

# THE ARCHITECTS' JOURNAL



## standard contents

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

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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 I one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. School of Architecture, Manchester Municipal School of Art, All Saints, Manchester, 15.	Arndwick 3480
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
AScW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAC	Board of Architectural Education. 66, Portland Place, W.1.	Welbeck 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre. 9, Conduit Street, W.1.	Mayfair 8641/6
BCC	British Colour Council. 28, Sackville Street, W.1.	Regent 3613
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 25, Victoria Street, S.W.1.	Abbey 5422-3
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BGC	British Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Sloane 8266
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Holborn 8146/7
CAS	County Architects Society. C/o A. Guy Chant, F.R.I.B.A. Salop County Council, 5, Belmont, Shrewsbury.	Shrewsbury 3031
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CDA	Copper Development Association. Kendals Hall, Radlett Herts.	Radlett 5616
CIAD	Central Institute of Art and Design. 41, 42, Dover Street, W.1.	Regent 3074
CIAM	Congrès Internationaux d'Architecture Moderne. Dolderal, 7, Zurich, Switzerland	
CID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPC	Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	Kensington 8161
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane 4280	
CUJC	Coal Utilization Joint Council. 13, Grosvenor Gardens, London, S.W.1.	Victoria 1534
DIA	Design and Industries Association. 9, Conduit Street, W.1.	Mayfair 5432
DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
EC	Electricity Commission. Savoy Court, Strand, W.C.2.	Temple Bar 7565
EJMA	English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FB 1951	Festival of Britain 1951. 2, Savoy Court, Strand, W.C.2.	Temple Bar 1951
FASSC	Federation of Association of Specialists and Sub Contractors. 21, Tothill Street, S.W.1.	Whitehall 9606
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, Nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577

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[Vol. 108

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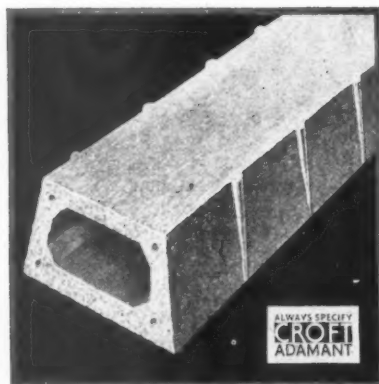
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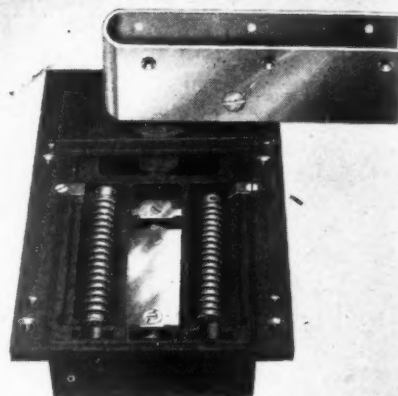
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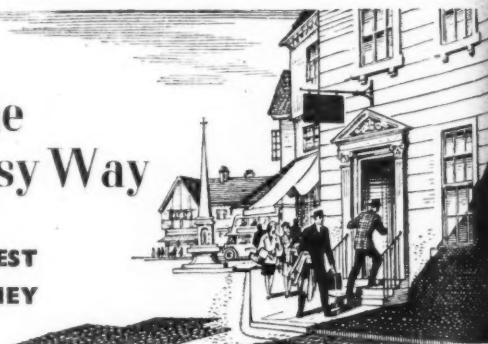
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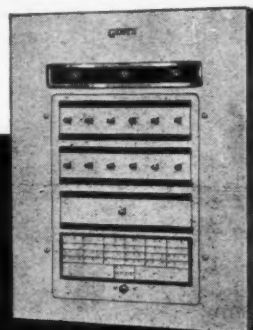
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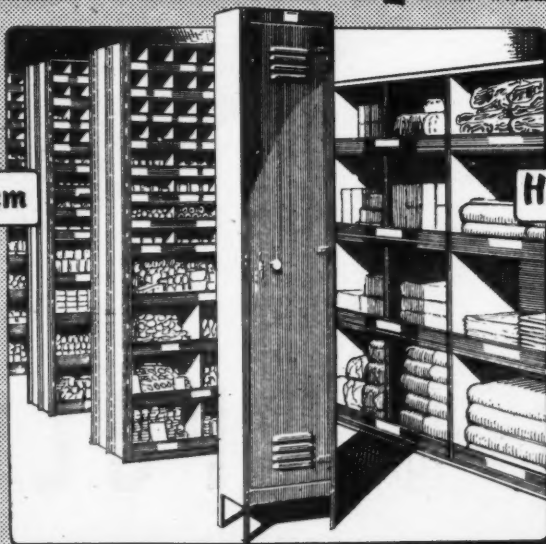
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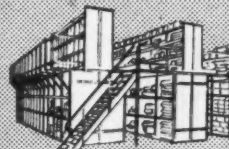
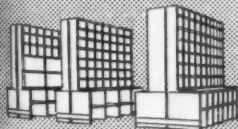
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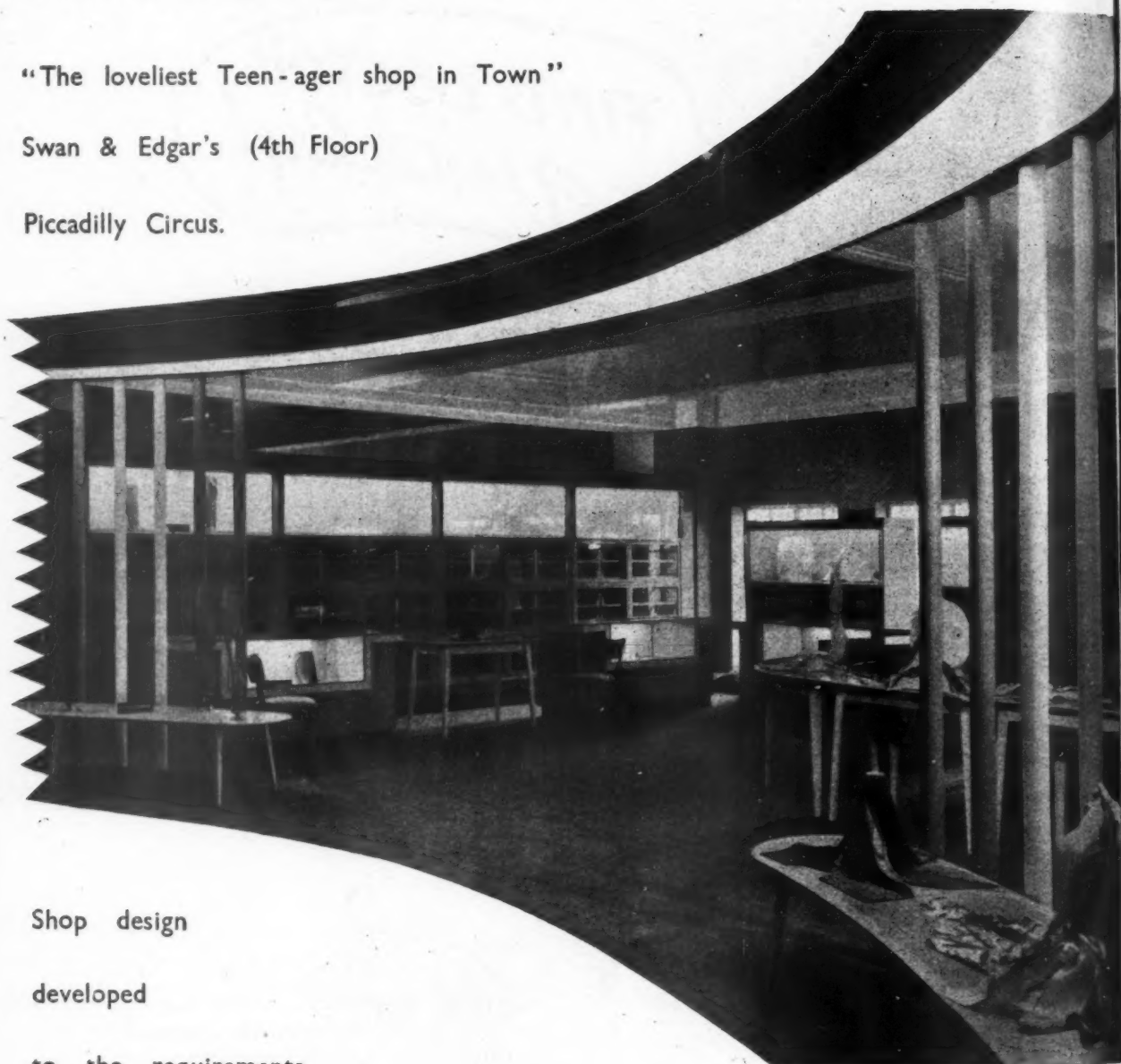
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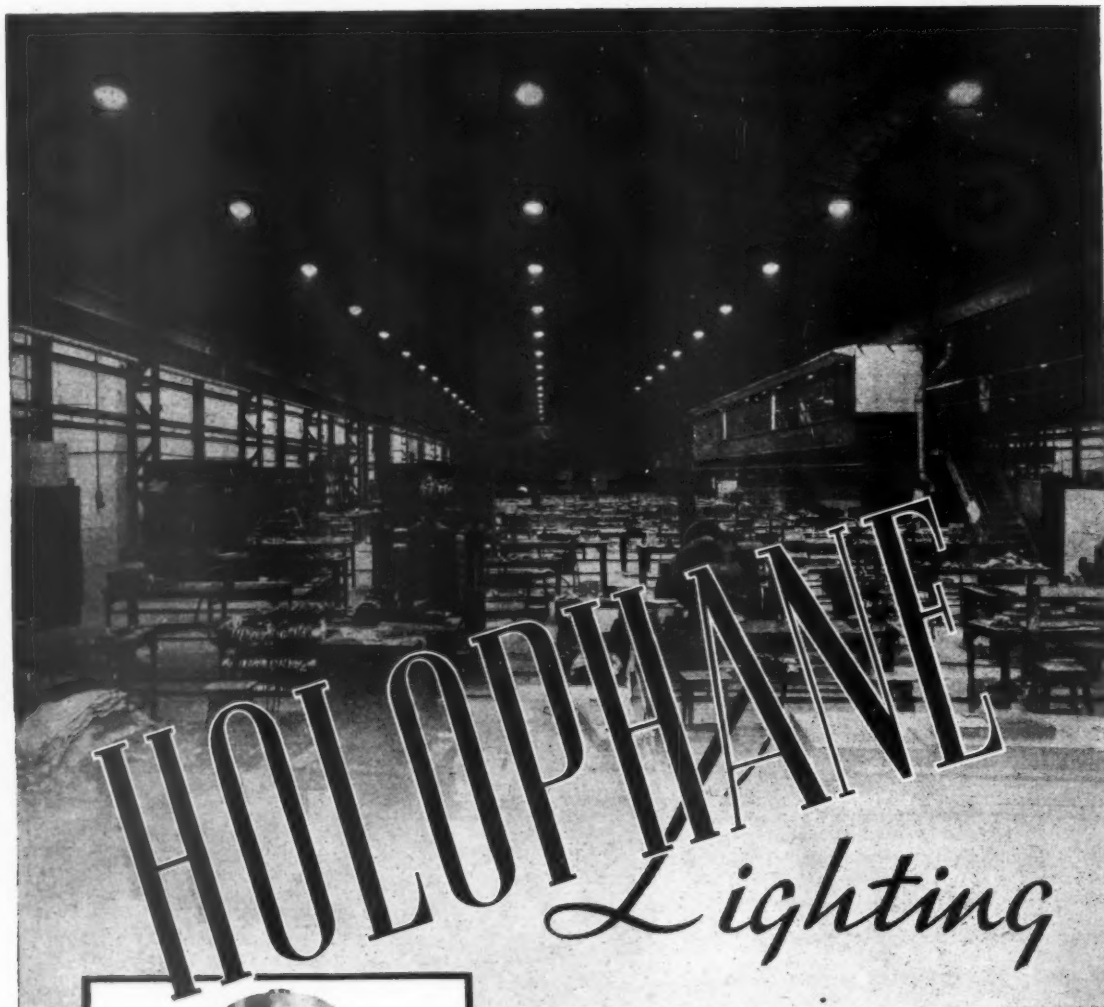
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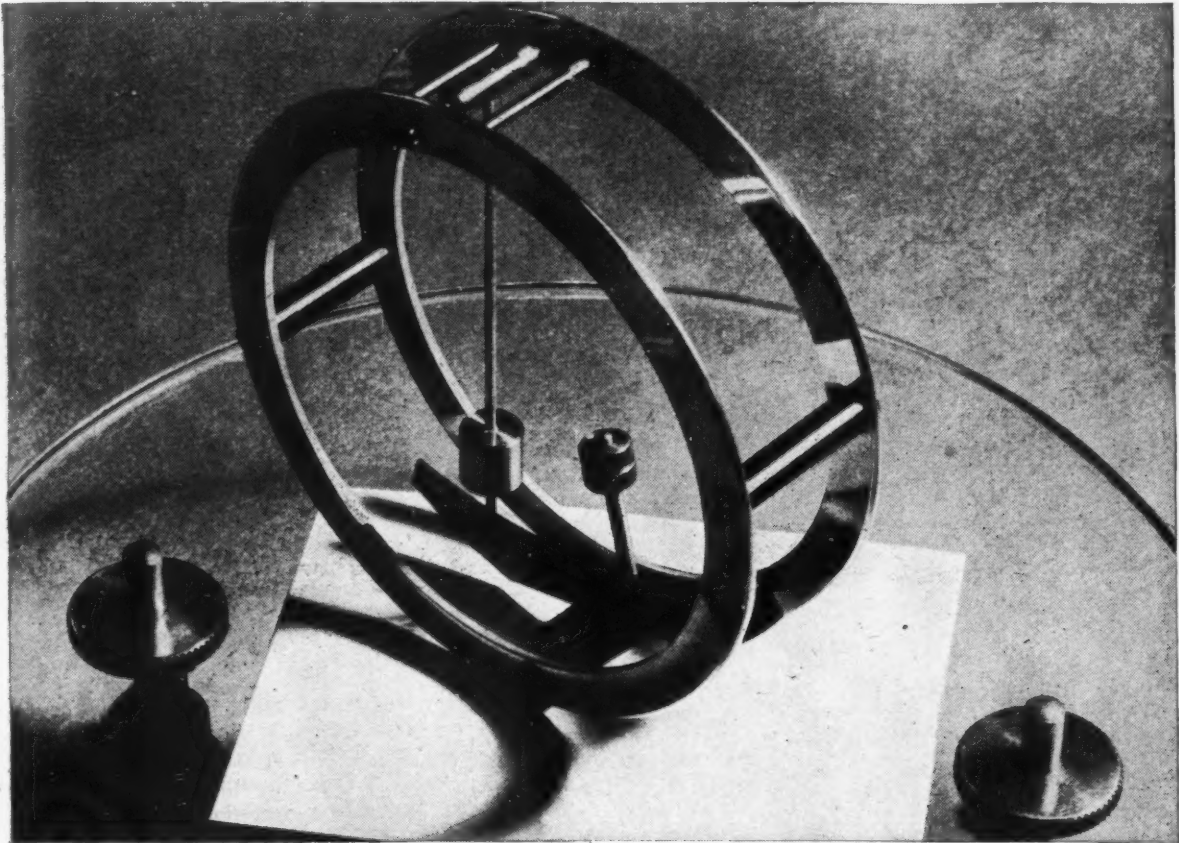
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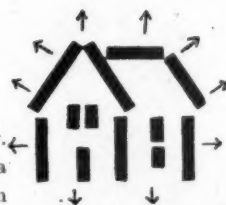
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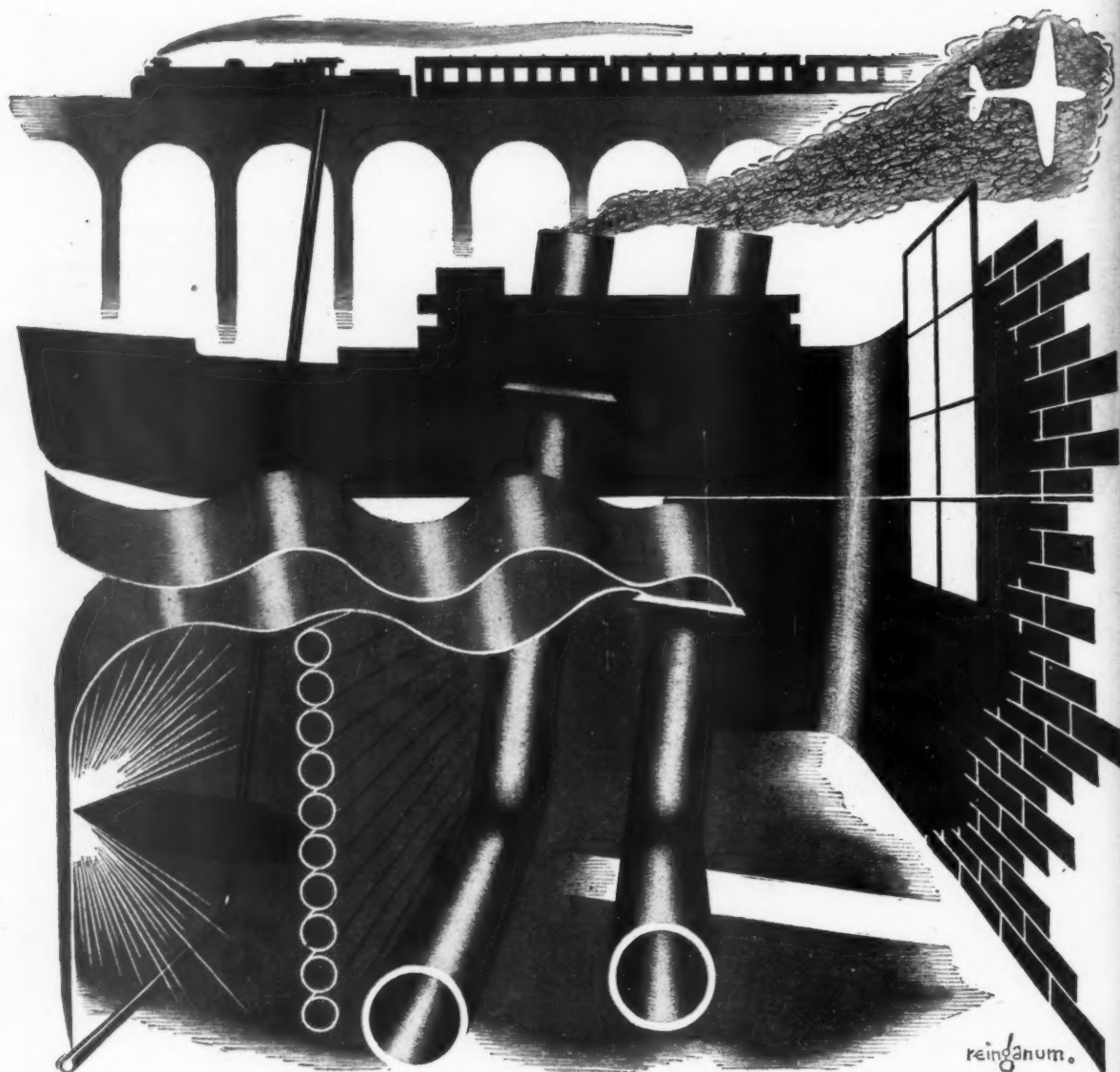
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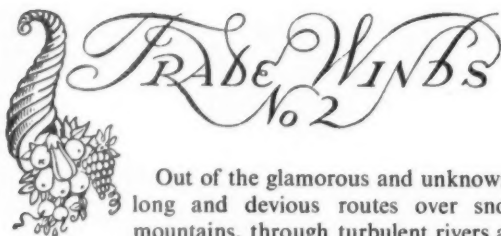
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But the undisputed power of Venice began to wane and die when the sea route by Africa to the Indies was discovered. In 1587 A.D. the last of the Venetian Argosies to England was wrecked off the Needles and with this disaster sank six hundred years' supremacy in the mediaeval trade.



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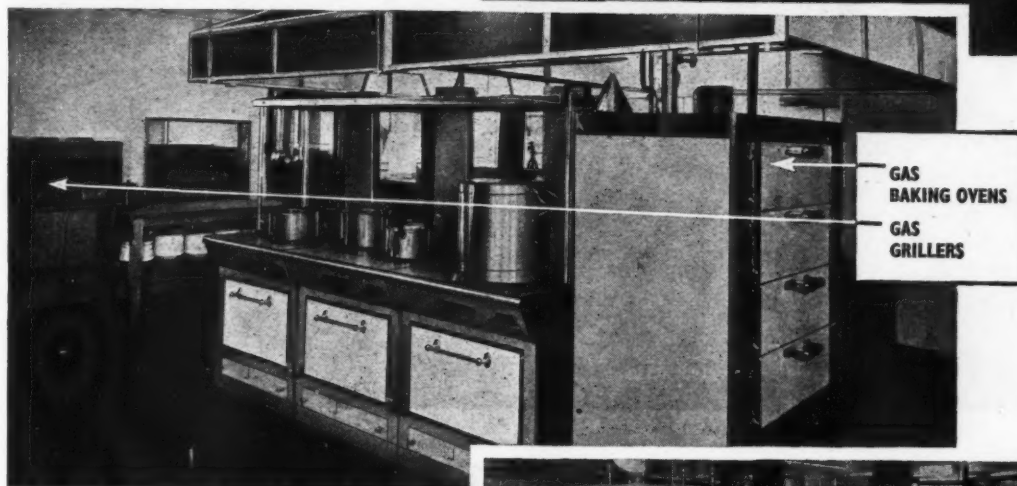
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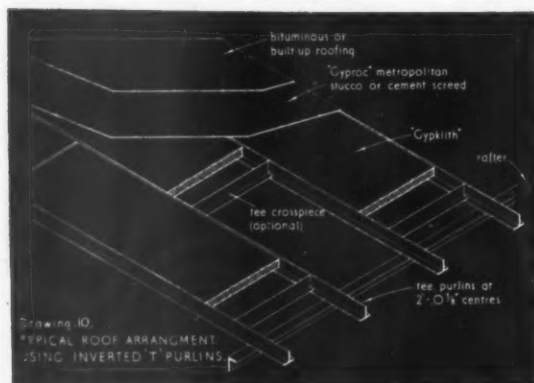
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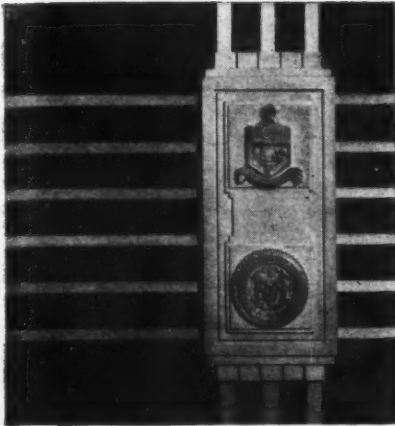
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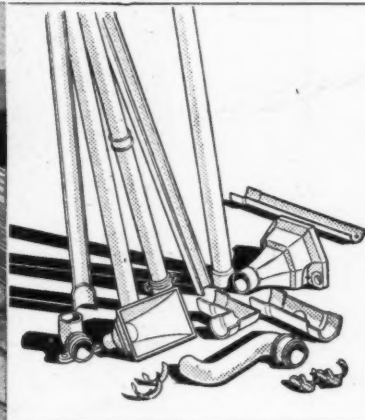
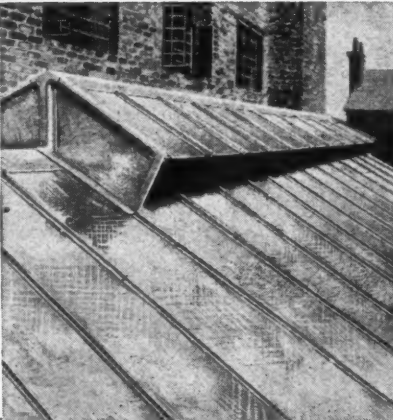
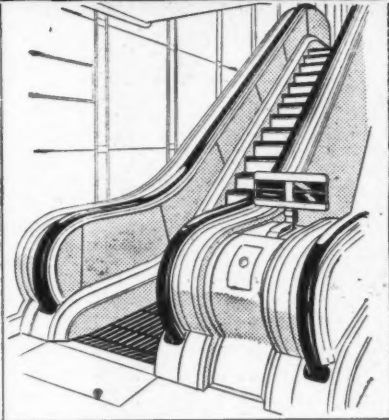
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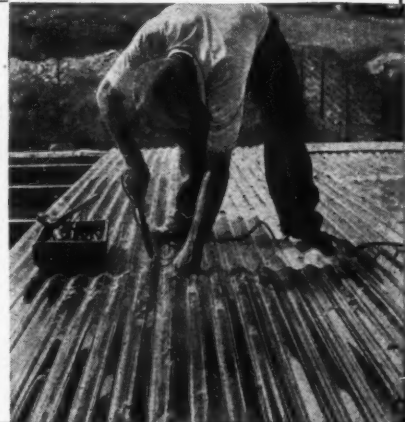
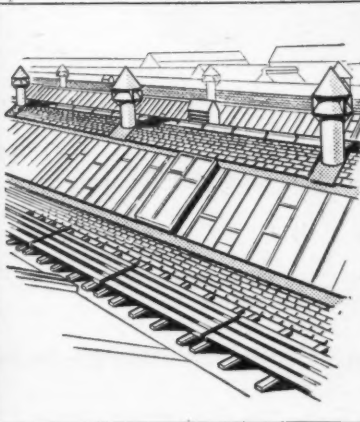
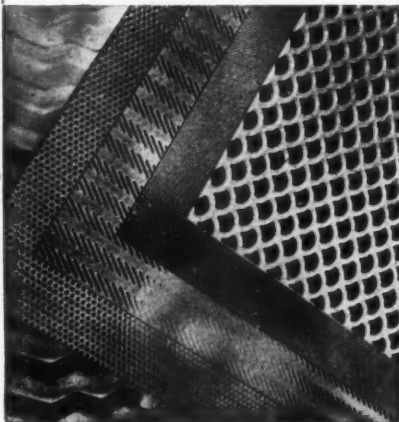
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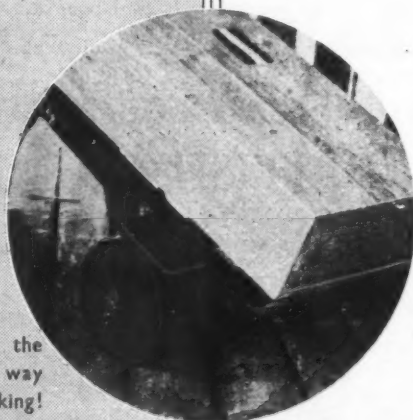
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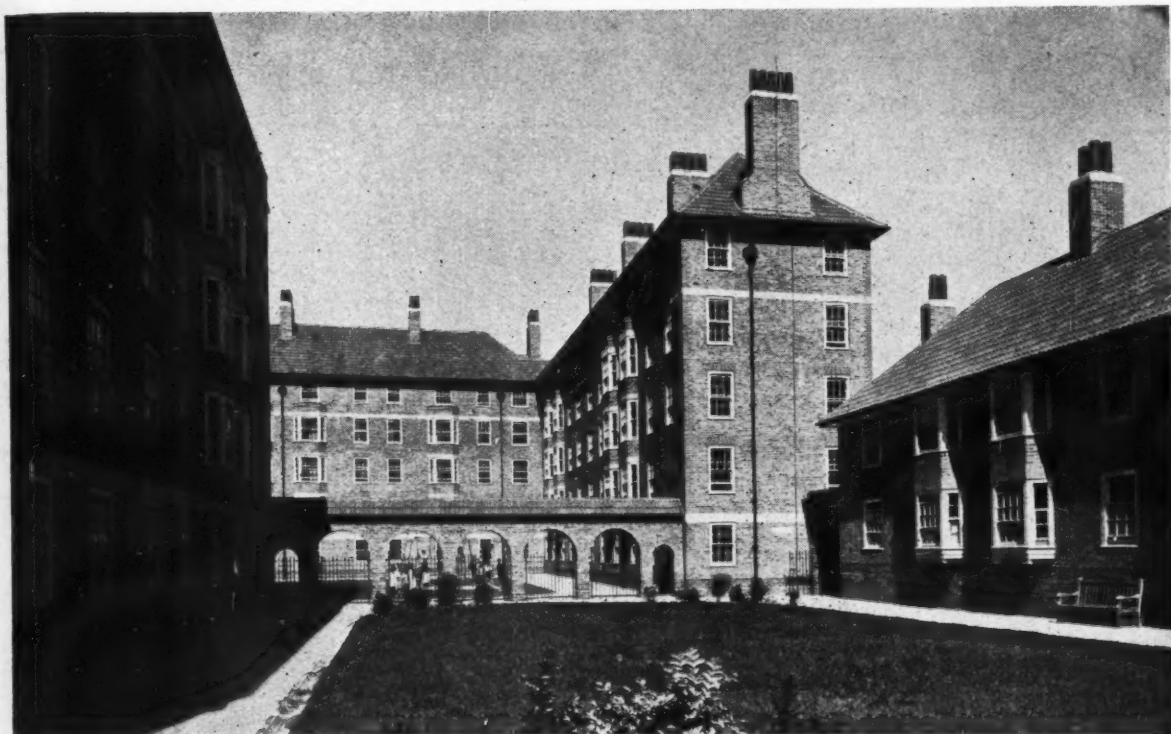


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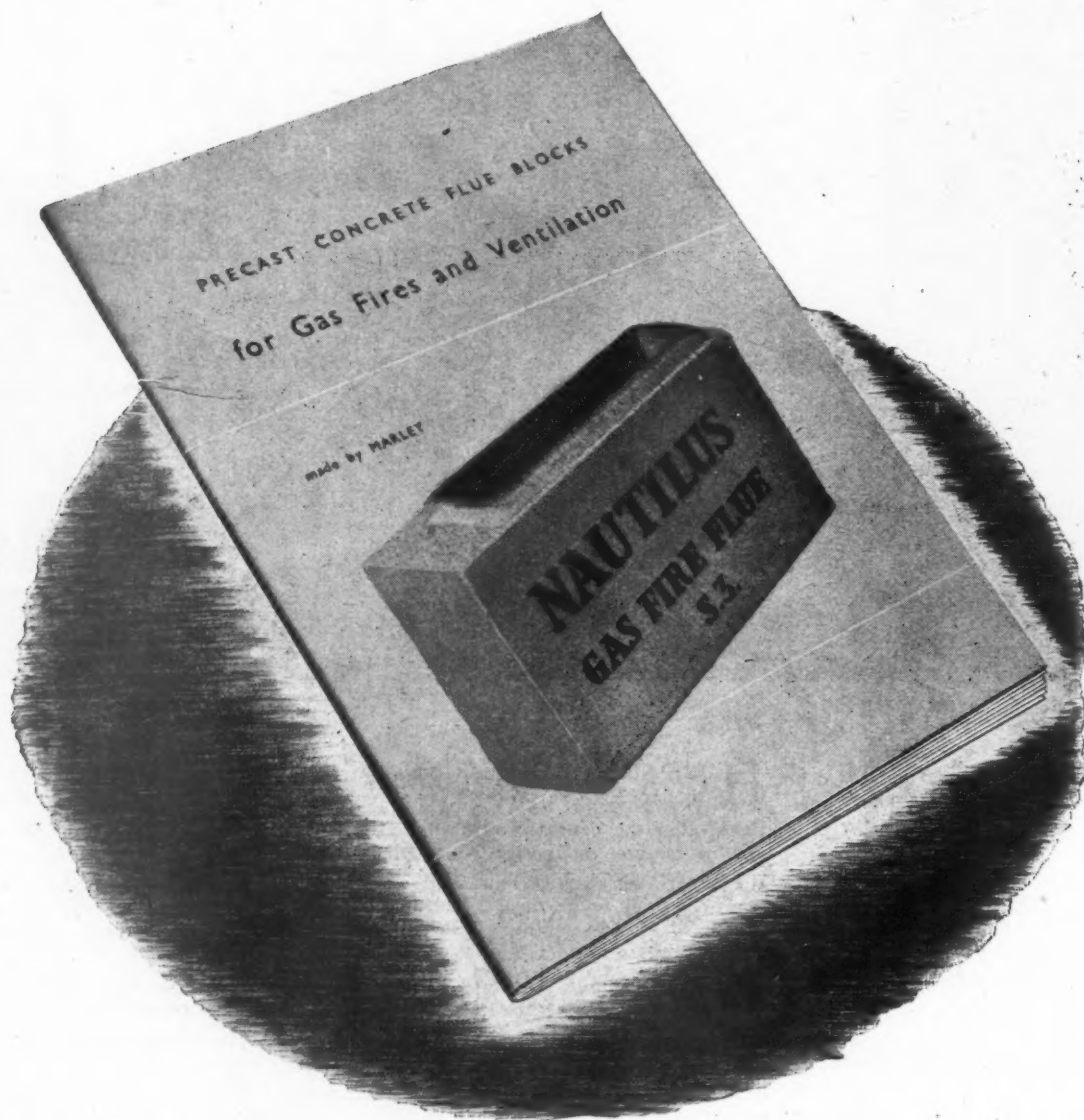
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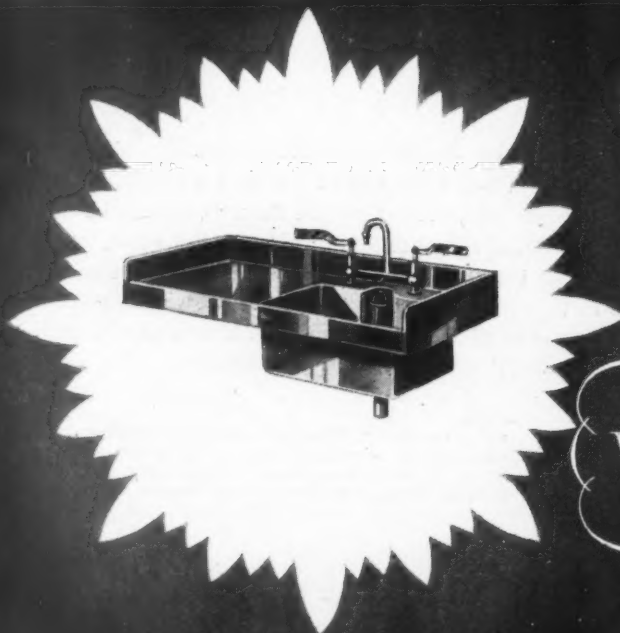


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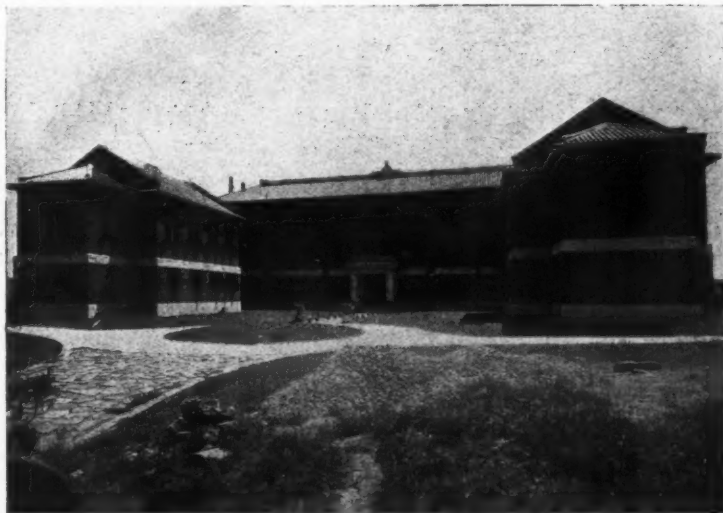
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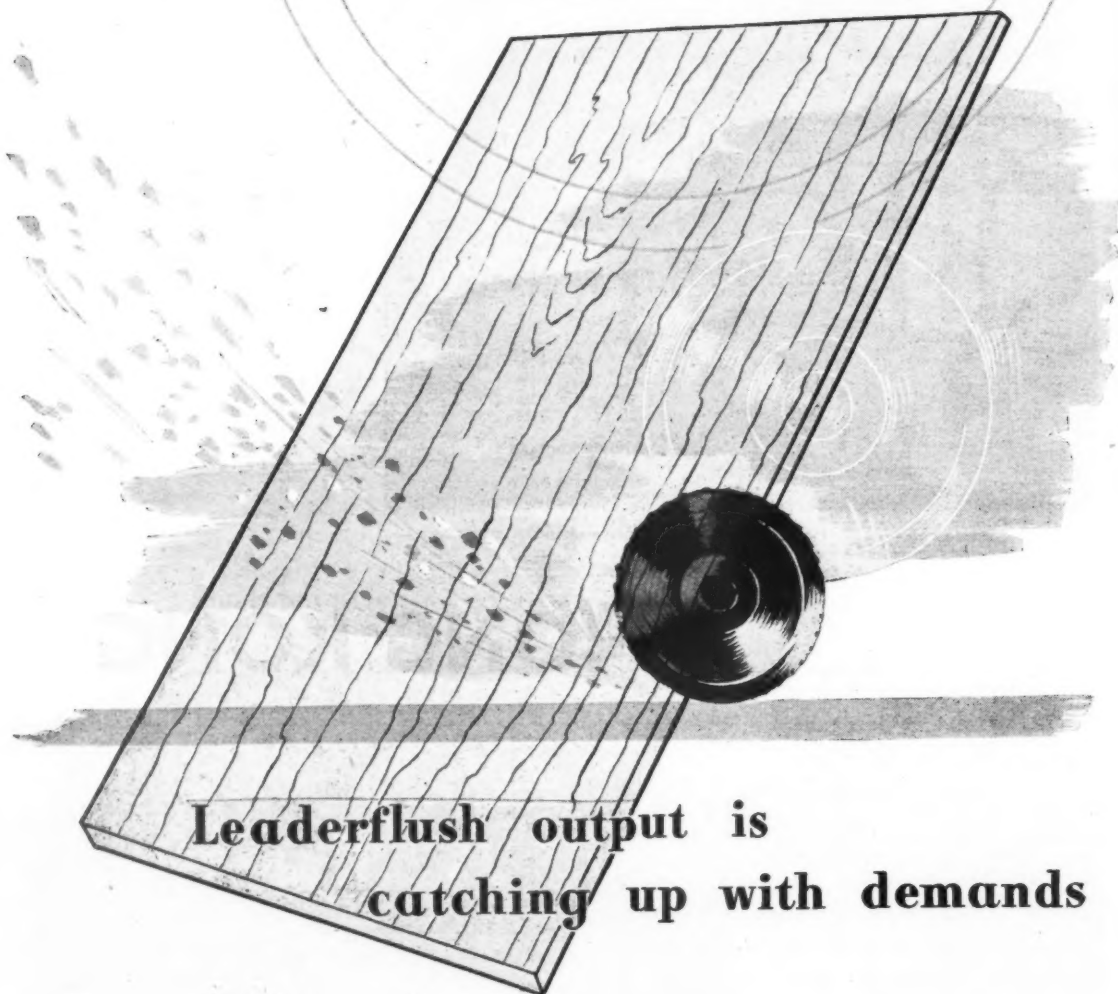
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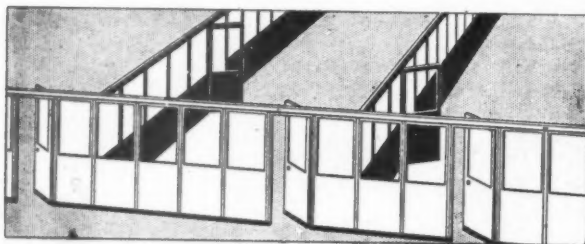
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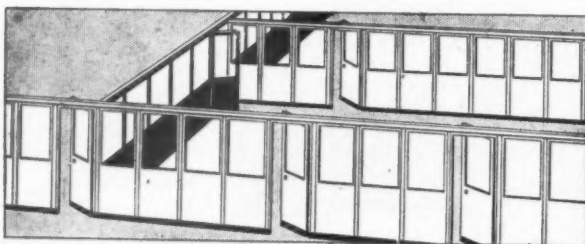
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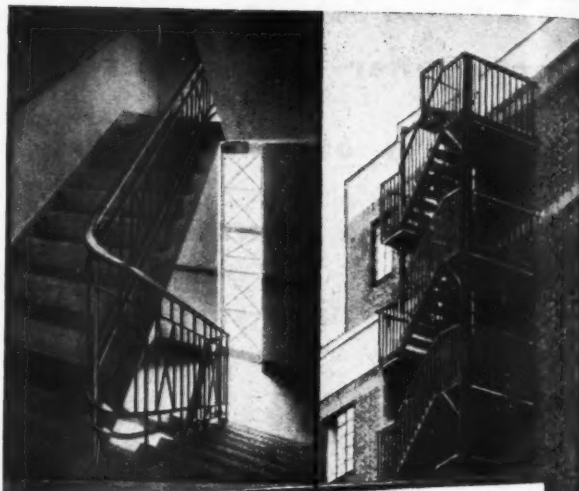
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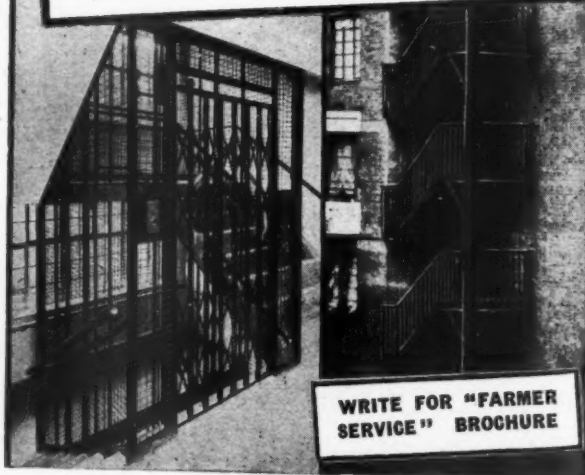


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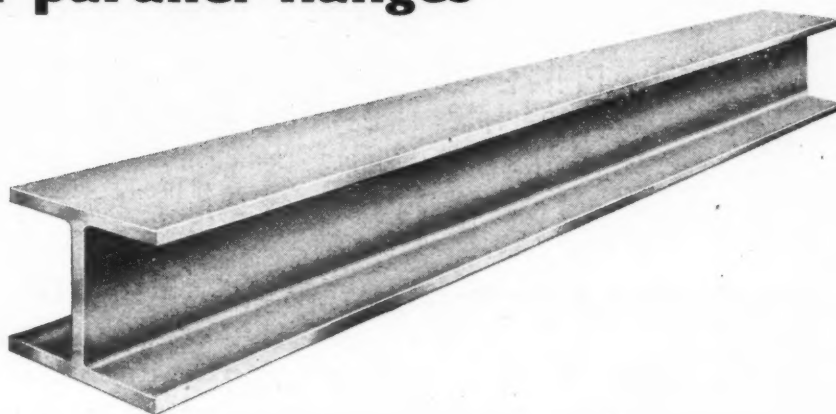
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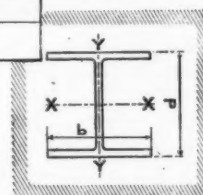


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8 x 8	45	13.23	20.50	.39 .64	152.76	55.02	38.19	13.75	3.39	2.04	106.0	
10 x 10	62.63	18.42	23.25	.43 .72	338.97	119.94	67.79	23.98	4.79	2.54	108.2	
12 x 12	82.55	24.28	25.53	.47 .79	652.00	228.00	108.60	38.90	5.18	3.07	109.6	
14 x 12	100	29.41	25.45	.55 .92	1048.40	265.20	149.80	44.21	5.97	3.00	107.0	
16 x 12	110	32.35	29.10	.55 1.00	1504.60	288.30	188.10	48.05	6.82	2.99	106.8	
18 x 12	122	35.88	30.50	.59 1.08	2094.50	311.40	232.70	51.90	7.64	2.95	106.0	
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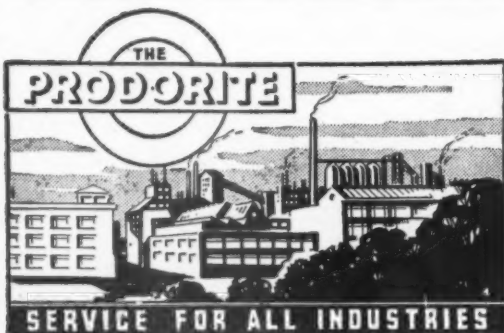
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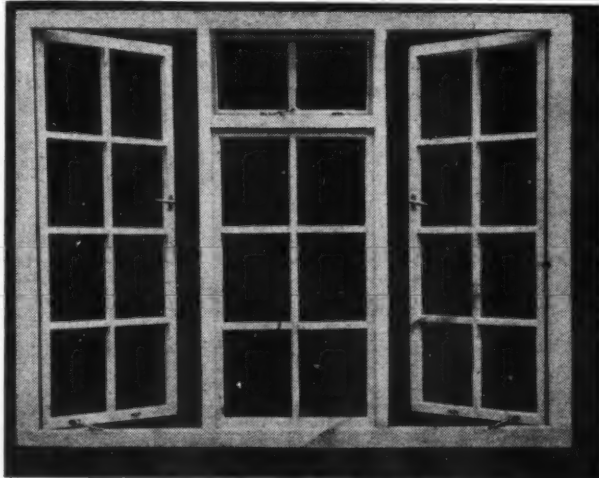
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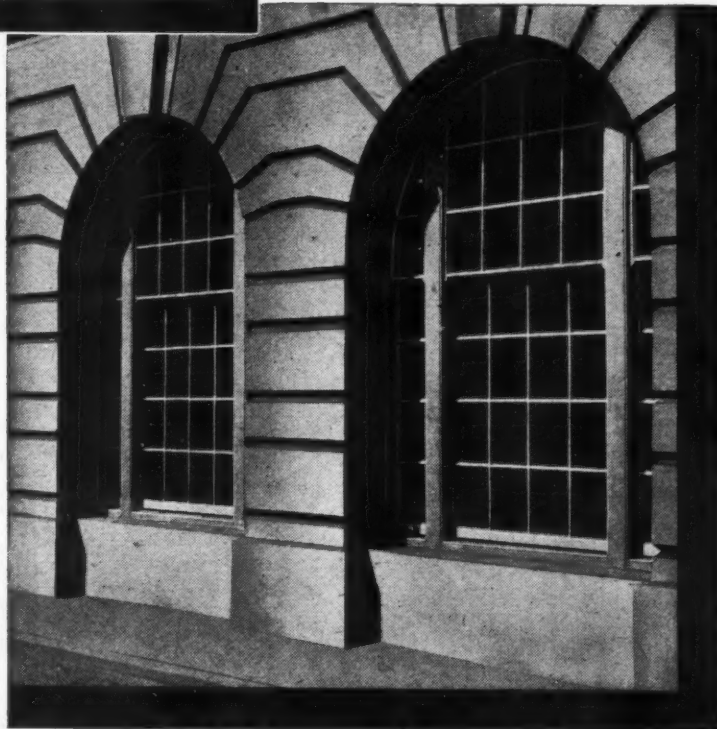


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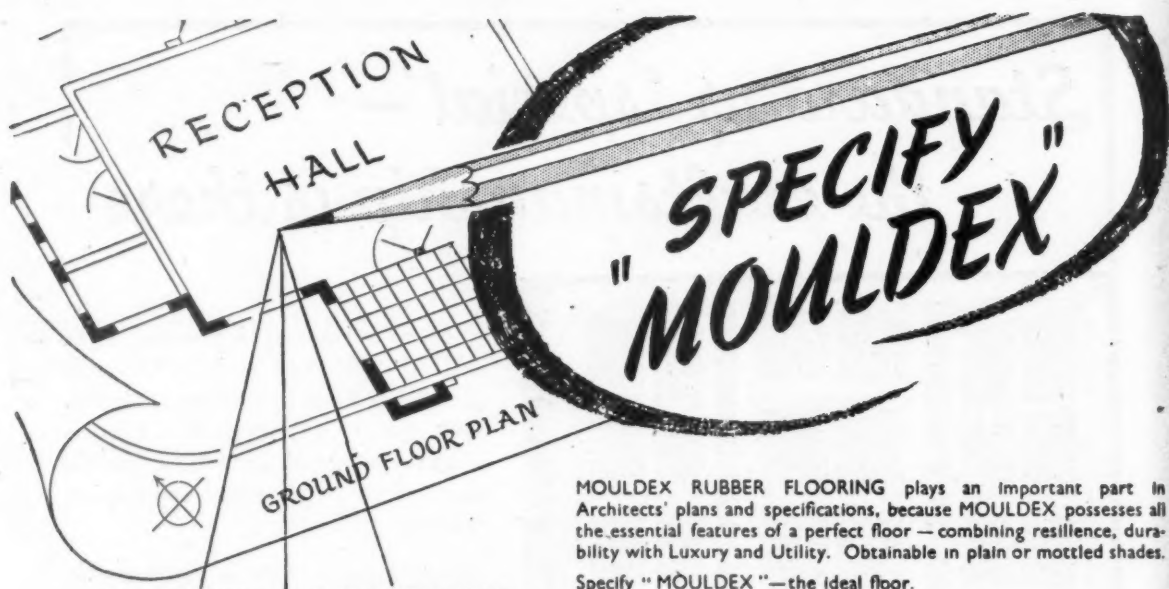
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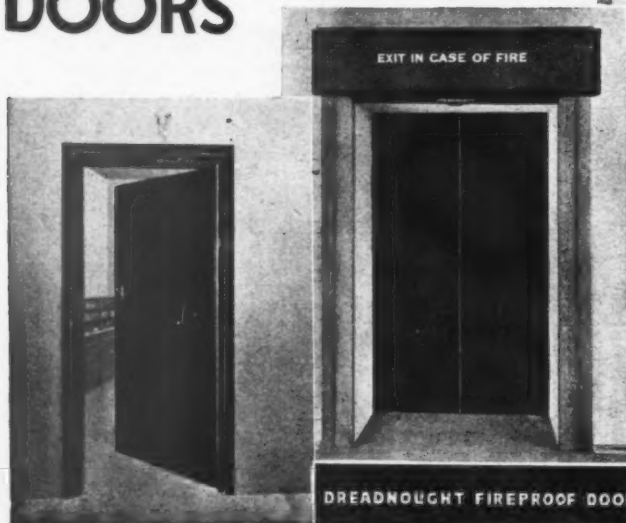
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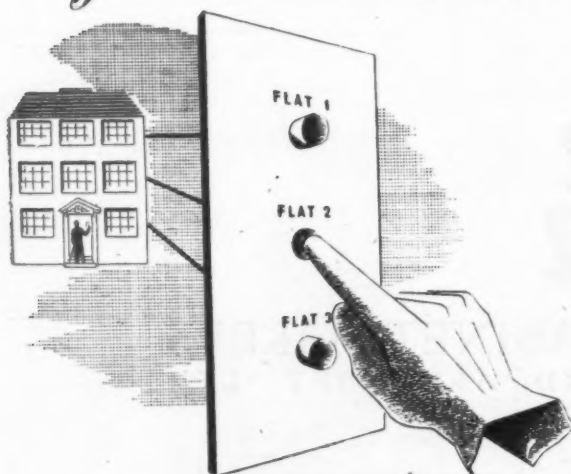
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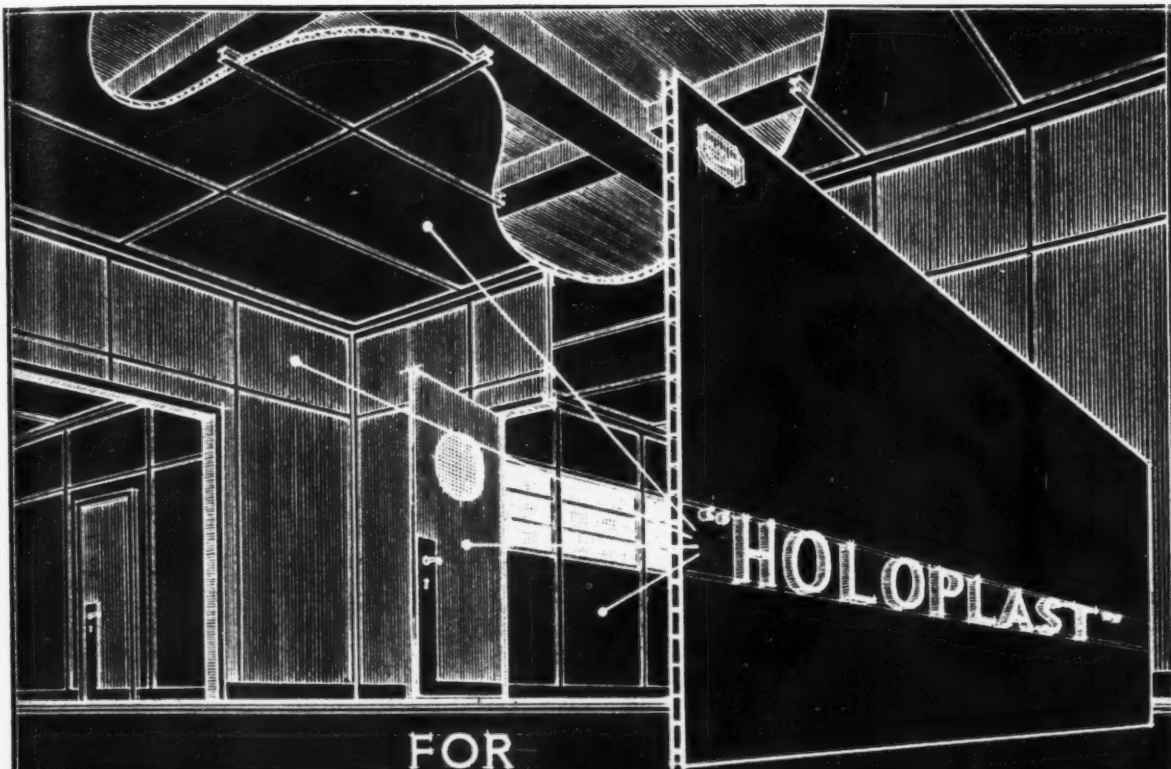
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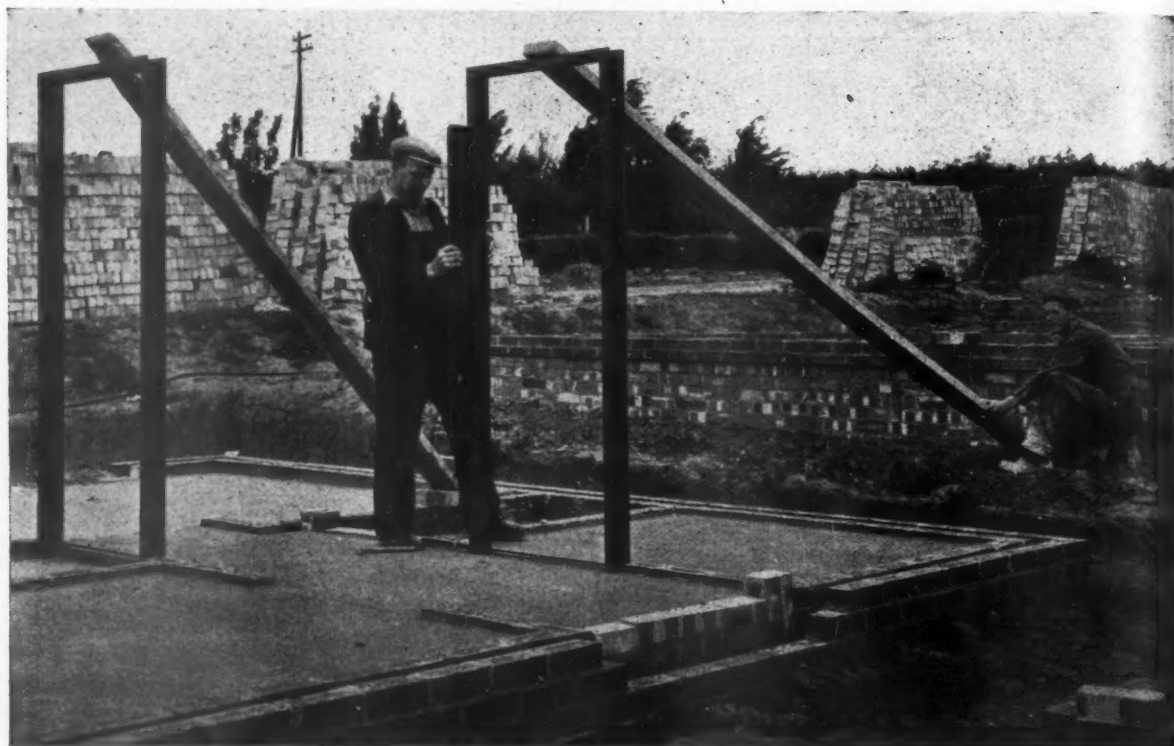
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## DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

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 given in the glossary of abbreviations on the front cover.

**ASCOLT.** *Autumn meeting of Building & Allied Trade Golfing Association.* At Berkshire Golf Club. Members intending to play (or any persons interested in membership of this Association) should communicate as early as possible with Mr. Hubert H. Hill, Monument Station Buildings, King William Street, London, E.C.4. (Telephone: Mansion House 3714.) SEPT. 28

**BIRMINGHAM.** *Design Week.* (Sponsor, CID.) OCT. 11-16

**BOLTON.** *Design Fair.* At the Art Gallery, Civic Centre, Bolton. (Sponsor, CID.) UNTIL SEPT. 25

**LONDON.** *Darkness into Daylight Exhibition.* At the Science Museum, South Kensington. (Sponsor, Science Museum.) UNTIL SEPTEMBER 30

*Royal Photographic Society's 93rd Annual Exhibition.* At 16, Princes Gate, S.W.7. (Sponsor, Royal Photographic Society.) Part 1: Pictorial and Colour. SEPT. 10 to OCT. 3

Part 2: Scientific Nature Record and Technical. OCT. 9-30

*Display of Domestic Solid Fuel Burning Appliances.* At the Building Centre, 9, Conduit Street, W.1. (Sponsor, C.U.C.) This display is changed at approximately 4-monthly intervals. PERMANENT EXHIBITION

*Gas in the Design for Living.* Exhibition of gas cookers, space and water heaters, laundry equipment and portable cooking and heating appliances. At the Building Centre, 9, Conduit Street, W.1. (Sponsor, BGC.) PERMANENT EXHIBITION

*Machine Tool and Engineering Exhibition.* At Olympia. (Sponsor, The Machine Tool Trades Association.) UNTIL SEPT. 11

*TCPA Dutch Tour.* (Sponsor, TCPA.) FROM SEPTEMBER 11

*R. C. Blyth. Design and Control of Concrete Mixes.* At Caxton Hall. (Sponsor, Institution of Sanitary Engineers.) 6 p.m. SEPT. 21

*Biology and Civil Engineering Conference.* September 21. Morning: *Causes, Effect and Prevention of Soil Erosion.* Afternoon: *The Effect of Vegetation on Drainage and*

*Floods.* September 22. Morning: *The Effect of Vegetation in Stabilizing Artificial Slopes.* Afternoon: *The Use of Vegetation to Stabilize Sand Dunes.* September 23. Morning: *The Effect of Vegetation on the Settlement of Roads and The Effect of Vegetation on The Settlement of Structures.* Afternoon: *Algal Growth and Engineering Design.* At the ICE, Great George Street, Westminster, S.W.1. (Sponsor, ICE.) SEPT. 21-23

*J. T. Finch. Standards of Practice in Domestic Sanitary Engineering.* At Caxton Hall. (Sponsor, Institution of Sanitary Engineers.) 6 p.m. OCT. 19

*Unveiling of the Joint Memorial to Admirals of the Fleet, Lord Jellicoe and Lord Beatty in Trafalgar Square,* by the Duke of Gloucester. OCT. 21

*International Housing Exhibition.* At the Empire Hall, Olympia. (Sponsor, International Housing Exhibition.) Nov. 9-18

*Public Health and Municipal Engineering Congress and Exhibition.* At Olympia. (Sponsor, Public Health Congress Council.) Nov. 15-20

*Building Teachers' Conference.* At the Northern Polytechnic. (Convener, D. A. G. Reid, Brixton School of Building.) 10.30 a.m. to 4 p.m. Nov. 27

**MAIDSTONE.** *J. Singleton-Green. Concrete Troubles.* At the Maidstone Technical Institute, Tonbridge Road, Maidstone. (Sponsor, S.E. Society of Architects, Maidstone Group.) 7 p.m. OCT. 7

### COMPETITIONS

**RIBA Prizes for Public and Secondary Schools:** A total of 10 guineas in prizes is offered for: 1. The best original illustrated essay dealing with a building or group of buildings with which the competitor is personally acquainted; 2. the best sketches or scale drawings of a building or part of a building in pencil, ink or colour, maximum size 30 in. by 22 in. Assessors: H. T. Cadbury Brown, Hugh Casson, E. R. Jarrett. Further information from the Secretary, RIBA, 66, Portland Place, London, W.1. Entries by October 7.

**RSI Prize Competitions:** John Edward Worth Prize (£40) for an essay on *Practical Improvements of Appliances or Inventions in or about Dwelling-Houses*, and John S. Owens Prize (£15) for an essay on *Atmospheric Pollution.* Apply Secretary, Royal Sanitary Institute, 90, Buckingham Palace Road, London, S.W.1, for general conditions. Entries by December 31.

## NEWS

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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.*

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

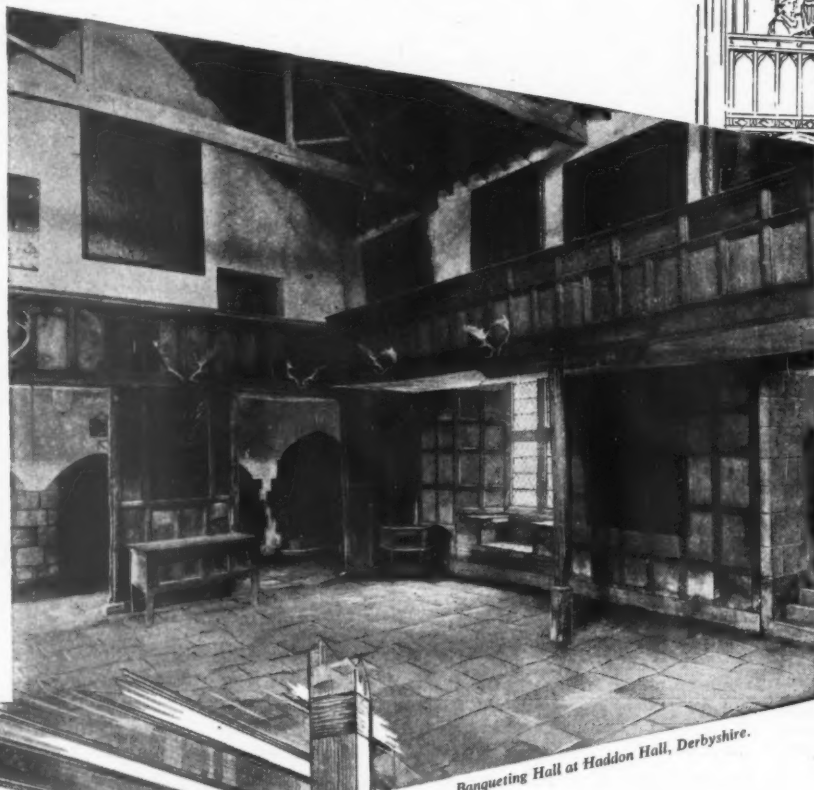
★★ means important news, for reasons which may or may not be obvious.

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

### *The RIVER CREED HYDRO-ELECTRIC PROJECT of the North of Scotland Hydro-Electric Board has been abandoned.*

The North of Scotland Hydro-Electric Board has decided to accept the recommendation of its Fisheries Advisory Committee that the River Creed hydro-electric project should be abandoned. During the last three years, the Board has surveyed sources of hydro-electric power in Lewis. As a result a scheme was prepared for the River Creed, which flows into Stornoway Harbour. Details of the Creed Scheme were submitted to the Fisheries Advisory Committee whose recommendations for the preservation of the salmon stock seriously hampered the scheme and rendered it uneconomic. When the Board intimated that the conditions were unacceptable the Fisheries Committee recommended that the scheme be abandoned. The Board has now reluctantly agreed to this course. Electricity is being generated for Stornoway and district by extensions of oil-fuelled diesel plant at Stornoway generating station.

*In a changing world...*



Banqueting Hall at Haddon Hall, Derbyshire.



## Timber endures

The permanent beauty and utility of timber is enshrined in ancient monuments everywhere. Haddon Hall, for instance, with its open timber roof, panelled screen and minstrel gallery excites admiration of 14th century craftsmanship and emphasizes the unique suitability of the material. For similar reasons the modern architect, craftsman and designer prefer timber. They enjoy not only a far greater range of hardwoods and veneers but a wide variety of plywoods—water resistant, flat, shaped or metal faced—prepared for their use with all the advantages of modern kiln drying, fireproofing, etc. to meet the exacting demands of modern tastes and requirements.

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## From AN ARCHITECT'S Commonplace Book

**THE LINEAR TOWN.** [From *The Home of Man*, by Le Corbusier and Francois de Pierrefeu (Architectural Press).] The fact is that, from now on, a working-class town no longer need be contracted into a ball around harbour or railway terminus, nor revolve aimlessly within a capital's orbit. It will have the right to stretch beside a waterway, to become linear, to split up into segments facing their factories, each segment cut down to a size proper to a small town or village, though more homogeneous and enjoying all those buildings and institutions that secure for it a personal existence. An exciting thing will then happen, the merging, no longer theoretical this time but real, of worker's life with peasant's and, thrown in, the varied exchanges such neighbourliness implies. The most material will consist in bartering fruits, vegetables and so forth against half-finished articles that, later still, will come on the market completely finished thanks to electricity, and rural homes and workshops.

★★  
**During July 19,838 PERMANENT HOUSES WERE COMPLETED in Great Britain, making a total of 132,303 in the first seven months of 1948.**

The figures are presented in a White Paper (Cmd. 7507) by the Minister of Health and the Secretary of State for Scotland. The summary shows that 1,183 temporary houses were finished in July, leaving only 2,916 to be completed out of the total programme of 157,270. The number of permanent and temporary houses completed in July was 21,021, which compares with 23,466 in June. By new building, repair, conversion and requisitioning, homes were provided in July for 24,318 families, bringing the total number of families rehoused by these methods under the post-war programme to 753,095. The number of houses completed since the war is 484,722 (330,368 permanent and 154,354 temporary).

**A party of IRISH HOUSING EXPERTS visiting this country to study methods of housing prefabrication have inspected LCC housing estates.**

The delegation, led by Mr. T. J. Murphy, Minister of Local Government of the Eire Government, consisted of the following members:—Six members of the Dublin Housing Consultative Council (Chairman, Mr. T. C. O. Mahoney; Director of Housing, Mr. M. E. Dockrell; Councillors Phelan and Gibbons; and Messrs. T. Dunne and

L. Crawford), two officers of the Dublin Corporation, and four officials of the Department of Local Government. The visit began with a tour of Messrs. Costain's factory at Childeritch, Essex, where components of the Airey house are made, and was followed by a tour of the Hainault Estate, Essex. This LCC estate contains a number of the new post-war prefabricated houses of all types. Later, the party visited the Stent factory at Dagenham, where the Stent house (pre-cast concrete) is made. In the absence of the Council's Director of Housing and Valuer, the Assistant Director (Mr. I. I. Ungar) conducted the party, accompanied by other officers of the Council's Housing Department.

**The Forestry Commissioners have published their REPORT for 1947.**

The report\* stresses the necessity for a measure of control over woodlands and particularly over fellings. During the 12 months covered by the report, licences for felling were issued by the Board of Trade in respect of 55,000,000 cubic feet—an increase of 2,500,000 cubic feet over the figure for the previous year. "This heavy drain," the Commissioner's state, "cannot be much longer sustained. Clear fellings must be reduced to a minimum as speedily as possible, and production encouraged from improvement thinnings. A large aggregate area of the younger plantations which remain are in need of thinning, and considerable quantities of poles and pit-props might be obtained from this source, greatly to the benefit of the stands concerned."

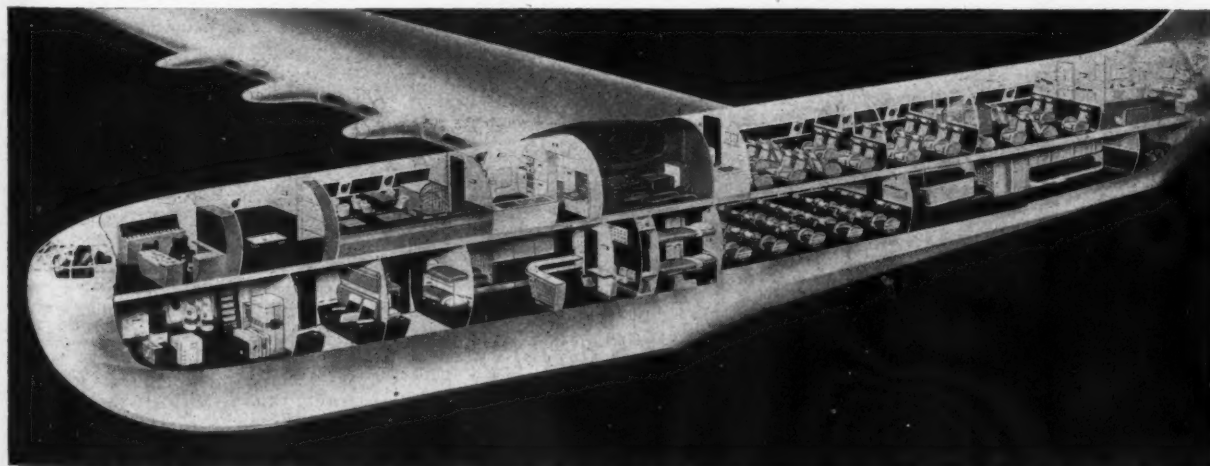
\* House of Commons Paper No. 179, 1s. 3d.

The census which is now being made in Scotland, England, and Wales shows that in some counties the proportion of felled, devastated, and scrub woodland is as high as 60 per cent.

★  
**It is estimated that the CONVERSION OF THE FAMOUS NASH TERRACES, overlooking Regent's Park, into Government Offices will be completed by the end of this year.**

The Government's decision to convert unoccupied terraces into temporary offices was announced early in 1946. The object was to free other accommodation and to prevent deterioration of the houses which were rapidly becoming uninhabitable. So far, according to the *Daily Telegraph*, 130 houses have been converted. They are occupied by 3,500 clerks of the Ministries of Works, Food Supply, Agriculture and Fisheries, and National Insurance. A part of York Gate has also been allotted to the National Association of Local Government Officers.

Architects estimate that the remaining 76 houses will be converted by the end of the year. The further task of repairing and weatherproofing the stucco exteriors of the whole Nash façade, which includes 186 houses let to private tenants, is not expected to be finished until the summer of 1949. All original features of worth have been preserved whenever possible. Rich ceilings, damaged by bombing, have been carefully raised into position again. Group central heating has been installed for economy, but original fireplaces of artistic value have been preserved.



The design of the interior of this Saunders Roe flying boat, the SR45, is by Mr. Richard Lonsdale-Hands. Due for completion in 1951 the flying boat has a range of 5,500 miles, a cruising speed of 350 m.p.h. and can carry 100 passengers. There are two decks, the upper accommodates the flight deck, control room, and crew's rest room, the restaurant and kitchen, and the women's cloakroom. The lower deck has storage space forward, with seating and sleeping cabins and a purser's reception centre by the forward staircase and a lounge, cocktail bar and promenade aft.





## Photo Album: Spanish Miscellany

Now that the ban on travel to Spain has been lifted, architects have a long overdue opportunity to renew acquaintance with that country's architecture. It makes a fascinating study that has no parallel in Northern Europe. The influence of Moorish work has never disappeared and this, allied to the Spanish genius for rich and bizarre decoration which produced the plateresque and churrigueresque styles, has resulted in an architecture which, if too

unrestrained for the English palate, is rarely without interest. A third influence came from the South American colonies whence Indian decorative motifs were imported to the imperial centre. The photograph shows the interior of La Mesquita at Cordoba, one of the outstanding examples of Moorish architecture in Spain. But the Moors did not remain untouched by European influences, as is apparent in the corinthian capitals and the pier mouldings.

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## ★★★ WORK ON NEW TOWNS is to start this year.

A start will be made late this year on the building of Stevenage, Hemel Hempstead, Harlow, and Crawley. It is probable that the development of Welwyn and Hatfield will begin concurrently. Building on the first four sites was specifically banned in the White Paper on capital expenditure, but the Ministry of Health has decided that the four schemes are now an integral part of the London area housing programme, with the result that the development corporations have gained access to supplies of materials and labour from which they have hitherto been excluded.

## ★ Work has begun on the super-structure of SKELTON GRANGE POWER STATION, at Knostrop, Leeds.

The cost of the work is £6 million. Work on excavation and the foundations has been in progress for the past two years. An area of 150,000 square yards has been excavated to an average depth of eight feet, and about a quarter of a million tons of clay, rock, and low-grade coal have been removed. Scaffolding for the first three pillars of the turbine house have now been erected. The operations cover only about two-thirds of the original plan, which includes two cooling towers, a main block of buildings about 130 ft. high, and two chimneys nearly 400 ft. high. The architect responsible for the design is Mr. R. A. H. Livett, Leeds City Architect. The consulting engineers are Merz and McLellan, and the civil engineering consultants Sir Alexander Gibb and Partners.

## The provisions of a will in which £30,000 was left to erect a tower on Bangor Cathedral have created A PROBLEM OF "CONSIDERABLE MAGNITUDE AND INTRICACY."

The Dean (the Very Rev. J. T. Davies), reporting to the Friends of Bangor Cathedral, says:—"The intention of Mr. King (of Caernarvon) as outlined in his will cannot be fully executed. Sir Ralph Freeman, our consulting engineer, has pronounced that the nature of the subsoil is such that he could not endorse a scheme which would entail a substantial addition to the present load. This left our architects—Messrs. Caroe and Partners—with a problem of considerable magnitude and intricacy. How much of a tower could be added? And how far would such a tower meet the conditions laid down in the will? The design put forward is clearly the work of masters in ecclesiastical architecture and one of unqualified beauty. The design extends the buttresses at the four angles of the present tower to a height of 34 ft., ending in pinnacles of great beauty. With a parapet surmounting the present structure, these give the impression of a tower of considerable height without adding more than a small proportion of weight. The idea of height is further enhanced by a slender framework supporting a graceful copper-sheeted spire which would make the cathedral once more a landmark in the city." He adds that the Legal Committee of the Church in Wales, however, have given the opinion that the "suggested spire would not be a part of the tower, but that the matter could not be authoritatively determined except by the Court of Chancery." Nothing more can be done until the Court's decision has been given.

# THE ARCHITECT AS DESIGNER

THE growing complexity of building techniques sometimes hides the fact that they are means and not ends. The architect's main task is to design and his technical knowledge is subsidiary to this purpose. If full appreciation of this is being obscured it is not entirely the fault of the architect. The increasing tendency towards specialization that is unavoidable in a highly industrialized age, the serpentine toils of shortages of materials and labour, close governmental regulation of building work and the difficulties and limitations that cramp architectural work to-day, do not encourage architects in the freedom of design that is ideally desirable. The result is that architects with plenty of work in hand find it necessary to spend more time at the conference table and less at their drawing boards than they would wish.

This may be unavoidable, but it is bound to leave its mark on architects' work. It is to be hoped that the restrictions imposed by shortages are already within measurable distance of disappearing. But the technical complexity of building work is likely to increase, and the danger is that architects will cease to be designers and instead become technicians. Symptoms of this change are already apparent. It is not uncommon to find a design praised not on its æsthetic merit but because it is a neat piece of planning and reveals a competent knowledge of constructional possibilities. The tendency to regard the architect largely as a technician is brought nearer not only by present economic conditions but also by teaching methods in the schools. A liberal education in the fine arts, which should form every architect's schooling, is a luxury which few can afford to-day. It is significant that in the eighteenth century, when very little bad architecture was produced, even if the majority of architects lacked a formal training, they did not question the rule of taste that was laid down by dilettanti (in the proper sense of the word) and amateurs.

To-day an enlightened patronage is still possible but as a public rather than a private responsibility. The means of ensuring a high standard of design would therefore seem to lie in disburdening the architect of the administrative difficulties that beset him. *Ad hoc* solutions to this problem already exist. It is accepted practice that the busy architect should sketch out a design in broad terms and rely on his assistants to work out the details. A growing arrangement is the co-operative partnership consisting of an architect, an engineer, a surveyor, and a business manager, which is able to deal effectively with the specialized aspects of complicated projects. But for the small architect or one who prefers to work alone another solution is needed. This may lie in a new conception of the function of the building contractor. It is to be wondered whether it is not possible for him to take over many of the detailed activities of the architect who would then remain free to supervise the work in a broad sense instead of being tied down by the technicalities of a complicated construction. Details could be worked out by the contractor and his specialist

sub-contractors, and submitted to the architect for approval. This is a scheme which may well deserve experiment. Its sovereign merit would be that the architect would be much freer to think about design in the abstract upon which a more concrete success always depends. It would be disastrous were the talent of British architects to become swamped by the increasing demands of administrative duties.



*The Architects' Journal*

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1

Phone: Whitehall 0611

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

### DEVELOPMENT CHARGES

Now that the building of houses to private order is to be resumed, and hopes for other types of private building glimmer a little brighter, it becomes obligatory for architects to gain a good working knowledge of the Central Land Board's activities. In particular they will be concerned with the application of development charges, the effects of their imposition, and the policy on which the Board will base its development charge decisions at different times and places.

The principle of a development charge is easily understood by a simple and very topical example. A man wants to buy a plot of land on the outskirts of a town in order to build a house. Let us assume the market value of this plot would have been £250 if the Town and Country Planning Act, 1947, had not been passed. The Central Land Board intends that our man shall still pay £250 for the plot, but in two parts—£40 to the owner (the market value for existing use of the plot as agricultural land) and £210 to the Board. The £210 is the difference between the plot's existing use value and the value as a building plot plus planning per-

mission for a house to be built on it. This difference is called Development Value and is now expropriated to the State.

Only very rarely will a case be as simple as this. Charges to land and buildings not considered development, and developments exempt from development charge, are described in the Board's pamphlets, in the Act, and in the Statutory Instruments under it. Not even the Board can call them simple, and it is said that a strict interpretation of the Act would make financially impossible one of the most desirable of all town planning improvements, the redevelopment of central urban areas. If a man were to buy a block of twenty 4-floored buildings in a central area, demolish ten of them for open space, car parks, etc., and rebuild the other ten as 8-floored buildings, he would not have increased the floorspace or cubic content of the block at all. Yet it appears that the Board will be compelled to charge him a big development charge on the ten buildings, that were changed from 4 floors to 8, and will not be able to allow him a "credit" for the vanished space in the ten demolished buildings. It may be there is some way round this difficulty within the terms of the Act. If not the situation will be impossible, and so big a defect in one of the most complex Acts ever passed will come in for comment.

This doubt, to put it no higher, about the effect of the Board's activities on one of the fundamental objectives of town planning strengthens the view earlier expressed on this page that the activities of the Board should always be such, and should solely be such, as will further the interests of good planning. It seems to an architect that the Board could be used in several other ways: as an independent profit-making organization, as an alternative to the present building licensing arrangements, and even as a help

towards winning elections. There is no good the Board laying its hand on its heart in this vital matter and pointing reproachfully to its General Principles. Astragal has asked several people of good intelligence and some knowledge of building projects what they make of General Principles 1 and 3 as regards their application in practice to common types of development. Only one had found any practical guidance in them. To him it seemed that they contained a hint that if landowners hung on to their land as long as they could they might somehow get more for it than if they sold at an alleged existing use value directly demand made itself felt. It is unlikely that this is what the Minister has in mind.

One point in the mazy development charge picture is now a little clearer and will result in many sighs of relief from those who bought plots of land before the war intending to build houses for themselves. It appears that anyone who bought land at more than its agricultural value before the war to build a house upon, will be entitled to a cut out of the three hundred million pounds fund equal to the development value in the land for the erection of a house. Two points to watch, however: the house must be started on or before January 7, 1952, and the claim for payment must be filed before March 31, 1949. In due course the Central Land Board will make a payment when all the hundreds of thousands of claims have been sorted out, assessed, negotiated, approved, and sanctioned by Parliament, and this payment, if all goes well, should equal the development charge.

### OH MY GIEDION

Still larger numbers of people attended Dr. Giedion's final appearance in London before his departure. Briefly he reiterated the main points of his earlier lecture before calling on selected members of the audience to answer the question "What is the present state of architecture, and which way do we want to move?" Alas, Dr. Giedion was still asking the question at the end of two hours' solid talk because, of course, no one seemed to know the way, or if they did couldn't say so, being either engrossed in excusing the new empiricism or in reiterating the architectural student's a b c. Many, too, were defeated by the acoustics of the lecture





Two weeks ago Astragal commented on the slowness of *MOW* in reconditioning Trafalgar Square. This dilapidated statue of George II stands in another neglected spot, Golden Square, which is at long last attracting the attention of the Westminster Council.

theatre of the V & A where the discussion was held, and some unhappily felt, like Mr. Arup, that they did not know what it was all about. Two marked impressions remain with me, the painters' extraordinary views on architecture and the architect and the conviction that in spite of the many benefits to be derived from listening to Dr. Giedion and the other great men present, most of the audience needed no more theory but only the chance of a little practice.

#### ERITH (R.) HAS NOT ANYTHING TO SHOW MORE FAIR

Well, so we are over the crossroads at last (see Foyle & Wright's charming community centre for Cavendish in last week's AJ). "As the new stage is an extension of the existing main hall," writes the captioner, his honest face beaming with unabashed innocence, "it has been decided that its elevational character should match the present Gothic Revival building." Ten years ago that statement would have been regarded as subversive. There would have been angry postcards from the schools of architecture, denouncements from dais and from desk, protests from those old faithfuls, "we-the-undersigned . . ."; but today all is quiet, save for the angry murmur of an indignation meeting boiling up at the Museum of Modern Art in New York, and the flashing reflective fire of Professor Giedion's pince-nez.

Behind us now lies the trail blazed by *The Architectural Review*, marked by the merestones of Sharawaggi, punctuated by the smouldering ashes of camp fires left by pioneers Betjeman, Piper, Richards and Grigson. Ahead lies the new road, sinuous, gloomy, overgrown. As we press along it, in our ears sounds still louder the creak of fashion's wheel turning, the thud of architects' and journalists turning their inevitable somersaults. Goodbye to the gleaming concrete artery and the striding pylons which express for the New Age the bold thingamabob of the whatsisname. See you again in 25 years, if we can get the lichen out of our eyes by then.

#### SHEPHEARD LEADS HIS FLOCK

Incidentally, those of you who thought that the perspective illustrating the Cavendish Centre was by Peter Shephard would, I understand, be wrong. It is by Mr. Neyroud, one of the ablest of the Shephard school, which, judging by the drawings of Grainger Smith and Geoffrey Wedgewood in Gordon Hemm's recent book on Liverpool, seems to flourish in that home of graded washes and Chinese-white window-bars.

The fight for stylistic supremacy between these modern Farey-tales, the Gordon Cullen pattern-plates, the Harvey Thundercloud and the loose Corbusier squiggle is still on, and the issue remains in doubt. All you can say is that none of them are half as easy to do as they look, and that though architects are learning to draw trees at last, they are still apparently pretty unskilful at people.

#### ROADSIDE CAFES

The lorry-drivers' pull-up, with its huge parking areas, is not an easy problem, and I welcome the shilling pamphlet, recently issued by the British Road Federation, asking for bigger, and cleaner cafés and canteens. Long-distance lorry-drivers are an important link in the nation's transport system, but nobody seems to bother about them very much. Other countries, it appears (notably the USA), do these things better. Wisely, the BRF has limited itself to a list of desirable features for new cafés and to a record of the undesirable features of the old ones, which

makes the booklet rather like one of the CPRE's Cautionary Guides of pre-war days, but it's an indication of the standard normally found that there is no illustration of any really well-planned and decently equipped lorry-drivers' café, presumably for the good reason that no such place exists.

ASTRAGAL.

## LETTERS

(H. Anthony Clark, L.R.I.B.A.

An Assistant Architect

Gordon W. Jackson, F.R.I.B.A.)

### Height of Habitable Rooms

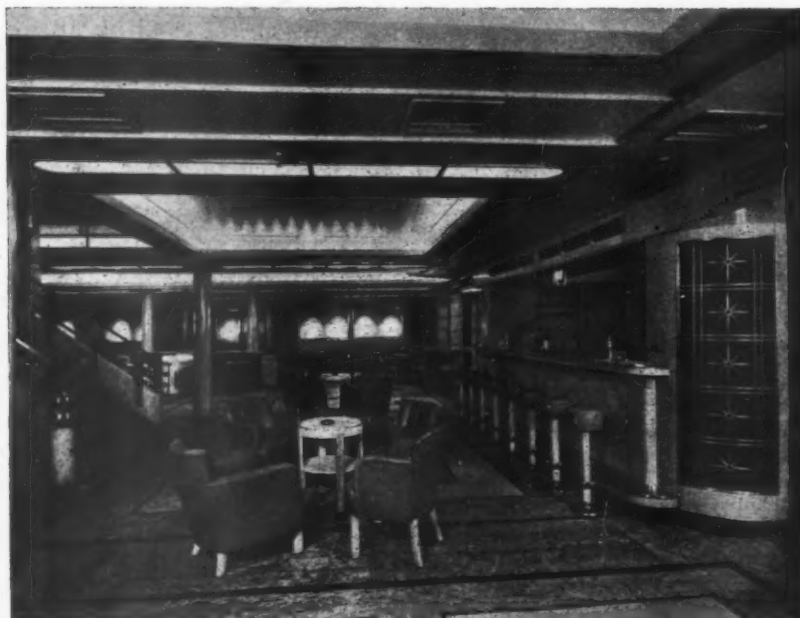
SIR,—I hope the current controversy on the minimum height of habitable rooms will not be allowed to die an inconclusive death. Is it not time that the Minister of Health made a declaration of policy by a straightforward recommendation to Local Authorities? As an advocate of a minimum of 7 ft. 6 in. in the height of habitable rooms, I meet a great deal of opposition from people who are afraid that something would be lost; that the reform is being advocated purely on the grounds of economy; that it must, therefore, be a retrograde step. Today, economies in material, labour and time, and the necessity to keep the rents of new houses down to a minimum, are highly important factors, but I would not approve on these grounds alone if I felt that the result of a reduced height would be detrimental to either health or amenity.

Apart from the aesthetic advantages to be gained with lower rooms, I would also point out that whereas Local Authority and speculative built houses constructed before the war frequently had living rooms of 150 square feet which, at a height of 8 feet, gave the room a cubic capacity of 1,200 cubic feet, the minimum size of living rooms today is seldom less than 180 square feet, which, for a room 7 ft. 6 in. high, gives a cubic capacity 1,350 cubic feet. This additional air space requires additional heating, and there is also the attendant increase in the rate of heat loss to be taken into consideration. From personal experience, I find that the average person is not aware of any difference in the height of a room when it is a question of 7 ft. 6 in. versus 8 ft., unless their attention is deliberately directed towards it.

While bye-laws generally are arbitrary over this question of the minimum height of rooms, and while a minimum window area is laid down, I have not come across any bye-laws which stipulate a minimum height from floor to head of window. I have seen many examples, even in the latest houses, where the heads of living room windows are only 6 ft. 6 in. or 6 ft. 9 in. above floor level. In my opinion, this is far more depressing to the occupants of a room than a low ceiling could ever be, since both light and ventilation are badly affected. I consider it essential that in ground floor rooms the height to the head of a window should be 7 ft., better if it is 7 ft. 3 in., irrespective of whether the room is 7 ft. 6 in. or 8 ft. high.

In conclusion, I suggest a minimum height

# ON THE SOUTH AMERICAN ROUTE



*RMS Andes, completed ready for her maiden voyage in September, 1939, and immediately put into service as a Troop transport during the war, has been refitted for normal sailings. The main features are sports and boat decks, forming a vast playground, swimming pool, the grand hall for use as a lounge, for dancing or as a cinema theatre, a shopping arcade, gymnasium, and a children's playground. Top, the first class foyer and cocktail bar; left, a second class two-berth cabin; below, the swimming pool; bottom, the lido cafe.*



of 7 ft. 6 in., provided that the floor areas of the various rooms are not less than the recommendations contained in the 1944 *Manual of Housing*, and subject to a stipulated minimum height from floor to window head.

H. ANTHONY CLARK,  
Wrexham. Borough Housing Architect.

## Round the Table

SIR.—Instead of reviving the old acrimonious dispute of Private v. Official Architects, why not seek to raise the status of those architects engaged by Borough and Urban Councils? Many official architects have to work under the authority of the Borough Engineer and his deputy, and this should not be so. It is often the hand of the Engineers which deadens the real creative work of some architects. Also, although the whole of some quite extensive schemes are entirely carried out and supervised by the architectural staff, very rarely do they get any credit for this, neither are their names mentioned in connection with the schemes.

Incidentally I do not like the attitude of your correspondent who says that when work slackens off in a private office one can dispense with the services of assistants; that all too frequently happens, and is one reason why some assistants are leaving the ranks of private architects.

AN ASSISTANT ARCHITECT

## Defence Regulation 56A

SIR.—I am an architect who, after 40 years in the profession, found myself charged with contravening this Defence Regulation, in that I exceeded the total cost of licences granted, and to answer this was compelled to appear in the felon's dock. I hope it will not be the lot of any of my fellow architects to have this humiliating experience of occupying the dock attended by warders from H.M. Prison, and I feel constrained to write you in protest in the hope that my fellows may not have to do so in future.

Fortunately, with the aid of eminent Counsel, I and those charged with me were acquitted of all charges by a jury who stated they were unanimously of the opinion that we had "acted in accordance with our duties and authority."

This case cost the defence several thousands of pounds and me many weeks of great suffering and strain, and none of this was really necessary and should not have been necessary had the Ministry officials considered us as responsible men anxious and willing to co-operate with them, and not as a collection of crooks from the outset. From the date the matter was referred by me voluntarily to the Ministry, no explanation on the points at issue was asked of me, but a former builder's clerk acting as an inspector was the sole person appointed by the Ministry to make a casual inspection of the builder's account books.

On this slender evidence this case was launched fifteen months after my voluntary report. My plea is that the members of the architectural profession should be treated by the Ministry as responsible men; that we should be considered as persons not only capable but willing to co-operate with them in carrying out their expressed views, but if we are to be hedged around with ridiculous conditions without some freedom of action, our task in such co-operation will become impossible.

I acknowledge my good fortune in being able to provide the eminent Counsel who acted so ably for me, and I put forward this letter in the hope that it may be of help to those of the profession not so fortunate.

Bournemouth

GORDON W. JACKSON





A typical block.

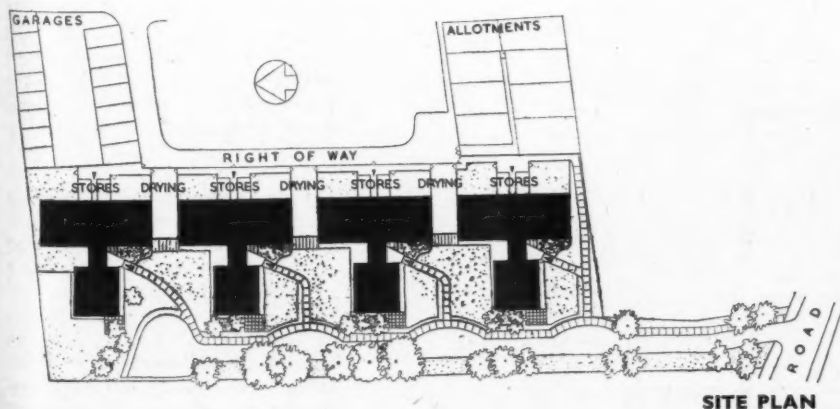
# FLATS AT WHITTON, MIDDLESEX

DESIGNED BY ERIC LYONS  
& G. PAULSON TOWNSEND

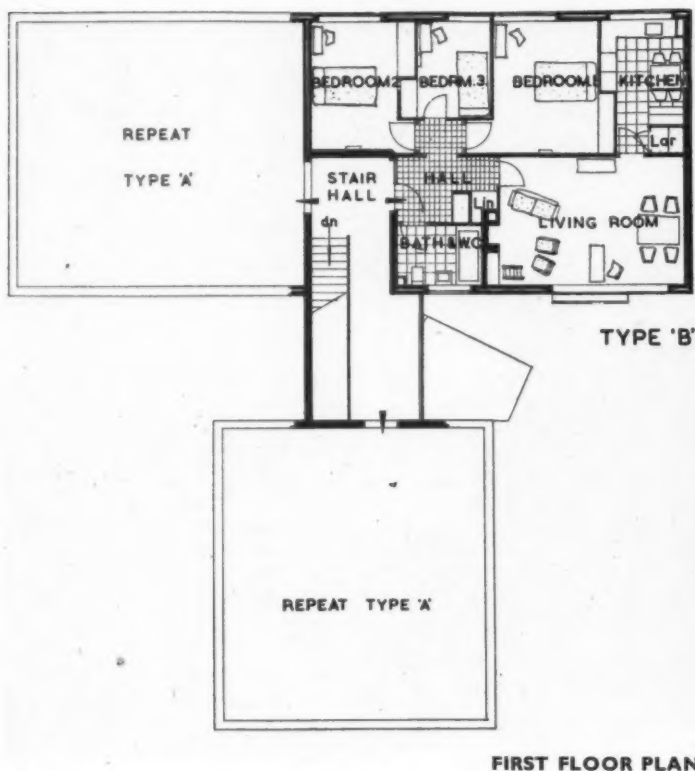
**GENERAL.**—The programme was to provide 24 flats on this site, originally intended for development with maisonettes (flatted houses). Rigid economy and low timber content were important to allow building under licence controls.

**SITE.**—The site is "backland," surrounded on three sides by the back gardens of houses, and on the fourth side by a common way serving the yards to the shops and flats in the High Street. The only approach is from Constance Road in the south-west corner of the site.

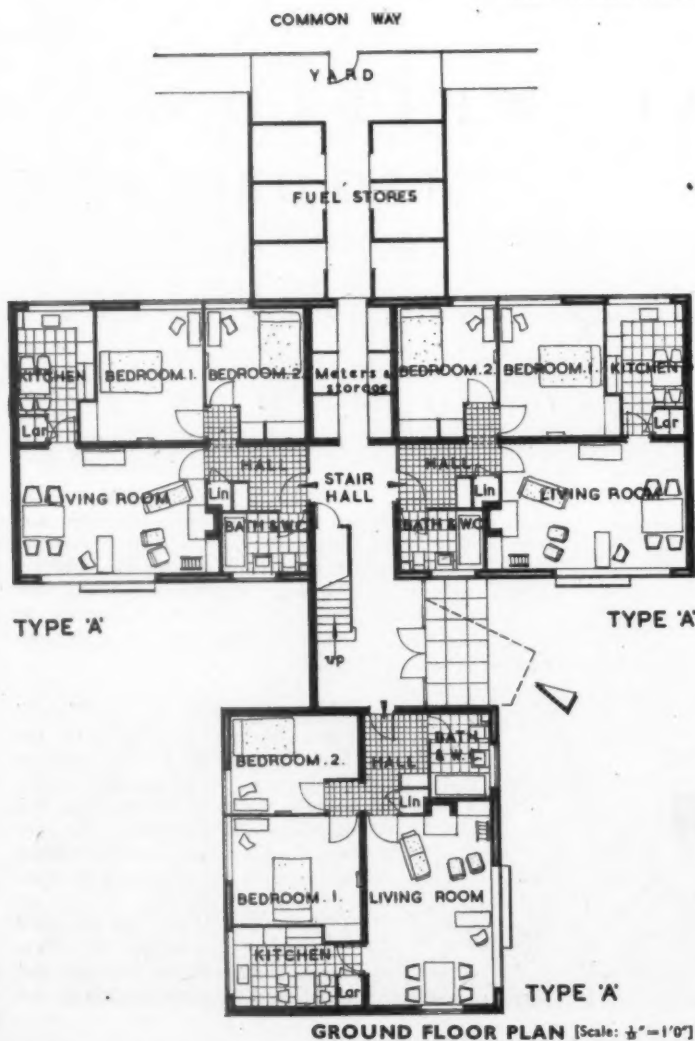
**PLAN.**—The 24 flats are provided in 4 two-storey blocks of 6 flats each. The blocks are T-shaped and each contains 5 two-bedroom and



SITE PLAN



FIRST FLOOR PLAN



GROUND FLOOR PLAN [Scale: 1/4" = 1'0"]



One of the stair halls.

1 three-bedroom flats, all served by the common central staircase. The approach is by a new private road from Constance Road. Access for trades, fuel and refuse collection is from the existing common way along the east boundary. Living rooms face either west or south and have an outlook over the common gardens. Blocks are linked by a screen wall shielding the laundry hanging spaces. The ground floor stair hall gives access to the rear of the buildings, to the pram or cycle stores, and to the laundry hanging spaces between the blocks. In the flat plan, the plumber has not received first consideration and the separation of kitchen from bathroom has allowed a convenient living arrangement. The economies effected by the smallness of circulation space easily outweigh any theoretical savings in plumbing costs.

Right, a typical living room. Below, the blocks of flats from the south west.

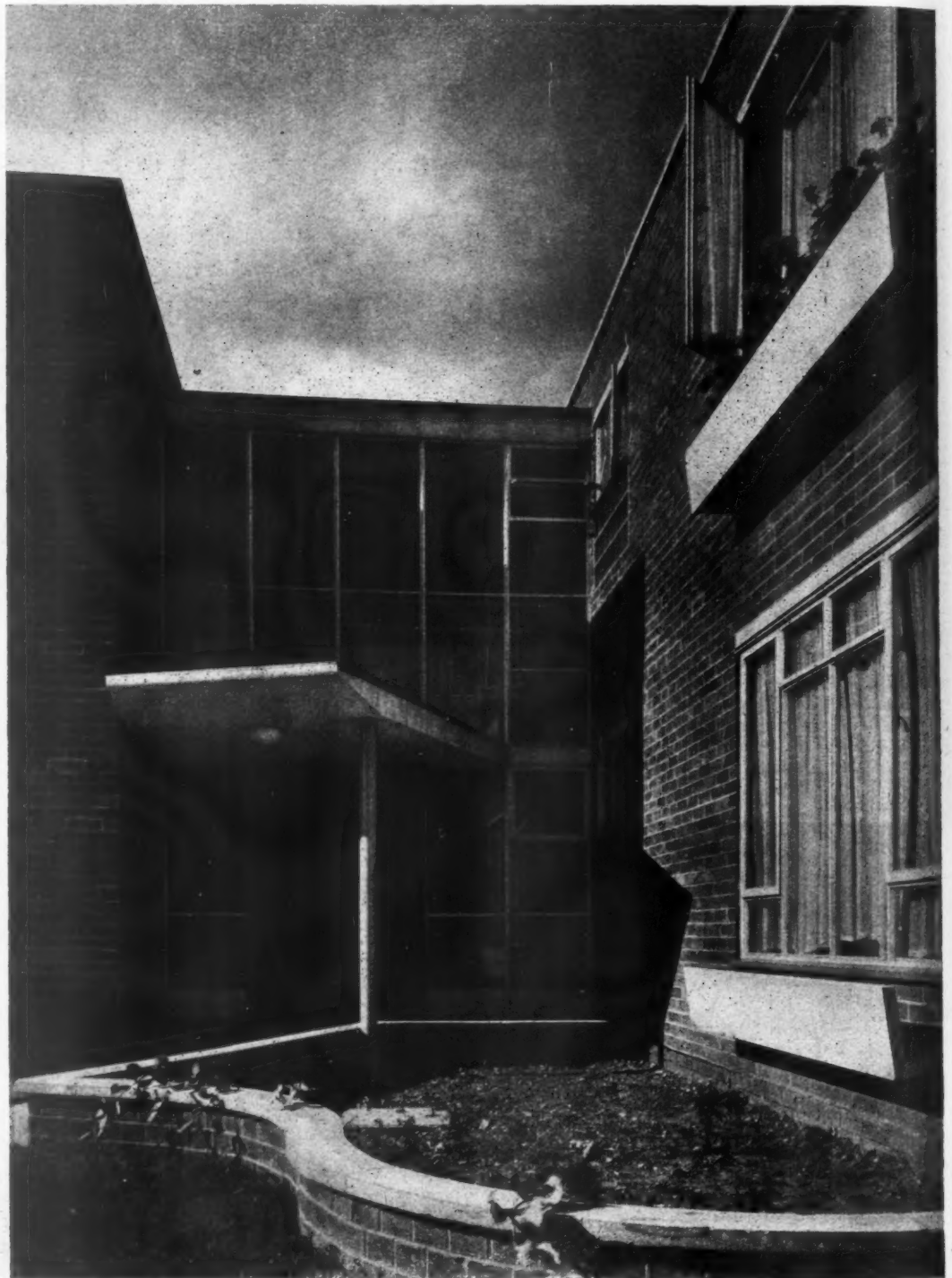


CONSTRUCTION.—Walls : 11 in. and 9 in. brick walls partly in facings, partly Tyrolean finish, partly Derbyshire spar cement dash. Roofs : R/C in-situ slab with insulating screed and asphalt finish. Internal walls : 9 in. and 4½ in. brick. Floors : R/C in-situ slab with screed and boarded finish. Partitions : breeze slab.



FLATS AT WHITTON, MIDDLESEX

## FLATS AT WHITTON, MIDDLESEX



*One of the main entrances.*

**INTERNAL FINISH.**—Common staircases: magnesite flooring to halls, landings, and staircases. Walls fairface in multi-coloured facing brick and sandlimes. All rooms plastered throughout. Fire-place wall to living room in facing

bricks. Bathroom tiled to cill height.

**SERVICES.**—All pipes are in vertical ducts with full-height access panels on each floor. Hot water is by back boiler in living

room fire, serving cylinder in linen cupboard with immersion heater.

**CONTRACTS.**—Contract price :—£23,000. The general contractor was H. B. Kingston, Ltd. For list of sub-contractors see page 256.

**BY ERIC LYONS & G. PAULSON TOWNSEND**





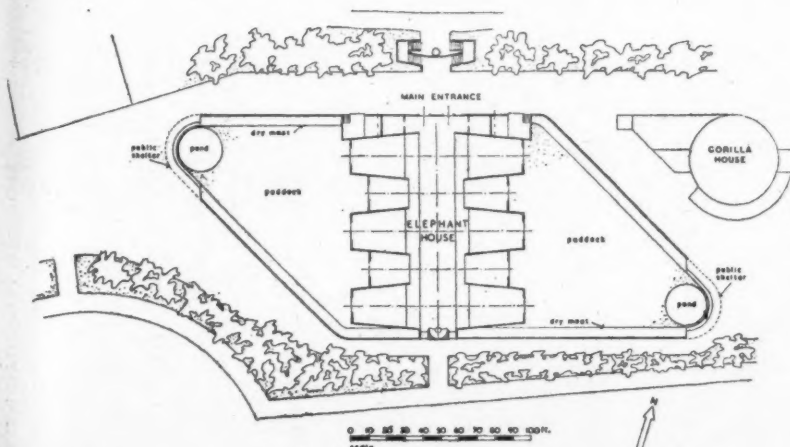
*The present condition of the site. Reinforcing rods of the abandoned work can clearly be seen.*

# ELEPHANT HOUSE

## AT THE ZOOLOGICAL GARDENS, REGENT'S PARK

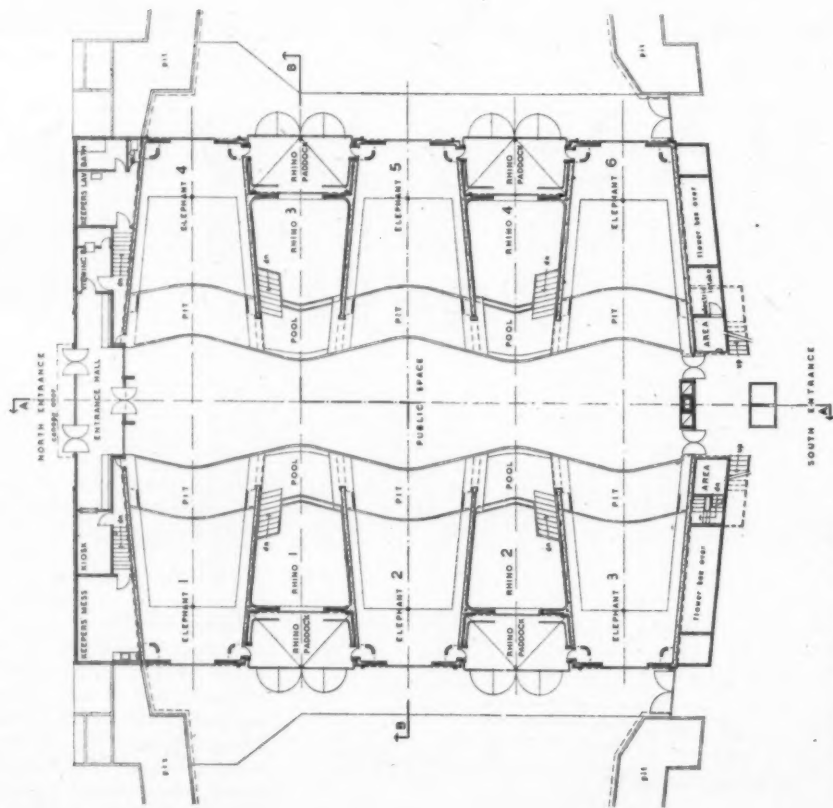
*DESIGNED  
BY TECTON*

**GENERAL.**—These designs for a new elephant house were prepared for the Council of the Zoological Society in 1938 and building was started the following year, due partly to the generosity of the Maharajah of Bhavnagar who contributed £10,000. With the outbreak of war work had to be stopped, and it has since been decided by the Council of the Zoological Society to abandon the entire scheme. The new elephant house was designed to accommodate six elephants and four rhinos.

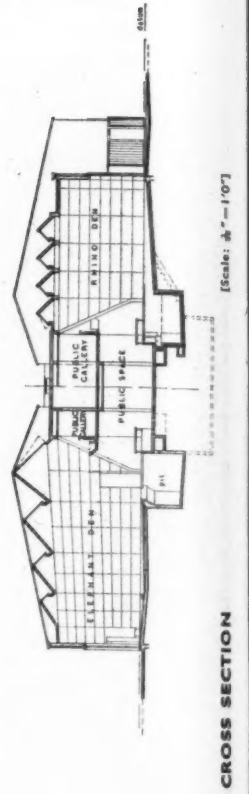
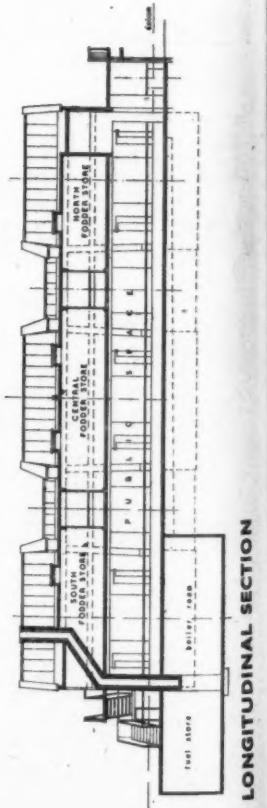
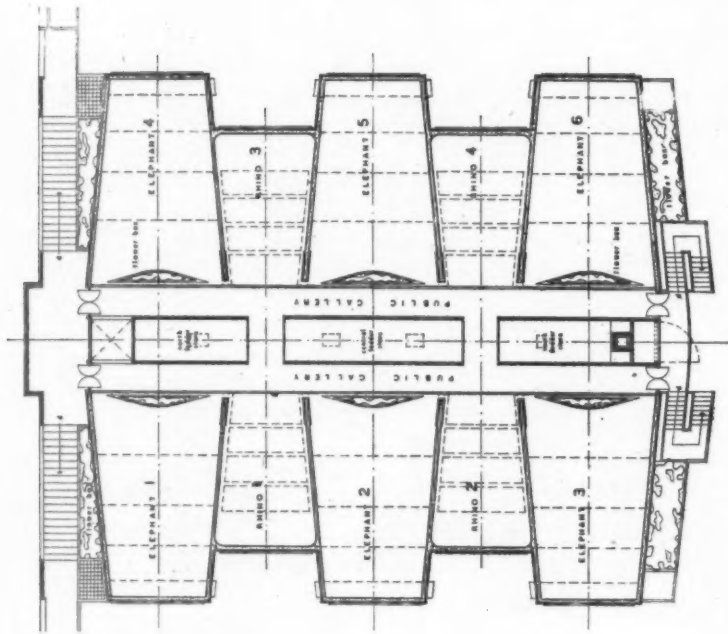


**SITE PLAN**

# ELEPHANT HOUSE IN REGENT'S PARK



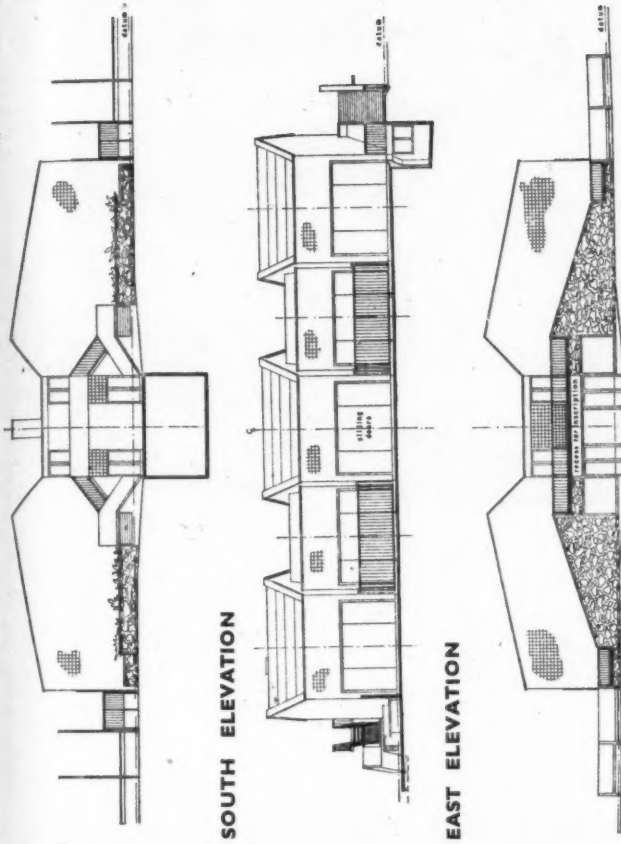
GALLERY PLAN



LONGITUDINAL SECTION

CROSS SECTION

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



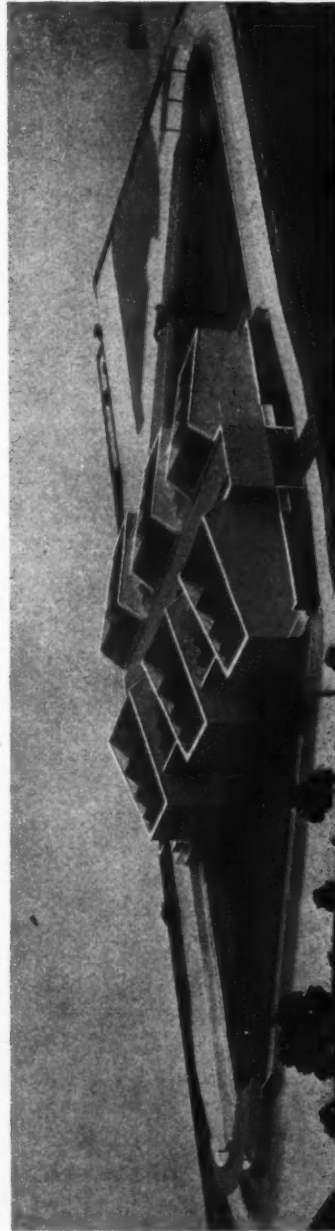
NORTH ELEVATION

*Above left, the moat which was designed to surround the paddock as it is today. Below, the model from the south.*

**LIGHTING.**—The dens are designed to be entirely top-lit, with the glazing so arranged that no light shines directly into the spectators' eyes thus avoiding glare, while the animals themselves will be brilliantly lit.

The building was to be built on a site adjacent to the gorilla house which Tecton designed in 1933.

**PLAN.**—The dens for the elephants and rhinos are wedge-shaped and alternate with each other. Arranged on either side of a central public-space, the floor of the dens is slightly higher than the level of the public space. Between the elephants and the visitor there is a dry pit, and he is protected from the rhinos by a pool. The animals can be examined from two levels; from a gallery, which also accommodates the fodder stores, and runs the whole length of the building, and from the lower level public space. This gallery is reached by stairs outside the building. In the paddocks on either side of the elephant house sand baths and pools are planned, the dens being provided with warm sprays.

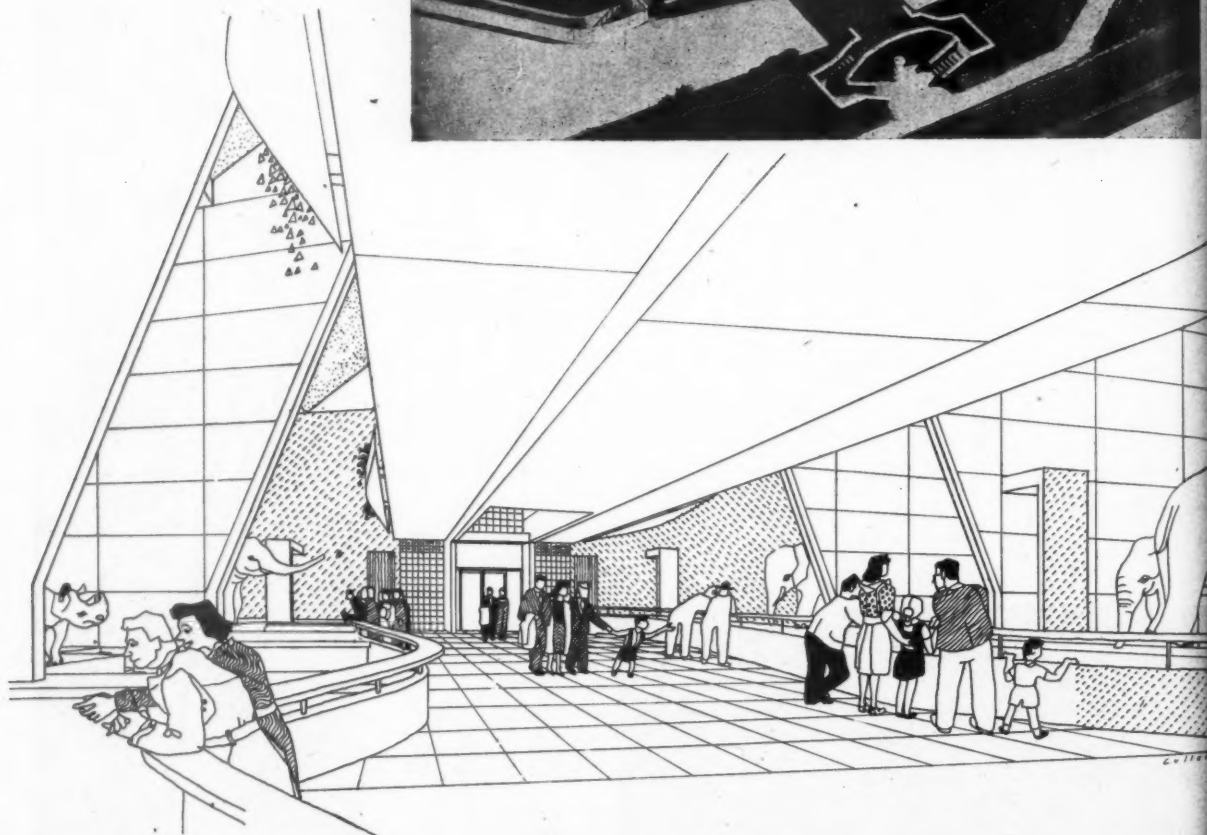
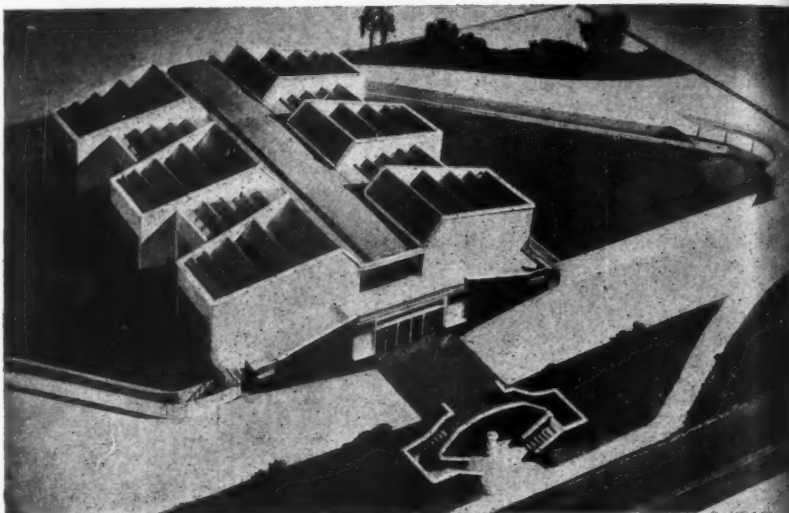


D E S I G N E D B Y T E C T O N



*Right, from the north. Below, a sketch by T. G. Cullen of the interior. Bottom, from the west.*

**MATERIALS.**—The main structure is in reinforced concrete faced externally with light coloured faience slabs and internally the dens are lined with terrazzo divided up into panels by metal strips. The roof lights are set in steel frames.



ELEPHANT HOUSE IN REGENT'S PARK BY TECTON





TON

2



## ESCALATORS

35. B I

The Architects' Journal Library of Information Sheets 99. Editor: Cotterell Butler, A.R.I.B.A.

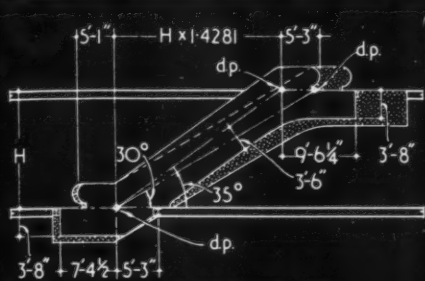
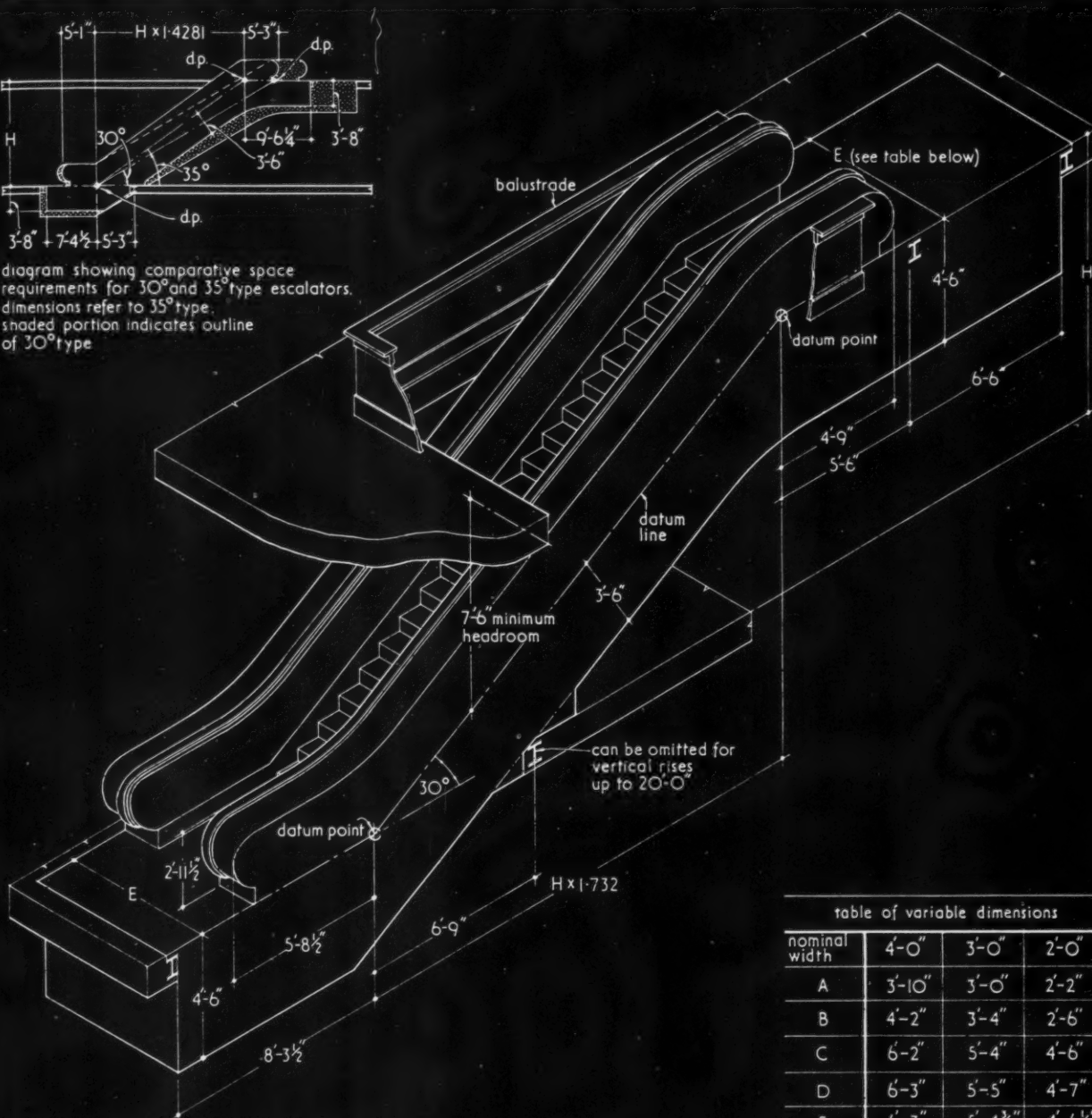
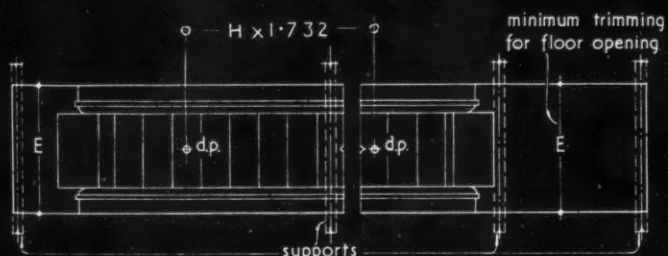


diagram showing comparative space requirements for 30° and 35° type escalators. dimensions refer to 35° type. shaded portion indicates outline of 30° type

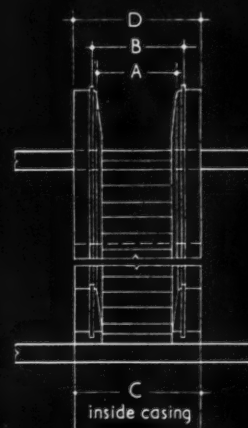


ISOMETRIC VIEW OF 30° TYPE ESCALATOR.

nominal width	4'-0"	3'-0"	2'-0"
A	3'-10"	3'-0"	2'-2"
B	4'-2"	3'-4"	2'-6"
C	6'-2"	5'-4"	4'-6"
D	6'-3"	5'-5"	4'-7"
E	6'-3"	5'-4 $\frac{3}{4}$ "	4'-6 $\frac{1}{2}$ "



$\frac{1}{8}$ " SCALE PLAN AND ELEVATION OF TYPICAL 4'-0" ESCALATOR.  
for variable dimensions to suit 3'-0" and 2'-0" widths see table above  
for loads on supports consult makers



### 35.B1 ESCALATORS: DESIGN AND SPACE REQUIREMENTS

This Sheet describes the general design and application of escalators and gives the space requirements for a typical installation.

#### Advantages

An escalator system has a passenger carrying capacity which could only be equalled by an excessive number of lifts occupying a larger floor area. It gives an improved service for a smaller operating cost. It provides more incentive to movement from one level to another than does a lift.

#### Applications

Departmental stores. Office buildings. Factories—for bulk movement of operatives. Railways—surface and underground. Public exhibitions. Amusement parks. Entrances and exits to subway tunnels.

#### Angles of Inclination

Escalators are available with angles of either 30° or 35° inclination to the horizontal. The 30° type results in a better ratio of step tread to riser and is therefore to be preferred where site conditions permit. It is suitable for any vertical rise. The 35° type, due to its steeper slope, is not recommended for vertical rises in excess of 20 ft. Within this limit, the 35° type can often be used with advantage by virtue of its reduced overall length—sometimes conditions imposed by existing buildings render it the only solution.

#### Widths Available

Three nominal widths are available—2 ft., 3 ft., and 4 ft., the clear tread width being approximately 6 in. less than these figures.

*Factors governing choice of width:* Selection of the most suitable width involves consideration of the following:

2 ft.—Passing into disuse except where overall width of the escalator is a deciding factor due to space limitations imposed by existing building conditions. Escalator will accommodate one person per step only.

3 ft.—Considered adequate for most departmental store applications. Escalator will accommodate two medium-size persons per step and will permit passing except by heavily laden persons.

4 ft.—Use limited in the main to railway and subway tunnel applications, but may be adopted for service

between lower floors of departmental stores. Escalator will accommodate, and permit easy passing, between two heavily laden persons.

The 35° type is available in 2-ft. and 3-ft. widths only.

#### Speed

Experience has shown that a speed of 90-100 ft. per min. for the step on its incline is the most suitable for all applications other than those involving vertical rises in excess of 30 ft. or where large peak crowds have to be handled.

#### Effect of Width and Speed on Carrying Capacity

The carrying capacity of an escalator is governed primarily by its width. The 2 ft., 3 ft. and 4 ft. wide escalators are rated to transport 4,000, 6,000 and 8,000 persons per hour when operating at 90 ft. per min. step speed. These are conservative figures in which allowance has been made for passengers not feeding sufficiently consistently on to the escalator to ensure that every step receives its full load.

Increasing the speed up to about 145 ft. per min. will improve the capacity, but not in direct proportion. There is little advantage gained from speeds in excess of this figure other than a beneficial psychological effect on impatient individual passengers.

#### Space Requirements

The isometric drawing shows the maximum space requirements for a 30° type escalator. The auxiliary diagram shows the differing dimensions for a 35° type and also the space saved by its use.  $\frac{1}{4}$  in. scale plan and elevation details of the 30° type are also given. The latter may be used as preliminary data for tracing on to sketch plans.

#### Code of Practice

A Code of Practice for the design, installation, and testing before putting into service of escalators has been drawn up by the Lift and Escalator Panel of the Building Industries National Council from whom copies are obtainable.

*Compiled from information supplied by:*

J. & E. Hall, Ltd.

Head Office: Dartford, Kent.

Telephone: Dartford 3456.

Telegrams: Hallford Dartford.

London Office: 10, St. Swithin's Lane, E.C.4.

Telephone: Mansion House 9811.

Telegrams: Hallford Phone London.



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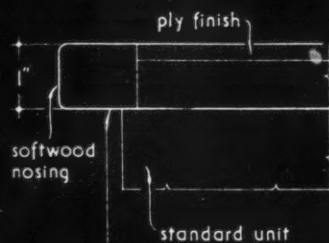
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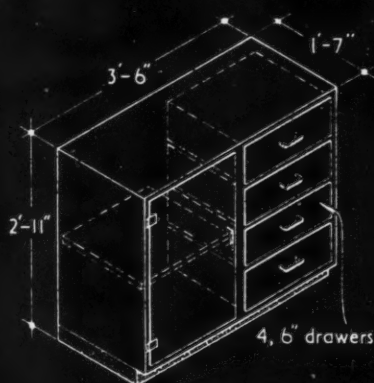
**SPECIALISED FITTINGS | KITCHEN CUPBOARDS****43.E1**

The Architects' Journal Library of Information Sheets 100. Editor: Cotterell Butler, A.R.I.B.A.

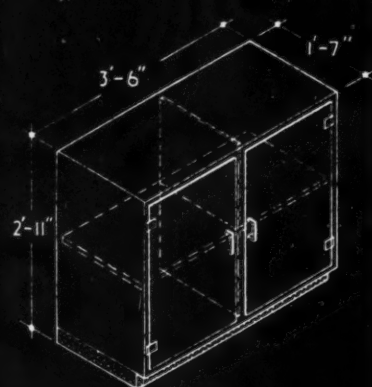


overhang 2" at front 1" at ends.  
adjacent units fitted with  
continuous top

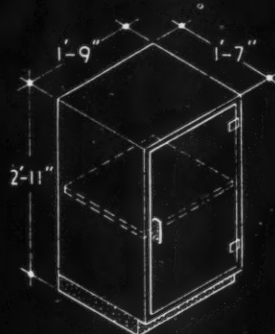
STANDARD WORK TOP  
applicable to units 1, 2, 3 and 4



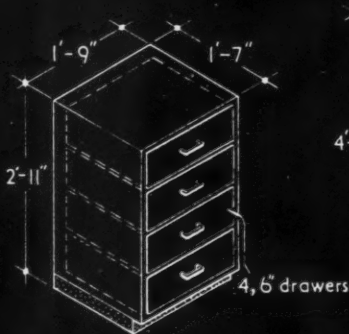
TYPE 1



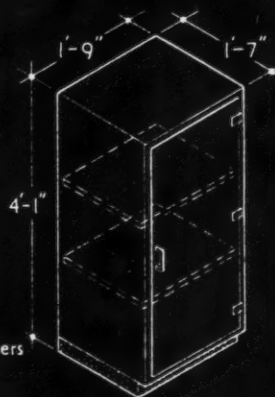
TYPE 2



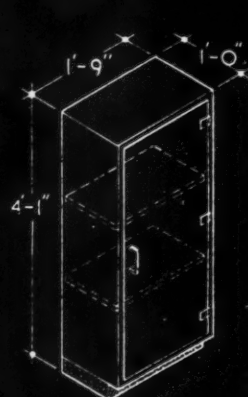
TYPE 3



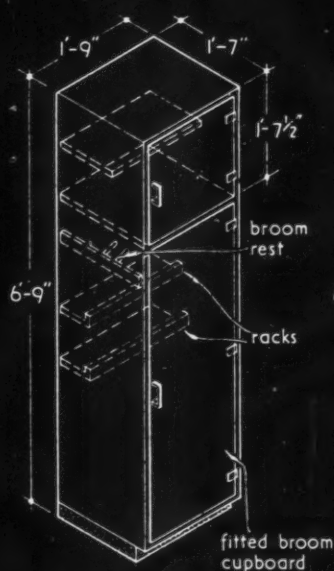
TYPE 4



TYPE 5



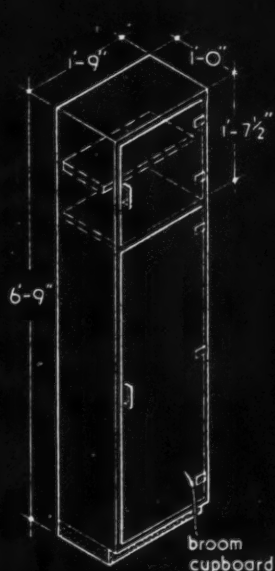
TYPE 6



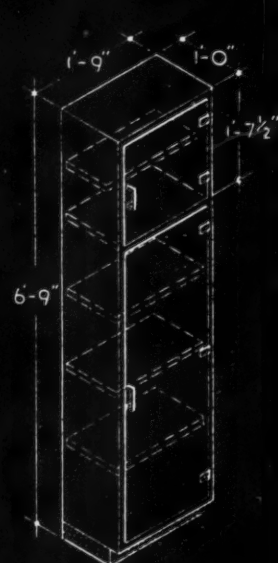
TYPE 7



TYPE 7s



TYPE 8



TYPE 8s

STANDARD KITCHEN CUPBOARD UNITS: FLOOR MOUNTED TYPES.  
Compiled from information supplied by Austins of East Ham Limited.

#### 43.E1 STANDARD KITCHEN CUPBOARD UNITS: FLOOR MOUNTED TYPES

This Sheet is the first of two describing standard kitchen cupboard units and deals with floor mounted types. The units are classified according to manufacturer's code numbers. Sheet 43.E2 deals with wall mounted types and shows a typical grouping of a number of units.

##### Construction

The units are constructed of  $1\frac{1}{2}$  in.  $\times$   $\frac{3}{4}$  in. framing with muntins 3 in.  $\times$   $\frac{3}{4}$  in. to which plywood is cemented on the stressed skin principle. Backs where provided are of hardboard which is cemented to the framework.

All cupboards except No. 4 are normally supplied with backs. The stressed skin principle of construction renders the omission of sides impracticable, but cupboards can be supplied without backs if so specified.

**Joints:** All joints are made with synthetic resin waterproof cement, and screwed.

**Doors:** These are either  $\frac{5}{8}$  in. solid plywood or skeleton framed, flush both sides. They are lipped over the sides of the frame. They can be supplied right or left handed.

**Work tops:** These are obtainable—for units 1, 2, 3 and 4—to suit a single unit or range of two or three units. They have a softwood framing and intermediate rails at 1 ft. 9 in. centres. An outer softwood nosing is fitted to accommodate a flush  $\frac{1}{4}$  in. ply top. The tops are 1 in. thick and project 2 in. over the cupboard face and 1 in. over each end.

**Divisions:** These are of hardboard.

**Shelves:** These have a softwood framing with a front edge fillet, nosed and rebated to accommodate a flush plywood or hardboard top.

**Broom rack:** This comprises two  $\frac{1}{2}$  in. round dowels which project from a cross rail. They slope upwards at about 30°.

**Plinth:** This is not supplied and should be provided by the builder. It serves the additional purpose of a scribing fillet and should be set back 2 in. to provide toe space.

##### Fittings

**Hinges:** The doors are hung on face-fixed cabinet type hinges.

**Catch:** Each door is fitted with a "Unique" self-acting spring catch.

**Handles:** The doors and drawers have bow handles.

##### Finish

Cupboards are normally supplied unpainted.

##### Fixing

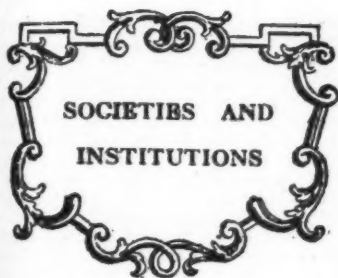
Cabinets should be site fixed by screwing through back framing.

Compiled from information supplied by:

Austins of East Ham Ltd.

Address: East Ham, London, E.6.  
Telephone: Grangewood 3444.  
Telegrams: Austins, East Ham.





*Speeches and lectures delivered before societies as well as reports of their activities, are dealt with under this title, which includes professional societies, trade associations and government departments. To save space they are represented by their initials—see front cover. Lectures cannot usually be reported in full, but the extracts given are in the speaker's own words.*

## MARS & ICA

### S. Giedion

August 31. A discussion following upon the lecture given by Professor Giedion on August 18 and held at the Victoria and Albert Museum. Sir Leigh Ashton was in the chair.

**Prof. S. Giedion:** *h a v i n g* shown a number of slides used in his previous lecture, said: I would appreciate it very much if we could agree not to spend too much time in the discussion in referring back to other discussions that have been held here or in the United States. I would prefer it if the discussion can move forward in a direction of its own, not concerning itself with labels and names, but going back to fundamentals.

We are not really very much concerned with what percentage of "cosiness" should be pumped into a building or how we should calculate the amount of functionalism and psychology that should be incorporated in a structure destined for human beings.

I do not think it is right today to degrade architectural thought entirely to the practical considerations of the moment. This restricts the calling of the architect to the exclusive rôle of a specialist. Specialists already exist in every field, good and bad. Each of them sits in a walled mountain hut, and, although outside great storms are passing by, they act as if these did not exist.

Long ago Walter Gropius compared the rôle of the architect today with that of a philosopher whose task is to co-ordinate the activities of many disciplines. The action of an architect as a co-ordinator is what we need.

The same tasks have everywhere to be

solved, in the sciences and humanities, and in history. Everywhere the specialists in the different fields cannot understand one another because each of them speaks a different language. But the architect has an enormous advantage over others. He has already discovered a common vocabulary; he is closely connected with the outer reality, and he should become in closer contact with inner reality. He has, like every artist, to be aware of developments to come; it may be in art, it may be in science. There was never a great architect who had not a piece of a prophet in his bones.

**Mark Hartland Thomas:** *I f e e l* the pictures which Prof. Giedion has shown us and the explanation he has given will have reminded us that there are forms of things, attitudes of mind, intellectual concepts, emotional apprehensions, that run through all the different things that we make and the different things that we think and feel. There is a similarity between them. Prof. Giedion points to these things because he is urging us to attempt to be conscious of the similarities and affinities between the arts, for example, and to achieve this new universality.

There is a serious weakness in our present age in that so many of us are specialists in one field of human labour and thought or another, and we do not understand each other. But there is such a thing as an emotional apprehension of these things, and Prof. Giedion, I think, feels that architects are in a key position to assist this movement. The movement does already exist.

I will take one example. We are beginning to prepare for the Festival of 1951 and to call together small groups of people in different parts of industry and in different interests who should be consulted. I recall in particular a meeting with the makers and designers of textile machinery. We put to them the question: "What do you think in the next three years is going to be your most hopeful line of development?" The most important thing in textile machinery in the next few years, they said, was the relation between the machine and the human being who worked it. That was a most striking thing. Of course, the study was not, so to speak, humanitarian. The machine and the machine tool are there to be used and to increase one's productivity; they should be redesigned in relation to the comfort and convenience of the worker who controls the machine, his accessibility to it, and the shape and even the colour of the machine must be made compatible. Here we have the technician and the artist coming together. I have mentioned this effect of integration at some length because I feel that there is a movement in that direction already in existence; we are not supporting something completely new, and we should know where we are going.

**Marcus Whiffen:** *I n* his lecture a fortnight ago, Prof. Giedion quoted from the leading article in the *Architectural Review*. The *Review* may have invented the phrase "the new empiricism" to describe a trend in architecture, but it does not identify itself with the new empiricism. So far as the new empiricism is concerned the *Review* makes it its business to report and explain but not to support. Why is Prof. Giedion so indignant about this new empiricism? One would expect him as a historian to welcome a new chapter in architectural history, but, of course, he will not allow it to be either new or a chapter.

I am very doubtful whether one can apply the test of "constituency" as a yardstick to contemporary architecture. In order to tell what is constituent in the present one needs

more than "a piece of the prophet in one's bones." It is with the individual building as a work of art and not as a stage in a historical process that the architects and critics and perhaps even architectural journalists should ultimately be concerned.

**Pafford Keating Clay:** *s a i d* that many architects today made analyses with precision but could not perform a synthesis. He continued: My plea is for a synthetic way of thinking, in which, for example, a work of architecture is a way of living, a plan, a technical structure, and a work of art. These are not assembled parts, they are not opposite aspects of the same thing, not one may be added to the other, not one may be considered as isolated from the others, nor may one be subordinated to another, and each must be seen in terms of the other at all times. Aesthetics, then, is no addition to necessity; it is always present.

**Maxwell Fry:** *I f* one studies the period which covered the eclipse of Gothic architecture and the rise of the Renaissance in England and then compares it with what happened to society during that period, one will come to the conclusion that architecture must inevitably be a symbol—an adequate symbol—for the society and the ideas society has about itself at any one period. We are in a period of the early building up of a new set of architectural symbols.

In any movement there are two phases. The first is a highly creative period when there is a build-up of ideas in all their purity and when everything seems to be clear. Then this moves on in ever-increasing and widening circles and new experiences are gathered until at last there comes a point when these ideas, once established, have to be put to a more common daily use, and on that point there is something in the nature of a spiritual crisis. In our own case this period has coincided with major wars, so that there has been a bigger gap than in earlier periods, and now we have reached the period of self-examination and are creating new symbols. The material for dreaming has been a little lost, but the symbols show that architecture is still alive.

**Roland Penrose:** *I* have always taken a very keen interest in the developments of the visual revolution in this century. Three things are chiefly responsible for that revolution. One is Cubism, another is Surrealism, and the third is Picasso. Those three things are factors which make for something new in our outlook in the visual world because they all make for a breakdown of the old watertight compartments and for a union between science and the arts, between the sophisticated and the primitive, between emotion and calculation.

There is a very old theory that buildings could always be thought of as representing muscular effort, human sensation, in fact. Starting from the Stone Age up to St. Paul's Cathedral, you can always find a load carried on well-planted arms and legs, and it is in the degree that a building has defied the laws of gravity that it seems satisfactory.

In 1909 Bleriot flew across the Channel. In 1909 the Cubist painters were beginning their most important work. That date is no ordinary coincidence, and its implications have not yet worked themselves out. It has brought a new sense to us all and to architecture. We no longer struggle up from the ground. We are airborne, and that is a fact which nothing can change; there is no turning back from it.

That is as far as the structure of the building is concerned. There is also a thing which has interested me as a painter,

and that is the expression of the building. The modern building as well as the ancient always seems to have some sort of expression, it may be inspiring, or it may be squalid, and how often it is like the negro masks so much appreciated by the Cubist painters.

The fact that all these revolutions have gone on since the century began means that there should be an enormous fund of experiment not yet worked out, and it is a sad thing when we do find backsliding and a refusal to consider and work out the developments that have taken place. That happens in painting just as much as it may happen in architecture. We continually find an abstract painter who now is content with cosy romantic vagaries representing landscapes, architecture, what you like; the Surrealist painter who, forgetting his former revolt, has now decided that painting is only a thing to amuse and that the former things should be forgotten. Professor Giedion has reminded us of such structures as the Eiffel Tower, the Crystal Palace, and perhaps the Royal Pavilion at Brighton might be included. These represent the triumph of modern architecture just as the cathedral was the triumph of medieval. But it would be a sad thing if we forgot those tremendous experiments that have gone on in our lifetime. Can we possibly forget? Can our spirits fail at this time to meet the challenge? Can we abandon those discoveries? The answer remains with us.

**Werner Moser:** suggested that they were rather over-emphasizing the necessity for the integration of art and science. Integration might be overdone. The architect and the artist must work separately, each within the spirit of his idiom. It must be remembered that art and architecture and science had different origins; care therefore should be taken not to make superficial comparisons. It might be asked why they did not come together, but the fact remained that they did not.

**Julian Trevelyan:** declared himself very much in agreement with Prof. Giedion, and found in architecture a parallel with his own medium of painting. He continued: Generally speaking, there is now a tendency to go over the ground again and fill in the gaps, and here a lot of work has still to be done. It is as if one rushed into a museum like this—the Victoria and Albert—dashed round all the rooms and then came back and looked carefully at the various things. It is this second look which is happening now. Some of the *raison d'être* of this discussion comes from the feeling that that is now happening in architecture.

I would like as a painter to make a plea for one or two simple aspects of contemporary architecture which seem to me either neglected or not sufficiently emphasized. There seems to be a certain fault among contemporary architects in their own visualization of buildings. They look on buildings as if they were still perspective drawings. They see them as they are when they plan them, but I sometimes feel that architects have not visualized them completely as they will be.

Then I want to make in a sense a rather specialized plea for greater use of colour in architecture. I feel that it could be used as clearly, positively, and subtly as in certain paintings. An extraordinary fear comes up in people's minds that colours will clash and that there will be discords in colours. As a painter I do not believe that is true in architecture, because colours are seen through a filtered atmosphere which makes them blend and become harmonious. I would even suggest that if there were a by-law enforcing the painting of every separate house in the street in a different colour, no harm would come of it.

**Ove Arup:** who began by saying that he was not quite sure he knew what the discussion was about, proceeded as follows: We have to consider in which direction we want architecture to move, what kind of art we want. I have had a fairly good idea of what kind of architecture I would personally like, but it is totally beyond me to describe it in words. That requires a person who has not only acute sensitivity, but is able to convey that sensitivity to others. Prof. Giedion is such a person, and when I read Prof. Giedion's lectures it is not so much the arguments or words that appeal to me; it is rather that I seem to find myself in agreement with his views as to what is good architecture. At the same time I cannot help noticing his method of dismissing certain kinds of architecture by giving them a label such as "cosy" or "pseudo" something or other. I cannot myself find so much to object to in the programme of the New Empiricism. This "cosiness" would be quite satisfying to people's emotional needs. That is why I do not think programmes matter so much. The only programme I would subscribe to is that the architect should have an open mind and not be afraid to use new materials and methods of craftsmanship.

**Merton Tester:** I was relieved to hear what Mr. Thomas had to say that we are approaching a synthesis between art and science. That, of course, I think, is very definitely what we need today. It is most excellent that we should appreciate that there is a gap between art and science, but I do not know that we can do very much beyond appreciating it. We can, and have, analysed the present situation with some accuracy, but I am not sure that we can really get any further. I do not think that we can make a conscious effort to produce a synthesis between science and art which would in any ordinary way help at all. Professor Giedion has spoken from the point of view of the historian. The historian from his heights sees certain aspects which are denied to the rest of us who are crawling on the ground. I feel that the situation as regards architecture expressing the social milieu of the age is probably summed up by Geoffrey Scott in his *Architecture of Humanism*, in which he says, "The history of civilisation has in architecture its truest, because its most unconscious record." That, I think, is a very fair summing up of the case. I think in fifty years' time or even less we may be able to say what we should have done now.

One thing I should like to stress very much. In my opinion architecture is essentially an art and not a science. It is the aesthetic and emotional content which is important. One of the regrettable things nowadays is that architects themselves tend to be more and more technicians and less and less artists. I can see a time coming in the course of a few years when architects will have to make up their minds to be either artists on the one hand or engineers on the other.

There is another point in respect of which the question of a synthesis between science and art becomes more and more difficult. I feel that scientific knowledge has so far outstripped our appreciation of it that we shall never catch up.

One of the points Professor Giedion made in his last lecture concerned the part of the architect in reflecting the ideas of the common man. That I think is less desirable, not because the common man is not a worthy person, but because he becomes a lot worthier when he becomes less common. If he meant that the architect should reflect the spirit of the age, that again is understandable, but the spirit of the age is probably now summed up in the fish and chip shop and the greyhound racing stadium. The essence of architecture is its aesthetic content, and not its moral or its sociological or its political content.

**Osbert Lancaster:**

With Dr. Giedion's principal argument that we are in dire need of a new universality there can be no disagreement. We have had it before and there is no earthly reason why we should not have it again. With his statement that architects are particularly favourably placed at a sort of central liaison depot in this new movement I entirely agree, but I must also point out that they have done practically nothing to take advantage of their unique position. A practical example might be afforded by the architecture of the Great West Road and the posters displayed on the hoardings on that road. No one can doubt that the posters would have looked markedly different if there had been no Cubist movement, but do those buildings reflect any of the influence of the Bauhaus? It is a question of the failure of architecture to widen out or to penetrate downwards. That is the crux of the problem.

Dr. Giedion congratulated himself and us on the fact that architects have now a common idiom, but there is a grave danger of the idiom degenerating into a dialect. It is very nice that Prof. Giedion and Mr. Werner Moser have a common dialect, but I doubt whether it would be perfectly comprehensible to the people who commission and build the greyhound tracks and the fish and chip shops to which Mr. Tester alluded. It does not strike any responsive chord in the people who are actually at the paying end. It may be, of course, that an ideal state will one day be achieved in which the principles and knowledge of architecture will be so generally diffused that one could very frequently dispense with the architect himself. The advantage of getting to a generally accepted tradition of that sort is that it gives you room for so much more variety within the framework. Had we got this, then we might have "cosiness" and "empiricism."

**Anthony Cox:** confessed that he had found the discussion rather confusing, but one remark which had impressed him was to the effect that very shortly the architect might have to make the choice between being an artist on the one hand and an engineer on the other. That was a position which faced the architects of the nineteenth century and they chose the wrong way and decided to be artists. At this time, he thought, there was a definite feeling amongst architects that some further richness and emotional expression was desirable in architecture. That was something they had to be very careful about. The modern movement in architecture had a rational and functional core, and unless they could build on that bedrock and enrich the emotion and make it more impressive they would be departing from the rationale of modern architecture as he understood it.

**Prof. Giedion:** added a few words.

The discussion, he said, had ranged over the actual state of architecture today, what they thought was wrong with it, and finally in what direction they wanted to move. He would stress this last question: In what way did they want to move? He had hoped that they would have discussed this question of direction rather more. Here the speaker made a digression to speak of the architecture of Coney Island as representing in one way community life, but from this he turned to an aspect of architecture in Britain, as also representing community life, but unconnected with any commercial purpose, as exemplified by the Peckham Health Centre. In conclusion he commented on the fine and forward-looking spirit shown especially by the young architects of this country. All that he pleaded was that they be allowed to work in the right way.

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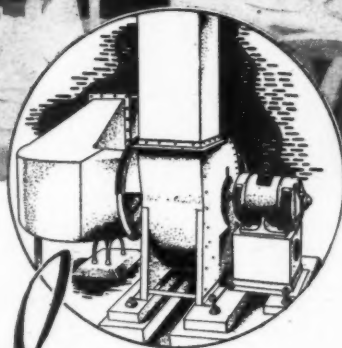
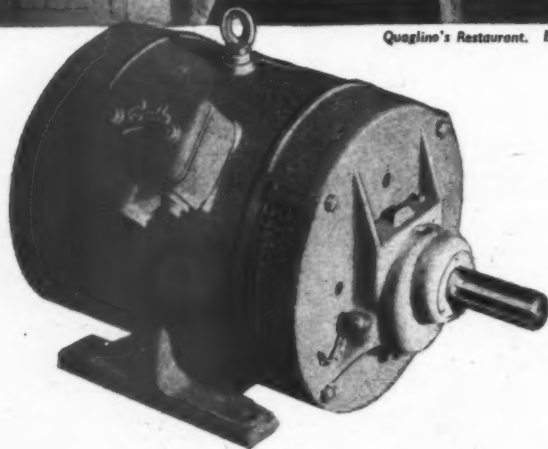
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## TECHNICAL SECTION

*A digest of current information prepared by independent specialists; printed on one side of the paper only, to allow readers to cut out the items for filing and paste them up in classified order. Headings below.*

### INFORMATION CENTRE

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.

#### 10.36 design: building types OFFICE BUILDINGS

*Working Conditions in the Civil Service.* H.M. Treasury. (HMSO, 1947, pub. 1948, 4s.)

Most informative document dealing comprehensively with design, equipment, services, maintenance, and amenities of Civil Service and other commercial and industrial office buildings. Fully illustrated and containing much valuable tabulated survey data. Bibliographical references on lighting, heating, ventilation, noise control, and canteens.

This study of physical working conditions in the Civil Service is based on an extensive observational survey of Government offices and typical modern industrial and commercial office buildings. It investigates the location, structure, and suitability of buildings, and refers to interior planning, floor area per person, and internal communications. There are detailed sections on standards of illumination, natural and artificial lighting, heating and ventilation, the control of external and internal noise, the provision of lavatories and cloakrooms, arrangements for filing and storage, and furniture and equipment. Cleaning and maintenance are other aspects fully covered, and a most detailed study and survey are devoted to canteen facilities.

In the conclusion to this excellent report it is stated that accommodation officers of departments should combine expert knowledge of accommodation problems with human outlook. As far as possible new sets of accommodation standards for matters capable of standardization should be laid down for the Civil Service. These standards should be regarded as average and not be rigidly applied to every case either as maxima or minima.

A detailed summary of observations and recommendations concludes the report containing much useful data applicable to office buildings in general. Finally, there are a number of appendices tabulating survey results covering the various types of buildings studied together with their services and equipment.

#### 16.32 materials: miscellaneous CLAY ROOFING TILES

*Clay Single-lap Roofing Tiles and Fittings.* B.S. 1924: 1948. (British Standards Institution. 3s.)

Covers limited range of types only. General requirements, manufacture and colour. Specific requirements for dimensions, holes, nibs. Each type illustrated by diagrams.

#### 18.17 construction: theory TESTS ON CONCRETE COLUMNS

*Tests on Concrete Columns Reinforced with Square Twisted Steel and Mild Steel.* K. Hainal-Könyi. (The Structural Engineer, July, 1948, pp. 395-431.)

Comparative tests on concrete columns reinforced with square twisted steel and mild steel respectively.

The purpose of the tests was to investigate the suitability of square twisted bars as reinforcement of concrete columns. The results show that square twisted bars offer many advantages and that the ultimate load is considerably increased if square twisted steel bars are used instead of mild steel bars. The test results are compared with design formulae in past and present codes, and a new design formula is suggested.

#### 20.85 construction: complete structures R.C. SHELL ROOF

*Arch Roof with Dome-ends Provides Unobstructed Area for Skating.* (Eng. News-Rec. [USA], July 8, 1948, pp. 110-2.)

The lower floor of the building accommodates 300 cars and a number of bowling alleys. The upper floor is used as a skating arena and is covered by a framed shell roof construction.

The barrel-roof portion has a clear span of 130 ft. and a length of 100 ft., and is enclosed at either end by a semi-dome built to a radius of 65 ft., making the total inside length 230 ft. The frames of the barrel are at 25 ft. centres and project above the barrel so as to provide a smooth ceiling. The semi-dome ends are polygonal in plan and consist of segmental portions. Providing straight lines in the horizontal direction for its entire height, the segmental dome permitted simpler form work than that required for a circular dome. Expansion joints are provided between the barrel section and the semi-domes. The external concrete walls are independent of the framing.

#### 23.76 heating and ventilation HEAT PUMP

*The Heat Pump.* (Architect & Building News, July 2, 1948.)

Theory of heat pumps. Descriptions of one English and several Swiss examples. Dis-

cussion of advantages. 7 photographs, 10 diagrams.

This article follows closely several earlier notes on heat pumps, but is longer and includes more information and fuller diagrams of Swiss installations, including the Zurich Rathaus where the river is adjacent to the building, the Zurich municipal buildings scheme serving a group of buildings where the plant is 200 yards from the river and where, instead of pumping river water that distance, the evaporators are installed in the river and the heat then transferred by much smaller pipes than would have been needed for pumping large volumes of river water. A third Swiss scheme illustrated is the Etzel Power Station, where evaporators are built into the exhaust air shaft to make use of waste heat from electric generators, and a fourth scheme is that at Steckborn, serving artificial silk mills.

Other Swiss installations are referred to and also the now well-known English scheme at Norwich is described, and the cost figures for this are given.

*This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.*

### QUESTIONS AND ANSWERS

#### 2958 DEMOLITION

**Q** I am about to proceed with a scheme involving the demolition of part of a mansion (war damaged) and restoration of the remainder. The part to be pulled down is rich in reclaimable materials—timber, lead, slates, bricks, etc.—and I would appreciate your advice upon the best means of handling this part of the work.

The pulling down would entail rather more work than, in this area, I would wish to include in a general contract, and, in addition, it is desired to proceed with it before the restoration proposals are brought to the contract stage. Should one, in such a case, invite offers from demolition contractors, advertise the buildings for sale for demolition, or merely invite tenders and leave the demolition contractors either to offer a price or to ask one?

Would you also tell me if any consent, permit, or licence would be required, and whether or no the matter would require reference to the Central Land Board?

**A** It is usual to ask about three contractors to tender for the work. If the old materials are wanted the contractor should be told that they are to become the property of the employer and that they are to be pulled down carefully and cleaned and stacked on site. If they are not wanted the contractor should be told that they are to become his property and that he is to remove them and allow credit accordingly.

If the latter course is adopted it is, as you suggest, just possible that the contractor would, in effect, offer to pay for being allowed to do the job, but it is not probable.

The main thing to remember is that any proposals should be approved by the War Damage Commission before being put in hand.

You will have to obtain a building licence if the value of the work exceeds £100, as demolitions are classed as building operations for the purpose of the regulations. No reference need be made to the Central Land Board.



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*This feature covers both the production and marketing of new materials and designs of equipment, as well as the general trend of developments within the building industry.*

## THE INDUSTRY

### WELL PRESENTED DATA

As most readers of the AJ know only too well, it is comparatively rare for manufacturers to issue booklets and handbooks which present relevant information in a reasonably compact form. All credit, then, to Thermacoust Ltd., who have produced an admirable set of detail drawings for the Thermagard system of standardized construction, and equally admirable data sheets on Thermacoust as a material. As is now well known, Thermacoust is a structural insulation slab made of wood wool and a mineral cementing agent. Thermal conductivity is 0.58, and the slabs are made in 1, 1½, 2 and 3 inch thickness and measure 6 ft. by 2 ft. Data sheets include information and drawings to show its use on both pitched and flat roofs, the section reproduced on this page showing a typical eaves detail to a flat roof.

The Thermagard system of construction makes wide use of Thermacoust slabs for insulation purposes. The designers based many of their ideas on Post War Building Study No. 2, *Standard Construction for Schools*, and they believe that the use of a standard steel framework allows the maximum advantage to be taken of stan-

dardization, while at the same time there remains considerable freedom in planning, and in the use of alternative materials for the cladding of the structure.

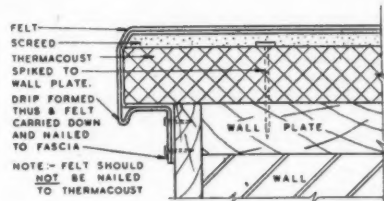
Standardization, since it inevitably involves a common modulus for the different buildings required in a school, is almost bound to lead to some divergence from the Ministry of Education's recommended sizes for different rooms. These sizes, however, are intended to be minima, and the fact that they may sometimes be exceeded by a modular design does not necessarily mean unnecessary expense as the small increase in quantities of materials may be more than offset by the overall savings in production costs.

In choosing the best modulus for a system of construction which is deliberately intended to encourage use of alternative cladding materials, the relation of the modulus to the dimensions of the various building materials is of less importance than that the modulus should be such as to suit as closely as possible the different sizes of rooms required. The ultimate choice of modulus will depend on some factor common to all the buildings, irrespective of the cladding materials used in any particular job.

The standardization of school windows was an accomplished fact before the advantages of standardizing the whole construction were seriously contemplated, and since the same basic size of window can be used throughout the buildings, the correct relation of the modulus to the window sizes becomes of paramount importance.

After exhaustive experiments with various sizes and special forms of members for the stanchions, it was found that sections having a flange width of 5 inches would be most practical.

This, in conjunction with the standard window sizes, led to an appropriate bay-width being 8 ft. 3 in., which has been adopted for the plan modulus throughout. The use of the same modulus for the vertical dimensions was soon found to be unpractical.



*Eaves details of a flat roof using Thermacoust: a structural insulation slab made of wood wool and a mineral cementing agent.*

Any serious increase on the recommended height of 11 ft. for classrooms would be extravagant, and as far as single storey schools are concerned, no obvious relationship exists between the heights of the different rooms and corridors comprising the whole.

The standard Thermagard construction is available in widths of 3, 4, and 5 times the 8 ft. 3 in. moduli, one unit being the width of the corridors. External walls are of cavity construction with a 4½ in. brick panel, cavity, and a 2 in. Thermacoust inner leaf, plastered, which has a U factor of 0.165, less than half the transmission figure for solid 13½ in. brickwork. Roofs were originally standardized at pitches of 20½° and 40°, but the lower pitch trusses have now been abandoned, partly because there has been a demand for a flat roof construction. (Thermacoust Ltd., 39, Victoria Street, London, S.W.1.)

### THE "AIR FLOW" VENTILATING UNIT

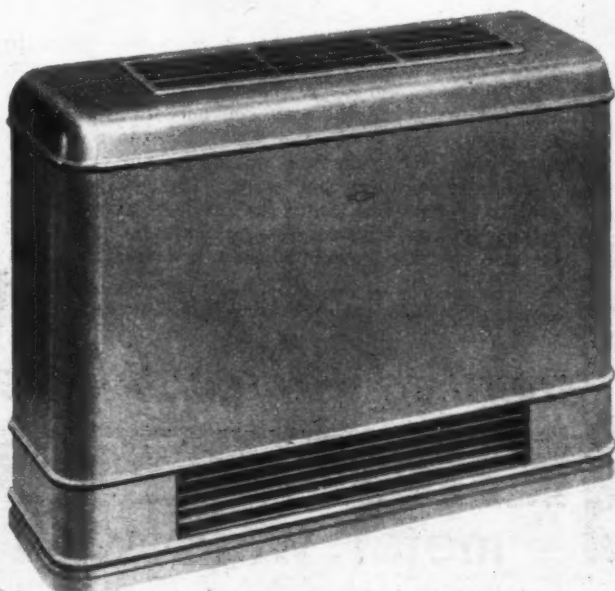
Designed to provide an efficient and reliable method of heating and ventilating, and supplying clean and humidified air, this unit is made in two types, one for use with an existing hot water or steam system and the other as an entirely self-contained electrical unit.

Erection and installation work has been reduced to a minimum and where conditions do not restrict the location of this unit the best position is on an outside wall. Air is drawn into the room through a grille 18 in. by 2½ in. and the damper control, incorporated in the unit, provides a simple means of proportioning the intake. All fresh air can be used, or if the room has been unoccupied and it is desired to heat it quickly, the room air can be re-circulated. Alternatively, by adjusting the damper control, a varying proportion of fresh and re-circulated air can be used. Dirt and dust are removed by passing the air through a filter. This should be cleaned by washing in soapy soda water, followed by draining and re-oiling with a brush.

Output when the three fans are being run at full speed is 30,000 cu. ft. per hour and output grille velocity is 500 ft. per minute, discharged at an angle of 45°, giving a full circulation of conditioned air without draught.

In the electric unit the heater element has a 7 KW. loading and is fitted with independent switching, which enables it to be used on either 2, 5 or 7 KW; alternatively, control can be by a separate room thermostat. In the steam or hot water unit the heater bank is constructed from a series of gilled tubes.

The heating capacity of the hot water unit is 20,000 B.T.U.s. per hour (using 100 galls. per hour and with a temperature drop of 20°), and of the steam unit 48,000



*A 7-kilowatt air flow heating and ventilating unit.*

B.T.U.s. (5 lb. pressure and using 50 lb. per hour). From this it can be seen that the heat output of one hot water unit is roughly equivalent to six normal radiators.

The heated air is humidified by being passed over an open bath, whose surface has been calculated to give approximately 5 per cent. humidity. Finish is in stove enamel, which can be supplied in any colour, and the casing is insulated so that it does not become hot to touch. (*Fenton, Byrn & Co. Ltd., Swains Road, London, S.W.17.*)

#### NATIONAL BUILDING STUDIES

MOW's Post-War Building Studies are to be continued by a new series which will be known as National Building Studies. There will be three broad groups. Special Reports covering a particular field of research work, Technical Papers intended primarily for technical or scientific readers, and Bulletins written for the building industry "which will contain the details required to enable those in the industry to apply the results of research in a practical way." The two Bulletins so far published deal with clay bricks and the painting of new plaster and cement. These and the other special reports and technical papers are remarkably well done and are excellent value for money, but we still most urgently need some means of putting the results of research over to the small builder, the foreman and the more intelligent operative, a far more difficult problem, but one which must be solved if the results of research are to make any real difference on the job, for whatever the architect may specify, the help of the foreman is still essential. A useful piece of co-ordination has now been arranged whereby most future Government publications of technical interest to the architect will be grouped in a single series.

## Announcements

The East Central Area Office of the Essex County Planning Department has moved from its old address at 43, Duke Street, Chelmsford. The office's new address is Pearl Assurance Buildings, Chelmsford. Telephone: Chelmsford 2437.

As from September 13, the Headquarters of the Export Licensing Branch of the Board of Trade, now at Stafford House, King William Street, E.C.4, will be removed to Regis House, King William Street, London, E.C.4; Telephone No.: Avenue 3111.

*The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1, and the advertisers listed will be asked to supply information direct.*

## ENQUIRY FORM

*I am interested in the following advertisements appearing in this issue of "The Architects' Journal."*

## Buildings Illustrated

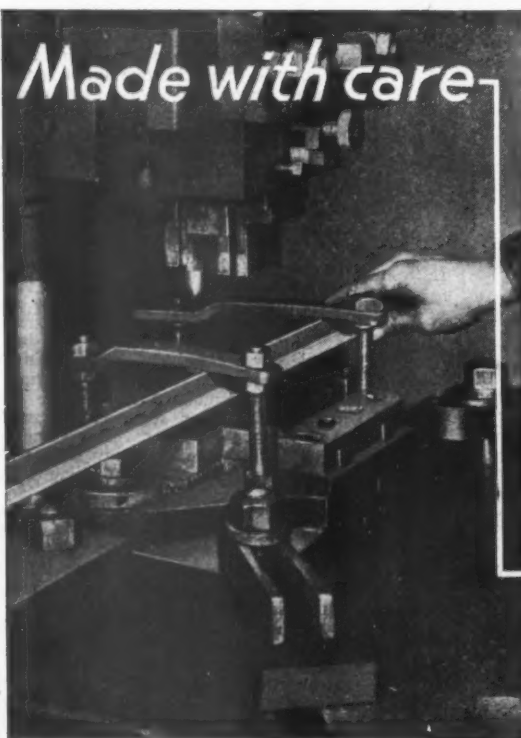
*Flats at Whitton* (pages 243-246). Architects, Eric Lyons and G. Paulson Townsend. General Contractor, H. B. Kingston Ltd. Sub-contractors: Asphalt, Ragusa Asphalte Paving Co.; Reinforced concrete, Hyrib and BRC fabric; Bricks, Marston Valley Brick Co. and Standard Brick and Sand Co.; Artificial stone, Ashford (Mdx.) Concrete Products Ltd. (pre-cast window boxes and copings); Glass, Aygee Ltd.; Patent flooring, Universal Flooring Co.; Grates, Newton Chambers & Co. Ltd.; Gasfitting, Gas Light & Coke Co.; Electric wiring, Haines & Sheppard Ltd.; Plumbing, Faithfull Bros.; Sanitary fittings, S. R. Love & Sons; Door furniture, Stedall & Co.; Casements (EJMA wood), Joinery & Builders Supplies Ltd.; Metal windows, Williams & Williams; Plaster, A. Offer & Son; Tyrolean finish decorative plaster, Cement Marketing Association (external render); Metalwork, Fredk. Braby & Co. Ltd.; Joinery (kitchen fittings), Kandya Ltd.; (doors) Craigelea Joinery Co., (main entrance doors) Emcol Products; Tiling, H. Michie; Shrubs and trees, Garden Landscapes Ltd.; Signs, Daymonds Ltd.

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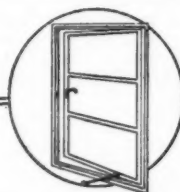
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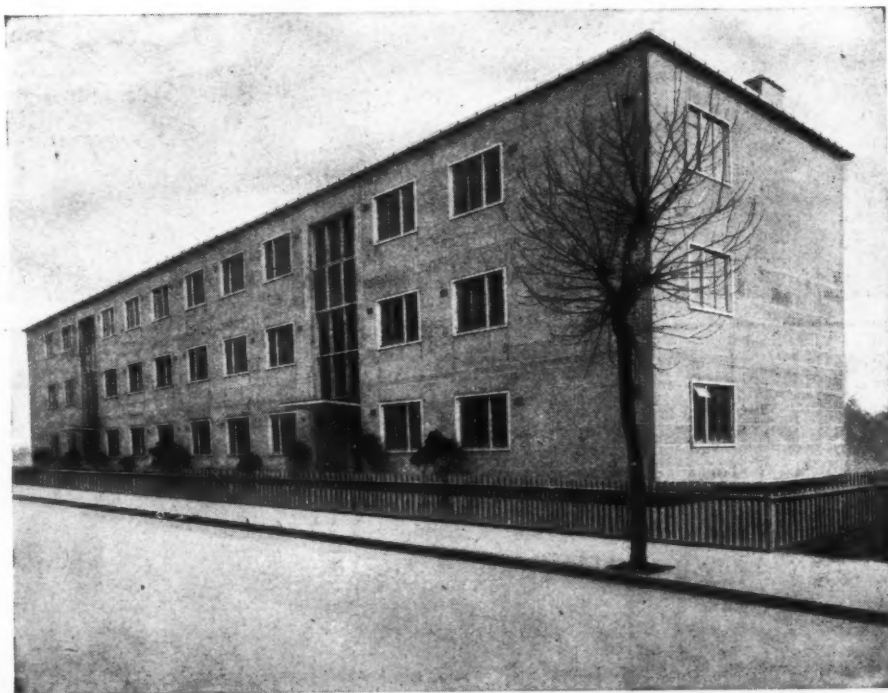
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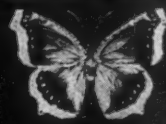
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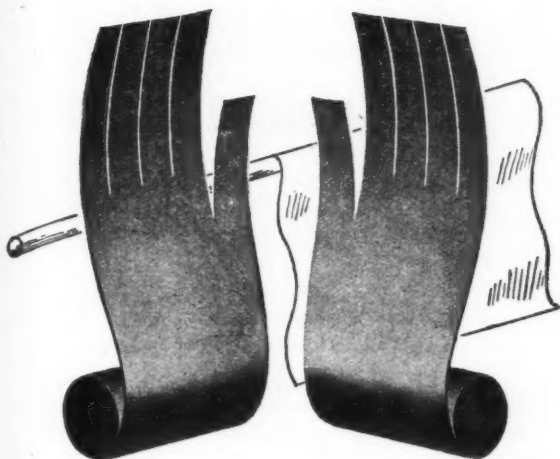
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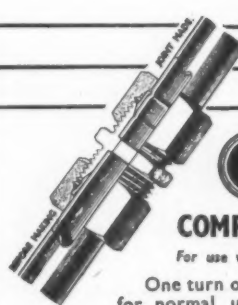
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L.G.B.

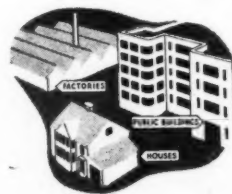
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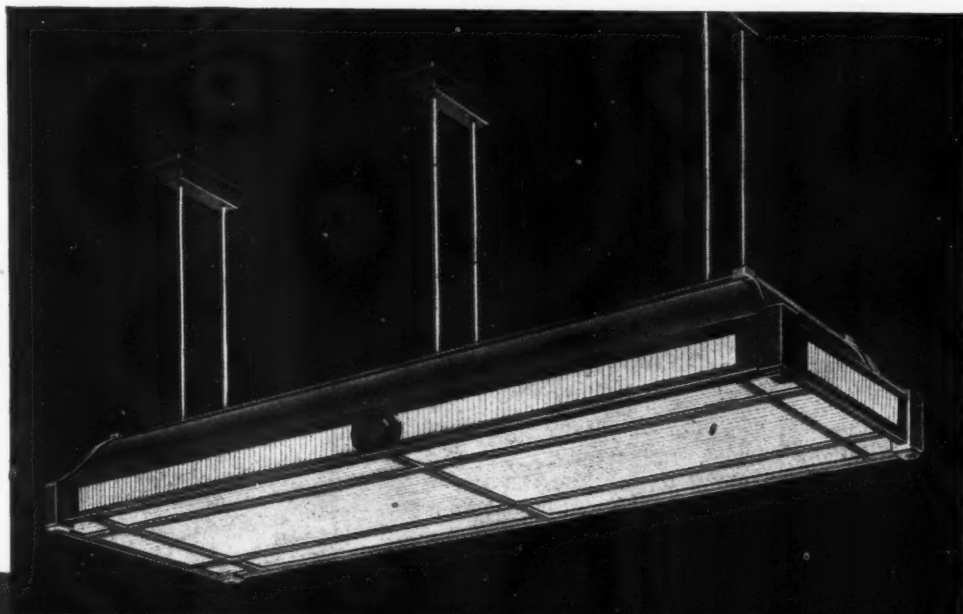
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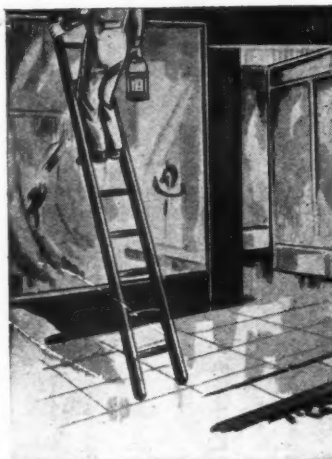
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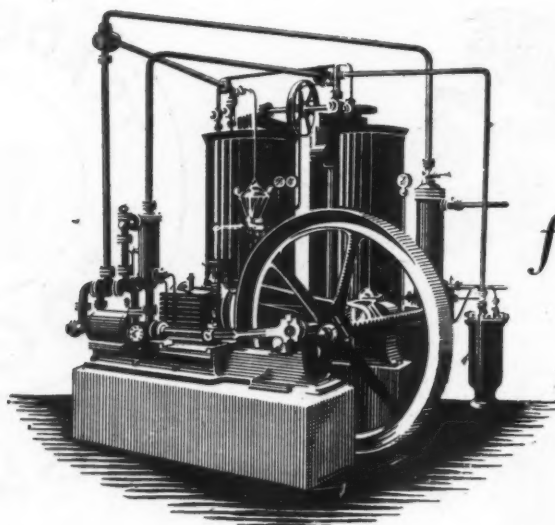
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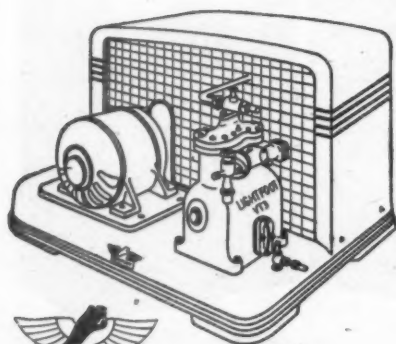
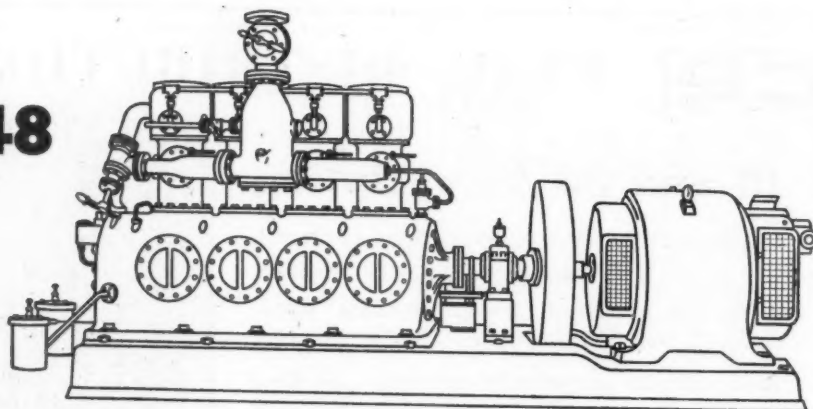
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Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

None of the vacancies in these columns relates to a man between the age of 18 and 50, inclusive, or a woman between the age of 18 and 40, inclusive, unless he or she is excepted from the provisions of the Control of Employment Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

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## LONDON COUNTY COUNCIL.

HOUSING AND VALUATION DEPARTMENT. ARCHITECTURAL ASSISTANTS. Applications are invited for positions of Architectural Assistant, at salaries of up to £580 a year. Commencing salaries will be determined according to qualifications and experience, and qualified candidates will be eligible for appointment to the permanent staff of the Department on the occurrence of vacancies. Engagement will involve Superannuation contributions at the rate of 6 per cent. of salary.

Successful candidates will be required to undertake the design, layout, and preparation of working drawings for housing schemes (cottages and multi-storey flats), and will be employed in the Housing Architect's division.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped, addressed folio envelope required). Canvassing disqualified. (870).

## COUNTY BOROUGH OF BOURNEMOUTH.

## BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following appointments in the Town Planning Section.

(a) One SENIOR PLANNING ASSISTANT, Grade A.P.T. VI, £595-£660 per annum.

Applicants should have good experience in Civil Engineering and Town Planning, and the holding of a Civil Engineering, Surveying, and/or Town Planning qualification will be an advantage.

(b) Two PLANNING ASSISTANTS, Grade A.P.T. IV, £480-£525 per annum.

(c) One PLANNING ASSISTANT, Grade A.P.T. II, £430-£465 per annum.

Applicants should have good experience in one or more of the following:—Development Control; Sociological or other Basic Survey Work; or Planning and Architectural experience in connection with redevelopment schemes. The holding of a Civil Engineering, Surveying, Architectural, and/or Town Planning qualification will be an advantage.

(d) Two PLANNING ASSISTANTS (General Division, salaries according to age, max. £385).

Appointments will be terminable by one month's notice in writing on either side, and subject to the provisions of the Local Government Superannuation Act, 1937, and the National Scheme of conditions of service, the standing orders and other regulations of the Council in force from time to time. The selected candidate must pass a medical examination.

Applications appropriately endorsed, stating age, qualifications, experience, past and present appointments, and accompanied by three testimonials, should reach me not later than 17th September, 1948.

Canvassing will disqualify.

A. LINDSAY CLEGG,

Town Clerk.

Town Hall,  
Bournemouth.

1597

## COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

## COUNTY PLANNING DEPARTMENT.

Applications are invited for the following permanent appointment to the Headquarters Staff of the County Planning Department:—

JUNIOR PLANNING ASSISTANT (RESEARCH). Salary scale, £390-£415-£465 per annum.

Applicants should have had experience in the collection and presentation of statistics and data required for town and country planning, and a University degree in economics or geography is desirable. A knowledge of local government, including the general work of a planning department, will also be an advantage.

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

Applications stating age, qualifications and experience, and accompanied by copies of two recent testimonials, should be received by the undersigned not later than the 18th day of September, 1948.

ARTHUR BATES,

County Planning Officer.

County Planning Office, 7, Bond Street,

Wakefield.

1721

## MUNICIPALITY OF UMTALI.

## VACANCY: TOWN PLANNING OFFICER.

Applications should be submitted in duplicate and one copy despatched so as to reach me not later than noon of 18th day of September, 1948. The remaining copy should be posted at the same time to P. M. Aldred, Esq., c/o Rhodesia House, The Strand, London, W.C.2.

The salary grade for the position is £759-£835-£924 per annum, and the commencing salary may be higher than the minimum of the grade (in any case not exceeding two steps in such scale) in accordance with the qualifications and/or experience of the successful applicant. In addition, a cost-of-living allowance at rates laid down by the Council from time to time will be paid. At present this amounts to £134 per annum on the minimum and £150 per annum on the maximum of the grade; plus, in the case of married persons, a children's allowance at the rate of £30 per annum for the first child and £24 per annum for each subsequent child.

Applicants must have passed the Final Examination of the Town Planning Institute, and preference will be given to applicants holding one or more of the following additional qualifications:—

Associate of the Royal Institute of British Architects. Testamur Examination of the Institution of Municipal Engineers.

Final Examination of the Royal Institute of Chartered Surveyors, or University Degree in one of the above subjects.

Applicants must have had at least three years' experience of Town Planning work, preferably in Urban Areas, and should be conversant with local authority procedure and practice. They should have had experience in preparatory survey and investigation work for Statutory Planning Schemes, preparation of such schemes, and Interim Development Control and administration.

Applicants should submit full details of age, specific nationality, health, marital status, previous experience, qualifications and military service, present appointment, and should submit certified copies of testimonials from past employers.

The successful applicant will be required to serve a probationary period of six months, thereafter he will be eligible for appointment to the fixed establishment, and if so appointed he will be required to contribute to the Council's Superannuation Fund.

Applicants are advised that their present Superannuation Contributions are not transferable to the Council's Superannuation Fund.

If the successful applicant is married a Municipal house will be available on a rental basis. The Council will contribute the following amounts towards the cost of sea passages ex-United Kingdom:—

Man and wife, £50 each.

Children under 16 years: 1st child, £20; remaining children, £10 each.

Should the successful applicant resign within a period of three years from date of appointment certain proportions of the above amounts will be refundable to the Council.

Salary will be admissible from the actual date of embarkation, although the date of appointment will be held for all other purposes to be the date upon which duties are actively assumed.

A satisfactory medical certificate on the Council's prescribed form must be produced before the commencement of duty.

In regard to any points not mentioned in this advertisement the successful applicant will be bound by the Council's Service Regulations and any amendments which may be made thereto from time to time.

Canvassing, directly or indirectly, will be a disqualification.

G. F. CLARK,

Town Clerk.

Town House, Umtali, Southern Rhodesia.

5th August, 1948.

1438

## COUNTY COUNCIL OF DURHAM.

## COUNTY PLANNING DEPARTMENT.

Applications are invited for the following permanent appointments in the County Planning Department:—

(a) ASSISTANT AREA PLANNING OFFICERS, Grade Va, A.P.T. (£550-£610).

(b) PLANNING ASSISTANTS, Grade V, A.P.T. (£520-£570).

(c) JUNIOR PLANNING ASSISTANTS, Grades I and II, Miscellaneous Division (£315-£360) and (£375-£420).

Applications for (a) and (b) should be suitably qualified and experienced, and for (c) preference will be given to those with previous planning experience.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination by the Council's Medical Officer. The appointments will be terminable by one calendar month's notice on either side.

Canvassing, either directly or indirectly, will disqualify. Applicants must disclose in writing whether to their knowledge they are related to any member or to the holder of any senior office under the Council.

Applications, setting out in detail particulars as to age, married or single, qualifications, present and previous appointments, together with the names of two or more persons to whom reference may be made, should be delivered to the County Planning Officer, 10, Church Street, Durham, by noon on Saturday, 25th September, 1948.

J. K. HOPE

Clerk of the County Council.

Shire Hall, Durham.

31st August, 1948.

1722

## CITY OF CANTERBURY.

## SECOND ASSISTANT ARCHITECT.

Applications are invited for the appointment of Second Assistant Architect, in the City Architect's Department, at a salary in accordance with Grade A.P.T. IV, £480-£525.

Applicants must be A.R.I.B.A. and should have had experience of housing work. Town Planning experience is also desirable, but not essential.

The successful candidate will be required to pass a medical examination.

If necessary, consideration will be given to the provision of housing accommodation for the person appointed to the position.

Applications, giving age, full particulars of experience and qualifications, and the names of not more than three persons to whom reference may be made, should be received by Mr. L. Hugh Wilson, A.R.I.B.A., A.M.T.P.I., City Architect, not later than Friday, 17th September, 1948.

Canvassing will disqualify.

J. BOYLE,

Town Clerk.

Municipal Buildings, Canterbury.

25th August, 1948.

1590

## CITY AND COUNTY OF THE CITY OF EXETER.

Applications are invited for the following appointments on the permanent staff of the City Architect's Department:—

(a) PRINCIPAL ASSISTANT PLANNING ARCHITECT. Salary A.P.T. Grade VII, i.e., £635 to £710 per annum.

(b) SENIOR ASSISTANT PLANNING ARCHITECT. Salary A.P.T. Grade VI, i.e., £595 to £660 per annum.

Candidates for the above appointments are required for architectural and detailed planning work in connection with the reconstruction of the blitzed central areas of the City. They must be Associate Members of the Royal Institute of British Architects and have experience in Town Planning.

(c) SENIOR ASSISTANT ARCHITECT. Salary A.P.T. Grade V, i.e., £520 to £570 per annum.

Candidates for this appointment must be Associate Members of the Royal Institute of British Architects, and preference will be given to those who are experienced in educational work.

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

Successful applicants will be required to pass a medical examination.

Canvassing will disqualify and candidates must disclose whether, to their knowledge, they are related to any member of the Council, or to the holder of any senior office under the Council.

Applications, stating age, qualifications, previous and present appointments and salaries, details of experience, and the earliest possible date when available, together with copies of recent testimonials, should be sent to H. B. Rowe, F.R.I.B.A., A.M.I.Struct.E., City Architect, Southernhay West, Exeter, not later than the 17th September, 1948.

C. J. NEWMAN,

Town Clerk.

Exeter.

24th August, 1948.

1578

## CANNOCK RURAL DISTRICT COUNCIL.

## APPOINTMENT OF ARCHITECTURAL ASSISTANT (TEMPORARY).

Applications are invited for the above appointment, at a salary in accordance with A.P.T. Grade III, of the National Scale of Salaries (£450-£495 per annum).

Candidates must be experienced in preparing Plans and Specifications for Architectural work usually undertaken by a Local Authority. The appointment will be determinable by one month's notice on either side.

Applications, stating age, qualifications, experience, etc., endorsed "Architectural Assistant," and accompanied by copies of two recent testimonials, must reach the undersigned not later than Monday, the 20th September, 1948.

JOHN P. ROBERTS,

Clerk to the Council.

Council Offices, Penkridge, Stafford.

25th August, 1948.

1698

## NORTHUMBERLAND COUNTY COUNCIL.

## COUNTY PLANNING DEPARTMENT.

Applications are invited from persons with suitable qualifications for the appointment of SENIOR PLANNING ASSISTANT, at a salary in accordance with Grade VI (A.P.T.) of the National Joint Councils Scale of Salaries (£595-£660).

Candidates should be members of the Royal Institute of British Architects, the Royal Institute of Chartered Surveyors or the Institute of Civil Engineers and should preferably be corporate members of the Town Planning Institute and possess recent practical experience in the preparation and administration of planning schemes and in the control of development.

The appointment (which is a whole-time one) will be subject to the National Scheme of Conditions of Service, to the provisions of the Local Government Superannuation Act, 1937, and to three months' notice on either side, and the successful candidate will be required to pass a medical examination to the Council's satisfaction.

Applications, on forms to be obtained from the undersigned, must be submitted not later than the 18th September, 1948.

E. P. HARVEY,

Clerk of the County Council.

County Hall, Newcastle-upon-Tyne, 1.

1724



**THE KIRKBURTON URBAN DISTRICT COUNCIL.**  
**ARCHITECTURAL ASSISTANT.**

The Council invite applications for the above-mentioned appointment in the Engineer and Surveyor's Department.

The salary will be Grade II (£420-£465). The appointment will be subject to the Local Government Superannuation Acts, and the successful applicant may be required to pass a medical examination. An appropriate travelling allowance will be paid by the Council for a 8 h.p. car.

Candidates must have a thorough knowledge of building construction, and should have experience in the maintenance, design and construction of Municipal buildings, including housing.

Forms of application for this appointment, together with fuller particulars, may be obtained from Mr. D. J. Woodhill, A.M.I.Mun.E., Engineer and Surveyor, Town Hall, Kirkburton, near Huddersfield, and these should be returned to the undersigned not later than Saturday, the 25th September, 1948.

G. W. SMITH,

Clerk to the Council.

Town Hall, Kirkburton, near Huddersfield 1693

**COUNTY BOROUGH OF TYNEMOUTH.**  
**BOROUGH SURVEYOR'S DEPARTMENT.**  
**STAFF VACANCIES.**

Applications are invited for the following appointments:-

(a) **CHIEF PLANNING ASSISTANT.** Grade VII, £635-£710. Applicants must be Associate Members of the Town Planning Institute, should possess in addition a recognized Engineering or Architectural qualification and should have had some administrative experience. The successful applicant will be in charge of the Planning Section of the Department under the direction of the Borough Surveyor.

(b) **SENIOR PLANNING ASSISTANT.** Grade V, £520-£570. Applicants must be Associate Members of the T.P. Institute, and should have experience in the carrying out of basic surveys and the re-planning of built-up areas. A recognized Engineering or Architectural qualification will be an advantage.

(c) **THREE ARCHITECTURAL ASSISTANTS.** Grade V, £520-£570. Applicants must be Associates of the R.I.B.A., and have had good general architectural experience. Experience in settling contractors' final accounts will be an advantage.

(d) **JUNIOR ARCHITECTURAL ASSISTANT.** Grade II, £420-£465. Applicants should have passed the Intermediate examination of the R.I.B.A.

**HOUSING ACCOMMODATION.**—The Corporation will be prepared to assist in the provision of housing accommodation in cases of difficulty.

Applications on forms to be obtained from the Borough Surveyor, Mr. D. M. O'Herlihy, B.Sc., M.I.C.E., Howard Street, North Shields, together with copies of not more than three recent testimonials, should be addressed to the Borough Surveyor, to arrive by 27th day of September, 1948.

All appointments are subject to the National Scheme of Conditions of Service, the Local Government Superannuation Act 1937, a medical examination, and one month's notice on either side.

Canvassing, either directly or indirectly, will disqualify, and applicants must state whether or not to their knowledge they are related to any member of the Council or to a holder of any senior office under the Council.

Dated this 7th day of August, 1948.

(Sgd.) FRED. G. EGNER.

Town Clerk.

14, Northumberland Square, North Shields. 1650

**CITY OF NOTTINGHAM EDUCATION COMMITTEE.**

**COLLEGE OF ART AND CRAFTS.**

Principal: ALFRED H. ROWDAY, A.R.C.A.

Applications are invited from Men and Women for the post of **STUDIO INSTRUCTOR**, in the School of Architecture of the College, which is recognized for exemption from the R.I.B.A. Intermediate and Final examinations, and in the Department of Town and Country Planning from the Final examination of the Town Planning Institute. Duties to commence as soon as possible. Candidates should hold recognized Qualifications in Architecture, preferably the degree or diploma of a Recognized School. The Nottingham College of Art and Crafts is recognized by the Ministry of Education as a Central College. Subject to the conditions governing full-time teaching service, the person appointed will be given such opportunities as may be practicable to maintain his/her professional practice.

Salary: Burnham Scales, 1948, with additional allowances, where appropriate, for (i) training; (ii) graduation; (iii) full-time professional experience after age 21; (iv) previous recognized teaching service; and (v) service in H.M. Forces or the recognized equivalent. A qualification in Town and Country Planning will be regarded as an additional recommendation, and may qualify under certain conditions for additional salary.

Application forms can be obtained from the Principal, College of Art and Crafts, Waverley Street, Nottingham, to whom they should be returned, with copies of two testimonials, within 14 days of the publication of this advertisement.

F. STEPHENSON,

Director of Education.  
Education Office, South Parade,  
Nottingham. 1752

**HEMEL HEMPSTEAD DEVELOPMENT CORPORATION.**  
**ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments:-

(a) **PRINCIPAL ASSISTANT ARCHITECT.** Salary in the range £750-£1,000.

(b) **SENIOR ASSISTANTS:** (i) Architectural, (ii) Planning. Salary in the scale £550-£730-£750.

(c) **ASSISTANTS:** (i) Architectural, (ii) Planning. Salary in the scale £280-£325, according to age, experience, and qualifications.

Applicants for post (a) should be Associates of the R.I.B.A. and should have a sound knowledge of design and construction of building, with particular emphasis on the design and layout of housing estates. Sound experience in administration and in the control of drawing office staff is essential.

Applicants for post (b) should either have the Town Planning Diploma, be Associate Members of the Town Planning Institute, or be Associates of the R.I.B.A. They will be required to work with the head of the appropriate section either on the design and layout of Neighbourhood Units and other planning work relative to the planning of a new town, or on the planning and design of housing and other buildings to be constructed by the Corporation.

Applicants for post (c) must either have reached Intermediate standard R.I.B.A., have a sound knowledge of planning and design of buildings, or hold the Intermediate examination of the Town Planning Institute and have had experience in town planning.

The persons appointed will be required to work at the Development Corporation's offices at Hemel Hempstead and to reside in the district. The posts will be subject to the Development Corporation's staff rules and conditions of service, and in the case of post (a) to three months', in the case of posts (b) and (c) to one month's notice of termination on either side. Contributory superannuation (with the choice of entering or continuing in a fund under the Local Government Superannuation Act, 1937) will be provided.

Applications, giving particulars of age, qualifications, experience, present and past appointments, and the names of three persons to whom reference can be made, should be endorsed with the title of the post for which application is made and addressed to reach the undersigned not later than 25th September, 1948.

W. O. HART,

General Manager.

Westbrook Hay, Hemel Hempstead, Herts. 1711

**FLINTSHIRE COUNTY COUNCIL.**  
**PLANNING DEPARTMENT.**

Applications are invited for the appointment of **DEPUTY COUNTY PLANNING OFFICER**, at a salary in accordance with Grade A.P.T. VII, of the National Scales (£635 per annum, rising to £710 per annum, consolidated). Applicants should have had considerable experience in the preparation of Planning Schemes, the control of development, the application of the Town and Country Planning Acts and Orders and in the work of the Planning office of a local authority or joint committee. Preference will be given to applicants who are Corporate Members of the Town Planning Institute, and who also hold a recognized qualification in architecture, surveying or engineering. The successful candidate will be required to provide a motor car, for which an allowance will be made either by way of mileage rates under the National Joint Council scale or fixed allowance, as may be determined on appointment by the Council. The appointment will be subject to (a) the National Scheme of Conditions of Service, as modified by the County Council, (b) the Local Government Superannuation Act, 1937, and (c) the successful passing of a medical examination.

Applications from registered disabled persons will be considered.

Applications on the prescribed form obtainable from the undersigned, are to be returned so as to be received not later than Saturday, 25th September, 1948.

W. HUGH JONES,

Clerk of the County Council.

County Buildings, Mold. 1659

**COUNTY BOROUGH OF IPSWICH.**  
**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

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

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

Salary will be in accordance with Grade IV of the A.P.T. Division of the National Scales (£480 to £525 per annum). If applicant possesses the A.R.I.B.A. or equivalent examination then the salary will be in accordance with Grade A.P.T. V (£520 to £570 per annum). A person appointed in Grade A.P.T. IV, will be eligible for promotion to Grade A.P.T. V, on qualifying.

There is no form of application but candidates must state age, experience, and any other relevant details.

Copies of not more than three recent testimonials must be supplied.

Applications must be received by the Borough Surveyor, Town Hall, Ipswich, not later than Monday, 20th September, 1948.

Canvassing will disqualify. If the applicant is to his knowledge related to any member or any senior officer of the Council he must disclose that fact in writing when submitting his application.

J. G. BARR,

Town Clerk.

Town Hall, Ipswich.

23rd August, 1948. 1680

**COUNTY BOROUGH OF ROTHERHAM.**  
**ASSISTANT ARCHITECT.**

Applications are invited for the appointment of an Architectural Assistant, in the office of the Borough Engineer, at a commencing salary of £520, rising by annual increments to a maximum of £570 per annum.

Applicants must be Associate Members of the Royal Institute of British Architects, and preferably with experience in the service of a Local Authority.

The post is superannuable, and the candidate selected for appointment will be required to pass a medical examination.

The appointment will be subject to the conditions of service adopted by the Council, and based on the National Scheme of Conditions of Service. It will be determinable by one month's notice on either side.

**HOUSING ACCOMMODATION WILL BE AVAILABLE FOR THE SUCCESSFUL APPLICANT IF REQUIRED.**

Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council. Deliberate omission to disclose any such relationship will disqualify any candidate.

Canvassing of members of the Council, whether direct or indirect, will disqualify.

Applications (endorsed "Architectural Assistant") stating age, qualifications and experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than the 24th September, 1948.

JOHN S. WALL,

Town Clerk.

Municipal Offices, Rotherham, Yorks. 1708

**SHEFFIELD REGIONAL HOSPITAL BOARD.**  
**LINCOLN NO. 3 HOSPITAL MANAGEMENT COMMITTEE.**

ARCHITECTS with R.I.B.A. qualifications are invited to offer their part-time services to the Committee, in connection with works of restoration, reconditioning and extension at Raebury Hospital, and general maintenance at Harmston, Bourne, Caistor and Holbeck Institutions. Applications for the appointment, stating the terms offered, should be received by the Secretary not later than 11th September.

W. G. KEY,

Secretary.

Harmston Hall, Lincoln. 1656

**SALOP COUNTY COUNCIL.**  
**COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments to established posts in the Department:-

(1) **SENIOR ASSISTANT ENGINEER**, as A.P.T., Grades IV and V (£480-£570 per annum). Applicants must be experienced in the preparation of heating and electrical schemes, and the successful applicant must have passed the final examination of the Institute of Heating and Ventilating Engineers, or equivalent, before proceeding to Grade V.

(2) **QUANTITY SURVEYING ASSISTANT**, as A.P.T., Grade III (£450-£495 per annum). Applicants must be capable of extracting and billing and assisting in the settlement of accounts.

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

Application forms may be obtained from the County Architect, Mr. A. G. Chan, F.R.I.B.A., 5, Belmont, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Tuesday, 21st September, 1948.

G. C. GODBER,

Clerk of the Council.

Shrewsbury, August, 1948. 1714

**SOUTH-EASTERN REGIONAL HOSPITAL BOARD, SCOTLAND.**

**APPOINTMENT OF ARCHITECT.**

Applications are invited for the post of Architect to the above-mentioned Regional Board. Applicants should be Registered Architects and members of the Royal Institute of British Architects; and should have had experience of architectural practice, office organization, and in the field. Special experience of hospital work is desirable, but not essential.

The Architect, whose Headquarters will be in Edinburgh, will be responsible to the Chief Architect for the Scottish Regional Hospital Boards (excluding the Western Region), and the scope of the work will include the planning and design and supervision of new hospital buildings and extensions, maintenance of existing buildings and collaboration with private architects who may be appointed for special projects.

Salary will be at the rate of £750 per annum, rising by £25 per annum to £1,000 per annum. The post is subject to the provisions of the National Health Service (Scotland) (Superannuation) Regulations, 1948, and the successful candidate will be required to pass a medical examination.

Forms of application may be obtained from the Secretary, South-Eastern Regional Hospital Board, Scotland, 11, Drumshough Gardens, Edinburgh, 3, and should be returned to the same address not later than 2nd October, 1948.

Canvassing in any form will disqualify.

EWEN CAMPBELL,

Secretary.



CITY AND COUNTY OF BRISTOL.  
CITY ARCHITECT'S DEPARTMENT.

Applications invited for the following temporary appointments:

**SENIOR ASSISTANT ARCHITECTS** (Housing and Education Sections). A.P.T. Grade VI (£595-£660).

Preference will be given to Associates R.I.B.A. All appointments determined by one month's notice in writing on either side. Applications, stating age, qualifications, experience, present position and salary, and names of two persons to whom reference may be made, should be delivered to the undersigned.

Although not compulsory, it is desirable that successful applicants shall live within the City.

J. NELSON MEREDITH, F.R.I.B.A.,  
City Architect.

Eagle House, Colston Avenue, Bristol, 1. 1712

COUNTY BOROUGH OF WOLVERHAMPTON  
EDUCATION COMMITTEE.

## APPOINTMENT OF DEPUTY SUPERINTENDENT OF BUILDINGS.

Application invited for above permanent appointment on staff of Director of Education, at salary in Grade A.P.T., IV, of National Scales (£480 to £525).

Applicants should possess appropriate technical qualifications and be experienced in maintenance and repair of buildings, measurement of builders' work, estimating, and administration of building contracts.

Successful candidate may qualify for subsistence and travelling allowances if put to additional expense owing to inability to obtain local accommodation for his family.

Conditions of appointment obtainable from Director of Education, North Street, Wolverhampton, to whom completed applications should be returned by 30th September, 1948.

J. BROCK ALLON,  
Town Clerk.

Town Hall, Wolverhampton. 1717

DEPARTMENT OF HEALTH, DUBLIN.  
VACANCIES FOR ARCHITECTURAL STAFF  
IN CONNECTION WITH REGIONAL  
SANATORIA CONSTRUCTION.

Applications are invited for vacancies in the following grades:—

(a) **TEMPORARY SENIOR ARCHITECT.** Salary ranges: £800-£40-£950 a year (man); £700-£35-£850 a year (woman).(b) **TEMPORARY ASSISTANT ARCHITECT.** Grade I. Salary ranges: £650-£30-£800 a year (man); £550-£25-£650 a year (woman).(c) **TEMPORARY ASSISTANT ARCHITECT.** Grade II. Salary ranges: £9 10s.-£12s. 6d.-£13 a week (man); £7 10s.-£10s.-£10 10s. a week (woman).(d) **TEMPORARY ARCHITECTURAL ASSISTANT.** Salary ranges: £5 15s.-£6s.-£7 10s. a week (man); £4 10s.-£7s. 6d.-£6 a week (woman).

Within the above salary ranges, commencing salaries will be determined according to qualifications and experience.

Candidates for posts under (a), (b) and (c) must hold a recognized University degree in architecture, or an equivalent academic qualification. Candidates for (a) and (b) must also have had satisfactory post-graduate practical experience of Architectural work and in the design and construction of buildings, including experience in the preparation of designs and contract drawings from sketches or instructions and in the supervision of building contracts. Candidates for (d) must have had at least six years' suitable high-class professional experience, including satisfactory experience in the design and construction of important buildings and the services connected therewith. It is desirable that candidates for (c) should have experience in the design and construction of hospitals and in the direction and control of staff. For posts under (c) candidates must have had satisfactory architectural experience. Candidates for appointment under (d) must have received at least three years' training in architectural work in an Architect's office or in a recognized school of architecture.

Female candidates must be unmarried or widows.

Application forms and Conditions of Service may be obtained from the Dept. of Health (Room 22), Custom House, Dublin. Completed forms must be forwarded so as to reach that address on or before 11th October, 1948.

P. O. CINNEIDE,  
Secretary.Department of Health, Dublin.  
31st August, 1948. 1738

## CROWN AGENTS FOR THE COLONIES.

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

**QUANTITY SURVEYOR** required by Public Works Service, Malaya, for three years, with possibility of permanency. Commencing salary according to experience in scale \$5,160 to \$10,800 a year, plus expatriation pay of between \$1,080 and \$1,980 a year, plus cost-of-living allowance of up to \$4,500 a year. (Malayan dollar equals £1.44.) Free passages. Candidates, age 25-30, should be Chartered Quantity Surveyors, and have had two years' experience, after pupilage, in all aspects of the work. 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. W.L.I. quoting M/N/18275/3D on both letter and envelope. 1726COUNTY BOROUGH OF BLACKBURN.  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANT.

Applications are invited in connection with the appointment of an Architectural Assistant, Grade VI of A.P.T. Division of the National Joint Council salary scales, viz., £596-£660.

Applicants must be registered architects, and have good general experience in the design and construction of public and Municipal buildings, schools, etc., and each will be required to undertake two years' service in the post.

Applications, endorsed "Architectural Assistant," stating age, qualifications, experience, present and past appointments, together with not more than three recent testimonials, should be submitted to the Borough Engineer and Surveyor, Town Hall, Blackburn, not later than Saturday, 25th September.

CHAS. S. ROBINSON,  
Town Clerk.

1737

## COUNTY COUNCIL OF RENFREW.

The Council invite applications for the appointment of SENIOR ARCHITECTURAL ASSISTANT in the County Engineer's Department. Applicants should have wide experience of Local Authority Housing and Public Buildings. Preference will be given to members of the R.I.B.A. and the R.I.A.S. Salary scale £480 to £570 per annum (inclusive of bonus). The appointment is subject to the provisions of the Local Government Superannuation (Scotland) Act, 1937, and the successful candidate will require to pass a medical examination. Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be lodged with the undersigned immediately.

ROBERT URQUHART,  
County Clerk.

County Buildings, Paisley. 1735

## HEREFORDSHIRE COUNTY COUNCIL.

Applications are invited for the following appointment on the permanent staff of the County Architect's Department:—

**ASSISTANT ARCHITECT.** Grade VII, A.P.T. Division, £236×£25 to £710 per annum. Candidates should be Associate Members of the R.I.B.A. and be able to take charge of a section of the Drawing Office.

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

Forms of application may be obtained from the County Architect, W. Usher, A.R.I.B.A., County Offices, Bath Street, Hereford. Completed applications must reach the County Architect by not later than 23rd September, 1948. 1736

## COUNTY OF LINCOLN—PARTS OF LINDSEY.

## COUNTY ARCHITECT'S DEPARTMENT.

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

(a) **SENIOR QUANTITY SURVEYOR.** Commencing Grade VI, £595 per annum, rising by £25 to top of Grade VII at £710. Candidates must have had considerable experience in taking-off, abstracting and billing.(b) **ASSISTANT ARCHITECT.** Commencing Grade V, £520 per annum, rising to top of Grade VI at £660 per annum.(c) **ASSISTANT ARCHITECTS (THREE).** Commencing Grade V, at £520, rising in four years to £570. Candidates for (b) and (c) must have passed the qualifying examination for A.R.I.B.A. and be proficient in design and have the modern outlook.(d) **HEATING ENGINEER.** Commencing Grade IV, £480 per annum, rising in four years to £525. Candidates must be experienced in the design of heating installations and preparing estimates.

Applications, stating age, training, experience and qualifications, together with copies of two recent testimonials and the names of two persons to whom reference can be made, should be sent to A. R. Clark, A.R.I.B.A., A.M.T.P.I., County Architect, County Offices, Lincoln, not later than Monday, 20th September, 1948. 1734

BOROUGH OF WALTHAMSTOW.  
BOROUGH ARCHITECT'S DEPARTMENT.  
ASSISTANT ARCHITECT.

Applications are invited for the permanent position of Assistant Architect, at a salary in accordance with Grade VII of the National Joint Council for Local Authorities Administrative, Professional, Technical and Clerical Services (£450, rising to £495 by annual increments, plus London weighting allowance, according to the scale).

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 Friday, the 24th September, 1948.

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 under the Council.

G. A. BLAKELEY,  
Town Clerk.Town Hall, Walthamstow, E.17.  
1st September, 1948. 1751

## KENT COUNTY COUNCIL.

Applications are invited for four appointments of ASSISTANT ARCHITECTS, each at a salary in accordance with A.P.T. Division, Grade V(a) (£550-£610 a year).

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

Candidates must be Members of the Royal Institute of British Architects, by examination, 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 30th September, 1948.

W. L. PLATTIS,  
Clerk of the County Council.County Hall, Maidstone.  
30th August, 1948. 1733

## SOMERSET COUNTY COUNCIL.

## COUNTY PLANNING DEPARTMENT.

Applications are invited for (a) TWO JUNIOR SURVEYING ASSISTANTS, and (b) ONE JUNIOR PLANNING ASSISTANT. Salaries in accordance with A.P.T., Grade I, £390×£15 to £435. All appointments are subject to the Local Government Superannuation Act, 1937. Applicants for (a) should have had extensive experience in the revision of Ordnance Survey maps and surveying generally, and should be able to drive a car. Applicants for (b) should have been trained in the office of an Architect, Engineer or Surveyor, and have been accepted for studentship of a recognized Professional Institute. Applications are to be made on forms obtainable from the undersigned, and must be submitted on or before the 11th October, 1948.

R. W. DALE,  
County Planning Officer.41, Upper High Street, Taunton.  
Somerset. 1729BOROUGH OF ROYAL LEAMINGTON SPA.  
APPOINTMENT OF JUNIOR ASSISTANT  
ARCHITECT.

Applications are invited for the above appointment, at a salary in accordance with Grade I (Miscellaneous Division) of the National Scale, i.e., £315, rising by annual increments of £15 to £360 per annum, inclusive of consolidated bonus.

The appointment will be on the unestablished staff of the Corporation, terminable by one calendar month's notice on either side, and subject to the Scheme of Conditions of Service of the National Joint Council.

Candidates should be experienced in the preparation of working drawings and details, particularly in relation to housing.

Applications, together with copies of not more than two testimonials, must be submitted to H. Fedeski, A.R.I.B.A., Dip.T.P., County Architect, Director of Housing, Town Hall Annex, 3, Regent Grove, Leamington Spa, before 12 noon Thursday, 16th September, 1948.

JAMES N. STOTHERT,  
Town Clerk.Town Hall, Leamington Spa.  
31st August, 1948. 1728

## HIS MAJESTY'S COLONIAL SERVICE.

Applications are invited for the post of ASSISTANT TOWN PLANNER, Federation of Malaya. The appointment is on probation for permanent and pensionable employment, at a salary within the incremental scale \$602 to £1,260 per annum, plus an expatriation allowance of £126, £210 or £231, according to position in the salary scale. In addition a cost-of-living allowance is payable at the rate of 50 per cent. of basic income, subject to certain maxima. An out-of-pocket allowance of £60 is paid on first appointment. Partly furnished Government quarters, for which a rental of between 5 and 6 per cent. of salary is normally charged, are provided if available, or an allowance is paid in lieu. The duties of the post will include the preparation, under the supervision of the Town Planner, of town planning and replanning schemes, and of estate layouts for towns in the Federation of Malaya, examinations of plans submitted by private landowners, supervision of the drawing office staff, and checking of survey data.

Candidates must have had experience in Municipal engineering and surveying, and in the preparation of town planning schemes, and must have passed the final examination of the Town Planning Joint Examination Board or its equivalent, and should possess the Diploma of the Town Planning Institute of Great Britain. Preference will be shown to candidates who possess the additional qualifications of A.M.I.C.E. or who hold degrees or diplomas granting exemption from Parts A and B of the examinations of that Institution.

Terms of service include free first-class passages for the officer and, if married, for his wife, and children under the age of 12, once each way each tour, free medical attention, and home leave on full pay at the rate of 45 days for each year of resident service after tours of three years.

Applicants, who must be British subjects, and be between the ages of 25 and 35, should write at once to the Director of Recruitment (Colonial Service), 2, Sanctuary Buildings, Great Smith Street, London, S.W.1, stating age, professional qualifications and experience. 1732

**PEMBROKESHIRE COUNTY COUNCIL.**  
**COUNTY ARCHITECT'S DEPARTMENT.**  
Applications are invited for the under-mentioned appointments on the permanent staff:—

**TWO SENIOR ARCHITECTS.** Qualified as Fellows or Associates of the R.I.B.A., and having specialized knowledge and experience in the design and construction of Educational Buildings, Police Housing, Hospitals, etc. Salary in each case, A.P. & T. Division, Grade VII, £635 to £710 p.a. Commencing figure in accordance with qualifications and experience.

**TWO SENIOR ASSISTANT ARCHITECTS.** Qualified members of the R.I.B.A. by examination, and having experience of contemporary architectural design. Salary scale, A.P. & T. Division, VI, £595 to £660 p.a., according to qualifications and experience.

**TWO ARCHITECTURAL ASSISTANTS.** Should be up to the Inter. exam. standard of the R.I.B.A., and have had good experience in general architectural work, including schemes and the preparation of working drawings. Salary scale, A.P. & T. Division, Grade III, £450 to £495 p.a., according to qualifications and experience.

**ONE SENIOR QUANTITY SURVEYOR.** Should be P.A.S.I. (Quantities Section), and have had considerable experience in the preparation of quantities, specifications, site measuring, estimates and final accounts. Salary scale, A.P. & T. Division, Grade VI, £595 to £660 p.a., according to qualifications and experience.

**ONE ASSISTANT QUANTITY SURVEYOR.** Preference will be given to applicants who are Professional Associate Members of the Chartered Surveyors' Institute, and experienced in the preparation of Bills of Quantities for Public Buildings, etc. Salary scale, A.P. & T. Division, Grade V, £520 to £570 p.a., according to qualifications and experience.

All the above appointments will be superannuable and subject to medical examination. Canvassing will be a disqualification. Applications from persons serving in H.M. Forces should state their position regarding their release. Ex-Servicemen candidates with experience prior to their war service will be specially considered. Details of these appointments and forms of application may be obtained from Walter Barrett, M.B.E., A.R.I.B.A., County Architect, County Offices, Haverfordwest, to whom applications should be delivered not later than 30th September, 1948.

**W. E. BUFTON,**  
Clerk of the County Council.  
County Offices, Haverfordwest.  
31st August, 1948. 1727

**COUNTY BOROUGH OF EAST HAM.**  
**ARCHITECTURAL ASSISTANT (GRADE IV)—**  
**BOROUGH ENGINEER'S DEPARTMENT.**  
Applications are invited for the permanent appointment of Architectural Assistant, in the Borough Engineer's Department. Salary £480 by £15 to £525 per annum, plus the appropriate London allowance.

A salary in excess of the minimum of the grade may be paid according to the qualifications and experience of the successful candidate.

The Council have in course of preparation a large and varied programme of interesting works which it is anticipated will not be affected by the proposed reductions in capital expenditure.

Housing accommodation is not provided, but the Council will be prepared to consider an application for a subsistence allowance from a person appointed who may be unable to obtain suitable accommodation.

Particulars of the terms and conditions of appointment and form of application (which must be returned by Friday, the 24th September, 1948) may be obtained from the undersigned.

Canvassing in any form will disqualify.  
**H. A. EDWARDS,**  
Town Clerk.  
Town Hall, East Ham, E.6.  
September, 1948. 1757

**BOROUGH OF BARKING.**  
**BOROUGH ENGINEER AND SURVEYOR'S**  
**DEPARTMENT.**

**APPOINTMENT OF TECHNICAL ASSISTANT.**  
Applications are invited for the appointment of Technical Assistant, in the Building Surveyor's Section, at a salary in accordance with Grade IV of the National Scale, namely £510 per annum, rising by annual increments of £15 to £555 per annum inclusive (less £10 per annum for a person under the age of 26 years).

Candidates, who should be capable draughtsmen, must have a good knowledge of and practical experience in the construction and maintenance of buildings, preparation of quantities and specifications, and the measurement of work and materials. Local government experience will be an advantage.

The appointment will be subject to satisfactory medical examination, to the National Joint Council's Conditions of Service, to the rules and regulations adopted by the Council from time to time, to the Local Government Superannuation Act, 1937, and to membership of an appropriate trade union or association.

Applications, on forms which may be obtained from Mr. C. Harper, B.Sc., M.I.C.E., endorsed "Technical Assistant", should reach the undersigned not later than the 20th September, 1948.

The Council will be unable to assist the successful candidate in the matter of housing accommodation.

**E. R. FARR,**  
Town Clerk.  
Town Hall, Barking.  
2nd September, 1948. 1758

**CITY OF CARDIFF.**  
**CITY SURVEYOR'S DEPARTMENT.**  
Applications are invited for the appointment of **ASSISTANT ARCHITECT, A.P.T., Grade VII** (£635-£710 per annum).

Candidates should be fully qualified Architects and Associate Members of the Royal Institute of British Architects, with good general experience in the design and construction of Housing and Public Buildings.

The appointment is subject to the following conditions:—

(1) The Scheme of Conditions of Service approved by the National Joint Council for Local Authorities, as adopted by the Council.

(2) The Local Government Superannuation Act, 1937.

(3) The passing of a medical examination by the successful candidate.

(4) Determination by one month's notice on either side.

(5) The disclosure in writing of any known relationship between the candidate and any member of the Council or holder of any Senior Officer under the Council.

(6) Canvassing, directly or indirectly, will disqualify.

Applications, endorsed "Assistant Architect, Grade VII," should be tabulated, stating age, qualifications, present and previous appointments, salaries, and details of experience and training, together with the names of three referees to whom reference can be made, and delivered to the undersigned within fourteen days of the appearance of this advertisement.

(Sgd.) **S. TAPPER JONES,**  
Town Clerk.  
City Hall, Cardiff.  
September, 1948. 1749

**COUNTY BOROUGH OF MERTHYR TYDFIL.**  
**SENIOR ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of Senior Architectural Assistant, on the permanent staff in the Department of the Borough and Waterworks Engineer, Surveyor and Architect, at a salary in accordance with A.P.T. VII (£635-£710, rising in three annual increments of £25 per annum). Candidates must have had considerable experience in the design and construction of houses, clinics, public buildings and general architectural work, and in the preparation of Specifications, Bills of Quantities and

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EDWARD ROBERTS,  
Town Clerk.

Town Hall, Merthyr Tydfil.  
2nd September, 1948. 1756

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**DUNLOP Rubber Company, Limited,** require an **ARCHITECTURAL ASSISTANT** experienced in Industrial Design and Construction. Qualifications are advantageous, but not essential. Applications in writing to Personnel Manager, Fort Dunlop, Erdington, Birmingham, M. 1596

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**ARCHITECTURAL ASSISTANTS** required immediately; salary according to qualifications and experience, but minimum of £500 per annum; superannuation scheme in operation. Write, giving full particulars of age, training, experience, etc., to C. S. Allott & Son, Consulting Engineers, 1, North Parade, Manchester, 3. 1631

**UNIVERSITY** Department requires the services of an **ASSISTANT ARCHITECT**; candidates must be fully qualified, not over 40 years of age, and have had good practical experience; good prospects and permanent position for the right man; salary according to age and experience. Applications, giving full details of experience, and enclosing copies of three recent testimonials, to Secretary, Department of Estate Management, 74, Trumpington Street, Cambridge. 1651

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**ARCHITECTURAL ASSISTANT** required; experience of design of industrial buildings, canteens, offices, houses, etc.; state experience, age, qualifications and salary required; Birmingham area. Box 1719.

**ARCHITECTS**.—Firm has vacancies as follows:—An Assistant Architect, under 40 years of age, who must be F. or A.R.I.B.A. (salary will be related to age and experience). An Architectural Assistant, who is a R.I.B.A. student. These appointments will be initially in London. Applications should be addressed to Box No. 603, c/o Dawson's, 28, Craven Street, W.C.2. 1716

**ARCHITECTURAL ASSISTANT** required, having knowledge of Hospital work; commencing £600. Pick, Everard, Keay & Gimson, 6, Millstone Lane, Leicester. 1744

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**ARCHITECTURAL ASSISTANT** required; preferably qualified or of R.I.B.A. Intermediate standard. Also **JUNIOR ARCHITECTURAL ASSISTANT**; should be good tracer; salary according to experience and qualifications. Gelder & Kitchen, 120, Alfred Street, Hull. 1739

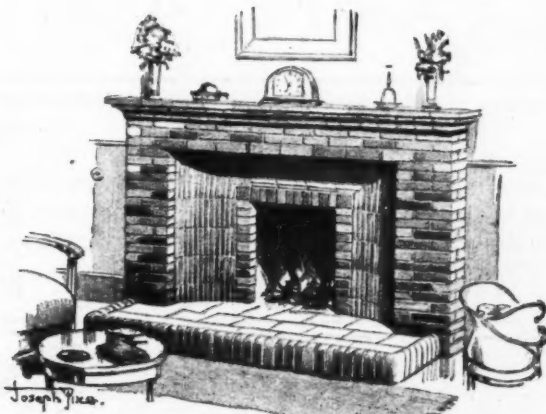
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**"ARCHITECTURAL REVIEW,"** January, 1948; one copy wanted for binding purposes. Write R. Turner, 129, The Ridgeway, E.4. Phone SIL 5153. 1756

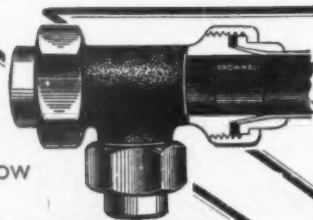
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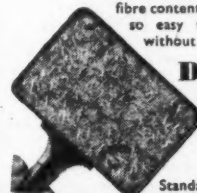
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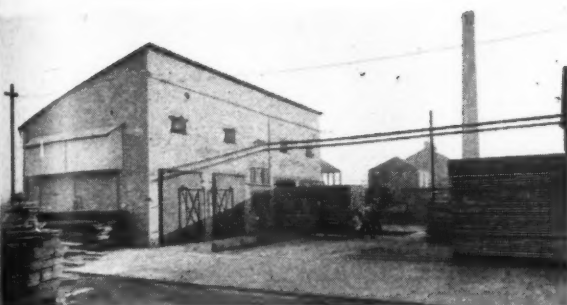


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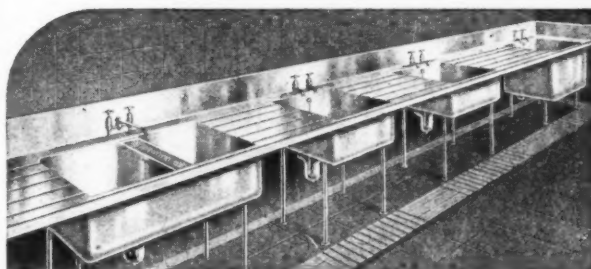


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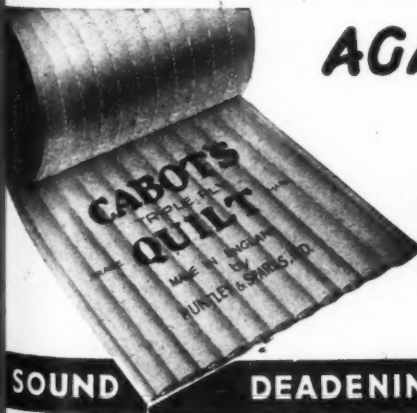
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3'-0"	240
4'-0"	300
5'-0"	360
6'-0"	420
7'-0"	480
8'-0"	540
9'-0"	600
10'-0"	660
11'-0"	720
12'-0"	780
13'-0"	840
14'-0"	900
15'-0"	960
16'-0"	1020
17'-0"	1080
18'-0"	1140
19'-0"	1200
20'-0"	1260
21'-0"	1320
22'-0"	1380
23'-0"	1440
24'-0"	1500
25'-0"	1560
26'-0"	1620
27'-0"	1680
28'-0"	1740
29'-0"	1800
30'-0"	1860
31'-0"	1920
32'-0"	1980
33'-0"	2040
34'-0"	2100
35'-0"	2160
36'-0"	2220
37'-0"	2280
38'-0"	2340
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