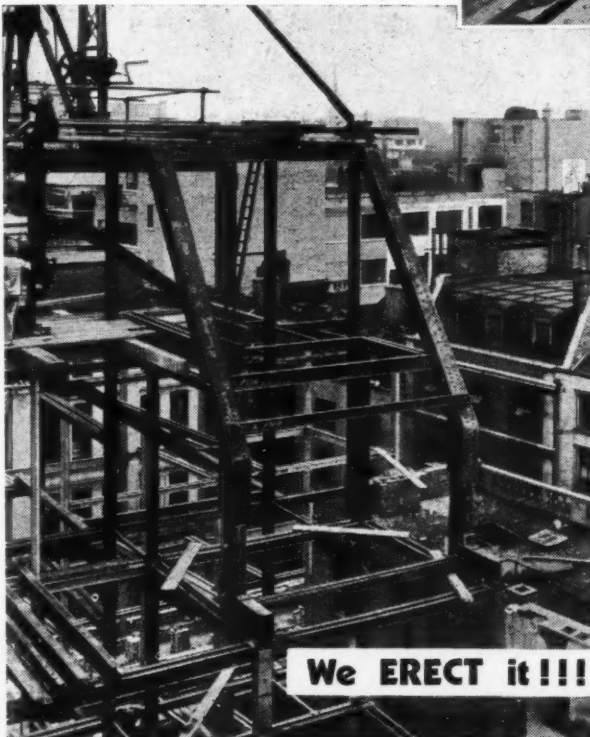
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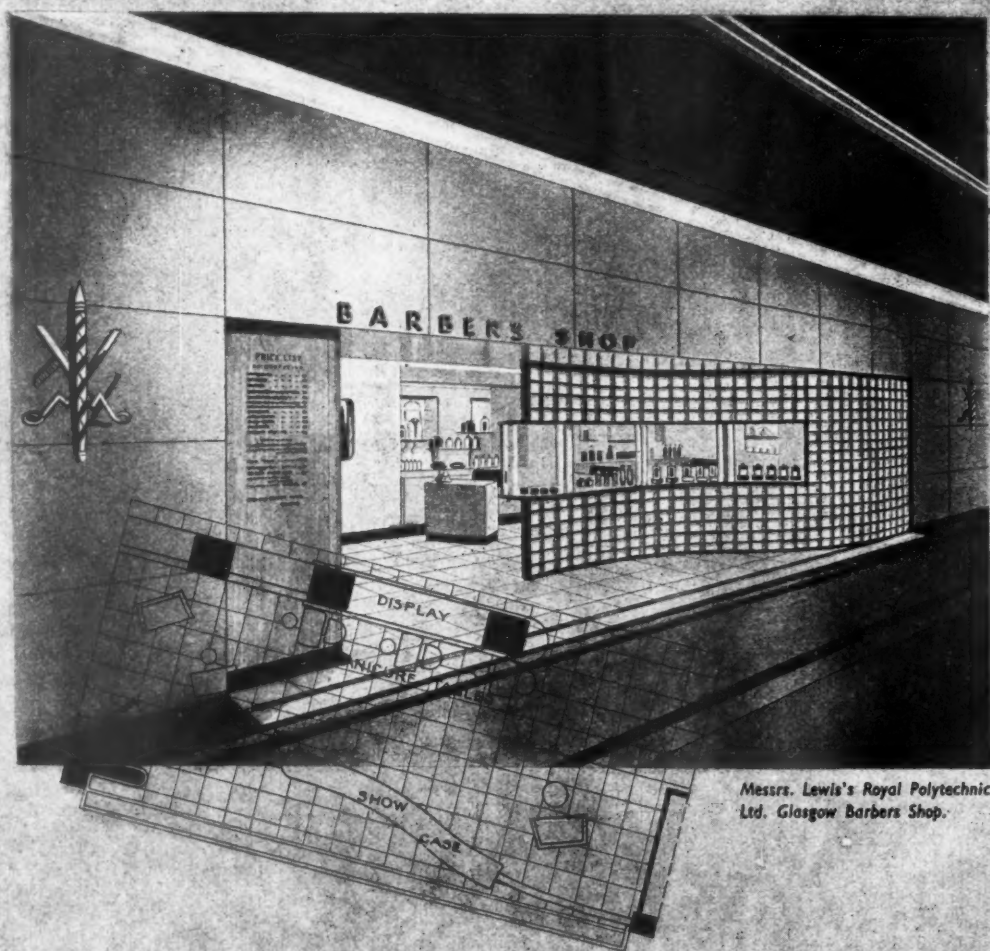
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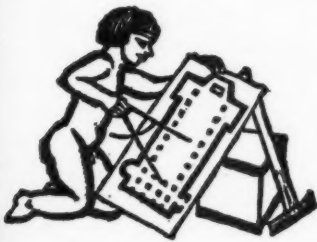
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## DIARY FOR FEBRUARY MARCH AND APRIL

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 the initials as given in the glossary of abbreviations on the front cover.

**BLACKPOOL.** *Annual General Meeting of the Federation of Master Builders.* FEB. 25-27

**LONDON.** Mrs. M. D. Gillies. *American Domestic Architecture.* At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) 4 p.m. FEB. 8  
Professor J. D. Bernal. *Science in Architecture.* At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. FEB. 12.

Professor G. I. Finch. *Scientific Adviser to the Ministry of Home Security. The Need for Scientific Research into the Prevention and Extinction of Fires.* At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 1.45 p.m. FEB. 13

Frederick Gibberd. *Design and Prefabrication.* At the London School of Hygiene, Gower Street, W.C.1. (Sponsor, DIA.) 7 p.m. FEB. 13

*Annual Luncheon of British Refrigeration Association.* At Connaught Rooms, Great Queen Street, W.C.2. Principal Guest, Rt. Hon. John Wilmot, M.P., Minister of Supply. 12.45 p.m. for 1.15 p.m. FEB. 14

Lord Forrester. *Advances in Swiss Architectural and Planning Technique Since 1939.* At the Association for Planning and Regional Reconstruction, 34, Gordon Square, W.C.1. (Sponsor, APRR.) 5.30 p.m. FEB. 14

A. G. G. Thompson, Medical Officer of Health for Lambeth. *Land Utilization in Relation to the Public Health.* Chadwick Public Lecture. At the Royal Society of Tropical Medicine and Hygiene, 26, Portland Place, W.1. 2.30 p.m. FEB. 19

Max Lock. *Surveys and Their Practical Application to Planning.* At the Livingstone Hall, Broadway, Westminster, S.W.1. (Sponsor, TPI.) 6 p.m. FEB. 21

Miss Jacqueline Tyrwhitt. *Planning in Canada.* At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1-15 p.m. FEB. 21

J. F. Bickerton and Petros Protopapadakis. *Layout of Passenger Stations.* At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, ICE.) 5.30 p.m. FEB. 26

*Solid Smokeless Fuel Appliances for Domestic Heating Services Exhibition.* At the Horticultural Hall, Vincent Square, S.W.1. The exhibition is being designed by Ian Jeffcott. (Sponsor, Solid Smokeless Fuels Federation.) MARCH

Stormont Murray. *Eric Gill; His Life and Work.* At the International Arts Centre, 3, Orme Square, Bayswater Road, W.2. (Sponsor, IAC.) 8 p.m. MAR. 1

G. L. E. Metz and R. L. Davies. *The Electrical Engineering Industry in The Post-War Economy.* At the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE.) 5.30 p.m. MAR. 7

Ashley Havinden, Designer and Art Director, Sir William Crawford and Partners. *Design and Publicity.* At the London School of Hygiene, Gower Street, W.C.1. Chairman, Sir William Crawford. (Sponsor, DIA.) 7 p.m. MAR. 13

Percy Delf Smith. *Signs and Amenities.* At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m. MAR. 21

H. Berry, M.P. *Town Planning and Water Supply.* At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1-15 p.m. APRIL 4

Mrs. Lovat Fraser. *The Future Use of Plastics.* At the International Arts Centre, 3, Orme Square, Bayswater Road, W.2. (Sponsor, IAC.) 8 p.m. APRIL 9

D. Winston Aldred, Head of the Department of Architecture and Building, South West Essex Technical College and School of Art. *The New Building Science.* Bossom Gift Lecture. At the Royal Sanitary Institute, 90, Buckingham Palace Road, S.W.1. 2.30 p.m. APRIL 9

L. H. Keay. *Post-War Housing.* At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. APRIL 9

**SOUTHEND-ON-SEA.** Paul Mauger. *Neighbourhoods and Homes.* Fourth of six lectures on Town Planning and Housing at the School of Art, Dowsett Avenue. Fee for students enrolled in other courses this session, 2s. 6d. New students, 5s., or 1s. per meeting. (Sponsor, Southend-on-Sea Municipal College.) 7.15 p.m. FEB. 11

Miss Elizabeth Denby. *Houses and Homes.* Fifth of six lectures on Town Planning and Housing. At the School of Art, Dowsett Avenue. (Sponsor, Southend-on-Sea Municipal College.) 7.15 p.m. FEB. 18

W. R. Arnold Whittick. *How Can All This be Managed?* Last of six lectures on Town Planning and Housing. At the School of Art, Dowsett Avenue. (Sponsor, Southend-on-Sea Municipal College.) 7.15 p.m. FEB. 25

**YORK.** NALGO Exhibition. At Holgate Hill Settlement. (Sponsor, BIAE.) FEB. 10-23

## NEWS

THURSDAY, FEBRUARY 7, 1946  
No. 2663. VOL. 103

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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.*

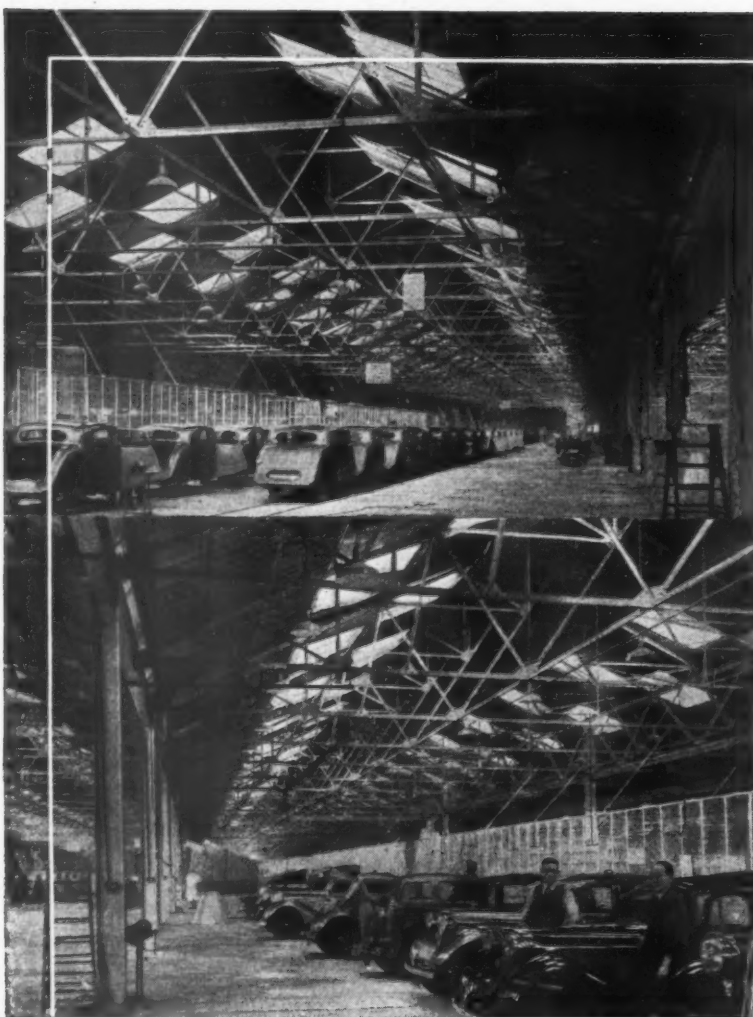
★ means spare a second for this, it will probably be worth it.

★★ 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.

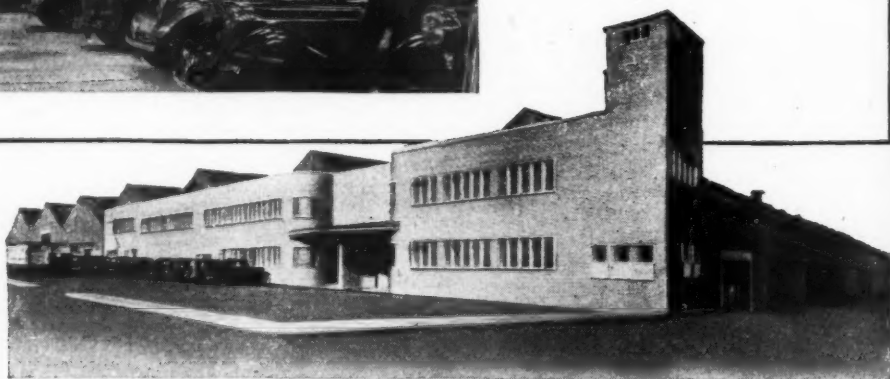
★  
*Intending competitors for the TITE PRIZE must submit forms of application to the RIBA by February 15. Those of the VICTORY SCHOLARSHIP by May 17.*

The attention of intending competitors is called to the fact that the Preliminary Competition for the Tite Prize will be held in London and at centres in the provinces on Wednesday, March 13, 1946. The closing date for the submission of forms of application is February 15, 1946. The Tite prize, a certificate and the sum of £35, is confined to Probationers and elected Students of the RIBA and elected Students of Dominion Allied Societies who have passed the RIBA Intermediate or equivalent examination or produce certificates from responsible architects to the effect that they have reached the required standard. Students who have passed the RIBA Final or equivalent examination at the time of the Final *en loge* competition are not eligible to compete. The Victory Scholarship, a Silver Medal and the sum of £120, is confined to members of the RIBA and of the Allied Societies Overseas and elected Students of the RIBA and of the Allied Societies Overseas, who have passed the RIBA Final or equivalent examination or who have produced certificates from responsible architects to the effect that they have reached the required standard, and in accordance with the new arrangements for the competition only one *en loge* competition will be held. This will be held in London and at centres in the Provinces on Tuesday, July 16, 1946. The closing date for the submission of forms of application is May 17, 1946. Forms of application for admission to the Competitions may be obtained at the RIBA, 66, Portland Place, London, W.1.



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## From AN ARCHITECT'S Commonplace Book

ON BUILDING IN YOUR *LARES ET PENATES*. [From An Autobiography by Frank Lloyd Wright (Faber and Faber).] As for objects of art in the house, even in that early day they were *betes noires* of the new simplicity. If well chosen, all right. But only if each were properly digested by the whole. Antique or modern sculpture, paintings, pottery, might well enough become objectives in the architectural scheme. And I accepted them, aimed at them often but assimilated them. Such precious things may often take their places as elements in the design of any house, be gracious and good to live with. But such assimilation is extraordinarily difficult. Better in general to design all as integral features. I tried to make my clients see that furniture and furnishings that were not built in as integral features of the building should be designed as attributes of whatever furniture was built in and should be seen as a minor part of the building itself even if detached or kept aside to be employed only on occasion. But when the building itself was finished the old furniture they already possessed usually went in with the clients to await the time when the interior might be completed in this sense. Very few of the houses, therefore, were anything but painful to me after the clients brought in their belongings

★  
**Mr. Lewis Silkin, Minister of Town and Country Planning, received a DEPUTATION FROM THE RAMBLERS' ASSOCIATION.**

The deputation explained that the primary purpose of the Ramblers' Association was to help townspeople to get into the country. They also sought to educate people from the town in country manners. There was going to be a greater invasion of the countryside than ever before and there must be proper provision for that invasion. There must be facilities for access to the wild uncultivated areas of Britain for the purposes of recreation. That meant a new Access to Mountains Act. Some of the finest scenery in the land could only be enjoyed by trespassers. In the Lake District people were allowed on the hills, but only by privilege and not by legal right. In the Peak District, and in other places preserved for grouse shooting and deer stalking, the trespasser was subject to intimidation and bullying by gamekeepers. The 1939 Act would not meet the situation and ramblers were hopeful that this Parliament, which was not dominated by landowning and sporting interests, would be sympathetic to the interests of the people. Ramblers also desired drastic revision of footpath law, and they suggested there should be a Footpaths Commission as recommended by the Scott Committee. This Commission should compile a record of all existing rights of way and settle by arbitration all disputed cases. There should also be more satisfactory arrangements for repair and maintenance of footpaths. Long-distance footpaths such as the proposed 250-mile Pennine Way, and a path round the coast of England and Wales were also required. The deputation was also deeply concerned about the large areas requisitioned for war purposes, and they felt these should now be released and made available for public enjoyment. Mr. Silkin said he greatly appreciated the work of the Ramblers' Association and was in full sympathy with almost everything they had said. He was particularly grateful for their efforts to educate townspeople to behave with due regard for the countryman. The Minister said he shared the views of the deputation on the Access to Mountains Act, and it was one of the issues which he was sure would have to be dealt with. National Parks, he explained, were now being considered by the National Parks Committee under the Chairmanship of Sir Arthur Hobhouse. With regard to footpaths he recognised that many were in danger of being lost and that action was very necessary. Mr. Silkin mentioned some of the difficulties with which he was faced, and the question of priority for other important legislation.

Nevertheless, he hoped that it would be possible in due course to introduce legislation dealing with access to mountains and moorlands, rights of way, national parks and the control of outdoor advertising. He believed it would be possible to go a long way to meet the wishes of the deputation, and he would be very happy to seek the advice of the Ramblers' Association and to discuss details with them at a later date. Members of the deputation were:—Dr. C. E. M. Joad, Vice-President, Ramblers' Association; P. A. Barnes, Executive Member RA, Secretary, Lancashire CPRE; D. W. F. Shelton, Access Committee R.A., Secretary Co-operative Holidays Association; F. E. Ritchie, Assistant Secretary RA; L. R. Morris, Secretary RA; G. R. Mitchell, Chairman RA.

**The trustees of Sir John Soane's Museum have appointed MISS DOROTHY STROUD to the office of Inspectress, in succession to Mrs. E. M. Daniell, who retired recently after forty years' service.**

Miss Stroud, who has been on the staff of the National Buildings Record since 1941, will be the fifth Inspectress since the opening of the Museum in 1837. The first Inspectress, Mrs. Conduit, had been a personal friend of Sir John Soane. At their last meeting, the Trustees presented Mrs. Daniell with an impression of the Soane bronze medal, struck in 1835, engraved with an inscription recording her term of office. Considerable progress has been made with the repair and rehabilitation of the Museum



What is believed to be the first civil building licence for a factory on its own site and independent of Government and municipal trading estates has been granted for this combined office and factory block for Smith's Potato Crisps at Fforest Fach near Swansea. Mr. James W. Mackintosh is the architect.

and it is hoped to make at least part of the collection available to the public next spring.

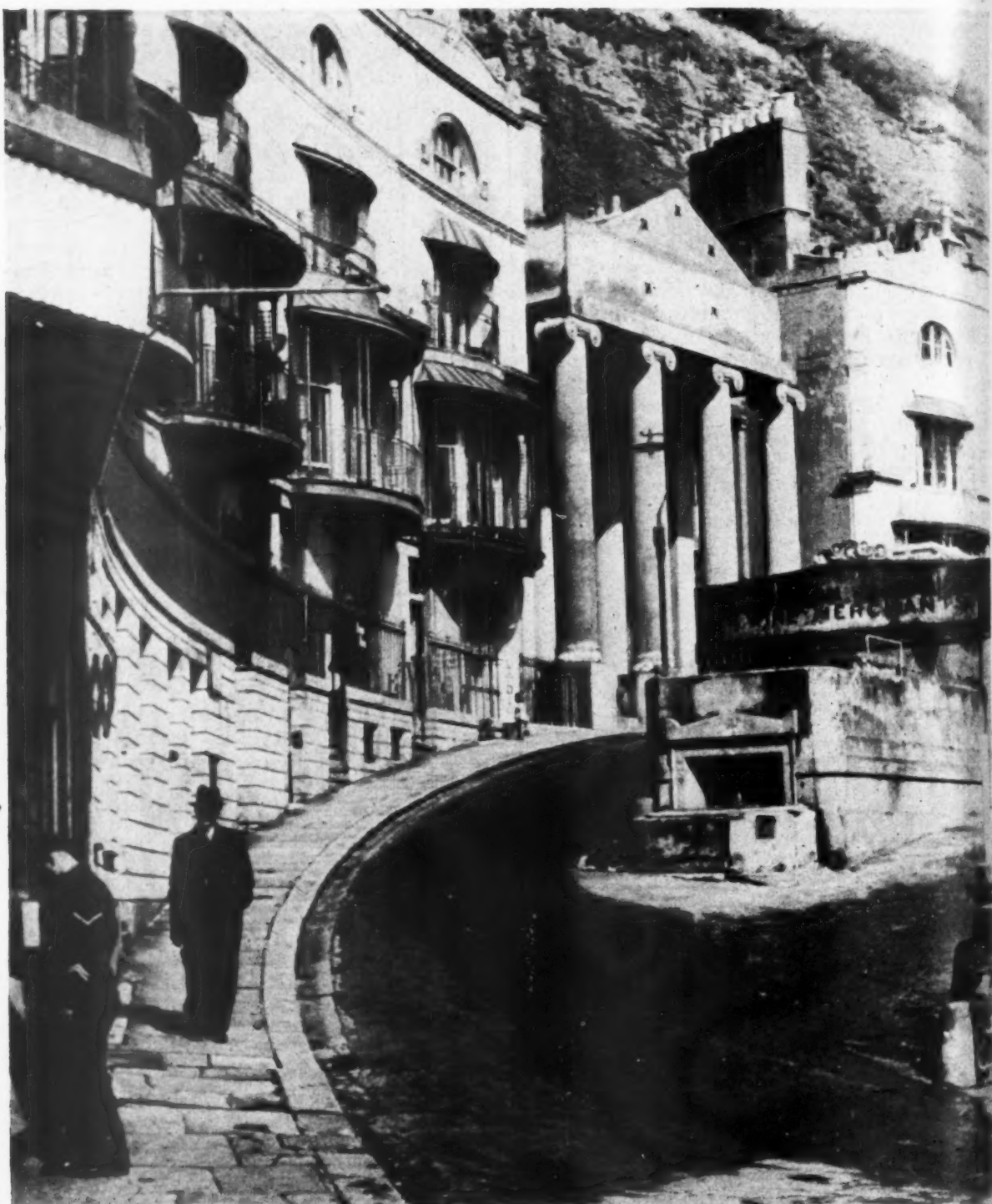
★  
**On going out of business a BUILDER CANNOT SELL HIS CERTIFICATE to trade as a builder.**

This is the decision of the Government, announced through the Ministry of Works to the National Federation of Building Trades Employers. The official announcement is as follows: A Certificate of Registration issued under the Regulation is the property of HM Government and is neither transferable nor purchasable. A builder registered under the regulation whose business has been closed down or who is no longer operating his business should notify the Department and should return his Certificate of Registration. When a registered builder sells his business, he must return his Certificate of Registration. The purchaser should at the same time apply for the registration by filling in the usual application form and supplying evidence of purchase, which usually takes the form of a letter from the seller or a solicitor's letter.

**Mr. H. B. Usher has been APPOINTED DEPUTY SECRETARY OF THE WAR DAMAGE COMMISSION in place of Mr. M. E. Rowe, C.B.E., K.C., who has been released from the public service to return to practice at the Bar.**

Mr. Usher served and was twice wounded in the First World War. He was Private Secretary to the Prime Minister from 1929 to 1935, and was then transferred to the Treasury, where, as an Assistant Secretary, he was concerned with matters relating to war damage. His new post ranks as one of Under Secretary in the Civil Service. Mr. Rowe, an authority on the law relating to rating and local government practice, was seconded from the Army to the Commission's staff in 1941 as an Assistant Secretary, being promoted later to Principal Assistant Secretary and Deputy Secretary. He has rendered outstanding service in connection with the administration of the War Damage Act. Mr. Rowe was one of the new batch of "silks" appointed last year, and he was awarded a C.B.E. in the recent New Year honours.





## "More Than Usual Domestic Convenience"

Though a little war scarred, Pelham Crescent, on the sea front at Hastings, has an important lesson to teach us in the planning of the small local unit. As Charles Tilt says of the Crescent in *The Landscape Album* published in 1834: "This extensive range of houses, which presents a handsome elevation united with more than usual domestic convenience, was erected in the year 1824, from designs by Joseph Kay. . . . In the centre of the range of houses is a terrace, raised upon an arcade wide enough to admit of

fashionable shops or bazaar, with a library, reading room, and promenade, which is the principal resort of the company for morning or evening lounge. Above the arcade is a carriage way having an ascent from the old road, and leading to the colonnade of entrance to the chapel. . . . Perhaps a lesson here to the designers of the suburban Parade. In any case, a very humane and coherent way of providing a small planning unit of houses, shops, promenade, library and church. (Photograph by Eric Brown).

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*The Minister of Works, the Chairman of the LCC, Sir Malcolm Trustram Eve, Mr. J. W. Stephenson, and Mr. Richard Coppock, have, amongst others, accepted invitations to become Patrons of the new London Building Trade APPRENTICES' SPORTS ASSOCIATION.*

The purpose of the new Association is to encourage sports, games and welfare among building trade apprentices in the London area, to promote local clubs and to obtain equipment and playing fields for the use of its members. Major Leslie Shingleton, former President of the London Master Builders' Association, has been elected its first President, and among members of the Council are the President and Vice-Presidents of the London Master Builders' Association, representatives of the LMBA Areas, Mr. E. H. Bryan, Chairman, and Mr. V. T. Sulston, London District Secretary, of the National Federation of Building Trades Operatives. Mr. F. W. Stratton is the Hon. Treasurer, and Mr. Tom Smith, Secretary and Manager. Membership of the Association is open to registered apprentices and their employers in the London area, ex-apprentices and junior staff of builders' offices, and the subscription rate is 3d. a week on both sides, the employer undertaking to pay 3d. a week for every apprentice in his employment who joins the Association. A fund amounting already to over £2,000 has been raised among members of the LMBA to give the Association a send-off. Area committees of local employers, operatives and apprentices are now being formed to organise clubs in their areas. Mr. Tom Smith, the secretary-manager of the Association, is a well-known ex-professional football player and referee. The headquarters of the new Association are, temporarily, at 7, Princes Street, Westminster, S.W.1. Telephone number WHIttehall 2840.

★  
*After March 31, all candidates for THE RIBA PROBATIONERSHIP will be required to submit certificates of having passed recognised examinations.*

It will no longer be possible to submit special applications, as has been the case for those who started their full time architectural education or joined the Armed Forces before June 30, 1943. Special applications may, however, be submitted after March 31, 1946, by applicants serving with HM Forces overseas, who produce evidence that they have been prevented from making their special applications by March 31, 1946, by reason of their overseas service.

*The Flush Door Manufacturers' Association has approved the construction of a FLUSH DOOR FOR POPULAR PRICED HOUSING.*

The Association feels that its main function will be the design, manufacture and marketing of flush doors under the most efficient conditions possible. Further details concerning the Association can be obtained by writing to the Flush Door Manufacturers' Association, London Road, West Thurrock, Grays, Essex, where applications can now be received from manufacturers for membership.

## MR. SILKIN'S STATEMENT

IT is surprising how little attention and comment has been stimulated by the announcement of the Minister of Town and Country Planning that henceforward local authorities can assume that all compensation and betterment payments will be a matter for the State. True, the statement is, as yet, no more than one of intention. Existing law is not changed by a word from any Minister. And this statement covers only half the story. So much will depend on the actual machinery and for that we must, presumably, wait until the promised Bill itself appears. Yet this announcement is, *per se*, a most important step along the road to a more sensible arrangement of our resources of both land and scenery.

For one thing, it is a definite statement, and that is something attractively novel from the Ministry of Town and Country Planning. But, of much greater importance, it is evidence that the Government realises that our existing local authority units cannot handle the problems of land values. They never could. Now they are no longer to be compelled to try.

Compensation and betterment have been the twin dilemmas that have faced every local authority when it has attempted any considerable degree of positive planning. Apart from the powers given to authorities in war damaged areas by the last Town and Country Planning Act, authorities have never been able to buy land compulsorily for the sole purpose of replanning it. They can buy land for all sorts of specific purposes—for road widening, for housing, or for recreation grounds, or because it is covered with insanitary dwellings—but never solely to redevelop it. That may or may not be a good thing, but it has had one inevitable result. If a plan adversely affects an owner, that owner must be compensated, and at once, and for the money that the authority so pays out it gains no tangible asset to put on the other side of the balance sheet. Equally, it has another result. Any betterment of the area resulting from its replanning by the authority accrues automatically to the individuals who happen to own the land affected. Betterment has one characteristic that distinguishes it from compensation. The damage you do to an individual landowner occurs at the start of your operation and is easily calculated. The betterment that results to other individual landowners happens only at the end of your operation and is very difficult to calculate even then.

The cardinal point of the Uthwatt Report was its appreciation that over the country as a whole, the cash value of betterment should at least equal the cash value of the compensation payable, in the long run. It is the last four words that are important. A local authority is not designed to conduct financial operations in which the credits only accrue in the long run. It lives on a year to year basis. Its budget must balance annually, its rates plus subsidies in any one year equal its expenditure for the same period. And if its compensation payments at first exceed its betterment recoveries its rates

must suffer. That may mean that the individual councillors are not returned at the next election. And that, more often than not, is the end of the story. Positive planning is nine parts strangled before it starts.

Naturally, Mr. Silkin's Bill will be eagerly awaited. The efficacy of his plans will depend very largely on the machinery he devises. But at least it looks as though he has not only grasped a fundamental issue (there has never been any difficulty in seeing it) but is determined to shape his actions to meet it.



*The Architects' Journal*

War Address: 45, The Avenue, Cheam, Surrey

Telephone: Vigilant 0087-9

N O T E S

&

T O P I C S

#### RED TAPE AND SHARAWAGGI

Joybells peal in Cheam. *Feux de joie* are fired from the windows of No. 45, The Avenue. Dr. Pevsner is given the day off to look for treasure in Tufnell Park. For a moment Uvedale Price and William Temple stop spinning in their graves. As Sydney Howard used to ask, What's to do? Nothing less than the fact that the presence of a Sharawaggi cell in MOTCP has been publicly revealed.

In his admirably lucid talk at the RIBA on *The Design of Residential Areas*, Mr. Gordon Stephenson, Senior Research Officer of MOTCP, said that he was himself "a bit of a Sharawag." Equally impressive was the response of the audience. Nobody asked what it meant. Everybody clearly accepted it without question as the usual planning policy of

the future. Already the Art of the Irregular is marching down the corridors of Whitehall. To-morrow it will be in the very streets.

#### ABERCROMBIE PLANS INCORPORATED

Having completed his quota of British cities Sir Patrick Abercrombie is reported to be leaving for the Middle and Far East. For a time at least that springy tread will be heard no longer in the pinewoods of Bournemouth or in the suburban wastes of Greater London. That monocle will reflect not the wet clear skies of England, but the angry light of the Orient. That incisive voice will echo over the rond-points of Haifa, through the palm trees of Ceylon, even, it is said, in the bazaars of Addis Ababa.

According to report, Abyssinia today is being energetically reconstructed under the direction of a British general, who is adviser to the Emperor. It is to his aid that Sir Patrick presumably is coming, and to those urban scenes so familiar to the readers of *Scoop*—the camels and the Oldsmobiles, the electric bulbs winking through the rain from the Ciné-Parlant, the hotel porter paring the soles of his feet with a dagger or buttering the bolt of an ancient rifle.

Three cheers anyway for the enterprise of the Abyssinian Government in inviting our professor, and Harar for Sir Patrick himself.

#### MUST READING

It is obvious that the Education Act [1944] is going to demand a fantastically large school-building programme. It is equally obvious that since education can be hampered as much by bad

buildings as by bad teaching, that the design of these schools will be a tremendous responsibility for those to whom it is entrusted. But no architect, however able and imaginative, can design a school properly unless he has some knowledge of the new educational system, of its aims as well as of its organisation. To acquire such knowledge he can hardly do better than supplement the official technical information by reading the shilling Min. of E. pamphlets\* which have recently been published. These are short, clear, and admirably written, and very strongly recommended indeed.

#### NOT SO MUST READING

Among other publications received are *Limited Edition*,† a lively and informative American newsletter on art and artists, described by an enthusiastic correspondent as "a smart mind with no torch to carry digging under the rosy veil just for the healthy hell of it"; a couple of copies of *Architecture* with news of architectural events in Soviet Russia; a BBC pamphlet containing the series of admirable talks on Social Welfare which were given in 1944 to the West Indies ["the gaps created by the omission of recordings of numerous sound effects, such as a game of ping-pong and shower baths, have been filled"]; and a pamphlet from the True Temperance Association attacking the nationalisation of pubs. Now you can snuggle back into the chair with *Forever Amber*.

#### ARCHITECTS AND SILVER

A friendly controversy between architect and silversmith recently found its way into the columns of *Var Selv*, a Norwegian magazine which can best be described as a cross between *Vogue* and *Homes and Gardens*. It all started when an architect, Bernt Heiberg, put forward the view that architects are well qualified to design, or collaborate

\* *A Guide to the Educational System of England and Wales*. 1945.  
*The Nation's Schools: Their Plan and Purpose*. 1945.

*Youth's Opportunity: Further Education in County Colleges*. 1945.  
*Building Crafts*. 1945.

[All published by the Ministry of Education and obtainable through HMSO.]

†The editorial Christmas card carries a poem on Santa Claus which ends, "be good to the little old man when you find who the little man is."

in designing, many things besides buildings, and mentioned silverware as an example of the kind of thing they ought to design.

This brought a prompt and spirited reply from Ivar David-Andersen, one of Norway's best-known silversmiths, and himself a designer as well as a business man. Both sides supported their arguments by illustrations, and the impartial reader probably decided the honours were about even. One cannot help feeling that Heiberg's argument in favour of the architect would have carried greater weight in

a country where the standard of silverware design is not so high as it is in Norway.

Even, perhaps, in England—where the promising young silver designer trained at the Birmingham silversmiths' school is likely to be lured away, by higher salaries, into other light industries, where he will end up as a designer of bathroom or motor-car fittings or even doorknobs. It isn't hard for these industries to outbid the silverware manufacturers.

Mr. A. R. Emerson, of the Central School of Arts and Crafts, recently gave the probable salary of a silver designer working for one firm as £350 to £500 a year, with a fee of two or three guineas for a freelance design. Even the worst-paid architect could scarcely be jealous of such payment as this—and as the figures were quoted in an article on prospects in the silver industry, they probably erred, if at all, on the generous side.

To give an idea of what the argument was all about, I illustrate some recent examples of silverware by David-Andersen—a tobacco box, a jewel casket with enamelled decoration, and a bridal coronet about three inches high which, I understand, represents a modern designer's version of an Old Scandinavian custom.

#### COLOUR IN THE FACTORY

In his report of the year, the Chief Inspector of Factories has, I see, become quite excited about the value of colour in factories. While all architects would most certainly agree with him, I feel that although it is no doubt justifiable to talk about *Æsthetic Starvation* and *Modern Psychological Concessions* when making a report to a Minister of Labour, this approach is more likely to convince the personnel manager or welfare officer than the hard headed Midland manufacturer.

To him, I would be inclined simply to say, "Well, you've got to paint most of the place anyway and if the colour does not cost anything extra, why not make the place look a bit more cheerful? If you do, it might even get some more work done."

ASTRAGAL



## LETTERS

C. J. Bundock

(General Secretary, National Union of Journalists)

R. S. Wilshire, F.R.I.B.A., F.S.I.

(Education Architect, Belfast)

H. G. C. Spencely

Ove. N. Arup, M.Eng.F

### Press Accommodation

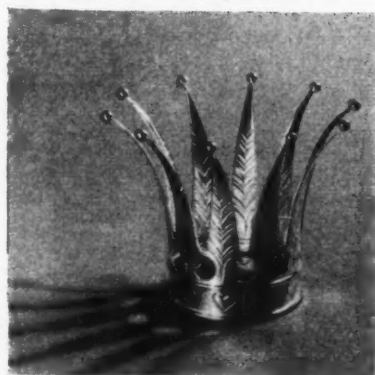
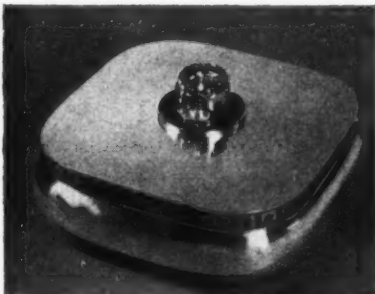
SIR.—The following letter concerning press accommodation has been sent to local government authorities:—

I am instructed to write to you in view of the many schemes under consideration and those likely to come under consideration for the construction of new town halls, municipal premises, police courts, and other buildings in which local government or other departments of public activities may be used.

My Union would respectfully urge upon those responsible for the carrying out of such building schemes that the architects employed on the plans should not forget the desirability of providing accommodation for Press representatives which is both adequate and reasonably comfortable, as well as satisfactory in an acoustic sense.

It is suggested that it might be helpful in the preparation of such plans the local branch of the National Union of Journalists could be consulted concerning Press accommodation.

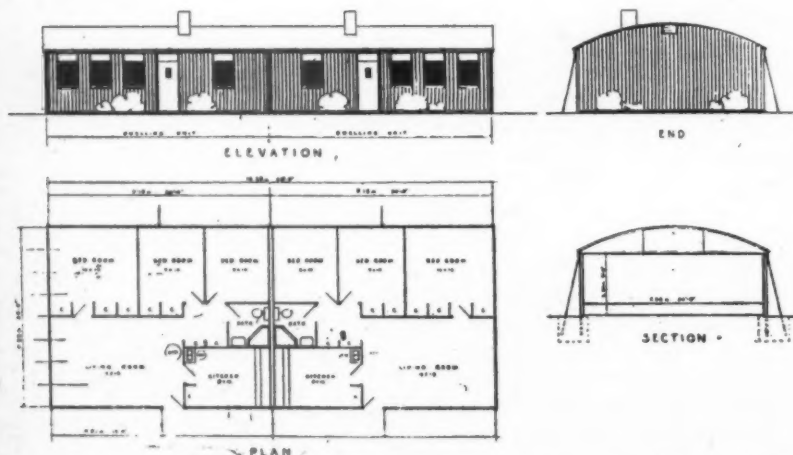
I am sure you will agree that adequate Press accommodation (in many cases it is quite inadequate at present) will assist both



Three examples of Norwegian silverware. From top to bottom, a tobacco box, a jewel casket and a bridal coronet. See Astragal's comments on *Architects and Silverware*.



## USA RATIO STRUCTURES



Above are some sketches of emergency dwellings taken from a report on Modern Designs for Prefabricated and Demountable Buildings by the New School of Social Research, New York, which is reviewed in this week's Information Centre. The report deals with details and plans of what are called Ratio Structures made of standardized, prefabricated parts, easy to transport and assemble, from which buildings of all kinds can be built from the same parts. The designs have been carried out mainly for temporary use overseas. Top, portable house of steel frame with exterior panels of wood or canvas; roofing felt over the one-way roof is taken down the back wall, thus reducing paint-work. Centre, one family house of steel frame with panels of wood or metal. Below, semi-detached houses of metal or wood of 20-ft. span. A single box wall unit carries all the plumbing.

the body concerned and the Pressmen whose duty it is to report the proceedings to the public.

In Courts of Justice where a considerable volume of business is transacted, it would be a great advantage if a small room could be set aside for Press representatives on similar lines to that reserved for the Legal profession, with a prepayment telephone.

I am confident that this aspect of any plans for new buildings will receive your sympathetic consideration.

C. J. BUNDOCK,  
General Secretary,  
London National Union of Journalists.

## They Geld Horses, Don't They

SIR.—With regard to Astragal's note, *They Geld Horses, Don't They*, I should like to point out that the reason the LPTB can produce such a high general standard of design is not because it is a semi-public body, it is due to the simple reason that a dominating personality, who fortunately had a very high standard of appreciation of both design and architecture, was able to get what he wanted.

I refer, of course, to the late Mr. Frank Pick.

There was a time when the Underground Railway, before it became a semi-public body, did not exhibit this desirable trait to the same extent, but it was actually before it became a semi-public body that the good work started, and fortunately the tradition still lasts.

Architecture and good design is not the special product of private enterprise, semi-public monopolies or even State control, it is a matter of some individual who, having the necessary good taste, has a strong enough personality to get his own way.

D. S. WILSHIRE,  
Belfast Education Architect.

## Application for Public Appointments

SIR.—Guy's and Bart's are first-class medical schools with tradition and high standards to maintain. Lucky are the ratepayers whose officers choose Guy's or Bart's men to fill their medical posts. These ratepayers, by the way, are the only persons qualified (by virtue of paying the piper) to call the tune, and if, through their officers, they care to advertise for doctors with blue eyes or red hair who is entitled to interfere?

While one may sympathise with Mr. Athoe's anxiety for his institute, the ARCUK'S request to local authorities is not likely to encourage their employment of architects.

Edenbridge H. G. C. SPENCELY

## Box Frame Construction

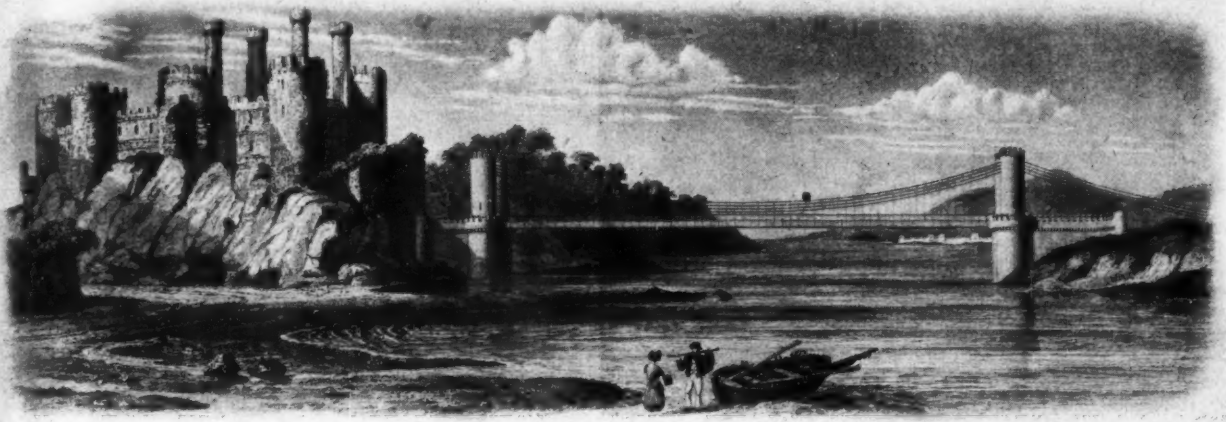
SIR.—It is naturally a source of some gratification to me to be included in the Personalities in your New Year issue, but I am a little bit worried about the reference to me as the inventor of the Box Frame.

I do not think Box Frame construction can quite rightly be termed an invention, but if it is, the inventor must be sought elsewhere. I have invented the name, and also advocated the use of this type of construction as a means of standardising and thereby facilitating large-scale building. I am, however, anxious that I should not appear to lay claim to an achievement which is more a logical development of building, arrived at independently in many places.

London OVE N. ARUP



# PHYSICAL PLANNING SUPPLEMENT



## CONWAY

### ALTERNATIVE PROPOSALS FOR THE NEW BRIDGE

Until 1826 there was only a ferry across the river at Conway; then, in order to attract traffic which was being diverted along a new southern route (see map on this page) Telford's suspension bridge was constructed. Still in use today, the Ministry of War Transport now propose to replace it by a bridge more suited to modern traffic requirements. The following article by Mr. Harrison describes an alternative proposal by which Telford's bridge could be retained along with Conway's old quayside.

BY EVAN HARRISON

Conway Castle is one of the four great Edwardian Castles in North Wales, described by Nikolaus Pevsner as the finest examples of mediæval Military Architecture in Europe—Caernarvon, Harlech, Beaumaris and Conway. The walled town to which it is connected is unique in this country and has few rivals in Europe in the completeness of its mediæval walls and 21 towers. The castle and walled enclosure were constructed in 1284 to hold the passage of the river, together with a "spur wall" which is a unique feature, jutting into the stream.

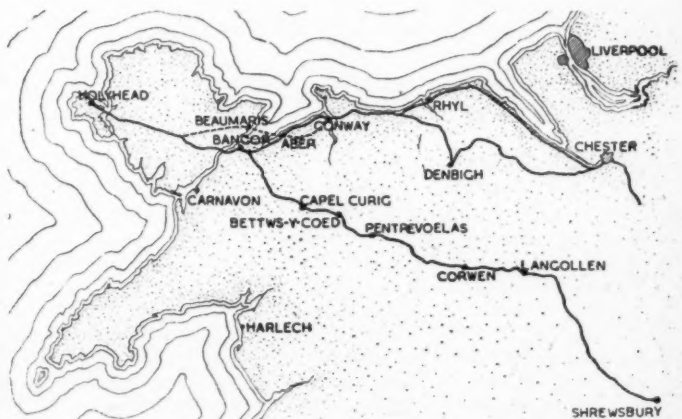
#### communications

Until 1826 there was no bridge across the river Conway—only a ferry. In 1826 Telford constructed a Causeway 700 yards long from the east bank to join a rocky islet in mid-stream, and from the islet to the Castle verge flung the graceful suspension bridge which now exists—"the finest road entry into a town in Britain." The reason for this work, and the highway background, is as follows: A Royal Post to Ireland existed as early as 1574. It passed through Chester, Denbigh, Conway and Beaumaris, to Holyhead, with two ferries and a dangerous passage on the side of a steep rock, from Dwygyfylchi to Llanfairfechan. In 1769 Parliament voted £2,000 for a new road which was constructed at a lower level, but still 300 ft. above sea level. From Aber to Beaumaris the passage was across the Lavan Sands. With closer communication between Great Britain and Ireland, which culminated in the Act of Union of 1800, need of better provision for Irish Mail Coach Traffic became urgent. A new route which avoided the ferry at Conway and the dangers of Penmaen Mawr and the Lavan Sands. By the enterprise of the first Lord Penrhyn, a first-class road was laid down along Nant Ffrancon and Llugwy Valley, so that the mails came by way of Llangollen, Corwen, Pentre Voelas, Bettws-y-Coed, Capel Curig and Bangor. This new route not only brought about the rapid disuse of the Aber passage, but also diverted from Chester and Conway important traffic which had hitherto gone that way. The result was a concerted effort to improve

the older northern road, hence Telford's Suspension Bridge of 1826 superseding the Ferry, and the making of the Penmaen Bach loop, as a substitute for the toilsome ascent of the Sychnant Pass—incidentally breaching the town walls of Conway to issue into the new Bangor Road. Both routes were at the same time relieved of the troublesome crossing at Bangor Ferry by the building of the great Menai Suspension Bridge, also by Telford (opened in 1826) who there applied a novel principle of road construction for a bridge. Thus the Menai and Conway bridges are pioneer structures of this type of suspension.

#### railways

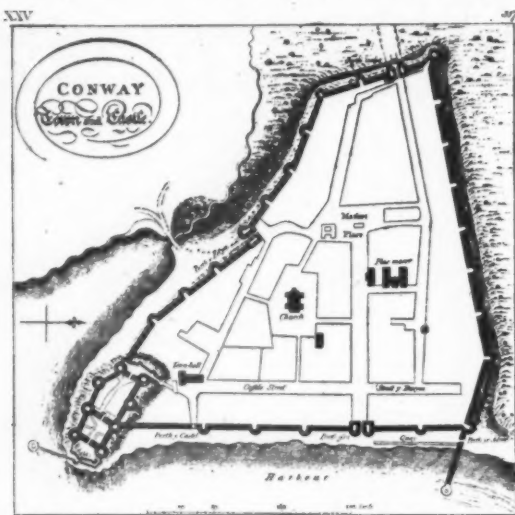
The Chester-Holyhead Railway was begun in 1845 and completed in 1850, following the old coach route. Side by side with the suspension bridges over the Conway and the Menai straits, Robert Stephenson, the Railway Companies' Engineer, constructed two tubular bridges, no less remarkable achievements for their period than Telford's bridges, to carry the railway. Conway Tubular Bridge, 1848; Britannia (Menai) Tubular Bridge, 1850. Thus, in this part of North Wales are situate the masterpieces of Mediæval Military Architecture and of nineteenth century engineering in castles and bridges.



#### the modern problem

The road traffic problem has become acute in recent years because:—

- (1) The branch railway line to Llandudno, carrying heavy excursion traffic in the season, makes a level crossing with the main road just before the commencement of the causeway on the eastern bank.
- (2) The suspension road bridge is narrow (one-way traffic



CONWAY CASTLE.

only) and tolls are collected (by the Conway Corporation).

(3) The main road through the town is also rather narrow and winding, with obstructions to view—exit through a narrow gateway in wall to Bangor Road.

Conway is one of the principal tourist centres in North Wales, especially for day visitors, who are attracted to:—

(1) The Market Square, where buses and coaches start for tours in the mountains.

(2) The Castle (owned by the Corporation), open to visitors on payment.

(3) The Quayside.

The Quayside is a favourite haunt, also for fishermen and yachtsmen. There is a small fishing industry (principally mussel fishing) and headquarters of Conway Yacht Club. Steamers ply to Trefriw and Llanrwst. The Smallest House in Wales (as alleged) is also to be seen on the Quay. And at the end of the Quay is a unique feature—a mediæval Spur Wall projecting into the river, by the side of which is a rickety wooden jetty; a small arch leads to the Marine Walk around Bodlondeb Park, with trees overhanging the waterside.

Other attractions in Conway are the *Plas Mawr* or Great Mansion in the High Street, built by Robert Gwynne of Gwydyr in 1580, now the headquarters of the Royal Cambrian Academy of Art—a remarkable stone building with steep stepped gables, bay windows and inner courtyard with external staircase, recalling old houses in Normandy and Brittany.

Over the town looms the *Conway Mountain*—Mynydd-y-dref, the Town's Mountain, leading to the greater mountain ranges beyond. Conway is the Gateway to the Mountains, as well as a link in the chain to Holyhead and Dublin.

#### modern solutions

How should the old walled town be by-passed, having in mind that a main connection of great importance—London-Chester-Holyhead-Dublin—is involved? On the other hand,

## PRE-BRIDGE CONWAY

at the height of the season, the bulk of the traffic flows in and out of Conway.

The Ministry of Transport's official scheme is understood to comprise the improvement of the level crossing on the east bank by a flyover junction and roundabout—a necessary work. Thence, the causeway road would be widened, and a new arched bridge takes the place of the old suspension bridge, with a roundabout in front of the Castle; the main arterial road of double carriageway is carried along the quayside, involving the removal of all existing buildings, breaching the old spur wall, and passing through Bodlondeb Park to the Bangor Road (a tunnel to avoid the severance of a deep cutting being contemplated).

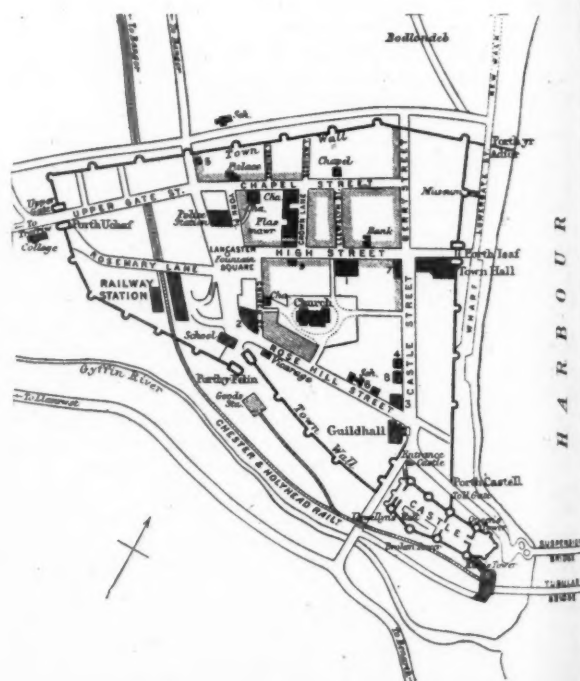
These matters were discussed at a Public Inquiry at Conway in July, 1939, when objections were heard from local fishermen, yachtsmen and ratepayers, as to the effect on the quayside; the only alternative scheme then mooted being that of the Caernarvonshire County Council, which would widen the main road through Conway, involving considerable demolition of property (which it was suggested would eventually be required in any case).

#### other schemes

Professor Abercrombie had in his Regional Report on North Wales suggested as an alternative a "great loop" north of the Walled Town, leaving the coastal road at Penmaen Bach, crossing Conway Marsh and the Estuary to Deganwy—a bold scheme which would, however, leave the level crossing still to be dealt with.

A scheme for a new road and bridge south of the existing railway bridge and the walled town has also been propounded; but is of great complexity, on account of the railway sidings and goods yards, on the east side, and contours and buildings on the west side, to rejoin the Bangor Road.

The solution which is here illustrated is based upon the position that a by-pass to the walled town should roughly join the point at entrance to the Causeway, to a convenient point in the Bangor Road. It would, however, be preferable to branch off the existing Causeway a little further to the west, and proceeding at an acute angle to the line of the channel,



CONWAY AS IT IS TODAY

bridge the deep water channel roughly at right angles, passing just north of the north-east corner (and spur wall) of the walled town, thence proceeding (being at a higher level) in a shallow cutting through Bodlondeb Park to join the Bangor Road.

The advantages claimed for this Harbour Bridge scheme are:—

- (1) It provides a complete and uninterrupted by-pass for traffic.
- (2) The Quayside and the Spur Wall are left intact.
- (3) The entrance to the Walled Town remains as it is, or with such minor improvements as may be gradually required.

(4) Thus traffic into the town has to slow down, whilst fast traffic can proceed unhindered.

(5) Incidentally, a small harbour is created in midstream, opposite the Quayside, which could be made an attractive feature, combined with public gardens, with a new view of the Castle and Walled Town.

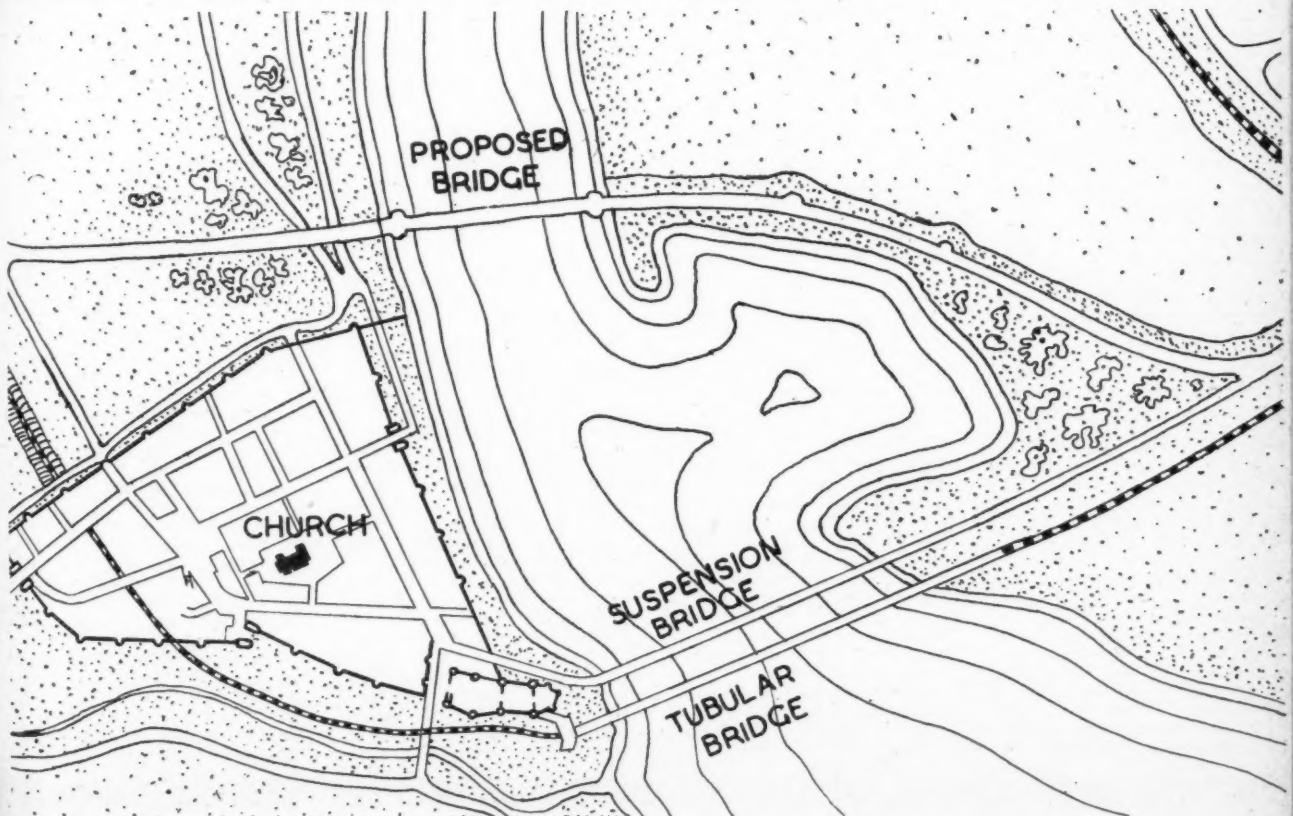
Criticisms of the Harbour Bridge scheme might be that:

- (1) It would be more costly; admittedly a new Causeway and foundations in the river bed would be more costly *pro rata* than a road on existing foundations; but on the other hand there would be no expense incurred in purchasing and removing existing buildings on quayside and the existing bridge.

Right is a perspective and below a plan of the scheme for a new road bridge at Conway proposed by Mr. Harrison. If carried out it would by-pass Conway leaving all its present attractions, not least of which is Telford's suspension bridge (p. 123), intact.



## SCHEME FOR A NEW BRIDGE PROPOSED BY MR. HARRISON





(2) That Scouring might be caused to the channel—it is contended the new Causeway would not cause any more scouring than the existing Causeway, providing the deep water channel is well bridged; and inlets for flow of water can be provided through the new harbour walls.

(3) The arched bridge might not be high enough to admit yachts and cargo boats—on this point the new arched bridge might well be higher than the existing suspension bridge without producing an unpleasant effect. In any case, larger vessels could anchor outside or unload on to a small extension of the existing quayside (north of the proposed bridge). The point is that a quayside and harbour are preserved, whereas in the

official scheme the quayside is taken over for an arterial road, and what remains is so narrow as to be of little use, or amenity. As to upstream traffic, what goes under one bridge will go under the other.

On the æsthetic effect, if the design were kept simple in outline and details, it would not detract from the view of the old town; but rather provide an enhanced setting—a complementary shape in plan echoing the lines of the town; the drawbridge entrance of Telford, so justly praised, remains; the quayside haunt remains; but in addition a curved arm, as it were, conducts away the main traffic; and, like a jewelled bracelet, enhances its view and weds it to the river.

## THE BATH PLAN RE-EXAMINED

The following notes are condensed from a report sent by the Bath Group of the Bristol Society of Architects to the Chairman of the Bath and District Joint Planning Committee.

In the course of a study of *A Plan for Bath*, we have been struck by one aspect of the plan which is of fundamental importance. We refer to the discrepancy in feeling between the written Report and the graphical representation of the Plan as exhibited at the Victoria Art Gallery. We therefore urge upon the Planners a fresh study of the broad outlines of the problem as it is treated in their own Report, particularly in Chapter IV, in order that the Plan may interpret these to the best advantage of the City. We are confident that if the Plan goes forward as now represented, Bath will lose qualities which may never be regained.

The character of Bath is universally recognized as unique, but it is unsubstantial, flourishing in a good atmosphere and failing in a poor one, and it is affected especially by the day to day activities of the community. In fact the influence of man-made things may dull or enhance the charm of a city like Bath in a decade, or less. In our opinion the tendency of the planning is to lose sight of the importance of atmosphere and to overlook the historic charm and intimate scale of the City.

The Georgian character of Bath architecture is mainly a facade; it catches the eye and is accepted as a legacy of the Georgian period inseparable from Bath. It is our conviction that no present-day copyism can hope to perpetuate this character and we find ourselves in entire agreement with the section of the Report in which this matter is discussed. While a great deal must be new, we consider that the Plan destroys some that could be saved and we would urge the preservation of every facade and feature of the Georgian period which now contributes to its atmosphere and does not stand in the way of considered progress.

It was natural that housing designs for the City's housing

schemes should be taken to an advanced stage of representation, since housing has priority in the building programme. But it is disappointing to find the City putting forward designs with elevational treatments in the cottage tradition. These do not appear either to reflect the trends of contemporary house design, or to take account of the strong traditional character of Georgian Bath which is definitely metropolitan in flavour.

We find no direct reference to atmospheric pollution in the Report. It is not enough to cater for moving industry elsewhere: What is required urgently is the enforcement of regulations comparable with those which secure the purity of the City's water supply. Only in this way will Bath be spared the deluge of grit and dirt that can be seen spreading over the city in the morning light, and the ultimate destruction of its finest architecture of whatever period.

The extent to which control can and should be exercised over the choice of finish and colour in street architecture and housing is debatable; but we would draw attention to the frequent use of dismal and disfiguring colour, and we suggest that building owners be influenced to obtain good advice on this and kindred subjects usually classed as purely practical maintenance. The use of colour which does not show dirt should not be the only consideration. It is to be hoped that efforts will be made to add to the gay appearance of promenade spaces, particularly of those within the Abbey Precinct, by tubs of flowers and flowering shrubs in the manner used with such conspicuous success in Scandinavian countries. The opportunities for such treatment in Bath are exceptionally good. A number of the architectural features in the Abbey Precinct have been designed to include facilities for planting: the broad promenade spaces and the colour of the Bath stone provide an ideal setting. Placing, colour, and massing effect must be properly studied; we are only too familiar with the poor effect of small spots of colour dispersed evenly over large areas of stonework. The private owner could contribute by planting window boxes, and should be encouraged in this direction. We would

draw attention to the appearance of inter-war housing, much of which is a disfigurement of greater potential than is recognised in the Plan. These houses must remain with us for many years, and we submit that much of their serried dullness could be relieved by the planting of roadsides and front gardens to a scheme based on the best horticultural advice. We submit that the proper planting of new estates should have been enforced by the Local Authorities, who should now take steps to regain the ground that has been lost.

It is considered that the main arterial road by-passing the City by the northerly route is a mistake as it cuts through the core of the Georgian city and spoils the north side of Victoria Park. The incidence of fumes and of intense traffic noise, reverberating in the proposed cutting, upon this part of the city would reduce it to a low amenity level. In place of this it is recommended that the City be by-passed on its southern area, using roads which, for the greater part, already pass through industrialized zones. Wherever possible, wide new streets should be avoided by the introduction of one-way traffic in order to preserve the proportion and scale of old Bath.

The projected formation of a new heavy industrial area in Bathampton at the junction of the two beautiful valleys is strongly deprecated. A good alternative site is not immediately evident, but we suggest that the district of Newton-St. Loe, in the vicinity of the turnpike, is suitable.

Town planning terminology has seized upon the word Precinct and uses it in its barest sense of "a minor territorial division." Thus any area enclosed in sub-arterial or major local roads, with limited access and circulation roads becomes a Precinct. In our opinion the Abbey Precinct as proposed in the Plan suffers from the breadth of this term, for the traffic ways appear insufficiently limited. Further, the proximity of the Parade gardens and their bearing on this Precinct appear to have been overlooked. The Parade Gardens and the promenades which adjoin them must be considered as an adjunct to the Abbey Precinct although a roadway separates them. The placing of

swimming and sunbathing facilities on the river bank immediately opposite will, in our opinion, make serious inroads upon the peace and character of this precinct. Open-air baths are notoriously noisy during the brief period of active life permitted to them by the English climate, and for a large part of the year are unbeautiful and deserted wastes.

We do not find ourselves in agreement with the view expressed in the Report that the scheme to remodel the Royal Crescent as a Civic Centre "would create one of the finest Civic Centres in the world," and would be "a grand civic gesture of this age to those who follow." The change of function of this grand block of domestic buildings, the building-up of the spaces at the rear, and the general mutilation of the crescent necessary to convert it for civic purposes appear likely to be disastrous to its architectural character and balance. Further, it is generally accepted that a Civic Centre to function efficiently and be corporate with the day to day activity of the people, should be near the hub of the City. Therefore we suggest that this proposal should be reconsidered.

It is in the planning of the central area that we chiefly detect factors which we consider will harm the intimate scale and character of this area of the City. We recognize that town planners have to predetermine the main plan shapes of buildings which have not yet been planned in detail, in order to indicate their aims, the weight of building compared with open ground, the focal points to be stressed and any symmetry or asymmetry which they consider desirable. In our opinion the block planning in this area suffers from two tendencies. One is the tendency to bring formality, symmetry and a monumental character to much of the new buildings, when informality would be appropriate and effective. The second is the tendency towards large and stiff blocks of new buildings. In this part of the City we consider that the safeguarding of the scale and character of the existing important buildings should have primary consideration, and to this end a substantial reduction in the mass and scale indicated for the new blocks is considered to be vital.





Left, the completed house. Below left, diagram showing main principle of construction of concrete pier blocks, holding reinforcing rods, and  $4\frac{1}{2}$  in. brick non-load-bearing screen walls.

# THE JEMM FLATTED HOUSE

BY JOHN E. M. MACGREGOR

**GENERAL.**—This prototype, illustrating a new system of construction, has been erected at the Roffey Park Rehabilitation Centre, Horsham, Sussex. The system is capable of many applications.

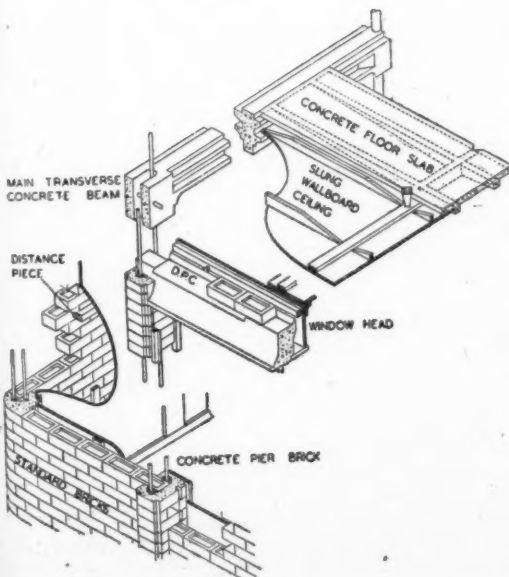
**THE SYSTEM.**—The basis of Jemm construction is a patented concrete pier brick, much the same size and weight as the ordinary brick. It is so shaped that it bonds into a  $4\frac{1}{2}$  in. brick wall, while at the same time it incorporates vertical reinforcing rods so as to produce a framed construction without the use of shuttering. The bond is maintained by reversing the pier bricks on alternate courses and the brickwork rises level round the building in the normal way. The reinforced piers give such stability to the wall that brickwork is reduced to the bare minimum of  $4\frac{1}{2}$  in. outside walls, and the chimney stack, while, except for half batts at the

window openings, brick cutting and intricate bonding is entirely eliminated.

**CONSTRUCTION OF PROTOTYPE.**—There are three basic units; first the ordinary brick, second, the 8 ft. by 4 ft. wall board sheet stiffened before delivery with transverse glued battens, and, third, a composite window consisting of two 3 ft. 3 in. steel casements with an 11 in. casement between. The design is completed by a series of precast concrete members made to accord with these units.

**Foundations.**—Pier foundations 2 ft. 6 in. by 2 ft. 6 in. are set at 8 ft. 5 in. centres with reinforced ground beams between. This length exactly accommodates eleven bricks and 8 ft. wall board.

**Walls.**—A light right angle wood jib for accurate positioning of the vertical reinforcing rods with one arm half the length of the front



and the other half that of the end, is used successively for the four corners. The length of the building is three full 8 ft. 5 in. bays with half bays at either end and the width of two bays with a half bay in the centre. The external walls are lined internally with 8 ft. by 4 ft. sheets of wall board laid horizontally delivered with 2 in. by 1 in. battens already glued to the back. They are fixed to horizontal grounds behind the splayed skirting, moulded dado rail, and coved cornice, which incorporates a dovetailed picture hanger groove on the underside. These grounds are secured to the brickwork by Rawl-plugs and distanced with oak cotton-reel shaped distance blocks which prevent any moisture that may have penetrated the brickwork reaching the lining. The ends of the wall board sheets lie in the rebate in the pier bricks and are covered with a 6 in. vertical board. The walls otherwise are free from vertical disfigurement.

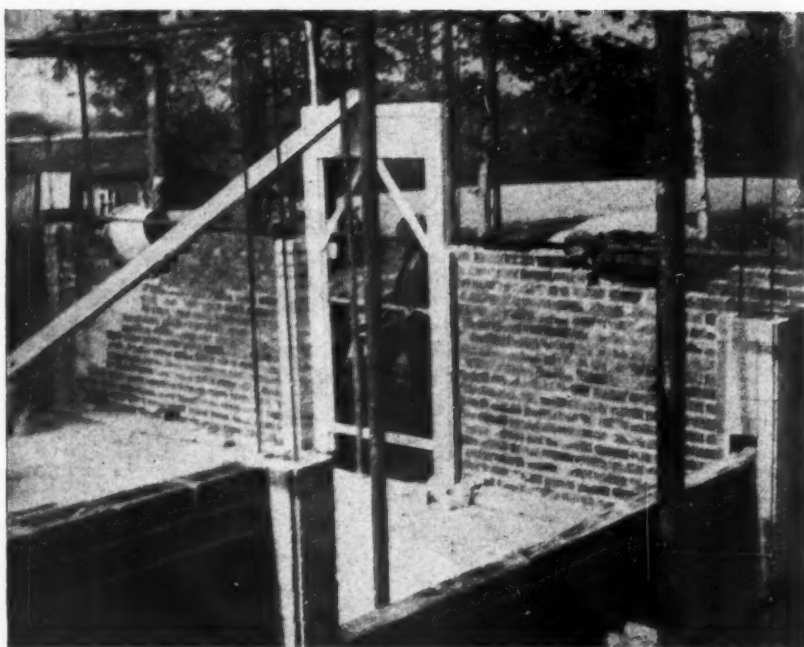
**Partitions.**—These are of similar wall board sheets as those used on the outside walls with 4 in. by 2 in. horizontal studs at floor, dado and ceiling.

**Precast Concrete Units.**—The precast steps of the flying external staircase—the butts of which are alternately 9 in. and 6 in. deep to avoid horizontal brick cutting—the window cills, mullions and heads on the main floor beams are all built in with the brickwork. The wall is capped with a course of the patent pier bricks laid on edge incorporating horizontal rods so as to complete the framed structure and receive the roof wall plate.

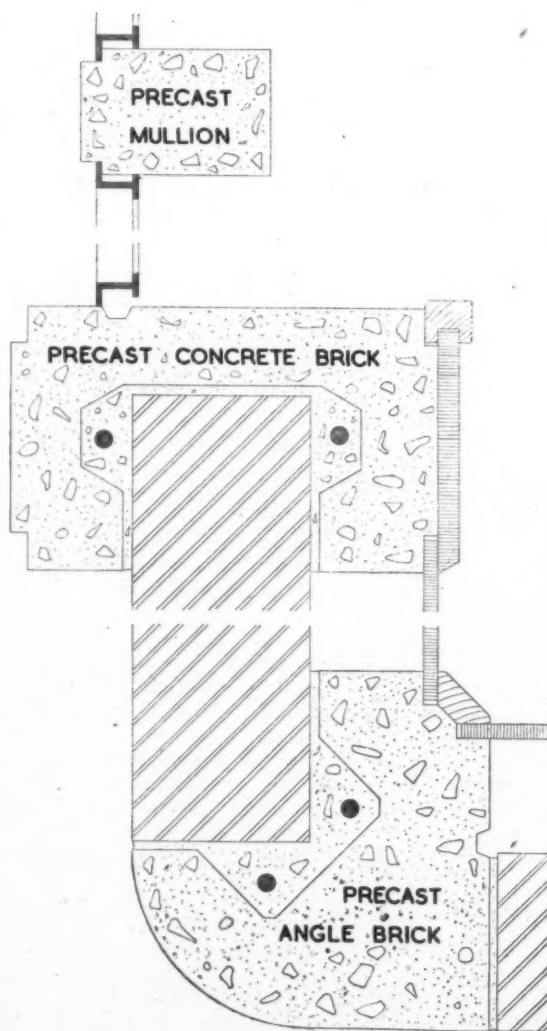
**First Floor.**—This is supported by precast concrete beams moulded to receive floor slabs and ceiling boards spanning from the wall piers to tubular stanchions in the central partition. The floor is formed of 8 ft. by 2 ft. precast concrete slabs with stiffening ribs on the underside which span from beam to beam and are kept clear of the walls so that the cavity is unobstructed from roof plate to ground. This and the ground floor, which is of *in situ* concrete, is finished with McNoills roofing felt in mastic before the insertion of the partitions.

**Ground Floor Ceiling.**—This is of 8 ft. by 4 ft. Gyproc sheets stiffened with 3 in. by 1 in. battens on edge. They are fixed with one side in the special rebate in the concrete beams and the other secured to a batten along the centre of the bay suspended from the floor slabs.

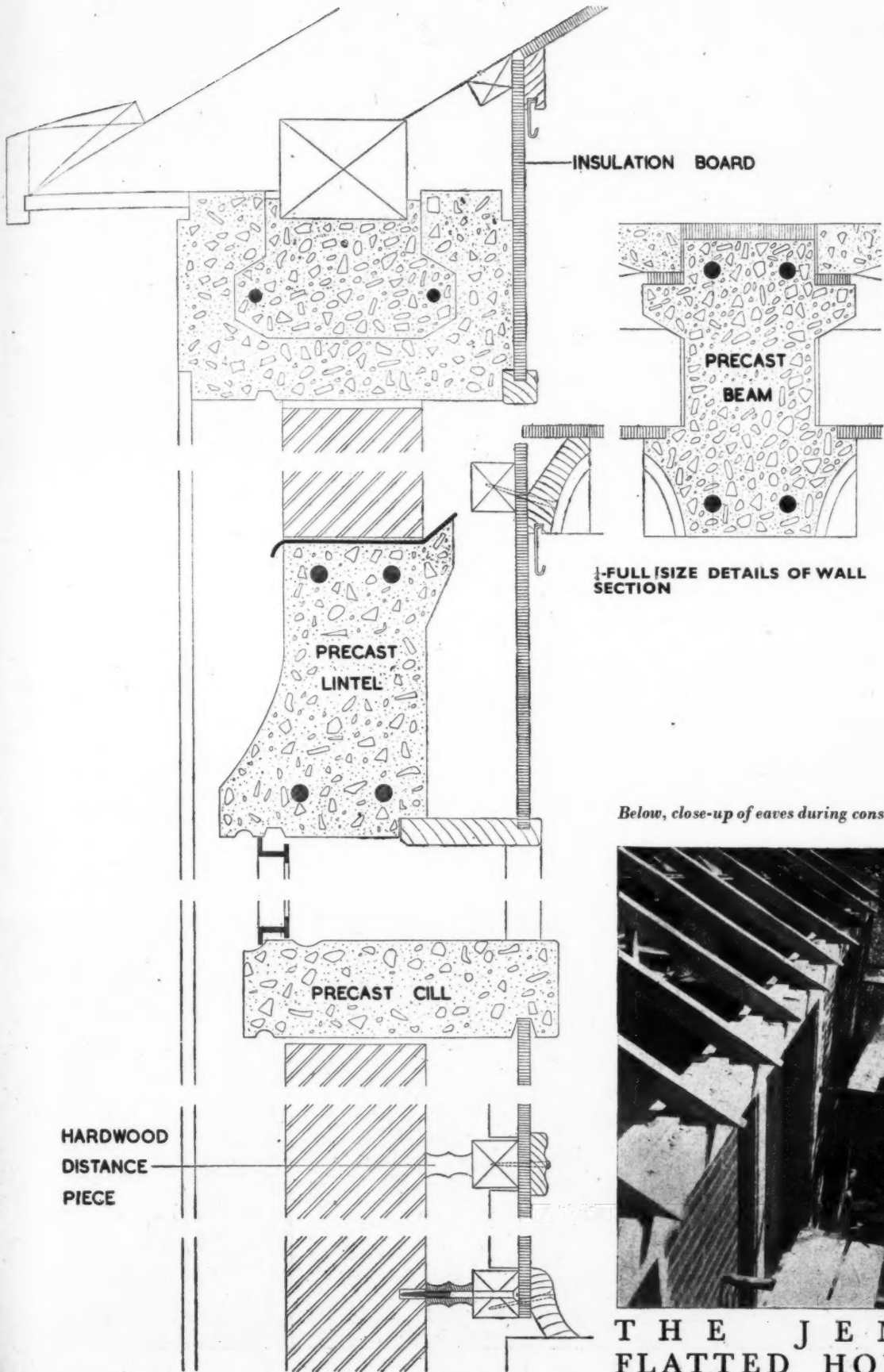
**Roof.**—The roof is of normal wood construction covered with double Roman tiles.



Above, view taken during construction showing concrete pier bricks with reinforcing rods in position.



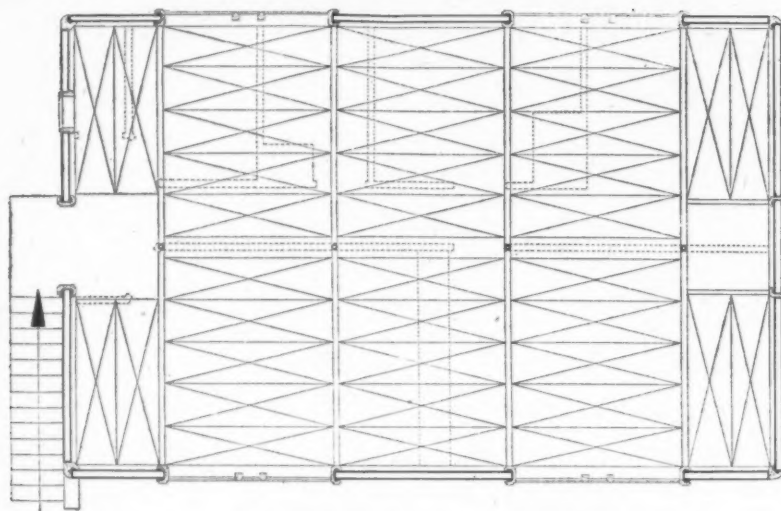
1/4" FULL SIZE DETAILS OF WALL PLAN



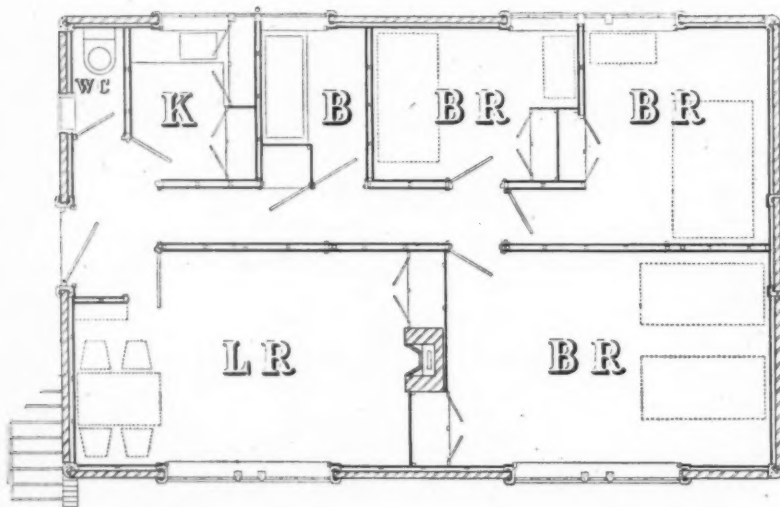
*Below, close-up of eaves during construction.*



**THE JEMM FLATTED HOUSE**



FIRST FLOOR PLAN SHOWING CONCRETE FLOOR UNITS



GROUND FLOOR PLAN

[Scale:  $\frac{1}{2}$ " = 1' 0"]



Above, the house nearing completion. Below, left, ground floor showing central steel columns; centre, concrete floor units being laid; right, the pre-cast stairs.

#### FITTINGS AND SERVICES.—

The kitchens and all bedrooms are fitted with built-in cupboards. The sanitation, although not pre-fabricated, is simple and concentrated to one manhole. The water is heated by a back boiler in the living room open fire or by an immersion heater, and the Hartley Octopus system of electric wiring is employed.

PLANNING.—The plan is identical on ground and first floors, and consists of a living room having one complete window unit, a best bedroom with a similar window, a second bedroom with three-fifths of the window unit, and a third bedroom, bath and kitchen, each with two-fifths of the window unit, while the larder accounts for the remaining fifth.

COST.—The single pair of flats, including drainage up to and including the first manhole, cost less than £1,300.

(The building Contractors were Hoad & Taylor, of Horsham, and the pier brick and all precast concrete units were supplied by Girlings Ferro-Concrete, Feltham.)



THE JEMM FLATTED HOUSE



# 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

2355

### Rural Housing

**HOUSING IN RURAL AREAS: Report of One-Day Conference at Housing Centre, May, 1945.** (Housing Centre, 1945, 1s. 0d.) Problems of rural water supply and sewerage, rural housing policy, industry in relation to village life, Housing Societies and countryside.

1. *Water and Sewerage in the Countryside.*—Speakers: S. R. Raffety, Mrs. St. John Irvine.

The lack of piped water supplies and sewerage in certain rural areas has become a matter of public interest in recent years after a long period of apathy. Means of transport, appreciation of urban amenities, the spread of electricity and gas into country districts, better agricultural wages, and the requirements of hygienic dairy farming have all brought about a change of view. But the fundamental difficulty in providing the required services is still that of cost together with administrative and legal limitations. The grants under the Rural Water Supplies and Sewerage Act, 1944, should be of great assistance, but it is doubtful whether, in view of the increase in construction costs, the sum allocated will be sufficient to accomplish all that is hoped for. The only permanent solution of rural water supply problems is a scheme on regional lines capable of expansion for future requirements.

2. *Sequel to the Hobhouse Report on Rural Housing.*—Speaker: Mrs. E. Gooch. The Report suggests the setting-up of Joint County Committees to formulate standards of fitness and minimum requirements. Sixty such committees have now been set up throughout England and Wales. Their main function is to organise a long-term development policy, but the present situation demands the tackling of urgent problems first, e.g., the accommodation of homeless people from bombed cities, the provision of returning service men who have married during the war, the problems of temporary housing, etc. Other more immediate tasks of the Joint Committees include the eventual clearance of rural slums, the reconditioning of dwellings under the Rural Workers Act, a survey of existing houses and of the need for new ones, estate administration and maintenance.

3. *Will Decentralization of Industry Affect Village Life?*—Speaker: W. Dobson Chapman.

The reasons why decentralization of industry is necessary are explained, drawing special attention to the defects of the over-sized town from an urban sociological point of view. The further development of existing small towns or regional centres as recommended in the Barlow Report should serve to counteract the disadvantages of existing urban development. The right types of industry for the countryside are

those which are economically linked with agriculture and a number of other industries which tend to have a high rural incidence. It is of special importance in view of the character of British farming to secure a satisfactory balance between the basic industry of agriculture and the incoming industries and particularly between male and female labour. In order to provide sufficient social amenities and education and health services an increase in total population in rural areas must be achieved by building up the small country towns and by creating stronger nucleation of settlements within the countryside proper. The provision of community centres, the size of urban units in rural areas, and the quantity of land required for decentralization are important aspects of a policy for controlled dispersal of industry which will give rural areas an economic and social balance, and will generally provide them with a standard of life comparable to that of the best urban areas.

4. *The Role of the Voluntary Housing Society in the Countryside.*—Speaker: Miss M. E. Merrylees.

The history of the Housing Society movement, its work, administration, and finance are described, and some details of the achievements of rural housing societies in Hampshire, Knutsford, and Gloucestershire are given.

2356

### Health

**TOWN PLANNING AND HEALTH.** J. H. Forshaw. (P. S. King & Staples, 1945, 1s. 6d.) Chadwick Public Lecture delivered at Royal Sanitary Institute, November 11, 1943. Study of town growth based on considerations of health and convenience comparatively new science. Survey of progress. Requirements of physical and mental health. Fully illustrated.

It is essential to base future decisions upon a national plan, to guard against unemployment and the inevitable repercussions on the health of the people. The rehabilitation of derelict surroundings and landscape preservation in the interest of health call for planning control. Individual dwellings must not only be convenient and healthy but must also be properly located for work and recreation. Town planning principles applied to the design of the community plan must serve to eliminate the factors of noise and travel fatigue, to secure surroundings free from smoke pollution, to provide sufficient open space, and to reduce road casualties. Planning based on health considerations in the broadest sense will produce vital population improvements.

2357

### Landscape and Airfields

**THE RESTORATION OF THE LANDSCAPE AFFECTED BY WARTIME AIRFIELDS.** B. Hackett. (Journal of the Institute of Landscape Architects, October, 1945.) Rehabilitation of land-

scape covered with wartime airfields. Proposals for future use include retention as service or civil airfields, conversion into housing sites, setting-up of recreational centres, return to agricultural use.

The urgency of the construction of war-airfields resulted in the "freezing" of large areas of best agricultural land. It should, therefore, be an early Government commitment to survey future agricultural needs and arrive at some decision on the release of the lands covered by airfields. The breaking-up of the landscape pattern, the erection of service buildings, and the distance of the airfields from centres of population all increase the difficulty of their future use.

Proposals for the restoration of the areas concerned are put forward under the following headings:—

1. Retention as airfields for service or civil use.
2. Conversion to sites for housing in some form or the other, either as an extension to a village, a new village, an agricultural training centre, or small-holding estate.
3. A recreational centre, either for the purpose of sport and exercise, or on the Holiday Camp lines.
4. Return to agricultural use.

Each proposal is accompanied by a detailed description of the treatment of the land from the landscape designer's point of view. In conclusion the appointment of Regional Landscape Advisers is recommended to work in conjunction with the Regional Officers of the Ministry of Town and Country Planning, the Land Utilization Officers, etc. The finances of the landscape restoration should flow from the Treasury, and not be a local charge.

2358

### Conference

**THE NEW PLANNING. Report of the London Conference, December, 1944, of the Town and Country Planning Association.** Edited by Barbara Bliss. (Faber & Faber, 1945, 8s. 6d.) Problems and possibilities inherent in powers given to local authorities under Town and Country Planning Act, 1944, to acquire areas for redevelopment and relocation.

The conference, which was attended by representatives of many local authorities, discussed what localities themselves can do to anticipate and fit in with a good national policy. Papers were read on the following subjects:—

Redevelopment and overspill. The Tottenham Council's proposals to deal with decongestion and dispersal. Architectural design and control of external appearance.

Some administrative problems of the new planning.

Plymouth's plans and the overspill problem.

Rural areas and the new planning.

## STRUCTURE

2359

### USA Prefabrication

**MODERN DESIGNS FOR PREFABRICATED AND DEMOUNTABLE BUILDINGS.** Research Report by New School for Social Research, New York. (Sponsored by Office of Production Research and Development War Production Board, Washington, D.C.) Details and general arrangement plans of

Ratio Structures for schools, warehouses, houses, etc., particularly for use overseas, in timber and in metal. Portable houses.

The Ratio Structures System consists of four basic elements:—

- (1) An arched roof on posts.
- (2) The exterior curtain walls.
- (3) The interior partitions.
- (4) The hung ceiling panels.

The enclosed space is left entirely free for any arrangements of walls and partitions. The roof is made of curved plywood panels set with staggered joints, which form barrel vaults spanning the entire width of the building. The external walls consist of a standard frame which may be fitted with windows, doors or solid sections. The partitions are made from laminated fibreboard with wood frames. The ceiling panels may be of similar construction. For buildings overseas packaging facilities have been thoroughly considered. The different sections nest into one another, and timber is replaced partly or fully by steel. With only two different sizes of curved corrugated metal sheets, three different spans 33, 30 and 27 ft. can be built.

The Ratio all-metal series are especially applicable to warehouses. Forty feet is a convenient span. For emergency housing 20-ft. span types have been designed.

Ratio Structures may be built with flat roofs. Roof panels in the flat series are plywood sheets on light frames. These span between girders. The girder and post units are the main structural elements. The plywood posts and girders may be replaced by bar joists and metal columns.

A special type of portable house has also been developed. While the design was made primarily for dwelling units, it is suitable for many other purposes such as hospitals, health centres, stores, schools, libraries, etc.

Two storey systems have also been designed for housing. The main characteristic of the system is its great flexibility; structures of all types can be built from the same parts. Ratio Structures buildings were used by the US Government in Sidney, N.Y., in 160 dwelling units and a community centre. (See page 122.)

#### 2360 British Prefabrication

TECHNICAL NOTE ON SOME TYPES OF PERMANENT PREFABRICATED HOUSES. (MOH Circular 182/45 October 16, 1945.) Recommendations to local authorities. Brief technical descriptions and diagrammatic drawings of seven types of construction.

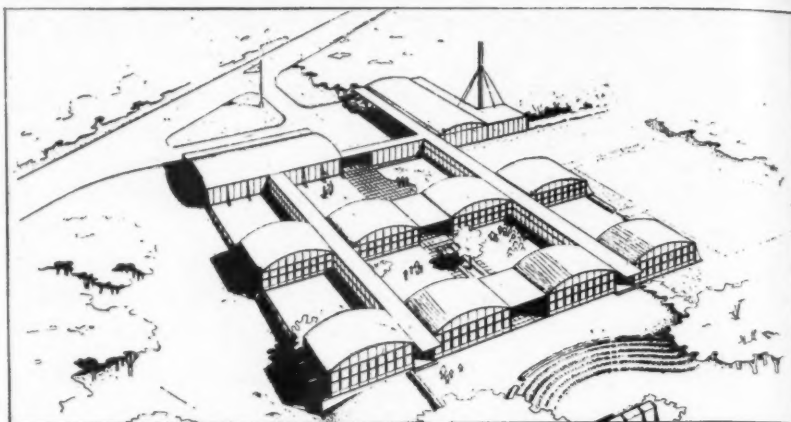
The technical efficiency of each of the selected non-traditional houses has been assessed under the headings given in Appendix B to the *Housing Manual, 1944*. Six systems are framed. Out of these four are in steel (BISF (A), Braithwaite, Hill, Howard) two in reinforced concrete (Airey, Orlit). The only system without framing is Easiform. The degree of flexibility of design varies, the systems in concrete are more flexible in layout than those in steel.

A separate leaflet with illustrations of the selected types has also been issued.

#### 2361 Metal Windows and Doors

METAL CASEMENT WINDOWS AND CASEMENT DOORS FOR DOMESTIC BUILDINGS. B.S. 990:1945. (British Standards Institution, 3s. 6d.) Dimensions and structural details.

This specification supersedes the standards for casement windows and doors in B.S.990:1941. It refers only to casement windows and doors composed of uniform rolled steel sections to standard sizes and designs chiefly useful in domestic work and delivered to the site, complete with fittings ready for fixing into the buildings. The



A USA Ratio Structure—a school building where each class-room is a separate unit. Non-bearing wall sections permit variations of glass areas as required in each climate. See No. 2359.

sizes and details are so determined that all parts and fittings are inter-changeable.

#### 2362 Prestressed Concrete Tank

TWO-WAY PRESTRESSED CONCRETE WATER STORAGE TANK. J. R. Carr. (Engineering News-Record, October 4, 1945, pp. 434-439.) Walls of huge tank prestressed both horizontally and vertically.

The use of prestressed high tensile wire in a 1,000,000 gal. tank was described in No. 1457:20.444. In a water tank of 4,750,000 gal. at Great Falls, Mont., the wall was prestressed also vertically in order to prevent horizontal cracks. Experience has shown that horizontal cracks often develop in a concrete tank of this type. The immense size of this tank made the prestressing of concrete of paramount importance. The tank has an average inside diameter of 156 ft. and an average water depth of 33 ft. 3 in. The wall carries a shell concrete dome rising 24 ft. 9 in. The thickness of the shell is 4½ in. at the wall, tapering uniformly to 3½ in. at the crown. As usual the wall was constructed of an inner part and an outer shell which covers the prestressed ring reinforcement. Vertical prestress applied to both parts. No horizontal construction joints were permitted. Both the main wall and the outer shell were poured in 26 monoliths, each about 19 ft. wide. Bevelled keyways were formed vertically between monoliths to lock them together.

Mild steel was used throughout, stressed at 32,000 lb./sq. in. This was possible because the stress was applied after the best part of the shrinkage had taken place. The designers are confident that sufficient compression will always remain in the concrete, computed to be a minimum of 50 lb./

sq. in., to prevent the possibility of cracks and leaks.

The article contains many interesting details regarding the application and control of the prestress. The architectural treatment of the walls, with fluted pilasters, is unfortunate.

## LIGHTING

#### 2363 Munsell Colours

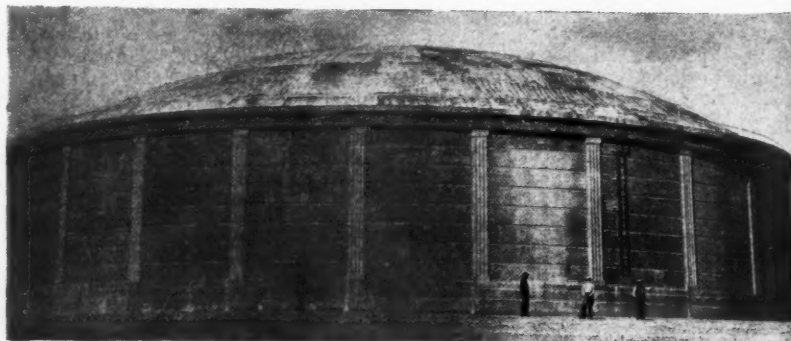
MUNSELL STANDARD COLOURS SPECIFIED FOR FOUR ILLUMINANTS. D. Nickersen. (Illuminating Engineering, March, 1945, p. 159.) Specifications for incandescent light, North sky, blue sky, and substitute daylight.

This note summarises previously published work. It discusses and quotes data for Munsell Colours as seen under four types of light, incandescent, north-sky light, substitute daylight and light from a clear blue sky. This adds greatly to convenience in using the Munsell tables. It is suggested that the tables should be extended for fluorescent sources.

#### 2364 Munsell Colours

SPACING OF THE MUNSELL COLOURS. D. Nickersen. (Illuminating Engineering, June, 1945, p. 373.) Summary of report for Optical Society of America.

The existing spacing of the Munsell colours has a number of psychological irregularities, and a Sub-Committee of the Colorimetry Committee of the Optical Society of America, in a previous report, made an attempt to reduce them. A statis-



A two-way pre-stressed concrete water storage tank in the USA. See No. 2362.



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

## Radio Listening to be clearer and simpler in the future

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

This is not yet a feasible proposition

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

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

*Rediffusion also equips factories for announcements and music*

### REDIFFUSION

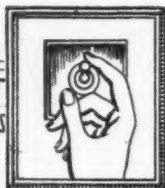
BY BROADCAST RELAY SERVICE LTD.

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

serves the following areas:

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





# *Electricity*

## *is basic in building*

Electricity, which was the *mainpower* behind the production of munitions of war, is now a prime necessity in the building and equipment of the new and better homes for peacetime Britain. Electricity is no longer a luxury to be enjoyed by a few; it is the *main source* of that comfort and cleanliness to which every householder is entitled. And, in addition to being indispensable, Electricity is able to meet—and is meeting the hundred and one demands which indispensability entails.

For information and advice about the many new uses and greatly increased adaptability of Electricity consult your Electricity Supply Undertaking or the British Electrical Development Association, 2 Savoy Hill, London, W.C.2

*The Electrical Section at the Building Centre, Maddox Street, London, W.1, provides interesting illustrations of electrical application in domestic and industrial premises.*





tical estimation of the correct notations of hue, value and chroma was made by a large number of observers, and in their second report summarised in the present article, the Committee used this data to build up an improved system of surface colours to correspond as nearly as possible to the ideal colour solid.

### 2365 Natural Lighting

**NATURAL LIGHTING.** (Pamphlet by the Illuminating Engineering Society.) Characteristics of good natural lighting, planning points.

This is a nicely printed, well illustrated pamphlet by the Illuminating Engineering Society. Its descriptive matter is accurate and easily read, but it is much compressed. Copies are obtainable in bulk from the Society.

### 2366 Points in Choosing Systems

**LIGHTING MEN AND LIGHTING MATERIALS.** A. A. Brainerd. (Lighting and Lamps, June, 1945, p. 24.) Practical points in choosing systems. Deficiency in data.

This is one of a series by Mr. Brainerd. Generally they are addressed to engineers, but contain a few points of more general interest. For instance, in this article there are the following useful reminders:

Few large lamps need less maintenance than many smaller ones.

A large, low-brilliance source will gather dirt faster than a concentrated source.

A long-life lamp generally suffers more depreciation than one of short life.

### 2367 Fluorescent Lamps

**FLUORESCENT LAMPS.** H. G. Jenkins. (GEC Journal, August, 1945, p. 185.) Source of energy, circuits, spectra, colour and efficiency.

This note is largely a recapitulation of the author's excellent paper and demonstration at the Royal Society of Arts in the middle of the war. He describes first the nature of the fluorescent powders and the characteristics of the low pressure mercury discharge. There is a brief description of cold cathode lighting and an equally short discourse on the energy transitions in the mercury atom. The description of various circuits and apparatus occupies a longish interval and is followed by references to flicker and colour. The spectra of the wartime white lamp and noon sunlight are compared and shown to be very similar, though the author draws attention to the fact that light of daylight quality at low illumination levels is known to produce a depressing effect. This would account for a characteristic which many have noticed, and emphasizes the desirability of using these lamps for high values of artificial lighting. Finally the life of the lamps and their efficiency is discussed.

There is a reference to the types of fluorescent lamps to be made in this country soon.

### 2368 Germicidal Lamps

**THIRD MEMBER OF THE LAMP FAMILY.** F. H. Blumer. (Lighting and Lamps, June, 1945, p. 26.) Some uses of germicidal lamps. Application in a foundry.

The Third Member of the lamp family is the germicidal lamp, the other two being the visible light and infra-red energy sources.

We gather from this article that the germicidal lamp development in the USA has only proceeded slowly because of the war, and is now expected to be rapid. Apart from this claim, the article is devoted to a

description of its application in a foundry. Mainly the idea is to sterilize the air and prevent the air-borne communication of disease among workers. Germicidal units are naturally, therefore, concentrated more in clerical offices, locker rooms, wash rooms and other places where people are close together than, for instance, in the foundry room where men are scattered.

There is no data on cost and installation, but a few photographs show the type of unit used and typical locations.

### 2369 Infra-Red Radiation

**INFRA-RED—ITS CHARACTERISTICS AND UTILITY.** P. H. Krupp. (Lighting and Lamps, July, 1944, p. 16.) Nature of infra-red energy, equipment, application.

Infra-red rays are radiated in that part of the energy spectrum between visible light and radio waves. It is commonly generated by filament sources now, and when it strikes the material at which it is directed the friction ensuing from the friction of the rays on impact creates the heat which is so useful industrially.

One of the main points in the economy of use is to ensure that reflectors send all the energy where it is wanted. The material and design of reflectors is discussed, and there is a brief note on industrial applications.

### 2370 Cold Cathode Tubes

**COLD CATHODE LIGHTING.** H. A. Miller. (Electrical Times, July 26, 1945, p. 109.) Efficiency and colour of new cold-cathode tubes.

We have heard much from America about the introduction of cold-cathode lighting, as distinct from our present hot-cathode fluorescent lamps. Here is a note of some British products. They operate on a lower voltage than previous types (430-460 V.) with an initial efficiency about the same as the hot cathode type, but with a life rated at 8,000 hours (2-3 times the hot cathode, and about eight times the tungsten). Depreciation is not rapid, and the lamps can be operated in higher air temperatures than the ordinary fluorescent tubes—up to 120° F. Colours are white, warm white and daylight.

### 2371 Lighting Data

**ENGINEERING DATA AND THEIR INTERPRETATION.** A. H. Brainerd. (Lighting and Lamps, August, 1945, p. 30.) Danger of narrow interpretation. Need for more standard test procedures.

Mainly this article is a mild warning to engineers not to be dogmatic in interpretations—a warning based on the fact that there are still lacking several test procedures necessary for proper appraisal of engineering characteristics. What is perhaps of more interest to the architect is the fact that deficiencies of test procedure are claimed here to be such that no proper comparison can be made, for instance, between hot and cold cathode systems. Yet it seems likely that the deficiencies limit the finer rather than the major interpretations.

### 2372 Home Lighting

**RECOMMENDED PRACTICE OF HOME LIGHTING.** Report by Committee on Residence Lighting of the American Illuminating Engineering Society. (Illuminating Engineering, June, 1945, p. 339.) Objectives of good lighting. Recommended values. Good practice described. Many illustrations.

The Report commences with a very brief description of the objectives of good light-

ing, with a table of recommended illumination value for the home. The table is summarised below.

Visual Task	Recommended Values
Reading .. .. .	20-40 f.
Sewing .. .. .	20-100 "
Writing .. .. .	20 "
Games—Card .. .. .	10 "
Ball .. .. .	40 "
Kitchen—Cooker, Workspace and Sink ..	40 "
Dressing Table .. .. .	20 "
Bathroom Mirror .. .. .	40 "
Laundry .. .. .	40 "
Workbench .. .. .	40 "
Lighting of stairs, hall and room areas generally .. .. .	5-10 "

The main part of the report describes recommended practice for each type of room in the house, and there are copious illustrations.

Obviously the report is concerned with practice for fairly expensive houses, and not those for families with low incomes. Notice for instance the recommended values shown here. The fixtures illustrated will provide some shocks for those who think the standard of American design is high.

### 2373 Public Lighting

**PUBLIC LIGHTING IN THE CITY AND HIGHWAY.** (Pamphlet by the Illuminating Engineering Society). Administrative problems. Principles of street lighting design. The road surface.

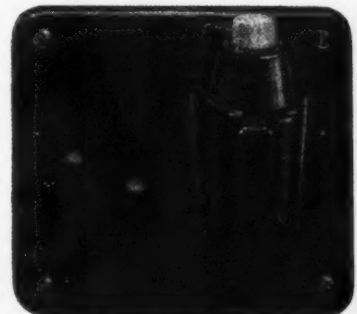
This is another of the Illuminating Engineers' pleasant little pamphlets about lighting, but it deals primarily with what the controlling authorities should know when comparing and choosing different systems. Local authority architects, surveyors and planners will find it very useful.

## EQUIPMENT

### 2374 Electrical Accessories

**THE DESIGN AND INSTALLATION OF ELECTRICAL ACCESSORIES FOR DOMESTIC PURPOSES.** F. C. Fuke. (Journal of the Institute of Electrical Engineers, April, 1945, Part II.) Contacts, switches, fuseboards.

The author, a member of the firm of British Mechanical Productions, has produced a paper of much indirect interest to designers, insofar as it shows the care with which the design of some domestic accessories is being handled. For instance, a micro-break tumbler switch is described in which the micro-break remains unaltered regardless of wear and tear in operation, and a very attractive foot-operated socket outlet is also shown. (An illustration is given here.) There is common sense here,



A switch socket-outlet designed for foot operation. See No. 2374.

for switched socket-outlets are usually foot operated in any case. A new type of plug pin with permanently resilient contacting prongs is included in the discussion.

## QUESTIONS and Answers

**T**HE 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.

### 2375 Electrolytic Action in Plumbing

**Q** We have put in a new pair of galvanised water tanks to an ordinary house hot-water system, heated by a back boiler, the old pipes also being galvanised iron. Now the pipes connecting the two tanks (supply to storage) were put in in copper wire. We were also contemplating renewing the supply pipes (hot and cold) to the bath and wash basin in the bathroom in copper pipe. We are now informed by an expert water engineer that an electrolytic action will be set up between the copper pipes and the galvanised tanks and the old iron pipes from the back boiler to storage tank, resulting in the destruction of the tanks in a very short period of time (probably in 6 to 12 months). The water supply is to be the South Staffordshire Water Co. Can you enlighten me on the subject as I have not met this problem before, and the local plumbers do not agree that there will be any serious trouble?

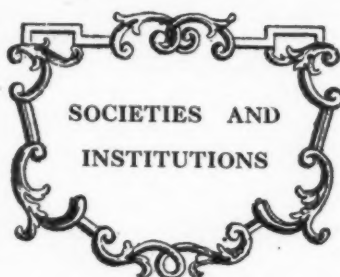
**A** The answer to your query will depend upon the type of water supplied by the South Staffordshire Water Co.

Certain waters will dissolve copper and the small particles may be carried into the supply tank or the cylinder. If the tank is galvanised the copper particles will form small electrolytic cells and dissolve the zinc, ultimately perforating the tank.

You will readily appreciate that provided the water does not flow through a galvanised pipe or tank after it has passed through the copper, this electrolytic action cannot take place. The supply pipes to the bath and water basin which you intend to install can therefore be in copper, as any water after passing through them will merely be going to waste. If the water supply is of the acid type tending to dissolve copper, then you may expect to find trouble in your storage tank, which according to your letter, has already been installed with a copper pipe from the supply tank. If the existing copper pipe has been installed for 6 months or more, we suggest that you should examine the cylinder or galvanised pipe work and see if any corrosion has taken place. If it has, then the copper pipe should be replaced with galvanised. This, however, will not affect the copper pipe work which you intend to install.

From the foregoing you will see that it is quite possible for your water engineer and for your local plumbers both to be right. Not all plumbers, however, appreciate the circumstances in which corrosion can occur and they may be basing their opinion only on installations where copper pipe work has been used in positions where the water passes first through galvanised work.

We may perhaps add that no records are available on the solubility of copper in the water supplied by different companies.



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

## RIBA

### Prizes and Studentships

The following statement on RIBA PRIZES AND STUDENTSHIPS has been issued by the RIBA Board of Architectural Education. It summarises the present position and lists briefly the prizes and studentships open in 1946.

Suspended during the war, the Annual Prizes and Studentships of the RIBA have now been re-opened for competition. The closing dates of entry for the Tite Prize and Victory Scholarship have already been announced (February 15 and May 17 respectively).

Before the war all students were familiar with the various prizes, the type of work or competition involved in each, the value of the prize (both in terms of money and prestige) and who were the current winners and schools. The following notes will give the present generation of students a broad picture of the system. They are no substitute for careful study of the Prizes and Studentships pamphlet (from the RIBA) which every potential entrant should study carefully. The conditions vary somewhat, some prizes being open to qualified architects, others to those partly qualified, and some to unqualified persons; again, some are restricted to entrants of British nationality. These conditions were laid down in the original bequests which established individual prizes.

The obtaining of a prize is a hallmark which is of considerable prestige value to the young architect. For instance, the *Hunt Bursary* indicates special knowledge of town planning; the *Henry Saxon Snell Prize* and *Theakston Bequest* special knowledge of the design and construction of hospitals; the *Grissell prizeman* is recognised as an expert on structures; the winner of the *Owen Jones Studentship* is known to be skilled in colour decoration. These distinctions carry weight

when winners of them apply for appointments in after life.

Some of the prizes and studentships are offered in alternate years, according to the funds available from a particular bequest. The Board of Architectural Education has arranged that these shall run "in parallel" so far as possible; for instance, the *Victory Scholarship* alternates with the *Soane Medallion*. Both are equal in value and both are for design.

The following are offered for competition in 1946:—

**The Tite Prize.** A certificate and £35. The junior prize for design and the most popular. Usually attracts from 200 to 250 entries. Open to those of Intermediate Standard in the Empire.

**The Victory Scholarship.** Silver Medal and £120. The senior prize for design, alternating with the *Soane Medallion*. Open to those of Final standard in the Empire.

**RIBA Alfred Bosson Research Fellowships.** For post-graduate research. Grants are made for specific investigations on architectural subjects. The value of individual Fellowships is decided by the Selection Committee. Open to members of the RIBA only. This scheme is new and a complete revision of the pre-war Bosson Studentships. No competition; merely application to the Secretary RIBA.

**The Ashpitel Prize.** £20 in books for the best candidate in the External Final Examination.

**The Arthur Cates Prize.** £100 (an increase of £25 from pre-war). Open to those who have passed the final in one examination or hold the diploma of a recognised school. Drawings to be submitted of studies "for the promotion of architecture, more especially in relation to geometry of vaulting, stability of edifice and design, coupled with actual measurement and delineation, both geometrical and pictorial of appropriate examples."

**The Hunt Bursary.** £75 (an increase of £15). Open to RIBA members who have passed the Final and are 21 years of age. Entrants must apply and submit evidence in the form of notes, studies and testimonials, together with a programme of study. The winner makes a tour of 3 weeks and afterwards submits a thesis.

**The Neale Bursary.** £100 (an increase of £25), for study of historical architecture. Entrants must apply and submit evidence in the form of drawings, sketches and testimonials, together with a programme of travel and study. The winner makes a tour of 4 weeks and submits a thesis. Open to members who have passed the Final and are 21 years of age.

**The Measured Drawings Prize.** Silver medal and £75. Open to any member of the profession, of any nationality. Entrants to submit drawings and original plottings.

**The Athens Bursary.** £125. Open only to the teaching staff of recognised schools of architecture. Four weeks travel in Greece including residence at the British School at Athens. Application only.

**The Owen Jones Studentship.** Certificate and £100. RIBA members of Final standard. No set subject for competition. Entrants to submit studies of colour design. Eight weeks' tour, after which drawings to be submitted.

**The RIBA Silver Medal for an Essay.** Medal and £50. Open to members of the RIBA who have passed the Final. Can be on any architectural subject. A synopsis must be submitted for approval by the jury. The essay should be illustrated by drawings and photographs.

**The Banister Fletcher Essay Prize.** Silver Medal and £26 5s. Open to probationers and elected students of the RIBA. This year's subject is "Terrace and Square in the English Tradition." Length 3,000 words plus illustrations.

**RIBA Prizes for Public and Secondary Schools.** Totalling 10 guineas. For best original essay or sketches or drawings.

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nical Institutions. £5 in books. Each school nominates one student and the Principal submits a portfolio of his work.

The following prizes and studentships will be among those to be offered next year: *The Henry Saxon Snell Prize and Theakston Bequest, The Florence Bursary, The Soane Medallion, The Godwin and Wimperis Bursary, The Grissell Gold Medal, The Pugin Studentship.*

## Announcements

Mr. C. Z. Chen, B.A.R.C., designated planning officer in charge of replanning of the City of Peiping, would like to receive catalogues from building materials manufacturing firms before his departure. Communications to be addressed to 43, Paulsons Square, Chelsea, S.W.3, before the end of February, and to C. Z. Chen, c/o Bureau of Public Works, Peiping, China, after February.

Messrs. Hugh Minty & Partners announce they have obtained a licence to reinstate their London offices at 14, Bedford Row, W.C.1, and will commence practice there as soon as repairs have been completed. The telephone number will be Holborn 0452/3. To deal with the volume of work at Mitcham they have also opened offices at 318, London Road, Mitcham, situated midway between the Town Hall and the Main Post Office. Their office at Yateley, Camberley, will continue to be used for work in Hampshire and Berkshire. The telegraphic addresses of the firm are as follows: 14, Bedford Row, Huminty Holb London; Yateley, Camberley, Huminty Yateley; 318, London Road, Mitcham, Huminty Mitcham. The firm will be glad to receive catalogues at all three addresses.

Mr. H. Hubbard Ford, A.R.I.B.A., has reopened his practice at 51, Gildredge Road, Eastbourne, and will be pleased to receive trade catalogues.

Major Clifford E. Culpin, F.R.I.B.A., has been released from the Royal Engineers and has resumed partnership with his father, Mr. Ewart G. Culpin, F.R.I.B.A., P.P.T.P.I. They will practise as formerly under the style of Culpin & Son, Chartered Architects and Town Planning Consultants. Their new address is 3, Southampton Place, W.C.1. (Telephone. Holborn 0163), where they would be glad to receive trade catalogues, particularly those relating to housing and schools.

Messrs. Davis, Belfield & Everest, Chartered Quantity Surveyors, have moved their branch office in Norwich to 16, All Saints' Green, Norwich. Telephone. Norwich 26427.

Mr. Wilfred H. Lott, L.R.I.B.A., F.S.I., having resigned his position of architect with the Gas Light & Coke Company, will now practise from Forge Cottage, Swans Brook, Horam, Sussex.

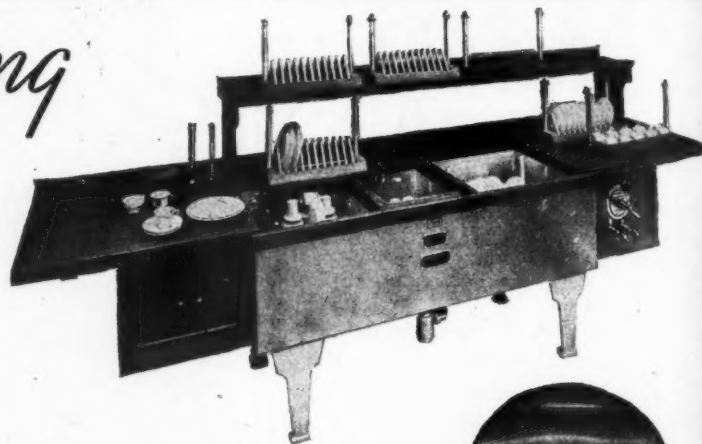
Mr. Winton Newman, owing to ill health and on the highest medical advice, has been compelled to cease active practice. The practice is now being carried on by Mr. H. Fitzroy Robinson, B.A. (ARCH.) A.R.I.B.A., under the same style and title, H. V. Ashley & Winton Newman, F.F.R.I.B.A., Chartered Architects, and at the same address, 3, Verulam Buildings, Gray's Inn, London, W.C.1. Mr. Robinson will have the assistance of Mr. H. H. Bull who will continue as manager as heretofore, whilst Mr. Winton Newman will be available in a consultative capacity as and when his health permits.

Mr. Guy H. Nicholls, F.I.A.A., L.R.I.B.A., Chartered Architect, has moved to 5, Grosvenor Crescent, Hyde Park Corner, London, S.W.1. Telephone: Sloane 8174.

Mr. John L. Gaudie, A.R.I.B.A., A.M., T.P.I., a Lieutenant in the R.N.V.R., is about to be released from the Royal Navy and would be glad to receive trade catalogues, etc., at 52, Kirk Brae, Edinburgh, 9.

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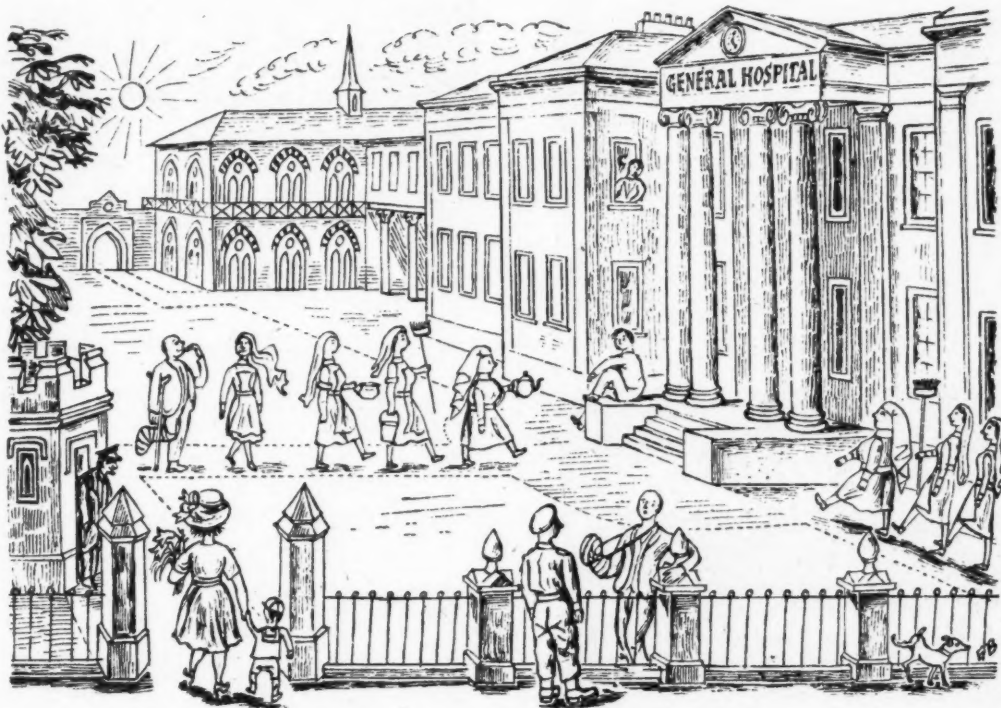
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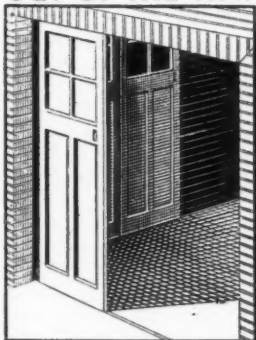
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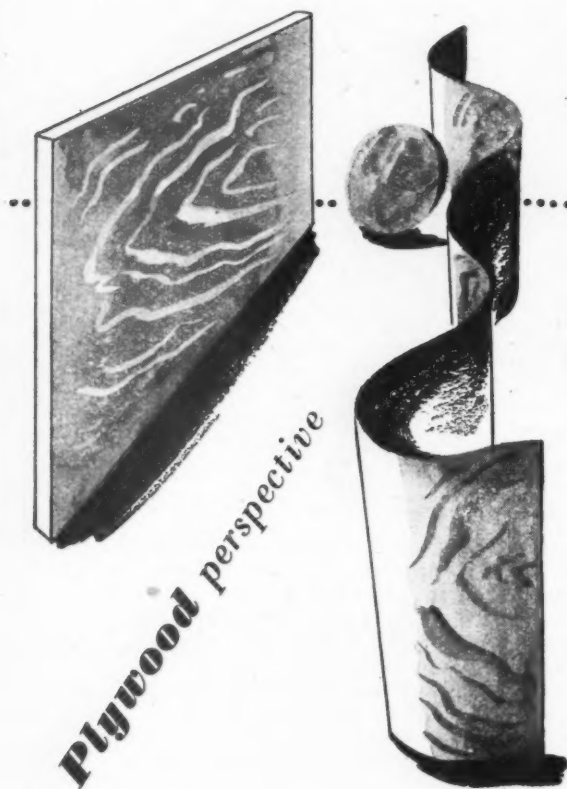
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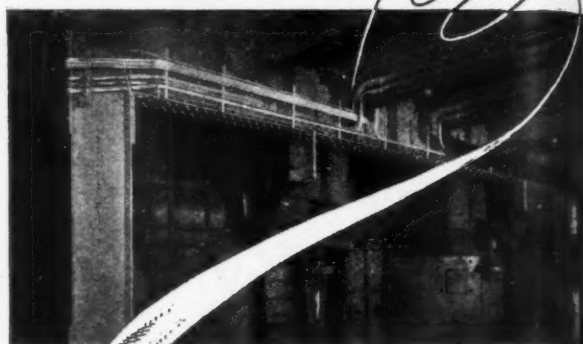


The planner, whatever he is planning, must do more than peer into the future. If he is to peer to any purpose, he must have got his data in perspective too. And data will not always stay put. The properties, for instance, of a material like plywood, were one thing before the war, and are quite another today. When plywood is more plentiful again, it will be important to know just what it can do, and we shall be glad to tell you. Part of the story, of course, concerns "Plymax," the metal-faced plywood.

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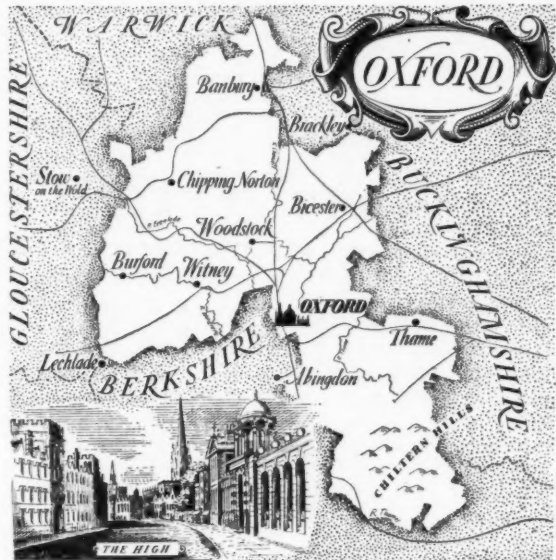


THE ancient University, which has made the name of Oxford renowned, received fresh impetus from the students expelled from Paris in 1168. In the two following centuries, many colleges were founded, and it was at St. John's that King Charles I set up his headquarters at the beginning of the Civil War.

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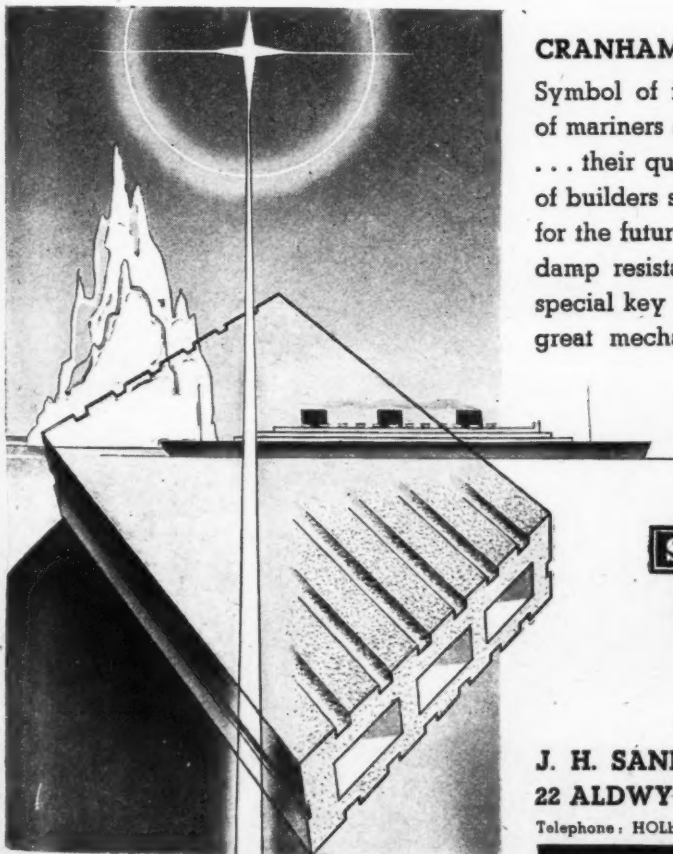
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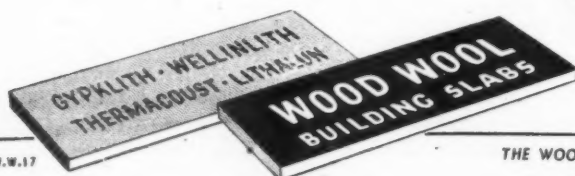
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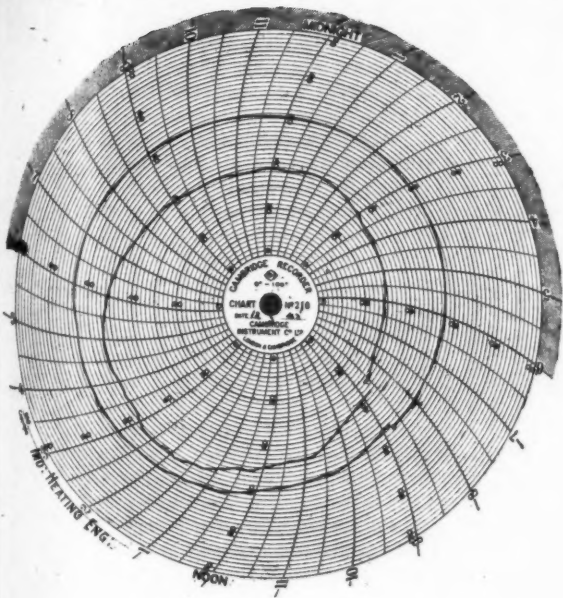
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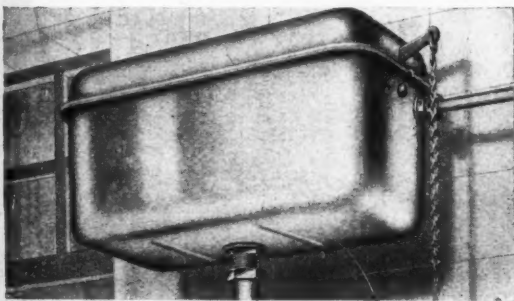


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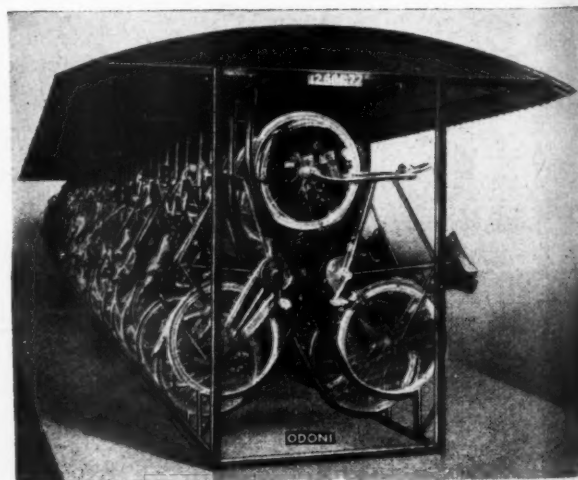
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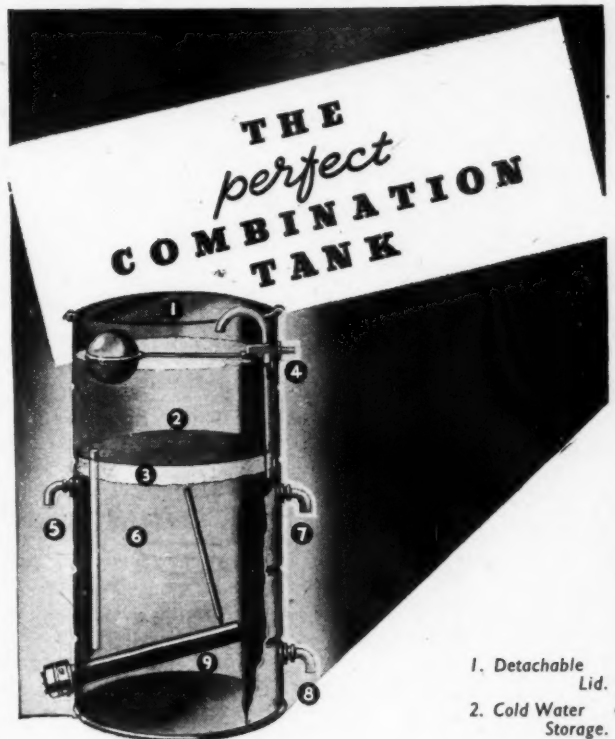
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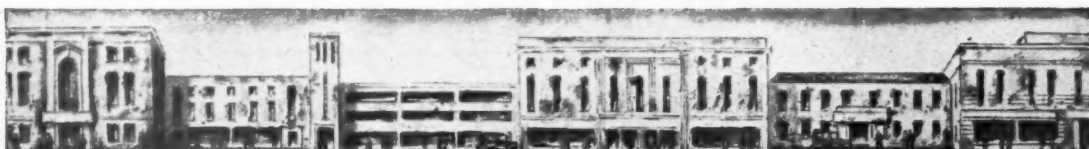
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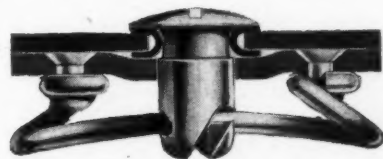
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Replies to Box Numbers should be addressed care of "The Architects' Journal," War Address: 45 The Avenue, Cheam, Surrey.

## Public and Official Announcements

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THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: 75, EATON PLACE, LONDON, S.W.1. TEL.: SLOANE 5615. 991

### CITY AND COUNTY OF THE CITY OF EXETER.

#### APPOINTMENT OF CITY ARCHITECT.

Applications are invited for the above appointment, at a salary of £1,000 per annum, rising by annual increments of £50 to £1,250 per annum, plus cost-of-living bonus, now £59 19s. 3d. per annum. The commencing salary will be fixed in accordance with the qualifications and previous experience of the selected candidate. Applicants must not be under 35 years of age.

The person appointed must be a member of the Royal Institute of British Architects, and will be responsible for designing and carrying out the Council's architectural work, including its housing and educational building programmes. He will be required to advise the Council on all architectural matters under its control, and will be responsible for the upkeep and maintenance of the Council's buildings and properties, and the control of the staff engaged on such work.

The appointment will be subject to three months' notice on either side and to the provisions of the Local Government Superannuation Act, 1937. The person appointed will be required to pass a medical examination.

Applications, stating age, qualifications, and full records of experience, together with copies of three recent testimonials, should be sent to the undersigned not later than the 20th February, 1946.

No application forms will be issued.  
C. J. NEWMAN, Town Clerk.

Exeter.  
22nd January, 1946. 635

### BOROUGH OF BANBURY.

#### BOROUGH SURVEYOR'S DEPARTMENT.

Applications are invited for the following permanent appointment in the Borough Surveyor's Department:—

ARCHITECTURAL DRAUGHTSMAN (Grade A), i.e., salary £255 per annum, rising, subject to satisfactory service, by four annual increments of £15 to a maximum of £315 per annum, plus cost-of-living bonus at the prevailing rate (at present £59 19s. 3d. per annum).

Applicants for the appointment should be skilled draughtsmen, and have had a thorough training and practical experience in design and building construction.

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

Applications, stating age, qualifications, and full particulars of experience, and accompanied by copies of three recent testimonials, must be received by me, the undersigned, not later than Saturday, the 23rd February, 1946.

E. OWEN REID, Town Clerk.  
Municipal Buildings, Banbury.  
29th January, 1946. 670

### TENDRING RURAL DISTRICT COUNCIL.

#### APPOINTMENT OF ARCHITECTURAL ASSISTANT.

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

Candidates should hold a recognised architectural qualification, and have had experience in the preparation of Municipal Housing Schemes.

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

Applications, stating age, qualifications and experience, endorsed "Architectural Assistant," and accompanied by the names and addresses of two references, must reach the undersigned not later than 28th February, 1946.

H. M. A. WARD, Clerk to the Council.  
Council Offices, Weeley, near Clacton-on-Sea, Essex.  
31st January, 1946. 658

### CITY OF NOTTINGHAM.

#### QUANTITY SURVEYOR—HOUSING DEPARTMENT.

Applications are invited for the appointment of a Quantity Surveyor, in the Housing Department, at a salary of £600 per annum, plus war bonus, at present £59 19s. 3d. per annum.

Candidates must have had considerable experience of quantity surveying work, particularly in relation to housing, and must hold suitable professional qualifications. Membership of the Surveyor's Institution is desirable.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, to one month's notice on either side, to the successful candidate passing a medical examination, and to his undertaking to reside within the City boundaries.

Applications, stating age and experience, together with copies of three recent testimonials, to be delivered to the undersigned, and endorsed "Quantity Surveyor—Housing Department," not later than the 18th day of February, 1946.

J. E. RICHARDS, Town Clerk.  
The Guildhall, Nottingham. 621

### CUMBERLAND COUNTY COUNCIL.

#### APPOINTMENT OF PLANNING ASSISTANT

Applications are invited for the position of Planning Assistant, at a salary of £420 per annum, rising by annual increments of £20 to £460, plus war bonus (at present £59 19s. 3d. per annum), and a car and subsistence allowance in accordance with the County Council's scale.

The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to undergo a medical examination.

The appointment to be terminable by one month's notice on either side.

Candidates must be fully conversant with the Town and Country Planning Acts and Orders made thereunder, and be thoroughly competent to carry out Field Work, Plotting, and the Preparation of Plans.

Applications, stating age, qualifications, and experience, accompanied by copies of three recent testimonials, and endorsed "Planning Assistant," should be received by the undersigned not later than Monday, 11th February, 1946.

G. ANDREW WHEATLEY, Clerk of the County Council.  
The Courts, Carlisle.  
25th January, 1946. 646

### COUNTY BOROUGH OF SWANSEA.

#### HOUSING ARCHITECT.

Applications are invited for the appointment of Housing Architect in the Borough Architect's Department.

Salary: £750 per annum, plus cost-of-living bonus, as determined by the Council (current rate 23s. per week).

The person appointed will be required to take charge of all architectural work for the provision of housing accommodation undertaken by the Council, including the supervision of works carried out by contract and by direct administration.

Applicants must be Registered Architects and Fellows or Associates of the Royal Institute of British Architects, and should also have extensive experience in the layout, planning, and supervision of large scale housing schemes.

Applicants must be under 45 years of age. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

The appointment may be terminated by one month's notice on either side.

Forms of application may be obtained from the Borough Architect, Guildhall, Swansea, by application with stamped addressed foolscap envelope.

Applications, accompanied by copies of three recent testimonials, and enclosed in an envelope endorsed "Housing Architect," must be delivered to the undersigned not later than 16th February, 1946.

Canvassing directly or indirectly will disqualify.  
T. B. BOWEN, Town Clerk.

Guildhall, Swansea.  
25th January, 1946. 633

### BOROUGH OF WALLSEND.

#### QUANTITY SURVEYOR.

Applications are invited for the appointment of a Quantity Surveyor to the Borough Surveyor's Department. Candidates must have had a considerable experience of quantity surveying work, particularly in relation to housing, and must hold suitable professional qualifications. The appointment is temporary, but will extend for at least three years, subject to satisfactory service.

Salary: £400 per annum inclusive.  
Applications, stating age, experience, and qualifications, accompanied by copies of three recent testimonials, to be received by the undersigned not later than Wednesday, 13th February, 1946. Canvassing, directly or indirectly, will disqualify.

CHAS. E. BRADBURY, Town Clerk.  
Town Hall, Wallsend. 662

### METROPOLITAN BOROUGH OF HOLBORN.

#### APPOINTMENT OF DIRECTOR OF HOUSING AND BUILDING.

Applications are invited for the above permanent appointment, with the status of Chief Officer, on a salary scale of £1,000 to £1,500 per annum, rising by annual increments of £50, plus cost-of-living bonus (at present, £59 19s. 3d. per annum, women £48 14s. per annum). In appropriate cases the commencing salary would be higher than the minimum.

Applicants must have had considerable experience in administration, and possess preferably, not essentially, architectural qualifications. The person appointed would have control of all new building schemes and management of housing properties. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass the necessary medical examination.

Applications, stating age and experience, accompanied by three recent testimonials or the names of three persons to whom references may be made, must be submitted to the undersigned by 4th March, 1946.

C. F. S. CHAPPEL, Town Clerk.  
Town Hall, 197, High Holborn, W.C.1. 69

### EAST HERTS JOINT PLANNING COMMITTEE.

#### APPOINTMENT OF ASSISTANT PLANNING OFFICER WITH ARCHITECTURAL QUALIFICATIONS.

Applications are invited for the above appointment, at a salary of £500, rising by increments of £25 to £600 per annum, plus cost-of-living bonus (at present £59 19s. 3d. per annum).

The appointment will be terminable by two months' notice, and will be subject to the provisions of the Local Government Superannuation Act, 1937. The applicant will be required to provide a car, and will be paid for official travelling on the County Council's scale of mileage allowance for the time being in force.

Corporate membership of the Royal Institute of British Architects is essential, and applicants should either be Associate Members of the Town Planning Institute or show that they are studying for that qualification.

The successful applicant will be employed on all branches of the work of the department, and must be capable of undertaking the architectural work involved in the preparation of town improvement schemes and the control of building elevation.

Constructional experience, with a good knowledge of design and a facility for perspective drawing, is essential.

Applicants should give full personal particulars, details of past appointments and war service, and should describe the nature of the works upon which they have been engaged.

Applications should be forwarded to Major L. C. Kitching, M.B.E., A.M.Inst.M. & Cy. E., M.T.P.Inst., Planning Officer to the East Herts Joint Planning Committee, County Hall, Hertford, Herts, by first post on Thursday, 21st February, 1946, together with copies of three testimonials from persons to whom reference may be made, if required.

Canvassing of members or officers of the Joint Committee, either directly or indirectly, will disqualify the applicant, who must also disclose any relationship to any such member or official.

ELTON LONGMORE, Clerk of the East Herts Joint Planning Committee. 669

### COUNTY BOROUGH OF EAST HAM.

#### APPOINTMENT OF TOWN PLANNING ASSISTANT.

Applications are invited from qualified persons not more than 45 years of age for the permanent appointment of Town Planning Assistant, in the Borough Engineer and Surveyor's Department.

Candidates must be competent to undertake town planning work in all aspects of post-war redevelopment. Preference will be given to Associate Members of the Town Planning Institute or holders of an equivalent qualification.

The salary will be in accordance with Grade C of the Council's grading scheme for official staff, i.e., £420 per annum, rising by annual increments of £15 to a maximum of £465 per annum, plus war bonus, at present £59 19s. 3d. per annum, but the commencing salary may be at an incremental stage up to the maximum, according to the qualifications and experience of the person appointed.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, to the Council's conditions of service for official staff in force from time to time, and the successful candidate will be required to pass a medical examination.

Application forms are obtainable from the Town Clerk's office, and must be delivered to the undersigned, together with copies of three recent testimonials, not later than Friday, 22nd February, 1946.

Canvassing in any form will be a disqualification.

H. A. EDWARDS, Town Clerk.  
Town Hall, East Ham, E.6.  
29th January, 1946. 667

## COUNTY BOROUGH OF SWANSEA.

## CHIEF ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the appointment of Chief Assistant Quantity Surveyor, in the Borough Architect's Department.

Salary: £500 per annum, rising by annual increments of £25 to £600 per annum, plus cost-of-living bonus, as determined by the Council (current rate 23s. per week).

Applicants must be Fellows or Professional Associates (Quantities Sub-Division) of the Chartered Surveyors' Institution, and must have had extensive experience in the preparation of bills of quantities, specifications, and schedules for all classes of public buildings, the administration of contracts, measurement for and adjustment of accounts for all classes of work, and should be a competent estimator, and have a thorough knowledge of constructional detail and methods. Previous experience with a Municipal Authority will be an advantage.

Applicants must be under 45 years of age. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

The appointment may be terminated by one month's notice on either side. Forms of application may be obtained from the Borough Architect, Guildhall, Swansea, by application with stamped addressed foolscap envelope.

Applications, accompanied by copies of three recent testimonials, and enclosed in an envelope endorsed "Chief Assistant Quantity Surveyor," must be delivered to the undersigned not later than 16th February, 1946.

Canvassing directly or indirectly will disqualify. T. B. BOWEN, Town Clerk.

Guildhall, Swansea. 25th January, 1946. 634

## INGLESEY JOINT PLANNING COMMITTEE.

## APPOINTMENT OF COUNTY PLANNING OFFICER.

Applications are invited for the appointment of County Planning Officer, at a salary of £600, rising by two annual increments of £50 to £700 per annum, plus cost-of-living bonus (at present £59 16s. per annum), and travelling expenses on the County Scale.

Candidates should be Corporate Members of the Town Planning Institute or its equivalent, and have had experience in civil engineering, architecture, surveying, and preparation and administration of planning schemes and interim development control.

The person appointed will be required to devote the whole of his time to the services of the Joint Committee, and the appointment may be terminated by two months' notice on either side. The appointment will also be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Candidates should state in their applications whether or not they have a knowledge of the Welsh language.

Applications, endorsed "Planning Officer," giving age and full particulars of qualifications and experience, together with copies of three recent testimonials, should be received by the undersigned not later than the 30th March, 1946.

The appointment is open to members of H.M. Forces who possess the necessary qualifications and experience, and applicants serving abroad are requested to cable the date of the despatch of their application.

WILLIAM JONES, Clerk to the Joint Planning Committee. Shire Hall, Llangefni, Anglesey. 24th January, 1946. 649

## SPALDING RURAL DISTRICT COUNCIL.

## ARCHITECT'S DEPARTMENT.

Applications are invited for the permanent appointment of a Technical Assistant in the Architect's Department, at a salary of £300 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

Candidates should have a sound and practical knowledge of architectural and quantity surveying work, preparation of specifications, etc., and in addition to the usual office duties will be required to inspect works in progress and to work under the direction of the Council's Architect and Building Surveyor.

The successful applicant will be required to provide and maintain a car, for which an allowance will be paid on the County Council scale (at present £50 per annum, plus 13d. per mile).

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937.

Applications, stating age, qualifications, and experience, and earliest date on which duties could be commenced if appointed, together with copies of two recent testimonials, must reach the undersigned not later than 20th February, 1946.

Applications from serving members of H.M. Forces will receive every consideration.

L. FENNEL, Clerk to the Council. The Crescent, Spalding, Lincs. 653

## BOROUGH OF SOUTHGATE.

## APPOINTMENT OF ARCHITECTURAL ASSISTANTS (TEMPORARY).

Applications are invited for the following temporary appointments in the Architectural Section of the Borough Engineer and Surveyor.

(a) Architectural Assistant, at a salary of £375 per annum, plus bonus, at present £59 16s.

(b) Architectural Assistant, at a salary of £300 per annum, plus bonus, at present £59 16s.

The appointments are for a maximum period of two years in the first instance, and are terminable by one month's notice on either side. Applicants for appointment (a) should have previous municipal experience, and preference will be given to candidates who are members of the Royal Institute of British Architects or hold an equivalent qualification.

Applicants for appointment (b) should have made specific progress in obtaining a recognised professional qualification.

Applications, stating age, education, experience and qualifications, together with copies of not more than three recent testimonials, should be delivered to Mr. J. T. W. Peat, F.R.I.B.A., Borough Engineer and Surveyor, Town Hall, Palmers Green, London, N.13, endorsed "Temporary Architectural Assistant (a)" or "(b)" on or before Wednesday, 20th February, 1946.

GORDON H. TAYLOR, Town Clerk. Southgate Town Hall, Palmers Green, N.13. 26th January, 1946. 654

## URBAN DISTRICT OF SWADLINCOTE DISTRICT.

## APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the post of Architectural Assistant in the office of the Engineer and Surveyor, at a salary of £400 per annum, rising by annual increments of £25 to £500 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

Applicants should possess a recognised architectural qualification, and be experienced in the preparation of working drawings, specifications, and setting out in connection with municipal housing schemes.

The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, on forms obtainable from the Engineer and Surveyor, Council Offices, Swadlincote, should reach the undersigned not later than 25th February, 1946.

Canvassing directly or indirectly will disqualify.

S. ASHTON STRAY, Clerk of the Council. Council Offices, Swadlincote, near Burton-on-Trent. 25th January, 1946. 655

## CARDIGANSHIRE JOINT PLANNING COMMITTEE.

## APPOINTMENT OF TECHNICAL ASSISTANT.

Applications are invited for the appointment of Technical Assistant, at a salary of £200-£25-£250, plus cost-of-living bonus, at present £59 19s. 3d.

Candidates should be neat draughtsmen and colourists, accustomed to ordnance or other map revision. Experience in the preparation and colouring of maps required in connection with basic planning surveys and schemes would be deemed an advantage, but is not essential.

Applications, stating age, training, experience, with copies of three testimonials, endorsed "Technical Assistant," should be forwarded to the undersigned not later than the 15th February, 1946.

Applications from members of H.M. Forces are invited for this appointment.

WILLIAM JONES, Clerk to the Joint Planning Committee. County Hall, Aberayron, Cardiganshire. 651

## BOROUGH OF SURBITON.

## BOROUGH SURVEYOR'S DEPARTMENT.

## APPOINTMENT OF TOWN PLANNING ASSISTANT.

Applications are invited for the above appointment to the permanent staff, at a salary of £330 per annum, plus cost-of-living bonus, at present £59 16s. per annum. As from 1st April, 1946, the successful candidate will be placed in Grade PTA/B of the Town Council's grading scheme (£340-£15-£385), plus bonus. Applicants should be Members or Associate Members of the Town Planning Institute, or have similar qualifications, and have had experience in the preparation of Town Planning Schemes. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

Applications, on forms to be obtained from the undersigned, must be delivered not later than 23rd February, 1946. Canvassing, either directly or indirectly, will disqualify.

R. H. WRIGHT, Town Clerk. Council Offices, Surbiton. 671

## CITY OF ST. ALBANS.

## CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

## ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment in the above department of an Architectural Assistant. Salary £400 per annum, plus current cost-of-living bonus, £59 16s. per annum. Applicants must possess an architectural qualification, and have had experience in the preparation of plans, working drawings, specifications and layouts of modern municipal housing estates, including surveying and levelling.

The appointment is temporary, and is subject to one month's notice on either side. The position as regards military service must be stated by applicants. Canvassing will disqualify.

Applications in writing, stating age and experience, together with copies of two recent testimonials (non-returnable), must be received by me not later than first post on Saturday, 2nd March, 1946.

S. H. E. CRANE, Town Clerk. Town Clerk's Office, 38, St. Peter's Street, St. Albans. January, 1946. 657

## NEWCASTLE-UPON-TYNE EDUCATION COMMITTEE.

Applications are invited for the appointment of a CHIEF ARCHITECTURAL ASSISTANT, in the Education Architect's Sub-Department.

Applicants must be Registered Architects, and should be members of the Royal Institute of British Architects. It is desirable that candidates should have experience in the design of educational buildings.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937.

The commencing salary will be £550 per annum, rising by annual increments of £25 to £600 per annum, plus cost-of-living bonus in accordance with the City Council scale (at present £59 16s. per annum).

Printed particulars of the appointment may be obtained from the undersigned, to whom applications should be sent not later than 1st March, 1946.

THOS. WALLING, Director of Education. Education Office, Northumberland Road, Newcastle-upon-Tyne, 1. 658

## ASSISTANT REGIONAL PLANNING OFFICERS AND INSPECTORS IN THE MINISTRY OF TOWN AND COUNTRY PLANNING.

Vacancies are announced for Assistant Regional Planning Officers and Inspectors on the permanent establishment of the Ministry of Town and Country Planning, which are to be filled by competitive interview, during the spring and summer.

Assistant Regional Planning Officers will be required to assist the Regional Planning Officers in advising Local Authorities on their planning activities, and in informing the Headquarters Officers of the local planning position; Inspectors will be required to hold Public Inquiries and hearings into appeals by private developers and into the planning and reconstruction proposals of Local Authorities.

The posts are on salary scales (for men) of £892-£1,105 in London and £840-£1,055 in the Provinces, and are pensionable. This includes the consolidation additions. The Inspector posts are in London.

Candidates should preferably be corporate members of the T.P.I., but consideration will be given to those holding a recognised qualification in architecture, engineering or surveying, and having planning experience.

Candidates for the post of Assistant Regional Planning Officer should be between the ages of 30 and 45 and 30 and 50 (for Inspectors). Applicants should write to the Secretary, Ministry of Town and Country Planning, 32, St. James's Square, S.W.1, marking the envelope "A.R.P.O." or "Inspector," for full particulars and application forms, which should be returned completed on or before 16th March, 1946, in the case of civilian and Service candidates serving in this country, and 1st June from candidates in the Forces overseas or in H.M. Ships. 650

## FIFE COUNTY COUNCIL.

## PLANNING ASSISTANTS.

Applications are invited for appointment of Planning Assistants to the County Council.

Preference will be given to candidates who hold the Associate Membership of the Town Planning Institute, and in addition have had practical experience in the preparation of planning schemes. The salary will be £400 per annum inclusive of war bonus. Applications, stating age, qualifications and experience, etc., and accompanied by copies of not more than three recent testimonials, should be lodged with the subscriber not later than 19th February, 1946.

J. M. MITCHELL, County Clerk. County Buildings, Cupar. 30th January, 1946. 654



**BOROUGH OF SURBITON.**  
BOROUGH SURVEYOR'S DEPARTMENT.  
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment to the permanent staff, at a salary of £330 per annum, plus a cost-of-living bonus, at present £39 16s. per annum. As from 1st April, 1946, the successful candidate will be placed in Grade PT/A/B of the Town Council's grading scheme (£340-£15-£385), plus bonus. Applicants should be Registered Architects and/or members of the Royal Institute of British Architects, or hold similar qualifications. Experience in housing work of a local authority would be an advantage. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

Applications, on forms to be obtained from the undersigned, must be delivered not later than 23rd February, 1946. Canvassing, either directly or indirectly, will disqualify.

R. H. WRIGHT, Town Clerk.  
Council Offices, Surbiton. 672

**CITY OF CARDIFF.**  
CITY SURVEYOR'S DEPARTMENT.

Applicants are invited for the following appointments:

(a) ARCHITECTURAL ASSISTANT, Grade A. Salary £500 × £20 to £600 per annum. To be experienced in the management of a large drawing office.

(b) ARCHITECTURAL ASSISTANTS (Three), Grade B. Salary, £450 × £20 to £550 per annum.  
(c) ARCHITECTURAL ASSISTANT (One), Grade C. Salary £350 × £20 to £450 per annum.

(d) ARCHITECTURAL ASSISTANTS (Two), Grade D. Salary £250 × £20 to £350 per annum. The appointments will be subject to one month's notice on either side, and to the provisions of the Local Government Act, 1937.

All salaries are exclusive of cost-of-living bonus, which at present amounts to 23s. per week.

Applicants for positions (a), (b) and (c) must be Architects.

Applications, giving full particulars, accompanied by three recent testimonials, should reach the undersigned not later than noon on Thursday, 21st February, 1946.

S. TAPPER JONES, Town Clerk.  
City Hall, Cardiff. 681

**METROPOLITAN BOROUGH OF LEWISHAM.**  
APPOINTMENT OF BOROUGH ARCHITECT.

Applications are invited from qualified and experienced Architects for the appointment of Borough Architect. The person appointed will have complete responsibility for all architectural work of the Council, including, in particular, the layout, design and development of municipal housing schemes and the technical direction of the work of repair of war damage to dwelling-houses still remaining to be carried out in the Borough.

The salary will be at the rate of £1,500 per annum, rising by annual increments of £50 (subject to satisfactory service) to a maximum of £1,750, plus a temporary bonus in accordance with the recommendation of the London District Council for Local Authorities' Administrative, Professional, Technical and Clerical Services.

The appointment will be subject to the rules and regulations of the Council from time to time in force relating to officers; to the provisions of the Local Government Superannuation Act, 1937; to termination on three months' notice on either side; and to the successful candidate passing, satisfactorily, a medical examination by the Council's Medical Officer of Health.

The person appointed will be required to devote his whole time to the duties of the office, and will not be permitted to engage in private practice.

Forms of application and further particulars of the appointment may be obtained from me.

Applications, accompanied by copies of not more than three recent testimonials, should be addressed to me in envelopes endorsed "Borough Architect," and must be received not later than Saturday, the 23rd February, 1946.

Canvassing, either directly or indirectly, will be a disqualification.

ALAN MILNER SMITH, Town Clerk.  
Lewisham Town Hall, Catford, S.E.6. 644  
24th January, 1946.

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**INDIA.**—Important Commercial and Industrial Firm, with head office in Calcutta, requires experienced Assistant for architectural and building department; thorough up-to-date knowledge of design, construction, and planning; good prospects for a young man capable of accepting responsibility; commencing salary Rs.1,000 (£275) per month; provident fund; free medical attention. Applications in writing, stating age and whether married, to T. A. Martin & Co., 71, Queen Street, E.C.4. 648

**WANTED.**—Architectural and Surveying Assistant immediately; North Wales Coast town; state experience, qualifications, and salary required. Box 656.

**SENIOR ARCHITECTURAL ASSISTANTS** required in Drawing Office of large Midland Brewery; successful applicants must be prepared to reside in or around Burton-on-Trent; knowledge of licensed premises an advantage; salary, £400-£500. Apply Box 663.

**ASSISTANT ARCHITECT** required at once; must be able to prepare working drawings, housing and other priority work; salary, £300 to £400, according to ability. Full particulars to F. J. Lenton, Esq., F.R.I.B.A., 16, Broad Street, Stamford, Lincs. 665

**ARCHITECT'S ASSISTANT** required. Apply, stating age, experience, and salary, to Henry C. Smart & Partners, Architects and Surveyors, 251-3, Finsbury Pavement House, 120, Moorgate, E.C.2. 679

**SENIOR ARCHITECTURAL ASSISTANT** required in West Riding (Yorks) for Housing, Factories, Banks, etc.; permanent position for suitable man; good draughtsman, supervision, and knowledge of quantities essential. State age, qualifications, and salary required to Box 664.

**ARCHITECT'S ASSISTANT** required for West End practice; age 33 to 45; small office, with opportunity for advancement; mainly domestic and development work; neat draughtsmanship essential; salary £500 to £600, according to experience. Write, giving full particulars and when available, Box 666.

**WANTED.**—Architect's Assistant, for design and construction of theatres and general work; must be capable and experienced in design, details and specifications; to work under company's architect in Central London, and start immediately; salary according to experience and qualification, with good prospects for permanent responsible position. Write fully, stating age, experience, and salary required. Box 675.

**EXPERIENCED ARCHITECTURAL ASSISTANT**, with good knowledge of building construction, wanted immediately; good salary. Apply in writing, with full particulars, to Trehearne & Norman, Preston & Partners, 83, Kingsway, W.C.2. 678

**CAPABLE ARCHITECTURAL ASSISTANT** required immediately for extensive and industrial and other works; good prospects to right applicant; salary according to ability. Write, giving copies of references and details of experience, to Gelder & Kitchen, Alfred Gelder Street, Hull. 680

**Architectural Appointments Wanted**

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**SENIOR ASSISTANT**, with extensive architectural, structural, and civil engineering, drawing office experience, designing, detailing, surveying, supervision and maintenance on industrial and public works, desires executive post. Box 273.

**ARCHITECTURAL ASSISTANT**, 10 years' experience, designs, working drawings, surveying, levelling, requires temporary post; South London preferred; £8 week. R.B.J., 38, Wickham Avenue, Cheam. 275

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**A.** R.I.B.A., age 36, at present Capt. R.E., release group 28, wishes employment in senior capacity; 34 years' experience M.E.; 10 years' London experience. Box 277.

**ARCHITECT'S SENIOR ASSISTANT** (36), qualified; Poly. Royal Academy and R.I.B.A. final; 20 years' experience, completing responsible wartime post; well known civil engineering contractors (factories, aerodromes and housing), and shortly available; excellent draughtsman; wide experience business side and contract supervision, also quantities and specification writing; good appearance and manner; South or West of England preferred. Box 278.

**ARCHITECT'S ASSISTANT** (36), Registered, willing to assist Architects with part-time work in London; working drawings, details, etc. Box 279.

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