THE ARCHITECTS' JOURNAL

No. 2547] [VOL. 98
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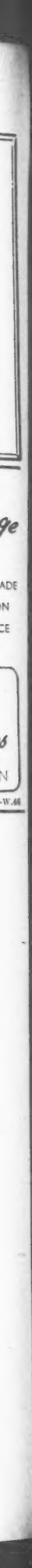
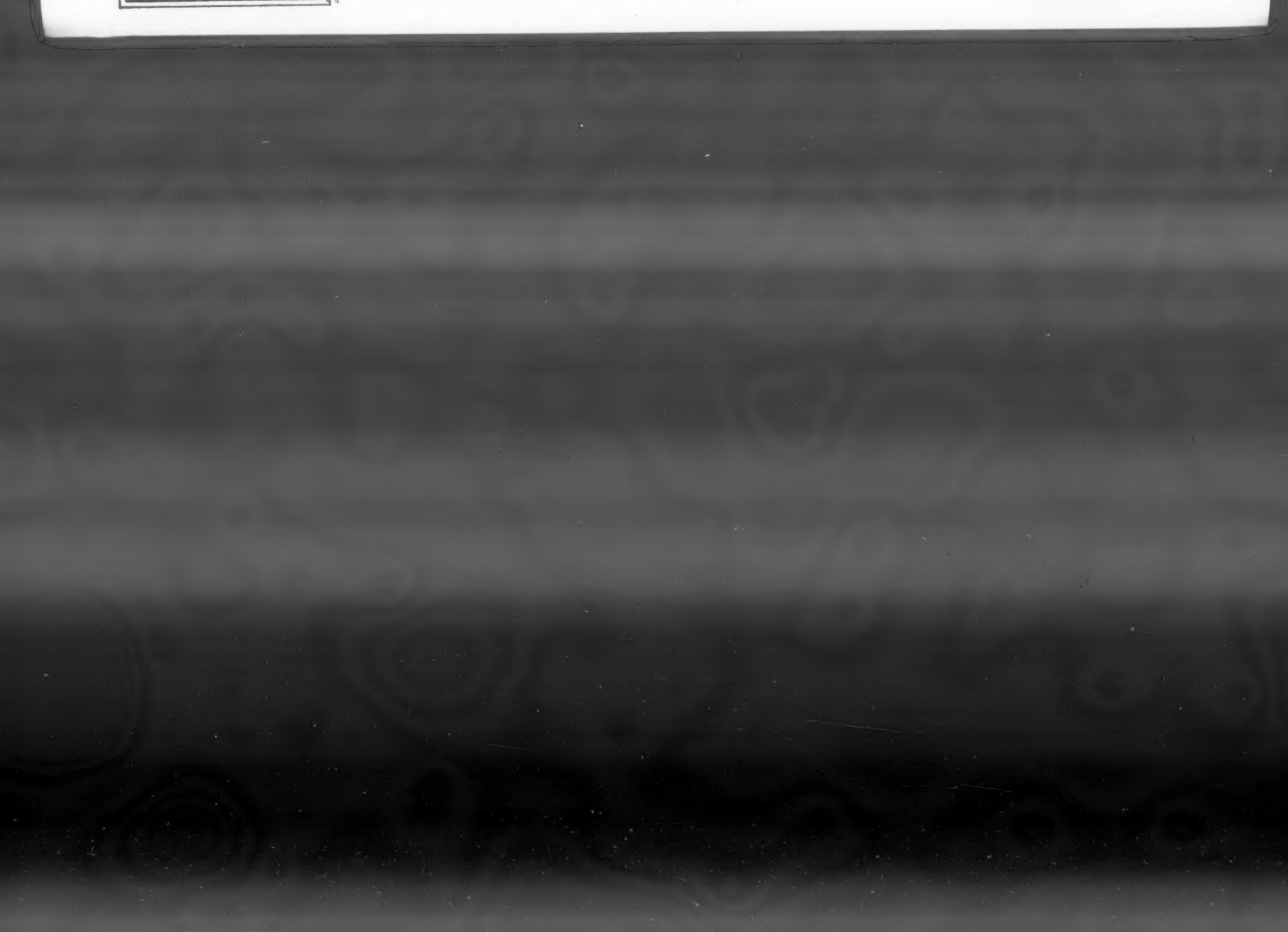
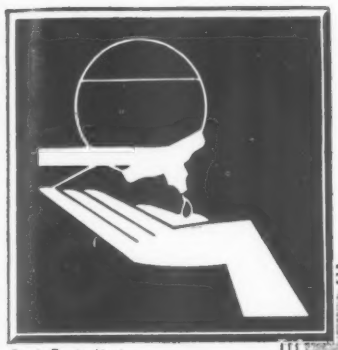
★ The war has both multiplied the number of Official Departments and encouraged Societies and Committees of all kinds to become more vocal. The result is a growing output of official and group propaganda. A glossary of abbreviations is now provided below, together with the full address and telephone 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. 32, 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 6927.
BC	Building Centre. 23, Maddox Street, W.1.	Mayfair 2128.
BDA	British Door Association, Shobnall Road, Burton-on-Trent.	Burton-on-Trent 3350.
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385.
BINC	Building Industries National Council. 110, Bickenhall Mansions, W.1.	Welbeck 3335.
BOE	Board of Education. Belgrave Square, S.W.1.	Sloane 4522.
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 7618.
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.
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.	Canonbury 2041.
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.
ISPH	Committee for the Industrial and Scientific Provision of Housing. 3, Albemarle Street, W.1.	Regent 4782-3.
LIDC	Lead Industries Development Council. Rex House, King William Street, E.C.4.	Mansion House 2855.
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3767.
MARS	Modern Architectural Research. 8, Clarges Street, W.1.	Grosvenor 2652.
MOA	Ministry of Agriculture and Fisheries, 55, Whitehall, S.W.1.	Whitehall 3400.
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' 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.
NBR	National Buildings Record. 66, Portland Place, W.1. All Souls' College, Oxford.	Welbeck 1881. Oxford 48809.
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.
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.
RC	Reconstruction Committee RIBA. 66, Portland Place, W.1.	Welbeck 6927.
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.
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646.
TCPA	Town and Country Planning Association. 13, Suffolk Street, S.W.1.	Whitehall 2881.
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6147.
TPI	Town Planning Institute. 11, Arundel Street, Strand, W.C.2.	Temple Bar 4985.







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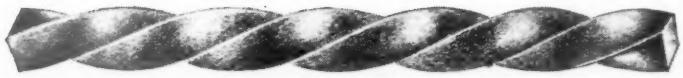
For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational Legal Notices, Miscellaneous, Property and Land Sales—*see* pages xxxiv and xxxvi.



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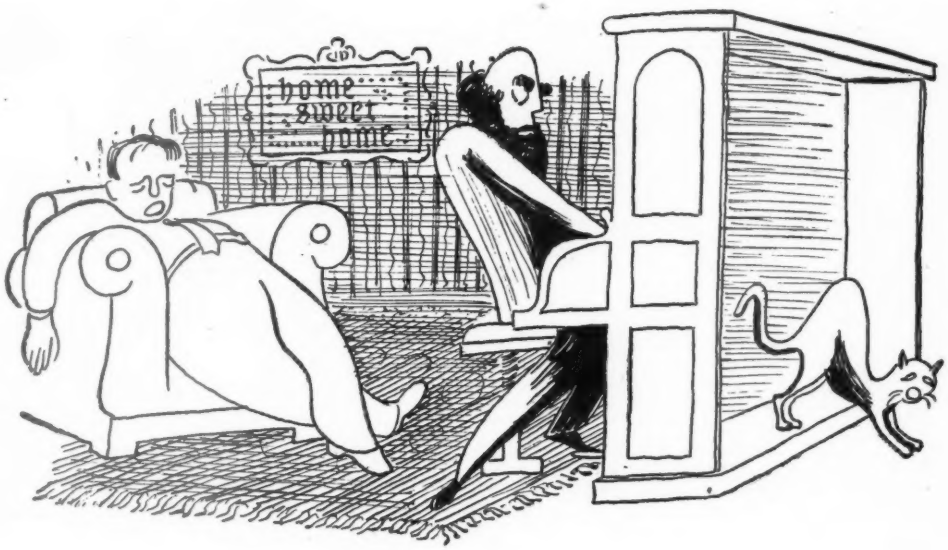

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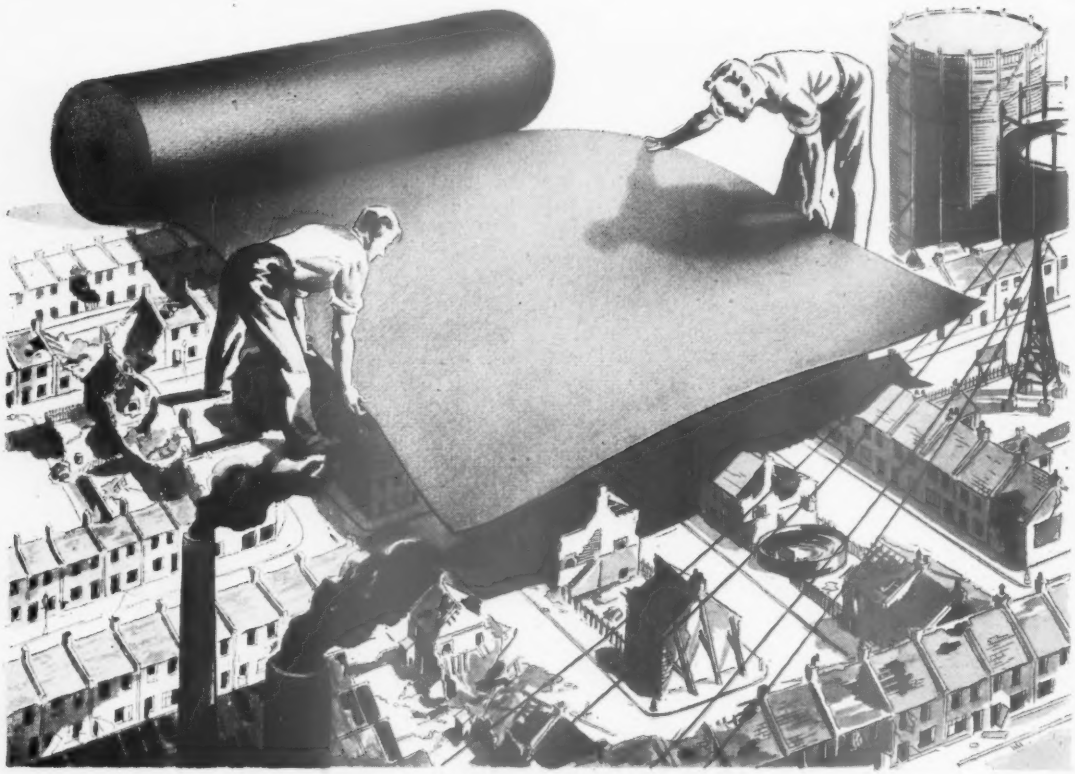

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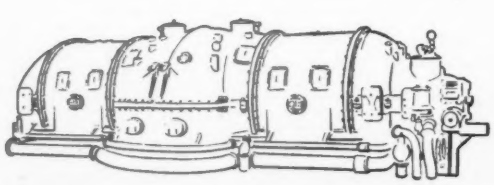

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The following table is compiled from Table 1 and Chart 2 of Bulletin No. 12—"Thermal Insulation of Buildings," issued by the Ministry of Fuel and Power. It relates to the lining of typical wartime constructions with ½ inch Insulating Board, with air space. "Cost of insulation" figures are per 1,000 sq. ft.

Construction	Thermal Transmittance			Increase or decrease of cost of Insulation over Savings on Heating Plant	Number of years in which fuel saving pays for extra cost of insulation
	Uninsulated	Insulated	Reduction		
Corrugated iron roof	1.5	0.32	1.18	£24 Saving	—
Corrugated asbestos cement roof	1.4	0.32	1.08	£17 10s. „	—
Corrugated iron wall	1.2	0.31	0.89	£6 „	—
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¼ in. Flat asbestos cement wall	0.89	0.28	0.61	£12 Extra	1½ years
4 in. Concrete roof	0.68	0.26	0.42	£24 „	4 „
4 in. Concrete wall	0.64	0.25	0.39	£25 „	5 „
4½ in. Brick wall	0.64	0.25	0.39	£25 „	5 „

In practically all heated "single-skin" buildings the savings in initial cost of central heating plant outweigh the cost of insulation, as the savings in labour in manufacturing and installing heating plant exceed the labour used in insulation. In all types of buildings in general use today the money saved on fuel repays the extra cost of insulation in a few years.

". . . and with what efficiency ?"

But there is another aspect of insulation—probably of greater National importance—*its effect on the efficiency of workers.* If, through inadequate or badly distributed warmth, or cold draughts precipitated by uninsulated surfaces, the output of workers in factory or workshop is reduced by 5% during the cold months of the year, the loss is equal to one week's output per annum. How many times would the value of one week's output exceed the cost of adequate insulation ? . . . . and can the country afford to lose the output ?

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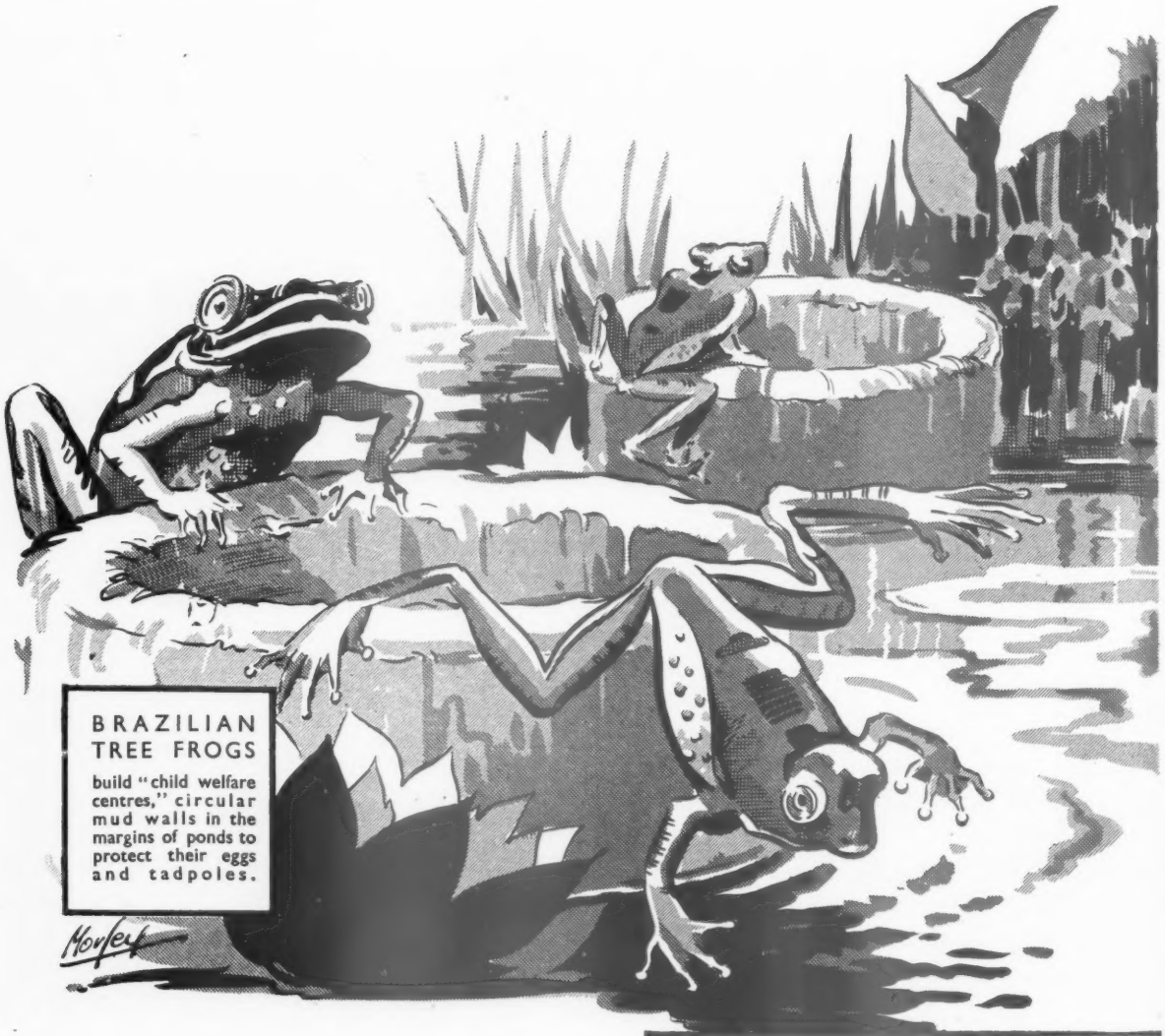

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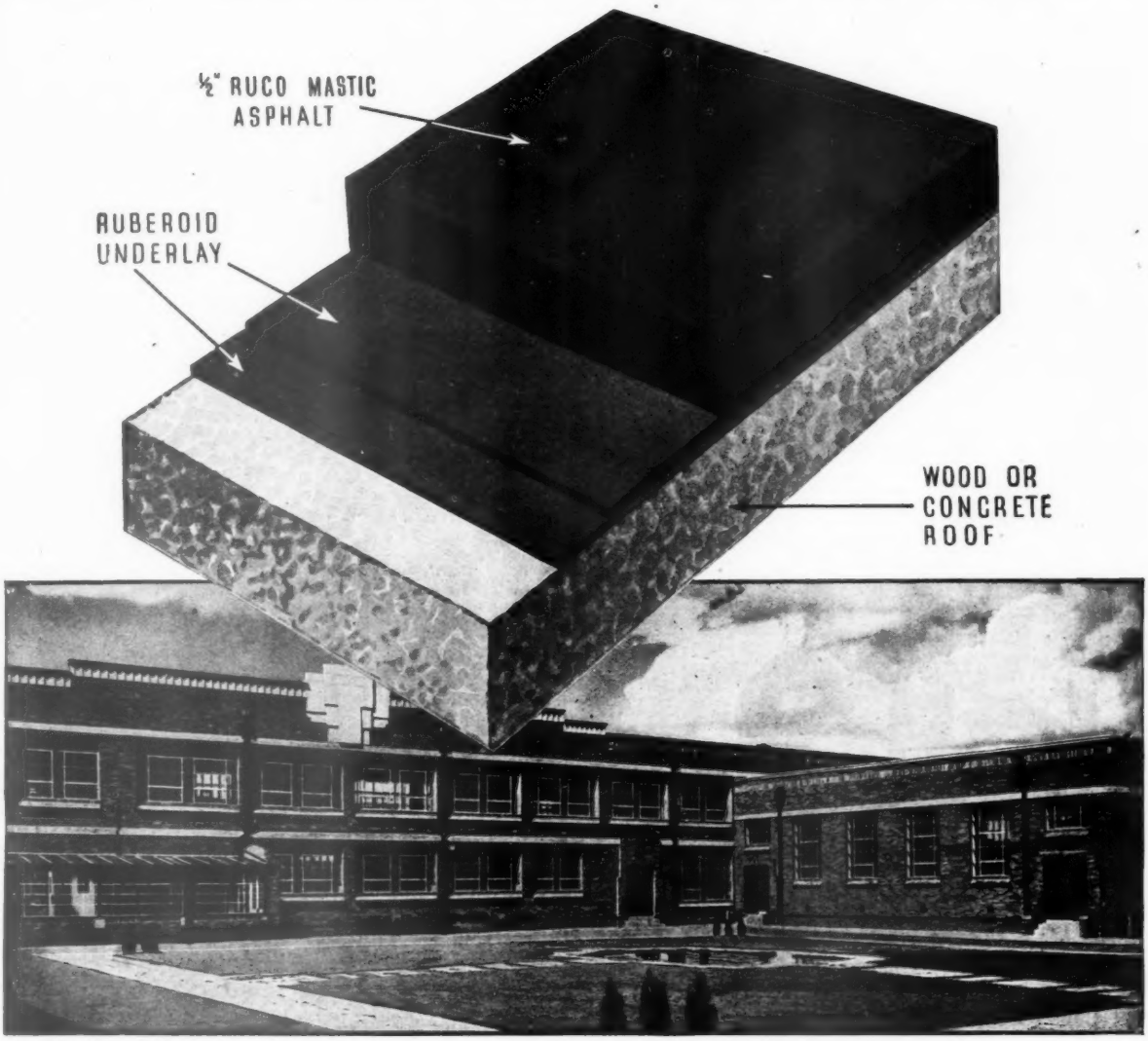

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Architects: Messrs. Cook, Howard & Lane, Mansfield.

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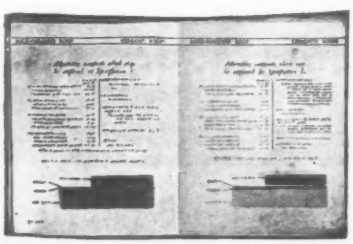

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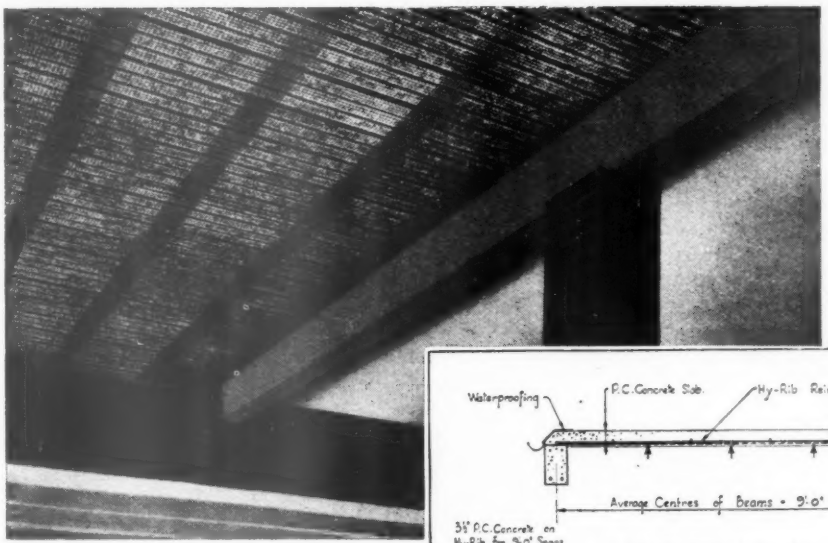
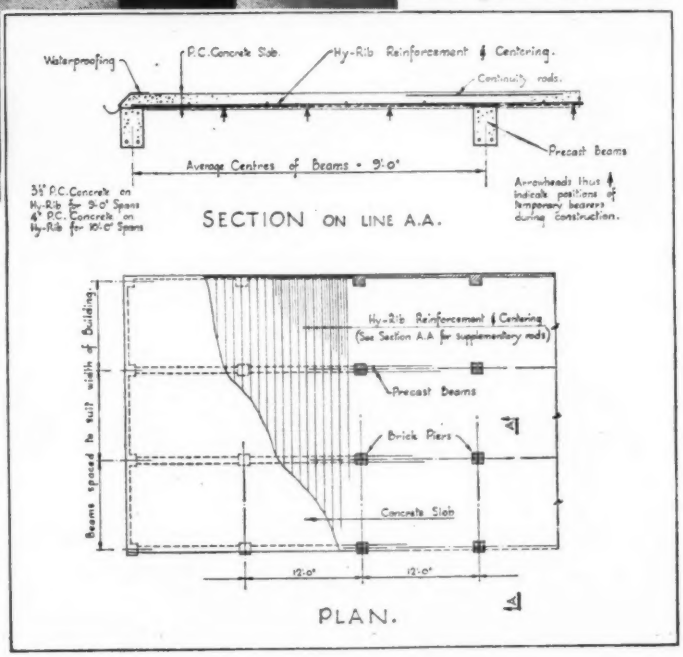


Illustration shows Hy-Rib centering and reinforcement after concrete of roof slab has set and temporary propping removed.

Typical details of unit garage showing construction of roof.



The use of Hy-Rib combined centering and reinforcement effects a double economy as timber shuttering is eliminated and the reinforcing steel is utilised in the constructional stages.

The use of Hy-Rib is a guarantee that the maximum strength is developed in the reinforcing steel. The sheets of Hy-Rib cannot "ride up" into the concrete during construction and become ineffective.

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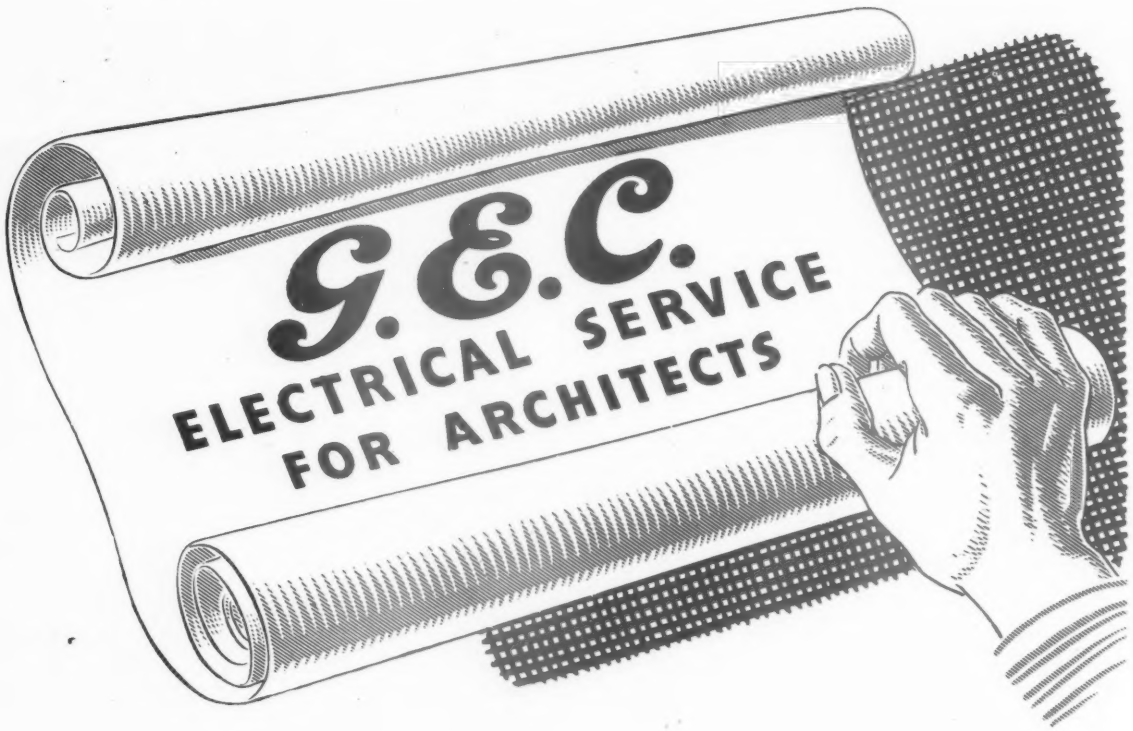

The progressive development of electrical services has been closely linked with war-time planning. This was inevitable. The vast G.E.C. research, technical and manufacturing resources have been fully and untiringly applied to war-time needs. But a comprehensive knowledge of up-to-date electrical practice is a prerequisite of all efficient planning. Therefore architects and other authorities whose responsibility it is to plan for post-war reconstruction are cordially invited to

Consult the G.E.C.

Much that is new in electrical development—advances in the efficiency and range of electrical applications, the outcome of research accelerated by war-time needs—may well be taken into account for plans designed for maturing in the future.

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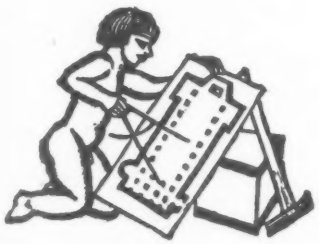


DIARY FOR NOVEMBER AND DECEMBER

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.

CARDIFF. *Rebuilding Britain Exhibition.* (Sponsor, RIBA.) DEC. 20-JAN. 17

CHELTENHAM. *Town and Country Planning Association Conference.* Speakers: Roy Hughes, Gordon Payne and A. G. Streater. Nov. 20

DUNDEE. *Rebuilding Britain Exhibition.* At the Victoria Art Galleries. Nov. 18-22

ISLE OF ARRAN. *Twenty Women at Home Exhibition.* (Sponsor, HC.) Nov. 18-29

LONDON. H. Alker Tripp. *Town Planning and Road Traffic Problems.* At Abercorn Rooms. Great Eastern Hotel. (Sponsor, TCPA.) 12.30 p.m. Nov. 19

Prefabrication and Kindred Problems. The Westminster Branch of the ABT has arranged a further series of lectures on new building technique. The remaining lectures will be given at 6.30 p.m. on the following dates, at the Alliance Hall, Palmer Street, Westminster, S.W.1. November 19: *Governmental Work on New Building Techniques.* November 26: *Some Problems of Prefabrication.* Enrolment fee was 5/- for the series; 2/- for single lectures. 50 per cent. reduction for members of the ABT, and for members of trade unions affiliated to the NFBTO. A series of booklets based on the first series of lectures is now in preparation. These will be published shortly, complete with additional information, illustrations and bibliographies. Nov. 18—26

County of London Plan Exhibition. At the Royal Academy, Burlington House, Piccadilly, W. The exhibition consists of large-scale maps and drawings illustrating the County of London Plan, prepared for the LCC by J. H. Forshaw, the Council's Architect, in association with Professor Patrick Abercrombie. The Council now awaits the views of MOTCP and MOT, and of the other Government departments and public authorities and public utility undertakings concerned, and will consider the Plan further when these views have been received. The Council is also anxious to obtain the views of the general public, particularly of Londoners. Open 10 a.m. to 5 p.m. weekdays, 2 p.m. to 5 p.m. Sundays, admission free. During the exhibition, talks will be given by the following speakers. All the talks will be at 3 p.m.: Nov. 25, L. St. G. Wilkinson, Borough Engineer and Surveyor, County Borough of Wallasey, and President of the Institution of Municipal and County Engineers. Nov. 18-28

Walter O. Hudson. *Architects' Registration Acts, 1931-38.* At 29, Lincoln's Inn Fields, W.C.2. (Sponsor, Institute of Registered Architects.) 2.15 p.m. Nov. 20

John A. F. Watson. *Housing and the Child.* At Queen Mary Hall, Great Russell Street, W.C.1. 2.30 p.m. (Sponsor, Society of Women House Managers.) Nov. 20

W. A. Robertson. *Timber: The New Outlook.* At Royal Society of Arts, John Adam Street, W.C.2. 1.45 p.m. Nov. 22

Ronald Tate. *Dental Clinics and Town Planning.* At Housing Centre, 13, Suffolk Street, S.W.1. 1.15 p.m. Nov. 23

Charles Gandy. *Town Planning and Clean Air.* At 1, Grosvenor Place, S.W.1. (Sponsor, TCPA). Nov. 25

H. A. Cox. *Timber, Uses New and Old.* At Royal Society of Arts, John Adam Street, W.C.2. 1.45 p.m. Nov. 29

C. C. Handisyde. *House Construction, Methods and Standards.* At Housing Centre, 13, Suffolk Street, S.W.1. 1.15 p.m. Nov. 30

W. A. Robertson. *Timber, the Minor Products.* At Royal Society of Arts, John Adam Street, W.C.2. 1.45 p.m. DEC. 6

Motorways for Britain Exhibition. At 22, Lower Regent Street, W.1. (Sponsor, British Road Federation.) DEC. 9-24

Film Evening. Films selected by Paul Rotha, who will give an informal talk. At 34-36, Bedford Square, W.C.1. 6 p.m. (Sponsor AA). DEC. 14

MELKSHAM, WILTS. *New Homes for Old Exhibition.* (Sponsor, HC.) Nov. 18-30

MORETON-IN-MARSH. *Town and Country Planning Association Conference.* Speaker: Dr. L. Dudley Stamp. Nov. 27

PRESTON. *Good Neighbours Exhibition.* (Sponsor, HC.) Nov. 18-23

SHEFFIELD. *Home from Home Exhibition.* (Sponsor, HC.) Nov. 18-24

SLEAFORD. *Living in the Country Exhibition.* (Sponsor, HC.) Nov. 18-21

SWANSEA. *Rebuilding Britain Exhibition.* (Sponsor, RIBA.) Nov. 18-DEC. 11

UXBRIDGE. Films: *Rehousing in Britain and Rural Conditioning.* (Sponsor, HC.) Nov. 18-21

YEALMPTON, DEVON. *Living in the Country Exhibition.* (Sponsor, HC.) Nov. 11-DEC. 2

NEWS

THURSDAY, NOVEMBER 18, 1943
No. 2547. VOL. 98

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.

Queen Charlotte's Hospital WILL GET £30,000 if a section of the partly built Nurses' Home at Shepherds Bush is completed by the end of 1944.

The partly-built Nurses' Home is now used as a store by the Government. If it is completed the Hospital will get £30,000 from the Bernhard Baron Charities Fund to provide more accommodation for maternity cases.

Is the Government prepared to consider building DEMOUNTABLE PREFABRICATED DWELLINGS for agricultural workers? asked Lord Barney in the House of Lords.

They can, he said, be built in addition to the 3,000 cottages of the Government's programme. The Earl of Onslow suggested that after the war greater use might be made of prefabricated steel houses, as scrap material and machinery will be available. Lord Bledisloe said that unless something is done to meet the housing shortage quickly after the war there will be a terrible outcry. Lord Snell, for the Government, said it is admitted that the scheme for 3,000 houses is disappointingly small. The resources of the building industry are fully drawn on for war-time work. Prefabricated units are already being used as emergency accommodation, but the Government do not recognize them as houses. The most they can do is to lay plans for building when labour is made available, and those plans are being laid.

from AN ARCHITECT'S *Commonplace Book*

APARTMENT HOUSE: 16TH CENTURY (continued). [*From* The Lives, Heroic Deeds and Sayings of Gargantua and His Son, Pantagruel, *by François Rabelais*]. In the middle of the lower Court there was a stately fountain of faire Alabaster, upon the top thereof stood the three Graces, with their cornucopias, or hornes of abundance, and did jert out the water at their breasts, mouth, eares, eyes, and other passages of the body ; the inside of the buildings in this lower Court stood upon great pillars of Cassydonie stone, and Porphyrie marble, made arch-wayes after a goodly antick fashion. Within those were spacious galleries, long and large, adorned with curious pictures, the hornes of Bucks and Unicornes : with Rhinoceroses, water-horses called Hippopotames, the teeth and tusks of Elephants, and other things well worth the beholding. . . . On the out-side, were placed the tilt-yard, the barriers or lists for turnements, the hippodrome or riding court, the theatre or publik play-house, the Natatorie or place to swim in, with most admirable bathes in three stages, situated above one another, well furnished with all necessary accomodation, and store of myrtle-water. By the river-side was the faire garden of pleasure ; and in the midst of that the glorious labyrinth. Between the two other towers were the Courts for the tennis and the baloon. Towards the tower Criere stood the Orchard full of all fruit trees, set and ranged in a quincuncial order. At the end of that was the great Park, abounding with all sort of Venison.

Company Sergeant-Major Roy Robert Jones, of Scarborough, has been MENTIONED IN DESPATCHES.
Before being called up for service in 1939, C.S-M. Jones was a student in the Leeds School of Architecture, Leeds College of Art, and had completed the Fourth Year of the Course. He served in France in 1939 and later transferred to the Royal Corps of Signals. His uncle, Mr. P. H. Jones, is a well-known Scarborough architect.

Miss Jane B. Drew is ARCHITECTURAL CONSULTANT TO THE BCGA Domestic Heat Services Committee.
The Committee is to undertake a comprehensive research on kitchen planning equipped with gas and coke services to suit varied needs and ranges of income. Full scale models are to be produced designed to incorporate the work-saving kitchen and give a complete exposition of the modern heat services which can be provided by gas and coke in the post-war home.

The Federation of British Industries Industrial Research Committee recommends the Government to ALLOCATE A MILLION POUNDS A YEAR to the Department of Scientific and Industrial Research.
The committee, under the chairmanship of Sir William Larke, makes the following recommendations : *Every manufacturing firm* should take stock of its position to ensure that it is devoting to research and development the maximum effort and funds, commensurate with the nature of its problems. Wherever possible, it should maintain its own research department ; where, however, this is not feasible, it should at least entrust one or more suitably qualified individuals with the responsibility for keeping constantly under review the application of research to its activities, and for initiating such investigations as may from time to time prove desirable, and create and maintain a special fund for such research and development of a magnitude compatible with its resources. *The firms comprising the industries* which have their own collective research associations should give the most careful consideration now to the question whether they are making to their research association a contribution either in money or in other ways, commensurate with the work which, if adequately supported, it could perform in furthering the interests of the industry as a whole. *Every industry* which has not created a collective research association should set up a co-operative research committee, and take steps to create and maintain a research fund which would equitably distribute the burden over the constituent concerns in proportion to their interest in the industry. *The research committee* should determine whether the scale and nature of the research needs were such as to require the establishment of a research association, whether a link could satisfactorily be formed with existing research associations, or whether research problems could be dealt with extramurally through university laboratories and other research establishments. *The Department of Scientific and Industrial Research* should make the maximum use of the wide powers it possesses both as regards the amount of grant which can be made available in each case in relation to associations and as regards the eligibility for grant of types of organization for collective research which, though not research associations in name, are in fact fulfilling similar purposes. Financial provision should be made from public funds to enable the department to increase and continue indefinitely financial support to research associations and similar organizations as a permanent feature of the national economy. *The Government* should allocate to the Department of Scientific and Industrial Research an annual sum of at least £1,000,000 for the maintenance and expansion of its activities. *A bureau of industrial research* should be established in the immediate future which should be national in scope and, though financially supported by those principally concerned, should be entirely objective in its activities.

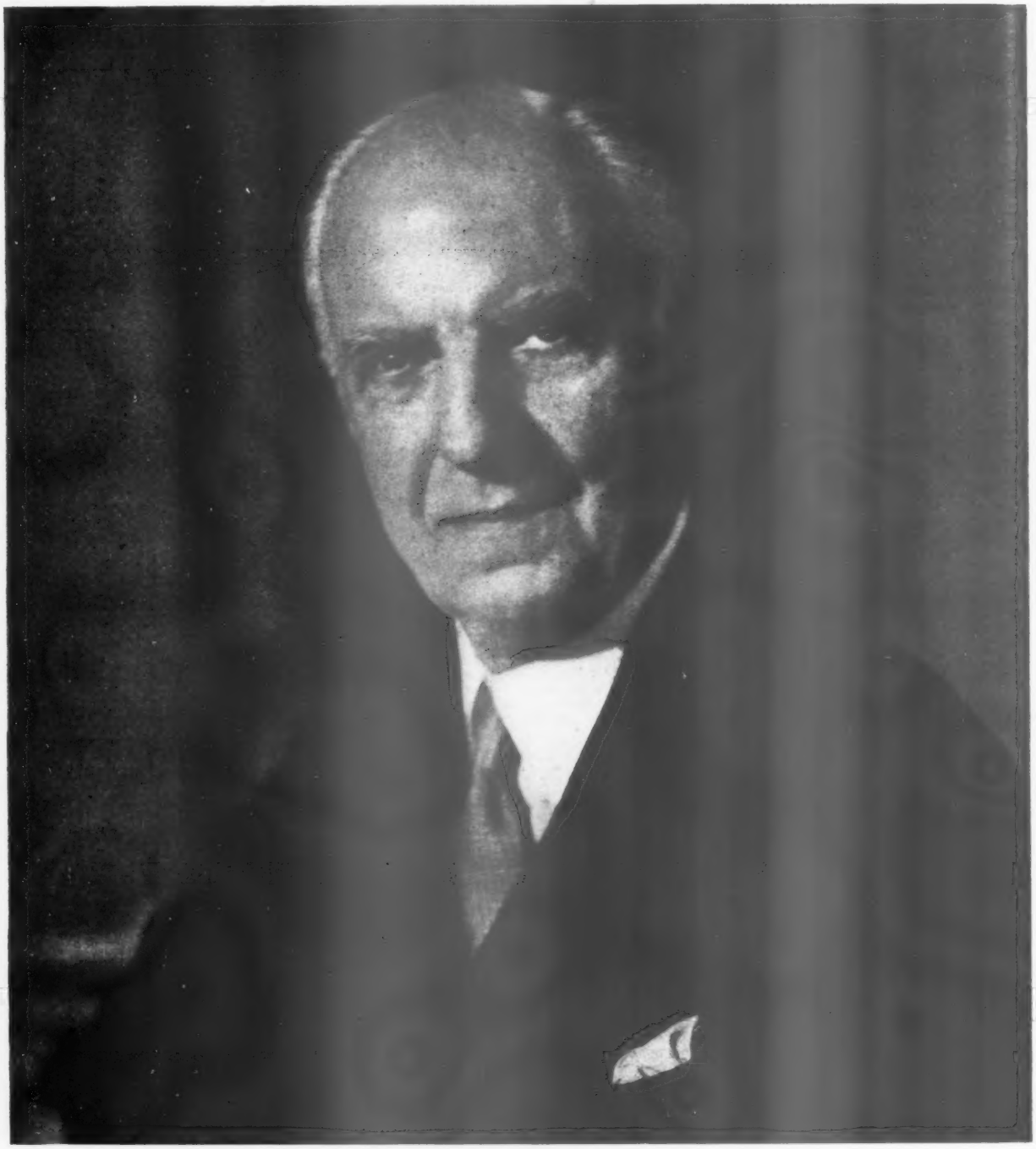
Unsightly garden walls in Edinburgh, denounced as GROTESQUE ABSURDITIES have been condemned by the City Council.
The walls erected in many places where railings have been removed from the fronts of houses, are in various modes of construction, most of them in brick work, cement and plaster These have been now denounced as grotesque absurdities. Most of them have been erected without the consent of the Dean of Guild Court. The Court proposes to deal with this menace to amenity at once.

★

Sir George Burt and Mr. Frank Wolstencroft, two of the members of the mission sent to America by MOW to study new building methods, are now BACK IN THIS COUNTRY.
Sir George Burt, who represented the practical side of the building and civil engineering industries and is chairman of the Building Research Board and chairman of the Inter-departmental Committee on House Construction, will start at once on drafting the report to the Minister. Until this is done, no statement can be made by Sir George or Mr. Wolstencroft on the work of the mission. The other members of the mission are expected back shortly.

The Borough Engineer estimates that YARMOUTH WILL NEED 3,400 HOUSES at least in the first pre-war year.
The General Purposes Committee has asked for less than a third of that number, but it has been told by MOH that 350 is the maximum number for which consent to build will be granted.

Local authorities requiring financial assistance for RURAL HOUSES COSTING MORE THAN £250 each must obtain the approval of the MOH Senior Regional Officer.
In a circular to county councils (excluding London) and rural district councils in England, MOH states : Applications for assistance under the Housing (Rural Workers) Acts in respect of works which will not cost more than £250 a house, may now be dealt with, in consultation with the housing authority, and it will no longer be necessary in these cases to submit particulars of individual applications to the Minister. If in any exceptional case it is desired, despite the need for spreading the available labour and materials over as many cases as possible, to grant assistance in respect of works costing more than £250 a dwelling, full particulars, including plans and specifications, must be sent to the Minister's Senior Regional Officer, so that it may be decided whether the carrying out of the works can be approved.



Minister of Reconstruction

On Friday last it was announced from No. 10, Downing Street, that the King had approved the appointment of Lord Woolton as Minister of Reconstruction. Sir William Jowitt, the Minister without Portfolio, will assist Lord Woolton in carrying out his work. Lord Woolton, who is sixty years old, and was educated at Manchester Grammar School and Manchester University, has been Minister of Food since 1940. Until then he was chairman of Lewis's and Pryce Jones Ltd., and vice-chairman of a number of other companies, but resigned all his directorships when he became Minister of Food. Governor of the Royal College of Art and chairman of the Board of Trade Committee on Art and Industry, he served on the Hambleden Committee on the Teaching of Industrial Art and the Lord Privy Seal's Committee to enquire into the need of deep shelters. This is the first time in the present Government that a Minister with a seat in the War Cabinet has been given full authority to deal with all aspects of reconstruction. The enormous job confronting the new Minister is emphasized in this week's leading article. "I have nothing to say about what I am going to do," says Lord Woolton. "All I will say about the future is that I will faithfully, and without prejudice, examine the facts as we can see them and endeavour to put before my colleagues in the Cabinet proposals which will be worthy of our great nation." For other Ministerial changes see page 367.

★

On Friday last it was announced from No. 10 Downing Street that the King had approved the following appointments : LORD WOOLTON, MINISTER OF RECONSTRUCTION ; Mr. H. U. Willink, Minister of Health; Mr. Ernest Brown, Chancellor of the Duchy of Lanchester. The Minister without Portfolio, Sir William Jowitt, will assist Lord Woolton in carrying out his duties as Minister of Reconstruction. Lord Woolton, who has been Minister of Food since 1940, will be a member of the War Cabinet. Mr. H. U. Willink, who succeeds Mr. Ernest Brown as Minister of Health, is 49 years of age and was elected Member of Parliament for North Croydon just over three years ago. In September, 1940, he was appointed by the Minister of Health to be Special Commissioner to supervise arrangements for the care and rehousing of people made homeless by air raids in the London Civil Defence Region (see this page and 366).

On November 25 most of BILBROUGH VILLAGE IS TO BE SOLD by public auction. The village is near York and is included in the sale of Bilbrough estate of 1,120 acres. Among the lots are The Three Hares inn, the old rectory and seven farms.

Mr. Hubert Bennett has been appointed CHIEF ARCHITECT TO THE SOUTHAMPTON CORPORATION.

An estate at Failand and Easton-in-Gordano, near Bristol, has been GIVEN TO THE NATIONAL TRUST. Most of the land was formerly the property of Sir Edward Fry and is given, subject to life interest, in remembrance of him and Mariabella, his wife, by a member of their family. It includes a group of old Scotch pines near the top of a hill about 400 ft. above sea level, formerly used as a landmark in the Bristol Channel, and still known as The Landmark.

★

On the Grange Hill site, near Ilford, a HOUSING SCHEME TO COST OVER A MILLION pounds is to be carried out by the LCC. Drawings are being prepared. The houses will include 686 three-room type and 650 four-room non-parlour houses. The total cost, based on 1939 building prices, is £1,600,000. There will be 11 houses to the acre after reserving space for schools, churches, shops, and other communal buildings. About 228 flats for old people will be provided on corner sites facing south. The LCC also propose to acquire by compulsory purchase three air-raid-damaged sites totalling 58 acres in Poplar and Stepney. One was a clearance area before the war. Estimated cost of buying and clearing them is £605,000.

FOOD, WORK, HOMES

"JUST as in time of peace plans for war and measures of defence ought to be in readiness for any sudden emergency, so in time of war we must make sure that confusion and chaos do not follow the victories of the armies or stultify the surrender unexpectedly early by the enemy. I regard it as a definite part of the duty and responsibility of this National Government to have its plans perfected in a vast and practical scheme to make sure that in the years immediately following the war, food, work, and homes are found for all. No airy visions, no party doctrines, no party prejudices, no political appetites, no vested interests, must stand in the way of the simple duty of providing beforehand for food, work and homes. They must be prepared now during the war. These plans must be prepared, and they must come into action just like, when war breaks out, general mobilization is declared. They must come into action as soon as the victory is won. On this far-reaching work His Majesty's Government are now concentrating all the energies that can be spared from the actual struggle with the enemy. The policy of waging war until victory would be incomplete, and indeed spoiled, if it were not accompanied by a policy of food, work and homes in the period following the victory for the men and women who fought and won."

The above tremendously important and significant words were made by the Prime Minister last week at the Lord Mayor's luncheon. He spoke thus because, though the most bloody and distressing months of the war may lie ahead, the news is good. "This hour," said Mr. Churchill, "is more hopeful and more stirring than any through which we have passed. It is a reasonable assumption that, unless we make some grave mistakes in strategy, the year 1944 will see the climax of the European war." Three days after this speech, Lord Woolton was appointed Minister of Reconstruction.

Slogans are politically indispensable to action. Lenin arrived on three words: *Peace, Bread, Land.* As politically powerful are Churchill's; *Food, Work, Homes*—words few, simple and direct, but implying, nevertheless, organisation and planning which will be complex, difficult, on a vast scale, and inevitably controversial.

The Prime Minister has not acted too soon in drastically revitalising and reorganising the Government machinery of reconstruction. If food, work, homes, are to be provided for all when peace comes, Lord Woolton is faced with a planning job on a gigantic scale. This can only be carried through by firm centralized and co-ordinated Government control. Especially in housing, and in its essential concomitant of physical planning, this fact becomes increasingly obvious, strong as are the arguments against bureaucracy in such cases as the sorry one of the 3,000 cottages.

But the present organization and legislation for planning is manifestly not merely muddled and myopic but powerless, frustrated, and inadequate. There is still no legislation on Barlow, Scott, and Uthwatt. The final reports of the Committees of the Post-war Building Directorate have not yet been published. The matter of prefabrication and modular standardisation has not been fully understood, considered, or organized. There is rivalry and lack of co-operation between Government Departments connected with building. Building costs are still rising. No decisions have been reached on the division of financial responsibility for housing between central and local government, nor on the absolutely basic question of costing and credit creation and control in general. No adequate survey of existing conditions, so essential a preliminary to planning, is being made. Not even proper provisional

short-term plans have been prepared, either locally, regionally, or nationally. In short, the country is at present quite unready for any radical re-building and re-housing programme.

It would be a national tragedy if the wheels of re-construction were to begin to move, without control, down the old pre-war road of unplanned building chaos. The Prime Minister's speech, and Lord Woolton's appointment, give hope that the Government is fully aware of the present inadequate state of affairs—that it will now set about the creation of a more powerful re-construction machine, running with less friction on its bearings, whose object will be to carry out "a vast and practical scheme," that will ensure for all, at the right time, and in the right way—food, work, and homes.

The Architects' Journal

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

NOTES & TOPICS

THE NEW MINISTRY

After weeks of rumours and prognostications, the news is out at last. We are to have a Minister of Reconstruction who will be a member of the War Cabinet. What superb timing on the part of the Prime Minister, and how politically astute the appointment of Lord Woolton. For here is a man with the "right" background, who, in spite of having worked for four years on the thankless job of food control, is a popular figure—popular no doubt because he has done the work of doling out our short supplies of food with outstanding success.

★

The significant point about the new Ministry is that it will be a co-ordinating body. But it will be useless unless it is vested with adequate powers. As *The Times* leader wisely stated last Friday, "One overriding condition of success is that the Minister shall enjoy the powers, without which, as has been seen already, reconstruction of any kind can hardly begin. He must have a mandate of unimpeachable authority to bring together the departmental ministers concerned to supervise and co-ordinate their investigations and programmes."

★

But power can easily be abused. Though still united in the immediate job on hand of winning the war, the people are suspicious of the future intentions of certain power groups and their Parliamentary representatives. The heavy Conservative leaning of the new Cabinet changes will not lessen those suspicions. If the reconstruction preparations are muffed or take a path that does not lead straight to the best possible post-war conditions for all—if political appetites and vested interests stand in the way of, in Mr. Churchill's words, "the simple duty of providing beforehand for food, work and homes"—the Right will be digging the political grave of the century.

MR. YERBURY IN SWEDEN

It is not surprising that the Swedish Government should have invited Mr. F. R. Yerbury to visit their country to exchange ideas and news on architectural matters, for the Swedes like to keep in touch with architectural trends throughout the world, and they now feel very cut off. Nearly everyone in Sweden takes an interest in building, especially housing; the Swedes are great homelovers, and housepride is a national characteristic.

★

Mr. Yerbury gave ten lectures in Sweden sponsored by the British Council, and a number of informal talks. The audiences were especially impressed by our planning propaganda in the form of books and exhibitions. The LCC Plan aroused a great deal of interest, as did also our war-time industrial design—our hostels, British Restaurants and their murals, our uniforms and most of all our Utility clothing, furniture and pottery, of which they say the Germans have no equivalent.

★

A conference on prefabrication was to be held in Finland, while Mr. Yerbury was in Sweden. He was asked to attend and to meet Alvar Aalto, who is now busy on standardisation problems. A moral must surely be hiding somewhere in this tale, for it was with a slight shock of surprise that the movers of this proposal received Mr. Yerbury's polite but firm refusal to attend the conference on the ground that he would be regarded, formally at least, as an enemy alien in that country. Perhaps this reaction on the part of the Swedes is easier to understand when one hears that the Russo-Finnish line is now so static that workshops have been set up on the very fighting line itself, where soldiers are busily producing prefabricated houses to relieve the housing shortage in the Finnish hinterland.

★

By far the finest new building in Sweden, says Mr. Yerbury, is Asplund's crematorium, to which, he thinks, the photos of it we have seen here do not do full justice. The building shows the slight tendency in current Swedish design to return to romanticism, though this has been well purified by the functional phase. Asplund's own house with its pitched roof would receive the sanction of any English RDC. The large open fire, an innovation in Sweden, is growing more and more popular, and it is often found in the loggia, where one can sit "in a tobacco trance" and enjoy the bird song and the aroma of the pines during the late spring and early autumn of the North.

Good luck accompanied Mr. Yerbury on his visit. It was only chance that, on the outward journey, delayed his taking a plane that was shot down, and chance again that allowed him, after a number of attempts, including an abortive flying trip of two hundred miles, to return to England when he did. Without that good luck he might still be languishing in Sweden, awaiting a fortuitous opportunity to run the gauntlet of the German night fighters. However refreshing to see the blaze of city lights flickering in the Stockholm waters, it was with a certain feeling of relief that he stepped from the blindfolded fuselage of his plane onto British soil again. He is soon to give a talk at the A.A.

FOR SALE AND TO LET

I need not apologize for returning to this subject. Everyone in Greater London has among their friends people who are looking for a house; and the number is increasing.

★

My latest knowledge of the estate market arose from a casual mention by a university don from Lancashire that he was paying £45 a year for a house in that part of the world. At the news that anyone, anywhere, was the tenant of what sounded like civilized accommodation on such peppercorn terms, an architect in the corner broke down. And like blitz victims he could only be calmed by being allowed to tell his story.

★

It seems that by now all houses sited between 5 and 30 miles from Charing Cross are full or are for sale only at prices which, to put it mildly, suggest they are in short supply.

★

Within 5 miles, there are no small houses to let and most of the larger houses are in sad disrepair and can be taken only on full repairing leases.

★

But there are exceptions, and the architect after two longish walks around the districts flanking Hampstead Heath collected a list of eight of these. His wife then set to work to telephone to the various agents.

★

The results, rates excluded, were: £400; *requisitioned*; *requisitioned*; £325; *uninhabitable through dry rot*; £380; *and requisitioned.* The eighth could not be identified by the agent. The requisitioning was by the Army, not by local authorities, and the houses were of prosperous 5-6 bedroom type in "avenues" quarter to half a mile from the Heath. The architect carefully added that in expecting to get such a house for under £300 rent and rates he may have been most unprofessionally ignorant of pre-war values in the neighbourhood.

★

His last story had war-time charm. An agent outside London apparently thought no one who was well balanced could be looking just now for an unfurnished house so he sent this notice: *One mile from ——, Sussex. A house of distinction. To let furnished.* 3 *reception*, 2 *bathrooms*, 2 *bedrooms only available. No linen, glass, silver. No children. Suit elderly ladies with maid.* 8 *guineas per week.*

PROPAGANDING THE LCC PLAN

It cannot be often that quarto architectural volumes go out-of-print almost on publication. That was what happened to the LCC Plan for rebuilding London. I understand 10,000 more are to be printed —an indication of what this plan means to Londoners. If a popular edition on the lines of Tubbs' *Living in Cities* could also be issued for the general public (as I believe is contemplated) it would go still further towards preparing public opinion for the fight which lies ahead.

SARTORIAL PROBLEM

"If you meet a man with four waistcoat pockets, he will either be a doctor who needs the pockets for oxygen cylinders, or an architect who stuffs them with prefabricated houses. But why are average adjusters and drysalters allowed only three pockets, and braceplug setters none?"—(*Beachcomber, Daily Express.*)

ASTRAGAL

LETTERS

Petrus

W. Clifford Brown, A.R.I.B.A.

Arthur Welford

The RIBA Memorandum

SIR,—Who are the authors of the Memorandum, submitted to the Central Housing Committee by the RIBA, on *House Construction of a Definite Life** which is published in the October number of the *RIBA Journal*? And who gave the authors permission to commit the Royal Institute to didactic mis-statements; from these mis-statements, to build tendentious arguments leading to illogical and specious deductions?

The tenor of the Memorandum like a movement of a musical symphony is set in its first subject, labelled

(a 1). "It has been stated that a house could be produced by the same methods as a motor car. The useful life of a car at its longest, however carefully it is looked after, is probably not as much as twenty years. A hire purchase car is worn out by the time it is paid for. . . . !"

The first sentence of this verbatim-quoted passage contains the Memorandum's first inaccuracy or, if the contention be true that "it has been stated that a house could be produced like a car," the Memorandum might, at least, have given its authority, so that those who read could check up on the reference. As far as is known, no reputable or responsible person has ever suggested that a house could be built "like a car." All that has been suggested is that a similar process of reasoning which evolved the line-production technique of motor-car manufacture—and incidentally aeroplane, wireless, ship and nearly all modern manufacture—should be applied to the manufacture of houses, that the machine, and the machine's capabilities of speed and precision should replace the old hand method as it has replaced slow hand production in nearly every other industry.

But the Memorandum ignores this premise

* See page 380.

and, from its own artificially created hypothesis, proceeds to build up an entirely untrue argument, based on the contention that hire-purchase cars are "worn out by the time they are paid for," i.e. in about three years. And the Memorandum makes this assertion in spite of the fact that the immediately preceding sentence states that a car, well looked after, may last as long as twenty years. Did, ever before, an authoritative body, such as the RIBA, indulge in such unanalytical exposition? It is by this method of non-sequitur, the placing of false premise alongside inaccurate statements, that the authors are able to arrive at their findings.

At the commencement of the same section (a 1), the Memorandum states "It would be regrettable if the difficulties (i.e. of adequate provision of houses) led to relaxation of by-laws or the acceptance of construction and substitute materials of any kind that could be interpreted as an acceptance by the Government of an official form of jerry-building." This is agreed by everybody; we want no jerry-building of any kind, whether official or unofficial, but this statement is only a partial truth since the possibilities for jerry-building exist without relaxation of by-laws or the acceptance of substitute materials. Perhaps the ARCHITECTS' JOURNAL will republish its photographs of the Borders' house to demonstrate that traditional materials, traditional methods of construction, traditional craftsmanship, and existing by-laws, concerning which the Memorandum makes much advocacy (sections c 1, d 1, and e 1), give ample scope for jerry-building. It is about time that the aura of sanctity, which prejudiced individuals are attempting to cast around "traditional methods" and "traditional materials," were blown sky-high.

The final paragraph of section (a 1) is a complete non-sequitur. If "so much must be provided of a permanent character that it would be advisable to build the whole building permanently," is it to be assumed that this line of—can it be called—reasoning should apply to other things than housing? Locomotives and railway carriages for instance. Much of Puffing Billy was of a permanent character.

The first paragraph of section (b 1) says that "materials of the kind used and proved in value for traditional building . . . should not be "superseded or suppressed by materials that have no tradition or proved value behind them." Apart from the fact that the proof of the pudding is in the eating, what is the inherent value of tradition? And who can show those who refuse to look? In the same paragraph, the Memorandum makes use of the sententious platitude that "every new material should be subjected to rigid and exhaustive test and proof." What does the Memorandum want to imply—apart from pomposity—by that statement. Have not its authors yet heard of the Building Research Station? Or do they connote their use of the word "rigid" with their use of the word "permanent" (section a 1)—or what?

Section (c 1) starts by laying down the law that "shortage of skilled labour . . . should be looked upon as a temporary condition." The Memorandum is using the word temporary without defining it—is it six months, six years, or sixty years? The end of the section says "a period of five or six years should see (*sic*) a large number of skilled young men entering the industry. So what! Is this "large number" deemed sufficient? And where do the demobilized live in the meanwhile? In "permanent buildings"?

The same paragraph reads on that "a great effort should be directed towards preserving the skilled crafts." Agreed, but to what end? So that sufficient houses may be built? And, if that expedient fails, what has the Royal Institute to offer? Its head to an infuriated populace? Or just some more platitudes? No, the Memorandum seems to have none of these in mind; it appears to want them preserved merely because they are endangered by the advent of ready-made goods. The RIBA thus lines up with the burners of the spinning-jenny.

The Memorandum next begins an attack on "adventures into the building and allied trades," although this is in strange contradiction to the cry "Leave housing to Private Enterprise," which we heard so often at the Building Industries National Congress. (It is noteworthy that by now the Memorandum has long left the subject of Limited Life House Construction. It hardly returns to the subject; it devotes most of the rest of its time to denouncing according to its phobia and eulogizing according to its predilection).

It continues with the pious hope already referred to, that in six years after the war there will be "a large number of skilled young men" (not adventurers, please), "taking their place in the industry" and ends the section by saying "the Royal Institute would regard with regret the creation of a body of labour unskilled in any craft" (even the craft of 1930-40 jerry-building?) "but the assembly of ready-made houses *by means of a spanner*."

Dare anybody begin to criticize this last sentence? The picture of the authors spluttering with incoherent indignation at the thought of a spanner, makes us wonder what would happen if anybody mentioned a spot-welder or even a multiple tenoner.

Section (d 1) begins with the, by now usual, fallacious dictum that "any relaxation of the existing building by-laws would indicate some surrender of quality in materials or workmanship." Why? It is, of course, a little difficult to see how any "surrender" (i.e. a lower standard of housing) is possible than was sometimes achieved under the by-laws which permitted some of the most wicked workmanship and materials to be used during the inter-war period. The truth, which the Memorandum appears studiously to ignore, is that changing the by-laws might cause better building or worse building, or maintain the *status quo*; it all depends on how they are changed.

Following on the heels of this fallacious assumption comes the next—that short-life housing would increase maintenance charges. Once again, why "would"? No attempt is made, and no analysis is given, to substantiate the assertion. Of course, it *might*, but then, *it might not*. The Memorandum prefers not to examine pros and cons.

Then comes the statement that foundations "are likely to cost approximately the same in either short or 'long life' building." Coming from the Royal Institute this remark is utterly indefensible. Foundations depend on weight of the structure. If it be light enough, foundations as such can be dispensed with and concrete piles, or some other such expedient, substituted.

In section (e 1) we get the anticipated attack on prefabrication, together with advertising, and the crocodile tears shed over "an inexperienced public." Here, the whole artillery of unctuous and hypocritical clap-trap is turned on; "public well-being," "freedom of choice," "liberty of market," "the exercise of taste and preference," "force the public to accept," . . . cliché follows cliché. How much "freedom of choice" did the "inexperienced public" have under the salesman's "sign on the dotted line" technique, when that traditional Gentleman Adventurer was selling gimcrack houses traditionally built of traditional materials with traditional craft under our existing and "unrelaxed" by-laws? They bought what they were given, neither more nor less, better nor worse. If they wanted something other than was provided, they just couldn't have it, and that was that.

The section then proceeds with a soft-pedalled plea against converting war factories to house-building. It would be "inadvisable." Where have gone the superlatives and the dogmatic and assertive "woulds and wills?" This "inadvisable" is very milk and water, although the Memorandum returns with an assertion that their participation "should diminish." Why *should* it? The Memorandum advances no analysis in terms of production of as many houses as possible to support its implied contention that war factories should be used as little as possible to produce houses.

But here is the crux of the whole Memorandum—it contains no analysis, no scientific weighing of pros and cons, no data to substantiate sweeping and contentious statements, no critical examination of the social usefulness of a house so that its degree of "permanence" might be valued. It is utterly deplorable that the Royal Institute, an authoritative and scientific body, should produce a document such as this on such a question.

This letter has the full approval of a number of architects but when the RIBA sees fit to put out such stuff as this anonymously, we see no reason why we should divulge our names. We enclose our cards.

PETRUS

SIR,—May I, together with several of my colleagues in the Profession, join with Astragal in expressing amazement at the findings of the RIBA on the question of post-war housing. It would appear from the Memorandum in the October issue of the RIBA JOURNAL, that in the opinion of the RIBA there cannot be any solution to the immediate urgent need for houses, which we all know will be demanded at the conclusion of hostilities.

There is no doubt in our minds that this demand will be pre-eminent in post-war activities, yet apparently the RIBA cannot hold out any hope for the 2,000,000 or so people who will want a house, and want it immediately. This statement is not only a sorry confession for a body composed of the leading practical architects in the country to make, but is, I maintain, bad propaganda for the profession as a whole, and appears to be playing into the hands of the large speculative building concerns, who will, no doubt, be prepared to take on the job of providing houses quickly. We all agree, I suppose, that a solution of prefabricated houses is not desirable under normal conditions, but unless some such scheme is put into operation, whereby a short-term licence is placed upon the structures, and normal building is proceeded with at a slower rate of progress, we cannot see any likelihood of the housing problem being solved.

We suggest that it is up to the RIBA to withdraw this Memorandum and employ their skill towards producing a short-life prefabricated house which will be satisfactory from both a constructional and æsthetic point of view.

W. CLIFFORD BROWN

Stepney Reconstruction Group Exhibition

SIR,—From the detailed figures of rates expenditure in Stepney (Astragal, October 21), it appears that that Borough has no debt against its ratepayers. Stepney would be lucky in that case, and unique amongst local authorities who together owe a capital sum of some £1,500,000,000 at interest, mostly to banks.

According to figures given by the Ministry of Health Annual Report for 1938-39, annual loan charges appear to be about 17½ per cent. of annual expenditure. (England and Wales).

All local authorities would be intensely interested to hear how Stepney manages to spend all of "every £1" raised in rates on social services, and how it comes about that none of it has to go in tribute to the bank.

Alternatively, what is the total which Stepney owes, the total annual amount which the Borough pays in interest and sinking fund, and the proportion of expenditure on debt service to that on social service?

Woodbridge ARTHUR WELFORD

041A

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

PRINCIPLES OF SOUND TRANSMISSION REDUCTION BY STRUCTURAL ISOLATION (1).

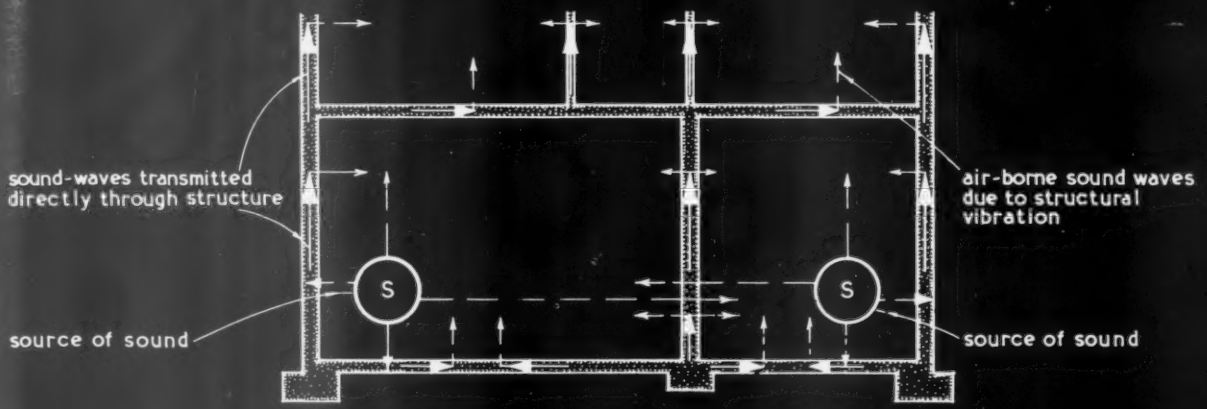


DIAGRAM INDICATING PASSAGE OF SOUND DUE TO STRUCTURAL CONTINUITY.
Internal source. Sound may be air-borne from source to structure, or may be due to impact or vibration.

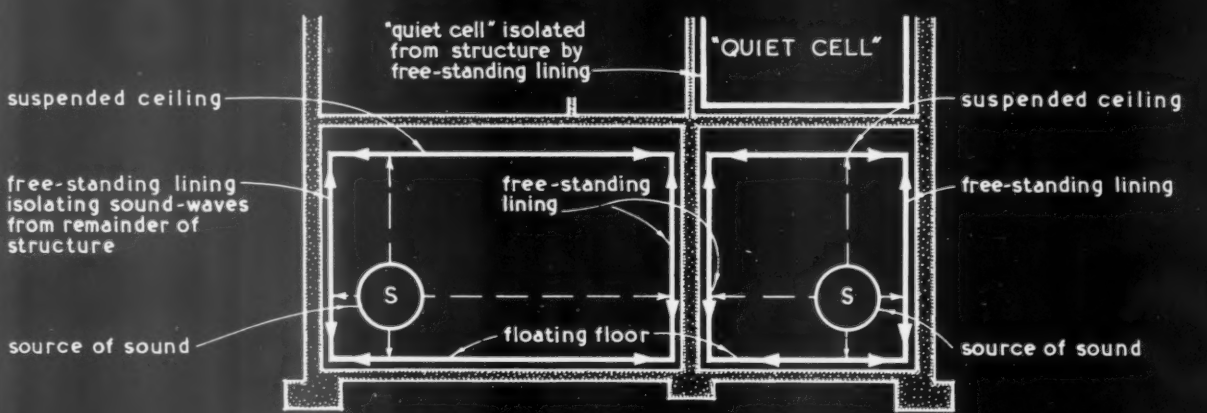
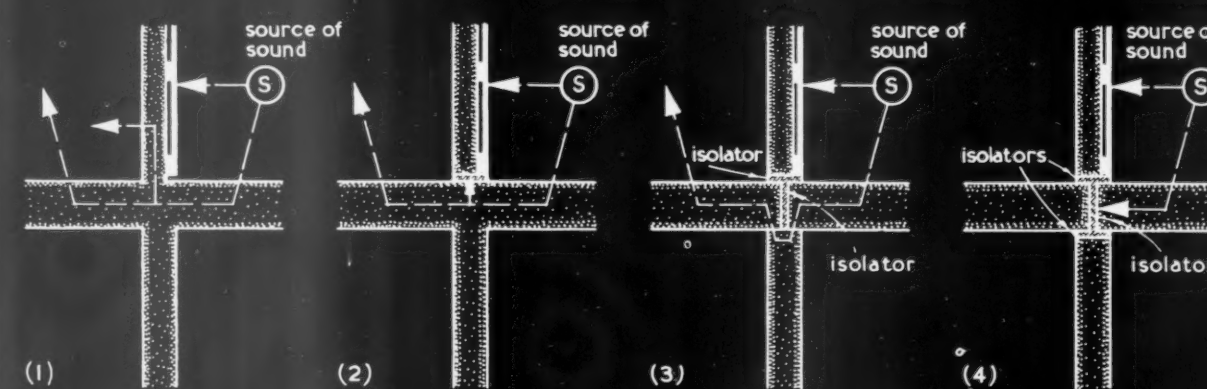


DIAGRAM INDICATING SOUND WAVES CONFINED AT SOURCE BY STRUCTURAL ISOLATION.



STAGES IN DEGREE OF ISOLATION BETWEEN TWO STRUCTURAL CELLS.

Issued by P.I.M. Board Co. Ltd.

543 INFORMATION SHEET: FIBRE BUILDING BOARDS 12: SOUND ISOLATION.
Sir John Burnet Tait and Lorne Architects One Montague Place Bedford Square London WC1.

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET
• 916 •
BUILDING BOARDS
No. 12

Subject : Principles of Sound Transmission Reduction by Structural Isolation (1).

General :

This Sheet is the first of the group dealing with sound insulation. Generally speaking sound waves may be said to be propagated either by continuous air wave-movement (which may occur through the interstices of apparently solid media) or by oscillations setting up complementary vibration in solid media and the period transmitted thereby to a distant point setting entirely separated pockets of air in vibration.

Although a massive and rigid construction will absorb or reflect incident sound to some extent, it is not usually economic compared with light, non-homogeneous building elements designed to be structurally discontinuous. For this reason and for the greatest degree of sound insulation, isolated cell construction is the method usually employed.

The interposition of resilient material, of different density and elasticity, between the vibrating solid material and adjoining structural elements isolates the sound energy and thereby restricts its dispersal. The use of sound-absorbent layers and air-gaps still further tends to restrict the passage of the sound from one structural cell to the next.

The diagrams indicate the propagation of sound waves via a continuous structure ; the principle of forming structurally isolated cells to reduce the sound transmitted to the structure, and stages in the structural isolation between two cells.

Insulwood :

This grade of board belongs to the low-density range, and is suitable for use as an isolator to reduce structural continuity ; it has a sound reduction figure of 20 decibels at a frequency of 500 cycles per second.

It is available in various thicknesses and in sizes up to a maximum of 12 ft. by 6 ft. Further technical data, methods of working, fixing, etc., are given in other Sheets of this series.

Previous Sheets :

Previous Sheets of this series on wallboards are Nos. 893, 895, 896, 898, 900, 902, 904, 909, 911, 912 and 913.

For Pimco systems of metal ceiling and partition fixing see Sheets Nos. 854, 858, 861, 864, 868, 872, 879 and 884.

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PHYSICAL PLANNING

PROBLEM NUMBER TWO

15

index

Max Lock, author of this week's article on Training for Planning, is an associate of the RIBA, a member of the Town Planning Institute and a member of MARS. He was trained at the Architectural Association where from 1937 until war broke out, he served on the staff. He then succeeded Dr. J. L. Martin as head of the Hull School of Architecture. He is at present leader of the team which is working on the Civic Diagnosis of Hull.

Last week Dr. Gutkind outlined the scale of the physical planning job before us, and the qualifications that will be needed in the new type of planning co-ordinator and general practitioner. The example of the USSR quoted by Arthur Ling served to illustrate the need for flexibility in any scheme of training for planners and especially in the relations between specialists on the job.

This week Max Lock indicates through his Planners' Tree, the type of training and the relations between specialists required for national planning in this country. He stresses the need for any scheme of training to combine a detailed knowledge of physical requirements with a broad knowledge of the more fundamental social and economic needs of the people of which the physical environment is but an expression. We hope that the Planners' Tree will do much towards clearing the professional air, which is now thick with misunderstanding as to the particular scope and relations of each profession, including the architect's, in physical planning.

WHAT KIND OF TRAINING WILL THE PLANNERS NEED?

Part two, the way to tackle the job, by Max Lock

the planner's field

The planner's task is so diffuse and composite that he may start from almost any point and, if properly directed, reach a right goal. By this I do not mean that anybody can be a "planner." The training of those who have to re-generate the physical environment is naturally a long process which should aim at nothing less than "wholeness," by which I mean the integration in the student's awareness of those human, scientific, aesthetic, economic and legal factors which express themselves in what is vaguely called "planning." Although town and country planning is ostensibly concerned with the outward measurable things, such as roads, buildings and services, it is these things which tell us about the less measurable but more fundamental human factors that lie beneath the surface. Today we are concerned with more than externals, and we realize that cities are men and women before they are bricks and mortar, and that therefore those who plan must possess a certain quality of citizenship before any technical ability they may have can effectively be put to the service of their fellow men. Indeed, it is only by plunging the whole discipline of planning into its proper element of the study of man's real wants that those who train for this profession can avoid on the one hand the danger of the rigid "technocratic" approach of those who are engineer-minded or, on the other, the equally sterile and superficial "cosmetic" approach of the architect-minded — for the drawing-board planning of façades and vistas or even of piped services can never be a substitute for the more drastic and organic surgical treatment needed to give people who dwell together the social, material, economic and spiritual things they need.

the planner's purpose

Now, in planning the education of the planner, we must know for whom we plan. The field of public service is open

as never before, and the importance of the role of Planning Officer is likely to increase as rapidly as that of the Medical Officer of Health has developed in the last thirty years. In the same way that the latter is the diagnostician of public health, so is the Planning Officer to be the diagnostician of "public environment." It is a statutory obligation that the public should be presented with annual reports on matters of health. The Barlow Report has suggested that annual reports should also be available on matters of environment. Why not? When this happens, the whole function of the planning office in municipal and regional government will become reformed. In addition to its normal function of administrating the statutory schemes, it will engage on the more creative and curative function of planning. Its responsibility will be to collect the pigeon-holed wealth of information relating to the physical environment that already exists in official and non-official departments of town-government, and to collate this into map form which can be easily understood by responsible citizens and councillors concerned with the local administration of planning. In other words, the Planning Officer will have a direct responsibility to the people of a place that will penetrate to every house of every street. The first objective in the education of the planner is therefore to inculcate into the student a trained "diagnostic eye," so that he can perceive the urban and regional complex in their entirety as they affect human life and convenience.

For this it would seem that three stages are necessary :—

The first stage is that of *elementary citizenship*. The student should know how local government functions, how a city is run, the nature of its mechanisms and controls, the interests and factions which constitute it, the political and planning problems, the nature of the tensions between which the ultimate plans must strike a fair equilibrium.

The second stage is that of *fact finding*. The student must apply his knowledge to the environment in which he finds himself, and must learn how to win fresh knowledge by personal discovery and by survey field work which he carries out under guidance, and which is designed not only to be of educational use to himself but a much needed and continuous contribution to the planning problems of the community.

The third stage is that of the gradual gathering of *technical and theoretical knowledge*, and the maturing process which develops the ability to apply planning principles to human problems.

The main point — which should never be lost, however —is the need for the student constantly to be a *permeator* of his environment, to master realities by continued concentration upon his living subject around him, rather than remain a scholar in a sheltered academic back-water. Indeed, the proper function of the planning school would be ideally to serve as the essential link between the scientific and academic institutions (the Universities) on the one hand and the public administrative bodies (the Town Councils) on the other. Above all, it is important that the student should be in touch with the people themselves. As Uthwatt reminds us, "Planning exists for the planned, and not for the planners."

relations between planners

I am not here concerned with the subtle distinctions between training for public or private practice, but I am aware that, in the same way that we have seen medical science branch out into a great number of specialised fields, so we are about to see the science of planning rapidly divide itself into a number of specialisations. Already in Soviet Russia this is so, where we have the architect planners, the social planners, the economic planners and the engineer planners — as well as geographers and microclimatologists — all pooling their specialised knowledge in organised team-work known as "brigades" in the various localities. Our problem, however, is a different one in this country where natural resources are exploited almost to the full, so that planning is likely to be concerned far more with the rehabilitation and weeding out of the blighted areas in our existing cities, rather than with the wholesale planning of new towns and regions. But nothing less than the co-operative team approach — *the pooling of specialised investigation* — is likely to be adequate for such complex tasks. As Dr. Gutkind in last week's article has led us to see, we can divide our groups of planners into three broad categories :—

(1) national,
(2) regional, and
(3) local.

In their own way, each of these three are themselves highly specialised fields, each approached from a somewhat different angle, but nevertheless related to each other, but each requires a different emphasis in the composition of its personnel.

In the first class the whole web of the national network is the field of the planner, who is mainly concerned with the problems of distribution, particularly of wealth and population. *The geographic and economic specialists* as well as the legal administrator, are the dominants of this smallest group of planners.

The second group — the regional planning team — is concerned with the regional network of the services and communications, the live arteries linking production and consumption, agriculture and industry, country and town within the framework of that region. The dominant in this group of planners, it is suggested, will be the *technical and engineering practitioners*. Their concern is rather more with the network as a whole than with the detailed problems of the knots, or nodal points, on the network (the municipalities).

This brings us to the third group of planners who are concerned with these junction points, with the built-up areas of human settlement, with the detailed organisation within confined bounds of space and movement for both production and consumption, and for the expression of all these things in well-ordered lay-out and good design. For this group the dominant skill will need to be that of *the architect-planners*, i.e., technically, socially and aesthetically trained men and women.

We notice, first, that for all groups, the habit of thinking in spatial relationships is important, but it becomes increasingly so as we focus down our problems from the general to the detailed, from the national to the local. Secondly, all three fields require *well-balanced team-work under the right leadership*, a leadership which will tend to be drawn from the dominant skills suggested for each of these different types of planning. We will now consider this in greater detail.

the planners' tree

A recent publication of PEP has referred to those who engage on war-time building as "the commandos of industry." If we accept this role as we commence the battle for the Peace, there must surely be a plan of action which should begin with a planned welding together of the training of all who contribute to the re-ordering of the physical environment. Planning must no longer be divorced from architecture, nor architecture from technology, practical building and public administration. I have previously suggested* that education for the visual arts, technics and planning should be included within a single faculty in the training of those who plan or build. The fact that not a single architectural school in this country is to be found under a science faculty of a university, and that education for engineering is so frequently kept rigidly separate from education for art is an indication of the radical reforms that are now necessary.

Art, science and technical knowledge (skill) must be the three threads running continuously through any scheme of education for planning.

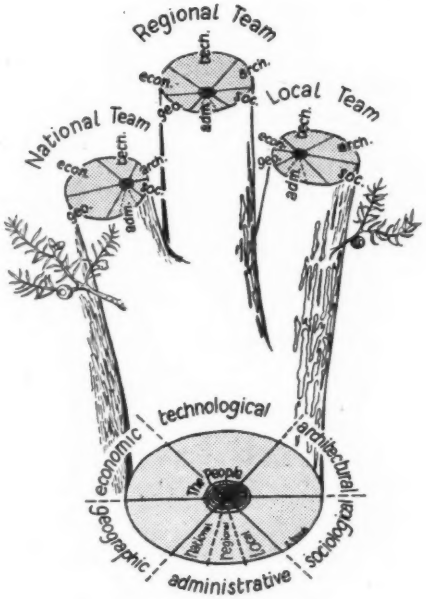
Now, we are moving into an age of pooled specialisation. But specialists will not be able to pool their contributions in practice unless they have learned to do so in training. Again, specialisation must—like the branches of a tree—grow out of a central stem and have its roots in a common soil. It cannot therefore be emphasised too strongly that in the undergraduate phase of training there should be a closer merging of the scientific and the architectural, as well as the economic and sociological aspects of planning and building. Following the present trends, specialisation for town planning will continue

*A.J. Nov. 12, 1942.

to take place after the student has qualified in his dominant profession—whether that profession be engineering, architecture, economics, geography, sociology or public administration. The diagram illustrates this, the important thing being that the branches must grow out of a single integrated trunk. But, it is merely superficial to concern ourselves with the branches and the stem of this tree of knowledge. We must go further and examine the roots and the soil in which it is set. When a boy (or girl) reaches School Certificate Stage, he begins to concentrate either on science or the classics or modern languages. Note the absence of any special "side" for those who will be engaged in technical callings—unless this is included in the science courses (which it seldom is). Now, since those who build and plan are most desirably drawn from a technical background, there seems a clear case for such a further sixth form technological side in the later stages of secondary and public schools, which would include the forming of taste and appreciation of what is good supplemented perhaps by elementary background courses in architecture, engineering and town-planning. In fact, it would stress all those arts, skills and sciences which contribute to the development of physical environment.

Similarly, if technical colleges could be induced to consider the humanities and add, say, economics and some knowledge of social and aesthetic questions to their sheer engineering, a great gulf would be bridged. Penetration into any mine of knowledge, such as, for instance, engineering, however deep it may be, can only be of real service to society if its linkages with other specialist fields is appreciated all the time. That is why the team, and the pooled balancing of skills in all stages of training, is the only realistic approach. The diagrammatic tree of training emphasises this merging of humanities, sciences and techniques throughout all stages of its growth—from the root stage to the branch stage, six or seven years later, when full qualification is reached. Each branch achieves its own particular equilibrium or balance of skills.

Nothing, however, has been said about the hitherto neglected question of the possible period of post-school training for citizenship and for taking active part in community and national life. We are already seeing what opportunities exist for organised survey work among units of the army stationed in the various towns in the East Riding of Yorkshire, where officers and other ranks are engaged upon making surveys of their own urban areas under the direction of some of the Hull Regional Survey team. This is regarded by Military authority as a sound and practical complement to the ABCA lectures on *British Way and Purpose*. It has already been stressed that no training for citizenship can be complete without personal field work of some sort or another, any more than can training for war. If the builder is the commando of industry, the planner will be the soldier of citizenship.



THE PLANNERS' TREE

The people are served by six skills which contribute to the development of their physical environment.
The planner's education should comprise awareness of the inter-relationship of each of these six fields of knowledge, whatever emphasis he may previously have given to any one of these fields.
This emphasis will decide to which of the three branches he will naturally gravitate.
These branches—the national, regional and local planning teams—show two things in the diagram of their cross-section :—
(1) *The varying importance of the professions in relation to one another in each branch.*
(2) *The dominant qualities necessary in the leaders of each group (e.g., Planning Officers) and in the basic foundation of their training.*

the curriculum

However, space does not permit for a further elaboration of this aspect of training, nor of a detailed analysis of the entire school curriculum. This brief résumé of the problem, nevertheless, would be incomplete without some further suggestion for the ground to be covered in the town-planning course, at least as it relates to the post-graduate year or two years of study which lead to the final town-planning examination. It is assumed that the elementary groundwork will have been covered in the fourth and fifth years of training for the planner's dominant profession. It is in the last post-graduate year that the student would study the physical environment in all the aspects we have mentioned. The lecture courses would be supplemented by studio work, i.e., by design, town-planning, etc., and by the making of field surveys from which maps are drawn and reports written.

The Planning School will, as mentioned above, be closely linked with the city and regional planning departments, and students of planning, of economics and of geography will be able, by specific research and investigation, to help to build up a centre of information useful in the fields both of training and of official practice. There is much to be said for full-time study, but this post-graduate course is best spread over a two-year period and conducted on a part-time and evening basis, in order that students may be gaining practical experience in an office at the same time. It is suggested the curriculum would divide itself into nine main subjects :—

1. Studio design subjects and theoretical studies, relating to site planning, landscape, town and regional planning schemes (about 10 studies).
2. Social planning relating to the economic or physical aspects of national, regional and local problems (30 lectures).
3. Economic geography with special reference to food production (10 lectures).
4. Planning reform in the form of weekly discussions of the Barlow, Scott, Uthwatt and Beveridge Reports and other matters (which may be an open forum).
5. Research and Survey procedure (20 lectures + field work).
6. Conditions of Health and Housing (15 lectures).
7. Transport, Communications and Public Services—Civil Engineering (20 lectures).
8. The Survey, Location and Planning of Industry and Population (30 lectures).
9. Law, Finance and Legal Administration (30 lectures).

conclusion

Finally, with a curriculum that covers so many fields touching the practical daily problems of planning over the narrowest as well as the broadest fields, it would be a mistake to ignore the vital importance of *research* as a major function of the planning school, for, not only is pooled fact finding of supreme value to consultants and administrators alike and to all those responsible for the formulation of zoning policy, but a research centre is the most useful link between training and practice, heightening the standards and awareness of both. Indeed, if the planner's is to be a civic surgeon's function, and if this service to the public is to diagnose, to plan and to administer the environment in terms of the ascertained needs of the citizens themselves, then surely this training for planning will automatically find itself in the forefront of a deeply needed and much wider campaign for general practical education in citizenship for democracy.

PLANNING REVIEW

LOCATION OF INDUSTRY

Lord Ridley, in a letter to *The Times*, describes the unfavourable change in the balance of industry caused by the fortuitous growth of war industries and the development of heavy industries to their maximum employing power, while light industries have hardly grown at all, and some of the smaller units have been displaced for temporary war-time production or for storage of war products. He points out that the first example of Government control of development and the location of industry has caused general anxiety lest the future may bring a repetition of the past. He urges that a positive Government policy of planning for industry, whether by inducements or directions or both, should begin now, for the planning of industry and occupation is the starting point of the planning of services by local authorities. He believes that an effectively decentralized Government machine is needed to carry out reconstruction, backed by some form of regional organization.

Mr. Oscar Guest, who is responsible for the inauguration and maintenance of a factory now employing 1,600 workers in a special area where unemployment in 1938 was as high as 70 per cent. of the registered working population, in a further letter, endorses the views expressed by Lord Ridley. He suggests that all manufacturers operating factories in special areas should formulate post-war plans for production, and that these should be open for discussion through the medium of the joint production committees. They should then be submitted to the special area commissioners in the districts concerned and also to the area production officers. It should then be the duty of these two bodies to forward these plans for the attention of the Board of Trade, who may be concerned in the planning and allocation of industry after the war.

THE SCOTT REPORT

In a leading article entitled *Dusty Answer* on November 7, the *Observer* drew attention to the delay over the consideration of the Scott report. It pointed out that consideration alone does not save the ruin and spoliation of the country which is rapidly going on. Particular attention is drawn to the menaced amenities of the Broads, and the article urges that, until the Government responds to the Scott report, it is the business of private individuals and societies to save beauty and solitude in places most meriting protection.

BUILDING SOCIETIES

A leading article in the *Daily Worker* on November 6 asks if the building societies of Britain are going to be the defenders of obstructive and speculative landowners? It suggests that they must face up to this question in view of the campaign that Mr. Smith, the general manager of the Halifax Building Society, is conducting against the Uthwatt report.

TOWN AND COUNTRY CAMPAIGN

*A leaflet called *Ten Points about the Town and Country Campaign* has been issued by the Warwickshire Rural Community Council. It explains a resolution which was passed at a meeting of the Council on July 10th, 1943, which was addressed by Earl De La Warr and Mr. Hugh Roberts (a member of the Scott Committee), and which inaugurates a campaign to establish an organization on a national basis. Lord Justice Scott states in the leaflet, "I am deeply impressed with your Town and Country Movement. You have interpreted my committee's report as I would have it understood. . . . Your little leaflet is as far-seeing and comprehensive as it is terse in expression."

RECONSTRUCTION?

In an article in the *Observer* on November 7, the Parliamentary Correspondent reviewed the reconstruction position. This article, anticipating developments which have now come to pass (see pp. 366-8), pointed out that on the general matter of planning for reconstruction there is a sharpening eagerness in Parliament to hear what the Government proposes to do. Mr. Churchill has had to come to the rescue of Sir William Jowitt, the result of whose studies of reconstruction problems have so far been shielded from the light of day, and it is believed that Mr. Churchill intends to supersede Sir William Jowitt's department by a full-blown Ministry with executive powers. The King's Speech will be closely examined for the promise it brings of advance in domestic social legislation. On this the Tory Reform Committee—pledged to press for implementation of the proposals set out in Mr. Churchill's Four Year Plan broadcast of last March—is ready to put down a critical amendment if the proposals do not seem adequate.

NEW LITERATURE

Post-War Reconstruction in Britain: Survey January, 1941—June, 1943. Ministry of Information, Q 2977. Free.

A New Method for Measuring the Quality of Urban Housing: Reprinted from the American Journal of Public Health, Vol. 33, No. 6. June, 1943. American Public Health Association, 1790, Broadway, New York, N.Y. Free.

Sixth Report of the Society of Women Housing Managers: Free.

Incidence of Rates on Houses: Memo. No. 40. Nuffield College Reconstruction Survey.

Country and Town: A Summary of the Scott and Uthwatt Reports. C. M. Young. Penguin. 9d.

Trees in Britain: F. R. Badmin. Puffin. 9d.

**Ten Points about the Town and Country Campaign:* Warwickshire Rural Community Council, Midland Bank Chambers, 126, The Parade, Leamington, Spa. Free.

Illustrating the Industrial Revolution: Changing Britain, Series No. 1. Cadbury Brothers Ltd. 1s.

PLAN OF MODEL TOWNSHIP HARVARD UNIVERSITY STUDENTS

The final layout above, for a model township, is part of a programme for city reconstruction by Walter Gropius and Martin Wagner. It is planned in relation to Boston, and is intended to be an example of how city reconstruction may be started from housing. The programme formed the basis of a subject set to advanced students in the Harvard University Departments of Architecture and Landscape Architecture.

The idea which inspired this scheme for a model town by Harvard University Students arose from six premises:

1. Lot and block rehabilitation has not been successful. Sweeping square-mile rehabilitation has become a necessity since we have recognized the interrelationship of the town with its region.

2. Former suggestions such as the City Beautiful have proved to be incomplete. First, action should be started by preparing legal, financial and administrative instruments to enable the planners to conceive and work out reliable master plans.

3. Places of work and their relation to places of living should form the pivot of all reconstruction work.

4. Existing cities should be relieved of congestion and high blood-pressure by removing those who cannot be permanently employed. Resettled around small industries in new townships these people would regain their productive capacity and purchasing power.

5. The new townships should settle along super-highways and be connected by fast feeder roads with the old city centre.

6. The size of the townships should be limited by the pedestrian range to keep them within a human scale.

The problem was set by Walter Gropius and Martin Wagner. The township, selected from five available sites, is situated along the proposed super-highway near Weston-Wayland, Mass., on the western fringe of metropolitan Boston. It was to be laid out for about 5,000 people, with farms and truck gardens around it. The size of the township was to be clearly defined and would be kept within pedestrian range—one-half to one mile in diameter. A gross density of six families per acre was therefore suggested. Some small industries were to be settled within walking distance of the dwellings. A community centre was to be provided. The second and third parts of the programme, with which we cannot deal here, were to be concerned respectively with the design of the dwellings, and a financial set-up showing the initial as well as the operating cost of the enterprise when built in one stroke.

Preliminary research and planning resulted in the production of several team-designed layouts; after these had been judged a group of seven students prepared a comparison of road systems, their lengths and shapes; a traffic distribution chart of the selected road systems; a study of the best location and distribution of industry and a study of the function of community centres. In the final layout the drives to the individual houses branch off from the peripheral feeder road. The footpaths form a net radiating from the community centre and altogether independent from the road system. The radial walks between dead ends of drives run into park strips leading to the farm and recreation areas. The nurseries are located at the periphery of the centre area where housewives cross on their way to do their shopping. The size of the average family lot is 5,600 sq. ft. net. Industry is located off the prevailing wind at the south-eastern fringe of the township, and is served by a railroad.

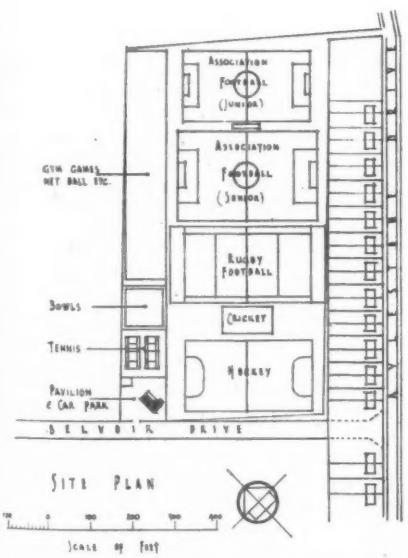
Through such a scheme as this it is hoped to relieve the old city of its dead weight until its reopened areas may be devoted to their rightful function as the organic, commercial and cultural centre of the whole region.

From *The Architectural Forum*, July, 1943.

SPORTS

PAVILION FOR LEICESTER Y.M.C.A.

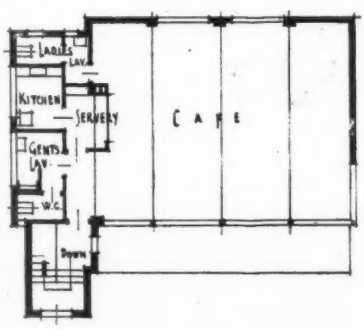
BY FRANK BROWN AND A. L. SHARPE



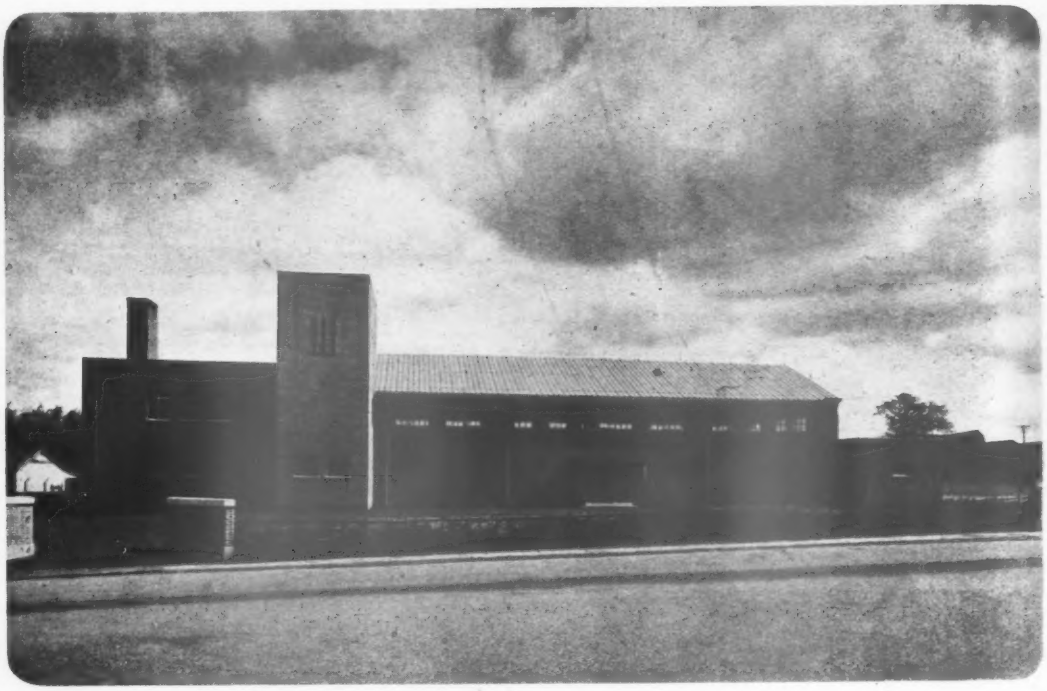
Above, a view of the pavilion taken from the sports ground. The café on the first floor seats about 80 and is usable as a club room. The men's dressing rooms below can be converted into a secondary club room by sliding and folding back the dividing doors.

CONSTRUCTION — Part steel framed. R.S. channel stancheons supporting the roof girders are left exposed as window mullions. Brick walls. Floors: ground floor, concrete; first floor, timber.

ELEVATIONAL TREATMENT —Rustic facing bricks, standard steel casements, pre-cast concrete lintels, etc. Floors: entrances, 6 in. by 6 in. red quarries; dressing rooms and bathroom, coco matting on concrete; café, tongued and grooved deal boarding stained; kitchen and lavatories, concrete.



SERVICES—Bathing accommodation for football teams: large bath, 8 ft. by 5 ft. 6 in. by 2 ft. 6 in. and two showers. Hot water for bath, showers, sink, etc., is provided by gas-heated boiler. Hot water is stored in a 200-gallon lagged copper cylinder. Showers have anti-scald mixer valves. Cold water supply through 600-gallon storage tank situated in tank room over the staircase. Extract flue over bath to take steam away. Café service: gas cooker in kitchen, gas-heated tea urn in servery. The café is heated by electric tubular heaters controlled by thermostat.



MESSROOM

AT CYCLE WORKS, REDDITCH

BY MARTIN PEEL AND F. W. B. YORKE

Top, the main front; above, main entrance and staircase tower.

GENERAL — Works messroom and kitchen to provide for several hundred people and caretaker's flat (living room, two bedrooms, kitchen and bathroom). The building erected for the Enfield Cycle Co. cost £12,920.

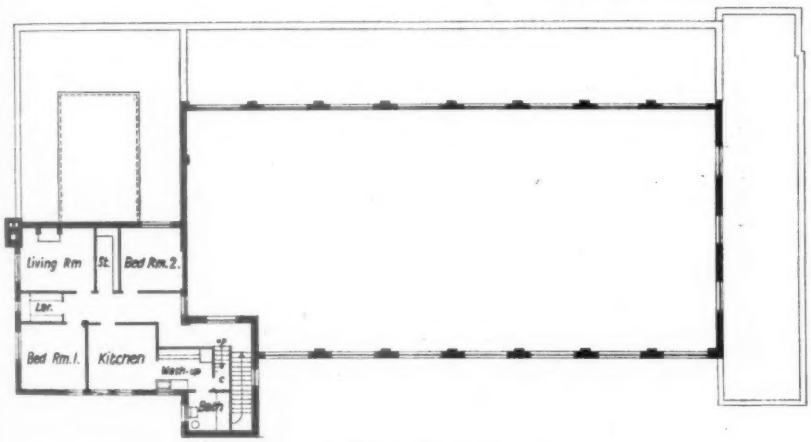
PLAN—The mess room is detached but directly approached from the works and is in close connection with the sports field. The section screens forming the staff mess rooms are temporary. An extension on the kitchen side is contemplated after the war. The staircase from the kitchen leads to the basement stores and the patent concrete staircase from the hall to the caretaker's flat and from there up to the tank room.

CONSTRUCTION — Walls are 14 in. brickwork, and the roof is covered with grey-colour asbestos cement sheets carried on steel trusses. Flat roofs are of patent slab construction, asphalted and have a ribbed internal soffit.

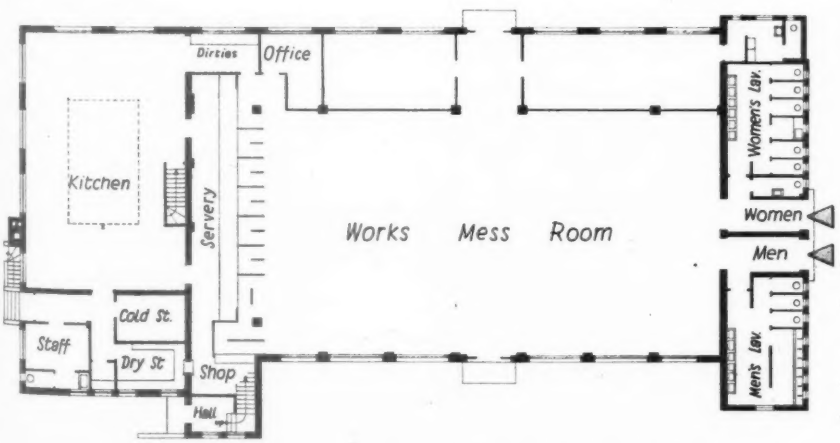
Above, view from playing fields and the principal entrance to the messroom.

Partitions are steel with steel sheet dado and glazed, partly obscure above.

ELEVATIONAL TREATMENT—Sandfaced 2⅝ in. bricks with ½ in. flush joints, patent lights to water tower and lavatories and patent roof lights to kitchen and lavatories, inlet vents in walls to messroom, outside electric lamp holder in patterned brickwork, main cornice, concrete in situ, and patent stone copings to parapets.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

FINISHES—The messroom basement and tower are distempered ivory and the walls of the messroom have a cement dado. Outside windows, purlins and pipes are painted ivory and the outside and internal doors and frames and steel doors and screens and trusses are painted blue. Spouting is finished in light oxide paint and radiators and hot pipes in radiator painted cream. The walls of the kitchen, lavatories and stores are in glazed tiles. Floors are: messroom, coloured asphalte; kitchen, lavatories and stores, russet brown quarries. In the caretaker's flat the walls and ceilings are distempered ivory and all woodwork is painted blue. There are patent slab floors, boarded in the flat and floors of russet brown quarries in the kitchen and bathroom.

FITTINGS AND SERVICES—The shop and the servery have barriers of pipe construction, and the shop has built-in fittings and a hatchway into the day store. A sink and slab are fitted for fish preparation, and in the cold store, which is specially ventilated, are two refrigerators. Low pressure hot water heats the whole building. In the caretaker's living room is a coal fire.

The general contractor was Harry B. Tarleton. For subcontractors see page xxxii.

INFORMATION CENTRE

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

PHYSICAL PLANNING

1288 *Transport*

USE AND MISUSE OF TRANSPORT. (*Planning No.* 211. *PEP, September*, 1943). Shows how need for transport can be reduced by altering spatial relationship of houses, work places and other buildings.

The number of passengers carried by rail in 1938 was almost exactly the same as the number carried in 1928 and freight tonnage carried fell by 13 per cent.; but during that period the number of licensed commercial motor vehicles increased by 60 per cent., and the number of cars taxed on horse-power by 120 per cent.

In this way the great advantage of the motor vehicle, its speed, was gradually being nullified; just before the war the horse-drawn cab was as fast in city streets, the pedestrian almost as speedy, as the automobile.

The traffic of a residential zone is predominantly passenger transport, chiefly of a local character. Its goods traffic consists mainly of delivery vans; the only heavy vehicles are dust carts, coal carts, laundry and furniture vans. There are peak hours for the journeys to and from work and school. Shopping expeditions usually take place at off-peak periods; visits to theatres and cinemas may create minor traffic peaks. Access to the open country must be easy; apart from this, there is no need for direct connection with destinations outside the urban area.

Passenger transport predominates even more in the districts which house offices, schools and civic buildings, and it is nearly all intra-urban transport. The traffic generated by these various premises differs in the nature of the users (children—adults) and the timing of traffic; schools, offices and theatres have traffic peaks, while the visits of the public to doctors, libraries and community centres may be spread over the whole day.

The shopping centre generates a complex traffic of both passengers and goods. The shop assistants' journeys to and from work create traffic peaks in the morning and evening, while shoppers' movements are more evenly spread over the day. Goods arrive in comparatively bulky and heavy units from wholesale markets, local factories and the railway stations. Goods later leave the shops in lighter delivery vans.

Raw materials, assembly parts and accessories for industrial areas may arrive either from outside the town or from within. Similarly their products may be either consumed locally or shipped farther afield. Local and long-distance traffic will often be combined. The passenger traffic consists almost entirely of journeys to and from work; it is local or suburban and shows distinct peak-hours. Wholesale markets and warehouses have a comparatively small passenger traffic, comprising the daily journeys of relatively few sellers and buyers. The goods traffic is heavy; there is the influx of foodstuffs, fuel and other bulky goods from outside the urban area, and the outflow, in smaller units, to retailers.

The main railway station (catering chiefly for passengers) is the terminus for journeys to and from places outside the urban area. It is, on the other hand, a focal point for the collection and dispersal of local travellers from and to all parts of the town.

The burden of the daily journey could be tolerable and at the same time variety of employment offered if there were a number of medium-sized industrial zones within convenient reach of the residential areas. The industrial zones should be in scale with the residential development and properly disposed in relation to it. On the basis of pre-war experience on existing trading estates, it has been recommended that industrial areas accommodating a number of, say, 50 to 70 factories and employing 4,000 to 6,000 workers, might be located among the residential districts on the outskirts of towns. "A certain ration of neighbourhood units . . . calls for an industrial area." This would make the industrial zones easily accessible from several surrounding neighbourhood units. The creation of a number of trading estates—of the order of 50-100 acres—instead of a single large one, would also facilitate travel to them by workers who live in the more central parts of the town; the problems of the peak-hour traffic would be less acute while, on the other hand, the grouping of factories would make it easier to arrange for a staggering of working hours.

1289 *National Buildings Record*

NATIONAL BUILDINGS RECORD AND THE FUTURE. *John Summerson.* (*A.A. Journal*, September, 1943). Post-war functions of the 100,000 photographs and drawings collected by NBR.

After the war the functions of the NBR will have to be re-stated to fulfil obligations in about four general directions:—

(1) The indefinable long-term duties of a national archive—a limb, as it were, of the Public Record Office.

(2) An architectural gazetteer of Britain at the service of Ministries and Planning Authorities.

(3) An educational service not only in connection with architectural, historical and sociological studies of the university kind, but with the visual side of school education in general.

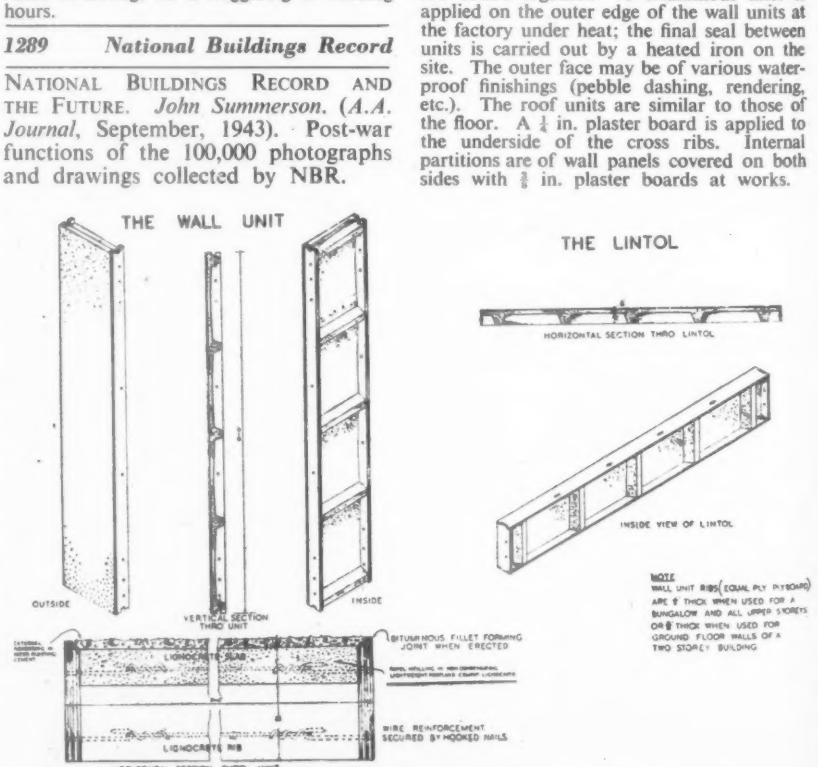
(4) A centre for the study of architectural photography and draughtsmanship.

STRUCTURE

1290 *Factory-produced Bungalow*

THE TARRAN FACTORY-PRODUCED BUNGALOW. (*The Architect and Building News, September* 3, 1943, *pp.* 140-1). (*The Builder, September* 3, 1943, *p.* 194). (*Architectural Design and Construction, October*, 1943, *pp.* 212-214.) Specially light-weight bungalow. All plumbing, etc., fixed on units in factory. Easy erection.

With the exception of a concrete raft, all parts are factory produced. The structure is carried on precast concrete foundation blocks. The floor units are constructed in panels of approximately 12 ft. by 4 ft., composed of a frame of light pressed channel section galvanized steel, intermediate cross ribs of resin bonded plywood, and top decking of the same material, nailed to the cross ribs. The wall units are 8 ft. by 1 ft. by 4 in. made of lignocrete which is a composition made of sawdust and cement, reinforced horizontally with steel wires and vertically by resin-bonded plywood ribs. Adjacent floor and wall units are bolted together. A bituminous filler is applied on the outer edge of the wall units at the factory under heat; the final seal between units is carried out by a heated iron on the site. The outer face may be of various waterproof finishings (pebble dashing, rendering, etc.). The roof units are similar to those of the floor. A ¼ in. plaster board is applied to the underside of the cross ribs. Internal partitions are of wall panels covered on both sides with ⅜ in. plaster boards at works.



Wall and lintol units of the factory-produced Tarran bungalow. See item 1290.

Provision for plumbing, hot and cold water, etc., is made in the Tarran plumbing panel. All pipes and connections for bath, wash-hand basin, w.c., etc., together with cold and hot water tank are incorporated in the one unit. The whole is prepared in the factory. All light or power points, switches or other electrical accessories are fixed to the particular wall unit or roof panel in the factory. The fireplace, flue and chimney breast are built of special interlocking lignocrete blocks.

The total weight of a bungalow recently exhibited in London was 22 tons as compared with 80 tons in traditional materials. It was transported in five lorries of 4.5 tons capacity. It is claimed that excluding drains, footpaths, surface-concrete, fencing, etc., the whole bungalow can be erected complete for occupancy in less than 5½ days by ten men.

1291 *Stabilizing Soil by Cement*

THE STABILIZATION OF SOIL BY CEMENT. (*Engineering*, *August* 27, 1943, *p.* 165; *Concrete and Constructional Engineering*, *September*, 1943, *pp.* 294-297). Method of paving areas by mixing cement with the soil of the site.

While the paving of large areas is commonly carried out by means of deposited concrete, the alternative method of mixing cement with the soil of the site, so that the soil takes the place of the normal concrete aggregate, is not so well known in this country. In USA it has become an accepted form of construction. The first full-scale experiment in this country has recently been carried out. The area to be paved was a fairly level rectangular field of approximately 4 acres to be used as a storage space for units for partially prefabricated ships. A firm even surface was required, capable of carrying wheel loads of 3 tons on pneumatic tyres.

Cement stabilization cannot be carried out without reference to the characteristics of the soil concerned. The subsoil from 9 in. to 1 ft. below the surface was a sandy clay which was probably unsuitable for this treatment, but since the grading necessary to provide a cross fall of 1 in 150 did not expose this, it was possible to provide 6 in. thickness of soil-cement by treating the top soil which was of a silty nature. After a thorough investigation of this layer, the cement content decided on for stabilization was 12 per cent. by volume. A gravel pit existed near the site and the material from it was mixed with the soil in the proportion of one part of gravel to two of soil.

Only special units of the plant were supplied by the contractor, agricultural implements being hired locally.

The labour, apart from supervision, consisted of a foreman, an operator for the grader and roller, two tractor drivers and six labourers. With these it was possible to pave 1,200 sq. yds. to a depth of 6 in. per day of eight hours.

One bag of cement was used on 2 sq. yds. Since the surface is intended to withstand not only traffic and static loading, but is subject to attrition due to the dragging about of steel plates, etc., it was decided to provide a protective coating of a light tar spray with stone chips.

The method described is cheap and rapid compared with the usual process of paving with concrete deposited ready-mixed on the subsoil and levelled by a paving machine.

SANITATION and Plumbing

1292 *RIBA Lecture*

HYGIENE AND SANITATION: ANALYSIS. *Dr. Charles F. White, O.B.E., M.D., D.P.H., D.T.M.* (*Lecture at RIBA*, *May* 8, 1943. Reported in JOURNAL, *July* 22, 1943.) Filth diseases, "cholera," typhoid and typhus. Need for separation of water supply from all possibility of contamination. Noise is deleterious to health. Height of sanitary fittings and effect on health. The menace of rats and bed bugs. Water storage tanks in houses.

This paper is a general treatment of the medical point of view on various matters of hygiene which are affected by the work of the architect. Cholera in 1831 drew attention to the need for improvements in sanitation. Cholera is no longer a menace in this country but typhoid and typhus are. Any possibility of communication between water supply and sewage may lead to an outbreak. Smells do not cause typhoid or diphtheria but drain pipes inside buildings may result in leakage of liquids as well as gases unless joints can be made and kept perfect.

Noise in dwellings should be reduced as much as possible, whether from water or waste pipes or flushing cisterns. In offices adequate numbers of water closets are essential and there must be ventilation good enough to be satisfactory in peak periods. Washing accommodation in dwellings should be in close association with water closets otherwise food poisoning is likely to occur. Heights of fittings need careful attention but on the whole they should be too low rather than too high.

Rats are a menace which can only be eliminated by building them out of existence. So long as nestng places occur in buildings other methods such as poisoning can only have temporary results. The degree of bed bug infestation is appalling and again places of harbourage must be eliminated.

Water storage tanks cannot be eliminated, at any rate in the London area, but they must be properly protected from contamination.

1293 *RIBA Lecture*

HYGIENE AND SANITATION: APPLICATION. *F. L. Barrow.* (*Lecture at RIBA*, *May* 8, 1943. *Fully reported in the Journal of the RIBA*, *August*, 1943). Practical treatment necessary to avoid pollution of water, escape of foul air, plumbing noise, infestation of vermin. The correct height for plumbing appliances.

This lecture followed one by Dr. C. White (item No. 1292 Information Centre), in which the problems were stated and commented on from the medical point of view. Mr. Barrow lists the various main problems mentioned in the earlier lecture, states how they arise and suggests methods for dealing with them. While there is nothing startlingly new in the lecture it contains a most useful collection of practical points.

1294 *Pipes and Frost*

PREVENTION OF DAMAGE BY FROST. *The Editor* (*Plumbing Trade Journal*, *June*, 1943). Suggestion that frost damage can be reduced by taking advantage of slight compressibility of water together with use of full-way gate valves for stop taps and fixed valves for all screw-down draw-off taps.

An interesting suggestion explained at some length. In addition the proposal is made that all draw-off taps should be branched in, leaving a small length of vertical pipe to act as an air vessel, and to provide for expansion. Arguments against this are dealt with. Two pipe failures due to expansion of water in cold water pipes subjected to heat are noted. These are interesting as examples which could easily have been avoided.

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.*

1295 *Dimensions of Gas Equipment*

Q *We wish to compile a list of the standard dimensions of gas stoves, gas refrigerators and gas water heaters.*

Although we do not expect that you will have statistics of the most common sizes used in domestic houses, we believe that you published in Specification *some very useful schedules giving the type of information required.*

Would you be so good as to place at our disposal your most up-to-date information.

A The Architectural Press has not published in *Specification* or elsewhere a comprehensive schedule such as you require.

Some dimensions were given in Information Sheets (which can be seen at the RIBA Library if you have not got them). The numbers of the Information Sheets are given below.

If you wish to compile a schedule of sizes manufactured immediately before the war, we should advise you to write to the principal manufacturers concerned. Alternatively, if you are considering post-war development, it might be worth your while communicating with the Directorate of Post-War Design, Ministry of Works.

Information Sheets.

Cookers. Sheets Nos. 57, 147, 471, 569.
Fires. Sheet No. 346.
Radiators. Sheet No. 97.
Refrigerators. Sheets Nos. 462, 465, 467, 469.
Stoves. Sheet No. 56.
Supervecta Heater (*Panel*). Sheet No. 584.

1296 *Cooking Range Hoods*

Q *I am often being asked to provide hoods over existing ranges in canteen kitchens. I am concerned about the design of these, as I cannot find a formula or example to enable me to calculate the size of the hood and size and height of the outlet shaft or shafts. I should be very glad, therefore, if you could give me any information on this subject.*

A No standard sizes have been laid down but it is usual for the hood to project, on plan, a little beyond the stove and to be gathered up to a central flue, the bottom of the hood being as low as possible (compatible with reasonable head room). As an example, for a range 6 ft. by 3 ft., we would suggest a hood 7 ft. by 4 ft. and 2 ft. 6 in. high, gathered to a 12 in. diameter flue, the bottom of the hood being 6 ft. 3 in. above floor level. A flue less than 14 ft. high would probably be inefficient, without an extract fan.

Hoods are usually made of sheet iron or of asbestos or wired glass panels in an angle-iron framework. Glass, of course, gives better light but is more expensive. A small condensation channel (say 2 in. by 1 in.) should be run around the bottom of the hood; this needs no outlet; when the hood heats up the moisture will evaporate.

If you have any special difficulties you will probably find the manufacturers of the ranges to be most helpful.

Hoods and canopies are dealt with in Information Sheet 459.

SOCIETIES AND INSTITUTIONS

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 economise 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

Memorandum

The following is the memorandum prepared by the RIBA at the request of a sub-committee of the Central Housing Advisory Committee of the Ministry of Health on HOUSE CONSTRUCTION OF A DEFINITE LIMITED LIFE, as published in the *RIBA Journal* for October. In last week's issue this memorandum was severely criticized by *Astragal*, with whose remarks on the subject the JOURNAL is in complete sympathy.

In this memorandum it is assumed that *House Construction of a Definite Limited Life* refers to housing to be erected under a relaxed code of building bye-laws wherein a poorer quality of construction and material would be acceptable than would be the case in housing erected under codes for a full span of life.

For the sake of brevity the type of housing under consideration is referred to throughout as short-life housing in order to distinguish it from ordinary or long-life housing.

The reasons for considering a policy of short-life housing are as follows :—

(*a*) Post-war shortage of housing and shortage of time.
(*b*) Post-war shortage of materials of traditional kinds.
(*c*) Post-war shortage of skilled labour.
(*d*) Post-war cost and quality of building.
(*e*) The greater use of standardization and pre-fabrication.

(a1) Government is faced with difficulties, especially in respect of the shortage of housing and of time. It would be regrettable, however, if the difficulties led to relaxation of by-laws or the acceptance of construction and substitute materials of any kind that could be interpreted as an acceptance by the Government of an official form of jerry-building. No shortage of housing or of time should be accepted as a reason for anything of the kind, or of damage to the amenity of town or country.

It has been stated that a house could be produced by the same methods as a motor car. The useful life of a car at its longest, however carefully it is looked after, is probably not as much as twenty years. A hire-purchase car is worn out by the time it is paid for and the owner is faced with a new capital expense for replacement ; a short-life house will be worn out by the time its mortgage is cleared and the owner is faced with a new capital expense for replacement ; a long-life house after its mortgage has been cleared has a considerable period of usefulness left in it for the enjoyment of its owner to recompense him for his initial outlay.

In short-life building so much must be provided of a permanent character that it would be advisable to erect the whole building permanently.

(b1) The shortage of materials, whether artificial or real, of the kinds used and proved in value for traditional building, is not a reason for any action that may result, in the long run, in their suppression or supersession by materials that have no tradition or proved value behind them. Every new material should be subjected to rigid and exhaustive test and proof.

A case could be made out for devoting some of the energy directed to the production of substitute materials towards the increase in manufacture of traditional materials that have been proved in value through centuries of good craftsmanship. It is the opinion of the Royal Institute that no temporary shortage of traditional materials should be accepted as a permanent condition or encouraged into a state of permanency. Temporary shortages should be tolerated for a brief time only after the war.

(c1) The shortage of skilled labour after the war should be looked upon as a temporary condition in the same way as a shortage of traditional materials. A great effort should be directed towards preserving the skilled crafts and the skilled labour that creates them, especially in view of the danger of suppression and supersession of both craft and skill by use of ready made and untried goods. Adventurers into the building and allied trades, with little regard for anything but quick profits should not be encouraged. The Royal Institute is of the opinion that the Government should direct its policy towards the encouragement and improvement of the crafts in the industry and, towards that end, should foster the training of new entrants through proper apprenticeship and the building trades schools. Where a policy of this kind is pursued in conjunction with the Board of Education, a period of five or six years after the war should see a large number of skilled young men taking their place in the industry.

The Royal Institute would regard with regret the creation of a body of labour unskilled in any craft but the assembly of ready-made houses by means of the spanner.

(d1) The Royal Institute considers that, however short the life of the intended housing may be, a long-term view of its cost should be taken.

It is to be supposed that short-life housing can only be permitted under some relaxation of the existing building by-laws, which would, in its turn, indicate some surrender of quality in materials and workmanship. Apart from the consequent loss of amenity cheapness in these initial factors will lead to the high cost of maintenance which is likely to prove more expensive than the initial saving. It cannot be satisfactory that a saving in capital outlay should be made at the cost of higher maintenance charges spread over even a short life.

There is a danger that a short-life house once permitted and erected may come to be regarded as a permanent building. Licences and permits have a habit of being extended, and there may be an especial danger in this case where the paying off of capital outlay must be compressed into a short period.

The financing of the short-life house, owing to this compression, may have the effect of raising the rent of the house, which in turn would lead to higher assessments for rates and taxes. It would seem that the payment of compressed mortgage charges, higher rent, rates and taxes, and higher maintenance costs are all against the introduction of short-life housing.

The cost of foundations and services are likely to be approximately the same in either the short or longer life building. Services can hardly be reduced in quality or consequently in their useful life and are likely to outlast the carcass of a short-life house, becoming an unnecessary waste when the superstructure is ultimately demolished.

(e1) Prefabrication, standardization, and mass production have been applied successfully in the past to building units such as windows and doors, grates and mantels, cookers and ranges, lavatory apparatus, door furniture and ironmongery, and to electrical goods and fittings of many kinds ; there is a useful and legitimate place for such standardization and prefabrication. There is, however, a danger of advertising slogans being made use of for the purpose of selling questionable goods, or even whole houses, to an inexperienced public. The Royal Institute suggests that the Government should not take any action that might lead to the exploitation of the public. The danger to the industry and crafts has already been stressed but the public well-being is to be considered, its freedom of choice, liberty of market, and the exercise of its taste and preferences should be preserved. Situations might arise, however unwittingly, where a continuation and misuse of the war-time system of licence and permit might be used to force the public to accept certain manufacturers' goods when it might have other legitimate preferences.

It is probable that war factories will be converted to the production of goods useful to the community on the termination of hostilities. It would be inadvisable that too great a proportion of this production should be directed into the building industry ; the proportion should diminish as the shortage of traditional materials decreases.

The production methods of these factories can, no doubt, be used for standardization and prefabrication ; neither of these are new in the industry but unless quality is inherent in the goods produced the results are likely to be too poor for use even in a short-life house. War-time production has been subject to governmental supervision, inspection, and test at all stages of manufacture. If quality is to be maintained in peacetime production supervision, inspection and test will need to be retained, and should be regarded as part of the essential cost of mass production. Unless quality is an obtainable object, as well as cheapness, much of the argument in favour of mass production becomes specious.

CONCLUSIONS

As a result of the foregoing considerations, the Royal Institute has come to the following conclusions :—

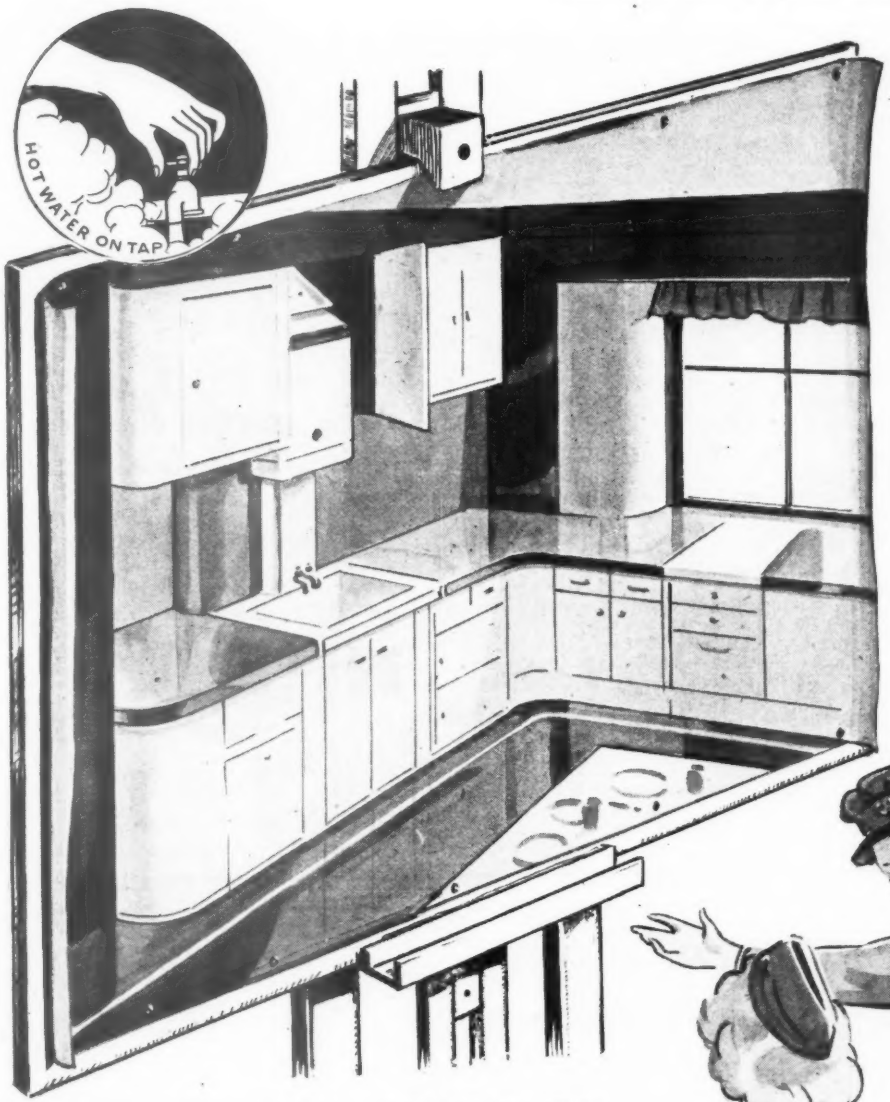
(a2) While recognizing the difficulties arising from shortage of housing and the urgency of the problem, the Royal Institute is unable to recommend short-life housing as an adequate solution of the housing problem.

(b2) While recognizing that there may be shortages of materials of traditional kinds after the war, the Royal Institute is opposed to substitution for them of unproved materials.

(c2) The Royal Institute is opposed to the creation of a body of men unskilled in any craft beyond the assembly of ready-made buildings. It is in favour of the creation of an increased force of skilled labour through apprenticeship and training, and is of the opinion that such a force could be obtained in a limited number of years.

(d2) The Royal Institute is of the opinion that only a long view of housing could be acceptable. That codes of building by-laws should not be relaxed for the sake of speed or cheapness at the expense of quality in either building materials or construction.

(e2) The Royal Institute recognizes that



WHAT DO YOU THINK OF THIS READER'S IDEA?

MR. LEACH writes: "A water heater should be considered as part of a built-in-kitchen equipment and not as a separate item to be provided afterwards. A place should be allocated for it—not on an external wall—but, for example, over the sink (*see sketch*), fitted between cupboards, open at bottom for ventilation and with a removable front access panel. Water services would be enclosed in a duct at back of sink and heater."

IF you have an interesting idea on Hot Water Heaters in Kitchen, Bathroom, the Flat or the House send it to Ewart. If considered useful Ewart will use it in this series of advertisements.

Meanwhile Ewart research continues and the range of Ewart post-war heaters will meet every demand of architect, builder and public.

EWART GAS WATER HEATERS

Instantaneous AND STORAGE TYPES

EWART & SON, LTD. LETCHWORTH, Herts.—Letchworth 1191—Established 1834

883

there is a place for a limited application of standardization and prefabrication and the advisability of converting war factories to peace-time uses. It is not in favour of diverting these factories indiscriminately to the production of either ready-made buildings or building materials, especially to goods or construction of untried quality or value. It is in favour, to a limited extent, of discriminate mass production provided good design and quality are integral parts of the goods produced. The Royal Institute is not in favour of these factories being assisted to force their goods on the public, or in any way to limit the freedom of choice and the exercise of judgment by the public.

ICE

Grey Wornum

October 27, at the Institute of Civil Engineers, Great George Street, S.W.1. A talk on ALTERNATIVE MATERIALS AND METHODS FOR BUILDING, by Grey Wornum, F.R.I.B.A.

G. Wornum: It is nearly 100 years since the Great Exhibition of 1851 when Joseph Paxton produced his " Glass Ark the size of a Warehouse " in Hyde Park, later known as the Crystal Palace. Over 600 yards long, containing a million square feet of glass, demountable and covering regardlessly trees, grass and even live birds, so that sparrow-hawks had to be introduced to stop the soiling of the exhibits—it is tragic that such a structure should have had so little influence on the building of its time.

England in its flush of industrial success wanted to vie with the great cities of Europe and thought to do so by reproducing buildings of accepted fame and style. Such a policy of the Victorians might be considered more reasonable than our own late persistence in Bankers Georgian in the face of the lead already given by Le Corbusier, Gropius and Frank Lloyd Wright. Both policies had birth in snobbery and both have stifled progress.

It might be agreed that the great architectural " styles " have grown out of the materials in common use at the time. Egyptian and Greek architecture depended on the use of large stones, made mostly possible by slave labour. Gothic architecture depended on the use of small stones. Handmade bricks, stone ornament and painted wood produced the superb formula of our own eighteenth-century work. Plaster and stucco produced styles in countries where facing bricks were not produced. Where we can go very wrong is by the use of alternative or alien materials for styles of architecture evolved from the use of specific ones. You cannot produce fine Classic architecture by the use of artificial stone any more than fine Gothic architecture can be produced in terra cotta—as many a Waterhouse building testifies.

The essential quality of traditional materials is that they become more beautiful with age —a quality no synthetic or machine-produced material has yet been found to have, be it asbestos, glass, plastics, terra cotta or pressed brick. The use of stone, bricks and tiles in true period architecture was on a long-term programme for beauty. There are records of the disgust caused by the bright red boxes that the Queen Anne style houses resembled when first built. Bedford Square, London, when new, could have had little of its present-day charm, with the bright yellow stock bricks and the plane trees still ungrown. One is told that the Elizabethan furniture, so sympathetic to us to-day in its mellowed brown tones, was at the time coated with yellow varnish.

Even if traditional materials could be produced in large enough quantities for our post-war needs, there would obviously be insufficient craftsmen to handle them, not enough time in which to employ them, and not enough money available to pay for them. Period style buildings, except for special purposes, could not give sufficient flexibility for changing conditions of work and living and for the installation of ever-improving modern equipment. The large number of still sound but completely out of date buildings in our cities is proof enough in itself. The freer style of design that these conditions demand may therefore possibly be quite well served by the alternative materials of our scientific age. Such a practice would unavoidably incur short-term building. This policy has been adopted in many American cities; hotels, hospitals, and theatres particularly, getting too out of date in their planning and equipment to be even worth modernizing. That country has adjusted its economics accordingly, allowing for instance some 25 years as the life for an hotel.

This country a hundred years ago had a population of some 15 millions. To-day it is more than three times that number and we live in an age of the " mass man." Our population is being stamped to pattern by the million by broadcasts, newspapers, films and easy transport. Its problems of living and family life are similarly to pattern. Our mass man requires to be housed to the extent of four million new homes within some ten years, and our damaged cities and out-of-date planning require reconstruction at the same time. For housing, schools and emergency accommodation assistance in production by short-term methods would seem to be the only hope of such a programme being fulfilled, this extra production being handed over as far as possible to industry. It must be emphasized, however, that such short-term policy would not expect that at the end of 20 years a whole structure might be valueless but that parts, particularly the outer skin that takes the weather, might need replacement periodically and, if consisting of standardized components, at no very great expense. The provision of a new outer skin is no new practice. The terrace blocks round Regents Park designed by Nash, of brick construction faced with Roman cement, are protected with an essential skin of paint. This skin has had to be renewed every three years (by covenant in the leases) for the last 100 years or more.

An average six-roomed house has been estimated to contain some 53,000 separate parts—20,000 of these being individual bricks. The weight of the material for such a dwelling has been assessed at 125 tons and the load the structure has to carry is nearly 6 tons of human beings and their belongings. Included in this dead weight are 6 tons of water which has eventually to be absorbed. Surely a new technique is obviously required? An American architectural journal at the end of last year produced a special feature called *The House of 194X* contributed to by 42 architects. There were few designs related at all to traditional building. Many of the suggestions had not reached a practical conclusion but the direction of thought and the goal were definitely sound. It has already been found possible to get the weight of a six-roomed house down from 125 tons to 7 tons or less above ground, by new materials and methods. Their employment would mean, however, a definitely new approach to the æsthetics of building and no attempt could be made with any success to emulate period or traditional styles by such means. This need not cause great anxiety when one considers the attitude of the younger generation, whose world it will eventually be, towards such matters. Because of their present reactions we would be doing a grave injustice to them to credit them with any inferior æsthetic sense. Unhampered by nostalgia for the past, they already show a tendency in their thinking that is far clearer than that of their elders. Where they differ so fundamentally from most of these elders is that they do not think in terms of " façades." To them the design of a building demands a complete solution of all its problems, down to the position and design of the smallest piece of equipment. Their weakness for a time may be their over-enthusiasm for new techniques and materials, that only experience can temper.

The alternative materials that may come into common use after the war embrace the metals such as aluminium, light metal alloys, stripped steel both cold rolled and pressed, with much greater use of welding. These may all serve good purposes for structural design. Cast iron itself has undergone great development in recent years, particularly in regard to stove finishings. Plywood with resin bonding promises to become a most important material. Glass has made great developments, particularly in the direction of armoured glass and insulating glass. Incidentally a method has been found for welding aluminium to glass. The glass brick and glass wool is also serving insulating purposes. Plastics are covering a vast field and methods are already in use in America for welding plastic to metal and to itself. Laminated plastics will no doubt have a great future for the same purposes as steel trim and for general covering on all surfaces taking hard wear. Pulp and fibre board have both been developed considerably in recent years and the impregnation of these boards with resin is adding considerably to the possibilities of their use. All kinds of developments have taken place for the use of thermal insulation in blocks and boards which make for light construction in building and produce actually better results than traditional materials. There is much yet to be worked on to produce sound insulation by light-weight methods at economic cost. Such materials as the foregoing might if misused produce shoddy building, but architects believe that with the safeguards of good planning and design and sound construction much may be made of such techniques. They would be most suitably applied to the production of a whole new community where suitable grouping, composition and landscape gardening can have scope. Traditional building methods will no doubt at present remain more suitable for small single buildings in existing villages or in the rural countryside.

DIA

F. R. Yerbury

November 3, at the Royal Society, Burlington House, Piccadilly. Lunch-time meeting of the Design and Industries Association in the series on *The Place of Good Design in Business*. Talk on COMMERCIAL DESIGN TO-DAY IN SWEDEN, by F. R. Yerbury, Hon. A.R.I.B.A., on his return from his visit to Sweden. Chairman: Lord Sempill.

F. R. Yerbury: Owing to war conditions which have affected Sweden much more than some people would suppose, there has been very little movement in design in any direction since 1939. Shortage of materials and, to an extent labour, have been one of the basic causes of this slowing-up in the rapid progress which Sweden was making before the War in every direction where technics and the arts played their part. Building has practically come to a standstill except in connection with military and national security requirements, and in the provision of living accommodation for the people. Stockholm is still very overcrowded and it is even more difficult to find a flat in that city than in Central London to-day.

The whole of the energies involved in what might be called Industrial Design are concentrated on housing the people, either by way of the actual building of houses or in the provision of equipment and furniture. Furniture in Sweden, after going through a long and trying process of " modernism " and " sentimentalism " has arrived at a stage where there is a very clear and definite twentieth-century period of Swedish furniture. Sweden, taking it all round, has probably the highest standard of design in everyday furniture of any country.

The Swedes are very impressed with the

effort which has been made in England to produce Utility furniture, china and so on, and compare this war-time emergency furniture very favourably with that which they themselves are producing under comparatively peace-time conditions. Many Swedes are in close touch with Germany and know only too well that in that country nothing whatever is being done to provide either for normal needs or for the needs of those bombed out of their houses.

Although little progress has been made in the development of design in everyday things in Sweden, the interest in good design has by no means abated and the pre-war standard has certainly been well maintained. There are still to be seen in some of the shops in Stockholm articles of furniture, glass and other household goods in the very worst taste possible, but the feeling for better designed things has permeated the population as a whole and in the majority of shops, even of the cheaper kind, it is possible to satisfy the tastes of the most fastidious. The younger generation is undoubtedly furnishing on simple and what might be called modern Swedish lines, although it must be admitted that one of the things which more or less force them to this position is the rather low standard of accommodation which is generally accepted in the bigger towns in Sweden as being satisfactory for ordinary domestic life. Although modern blocks of flats have an æsthetic charm unsurpassed anywhere in Europe, we in England would feel that this does not make up for the lack of adequate sleeping and living accommodation. There is a slight danger in the rapid extension of Stockholm which is going on at the present time, which may result some years hence in the creation of slum conditions, a most surprising thing in a city where up to the present there have been no slums.

One striking aspect of the present-day life in Sweden is the importance of timber. Owing to shortage of other materials, especially coal, the natural product of Sweden—timber—is being exploited to its fullest extent. Apart from the use of timber for heating purposes in cities, and the use of charcoal or timber for cars driven by producer gas (there being no petrol available), wood in all sorts of forms is being used for the production of materials for clothing, textiles of every sort, and even liquor. The new type of textile, of course, calls for new technique in design but the Swedes have easily mastered this.

The use of Plastics is practically non-existent partly because of the lack of raw materials but more important still, the high cost involved in the production of moulds, which cannot be justified in a country of such a comparatively small population.

Sweden is one of the few countries left in which black-out is not in force and one of the greatest thrills to a visitor from a country like England is to experience the transient joys of Neon lighting once again. Paraphrasing a remark of Mr. Chesterton in New York, "How wonderful it all seemed especially if one could not read Swedish."

TCPA

C. Williams-Ellis

November 11, at 1, Grosvenor Place, S.W.1. Lunch-time meeting of the Town and Country Planning Association. Talk on BACKGROUND MAKETH MAN, by Major Clough Williams-Ellis, M.C., J.P., F.R.I.B.A. Chairman: H. M. Cleminson.

C. Williams-Ellis: Some day, one hopes, there will be a committee to end committees, a meeting to end meetings, but meanwhile here we are, and I regret to announce the birth and vigorous activity of yet another "body."

I am only an accessory after the fact and am in no way responsible for its intimidating baptismal name *The Committee for Education in Appreciation of Physical Environment*. It certainly has the merit of being exhaustively descriptive—but though it has now become a Council with numerous sub-committees—and despite all the uncivil things that Mr. A. P. Herbert has said about calling committees by their chairmen—Barlow, Scott, Uthwatt, Beveridge and so on—I myself call ours *The Cleminson Committee* to save time and paper—and, may I add, to give honour where honour is due.

Had I been sole god-parent and been asked to name this child I should have unhesitatingly said, "Let it be called the Council of FENG SHUI"—for under that name the Chinese long ago forestalled us, as in so many civilized innovations.

In my book *England and the Octopus*, written some sixteen years ago, I quoted Professor Abercrombie on Feng Shui, and if I now recite a few extracts from what he wrote, you will see how close we are and how apt is my reference:—

". . . China for a thousand years or more has been devoting its unrivalled artistic genius to this very question. (That of the inevitable artificialisation of natural landscape). Unlike the Greeks, whose city policy still dominates Europe (except these islands), the Chinese have always looked to the countryside as their home. They accordingly definitely attempted so to harmonize human additions with natural features that a new and complex landscape might result, a fusion of conscious art with nature. This has been described as the science of 'adapting the residence of the living and the dead so as to co-operate and harmonize with the local currents of the cosmic breath.' The study is thus lifted on to a lofty plane; it is related on the one hand to the Chinese preoccupation with the fact that man is merely a temporarily detached and animated fragment of the earth, soon to return to it; and on the other to that intense veneration for natural scenery, and especially lofty mountains, which has caused Tibet, on the roof of the world, to be selected as the holy place.

"But besides this spiritual aspect there was the purely practical one: the people were too numerous to be penned in cities—they spread over the face of the country. The density of the population per square mile forced them to regard the country as equally subject to artificial treatment as the town. Unless it was controlled it would become a hopeless mess. Hence the practice and æsthetic of Feng Shui. . . . Infringements of these rules or neglect of their study are punished sometimes by Nature, at other times by man. . . . Missionaries establishing themselves in some remote valley and building a neat corrugated iron tabernacle with spiked bell turret have been indignantly surprised when the population has arisen and massacred them—not by reason of any objection to their religious teaching, but because the pitch of the roof was, perhaps, too steep or the spike of their bell turret should have been domed or square-topped.

"There must, it will be found, be no attempt to make new things imitate the old, or to aim at a bogus naturalism."

Now this venerable Chinese philosophy of Feng Shui seems to me to give our Council a respectable background and high historic sanction.

Our general aims may be sufficiently summarized by one paragraph from our manifesto, *The Future Citizen and his Surroundings*, that runs thus:—

"We shall all be agreed that Education is concerned with the training of personality; with the attempt to cultivate the art and the habit of right thinking; with showing that no man liveth unto himself, but must share life to the full with his fellows; with the endeavour to make of the pupil a good citizen—ideally of the world, but in any case a citizen of his own country. It is concerned, therefore, with preparing the pupil for life—the whole of life, not merely the making of a living. He should understand, as far as possible, the background against which his life is to be lived; he must be enabled to appreciate its beauties and the achievements of those who have produced them; he must be led, too, to detect ugliness and selfishness, and so there must be sown within him the seeds of sound judgment and informed criticism. He should be taught impatience with things unnecessarily drab or sordid, and should be infected with a desire to remove or improve them."

We realize that unless we can begin to exert a civilizing influence in the nursery and the school we are beginning too late, and as chairman of the *Toys and Publications Committee* of the Council, I am particularly concerned to assure an adequate supply of acceptable books and models to illustrate, extend and generally subserve our educative propaganda.

Already one architect of international repute is organizing a toy industry on novel and enlightened lines, several elementary little books are being specially written for the Council by authorities of eminence, and a number of helpful suggestions has been sent along from various quarters.

Ours is, I hope, no patronizing mission of Superior Persons, trying to impose our views and tastes upon the Common Man or even his Common Children. Or is it? It is difficult altogether to escape the charge—which is an easy one to level at *any* reforming body. And indeed I am not sure that we are not sometimes unduly frightened, intimidated and inhibited by such accusations, which can be just as useful to the obstructionist reactionary as to those die-hard democrats who still chant "Vox populi, vox dei." I remember Bernard Shaw once saying that if any picture were ever admired by as much as 10 per cent. of the population, then it should most certainly be burnt. If that desperate saying has any truth in it—then surely it is our job to make it become *un*true.

Clive Bell, whom no-one could accuse of being authoritarian, fully accepts the need of leadership by the enlightened few, who, if they are truly enlightened, may also be privileged, chiefly in having means and leisure which will enable them to civilize others. He said somewhere: "It is impossible to say what proportion of the population must be highly civilized to civilize moderately the rest. All one knows is that in England the proportion is inadequate."

Well, that is why we want such as *are* highly civilized to help us leaven the lump—and do not let us mock-modestly pretend that the lump doesn't *need* leavening, or that it is presumptuous in us to attempt it.

But please, PLEASE understand that all this applies only to our dealings with already ruined grown-ups. The open-minded and as yet unspoilt child we must carry with us all the way by every means *other* than authority. He requires and deserves scrupulous care and the completest honesty *and* subtlety of which we are capable.

We are trying to educate the future consumer demand for decent design in the physical background and equipment of living—Town and Country Planning, Architecture and all the things of daily use. We aim at producing discriminating customers who will know and demand competent designing and no longer love the worst when they see it. We want to create an appreciative and encouraging audience for the good artists and technicians, to assure rotten eggs and derisive boos for the bad. In all this, we see ourselves as the handmaidens of Planning.

With the Minister of Education's cordial support, we have already infiltrated into the state schools by way of lecture courses for the existing staffs, who, in turn, colour and vivify their normal lessons in history, geography, English, art, or what not, from what you might call the Amenity Vitamins with which we have provided them.

We of course further help them with lists of appropriate books, and we are actually promoting the writing and publication of several new ones for which there seemed a need. Professor Reilly, of whose provocative

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liveliness you had a reminder here the other day, has undertaken one of them.

We envisage, naturally, an exhibition at no distant date, and the RIBA that has been most generously and effectively with us all the way, is arranging an educational conference in January which should greatly further enlighten us, and give us fresh targets.

PUBLICATIONS RECEIVED

Architectural Hygiene. Banister Fletcher. (Isaac Pitman, 18s.).

The Small House. Marion Fitzgerald. (J. M. Dent, 6d.).

Building Societies and the Housing Problem. G. D. H. Cole. (J. M. Dent, 6d.).

Planning and Performance. W. A. Robson. (J. M. Dent, 6d.).

Farm Cottages and Post-War Farming. A. G. Street. (J. M. Dent, 6d.).

New Photo Vision. Helmut Gersheim. (The Fountain Press, 10s. 6d.).

Building Societies Year Book. (Franey, 10s. 6d.).

Butterflies in Britain. Richard Chopping. (Penguin Books, 2s.).

Building Timbers. E. H. B. Boulton and B. Alwyn Jay. (Geo. Newnes, 7s. 6d.).

Housing Problems. (Association of Building Technicians, 6d.).

Henley Student Manual. (W. T. Henley's Telegraph Works Co.)

Town and Country Planning Quarterly Review. (TCPA, 2s. 6d.).

Houses, Towns and Countryside. Elizabeth E. Halton. (TCPA, 1s.).

Prefabricated Timber Houses. (Timber Development Association).

Smokeless Air. (National Smoke Abatement Society, 1s.).

Youth Service After the War. (H.M. Stationery Office, 6d.).

The Home Counties. S. P. B. Mais. (Batsford, 10s. 6d.).

Post-war Forest Policy. (H.M. Stationery Office, 2s.).

New Towns for Old. Stanley D. Adshead. (J. M. Dent, 6d.).

Public Health and Social Conditions. Charles Porter. (J. M. Dent, 6d.).

Co-operative Home Building. W. P. Watkins. (J. M. Dent, 6d.).

Turkey at the Crossroads. Philip Paneth. (Alliance Press, 2s. 6d.).

Your London has a Plan. (Association of Building Technicians, 6d.).

Trinity College. G. M. Trevelyan. (Cambridge University Press, 6s.).

An Introduction to Concrete Work. H. L. Childe. (Concrete Publications, 1s. 6d.).

TVA: Adventure in Planning. Julian Huxley. (Architectural Press, 8s. 6d.).

Changing Britain. (Cadbury Bros., 1s.).

Town and Country Planning Acts, 1932, 1943. (H.M. Stationery Office, 2d.).

MOW Codes of Practice Committee, Second Report. (H.M. Stationery Office, 3d.).

A Batsford Centenary. Hector Bolitho. (B. J. Batsford, 10s. 6d.).

West Indian Summer. James Pope-Hennessy. (B. J. Batsford, 12s. 6d.).

The Bricks (Range of Prices) No. 1 Order, S.R. and O. 1943, *No.* 1457. (*HMSO*, 6d.).

The Bricks (Range of Prices No. 2 Order, S.R. and O. 1943, *No.* 1478. (HMSO, 3d.).

Marxism and Modern Art. K. D. Klingender. (Lawrence and Wishart, 1s.).

Meet Our Russian Allies. Philip Paneth. (Alliance Press, 2s. 6d.).

The Building Congress, 1943—*Record of Proceedings*. (Building Industries National Council, 6s. 6d.).

The Building Industries Survey, Vol. VIII, No. 2. (Building Industries National Council).

Changing Britain. (Cadbury Bros., 1s.).

General Scheme for the Repair of Houses, Etc. (Circular sent to local councils by MOH).

Planning Work During the War Period—Memorandum B. Circular sent to local authorities by MOTCP. (HMSO, 2d.).

The Employment of Technical Planning Staff in War Time—Memorandum C. Circular sent to local authorities by MOTCP. (HMSO, 1d.).

Country and Town. G. M. Young (Penguin, 9d.).

Psychometric Chart. (Edward Arnold, 4s.).

ANNOUNCEMENT

Messrs. Mitchell & Bridgwater, chartered architects, 42, Bruton Place, Berkeley Square, W.1, dissolved partnership, by mutual consent, on September 30. The practice will be continued by Mr. Derek Bridgwater at the same address.

THE BUILDINGS ILLUSTRATED

MESS ROOM AND CARETAKERS' FLAT AT REDDITCH, for The Enfield Cycle Co., Ltd. (pages 376-377). Architect, Martin Peel, Redditch, and F. W. B. Yorke, F.R.I.B.A., Birmingham. General contractor, Harry B. Tarleton; sub-contractors: Limmer & Trinidad Lake Asphalt Co., Ltd., roofs and mess-room floor; Himley Brick Co., Ltd., facing bricks; Charles Wade & Co., Ltd., structural steel; Bell's Corrugated Asbestos, combined sheeting; Flooring Contracts Ltd., flooring and flat roofs; Turners Asbestos Co., Ltd., mess-room roofing; James Ward Ltd., central heating and hot-water supply; Redditch Gas Co., gas fixtures; Shropshire, Worcestershire & Staffordshire Electric Power Company, electric wiring, light fixtures, and electric heating; Pearce and Cutler Ltd., sanitary fittings; Patent Staircase & Flooring Contracts Ltd., stairtreads; Alfred Brown & Co., door furniture; Henry Hope & Sons, Ltd., casements and window furniture; Robertson (B'ham.) Ltd., tiling; A. Seers & Son, Ltd., painting; Jackson Electric Stove Co., Ltd., kitchen fittings; East Worcestershire Waterworks, Ltd., water supply.

CLASSIFIED ADVERTISEMENTS

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

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

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s.

The Incorporated Association of Architects and Surveyors maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: **75 Eaton Place, London, S.W.1. Tel.: Sloane 5615** 991

CUMBERLAND COUNTY COUNCIL.

ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of two Temporary Architectural Assistants in the County Architect's Department.

The salary offered is £325 per annum rising, subject to satisfactory service, by increments of £12 10s., to £350 per annum (the first increment will take effect on the 1st April, 1945), together with War Bonus at present 17s. 6d. per week, and an allowance for extended office hours (now 47 hours per week) of £50 per annum.

The appointments will be subject to the Local Government Superannuation Act, 1937, and will be terminable by one month's notice on either side.

Forms of application may be obtained from the County Architect, 4, Alfred Street North, Carlisle, and should be completed and returned to him, accompanied by copies of three testimonials, not later than Wednesday, the 1st December, 1943.

G. A. WHEATLEY,
Clerk of the County Council.

The Courts,
Carlisle.
5th November, 1943. 976

BRIGHTON TECHNICAL COLLEGE.

Principal: W. MANSERGH VARLEY, M.A., D.Sc., Ph.D.

DEPARTMENT OF BUILDING AND SANITARY ENGINEERING.

Applications are invited for the appointment of a full-time TEACHER to be responsible for the work of PLUMBING TRADE CLASSES, and to assist in the work of the General Building Course.

Candidates should hold the First Class Final City and Guilds Certificate in Plumbing and have had experience in hard metal work and lead burning.

The salary will be according to the appropriate Burnham Scale plus full allowances for industrial experience.

Forms of application may be obtained from the undersigned, and should be returned with at least two recent testimonials by December 15th to the Principal of the College.

F. HERBERT TOYNE,
Education Officer.

54, Old Steine,
Brighton, 1.
November 9th, 1943. 981

GLOUCESTERSHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

Applications are invited for the appointment of one Temporary Senior Planning Assistant.

The salary will be either £312 or £364 per annum plus war bonus (now £33 16s. per annum) and travelling allowances according to County Council scale. The higher salary will be paid to the successful applicant who has passed the examination of the Joint Planning Board and is an Associate Member of the Town Planning Institute.

The successful applicant will be required to pass a medical examination and to contribute to the superannuation fund.

Applicants must be above military age or not liable for service on medical grounds.

Applications stating age, qualifications and experience should reach the County Planning Officer, St. John's Lane, Gloucester, on or before the 30*th November*, 1943.

GUY H. DAVIS,
Clerk of the County Council.
985

CITY OF LEEDS EDUCATION COMMITTEE.

LEEDS COLLEGE OF ART.

THE LEEDS SCHOOL OF ARCHITECTURE.

Applications are invited for the post of Lecturer in Architecture. Applicants should be Associate Members of the R.I.B.A., and have been trained in a recognised School of Architecture. Salary in accordance with the Burnham Scale, with allowance for professional experience, and war bonus. The appointment is temporary in place of a lecturer on War Service, but may become permanent.

Further particulars and forms of application, which should be returned by the 30th November, 1943, can be obtained by sending a stamped addressed envelope to the Director of Education, Education Offices, Leeds, 1. 979

CITY OF OXFORD.

TEMPORARY ARCHITECTURAL ASSISTANT.

Applications are invited for the above post, at a salary of £350—£400 according to qualifications and experience, plus war bonus, at present approximately £45 10s. per annum. Preference will be given to applicants who have had municipal experience and are members of the R.I.B.A.

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

Applications, stating age, qualifications and experience, and accompanied by copies of not more than three testimonials, should reach the undersigned not later than Thursday, 25th November, next.

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

J. C. RIDDELL, B.Sc., A.M.Inst.C.E.,
City Engineer and Surveyor.

Town Hall,
Oxford. 982

Architectural Appointments Vacant

Advertisements from Architects requiring Assistants or Draughtsmen, and from Assistants and Draughtsmen seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice. Other "Appointments Vacant" and "Wanted" will be found under later headings, and are subject to the charge given under each heading.

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

LONDON ARCHITECT AND SURVEYOR requires assistant, present and post-war building schemes and extensive war damage and estate matters. Apply by letter stating qualifications, age and salary to T. W. Leadenhall Buildings, E.C.3. 202

ARCHITECTURAL AND SURVEYING ASSISTANT required for West Riding Office, must be good draughtsman and able to work from sketches. Reply with full details of age, experience and salary required to Box 204.

JUNIOR ASSISTANT required by architectural department of City property company. Preference given to applicants with experience in preparing drawings on linen and ability to carry out building survey work. Applicants should be under military age or ineligible for essential work. Write for appointment. Box 986.

Classified Advertisements continued on page xxxvi

Architectural Appointments Wanted

ARCHITECT (special qualifications for post-war planning and design) desires post shortly. Experienced, having sole charge contracts from initial interview to completion, including drawings, specifications, estimates, etc. London only. Box 167.

SURVEYOR'S ASSISTANT (36), recently engaged on schedule of condition and war damage surveys. Experienced in land surveying and levelling, including theodolite. Registered architect. Seeks engagement on work of national importance. Apply Box 174.

YOUNG ARCHITECT, registered, competent, requires responsible position. Work in connection with wartime building or preparation of post-war schemes. Box 176.

ARCHITECTURAL ASSISTANT (Chartered Architect) requires senior position. London district. Wide experience of housing and planning. State salary offered. Box 177.

SOUTH-WEST ENGLAND. ARCHITECT AND SURVEYOR with own office in Bristol seeks free lance or part-time work. Experienced in all branches of the profession, especially in hospital, factory, brewery and war damage work. Speedy and accurate draughtsman with high capabilities in design and construction. Telephone Bristol 43746. Box 178.

ASSISTANT, Diploma with distinction, Liverpool University; 2 years' office experience; age 25 years; seeks position London, Home Counties or Liverpool. Box 179.

SURVEYOR, ARCHITECT (qualified) **and Property Manager** desires position, long experience, over 30 years, theoretical and practical, expert knowledge of profession, and all trades; not liable for military service, rendered War Service 1914-18. Supervision all classes of Buildings and Public Works to £230,000, including War Damaged Properties; excellent testimonials, etc. Please apply Box 186.

CHARTERED ARCHITECT AND SURVEYOR with own London office, offers assistance to other practitioners in the preparation of post-war schemes, surveys, war damage, etc. Terms by arrangement. Box 181.

REINFORCED CONCRETE ENGINEER requires spare-time design and detail work. Calculations submitted. Any type of precast or *in situ* structures. Box 187.

ARCHITECT, 17 years' experience, requires home evening work to assist in preparation of drawings. Can arrange appointment during day-time. Write Box 963.

ARCHITECTS' SENIOR ASSISTANT, prepared to undertake spare time work, working drawings, etc., Birmingham area. Box 191.

KEEN AND ENTHUSIASTIC STUDENT of Architecture seeks position as junior assistant in architects office, Epsom district; experienced in scales from ¼ to 3 in. and full size; have prepared sheet drawings, small knowledge of perspective; experience in use of colours and of printing; 13 months' experience in architect's office; firm now moving back to London. Box 192.

CHARTERED ARCHITECT (51), desires engagement. London or near preferred. J. L., 71, Allerton Grange Way, Leeds 7. 193

ARCHITECT'S AND SURVEYOR'S ASSISTANT age 22 years, totally exempt from military service, desires post in the North Midlands, preferably Manchester or Leeds district. Seven years experience including three years as Quantity Surveyor's Assistant. Fully competent to perform all usual duties. Salary £300 per year or by arrangement. R. Cooper, c/o. Miss Bird, Oak Street, Fakenham, Norfolk. 194

ARCHITECT ASSISTANT, age 25, ex-service man, requires position in London; 8 years practical experience on various types of work, including factory (R.C. and steel) design, layouts of housing estates, site supervision, specifications and bills of quantities. Box 195.

CHARTERED QUANTITY SURVEYOR, P.A.S.I., requires work on housing, post-war reconstruction, town planning schemes or war damage. Fully experienced. Studying for final T.P.I. exam, 1944. Box 196.

JUNIOR requires post in architect's office (London area), keen and willing. At present attending Municipal College and School of Building. Box 197.

A.R.I.B.A., 25, exempt, seeks responsible position in London. Box 198.

DRAUGHTSMAN requires spare time work in London. War damage surveys, post-war planning, or general work for architects, builders, etc. Moderate fees. Box 200.

CHIEF ARCHITECT of a Government Department desires change. Aged 32, married. Exempt (medically). Preferably Eastern Area. Experienced Government and Local Government service. Please state salary, and if housing accommodation available. Free at month's notice. Box 201.

ARCHITECTURAL DRAUGHTSMEN, experienced in all classes of architectural draughting, desire additional work. Complete drawings carried out from rough sketches. Moderate fees. "Designs," 244, Gammons Lane, Watford, Herts. Telephone: Garston 2302. 984

Other Appointments Vacant

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

ASSISTANT EDITOR wanted for Architectural Paper. Write, with full particulars of qualifications, salary required, &c., to Box 51.

SURVEYORSHIP. The trustees of a small Charitable Trust, whose freehold property is in South London, will consider applications for the post of surveyor to the charity. Small annual retaining fee plus fees on R.I.B.A. scale for works carried out. Apply by letter, giving qualifications and sending copies of testimonials to Mr. W. A. Latham, Albert Institute Chambers, Chancel Street, S.E.1, on or before 1st January, 1944. 978

Miscellaneous

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

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 53, Great Marlborough Street, W.1. Gerrard 4223-4224-4225.

SPECIFICATIONS AND BILLS OF QUANTITIES, etc., expeditiously and accurately typed or duplicated. Translations and Facsimile, Typewriting. All work treated confidentially. Miss G. Saunders, Typewriting Bureau, 17, Dacre Street, Westminster, S.W.1. Telephone: Whitehall 2605.

WANTED—A Plan Cabinet. Please state size, number of drawers, depth of drawers and price. Box 184.

WANTED. Student requires bound or single copies of *Architectural Review,* 1936-1943. What offers? Box 964.

WANTED.—Centrolinead, good make and condition. Morgan, Whitehall 8627. 199

STUDENT REQUIRES INFORMATION SHEETS, 1—878 inclusive. Any offers? Box 203.

CONSULTING ENGINEERS with wide experience of structural design are prepared to co-operate with architects working on post-war schemes. Box 980.

ARCHITECTURAL STUDENT undergoing training in country town desires to purchase books, lecture notes, etc., for his studies. Anything suitable for a student would be acceptable. Prices, etc., Box 983.

For Sale

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

FOR SALE.—*Houses and Gardens* (Bailey, Scott & Beresford), *Architecture of Greece and Rome* (Anderson & Spiers), *Meyer's Handbook of Ornament, Short History English Renaissance Architecture* (Blomfield), *Gwilt's Encyclopaedia of Architecture,* Vols. 47 and 48 *Architectural Review,* standard binding. Write Box 973.

WHAT OFFERS? Watts' Quick Set Dumpy Level in strong leather case with tripod; also Levelling Stave (pre-war, as new), cost over £30. Box 987.

Educational Announcements

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

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