

# THE ARCHITECTS' JOURNAL



## standard contents

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

## DIARY NEWS

from AN ARCHITECT'S  
Commonplace Book

## ASTRAGAL

## LETTERS

## PHYSICAL PLANNING

## CURRENT BUILDINGS

## INFORMATION

## CENTRE

Physical Planning      Lighting  
Structure      Heating & Ventilation  
Materials      Questions & Answers  
Acoustics & Sound Insulation

## INFORMATION SHEET

## SOCIETIES & INSTITUTIONS

## PRICES

Architectural Appointments  
Wanted and Vacant

No. 2603]

[Vol. 100

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★ The war has both multiplied the number of Official Departments and encouraged Societies and Committees of all kinds to become more vocal. The result is a growing output of official and group propaganda. A glossary of abbreviations is now provided below, together with the full address and telephone number of the organizations concerned. In all cases where the town is not mentioned the word LONDON is implicit in the address.

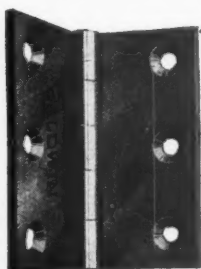
AA	Architectural Association. 34/6, Bedford Square, W.C.1.	Museum 0974
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
BC	Building Centre. 23, Maddox Street, W.1.	Mayfair 2128
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. Shobnall Road, Burton-on-Trent.	Burton-on-Trent 3350
BIA	British Ironfounder's Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	British Steelwork Association. 11, Tothill Street, S.W.1.	Whitehall 5073
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CEMA	Council for the Encouragement of Music and the Arts. 9, Belgrave Square, S.W.1.	Sloane 0421
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Sloane 4280
CSI	Chartered Surveyors' Institution. 12, Great George Street, S.W.1.	Whitehall 5322
DIA	Design and Industries Association. Central Institute of Art and Design, National Gallery, W.C.2.	Whitehall 2415
DOT	Department of Overseas Trade. Dolphin Square, S.W.1.	Victoria 4477
EJMA	English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.	Canonbury 2041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 55, Great Ormond Street, W.C.1.	Holborn 2664
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-29
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3767
MARS	Modern Architectural Research. 46, Sheffield Terrace, W.8.	Park 7678
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Belgrave Square, S.W.1.	Sloane 4522
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOI	Ministry of Information. Malet Street, W.C.1.	Euston 4321
MOLNS	Ministry of Labour and National Service, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalt Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NBR	National Buildings Record. 66, Portland Place, W.1.	Welbeck 1881
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041
NFBTO	National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby Street, W.C.1.	Holborn 2770
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NT	National Trust for Places of Historic Interest or Natural Beauty. 7, Buckingham Palace Gardens, S.W.1.	Sloane 5808
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
RCA	Reinforced Concrete Association. 91, Petty France, S.W.1.	Whitehall 9936
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Temple Bar 8274
SFMA	School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.	Chancery 5313
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6147
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815

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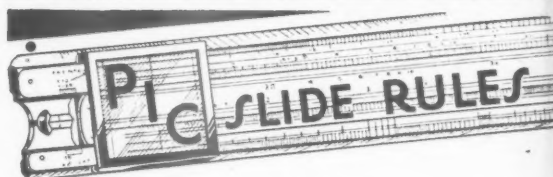
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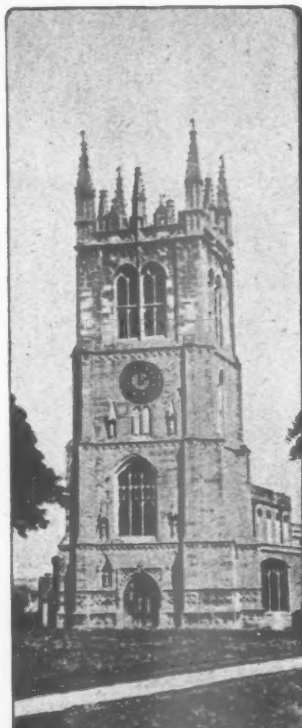


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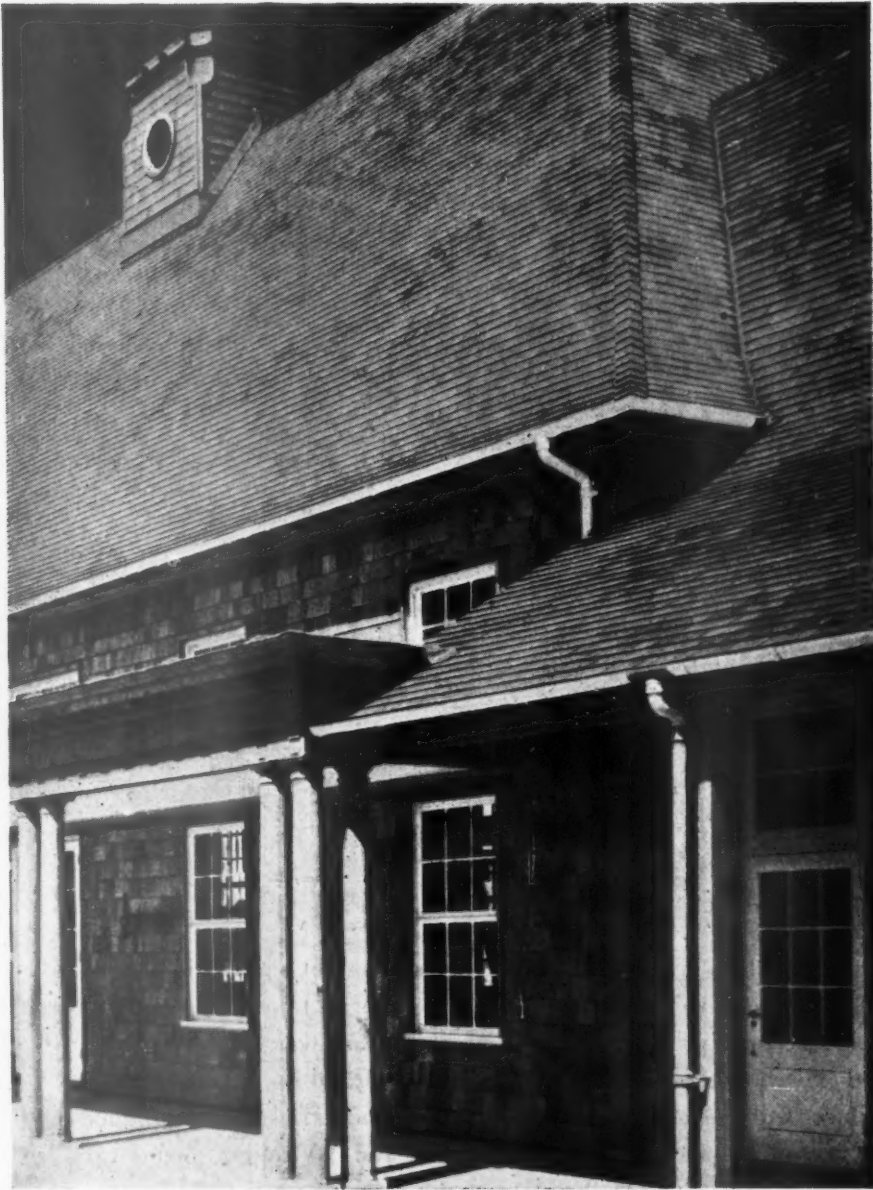
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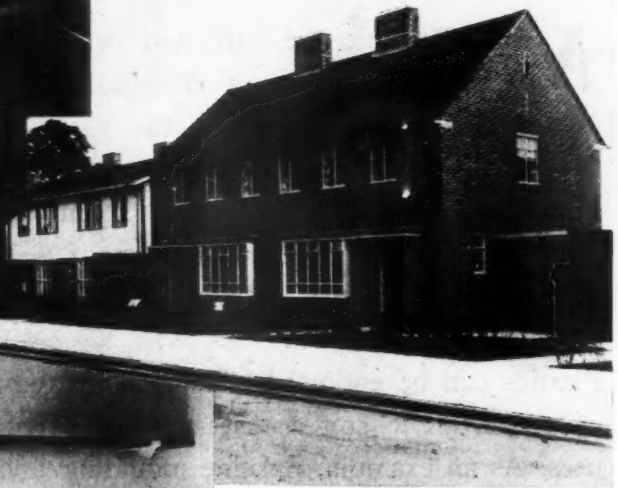
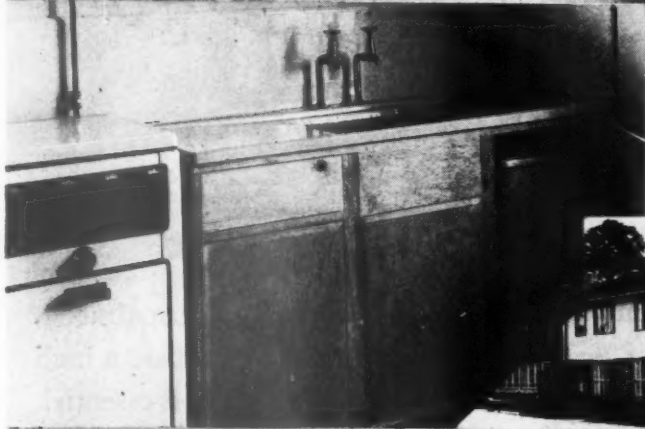
## *Sleeping rough . . .*



. . . but not as rough as if a reliable ground-sheet were not part of the soldier's equipment. Though one of those everyday commodities taken very much for granted in peacetime, proofed and coated cloths have called for constant research and experiment to ensure materials able to stand up to the hard wear of war. Since war began, Imperial Chemical Industries have produced millions of yards of proofed cloths and "Rexine" and "Vynide" for military and civil services. Science allied to long manufacturing experience has contributed to the production of the high quality demanded. When the knowledge gained can be applied to the production of peacetime requirements, architects and interior decorators can rely upon a range of Mural "Rexine" and Mural "Vynide" panelling cloths outstanding in quality and unrestricted in colour and design.



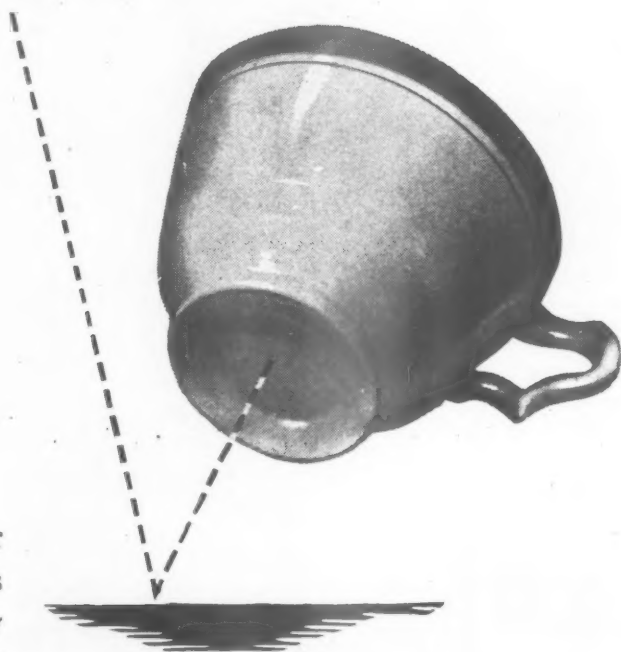
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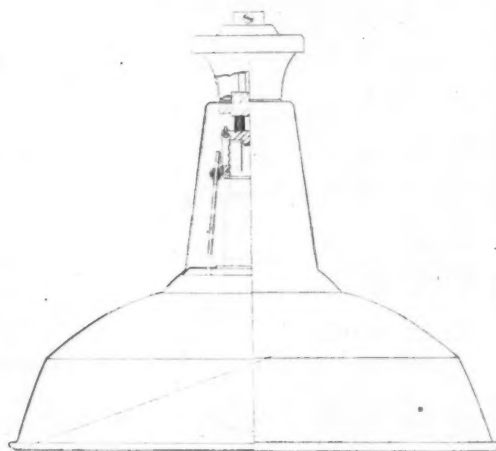


# BENJAMIN LIGHTING DATA

6

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- III REFLECTING SURFACES must be chosen so that they do not reflect bright spots into the eye.
- IV VISOR GLASS FRONTS besides keeping out dirt can be supplied with frosted or opal glass to diffuse the light.



★ This is No. 6 of a series of data sheets.  
Paper restrictions prevent our publishing  
all of them here but we will gladly send you  
copies of the rest.

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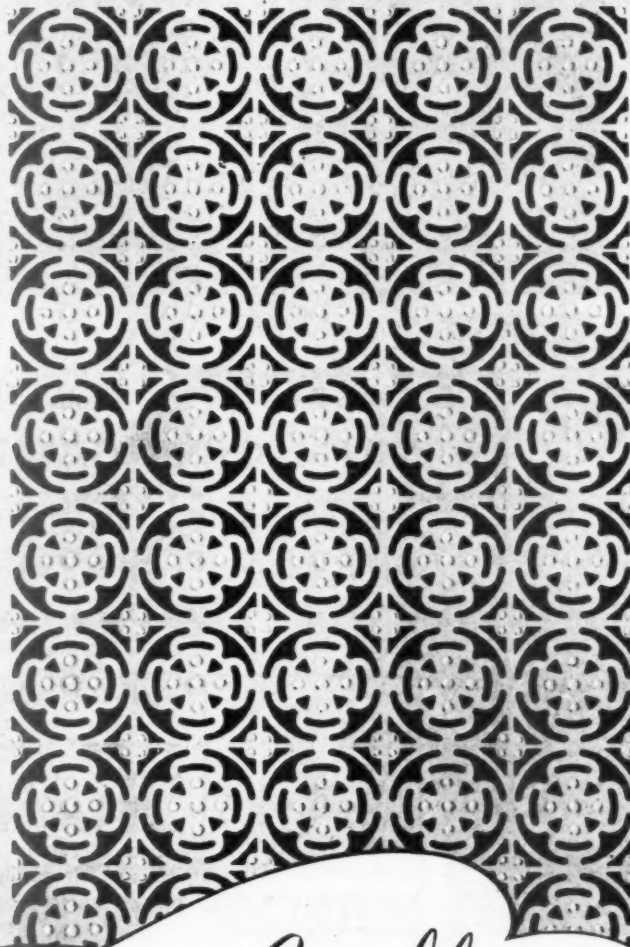






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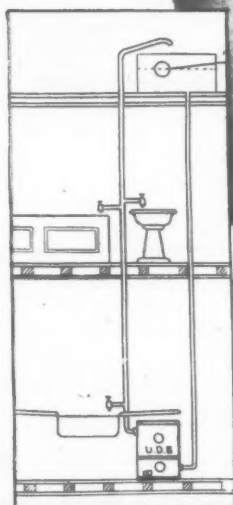
'Castodors' fire-resisting qualities contribute to the safety of modern buildings. After searching tests they have been certified as approved by the National Fire Brigades Association and by the Mercantile Marine Department of the Board of Trade. Fitted to R.M.S. "Queen Mary," "Queen Elizabeth" and L.C.C. Fire Brigade Headquarters. Caston's Patent spring-operated oil-damped self-closing gear on the principle of the human forearm, rapid at first, slows to a gentle noiseless close.

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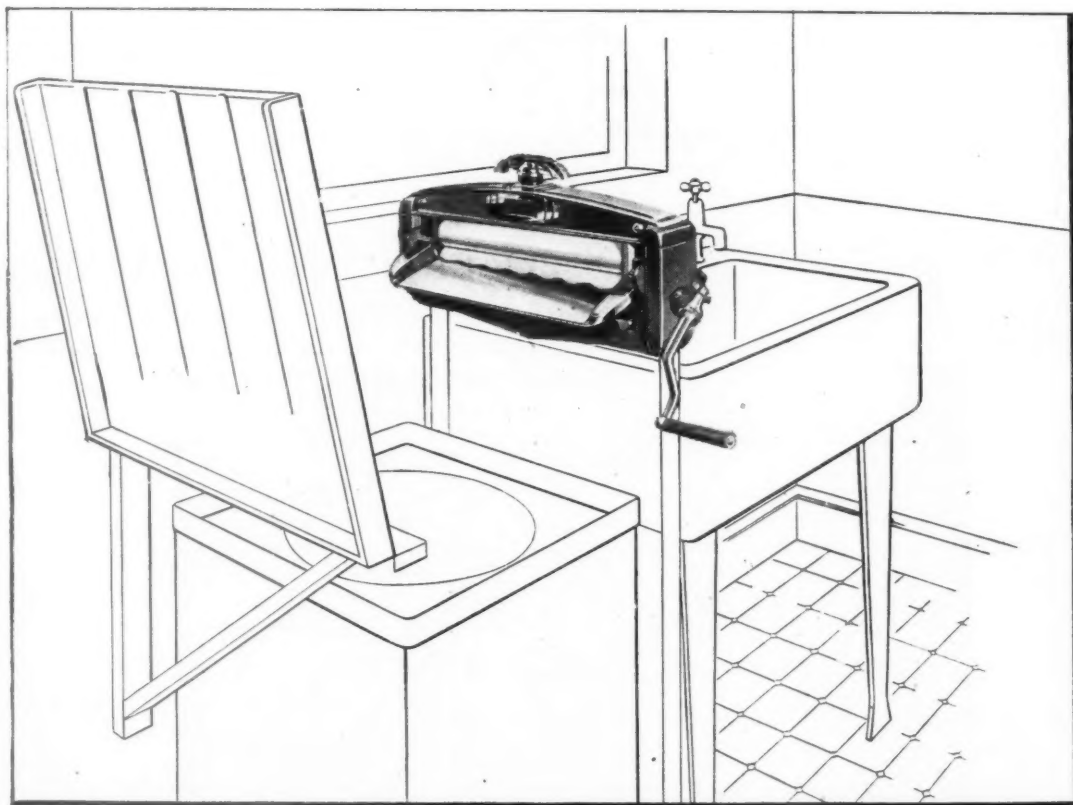
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## *She dreamed . . . . .*

*and in her dream time turned back thirty years. She was a housewife, busy with the weekly wash. With aching back and heated weary face she toiled between a sink she had to bend herself in two to reach, a copper boiling over a roaring roasting fire, and a monstrous mangle she barely had the strength to turn.*

## *She woke . . . . .*

*and there she was — a housewife, but of the pattern of today and tomorrow. With the weekly wash before her, nothing but the normal work of a normal day. With her pleasant kitchen, her just-right sink, her easy to use wash-boiler and her rubber roller wringer. What need had she to fear a back that ached, or a skin shrivelled by heat and exhaustion?*

Modern woman demands a civilised standard for the kitchen where the biggest part of her work is performed. A survey undertaken to ensure that her standards are met has laid down what are the minimum requirements—the size and

height of sink, the type of draining-board, the presence of wash-boiler. And always—room for a rubber roller wringer. The housewife herself will tell you *which* wringer—the Acme 55—the BEST.

To plan a modern house without a modern kitchen would be like building a ship without an engine room. To fix the kitchen without equipment for the home laundry would be leaving the engine room bare of engines.

Ministries and local authorities have accepted and approved surveys which regard conditions for the home laundry as vital. Which emphasises that room should always be made in the sink-unit for a rubber roller wringer, which halves a woman's work and takes the nightmare quality out of wash-day.

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



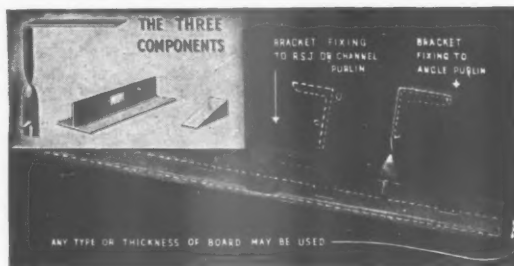
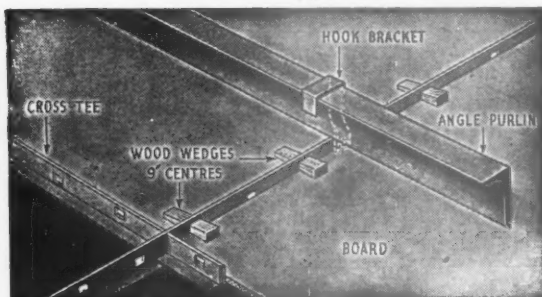
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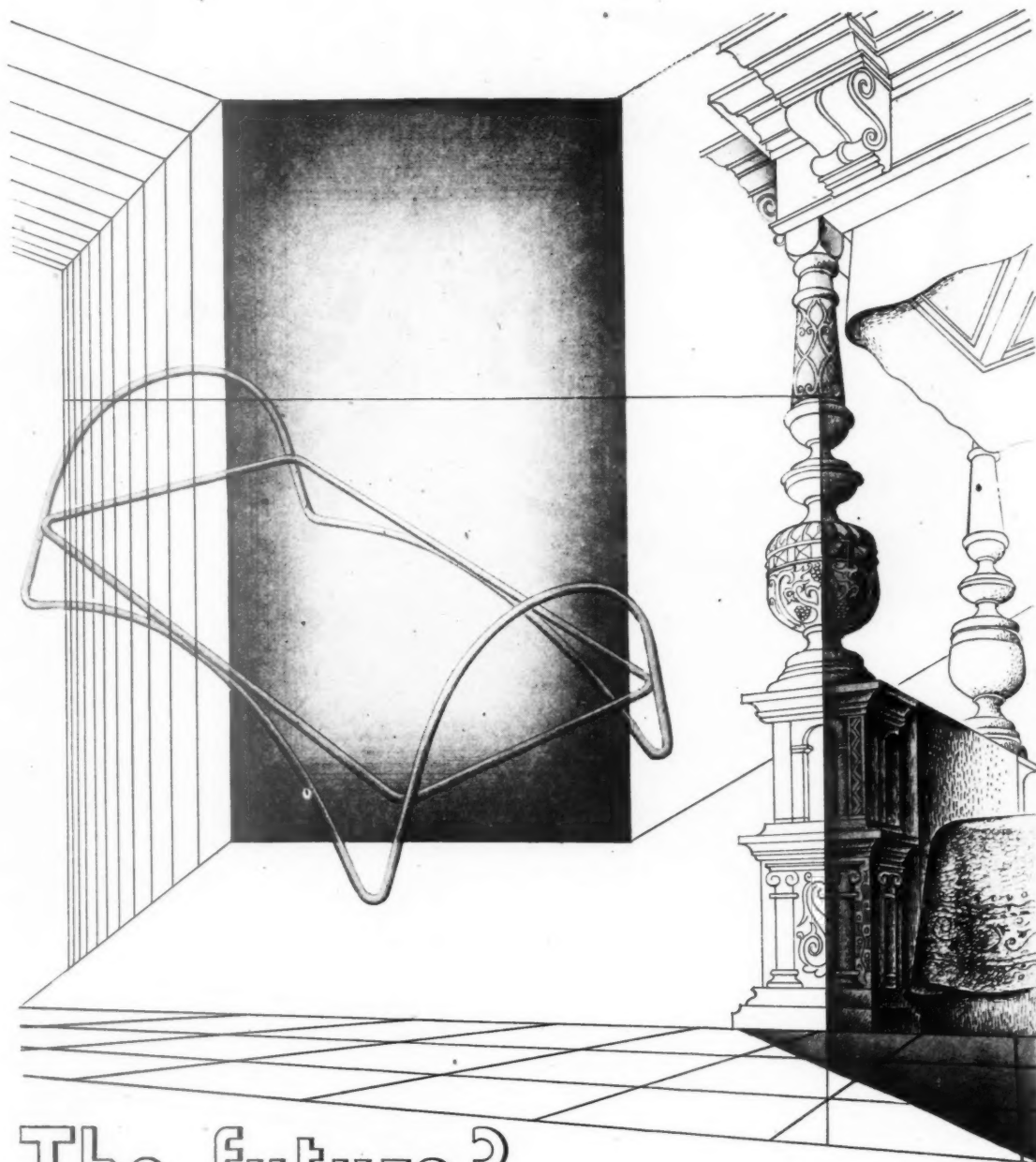
# DREADNOUGHT

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## The future?

A planned future will need also, to coin a word, to be "simplicated". The elaborate makeshifts into which our civilization has drifted (think for a moment of all the dusting and cleaning necessitated by outmoded methods of ventilation) will without doubt be simplified until comfort will be available from central sources automatically and certainly. When the time comes for that, Brightside will be there.

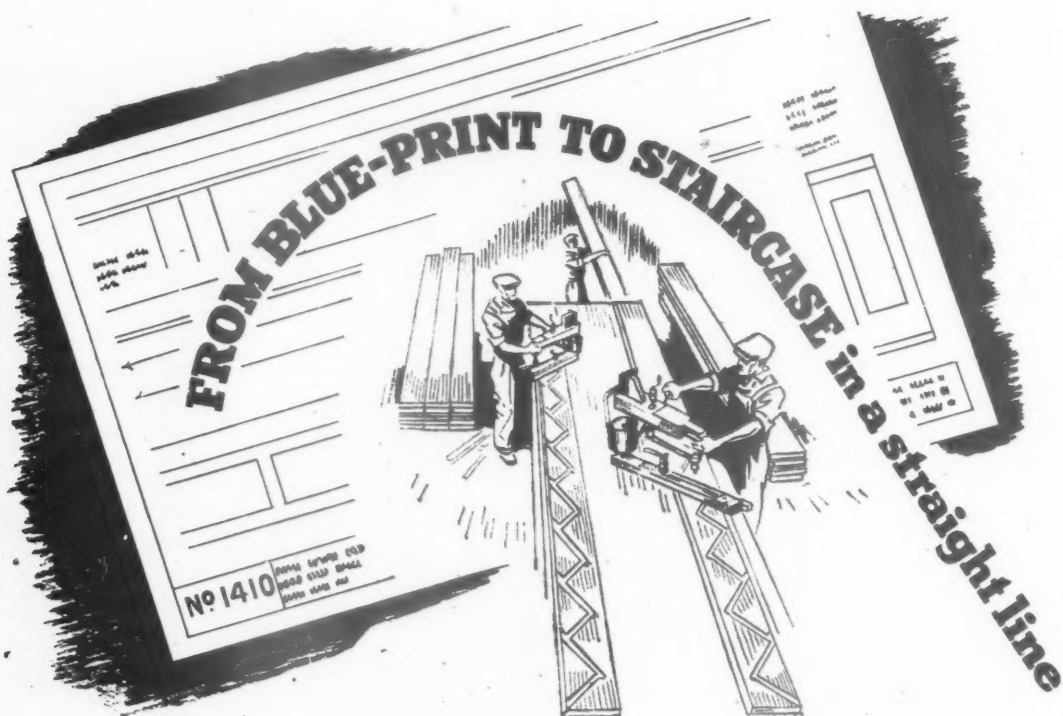
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# MAGNET JOINERY

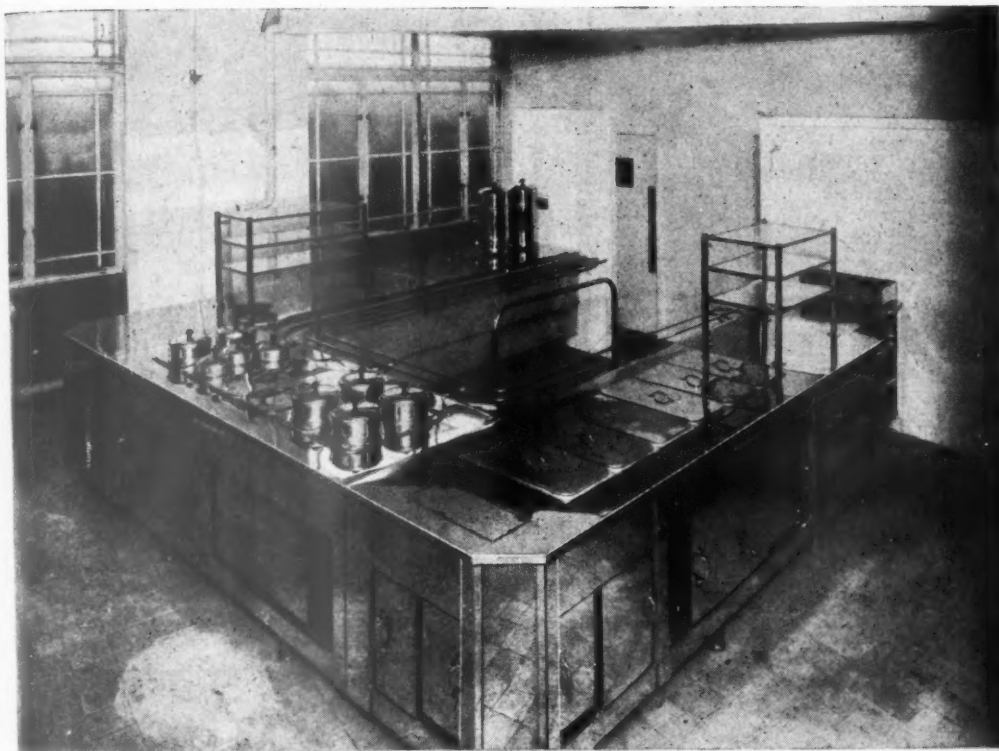
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WEST THURROCK, GRAYS, ESSEX

• ANNE ROAD, SMETHWICK, BIRMINGHAM

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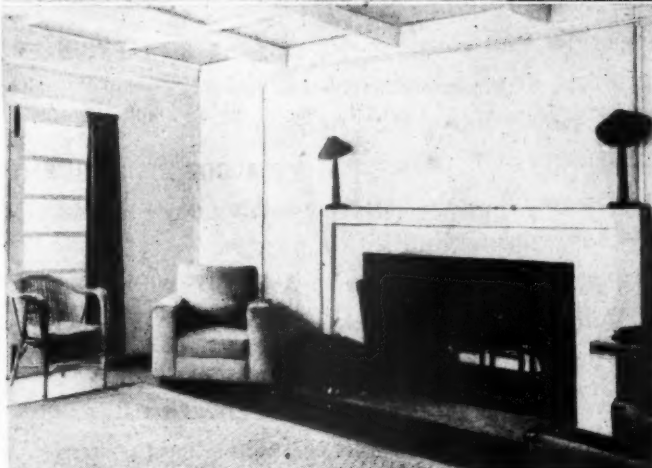


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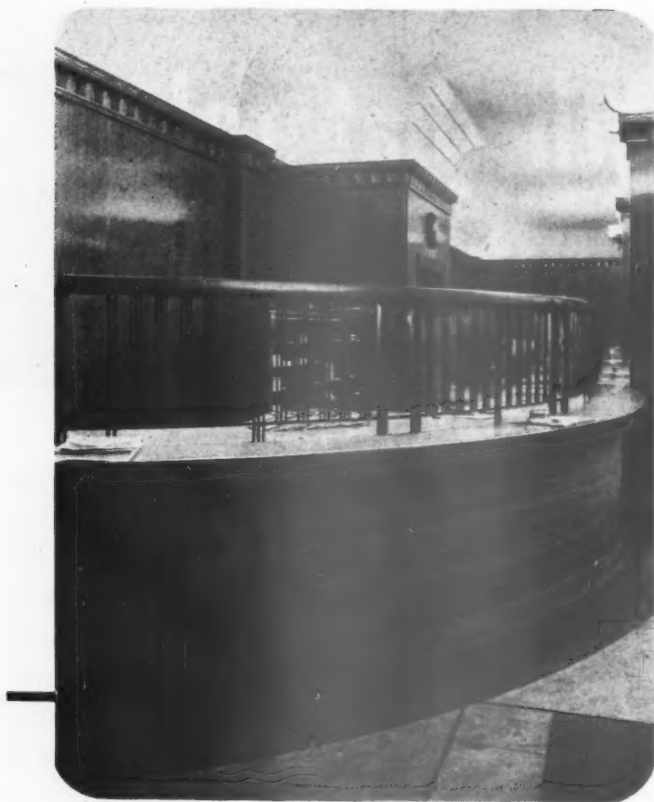
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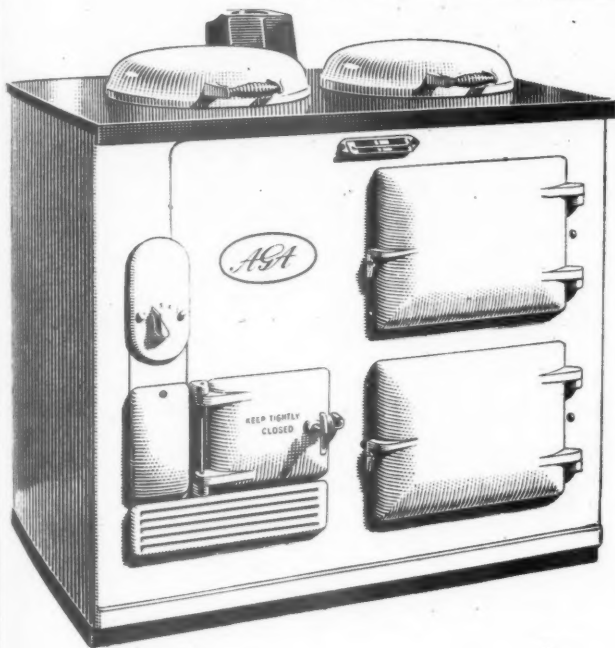
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# HEAT STORAGE COOKING

EXAMPLE

## THE AGA COOKER

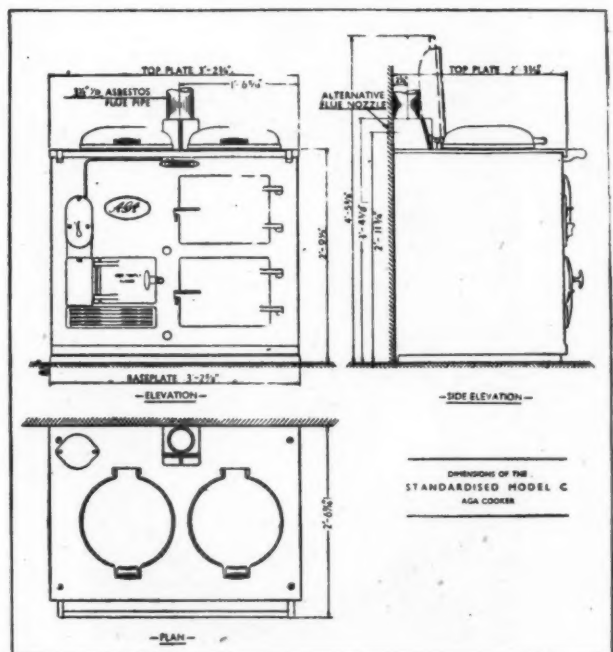


WEIGHT: Approximately 10½ cwt.

**INSTALLATION:** It fits right back against the wall: the flue pipe can be taken either straight up to the chimney or else a different flue chamber can be fitted and the stub taken to a built-in flue. It is recommended that the AGA Cooker should stand on a sheet of asbestos cement or asbestos millboard (in the case of a wooden floor): or it may be raised on a brick or cement dais flush with the front plate of the cooker. It is important that the hearth or base upon which the cooker stands should be perfectly level.

### SPECIFICATION FOR MODEL C:

The dimensions of this model are given in the drawings below, which show front and side elevations and plan. It is recommended for average conditions in a medium-sized house. It provides a fast boiling plate and a separate simmering plate, and two ovens, one for roasting and one for simmering and plate-warming. It is guaranteed not to consume more than an annual maximum of 2½ tons of fuel.



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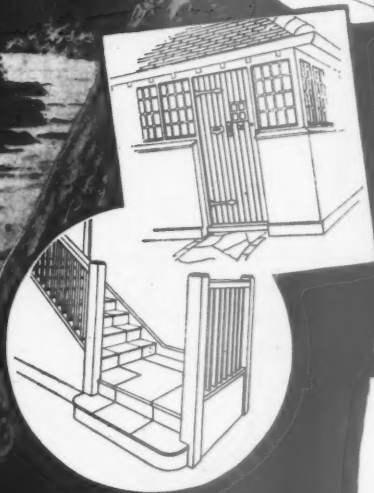
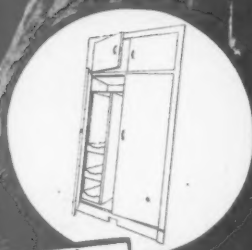
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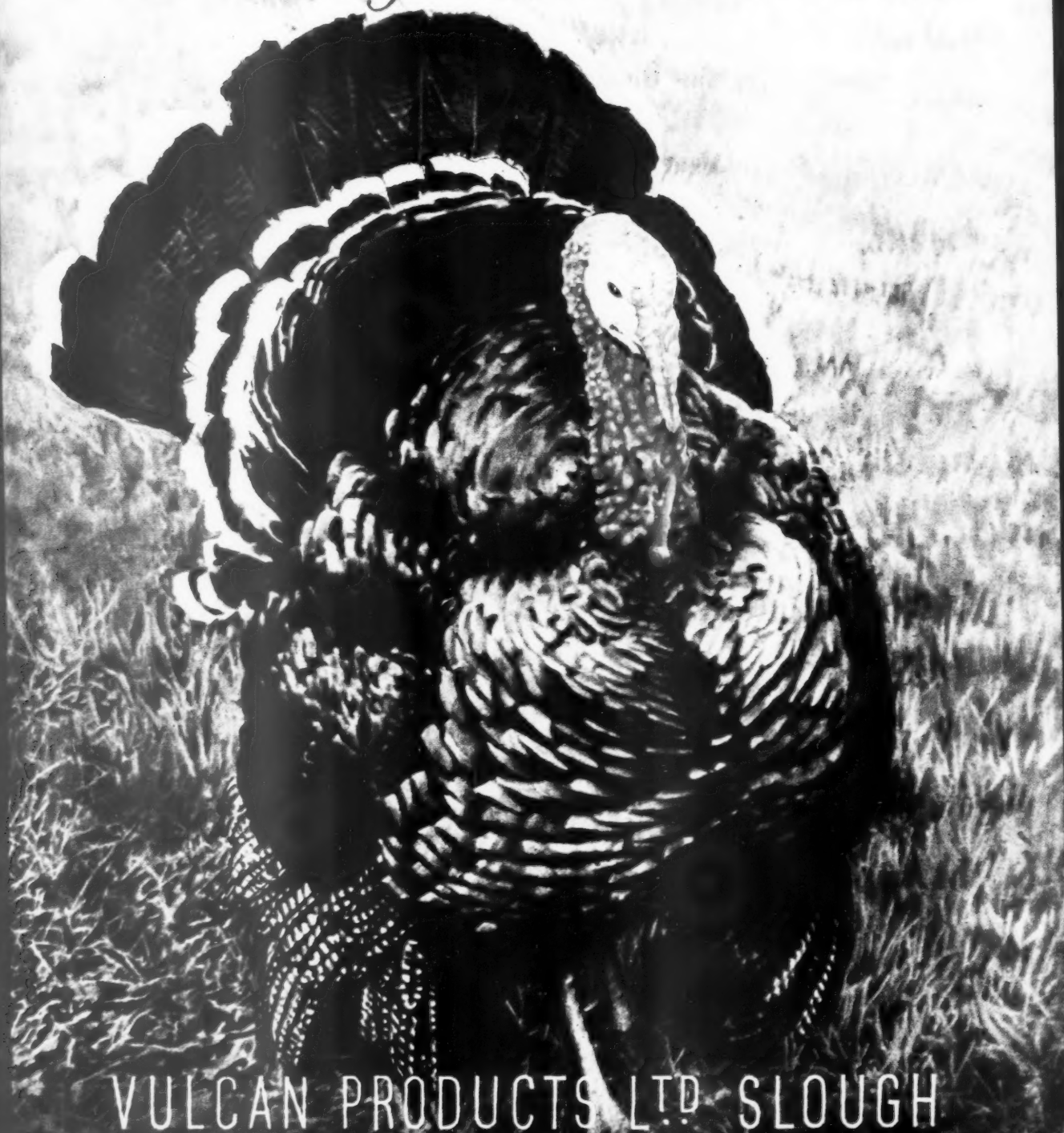
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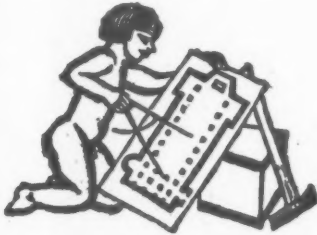
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In common with every other periodical this JOURNAL is rationed to a small part of its peacetime needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee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

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## DIARY FOR DECEMBER JANUARY AND FEBRUARY

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

**BERWICK - ON - TWEED.** *When We Build Again.* Exhibition and Film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.) The Town and Country Planning Association is holding a conference on the last day of the Exhibition. DEC. 14-16

**BRISTOL.** *Architectural Students' Association Congress.* At the offices of the Bristol Gas Company. Congress opens with a reception at Red Lodge, Bristol, at which the Lord Mayor will be present. The theme of the congress will be the Architect's contributions to reconstruction dealt with in three main phases: (1) The architect's duty as an artist; (2) the architect's social obligations; (3) the architect's obligation to his profession. Speakers include John Madge, of the Reconstruction Research Group of the University of Bristol, Colin Penn, and Miss R. Churchill. The congress is being organized and arranged by the Students of the RWA School of Architecture, Bristol, under their President, J. A. Matthews. During the congress a public exhibition will be held of the work of the RWA School. DEC. 14-15

**CROSBY, LIVERPOOL.** *The English Town: Its Continuity and Development.* (Sponsor, TCPA). JAN. 17-31

**GATESHEAD.** *Rebuilding Britain.* Exhibition. At Shipley Art Gallery. (Sponsor, BIAE). DEC. 14-30

**LONDON.** *Electrical Tools for the Building Industry.* Exhibition. At the Connaught Rooms. F. C. Orchard, chief electrical engineer of Hornsey, will give an address on the present-day use of small tools in the building industry at the opening ceremony, December 18, 2.15 p.m. (Sponsor, LMBA). Tickets for the exhibition from the LMBA, 47, Bedford Square, W.C.1. DEC. 18

Jacob L. Crane, of the United States Government. *An American Looks at British Housing.* At the RIBA, 66, Portland Place, W.1. As Assistant Administrator of the National Housing Agency and Director of Urban Planning, Mr. Crane's position is equal to Ministerial rank in this country. Mr. Crane is a Member of the American Society of Civil Engineers, Member and Past President of the American Institute of Planners, Member of the American Society for Public Administration, and Member of the National Association of

Housing Officials. He is in this country at the invitation of the Minister of Health and the Minister of Town and Country Planning. 5.30 p.m. JAN. 2

*TVA Documentary Film.* At a joint meeting of the Town Planning Institute and the Institution of Civil Engineers. At the Institution of Civil Engineers, Great George Street, S.W.1. 6 p.m. JAN. 25

G. Pierce Clingan, City Building Surveyor, Liverpool. *National Building Regulations.* At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, Royal Society of Arts). 1.45 p.m. JAN. 31

H. M. Webb. *Reconstruction under the Town and Country Planning Act, 1944.* At Caxton Hall, Caxton Street, S.W.1. (Sponsor, TPI). 6 p.m. FEB. 1

Percy Smith, Master of the Faculty of Royal Designers for Industry. *Beauty in Sign Painting and Civic Lettering.* At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA). 1.45 p.m. FEB. 7

*Competition for the best Design for an International Airport for London.* Promoters The Aeroplane, Bowling Green Lane, London, E.C.1. Assessors: Austin Blomfield, M.A., F.R.I.B.A.; H. Roxbee Cox, B.Sc.; Air Vice-Marshal D. C. T. Bennett, C.B.E., D.S.O.; W. R. Verdon Smith; and Dennis H. Handover. Prizes: 1st, £500; 2nd, £100; 3rd, £50. Closing date December 31, 1944. Overseas entries must arrive at the offices of *The Aeroplane* by February 16, 1945. DEC. 31

Discussion. *Lay-out of Road Intersections.* Introducer, A. J. H. Clayton. At the Institution of Civil Engineers, Great George Street, Westminster, S.W.1. (Sponsor, Institution of Civil Engineers). 5.30 p.m. JAN. 9

**SPALDING, Lincs.** *The English Town: Its Continuity and Development.* Exhibition. At the East Elloe Post-War Housing Committee, Holbeach. (Sponsor, BIAE). DEC. 14-30

**WORKINGTON.** *Town and Country Planning Association Conference.* Speakers, Mrs. Jean Mann and George Bull, Town Clerk, Durham. JAN. 13

*The English Town: Its Continuity and Development.* Exhibition. (Sponsor, TCPA). JAN. 8-13

## NEWS

THURSDAY, DECEMBER 14, 1944  
No. 2603 VOL. 100

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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.

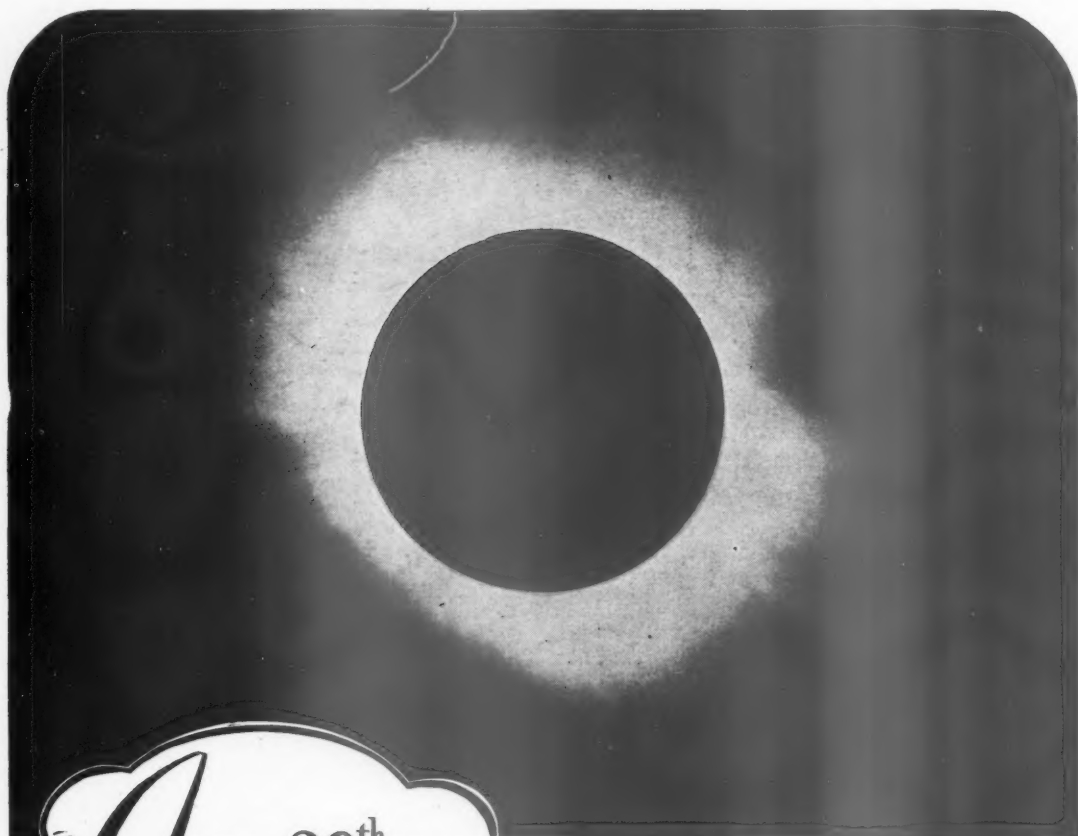
★★ means important news, for reasons which may or may not be obvious.

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

### *The Ministry of Education has published draft PLANNING AND BUILDING REGULATIONS FOR SCHOOLS maintained by local authorities.*

Drawn up under the new Education Act, which comes into force on April 1, they tell local authorities that schools must: Be placed off main roads; have unrestricted sunlight and plenty of space around them; have staff rooms, accommodation for medical inspection and treatment, and kitchens; except in small primary schools, have one or more dining rooms; have, on the sites, playing grounds from half an acre for primary schools to 14 acres for large secondary schools; art and craft rooms, a library, an assembly hall with platform, or stage, and a gymnasium in secondary schools; accommodation for film projection and the use of episcope, and class-rooms wired for broadcast reception in county and voluntary schools; in boarding schools, dormitories and cubicles, sanatoria, sick rooms, pupils' common rooms, and accommodation for domestic staffs.

*Mr. J. Norman Daynes, K.C. has retired from the office of Director of Cement in the Ministry of Works and intends to return to practice at the Chancery Bar.*



June 29<sup>th</sup> 1927

Photograph by Greenwich Observatory party at Giggleswick, Yorkshire

The year 1927 was remarkable for a series of natural phenomena. Floods, earthquakes, cyclones, storms and forest fires caused great havoc. In England, a complete solar eclipse was visible, such as had not been witnessed here since 1724 and would not recur until 1999.

Meanwhile, we were carrying on with our own job of Building. The year 1927 saw us engaged on such new works as the Park Lane Hotel, Liberty's Store in Regent Street, Swan & Edgar's Store at Piccadilly Circus, the Army & Navy Club in Pall Mall, Crosse & Blackwell's factory at Bermondsey, hospitals, flats and a variety of other new buildings, as well as renovation and alteration jobs of every description.

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## From AN ARCHITECT'S Commonplace Book

VIA MEDIA. [From *Our Building Inheritance* by W. H. Godfrey (Faber and Faber)] It seems obvious that if the town is to become again a self-contained organism, with its market-place (or in modern terms—civic centre) set, both for convenience and fitness, at its core, the through traffic will have to be diverted. It is not so certain that the common remedy proposed, that of the by-pass road, is entirely satisfactory. The by-pass breaks contact between the town and the highway to which it belongs and in so far as it is successful in its purpose, it does to some extent cut the town adrift. But more often it succeeds only partially, and heavy traffic, which has no real business in the town, finds some more or less empty excuse for preferring the streets to the by-pass. I cannot help thinking that there is—in a literal sense—a *via media* to be found between the two extremes of destroying the possibility of civic life by allowing the traffic to flood the main street and of starving the town by expelling the traffic lines from its boundaries. If the through traffic is taken by way of the suburbs of the town, as has been done so successfully at Cheltenham, the centre is reserved for its proper purpose—the leisurely enjoyment of all the appointments of civil life—and yet the town is kept in communication with the outside world.

### ★ Artist and book illustrator, REX WHISTLER LEFT £4,627, net personalty £4,467.

Lieut. Rex John Whistler, Welsh Guards, was killed in action in France last July. According to the *Daily Telegraph*, Brighton Corporation, the War Department, the executor of the artist, Rex Whistler, and the owner of a house in Preston Park Avenue, Brighton, are all anxious to solve the legal ownership of the artist's last paintings before he was killed in action. The paintings, three in number, were done in oils by Whistler on the walls of a house in a room used by the Welsh Guards before the invasion as their regimental mess. They are: The crest of the regiment in blue, white and gold in bold relief. A study of George IV. with mural decorations. An allegorical representation of George IV as Prince Regent awakening the Spirit of Brighton. Following Whistler's death the then Mayor of Brighton, Councillor Dutton Briant, communicated with the officer commanding the regiment and the artist's mother, Mrs. Turner, with a view to the paintings being acquired by the Corporation. The owner of the requisitioned house, Mr. Norman Dalrymple, of Graham Avenue, Brighton, is laying claim to them, and the War Department is interested in the Welsh Guards crest. Corporation employees, under expert direction, have actually removed one of the paintings, but the other two lie on the floor of the former mess, with the doors and windows locked and sealed, pending the solution of the legal tangle.

lems of the day with which your Ministry is so often faced. May I hope that during your *régime* we shall not be put in the false position of having to operate under schemes which we regard as essentially unsound, but which your Department has decided upon without taking us into consultation? I offer you our full co-operation. I hope you will accept it and make use of it, in the interest alike of the country and of the greater efficiency of the Ministry over which you now preside.

### ★ Major Raymond Gordon Brown, A.R.I.B.A., A.A.Dipl., Parachute Regiment, has been appointed PRINCIPAL OF THE AA SCHOOL OF ARCHITECTURE.

Application has been made by the Council of the AA for his release from the Army. Major Gordon Brown is 32 years of age, and a South African by birth. He was educated at Haileybury College and Clifton College. After leaving the AA School he studied with the Dutch architect Dudok. He has been chief assistant to Sir Walter Tapper, R.A., Professor A. E. Richardson, A.R.A., and Mr. C. Lovett Gill, F.R.I.B.A.



Major Raymond Gordon Brown, A.R.I.B.A., A.A. Dipl., the new Principal of the AA School of Architecture. (See News Item above).

### Mr. J. C. Gray, J.P., President of the National Federation of Building Trades Employers, has pledged FULL AND CORDIAL SUPPORT of the organized builders of the country to Mr. Duncan Sandys, the new Minister of Works.

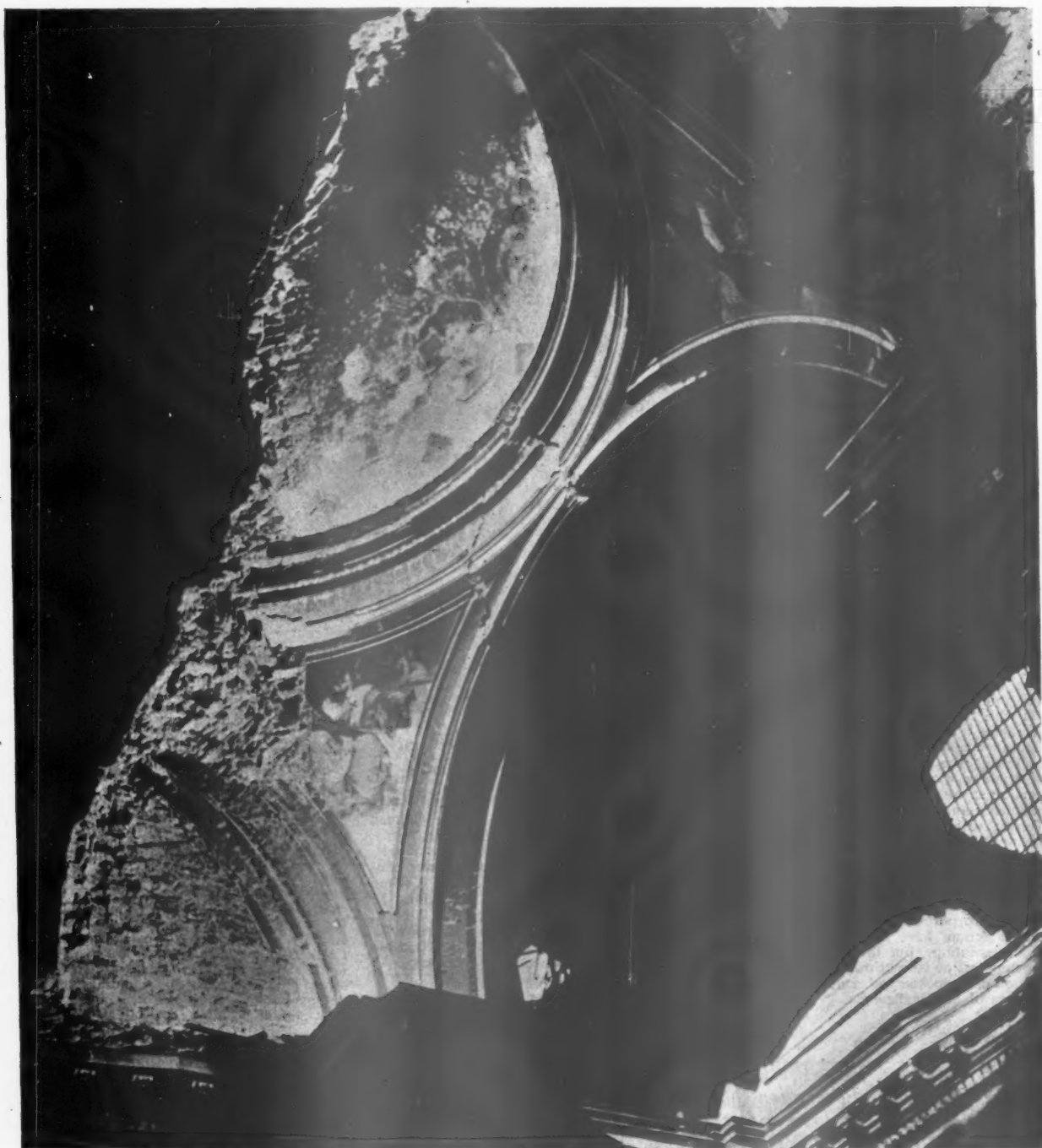
With the pledge goes the request that the builders be more fully consulted in the future than they have sometimes been in the past. Mr. Gray's letter is as follows:—On behalf of the organized builders of the country, I should like to congratulate you on your appointment as Minister of Works a position of vital importance in these critical days, and to assure you that in the vast task which lies before you, you will have the cordial support of all my members. We have on more than one occasion had to make mild protest against the apparent unwillingness of your Department to consult us as practical men on the practical prob-

### Let the Youth Hostels Association constitute a mighty army to FIGHT FOR ENGLAND'S beauty against all whose folly might destroy it.—Mr. Henry Strauss, M.P.

Mr. Henry Strauss, M.P., Parliamentary Secretary to the Ministry of Town and Country Planning, speaking in Norwich at the Annual Meeting of the East Anglia Regional Group of the Youth Hostels Association, said: Two facts render the problems of town and country planning more important and more urgent in England than in any other country in the world. First, no other country is so crowded. Secondly, while no other country has greater wealth or variety of natural and of man-made beauty, in no other country can that beauty be so easily destroyed. No folly of man could destroy the Rocky Mountains; but ill-placed, badly designed and bogus building can easily ruin the unique beauty of the Downs or the delicate perfection of the Norfolk Coast. Let the Youth Hostels Association, whose membership has increased since 1939 from 83,000 to 133,000, constitute a mighty army to fight for England's beauty against all whose folly might destroy it. They should fight for it both in the countryside and in those gracious and friendly villages and towns which Gilbert Chesterton called the *Crown Jewels of England*. Some multiple shop company may already have erected 500 buildings of one design, but that is no reason whatever why they should be allowed to erect the 501st, if the design is either bad or unsuited for its intended site. What we build ought to be as worthy of the 20th century as Bath, or King's Lynn, or the New Town of Edinburgh were of the 18th century. Let us be worthy of our tradition and the vigour which as a nation we have displayed in our greatest crisis. In such a cause defeatism is indecent.

The East Sussex Branch of the Rural Districts Councils Association invites members of the South Eastern Society of Architects to submit DESIGNS FOR A PAIR OF RURAL HOUSES. Application for particulars to be made, not later than December 16, to the Clerk of the Chailey Rural District Council, 31, High Street, Lewes. Designs to be sent in by March 1, 1945.





## *Bombed Buildings Abroad—I*

With this picture of the bomb-ruined dome of Capua Cathedral, we inaugurate a series of photographs of bombed buildings abroad, which will be published on this page from time to time. Such photographs are interesting not merely because they provide a record of well-known buildings after high explosive has partially destroyed them, but also because they have an appeal purely by virtue of their ruined state. Most ruins have a particular aesthetic and romantic character of their own, a certain drama which the original wholeness may not have possessed, and this applies as often to the silhouette of some decaying Gothic battlement as to the blitzed and moonlit row of mansions in a Bayswater side street.

Though we may deplore the destruction of fine old buildings, we can gain some consolation in appreciating the picturesque and accidental beauty of their wreckage. In many cases these ruins are well worth preserving for themselves, a creed that has been sloganized in the phrase, *Save Us Our Ruins*. There is certainly drama as well as Significant Form in this broken dome at Capua. The whole cathedral, which was founded in 856, and possessed its original campanile, was hit by both German and Allied bombs in October, 1943, when the town of Capua was completely destroyed. The picture was taken by George Silk, staff photographer of the United States magazine, *Life*.

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**At Oxford, Woolworth's propose to demolish the Clarendon Hotel and build A NEW STORE WITH A GOTHIC ELEVATION on the site.**

At the head office of Woolworth's a representative of the *Evening News* was told: We have had a meeting with the Oxford City engineer and the Oxford Preservation Trust, and we are trying to meet their wishes. The following letters from the Oxford University Undergraduate Representative Council and from the Georgian Group concerning the proposed demolition of the hotel have appeared in *The Times*.

SIR,—May we take advantage of your columns to draw attention to a matter arousing great anxiety in many circles in Oxford? This is the proposed demolition of the Clarendon Hotel in Cornmarket Street, and the erection on its site of a Woolworth's stores of the usual variety. This fine eighteenth-century hotel is one of the few buildings of architectural merit remaining in "The Corn," and it does much to prevent the street from entirely losing its individual character. At its last meeting the Undergraduate Representative Council passed the following resolution:—"That this Council regards with horror the proposal to replace the Clarendon Hotel by a Woolworth's stores, and would therefore urge all lovers of Oxford to take active steps to prevent this wanton transformation." We should like to add that the URC is, of course, as its name implies, the only body recognized by the Vice-Chancellor as being representative of Oxford undergraduates.—Yours faithfully, William H. Taylor, Chairman; Gillian Toller, Secretary; Oxford University Undergraduate Representative Council, St. Hilda's College, Oxford.

SIR,—The Georgian Group was concerned before the war with the case of the Clarendon Hotel, in Cornmarket, Oxford, which is referred to in the letter from the officers of the Oxford University Undergraduate Representative Council. As your correspondents rightly say, it is one of the few buildings of architectural merit remaining in that street, and the Group would regret to see it go the way of so many other fine eighteenth-century buildings. However, the sale of the site to Woolworth's is an accomplished fact and, in 1939, there seemed little to be done. But now that planning is in the air and the need of decentralizing Oxford's congested shopping centre is generally recognized, it may be that wiser counsels will prevail. In any event, it is most heartening to find the younger generation so deeply interested in architectural amenities: it gives encouragement to those of us who are fighting to preserve for them, and for those who will come after them, our sadly depleted heritage of fine buildings.—I am, sir, your obedient servant. A. E. Richardson, Vice-Chairman, The Georgian Group, 4, Hobart Place, S.W.1.

**The Metropolitan Water Board's plan to construct three large reservoirs is being OPPOSED BY THAMES VALLEY VILLAGES.**

It is proposed to construct the reservoirs in the parishes of Wraysbury, Horton and Datchet. The scheme is being opposed by the villages concerned, as they fear that these huge dams built in this low-lying part of the Thames Valley will lead to increased flooding. Protests have been sent to the Eton Rural District Council, the controlling authority.

## BINC AND PREFABRICATION

THE Building Industries National Council has put out a report on Prefabrication which seeks to suggest that all would be well in the garden, if only the old and tried traditional builders were left to get on with the job without unwarranted interference from the upstart prefabrication people next door. At a time when the "traditional" building industry can look forward to a decade of uninterrupted full pressure employment, come all three corners of the earth with prefabrication, we find the chief body of the industry uttering such cold footed phrases as "Need to secure the stability of the building industry," "It would be highly undesirable to undertake adventures in building on a huge nation-wide scale and to adopt sub-standards for the housing of the people *unless the need were really established*" (our italics), "The arbitrary introduction of new sources of production employing improved materials," "Prefabricated structural parts which are not of normal type."

These are words of reaction.

We do not wish to champion Portal's steel bungalow; it could have been better, the conception on which it was based could have had that flexibility with standardization that BINC so belatedly and half-heartedly applauds, but it is to the discredit of the building industry that it has wholly failed to guide the Government in its distress and is itself responsible for the dismay it has now brought upon itself. The Portal has now been accepted, at least in principle, but BINC can do nothing better than advance its front by a few reluctant yards and grudgingly admit that if we must have prefabrication let it be only temporary; let not the building industry soil its hands with it; we could allow ourselves the luxury of a little standardization of parts and a little more efficiency in production, etc. . . . No, the language is not that of the enthusiast.

We strongly oppose the attitude of mind expressed in this report. Prefabrication is not the unproved baby the report implies. It has a case history of 100 years, and is becoming an integral part of building. Note the "unproved" materials it uses: sheet steel, insulation boards, glass, glass and rock wool, aluminium sheet, trim and foil, timber, concrete; the list is a long one, but one and all are used as a matter of course in everyday building. What then is the fuss about? It is about the manufacture of materials in the factory instead of on the site. If the factory happens to be an engineering plant instead of a contractor's yard, is it not up to the contractor to buy an engineering plant?

There is nothing to fear in prefabrication if properly applied. It is a movement that the building industry should take hold of and absorb in the process of bringing itself up-to-date. It implies more work in the factory and the use of different skills and crafts, but not necessarily inferior skills; it requires careful organization; it requires above all, a national system for the co-ordinated standardization of parts. If the building industry, vested in brick, stone and mortar, will not avail itself of progress

along these lines, it must expect younger and more virile industries to step into the breach, as they are beginning to do. BINC has the solution at its hand, but the issue of this pamphlet does not suggest that it is going to grasp the nettle with firmness and courage.



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

## N O T E S & T O P I C S

### BINCOISM

The Report on Prefabrication, recently issued by the Building Industries National Council contains various statements which require comment. First: "The product of the building industry," it states, "is characterized by the requirements of standard performance with long life." But is long life of a building of the traditional type of real advantage? Living conditions and habits change considerably even within the lifetime of one generation, and we cannot assume that the requirements of our children will remain the same as ours. A period of 60 years, which is usually considered to be a normal length of life for so-called permanent buildings, may be far too long.

This, of course, is no argument against permanent buildings in general, but only against certain types. Moreover, one must distinguish between the various functions of a building, some of which can be practically permanent, whereas others will vary with changing social conditions and habits. Thus to give shelter against weather is a permanent requirement, whereas the arrangement of rooms inside, suitable for one particular generation, may be totally inadequate for another. It follows that, while long life of the

carcass may be an asset, it may become a liability if it prohibits periodic adjustments.

The traditional house in brick, stone and mortar does not fulfil this need, but there are other methods of building which allow a far greater flexibility of the inner layout, without interfering with the carcass (for example, the experimental houses at Birmingham, illustrated in the A.J. for October 19, 1944, pp. 291-294; House No. 7 at Northolt, in the A.J. for October 12, 1944, pp. 269-270; or Mr. Arup's method of box frame construction described in this week's Information Centre). There is, in any case, no reason to believe that prefabricated houses need necessarily have a shorter lifetime than those in brickwork.

A second point: In referring to the "use of certain forms of structural prefabrication," the pamphlet states: "This official policy will compress a nation-wide building development into very much shorter periods with much less security for the public interest than would apply in normal times. It cannot provide the periods required for the proof of the satisfactory performance of a new type of building." (The italics are mine.) It is not clear whether the word Security stands for financial or structural security. Probably the financial security of an investment is not meant, and in any case emergency houses at least are to be financed publicly. As far as the period of satisfactory performance is concerned, the Government sponsored steel bungalow, for example, could no doubt last longer than the specified period of 10 years.

If Security implies structural safety, one has only to cite the case of the prefabricated experimental Braithwaite house which recently underwent a severe unintentional test. The house is surrounded by a number of traditional brick buildings. A flying bomb exploded in its immediate vicinity and completely destroyed many of the

brick houses. The prefabricated house was only superficially damaged, and has already been repaired, although brick houses further from the centre of the explosion were damaged irrevocably.

A third point: "It would be highly undesirable to undertake adventures in building on a huge nation-wide scale and to adopt sub-standards for the housing of the people, unless the need were really established." In what way do the various prefabricated systems represent a sub-standard? The space available in the official temporary houses falls short of the standards established for permanent houses, but the question of floor area has obviously nothing to do with the technique of manufacture or with the materials used in a building. Consequently, the term Sub-standard should be applied only to the performance of the building in weather resistance, moisture penetration, thermal insulation, sound insulation, fire resistance, vermin infestation, and so on. How do prefabricated houses compare with traditional brick buildings in this respect?

In MOW's Post-War Building Studies No. 1, *House Construction*, the Burt Committee has prescribed certain desirable minimum standards for dwellings. In an Appendix the values of the different elements of a normal brick house are compared with the values of the desirable standards. Out of the 14 items we find 10 items Low without qualification, one Low with qualification, one Satisfactory, one Adequate, and one Ample.

Many systems of prefabrication claim a higher standard of performance than the traditional brick house. Taking, for example, the thermal insulation of the walls, the heat transmittance of the usual 11 in. cavity wall is .30 BTU, as against a desirable standard of .15 to .20. But there are systems which reach the lower limit of the desirable standard. (The lower the figure of heat transmittance, of course, the better the thermal insulation.) It would appear from this comparison that the traditional brick house is definitely sub-standard,

Why should prefabrication necessarily result in sub-standard houses? It is actually easier to achieve the standards suggested by the Burt Committee with many unorthodox building methods.

This extraordinarily unobjective report of an organization ostensibly representing the whole great building industry of this country makes exasperating reading.

HENRY YEVELE

I have been reading Mr. J. H. Harvey's book on Yevele.\* This is a phantasia rather than a symphony. Mr. Harvey has revived Letherby's view that the Perpendicular style



Illustrations from Henry Yevele, reviewed here by Astragal. Top, the Neville screen at Durham Cathedral (1379) by Yevele. Bottom, a boss in the cloisters of Canterbury Cathedral, perhaps a portrait of Henry Yevele (c. 1400).

\* Henry Yevele: *The Life of an English Architect* by John H. Harvey (Batsford, 15s. 0d.).

started in London. There is much to be said for this view, but it is doubtful if Mr. Harvey has managed to say it. It is quite possible that in the Chapter House of old St. Paul's were to be seen the elements which were later combined into the Perpendicular style, and it is also possible that the Choir of Gloucester was built under the influence of the Court School of London. Little more than this can be said. But Mr. Harvey says a great deal more, namely, that William Ramsey, the Master Mason at St. Paul's in 1332, "invented" Perpendicular and "designed" Gloucester Choir. His further contention is that Yevele did for Perpendicular what Chaucer did for the English Language.

This is biting far too much off at once, and the mouthful is difficult to swallow. Setting aside Chaucer and the English Language, which is rather a subject in itself, the hard fact which Mr. Harvey ignores is that the Chapter House at St. Paul's and the wooden Lantern at Ely are not in the Perpendicular style; therefore it is hardly legitimate to ascribe the "invention" of this style to the Master Mason and the Master Carpenter respectively. Yevele's precise influence, therefore, is not really demonstrated by Mr. Harvey, and we are left somewhat where we were to start with.

Mr. Harvey has observed those points of detail which the Chapter House of St. Paul's and Gloucester Choir can be said to have in common (if this sort of language is permissible, and there is no reason why it should be), but he jumps to conclusions. You could make a guess that Wren designed All Souls, in Oxford, but you would be wrong. It is this kind of fallacious argument which spoils Mr. Harvey's thesis.

The truth very probably lies somewhere in the direction in which Mr. Harvey is pointing. He has seen the force of Edward II's burial at Gloucester, and we can surmise strong Court influence, but he has not paused to work out the details, and therefore his theory lacks conviction, while he tends to get his facts wrong.

ASTRAGAL



## LETTERS

J. R. Kell, A.M.I.Mech.E.

Percy E. Thomas, P.R.I.B.A.  
(President Architects' Benevolent Society).

H. J. Reifenberg.

### Big Ben

SIR,—Astragal refers to Big Ben being designed by 'Mr. Denison,' later Lord Grimthorpe. I hasten to point out an obvious error. Lord Grimthorpe was previously Sir Edmund Beckett, Q.C.

There is a good deal of further information to be obtained about the Westminster Clock from Beckett's book, *Clocks, Chimes and Bells*.

St. Albans

J. R. KELL

### ABS Christmas Appeal

SIR,—Owing to the paper shortage, the Architects' Benevolent Society is not issuing a personal appeal by post to Architects this year. This does not mean, however, that money is not needed. In fact, our funds have never been adequate for the relief required, and at the present time we most urgently need more donations, and more subscriptions, so that we may help the many sad cases of distress and difficulty which now come before us. In addition to the usual applications, we have also to deal with problems arising out of the war, such as breakdowns due to war strain, losses caused by enemy action, and temporary difficulties after discharge from war service.

The close of the year is apt to seem a sad, depressing time. How much more so to those who have the additional burdens, of age, ill-health and poverty. May I ask



that every Architect shall consider this letter as a personal appeal to him or her, and will respond by sending a contribution, no matter how small, as a Christmas gift for Architects and Architects' Assistants and their families who are in great need. Gifts should be sent to: Percy E. Thomas, O.B.E., Architects' Benevolent Society, 66, Portland Place, London, W.1. All who give will be helping a very valuable and necessary work.

PERCY E. THOMAS  
(President, Architects' Benevolent Society).

London

## Density and Daylight

SIR,—In the recent report on the *Design of Dwellings* issued by MOH we find the following statement:

"It can be shown that for a given floor-space index for a given site, an increase in the height of buildings laid out in parallel blocks (giving a correspondingly wider

spacing of blocks) is accompanied by an increase in daylight and an increase also in the amount of open space available per flat" (par. 31, p. 64).

Similar suggestions—based on the analysis of special examples—can be found elsewhere. A closer mathematical analysis, however, will show that daylight improves with increasing height in the case of higher densities only. For low densities the opposite may be the case. Where any improvement occurs with a spacious residential layout it is very small beyond a certain number of floors and becomes less and less with every storey added. It may easily be offset by other factors (e.g., a slightly greater building depth) which have, I think, not been given due consideration so far. It should also be borne in mind that this improvement usually refers to the ground floor only, the existing upper floors receiving less daylight if further storeys are added.

Diagram 1 shows the increasing spacing necessary to maintain the same floor-space

index if the number of floors is increased. There is—as can be proved mathematically—always a point where the angle of obstruction remains constant whatever the number of floors. Its position above ground floor level depends on the floor-space index chosen. Here (for a floor-space index of 1) it is at first floor level. It would be at second floor level for a floor-space index of 2, a.s.f. For any point above this point daylight decreases if the number of floors is increased, as shown by the dotted lines.

Much therefore depends on the point from which the angle of obstruction is measured. If we take it at window head level (as I think we should), that is to say at about  $4\frac{1}{2}$  storey height, then no increase in daylight is obtained by adding to the number of floors for a floor-space index below 0.8. The reversal of what is generally assumed may, therefore, well occur in practice, for the floor-space index of a 12/acre layout is about 0.3, and even for flats it should not be more than 1.

How much the floor space index increases or decreases with increasing height for a given angle of obstruction depends on the quantity  $b \tan \phi$ , where  $b$  = building depth and  $\phi$  = angle of obstruction. In Diagram 2 the floor-space index is plotted against height for different values of  $b \tan \phi$ . It will be seen that inside the low density residential area no substantial increase occurs beyond the first few floors. The densities of a 12/acre suburb (0.3), the City of London (2.3) and the skyscraper area of Manhattan, New York (4.0) have been indicated for the purpose of comparison.

For a given angle of obstruction, building depth is of far greater influence on density than height. For a depth of 30 ft. and  $\tan \phi = \frac{1}{2}$ , we may reduce the number of floors from 10 to 5 without reducing density, if we increase the building depth by less than 9 in. Or, for a given  $\tan \phi = \frac{1}{2}$ , the floor-space index of a 4-storeyed building of 25-ft. depth is increased by  $\frac{1}{2}$  per cent. only, if the number of floors is increased to 10. If the depth is increased to 35 ft. instead, the floor space index is increased by as much as 30 per cent.

An interesting result is that—for low angles of obstruction—4-storey blocks with staircase access show higher densities than 10-storey blocks with exterior corridor access, because of their greater depth. Generally, it may be said that with a spacious residential layout high buildings are not substantially superior in density to buildings of medium height (3-4 floors) if the spacing is governed by the angle of obstruction. On the other hand, substantial gains in density may be obtained by types of greater depth and correspondingly narrower frontage, and for such types the increase in density obtained by adding to the number of floors is more substantial than for shallow types. Disadvantages often connected with types of great building depth should, however, carefully be balanced against the advantages gained.

The matter is quite different where for one reason or another higher densities have to be reverted to. Then a substantial improvement in daylight can be achieved by adding to the number of floors. The case for high buildings proper is the business quarter, because of the greater depth of office buildings and the lower standard of daylight and sunshine permissible.

It should be noted that daylight is only one aspect of the matter. High buildings may show definite advantages in other respects, especially an increase in open space available and a better organization of amenities and services. On the other hand, with small houses the requirements of sufficient private garden space and privacy are overriding. I have not dealt with these various aspects in this short letter.

London

H. J. REIFENBERG

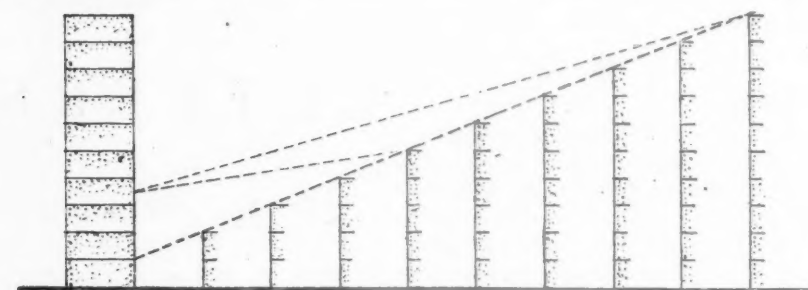


Diagram 1. Blocks spaced to maintain the same floor space index (superimposed on left-hand side).

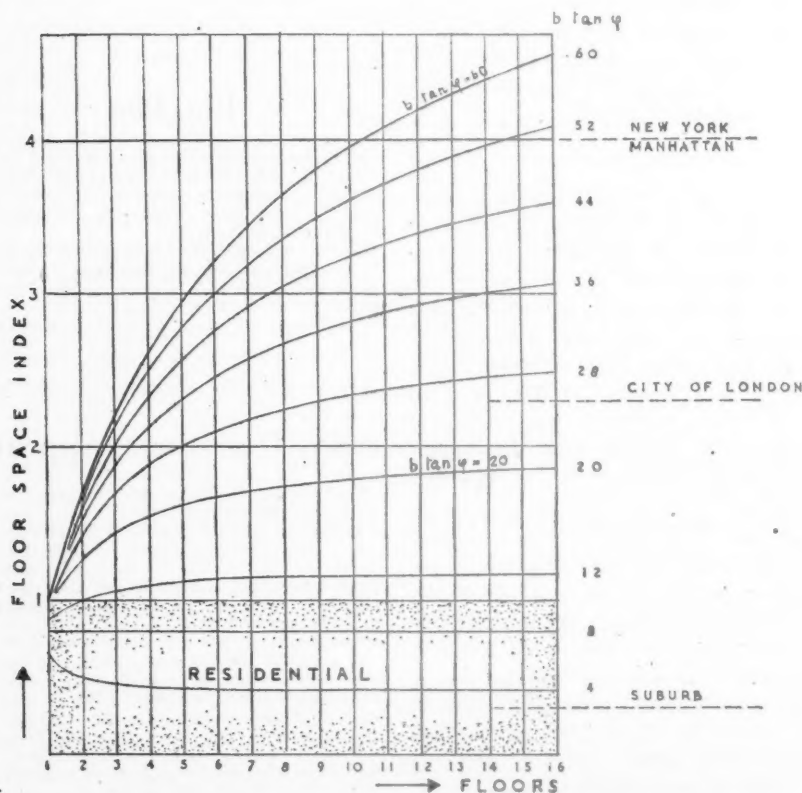
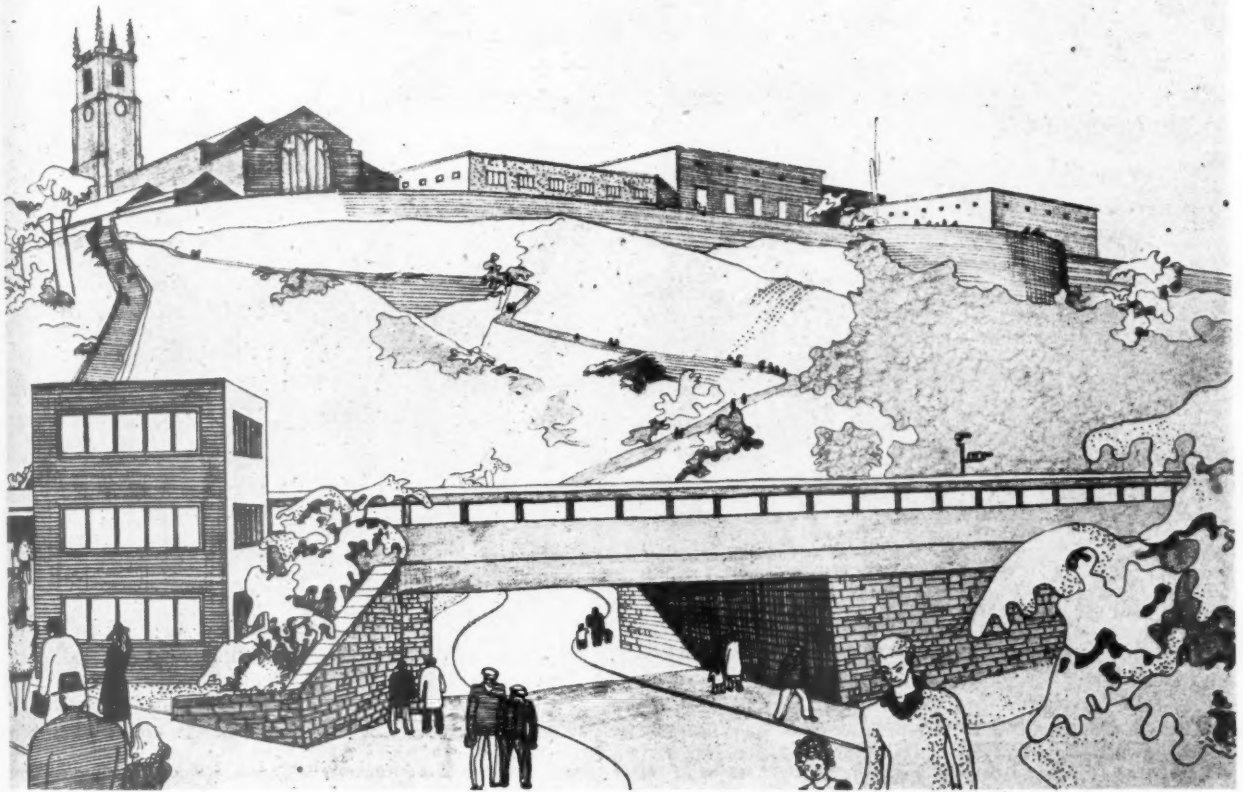


Diagram 2. Floor space index and height for different values of  $b \tan \phi$ . (See letter from H. J. Reifenberg.)



## PHYSICAL PLANNING SUPPLEMENT



## A Plan for MACCLESFIELD

This long-term plan for the central area of Macclesfield has been prepared by W. Dobson Chapman, PPTPI, Honorary Planning Consultant to the Macclesfield Corporation. The plan was exhibited at Macclesfield in September in order that the Town Council might have the benefit of informed public criticism. Extracts from the report are given below. It is emphasized that the drawing above, which is a view over the railway to the town-centre on the hill, and the ones on the following pages are purely illustrative and are not a prophecy of rigid intentions on the part of the Corporation.

## introduction

Clearly a town such as Macclesfield cannot be planned independently of the region in which it is situated, since there are many matters of regional planning which have a direct bearing upon local planning. These regional matters are now being dealt with under the Cheshire Advisory Plan. This Plan for the whole of Cheshire is being prepared for the County Council in collaboration with an Advisory Planning Committee composed of representatives of all the local authorities in Cheshire. Whatever may be the outcome of

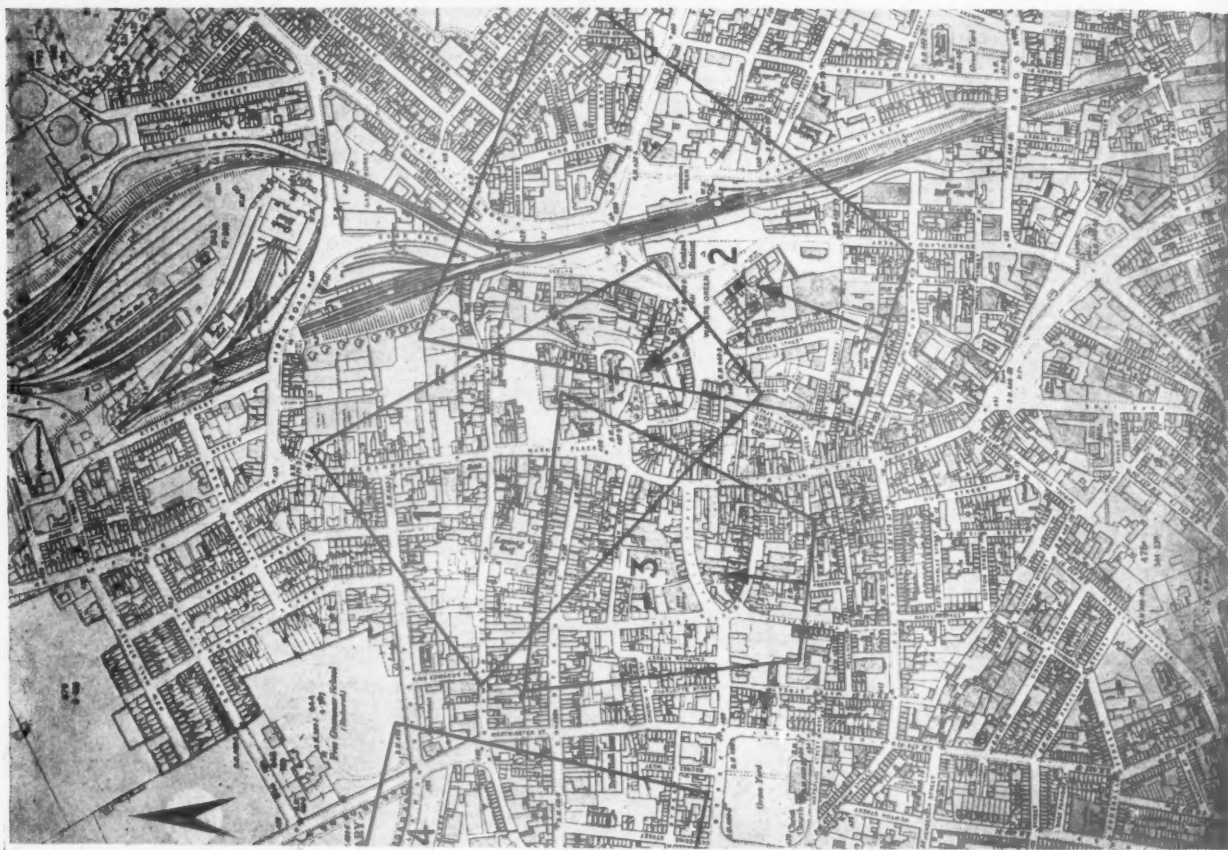
these efforts in the larger field, it is clear that for Macclesfield steps should be taken to secure its proper redevelopment to an optimum size in terms of population, of some 50,000 inhabitants; such redevelopment should be designed to ensure proper economic and sociological balance by attracting new and more varied industries to supplement the existing basic industry and remove the present over-dependence on textiles.

This plan is in the nature of a suggestion. Its objective is mainly to create a public awareness of the need for some positive plan, which will form a guide to the future development of the town. In order to help the reader to interpret the three-dimensional significance of the basic Plan, a few perspective sketches are introduced showing "The Shape of Things to Come" as visualized by one architect. In practice, of course, the final appearance of the town would, for the most part, be the outcome of the normal course of development and redevelopment in which the creative endeavours of many persons and varied interests would play their part, although conforming to the general pattern predetermined by the plan itself whatever that may finally be.

## the plan

It will be observed that the suggested positive plan covers only the congested central area of the town. In the preparation of this Plan due regard has been given to the effect on lines of communication, and the broader zoning proposals on the planning of the remainder of the Borough, which, fol-

## M A C C L E S F I E L D



Above is a map of the central area of Macclesfield as it exists today. It has a population of 36,000, largely dependent upon one main industry. There is a severe lack of open space in and about its central area, which the plan on page 444 would remedy by bringing a strip of parkland right into the town. The figures on the map above relate to the airviews on facing page.

lowing the completion of the Cheshire Advisory Plan, will no doubt become part of a larger planning unit. Macclesfield should then be replanned together with adjacent areas, in a manner which will make the fullest possible use of the improved planning powers which, it is hoped, will materialize under new legislation in the very near future.

The preparation of the positive plan has been based upon five main assumptions:—

- i. That a system of outer-ring (by-pass) roads around the town will be provided in order to eliminate all through traffic from the centre. Modern development of the motor vehicle has made segregation of through traffic (i.e., traffic passing through the town on its journey from one place to another), and local traffic, essential. A well-designed ring road system involving only a little if any extra distance, should enable traffic to pass quickly and easily from one side of a town to another. Criticism is often levelled against the ring road system on the basis that, by taking through traffic out of the town centre, considerable trade to the town is lost. Evidence gained from towns where this principle has been applied does not support the argument; on the contrary, it has been found that there is a tendency to more flourishing business in a street which has had through traffic taken from it.
- ii. That the ultimate optimum size of Macclesfield in terms

of population when fully developed, will be approximately 50,000. This increase in the population from the present approximate figure of 36,000 will be necessary to create a supply of labour for the new industries which it is hoped to attract to the town. Macclesfield is at present so much dependent upon one main industry that it will require a population increase of as much as 15,000 in order to create something of an occupational balance within the town, with a view to reducing the possibility of a high unemployment figure resulting from slump conditions. It would be desirable that the wage-earners of this 15,000 additional population be employed in a variety of new industries independent of the silk industry. The purpose of reducing the dependence of the town upon one main industry is to avoid the ill-effects which the town would feel, should there be a depression in that industry. Many Macclesfield people will remember such times of depression in the past, and will be well aware of the consequent need for a variety of industries other than silk.

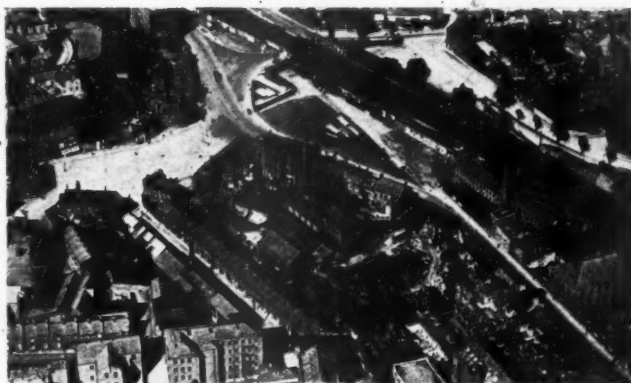
- iii. That the Gas Works at some date in the not-too distant future will be moved to a more adequate site in closer proximity to the Gas Holders, near the existing Lower Heys Mill. The site of the present works in the central area of the town forms, to say the least, one of the principal "eye-sores" of the town. The proposed increase

D T O D A Y

The centre of Macclesfield, with the church on the hill, and the Town Hall beyond projecting into the Market Place. The open market is a traditional feature of Macclesfield life, and is preserved on the new proposals. See perspective 1 on page 445.



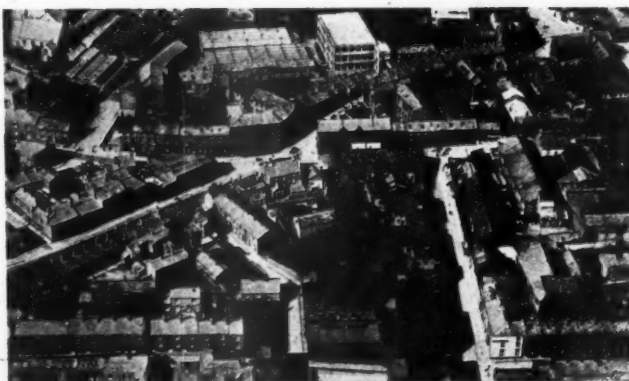
The Central Station below the church on the hill. At present there are two stations, the one shown here, and Hibel Road Station which it is proposed to remove. Perspectives from different sides of the proposed new Central Station are shown on page 441 and in perspective 2 on page 445.



An area lying South West of the Market Place. Perspective 3 on page 445 shows what it might be like if the jumble of buildings at the top of the air view opposite were removed, and planned as a shopping centre linked with the market place.



An area to the West of the Town Hall and Market Place, where a cultural centre is proposed in close proximity to the existing King's School. See perspective 4 on page 445.





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Above is a map of Mr. Dobson Chapman's proposals for the redevelopment of the central area of the town. A population increase of 15,000, which would be employed in industries independent of the silk industry, is suggested. The site proposed for the location of a new industrial estate can be seen outside the ring road to the north east of the central area. On the facing page are sketches of the central area as it might be if the proposals were carried out.

in the size of Macclesfield would necessitate additions to the Gas Works, and it would seem unfortunate that for want of a bold move in the near future Macclesfield should be marred for generations to come.

- iv. That the Railway Companies concerned will agree to the alteration of the route of the line from Bollington at its entrance to Macclesfield, and that in future only one station (on the site of the existing Central Station) will be used to serve the town. The present arrangement of two passenger stations for the town is quite unnecessary for railway transport to and from the town; furthermore, it is confusing, and the suggestion is made that one adequate and well-designed station on the site of Central Station would be an advantage. The site of Central Station is the only position on the line through Macclesfield which is suitable for the erection of a station to serve both the Main line and the Bollington line. The railway through Macclesfield is a disfiguring element to the centre of the town, and it is felt that it would be very desirable if to some extent such unsightliness could be alleviated.
- v. That a New Industrial Estate will be sited on the north-east side of the town, north of the Hurdsfield Estate, and on either side of the outer by-pass road between the

L.N.E.R. Bollington line and the Macclesfield Canal.

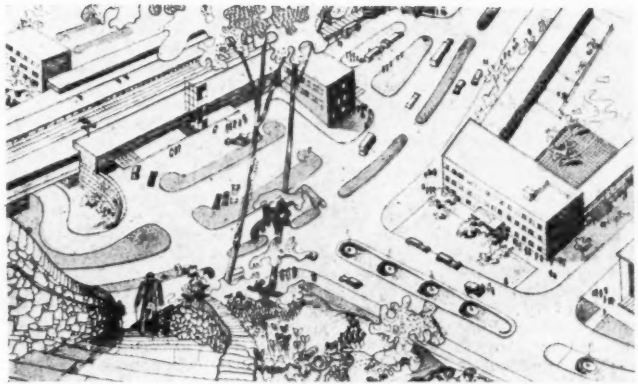
The need for new industries in Macclesfield has already been explained. It now seems to be quite clear that Government Policy in relation to the decentralization of industry will in the future be one of encouragement and not direction; it is therefore incumbent upon Macclesfield in their efforts to attract new industries to set forth the most favourable conditions they can offer to prospective industrialists. For this reason, a well-planned industrial estate is suggested having good road and rail access and being adequately supplied with all the necessary services of water, sewerage, gas and electricity. Standard factory buildings might even be built by the Municipal Authority for letting to small industrialists, who are unable to afford the outlay entailed in building their own works. On such an estate also the Municipal Authority and other interested bodies should build an estate administrative centre, which would comprise facilities such as meeting rooms, restaurant, show-rooms, bank, post office, branch employment exchange, public house, a few small shops, and garage both for lorries and for private cars. The presence of such facilities would have a very favourable influence upon the industrialists in quest of a new site.

# T O M O R R O W ?

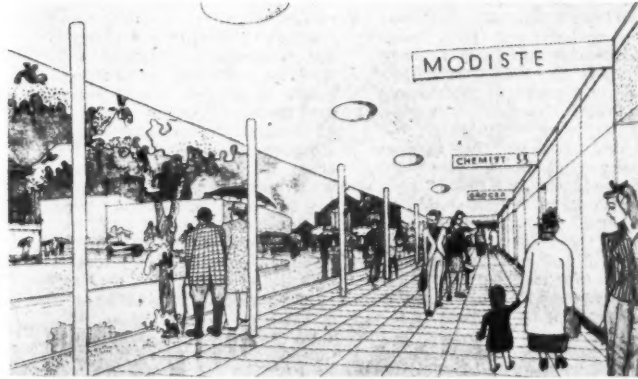
**MARKET PLACE :** The Market Place is extended, although it is still on the original site, which is shown in the centre of airview 1 on page 443.



**RAILWAY STATION :** The new railway station is on the site of the existing Central Station, shown in airview 2 on page 443. The artist has taken a viewpoint on the hill just below the church, for the perspective opposite.



**SHOPPING CENTRE :** Looking towards the Market Place and Town Hall from the new shopping centre, which has been formed by the removal of the buildings at the top of airview 3 on page 443.



**CULTURAL CENTRE :** The proposed cultural centre would include a Central Library, an Art Gallery and Museum, a Concert Hall, and a Theatre. In addition, it is suggested that an Art School and Technical College should be provided. See airview 4 on page 443.





## PLANNING AND POLITICS

A problem that disturbs the planners' peace of mind at the moment is the vexed question whether planning and politics ought to mix or whether they should remain apart. Technicians are always apt to resent the intrusion of politics into the field of technology. Objective scientific work seems threatened by the intruder. Yet in planning only very few decisions can be made on the technical plane, for instance, those which determine the location of a particular dam, the height of a cooling tower, the width of a speedway. More often planning decisions rest upon assumptions about the behaviour, the likes and dislikes of people. Sociology is a far from exact science. In this branch of planning and particularly in social surveys a biased approach so horrifying to the orthodox scientist, yields sometimes better results than aimless research. This method may be called euphemistically "directed research," more often than not with a bias on the political or ideological side. Since the suspicion is gaining ground amongst planners that planning has in fact very much to do with politics, there are some who feel compelled to deny this hotly. Mr. D. E. Lilienthal, in his book on the TVA, recently published as a Penguin Special in this country, coins the phrase: "a river has no politics," which is picked up by Mr. Charles Davy who reviews the TVA book under this title in the *Observer* of October 22, 1944. But Mr. Lilienthal qualifies his statement by saying that whilst partisan politics were fortunately not allowed to use the TVA as their battleground, the major decisions as to whether and to what end the Tennessee region should be developed, had to be hammered out in the political field. Mr. Davy, in laying undue stress on the non-political character of the river obscures the fact that the TVA scheme is politics in the best sense, made possible and sustained by political action of the Roosevelt administration.

Another article in the *Observer* deals with similar aspects of planning. A discussion arose out of an article by the economic correspondent of the paper who stressed the need for a TVA scheme for Wales. In this connection the question of a special Secretary of State for Wales was also ventilated. Mr. James Griffiths, M.P., Secretary of the Welsh Parliamentary Party, and since his visit to the Tennessee Valley a strong advocate for a similar plan for Wales, says: "Who will organize a TVA development for Wales? The Welsh Advisory Council assumed that a National Planning Authority would be set up which would delegate powers to regions, and so nearly a year ago urged the creation of a planning authority for Wales. The answer

is silence."

Another Welsh MP said: "A TVA scheme is a cart. Where is Wales' horse unless it has a Secretary of State." Or in other words, what is the good of a planning scheme without the political organization and action needed to bring it life, to set it on its course and guide its destiny?

Catherine Bauer, the renowned American authority on housing is struck by the absence of political thought amongst British planners. In her article "Planning is Politics—but are Planners Politicians?" (*Architectural Review*, September, 1944), she says:

"Planning is politics, if it is anything more than mental gymnastics. And taking monetary profit out of land is revolutionary politics, whether advocated by a Hyde Park agitator or by a Royal Commission. It cannot and should not be decided by the experts and intellectuals alone, no matter how rational, eloquent, scientifically objective, high-minded, progressive or correct they may be. Nor can it just be tacked on to the present social system as an isolated reform. If it comes at all it is bound to be part of a great wave that will change a lot of other things even more. I have some sympathy with the caustic sneers of Sir Gwilym (Gibbon) for the 'Utopian Planners.' He does understand at least that it is not only useless but irresponsible to make radical proposals without recognizing their revolutionary political implications. Architects and planners in England and America, perhaps professional people in general, almost never used the word 'politics' except in an invidious or deprecatory sense, although it is clearly the life-blood of democracy. Indeed, while reiterating constant regard for the latter institution, they tend to ignore the only basis for democracy acknowledged in our respective countries—the party system. (Nor do they propose anything else to replace it.) And yet, as Herman Finer of the London School of Economics, said in an excellent article, 'the paramount, the indispensable authority in the planning process, has to come from the political parties. Planning (otherwise) cannot but be puny and rather academic. . . . The cardinal responsibility rests with the parties, for that is where the power rests.'"

And again elsewhere in this remarkable article, Catherine Bauer re-emphasizes: "Once purely designers, the professional planners have gradually accepted the notion that they must also be managers. Now is the time for them to become organizers as well . . . and politicians. As a matter of fact, town planners, in the days when they thrived on the patronage of rich and powerful autocrats, were well acquainted with the art of politics. Perhaps their present relative ineffectiveness

simply indicates that they have never relearned the political arts in a form suitable for democracy. . . ."

Planning quite obviously has entered a new phase. Those who imagined that they could skirt the minefield of party politics have had a rude awakening. The stormy debates in the house over the Bill which was to do no more than clear the way for the plans of the future, show which way the wind is blowing. Equally revealing is the case of Birkenhead, where the votes accorded to the two suggested plans were not cast on the respective merit, but to the dictates of party politics. This may seem deplorable to those who have deceived themselves for so long; it only demonstrates the point that planning, which affects the social medium so fundamentally, cannot be shaped away from it and remain aloof from the interplay of social forces that express themselves in the politics of our day.

## TCPA URGES ACTION

The Town and Country Planning Association has issued a memorandum on recent developments in official Planning and Housing policy. The Association submits:

1. that The Ministry of Town and Country Planning should
  - (a) schedule certain areas for replanning at lower densities;
  - (b) schedule areas for redevelopment and (c) fix standards to be applied in all types of development.

2. that The Board of Trade should guide industry to decentralized sites within the above pattern.

3. that The Ministry of Works should grant priorities for new building of every class in dispersal areas, as well as for urgent rebuilding in redevelopment areas.

4. that The Ministry of Health should speed up housing more rapidly when it fits in with the approved dispersal plan.

5. Local Authorities in congested areas would thus be enabled to rebuild on the more open standards set by the Ministry of Town and Country Planning (1(c) above) and local authorities in the smaller towns encouraged to cater adequately for increased population and for the needs of modern industry.

The White Paper on Control of Land Use is criticized because it does not face the crucial issue which is how to reduce population density in congested areas without merely transferring large numbers to suburbs. The Association asks the Government to state clearly that they fully accept the Barlow thesis, that national policy will be to limit the size and promote the decongestion of, over-large towns and to disperse their excess of population and industry to smaller towns.

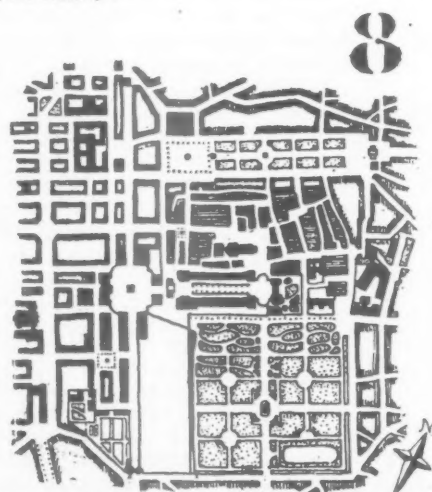
On the location of industry it is urged that the broad location of industrial zones must be the responsibility of The Ministry of Town and Country Planning and not of the Board of Trade.

## PLANNER'S QUIZ

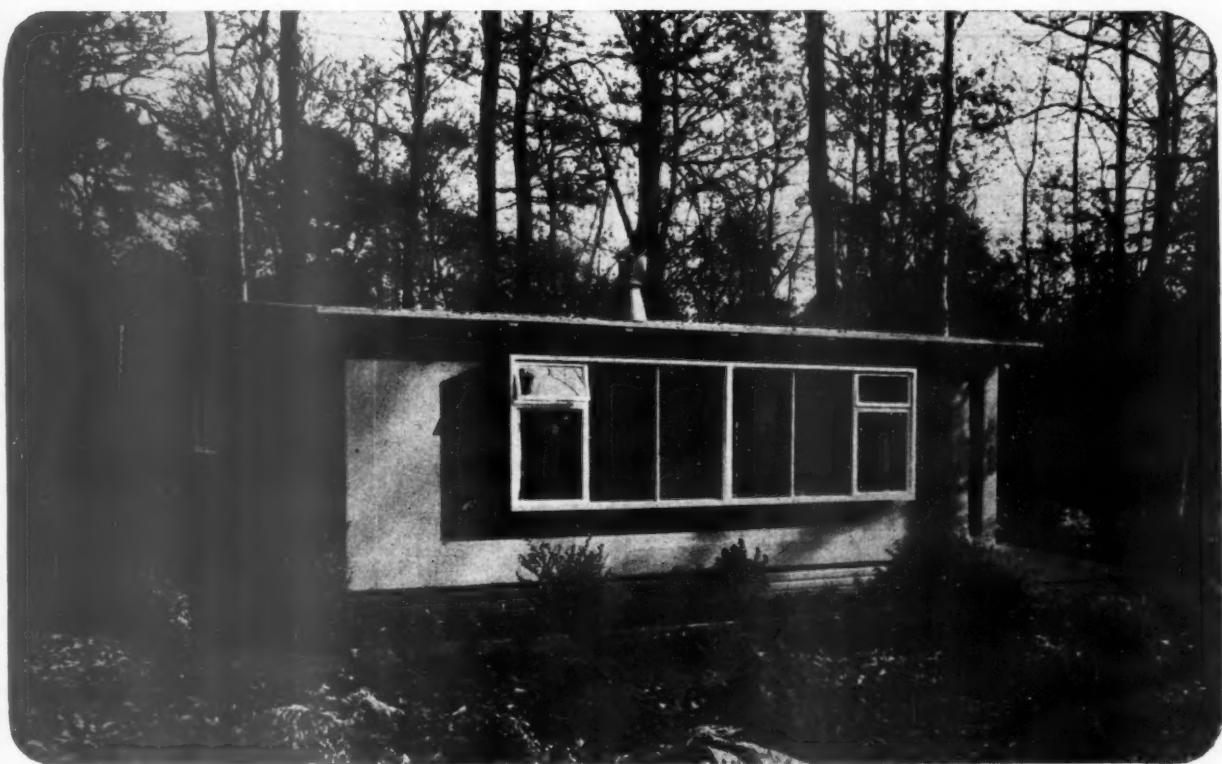
### THE ANSWER TO THE LAST PROBLEM

7. Washington, USA—18th century—L'Enfant's map of Washington strongly influenced by Versailles. Provides magnificent settings for central monuments but extremely awkward ground sites for other buildings and quite unrelated to the needs of daily life and movement.

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



Answer in the next Planner's Scrapbook.



# JICWOOD STRESSED-SKIN BUNGALOW

DESIGNED BY RICHARD SHEPPARD

**GENERAL**—Stressed-skin temporary type developed by Messrs. Jicwood as a result of experience gained in aircraft construction, to last a minimum period of ten years. It can be erected in 200 man-hours, 50 per cent. of labour being unskilled. It is demountable and loss on reassembly is claimed to be 5 per cent. The amount of timber used is one-third of that used in a similar house of traditional brick construction. The insulating value of the walls is at least equivalent to 11 in. hollow brick construction. The estimated cost is about £600.

**STRUCTURE**—Walls have inner and outer  $\frac{1}{8}$  in. plywood skins carrying dead and superimposed loads and containing a core of expanded rubber plastic which acts as a stabilizer preventing buckling of the skins. This core could be substituted by any expanded compound or waste material, such as

paper and resin. The overall thickness of the outer walls, roof and floor is  $1\frac{1}{2}$  in. The floor has an extra  $\frac{1}{4}$  in. plywood top skin to provide against abrasion.

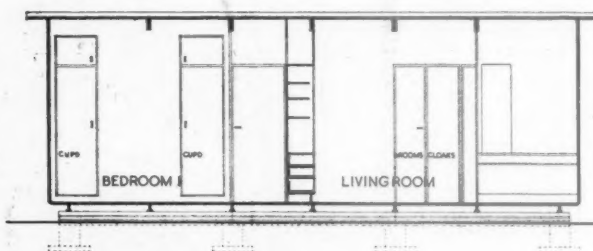
Partitions are not load bearing and could have purely nominal skins of ply or cardboard to protect the core, making an overall thickness of 1 in.

Panels are pressed in small sections of a maximum size of 8 ft. by 4 ft., and then jointed in the factory to form larger sections, such as whole walls. In this case each wall is one section, roof and floor are each two. Joints are formed by a spline inserted between panels. Synthetic waterproof glues and resins are used for jointing applied under pressure. The surfaces of core material and the inside faces of the plywood skins are sprayed with the same glue. Angles between walls and floors are formed by a 1 ft. section shaped in the press. Curved

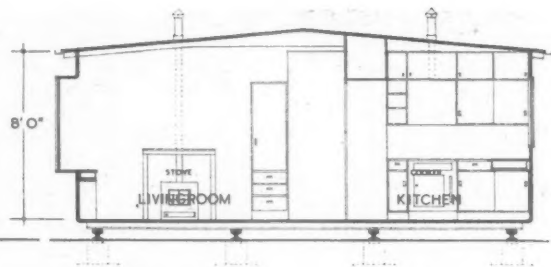
panels of any shape can be made in this way.

Floor joists at 4 ft. centres are fixed in the factory. The roof is supported on 6 in. by  $3\frac{1}{2}$  in. box beams with  $\frac{1}{4}$  in. plywood sides and cores of 2 in. by 3 in. solid timbers at top and bottom, spaced at 4 ft. centres. The roof beams are made separately and fitted into prepared slots in the walls on the site. The roof is glued to the beams on the site. Partitions are made up in lengths as required and assembled on the site by gluing. The partitions rest on special fillets on the floor. The whole structure can be taken to the site in one shipment.

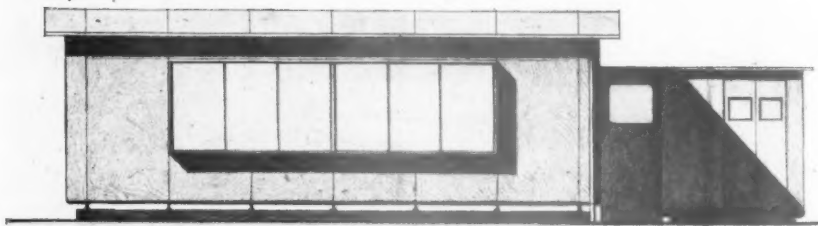
Solid inserts are let into the walls, floor and roof at all points where screwing will occur. Window and door openings are cut to required sizes and frames are fixed round the openings and screwed and glued in the factory. The large window is formed from a small



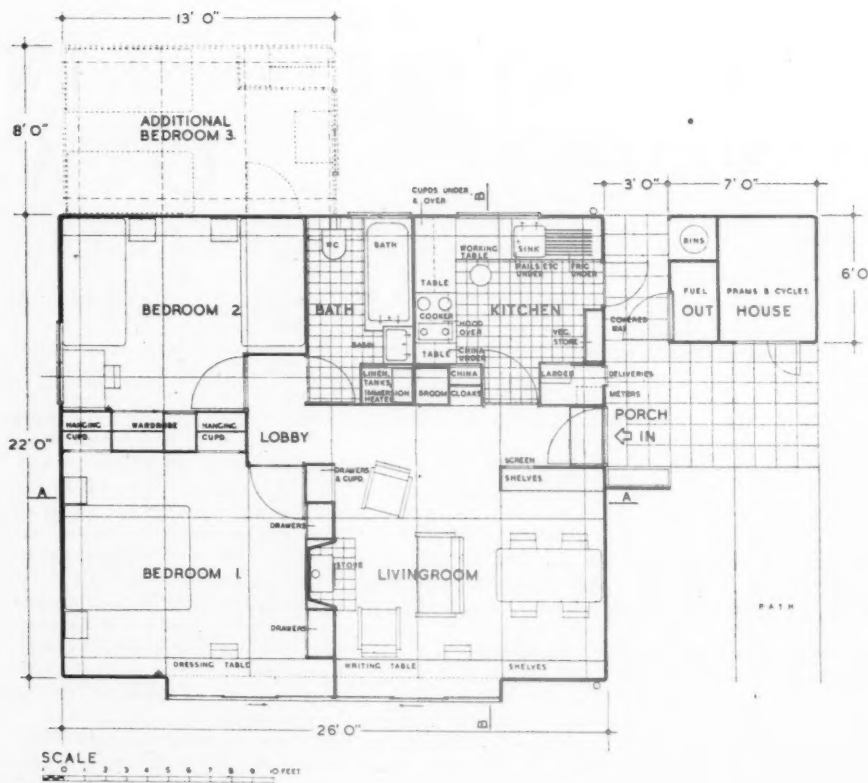
SECTION AA



SECTION BB



FRONT ELEVATION



PLAN—TYPE I

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

number of sections pressed together to the required shape, the upper part acting as a beam to carry the roof.

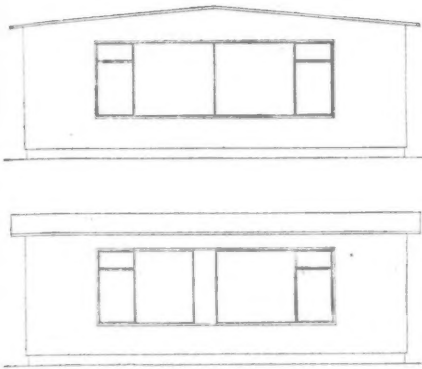
**FINISHES**—The exterior can be finished in a variety of ways, such as pebble dash or scrubble. High-grade veneers with a varnished finish are suitable for wall surfaces, both inside and outside, so far as fire regulations permit. Special fire-resisting paints can be applied where local authorities insist. Other finishes outside could be felting, rubber or thin plastic sheeting, and inside, polished wood, distemper, or wall paper.

**SOUND INSULATION**—This is a difficult problem in stressed skin structures. It is here partially overcome by careful detailing of joints, door surrounds and the use of cupboards as baffles between rooms.

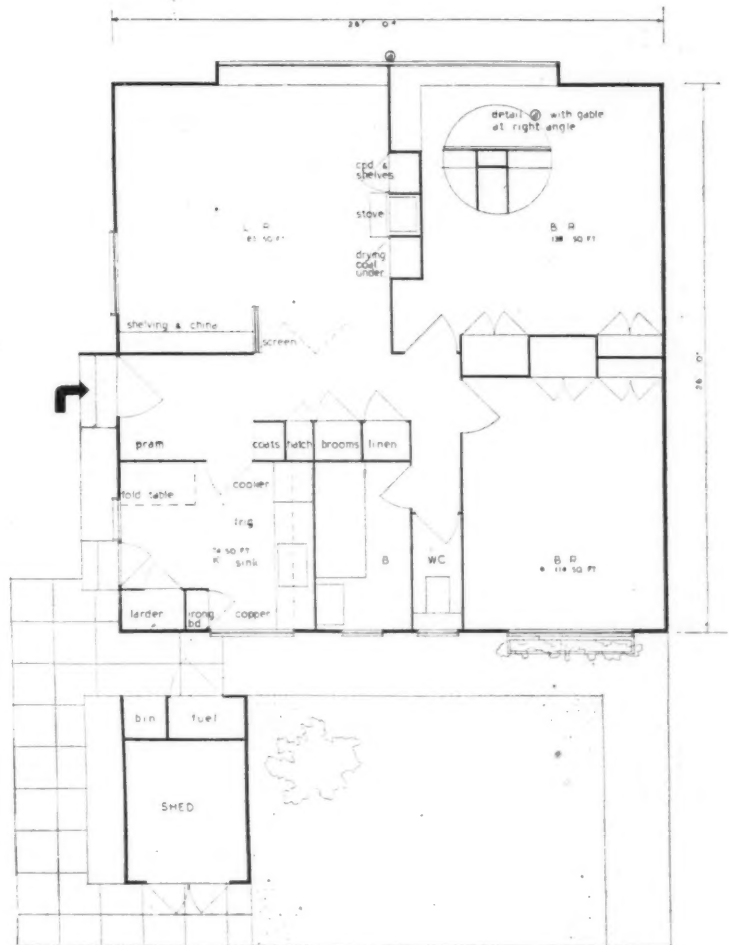
**PLANNING**—That of the experimental house (Type I) illustrated here with plan on this page, covers an area of 600 sq. ft. Another model (Type II), now being completed, has a deeper plan, and to shorten the frontage, the shed is here in the front (or rear) of the house. The plan is on the facing page. Type II conforms to the overall area of the Portal House. The structure being very simple, the plan could be easily varied without endangering speed of production.

**EQUIPMENT**—Cooking and water heating is by one unit, an Esse Solid Fuel Cooker. Heating in the living room is by a recessed Esse stove used in conjunction with an air-warming duct system to distribute warmth into bed and bathroom.

Plumbing is on a unit system fixed complete to the wall between kitchen and bathroom. By a slight variation, the unit used in the Portal House could be incorporated.



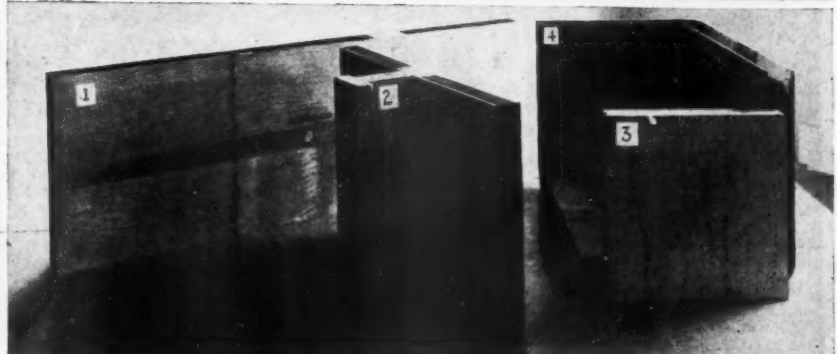
ALTERNATIVE ELEVATIONS  
TYPE II



PLAN—TYPE II

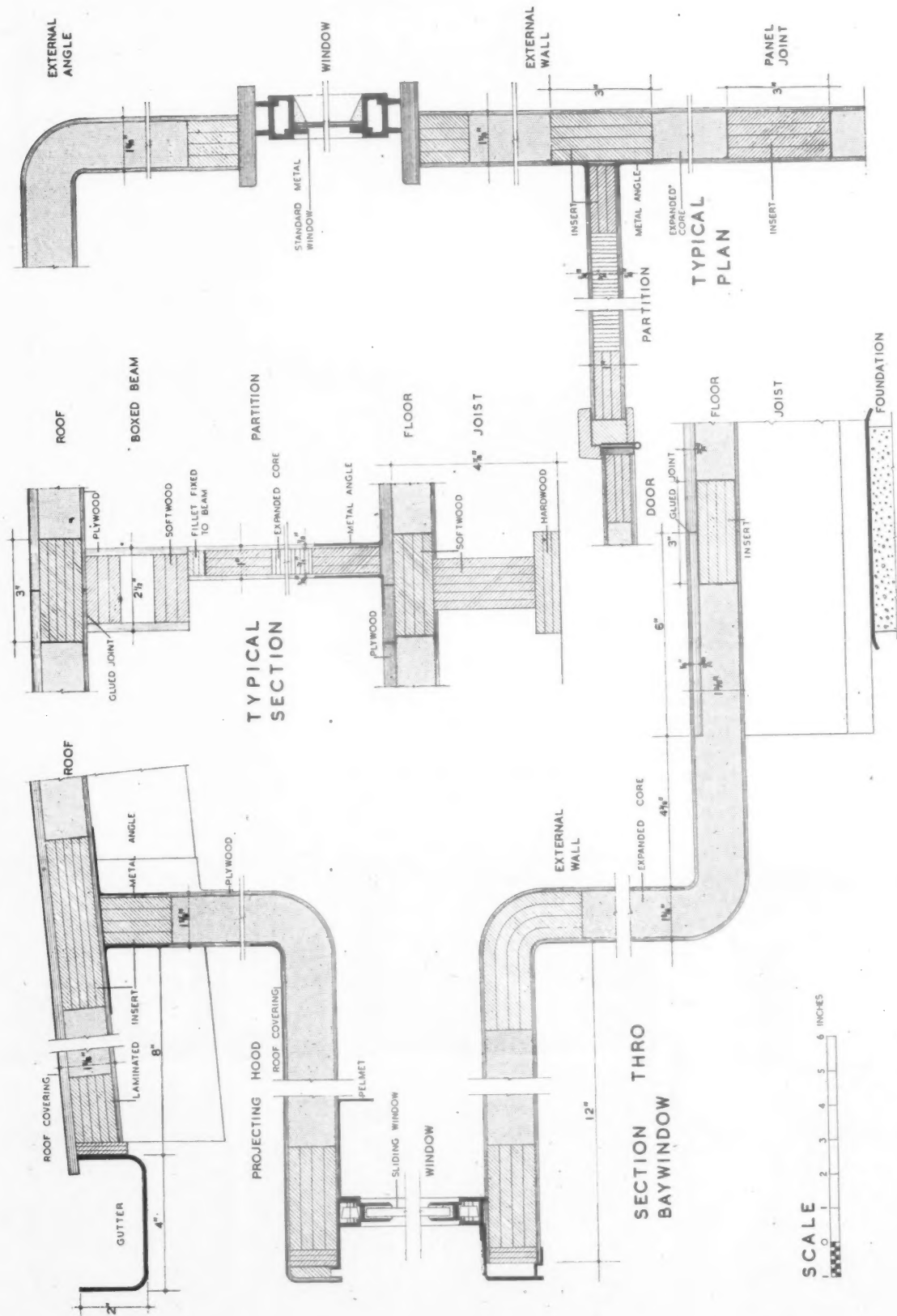
[Scale: 1/4" = 1' 0"]

Right, plan of Type II, whose overall area is that of the Portal House. Above top, elevations with roof pitch running alternative ways. Below left, the kitchen with the Esse solid fuel cooker which also heats water. Below, centre top, the living room looking towards the Esse solid fuel stove. Below, right top, the living room looking towards the dining alcove. Below, bottom right, samples of the wall structure and joints.



DESIGNED BY RICHARD SHEPPARD





CONSTRUCTIONAL DETAILS—QUARTER FULL SIZE

JICWOOD STRESSED-SKIN BUNGALOW



# 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.

## STRUCTURE

1708

### Timber Houses

**SWEDISH FACTORY-PRODUCED TIMBER HOUSES.** Cyril Sjoström (*Architects' Journal*, February 3, 1944, pp. 101-105). Examples of Scano Houses of solid timber units.

The Scano system of construction provides single-storey and two-storey houses in prefabricated units of solid timber. Tongued and grooved vertical planks are used in units up to 17 ft. 6 in. high, 8 ft. wide, weighing ca. 8 cwt. The wall sections are delivered complete with windows and doors.

1709

### Temporary House

**THE ARCON TEMPORARY HOUSE** (*The Architects' Journal*, November 30, 1944, and other journals). Prefabricated temporary bungalow of steel frame and asbestos cement cladding.

The structure consists of a light steel frame of rolled sections with tubular steel trusses. The exterior is clad with a double layer of moulded asbestos cement sheeting, as also employed for the roof, but single layer only. The walls are lined with storey high panels, 3 ft. wide, consisting of  $\frac{1}{2}$  in. plasterboard, backed by insulating material. The thermal insulation value of this construction, it is claimed, is equal to that of an 11 in. cavity brick wall.

1710

### Box Frame Construction

**MEMORANDUM ON BOX FRAME CONSTRUCTION FOR TERRACE HOUSING AND FLATS.** Ove Arup. (*Privately published*, May, 1944.) Blocks consisting of load-bearing division walls, monolithic with floors and roof, and of non-load-bearing longitudinal external walls and partitions.

The method of construction suggested in this memorandum is particularly suitable for terrace houses and blocks of flats. It facilitates the provision of such buildings on a large scale, without restricting the freedom of architectural design normally resulting from excessive standardization.

The suggestions are based on the idea of part prefabrication. Factory production is best suited for light non-structural elements. The solid structural wall still has a part to play in modern building in order to provide sound insulation between the dwellings. The deficiency of traditional building is the lack of a simple and clearly defined structural system, and the fact that by using ordinary brickwork we deprive ourselves of the possible benefits of mechanization and large-scale organization. Instead of making the longitudinal external walls, division walls and some of the partitions structural, it is much simpler to confine the structural system to a series of plain parallel walls;

and instead of the brick we need a larger unit or a material such as concrete which can be handled mechanically.

For these reasons it is suggested that a simple structural grid should be arranged, formed by the division walls, leaving the front and back open. The longitudinal external walls and partitions can easily be made of light prefabricated units, whereas the structural division walls are to be cast in situ, monolithic with the floors and the roof. The resulting structure is a series of boxes which has very great strength and rigidity.

The system is ideal from the contractor's point of view. It is extremely simple,

allowing frequent re-use of standardized shutters and the contractor is independent of the other trades.

Walls and floors have a high standard of fire resistance.

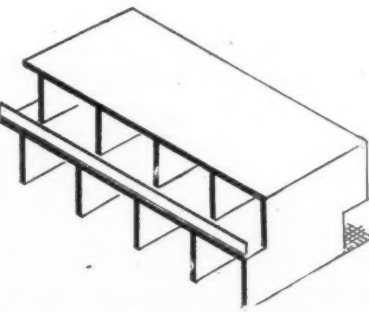
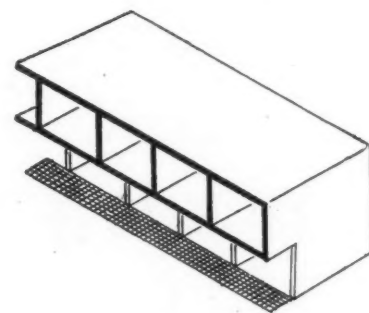
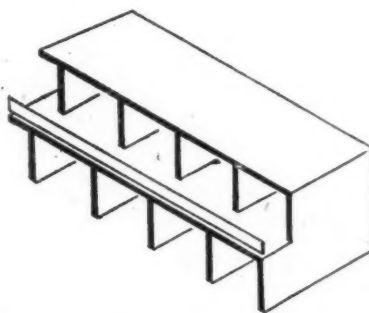
The depth, the distance between cross walls and the relative position of the boxes can be varied to suit local requirements and an entirely unobstructed floor space is provided for each dwelling. Thus the architect is free in the planning of the individual dwelling and the treatment of the elevations; a multitude of alternative materials both for the structural grid and the "infilling" may be used, and there is complete freedom for alterations and improvements in the planning or construction of non-structural elements.

The structure has such an ample reserve of strength that buildings of up to twenty storeys can be designed without alteration of the plan of the different storeys.

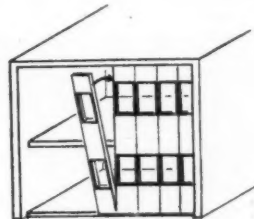
Regarding the material to be used in the structure, ordinary concrete has two disadvantages:—

- (1) The internal concrete surfaces cannot be nailed and have to be finished off with panelling or plastering.
- (2) The roof and the two end walls must be insulated against heat loss.

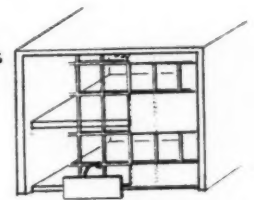
Both difficulties can be overcome, but it would be an advantage to use a reliable lightweight concrete, at least for the roof and the end walls, with a sufficiently low thermal conductivity and of sufficient



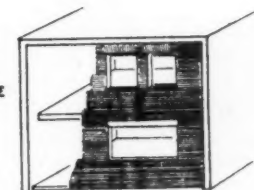
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LIGHT PANELS  
TWO STOREYS  
HIGH



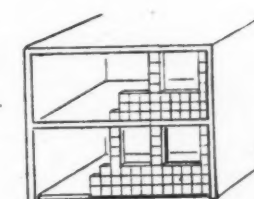
2  
LIGHT FRAMING  
WITH  
SHEETING



3  
BRICKS  
OR BLOCKS  
IN FRONT  
OF STRUCTURE



4  
BRICKS  
OR BLOCKS  
AS PANELS  
INSIDE  
STRUCTURE



Box Frame Construction. Left, variations in cross section. Right, alternative constructions for front and rear walls. (No. 1710)

strength, provided it could be produced at a cost not greatly exceeding that of ordinary concrete. A promising scheme would be to use a fairly strong light-weight concrete for the box frame and lighter precast blocks as panels for the external walls.

The memorandum is accompanied by 24 sheets of drawings and diagrams. These show the application of the principle of Box Frame construction for a great variety of cases. The layout may be staggered; it is easy to arrange passages through the building; balconies, porches may be incorporated in the design. The system is equally applicable to hostels, hotels, hospitals, small and large flats, and there is no restriction in the accommodation of staircases.

An investigation of costs proves that the variation of the distance between the division walls has very little effect. Related to 1 sq. ft. of floor area the cost of the cross walls decreases, that of the floors and roof increases with an increasing span, but the sum of the two figures shows little variation between 12 ft. and 24 ft. The minimum lies at about 18 ft. The diagrams are based on a floor area of 450 sq. ft. Obviously the cost of the front and back walls increases with an increasing distance between the division walls if the floor area is fixed. The result of this is that the most economical span is found to be smaller for the whole carcass than for the box frame structure alone, and this effect will be more pronounced the higher the cost of the external walls.

Where the distance between division walls exceeds 24 ft. (e.g., in larger flats), extra structural walls or frames have to be introduced.

The question of services and lay-out lies outside the scope of the memorandum, but a few general remarks relating to them are added. The joining of dwellings in terrace housing and flats creates an opportunity of providing various communal services—group heating, hot water supply, communal laundries, creches, etc.—an opportunity which is unfortunately often lost. The result is, that only the disadvantages of close grouping remain, and that a prejudice against this form of housing is created. To make use of such possibilities it is not enough to consider the planning of the individual house; the layout must be decided on at the same time. The importance of this question of layout can hardly be over-emphasized.

## HEATING and Ventilation

1711 MOW Building Study

**SOLID FUEL INSTALLATIONS.** *The Ministry of Works Post-War Building Studies, No. 10. By a Committee convened by the British Coal Utilization Research Association. (HMSO, 9d.)* Objectives in appliance design. Recommendations for design. Economies from improved appliances. Installation of appliances. Characteristics of solid fuels. Objectives relating to building and architecture. Appendices on: Standards of performance of appliances; Smoke abatement; Comparative examples of operating costs for existing and improved appliances; Installation of appliances; Design of flues; Selection of types of appliances.

Although the title does not say so, this report is in fact confined to a consideration of solid fuel usage in individual dwellings. A claim is made that one of the important

features of solid fuel is that it can be stored on the spot and can therefore readily meet peak demands due to a sudden spell of cold weather. It is suggested that gas and more particularly electricity cannot economically meet such heavy peak loads.

The Committee recognizes the fact that with a few exceptions solid fuel appliances of the past have had very low efficiencies, and that very little development had taken place until recently. They visualize a very different state of affairs after the war, and describe improvements which are now being incorporated in manufacturers' designs. It is to be hoped that all those responsible for choice of appliances will take note of the points made. The case for a higher first cost of appliance being justified by a resulting lower fuel cost is well made. This is a most important factor since so many houses, municipal as well as privately built, have in the past taken little, if any, account of running cost.

The sections on appliance installations contain several recommendations which directly affect the house plan and construction.

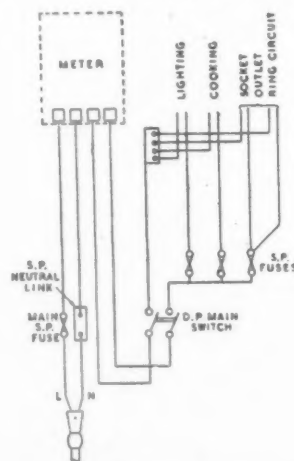
Some of the appendices make difficult reading, but the first one which sets down standards of performance for appliances is a valuable advance, and could provide a useful basis for British Standard Specifications. The appendix on smoke abatement leaves one in a state of annoyed confusion. The one on design of flues is also most difficult to follow, and would have been greatly improved by the addition of explanatory diagrams.

1712

MOW Building Study

**ELECTRICAL INSTALLATIONS.** *The Ministry of Works Post-War Building Studies, No. 11. By a Committee convened by the Institution of Electrical Engineers. (HMSO, 1s. 6d.)* Installations in small and large houses and flats, including electrical domestic appliances. Ownership and control of electricity service cables in flats and other multi-occupier buildings. Installations in multi-occupier buildings, schools, hospitals and farms. Includes telecommunications of all types.

This Report deals in detail with recommendations for the installations for the various buildings, including service and control arrangements, type of wiring and conduit and method of lay-out, and includes a useful guide to the many growing complications of telecommunication service. There



From Electrical Installations, MOW PWB Study No. 11. Left, diagram of consumer's supply circuit. Right, water heater housed under sink draining board. The approximate overall dimensions of the lagged tank of 20 gallons is 33 in. high by 20 in. diameter. (No. 1712)

is the usual plea for more co-operation, at an early stage, between architect and engineer, and after reading the Report there can be little doubt that the many electrical services now installed in modern buildings make such co-operation essential. Lighting—in the sense of quantity and quality—is not dealt with, as this is to be covered in a separate Report of the Lighting Committee. (No. 12 of the series.)

In the section on small houses there is a great deal to interest architects. Ring main wiring is advocated, and a new type of standard socket outlet is agreed upon, and details given in an Appendix. Commendable progress towards standardization of apparatus has been made, and a number of illustrations are included. The Committee recommend screwed or lug-grip-jointed steel conduit. The suggestion that where socket outlets are provided for space heating, chimney fireplaces and flues may be omitted and thereby offset the cost of the installation hardly seems to take due account of the need for ventilation even in rooms electrically heated. The section on telecommunications, which includes door bells, telephones, sound broadcasting, wire broadcasting and television, is a useful guide to recent and possible future developments which must be allowed for.

The illustrations of apparatus make one suspect that there may be difficulty in obtaining satisfactory appearance unless care is taken to plan kitchen cupboards, etc., to rather larger depth from front to back than is usual.

The sections dealing with buildings other than domestic are less detailed, and tend to be rather more a list of possible requirements. As such they will doubtless form the purpose of a useful reminder to architects. The last section on Farm Buildings is interesting as an example of the scope for improvement. It would be an eye-opener to some farmers. 34 cows plus accessories, such as calving pens, dairy, etc., appear to require rather more than 70 electric points of one kind and another. At first sight this seems excessive, but a study of the plan shows it to be a not unreasonable number for efficient working.

1713

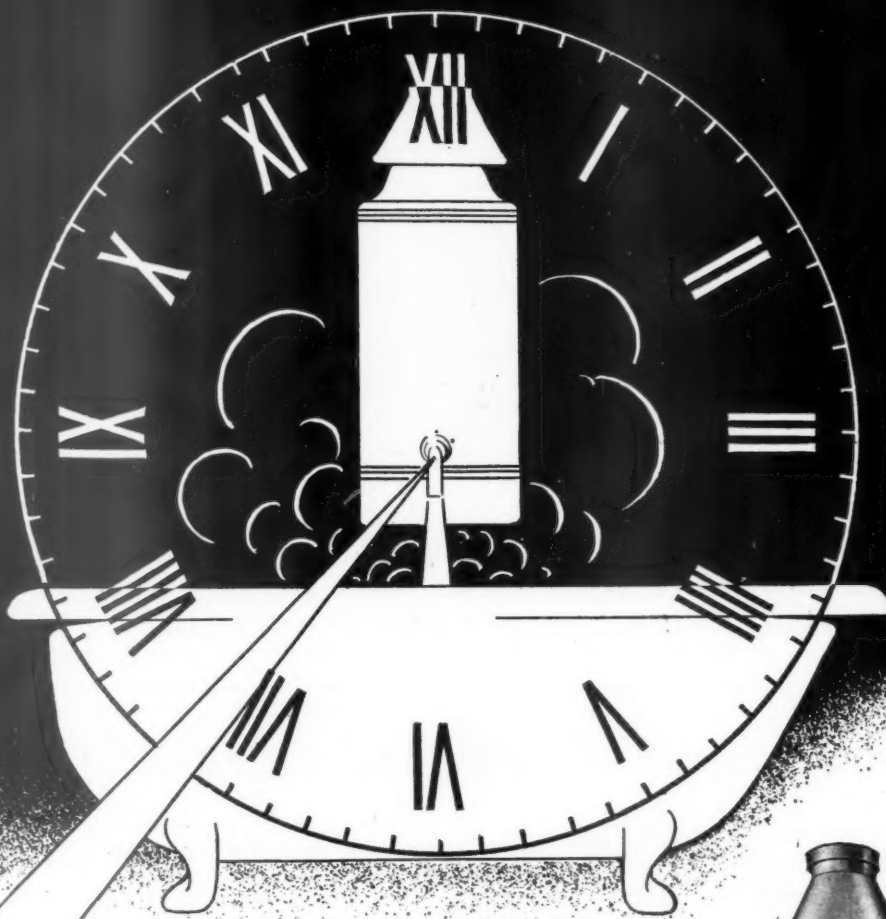
Survey

**HEATING, PAST, PRESENT AND FUTURE.** *J. R. Kell (Journal of the Institute of Heating and Ventilation Engineers, July/August, 1944, p. 90).* Survey of past achievements, with forecast of future development.

The author makes, first, a short historical



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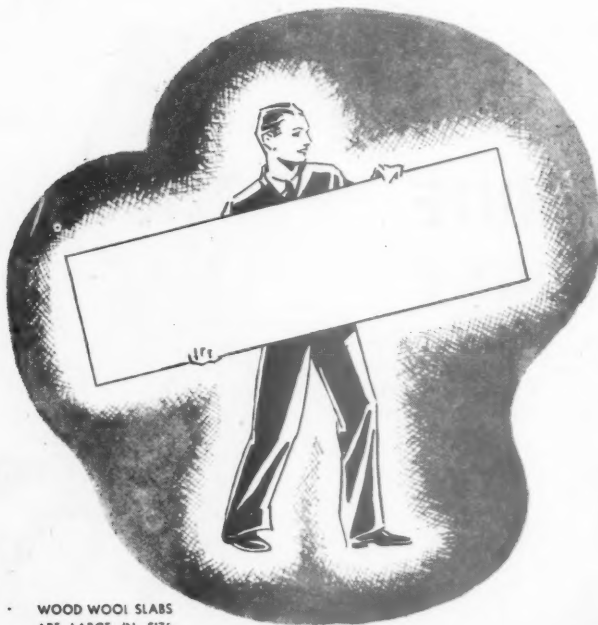
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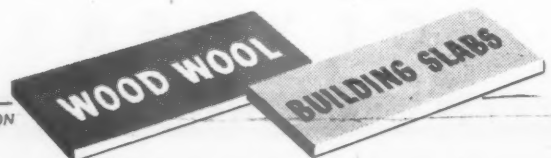
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survey of the achievements of the past in the field of heating, and then deals, very briefly, with the present state of the art. He then indicates what might be profitable lines of exploration for future work, including further investigation of luminous sources of high temperature radiation and the reversed cycle heating, or heat-pump. The paper does not concern itself with domestic heating.

1714 Anthracite Unit

**NEW PRINCIPLES OF BURNING ANTHRACITE ANNOUNCED.** (*Plumbing and Heating Journal, September, 1944, p. 58*). New principle enables very small heating units to be built, burning small quantity at high rate.

A new unit for burning anthracite has been developed in America. It is expected to provide a complete automatic heating unit in a space less than  $2 \times 2 \times 3$  ft. The unit is a jacketed tube 6 or 8 in. diameter and 18 in. long. The fuel is fed in at one end by means of a worm; it is burnt in the centre of the tube, and the ash is discharged at the other end. The unit can be adapted to warm air, water or steam heating. The complete unit weighs 75 lb. compared with 1,000 lb. for an ordinary boiler doing the same work.

Instead of burning a large volume of fuel slowly, as is normally done at present, the new unit burns a very small quantity at a very high rate, enabling high efficiency and high ratings to be obtained. It has not yet been used in an actual heating plant on the full scale.

## 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.

1715 Damage to Drawings

**Q** When examining some drawings recently, I discovered that the surface of the paper had been damaged in places by some kind of vermin, possibly clothes-moths. The surface of the paper appears to have been eaten away in small patches thus damaging the work. The drawings had been carefully stored in a well-made portfolio, so I should be grateful if the Information Centre could suggest the cause and a remedy?

**A** Occurrences of this type are usually caused by fungus growths, but as there are many varieties it is not possible for us to help you. The Director of the British Museum (Natural History), Cromwell Road, London, S.W.7, is probably the best authority and would no doubt help you if you sent a specimen of the damaged paper.

1716 Water off Roofs

**Q** I want to know if:—

**A.** Water conserved from asbestos roofs is safe for drinking purposes (after being passed through a filter), or should the material be left to "weather" a few months, or should the roofing be treated with a preparation first?

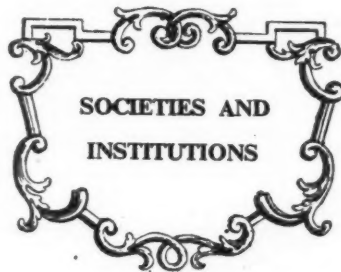
**B.** Can you recommend a solution to

apply to Ruberoid roofs to prevent a film of oil forming on the water?

**C.** Alternatively, is there a filter on the market that would render water collected from either of these materials, both safe and palatable?

**A** Water from asbestos roofs should not be used for drinking purposes for several months; after that time it is quite safe. The same applies to Ruberoid; there should not be a film of oil once it has been exposed for a few months.

It is possible to treat such materials with a solution, but even so it must be left for a few months, and little time would be gained. Any real purification system would be expensive and unjustified.



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

## RIBA

### Scale of Fees

The Council of the RIBA has approved the SCALE OF FEES FOR THE SITING OF EMERGENCY FACTORY MADE HOUSES given below. For permanent housing, the Scale of Fees for State-Aided Housing Schemes approved by the RIBA Council in May will apply.

This scale applies to the siting of emergency factory made houses where the site will revert to an open space. Where the site is to be used eventually for permanent housing it will be necessary for the architect to prepare a layout for the permanent housing before dealing with the temporary houses, and in this case an additional fee will be charged.

The scale throughout is exclusive of reasonable travelling and out-of-pocket expenses, and printers' charges for additional copies of drawings and documents.

#### A.—Layout

For taking instructions, negotiating with Ministries, Government Departments, Regional and Local Authorities, including the preparation of two copies of drawings

required, preparing preliminary sketch to 1/2,500 scale, and finished drawing of the layout 1/500 scale, the fees are to be:

For the first 25 dwellings, £1 15s. a dwelling.

For the next 25 dwellings, £1 5s. a dwelling.

For the next 25 dwellings, £1 2s. 6d. a dwelling.

For the next 25 dwellings, £1 a dwelling.

For the next 25 dwellings, 17s. 6d. a dwelling.

For the next 25 dwellings, 15s. a dwelling.

For the next 25 dwellings, 12s. 6d. a dwelling.

For the next 25 dwellings, 10s. a dwelling.

For the next 25 dwellings, 7s. 6d. a dwelling.

All over 225 dwellings, 5s. a dwelling.

#### B.—Constructional Work for Roads and Sewers

For making constructional drawings of the roads and sewers and preparing specification from a standard specification, the fees are to be: £1 15s. a dwelling.

If general supervision by the architect is required this charge is to be increased to £2 5s. a dwelling.

#### C.—Additional Services not included under A and B above

The following services for which the architect may be employed will be charged on a quantum meruit basis:

Negotiations relating to the site.

Making surveys, measurements and plans of the site or existing buildings and taking levels.

Making drawings for and negotiations with Ground Landlords and Public Authorities not referred to above.

Making arrangements in respect of party-walls, rights of light and other easements.

Additional work involved where the work is carried out under more than one building contract.

Making extra drawings for the client, contractors, sub-contractors or Clerk-of-Works' use.

Work in connection with litigation and arbitration.

#### D.—Abandoned Works

Where any of the architect's services have been rendered under Sections A and B of this scale and the whole or part of the proposed scheme is subsequently abandoned, reduced fees shall be payable in accordance with the amount of work done.

## RIBA

### Demobilization

The following memorandum on POST-WAR SUPPLY OF ARCHITECTS has been issued by the RIBA.

Since the outbreak of war architects have been largely diverted into a variety of activities considered to be essential to the war effort. Many are now serving with the armed forces; others are employed in greatly expanded Government Departments; relatively few continue to be engaged in capacities at all reminiscent of their pre-war occupations; most assistants and students have been called up or have volunteered for service with the armed forces on reaching military age.

If order is to be created out of the confusion caused by the war, the future of the profession must be the result of careful planning, particularly in respect of demobilization, recruitment and training.

In February, 1943, a White Paper on Training for the Building Industry was presented to Parliament by the Minister of

Labour and National Service. This Paper gave a figure of 1,250,000 as the maximum post-war strength of the building industry, a strength which it is understood is to be reached at the end of the fifth year after the war. From the recent White Paper on demobilization, it may be assumed that this five-year period will commence when men and women are released from the Forces to take up civilian employment. Discussions have taken place and Government departmental inquiries have been made to determine the number of architects likely to be required when the building industry reaches this maximum strength. The RIBA has given evidence and has been represented at certain of the discussions. However, in 1944 the RIBA Council instructed the Demobilization Committee to prepare an independent report upon which the Institute might base its policy on demobilization and recruitment. This report was approved by the Council and submitted to the Ministries concerned.

In estimating the number of architects likely to be needed in the post-war period, the Demobilization Committee decided that calculations must of necessity be based on the figure referred to in the White Paper and upon the proposals to reach that figure in five years. Careful consideration was given to all relevant factors, and in particular to the conditions of professional employment which existed in pre-war years.

It was impossible not to take notice of an increasingly popular view that post-war reconstruction and building activities would involve a spectacular increase in the number of architects required, but after the most careful consideration of the many factors involved, it was found that, when in due course the building industry reaches its maximum strength, the number of fully qualified architects for whom full and regular employment can be provided will be only slightly larger than existed before the war.

Apart from statistical considerations, great importance has been attached to the fact that in pre-war years many architects were under-employed, and that, although a mechanical continuity of output is not practicable, a much fuller degree of employment will be necessary if architects and their assistants are to be adequately recompensed. Note has also been taken of the recommendations contained in recent official publications and reports that greater use should be made of the services of architects. Recruitment plans—which are under constant review—will allow for any increased employment which may arise from such recommendations.

It is also anticipated that Town Planning will require a number of architects whose activities will not be directly related to the output of the building industry, and that for a period after the war the War Damage Commission will also need the services of architects in an administrative capacity.

Having determined the total numbers of architects needed during and after the five years' expansion period in the building industry, the Report indicates the manner in which the profession will have to be built up to the required strength. In this connection it is considered to be essential to the effective employment of the building industry that an appropriate number of architects should be engaged on advance planning at least twelve months before the corresponding ratio of building operatives becomes available.

The number of architects expected to be available in this country at the end of the war with Germany is considered sufficient to provide for the greatly depleted building industry at that stage, but in view of the fact that demobilization, recruitment and training of craftsmen will thereafter be arranged to ensure the rapid building up of the industry, immediate action will similarly be necessary to secure an increase in

the number of architects available to meet growing needs. *This increase will only be achieved by the earliest possible release from the forces of all qualified architects, students and assistants.*

As far as may reasonably be estimated, the services of all qualified architects released from the Forces could be fully absorbed during the first year after the commencement of demobilization. Increases needed during the remaining years of the expansion period can be provided from three sources, the combined numbers from which are estimated to be approximately equal to the demand:—

1. Students whose full-time studies have been interrupted by national service.
2. Assistants whose training was interrupted by national service.
3. Those who are at present, or may become, full-time students.

In the case of categories 1 and 2, their services as qualified architects will be needed during the second, third and fourth years, and because most will require two or three years in which to complete their studies, they must be released during the first year after the end of the war with Germany.

In the case of category 3, few would be able to complete their training before the end of the fourth year, by which time the supply from other sources would have become exhausted. For this reason, and in order that the profession may be maintained at a satisfactory level, the claims of national service must be carefully considered in relation to architectural education and training.

The RIBA considers that its policy of demobilization and recruitment, as briefly described here, is essential to the successful carrying out of the Government's programme of housing and reconstruction as well as to the well-being of the architectural profession. It is continuing to press for the adoption of this policy by the Ministries concerned.

## RIBA

### New Members

*As Fellows* (11).—Crampton, Alfred (Southport); Crossley, George (Huddersfield); Howard, Percy (Manchester); Jarvis, Capt. Harold Edgar, R.E. (Darlington); John, Lewis, M.A. (Liverpool), B. Arch. (Liverpool) (Cardiff); Lomas, Capt. Leslie Clarson, R.E. (Southport, Lancs); Seifert, Major Rubin, R.E. (London); Ferry, Ernest Frank (London); Hopcraft, Robert George (Blackrock, Co. Dublin); Neighbour, Sydney William, O.B.E., T.D. (London); Somerset, James Herbert (Epsom, Surrey).

*As Associates* (22).—Chalk, Derrick Wilbie, Dip. Arch. (Manchester) (Victoria University, Manchester) (Hyde, Cheshire); Cole, Douglas James, Dip. Arch. (The Polytechnic, Regent Street, London) (London); Falconer, Peter Serrell (Cheltenham); Felgate, Frederick Leonard (Pinner, Middlesex); Gowans, Alexander Adair (Glasgow); Hastings, Alfred Edward Joseph (London); Hindle, Ian MacFarlane (Southport); Lawson, Theodore Fraser, P.A.S.I. (St. Margarets-on-Thames, Middlesex); Leach, Alexander (Heald Green, Cheshire); Malcolmson, Reginald Francis (Portstewart, Co. Londonderry); Mason, Thomas Louis Kaine (Belfast); Parker, Charles Kenneth (Oldham, Lancs); Powell, Arnold Joseph Philip (Architectural Association) (London); Ralph, Stanley (London); Rendell, Frederick Charles (Walton-on-Thames, Surrey); Reynolds, Miss Josephine Preston, B. Arch. (University of Liverpool) (Wallasey, Cheshire); Taylor, Mrs. Margaret (and

(Architectural Association) (London); Turner, Miss Dorothy Maud Embree, B. Arch. (University of Liverpool) (Liverpool); Turner, Reginald Brandrick, Dip. Arch. (Victoria University, Manchester) (Macclesfield); Twisleton-Wykeham-Fiennes, The Hon. Laurence John Evelyn (Banbury, Oxon); Williams, Merlyn Christopher, Dip. Arch., Cardiff (The Technical College, Cardiff) (Bridgend, Glam.). (*Overseas*):—Gillman, Thomas Frank, B. Arch. (University College, Auckland, New Zealand) (Hamilton, New Zealand).

*As Licentiates* (42).—Bell, Wilfred, Lieut. R.E. (Harrogate, Yorks); Bradley, Frank (Manchester); Brown, Charles Bernard (London); Burley, Sidney Frederick (London); Causton, Thomas William (London); Cornforth, Reginald Royston (London); Cruickshank, Ronald Davidson (Aberdeen); Dobson, Joseph John (West Hartlepool); Field, Cecil William (Thames Ditton); Gillespie, Walter Henderson (Grangemouth, Stirlingshire); Grigg, John Alfred (Sutton Coldfield); Howard, John Stuart (Leamington Spa, Warwickshire); Howitt, Sydney Gerald (Hucknall, Notts); Jamieson, George Lindsay Auldjo (Edinburgh); Jones, Frederick William (London); Lambourn, W/S Capt. Robert Alan, R.E. (Reading, Berks); Lawrie, Kenneth (Stoke-on-Trent); Lawton, Eric Arthur (Cottingham, E. Yorks); McGarrigue, Thomas (Rugby); Mackenzie, Morton Angus (Newcastle-upon-Tyne); Meaden, Edgar Thomas (Birmingham); Meredith, Ivor Emyln (Lichfield); Mustard, Joseph William (Newcastle-upon-Tyne); Nicholls, Major Douglas Richard, R.E. (Chard, Somerset); Nimmo, Cecil Harry Frison (Glasgow); Northmore, Solomon Roy (Plymouth); Poinson, Harold Jesse (Stoke-on-Trent); Ricketts, Eric James (Weymouth); Rushbrook, Leslie William (Burnside, near Glasgow); Russell, Louis William (Canterbury, Kent); Smith, Alfred Edward (Virginia Water, Surrey); Swan, Maurice Arthur (Kingswood, Surrey); Taylor, William Dennis (Long Eaton); Timbrell, Sidney Percival (Wolverhampton); Tupper, John Patrick (Bristol); Tyrrell, Richard Henry (London); Uren, Clarence (London); Vidler, James William (Cambridge); Wise, Capt. Alfred Henry, R.E. (Longdown, near Exeter); Worcester, Paul Reginald (Wakefield); Worrell, Louis Henry (Taunton, Somerset); Wyllie, James Alexander (Glasgow).

## MOS

### L i c e n c e s

The following notice concerning the ISSUE OF BUILDING LICENCES has been issued by the Ministry of Supply.

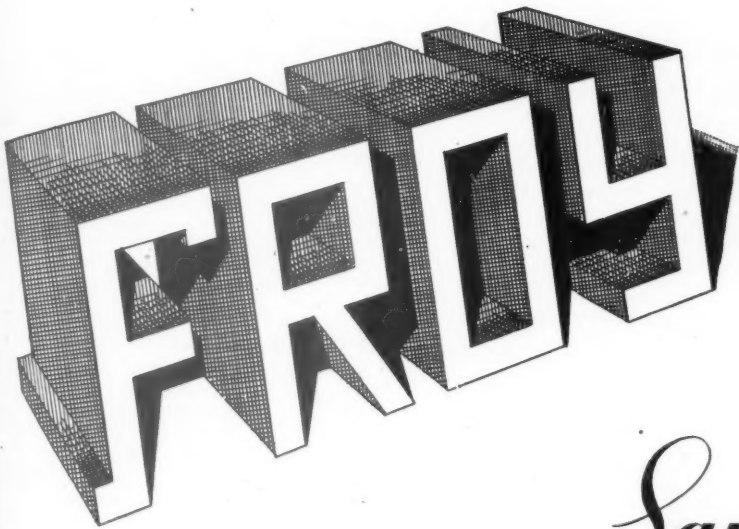
All applications for building licences should be made on the Ministry of Works form CL1136 obtainable from the Regional Licensing Officers, Ministry of Works, addresses of which are given below.

If the applicant desires the support of Timber Control, the Technical Plywood Section, or the Home Timber Production Department, the completed application form should be sent in the first place to Timber Control, Department 111, Clifton Down Hotel, Bristol, 8, who will consult the Departments concerned.

The application form CL1136 should be accompanied by any necessary plans, estimates and specification, and must include a detailed and priced list of all consequential requirements which will arise if the desired licence is granted.

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This notice defines a new procedure designed to accelerate consideration by the Ministry of Supply Departments concerned. It in no way invites such applications, nor does it indicate that licences will be more freely granted than in the past.

ADDRESSES OF REGIONAL LICENSING OFFICERS,  
MINISTRY OF WORKS

No. 1 Northern	2, Sydenham Terrace, Newcastle-on-Tyne	Tel. No., Newcastle 23574
No. 2 North Eastern	Weetwood Chambers, 93a, Albion Street, Leeds	Leeds 29063-4
No. 3 North Mid- land	Government Build- ings, Clifton Boul- levard, Nottingham	Nottingham 77733
No. 4 Eastern	Shaftesbury Road, Brooklands Avenue, Cambridge	Cambridge 55206
No. 5 London	51-54, Gracechurch Street, London, E.C.3	Mansion House 9855
No. 6 Southern	Whiteknights Road, Earley, Reading	Reading 61431
No. 7 South Western	5-6, Gotham Lawn Road, Bristol	Bristol 36841
No. 8 Wales	2, Museum Place, Car- diff	Cardiff 9070
No. 9 Midland	Somerset House, Temple Street, Birmingham	Midland 6561
No. 10 North Western	Lancaster House, 80, Princess Street, Manchester	Central 6931
No. 11 Scotland	9, George Street, Edinburgh	Edinburgh 34621
No. 12 South Eastern	Forest Road, Hawk- enbury, Tunbridge Wells	Tunbridge Wells 2780-8
No. 13 Northern Ireland	H. Ruben, Chamber of Commerce, Court Chambers, Victoria Street, Belfast	---

## FASS

### J. L. Musgrave

November 30 at the Dorchester Hotel. Luncheon given by the Federation of Associations of Specialists and Sub-Contractors. Guest of Honour: George Hicks, M.P., Parliamentary Secretary to the Ministry of Works. Speakers included George Hicks, Douglas Green, O.B.E., M.C., M.INST.C.E., M.I.STRUCT.E., A. L. Roberts, Vice-President of the RIBA, and J. L. Musgrave, M.I.C.E., President of FASS.

**J. L. Musgrave :** To assist in this task (of reconstruction) we know that the advice of certain sections of the Building Industry must be obtained, and we feel that the constructive advice and assistance which the Specialists are able to offer will not be overlooked, as a direct contact with the Ministry appears to be possible through the proposed Advisory Committee.

I do not propose to enlarge upon the necessity for the Specialist, nor on the part performed by him in modern building construction. This has already been done in the Report recently issued under the aegis of the Central Council; the Federation doubtless will make its comments on this valuable Report in due time.

It will be unfortunate if the Government decides that the Building Industry's contribution to the national effort to achieve a return to non-war conditions is to be limited to the provision of houses. No one would attempt to belittle the necessity for a vigorous housing programme, but it must be realized that housing in itself cannot absorb the whole of the employees who before the war were engaged on site construction, nor on the huge manufacturing

background from which the supplies for the Building Industry are drawn. To achieve the full use it would appear to be necessary to create a balance of building projects so that manpower, both on site and in factory, can be most usefully employed.

This Federation issued a general statement on this question of a balanced building programme in April, 1943, and I am glad to note that the Building Industries National Council have quite recently issued a statement to the same effect.

It will be appreciated that a time lag is bound to occur between the conception and planning of new ideas and the placing of those ideas into practice by the Building Industry which will be responsible for the carrying out of the practical work. The Government, therefore, at the earliest possible opportunity, should give the planners an indication of the direction in which they should plan, otherwise the Building Industry as a whole will not be able to perform its part in national rehabilitation.

## ANNOUNCEMENT

Mr. Norman Keep, F.R.I.B.A., Head of the Department of Architecture and Building, Municipal College, Southend-on-Sea, will be pleased to receive current trade catalogues, literature and diagrams appertaining to modern methods of construction, materials and fittings for all classes of building and engineering construction.

## TRADE NOTE

Steel Scaffolding Company informs us that Mr. H. J. P. Skinner has resigned from the offices of Chairman, Managing Director and Director which he held in Steel Scaffolding Co., Ltd., of 82, Victoria Street, London, S.W.1. Charles Bunn, Ltd., of Herbert Street, West Bromwich, Staffs., and Warrington Tube Co., Ltd., of Latchford, Warrington, Lancs.

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*In view of the fact that this industry is controlled and priority must be given to Government work the execution of orders is conditional on the regulations imposed by the Ministry of Works.*



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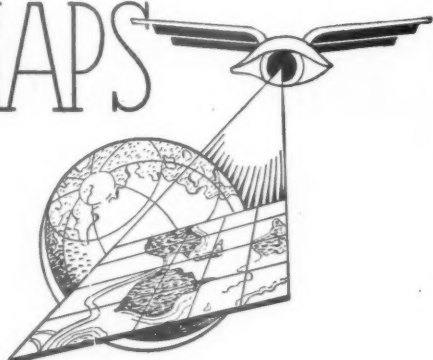
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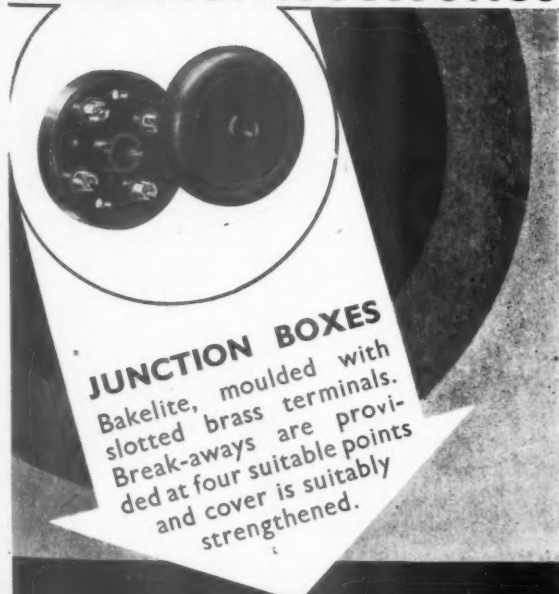
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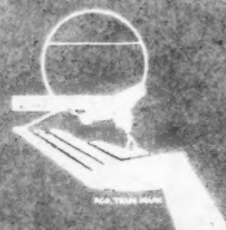
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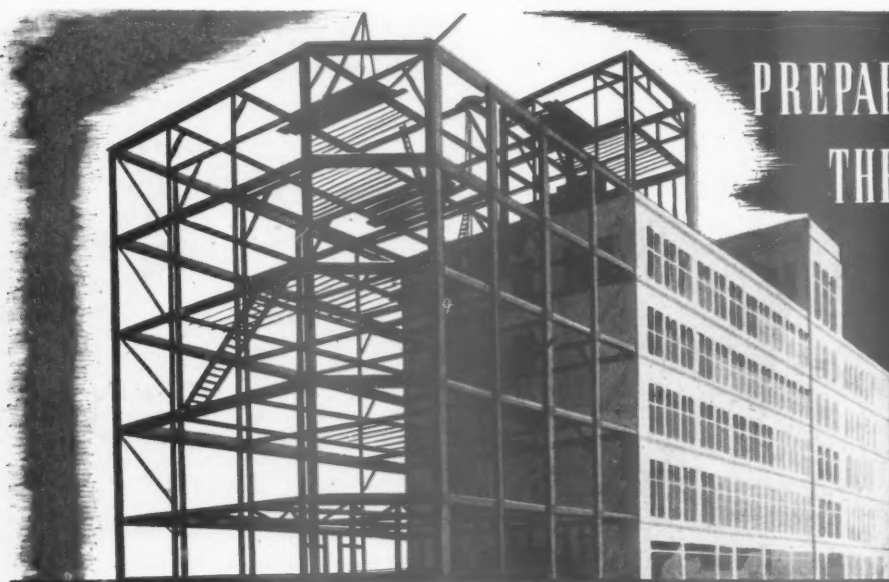
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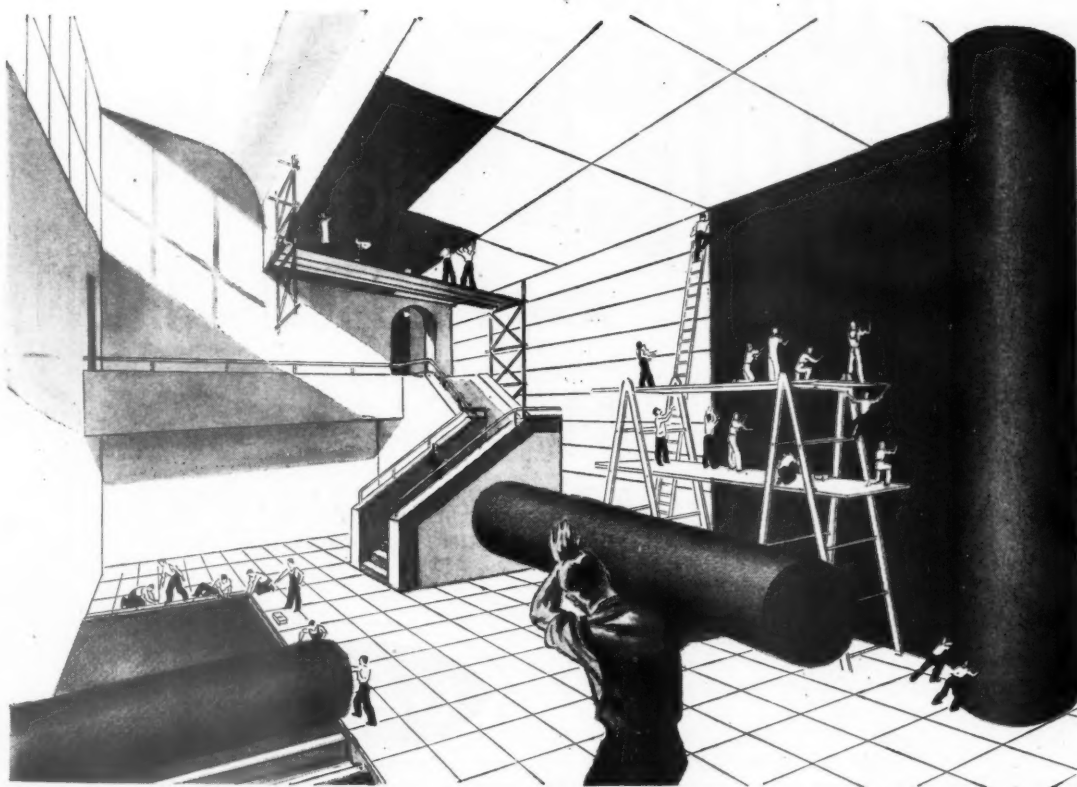
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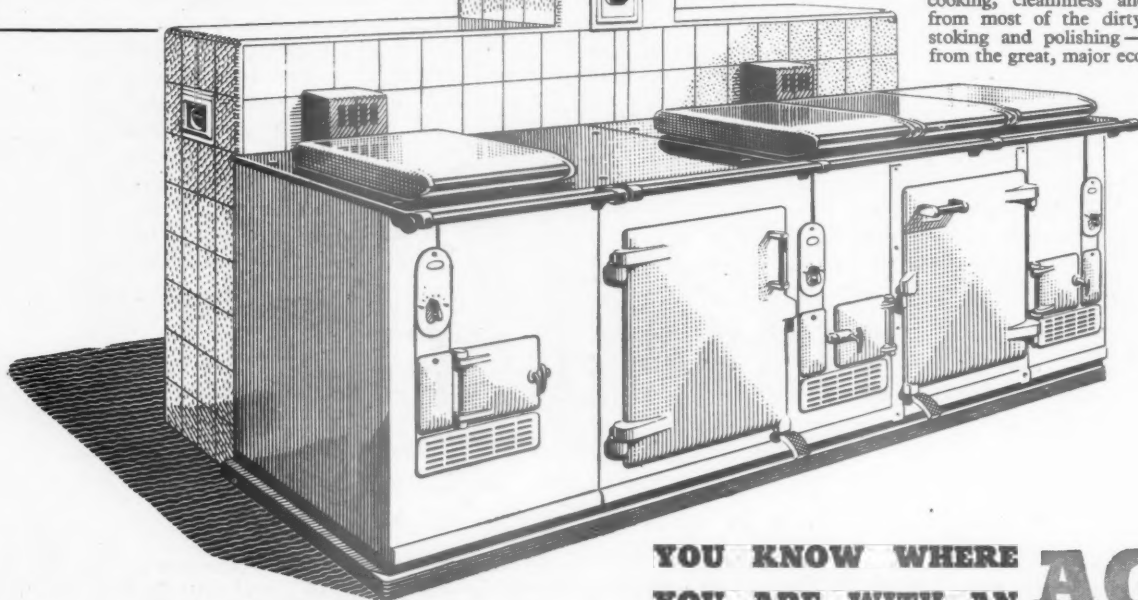
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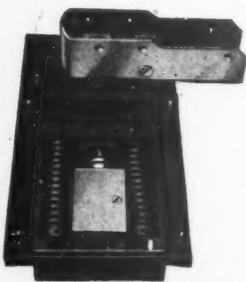
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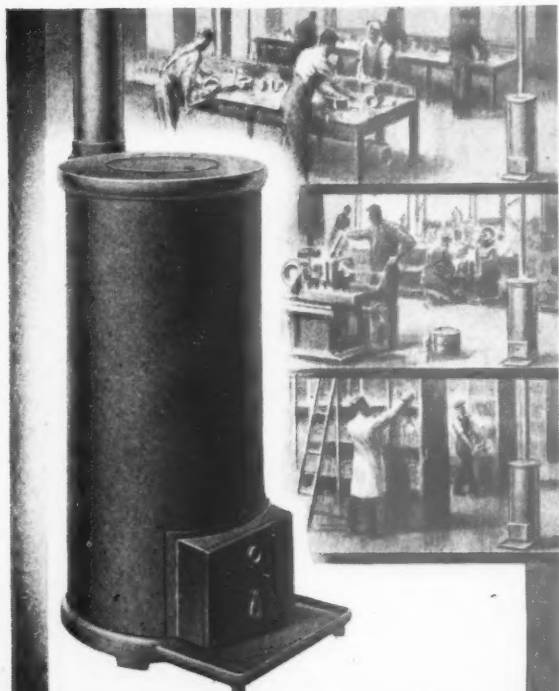
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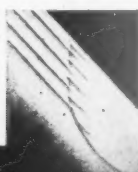
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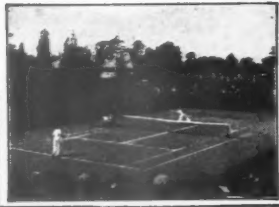
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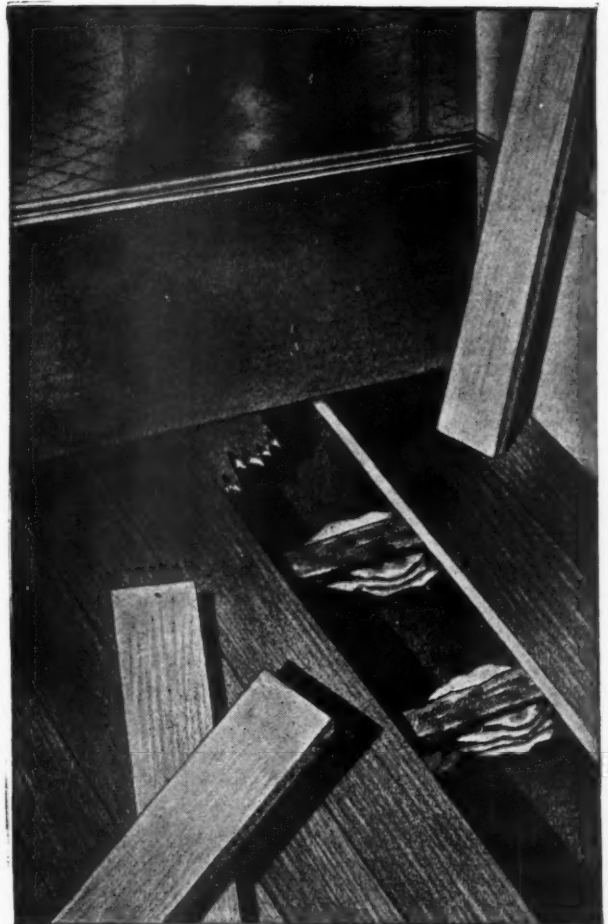
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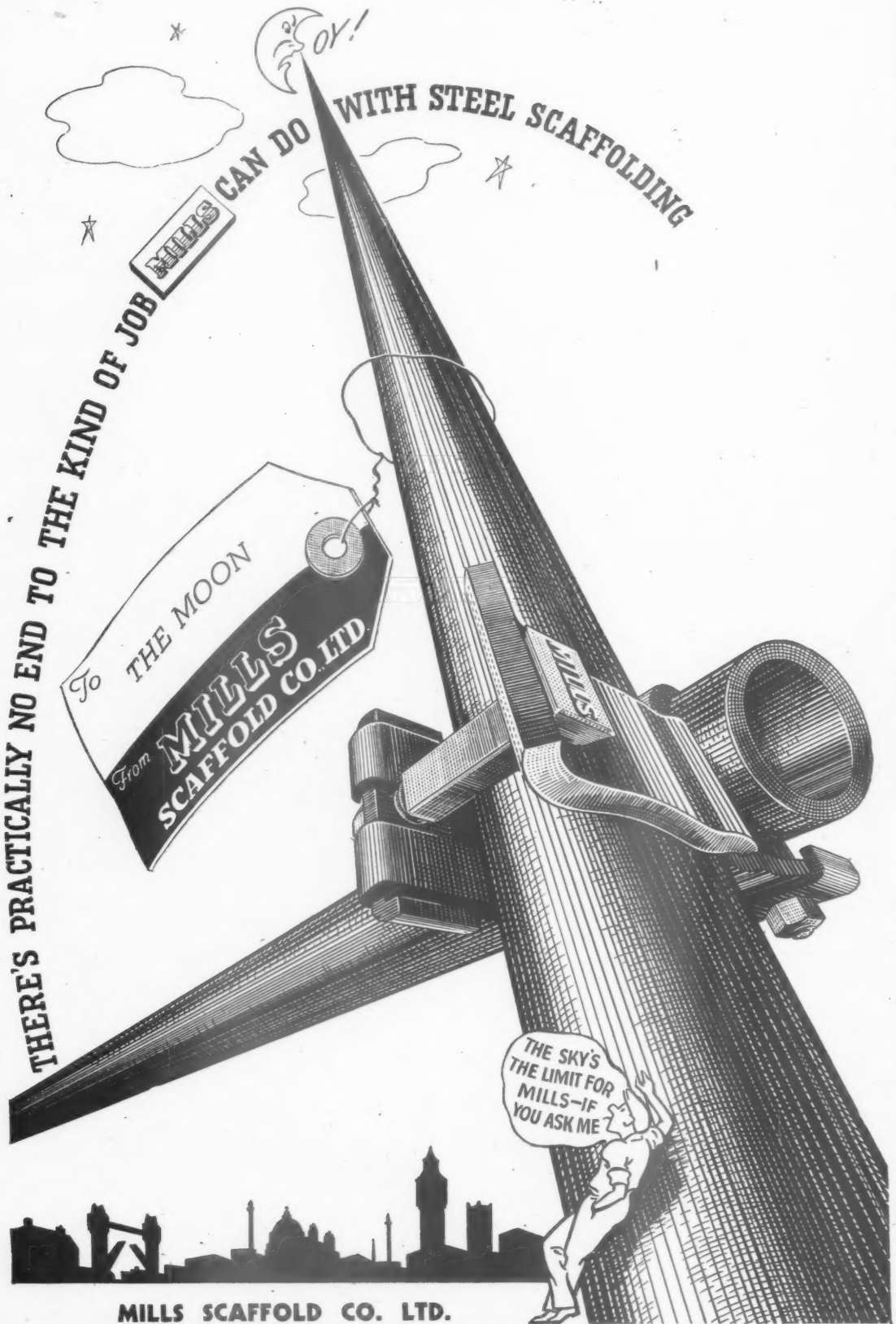


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