

# THROUGHOUT THE WAR AND INTO PEACE

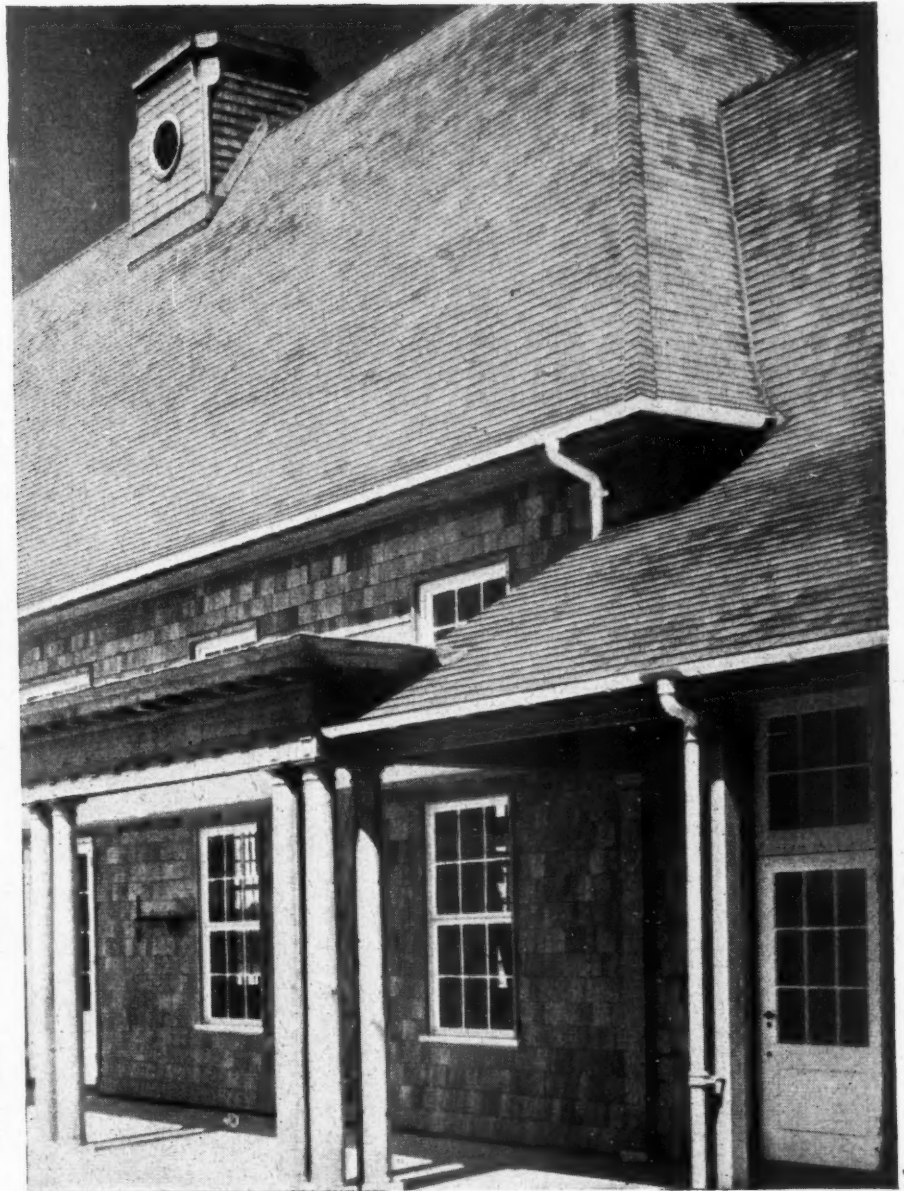
**T**HROUGHOUT the War, Colt's have maintained uninterruptedly a continuous supply and fixing service of Colt Shingles on War Department, Air Ministry and other

Government and essential buildings. Limited stocks are still available, and our Technical Department is at the service of all Architects.

Colt Shingles have proved themselves superior to every other roofing material in their remarkable resistance to blast, more than justifying our claims for the security of a Colt Shingle roof.

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

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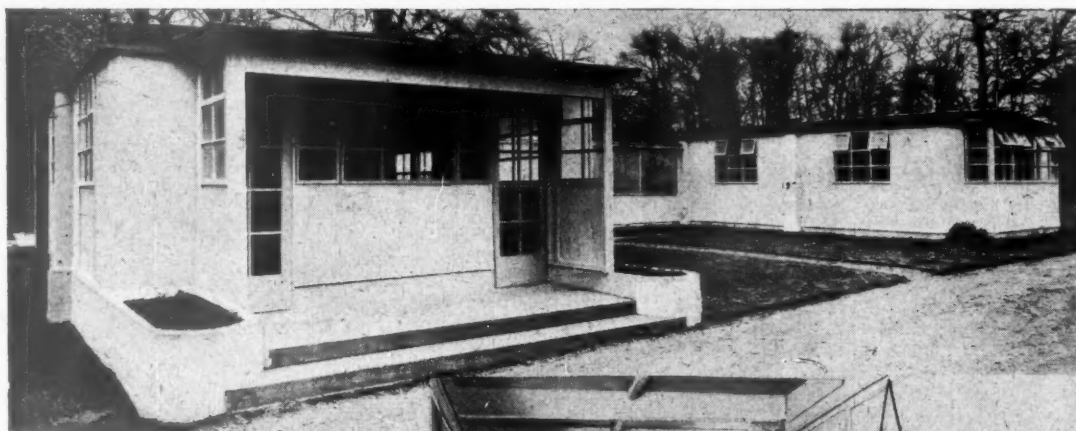
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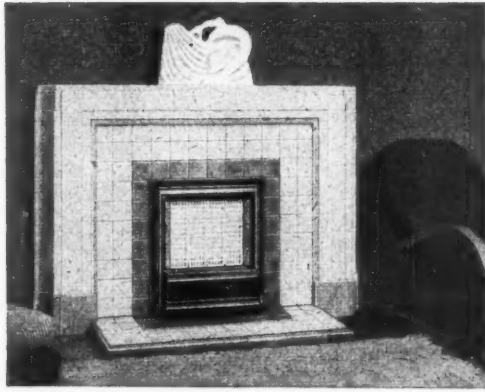
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Architects:  
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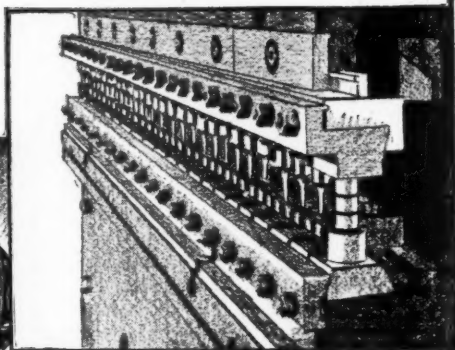
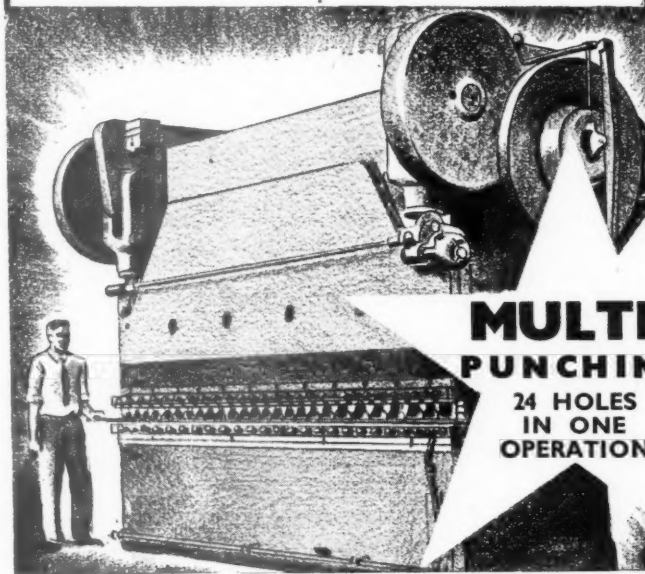
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**MULTI-PUNCHING**  
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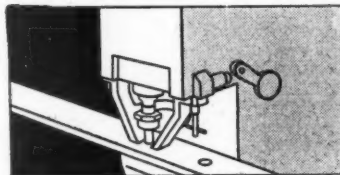


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Wartime emergency has caused Sebels to be set out for the production of all forms of metal fabrication, such as fencing, on a scale rarely seen in this country before. Typical of the plant employed is the Brake Press Punching Process, illustrated above. This, and other mass production equipment, has enabled Sebels to re-time and re-cost the fabrication of steel fencing on complete mass production lines. While the operator of the old single-hole machine is punching one hole at a time, after marking off the job, watching his spacing and line-up, the Sebel operator of the Brake Press can punch 24 holes, spaced and lined with precision.

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OF  
SINGLE HOLE  
PUNCHING



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The Logicol Coal Bunker (Regd.) Patent No. 458927 is a complete factory made unit which can be built into the wall of any type of house of whatever construction. Coal put in from the outside is taken from the inside.

Weather proof, damp proof—dust proof and fool proof—takes up no internal valuable floor space. Logical?—Yes—"Logicol."

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**M. K. ELECTRIC LTD.**  
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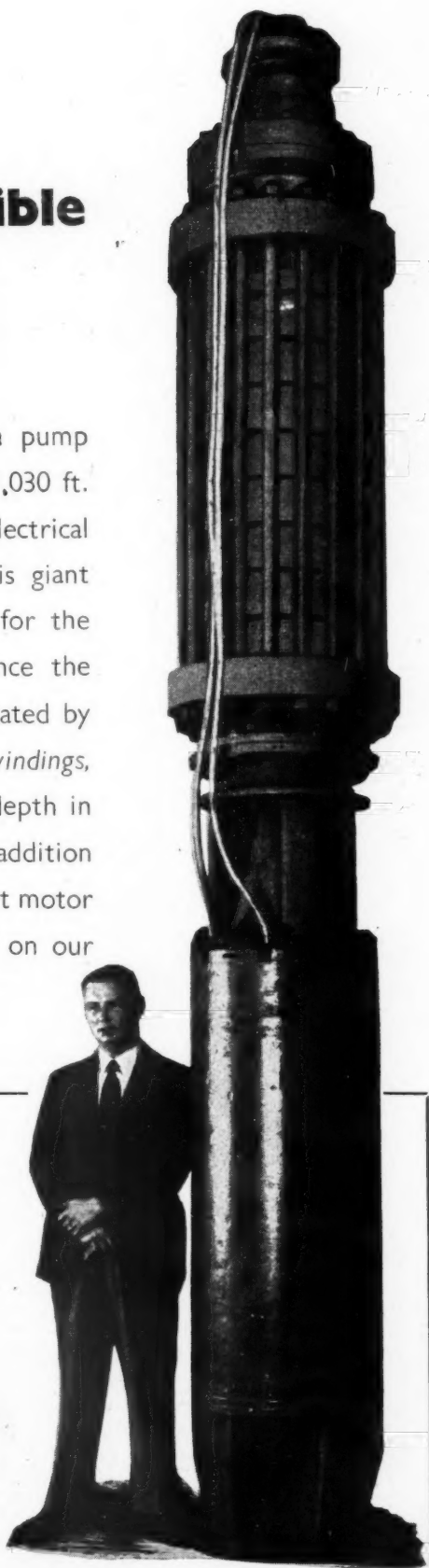
## The largest submersible pump in the world

This motor develops 350 h.p. and drives a pump delivering 700 g.p.m. against a total head of 1,030 ft. The overall efficiency of the unit, from electrical output to water horse power is 67.5%. This giant pump is about to be installed in a colliery for the purpose of dewatering a flooded mine. Since the motor is wet, and is in fact cooled and lubricated by the water which *circulates freely through the windings*, the whole unit can be lowered to the final depth in one operation. This is the latest and largest addition to our range of pumps, although designs for wet motor pumps of still greater magnitude are already on our drawing boards.

**Please send for illustrated leaflet** called "The Wet Motor Pump and how it works," written for the technical man (with a section for the layman). Enquiries (enclosing 1d. stamp) should be addressed to:

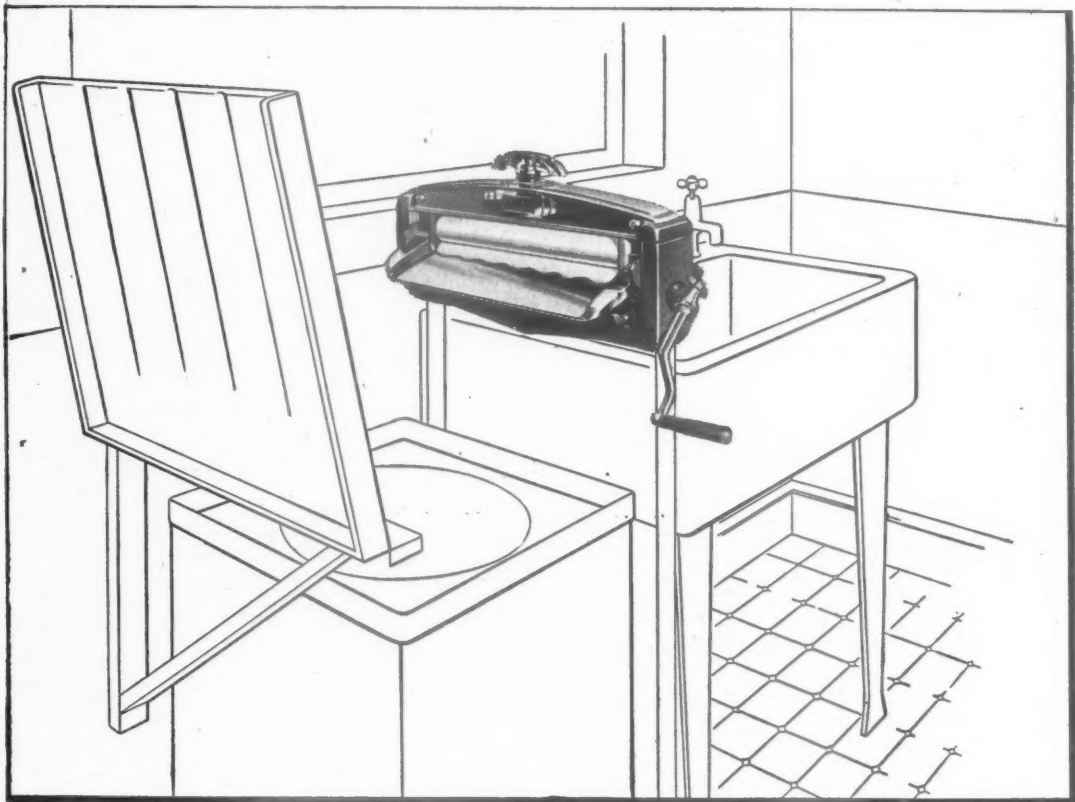
**HAYWARD-TYLER**

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*makers of a variety of centrifugal reciprocating  
and wet motor pumps*





## Fairy Tales brought bang up-to-date



"WHY GRANDMOTHER — what a bent back you have!"

"Because for years I stooped over a sink much too low for me, my dear."

"Why Grandmother — what a bad skin you've got!"

"That comes from a lifetime's toiling away on washdays, with a huge fire in the hottest weather to boil up my copper, my dear."

"Why Grandmother — what rough, red hands you have!"

"If you used the huge, heavy mangle I had to use, you'd have rough red hands, too, my dear."

But no. Grand-daughter is going to have no ugly hands, no bent shoulders, no ruined complexion. For she will run her new home in a new world. A world which plans kitchens for its housewives as it plans the most up-to-date factory for its workers.

A recent survey which has given careful thought to this question lays down the minimum requirements of a home-keeping woman. A sink of the worked-out correct height and depth, a removable or hinged draining board, a wash-boiler

adjoining the sink and under the draining board. It lays stress, too, on the importance of always making space for a rubber-roller wringer, which ensures a perfect wash, with no aching backs or sore cramped hands. That means, of course, the finest of Wringers — the Acme.

A plan for a post-war home which did not include as its most important part kitchen-planning would be a poor plan. And kitchen-planning which did not give careful attention to the home laundry, would not be kitchen-planning at all.

Home laundry conditions are laid stress on in surveys accepted and supported by Ministries and local authorities. One primary condition is that space should always be provided for a rubber-roller wringer. The wringer the housewife herself knows from experience is the best, is the Acme. That is the cleanser-wringer she will demand as part of the sink-unit in her future kitchen.

If your work brings you any problem in connection with the fixing of wringers, please get in touch with us for advice or assistance. We will have much pleasure in helping you.

# ACME





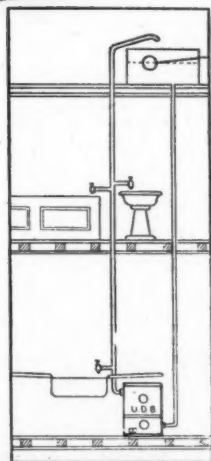
**THE ARCHITECT**  
*and the*  
**POST-WAR HOME**

The Architect's interest in a house begins with the planning of the first blue-print. The Housewife's begins when the removal contractor's van draws up at the front gate.

Sadia, thinking ahead, have produced an Electric Water Heater to satisfy the requirements both of the Architect whose calculations are in terms of pipe work, flues, ventilation, and constructional costs, and of the Housewife who thinks in terms of efficiency, economy and convenience.

The SADIA TYPE U.D.B. (UNDER DRAINING BOARD) will work entirely alone and provides a complete hot water installation while occupying the smallest possible space. As efficient as it is compact, as cheap to run as it is easy to fit, the SADIA U.D.B. ensures a constant hot water supply in bathroom and kitchen and wherever else it may be required. When used in conjunction with a solid fuel hot water installation it ensures a constant hot water supply throughout the year and a cool house in the summer.

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A waterproof insulating coating for all types of roofs.

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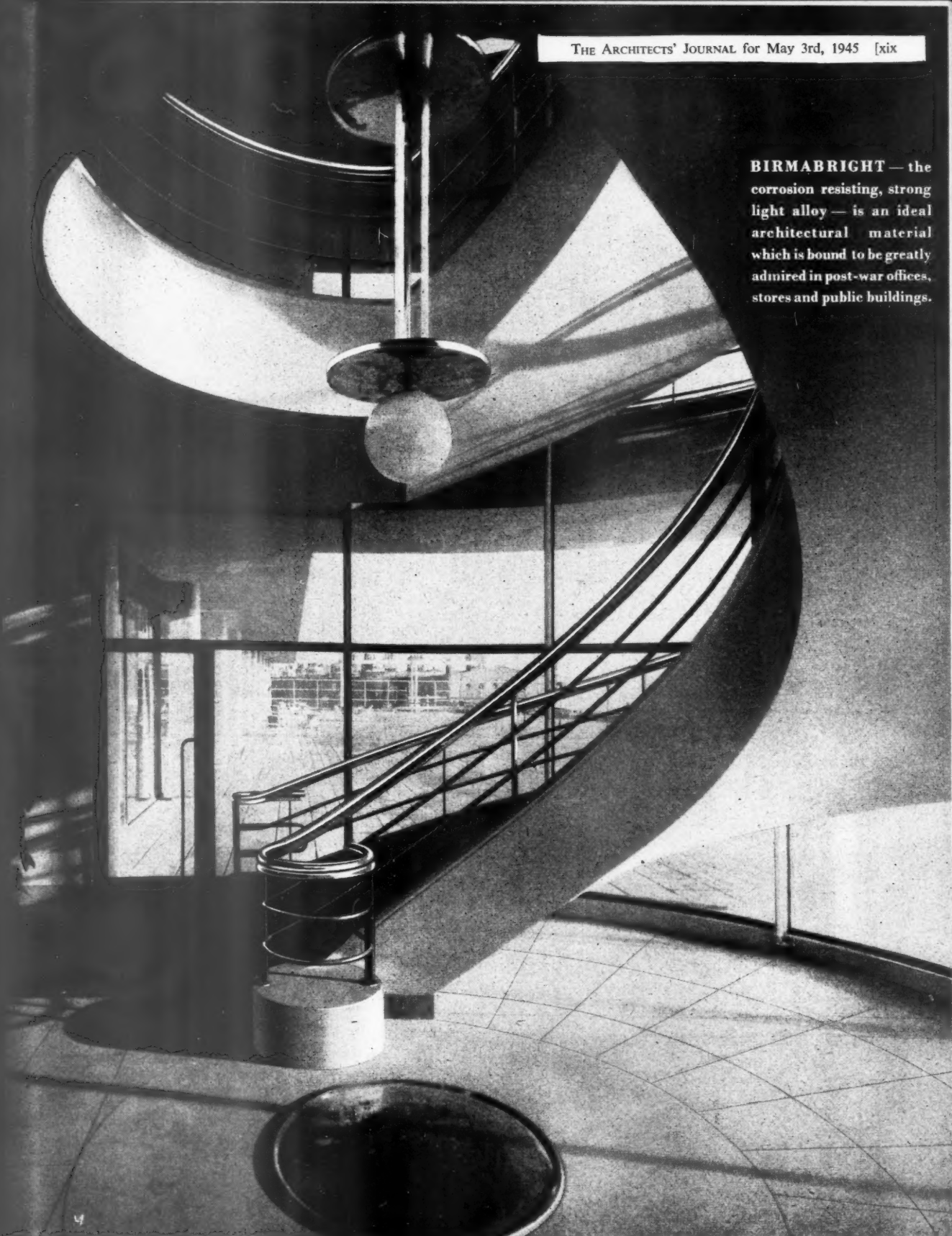
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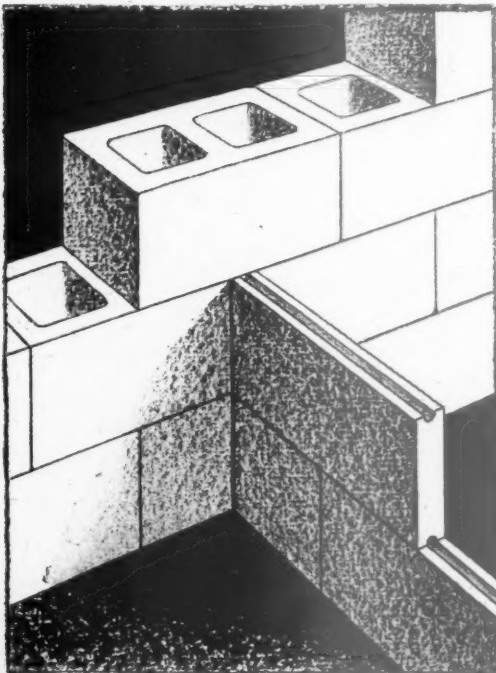
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**CROFT  
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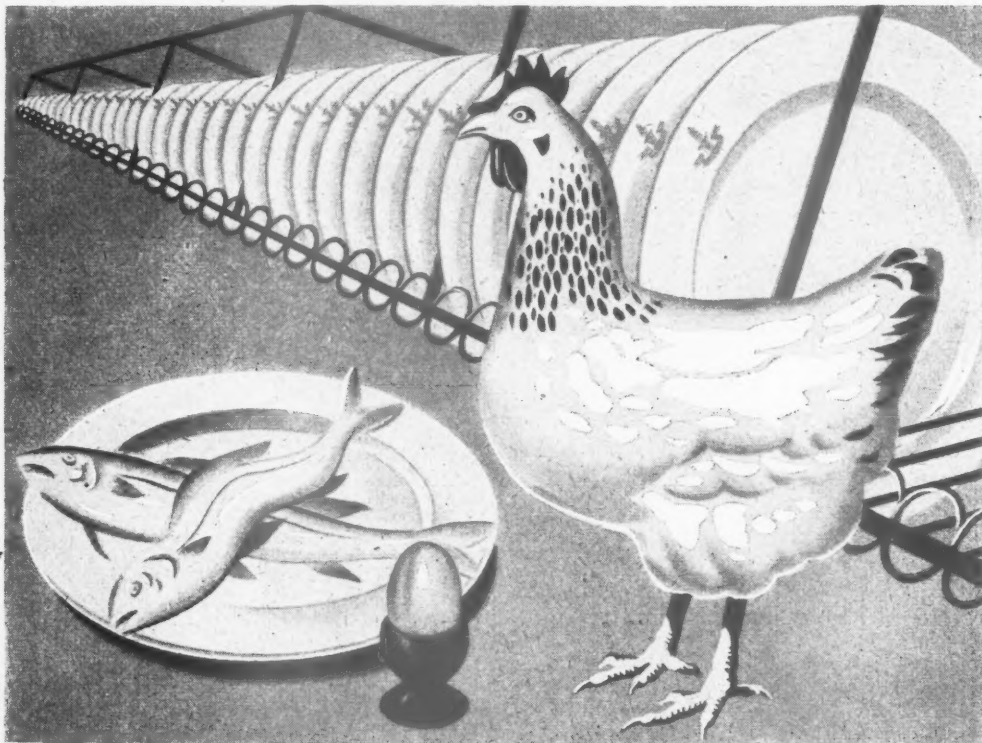
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— one of the many fine woods  
used by this Company to  
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to rebuild.

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MELTON MOWBRAY

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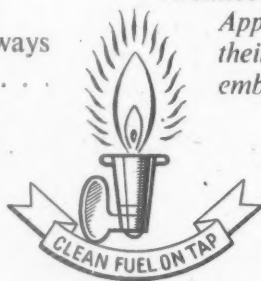
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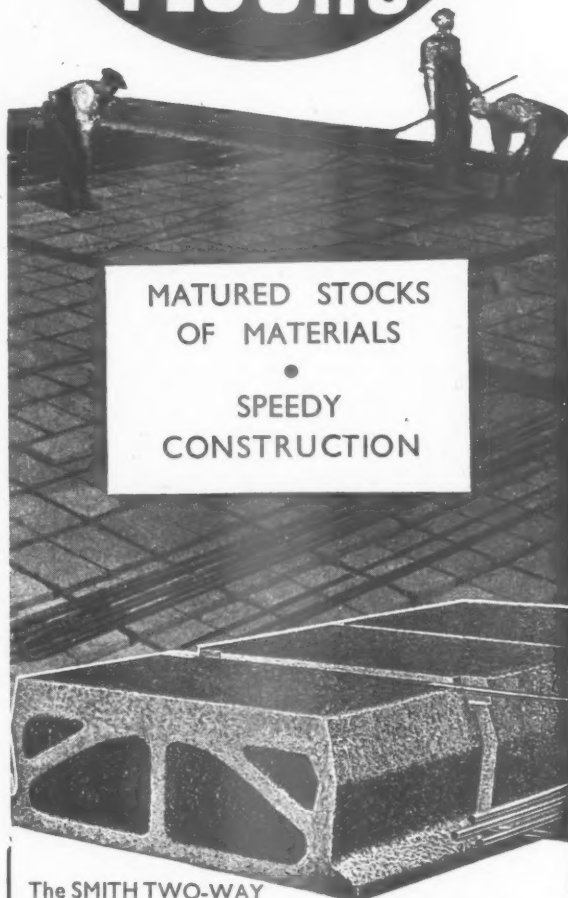
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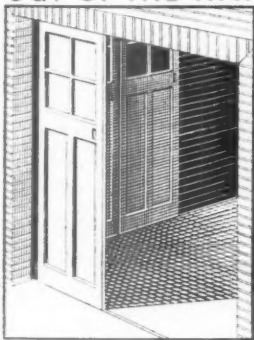
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## OUT OF THE WAY



It is true to say that in post-war building every inch of space will be of the utmost value; take advantage of every scrap of it—when you can, and how you can. This is where King Door Gear comes in—or to be more precise slides along. Doors that slide mean doorways that allow free passage all around them.

For ante rooms, cloak rooms, garages, lifts, etc., and places where space is limited or traffic congestion is likely to occur, sliding doors are the perfect application.

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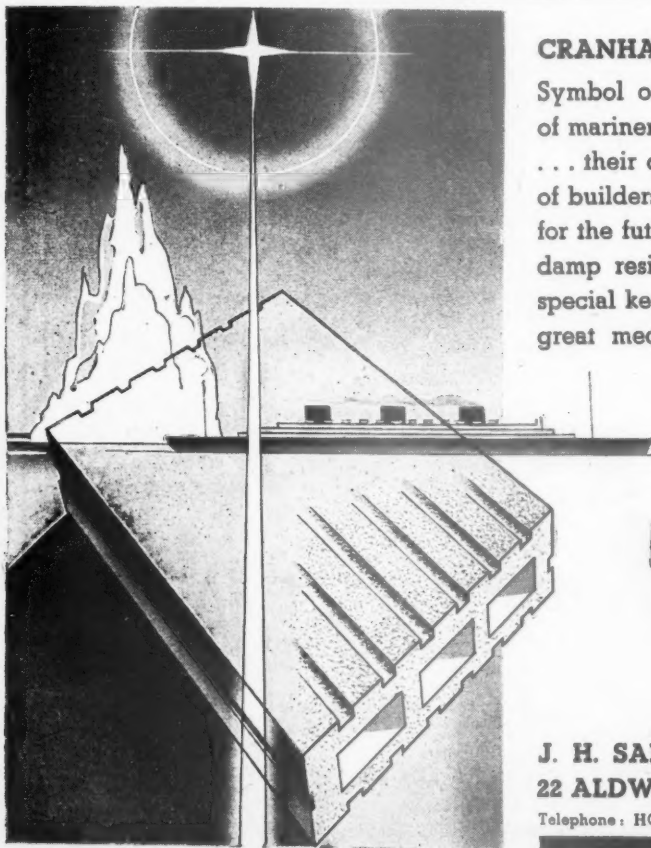
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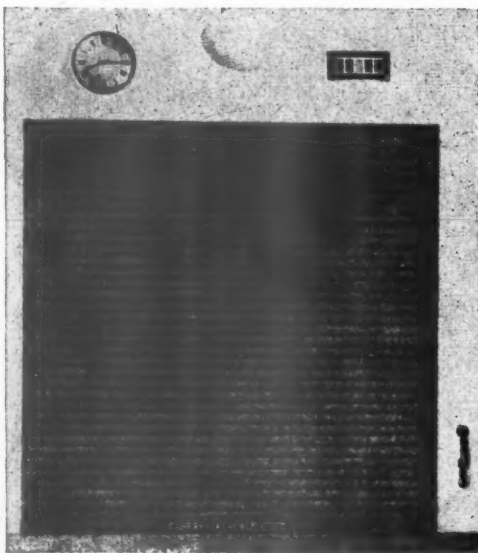
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LIKE THIS MAY HAPPEN  
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Unless buildings are sectionalised  
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FIREPROOF DOORS  
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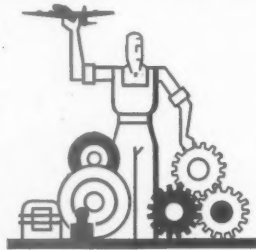
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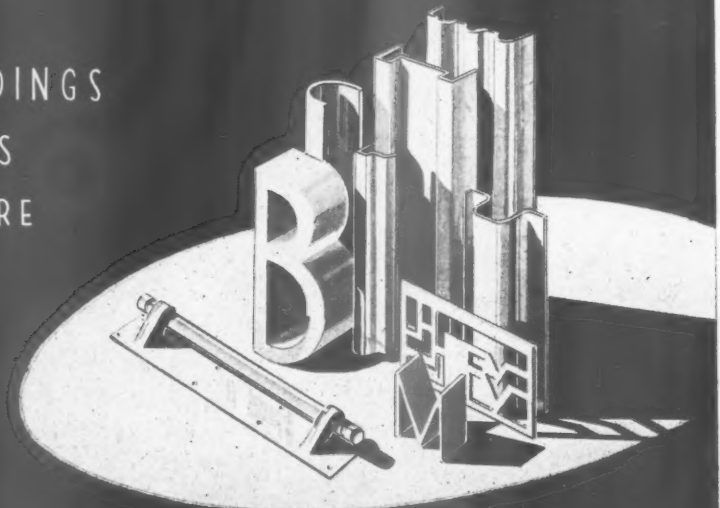


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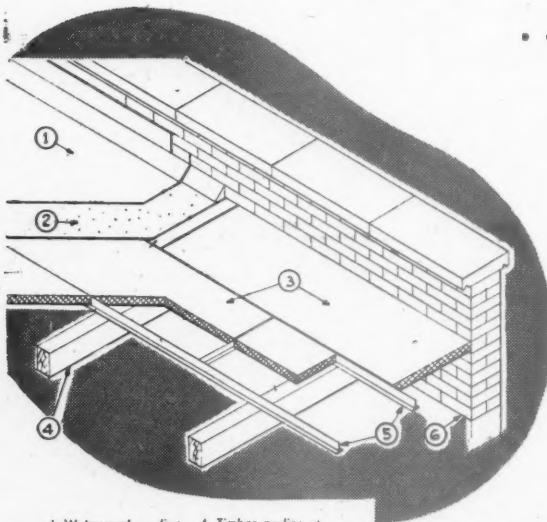
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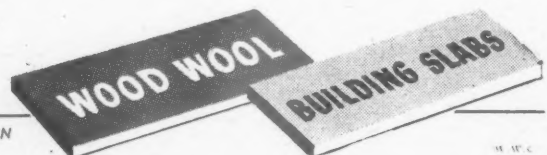
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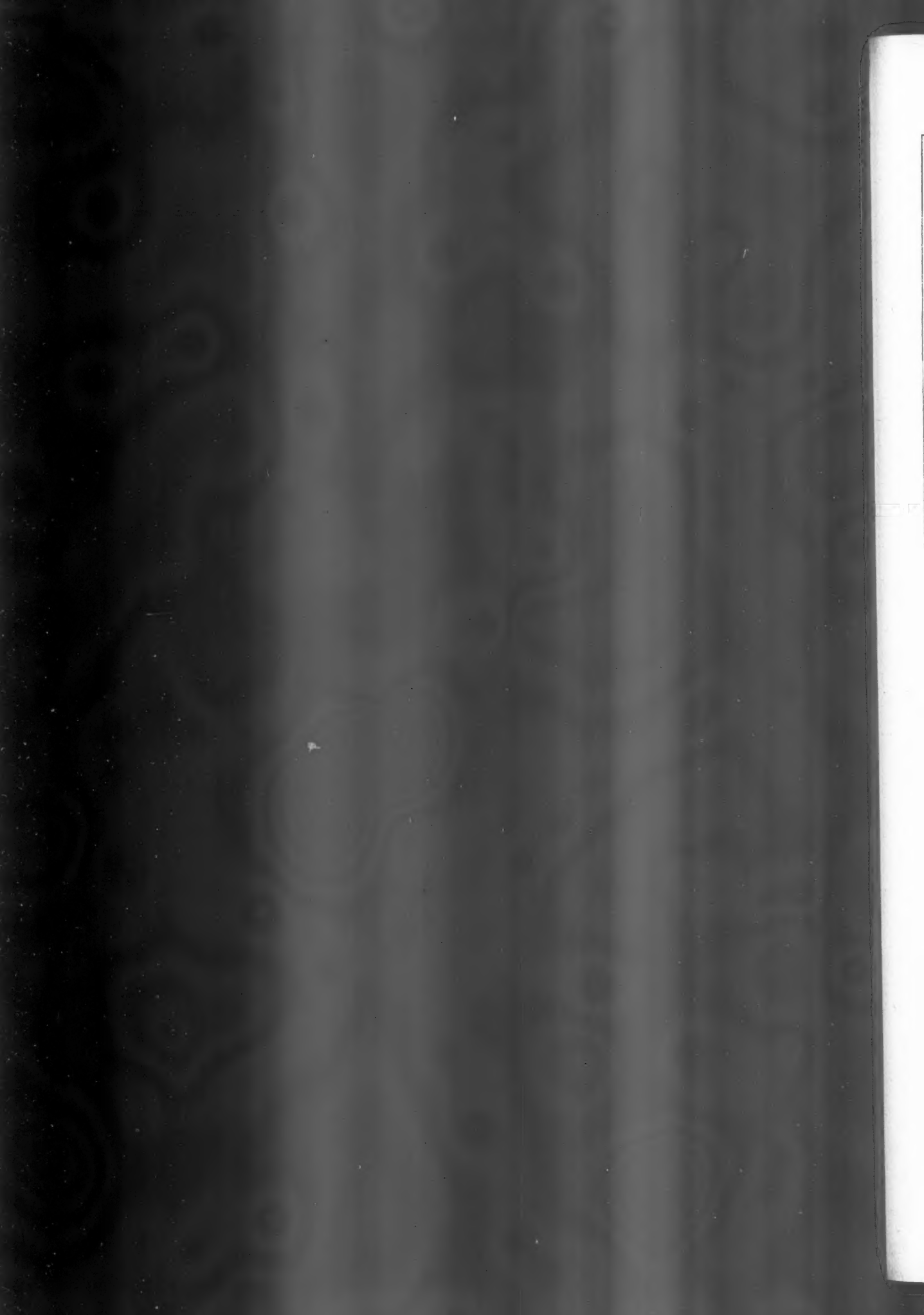
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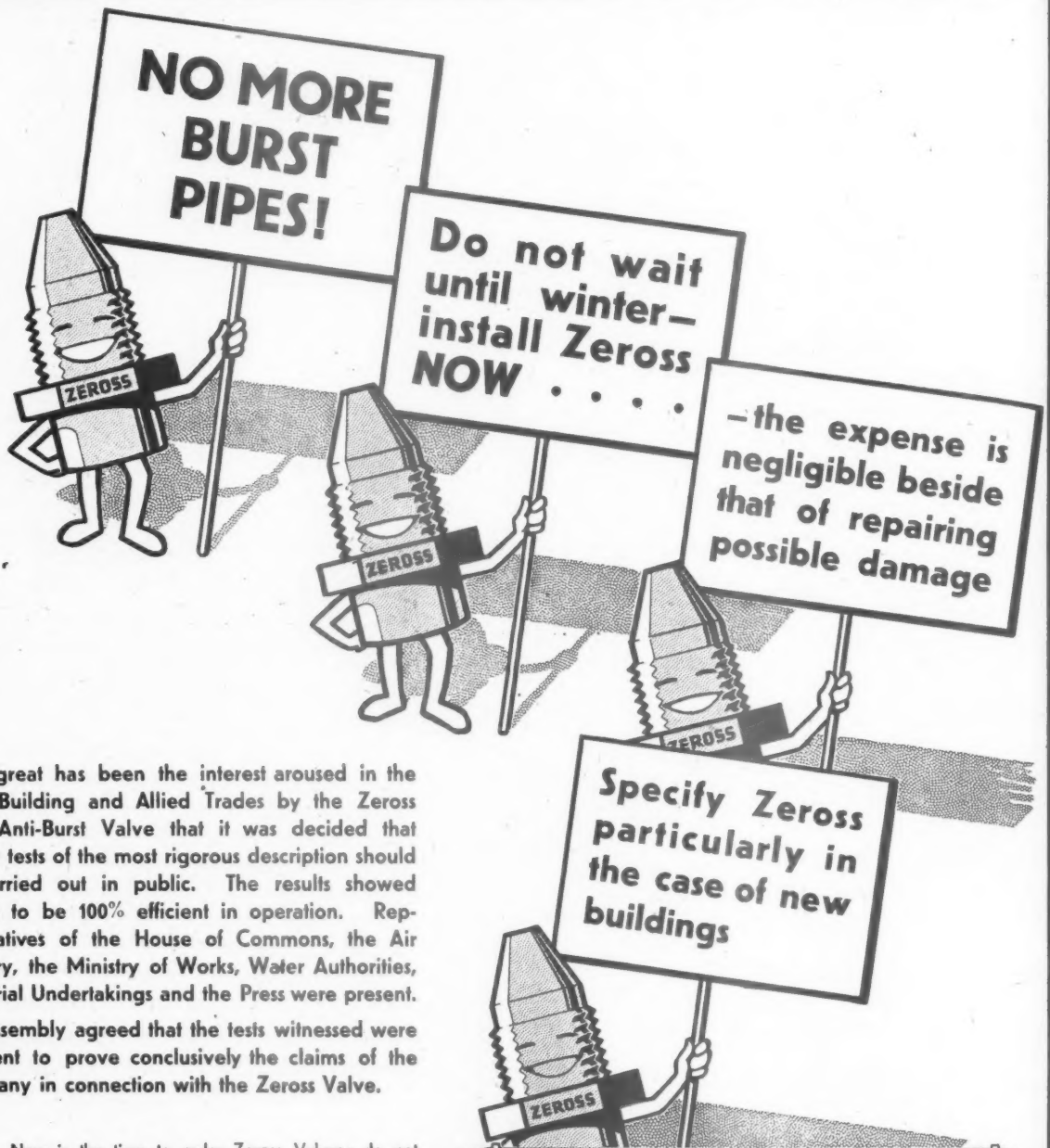
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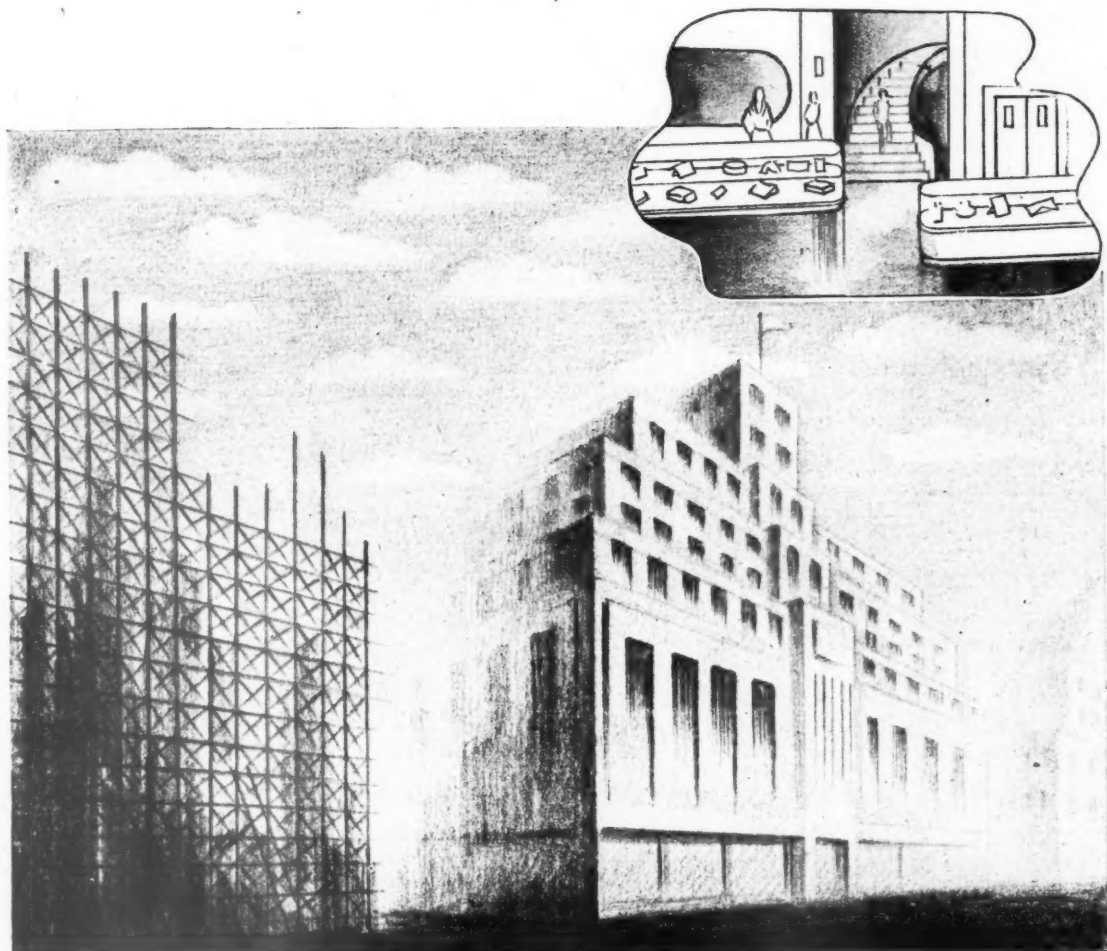
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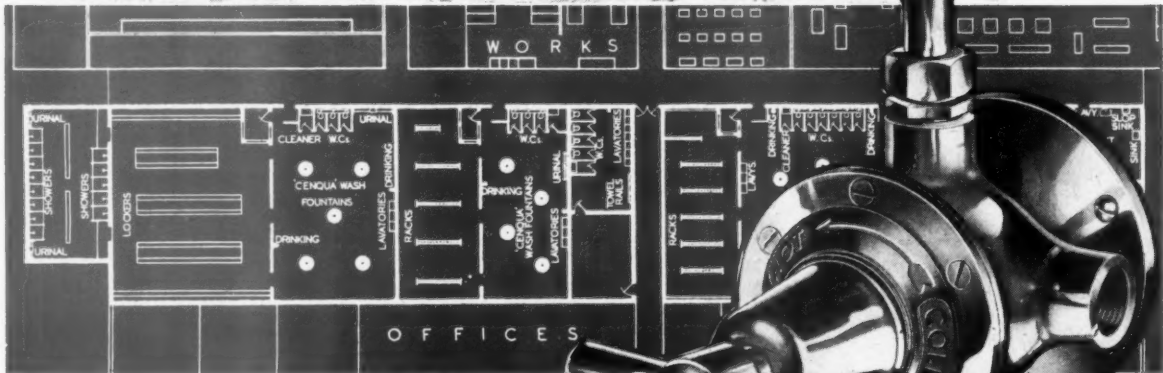
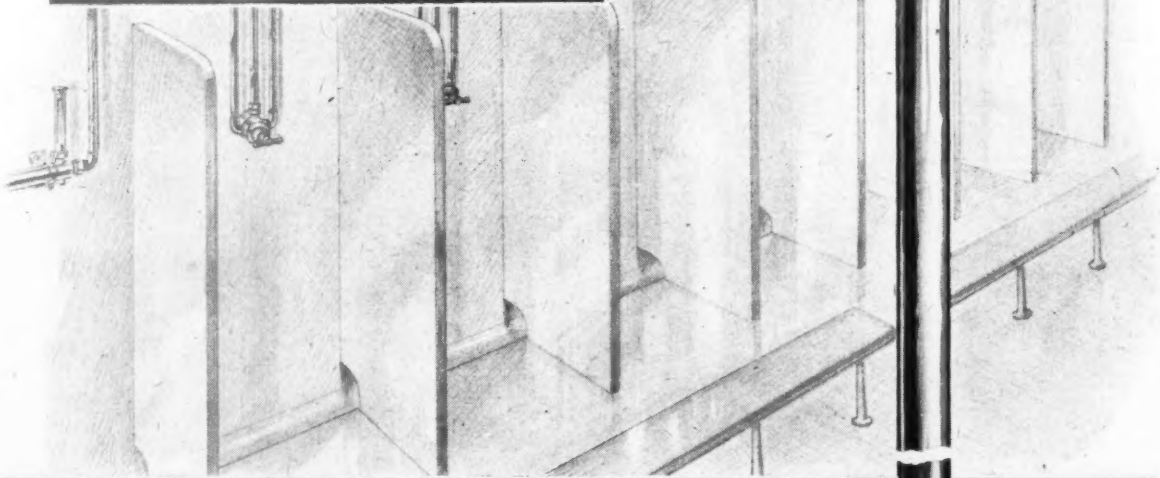
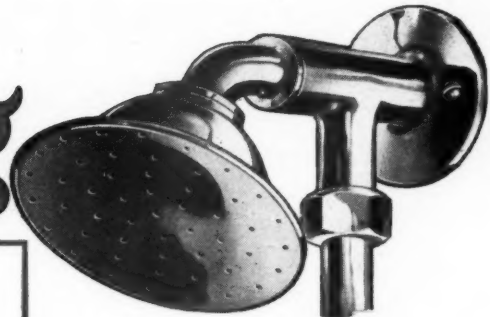


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 <p><b>COOKING</b> Small supplies of very hot water. Day only.</p>				Excellent
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 <p><b>SUNDRIES</b> Illness, hot water bottles, cleaning etc. Very hot water day or night.</p>				Excellent

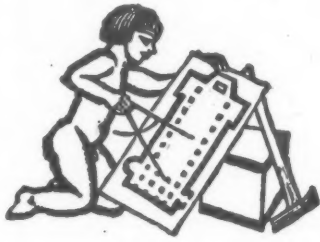
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# DIARY FOR MAY JUNE AND JULY

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

**BIRMINGHAM.** *The English Town: Its Continuity and Development.* At the George Dixon Grammar School, Edgbaston, Birmingham. (Sponsor, T CPA.) MAY 17-31

**BUXTON.** *The English Town: Its Continuity and Development.* Exhibition. At the Pavilion Gardens. (Sponsor, T CPA.) MAY 3-14

**CHESTERFIELD.** *When We Build Again.* Exhibition and film. At the Public Library. (Sponsor, T CPA in collaboration with Cadbury Bros.) MAY 3-9

**LONDON.** H. Conolly. *Planning for Individuals.* At 28, King Street, Covent Garden, W.C.2. (Sponsor, T CPA.) 1.15 p.m. MAY 3

*Rural Housing.* One-day conference. (Sponsor, the Housing Centre.) At 13, Suffolk Street, S.W.1. Programme:—10 a.m. to 11 a.m., *Water and Sewerage in the Countryside.* Speakers: S. R. Raffety, M.INST.C.E.; Mrs. St. John Irvine, Member of Rural District Council, Chairman of the Committee on Post-War Planning of the Devonshire Women's Institutes. 11 a.m. to 11.15 a.m., tea will be served in the Board Room. 11.15 a.m. to 12.15 p.m., *Discussion.* 12.45 p.m. to 1.15 p.m., buffet lunch in the Board Room. 1.15 p.m. to 2.15 p.m., *The Sequel to the Hobhouse Report.* Speaker: Mrs. E. Gooch, J.P., C.C., Member of the Rural Housing and the Design for Dwellings Sub-Committees of the Advisory Committee of the Ministry of Health. Chairman: Professor Sir Patrick Abercrombie, F.R.I.B.A., Chairman of the Housing Centre. 2.45 p.m. to 4 p.m., *Will Decentralization of Industry Affect Village Life?* Speaker: W. Dobson Chapman, M.T.P.L., L.R.I.B.A., F.I.L.A. 4 p.m. to 4.30 p.m., tea in the Board Room. 4.30 p.m. to 5.30 p.m., *The Role of the Voluntary Housing Society in the Countryside.* Speaker: Miss M. E. Merrylees, Assistant Secretary to the National Federation of Housing Societies. A collection of plans of rural cottages from different parts of the country will be on view at the conference. MAY 4

*Royal Academy of Arts.* One Hundred and Seventy-Seventh Summer Exhibition. (Private View, May 4, from 10 a.m. to 7 p.m.) Open to the public on Saturday, May 5. MAY 5 onwards

*Historical and British Wallpapers.* Exhibition. At the Suffolk Galleries, Suffolk Street, S.W.1. The exhibition is the first of its kind to be held in this country, for it is essentially one by an industry demonstrat-

ing its past, its present and in the Section of New Designs perhaps its future. (Sponsor, Committee of the Wallpaper Industry and the Central Institute of Art and Design.) MAY 8

Architectural Science Board Lectures at the RIBA, 66, Portland Place, W.1, May 9, 5.30 p.m.: *Heating Appliances for Small Houses.* (1) *Solid Fuel*, by E. A. C. Chamberlain, Director of Research, Federated Foundries, Ltd. (2) *Gas*, by D. A. Winter. (3) *Electricity*, by E. G. Batt, Chairman of the Domestic Appliances Development Committee, British Electrical and Allied Manufacturers' Association. May 16, 5.30 p.m.: *Heat Conservation in Small Houses.* by A. F. Dufton, of the Building Research Station. (Sponsor, RIBA Architectural Science Board.) MAY 9 and 16

Professor J. D. Bernal. *The Social Relations of Science.* Trueman Wood Lecture. At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 1.45 p.m. MAY 16

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

*Aluminium from War to Peace.* Exhibition at Selfridge's. All sections of the aluminium industry have combined to stage an exhibition that will tell, for the first time, the story of aluminium and its varied applications in the nation's post-war reconstruction plan. Aluminium in housing is featured in the exhibition. There will be planned kitchens and other rooms and a bathroom in all of which aluminium is used to the best advantage. The public will get a pre-view of furniture, domestic appliances and utensils of all kinds. Examples of anodised aluminium ranging from electric fittings to complete kitchens in anodised aluminium are being shown. (Sponsor, Aluminium Development Association.) MAY 30-JUNE 30

**MANCHESTER.** *Worthwhile British Products.* An exhibition of furnishing fabrics, glass, pottery and printing showing our pre-war attainment and chosen from the Manchester City Art Gallery Collection. At the Municipal School of Art, All Saints, Manchester, 15. Open during school hours. Closing 8 p.m. on Monday, Tuesday and Thursday and 12 noon on Wednesday and Saturday. MAY 3-JUNE 22

**NORTHAMPTON.** *Country Life and Country Needs.* Exhibition. (Sponsor, BIAE.) MAY 3-7

# NEWS

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No. 2623. VOL. 101

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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.

## An appeal is being made for £250,000 to REBUILD ROYAL VICTORIA HOSPITAL, Dover, as a memorial to the Heroes of the Battle of Britain.

This hospital still carries on in its 118-year-old and now badly war-scarred building. In the commemorative arch to be part of the main entrance hall of the new hospital will be inscribed the name of every airman who died in that battle. It is also intended to have a light, visible to aeroplanes and ships, shining at night from the hospital tower. The hospital will contain 100 beds and in addition there will be a maternity home of 24 beds. The hospital staff will be housed in a separate nurses home.

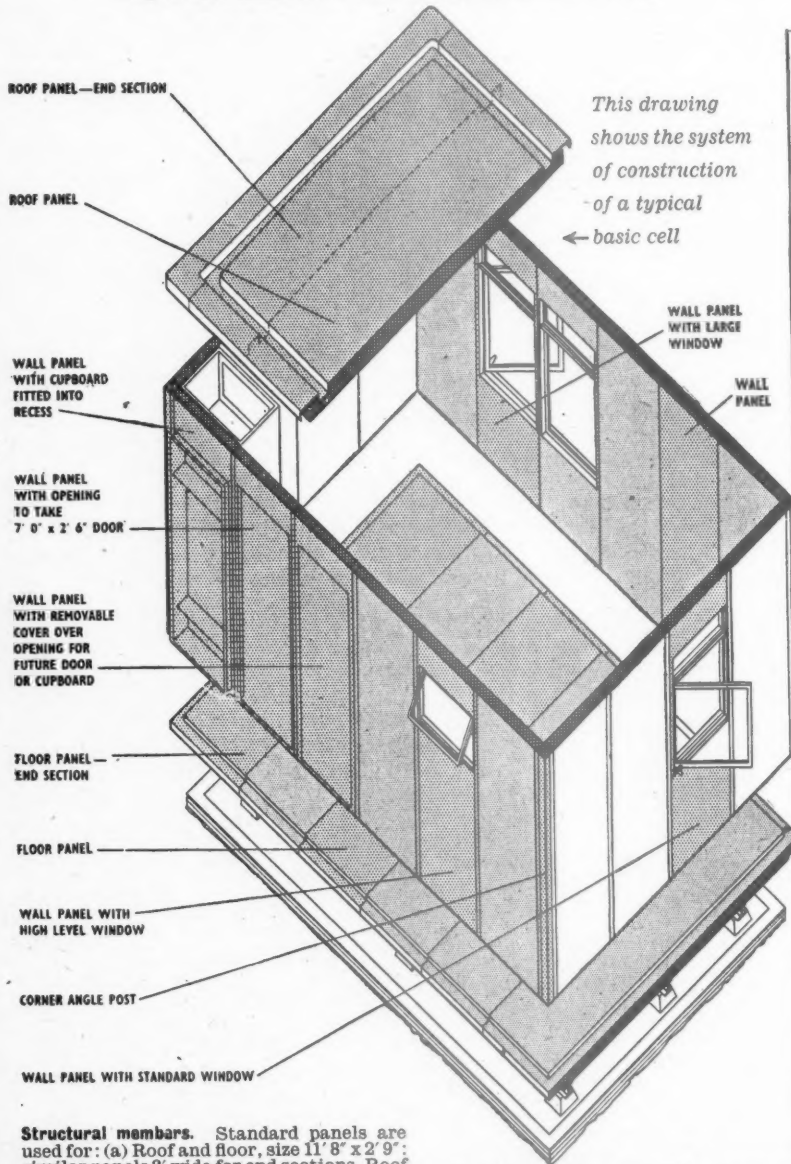
## Mr. George Hicks: The Government's housing TARGET IS UNLIMITED.

At the annual meeting of the Woolwich Labour Party, Mr. George Hicks, Parliamentary Secretary, Ministry of Works, denied the suggestion that 500,000 new houses was the Government's target for the first two years after the war. He continued: It is nothing of the sort. The Government's target is unlimited. If we find we can produce 1,000,000 houses we shall produce them, but after looking at all the factors as we can see them at present, 500,000 is our estimate of what we should be able to produce. The enormous programme we have before us, not only of houses but other kinds of building, will ensure full and stable employment for a building industry over 1,000,000 strong for many years.

# Aluminium and Unit Construction

## Suggestion for an Expanding House

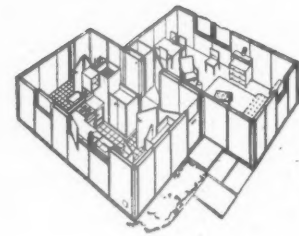
The house is so designed that it can be made up from a number of basic cells, each forming one or two complete rooms. These cells are designed in unit dimensions so that they may be built up from a number of standard panels in the factory.



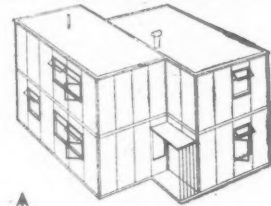
This drawing shows the system of construction of a typical basic cell

**Structural members.** Standard panels are used for: (a) Roof and floor, size 11' 8" x 2' 9"; similar panels 3' wide for end sections. Roof panels are recessed to take a concealed gutter. (b) Outer walls, size 8' 0" x 2' 9", 4" thick, in five variations for door and window openings. (c) Angle pieces, size 8' 0" x 4" square are used at the junctions of the wall sections. (d) Partition walls, size 8' 0" x 2' 9", 3" thick, in two variations for door and cupboard openings. They are constructed from an extruded light alloy frame with a covering of light alloy sheeting; window and door frames are integral with the framing.

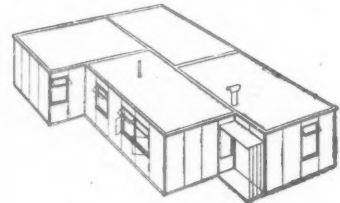
**Method of factory assembly.** The whole cell is assembled off the site. Sequence of operations: (a) assembly of floor sections. (b) assembly of wall panels to form complete wall sections: jointing to floor: fixing of corner posts. (c) assembly of cupboard units and internal partitions and fixing to floor. (d) assembly and fixing of plumbing unit complete with sanitary fittings and heating and hot water system. (e) assembly of roof panels and fixing: fixing of gutter lining.



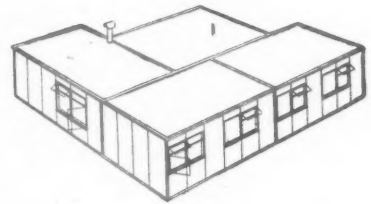
First basic plan, previously shown



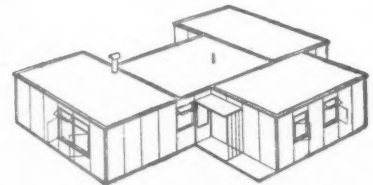
Two-storied development of first basic plan



Further development of first basic plan



Alternative developments of second basic plan



**Site assembly.** The complete cell is brought to the site and lowered on to prepared foundations formed of extruded aluminium alloy joists. The joists rest upon pre-cast concrete point foundations. Drains having already been laid, connections are made to the plumbing unit through access doors arranged in the sheeting of the floor panels. A non-load bearing skirting wall of brick or concrete block encloses the sub-floor. An aluminium alloy channel section forms the removable cover between the cells at roof level, and also forms the eaves.

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## From AN ARCHITECT'S Commonplace Book

A YANKEE ON ENGLAND: THE COFFEE ROOM [From A Passionate Pilgrim, by Henry James]. The latent preparedness of the American mind even for the most characteristic features of English life was a matter I meanwhile failed to get to the bottom of. The roots of it are indeed so deeply buried in the soil of our early culture that, without some great upheaval of feeling, we are at a loss to say exactly when and where and how it begins. It makes an American's enjoyment of England an emotion more searching than anything continental. I had seen the coffee-room of the Red Lion years ago, at home—at Saragossa, Illinois—in books, in visions, in dreams, in Dickens, in Smollett, in Boswell. It was small and subdivided into six narrow compartments by a series of perpendicular screens of mahogany, something higher than a man's stature, furnished on either side with a meagre uncushioned ledge, denominated in ancient Britain a seat. In each of these rigid receptacles was a narrow table—a table expected under stress to accommodate no less than four pairs of active British elbows. High pressure indeed had passed away from the Red Lion for ever. It now knew only that of memories and ghosts and atmosphere. Round the room there marched, breast-high, a magnificent panelling of mahogany, so dark with time and so polished with unremitting friction that by gazing awhile into its lucid blackness I made out the dim reflection of a party of wigged gentlemen in knee-breeches, just arrived from York by the coach. On the dark yellow walls, coated by the fumes of English coal, of English mutton, of Scotch whisky, were a dozen melancholy prints, sallow-toned with age—the Derby favourite of the year 1807, the Bank of England, her Majesty the Queen.

*Designed by the Aircraft Industries Research Organization on Housing, the ALUMINIUM HOUSE TO BE PREFABRICATED AT AIRCRAFT WORKS has been approved by the Ministry of Works.*

Modifications in design and construction are being made so that manufacture can start as soon as the Ministry of Aircraft Production can allot the factory capacity. The aluminium house is made in four sections, each complete in itself. Within a few hours of their arrival on the site, these four sections are coupled by interlocking fastenings, and when the services have been joined up the house is ready for occupation. The house is about the same size as other approved types of temporary houses. It is a single-storey building with front entrance and hall giving direct access to the living room, bathroom, and both bedrooms. There is space in the hall for a pram. The kitchen, which has a side entrance, is separated from the living room by a glazed partition. The bedrooms are on the opposite side of the hall from the living quarters, and between the various rooms are built-in cupboards. The floor frame is in aluminium alloy faced with normal timber floorboards. The outside walls are faced with alloy sheet, painted with a rough-cast finish of stone appearance. Inside, the walls are faced with plasterboard. The wall-filling is a light-weight aerated cement. The roof is of aluminium alloy sheet packed with cork.

*After analysing questionnaires from nearly four thousand women, the North-West England and North Wales Area of the British Electrical Development concludes that the minimum requirements of THE WORKING PORTION OF FUTURE HOMES in the NW area will be as follows:*

A Working Kitchen of ample size, with sufficient window space to ensure good daylight. The actual dimensions of the floor

space were not discussed, but it appears that areas of less than, say, 110 sq. ft. will not be acceptable. *Kitchen Equipment:* This should include an electric cooker of the conventional type, a sink (preferably of stainless steel) with draining board, an electric water heater, and space for a 3 to 4 cub. ft. refrigerator, preferably two lighting points, so that one can be arranged to give good light over the sink. A coal-fired cooking range is not necessary, but some form of electric heating should be provided. *Pantry:* This should be provided in addition to the space for the refrigerator, with a stone slab shelf, and a window wired to prevent the ingress of insects. *Utility Room:* This should be of at least 60 sq. ft. and have a deep sink for washing, with hot and cold water taps, and space for an electric wash boiler or electric washer, the latter preferably to have a heating element to allow the contents to be boiled. Space should be sufficient to allow a drying cabinet to be fitted with access to the open air for efficient ventilation. *Water Heating (for HW taps in kitchen, bathroom, and utility room):* Hot water may be provided by means of a back boiler heated either from a coal fire in the living room or by a slow-combustion stove in the kitchen. All temporary houses provided by the Ministry of Works will have an electric immersion heater in the hot-water cylinder. It is therefore not too much to expect that every permanent house will be similarly equipped. *Heating and Power Plugs:* The following minimum number of power plug points is recommended in addition to 1 or 2 lighting plugs in each room: Cooker and kettle (separate control unit), kitchen (3 points), downstairs living rooms, utility room and larger bedrooms (2 each), hall, top landing and smaller bedrooms (1 each).

*St. Pancras Borough Council is seeking the approval of the Ministry of Health to CONVERT 200 HOUSES INTO FLATS.*

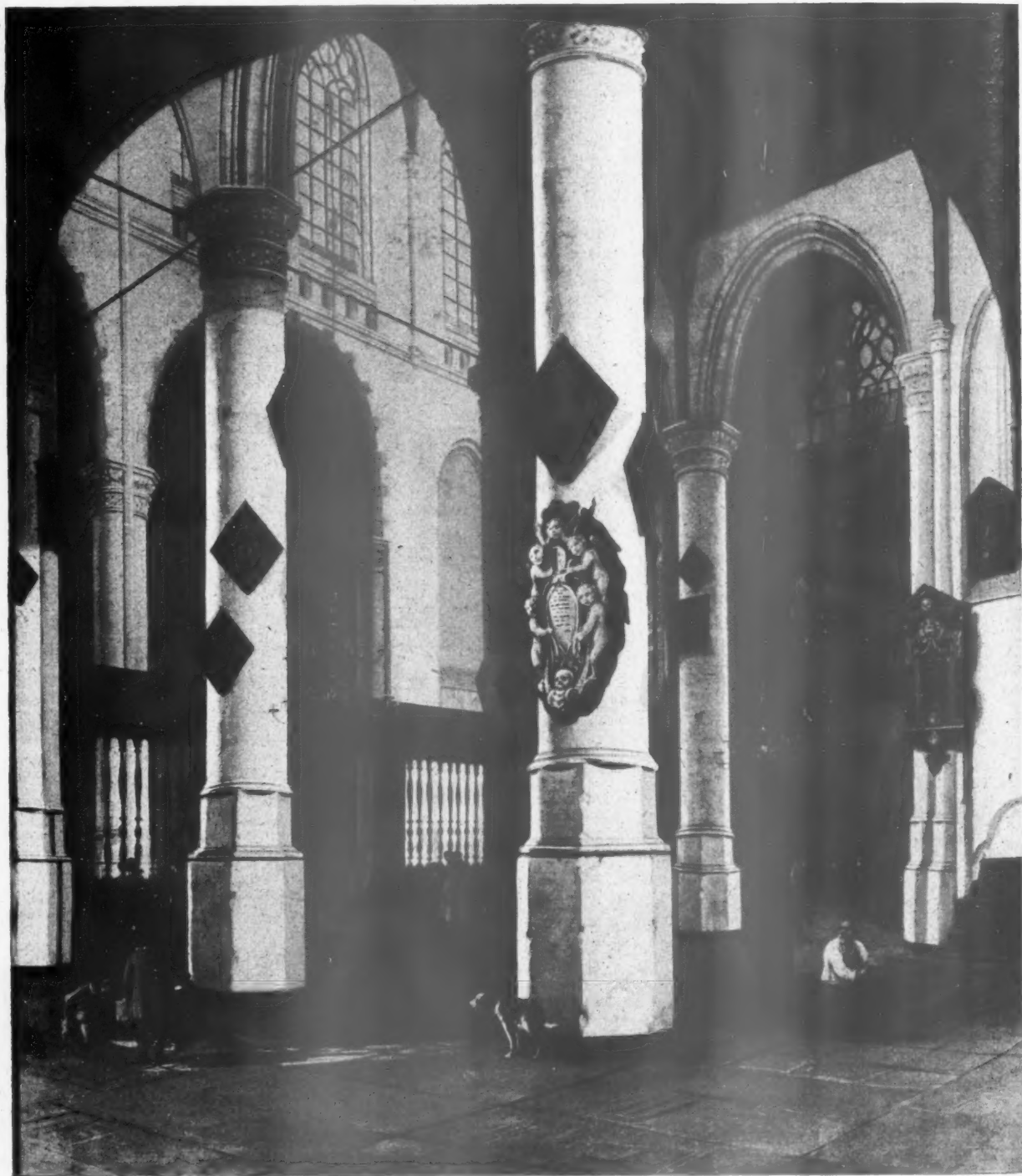
The Council estimates that it will cost £400 to convert each flat. Requisitioning powers have been sought following the Housing Committee's report that 300 to 400 vacant houses and 750 other empty properties in the borough were suitable for conversion.

★ *The Ministry of Health is prepared to consider applications from local authorities for permission to SEEK TENDERS TO BUILD PERMANENT HOUSES as when and where sites are ready.*

The erection of permanent houses will include the rebuilding of destroyed houses belonging to the local authority. Readiness means: (1) that the site on which the houses are intended to be built has been approved by the Minister, acquired by the authority and is immediately available for building operations; (2) that the lay-out of the site and the house plans of those houses on the site which the Council proposes to build as a first instalment have been approved by the Minister; (3) that any advance servicing of the site which is necessary, e.g., construction of roads and sewers has been completed. The number of houses for which permission can be given to seek tenders must depend on the estimated amount of labour likely to be available at the time when the houses are built. This number will be settled by the Minister in each case when the authority is ready to obtain tenders. Approval of tenders will depend on the prices obtained.

*After a total service of forty-one years with the Office of Works and the Ministry of Works, SIR JAMES WEST HAS RETIRED.*

Sir James West, O.B.E., F.R.I.B.A., has retired from his post as Chief Architectural Adviser to the Ministry of Works. He entered HM Office of Works in 1904, and became Chief Architect in 1934. He was a member of the British Building Mission to the USA in 1943. Among the numerous architectural works he designed, during his 41 years' service, were the RAF Training College at Cranwell, Lincs.; Royal Courts of Justice, Belfast; Ministry of Pensions, Acton; the Consulate-General, Alexandria; the Catafalque at Westminster Hall for the Laying-in-State of King George V; and the Annexe to Westminster Abbey for the Coronation of King George VI and Queen Elizabeth.



### Old Dutch

With so many of the old buildings and monuments of Europe irreparably devastated, let us hope that, in spite of the slow winking out and mopping up process that must be taking place in the difficult military country of Holland, most of the irreplaceable Dutch monuments will remain unharmed. Above is a painting of such a typical building—Nieuwe Kerk at Delft—painted in the seventeenth century, by Hendrik van Vliet famous for his pictures of Dutch church interiors. Its calm spaciousness and shim-

mering—but far from dim—religious light, affords a pleasant contrast to our wartime utility building and the current spate of temporary housing prototypes, feverishly erected and so cramped and unadorned. The picture reproduced above comes from the John Walter collection, and is on view at Roland Browse and Delbanco's new gallery at 19, Cork Street, London. It is mentioned in Waagen's *Art Treasures in Great Britain* as of "masterly perspective, tone and treatment."

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**Brighton Council has bought  
THE LAST PAINTINGS  
OF REX WHISTLER.**

Rex Whistler was killed in France with the Welsh Guards last year. The paintings were executed on the walls of a house in Preston Park Avenue, Brighton. One is *The Spirit of Brighton* and the other is of the Welsh Guards crest, which the town will present to the regiment.

**The toll-gate bridge over the River  
Parret at Burrowbridge, near  
Bridgwater, Somerset, one of the  
last in the country has been de-  
clared FREE FROM TOLL.**

The bridge is on the main road from Taunton to Wells. Before the war, when motor-cars streamed along the Taunton-Glastonbury road, as much as £10 an hour was taken in tolls. Altogether more than £25,000 has been taken since the bridge was built for £3,000 in 1915. Somerset County Council has paid £600 to the local toll commissioners for the transfer.

**Mr. R. Donald Scott, M.P. :  
The housing problem CANNOT  
BE SOLVED QUICKLY  
by conventional British  
methods of building construction.**

"There will still be a gap which can be bridged only by the timber house," he declared at the opening of the Timber Development Association's exhibition of timber-house designs, at Newcastle-upon-Tyne. Mr. Scott said that the timber house can be erected with a remarkably small number of man-hours, and that early occupation can be made without waiting for the drying-out period associated with a brick house.

**Mr. Roy W. King appeals to the  
Ministry of Works to CUT  
CLEAR FROM HOUSING.**

Speaking at a luncheon in London, Mr. Roy W. King, President of the Householders Association of Great Britain, appealed to the Ministry of Works, whose proper and logical sphere he said was to maintain Government property and to support research into new building material, to cut clear from housing now before calamity overtakes it and the country. Mr. King called for the release of key men from the forces. He said: If house builders are released from their present bondage permanent houses will arise slowly at first but soon in a steady stream until the industry's target of 400,000 a year is reached. The association has designed what is to be known as the HB house, a sound practical plan for houses in pairs or blocks. They are to be of full size three-bedroom type with an outside floor measurement of 960 sq. ft., embodying departures from tradition in the construction of the walls and roofs. The association is confident that these houses, which will be permanent, can be produced complete with all services for £985 each, excluding roads and land. The association has a scheme for the guaranteeing and certification of houses to be built in the post-war period and generally for improving and maintaining the standard of house construction. The scheme is to be controlled by an independent body known as the Housing Standard Certifying Council.

## EXPERIMENT IN PLANNING

**T**HE laboratory for a new planning experiment is Northern Ireland, a small country about the size of Yorkshire with a population of 1¼ millions, ½ a million of whom live in Belfast, the capital.

Although a small country it is by no means an insignificant one. Within its boundaries are to be found the largest productive plants in some of the world's great industries; ships built in the yards of Harland and Wolff are to be found in the far corners of the earth, and Ulster linen is world famous.

It is therefore not surprising to find that Northern Ireland has the initiative to conduct an experiment the outcome of which may make planning history. In contrast to Scotland and Wales it has the advantage of having its own Parliament and this, together with its compact administration, makes for a strong and unified direction.

The planning set-up is unique. It is National Planning on a Regional Scale.

The central authority is the Ministry of Health and Local Government, and the Planning Authorities are the County, County Borough, and the Urban District Councils. Each of the six counties has appointed a Planning Officer, and the main towns have done likewise. The whole Province is thus in process of detailed survey, and the first of the Draft Schemes have been submitted to the Councils.

Guiding and co-ordinating all these Authorities are (1) the Planning Advisory Board, and (2) the Planning Commission. The Board consists of a body of industrial leaders, public administrators, and representative citizens under the chairmanship of D. Lindsay Keir, Vice-Chancellor of Queens University. Their job is to evaluate the needs of the people and the resources of the country. The Commission consists of technical representatives of the various authorities including Government Departments and their job is to meet these needs and develop these resources by properly co-ordinated planning. They have statutory authority under the Northern Ireland Interim Development Act, 1944, which makes them a Court of Appeal in cases where the interests of two or more Authorities are involved, or where the issue is obviously a national one.

This planning machinery, originated by W. R. Davidge, has evolved under the guidance of a team of young officers of the Ministry of Health and Local Government headed by the chief architect, Denis Winston; Mr. Davidge being retained as the Government's Planning Consultant, and Chairman of the Planning Commission.

The plan illustrated in this issue is an outline plan for the Belfast area which includes the blitzed districts of the City, and has been prepared now to provide a framework into which urgent housing developments may be fitted.

Perhaps the most significant paragraphs of the report are the

final ones in which the Commission makes it quite clear that the plan can never be achieved unless far reaching additional legislation coupled with adequate financial aid is forthcoming from the Government.

It would indeed be a tragedy if the Northern Ireland Government, having taken such progressive steps in the field of planning, should make all this fine work ineffectual by failing to implement the Commission's recommendations by appropriate legislative and financial action.



*The Architects' Journal*  
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N O T E S  
 &  
 T O P I C S

THE ULSTER GROUP

Belfast has a population of 500,000 and a rateable valuation of some £3,500,000. It has a City Surveyor, controlling an architectural staff, but no City Architect. Recently a Committee investigated whether a City Architect should be appointed, and after touring up and down England at the ratepayers' expense, it finally decided that the City Surveyor was all that was required, since *there was not sufficient work to warrant the appointment of a City Architect*. Note the size, appearance, and population of the City and draw your own conclusion. Note, too, that the local body of architects (the Royal Society of Ulster Architects) and the Government Department concerned have been fighting for the appointment of a City Architect for five years.

The Government has recently appointed a Housing Trust to expedite housing in Northern Ireland. The housing situation here is as bad as in Scotland, and that's saying something. There is a danger that housing may

kill planning, and so far the Housing Trust has not declared its policy in relation to the planning schemes in the Province. The Trust is made up of five members—four men and a woman, with an average age of 44. They are unpaid and have been selected for their long record of public service.

The present position of planning in Northern Ireland, therefore, does not seem to be very encouraging. Let us hope then that the propaganda activities of a body of ten young architects called the Ulster Planning Group will help matters. This group, founded by Mr. McKee (the author of the article in the Physical Planning Supplement this week), though small and impecunious, is a lively one. Through its energy the *Living in Cities* Exhibition was brought over to Northern Ireland.

The Group has also held a very successful exhibition on the planning of Belfast. It was opened by the Prime Minister of Northern Ireland, and during its run was implemented by lectures from well-known people like Clough Williams-Ellis and W. R. Davidge. This exhibition took six months to prepare, the ten members working at it in their spare evenings and at week-ends, and paying for it out of their own pockets.

Later the Group held an exhibition on housing. This time CEMA gave a helping hand and paid part of the expenses. Full support to the Ulster Group, so gallantly fighting the planning battle against public and official apathy.

NEWS FROM SOUTH AFRICA

Some trenchant remarks about the building situation in South Africa come in a letter from a contact over there,

and, though rather gloomy, are worth putting on record.

"In the Press recently," he writes, "I noticed quite a few write-ups about the South Africa number of the *Architectural Review*, and I think it arrives at a very opportune moment. SA architecture and building is, to my mind, of a very low standard. Most of the building is speculative. We have good architects in the country, but we lack really good artisans. The Union is strong, and they limit their mediocre bricklayers to about 270 bricks a day. Even Churchill used to lay 600-700."

"At the moment, of course, building in SA is out of the question, prices of land and material having gone up over 100 per cent. since the war broke out. Prices pre-war were high as compared with England. I heard of a case the other day, a house near me on about  $\frac{3}{4}$  acre, which before the war would have been dear at £4,000, sold for £12,000. One would think the Government could do something about such inflation, but they seem to be either helpless or ignorant of correct methods."

"Native housing is also a problem. The native has got little or no money, but when he is brought into the towns and detribalized he may come up to £10 a month. He must be housed, yet our Government cannot get materials cheap enough or labour to put up the rough shacks natives would be happy with. The Building Unions refuse to allow semi-skilled natives to erect their own houses; they insist in putting highly paid bad workmen on the job. Thus the cost of the native housing is just ridiculous. Housing for natives should follow the nice clean lines of their kraals, with plenty of space and trees such as we love to see in SA, especially space, but you should see some of the locations they put up for the poor blighters."

"I feel myself there is going to be one hell of a riot some day in SA with the natives. Working class houses to-day cost on an average £2,500 on an  $\frac{1}{4}$ -acre stand. The average working man's wage is between £25 and £40 per month. The cost structure is terrific



in SA, and the £ is worth about eight shillings. They talk a lot about secondary industries after the war, but the whole idea is laughable in view of the cost structure, and, what is more important, the poor quality of the stuff turned out."

\*

"The trouble in SA is that the whole country is run by financial combines. Men who have no idea of genuine economic endeavour, and who are concerned only in floating companies, making profits and then in getting out, leaving the public with the shares and the baby."

BOOKS WANTED

I was glad to see that at last someone has realized that people in the Services sometimes like to read books other than *No Orchids for Miss B.* For more than five years men and women in the Forces have complained of the difficulty of getting hold of books. Most of the organizations that have, in the past, undertaken to provide literature for the troops, have been run on a voluntary basis and, although their work has been appreciated, they were too often misguided by the belief that when people put on uniform they want only the lightest and most trivial reading-matter.

\*

Anything that looked like being the least bit serious was therefore barred.

This has been particularly hard on those who joined the Forces when they were reading for a professional qualification. How many people have had letters from young architect friends overseas begging for any kind of architectural literature which might save them from getting too rusty?

\*

The Central Book Depot now intends to provide a library of eight million volumes, which will include travel books, biographies and books of educational value, which will supply reading-matter to the Forces wherever they may be. The photograph reproduced here—and recently widely published in the daily Press—shows some of the books scheduled for Forces overseas. The book which is receiving special attention is Gibberd's *Architecture of England* (Architectural Press), which seems to indicate that members of the ATS may not only want books on domestic science and romance. I hope that the Central Depot has included in its lists many other books on architecture.

HEALTH AND LONGEVITY

Extract from *Who's Who*: "Willink, Rt. Hon. Henry Urmston, P.C., 1943; M.C.; K.C., 1935; M.A.; Barrister-at-Law; M.P. (Nat. C.) Croydon (North Division) since 1940; Minister of Health since 1843 . ." To what do you attribute your great age, Mr. Willink? Health?

ASTRAGAL



LETTERS

Sir Charles Reilly

H. F. Hoar, B.A., F.R.I.B.A.,  
A.M.T.P.I., Lt. R.E.

R. L. Whiston

SCR Architecture and Planning Group

SIR,—I should be very glad if you would draw the attention of any of your readers who might be interested to the formation of an Architecture and Planning Group of the Society for Cultural Relations with the USSR. I have just been honoured with the presidency of this Section, which, as part of a Society which has worked since 1924 to spread knowledge about Soviet culture and institutions in this country, will work on the same lines as the SCR's Writers' Group (of which Mr. J. B. Priestley is President), the Science and Education Sections, all of which exist to serve those interested in specialized aspects of cultural interchange.

All those professionally engaged or interested in architecture, townplanning, building, engineering, and allied matters are invited to become members and so help to strengthen that mutual understanding which will most fully implement the great decisions of the Crimean conference.

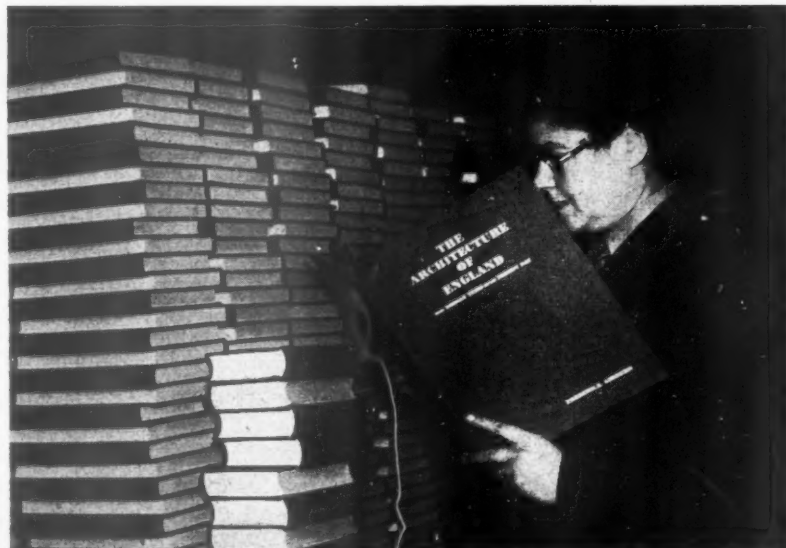
CHARLES REILLY,  
President, SCR Architecture & Planning Group

The Forces and Competitions

SIR,—I am sending you this copy of a letter to the Secretary RIBA for publication in the ARCHITECTS' JOURNAL. This handicap of being unable to compete is keenly felt by many I have spoken to. If nothing else, it would relieve the unutterable boredom.

"To the Secretary RIBA

SIR,—In view of the number of competitions which may be opened in the future and before demobilisation is complete, may



A pile of books scheduled for Forces overseas. A member of the ATS studies *The Architecture of England*. See Astragal's note.

# BLOWN TRANSPARENT PLASTIC TEARDROP



At the beginning of this war, any large-scale use of transparent plastics was still a novelty, by no means free from technical limitations. Such materials were more widely used in gun-turrets and cockpit covers for military aircraft than anywhere else, and a snag here—where wide visibility was essential—was the necessity of obstructing the transparent sheets by opaque glazing bars. The present-day cockpit cover, on the other hand, is a striking instance of the progress made in the use of transparent plastics, and deserves its name of *Teardrop*, for not only does it resemble a drop of water in shape but it is equally transparent and free from obstructions. Most of the newer British and American fighters have teardrop covers, and the example illustrated (on a Hawker Typhoon) is of particular interest because of its method of production—a method which the plastics industry

has borrowed and adapted from the old craftsmen in glass: a single sheet of Perspex is blown into the required shape. The process is said to give well-nigh perfect optical qualities so that the pilot has a practically undistorted view when looking back over the tail of his machine. This cover, evolved by Triplex in co-operation with the design department of Hawkers, slides to allow of normal ingress and egress, but it can alternatively be jettisoned by the pilot to allow of abnormal egress. As pleasing to the eye of the aesthete as to the aerodynamic expert, the smooth line of the teardrop cover is surely to be counted among the minor triumphs of wartime design. Though costly at present, it is hoped that such plastic materials as Perspex may be produced relatively cheaply before long. If so, it should have great practical and aesthetic possibilities in post-war building.

arrangements be made for members of the Forces to compete on something approaching equal terms with those architects at home who are not handicapped by distance from home, lack of materials, books, and necessary data? There are many here in the East who are hundreds of miles (myself fourteen hundred) from the nearest drawing board and T-square. Would it be possible for us to submit *esquisses* to scale for competitions (such as the Crystal Palace) in the manner of the preliminary drawings for the Victory or the Soane? Possibly a shortened form of the conditions of a competition could be evolved for dispatch by air."

H. F. HOAR

## Teapot Hall

SIR,—I was very interested to see the photograph and your reference to the above cottage.

I have noticed the gradual disintegration of this old place during the past seven or eight years when I have been visiting this neighbourhood. I enclose a rough sketch made from memory after passing the cottage on the 8th of last month, and you will see that your remarks regarding its extensive decay cannot be described as an over-statement. It seems strange that a building has to fall into this condition before anything is done about it. Presumably it is no longer regarded as suitable for habitation.

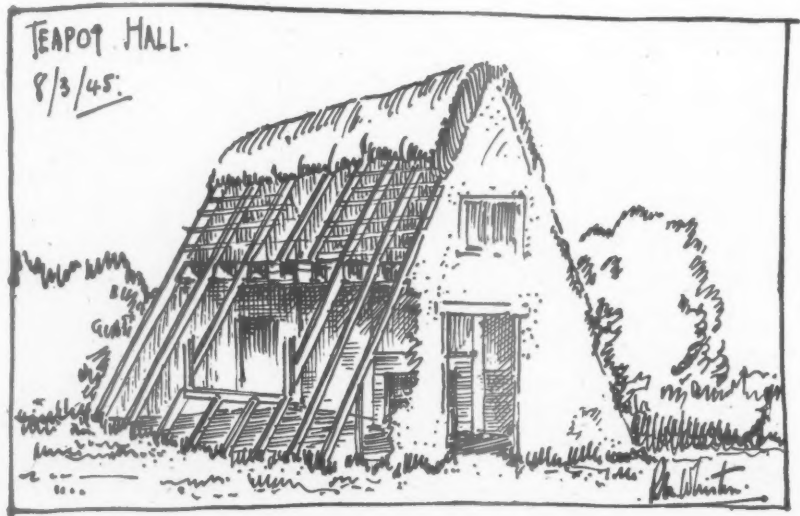
It is to be hoped that the recently formed country committees that are to carry out

a detailed survey of rural housing will pay particular attention to those cottages that possess definite architectural merit, and will not ruthlessly condemn all that may fall short of by-law requirements. Intelligent preservation in terms of internal remodeling where necessary would, in many cases,

provide a comfortable home for aged persons, and our countryside will be infinitely the poorer if the old cottages are to be allowed to fall into the state of Teapot Hall and disappear.

Spalding, Lincs

R. L. WHISTON



See letter from Mr. R. L. Whiston on this page.

Above North should into a Report

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## PHYSICAL PLANNING SUPPLEMENT



Above is an airview of South-East Belfast looking down the River Lagan to the Belfast Lough. In the recent report of the Northern Ireland Planning Commission on the planning of Belfast it is proposed that the existing park (to the right of the river) should be extended by a green strip along the river front to the worked out brickfields in the foreground, which will be made into a further park, thus bringing a river parkway right into the city centre. In the following article the Planning Commission's Report is reviewed by J. ROY MCKEE, A.R.I.B.A., A.M.T.P.I.

## A plan for BELFAST

More than two years ago the Government of Northern Ireland foresaw the need to approach planning problems from a much wider standpoint than that of pre-war days. The only Town Planning Acts in Northern Ireland in those days was our 1931 Housing and Planning Acts modelled on the 1925 English Act. The shortcomings of this legislation are already well known; as well as this, few of our Local Authorities prepared schemes at all, and those that did found many difficulties arising in their application, particularly on the boundaries of the larger urban areas.

Realizing that city and town development no longer could be treated as something apart from the organization of agricultural and rural life, the Government took a wise and decisive step. Acting on the advice of Mr. W. R. Davidge, it set up the following planning machinery:—

(1) *The Planning Advisory Board.*

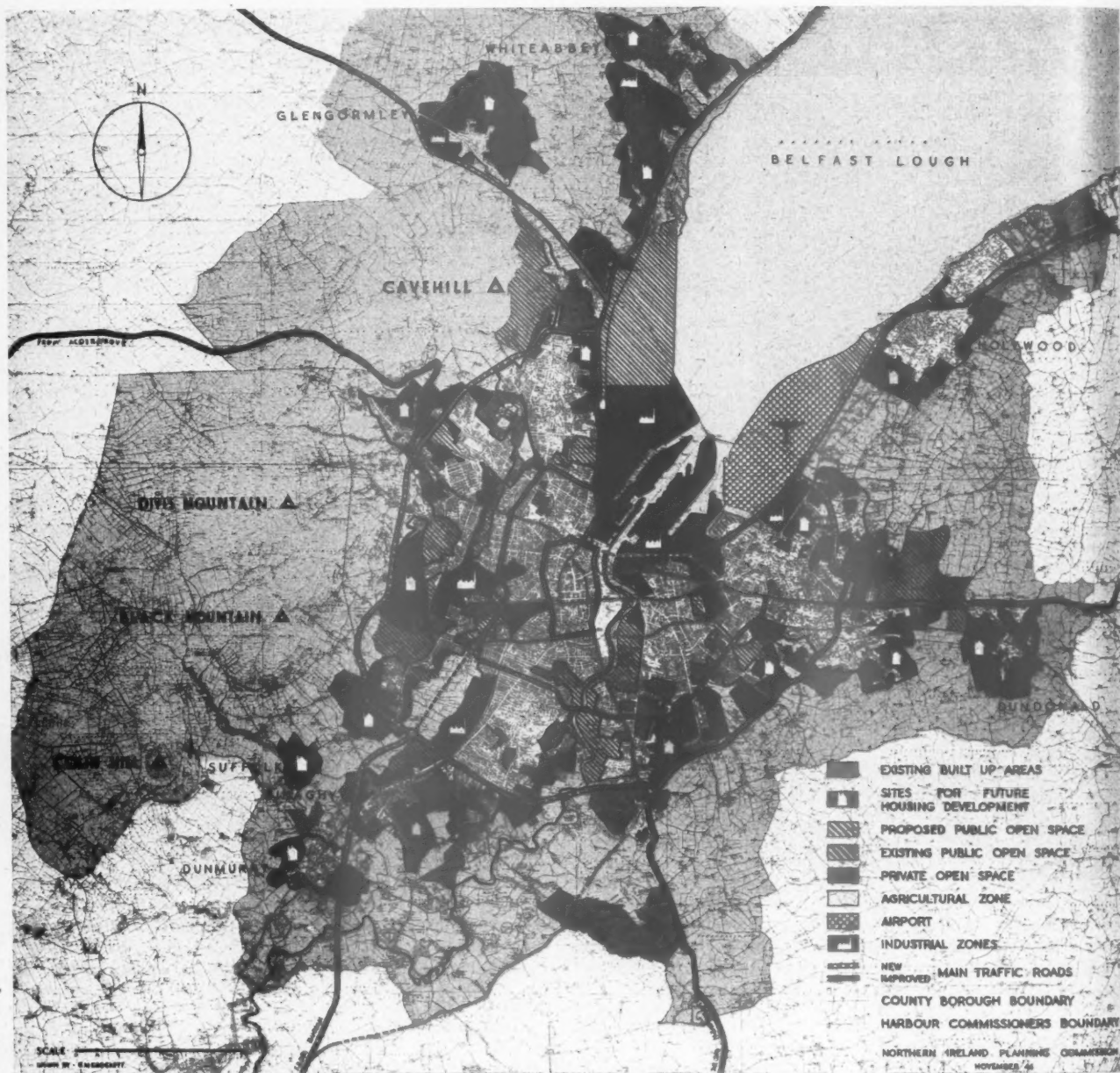
Not a technical committee. It consists chiefly of a body of industrial leaders, public administrators, and interested citizens, and is considered to be a typical cross section of the community. Its function is to advise on broad matters

of principle in connection with physical planning in the Province.

Working concurrently with the Planning Commission, the Board proceeded with specialized surveys of economic problems. The results of some of these surveys—Housing, Industry, Water Supply and Sewerage Disposal—were presented to the Government in three reports. Containing the results of factual investigation and studies, these reports suggested the main framework of plans to be studied, elaborated and reduced to practical form by the Commission. Further reports are being prepared.

(2) *The Planning Commission.*

This is a technical committee concerned with the details of physical planning throughout the Province, and the important point in its constitution is that it has statutory powers under Section 2-2 of the 1944 Act, which lays down that a Local Authority, in cases of special importance or in those matters concerning more than one authority, shall only act after consultation with the Committee. A good example is the present report, which



## PLANNING PROPOSALS FOR BELFAST

Above is a map showing proposals made by the Northern Ireland Planning Commission in its report on the planning of Belfast. Belfast is situated at the head of a sea Lough and is surrounded by a ring of low mountains. It lies in a bowl, the diameter of which is approximately four miles. Through the bowl runs the River Lagan, for the most part lined by beautiful woods which are easily accessible from the city. The recommendations which have been made for Industry, Housing, Agriculture, Transport and Open Space, in this report published by HMSO, are along lines now familiar to planners the world over.

- covers four different Authorities: (1) the City of Belfast; (2) the Harbour Commissioners; (3) the County of Antrim; and (4) the County of Down.
- (3) *Commission's Members.*  
Its membership is composed of the Architects and Engineers of the County, and County Boroughs, of Belfast Water and Harbour Commissioners, and of the various Government Departments.
- (4) *A Planning Consultant.*  
Mr. W. R. Davidge's services have been retained to advise and co-ordinate the work now in progress. He is also Chairman of the Planning Commission.
- (5) *Local Authorities.*

The authorities responsible for local planning are the County Councils, the County Borough Councils, and the

Urban District Councils. All main towns in the Province, with two exceptions, have appointed properly qualified Planning Officers, as also have five of the six Counties.

It will thus be seen that this report is the carefully considered opinion of a body of unbiased experts who have not only made practical recommendations for the improvement of the City, but also as to the means of carrying it out.

Contrast this with London, where, to quote a leading article in THE ARCHITECTS' JOURNAL of January 25:—

"The inadequacy of the present structure (Local Government) is conspicuous in the sphere of town and country planning which . . . most clearly requires an effective regional organization. There is no such organization. In consequence, we have three separate plans for London, which

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**AIRVIEW AND CLOSE-UP OF THE CENTRAL AREA**

Top is an airview of Belfast City Centre facing south-west, the white lines indicate the run of the two inner rings. The smaller ring is the boundary of the proposed central shopping, business and commercial precinct. The City Hall can be seen standing in a square at one end of this. The River Lagan is in the lower left-hand corner of this picture. Below is a panorama of the centre of Belfast facing north, with the City Hall on the extreme left and the River Lagan on the extreme right.

even the genius of Sir Patrick Abercrombie cannot weld into a unity."

**Location of industry**

Belfast grew up during the industrial revolution and has the usual defects of cities of that period with regard to industry and housing.

The Commission, noting the conclusions of the Barlow Commission and the Report issued by the Planning Advisory Board, has synchronized their recommendations for industry and housing. They recommend:—

- (1) Heavy industries, on unsuitable sites, as their premises become obsolete, should be re-located in the new harbour area where they will be in direct contact with road, rail, sea, and air lanes.

- (2) Certain light industries, due to their nature, will have to continue to be located near the central commercial zones, and the Commission recommend that these "workshop industries" should be grouped in flatted factories.
- (3) Due to the drive and energy of our present Prime Minister, Sir Basil Brooke, many new light industries are being opened up in Northern Ireland, and many more are expected in the future. These industries depend mainly on electric power and road transport, and having more freedom of movement are recommended to be located away from the centre of the city in order to relieve congestion, and, at the same time, make possible a parallel movement of workers away from the crowded areas. Seven small towns, eight miles from the city centre, are recom-

mended as suitable for these light industries. These are the same towns recommended under housing.

### housing

The survey prepared by the Planning Advisory Board shows there are in the city 5,000 houses unfit for human habitation; that there are 9,000 married couples without homes; and that density figures for Belfast average about 40 dwellings per acre.

The Commission recommend a four-point programme to deal with the situation:—

- (1) Emigration to existing small towns.—Seven towns about 8 miles from the city are suggested.
- (2) The provision of new satellites.—It is proposed to build up small existing centres, such as Dundonald, Glengormley, and Dunmurry, having the advantages of an existing community, a shopping centre and the future benefits of new industries which are also being directed there.
- (3) New suburbs.—Smaller housing groups located just off main roads and on the three main railways.
- (4) Central re-development.—Provision of housing accommodation for the Central Area is suggested in the form of four-storey flats, and two-storey houses to re-house approximately two-thirds of the present population.

### transport

In the Commission's own words, their recommendations on transport "may at first sight appear drastic," but nevertheless they are practical, and show imaginative foresight that should prove economical in the long run. They recommend that transport by road, rail, sea, and air should be co-ordinated in a unified scheme. Some of their suggestions are:—

A new by-pass to the South. This is a fast motorway cleverly planned to take advantage of one of the green wedges running into the city, so that it connects to the middle ring on a route that is almost completely free of buildings.

An extension of the existing by-pass to the east along the Lough side connecting the aerodrome and Bangor (Belfast's Brighton) with the city.

The relief of congestion in the central areas of the city by a system of ring roads. The Commission strongly recommends that all public transport should be kept on the inner ring instead of running through the city centre as at present, thus preserving the centre as a business and shopping precinct.

After considering the present congestion of the city centre by the inadequate and obstructed river crossings, and noting the further difficulties presented by the present position of coal wharves, cross-channel steamer berths, and cattle docks, the Commission have decided on the bold policy of re-locating these river services further downstream in the harbour area proper and of re-building the existing bridge with better approaches, and the erection of a new high-level bridge lower down the river, together with a clean-up of the river front. A somewhat similar solution to the London South Bank proposal. The provision of this high-level bridge downstream has much to commend it; notably, a link for fast east-west traffic, taking it out of the city centre and linking the airport with all parts of the city. The question of levels here, however, will present some difficulty, as all the streets in this vicinity are just above high water mark.

A central rail terminal is not suggested. The positions of the existing three stations have been improved so that they are practically on the second inner ring.

Belfast is fortunate in having an airport close to its centre. The Commission is very much alive to the future importance of air transport, and recommends that the airport should be doubled in size, and made suitable for sea- and land-based planes. Their recommendations for road improvements to the east of the city centre, particularly the building of the new high-level bridge, would mean that the airport would be seven minutes' journey by car from the city centre.

### agriculture and amenities

One of the principal objects has been to preserve for future generations the advantages of Belfast's unique situation at the head of the Lough, with its easy access to the beautiful Lagan valley and to the unspoiled hills on either side.

The Commission urge a limitation of the outward growth of the city and the establishment of an agricultural zone (green belt) outside the new building areas. Particular attention is paid to the Holywood Hills, the Lagan valley, and the Antrim Hills, which should be preserved against uncontrolled building in the period immediately after the war.

Although the detailed planning of Belfast is not within the Commission's terms of reference, attention is drawn to "certain outstanding problems whose importance makes them of concern to the whole Province." "One of these," says the Report, "is the development of the banks of the Lagan on both sides, particularly between the Albert Bridge and the cross-channel steamer berths. This river frontage forms the gateway to the Province—it gives visitors their first impression of Ulster."

The Commission are convinced that the clearance of High Street following the air raids affords an opportunity of creating something fine, and they recommend that a new tree-lined High Street should be created as a memorial and a symbol of the renewed vigour and progress of the city after its ordeal of war.

Attention is also called to the need for adequate parking facilities and long-distance bus stations.

Reference is made to the small amount of open spaces in Belfast in comparison with other cities of similar size. The Commission urges the desirability of making good this defect by every means possible and as soon as possible.

### co-ordination

Belfast, like most other cities, has separate Committees for the carrying out of Education, Estates, Parks, Improvement, Transport, all working together in their own little watertight compartments. The Commission emphasize that in order to make possible the realization of many of their recommendations it is necessary that steps be taken now to set up a Planning or Reconstruction Committee of the Belfast Corporation, whose main function it would be to correlate the activities of the different Committees in order that development could proceed in an efficient and economical manner.

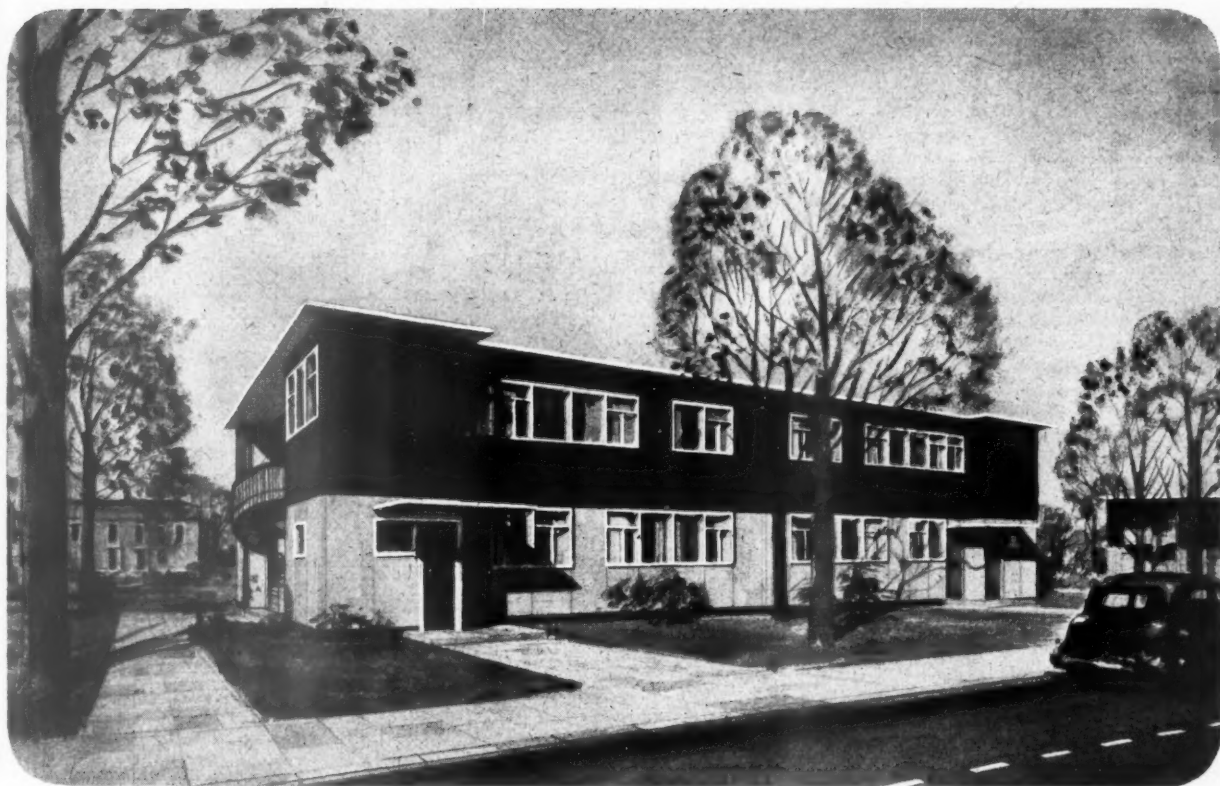
### war damage

The bombing of Belfast has provided many opportunities for the re-location to more suitable sites of industrial and other property. To effect this removal they suggest that agreement be reached with the War Damage Commission regarding payments for re-building on alternate sites. Owners could not afford to move if they were only to receive a payment based on the value of the old building; payment would have to cover the cost of re-building at present-day prices, as is now the case when re-building is carried out on the original site.

### conclusion

The Commission draw attention to the Imperial Government's White Paper on the Control of Land Use, and they state: "While we welcome whole-heartedly this unequivocal statement by the Imperial Government, we would emphasize that the provisions of the Town and Country Planning Bill now before the British Parliament does not appear to be of such a kind as would enable Local Authorities to implement this declared policy. Local Authorities will need wide powers of acquisition and control accompanied by strong financial aid from the Central Government if real improvements are to be made in the living conditions of the people."

It is on the assumption that appropriate legislation will be introduced and proper financial agreements reached that the Commission have submitted their recommendations for the physical re-development of the Belfast area.



# THE PREBUILT DRY CONSTRUCTION DUPLIX HOUSE

DESIGNED BY I. SHAMAH

**GENERAL**—This house designed for Prebuilt Constructions Ltd. is of interest as the first post-war duplex house to be sponsored by private enterprise. It is interesting also in its use of a new plastic material for cladding, which has been developed by the company after two years of intensive research.

It is a permanent semi-detached house comprising two flatted dwellings for use during the emergency period convertible at a later stage into a house for a family of six or more persons, who comprise over 25% of the population.

**PLANNING**—Ground area is 36 ft. frontage and 24 ft. depth having 750 sq. ft. super per flat and 1,485 sq. ft. super per house. Suitable aspect is front facing N. to NE.

The following are main features

of the design as two flats: A separate front entrance is provided for each self-contained flat. Pram space is provided in the passage and there is independent access to all rooms from the passage. Living rooms open out on to the garden or on to a balcony. The living room can be divided to form a dining recess and living space. Sliding doors can be provided between living room and main bedroom so that the two rooms can be thrown into one for large gatherings. Planning can provide either two large bedrooms or one large and two small bedrooms. There is a back entrance to each kitchen, which adjoins the living room. Meals can be served through a hatch or by means of a push-through table. There is space in the kitchen for occasional meals. Kitchen and bathroom plumbing

duct is in one unit to which any type of cooker and boiler can be attached. The MOW plumbing unit can be installed if necessary. There is a separate WC not adjacent to bedrooms, thus minimizing noise. Fuel and cycle space are provided within the general house space, eliminating sheds, and providing clear back gardens for private or communal use.

The following work is necessary to convert the flats into a house:

- (1) Remove partition in passage and replace second front door with window panel.
- (2) Remove bath from ground-floor bathroom and replace with washing unit thus converting it into utility room and/or cloakroom.
- (3) Remove kitchen equipment and fittings from first floor kitchen and close hatch and fit cupboards. Fuel store becomes cupboard for trunks. Back staircase may be removed or it may be retained to provide separate entrance to bedroom.
- (4) Remove

ground floor bedroom window panels and replace with garage doors. Line walls and roof with fireproof asbestos cladding. (5) Adjust panels and door of ground floor living room.

The following are features of the design as a house: The entrance hall is increased in size. A separate parlour is formed which can also be used as a study, nursery or extra bedroom. Four bedrooms provide accommodation for a family of six or more. The fourth bedroom can have a separate entrance and would be suitable for a lodger. A garage has been provided as recommended by the Dudley Committee Report on the Design of Dwellings (para. 57). This has been planned within the general design of the house to provide clean lines; it can be used as another room such as a workshop if required.

The house can easily be converted back into flats should another housing crisis occur, or the family grow smaller.

Alternative plans of a smaller type of duplex house have also been prepared of 24 ft. frontage and 33 ft. depth,

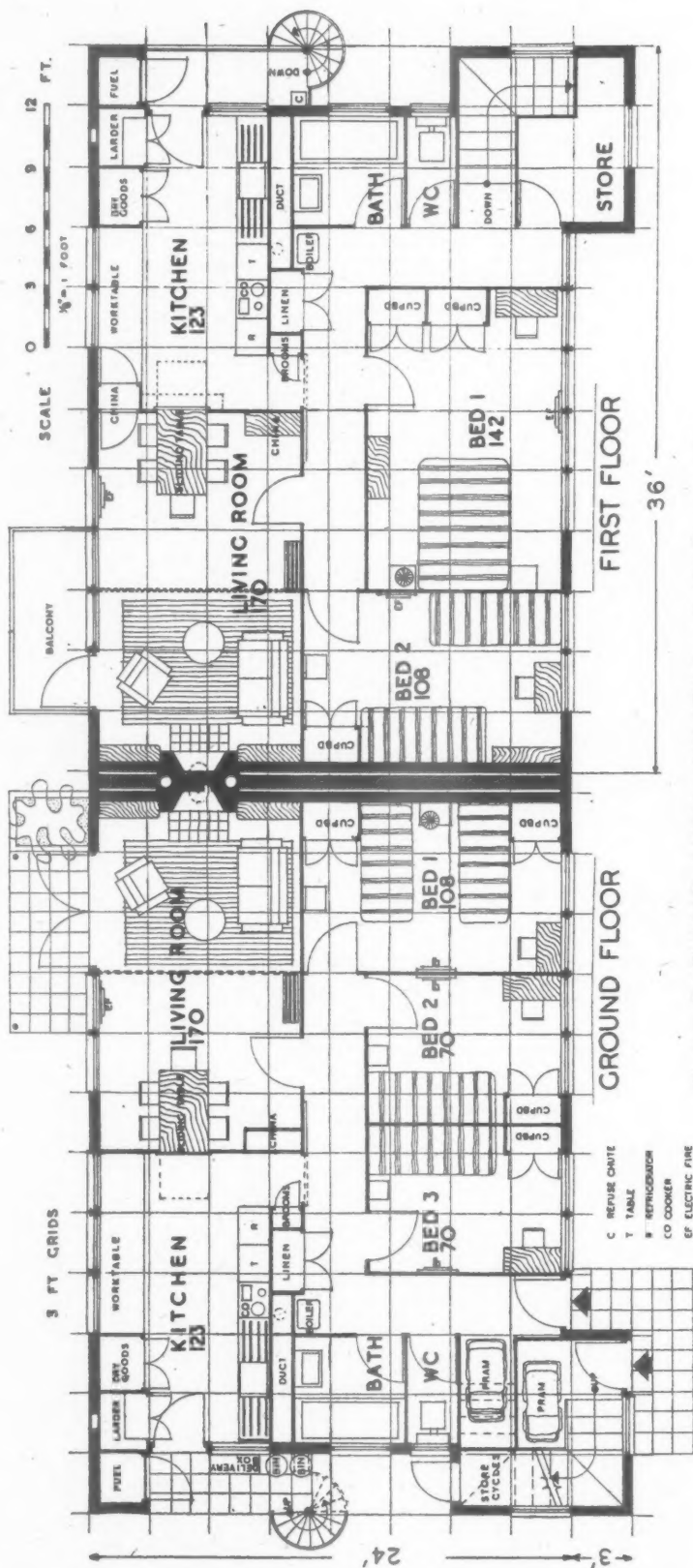
**CONSTRUCTION**—Special attention has been paid to the recommendations of the Burt Committee, the Housing Manual 1944, and B.S. Specifications.

The foundations are of the usual concrete raft.

Two types of steel framework are proposed with stanchions and beams at 3 ft. centres—(a) the welded light steel framework specially designed by Hills Patent Glazing Co., as used in the flatted dwellings at Northolt and the Birmingham house designed by Herbert Manzoni.\* The weight of steel per house is about 3 tons. Erection time is about 50 man-hours. (b) Ordinary RSJ standard sections. Weight per house about 6 tons. Erection time about 70 man-hours. This framework, though heavier, costs approximately the same as the lighter type and has the advantage of greater resistance to corrosion; also, owing to the use of standard rolled steel joists, needing no new plant for their production, it is readily and immediately available.

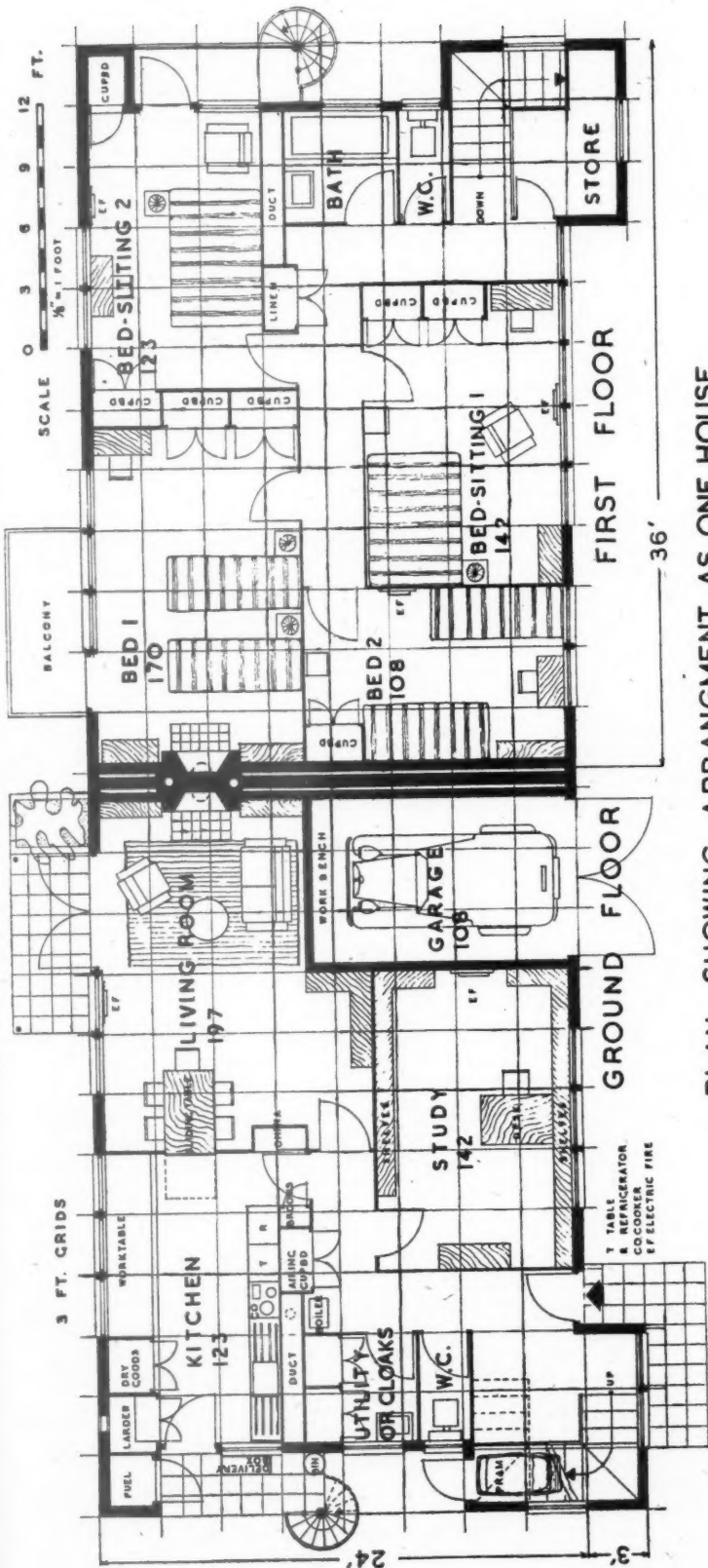
Exterior cladding can be of any type including brick. Two special types have been developed, however, for speedy erection: (a) Hollow tile blocks 4 in. thick attached to the steelwork. These are erected dry and pointed later. (b) Plastic composition panels  $\frac{3}{4}$  in.

\* See A.J., October 19, 1944, pp. 291-294.



PLAN SHOWING ARRANGEMENT AS TWO FLATS





PLAN SHOWING ARRANGEMENT AS ONE HOUSE

[Scale: 1" = 1' 0"]

thick of high density with hard impermeable facing. The panels are made largely of waste material, chemically treated and bonded with a plastic formaldehyde resin adhesive. They are produced in sizes up to 3 ft. by 8 ft. in various thicknesses, densities and colours. Tests have been carried out on this material at the National Physical Laboratory and the Building Research Station and it has been considered very satisfactory for partitions and interior cladding. It is now undergoing tests at the Ministry of Works as flooring.

The following are some of the characteristics of a 1 in. panel of this material: Approximate densities are 35 to 60 lb. per cu. ft.; tensile strength is  $\frac{1}{4}$  to 1 ton per sq. in.; thermal conductivity is 1.2 to 0.80 BTUs; modulus of rupture is up to 2,800 lb. per sq. in.; maximum crushing strength is up to 4,200 lb. per in.; the panels can be sawn, drilled, nailed or screwed, and painted; it has good sound insulation and fire-resisting properties, and it is washable; damaged panels can easily be replaced.

The panels are attached to the framework by means of a positive locking spring clip which allows for expansion and contraction. Joints are sealed with mastic and covered with flush cover strips. Bitumen felt strips are clipped over the stanchions before attachment of tile or panel cladding.

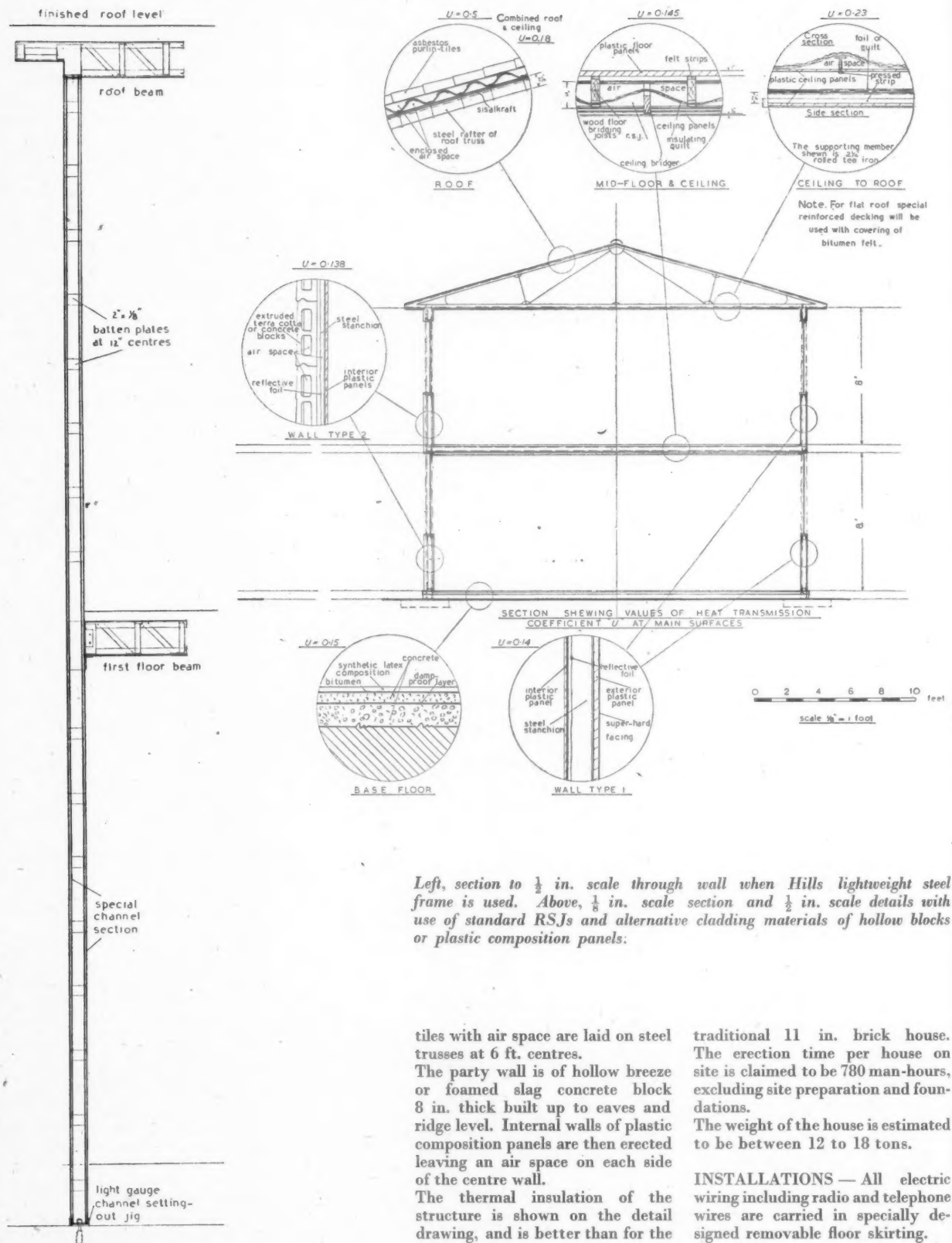
Interior lining of walls is of the same plastic composition panels 1 in. thick with the same spring clip attachment as the external panels. Aluminium foil provides additional heat insulation.

Partitions are also of the same panels held in position by metal trim floor and ceiling skirting and vertical H sections of timber or steel.

Windows can be of standard type steel or timber. Doors are of standard timber or veneered plastic composition panels.

Flooring on the ground floor is direct on to the surface concrete. A dampcourse is laid over the concrete with a bitumen covering; latex composition or the plastic panels are then laid on. The first floor is of plastic composition flooring panels on timber joists laid between steel beams at 12 in. centres. Insulating quilt and double ceiling panels are fixed.

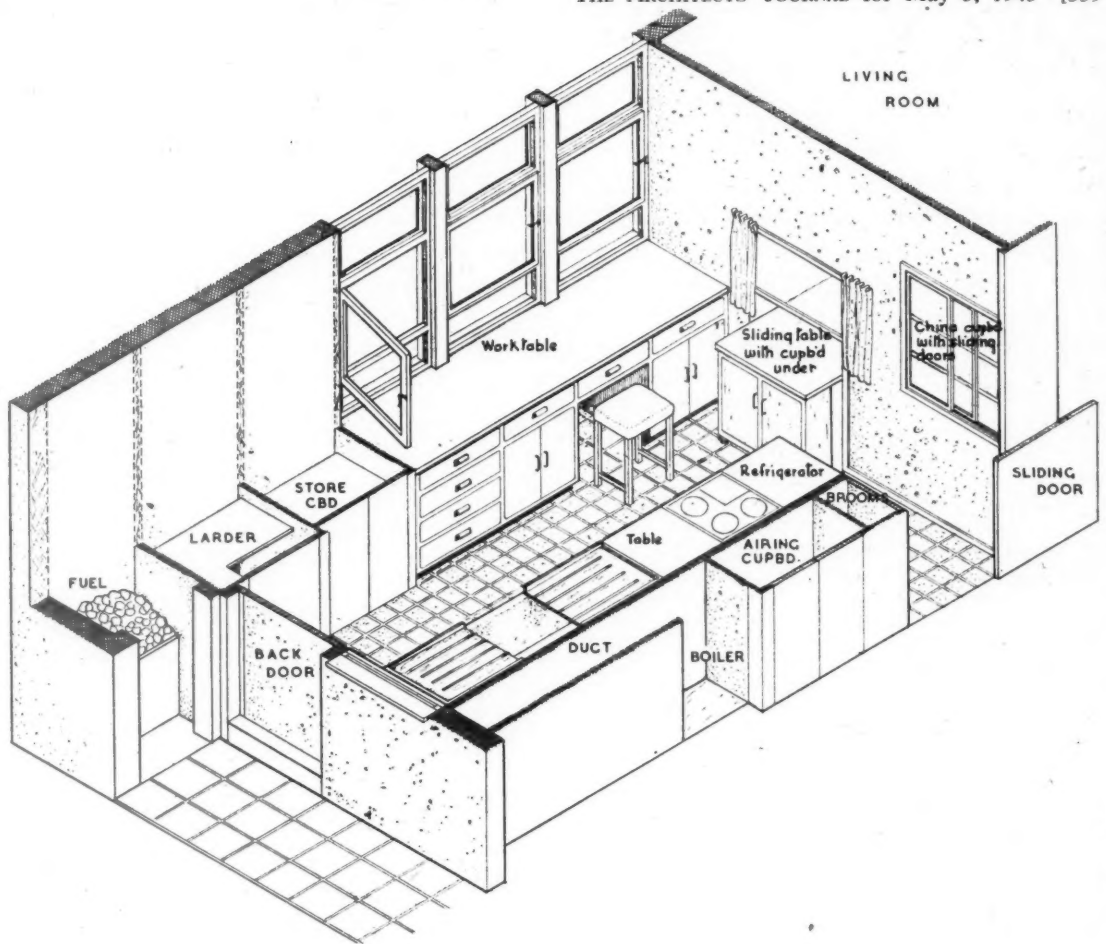
The roof can be flat or pitched. If flat, a lightweight asbestos cement metal reinforced decking with bitumen felt is used. If pitched, asbestos cement purlin



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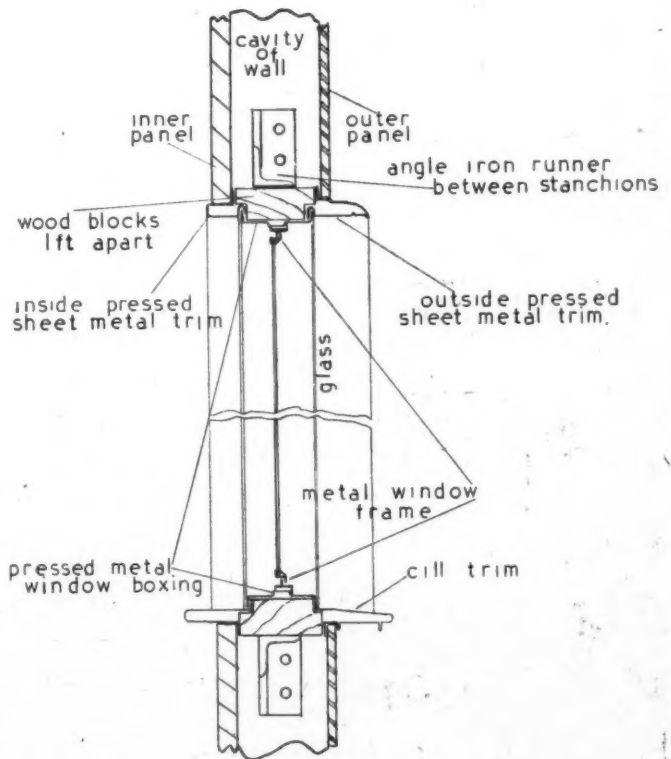
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Above, isometric drawing of the kitchen. Right,  $\frac{1}{2}$  in. detail section through window when standard RSJ steelwork is used.

**KITCHEN**—Special attention has been paid by the designer to the kitchen. A feature is the sliding dining table which can be pushed through from living room. A china cupboard is accessible either from the kitchen or the living room. There is an outside delivery cupboard with locking device for tradesmen, and a dust chute leading to an outside bin.

**COST**—The approximate estimated cost including erection and built-in fittings is claimed to be £1,100 per semi-detached house or £550 per flat, *i.e.*, 14s. 8d. per foot super.



D E S I G N E D B Y I . S H A M A H

# 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.

## 1908 Smith's System

**SMITH'S BUILDING SYSTEM.** *H. Howard Smith. (Architectural Design and Construction, February, 1945, pp. 40-44.)* MORE ABOUT SMITH'S BUILDING SYSTEM. (*Architect and Building News, March 3, 1945, pp. 206-208.*) House composed of large pre-fabricated panels in brick-faced lightweight concrete, erected by gantry.

An experimental block of houses in this system has recently been erected in Birmingham. The external walls are composed of mass-produced panels in brick-faced lightweight concrete. The maximum size of a panel is 7 ft. by 2 ft. 6 in., weighing about 8 cwt. The main feature of the system is the method of erection by a gantry. The brick units are mechanically hoisted to the correct level, and transported and placed in the required position by the use of overhead trolleys. Four units, each equivalent to 160 bricks, can be placed into position simultaneously. The appearance of the completed house is conventional.

## 1909 Steel Section Book

**STRUCTURAL STEEL SECTION BOOK.** (7th Edition, December, 1944. Issued by Fleming Bros., Glasgow, C.2.)

Data on beams, stanchions, struts, plate girders, brackets, roof trusses. General tables. Estimating data. Welding. Two-pin rigid frames.

This small size pocket book (4½ in. by 2½ in. by ½ in. thick) of over 600 pages contains an amazing amount of useful information. In its 7th edition it has been very much enlarged, and has many features which, as far as can be ascertained, have not yet been published elsewhere (e.g., in the beam tables safe loads for beams not tied laterally are inserted). This is very important since in other similar publications only such values are given which are correct if the compression flange is stayed laterally at a distance not exceeding twenty times its width. If the distance of lateral supports is greater, the permissible load has to be reduced, and this may easily be overlooked when tables without reference to this reduction are used.

Another important addition are tables of moments of inertia of component parts of plate girders, which allow the calculation of the total moment of inertia for a great variety of combinations of angles, webs and plates. The new tables of eccentric loads on bolted, riveted and welded brackets, with examples of applications, are very convenient for designers. Conventional roof trusses for spans between 15 and 80 ft. and north light roof trusses between 15 and 40 ft., with all the necessary data for esti-

mating and design and stanchion sizes for various heights are also included.

The most prominent feature of the booklet, however, is the section on welding. It provides ample information on the design of two-pin rigid portal frames up to 80 ft. span and, in this respect, it may be considered as a pioneer in this country. The data on portal frames will be very helpful to all who are interested in something better than the conventional roof truss on cantilevered stanchions.

While the practical value and progressive spirit of the booklet must be warmly acknowledged, some criticism of the section on portal frames may be allowed. The book suggests the use of the same cross section both for the legs and the rafters, and all formulæ are based on this assumption. The appearance of such a structure is not very pleasing. A much better architectural effect can be obtained if the legs are tapered and the rafters are shallower than the upper portion of the legs. (An example of this type of 80 ft. span was published in A.J., July 8, 1943, p. 26.) This variation of the cross section can easily be achieved in a welded structure, and corresponds to the requirements of strength, whereas with a constant cross section throughout material is wasted and the eye is not satisfied.

## 1910 Engineer's Compendium

**A CONSTRUCTIONAL ENGINEER'S COMPENDIUM.** (Published by Appleby-Frodingham Steel Co., 1 guinea.) Data on plates and sections. Stanchions and struts. Beams, compound girders, gantry girders, plate girders and roof trusses. Electric welding. Sheet piling. Reinforced concrete slabs, beams, columns and foundations. Timber. General information, formulæ, tables.

The data for this book were compiled in 1939, but its publication was postponed because of the outbreak of the war. The Company considers the present time opportune for issuing the Compendium, since designers are now beginning to concentrate on post-war planning.



Smith's building system applied to house building. One prototype house is complete; steel gantries are in position for erecting the second house. See No. 1908.

# THE BUILDING USES OF CAST IRON

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## TECHNICAL FACTS AVAILABLE FOR ARCHITECTS AND BUILDERS

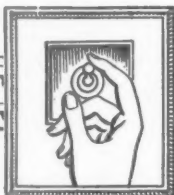
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The use of cast iron in modern building technique and equipment has been specially studied by a department opened for that purpose by the British Cast Iron Research Association. Known as the Building Uses Department, it is available for dealing with enquiries from architects and builders about the various uses of cast iron.

Mr. Derek L. Bridgwater, B.A.R.C.H., F.R.I.B.A., is architectural consultant to the department.

*Enquiries should be addressed to*

The Building Uses Department, British Cast Iron Research Association,  
Alvechurch, Birmingham.



On Active Service

# *Electricity* *is basic in building*

Electricity has become the *mainpower* of production; and new and better homes will be the main necessity of peace production. In building and equipping these homes the cheap flexible power of Electricity will be a requirement as basic as bricks, as sure as steel, as capable as concrete. In each future dwelling the universal versatility of Electricity will cause it to be not an adjunct to, but the presiding genius of the home.

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 applications in domestic and industrial premises.*



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The book comprises 905 pages and contains a great deal of useful information. In addition to the usual tables on sections and their combinations acting as beams and columns, design data for sheet piling, welding, reinforced concrete slabs, beams and columns and timber beams are included.

The present edition is naturally limited, and contains several minor mistakes which will be corrected as and when a reprint is made. Meanwhile it would be helpful if a list of these mistakes could be sent to everybody in possession of the book. Moments of inertia and section moduli of angles are missing and should be included in future editions.

## LIGHTING

1911 Education

**LIGHTING EDUCATION.** C. H. Atherton. (*Illuminating Engineering*, June, 1944, p. 351.) Education for lighting engineer. His attitude to the purchaser.

This is a breezy, but astute appraisal of lighting education for the engineer. It shows how the teaching material just after the last war was related mainly to salesmanship (more light) in America, and in Europe, to the fundamentals of illumination.

The merit of the European view was partly recognized, but it was tempered by the fact that in America they achieved average intensities three times higher than elsewhere. Today the position is said to be reversing slowly, with America leaning more heavily on the non-profit-making study of fundamentals.

Any architect who wants to know what he was really sold and how he was sold it in the lighting world before the war should read this note.

1912 Survey of Taste

**LIGHTING FIXTURE STYLE PREFERENCE IN AMERICA.** (*Lighting and Lamps*, August, 1944, p. 29.) Survey of American taste in fixtures for dining rooms.

This is a brief report of a survey for a popular American magazine. Apparently about 40 per cent. preference was expressed by American women for a unit flush with the ceiling. Almost an equal preference was expressed for chandeliers, and 25 per cent. wanted a straight fluorescent fitting.

There is a rather naive attitude to Traditional and Modern tastes in the report which makes one uneasy about attempts to satisfy this expression of opinion.

1913 Road Lighting

**TRUNK ROAD LIGHTING.** F. H. Pulvermacher. (*Electrical Review*, August 25, 1944, p. 265.) Technique and cost of trunk road lighting.

This article suggests that the 4,000-odd miles of trunk road now controlled directly by the Ministry of Transport should be illuminated over the full length. A Report by the Ministry itself in 1937 recommended that for this type of lighting the lamps should not be spaced at greater distances than 180 ft.; this would mean that some 105,000 standards would be necessary (omitting the lengths of road already lighted). The lamps presumably would be either of the mercury or sodium vapour type, with directive lanterns. Mounting height would be 25 ft., and the overhang from the kerb not more than 6 ft., in accordance with the Ministry's previous suggestions. Power provision is discussed. The annual cost is estimated at approximately £2,000,000, which it is claimed should not be regarded as excessive in view of the general maintenance costs per annum for trunk roads of some £60,000,000.

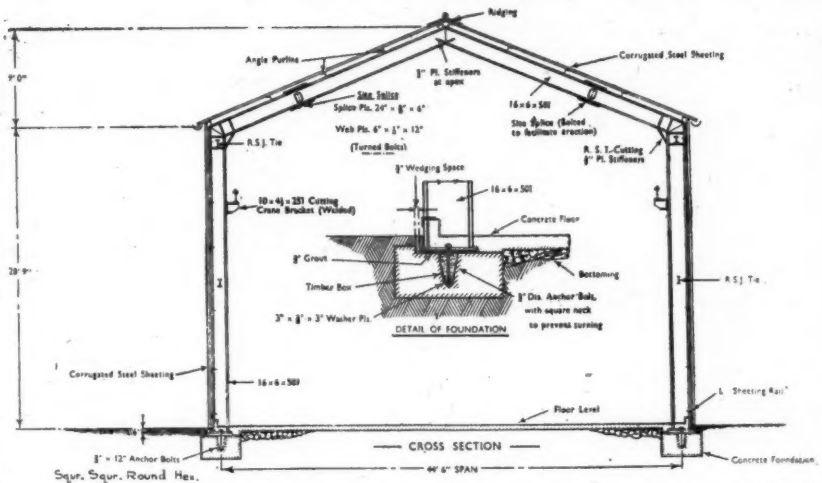


Diagram from Structural Steel Section Handbook, showing section of Portal frame. A better aesthetic effect can be obtained if the legs are tapered. See No. 1909.

1914 Mill Lighting

**IMPROVING MILL LIGHTING CONDITIONS.** T. S. Jones. (*Textile Manufacturer*, October, 1944, p. 44.) Bad lighting common in mills. General points for improvement.

1915 Light in Hygiene

**SOME OBSERVATIONS ON HOSPITAL DUST, WITH SPECIAL REFERENCE TO LIGHT AS A HYGIENIC SAFEGUARD.** L. P. Garrod. (*British Medical Journal*, February 19, 1944, p. 245.) Strong evidence that daylight is valuable bactericidal agent in ordinary rooms.

Preoccupation with droplet methods of infection has obscured the importance of dust performing the same function. Cross-infection is particularly likely to occur where there are many open wounds, and war concentrates attention on the mechanism. The present investigation was related to cross-infection in surgical wards.

The whole of the findings make most interesting reading. They may be summed thus: It must now be recognised that ordinary diffuse daylight, even on a cloudy day, and even in winter in England, can be lethal to bacteria, and that glass is no absolute bar to this effect. Streptococci which could remain alive for weeks, and often months in the dark—for instance beneath bookcases and in cupboards—live only for a few days, at most, in the light of the room.

It is noted that further studies are needed. One wonders when the authorities in this country will consider and study the uses of small UV sources for this purpose.

## PLUMBING and Sanitation

1916 Hub of the House

**HYGIENE AND SANITATION: THE HUB OF THE HOUSE.** Report prepared by the Association for Planning and Regional Reconstruction. (*Architects' Journal*, January 11, 1945.) Full reproduction of report dealing with personal hygiene, household cleaning and laundry work. Includes time-saver standards reproduced from *The American Architect*.

## QUESTIONS and Answers

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

1917 Removing Whitewash

**Q** What is the simplest method for removal of whitewash from brickwork so that the surface may be painted? Steam cleaning has been suggested, but no doubt other methods are available.

**A** It should be possible to clean off ordinary whitewash by means of washing and brushing. If this is not satisfactory, steam cleaning can be resorted to. An alternative method is cleaning by means of water jets. The Building Research Station of Bucknalls Lane, Watford, carried out some experiments before the war, and we should advise you to get in touch with them.

1918 Post-war Costs

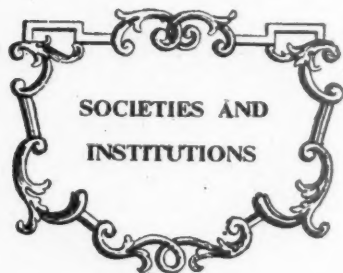
**Q** I should be grateful if you could give me an approximation of the probable increase in building costs after the war. For example, if a residential property could be built at 1s. 2d. per foot cube pre-war, what would be a rough figure to use post-war?

**A** It is extremely difficult to give you an approximation of the increase in building costs after the war. The cost of materials and labour has not risen consistently, and even now authorities differ very considerably in their views. Lord Portal, in a statement to the House last year, referring to agricultural cottages, said that building costs had risen by 105 per cent., and the subsequent increases have now probably raised this figure to 110 per cent.

It is probable that costs will continue to rise gradually, and that we cannot foresee where this will end. It should be remembered that these increased costs include for

loss of output due to inferior labour, the increased costs of working a 60-hr. week instead of a normal working week, and the various costs which arise in connection with the transport to the required district.

It may well be that under more normal conditions as regards the quality of labour and the hours worked, the increased cost will not be more than 66 per cent. above pre-war.



*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.*

TCPA

## Hope Bagenal

April 19, at the Planning Centre, 28, King Street, W.C.2. Lunch-time meeting of the Town and Country Planning Association. Lecture on THE NOISE PROBLEM IN RELATION TO TOWN AND COUNTRY PLANNING, by Hope Bagenal, F.R.I.B.A. Chairman: Lord Horder.

**H. Bagenal:** Noise is mentioned in the Dudley Report as one of the unnecessary drawbacks created through an unorganized physical environment. The possible sources of noise are somewhat as follows: traffic, especially on a hill or at "lights," that is where there is gear-changing; railways and railway yards where there is shunting at night; noisy industries on the margin or residential areas; services such as power substations and milk-distributing depots; sport stadia and dirt-tracks; and to a less extent school playgrounds and technical schools where trades

are taught, and dogs' homes. There is also the escape of wireless noise from open windows in summer and there is a special class of problem likely to arise from the siting of new aerodromes and civil airports.

Without exaggerating noise problems, planners should bear some facts in mind. First noise is much more of a nuisance on a quiet site, and in suburban conditions people will complain of a noise which, in city surroundings, would form part of the background. It is for this reason that power substations and milk distributing depots should be watched. Secondly, intermittent noises are bad; thirdly, noises in the evening or at night, which keep children awake—as from entertainment buildings or stadia—can cause a real loss of amenities, so that if a new neighbourhood contains a traditional fairground, or if an open space gets a licence for a dirt track, or for an open-air dance floor artificially lit and provided with loud-speakers, there may be serious complaints extending some distance away.

Clearly, spacing or distance apart, is the root of the matter. An arterial road having heavy traffic by day and night, may at the kerb give as much as 100 noise units, and to reduce this to the permissible 40 units at the window sill, a housing estate should be located at a distance of some 300-400 feet away. A greater distance should be enforced in respect of railways, especially at a point where a metal viaduct occurs. On the other hand, if the main road or railway passes through a cutting the noise can be considerably screened. In regard to traffic it is possible to associate, very roughly, appropriate loudness figures at the kerb with the four classes of roads as suggested by Sir Alker Tripp. Taking main arterial roads at 100 units sub-arterial roads can be assessed at 90 units, local shopping roads at 70 and local residential roads at 40. A quiet suburban garden is generally taken at 30 units. A normal bedroom window can be said to reduce loudness by 20 units, so that if a standard of at least 40 units be aimed at for the loudness at the sill, that will give 20 units within the room and permit of fair sleeping conditions. Noise nuisance is difficult to assess, but if sleep be interfered with in bedrooms and telephone conversation made impossible in living rooms (which often occurs), then there would seem to be grounds for a real nuisance complaint. A method of calculating very roughly the reduction of a noise having a certain loudness by distance, is given in Post-war Building Study No. 14.

In planning an urban district for blocks of flats two principles should be recognized. First high buildings coming immediately opposite each other cause increase of loudness by reflection, therefore a method of alternating blocks so that each block comes opposite a space, will tend to reduce noise nuisance. Second, the quiet side of the site has a positive value specially for bedrooms. If a large building site between noisy roads can be developed as a whole, instead of different plots separately, then it would be possible to group premises needing relative quiet on the centre of the site away from the street front and raise the height; while the premises not needing quiet, at a less height, could be grouped along the perimeter of the site at the building front. For new city accommodation this method is desirable not only for flats, but also for law courts, board rooms, banks, auction rooms, etc.

Noisy industries should be recognized as noxious equally with smoke and smell producing industries and confined to a Special Industrial Zone. It is well to remember that some industries are very noisy indeed, namely, joinery works using planing and moulding machines and circular saws, and sheet metal works. These may prove just as much a source of nuisance within 300 ft. as a trade producing acid fumes. Also since it is working class dwellings which may be located near an industrial zone, the night worker who has to sleep by day should not

be forgotten. (I should like to draw your attention to the Noise Abatement League's leaflet No. 5, *Protection of Night-workers from Noise during the Day*.) Milk distributing centres work at night and have heavy traffic coming and going; the unloading quays ought not to come near dwellings. Power sub-stations have a high-pitched brush scream. Noises high in pitch can be screened by trees.

In regard to school playgrounds, without wishing to exaggerate the noise made by healthy children during the morning break, it is still one of the subjects that appears in the list of complaints. It is most marked in a confined space such as a paved court; a playing field partially screened by trees would not be a serious nuisance. Technical schools where joinery machines are used for trade teaching can be very noisy.

When we come to the question of noise in the home there are two serious sources—namely, wireless noise from open windows in summer, and the barking of dogs. In rehousing the population of these islands, we must remember that educated persons—of all incomes—deserve some consideration as well as others. There are the studious elderly, there are young people working for examinations in the evening, and there is a class of persons who have found their problems difficult in recent years, namely, musicians and musical students who must practice in order to pursue their vocation. Here some sort of occasional classifying of residential buildings is desirable. Many contemplative people would willingly pay a little extra in rent, not for latest luxury equipment, but for quiet conditions. But this is not easy. An inconsiderate neighbour in a quiet cloister or small block of flats can often by means of a dog or wireless, ruin the amenities. In blocks of flats it is found that the ordinary clause in the tenants' agreements that the tenant shall cause no unreasonable noise is difficult to uphold in the courts if complaints should be made, because of lack of well-defined standards; but it can be done by a tenants' agreement having a clause whereby the use of wireless or gramophone is prohibited except under written licence of the lessor. In practice this licence can be withdrawn if in the opinion of the lessor any tenant commits a nuisance. In London it has been found that tenants who desire quiet conditions will sign such agreements. I suggest that in every neighbourhood unit there should be one or two quiet blocks where dogs are not permitted, and some such arrangement among tenants should be provided. For ordinary suburban housing the separating of houses by placing them alternately at opposite ends of the strip sites, can sometimes be arranged. Another method is to use garages as screens or baffle walls, or again by means of recessing alternate fronts.

In regard to musicians, both professional and amateur, they would be helped by the proposal in Post-war Building Study No. 14, *Sound Insulation and Acoustics*, that at least one living room in every dwelling house should have walls giving an insulation the equivalent of a 4½ in. brick wall. Their case would also be helped by the including of a couple of practice rooms in the new art community centres proposed by CEMA.

In the case of new civil airports, it was proposed some years ago by the Noise Abatement League that extensive exercise of zoning powers ought to accompany the decision on the siting of a new airport in order that houses shall not be built near it. How near houses can be allowed must depend partly on the prevailing wind. Aeroplanes make unavoidable noise, taking off into the wind, and if this brings them over houses, schools, hospitals at a relatively low height, serious complaints owing to noise can occur. Recommendation by the Noise Abatement League was made after enquiry into the case of a town where very considerable hardship had occurred and strong representation had been made.



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NUS

Congress

The 1945 Congress of the National Union of Students was held in Birmingham at the beginning of April, on the general theme of THE STUDENT'S CONTRIBUTION TO PEACE.

Resolutions passed by the Architectural Commission of the Congress included;

1. "So that student opinion might properly be expressed, the Commission urges that the national architectural student movement be recognized by the RIBA."

2. "The Commission is fully aware that it is only by our taking an active part in the political life of the country that we can contribute to the full in bringing the proposals expressed by Congress as a whole to actuality. Students of architecture have a special part to play in ensuring, through their activities at the General Election, that the problems of physical reconstruction are tackled in the way they wish."

3. "The Commission realizes that the standards of housing and building which we consider essential to the health of the community cannot be achieved in a state where there exists the threat of war. Therefore, we consider it to be part of the work of architectural students to strengthen inter-allied understanding, especially in their contribution to the forthcoming Election."

The relation of architecture and town planning to many of the problems to be faced in the Peace was evident in the discussions at other Commissions of the Congress. Architectural students attended meetings of these Commissions of students of other faculties with the object of propagating a realization of

the part which must be played by architects if reconstruction is to be carried out successfully.

One of the twenty Special Commissions of the Congress was on the subject of *The Land, Town and Country Planning*. Resolutions passed by this meeting of more than seventy students of various faculties included a demand for a National Plan and for adequate legislation to carry out the plan properly. The Commission resolved that the nationalization of the land was an essential part of this legislation. Three further Resolutions read:

1. "Legislation should include the setting up of a Ministry of National Development with a permanent Planning Commission responsible for co-ordinated schemes of national development."

2. "The Commission believes to be essential, within the framework of the National Plan, the provision of four million houses in five years, built to the best standards both of quality and design and with all services and amenities necessary for a proper community life, to be let at rentals within the means of the ordinary working-class family."

3. "The Commission calls for the demobilization as a first priority under the Government Scheme of all Service men, or women, with experience in the design, administration and execution of building works or the manufacture of materials and components, with suitable stipulations as to their taking up, and continuing as long as required in, the production of houses."

These Resolutions were later unanimously endorsed by the Architectural Commission.

The ArchSA, under its Agreement with the National Union of Students, was responsible for organizing the Architectural Commission. F. S. Bolland, Editor of *Plan*, was Chairman of the Commission. D. M. Goodacre, National Secretary of the ArchSA, was

Chairman of the Special Commission on *The Land, Town and Country Planning*.

RIBA

New Members

*As Fellows* (5): Aberdeen, David William De Rieu, B.A. (Lt. R.E.) (Box, Wilts); Bicknell, Peter, M.A. Cantab. (Cambridge); Brightiff, Charles Henry (London); Johnson, Allan, Dip. Arch. (Leeds) (Capt. R.E.) (Edgware, Middlesex); Waters, Alwyn Brunow, M.B.E., G.M. (Capt. R.E.) (London).

*As Associates* (9): Ball, Brian William Bradford (Weston-super-Mare); Dowling, Miss Catherine, B.Arch. (University College, Dublin) (Ballynacally, Co. Clare); Eve, Richard Stewart, B.Arch. (McGill University, Montreal) (Godalming); Fudge, Alan George (London); Malcolm, Francis Kingwell (New Malden); Miller, Hedley Walter (Plymouth); Reed, Miss Ruth Louisa (Leeds School of Architecture) (Leeds); Smyth, Dermot Paul (University College, Dublin) (Dublin). *Overseas*: Green, Clemons Landseer (University College, Auckland, New Zealand) (Morrinsville, New Zealand).

*As Licentiates* (12): Alexander, Maurice (Dorking); Begkingsale, Alec (Lt. R.E.) (Bristol); Carter, Arthur Brian, F.S.I. (London); Edgecombe, Horace (Captain) (London); Hamblin, Stanley Herbert (Birmingham); Lasdun, Denys Louis (Capt. R.E.) (London); Lowe, Joseph Henry (Pinner); Mackay, Daniel (London); Pagett, Alfred William John (Wolverhampton); Shaw, Herbert Vivian (Chatham); Shore, Robert Collier (Manchester); Woolley, Harold Ethelbert (Bridgend).

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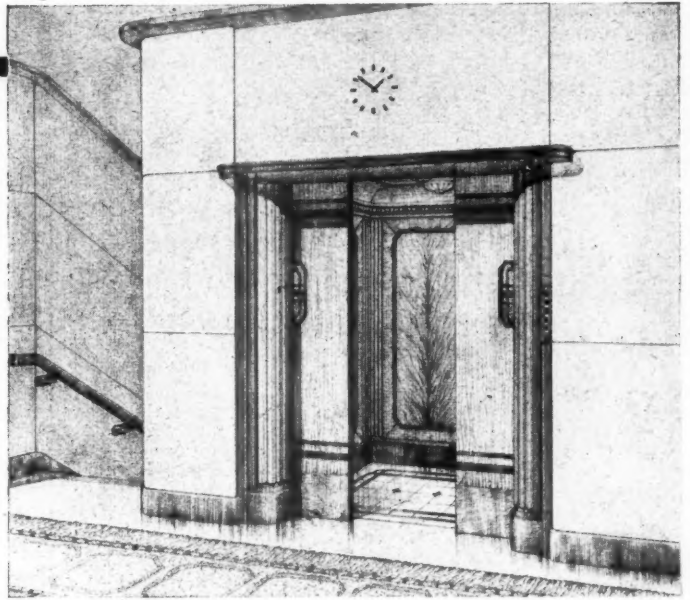
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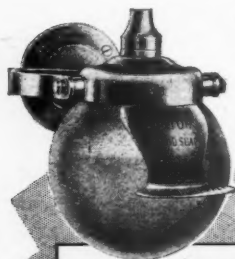


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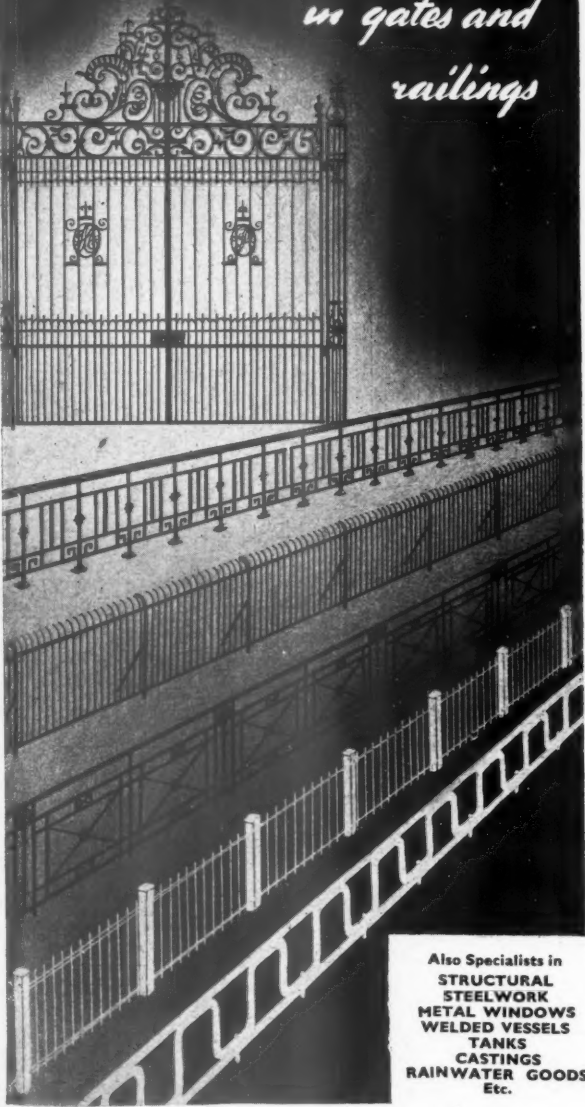
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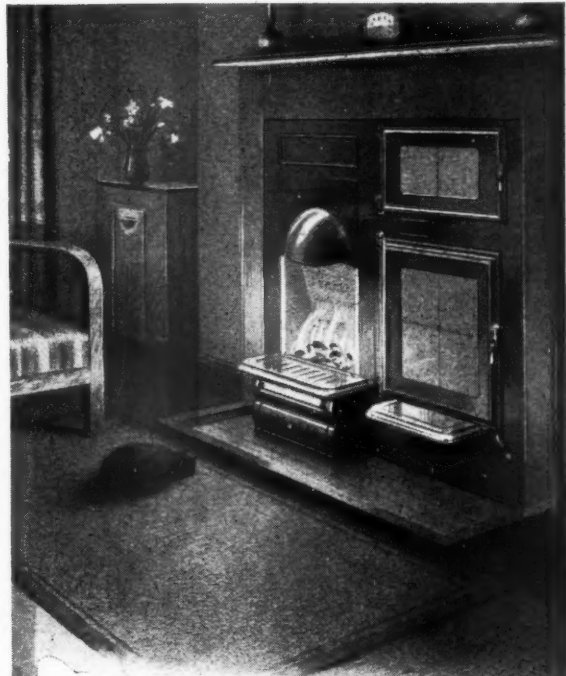
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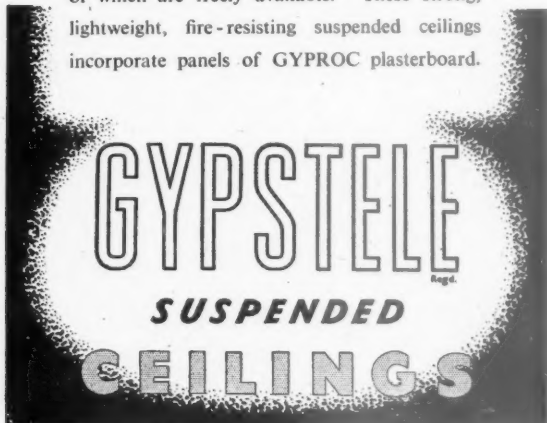
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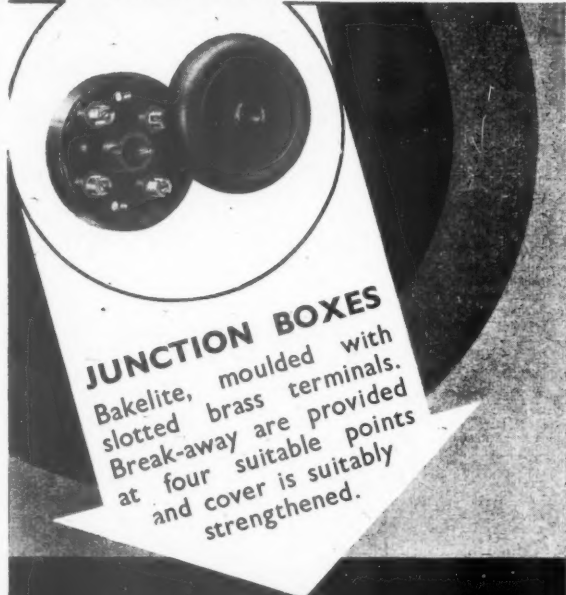
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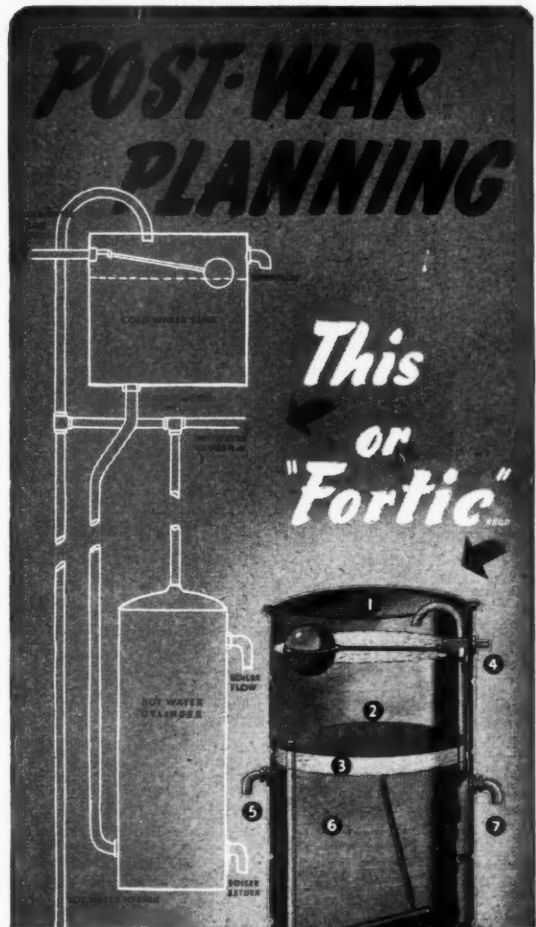
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(b) ASSISTANT QUANTITY SURVEYORS, from £400/£450 per annum.

The above amounts are supplemented by the usual Whitley Council bonus award, which at present amounts to £59 16s. per annum.

In the case of the Assistant Architects, applicants must be registered Architects, and generally preference will be given to applicants who are members of the Royal Institute of British Architects, or in the case of Quantity Surveyors, the Surveyors' Institution.

After six months' service the successful candidates will be required to contribute to the Corporation Superannuation Fund.

Applications, stating age and experience, together with copies of two testimonials, must be submitted to Mr. John Hughes, B.Arch., F.R.I.B.A., Director of Housing, Town Hall, Manchester, 2, not later than Monday, 14th May, 1945.

Canvassing in any form, oral or written, direct or indirect, is prohibited, and copies of applications must not be sent to any member of the Committee or the Council. PHILIP B. DINGLE, Town Clerk. 689

ARCHITECTURAL ASSISTANT, temporary, required by the Corporation of Deal, for a minimum period of two years.

Candidates should preferably be A.R.I.B.A. or equivalent, and have had experience in designs for Public Buildings, Council Houses, etc.

Salary £240 per annum, plus current war bonus. Write, quoting EA.1135XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 11th May, 1945. 699

**HUNTS. COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. ARCHITECTURAL ASSISTANTS.**

Applications are invited for the appointment of TWO ARCHITECTURAL ASSISTANTS in the County Architect's Department.

The salaries will be between £240 and £305 per annum, according to qualifications and experience, plus an allowance of 5/78th of the salary for wartime hours and plus a war bonus of £59 16s. per annum for men and £48 2s. per annum for women.

Applications, stating age, qualifications and experience, and earliest date on which duties could be commenced if appointed, together with copies of two testimonials, should be sent to Mr. T. H. Longstaff, F.R.I.B.A., County Architect, Walden House, Huntingdon, by not later than Tuesday, 8th May 1945.

J. B. KELLY, Clerk of the County Council.

Gazeley House, Huntingdon. 711

**ARCHITECTURAL ASSISTANTS.**

The Miners' Welfare Commission invites applications for the above posts. Salary £300 to £400, according to qualifications and experience, plus war bonus at Treasury rates.

The appointments will be temporary, but the holders will be eligible, subject to satisfactory service and the occurrence of vacancies, for transfer to the regular staff with membership of the Staff Pension Scheme.

Applications must be made not later than Saturday, 26th May, 1945, on a form obtainable from the Establishment Officer, Miners' Welfare Commission, Ashley Court, Ashted, Surrey. 704

**ASSISTANT ARCHITECT, temporary, required by the Norfolk Education Committee.**

Candidates must be A.R.I.B.A. or hold an equivalent qualification, and have had considerable experience in the design of school buildings.

Salary £500 per annum, plus war bonus, at present £59 16s. per annum. The appointment is subject to the provisions of the L.G.S. Act, 1937, the successful candidate being required to pass a medical examination.

Write, quoting EA.1307XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 11th May, 1945. 695

**TECHNICAL ASSISTANTS, permanent, required by the County Borough of Southend-on-Sea.**

ASSISTANT ARCHITECT. Must be A.R.I.B.A. or equivalent, and have had considerable experience with a Local Authority, including the design of public buildings, schools, etc.

Salary scale, £700—£25—£800 per annum, plus bonus of £50 per annum. Commencing salary according to qualifications and experience. Reference EA.1376XA.

ARCHITECTURAL ASSISTANT (1st class). Must be A.R.I.B.A. or equivalent, with previous experience with a Local Authority. Salary £300—£20—£400 per annum, plus bonus of £60 per annum. Reference EA.1377XA.

The appointments are subject to the L.G.S. Act, 1937, the successful candidates being required to pass a medical examination.

Write, quoting the appropriate reference, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 11th May, 1945. 694

**TOWN PLANNER required by the Government of Jamaica.**

Applicants must have passed the Final Examination of the Town Planning Joint Examination Board or its equivalent, and have had a wide experience of Town Planning. The selected candidate would be required to act as Adviser to the Housing Authority, and be attached to the staff of the Government of the Colony.

Salary between £800 and £1,000 per annum, flat rate according to qualifications and experience.

Free passage on first appointment only. Quarters not provided.

Write, quoting EA.1398A, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 10th May, 1945. 696

**TECHNICAL ASSISTANTS, permanent, required by the County Borough of Oldham.**

Candidates must have been born before 1923 and hold a recognised architectural qualification; experience in a Municipal Office will be an advantage.

CHIEF ARCHITECTURAL ASSISTANT. Should be experienced in the erection and maintenance of public buildings, preparation and layout of Housing Schemes, and in the control and administration of staff.

Salary: £500—£20—£600 p.a., plus bonus, £59 16s. p.a. Reference: EA.1277XA.

ARCHITECTURAL ASSISTANT. Must be neat and capable draughtsman. Competent to prepare working drawings, take out quantities, and prepare estimates.

Salary: £320—£15—£350 p.a., plus bonus, £59 16s. p.a. Reference: EA.1278XA.

The persons appointed will be required to contribute to the Superannuation Fund, and to pass a medical examination.

Applicants should write, quoting the appropriate references, to the Ministry of Labour and National Service, Appointments Department,

Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for the necessary forms, which should be returned completed on or before 14th May, 1945. 708

**ARCHITECTURAL ASSISTANT required by the Urban District Council of Swadincote.**

Commencing salary £400 p.a., rising by four annual increments of £25 each to £500 p.a., plus cost of living bonus, at present £49 8s. p.a. The appointment will be for a minimum period of three years, after which time it will be subject to review.

Candidates must be Associates of the Royal Institute of British Architects, or hold an equivalent qualification.

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

Write, quoting EA.1394XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 15th May, 1945. 709

**TECHNICAL ASSISTANT, temporary, required by the Urban District Council of Havant and Waterloo, Hants.**

Candidates must have been born before 1923, preference given to holders of a recognised professional qualification, and be accustomed to making surveys, taking levels, and preparing plans of lay-outs and other incidental work in connection with the Council's housing scheme.

Salary £375 per annum inclusive. Write, quoting EA.1396XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 11th May, 1945. 698

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ARCHITECTURAL ASSISTANT, permanent, required by the County Borough of Eastbourne. Candidates must have been born before 1923, and hold a recognised Architectural qualification and have had experience in Housing, Schools, and Public Buildings.

Salary scale £275 to £325 per annum, plus war bonus, at present £60 per annum.

The appointment is subject to the provisions of the L.G.S. Act, 1937, the successful applicant being required to pass a medical examination.

Write, quoting EA.1385XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 10th May, 1945. 697

TECHNICAL ASSISTANTS, permanent, required by the County Borough of Northampton. SENIOR PLANNING ASSISTANT. Must be A.R.I.B.A. or equivalent, and A.M.T.P.I., and have had a wide practical experience in the preparation of Town Planning schemes.

Commencing salary £500 per annum. Reference EA.1382XA.

ARCHITECTURAL ASSISTANT. Should be A.R.I.B.A. or equivalent, and have had experience of Municipal Housing schemes. Commencing salary £400 per annum. Reference EA.1399XA.

The appointments are subject to the provision of the L.G.A. Act, 1937, the successful candidates being required to pass a medical examination.

Write, quoting the appropriate reference, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 9th May, 1945. 700

TOWN PLANNING ASSISTANT, temporary, required by the Corporation of Tottenham.

Candidates must have been born before 1923, and be A.M.T.P.I., A.M.I.C.E., A.R.I.B.A. or equivalent, P.A.S.I. or A.M.I.M. & Co.E. They should have practical experience in the preparation of plans and layout of housing schemes.

Salary: Men, £365-£15-425, plus war bonus, at present 23s. per week.

Women: 4/5ths of this salary, plus war bonus, 18s. 6d. per week.

The appointment is subject to the provisions of the L.G.S. Act, 1937, the successful candidate being required to pass a medical examination.

Write, quoting EA.1393XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 14th May, 1945. 710

ARCHITECTURAL ASSISTANT, permanent, required by the Urban District Council of Bilerica, Essex.

Candidates must be A.R.I.B.A. or equivalent, and have had experience of design, layout, and construction of Council Housing Estates and other Municipal Buildings. Town Planning experience would be an advantage.

Salary £400 p.a., plus cost of living bonus, at present 16s. p.w. The appointment is subject to the provisions of the L.G.S. Act, 1937, the successful candidate being required to pass a medical examination.

Write, quoting EA.1189XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 15th May, 1945. 707

TOWN PLANNING ASSISTANT, temporary, required by the Corporation of East Ham.

Candidates must be A.M.T.P.I. or hold an equivalent Town Planning qualification, and be competent to undertake work in all aspects of post-war re-development.

Salary £370-£15-£445 p.a., plus cost of living bonus, at present 19s. p.w. Additional payment is being made for extended office hours. Commencing salary within the scale, according to qualifications and experience.

The appointment is subject to the provisions of the Local Government Superannation Act, 1937, the successful candidate being required to pass a medical examination.

Applicants should write, quoting EA.1097XA, to the Ministry of Labour and National Service, Appointments Department, A.3 (b), Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for the necessary forms, which should be returned completed on or before 14th May, 1945. 706

CIRENCESTER RURAL DISTRICT COUNCIL. APPOINTMENT OF ARCHITECT.

Applications are invited for the appointment of Architect for the Council's Post-War Housing Programme, embracing approximately 200 houses, 50 of which are in the First Year's Programme. A knowledge of the Cotswolds and its amenities is desirable, but not essential.

Applications, giving particulars of qualifications and experience in Local Authority architectural and building work, stating when able to undertake the duties, endorsed "Architect," should be sent to the undersigned, not later than 19th May, 1945. J. A. HALL, Clerk to the Council.

Rural Council Offices, 29, Gloucester Street, Cirencester, Gloucester. 701

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ARCHITECT'S ASSISTANT required in Yorkshire (W.R.) town; must be experienced in all classes of work, and competent to supervise. Apply, giving age, full particulars and salary required; possible partnership for suitable man. Box 702.

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Applications, which must be in writing, stating date of birth, full details of qualifications and experience (including a list in chronological order of posts held), and quoting Reference No. 128, should be addressed to the Ministry of Labour and National Service, Appointments Office, Vicars Lane, Leeds. 711

CHARTERED QUANTITY SURVEYOR required for responsible position in office of London Chartered Surveyor. This is an opportunity carrying prospect of partnership for a gentleman who has had complete experience in a professional office and who is able to work up and take full charge of Q.S. side of practice. Experience in large civil engineering contracts desirable. A salary commensurate with qualifications will be paid. Please write in confidence, stating age, with details of past experience and present employment, and whether available now or post-war to Box 670.

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A.R.I.B.A. (47), with T.P. qualification and specialist experience of heating engineering, desires post leading to partnership; Scotland preferred. Box 499.

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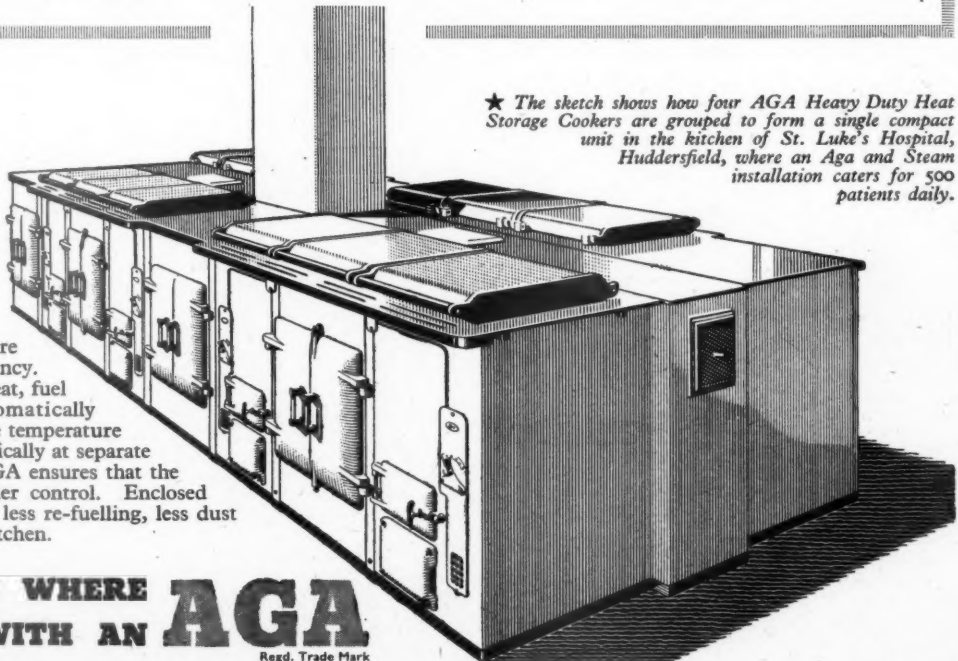
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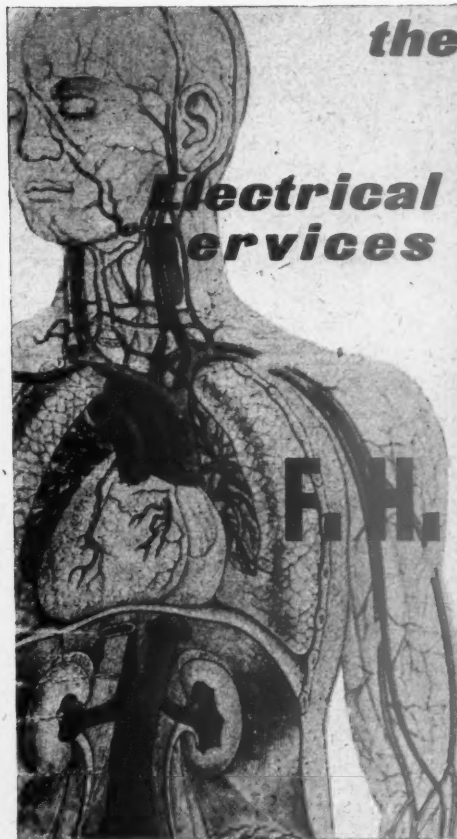
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