

THE ARCHITECTS' JOURNAL

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standard contents

every issue does not necessarily contain
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to H one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

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
ICW	Institute of Clayworkers. 4, Vernon Place, W.C.1.	Chancery 6258
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 1, Grosvenor Place, S.W.1.	Sloane 8606
IHVE	Institution of Heating and Ventilating Engineers. 72/74, Victoria Street, S.W.1.	Victoria 0146/7
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-29
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	MARS Group (English Branch of CIAM). 46, Sheffield Terrace, W.8.	Park 7678
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Belgrave Square, S.W.1.	Sloane 4522
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service. St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalt Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 5277/8
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers. 2, Caxton Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041
NFBTO	National Federation of Building Trades Operatives. 8, Rosebery Houses, Brems Buildings, E.C.4	Holborn 1881
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4041
NHTPC	National Housing and Town Planning Council. 41, Russell Square, W.C.1.	Museum 1264
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NRIAD	National Register of Industrial Art Designers. National Gallery, Trafalgar Square, W.C.2.	Whitehall 2415
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211/2
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322
RFAC	Royal Fine Art Commission. 6, Burlington Gardens, W.1.	Regent 1446
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
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. 20, Piccadilly, London, W.1.	Regent 6347
SCR	Society for Cultural Relations with the USSR. 98 Gower Street, W.C.1.	Euston 6272/3
SFMA	School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.	Chancery 5313
SIA	Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1.	Metropolitan 8344
SNTPC	Scottish National Town Planning Council. 11, Drumsheugh Gardens, Edinburgh, 3	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.
SPAB		Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6146 (3 lines)
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 81, Cannon Street, E.C.4.	City 1476
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Mayfair 8866
WEDA	Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4.	City 4263/4
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

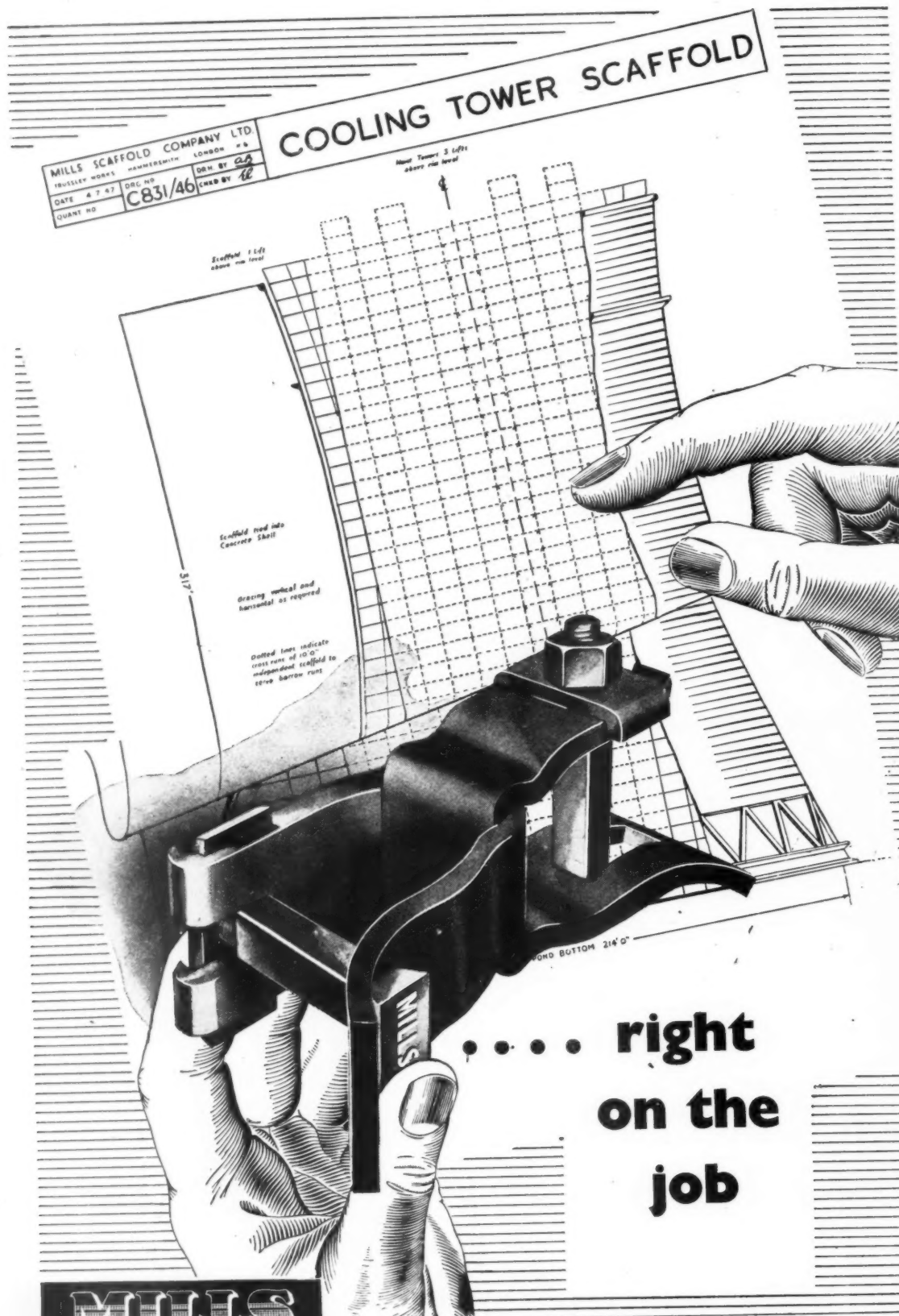
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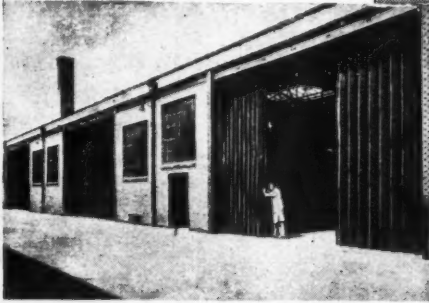
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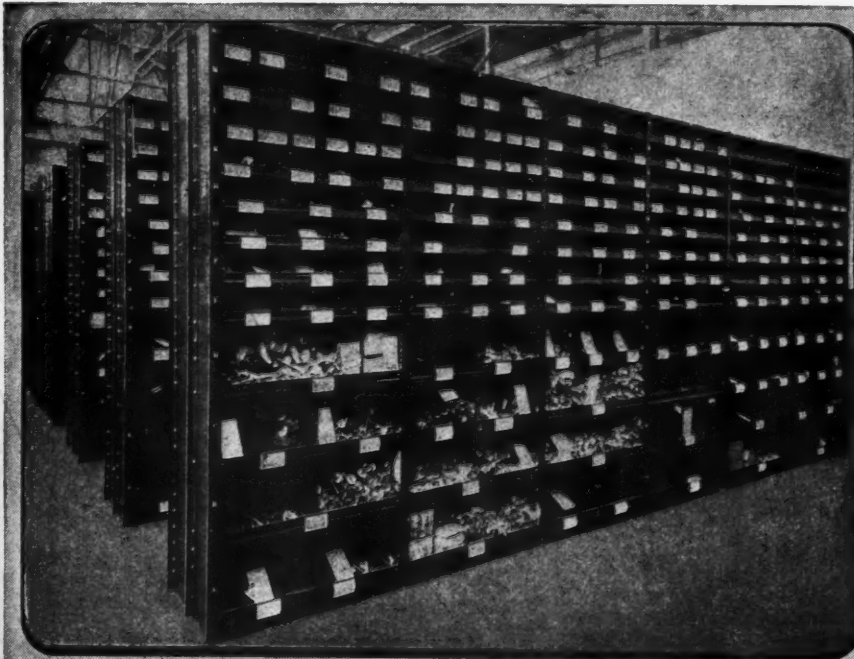
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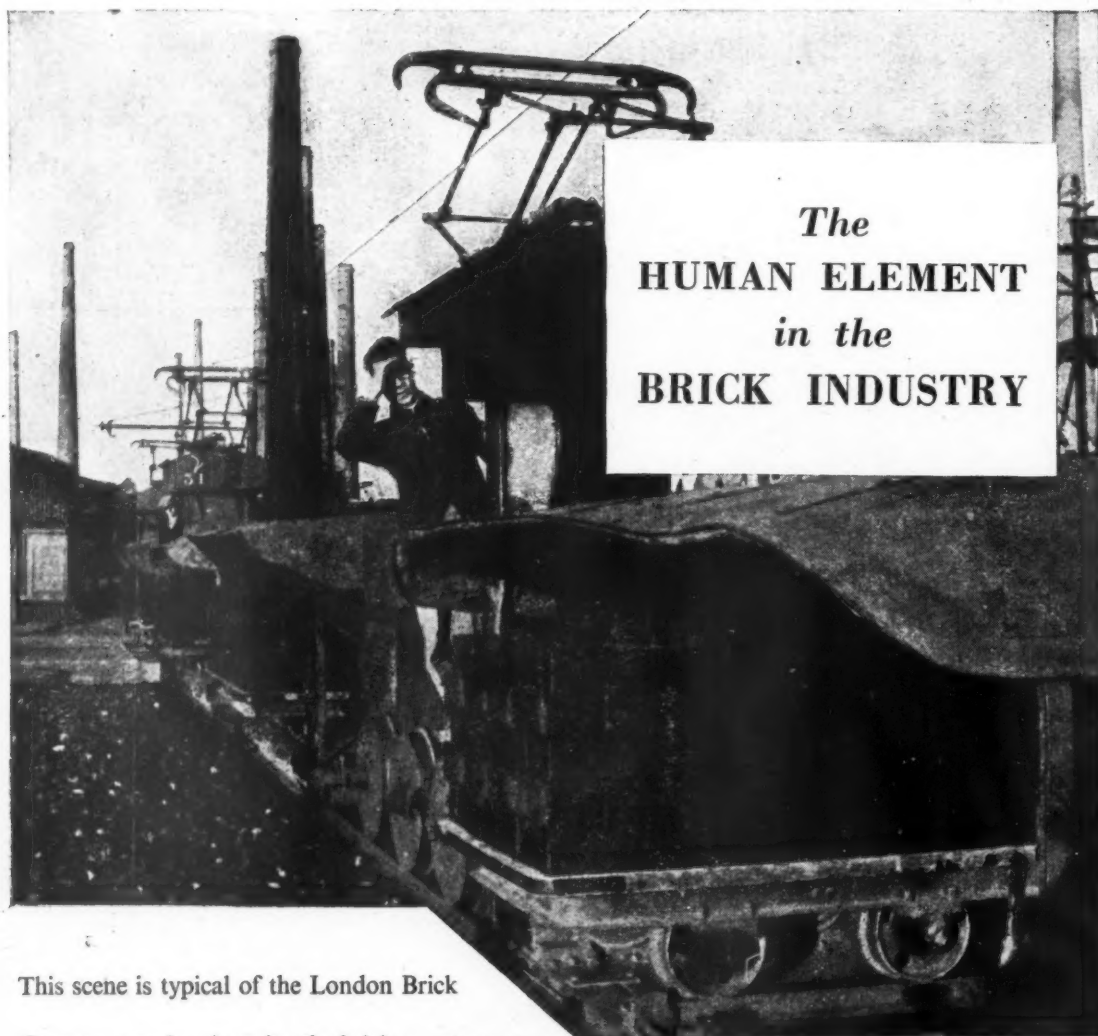
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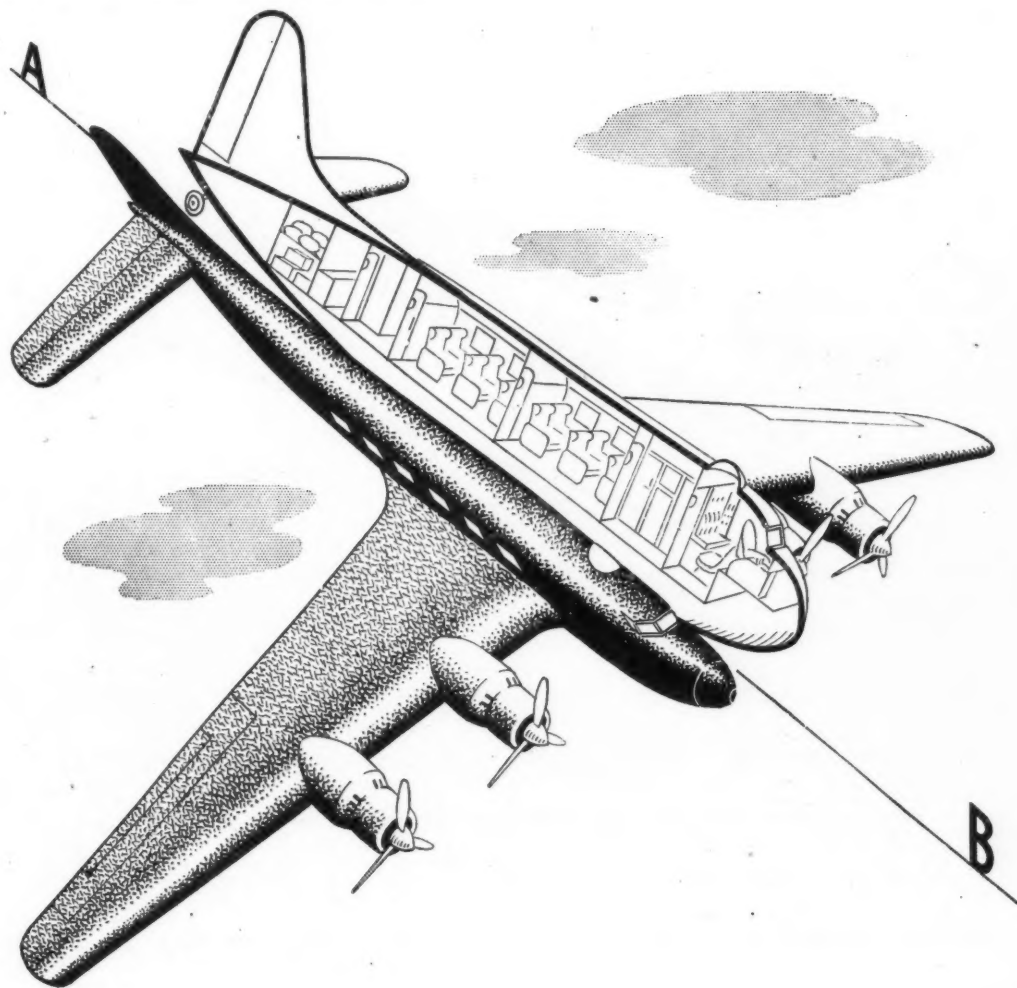
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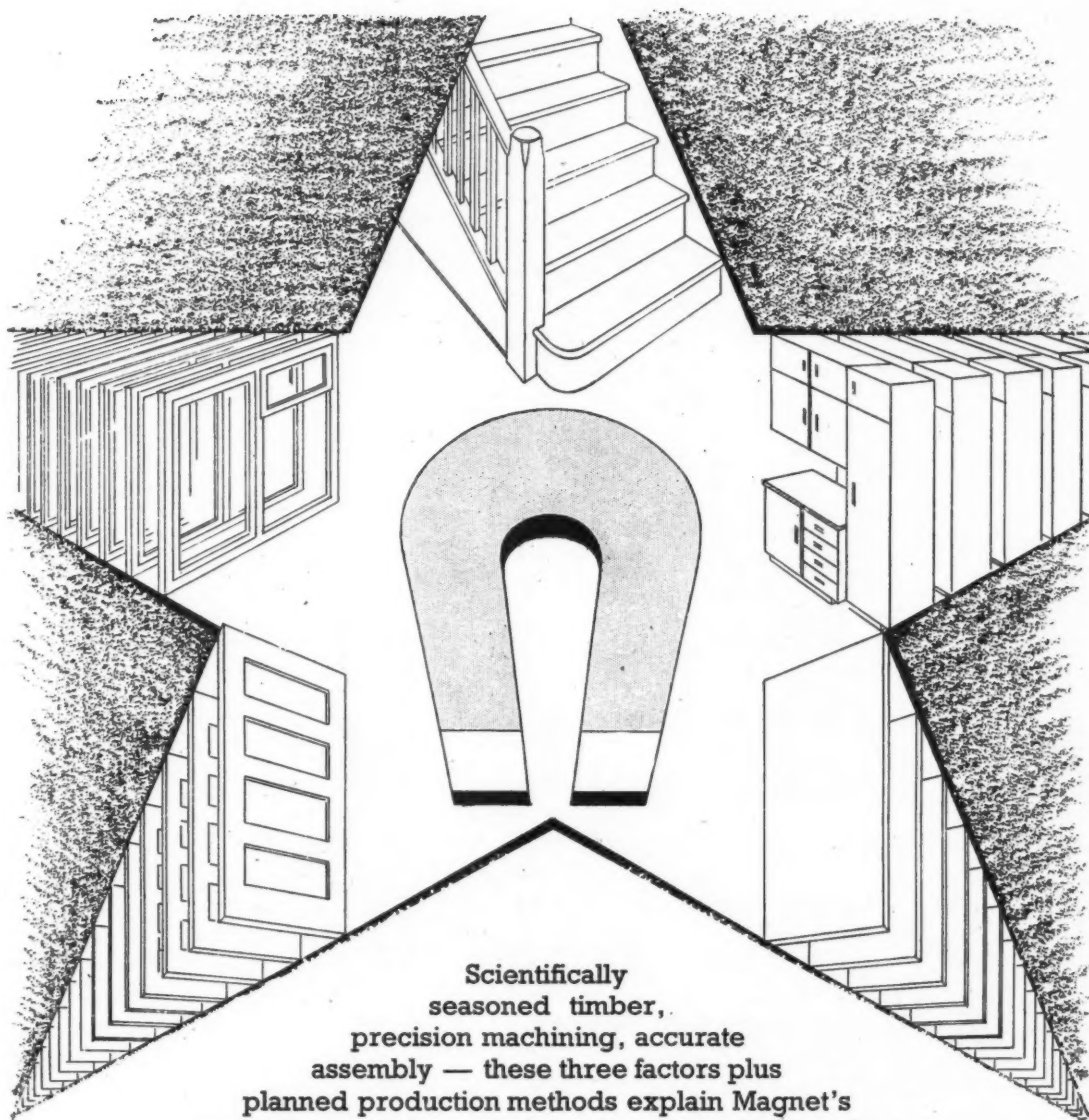
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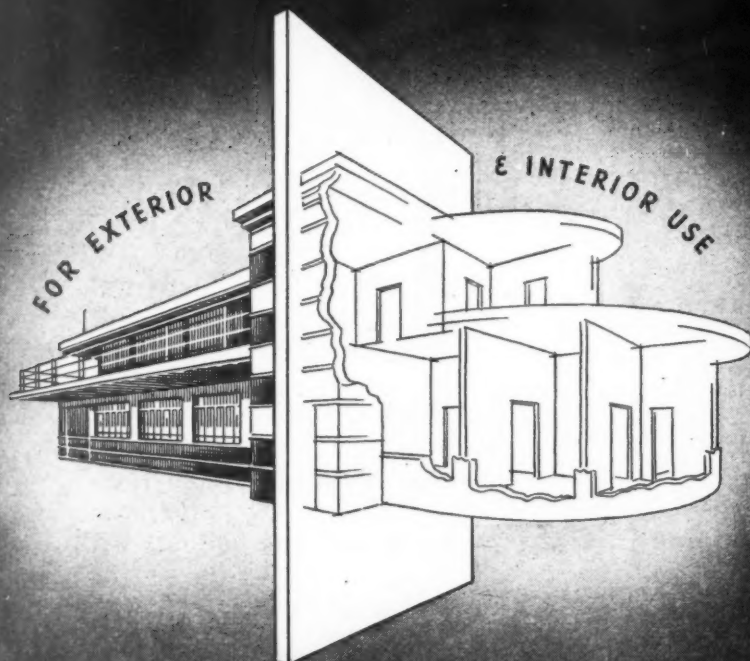
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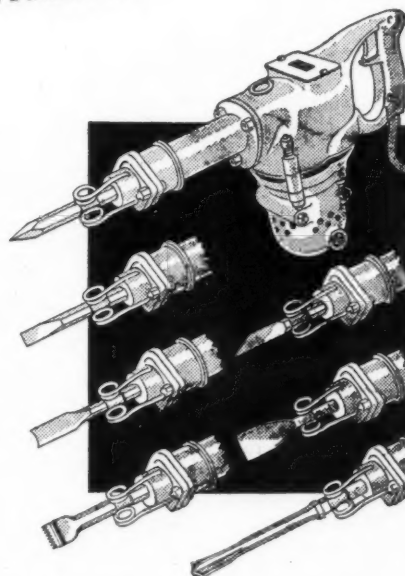
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CONSTRUCTION	Uninsulated		Under-Purlin Insulation		Over-Purlin Insulation			
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Corrugated Iron	—	220	—	220	—	—	220	220
Celotex Insulating Board	—	—	—	—	1/2"	1"	1 1/2"	1"
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Celotex Insulating Board	—	—	1 1/2"	1 1/2"	—	—	—	—
Thermal Transmittance 'U'	1.40	1.50	0.51	0.32	0.35	0.23	0.36	0.24
Fuel Consumption tons p.a.	7.7	8.3	1.7	1.0	1.9	1.3	2.6	1.3
Cost of Heating Plant, Cost £'s	88	94	19	20	22	14	22.5	15
Saving in Plant and Fuel due to Celotex insulation %			75	79	75	84	76	84

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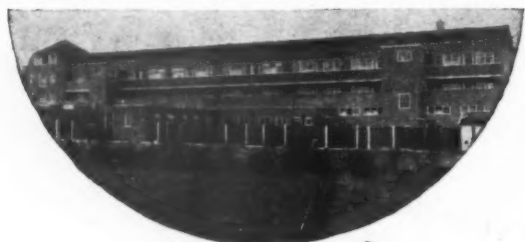
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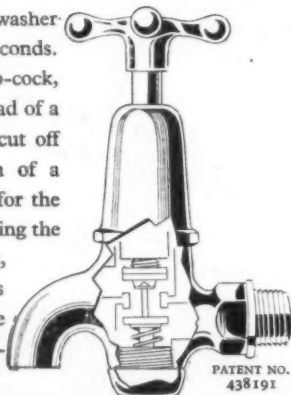
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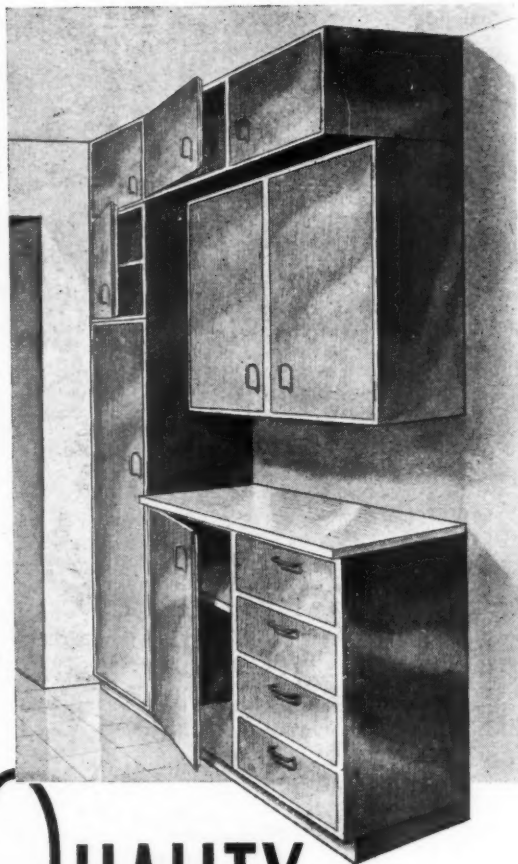
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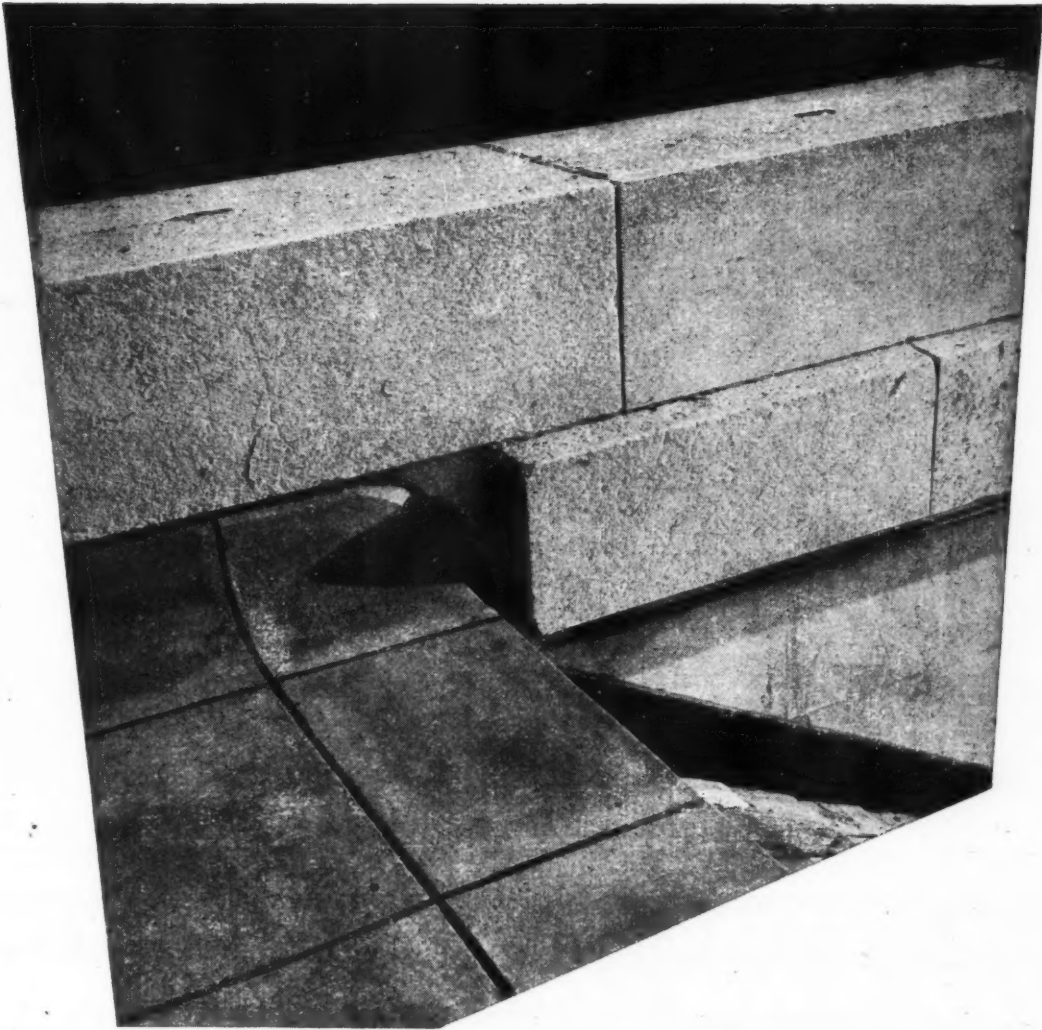
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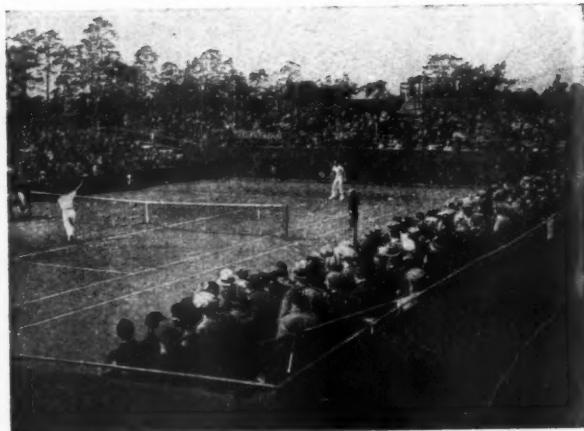
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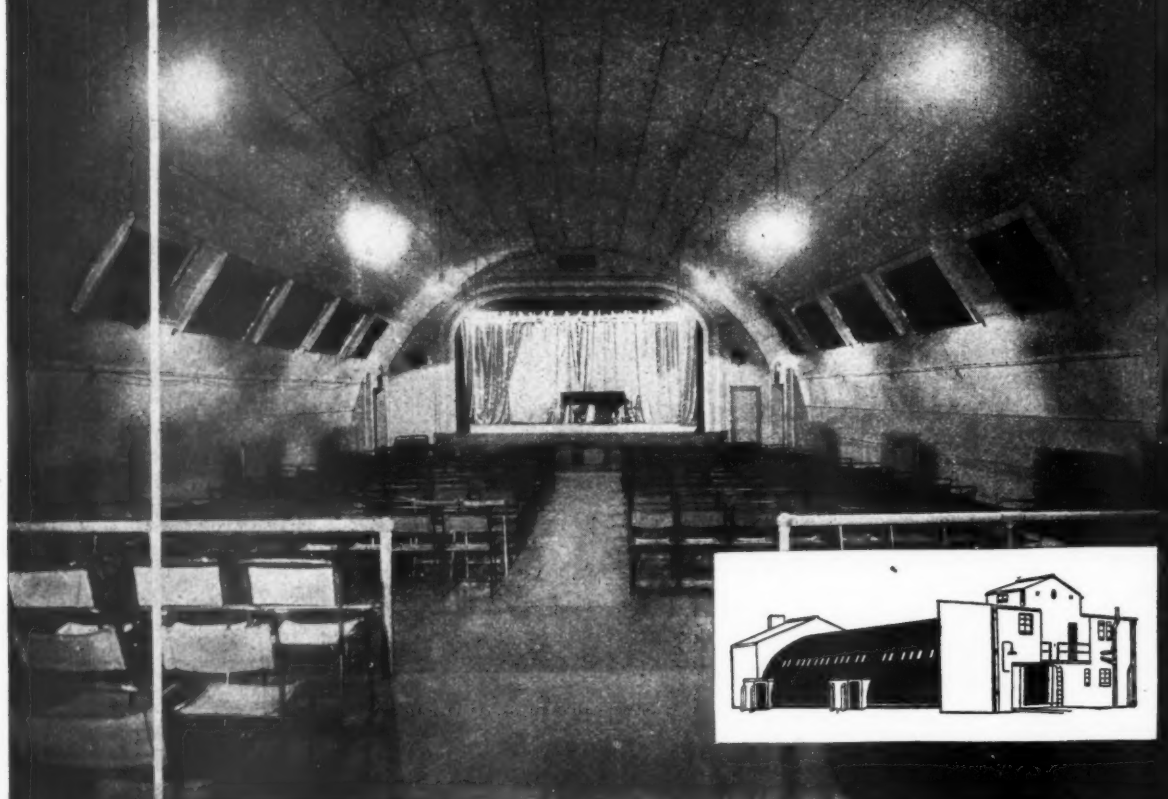
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| <p>Space Economy →</p> | <p>Gyproc two inch Solid Partitions occupy less than half the floor space required by most other types of partitions. This saving in space varies from 5 per cent. of the nett area in a small bungalow to 12 per cent. in blocks of flats. In office buildings the saving can be even greater.</p> | <p>THERMAL INSULATION →</p> | <p>The thermal transmittance "U" value of a two inch Solid Partition is only .43 B.Th.U. per square foot, per hour, per 1° Fahrenheit difference in temperature, or approximately the same as a $4\frac{1}{2}$" brick partition plastered both sides.</p> |
| <p>WEIGHT →</p> | <p>The Gyproc two inch Solid Partition weighs approximately 14 lbs. per square foot when erected.</p> | <p>Sound Insulation (I.P.A.) →</p> | <p>Gyproc two inch Solid Partition gives an average reduction of 34 decibels over the frequencies between 200 and 2,000 cycles per second, which makes it quite satisfactory for all normal purposes.</p> |

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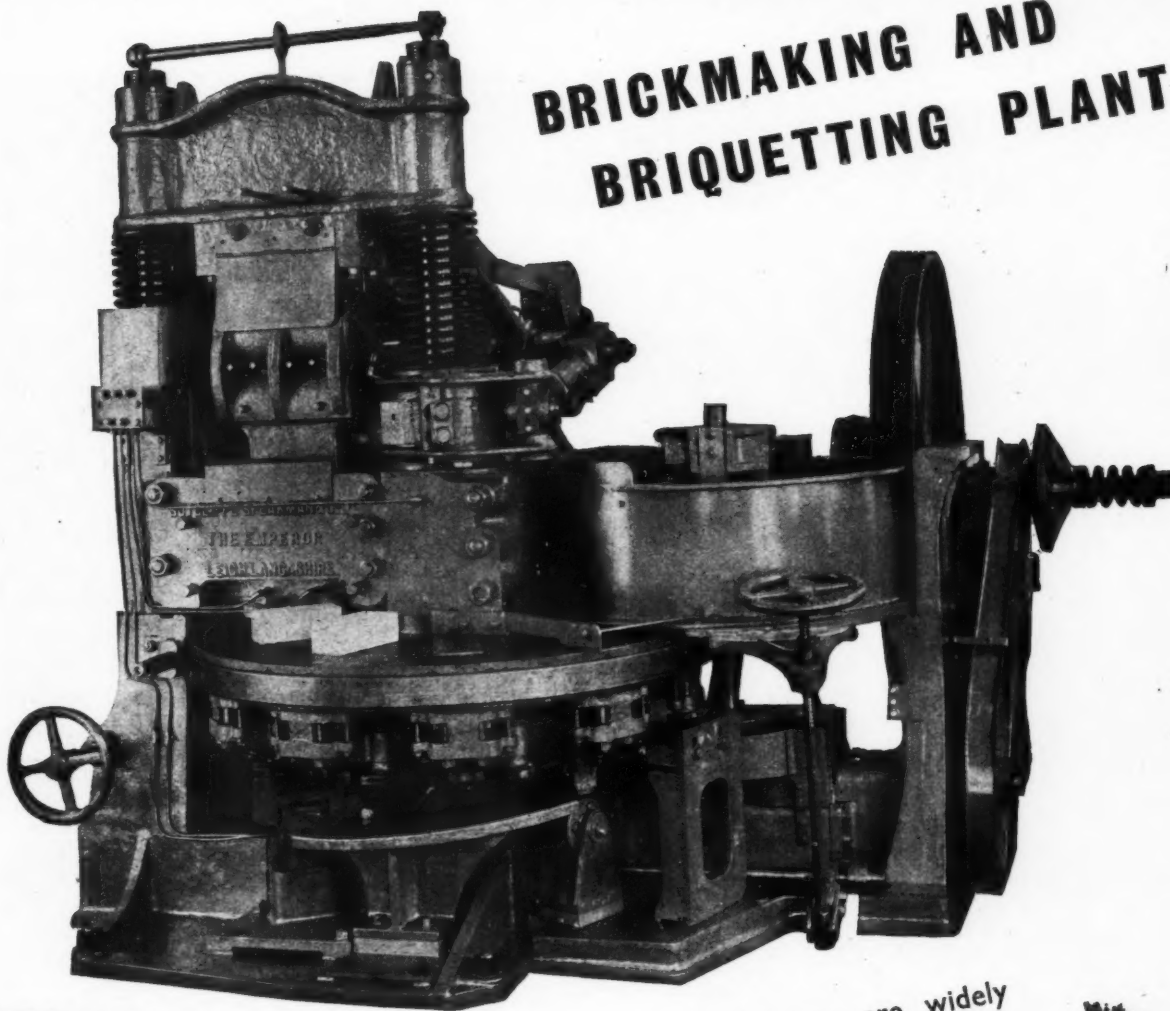
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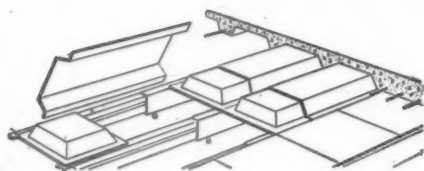
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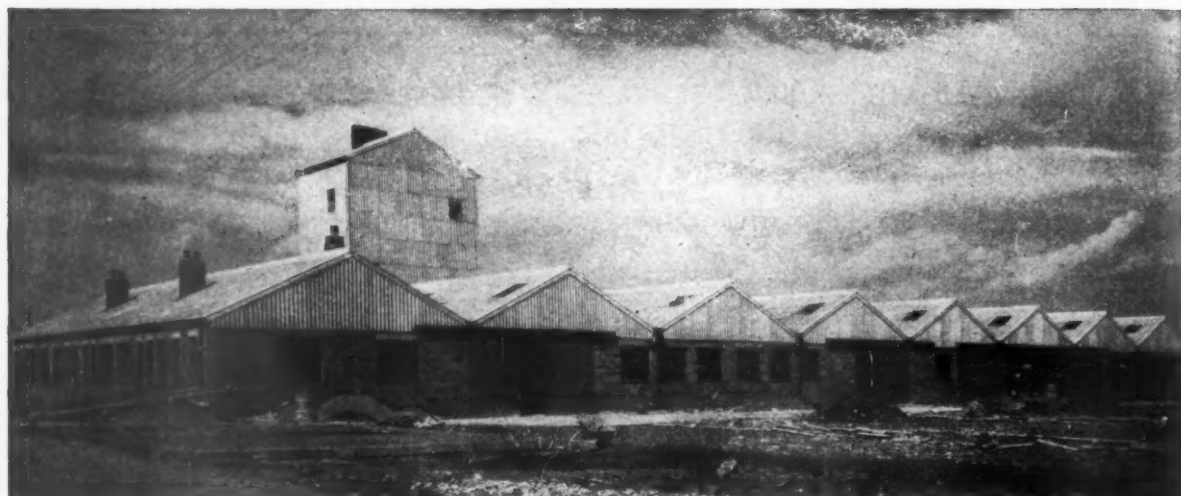
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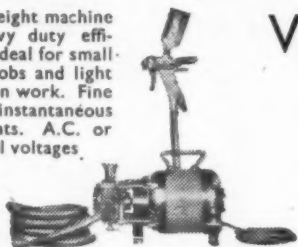
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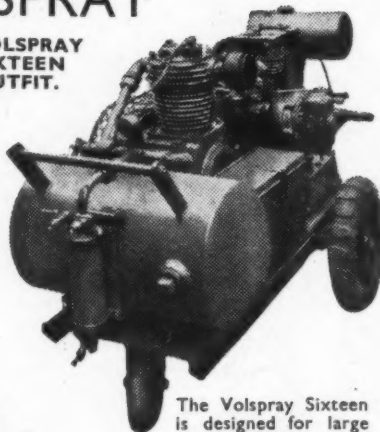
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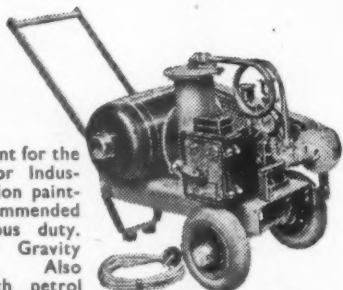
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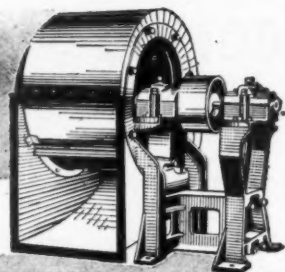
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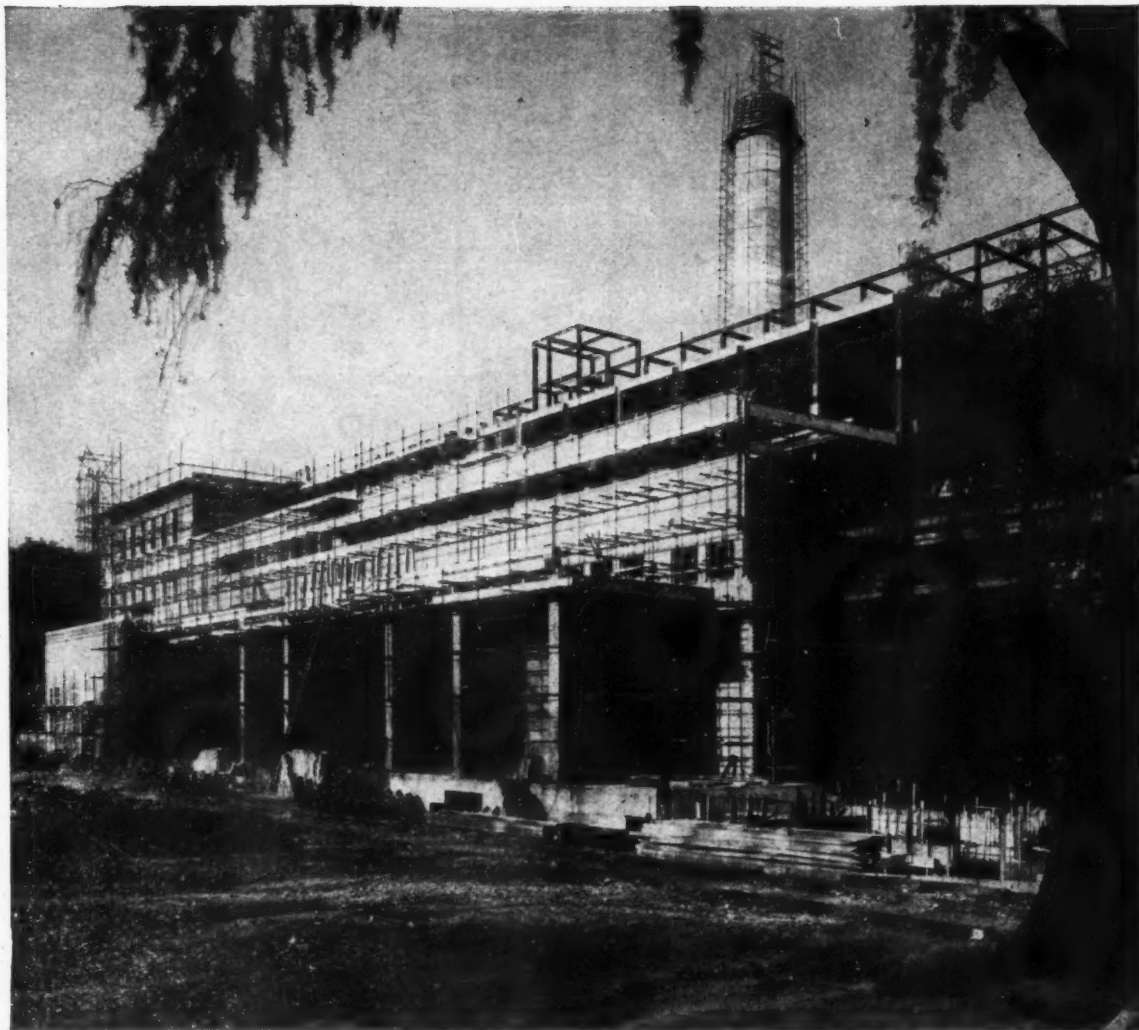
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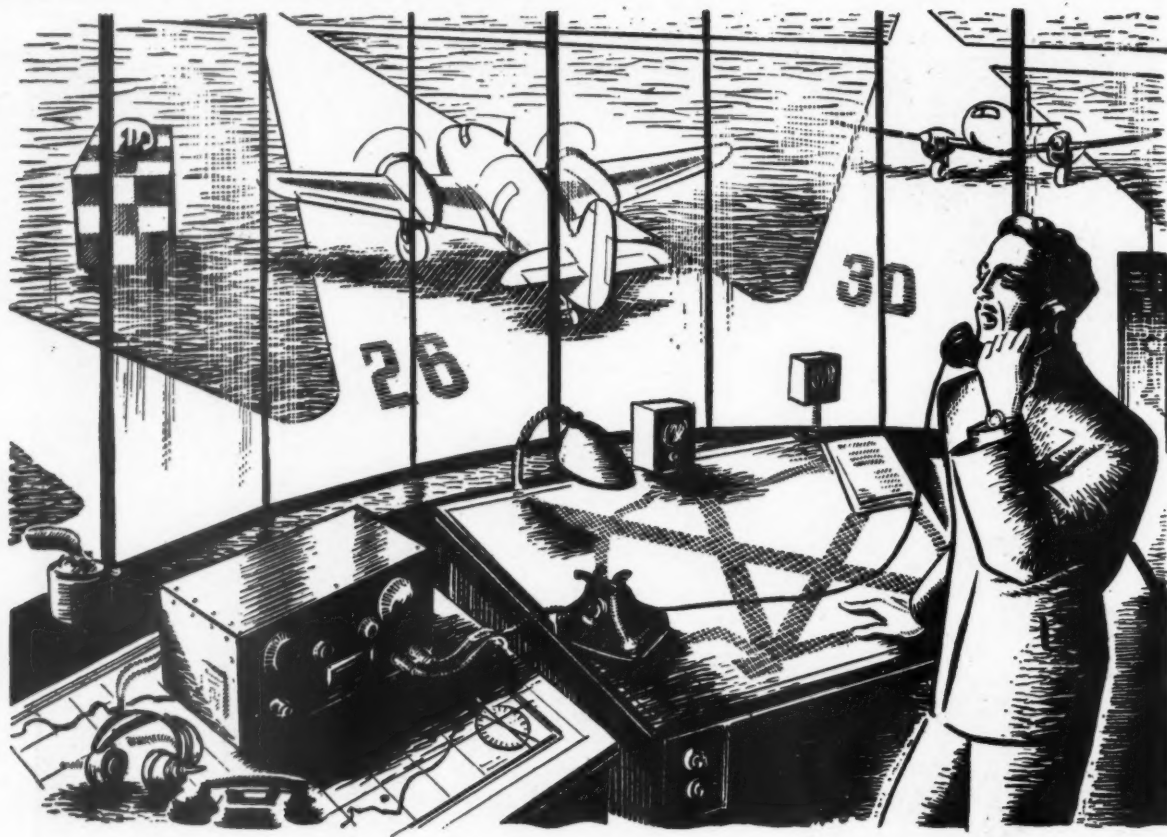
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DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

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

ASCOT. Building and Allied Trade Golfing Association. Autumn meeting. At Berkshire Golf Club, Ascot, Berks. On October 9, The Builders' Trophy will be competed for. Intending competitors should communicate with H. H. Hill, Monument Station Buildings, King William Street, E.C.4. (Phone: Mansion House 3714) not later than September 30.

BBC Third Programme. Howard Robertson, President of the AA, speaks on the occasion of the AA Centenary. Professor A. E. Richardson, R.A., E. Maxwell Fry, and Ian McCallum discuss *The Training of the Architect*. 6.25 p.m.

BRIDGWATER. Opening of the Bridgewater Plasterboard Factory, by the Rt. Hon. Charles W. Key, Minister of Works. Lunch, Clarence Hotel, 1 p.m. Opening ceremony, 3 p.m.

BRIGHTON.—Sussex Industries Exhibition. At the Dome and Corn Exchange. The aim is to provide national publicity to goods manufactured in the County of Sussex.

BRISTOL. Building Science Exhibition. At George Wilks Museum. (Sponsor, DSIR.) Oct 20-Nov. 1

CARDIFF. Building Science Exhibition. (Sponsor, DSIR.) Sept. 29-Oct. 11

EDINBURGH. Enterprise Scotland 1947. An exhibition of industrial design. At the Royal Scottish Museum, Edinburgh. (Sponsors, Scottish Committee of the CID.)

FOLKESTONE. Fourth Building Congress. At Leas Cliff Hall, Folkestone. (Sponsor, BINC.) Admission 1 guinea.

LONDON. Photography Aids Export Exhibition. At the Alpine Gallery, 74, South Audley Street. (Sponsor, Institute of British Photographers.) 9 a.m.-7 p.m.

The Miner Comes to Town Exhibition. At the C.O.I. Exhibition Centre, Marble Arch. There are nine sections dealing with all aspects of the mining industry. (Sponsor, COI for MFP and N.C.B.)

Woman's Fair Exhibition. At Dorland Hall, Regent Street, S.W.1. (Sponsor, "Woman.")

Exhibition of Architectural Lettering. At Friends House, Euston Road, N.W.1. 3-6 p.m. *English Monumental Sculpture*, a talk by Frederick Burgess, A.R.C.A. Percy Delf Smith, R.D.I., the President, in the chair.

(Sponsor, The Guild of Lettering Craftsmen.) 5 p.m.

Mrs. de Rothschild. WVS Garden Scheme. At the Housing Centre, 13, Suffolk Street, S.W.1. Buffet lunch, 12.45, 2s. 6d. Talk, 1.15, 6d.

Visit to Loughborough Park Estate—Guinness Trust. A special coach will leave the Housing Centre, 15, Suffolk Street, S.W.1, at 2.30 p.m. Booking fee and fare, 5s. per head, payable in advance (7s. 6d. per head for non-members). Bookings will be accepted in the order in which they are received. Loughborough Park Estate is the most recent scheme of flats built by the Guinness Trust. Architect—Edward Armstrong. It contains 398 flats of varying sizes and a Community Building and was opened in 1938. (Sponsor, HC.)

Stanley Bragg. *Problems of Rural Housing in Central Essex.* At the Housing Centre, 13, Suffolk Street, S.W.1. Buffet lunch, 12.45, 2s. 6d. Talk, 1.15, 6d.

Chinese Paintings by Miss Chang Chien-Ying, and Fei Cheng-wu. Exhibition at Heal's, 196, Tottenham Court Road, W.1. To be opened by the Chinese Ambassador, Dr. Cheng Tien-Hsi. At 3.30 p.m.

IHVE Jubilee, 1897 to 1947. The President and Council have arranged the following celebrations: *Meeting of Council.* At the Institution of Mechanical Engineers, Storey's Gate, S.W.1. 2 p.m. *Banquet and Dance.* At the Savoy Hotel. Dancing from 9 p.m. to 12.30 a.m. 6.30 for 7 p.m. *Oct. 7. Special Meeting of Members.* At the Institution of Mechanical Engineers, Storey's Gate. Mr. C. G. Vokes on *Air Filtration.* 2.30 p.m. Tea 5.30 p.m. *District Heating.* At the Institution of Mechanical Engineers, Storey's Gate. A special "Jubilee" paper by C. G. Carruthers. Oct. 8

E. Geoffrey Parsons. *Farming Policy for Agricultural Belts of New Towns.* At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) Buffet lunch, 12.45 p.m. Talk, 1.15 p.m.

M. J. Elsas. *The Social Aspects of Housing.* At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, The Housing Centre.) Buffet lunch, 12.45 p.m., 2s. 6d. Talk, 1.15 p.m., 6d.

MAIDSTONE. J. C. Morris. *Equipment of Modern Kitchens.* At Maidstone Technical Institute, Tonbridge Road, Maidstone. (Sponsor, South-Eastern Society of Architects, Tunbridge Wells Chapter, Maidstone Group.) 7 p.m.

NEWS

THURSDAY, September 25, 1947
No. 2746 VOL. 106

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

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

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

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

★
From October 31 to November 3, a course of lectures on HOUSING IN THE CRISIS is to be given at Ashridge, Berkhamsted, Herts.

The lecturers are as follows:—*Housing in the Social Structure of the Nation*, Hon. Lionel Brett, A.R.I.B.A.; *The Economics of Housing*, Professor Ian Bowen, University College, Hull; *The Principles and Method of House Property Management*, Miss Jean Thompson, Ministry of Town and Country Planning; *Design and Construction*, Mr. R. Fitzmaurice, B.Sc., M.I.C.E., Ministry of Works. Discussions will be arranged after all lectures. The course, which is open to men and women of all ages and occupations, assemblies during the late afternoon on October 31, and disperses after breakfast on November 3. The college bus meets specified trains from Euston at Berkhamsted on the opening day. Inclusive fee, £3 3s. 0d. Ashridge is 3½ miles from Berkhamsted, which is an hour's run from Euston. The college is set in beautiful gardens in one of the most famous parks in England. There are two golf courses close at hand, and the surrounding country is ideal for walking and riding. The buildings have been adapted to the needs of a modern residential college, but retain the spacious and informal atmosphere of a country mansion. Enquiries and application for enrolment should be made to the Bursar, Ashridge, Berkhamsted, Herts.

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EPITOME. [From *Concerning Town Planning*, by *Le Corbusier* (The Architectural Press).] Towns are born, and grow throughout the ages; they deform under the assaults of life. An evolution more or less serene is disturbed by the repercussions of successive inventions. The speed of life was $3\frac{1}{2}$ miles per hour; the pace of man, of his ox, his horse, or his ass. An authentic harmony lived enshrined in those settlements, maintained in such intimacy with the human body and mind. Suddenly, the steam-train! Mechanised speeds! A revolution at first latent—then bursting forth at a thousand points, and today a part of life. From 3 miles an hour, we passed to 30 or 60 (train or car) to 300 (passenger aircraft) to infinity (telegraph, telephone, radio). Information, the calculus, experimental science, precision instruments, introducing an unimagined range of measurement, have achieved the **CONQUEST OF METHODS** and provoked the **ANNIHILATION OF HARMONIES**. A page has turned. After a hundred years of struggle, of tumult and chaos, of shame, a second stage of mechanisation commences; the era of harmony.

The application of the Lathom Brick Company to establish a BRICKWORKS ON THE SIDE OF ASHURST HILL, near Wigan, has been granted by the Minister of Town and Country Planning.

The last spur of the Pennines in the west, and a place noted for its beauty, Ashurst Hill commands a splendid view to the sea over the Lancashire plain. A letter to Wigan Rural District Council states that the Minister will consent to a limited extension of the existing quarry and to the establishment of a brickworks on the site proposed. The company's application was the subject of a public inquiry last May. Objection was made by the Lancashire branch of the Council for the Preservation of Rural England, the Lancashire County Council, and the South Lancashire and North Cheshire Advisory Planning Committee.

Several countries have already made known their intention of exhibiting at the LYONS INTERNATIONAL FAIR in April, 1948.

Italy, Holland and Czechoslovakia have each promised to prepare exhibits of their national products. The participation of Austria, Belgium, Sweden and Switzerland may also be considered as certain. Negotiations are being conducted for the participation of several other countries. In order to show these official participations to the best advantage, the Lyons Fair has begun the construction of a new building to be called the Pavillon des Nations.

★★

The first part of the plan for re-building the centre of COVENTRY city is to be proceeded with by the Corporation.

The initial five-year programme has been divided into stages, of which the first two have been worked out in detail. Broadly, the programme, according to *The Times*, embraces the construction of shops in the central square of Broadgate and in half the shopping precinct which is to replace the ruins of an existing street. It also includes the erection of a big hotel in Broadgate, and the construction of a bridge, to carry suites of offices, over one of the main streets connecting with Broadgate. The first phase will include the bridge, the second the hotel. No permanent buildings stand in the way of either phase, although two open-air markets and a civic restaurant will have to be transferred elsewhere. Other phases will fol-

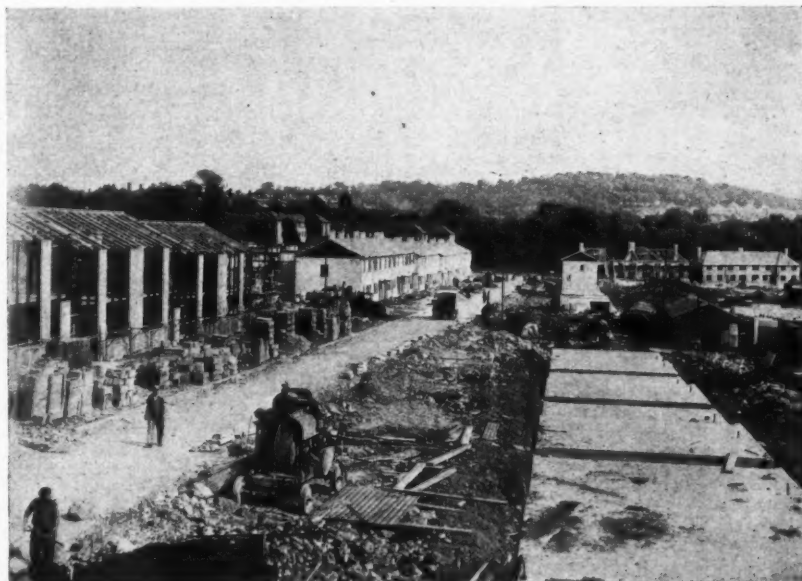
low progressively until the five-year programme is completed. Sites will be allocated for the first phase by the end of the year; building is to begin in October, 1948, and is to be completed by late 1950. From the early part of 1949 a labour strength of more than 1,000 will be required, and application is to be made to the regional officer of the Ministry of Works for the allocation of labour.

★

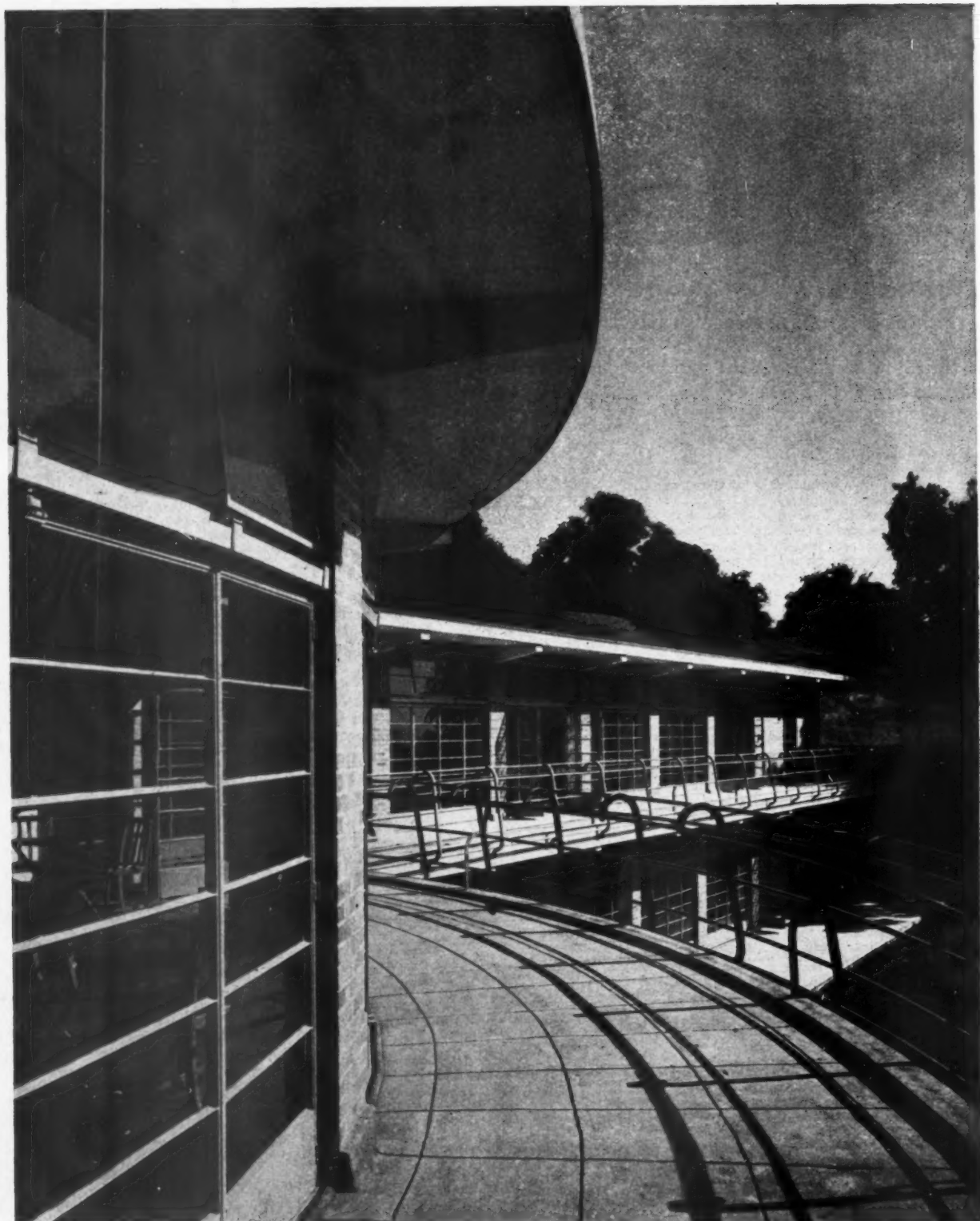
The GWR is building 72 specially designed water-proof road-rail containers for the CONVEYANCE OF CEMENT direct from the factory to the working site.

Each container will hold $3\frac{1}{2}$ tons of cement, and will be loaded three to a wagon. A hinged lid is fitted to the top, which can be clamped down after the cement has been poured in. At destination the container will be lifted from the wagon or lorry by crane and the contents deposited on the site by opening two hinged doors which form its base. This new method will be used when 80,000 tons of cement are transported from Rhooose to Rhayader for the construc-

tion of the Birmingham Waterworks Extension dam. It is expected that 200 tons will be loaded an hour and that 1,600,000 cement bags will be saved. Other work at present being undertaken is the provision of new hostels at Southall, Banbury, Old Oak Common and Westbury for locomotive men and other trainmen. They are to accommodate from 50 to 200 men and will be centrally heated, with canteens, bathrooms, showers, clothes drying rooms, recreation and quiet rooms. A contract has been let for extensive railway engineering works to serve the new strip mills at Margam, Port Talbot. The work includes the diversion and doubling of nearly $1\frac{1}{2}$ mile of railway, the provision of two new marshalling yards with subsidiary lines and sidings totalling 24 miles of track, and the construction of six large bridges with spans varying between 108 ft. skew span and 29 ft. square span, and two viaducts totalling 17 spans and 500 yards of retaining walls. The work is expected to be completed in two years. To cope with the increased quantity of iron ore passing through the G.W.R. Port Talbot docks the company is to lengthen its main discharging quay and provide five hydraulic pumps. The total cost of the two schemes is expected to exceed £600,000.



Eight hundred houses, shops and schools are being erected by the LCC on Evelyn estate, near Kidbrooke, Kent, about eight miles from Charing Cross. The site covers 85 acres, and two types of permanent prefabricated houses, the Hill and the Cramwell, will be built as well as traditional brick ones. The photograph shows some of the houses.



Sanatorium

On the balcony of the new women's wards at Standish House Sanatorium, Stonehouse, Gloucestershire. On the left is a day-room, and beyond, some of the wards. The building, just completed from the designs of Mr. S. E.

Urwin, F.R.I.B.A., County Architect, assistant Mr. A. Gray, A.R.I.B.A., stands on a hillside overlooking the Severn Valley. Further views of the new wards, which replace a building destroyed by fire, appear on pages 273 to 275.

★

Programmes prepared by the Central Electricity Board include the construction of FOURTEEN NEW GENERATING STATIONS during 1951 and 1952.

The Central Electricity Board has prepared programmes of generating plant extensions for 1951 and 1952 providing for the installation in selected stations and projected new stations associated with the grid of additional plant amounting in the aggregate to 3,923,500 kilowatts, and involving an expenditure of nearly £190,000,000. The programmes, which include the construction of 14 further new generating stations—seven in each year—comprise over 60 separate projects, and provide for 2,306,500 kilowatts to be in commission by the winter of 1951 and a further 1,617,000 kilowatts by the winter of 1952. In view of the longer periods now required for the completion and commissioning of new plant, the board has extended its plans to cover, in respect of extensions as well as new stations, not only the fourth but also the fifth year ahead.

The Royal Institute of British Architects has AWARDED SCHOLARSHIPS of £65 for the year 1947-1948 to the following students:

Mr. G. P. Howes (School of Architecture, Schools of Technology, Art and Commerce, Oxford), Mr. Ian H. Smith (School of Architecture, Schools of Technology, Art and Commerce, Oxford), Mr. D. P. Whitehorn (Aberdeen School of Architecture), Mr. Roger Booth (Leeds School of Architecture), Mr. G. Clayton Smith (Leeds School of Architecture). The Scholarships, awarded in accordance with the terms of the will of the late Sir Archibald Dawnay, are intended to foster the advanced study of construction and the improvement generally of constructional methods and materials and their influence on design.



Sir Thomas Gardiner, the new Chairman of the Stevenage New Town Development Corporation. Sixty-four years of age he was Director-General of the Post Office from 1936 to 1945 and Secretary of the Ministry of Home Security from 1939 to 1940. He succeeds Mr. Clough Williams-Ellis, who has resigned. See Astragal's note in the AJ last week.

TEN MILLION INFORMATION SHEETS. I.

THERE are some ten thousand architects' offices in this country. Each office deals in a different way with the classification of the great array of facts hidden away in codes of practice, standard specifications, reports, text books, journals, catalogues, brochures and memoranda of official and unofficial publications. These facts are the foundation upon which the job of building as a physical manifestation and the architect's reputation as an expert is built up, yet most architects will admit that their ambitious filing systems leave something to be desired, if only because the job of classification and organization is too big for the average office.

When one thinks in terms of ten thousand variations upon ten thousand efforts to solve one single filing problem, the colossal wastage involved in the absence of a standard method that all can use begins to become clear. It was this problem that, thirteen years ago, the Journal set out to solve with the original series of Information Sheets. The result showed that the need for an organized library of information had been greater even than the Journal itself anticipated. There was almost embarrassing evidence of their being wanted, not the least significant being the evidence that cannot lie, the evidence given by the figures of numbers of sheets distributed. During the six years 1933 to 1939, leaving out of account the Information Sheets published through the Journal, demands for something in the region of three million reprints were received and satisfied. The number of demands for filing binders and bound volumes equalled the number of architects in the country. In all, including those Sheets that were collected through the Journal, more than ten million Information Sheets were in circulation.

These are astonishing figures. They are difficult even to believe. Yet they are a fact. They establish once and for all the position the Information Sheet Library had already achieved by the beginning of the war. They explain why readers still monotonously write in asking *why* the Library was discontinued, *when* it will be restarted. They prove that the Library had assumed the proportions of a public service not merely to the architectural profession, but to the whole building industry.

In response to those readers who asked *why*, it was necessary up till now to explain that the war—the total cessation of normal building—security considerations preventing the publication of new building instructions or techniques—the shortage of paper—all these considerations made it necessary to suspend their publication. In response to those readers who asked *when*, it was not possible until this precise moment—the precise moment of the publication of this leading article—to give a definite answer. Many considerations, including the continued paper-shortage, made a decision difficult to arrive at. This did not mean that the question was not being debated. Nor did it

mean that the editors of the Library were idle; for three years behind the scenes work on the Sheets has been going forward. And to-day—at long last—it is possible to say that a new Series is about to be born. Failing a new war on October 2, 1947—failing a new war next week, that is to say—on that day the new Library of Information Sheets will be inaugurated as a weekly feature of the Technical Section of this Journal.



The Architects' Journal

9, 22 and 29, Queen Anne's Gate, Westminster, S.W.1

Phone: Whitehall 0611

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

TIME OFF FROM AUSTERITY

Watching, half hypnotised, the dancing of Ram Gopal at the opening of the exhibition of *The Human Form in Indian Sculpture* at the Victoria and Albert the other day, I think perhaps I appreciated as never before the origins of the intensely virile qualities of Indian art. Walking round the newly reopened Indian galleries later on it seemed as if the exhibits were but momentarily arrested editions of the same dance motifs, so powerful was the impression of restrained dynamics to be seen in almost every example.

Driving down the Cromwell Road afterwards and looking at the sad, tepid lumps of Portland stone on either side I could not avoid a sense of depression both because of the grim puritanical inelegance of almost every architectural motif to be seen but by the prospect of further decades of æsthetic austerity—or was it perhaps only the imminent prospect of the October petrol restrictions?

Anyway, Mr. Leigh Ashton certainly deserves congratulation on arranging a most lovely and sensitive exhibition and for starting it off in such an intelligent and entertaining manner, and even if we have never, and will never, evolve anything as energetic as the sculpture of India and Pakistan, at least there is always pre-stressed—or should it be post-stressed—concrete to think about. And that's restrained energy, anyway.

CIAM AFTERTHOUGHTS

Having achieved a degree of detachment from the exciting week in the West Country, it is possible to sum up personal reactions to this unique occasion.

It appears that there were doubts about holding the sixth Congress of CIAM at Bridgwater. Some felt that the provincial atmosphere was unbecoming for discussions on the environment for the "civilisation machiniste," but the choice was triumphantly vindicated, and for a whole week Bridgwater was the centre of the world; perhaps its human scale lent added stature to the giants, and the fireworks sounded the more resounding for its calm, but no matter where it had been held the Congress would have remained the most invigorating architectural event England has seen for many years.

Representatives of eighteen nations and the pioneers of the modern movement were gathered together for the first time since the war, and the occasion seemed not only the lifting of an intellectual and emotional blackout, but a powerful reaffirmation of faith in the future and of the continuing virility of CIAM ideals. It was a pity that every progressive member of the profession, and students particularly, could not have been there to share the stimulus, for there could have been no better refresher course. In a troubled world one currency at least has survived unscathed.

It was a week crowded not only with personalities but with business—reports from each country, lectures, visits, films and four working commissions sandwiched amongst them, one drafting a restatement of CIAM aims, another a new organisational framework more suited to its widening scope and representation, a third on urbanism and architectural expression, and a fourth on architectural education. The pace was terrific, and the eating places of Bridgwater were Babel. Never before, it is certain, had the Café Continental realised so precisely the implications of its name. Figures almost legendary gesticulated at street corners. Cameras, amateur and professional, were poised at all angles. And mercifully the sun shone, and England looked its mellow best.

On returning to London, exhausted but exhilarated, after Bridgwater, the capital felt slightly provincial. If only every international gathering could similarly restore a sense of purpose and values.

THE QUINTESSENCE OF URBANISM

I was pleased to see on the bookstall at the Arts Centre at Bridgwater a copy of the English edition of Le Corbusier's first post-war book. It has just been published by the Architectural Press, translated by Clive Entwistle. Called *Concerning Town Planning*, the book is based on a questionnaire submitted by Le C. in 1944 by the editors



Gandharua, a celestial musician, sandstone sculpture of the 10th century A.D. From the exhibition of Indian sculpture at the Victoria and Albert Museum. See Astragal's note on this page.

of a projected English magazine, now abandoned.

Corbusier has taken advantage of these questions to make a brilliant summary of the ideas on town and country planning he has been propagating and developing over the last twenty years. Preceded by "An Unpremeditated Glance into the Past," which discusses the lessons of Paris, Venice, Strasburg, Ulm and other towns, the replies to the questionnaire cover every town-planning problem from temporary emergency dwellings to the financing of reconstruction. Illustrated with sketches and diagrams in Le C.'s now well-known style, this volume is very good value these days at half a guinea.

WANTED, ONE SQUARE MILE

Like the chases in the Westerns, Le Corbusier's gallops have been among the few refreshing excitements in a time when most excitements are the reverse. The battle here is no new one; our old hero Life versus our old villain Academism. The fair dame is the United Nations Headquarters. (*UN Headquarters*. Reinhold Publishing Corporation. New York. \$3.50.)

It is a tribute to élan vital, blind faith, farsightedness or something as enviable that despite the disappointments at Geneva twenty years ago, the old champion bounds through the forest of question marks, tabulations and dis-

play capitals with unflagging zest and ends by convincing himself and almost convincing us that Life will win this time.

Le C. examines the claims of five proposed sites. No. 1 is in New York. No good at all. "New York is a terrifying city. For us, it is menacing. No. 4, White Plains. That is the place; "all points are satisfied," and the whole complex needs a site of one square mile. And what fun it is to prove that the gentlemen of the Headquarters Commission can't do their sums. They want at least ten square miles altogether. Or is it forty? Their films says forty. Why, gentlemen, Manhattan, with all the docks, and Wall Street, and Central Park, and two million residents, covers only seventeen square miles. What folly! "The reader is asked to judge for himself," and by now the reader is a strong partisan of 1 sq. m. well away from NY.

... BUT WILL TAKE LESS

This has been a seven months' chase. Then one day . . . John D. Rockefeller offers seventeen acres in New York. "We must act quickly and realistically. . . . New York provides the answer. New York will not, after all, crush the UN in receiving it. On the contrary . . ." We reel back. Is Life winning, or Academism, or what? We soon know. "Life has spoken." Perhaps only provisionally? Anyhow, Life accepts the offer that very night.

HARDY ANNUAL

The 1947 *Specification*, published today, is a bit later than usual, but in these days, when publishing is more like a tortoise race than anything else and books often take two years between MS. and bookstall, it seems to me something of a triumph on the part of F. R. S. Yorke and the Architectural Press to produce an annual at all, quite apart from revising it each year. This time, I see, there are new sections on domestic heating appliances and glazed wall tiling and a re-written plumbing section.

I gather that it is still impossible to print as many copies as people want, and I am afraid that those who failed to put their orders in early are to be disappointed. The "sold out" notices went up before publication.

ZEALOUS NEW ZEALAND

When faced with a manifesto from any group of young reformers I feel at once like that Edward Lear family which, you may remember, pursued a voyage round the world "with the utmost delight and apathy." Confronted with those ranked unquestionable aspirations, couched so resolutely in such implacable sens-serif, I fall a prey first to delight that the fountains of youthful enthusiasm are not yet dried up, but still have power to leap and sparkle, and then to apathy, with the familiar patterns that they weave before falling on the cold, grey stones of the public mind.

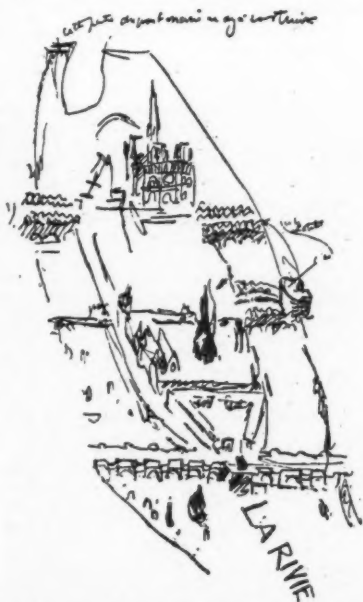
These conflicting emotions once more attacked me as, bowling along "the living rail" through Chislehurst, I read *Planning One*, a new magazine founded by a group of young New Zealand architects and students as a forum for discussion and propaganda in the service of a true architecture. "Architecture," say the editors, "is not possible within a capitalist economy." [So much for the monuments of Rome and Florence, of Paris and Rio de Janeiro.] "Without Everyman," they cry, "there can be no architecture, for building nice houses for nice people is not architecture." [Outside the window the gables and crickets of Chislehurst retired forlornly behind the rhododendrons.]

"Serif letters," they pronounce, "are basically unsound . . ." [and yet so infernally legible]. Wasn't this perhaps, the memory asks, where we came in? Well, if it was, no matter. Architecture would be in a bad way indeed in any country if there were no gadfly like *Planning One* buzzing fretfully in its ear from time to time, and the AJ, buried as it is in the outworn conventions of serif types, capital letters and occasional lack of assurance, sends its very best wishes for the continued prosperity of its new contemporary.

TAILPIECE

Tune in to the Third Programme today at 6.25. Howard Robertson is broadcasting on the AA as the first shot in the centenary programme. Don't switch off when he has finished, as there will be an interesting discussion on *The Training of the Architect*, with Prof. A. E. Richardson, Max Fry and Ian McCallum.

ASTRAGAL



From *Concerning Town Planning*. See Astragal note on the Quintessence of Urbanism.

LETTERS

CID's New Director

SIR.—Having known Gordon Russell for many years before the war, I can vouch for it that there are more reasons than have already been published why his appointment as Director of the Council of Industrial Design is so significant. He is known for his high standards in furniture design and production, but I think the motive force has always been an intense interest in sociological and economic affairs. His workshops at Broadway were worth visiting not only for themselves but for the personnel they contained. In 1930 or thereabouts he was the moving spirit of the Traders' Association of Broadway, who instructed me to prepare a plan for the parish, probably the first complete study of its kind. When confronted with an abstruse problem he would retire to dig in his herbaceous border, and there, about three feet down, are many of the ideas which we hope will now be brought to light.

London

G. A. JELLCOE, F.R.I.B.A.

Architectural Competitions

SIR.—In these days of shortages it is perhaps not surprising to find an absence of competitions, at present. The reasons for this, however, are rather obscure, and some ventilation of the matter would do a great deal of good, I think. Most current work is of a utility nature, and some more exciting outlet for architects' abilities would enable us to "keep our hand in" as regards the higher forms of architecture.

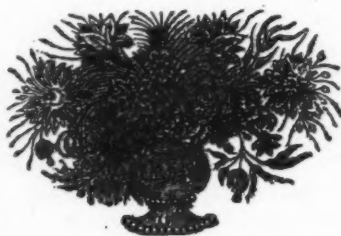
ANON



On October 2 subscribers to the ARCHITECTS' JOURNAL will find the first two of the new series of Information Sheets in their copy of the JOURNAL.

Gordon Cullen has devised the symbol shown above for the Information Sheet Service, and architects will in due course find it as ubiquitous as other famous symbols.

Sir Stafford Cripps has announced a cut of £200 million in our capital programme. Against this background Ian Bowen discusses modifications to the building programme and suggests how such modifications may be made without wrecking the housing plans.



Curtailment of the Building Programme

[by Ian Bowen]

The building industry during the 1939-45 war was organised according to a plan; the plan may have had its faults, but at least it embodied a connected set of ideas. Policy had some direction, and even the critics admitted that there was a policy to criticise.

One aspect of the war-time plan was control of entry into the industry. The registration of builders was used as a means of preventing the entry of more than a limited number of applicants. How this weapon of control might most effectively be used for the long-term benefit of the industry was widely discussed, and various proposals were considered in the technical journals and by leaders of the industry. But matters of policy have a habit of becoming bogged down in such general discussion. No general purpose, or principle of granting licences, acceptable to the industry itself, was worked out. The Government itself had also failed to formulate the basis for a policy. Meanwhile, the pressure of men returning from the Forces, and no doubt of many others who saw the chance of prospering as master builders or decorators, in view of the unfilled demand for work to be done, grew like a snowball; and, to change the metaphor, the dam was broken—free entry was allowed.

Thus the huge influx of labour into the industry planned during the war was not accompanied after the spring of 1946 by any of the planned control or the constitution of firms in the industry. Not even the number of entrants was to be controlled.

It is necessary to recall this recent industrial history in the light of the problems of to-day. There is a widespread demand for a curtailment of the housing programme. Pressure on the Government from the FBI, from many leading economists both inside and outside Whitehall, and from American official sources must all no doubt be tending in the direction of a heavy cut. The unanimity of the advice does not render it less impractical. It is most unfortunate that the planners of to-day are so much concerned with the building industry, and so little acquainted with it. At one time they urge a programme of new towns, the consequences of which over a ten-year period have only to be reduced to the roughest figures to be seen to be chimerical; at another time they go sharply into reverse and suggest that an existing, painfully nurtured, and barely emerging housing programme is the cause of our national near-bankruptcy.

In the recent speech of Sir Stafford Cripps a cut in the capital programme of this country of some £200 million was mentioned, but so far the doom of the building programme has not been pronounced. Housing may still escape. It is not too late to repeat the reasons why it should.

The myriads of small firms that have swarmed into the building industry since the beginning of 1946 are probably not for the most part engaged on new housing work. A great many of them are, as everyone knows but is too reticent to admit, the spivs of the industry. They do a series of jobs which by no reasonable standard could be called "essential work." They drain off all the spare supplies of materials. Their effect is to keep the new housing jobs undermanned and under-supplied with materials. This is true not only of many of the smallest new firms but of a proportion of the medium-sized concerns, which have attracted labour to black market, or nearly black market, work; some of this work no doubt appears in the official statistics as "housing repairs" and some under the category "other work."

It is clear, then, that there is a considerable margin of slack that could be taken in without reducing the new housing programme.

Secondly, there are all the schemes for factory building. A number of them have been started, under Government pressure or sponsorship, for the admirable purpose of providing employment in the former distressed areas. This purpose may be in need of revision in the light of the present emergency, involving as it does the need to re-deploy the nation's labour force.

Thirdly, the creation of an organisation to carry out a large housing programme, however this is tackled, takes time. A building planner, like Napoleon, can afford anything better than time. It has taken laborious and heart-burning months even to get as far as we have done—124,000 houses completed and 249,000 in hand. To stop or reverse this programme for a few months means destroying the possibility of renewing it for at least another year, or even a few years, and destroying the incentive to work for many workers now waiting for homes.

And what is the saving involved? The capital value of new housing built in 1946 was £189 millions, or 35 per cent. of total building work done; for 1947 it was planned to be some £340 millions, and will, in fact, probably not exceed £250 millions. There are strong economic grounds for preserving this last figure as a target and for economising on the other items of the building programme.



WOMEN'S WARDS

AT A GLOUCESTERSHIRE SANATORIUM

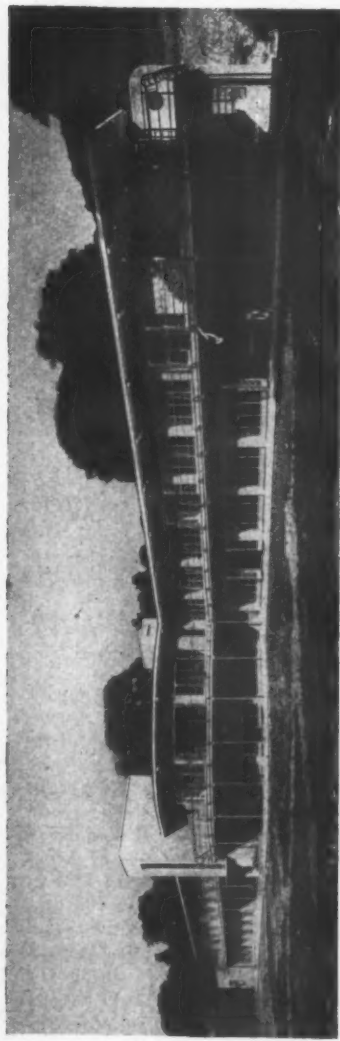
BY S. E. URWIN,
COUNTY ARCHITECT
ASSISTANT, A. GRAY



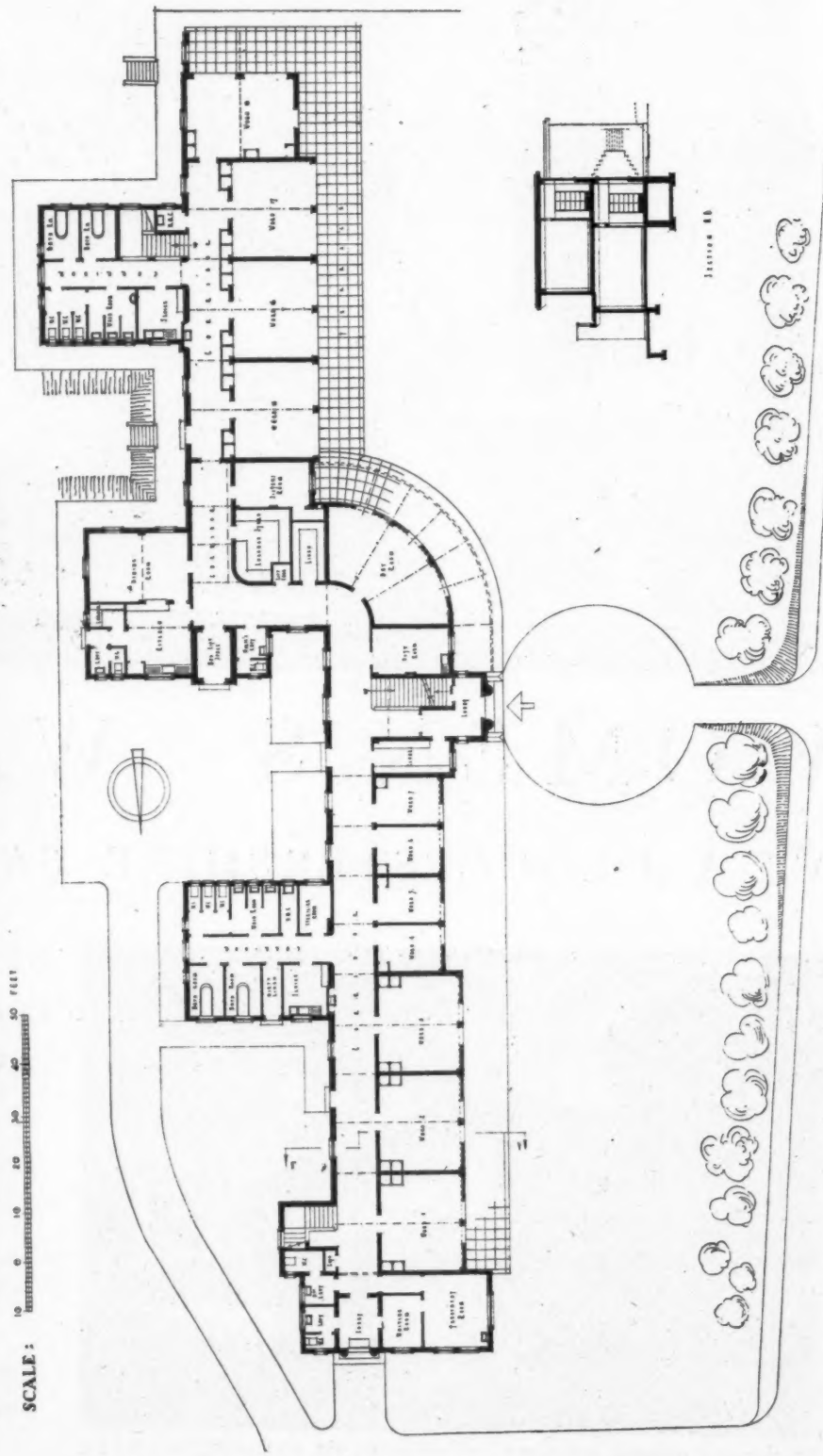
Top, the main entrance, day rooms and wards on the south-west front; bottom, another view of the wards on the same front.

GENERAL.— These women's wards at Standish House Sanatorium, Stonehouse, Gloucestershire, have been erected for the Gloucestershire Joint Board for Tuberculosis. The sanatorium came into being in the mansion (Standish House) and ex-Army hutting following the 1914-18 war. During the war it had served as a military hospital and at the beginning of the second World War the women's wards were still in the hutting, but they were largely destroyed by fire in 1944. In 1939 proposals were under consideration

WOMEN'S WARDS AT A GLOUCESTERSHIRE SANATORIUM



Left, the south-west front.



GROUND FLOOR PLAN

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

for rebuilding the wards and the Ministry of Health agreed to the replacement of the burnt-out building in 1944 with a modern one in permanent construction.

SITE.—On a hillside overlooking the Severn Valley. The wards face south-west, an aspect particularly desired by the medical superintendent.

CONSTRUCTION.—The main walls are of local bricks and the first floor is constructed of pre-cast concrete beams. Floors of the wards and day rooms, etc., are Granwood blocks and the floors and walls of the corridors, sanitary annexes, etc., terrazzo. Flat roofs are finished with asphalte and the first floor balcony with Paropa roofing. Owing to the national shortage of steel and timber, the construction of the building had to be carried out with the bare minimum of these materials.

ELEVATIONAL TREATMENT.—Elevations are of local hand made bricks with artificial stone dressings to the entrances, etc. Windows are standard steel type except the folding and sliding doors to the ward fronts and day rooms, which were specially made. Balustrading to the front of the balcony is of wrought iron tubing with tee iron standards. The main staircase window is of glass bricks.

INTERNAL FINISH.—The building is plastered throughout with the exception of the walls of corridors and sanitary annexe which are in terrazzo to the height of the top of the doors. Walls and ceiling are finished with flat oil paint, the wards, etc., to an ivory tint and the corridors and

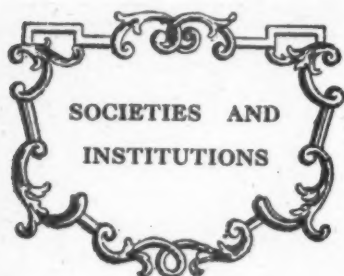


Top, a day room ; bottom, one of the wards.

staircases a pale shade of flesh pink. Staircases are precast concrete and doors to wards standard steel French doors. Built-in wardrobes are provided, one for each patient. The electric equipment to each bed includes bed light, power plug, call bell, plug-in wireless head phones (connected with main set in duty room). When a patient rings for a nurse, not only does a bell ring in the duty room but a light automatically appears outside the ward but the nurse can only switch off the light from inside the ward.

SERVICES.—Food and luggage lifts are being installed, but although there is a well for a bed lift the supply of the lift itself has had to be deferred on account of the shortages of materials. Heating is by steam from the central boiler house which serves the whole sanatorium and hot water is supplied from steam-heated calorifier. The general contractors were Messrs. G. Wimpey and Co., Ltd. For list of sub-contractors see page 286.





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

CIAM

Congress

September 12 and 13. At the CIAM Congress* at Bridgwater. Lectures on URBANISM by Walter Gropius and ARCHITECTURAL EXPRESSION by J. M. Richards and an intervention by Le Corbusier.

Urbanism

Walter Gropius: For whom are we going to plan and build? For the people, of course, and that includes all income groups. The body called "Society" is an indivisible entity which cannot function when some of its parts are not integrated or are being neglected, and when it does not function properly any body will sicken. The sickness of our present communities is the pitiful result of our failure to put basic human needs above economic and industrial requirements.

Overwhelmed by the miraculous potentialities of the machine, human greed has interfered with the biological cycle of human companionship, which keeps the life of a community healthy. At the lower level of society the human being has been degraded by being used as an industrial tool;

this is the real cause of the grim fight between capital and labour and of the deterioration of community relations. We now face the difficult task of re-balancing the life of the community and of humanizing the impact of the machine. The key for a successful rebuilding of our post-war communities, I believe, is our determination to let the human element become the dominant factor. When the pattern and scale of future communities become human again we cannot fail.

Community rehabilitation seems to call first for drastic steps to stimulate the community interest of every citizen by letting him participate actively. To attain this, our administrative framework must be humanized. It should be based on self-contained neighbourhood units, urban as well as rural, small enough to serve as organisms for re-activating normal social intercourse.

Zoning laws have not been safeguard enough against the spreading blight; we badly lack legal instruments to channel any development—privately or publicly undertaken—into a controlled and well-balanced communal organism. We cannot blame the real-estate man, who simply follows his business; it is up to the community to keep him from running wild. But he was not stopped because we failed to foresee the complex consequences which would arise. This scientific age has obviously prevented us from seeing our complicated life as an entity, for we have become too occupied by overspecialization. The professional man bores a hole ever deeper into his limited field of knowledge until he can no longer see his neighbour or know what he is doing. His head finally disappears and he has become a blind mole.

A CHALLENGE TO REPLAN SOCIETY

The end of this war offers a challenge to replan society, here and abroad, to co-ordinate the achievements of specialists, and embrace all phases of life. But life is a floating process, and the essence of it is change. We need to fix upon a flexible method of approach before we can physically plan for the future. The great discovery of our period is that there is no such thing as finality and that specialized knowledge is meaning less if we are not aware of its relation to other knowledge. Since art, science, and religion to-day are still disconnected islands, we grow impatient for a synthesis which will make whole what is now, unhappily, separate. Only then will the individual be integrated into his community, carried by a new faith.

The elements of science, art and philosophy for the composition of a new world lie ready, and food, leisure and freedom are within reach of all of us, but we still have to find the moral unity to take possession of them, we still have to develop a workable method of collaboration which, in the first place, is an art of controlling the little egos.

Planning has to go the whole hog; it is obvious that piecemeal plans, partial references, and appeasing concessions are but retarding factors in the way to a well-co-ordinated, over-all pattern of planning which would promote a healthy, twentieth-century community life. The remedy is to be found only in a deeper understanding of the planning problems on the part of the people themselves. They will then judiciously put pressure upon their governments to come to proper terms. In this respect every one of us can be instrumental in the form of his own environment.

LAND NOT A COMMODITY

Land is not a commodity, to be traded in shops over the counter. We should realize that without undermining the basic conceptions of property, the ownership and use of

land must be regulated by legislation so that the right of the community gradually rises above that of the individual when vital public problems are considered. Urban communities everywhere are critically in need of an extension of their powers to zone and to regulate sub-divisions, in and beyond their present urbanized areas. This is the pivot upon which any future success in planning is hinged.

I have no doubt that the quantity production methods which made the low-cost automobile possible can be applied to produce houses at a minimum cost; but this cannot be done until we have re-organized the building machinery. The whole post-war construction problem hangs upon our ability to co-ordinate. Our building standards can be raised to higher potentials only by increasing co-operative efforts without at the same time frustrating individual initiative.

Herbert Read, the English writer, in his foreword to *Creative Demobilization*, says that "Co-operation is the only 'technique' of intellectual and moral progress, and it is a technique which implies collaboration and not direction, freedom of initiative, not the impress of authority."

A synchronized effort on the part of all those involved in building operations—administrators, industrialists, financiers, realtors, architects, contractors, engineers and workers—should concentrate on a truly realistic, comprehensive construction plan to be offered to the Governments. Most certainly such a plan would have to secure not only good prospects for business and employment, but follow definite progressive social standards for the physical pattern of new communities. Only such a plan could, without infringing upon individual freedom, eliminate the bugaboo of excessive governmental control. The plan would need to offer also a realistic programme for gradually superseding old methods of subsidizing new housing projects, which were costly remedies, as we know, and even rather questionable as to the results attained.

We need incentives to increase private enterprise. For perennial subsidies do not lead to a real solution of the housing problem. Subsidies are to be considered only as a measure of transition until means and ways are found for solving the housing problem economically. One of the means of gradually reducing the cost is prefabrication.

People look upon prefabrication as an entirely revolutionary idea, but from my extensive experience with prefabrication—I began my experiments in 1910—I have come to see it as a slow, evolutionary movement not intended to cause a sudden revolutionary break.

OVER-MECHANIZATION

Very gradually the process of building splits up into shop production of building parts on the one hand and site assembly of such parts on the other. More and more the tendency will develop, I believe, to prefabricate the component parts of buildings rather than whole houses. Here is where the emphasis belongs, for man will always rebel against an over-mechanization which is contrary to life: Men must not live in myriads of identical dwellings so that he might mistake his neighbour's door for his own after a cocktail party. Because of an extremely ramified integration, the competing building industries should agree first upon a reduced number of standard sizes for component parts of buildings. The designer and builder will then have at their disposal something like a box of blocks to play with—an infinite variety of interchangeable parts for building, which could be assembled into individual buildings of quite different appearance and size.

*The Congress was also dealt with in the leading article and by Astragal in the AJ last week, when photographs of the delegates were published.

Prefabrication, as a logical progressive process aimed at raising the standards of building, will finally lead to the combination of both, which means higher quality for lower prices. There are many analogous cases of industry successfully offering improved commodities at lower prices to serve as evidence for such a statement. Thus prefabrication at last becomes a vital instrument to solve the housing problem economically. It will help to free us from the hamstrings of perennial subsidies in housing and from much of the governmental control and red tape it necessarily implies.

We need not fear that our future residences will be regimented because of standardisation. Natural competition in a free market will take care of that. Men did not hesitate to accept widely-repeated, standard forms in the pre-machine periods of civilization. Such standards resulted from their means of production and from their way of living. Mere machine repetition of a design certainly does not create a standard, because standards represent rather a combination of the very best many individuals have contributed to the solution of a problem. The standard forms of towns of the past express a happy blend of technique and imagination, or rather a complete coincidence of both.

But many of to-day's shapeless developments remind us of Frank Lloyd Wright's fitting remark: "Standardization can be murder or a beneficial factor, as the life in the thing standardized is kept by imagination—or destroyed by the lack of it."

Because architecture lost touch with community life, it became an aesthetic end in itself during the industrial age. The external embellishments of a building were designed to rival those of the neighbouring building instead of being developed as a type to be used repeatedly as a unit in an organic neighbourhood pattern.

THE NEW PHILOSOPHY IN ARCHITECTURE

The emphasis on being different instead of searching for a common denominator characterized the last generation of architects who dreaded the anti-human influence of the machine. The new philosophy in architecture recognizes the predominance of human and social requirements, and it accepts the machine as a modern vehicle of form to fulfil these very requirements. We have convinced ourselves that the repetition of simple, prefabricated building elements can make for better utility and beauty.

It is nonsense to label modern architecture as merely a functional or scientific movement. On the contrary, its initiators have directed all their endeavours towards the fusion of emotion and technique through short-cuts of creation rather than by computation. We experience a new conception of space. The old static three dimensional space of Newton has been replaced by a world of relativity of continuously changing energies which has forced us to revise our way of life. In architecture space is in flux; time, the fourth dimension, has become a part of it.

Today we can say that the prototypes of a new architecture have been created. This architecture, beyond a doubt, is here to stay, and the generation of architects practising after this war will secure its general acceptance by making it beautiful and comprehensible to all.

THE INTERNATIONAL STYLE

And let us no longer be deceived by that misleading designation "the international style." It is true that the achievements of science and technique employed in modern architecture are international in character, but the tendency of the present architectural spirit is to derive expression from regional

conditions, from indigenous elements. Slowly, but surely, we shall depart from what I like to call "the international style," these classical colonnades borrowed from the Greeks which adorn the town halls, bank buildings, museums, and ministries of the world from Moscow to Washington.

What sequence of procedure should we employ to break the vicious circle choking our cities? As they need relief from congestion, from "high blood pressure," we should first siphon out these people who cannot be permanently employed in the city, and offer to resettle them, together with some smaller industries, in neighbourhood units to be built in the country. I want to emphasize that such a policy requires the transfer of endangered production as well as purchasing power from sore spots in the city to a sound new area. There stranded workers can be reclaimed for production at a much lower cost *per capita* than the old city would need to pay for slum clearance on expensive land, and for unproductive relief. Such a transfer of idle labour would relieve the sick body of the old city, improve its circulation, and open up space for its rejuvenation.

The open spaces thus regained in the city could be used for the erection of necessary communal facilities and park areas, and for a basic net of traffic arteries connecting the neighbourhood districts with each other and with the civic centres. (The reopened areas of the dying cities could then be returned to their proper functions as integral parts of an organic social structure for the whole region.)

A neighbourhood unit should have a local government. Public officers within immediate reach of the voters would be able to provide a more direct reaction of the will of the people upon their administration. The sense of community spirit lost in the chaos of the fast growing metropolis can here be developed to favourably influence the growth of distinct characteristics in the community.

Relations between families, friends and co-operative teams would have a better chance as creative factors in ordinary living than they now know in the chaotic cities which isolate their citizens. Disregarding some few secluded hermits, man is a gregarious animal, whose growth is always accelerated and improved by life in a healthy community. The reciprocity of influence from individual to individual is as essential for mental development as food is for the body. Isn't it ironical that the social life of the people—where they live closest together—is thoroughly disintegrating? Left alone in the city desert without neighbourly contact, their minds are dulled and their growth stunted.

COMMUNITY CENTRES MORE URGENT THAN HOUSES

Reassured by scientific observations, I am deeply convinced that the building of neighbourhood community centres is of even greater urgency than housing itself, for these centres represent a cultural breeding ground which enables the individual to attain his full stature within the community.

The rehabilitation procedure can be speeded up by first creating the administrative set-up for new city neighbourhood units, and by actually building for each of these units a small community centre, even before any new housing has been started.

These centres could best be developed in connection with the schools and would enable the people to control their own fate more efficiently. The cost of these administrative units would soon be repaid, for the usual unproductive expenditures for relief, delinquency and crime, decline as rapidly as the initiative of the people grows. This procedure seems to me to be a good beginning for practical rehabilitation.

Architectural Expression

J. M. Richards: The purpose of the short paper I was asked to give at this stage of the sixth Congress is to begin preparation for the seventh Congress by putting forward some ideas that might be discussed more thoroughly then. I am not, therefore, making any attempt to state authoritative opinions but only to define some of the problems that face us in the particular field with which I am concerned and try to suggest the direction in which CIAM could profitably pursue its researches.

The field with which I am concerned is that of architectural expression in relation to the architect's public, a field which the English group at any rate felt demanded the attention of CIAM at this present moment, and I would like to begin by making two comments on the English group's choice of this line of study. First, it does not represent any abrupt break with the line of study that CIAM has pursued hitherto. During the last few days we have been discussing the contemporary architectural situation, with particular emphasis on the realization of CIAM ideals in various countries, or the reasons why CIAM ideals are not being realized to the full. In doing this we have to face the fact that these ideals express themselves in an idiom which is by no means accepted or understood by the man in the street. It is natural for the man in the street, however clearly—on an intellectual plane—he may understand the rational basis of modern design, to judge it in practice very largely by what he sees in the street; that is, as a visual art. And if he does not find the visible products of modern architectural thought sympathetic to his own aspirations, then modern architecture as a whole will not obtain his support and may be in danger of becoming an art of the kind that is appreciated only by connoisseurs of a private cult.

A QUESTION MODERN ARCHITECTS MUST ANSWER

It might be argued, in answer to this, that it never had been the rôle of the man in the street to discriminate about architectural style, that traditionally he accepts the fashions set elsewhere, which he is habituated to regard as part of the natural order of things. Although I referred somewhat disparagingly just now to an art only appreciated by connoisseurs of a private cult, that, in fact, exactly describes the art of architecture in several admired periods, like the seventeenth and eighteenth centuries. Need the architect, therefore, the argument might run, concern himself with the reactions of the man in the street? As long as he has faith in his own integrity as an artist, should he not follow his own inspiration without worrying about popular appreciation? That is one question modern architects must answer, and in posing it I have made it clear, I hope—and this is the second of the two points I mentioned—that the English group, in proposing a study of architectural expression, is not thinking of the abstract science of aesthetics but of questions of this kind; in particular whether modern architecture has a duty to provide the means of self-expression to the man in the street, and, if it has such a duty, what can the architect do consciously to provide the missing link between his own experiments in expression and the public's frustrated wish to participate in them?

An obvious answer to the argument that it is the business of a few specialists to work out an appropriate contemporary idiom, and

the business of the man in the street to appreciate it if he can and accept it if he cannot—as he did, for example, in the seventeenth and eighteenth centuries—is that the practice whereby fashions percolated downwards from above was a reflection of a hierarchical social system, which has now changed. Modern architecture prides itself on its sociological awareness, and on deriving its inspiration from the actual needs of humanity. Only by doing so, indeed, can it properly represent an age which is striving towards an egalitarian type of social organisation. The man of taste, as the dominating figure, has departed, and modern architecture must now presumably find its patron not in the privileged few, but in the enfranchised many—or at least in the various democratic and co-operative organizations by which the many are represented. Does this mean that architecture as an expressive art must defer to the unformed tastes of the man in the street or the councils and committees that represent him, pending such time as he and they are equipped to play the part of arbiters of taste?

ARCHITECTURE AN EDUCATIVE MEDIUM

Not necessarily, because architecture itself is an educative medium. It can itself fulfil the purpose of advertising the potential of the modern world. It can show people what science ought to be able to do for them and thus help to create a demand for the rational application of means to ends to which modern architecture gives formal expression. It is fundamental to CIAM beliefs that the sociological and technical aspects of architecture and its formal expression are interdependent, and a case can be made out for ignoring the man in the street's failure to give immediate welcome to modern architecture's outward appearance on the grounds that, as soon as he understands what modern architecture can do on his behalf—in the way of improving his standard of living and applying the benefits of modern science to the enrichment of his environment—then he will come to appreciate all that modern architecture involves, visually as well as functionally.

It has been said that modern architecture entered the home by way of the kitchen, and it is certainly true that the modern kitchen and bathroom, bringing as they do the delights of science directly into the home, have not been greeted by any mistrust of the new materials and shapes they brought with them. In fact their untraditional appearance and shining synthetic surfaces are valued as proof of the authenticity of the new contribution they can make to the comfort of everyday life. So perhaps we can go so far as to say that the ordinary man does not so much reject the modern idiom as cling to an earlier idiom because he has no confidence in what the brave new world the modern one belongs to offers him. He has accepted the modern kitchen and bathroom because from his own experience he has found them more efficient and economical, and thence more agreeable and even positively exciting. He may sense occasionally some of the exciting possibilities of modern architecture as a whole, but he will only come to regard them as possibilities to be welcomed into his own life when the scientific progress they stand for is shown to be something that he as an individual will benefit from, not something to be feared and therefore resisted.

THE ARCHITECT'S ATTITUDE TO THE MAN IN THE STREET

The question of the architect's attitude to the man in the street becomes therefore a choice between two alternatives: he can produce what he, for his own reasons, believes to be good architecture and hope that people will come to like it by habit, and by identify-



A general view of the CIAM Congress in session at the Arts' Centre at Bridgwater. At the extreme right is J. L. Sert, the new President of CIAM.

ing it with the improvement its scientific methods can bring to their environment. This might be a slow process, in which the architect—in his capacity as architect—can only play a minor part; for an improved environment depends on economics even more than on technics. Modern architecture can only serve the public fully if the rational philosophy on which it is based is accepted in other fields—especially political and economic fields—as the basis of their development, too. Modern architecture's forward progress depends on the establishment of a rational world of which it is but one typical manifestation. It will require, for example, the removal of economic insecurity to persuade the man in the street to cease to cling to what he has known in the past just because it is familiar, and to adventure instead into the unknown.

Alternatively, the architect can say to himself that he has some direct part to play in preventing a new architecture from being frightening because it commits the public to the unknown. He cannot himself remove economic insecurity, but he is one of the people through whom the abstractions of science are translated to the public in visible form, and the way to translate them is an important link in the process by which architecture is enabled to contribute to the better ordering of the modern world. In any case I have been speaking of the architect, and I have been speaking of the man in the street, but in fact, of course, they are not creatures of a different species. The architect is only a specialized man in a rather more consciously organized street; and as well as being himself one of those who must share the task of launching the world into the unknown future, he is also one of those for whom the new world is being created.

So the question resolves itself into this: whether the architect is to regard the public as the passive recipient of the benefits he has to offer, or whether, in the special circumstances of today, he is to make a special effort to enable the ordinary man—who is, for the first time in history, the real patron of architecture—to share somehow in the creative process. I do not mean, of course, that he might assist in the actual designing of buildings; only that the visual standards aimed at might be such as already come within his experience, so that, as far as he is

concerned, appreciation can be based on what already means something to him emotionally. Perhaps this is more easily done in the field of town planning, than of architecture in the limited sense, and the requirement is for a studied humanization of the visual side of the urban scene, of that same neighbourhood unit, for example, which we were discussing yesterday and which many people feel is, in this country, being planned in the sociological and even the territorial sense without being properly visualized, so that the finished product is in danger of emerging as a formless wilderness.

WHAT IS THERE SPECIAL ABOUT CONTEMPORARY ARCHITECTURE?

But that is to anticipate what I propose to say later about town planning. The next question should be: what is there special about contemporary architecture that makes it necessary even to consider measures to ensure that it remains capable of appreciation by the man in the street? There are several practical answers: the use of synthetic materials, the use of structure calculated with infinitely more exactness than the eye is able to judge, the introduction of standardization through the technique of factory production, the disappearance of types of ornament based on handicraft methods, and so on—all very familiar to us because they are the very factors that have made modern architecture the thing it is.

The first two—synthetic materials and new constructional methods—demand some adjustment of the relationship between architectural form and the human eye because for the first time they lift architectural technique out of the range of direct human experience; cantilever construction, for example, does not conform with an individual's personal experience of the behaviour of materials, and he has to take its stability, by an intellectual instead of a visual effort, on trust. This sort of difference is too obvious to be worth pursuing further, and the adjustment will to some extent be made automatically as time gives sanction to the new forms and structures. But the use of standardization presents a more difficult problem, and arouses a more positive resistance, because standardization suggests loss of individuality, and therefore conflicts with

people's natural instinct to struggle for the preservation of individual identity in a world dominated by the impersonality of the machine.

MASS PRODUCTION

Assuming the continued exploitation of the possibilities of mass production for economic and other reasons, how can this be reconciled with the avoidance of a completely dehumanized architecture? Are for example, contemporary experiments with complete prefabricated houses using machine production in too crude a way, by standardizing too large a component? Does prefabrication require more flexible types of component, designed without respect to the size of the separate dwelling, as a way of ensuring variety of architectural form, or can monotony be avoided and an added sense of enclosure be achieved by varying the height and density of the buildings in a given area. Alternatively, may we have to decide that a time may come when the process of industrialisation itself will have to be halted, because its in-humanity is threatening to outweigh its economic advantages? Still another alternative: can we expect the standardization of housing components to be so far accepted in due course that the public no longer requires the house itself to be a medium for self-expression? After the fashion of the Japanese house, will the dwelling-unit become purely diagrammatic, and the expressive and emotional outlet finds its place in landscaping or the relation of houses and groups of houses to their urban setting?

WHAT CAN THE ARCHITECT DO?

But that is looking rather far ahead. The question is, what can the architect do, pending such a development, to take into account those qualities in buildings that have, at the present moment, a symbolic or emotional significance for ordinary people, so that architecture shall remain an art in whose adventures they can share. The Russians have tried to solve this problem by reverting to a completely eclectic idiom such as we associate with the predominance of the bourgeoisie in the nineteenth century. They get value from such an idiom's strong association with economic security and from the reassuring richness of its symbolism, but by doing so they would appear to be denying themselves for a very long time to come the opportunity of working out a truly contemporary architectural aesthetic. Can we solve the same problem without losing our artistic integrity, by the less drastic means of developing our present idiom in a more human direction? If so, should humanization take place through the use of familiar materials—even in a non-structural way—thereby also achieving more sympathy of texture as well as variety? Is it in keeping with the spirit of modern architecture and its necessarily mechanistic quality to make use nevertheless of the effect of time and weather on building materials, or to encourage a return to some kind of regionalism in architecture, to the use of local materials and the incorporation of forms traditional to particular localities, especially those that can still be regarded as valid because they are derived from conditions of climate, social custom and the like, which still exist?

HUMANIZATION

Perhaps, however, in making these speculations, it is a mistake to concern oneself with the idiom in which the individual building is designed. Perhaps the process of humanization must take place on a much enlarged scale. For the ordinary man as well as for the scientist the scale of the modern world has increased in recent years, as a result of more rapid communications,

increased personal mobility and the greater size of the units into which society is organized. The scale of our vision has increased correspondingly. As an example, landscaping is now thought of in terms of the sweep of an arterial road across the countryside, not the design of a park or garden. And perhaps the landscaping of the towns he lives in is the medium through which the ordinary man can be given an acceptably human environment that yet utilizes the technique of modern architecture.

In England this seems to present an opportunity of a rather special kind, because town-planning is but rarely concerned with building towns from the beginning. It is concerned with the rebuilding of war-damaged towns, improving living conditions and communications and opening up the congested centres of towns built in the nineteenth century. Existing towns have personalities and traditions of their own, by which their inhabitants naturally set great store. As well as being a way of earning the allegiance of the man-in-the-street, it is clearly the duty of the town-planner to make a point of preserving and even intensifying local character rather than destroying it. Can he not do this by a technique of urban landscaping which incorporates modern buildings—themselves designed in a modern spirit—with existing buildings and existing topographical features in a consciously designed picture? Operating on the larger scale of the landscape designer, can the architect not utilise old buildings—whatever their style or material—in his scenic compositions, exactly as he might incorporate traditional, familiar materials in his design for an individual building? Is it possible by some such technique to reintroduce into the urban landscape as a whole the human qualities—the contrasts, variety and individuality—that are in danger of being lost, on the scale of the single building, because of the dehumanized techniques that are nowadays employed. And by doing so—and emphasizing thereby the historical continuity of a town's growth—is it possible to give the ordinary man on whose behalf the work is done a renewed sense that the architectural art is something in which he can participate?

• That is one possible line of research. There are obviously others, but I have come to the end of my time. To end as I began, I would emphasize that I am conscious that I have done no more than pose a number of questions—rather naive questions you may think. But these are questions that have somehow to be answered, and perhaps you will think that to attempt to answer them could profitably be made a part of CIAM's future work.

* * * * *

(Intervention by Le Corbusier* during the discussion on Architectural Expression by CIAM, Bridgwater, on September 13, 1947.)

Le Corbusier : I experienced a profound happiness when I heard Giedion demanding that we should place art at the summit of our preoccupations. I was deeply moved yesterday when I heard our president van Eesteren unveiling what hides in his innermost heart and thought: his subtle discrimination in art and in philosophy. After our hard week of work, see now how the blossoms unfurl.

For twenty years, since I was first submitted to the discipline of my own effort, I have known with certitude that the one fact, in the world, in the present immense shifting

of forces, the real question, the essential thing that has to come, is the *re-formation of the modern consciousness.*

Cogito, ergo sum. For each one of us, in the consciousness of each, this is to learn to recognize the nature of the new light that must shine on our enterprises and, in consequence, determine the programme of our work.

It is through personal experiment, through private work. It is through the participation of each in the construction of the whole. The whole will be made new by the innumerable multiplication of molecular efforts. The responsibility is upon the individual.

The first era of machinery disseminated chaos; the disaster of a prodigious century, magnificent in its scientific, moral and spiritual conquests. Everywhere lies disgrace, an unspeakable ugliness, a default of grace, of smiles, the evasion of goodwill . . .

But there is no reason to despair; all the elements of construction exist, at hand—an immense crowd of *means*. Harmony alone is absent, since no one has had the time, nor the taste, nor even the idea of giving thought to it. . . . *Harmony* is the great word of the present time: *the setting of all things in harmony! Attaining the reign of harmony over all things!* And, so doing, to provoke the burgeoning,

the bursting,

of the poetic phenomenon!

Poetry! The word should be pronounced. Poetry, that cannot exist but by the presence of relationships. Relationships create an interplay between precise objects, precise ideas—but never among the mists of ambiguous intentions. These exact objects and objectives are so placed that from their relations surges the prodigious, the unexpected, the unsuspected, the astounding, the miraculous.

The MIRACLE of precise relations occurs beneath our eyes, by the operation of the most mathematical exactitude.

But our efforts are capable of producing this miracle! For whom is this miracle? For a public.

For what public? It has been said—for the people.

I shall say: for men. It is a matter between one man and another man.

It is an individual addressing himself to his brothers. And the common work is, in the hour of its birth, held in the hands of whoever has the responsibility.

This man addresses his work to strangers. But to strangers who exist,

who are there,
who wait,

and for whom *EMOTIONS, ART*
are as deeply needed as water and bread.

These unknown men exist in modern society, perhaps at decisive posts. There are men at the command of essential trains of wheels in the life of a country which may be guided by their decisions and attitudes toward ugly or beautiful destinies. *Certain among these men need the nourishment of poetry.*

In an hour of industrialization, of collective enterprises which can bring security, abundance, a joy in living, and can save the world from imbecilic catastrophe—in the hour of all the indescribable possibilities capable of transforming into harmony the stupid disgrace which now degrades us, the person acquires a startling value; and the person exists, receiver and transmitter of human emotion.

I say this to you: behind our collective problems, which have held us together for twenty years in a productive and overwhelmingly friendly union, the responsibility rests deep within each one of us.

Harmony will result from the true expression of the modern consciousness.

* Translated by Clive Entwistle.

One of the main entrances.



FLATS

AT STAMFORD HILL, LONDON

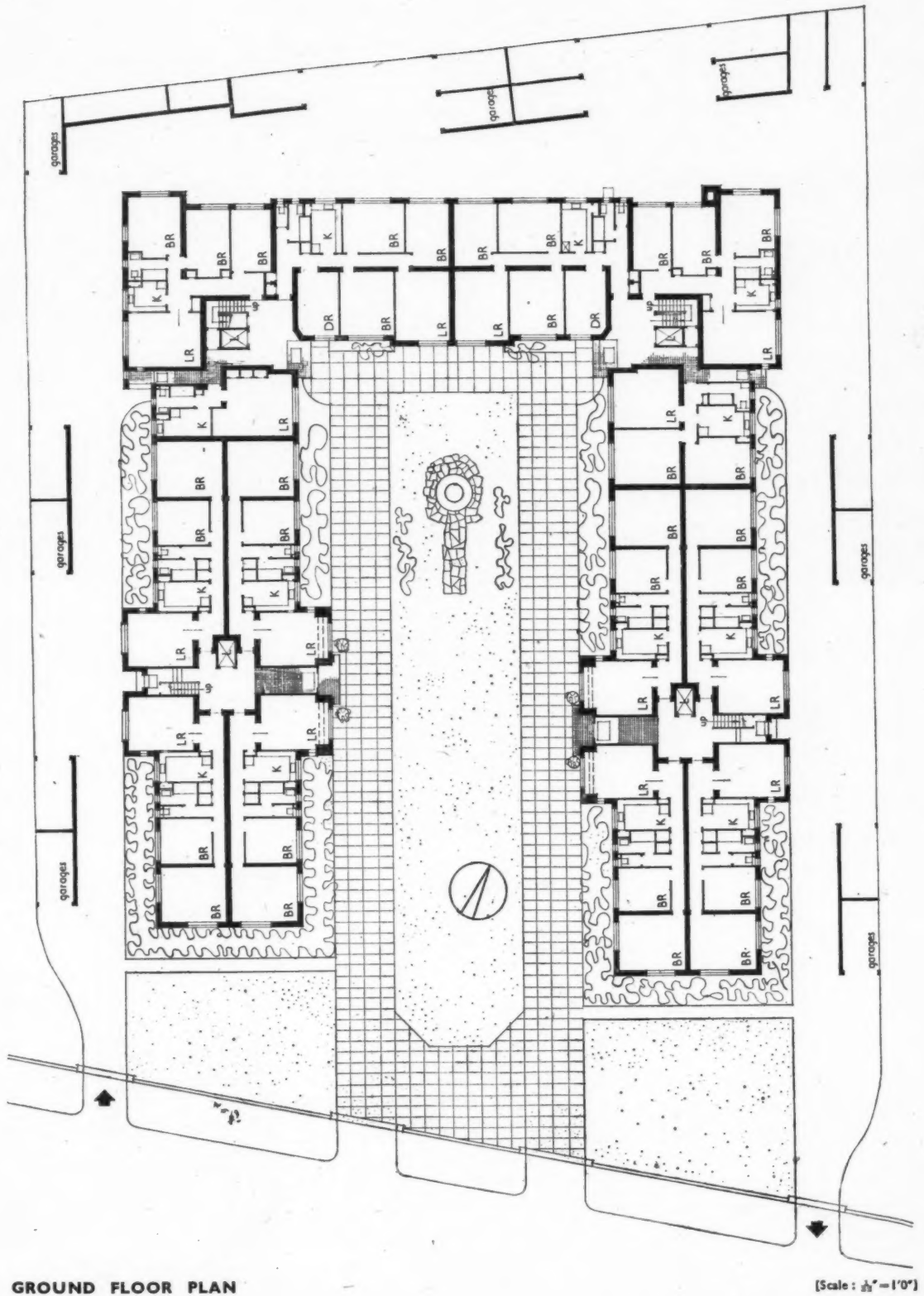
DESIGNED BY ERIC AMBROSE, OF
NIGHTINGALE AND AMBROSE

GENERAL.—The purpose of this scheme, which was completed in 1939, was to provide a block of good class residential flats ranging from one-room bachelor flats to five-room family flats with all modern conveniences. The value of the land was to be related to the total cost of the scheme in such a way that building finance could be obtained easily. As the site was opposite an LCC Housing Scheme due regard had to be paid to the elevation to justify the higher rents.

A restriction of the height of the building to four floors imposed by the LCC necessitated a rather high coverage of the land to arrive at an economic balance for the site. Room had to be found for garages and a heating chamber had to be placed in the basement where it was realised that difficulties might be encountered through spring water.

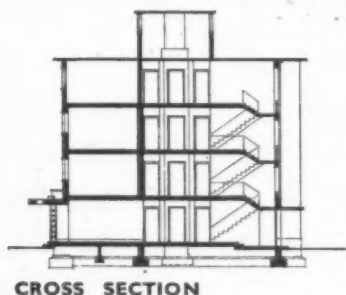
PLANNING.—The programme required that the flats were pro-

vided with lifts. As there were only three floors above the ground this called for economic grouping of flats. It was decided that the U-shaped plan looking on to a central square gave the best answer to all requirements and allowed the greatest amount of sunlight to the largest number of flats. The use of reinforced concrete construction resulted in a building with remarkably little noise transmission. The ceilings of the top floor flats were lined

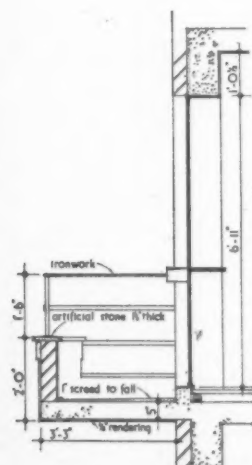


GROUND FLOOR PLAN

[Scale : $\frac{1}{4}" = 1'-0"$]



CROSS SECTION


SECTION THROUGH
A BALCONY

with insulating board and the roof of reinforced concrete was finished with asphalt. All pipes on the front elevations were grouped in ducts, but the need for economy prevented this arrangement for the flats on the rear elevation.

No trouble was experienced during the recent hard frosts with any of the pipes taken in ducts.

12 garages were provided with separate lock-ups for prams on the ground floor.

CONSTRUCTION.—A reinforced concrete frame was used with walls of cavity brickwork, roof of reinforced concrete covered with asphalt. Internal walls mostly $4\frac{1}{2}$ in. brick.


Ground floor, wood blocks on concrete with a water-proofing membrane for all rooms.

First, second and third floors provided with strip flooring on battens secured by insulating clips. Composition flooring was used for bathrooms, w.c.s and kitchens.

The flats were built by direct labour and the price works out at about 1s. 4d. per cubic foot.

Top, a general view of the flats from the road; middle, a typical cross section through an entrance hall to $\frac{1}{4}$ " scale; bottom, left, a section through a balcony to $\frac{1}{4}$ " scale; right, a corner entrance.

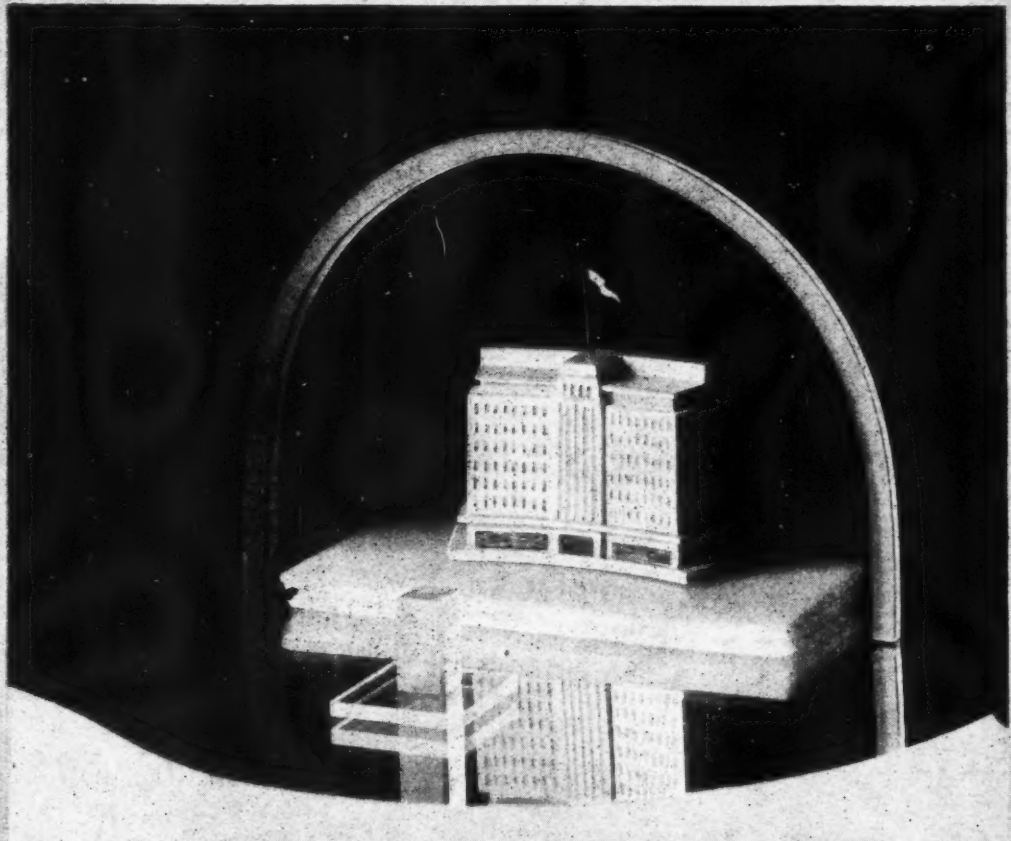




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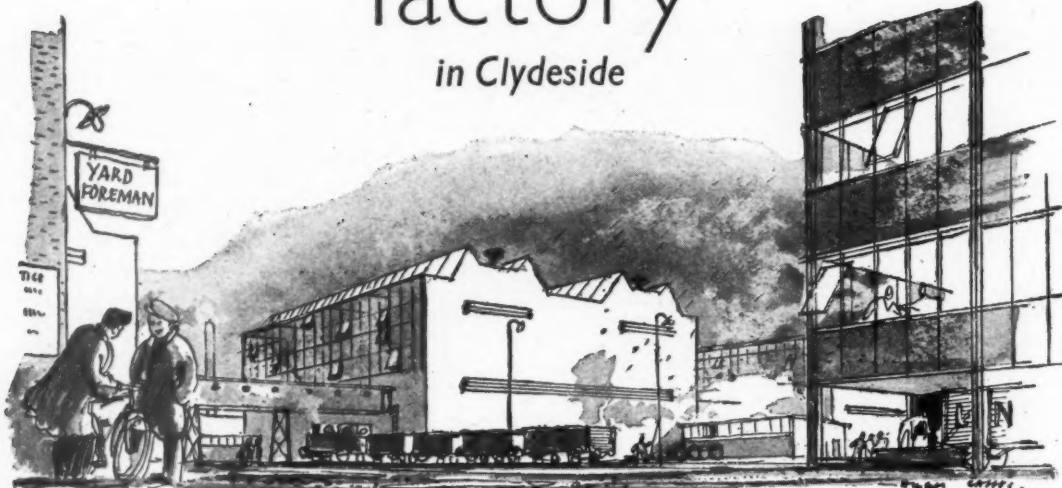
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TECHNICAL SECTION

The function of this feature is to supply a digest of, and commentary on, current information of interest to architects as recorded in technical publications and statements of every kind throughout the world. Items are prepared by specialists of the highest authority who are not on the permanent staff of the Journal, and views expressed are disinterested and objective. Items are printed on one side of the paper only to permit of cutting out and pasting up in classified order in readers' files. The Editors welcome information on all developments from any source.

INFORMATION CENTRE

To enable items to be filed all information is classified under the following headings:

1 SOCIOLOGY. 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLANNING: Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General. 12 MATERIALS: Metal. 13 MATERIALS: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 20 CONSTRUCTION: Complete Structures. 21 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION, ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHTING. 25 WATER SUPPLY, SANITATION. 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

2.17 planning: general SURVEY TECHNIQUE

Survey and Research. W. L. Waide. (Town Planning Institute, Town and Country Planning Summer School, 1947.)

Important paper on administrative aspects of survey technique delivered at this year's Town and Country Planning Summer School at Reading. Discussion of functional relationship between central government and local planning authorities with particular reference to direction contained in Town and Country Planning Bill, 1947, regarding nation-wide survey to be undertaken by local planning authorities. Illustrated by charts.

Suggested framework for policy and planning co-ordination at national, regional, county, district (or area), local, and detailed local levels. Outline of decisions to be made and of survey information to be collected at each level covering physical features, surface utilisation, history and growth, population densities, changes and structure, housing conditions, industry, agriculture, recreation and amenities, communications, public utilities, land resources, and community patterns. Importance of dynamic surveys recording changes in town structure, neighbourhood pattern and land uses in order to appreciate and interpret their cumulative significance. Relation between static and dynamic surveys. Influence of survey technique, based on periodical reviews of changing position, on future planning administration. Organisation of survey work and planning personnel.

10.18 design: building types HOUSING: CANADA

Housing in Canada: A Factual Summary.

Economic Research Division, Central Mortgage and Housing Corporation. (The Corporation, Ottawa, Canada, 1947.)

Quarterly report designed to provide complete and current factual information on housing situation and major trends. Efficient documentation.

The material is presented in three parts, the first being a factual summary of the tabulated material contained in the second part which covers the following fields: population trends; house-building activity; publicly assisted house-building, including summaries of various Acts; real estate lending and loans for building purposes; building labour and costs. The third part of the report lists in a most useful manner sources and explanatory notes in respect of the two preceding parts and concludes with an index.

12.7 materials: metal METAL LATHING

Metal Lathing (Steel) for Plastering. BS 1369:1947 (British Standards Institution, 1s.)

Deals with plain expanded; ribbed expanded (i) with ribs forming integral part of expanded sheet, (ii) with ribs attached subsequent to expansion; perforated; dove-tailed, lathing.

Specification contains quality clauses and lays down certain limits and tolerances as to size. The surface finish specified is "one coat of paint"; this would seem to be an indefinite provision, and one which would not give any sure immunity from corrosion, especially where the material were used for exposed renderings.

14.8 materials: concrete AERATED CONCRETE BLOCKS

Aerated Concrete Building Blocks (Dimensions only). BS 1364:1947 (British Standards Institution, 1s.)

Gives dimensions of aerated concrete building blocks having a density of less than 60 lb./cu. ft. Quality clauses will be introduced when greater experience of the behaviour of light weight blocks in this country has been gained.

18.9 construction: theory PRESTRESSED CONCRETE

Vorgespannter Beton (Prestressed Concrete). (Report No. 155 of the Eidgenössische Materialprüfungs- und Versuchsanstalt für Industrie, Bauwesen und Gewerbe, Zürich, March, 1946. Swiss francs 10.50.)

Report on investigations of the properties of concrete and of steel of very high tensile

strength, particularly creep and bond, in order to establish data for the design of prestressed concrete. Static and dynamic tests on prestressed beams. Suggestions for design. Practical applications.

During the years 1941-45, the Swiss Federal Research Station carried out a very elaborate research programme with the purpose of establishing a reliable basis for the design of prestressed reinforced concrete structures. Whereas in Belgium the method preferably used in the manufacture of prestressed concrete articles is post-stretching with special anchorage devices (see No. 2442:21.3.46), the Swiss industry has so far been mainly interested in pre-stretching without anchorage, i.e., a method relying on the automatic anchorage of small size wires. With this method the pre-stress is applied at the concrete at a comparatively early stage and the loss of initial pre-stress is greater than in the case of post-stretching. The assessment of the loss of pre-stress is essential for the design. Hitherto this assessment had to be based on a more or less rough approximation. The present report contains carefully established data on the creep of both concrete and reinforcement and thus enables designers to achieve a higher degree of accuracy.

Another important aspect of design according to this method is the bond between reinforcement and concrete. The Swiss experiments have led to the conclusion that if in short members, subjected to dynamic loading (e.g., sleepers), plain wires are used (as in this country), their diameter must not exceed 2 mm. (approx. 14 g.). The bond is greatly improved by rolling in notches or by roughening of the surface of the wire, in which case the diameter may be increased up to 6 mm. (approximately 1/4 in.). The same limit is applicable to square twisted bars.

The tests have established the behaviour of pre-stretched beams both in static and dynamic loading and the comparison with ordinary (i.e., non-prestressed) reinforced concrete beams show the great superiority of pre-stressed concrete in every respect.

An interesting practical application described in the report is a canopy for the protection of a part of the Gotthard line against avalanches, a structure of 33 ft. clear span, which was erected without interference with the traffic.

The main results of the tests and the recommendations for design are summarized in English.

23.39 heating and ventilation ELECTRIC RADIANT HEATING

Products and Practice. (Arch. Forum, pp. 111, 112 [USA], June, 1947.)

Brief description of two systems of electric ceiling panel heating. With illustrations.

The first system described is that of the U.S. Rubber Co., and consists of a thin, carbon impregnated, rubber sheet bonded to an asbestos board and backed by insulation. Panels are nailed round the edges. Blank panels can be used where heat is not required, and the heat output can be varied to some extent by alteration of the density of the carbon particles. The trial installation is designed to operate at a surface temperature of 110 degrees F.

The other system described is probably familiar to many readers, as it is the Crittall system of Dulrae heating. This consists of a fine chrome nickel coil embedded in a thin sheet of plasticized paper or fabric material. Laid in rolls, it operates at a surface temperature of 98 to 100 degrees F. and has an output of 50 B.T.U. per sq. ft. It does not form a suitable finish for direct decoration and is therefore fixed either by stapling it to a building board and then nailing up the boards, or by forming a sandwich of two boards with the Dulrae between.



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23.40 heating and ventilation FACTORY VENTILATION

Atmospheric Conditions in Industry. (Journal of the Institution of Heating and Ventilating Engineers, June, 1947, pp. 138-57.)

Three papers by members of the Inspectorate of Factories. The general problem. Standards of general ventilation. Removal of industrial poisons by ventilation: Of good general interest to designers of factories, particularly the last paper on removal of fumes, etc.

24.43 lighting FLUORESCENT LIGHT

Causes of Early Loss of Light Output of Fluorescent Lamps. By G. Meister and R. Nagy. (Illum. Eng [USA], May, 1947, p. 589.)

Loss probably due to short-wave ultra-violet. Useful note.

Manufacturers are studying the cause of the annoying early loss of light from fluorescent lamps. These authors made suggestions some months ago, and now report further research supporting the view that the cause is the short-wave ultra-violet light which activates the tube coating.

24.44 heating and ventilation DISTRICT HEATING

District Heating. J. R. Kell. (J. Royal Inst. British Architects, August, 1947.)

Historical references. Present technique. Survey of official publications and review of existing schemes and proposals with indication of trends, particularly for housing. Useful paper bringing together summary of information. Comparatively little reference to effect on town planning or construction.

This paper read as an Architectural Science Board Lecture is valuable in bringing under review a good deal of recent information on district heating. After brief historical notes the author discusses present day technique, dividing this into two parts, first heat production, and second heat distribution. The production side is not, as might be imagined, purely an engineering point, for although the engineer must provide the data the town planner must eventually be involved in the decision between large central heating stations as opposed to small dispersed units. From the evidence given it appears that units dealing with less than 300 to 400 houses are unlikely to be economic, but that above this size there is unlikely to be a great difference in terms of money cost. It is important to note, however, that in terms of fuel economy the larger plants will score heavily.

The distribution system calls for very dealing with less than 300 to 400 houses are planner in the case of housing schemes, for the capital cost of installing and insulating the pipe runs form a major part of the total cost, and special planning may help considerably. The paper refers to this and also to the importance of proper and economic design of the pipe ducts. The question of metering of heat supplies is also mentioned.

With very large schemes there is a choice between straight heating stations and thermoelectric stations. The two types are briefly discussed.

A very useful review of official publications is given, with considerable reference to the work of the Working Party of the District Heating Sub-Committee of the DSIR. Various cost estimates are quoted, summarized in tabular form.

The outcome of all these in general terms appears to be that district heating is unlikely

to reduce the householder's weekly budget for heating, but that for somewhere near his present outlay he can be given a very much warmer and more comfortable house. Moreover, there are many assets, as both the author and subsequent speakers pointed out, which cannot be given a definite monetary value. These include a reduction in transport of fuel in small lots, removal of ashes, a great reduction in household labour, and in relation to open fire heating a big reduction in dirt and atmospheric pollution which should in turn reduce maintenance costs in decoration. Curiously, nobody referred during the discussion to the probability of better health resulting from better heating of houses.

In conclusion the author touched upon possible future developments such as gas fired district heating from gas pumped under high pressure through long distance mains from total gasification plants in the coal-fields, the use of water power combined with extensive heat storage or with heat pumps, and the possible use of atomic energy plants in district heating.

The discussion included some useful points from people with practical experience of district or large heat distribution systems.

25.35 water supply and sanitation AMERICAN PRACTICE

Reference and Data Section. 1947. (Water and Sewage Works, July, 1947.)

Annual compendium of articles illustrating recent US practice in water and sewage treatment. Some tabulated design data. Of interest to specialists rather than the architect: little reference to building problems. Fully illustrated, 280 pp. Index to this periodical since July, 1941.

25.36 water supply and sanitation LEAD ECONOMY

Economy Memorandum, Lead No. 3. (Ministry of Works, May, 1947.)

Official prohibitions and restrictions on use of lead, pipe and sheet. Supersedes *Lead No. 2* of May, 1946, and increases restrictions. Alternatives are suggested. Applies to both new work and repairs.

Lead is prohibited for roof flats, damp-courses, hot and cold water piping (except where special danger of corrosion), soil and vent pipes, flush pipes, traps (except where waste is corrosive) Virtually all other uses remain restricted. Among alternatives suggested for roof flashings are sheet aluminium. Reference to the Memorandum is essential; it supersedes all previous official instructions on the subject.

28.3 miscellaneous CLASSIFICATION SYSTEM

APRR Classification System. Ellen G. Schoendorff. (APRR Information Bulletin, September, 1947, Reference Sheet No. 1.)

Simple method of classifying planning literature for quick reference purposes.

This classification has been devised in order to list certain items published in the Association for Planning and Regional Reconstruction Information Bulletin in a unified manner. The system is divided into 17 main sections, each main section having a number of sub-sections which can be expanded easily. Notation is based on capital letters and four symbols denoting relationship between various main and sub-sections. Classification headings deal with the main factors of physical planning and related subjects from the point of view of the planner.

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QUESTIONS AND ANSWERS

2912 WAR DAMAGE CONTRIBUTION

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Buildings Illustrated

Women's Wards, Standish House Sanatorium, Stonehouse, Gloucestershire, for the Gloucestershire Joint Board for Tuberculosis (pages 273-276). Architect, S. E. Urwin, F.R.I.B.A., County Architect; Assistant, A. Gray, A.R.I.B.A.; General contractor, G. Wimpey and Co., Ltd.; contract price, £41,361 2s. 1d.; price per cube foot, 3s. 2d.; price per foot square, £1 18s. 0d. Sub-Contractors: Western Trinidad Lake Asphalt Co., asphalt; Stonehouse Brick and Tile Co., Ltd., bricks; Gloucester Stone Co., Ltd., artificial stone; The Rapid Floor Construction Co., fireproof construction; Frazzi, Ltd., special roofings; Granwood Flooring Co., Ltd., patent flooring; Maddock and Wright, central heating; Hall and Stinson, electric wiring; Associated Clay Industries, Ltd., sanitary fittings; James Gibbons, Ltd., door furniture; W. A. Telling (South Western and Co.), plaster; R. A. and C. Marshall, Ltd., metal work; Jaconello, Ltd., terrazzo.

Flats at Stamford Hill (Cedra Court, Cazenove Road, N.16). Pages 280-282. Architect, Eric Ambrose, B.A., F.R.I.B.A., of Nightingale & Ambrose, F/R.I.B.A., Quantity Surveyors, Hood, Huggins & York, F/R.I.C.S. Sub Contractors, Excel Asphalt Co., Ltd., asphalt. Liversedge Reinforced Concrete Eng. Co., Ltd., reinforced concrete. Brickmakers & Factors Ltd., bricks. Empire Stone Co., Ltd. and Liverpool Artificial Stone Co., Ltd., artificial stone. Parkinsons Ltd., tiles and tiling. Everwear Flooring Co., Ltd., woodblock flooring. Dunlop Rubber Co., Ltd., rubber flooring. Freeman Heating Co., Ltd., central heating. Gas Light & Coke Co., Ltd.,

gasfitting. Ideal Boiler & Radiators Ltd., boilers. Saunders & Goswell, electric wiring, electric light fixtures and electric heating. City Plumbing Co., Ltd., plumbing. Edward Marshall Ltd., sanitary fittings. Clark Hunt and Co., Ltd., door furniture. Henry Hope and Sons, Ltd., casements. O. and S. Plastering Ltd., plaster. Haskins Ltd., metalwork. Duncan Tucker Ltd., and Manor Joinery Works, Ltd., joinery. C. and T. Painters Ltd., painting and decorating. Peerless, kitchen fittings and hatches. Keighley Lift Co., lifts. Electrolux and Gas Light and Coke Co., refrigerators.

Announcements

The London Master Builders' Association's prizes for painters and decorators' work in the City and Guilds of London Institute examinations for this year have been won by Kenneth James Breese and Charles Allen Hart, both of whom are students at the LCC School of Building at Brixton.

The London Master Builders' Association scholarship for the higher education of building trades apprentices, won by Ronald W. Russell, a registered apprentice with Messrs. J. & R. Roof, Ltd., East Ham, was presented by the Chairman of the Building Apprenticeship & Training Council, Sir George Gater, at Lambeth Bridge House, on September 18. The scholarship is for £200 a year for three years, and Mr. Russell will start a full-time course for a Higher National Diploma at the LCC School of Building at Brixton next term.

The Central Institute of Art and Design, with the support of the Council of Industrial Design, has decided to organise a further series of refresher courses for industrial designers. These courses will cover the field of design in the decorative industries, more particularly those which provide furnishings

for the home, but other fields of decorative design will be included. The courses will be confined to periods of three weeks and will be limited to 20 members each. Centred in London, they will be held in September, October, and November, respectively, and the firms who wish to send their designers or assistant designers will be called upon to pay an exclusive fee to the Central Institute of Art and Design of five guineas per week per designer.

The Board of Trade Timber Control states that the Veneer and Technical Plywood Sections of Headquarters, hitherto at 24, Kingsway, Sardinia Street, London, W.C.2, is temporarily accommodated in Rooms 249 and 250, Horseferry House, Horseferry Road, London, S.W.1. Telephone: VICTORIA 6800; Extensions 222 and 823 (Veneer), 803 (Plywood).

The Leicester College of Art is now fully equipped for the training of Advanced Industrial Design; modern machinery has been installed, and includes the latest model Turner Plastic Press. Only students with a good basic training in either Art, Design, or Engineering will be admitted to the courses, which are of two types: one of six months intensive training and one longer. Mr. N. R. G. Poynton, who, after basic engineering training, studied at the Royal College of Art, and has been in charge of Metalwork and Silversmithing at this College, will be responsible for the Department, which will be developed as a Research Department, and already a good many of the interim prototypes are actually in production by industry.

Mr. A. Burton Stibbon, lately Engineer, Surveyor, and Town Planning Officer to the Urban District Council of Cheshunt, has been appointed Technical Officer to the National Housing and Town Planning Council, 42, Devonshire Street, London, W.1. He will be pleased to receive trade catalogues relating to any aspects of housing.

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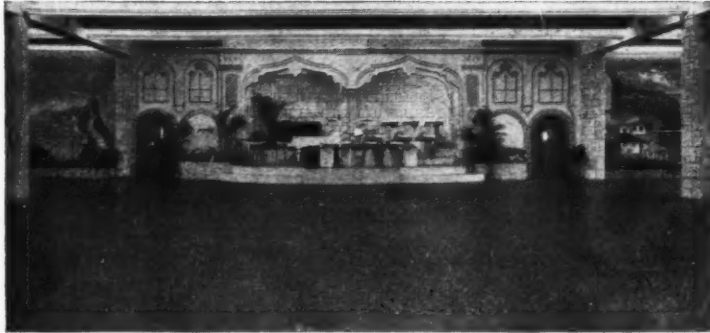
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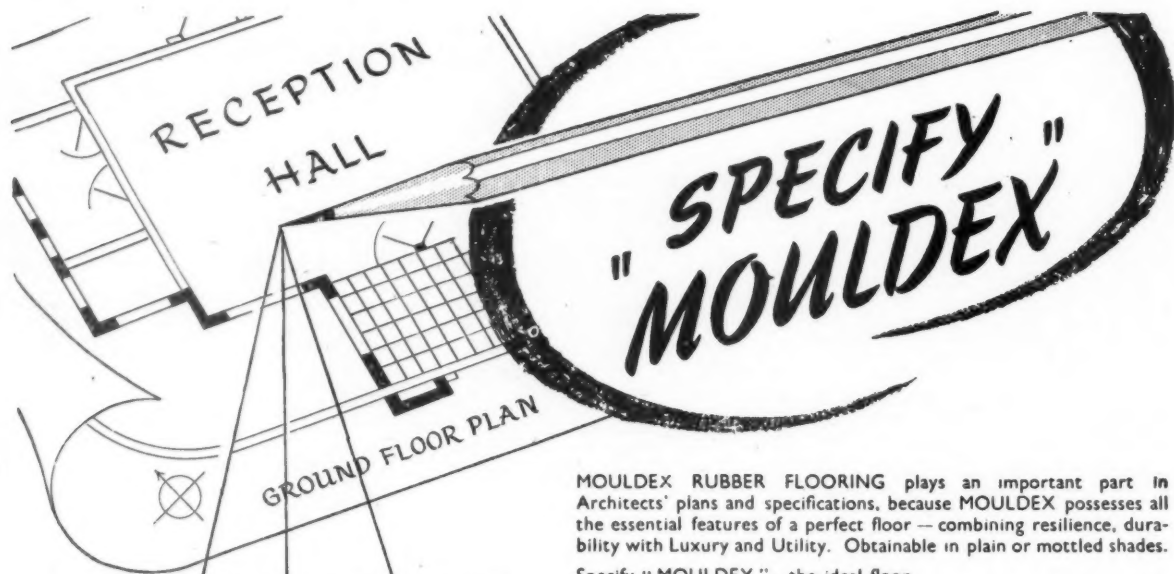
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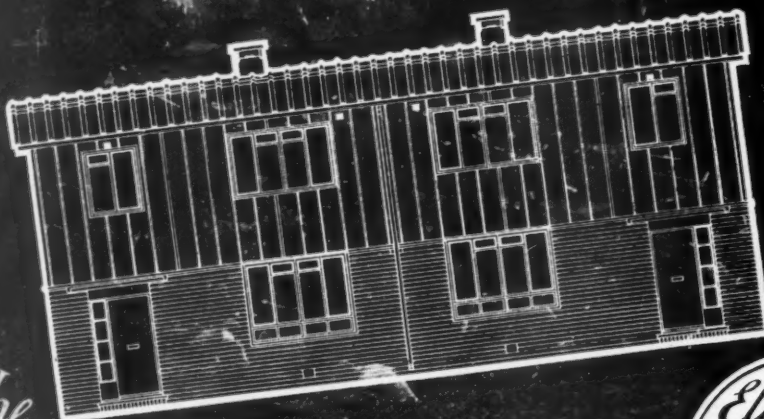
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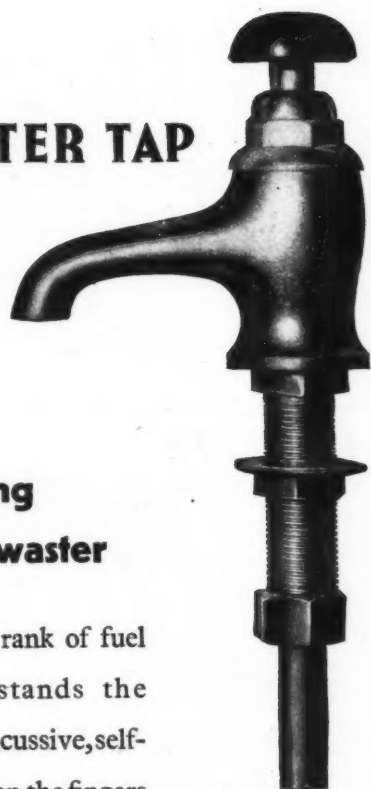
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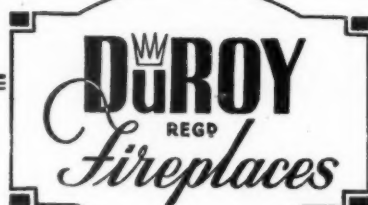
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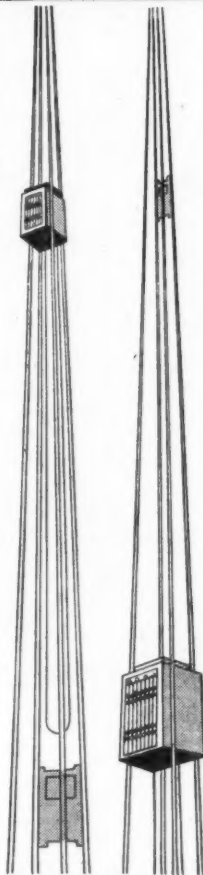
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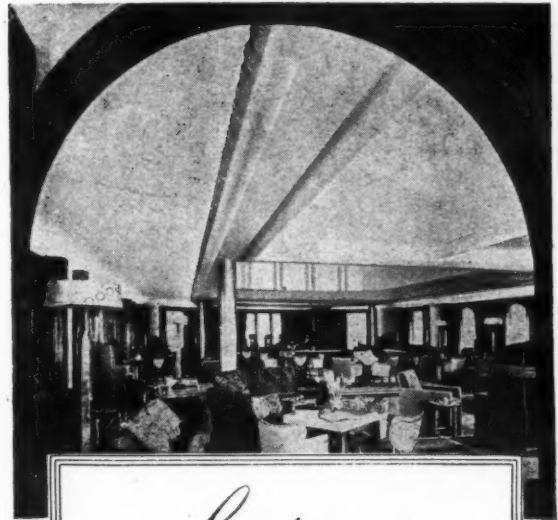
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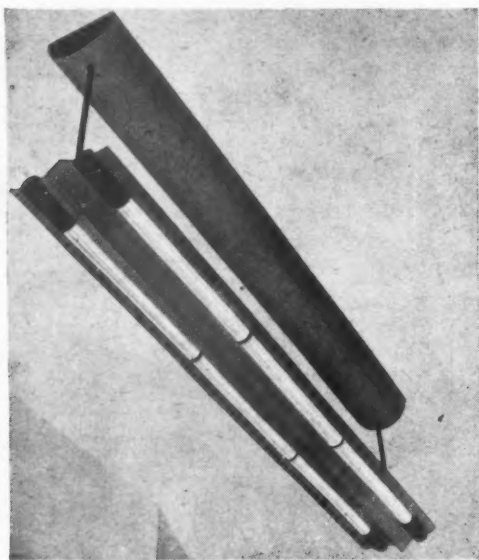
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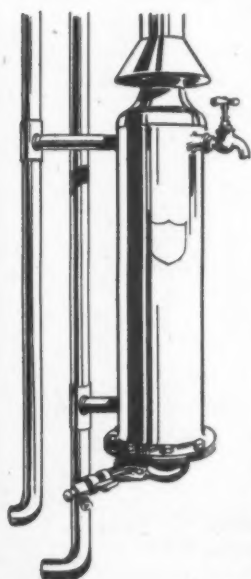
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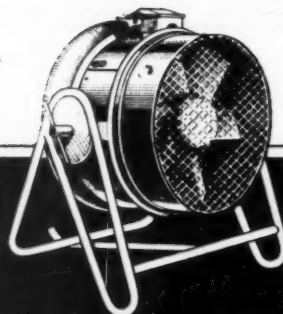
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CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

Public and Official Announcements

6 lines or under, 10s.; each additional line, 1s. 6d.

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

CORPORATION OF LONDON.

CITY SURVEYOR'S OFFICE.

APPOINTMENT OF TECHNICAL STAFF.

Applications are invited for the following appointment in the City Surveyor's Office:— ASSISTANT ARCHITECT AND SURVEYOR. Salary up to £475 p.a. (inclusive of consolidated bonus), according to age, qualification and experience.

The applicant should either have qualified or be about to qualify for Associate Membership of the Royal Institute of British Architects or Associate Membership of the Royal Institute of Chartered Surveyors (Building Sub-division).

The appointment is for the present on a temporary basis, and will be concerned principally with the reinstatement of war damage to a variety of types of properties. In the event of establishment to the permanent staff temporary service will count for the purpose of superannuation. Such appointment will be subject to the provisions of Local Government Superannuation, and applicants will be required to pass a medical examination.

Previous experience with a Municipal body is not essential.

Applications, endorsed "Technical Staff," to be made to George Holliday, F.S.I., City Surveyor, 55-61, Moorgate, E.C.2, giving the following particulars: Service with Armed Forces, age, qualification or intentions in connection therewith, previous training, positions and experience, date when available to commence duties if selected, together with copies of two testimonials. 979

LONDON COUNTY COUNCIL.

COUNTY OF LONDON PLAN-VACANCIES

FOR PLANNING STAFF.

Applications are invited for positions in the following grades:—

PLANNING OFFICER, Grade III, up to £700 a year.

TECHNICAL ASSISTANT, up to £580 a year. Commencing rate according to qualifications and experience. Opportunities for competing for permanent appointment and promotion. Successful candidates will be superannuated.

The planning work involved includes assistance in the detailed development of Reconstruction Area schemes and the preparation of revised zoning plans.

A knowledge of current town planning legislation is desirable in all cases, and candidates for Grade III positions should possess architectural, surveying or town planning qualifications.

Application forms obtainable from Architect to the Council, County Hall, S.E.1 (enclose stamped addressed envelope), returnable not later than 10 days from this date.

Canvassing disqualifies. (1680) 535

HAMPSHIRE COUNTY COUNCIL.

DEPUTY COUNTY PLANNING OFFICER.

Applications are invited for the appointment of Deputy County Planning Officer, at a salary of £850 a year, rising by annual increments of £50 to £950 a year, together with cost-of-living bonus (at present £59 16s. a year). The appointment will be subject to the Local Government Superannuation Act, 1937, and the passing of a medical examination.

Applicants must have had extensive experience, while in Local Government Service, in the preparation and administration of statutory planning schemes and experience as an executive Planning Officer to a Joint Planning Committee, or as an Assistant Regional or Assistant County Planning Officer will be an advantage. Applicants must possess the minimum technical qualification of corporate membership of the Town Planning Institute and of one or more of the allied professional institutions.

Officers using their own cars when travelling on County Council duties receive travelling allowance on the County Council scale for the time being in force.

No forms of application are issued, but applications, stating age, education, qualifications and experience, and giving names and addresses of not more than three references, should be sent to the County Planning Officer, Litton Lodge, Clifton Road, Winchester, not later than Thursday, 16th October, 1947.

G. A. WHEATLEY.

Clerk of the County Council.

The Castle, Winchester.

September, 1947. 781

COUNTY BOROUGH OF DERBY.

BOROUGH ARCHITECT'S DEPARTMENT.

APPOINTMENT OF TECHNICAL STAFF.

Applications are invited for the following

appointments on the permanent staff in accordance with the National Scale of Salaries:—

(a) ONE ASSISTANT ARCHITECT, Grade VI A.P. & T. Division, salary £535-£600.

(b) TWO JUNIOR ARCHITECTS, Grade I A.P. & T. Division, salary £330-£375.

(c) ONE SENIOR QUANTITY SURVEYOR, Grade VI, A.P. & T. Division, salary £535-£600.

(d) ONE CLERK OF WORKS, Grade III A.P. & T. Division, salary £390-£435.

Plus cost of living bonus in all cases; at present £59 16s. (male).

Applicants for:—

(a) Should be Associates R.I.B.A. with good experience of work undertaken by a Local Authority.

(b) Should have passed the Preliminary Examination of the R.I.B.A. and have had experience in general architectural work.

(c) Should be P.A.S.I. (Quantities Section) or prospective and have had experience in the preparation of quantities, specifications, site measuring, estimates and final accounts.

(d) Should be fully experienced in Municipal works, and have a sound knowledge of all building trades.

Each appointment will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.

Forms of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with copies of three recent testimonials, to arrive not later than Monday, 6th October, 1947.

Canvassing, directly or indirectly, will be a disqualification.

C. ASHTON,

Town Clerk.

Market Place, Derby. 751

BOROUGH OF WILLESDEN.

APPOINTMENT OF TOWN PLANNING

ASSISTANTS.

The Council invite applications for the following appointments on the temporary staff of the Borough Engineer and Surveyor's Department in connection with the preparation of Town Planning and Redevelopment Schemes.

(a) One First Class TOWN PLANNING

ASSISTANT.

(b) One Second Class TOWN PLANNING

ASSISTANT.

Candidates for both appointments must be either an Associate of the Royal Institute of British Architects, an Associate Member of the Town Planning Institute, Professional Associate of the Royal Institution of Chartered Surveyors, hold the Testamur of the Institution of Municipal Engineers or an equivalent qualification, and preferably have had experience in the preparation of Town Planning Schemes.

The salaries attaching to these appointments will be in the Administrative, Professional and Technical Division of the National Council's Scale for the London Area, namely, for appointment (A) Grade V, i.e., £480 per annum rising by two annual increments of £15 and one annual increment of £20 to a maximum of £530 per annum plus cost of living bonus, which at present is £59 16s. 6d., and for appointment (B) Grade IV, i.e., £440 per annum, rising by annual increments of £15 to a maximum of £485 per annum plus cost of living bonus which is at present £59 16s. 6d. per annum.

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

Applications, together with not more than three recent testimonials, should be forwarded to the undersigned, endorsed "Town Planning Assistant," not later than 10 a.m. on 3rd October, 1947.

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

R. S. FORSTER,

Town Clerk.

Town Hall, Dyne Road,

Kilburn, N.W.6.

3rd September, 1947. 752

COUNTY BOROUGH OF EAST HAM EDUCATION COMMITTEE.

SCHOOL OF BUILDING.

Applications are invited for the following

full-time appointments:—

(1) LECTURER IN BUILDING CONSTRUCTION and Allied Subjects, mainly for duties with full-time and part-time senior students. Ability to instruct in Quantity Surveying, Structural Engineering or Reinforced Concrete work will be an advantage. An appropriate professional qualification is desirable.

(2) TEACHER OF BRICKWORK for duties with secondary technical school and part-time students. Full Technological Certificate of the City and Guilds of London Institute essential.

Salaries in accordance with the Burnham Scales, London area.

Forms of application, which should be returned as soon as possible, can be obtained from the undersigned.

J. JOHN DYER,

Chief Education Officer.

Education Office, Town Hall Annexe,

Barking Road, East Ham, E.6.

10th September, 1947. 788

CITY OF STOKE-ON-TRENT.

CITY ARCHITECTURAL DEPARTMENT.

Applications are invited for the following

appointments on the Establishment Staff of the City Architectural Department:—

(a) ONE ASSISTANT ARCHITECT. Salary, A.P.T. Division, Grade VI, £535-£600.

(b) ONE ASSISTANT ARCHITECT. Salary, A.P.T. Division, Grade V, £460-£510.

(c) THREE ARCHITECTURAL ASSISTANTS. Salary, A.P.T. Division, Grade I, £330-£375.

(d) ONE JUNIOR ARCHITECTURAL ASSISTANT. Salary, Miscellaneous Division, Grade I, £255-£300.

(e) ONE ASSISTANT QUANTITY SURVEYOR. Salary, A.P.T. Division, Grade VI, £535-£600.

(f) TWO CLERKS OF WORKS. Salary, A.P.T. Division, Grade I, £330-£375.

All the above appointments carry, in addition, a cost-of-living bonus, at present £59 16s. per annum.

The selected applicants will be required to pass a medical examination, and the appointments will be subject to the following:—

(1) One calendar month's notice on either side.

(2) The provisions of the Local Government Superannuation Act, 1937.

(3) The National Scheme of Conditions of Service for Local Government Officers.

Applicants for (a) must be Associates of the Royal Institute of British Architects, and have had experience in the planning, design and construction of buildings for education purposes, and possess full knowledge of the Building Regulations and Standards for School premises of the Education Act, 1944.

Applicants for (b) should have had experience in the provision of buildings for Education purposes under the Education Act, 1944, and preference will be given to Members of the Royal Institute of British Architects.

Applicants for (c) should have received a sound architectural training, be neat and accurate draughtsmen, and have had a good general experience of architectural design and building construction.

Applicants for (d) should be neat and accurate architectural draughtsmen, with some experience of design and construction.

Applicants for (e) must be members of the Royal Institution of Chartered Surveyors (Quantities), and must be competent in all branches of Quantity Surveying practice.

Applicants for (f) should have had full experience of the Building trade, be able to supervise and inspect work in course of erection, including experience of house building contracts.

Applications, giving date of birth, particulars of education and training, qualifications, experience, present and previous appointments, with copies of two recent testimonials, and names and addresses of two persons to whom reference may be made, should be received by J. R. Pigott, F.R.I.B.A., Chief Architect, City Architectural Department, Kingsway, Stoke-on-Trent, endorsed with the title and grade of the appointment applied for, not later than Monday, 29th September, 1947.

HARRY TAYLOR,

Town Clerk.

Town Hall, Stoke-on-Trent.

12th September, 1947. 785

LOCAL APPOINTMENTS COMMISSION.

POSITION VACANT: TEMPORARY ARCHITECT, LIMERICK CORPORATION.

Application forms for and particulars of the above post may be obtained from the Secretary of the Commission, 45, Upper O'Connell Street, Dublin. Salary, £800 a year. Age limits: 25-45 years on 1st September, 1947. An extension of the upper age limit will be granted to existing pensionable officers of local authorities, and to persons with certain specified service in the Defence Forces or the Auxiliary Defence Services.

Subject to satisfactory service, employment will be for a period of five years, or for such longer period as may be determined.

Latest date for receiving completed application forms, 5 p.m. on 17th October, 1947. 815

ESSEX EDUCATION COMMITTEE.

MID-ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART, CHELMSFORD.

Applications are invited for the following

appointment:—

Full-time LECTURER in the Department of Architecture to assist in the instruction of Full-time Day and Evening Students preparing for the Intermediate and Final Examinations of the Royal Institute of British Architects.

The successful candidate should have suitable qualifications, preferably trained at a recognized School of Architecture, and with experience in an Architect's office.

Previous teaching experience, though desirable, is not essential.

Salary in accordance with the Burnham (Technical) Report, £300 by £15 to £325, with allowances for approved professional and/or teaching experience.

The successful candidate will be required to commence duties as soon as possible.

Further particulars and application forms may be obtained from Mr. E. W. Aiston, Clerk to the Governors, Mid-Essex Technical College, Market Road, Chelmsford, on receipt of a stamped addressed envelope, to whom they should be returned as soon as possible.

B. E. LAWRENCE,

Chief Education Officer.

County Offices, Chelmsford. 795

**STAFFORDSHIRE COUNTY COUNCIL.
COUNTY EDUCATION ARCHITECT'S
DEPARTMENT.**

Applications are invited for the appointment of **ARCHITECTURAL ASSISTANTS**, on the permanent establishment of the above Department, as follows—

(a) **ASSISTANT ARCHITECTS**, Salary, Grade VI, £535 per annum, rising to £600.

Applicants should be Registered Architects and Associates of the Royal Institute of British Architects, with good experience in the design of educational buildings.

(b) **SENIOR ARCHITECTURAL ASSISTANTS**, Salary, Grade V, £460 per annum, rising to £510.

Applicants should be Registered Architects, and preference will be given to members of the Royal Institute of British Architects.

(c) **ONE ASSISTANT HEATING ENGINEER**, Salary, Grades I to III, £330 to £435 per annum, according to qualifications and experience.

A cost-of-living bonus (at present £59 16s. per annum) is payable in addition to the salary scales quoted above.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination. They are also subject to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services.

Applications, endorsed "Architectural Staff," should be sent to "The County Education Architect, Staffordshire Education Committee, County Education Offices, Earl Street, Stafford," stating qualifications, experience, and previous appointments, and should be accompanied by copies of three recent testimonials.

Applications should be received within fourteen days of the date of this advertisement.

T. H. EVANS,

Clerk of the County Council.

789

**BOROUGH OF BRENTFORD AND CHISWICK.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the permanent appointment of an Architectural Assistant, in the Borough Engineer and Surveyor's Department.

Salary in accordance with Grade V of the National Joint Council Scale (£480-£530, plus cost-of-living bonus, at present £59 16s. per annum). Preference will be given to applicants who are Associate Members of the Royal Institute of British Architects, but consideration will also be given to applications of persons intending shortly to take the Associate Examination. Applicants should have experience in general architectural work, school and house planning and design, including the preparation of working drawings, specifications, and setting out.

The successful candidate may be required to work a reasonable amount of overtime, appropriate subsistence allowance being paid.

The appointment is subject to the Local Government Superannuation Act, 1937, and to one month's notice on either side, the successful candidate being required to disclose in writing whether to his knowledge he is related to any member or senior officer of the Council.

Canvassing, directly or indirectly, will disqualify.

The attention of applicants is drawn to the fact that owing to the acute shortage of housing accommodation in the Borough the Council will be unable to assist the successful candidate in obtaining accommodation.

JOHN SKINNER,

Town Clerk.

Town Hall, Chiswick, W.A.

10th September, 1947.

786

**GOVERNMENT OF NORTHERN IRELAND.
CIVIL SERVICE COMMISSION.
ASSISTANT QUANTITY SURVEYOR.**

Applications are invited for the post of Assistant Quantity Surveyor, Ministry of Finance, Northern Ireland. Subject to a probationary period of two years, the post will be permanent and pensionable.

Qualifications: Candidates must be British subjects and Associates of the Royal Institution of Chartered Surveyors (formerly F.A.S.I., Quantities Section).

Preference will be given to ex-Service candidates of the 1914-18 or the 1939-45 war, provided that they can or within a reasonable time will be able to fill the post efficiently.

Remuneration: The scale of salary (consolidated) is £500 per annum (linked to entry at age 26, with the addition of £25 for each year above that age subject to an upper limit of £600, and subtraction of £25 for each year below the age of 26), rising by annual increments of £25 to £750 per annum.

Closing date: Applications must be made on the prescribed form, which may be obtained from the Secretary, Civil Service Commission, Stormont, Belfast, and must be returned, duly completed, with copies of two recent testimonials, so as to reach him not later than 16th October, 1947.

792

**CORPORATION OF LONDON.
PUBLIC HEALTH DEPARTMENT.
PLANNING OFFICER.**

Applications are invited for the appointment of a Planning Officer, who will be in control of the Town Planning Department responsible, under the direction of the Improvements and Town Planning Committee, for the proper discharge of the duties and obligations of the Corporation of London in connection with the plan for the reconstruction of the City of London and other matters arising in connection with the development of the City under the Town and Country Planning Acts.

The salary offered is between £1,500 and £2,000 per annum, according to qualifications and experience.

The selected candidate will be required to devote his whole time to the duties of the office, pass a medical examination, take up the Freedom of the City, and contribute to the Corporation's Superannuation Scheme, and the appointment will be subject to the Standing Orders of the Corporation.

Applications for the appointment, on a form, which can be obtained from the undersigned, accompanied by copies of not more than three recent testimonials, must be addressed to the Town Clerk, Public Health Department, Guildhall, E.C.2, and be delivered on or before the 20th October, 1947.

Guildhall, E.C.2.

15th September, 1947.

PICKFORD.

803

**LONDON COUNTY COUNCIL.
VACANCIES FOR ARCHITECTURAL STAFF
IN THE ARCHITECT'S DEPARTMENT.**

Applications are invited for a number of positions in the following grades:—

ARCHITECT, Grade II, £700-£840 a year.

ARCHITECT, Grade III, £550-£700 a year.

TECHNICAL ASSISTANT (Section A), £440-£500 a year.

TECHNICAL ASSISTANT (Section B), *up to 167s. 6d. a week (max.).

*Commencing rates will be according to qualifications and experience.

Candidates for Grade II and III positions should possess appropriate professional qualifications, and are required for work in connection with the design and erection of school buildings. A number of Technical Assistants of good architectural training also required both for new works and for alterations.

Successful candidates are required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for permanent appointment and for advancement to higher positions, according to merit.

Application forms may be obtained from the Architect to the Council, County Hall, Westminster Bridge, London, S.W.1, enclosing stamped addressed foolscap envelope.

Canvassing disqualifies. (3059)

812

**NORTHERN POLYTECHNIC, HOLLOWAY
ROAD, N.7.**

The Governing Body invite immediate applications for the following appointments:—

FULL-TIME STAFF.

STUDIO MASTERS in Architectural Design.

LECTURERS on Quantity Surveying and associated subjects.

LECTURERS on Building Construction and Materials.

The remuneration attached to the above appointments will be in accordance with the Burnham Scale, the commencing salary being determined according to the training, professional experience, and war service in individual cases. Applicants are expected to have the professional qualification appropriate to the appointment, and some experience in lecturing will be considered an advantage. Members of the full-time staff are permitted to engage in private practice, for which purpose teaching duties are usually adjusted so as to allow a reasonable amount of free time.

Forms of application, together with full particulars, will be forwarded on receipt of a stamped, addressed foolscap envelope (state appointment for which application is made).

R. H. CURRELL,

Clerk.

807

**HAILSHAM RURAL DISTRICT COUNCIL.
ENGINEER AND SURVEYOR'S DEPARTMENT.**

Applications are invited for the following permanent appointment:—

JUNIOR TECHNICAL ASSISTANT (Architectural), A.P.T., Grade I (£330/£375), plus bonus, at present £59 16s. per annum. Applicants should possess a recognized architectural qualification.

Travelling allowance will be payable on the Council's scale, and the appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The appointment will be subject to one month's notice on either side.

Applications, properly endorsed, stating age, qualifications, experience, and past and present appointments, accompanied by copies of three recent testimonials, must reach the undersigned not later than the 8th October, 1947.

Canvassing, directly or indirectly, will disqualify.

A. CARR,

Clerk to the Council.

Cortlandt, Hailsham.

806

**COUNTY BOROUGH OF NEWPORT, MON.
GAER JUNIOR SCHOOL FOR 320 PUPILS.**

The Education Committee of the Newport Corporation invite Tenders for the above School, the total cube content of the buildings being about 430,000 cubic feet.

The Bill of Quantities and General Conditions of Contract will be available at the office of the Borough Architect, Town Hall, Newport, Mon., on or about Wednesday, the 1st October, 1947, upon production of the Borough Treasurer's receipt for a deposit of £2 2s. (two guineas), which will be returned upon the receipt of a bona-fide Tender. The plans of the proposed buildings can be examined at the Borough Architect's offices.

Sealed Tenders, endorsed "Gaer Junior School," must reach me not later than 10 a.m. on Wednesday, the 22nd day of October, 1947.

No Tender will be received except in the envelope provided, and must not bear any name or mark indicating the sender.

DAVID W. OATES,

Director of Education.

Education Offices, Charles Street,

Newport, Mon.

16th September, 1947.

804

**WESTMINSTER CITY COUNCIL—HOUSING
LICENSING SECTION.**

TECHNICAL ASSISTANT (for Civil Building Licensing Section). Temporary appointment. Salary, Grade A.P.T., II, of National Scales, £380-£425, plus bonus, £59 16s. per annum. Age limit 45 years. Superannuation scheme. Canvassing disqualifies.

Applicants should have had good experience of the building trade and possess thorough practical knowledge of builders' quantities and be able to check plans and specifications.

Applications, marked "Housing Department—Technical Assistant," stating full name, address, age, war service, examination qualifications, experience, whether related to any member or chief officer of the Council, with copies of two recent testimonials, must be received within 10 days of the appearance of this advertisement.

PARKER MORRIS,

Town Clerk.

Westminster City Hall, Charing Cross

Road, W.C.2.

783

**WORCESTERSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.**

Applications are invited for the following appointments on the permanent staff of the County Council:—

(a) **THREE SENIOR PLANNING ASSISTANTS**, A.P.T., Grade VI, Salary £535-£600.

(b) **ONE PLANNING ASSISTANT**, A.P.T., Grade IV, Salary £420-£465.

(c) **TWO JUNIOR PLANNING ASSISTANTS**, A.P.T., Grade I, Salary £330-£375.

(d) **TWO DRAUGHTSMEN**, at a salary between £250-£350, according to experience and qualifications.

In addition to the above salaries a cost-of-living bonus is at present being paid by the County Council, at the rate of £59 16s. per annum.

Each appointment is subject to—

(1) The provisions of the Local Government Superannuation Act, 1937.

(2) The National Scheme of Conditions of Service for Local Government Officers.

(3) The passing of a medical examination.

(4) Two months' notice in writing on either side.

Applicants for appointment (a) must have had considerable experience of the survey and planning of urban or rural areas and should be Members or Associate Members of the Town Planning Institute. Additional qualifications in Architecture, Engineering or Surveying will be considered an advantage.

Applicants for appointment (b) should have had experience in the conduct of Basic Surveys for planning purposes, and the control of new developments. Preference will be given to candidates with suitable professional qualifications.

Applicants for appointments (c) and (d) should be neat and expeditious draughtsmen, with some knowledge of surveying, and in the case of appointment (d) applications will be considered from Lithographic Artists.

Applications, on forms to be obtained from the undersigned, must be accompanied by the names of not more than three persons to whom reference as to character and ability can be made, and must be delivered in sealed envelopes endorsed with the title of the appointment, not later than Wednesday, 15th October, 1947, to

W. R. SCURFIELD,

Clerk of the County Council.

Shirehall, Worcester. (N199)

799

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

DRAUGHTSMAN (Architectural) required by Nigerian Government Railway for £8 to 24 months, with prospect of permanency. Commencing salary according to experience, in scale £600 to £970, including expatriation pay. Outfit allowance £60. Free passages. Candidates should be experienced in the preparation of sketch plans, working drawings and details, and in the preparation of bills of quantities and specifications, for general industrial work and housing. Apply at once by letter, stating age, whether married or single and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies.

4, Millbank, London, S.W.1, quoting M/N/17418 on both letter and envelope.

787

BOROUGH OF WALTHAMSTOW. BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the permanent position of ASSISTANT ARCHITECT, at a salary in accordance with Grade III of the National Joint Council for Local Authorities' Administrative, Professional, Technical, and Clerical Services, £390, rising to £435 by annual increments, plus London weighting allowance according to the scale, and cost-of-living bonus, at present £59 19s. 3d. per annum.

Applicants must have had experience in the preparation of working and detail drawings for housing schemes.

The appointment will be subject to the Local Government Superannuation Act, 1937, to the National Joint Council's Conditions of Service, to the successful candidate passing a medical examination, and to termination by one month's notice on either side.

Applications, stating age, qualifications and experience, accompanied by names and addresses of three referees to whom reference may be made, must reach the undersigned, endorsed "Assistant Architect," not later than 5 p.m., Friday, 10th October, 1947.

Canvassing in any form will be deemed a disqualification, and applicants must disclose any relationship to any member of the Council or holder of any senior office within the Council.

G. A. BLAKELEY,

Town Clerk.

Town Hall, Walthamstow, E.17. 798

COUNTY BOROUGH OF BOURNEMOUTH EDUCATION COMMITTEE.

BOURNEMOUTH ART SCHOOL.

Wanted, as soon as possible, TEACHER of Architectural Subjects, to be responsible, with some part-time assistance, for training of full-time and part-time students up to Intermediate R.I.B.A. stage, and for the organization of the Department.

Salary in accordance with Burnham Scale.

Apply (no forms), stating qualifications and experience, to the Education Officer, Town Hall, Bournemouth. 794

KENT COUNTY COUNCIL.

Applications are invited from Associate Members of the R.I.B.A. for appointment as ASSISTANT ARCHITECTS on the permanent staff of the Buildings Department—

(i) In Grade A.P.T., V, at a yearly basic salary not exceeding £510.

(ii) In Grade A.P.T., VI, at a yearly basic salary not exceeding £600.

In each case a war addition, at present £59 16s. a year, is also payable.

The posts are superannuable, and successful candidates will be required to pass a medical examination.

Candidates for post (i) should have had a thorough training in design and construction and experience in the supervision of works in progress.

Candidates for post (ii) must have previous service with a Local Authority; be experienced in the design, construction, and supervision of educational or other county buildings, and be fully competent to take charge of projects.

Applications, on forms obtainable from the County Architect, Springfield, Maidstone, should be delivered to him not later than the 11th October, 1947.

W. L. PLATTS,

Clerk of the County Council.

County Hall, Maidstone. 797

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post—

QUANTITY SURVEYOR required by Government Northern Rhodesia, Public Works Department, for 2 to 3 years in the first instance, with possibility of permanency. Salary according to experience, in scale £600 to £840, plus cost-of-living allowance up to £168. Free passages and quarters. Candidates must be Chartered Quantity Surveyors, and have had good experience of practical quantity surveying. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/17613 on both letter and envelope. 814

BOROUGH OF TORQUAY.

APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the post of Assistant Quantity Surveyor, in the Borough Surveyor's Department, at a salary in accordance with A.P.T. Division, Grade I, of the National Scale of Salaries (£330—£375), plus cost-of-living bonus, at present £59 16s. per annum.

Applicants should be capable of squaring, abstracting, billing, and measuring works on site.

The appointment is an established post, subject to the provisions of the National Scheme of Conditions of Service, and the Local Government Superannuation Act, 1937.

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

Applications, stating age, qualifications and experience, accompanied by copies of three recent testimonials should be sent to the undersigned, Town Hall, Torquay, not later than Saturday, the 4th October, 1947.

P. W. LADMORE,

Borough Engineer.

Town Hall, Torquay 817

CITY OF MANCHESTER.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent appointments—

ARCHITECTURAL ASSISTANT. A.P.T. Grade III, basic salary £390 per annum, by £15 to £435, plus cost-of-living bonus, at present £60 per annum.

Candidates should have passed the Intermediate examination of the Royal Institute of British Architects.

ASSISTANT HEATING, VENTILATING AND MECHANICAL ENGINEER. A.P.T., Grade IV, basic salary £420 per annum by £15 to £465, plus cost-of-living bonus, at present £60 per annum.

Candidates should be Graduates or Associate Members of the Institute of Heating and Ventilating Engineers; neat and expeditious draughtsmen, experienced in the design and supervision of heating, hot water and ventilating systems in all types of local authority buildings, and should have knowledge of mechanical equipment connected therewith.

The successful candidates will be required to pass a medical examination before the appointment is confirmed, and to contribute to the Corporation's superannuation fund, and to execute the Corporation's Deed of Service.

Applications on the official form, obtainable at the City Architect's office, must be returned, together with not more than three recent testimonials, to Leonard C. Howitt, B.Arch., Dip.T.P., D.P.A., F.R.I.B.A., A.M.T.P.I., City Architect, Town Hall, Manchester, by Saturday, 11th October, 1947, endorsed for the appropriate appointment.

Canvassing in any form, oral or written, direct or indirect, is prohibited, and will be regarded as a disqualification.

PHILIP B. DINGLE,

Town Clerk.

Town Hall, Manchester. 816

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Further particulars and forms of application may be obtained from the undersigned. Completed forms should be returned, together with copies of two recent testimonials, to the Principal, Brighton Technical College, Brighton, 7, within 14 days of the appearance of this advertisement.

W. G. STONE, M.A.,

Education Officer.

Education Office, 54, Old Steine, Brighton, 1. 820

BOROUGH OF THORNABY-ON-TEES.

JUNIOR ARCHITECTURAL ASSISTANT required for the Borough Engineer's Department.

Salary maximum of Grade I, Miscellaneous Division, viz., £300, plus £59 16s. bonus. The successful applicant will be transferred to A.P.T. Division, Grade I, on obtaining L.R.I.B.A. or equivalent qualification.

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

Form of application may be obtained from the Borough Engineer, Town Hall, Thornaby-on-Tees, and should be returned to the undersigned not later than Friday, 10th October, 1947.

J. R. CARR,

Town Clerk.

Town Hall, Thornaby-on-Tees. 782

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QUANTITY SURVEYOR required by Imperial Chemical Industries, Ltd., Wilton Works, Middlesbrough. Experience necessary in Taking Off, Abstracting, Billing and Pricing Works of a Building and Civil Engineering character. The successful candidate will be appointed to the established staff. Applications, giving full particulars, should be submitted to the Personnel Manager, Imperial Chemical Industries, Ltd., Wilton Works, P.O. Box 54, Middlesbrough, Yorks., quoting advert. ref. ICI/X/30. 725

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The Cylinder Latch that Deadlocks

The 'K' 146 Cylinder Deadlocking Rim Latch is a small and neat piece of door furniture designed to give added security. It functions in every way as a normal cylinder latch, but a part turn in the opposite direction to unlatching deadlocks the lock bolt and inside control knob ... it is truly the safest lock to fit.



LOCK

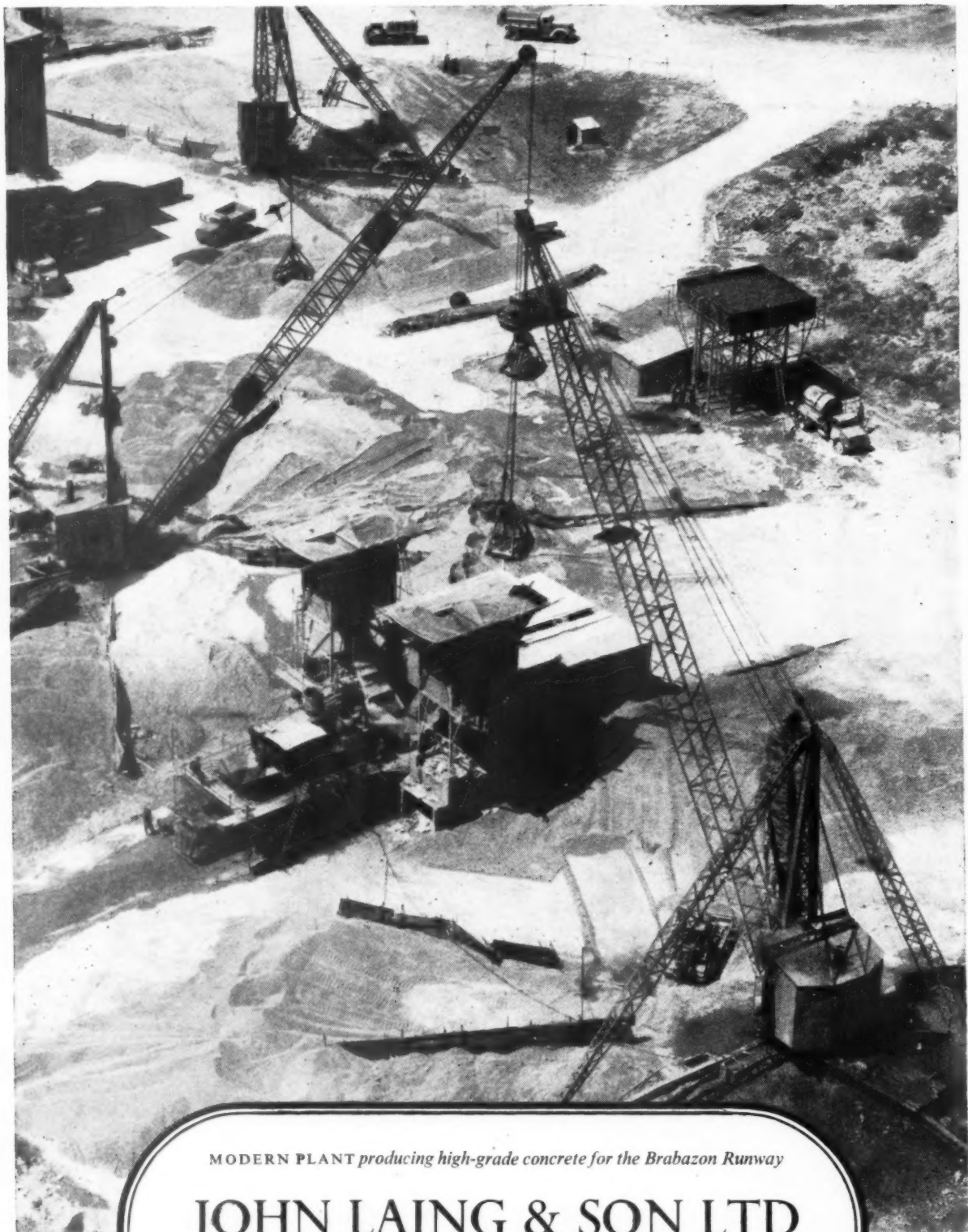
OTHER ADVANTAGES

- The cylinder is fitted with hardened steel protection plate which cannot be drilled.
- The bolt stop is operated by a press button which cannot fall into or out of engagement.
- The concentric tumbler arrangement gives a greater degree of individuality.
- Interchangeable between right and left hand doors.
- The outside escutcheon or rose is solid and fits flush to the door panel.

K. 146 CYLINDER DEADLOCKING RIM LATCH

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